



# FCC RADIO TEST REPORT

**FCC ID** : A4R-H2D  
**Equipment** : Interactive internet streaming device  
**Model Name** : H2D  
**Applicant** : Google LLC  
1600 Amphitheatre Parkway,  
Mountain View, California, 94043 USA  
**Standard** : FCC Part 15 Subpart E §15.407

The product was received on Jun. 05, 2019 and testing was started from Jun. 18, 2019 and completed on Aug. 12, 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.

*Louis Wu*

Approved by: Louis Wu

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

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



## Table of Contents

|                                                              |           |
|--------------------------------------------------------------|-----------|
| History of this test report.....                             | 3         |
| Summary of Test Result.....                                  | 4         |
| <b>1 General Description .....</b>                           | <b>5</b>  |
| 1.1 Product Feature of Equipment Under Test.....             | 5         |
| 1.2 Product Specification of Equipment Under Test.....       | 6         |
| 1.3 Modification of EUT .....                                | 7         |
| 1.4 Testing Location .....                                   | 7         |
| 1.5 Applicable Standards.....                                | 8         |
| <b>2 Test Configuration of Equipment Under Test .....</b>    | <b>9</b>  |
| 2.1 Carrier Frequency and Channel .....                      | 9         |
| 2.2 Test Mode.....                                           | 10        |
| 2.3 Connection Diagram of Test System.....                   | 11        |
| 2.4 Support Unit used in test configuration and system ..... | 12        |
| 2.5 EUT Operation Test Setup .....                           | 13        |
| 2.6 Measurement Results Explanation Example.....             | 13        |
| <b>3 Test Result .....</b>                                   | <b>14</b> |
| 3.1 26dB & 99% Occupied Bandwidth Measurement .....          | 14        |
| 3.2 Maximum Conducted Output Power Measurement .....         | 17        |
| 3.3 Power Spectral Density Measurement .....                 | 19        |
| 3.4 Unwanted Emissions Measurement .....                     | 22        |
| 3.5 AC Conducted Emission Measurement.....                   | 28        |
| 3.6 Automatically Discontinue Transmission .....             | 30        |
| 3.7 Antenna Requirements .....                               | 32        |
| <b>4 List of Measuring Equipment.....</b>                    | <b>36</b> |
| <b>5 Uncertainty of Evaluation .....</b>                     | <b>38</b> |
| <b>Appendix A. Conducted Test Results</b>                    |           |
| <b>Appendix B. AC Conducted Emission Test Result</b>         |           |
| <b>Appendix C. Radiated Spurious Emission</b>                |           |
| <b>Appendix D. Radiated Spurious Emission Plots</b>          |           |
| <b>Appendix E. Duty Cycle Plots</b>                          |           |



## History of this test report

| Report No. | Version | Description                                                                                                                                                          | Issued Date   |
|------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| FR960558E  | 01      | Initial issue of report                                                                                                                                              | Aug. 15, 2019 |
| FR960558E  | 02      | Revise the accessory mobile FCC ID                                                                                                                                   | Aug. 20, 2019 |
| FR960558E  | 03      | Remove description of out-of-band emission for KDB789033 D02 v02r01 G)2)c)                                                                                           | Sep. 02, 2019 |
| FR960558E  | 04      | <ol style="list-style-type: none"><li>Revise the description of EUT supported radio to 802.15.4.</li><li>Revised Connection Diagram of Test System config.</li></ol> | Sep. 20, 2019 |
|            |         |                                                                                                                                                                      |               |
|            |         |                                                                                                                                                                      |               |
|            |         |                                                                                                                                                                      |               |
|            |         |                                                                                                                                                                      |               |
|            |         |                                                                                                                                                                      |               |
|            |         |                                                                                                                                                                      |               |
|            |         |                                                                                                                                                                      |               |
|            |         |                                                                                                                                                                      |               |
|            |         |                                                                                                                                                                      |               |
|            |         |                                                                                                                                                                      |               |

## Summary of Test Result

| Report Clause | Ref Std. Clause     | Test Items                             | Result (PASS/FAIL) | Remark                                    |
|---------------|---------------------|----------------------------------------|--------------------|-------------------------------------------|
| 3.1           | 15.403(i)           | 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>1.58 dB at<br>5143.000 MHz |
| 3.5           | 15.207              | AC Conducted Emission                  | Pass               | Under limit<br>4.04 dB at<br>0.618 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: Ann Lee**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

| Product Feature                 |                                                                                                                  |
|---------------------------------|------------------------------------------------------------------------------------------------------------------|
| Equipment                       | Interactive internet streaming device                                                                            |
| Model Name                      | H2D                                                                                                              |
| FCC ID                          | A4R-H2D                                                                                                          |
| EUT supports Radios application | WLAN 11b/g/n HT20/HT40<br>WLAN 11a/n HT20/HT40<br>WLAN 11ac VHT20/VHT40/VHT80<br>Bluetooth BR/EDR/LE<br>802.15.4 |
| EUT Stage                       | Identical Prototype                                                                                              |

**Remark:** The above EUT's information was declared by manufacturer.

| EUT Information List |                |
|----------------------|----------------|
| No.                  | S/N            |
| #1                   | 96040EXANZZ144 |
| #2                   | 96010EXANZZ0YK |
| #3                   | 96050EXANZZ2T3 |

## 1.2 Product Specification of Equipment Under Test

| Standards-related Product Specification                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tx/Rx Frequency Range</b>                                 | 5180 MHz ~ 5240 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Maximum Output Power to Antenna<br/>&lt;CDD Mode&gt;</b>  | <b>MIMO &lt;Ant. 1+2+3+4&gt;</b><br>802.11a : 25.00 dBm / 0.3162 W<br>802.11n HT20 : 25.23 dBm / 0.3334 W<br>802.11n HT40 : 26.15 dBm / 0.4121 W<br>802.11ac VHT20: 25.13 dBm / 0.3258 W<br>802.11ac VHT40: 25.97 dBm / 0.3954 W<br>802.11ac VHT80: 18.90 dBm / 0.0776 W                                                                                                                                                                                                                                                                                         |
| <b>Maximum Output Power to Antenna<br/>&lt;TXBF Mode&gt;</b> | <b>MIMO &lt;Ant. 1+2+3+4&gt;</b><br>802.11ac VHT20: 24.98 dBm / 0.3148 W<br>802.11ac VHT40: 25.83 dBm / 0.3828 W<br>802.11ac VHT80: 17.91 dBm / 0.0618 W                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>99% Occupied Bandwidth<br/>&lt;CDD Mode&gt;</b>           | <b>MIMO &lt;Ant. 1&gt;</b><br>802.11a : 16.50 MHz<br>802.11n HT20 : 17.70 MHz<br>802.11n HT40 : 36.20 MHz<br>802.11n HT80 : 76.80 MHz<br><b>MIMO &lt;Ant. 2&gt;</b><br>802.11a : 16.50 MHz<br>802.11n HT20 : 17.70 MHz<br>802.11n HT40 : 36.30 MHz<br>802.11n HT80 : 77.04 MHz<br><b>MIMO &lt;Ant. 3&gt;</b><br>802.11a : 16.55 MHz<br>802.11n HT20 : 17.70 MHz<br>802.11n HT40 : 36.30 MHz<br>802.11n HT80 : 76.92 MHz<br><b>MIMO &lt;Ant. 4&gt;</b><br>802.11a : 16.55 MHz<br>802.11n HT20 : 17.65 MHz<br>802.11n HT40 : 36.40 MHz<br>802.11n HT80 : 76.80 MHz |
| <b>99% Occupied Bandwidth<br/>&lt;TXBF Mode&gt;</b>          | <b>MIMO &lt;Ant. 1&gt;</b><br>802.11ac VHT20 : 17.90 MHz<br>802.11ac VHT40 : 37.20 MHz<br>802.11ac VHT80 : 77.52 MHz<br><b>MIMO &lt;Ant. 2&gt;</b><br>802.11ac VHT20 : 18.05 MHz<br>802.11ac VHT40 : 37.50 MHz<br>802.11ac VHT80 : 78.36 MHz<br><b>MIMO &lt;Ant. 3&gt;</b><br>802.11ac VHT20 : 18.00 MHz<br>802.11ac VHT40 : 37.20 MHz<br>802.11ac VHT80 : 78.24 MHz<br><b>MIMO &lt;Ant. 4&gt;</b><br>802.11ac VHT20 : 17.95 MHz<br>802.11ac VHT40 : 36.90 MHz<br>802.11ac VHT80 : 77.28 MHz                                                                     |

| Standards-related Product Specification |                                                                                                                                                                                                          |        |        |        |        |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|
| <b>Antenna Type / Gain</b>              | <b>Ant. 1 :</b> PIFA Antenna with gain 3.49 dBi<br><b>Ant. 2 :</b> PIFA Antenna with gain 4.82 dBi<br><b>Ant. 3 :</b> PIFA Antenna with gain 4.46 dBi<br><b>Ant. 4 :</b> PIFA Antenna with gain 4.08 dBi |        |        |        |        |
| <b>Type of Modulation</b>               | 802.11a/n : OFDM (BPSK/QPSK/16QAM/64QAM)<br>802.11ac : OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)                                                                                                               |        |        |        |        |
| <b>Antenna Function Description</b>     |                                                                                                                                                                                                          | Ant. 1 | Ant. 2 | Ant. 3 | Ant. 4 |
|                                         | 802.11 a/n/ac                                                                                                                                                                                            | V      | V      | V      | V      |
|                                         | 802.11 a/n/ac MIMO                                                                                                                                                                                       | V      | V      | V      | V      |
|                                         | 802.11 ac TXBF                                                                                                                                                                                           | V      | V      | V      | V      |

**Note:**

1. MIMO Ant. 1+2+3+4 is a calculated result from sum of the power MIMO Ant. 1, MIMO Ant. 2, MIMO Ant. 3 and MIMO Ant. 4.
2. Ant. 1 & 2 and Ant. 3 & 4 are cross-polarization antenna.

### 1.3 Modification of EUT

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

### 1.4 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 | 03CH07-HY | DFS02-HY |

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

FCC designation No.: TW1190



## 1.5 Applicable Standards

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

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ FCC KDB 662911 D02 MIMO with Cross- Polarized Antennas v02r01.
- ♦ ANSI C63.10-2013

### **Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

## 2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).
- b. AC power line Conducted Emission was tested under maximum output power.

### 2.1 Carrier Frequency and Channel

| Frequency Band                       | Channel         | Freq.<br>(MHz) | Channel | Freq.<br>(MHz) |
|--------------------------------------|-----------------|----------------|---------|----------------|
| 5150-5250 MHz<br>Band 1<br>(U-NII-1) | 36              | 5180           | 44      | 5220           |
|                                      | 38*             | 5190           | 46*     | 5230           |
|                                      | 40              | 5200           | 48      | 5240           |
|                                      | 42 <sup>#</sup> | 5210           |         |                |

**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.

### CDD Mode

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

### TXBF Mode

| Modulation     | Data Rate |
|----------------|-----------|
| 802.11ac VHT20 | MCS0      |
| 802.11ac VHT40 | MCS0      |
| 802.11ac VHT80 | MCS0      |

| Test Cases            |                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| AC Conducted Emission | Mode 1 : WLAN (2.4GHz) Link + WLAN (5GHz) Link + Bluetooth Link + 802.15.4 Link + Wan Link + Lan Link + AC Adapter 1 |

### <CCD Mode>

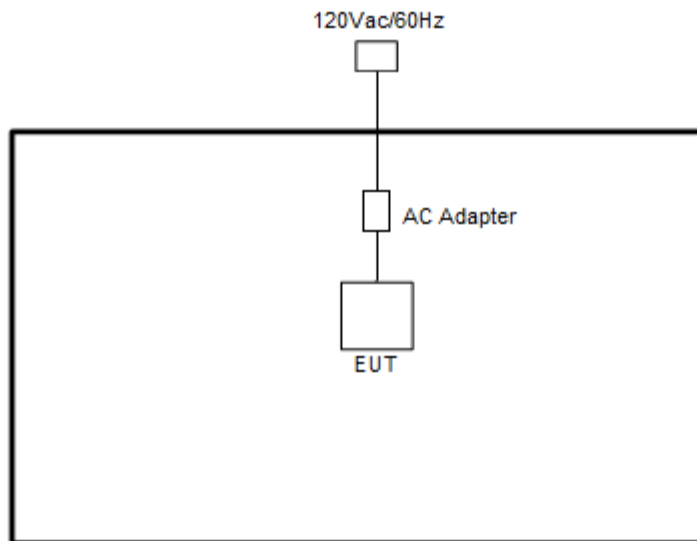
| Ch. # |        | Band I : 5150-5250 MHz |              |              |                |
|-------|--------|------------------------|--------------|--------------|----------------|
|       |        | 802.11a                | 802.11n HT20 | 802.11n HT40 | 802.11ac VHT80 |
| L     | Low    | 36                     | 36           | 38           | -              |
| M     | Middle | 40                     | 40           | -            | 42             |
| H     | High   | 48                     | 48           | 46           | -              |

### <TXBF Mode>

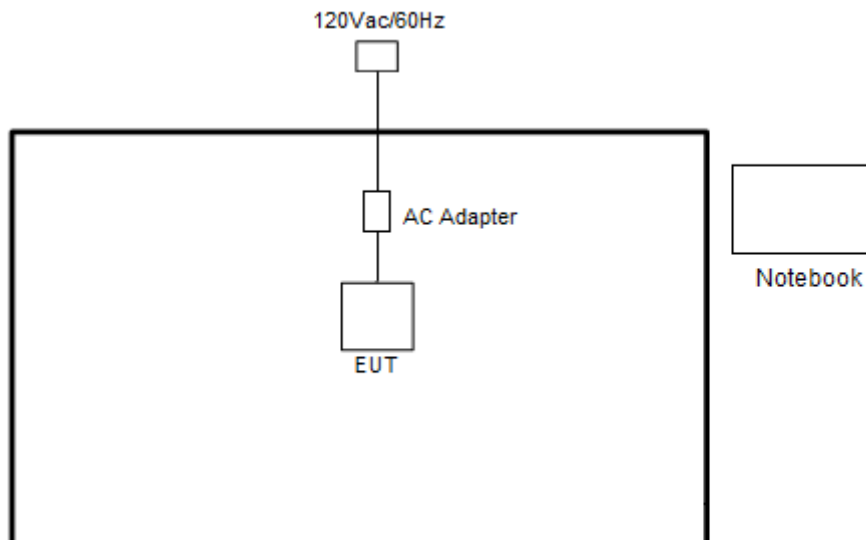
| Ch. # |        | Band I : 5150-5250 MHz |                |                |
|-------|--------|------------------------|----------------|----------------|
|       |        | 802.11ac VHT20         | 802.11ac VHT40 | 802.11ac VHT80 |
| L     | Low    | 36                     | 38             | -              |
| M     | Middle | 40                     | -              | 42             |
| H     | High   | 48                     | 46             | -              |

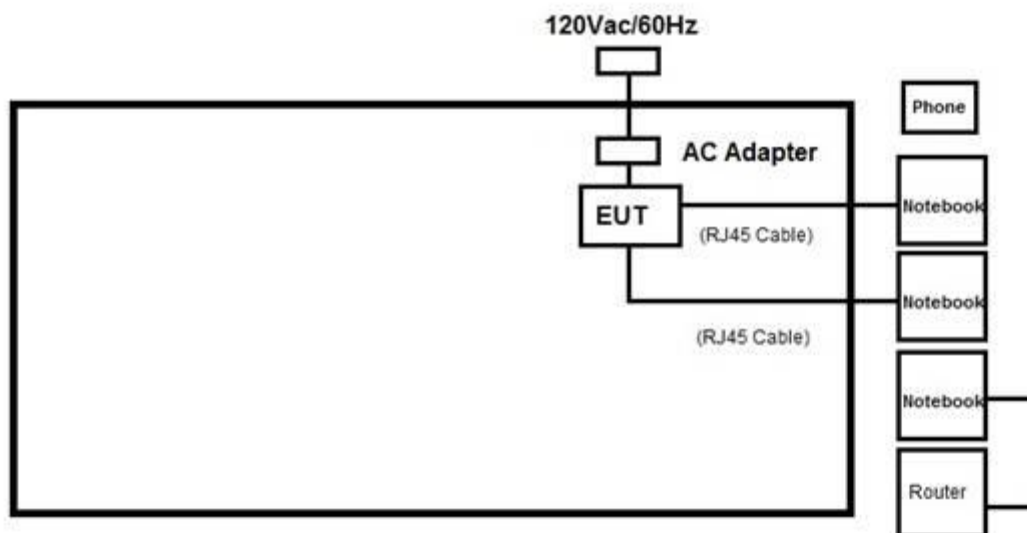
## 2.3 Connection Diagram of Test System

<CDD Mode>



<TXBF Mode>



**<AC Conducted Emission Mode>**

**2.4 Support Unit used in test configuration and system**

| Item | Equipment    | Trade Name | Model Name     | FCC ID                                       | Data Cable | Power Cord                                                 |
|------|--------------|------------|----------------|----------------------------------------------|------------|------------------------------------------------------------|
| 1.   | Notebook     | DELL       | P20G           | FCC DoC                                      | N/A        | AC I/P:<br>Unshielded, 1.2 m<br>DC O/P:<br>Shielded, 1.8 m |
| 2.   | 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 |
| 3.   | Notebook     | DELL       | Latitude E3340 | FCC DoC/<br>Contains FCC ID:<br>PD97260NGU   | N/A        | AC I/P:<br>Unshielded, 1.2 m<br>DC O/P:<br>Shielded, 1.8 m |
| 4.   | Mobile Phone | Apple      | A1687          | BCG-E2944A                                   | N/A        | N/A                                                        |
| 5.   | Router       | N/A        | N/A            | N/A                                          | N/A        | N/A                                                        |



## 2.5 EUT Operation Test Setup

The RF test items, utility “QRCT version: 4.0-00113” 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.

For TXBF mode, the modulation modes and data rates manipulated by the command lines in the engineering program made the EUT link to notebook by power under the normal operation. The “Putty” software tool was used to enable the EUT to transmit signals continuously.

## 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 26dB & 99% Occupied Bandwidth Measurement

##### 3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

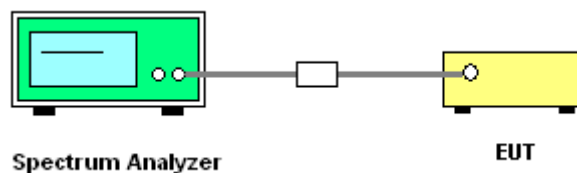
##### 3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

##### 3.1.3 Test Procedures

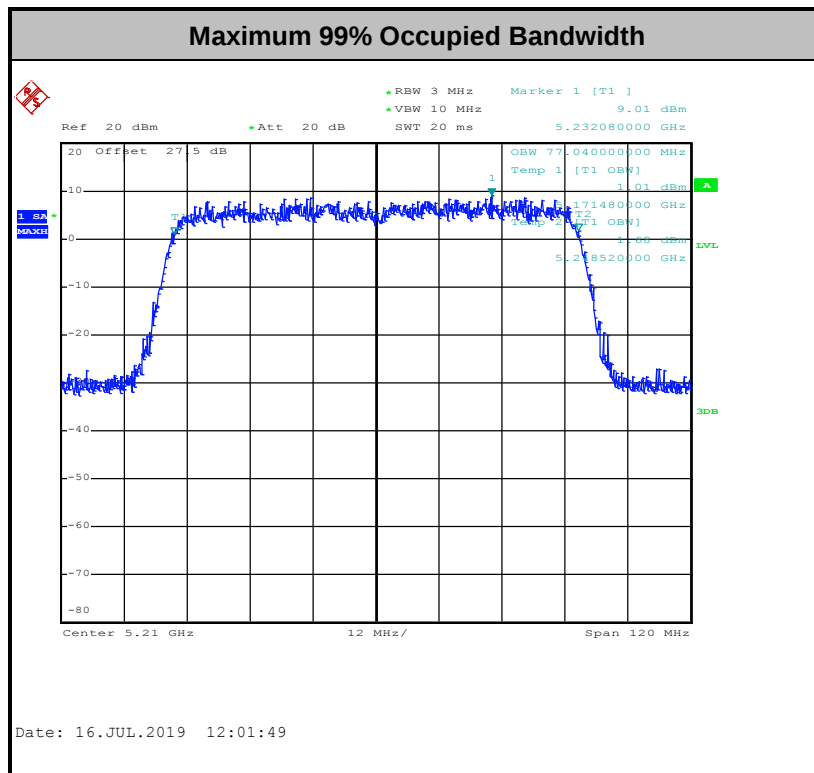
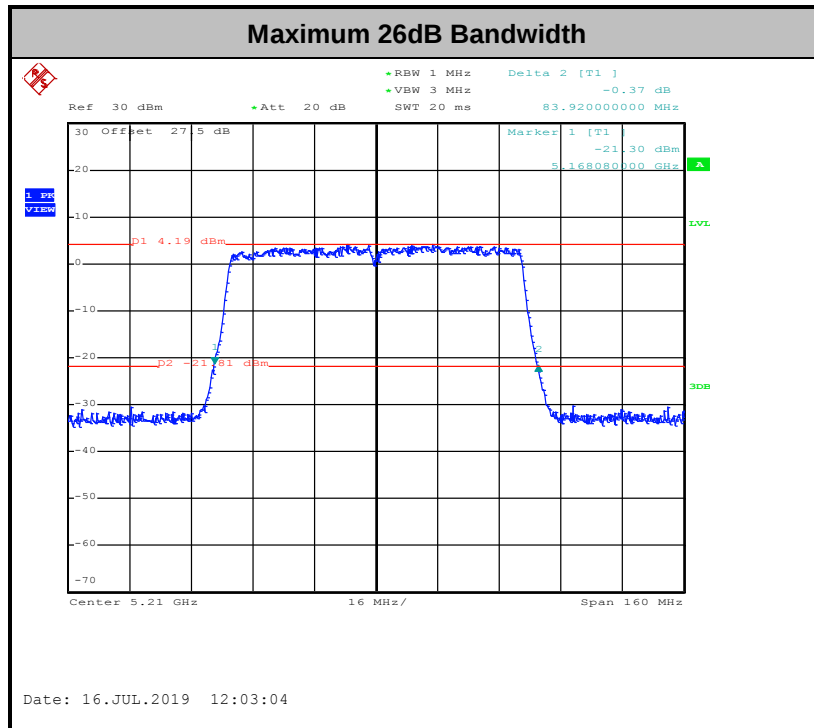
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW)  $\geq 3 * RBW$ .
8. Measure and record the results in the test report.

##### 3.1.4 Test Setup

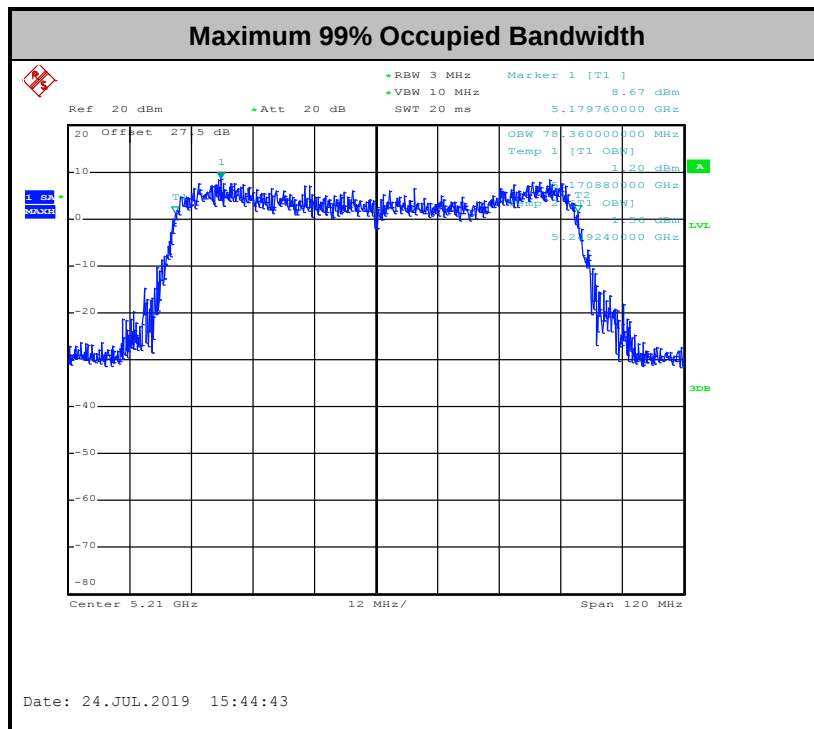
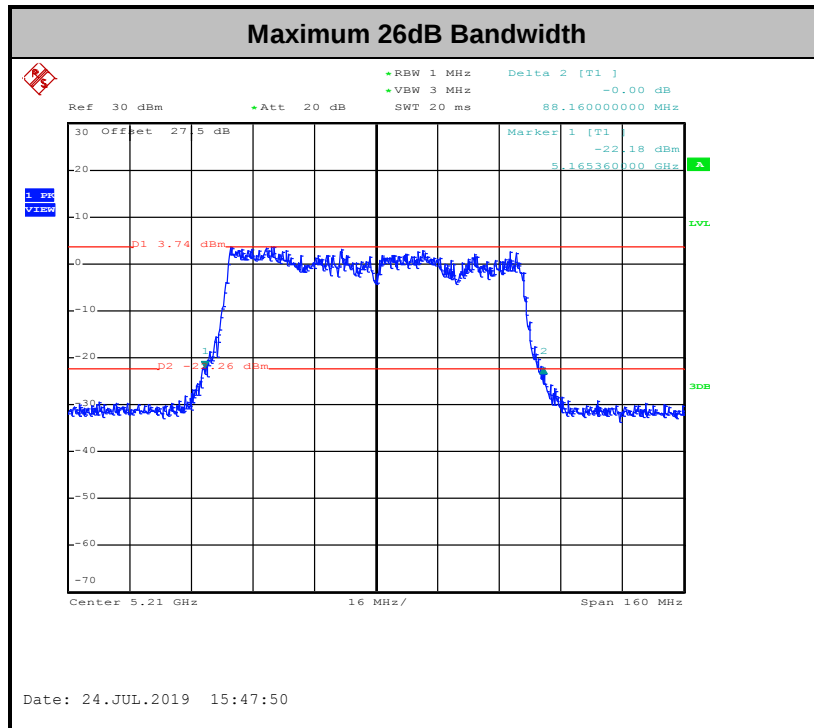


##### 3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

**<CDD Mode>**


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

**<TXBF Modes>**


**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**

#### **<FCC 14-30 CFR 15.407>**

##### **For the 5.15–5.25 GHz bands:**

- For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

##### **For the 5.25–5.725 GHz bands:**

- The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz.

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.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

### **3.2.2 Measuring Instruments**

See list of measuring equipment of this test report.

### 3.2.3 Test Procedures

#### <CDD Modes>

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

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

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

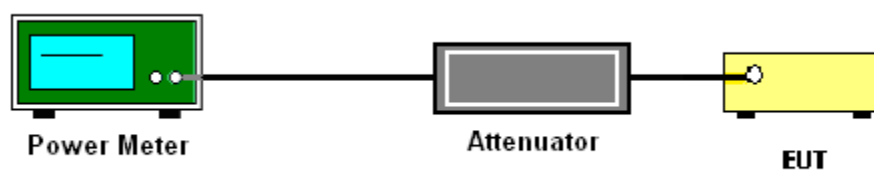
#### <TXBF Modes>

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 for TXBF modes.

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 at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

### 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**

##### **<FCC 14-30 CFR 15.407>**

##### **For the 5.15–5.25 GHz bands:**

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1.0 MHz band.

##### **For the 5.25–5.725 GHz bands:**

The maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz 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-3 #

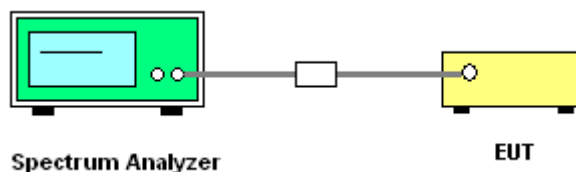
(power averaging (rms) detection with max hold):

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
  - Set RBW = 1 MHz.
  - Set VBW  $\geq$  3 MHz
  - Number of points in sweep  $\geq$  2 Span / RBW.
  - Sweep time  $\leq$  (number of points in sweep)  $\times$  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.
  - Detector = power averaging (rms).
  - Trace mode = max hold.
  - Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
  2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
  3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

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

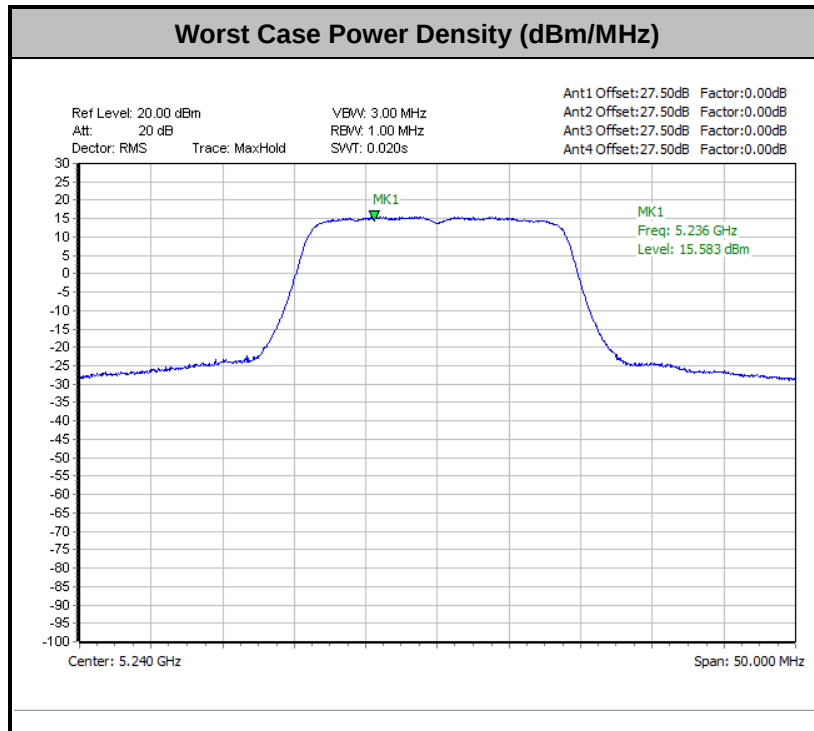
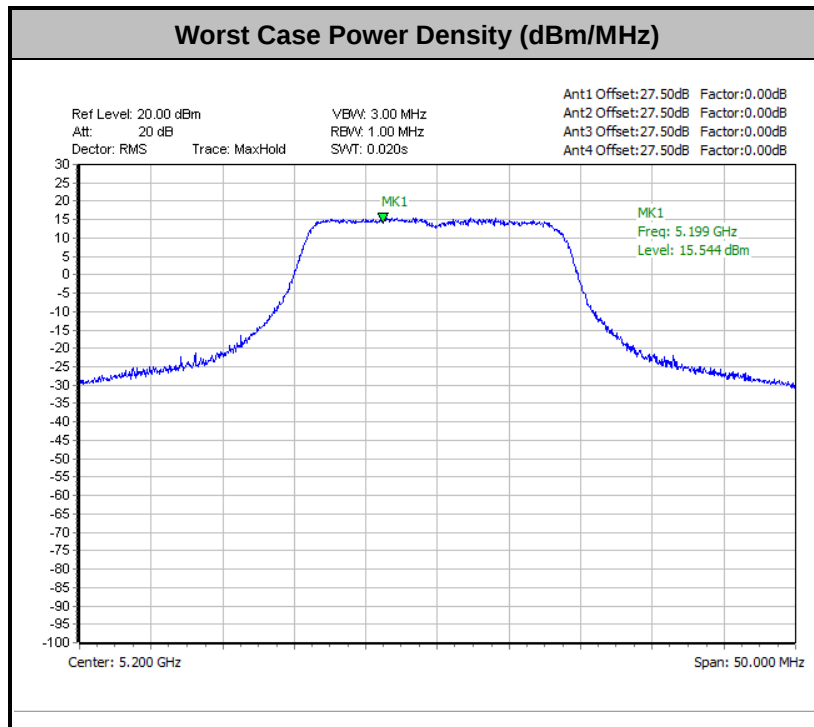
The total final Power Spectral Density is from a device with 4 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2, output 3 and output 4 to obtain the value for the first frequency bin of the summed spectrum.

### 3.3.4 Test Setup



### 3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

**<CDD Modes>****<TXBF Modes>**

### 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 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

- (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) Sections 15.407(b)(1-3) specifies the unwanted emissions limit 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.
- (ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

### 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

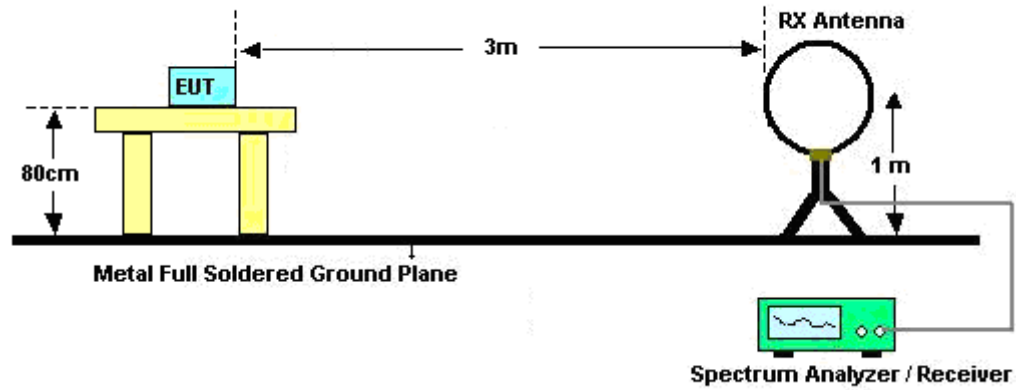
- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

(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.

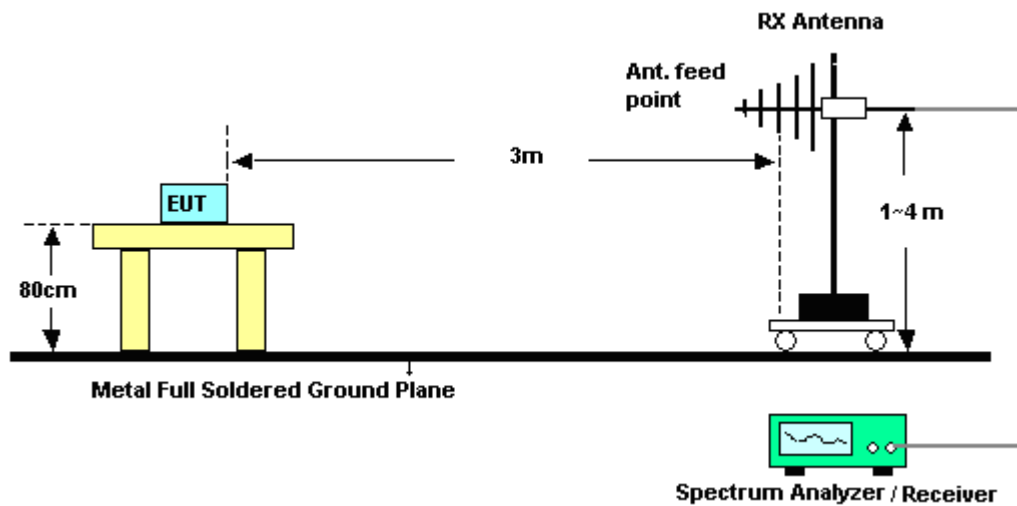
### 3.4.4 Test Setup

For radiated emissions below 30MHz

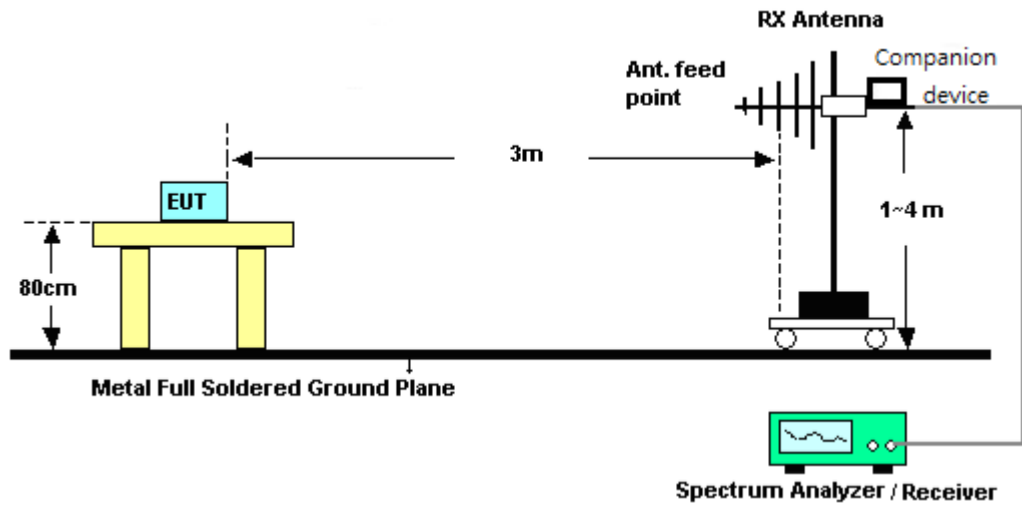


For radiated emissions from 30MHz to 1GHz

<CDD Mode>

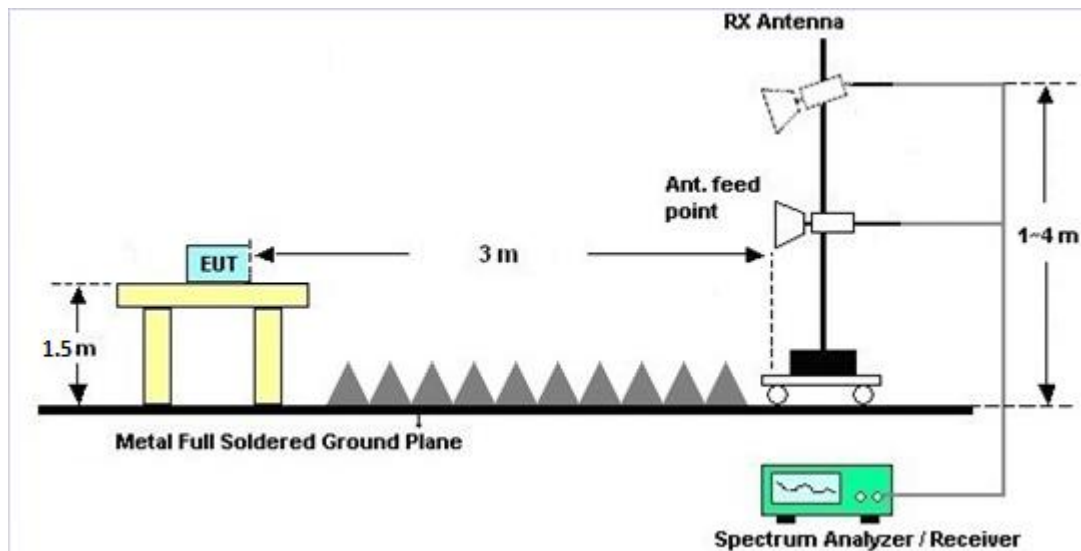


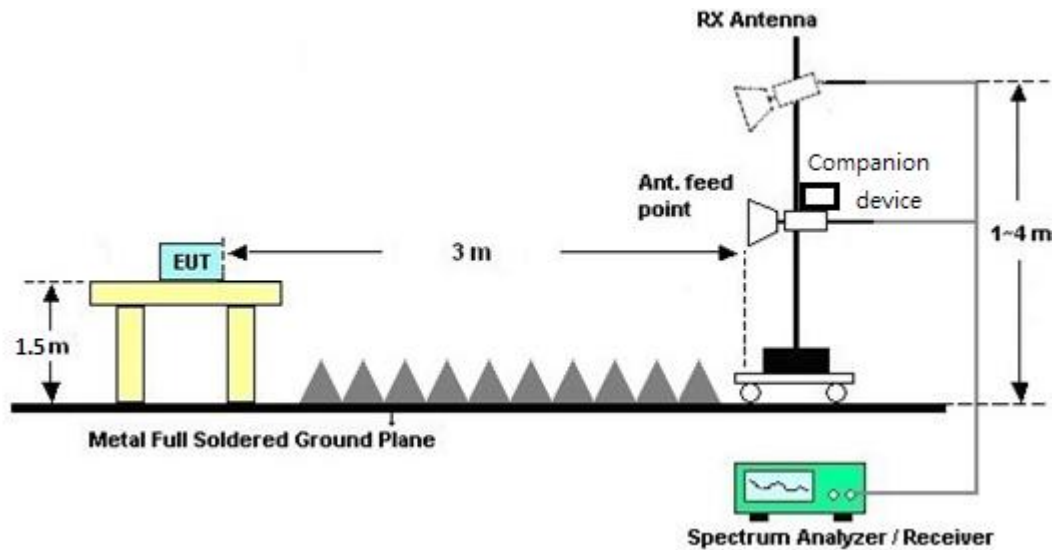
### <TXBF Modes>



For radiated emissions above 1GHz

### <CDD Mode>



**<TXBF Modes>**

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

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

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 Spurious at Band Edges**

Please refer to Appendix C and D.

**3.4.7 Duty Cycle**

Please refer to Appendix E.

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

Please refer to Appendix C and D.

### 3.5 AC Conducted Emission Measurement

#### 3.5.1 Limit of AC Conducted Emission

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

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

\*Decreases with the logarithm of the frequency.

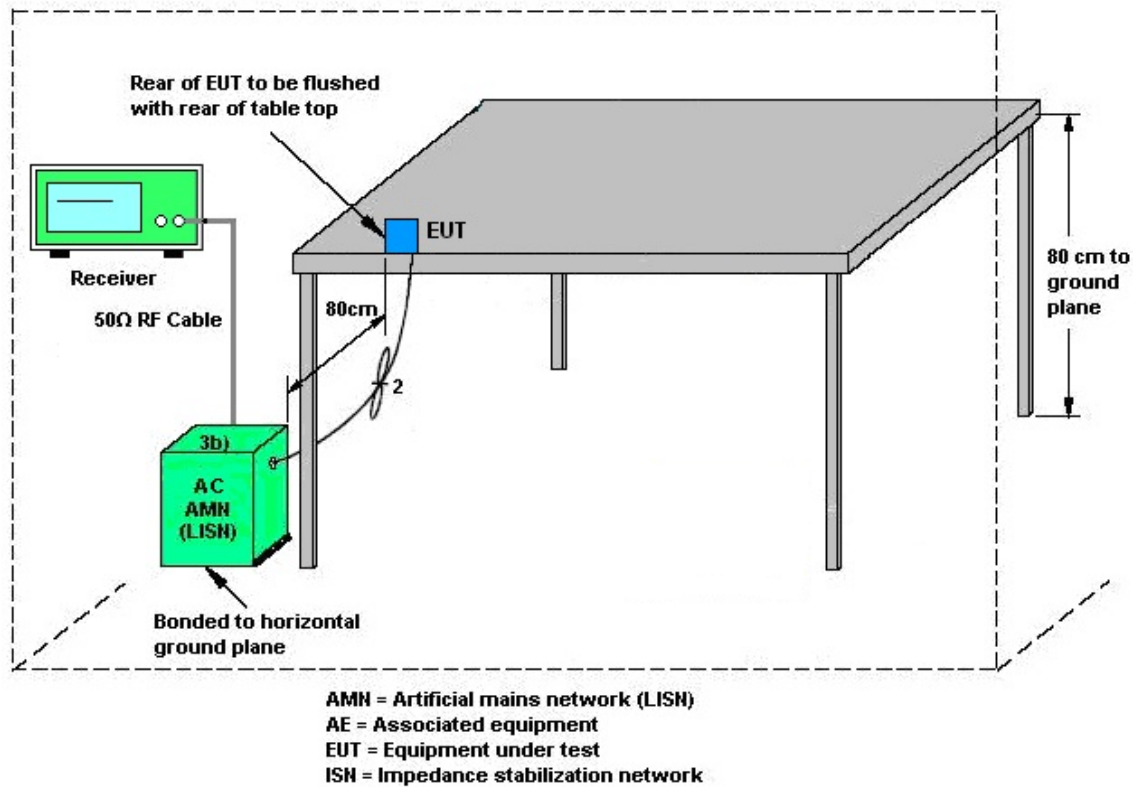
#### 3.5.2 Measuring Instruments

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.

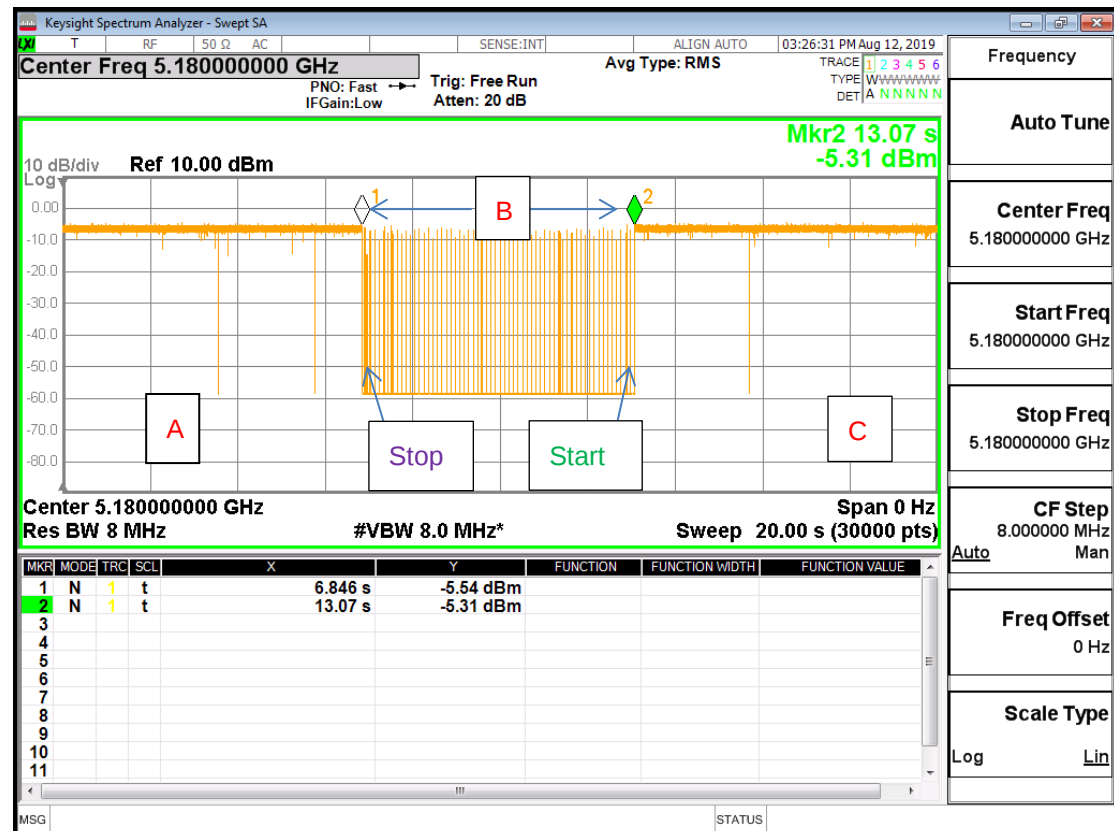
While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving.

- 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.



5180MHz



Note: The control / signaling 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

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

FCC KDB 662911 D02 MIMO with Cross-Polarized Antennas v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = GANT + Array Gain, where Array Gain is as follows.

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

Array Gain =  $10 \log(\text{NANT}/\text{NSS}=1)$  dB.

For power measurements on IEEE 802.11 devices,

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

Directional gain may be calculated by using the formulas applicable to equal gain antennas with

GANT set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain GANT is set equal to the antenna having the highest gain, i.e.,

F)2)f)i) & F)2)c)ii)

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

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

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

| <CDD Modes>                                                  |          |       |            |           |
|--------------------------------------------------------------|----------|-------|------------|-----------|
| Antenna polarization                                         | Vertical |       | Horizontal |           |
| 5.2 Band                                                     | Ant 1    | Ant 2 | Ant 3      | Ant 4     |
|                                                              | (dBi)    | (dBi) | (dBi)      | (dBi)     |
|                                                              | 3.49     | 4.82  | 4.46       | 4.08      |
| Note:Ant 1 & 2 and Ant 3 & 4 are cross-polarization antenna. |          |       |            |           |
| 5.2G Band Antenna                                            | DG       | DG    | Power      | PSD       |
|                                                              | for      | for   | Limit      | Limit     |
|                                                              | Power    | PSD   | Reduction  | Reduction |
|                                                              | (dBi)    | (dBi) | (dB)       | (dB)      |
| 1+2+3+4                                                      | 4.82     | 7.28  | 0.00       | 1.28      |

*Power Limit Reduction = DG(Power) – 6dBi, ( min = 0 )*

*PSD Limit Reduction = DG(PSD) – 6dBi, ( min = 0 )*

**TXBF modes**

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

FCC KDB 662911 D02 MIMO with Cross-Polarized Antennas v02r01

Directional gain is calculated as

$$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

$N_{SS}$  = the number of independent spatial streams of data;

$N_{ANT}$  = the total number of antennas

$g_{j,k} = 10^{G_k / 20}$  if the  $k$ th antenna is being fed by spatial stream  $j$ , or zero if it is not;

$G_k$  is the gain in dBi of the  $k$ th antenna.

The EUT supports beamforming for 802.11ac modes.

The directional gain calculation is following F)2)e)ii) & F)2)c)ii) of KDB 662911 D01 v02r01.

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

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

| Antenna polarization                                         | Vertical |       | Horizontal |           |
|--------------------------------------------------------------|----------|-------|------------|-----------|
| 5.2G Band                                                    | Ant 1    | Ant 2 | Ant 3      | Ant 4     |
|                                                              | (dBi)    | (dBi) | (dBi)      | (dBi)     |
|                                                              | 3.49     | 4.82  | 4.46       | 4.08      |
| Note:Ant 1 & 2 and Ant 3 & 4 are cross-polarization antenna. |          |       |            |           |
| 5.2G Band Antenna                                            | DG       | DG    | Power      | PSD       |
|                                                              | for      | for   | Limit      | Limit     |
|                                                              | Power    | PSD   | Reduction  | Reduction |
|                                                              | (dBi)    | (dBi) | (dB)       | (dB)      |
| 1+2+3+4                                                      | 7.28     | 7.28  | 1.28       | 1.28      |

*Power Limit Reduction = DG(Power) – 6dBi, ( min = 0 )*

*PSD Limit Reduction = DG(PSD) – 6dBi, ( min = 0 )*



## 4 List of Measuring Equipment

| Instrument                | Manufacturer      | Model No.                         | Serial No.                            | Characteristics                     | Calibration Date | Test Date                      | Due Date      | Remark                   |
|---------------------------|-------------------|-----------------------------------|---------------------------------------|-------------------------------------|------------------|--------------------------------|---------------|--------------------------|
| EMI Test Receiver         | Agilent           | N9038A(MXE)                       | MY53290053                            | 20Hz~26.5GHz                        | Jan. 23, 2019    | Jun.10, 2019~<br>Jul. 26, 2019 | Jan. 22, 2020 | Radiation<br>(03CH07-HY) |
| Spectrum Analyzer         | Agilent           | N9010A                            | MY53470118                            | 10Hz~44GHz                          | Apr. 18, 2019    | Jun.10, 2019~<br>Jul. 26, 2019 | Apr. 17, 2020 | Radiation<br>(03CH07-HY) |
| Loop Antenna              | Rohde & Schwarz   | HFH2-Z2                           | 100315                                | 9 kHz~30 MHz                        | Jan. 11, 2019    | Jun.10, 2019~<br>Jul. 26, 2019 | Jan. 10, 2020 | Radiation<br>(03CH07-HY) |
| Bilog Antenna             | TESEQ             | CBL 6111D &<br>00800N1D01N<br>-06 | 35419 & 03                            | 30MHz~1GHz                          | Apr. 30, 2019    | Jun.10, 2019~<br>Jul. 26, 2019 | Apr. 29, 2020 | Radiation<br>(03CH07-HY) |
| Double Ridge Horn Antenna | ESCO              | 3117                              | 00075962                              | 1GHz ~ 18GHz                        | Dec. 03, 2018    | Jun.10, 2019~<br>Jul. 26, 2019 | Dec. 02, 2019 | Radiation<br>(03CH07-HY) |
| SHF-EHF Horn Antenna      | SCHWARZBECK       | BBHA 9170                         | BBHA917025<br>1                       | 18GHz~40GHz                         | Nov. 20, 2018    | Jun.10, 2019~<br>Jul. 26, 2019 | Nov. 19, 2019 | Radiation<br>(03CH07-HY) |
| Preamplifier              | COM-POWER         | PA-103A                           | 161241                                | 10MHz~1GHz                          | May 20, 2019     | Jun.10, 2019~<br>Jul. 26, 2019 | May 19, 2020  | Radiation<br>(03CH07-HY) |
| Preamplifier              | MITEQ             | AMF-7D-0010<br>1800-30-10P        | 1590075                               | 1GHz~18GHz                          | Apr. 24, 2019    | Jun.10, 2019~<br>Jul. 26, 2019 | Apr. 23, 2020 | Radiation<br>(03CH07-HY) |
| Preamplifier              | Agilent           | 8449B                             | 3008A02362                            | 1GHz~26.5GHz                        | Nov. 02, 2018    | Jun.10, 2019~<br>Jul. 26, 2019 | Nov. 01, 2019 | Radiation<br>(03CH07-HY) |
| Preamplifier              | MITEQ             | TTA1840-35-H<br>G                 | 1871923                               | 18GHz~40GHz,<br>VSWR : 2.5:1<br>max | N/A              | Jun.10, 2019~<br>Jul. 26, 2019 | N/A           | Radiation<br>(03CH07-HY) |
| Filter                    | Microwave         | H1G013G1                          | SN477215                              | 1GHz High Pass<br>Filter            | Nov. 02, 2018    | Jun.10, 2019~<br>Jul. 26, 2019 | Nov. 01, 2019 | Radiation<br>(03CH07-HY) |
| Filter                    | Wainwright        | WLKS1200-8S<br>S                  | SN3                                   | 1.2GHz Low<br>Pass Filter           | Nov. 02, 2018    | Jun.10, 2019~<br>Jul. 26, 2019 | Nov. 01, 2019 | Radiation<br>(03CH07-HY) |
| Filter                    | Microwave         | H3G018G1                          | SN477220                              | 3GHz High Pass<br>Filter            | Nov. 02, 2018    | Jun.10, 2019~<br>Jul. 26, 2019 | Nov. 01, 2019 | Radiation<br>(03CH07-HY) |
| RF Cable                  | HUBER +<br>SUHNER | SUCOFLEX<br>104                   | MY24971/4,<br>MY28655/4               | 9kHz~30MHz                          | Feb. 26, 2019    | Jun.10, 2019~<br>Jul. 26, 2019 | Feb. 25, 2020 | Radiation<br>(03CH07-HY) |
| RF Cable                  | HUBER +<br>SUHNER | SUCOFLEX<br>104                   | MY28655/4,<br>MY24971/4,<br>MY15682/4 | 30MHz~1GHz                          | Feb. 26, 2019    | Jun.10, 2019~<br>Jul. 26, 2019 | Feb. 25, 2020 | Radiation<br>(03CH07-HY) |
| RF Cable                  | HUBER +<br>SUHNER | SUCOFLEX<br>104                   | MY28655/4,<br>MY24971/4,<br>MY15682/4 | 1GHz~18GHz                          | Feb. 26, 2019    | Jun.10, 2019~<br>Jul. 26, 2019 | Feb. 25, 2020 | Radiation<br>(03CH07-HY) |
| RF Cable                  | HUBER +<br>SUHNER | SUCOFLEX<br>102                   | MY2858/2                              | 18GHz~40GHz                         | Feb. 26, 2019    | Jun.10, 2019~<br>Jul. 26, 2019 | Feb. 25, 2020 | Radiation<br>(03CH07-HY) |
| Antenna Mast              | Max-Full          | MFA520BS                          | N/A                                   | 1m~4m                               | N/A              | Jun.10, 2019~<br>Jul. 26, 2019 | N/A           | Radiation<br>(03CH07-HY) |
| Turn Table                | ChainTek          | Chaintek 3000                     | N/A                                   | 0~360 Degree                        | N/A              | Jun.10, 2019~<br>Jul. 26, 2019 | N/A           | Radiation<br>(03CH07-HY) |
| Software                  | Audix             | E3<br>6.2009-8-24                 | 80504004656<br>H                      | N/A                                 | N/A              | Jun.10, 2019~<br>Jul. 26, 2019 | N/A           | Radiation<br>(03CH07-HY) |



| Instrument               | Manufacturer    | Model No.    | Serial No.        | Characteristics | Calibration Date | Test Date                       | Due Date      | Remark               |
|--------------------------|-----------------|--------------|-------------------|-----------------|------------------|---------------------------------|---------------|----------------------|
| AC Power Source          | ChainTek        | APC-1000W    | N/A               | N/A             | N/A              | Jun. 18, 2019                   | N/A           | Conduction (CO05-HY) |
| EMI Test Receiver        | Rohde & Schwarz | ESR3         | 102388            | 9kHz~3.6GHz     | Nov. 12, 2018    | Jun. 18, 2019                   | Nov. 11, 2019 | Conduction (CO05-HY) |
| LISN                     | Rohde & Schwarz | ENV216       | 100080            | 9kHz~30MHz      | Nov. 14, 2018    | Jun. 18, 2019                   | Nov. 13, 2019 | Conduction (CO05-HY) |
| LISN                     | Rohde & Schwarz | ENV216       | 100081            | 9kHz~30MHz      | Nov. 09, 2018    | Jun. 18, 2019                   | Nov. 08, 2019 | Conduction (CO05-HY) |
| Software                 | Rohde & Schwarz | EMC32 V10.30 | N/A               | N/A             | N/A              | Jun. 18, 2019                   | N/A           | Conduction (CO05-HY) |
| LF Cable                 | HUBER + SUHNER  | RG-214/U     | LF01              | N/A             | Dec. 31, 2018    | Jun. 18, 2019                   | Dec. 30, 2019 | Conduction (CO05-HY) |
| Pulse Limiter            | Rohde & Schwarz | ESH3-Z2      | 100851            | N/A             | Dec. 31, 2018    | Jun. 18, 2019                   | Dec. 30, 2019 | Conduction (CO05-HY) |
| Spectrum Analyzer        | Keysight        | N9010A       | MY560704<br>12    | 10Hz~7GHz       | Aug. 16, 2018    | Aug. 12, 2019                   | Aug. 15, 2019 | DFS (DFS02-HY)       |
| <b>&lt;CCD Mode&gt;</b>  |                 |              |                   |                 |                  |                                 |               |                      |
| Power Sensor             | DARE            | RPR3006W     | 13I00030S<br>NO32 | 9kHz~6GHz       | Dec. 03, 2018    | Jul. 10, 2019~<br>Jul. 16, 2019 | Dec. 02, 2019 | Conducted (TH05-HY)  |
| Spectrum Analyzer        | Rohde & Schwarz | FSP40        | 100057            | 9kHz~40GHz      | Nov. 21, 2018    | Jul. 10, 2019~<br>Jul. 16, 2019 | Nov. 20, 2019 | Conducted (TH05-HY)  |
| Switch Box & RF Cable    | Burgeon         | ETF-058      | EC120838<br>2     | N/A             | Mar. 27, 2019    | Jul. 10, 2019~<br>Jul. 16, 2019 | Mar. 26, 2020 | Conducted (TH05-HY)  |
| <b>&lt;TXBF Mode&gt;</b> |                 |              |                   |                 |                  |                                 |               |                      |
| Power Sensor             | DARE            | RPR3006W     | 13I00030S<br>NO32 | 9kHz~6GHz       | Dec. 03, 2018    | Jul. 23, 2019~<br>Jul. 26, 2019 | Dec. 02, 2019 | Conducted (TH05-HY)  |
| Spectrum Analyzer        | Rohde & Schwarz | FSP40        | 100057            | 9kHz~40GHz      | Nov. 21, 2018    | Jul. 23, 2019~<br>Jul. 26, 2019 | Nov. 20, 2019 | Conducted (TH05-HY)  |
| Switch Box & RF Cable    | Burgeon         | ETF-058      | EC120838<br>2     | N/A             | Mar. 27, 2019    | Jul. 23, 2019~<br>Jul. 26, 2019 | Mar. 26, 2020 | Conducted (TH05-HY)  |



## 5 Uncertainty of Evaluation

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

|                                                                         |     |
|-------------------------------------------------------------------------|-----|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 2.2 |
|-------------------------------------------------------------------------|-----|

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

|                                                                         |     |
|-------------------------------------------------------------------------|-----|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.7 |
|-------------------------------------------------------------------------|-----|

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

|                                                                         |     |
|-------------------------------------------------------------------------|-----|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.5 |
|-------------------------------------------------------------------------|-----|

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

|                                                                         |     |
|-------------------------------------------------------------------------|-----|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.2 |
|-------------------------------------------------------------------------|-----|

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

| Band I |           |                 |     |                |                             |       |       |       |                           |       |       |       |                                            |       |       |       |
|--------|-----------|-----------------|-----|----------------|-----------------------------|-------|-------|-------|---------------------------|-------|-------|-------|--------------------------------------------|-------|-------|-------|
| Mod.   | Data Rate | N <sub>TX</sub> | CH. | Freq.<br>(MHz) | 26 dB<br>Bandwidth<br>(MHz) |       |       |       | 99%<br>Bandwidth<br>(MHz) |       |       |       | IC 99%<br>Bandwidth<br>EIRP Limit<br>(dBm) |       |       |       |
|        |           |                 |     |                | Ant 1                       | Ant 2 | Ant 3 | Ant 4 | Ant 1                     | Ant 2 | Ant 3 | Ant 4 | Ant 1                                      | Ant 2 | Ant 3 | Ant 4 |
| 11a    | 6Mbps     | 4               | 36  | 5180           | 20.90                       | 21.05 | 21.00 | 20.90 | 16.45                     | 16.50 | 16.55 | 16.50 | 22.16                                      | 22.17 | 22.19 | 22.17 |
| 11a    | 6Mbps     | 4               | 40  | 5200           | 21.00                       | 21.00 | 21.30 | 21.00 | 16.50                     | 16.50 | 16.55 | 16.55 | 22.17                                      | 22.17 | 22.19 | 22.19 |
| 11a    | 6Mbps     | 4               | 48  | 5240           | 21.05                       | 21.15 | 21.15 | 21.05 | 16.50                     | 16.50 | 16.50 | 16.55 | 22.17                                      | 22.17 | 22.17 | 22.19 |
| HT20   | MCS0      | 4               | 36  | 5180           | 21.80                       | 21.65 | 22.00 | 22.00 | 17.70                     | 17.65 | 17.70 | 17.65 | 22.48                                      | 22.47 | 22.48 | 22.47 |
| HT20   | MCS0      | 4               | 40  | 5200           | 21.80                       | 21.60 | 21.96 | 21.80 | 17.65                     | 17.70 | 17.65 | 17.65 | 22.47                                      | 22.48 | 22.47 | 22.47 |
| HT20   | MCS0      | 4               | 48  | 5240           | 21.90                       | 21.75 | 22.10 | 22.05 | 17.70                     | 17.65 | 17.70 | 17.65 | 22.48                                      | 22.47 | 22.48 | 22.47 |
| HT40   | MCS0      | 4               | 38  | 5190           | 40.54                       | 40.50 | 40.86 | 40.86 | 36.20                     | 36.30 | 36.30 | 36.30 | 23.01                                      | 23.01 | 23.01 | 23.01 |
| HT40   | MCS0      | 4               | 46  | 5230           | 40.68                       | 40.68 | 41.04 | 40.93 | 36.20                     | 36.20 | 36.30 | 36.40 | 23.01                                      | 23.01 | 23.01 | 23.01 |
| VHT80  | MCS0      | 4               | 42  | 5210           | 83.92                       | 83.52 | 83.64 | 83.52 | 76.80                     | 77.04 | 76.92 | 76.80 | 23.01                                      | 23.01 | 23.01 | 23.01 |

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

| FCC Band I |           |                 |     |             |         |                                                |       |       |       |       |                       |          |                      |                            |           |
|------------|-----------|-----------------|-----|-------------|---------|------------------------------------------------|-------|-------|-------|-------|-----------------------|----------|----------------------|----------------------------|-----------|
| Mod.       | Data Rate | N <sub>TX</sub> | CH. | Freq. (MHz) | Ant     | Average Conducted Power with duty factor (dBm) |       |       |       |       | FCC Power Limit (dBm) | DG (dBi) | FCC EIRP Power (dBm) | FCC EIRP Power Limit (dBm) | Pass/Fail |
|            |           |                 |     |             |         | Ant 1                                          | Ant 2 | Ant 3 | Ant 4 | SUM   |                       |          |                      |                            |           |
| 11a        | 6Mbps     | 4               | 36  | 5180        | 1+2+3+4 | 18.00                                          | 18.00 | 17.70 | 18.20 | 24.00 | 30.00                 | 4.82     | 28.82                | -                          | Pass      |
| 11a        | 6Mbps     | 4               | 40  | 5200        | 1+2+3+4 | 18.60                                          | 18.80 | 18.70 | 19.20 | 24.85 | 30.00                 | 4.82     | 29.67                | -                          | Pass      |
| 11a        | 6Mbps     | 4               | 48  | 5240        | 1+2+3+4 | 18.80                                          | 19.20 | 18.90 | 19.00 | 25.00 | 30.00                 | 4.82     | 29.82                | -                          | Pass      |
| HT20       | MCS0      | 4               | 36  | 5180        | 1+2+3+4 | 18.60                                          | 18.80 | 18.50 | 18.60 | 24.65 | 30.00                 | 4.82     | 29.47                | -                          | Pass      |
| HT20       | MCS0      | 4               | 40  | 5200        | 1+2+3+4 | 18.40                                          | 18.50 | 18.70 | 18.70 | 24.60 | 30.00                 | 4.82     | 29.42                | -                          | Pass      |
| HT20       | MCS0      | 4               | 48  | 5240        | 1+2+3+4 | 19.00                                          | 19.60 | 19.00 | 19.20 | 25.23 | 30.00                 | 4.82     | 30.05                | -                          | Pass      |
| HT40       | MCS0      | 4               | 38  | 5190        | 1+2+3+4 | 14.00                                          | 14.30 | 14.10 | 14.10 | 20.15 | 30.00                 | 4.82     | 24.97                | -                          | Pass      |
| HT40       | MCS0      | 4               | 46  | 5230        | 1+2+3+4 | 19.80                                          | 20.10 | 20.30 | 20.30 | 26.15 | 30.00                 | 4.82     | 30.97                | -                          | Pass      |
| VHT20      | MCS0      | 4               | 36  | 5180        | 1+2+3+4 | 18.50                                          | 18.70 | 18.30 | 18.40 | 24.50 | 30.00                 | 4.82     | 29.32                | -                          | Pass      |
| VHT20      | MCS0      | 4               | 40  | 5200        | 1+2+3+4 | 18.40                                          | 18.40 | 18.60 | 18.60 | 24.52 | 30.00                 | 4.82     | 29.34                | -                          | Pass      |
| VHT20      | MCS0      | 4               | 48  | 5240        | 1+2+3+4 | 18.90                                          | 19.50 | 18.90 | 19.10 | 25.13 | 30.00                 | 4.82     | 29.95                | -                          | Pass      |
| VHT40      | MCS0      | 4               | 38  | 5190        | 1+2+3+4 | 13.90                                          | 14.30 | 14.00 | 13.90 | 20.05 | 30.00                 | 4.82     | 24.87                | -                          | Pass      |
| VHT40      | MCS0      | 4               | 46  | 5230        | 1+2+3+4 | 19.70                                          | 20.00 | 20.10 | 20.00 | 25.97 | 30.00                 | 4.82     | 30.79                | -                          | Pass      |
| VHT80      | MCS0      | 4               | 42  | 5210        | 1+2+3+4 | 13.20                                          | 12.70 | 12.70 | 12.90 | 18.90 | 30.00                 | 4.82     | 23.72                | -                          | Pass      |

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

| FCC Band I |           |     |     |             |         |                                        |                     |          |  |            |
|------------|-----------|-----|-----|-------------|---------|----------------------------------------|---------------------|----------|--|------------|
| Mod.       | Data Rate | NTX | CH. | Freq. (MHz) | Ant     | Average PSD with Duty Factor (dBm/MHz) | PSD Limit (dBm/MHz) | DG (dBi) |  | Pass /Fail |
| 11a        | 6Mbps     | 4   | 36  | 5180        | 1+2+3+4 | 14.14                                  | 15.72               | 7.28     |  | Pass       |
| 11a        | 6Mbps     | 4   | 40  | 5200        | 1+2+3+4 | 15.38                                  | 15.72               | 7.28     |  | Pass       |
| 11a        | 6Mbps     | 4   | 48  | 5240        | 1+2+3+4 | 15.38                                  | 15.72               | 7.28     |  | Pass       |
| HT20       | MCS0      | 4   | 36  | 5180        | 1+2+3+4 | 15.01                                  | 15.72               | 7.28     |  | Pass       |
| HT20       | MCS0      | 4   | 40  | 5200        | 1+2+3+4 | 15.23                                  | 15.72               | 7.28     |  | Pass       |
| HT20       | MCS0      | 4   | 48  | 5240        | 1+2+3+4 | 15.58                                  | 15.72               | 7.28     |  | Pass       |
| HT40       | MCS0      | 4   | 38  | 5190        | 1+2+3+4 | 7.10                                   | 15.72               | 7.28     |  | Pass       |
| HT40       | MCS0      | 4   | 46  | 5230        | 1+2+3+4 | 13.63                                  | 15.72               | 7.28     |  | Pass       |
| VHT80      | MCS0      | 4   | 42  | 5210        | 1+2+3+4 | 2.35                                   | 15.72               | 7.28     |  | Pass       |

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

&lt;TXBF Mode&gt;

|                |                     |                    |       |    |
|----------------|---------------------|--------------------|-------|----|
| Test Engineer: | Luffy Lin           | Temperature:       | 21~25 | °C |
| Test Date:     | 2019/7/23~2019/7/26 | Relative Humidity: | 51~54 | %  |

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

| Band I |           |     |     |             |                       |       |       |       |                     |       |       |       |                                   |       |       |       |
|--------|-----------|-----|-----|-------------|-----------------------|-------|-------|-------|---------------------|-------|-------|-------|-----------------------------------|-------|-------|-------|
| Mod.   | Data Rate | NTx | CH. | Freq. (MHz) | 26 dB Bandwidth (MHz) |       |       |       | 99% Bandwidth (MHz) |       |       |       | IC 99% Bandwidth EIRP Limit (dBm) |       |       |       |
|        |           |     |     |             | Ant 1                 | Ant 2 | Ant 3 | Ant 4 | Ant 1               | Ant 2 | Ant 3 | Ant 4 | Ant 1                             | Ant 2 | Ant 3 | Ant 4 |
| VHT20  | MCS0      | 4   | 36  | 5180        | 28.25                 | 24.95 | 24.70 | 24.45 | 17.90               | 18.00 | 18.00 | 17.90 | 22.53                             | 22.55 | 22.55 | 22.53 |
| VHT20  | MCS0      | 4   | 40  | 5200        | 24.70                 | 26.90 | 24.80 | 23.40 | 17.50               | 18.05 | 17.75 | 17.95 | 22.43                             | 22.56 | 22.49 | 22.54 |
| VHT20  | MCS0      | 4   | 48  | 5240        | 24.45                 | 25.35 | 23.95 | 25.25 | 17.80               | 17.90 | 17.85 | 17.95 | 22.50                             | 22.53 | 22.52 | 22.54 |
| VHT40  | MCS0      | 4   | 38  | 5190        | 45.26                 | 43.38 | 44.40 | 45.54 | 36.90               | 36.20 | 37.20 | 36.70 | 23.01                             | 23.01 | 23.01 | 23.01 |
| VHT40  | MCS0      | 4   | 46  | 5230        | 60.00                 | 59.42 | 63.06 | 60.87 | 37.20               | 37.50 | 36.90 | 36.90 | 23.01                             | 23.01 | 23.01 | 23.01 |
| VHT80  | MCS0      | 4   | 42  | 5210        | 86.08                 | 87.58 | 88.16 | 86.14 | 77.52               | 78.36 | 78.24 | 77.28 | 23.01                             | 23.01 | 23.01 | 23.01 |

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

| FCC Band I |           |     |     |             |         |                                                |       |       |       |       |                       |          |                      |                            |           |
|------------|-----------|-----|-----|-------------|---------|------------------------------------------------|-------|-------|-------|-------|-----------------------|----------|----------------------|----------------------------|-----------|
| Mod.       | Data Rate | NTX | CH. | Freq. (MHz) | Ant     | Average Conducted Power with duty factor (dBm) |       |       |       |       | FCC Power Limit (dBm) | DG (dBi) | FCC EIRP Power (dBm) | FCC EIRP Power Limit (dBm) | Pass/Fail |
|            |           |     |     |             |         | Ant 1                                          | Ant 2 | Ant 3 | Ant 4 | SUM   |                       |          |                      |                            |           |
| VHT20      | MCS0      | 4   | 36  | 5180        | 1+2+3+4 | 17.90                                          | 18.00 | 18.10 | 18.30 | 24.10 | 28.72                 | 7.28     | 31.38                | -                          | Pass      |
| VHT20      | MCS0      | 4   | 40  | 5200        | 1+2+3+4 | 18.60                                          | 19.10 | 19.00 | 19.10 | 24.98 | 28.72                 | 7.28     | 32.26                | -                          | Pass      |
| VHT20      | MCS0      | 4   | 48  | 5240        | 1+2+3+4 | 18.60                                          | 18.60 | 18.60 | 18.90 | 24.70 | 28.72                 | 7.28     | 31.98                | -                          | Pass      |
| VHT40      | MCS0      | 4   | 38  | 5190        | 1+2+3+4 | 14.20                                          | 13.90 | 14.10 | 14.40 | 20.17 | 28.72                 | 7.28     | 27.46                | -                          | Pass      |
| VHT40      | MCS0      | 4   | 46  | 5230        | 1+2+3+4 | 19.70                                          | 19.50 | 19.90 | 20.10 | 25.83 | 28.72                 | 7.28     | 33.11                | -                          | Pass      |
| VHT80      | MCS0      | 4   | 42  | 5210        | 1+2+3+4 | 11.30                                          | 12.30 | 11.90 | 12.00 | 17.91 | 28.72                 | 7.28     | 25.19                | -                          | Pass      |

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

| FCC Band I |           |     |     |             |         |                                        |                     |          |  |            |
|------------|-----------|-----|-----|-------------|---------|----------------------------------------|---------------------|----------|--|------------|
| Mod.       | Data Rate | NTX | CH. | Freq. (MHz) | Ant     | Average PSD with Duty Factor (dBm/MHz) | PSD Limit (dBm/MHz) | DG (dBi) |  | Pass /Fail |
| VHT20      | MCS0      | 4   | 36  | 5180        | 1+2+3+4 | 14.76                                  | 15.72               | 7.28     |  | Pass       |
| VHT20      | MCS0      | 4   | 40  | 5200        | 1+2+3+4 | 15.54                                  | 15.72               | 7.28     |  | Pass       |
| VHT20      | MCS0      | 4   | 48  | 5240        | 1+2+3+4 | 14.76                                  | 15.72               | 7.28     |  | Pass       |
| VHT40      | MCS0      | 4   | 38  | 5190        | 1+2+3+4 | 9.33                                   | 15.72               | 7.28     |  | Pass       |
| VHT40      | MCS0      | 4   | 46  | 5230        | 1+2+3+4 | 15.00                                  | 15.72               | 7.28     |  | Pass       |
| VHT80      | MCS0      | 4   | 42  | 5210        | 1+2+3+4 | 2.11                                   | 15.72               | 7.28     |  | Pass       |



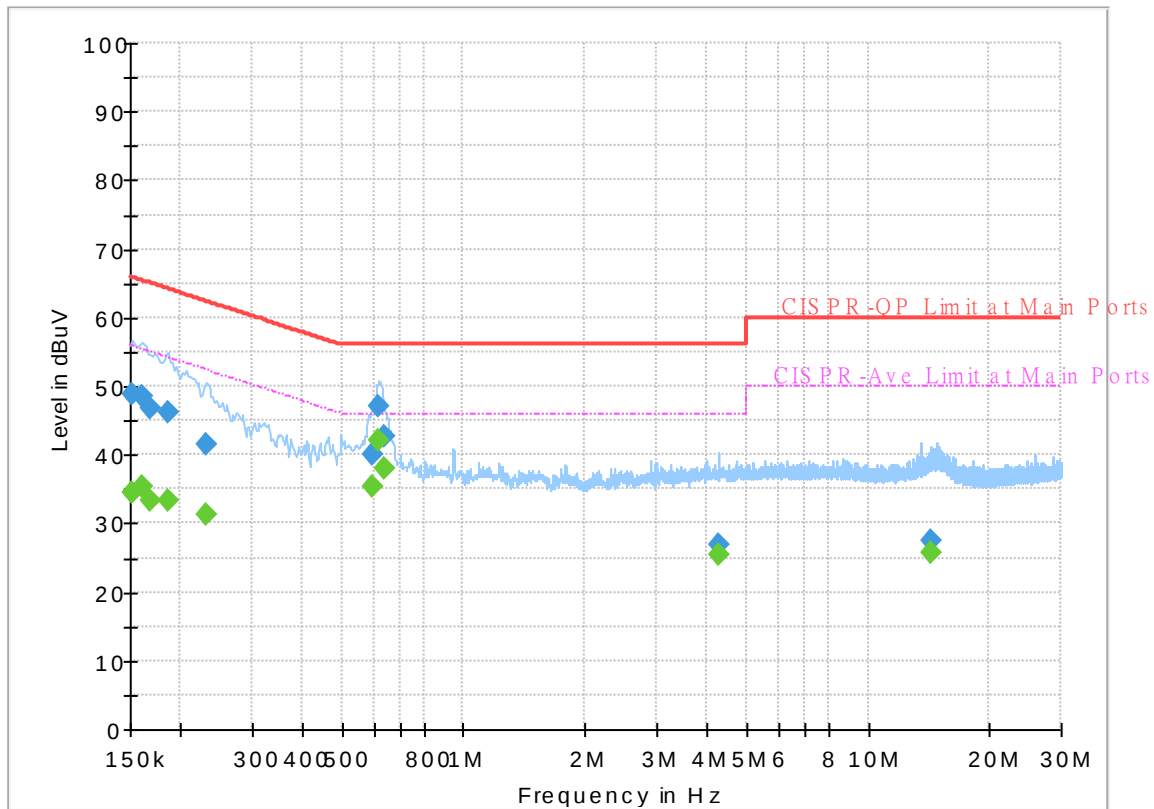
## Appendix B. AC Conducted Emission Test Results

|                 |             |                     |        |
|-----------------|-------------|---------------------|--------|
| Test Engineer : | Jimmy Chang | Temperature :       | 23~25℃ |
|                 |             | Relative Humidity : | 54~56% |

## EUT Information

Report NO : 960558-03  
Test Mode : Mode 1  
Test Voltage : 120Vac/60Hz  
Phase : Line

Full Spectrum



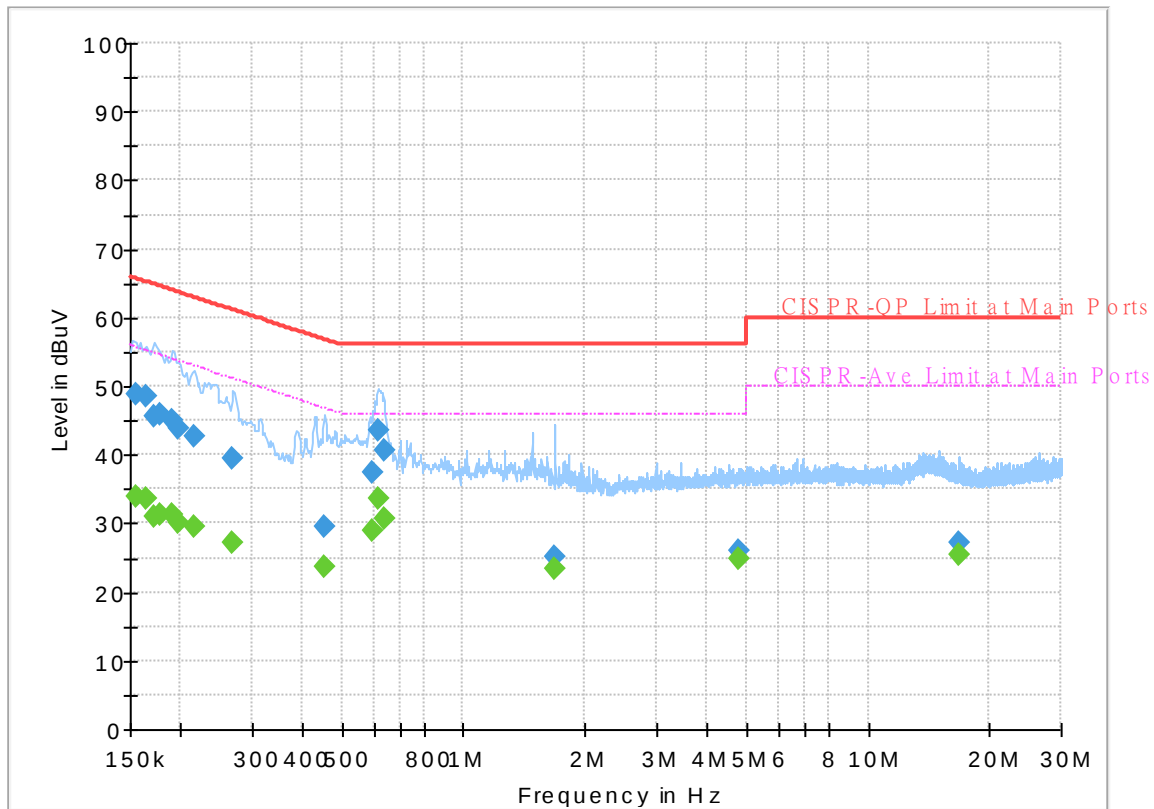
## Final\_Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|------|--------|------------|
| 0.152250        | ---              | 34.37           | 55.88        | 21.51       | L1   | OFF    | 19.5       |
| 0.152250        | 48.84            | ---             | 65.88        | 17.04       | L1   | OFF    | 19.5       |
| 0.161250        | ---              | 35.46           | 55.40        | 19.94       | L1   | OFF    | 19.5       |
| 0.161250        | 48.52            | ---             | 65.40        | 16.88       | L1   | OFF    | 19.5       |
| 0.168000        | ---              | 33.46           | 55.06        | 21.60       | L1   | OFF    | 19.5       |
| 0.168000        | 46.73            | ---             | 65.06        | 18.33       | L1   | OFF    | 19.5       |
| 0.186000        | ---              | 33.30           | 54.21        | 20.91       | L1   | OFF    | 19.5       |
| 0.186000        | 46.16            | ---             | 64.21        | 18.05       | L1   | OFF    | 19.5       |
| 0.231000        | ---              | 31.29           | 52.41        | 21.12       | L1   | OFF    | 19.5       |
| 0.231000        | 41.38            | ---             | 62.41        | 21.03       | L1   | OFF    | 19.5       |
| 0.595500        | ---              | 35.31           | 46.00        | 10.69       | L1   | OFF    | 19.5       |
| 0.595500        | 40.07            | ---             | 56.00        | 15.93       | L1   | OFF    | 19.5       |
| 0.618000        | ---              | 41.96           | 46.00        | 4.04        | L1   | OFF    | 19.6       |
| 0.618000        | 47.14            | ---             | 56.00        | 8.86        | L1   | OFF    | 19.6       |
| 0.636000        | ---              | 37.88           | 46.00        | 8.12        | L1   | OFF    | 19.6       |
| 0.636000        | 42.58            | ---             | 56.00        | 13.42       | L1   | OFF    | 19.6       |
| 4.290000        | ---              | 25.32           | 46.00        | 20.68       | L1   | OFF    | 19.7       |
| 4.290000        | 27.04            | ---             | 56.00        | 28.96       | L1   | OFF    | 19.7       |
| 14.383500       | ---              | 25.62           | 50.00        | 24.38       | L1   | OFF    | 20.1       |
| 14.383500       | 27.36            | ---             | 60.00        | 32.64       | L1   | OFF    | 20.1       |

# EUT Information

Report NO : 960558-03  
 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) |
|-----------------|------------------|-----------------|--------------|-------------|------|--------|------------|
| 0.154500        | ---              | 33.84           | 55.75        | 21.91       | N    | OFF    | 19.5       |
| 0.154500        | 48.78            | ---             | 65.75        | 16.97       | N    | OFF    | 19.5       |
| 0.163500        | ---              | 33.51           | 55.28        | 21.77       | N    | OFF    | 19.5       |
| 0.163500        | 48.50            | ---             | 65.28        | 16.78       | N    | OFF    | 19.5       |
| 0.172500        | ---              | 31.08           | 54.84        | 23.76       | N    | OFF    | 19.5       |
| 0.172500        | 45.73            | ---             | 64.84        | 19.11       | N    | OFF    | 19.5       |
| 0.177000        | ---              | 31.38           | 54.63        | 23.25       | N    | OFF    | 19.5       |
| 0.177000        | 45.94            | ---             | 64.63        | 18.69       | N    | OFF    | 19.5       |
| 0.190500        | ---              | 31.28           | 54.02        | 22.74       | N    | OFF    | 19.5       |
| 0.190500        | 45.05            | ---             | 64.02        | 18.97       | N    | OFF    | 19.5       |
| 0.197250        | ---              | 30.09           | 53.73        | 23.64       | N    | OFF    | 19.5       |
| 0.197250        | 43.90            | ---             | 63.73        | 19.83       | N    | OFF    | 19.5       |
| 0.215250        | ---              | 29.40           | 53.00        | 23.60       | N    | OFF    | 19.5       |
| 0.215250        | 42.82            | ---             | 63.00        | 20.18       | N    | OFF    | 19.5       |
| 0.269250        | ---              | 27.32           | 51.14        | 23.82       | N    | OFF    | 19.5       |
| 0.269250        | 39.61            | ---             | 61.14        | 21.53       | N    | OFF    | 19.5       |
| 0.451500        | ---              | 23.74           | 46.85        | 23.11       | N    | OFF    | 19.5       |
| 0.451500        | 29.52            | ---             | 56.85        | 27.33       | N    | OFF    | 19.5       |
| 0.597750        | ---              | 28.86           | 46.00        | 17.14       | N    | OFF    | 19.5       |
| 0.597750        | 37.34            | ---             | 56.00        | 18.66       | N    | OFF    | 19.5       |
| 0.613500        | ---              | 33.60           | 46.00        | 12.40       | N    | OFF    | 19.6       |

|           |       |       |       |       |   |     |      |
|-----------|-------|-------|-------|-------|---|-----|------|
| 0.613500  | 43.61 | ---   | 56.00 | 12.39 | N | OFF | 19.6 |
| 0.636000  | ---   | 30.83 | 46.00 | 15.17 | N | OFF | 19.6 |
| 0.636000  | 40.50 | ---   | 56.00 | 15.50 | N | OFF | 19.6 |
| 1.684500  | ---   | 23.46 | 46.00 | 22.54 | N | OFF | 19.6 |
| 1.684500  | 25.24 | ---   | 56.00 | 30.76 | N | OFF | 19.6 |
| 4.780500  | ---   | 24.80 | 46.00 | 21.20 | N | OFF | 19.7 |
| 4.780500  | 26.08 | ---   | 56.00 | 29.92 | N | OFF | 19.7 |
| 16.743750 | ---   | 25.47 | 50.00 | 24.53 | N | OFF | 20.2 |
| 16.743750 | 27.13 | ---   | 60.00 | 32.87 | N | OFF | 20.2 |



## Appendix C. Radiated Spurious Emission

|                 |                                  |                     |         |
|-----------------|----------------------------------|---------------------|---------|
| Test Engineer : | Jesse Wang, Stan Hsieh and KenWu | Temperature :       | 21~28°C |
|                 |                                  | Relative Humidity : | 51~68%  |

<CCD Mode>

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

| WIFI<br>Ant.<br>1+2+3+4     | 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 36<br>5180MHz |      | 5143.26              | 57.45               | -16.55                  | 74                          | 46.91                   | 34.3                          | 11.29                  | 35.05                      | 366                  | 177                     | P                     | H             |
|                             |      | 5143                 | 49.09               | -4.91                   | 54                          | 38.55                   | 34.3                          | 11.29                  | 35.05                      | 366                  | 177                     | A                     | H             |
|                             | *    | 5180                 | 119.64              | -                       | -                           | 109.1                   | 34.3                          | 11.29                  | 35.05                      | 366                  | 177                     | P                     | H             |
|                             | *    | 5180                 | 111.63              | -                       | -                           | 101.09                  | 34.3                          | 11.29                  | 35.05                      | 366                  | 177                     | A                     | H             |
|                             |      |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                             |      |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                             |      | 5146.9               | 61.01               | -12.99                  | 74                          | 50.47                   | 34.3                          | 11.29                  | 35.05                      | 233                  | 268                     | P                     | V             |
|                             |      | 5146.9               | 51.8                | -2.2                    | 54                          | 41.26                   | 34.3                          | 11.29                  | 35.05                      | 233                  | 268                     | A                     | V             |
|                             | *    | 5180                 | 119.74              | -                       | -                           | 109.2                   | 34.3                          | 11.29                  | 35.05                      | 233                  | 268                     | P                     | V             |
|                             | *    | 5180                 | 111.84              | -                       | -                           | 101.3                   | 34.3                          | 11.29                  | 35.05                      | 233                  | 268                     | A                     | V             |
|                             |      |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       | V             |
|                             |      |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       | V             |



| WIFI<br>Ant.<br>1+2+3+4     | 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 40<br>5200MHz |                                                                                             | 5141.18              | 56.23               | -17.77                  | 74                          | 45.69                   | 34.3                          | 11.29                  | 35.05                      | 362                  | 176                     | P                     | H             |
|                             |                                                                                             | 5144.82              | 47.13               | -6.87                   | 54                          | 36.59                   | 34.3                          | 11.29                  | 35.05                      | 362                  | 176                     | A                     | H             |
|                             | *                                                                                           | 5200                 | 123.41              | -                       | -                           | 112.82                  | 34.3                          | 11.34                  | 35.05                      | 362                  | 176                     | P                     | H             |
|                             | *                                                                                           | 5200                 | 114.99              | -                       | -                           | 104.4                   | 34.3                          | 11.34                  | 35.05                      | 362                  | 176                     | A                     | H             |
|                             |                                                                                             | 5353.88              | 50.89               | -23.11                  | 74                          | 40.05                   | 34.4                          | 11.49                  | 35.05                      | 362                  | 176                     | P                     | H             |
|                             |                                                                                             | 5353.6               | 42.18               | -11.82                  | 54                          | 31.34                   | 34.4                          | 11.49                  | 35.05                      | 362                  | 176                     | A                     | H             |
|                             |                                                                                             | 5148.98              | 63.39               | -10.61                  | 74                          | 52.85                   | 34.3                          | 11.29                  | 35.05                      | 290                  | 270                     | P                     | V             |
|                             |                                                                                             | 5148.98              | 52.4                | -1.6                    | 54                          | 41.86                   | 34.3                          | 11.29                  | 35.05                      | 290                  | 270                     | P                     | V             |
|                             | *                                                                                           | 5200                 | 123.79              | -                       | -                           | 113.2                   | 34.3                          | 11.34                  | 35.05                      | 290                  | 270                     | P                     | V             |
|                             | *                                                                                           | 5200                 | 115.92              | -                       | -                           | 105.33                  | 34.3                          | 11.34                  | 35.05                      | 290                  | 270                     | A                     | V             |
|                             |                                                                                             | 5354.44              | 50.69               | -23.31                  | 74                          | 39.85                   | 34.4                          | 11.49                  | 35.05                      | 290                  | 270                     | P                     | V             |
|                             |                                                                                             | 5351.36              | 42.05               | -11.95                  | 54                          | 31.21                   | 34.4                          | 11.49                  | 35.05                      | 290                  | 270                     | A                     | V             |
| 802.11a<br>CH 48<br>5240MHz |                                                                                             | 5145.6               | 52.58               | -21.42                  | 74                          | 42.04                   | 34.3                          | 11.29                  | 35.05                      | 360                  | 176                     | P                     | H             |
|                             |                                                                                             | 5000                 | 43.23               | -10.77                  | 54                          | 33.19                   | 34                            | 11.08                  | 35.04                      | 360                  | 176                     | A                     | H             |
|                             | *                                                                                           | 5240                 | 123.5               | -                       | -                           | 112.8                   | 34.37                         | 11.38                  | 35.05                      | 360                  | 176                     | P                     | H             |
|                             | *                                                                                           | 5240                 | 115                 | -                       | -                           | 104.3                   | 34.37                         | 11.38                  | 35.05                      | 360                  | 176                     | A                     | H             |
|                             |                                                                                             | 5363.4               | 51.39               | -22.61                  | 74                          | 40.48                   | 34.47                         | 11.49                  | 35.05                      | 360                  | 176                     | P                     | H             |
|                             |                                                                                             | 5354.72              | 42.96               | -11.04                  | 54                          | 32.12                   | 34.4                          | 11.49                  | 35.05                      | 360                  | 176                     | A                     | H             |
|                             |                                                                                             | 5141.18              | 51.38               | -22.62                  | 74                          | 40.84                   | 34.3                          | 11.29                  | 35.05                      | 258                  | 270                     | P                     | V             |
|                             |                                                                                             | 5149.24              | 43.11               | -10.89                  | 54                          | 32.57                   | 34.3                          | 11.29                  | 35.05                      | 258                  | 270                     | A                     | V             |
|                             | *                                                                                           | 5240                 | 123.47              | -                       | -                           | 112.77                  | 34.37                         | 11.38                  | 35.05                      | 258                  | 270                     | P                     | V             |
|                             | *                                                                                           | 5240                 | 115.6               | -                       | -                           | 104.9                   | 34.37                         | 11.38                  | 35.05                      | 258                  | 270                     | A                     | V             |
|                             |                                                                                             | 5372.64              | 52.19               | -21.81                  | 74                          | 41.28                   | 34.47                         | 11.49                  | 35.05                      | 258                  | 270                     | P                     | V             |
|                             |                                                                                             | 5370.96              | 42.25               | -11.75                  | 54                          | 31.34                   | 34.47                         | 11.49                  | 35.05                      | 258                  | 270                     | A                     | V             |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       |               |



## Band 1 5150~5250MHz

## WIFI 802.11a (Harmonic @ 3m)

| WIFI<br>Ant.<br>1+2+3+4     | 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 36<br>5180MHz |                                                                                             | 10360                | 46.59               | -21.61                  | 68.2                        | 51.42                     | 37.33                         | 17.42                  | 59.58                      | 100                  | 0                       | P                       | H               |
|                             |                                                                                             | 15540                | 50.66               | -23.34                  | 74                          | 46.59                     | 40.27                         | 20.32                  | 56.52                      | 100                  | 0                       | P                       | H               |
|                             |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                             |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                             |                                                                                             | 10360                | 47.01               | -21.19                  | 68.2                        | 51.84                     | 37.33                         | 17.42                  | 59.58                      | 100                  | 0                       | P                       | V               |
|                             |                                                                                             | 15540                | 50.51               | -23.49                  | 74                          | 46.44                     | 40.27                         | 20.32                  | 56.52                      | 100                  | 0                       | P                       | V               |
|                             |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                             |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| 802.11a<br>CH 40<br>5200MHz |                                                                                             | 10400                | 47.19               | -21.01                  | 68.2                        | 51.92                     | 37.4                          | 17.43                  | 59.56                      | 100                  | 0                       | P                       | H               |
|                             |                                                                                             | 15600                | 49.81               | -24.19                  | 74                          | 45.87                     | 40.2                          | 20.37                  | 56.63                      | 100                  | 0                       | P                       | H               |
|                             |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                             |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                             |                                                                                             | 10400                | 47.6                | -20.6                   | 68.2                        | 52.33                     | 37.4                          | 17.43                  | 59.56                      | 100                  | 0                       | P                       | V               |
|                             |                                                                                             | 15600                | 57.72               | -16.28                  | 74                          | 53.78                     | 40.2                          | 20.37                  | 56.63                      | 100                  | 276                     | P                       | V               |
|                             |                                                                                             | 15600                | 46.17               | -7.83                   | 54                          | 42.23                     | 40.2                          | 20.37                  | 56.63                      | 100                  | 276                     | A                       | V               |
|                             |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| 802.11a<br>CH 48<br>5240MHz |                                                                                             | 10480                | 47.23               | -20.97                  | 68.2                        | 51.87                     | 37.4                          | 17.46                  | 59.5                       | 100                  | 0                       | P                       | H               |
|                             |                                                                                             | 15720                | 55.31               | -18.69                  | 74                          | 51.27                     | 40.43                         | 20.42                  | 56.81                      | 100                  | 307                     | P                       | H               |
|                             |                                                                                             | 15720                | 45.75               | -8.25                   | 54                          | 41.71                     | 40.43                         | 20.42                  | 56.81                      | 100                  | 307                     | A                       | H               |
|                             |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                             |                                                                                             | 10480                | 47.32               | -20.88                  | 68.2                        | 51.96                     | 37.4                          | 17.46                  | 59.5                       | 100                  | 0                       | P                       | V               |
|                             |                                                                                             | 15720                | 59.22               | -14.78                  | 74                          | 55.18                     | 40.43                         | 20.42                  | 56.81                      | 100                  | 220                     | P                       | V               |
|                             |                                                                                             | 15720                | 49.92               | -4.08                   | 54                          | 45.88                     | 40.43                         | 20.42                  | 56.81                      | 100                  | 220                     | A                       | V               |
|                             |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         |                 |



## Band 1 5150~5250MHz

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

| WIFI<br>Ant.<br>1+2+3+4             | 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 36<br>5180MHz |      | 5145.08              | 59.83               | -14.17                  | 74                          | 49.29                     | 34.3                          | 11.29                  | 35.05                      | 366                  | 177                     | P                       | H               |
|                                     |      | 5142.48              | 50.34               | -3.66                   | 54                          | 39.8                      | 34.3                          | 11.29                  | 35.05                      | 366                  | 177                     | A                       | H               |
|                                     | *    | 5180                 | 121.34              | -                       | -                           | 110.8                     | 34.3                          | 11.29                  | 35.05                      | 366                  | 177                     | P                       | H               |
|                                     | *    | 5180                 | 111.94              | -                       | -                           | 101.4                     | 34.3                          | 11.29                  | 35.05                      | 366                  | 177                     | A                       | H               |
|                                     |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |      | 5150                 | 60.45               | -13.55                  | 74                          | 49.91                     | 34.3                          | 11.29                  | 35.05                      | 233                  | 268                     | P                       | V               |
|                                     |      | 5143                 | 52.42               | -1.58                   | 54                          | 41.88                     | 34.3                          | 11.29                  | 35.05                      | 233                  | 268                     | A                       | V               |
|                                     | *    | 5180                 | 120.79              | -                       | -                           | 110.25                    | 34.3                          | 11.29                  | 35.05                      | 233                  | 268                     | P                       | V               |
|                                     | *    | 5180                 | 112.29              | -                       | -                           | 101.75                    | 34.3                          | 11.29                  | 35.05                      | 233                  | 268                     | A                       | V               |
|                                     |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                                     |      |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| 802.11n<br>HT20<br>CH 40<br>5200MHz |      | 5149.76              | 57.51               | -16.49                  | 74                          | 46.97                     | 34.3                          | 11.29                  | 35.05                      | 362                  | 176                     | P                       | H               |
|                                     |      | 5149.76              | 49.11               | -4.89                   | 54                          | 38.57                     | 34.3                          | 11.29                  | 35.05                      | 362                  | 176                     | A                       | H               |
|                                     | *    | 5200                 | 123.69              | -                       | -                           | 113.1                     | 34.3                          | 11.34                  | 35.05                      | 362                  | 176                     | P                       | H               |
|                                     | *    | 5200                 | 114.79              | -                       | -                           | 104.2                     | 34.3                          | 11.34                  | 35.05                      | 362                  | 176                     | A                       | H               |
|                                     |      | 5366.76              | 51.51               | -22.49                  | 74                          | 40.6                      | 34.47                         | 11.49                  | 35.05                      | 362                  | 176                     | P                       | H               |
|                                     |      | 5350.24              | 42.28               | -11.72                  | 54                          | 31.44                     | 34.4                          | 11.49                  | 35.05                      | 362                  | 176                     | A                       | H               |
|                                     |      | 5150                 | 68.17               | -5.83                   | 74                          | 57.63                     | 34.3                          | 11.29                  | 35.05                      | 290                  | 270                     | P                       | V               |
|                                     |      | 5150                 | 52.22               | -1.78                   | 54                          | 41.68                     | 34.3                          | 11.29                  | 35.05                      | 290                  | 270                     | A                       | V               |
|                                     | *    | 5200                 | 122.99              | -                       | -                           | 112.4                     | 34.3                          | 11.34                  | 35.05                      | 290                  | 270                     | P                       | V               |
|                                     | *    | 5200                 | 114.45              | -                       | -                           | 103.86                    | 34.3                          | 11.34                  | 35.05                      | 290                  | 270                     | A                       | V               |
|                                     |      | 5363.68              | 51.06               | -22.94                  | 74                          | 40.15                     | 34.47                         | 11.49                  | 35.05                      | 290                  | 270                     | P                       | V               |
|                                     |      | 5382.44              | 41.83               | -12.17                  | 54                          | 30.83                     | 34.53                         | 11.53                  | 35.06                      | 290                  | 270                     | A                       | V               |



| WIFI<br>Ant.<br>1+2+3+4                       | 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) |
|-----------------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| <b>802.11n<br/>HT20<br/>CH 48<br/>5240MHz</b> |                                                                                             | 5085.8               | 52.1                | -21.9                   | 74                          | 41.93                   | 34.03                         | 11.18                  | 35.04                      | 360                  | 176                     | P                     | H             |
|                                               |                                                                                             | 5136.24              | 43.27               | -10.73                  | 54                          | 32.88                   | 34.2                          | 11.24                  | 35.05                      | 360                  | 176                     | A                     | H             |
|                                               | *                                                                                           | 5240                 | 123.5               | -                       | -                           | 112.8                   | 34.37                         | 11.38                  | 35.05                      | 360                  | 176                     | P                     | H             |
|                                               | *                                                                                           | 5240                 | 114.6               | -                       | -                           | 103.9                   | 34.37                         | 11.38                  | 35.05                      | 360                  | 176                     | A                     | H             |
|                                               |                                                                                             | 5358.08              | 51.79               | -22.21                  | 74                          | 40.95                   | 34.4                          | 11.49                  | 35.05                      | 360                  | 176                     | P                     | H             |
|                                               |                                                                                             | 5355                 | 42.58               | -11.42                  | 54                          | 31.74                   | 34.4                          | 11.49                  | 35.05                      | 360                  | 176                     | A                     | H             |
|                                               |                                                                                             | 5135.72              | 52.7                | -21.3                   | 74                          | 42.31                   | 34.2                          | 11.24                  | 35.05                      | 258                  | 270                     | P                     | V             |
|                                               |                                                                                             | 5149.5               | 43.03               | -10.97                  | 54                          | 32.49                   | 34.3                          | 11.29                  | 35.05                      | 258                  | 270                     | A                     | V             |
|                                               | *                                                                                           | 5240                 | 122.19              | -                       | -                           | 111.49                  | 34.37                         | 11.38                  | 35.05                      | 258                  | 270                     | P                     | V             |
|                                               | *                                                                                           | 5240                 | 113.8               | -                       | -                           | 103.1                   | 34.37                         | 11.38                  | 35.05                      | 258                  | 270                     | A                     | V             |
|                                               |                                                                                             | 5409.6               | 52.89               | -21.11                  | 74                          | 41.82                   | 34.6                          | 11.53                  | 35.06                      | 258                  | 270                     | P                     | V             |
|                                               |                                                                                             | 5369.28              | 42.19               | -11.81                  | 54                          | 31.28                   | 34.47                         | 11.49                  | 35.05                      | 258                  | 270                     | A                     | V             |
| <b>Remark</b>                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       |               |



**Band 1 5150~5250MHz**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1+2+3+4             | 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 36<br>5180MHz |                                                                                             | 10360                | 47.34               | -20.86                  | 68.2                        | 52.17                     | 37.33                         | 17.42                  | 59.58                      | 100                  | 0                       | P                       | H               |
|                                     |                                                                                             | 15540                | 50.48               | -23.52                  | 74                          | 46.41                     | 40.27                         | 20.32                  | 56.52                      | 100                  | 0                       | P                       | H               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |                                                                                             | 10360                | 47.04               | -21.16                  | 68.2                        | 51.87                     | 37.33                         | 17.42                  | 59.58                      | 100                  | 0                       | P                       | V               |
|                                     |                                                                                             | 15540                | 50.58               | -23.42                  | 74                          | 46.51                     | 40.27                         | 20.32                  | 56.52                      | 100                  | 0                       | P                       | V               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| 802.11n<br>HT20<br>CH 40<br>5200MHz |                                                                                             | 10400                | 46.67               | -21.53                  | 68.2                        | 51.4                      | 37.4                          | 17.43                  | 59.56                      | 100                  | 0                       | P                       | H               |
|                                     |                                                                                             | 15600                | 50.05               | -23.95                  | 74                          | 46.11                     | 40.2                          | 20.37                  | 56.63                      | 100                  | 0                       | P                       | H               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |                                                                                             | 10400                | 47.57               | -20.63                  | 68.2                        | 52.3                      | 37.4                          | 17.43                  | 59.56                      | 100                  | 0                       | P                       | V               |
|                                     |                                                                                             | 15600                | 56.8                | -17.2                   | 74                          | 52.86                     | 40.2                          | 20.37                  | 56.63                      | 100                  | 277                     | P                       | V               |
|                                     |                                                                                             | 15600                | 46.64               | -7.36                   | 54                          | 42.7                      | 40.2                          | 20.37                  | 56.63                      | 100                  | 277                     | A                       | V               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| 802.11n<br>HT20<br>CH 48<br>5240MHz |                                                                                             | 10480                | 47.13               | -21.07                  | 68.2                        | 51.77                     | 37.4                          | 17.46                  | 59.5                       | 100                  | 0                       | P                       | H               |
|                                     |                                                                                             | 15720                | 56.86               | -17.14                  | 74                          | 52.82                     | 40.43                         | 20.42                  | 56.81                      | 100                  | 307                     | P                       | H               |
|                                     |                                                                                             | 15720                | 46.6                | -7.4                    | 54                          | 42.56                     | 40.43                         | 20.42                  | 56.81                      | 100                  | 307                     | A                       | H               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |                                                                                             | 10480                | 44.99               | -23.21                  | 68.2                        | 49.63                     | 37.4                          | 17.46                  | 59.5                       | 100                  | 0                       | P                       | V               |
|                                     |                                                                                             | 15720                | 59.63               | -14.37                  | 74                          | 55.59                     | 40.43                         | 20.42                  | 56.81                      | 100                  | 215                     | P                       | V               |
|                                     |                                                                                             | 15720                | 49.89               | -4.11                   | 54                          | 45.85                     | 40.43                         | 20.42                  | 56.81                      | 100                  | 215                     | A                       | V               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         |                 |



## Band 1 5150~5250MHz

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

| WIFI<br>Ant.<br>1+2+3+4             | 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 38<br>5190MHz |                                                                                             | 5150                 | 59.31               | -14.69                  | 74                          | 48.77                     | 34.3                          | 11.29                  | 35.05                      | 386                  | 172                     | P                       | H               |
|                                     |                                                                                             | 5149.76              | 50.58               | -3.42                   | 54                          | 40.04                     | 34.3                          | 11.29                  | 35.05                      | 386                  | 172                     | A                       | H               |
|                                     | *                                                                                           | 5190                 | 112.79              | -                       | -                           | 102.2                     | 34.3                          | 11.34                  | 35.05                      | 386                  | 172                     | P                       | H               |
|                                     | *                                                                                           | 5190                 | 104.84              | -                       | -                           | 94.25                     | 34.3                          | 11.34                  | 35.05                      | 386                  | 172                     | A                       | H               |
|                                     |                                                                                             | 5458.6               | 50.16               | -23.84                  | 74                          | 38.96                     | 34.7                          | 11.56                  | 35.06                      | 386                  | 172                     | P                       | H               |
|                                     |                                                                                             | 5442.64              | 41.06               | -12.94                  | 54                          | 29.89                     | 34.67                         | 11.56                  | 35.06                      | 386                  | 172                     | A                       | H               |
|                                     |                                                                                             | 5145.34              | 57.59               | -16.41                  | 74                          | 47.05                     | 34.3                          | 11.29                  | 35.05                      | 247                  | 241                     | P                       | V               |
|                                     |                                                                                             | 5145.34              | 48.83               | -5.17                   | 54                          | 38.29                     | 34.3                          | 11.29                  | 35.05                      | 247                  | 241                     | A                       | V               |
|                                     | *                                                                                           | 5190                 | 113.16              | -                       | -                           | 102.57                    | 34.3                          | 11.34                  | 35.05                      | 247                  | 241                     | P                       | V               |
|                                     | *                                                                                           | 5190                 | 105.61              | -                       | -                           | 95.02                     | 34.3                          | 11.34                  | 35.05                      | 247                  | 241                     | A                       | V               |
|                                     |                                                                                             | 5391.12              | 50.51               | -23.49                  | 74                          | 39.51                     | 34.53                         | 11.53                  | 35.06                      | 247                  | 241                     | P                       | V               |
|                                     |                                                                                             | 5413.8               | 41.45               | -12.55                  | 54                          | 30.35                     | 34.63                         | 11.53                  | 35.06                      | 247                  | 241                     | A                       | V               |
| 802.11n<br>HT40<br>CH 46<br>5230MHz |                                                                                             | 5149.24              | 56.8                | -17.2                   | 74                          | 46.26                     | 34.3                          | 11.29                  | 35.05                      | 378                  | 161                     | P                       | H               |
|                                     |                                                                                             | 5150                 | 49.8                | -4.2                    | 54                          | 39.26                     | 34.3                          | 11.29                  | 35.05                      | 378                  | 161                     | A                       | H               |
|                                     | *                                                                                           | 5230                 | 118.99              | -                       | -                           | 108.29                    | 34.37                         | 11.38                  | 35.05                      | 378                  | 161                     | P                       | H               |
|                                     | *                                                                                           | 5230                 | 111.06              | -                       | -                           | 100.36                    | 34.37                         | 11.38                  | 35.05                      | 378                  | 161                     | A                       | H               |
|                                     |                                                                                             | 5363.96              | 52.22               | -21.78                  | 74                          | 41.31                     | 34.47                         | 11.49                  | 35.05                      | 378                  | 161                     | P                       | H               |
|                                     |                                                                                             | 5350.52              | 43.44               | -10.56                  | 54                          | 32.6                      | 34.4                          | 11.49                  | 35.05                      | 378                  | 161                     | A                       | H               |
|                                     |                                                                                             | 5145.08              | 58.27               | -15.73                  | 74                          | 47.73                     | 34.3                          | 11.29                  | 35.05                      | 244                  | 241                     | P                       | V               |
|                                     |                                                                                             | 5144.82              | 50.49               | -3.51                   | 54                          | 39.95                     | 34.3                          | 11.29                  | 35.05                      | 244                  | 241                     | A                       | V               |
|                                     | *                                                                                           | 5230                 | 119.31              | -                       | -                           | 108.61                    | 34.37                         | 11.38                  | 35.05                      | 244                  | 241                     | P                       | V               |
|                                     | *                                                                                           | 5230                 | 111.72              | -                       | -                           | 101.02                    | 34.37                         | 11.38                  | 35.05                      | 244                  | 241                     | A                       | V               |
|                                     |                                                                                             | 5369                 | 52.22               | -21.78                  | 74                          | 41.31                     | 34.47                         | 11.49                  | 35.05                      | 244                  | 241                     | P                       | V               |
|                                     |                                                                                             | 5353.04              | 43.01               | -10.99                  | 54                          | 32.17                     | 34.4                          | 11.49                  | 35.05                      | 244                  | 241                     | A                       | V               |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         |                 |



**Band 1 5150~5250MHz**  
**WIFI 802.11n HT40 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1+2+3+4             | 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 38<br>5190MHz |                                                                                             | 10380                | 46.82               | -21.38                  | 68.2                        | 51.6                      | 37.37                         | 17.42                  | 59.57                      | 100                  | 0                       | P                       | H               |
|                                     |                                                                                             | 15570                | 50.72               | -23.28                  | 74                          | 46.71                     | 40.23                         | 20.35                  | 56.57                      | 100                  | 0                       | P                       | H               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |                                                                                             | 10380                | 47.12               | -21.08                  | 68.2                        | 51.9                      | 37.37                         | 17.42                  | 59.57                      | 100                  | 0                       | P                       | V               |
|                                     |                                                                                             | 15570                | 50.17               | -23.83                  | 74                          | 46.16                     | 40.23                         | 20.35                  | 56.57                      | 100                  | 0                       | P                       | V               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| 802.11n<br>HT40<br>CH 46<br>5230MHz |                                                                                             | 10460                | 47.84               | -20.36                  | 68.2                        | 52.51                     | 37.4                          | 17.45                  | 59.52                      | 100                  | 0                       | P                       | H               |
|                                     |                                                                                             | 15690                | 50.73               | -23.27                  | 74                          | 46.71                     | 40.37                         | 20.4                   | 56.75                      | 100                  | 0                       | P                       | H               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                     |                                                                                             | 10460                | 47.39               | -20.81                  | 68.2                        | 52.06                     | 37.4                          | 17.45                  | 59.52                      | 100                  | 0                       | P                       | V               |
|                                     |                                                                                             | 15690                | 50.36               | -23.64                  | 74                          | 46.34                     | 40.37                         | 20.4                   | 56.75                      | 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 1 5150~5250MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1+2+3+4               | 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 42<br>5210MHz |                                                                                             | 5129.74              | 57.2                | -16.8                   | 74                          | 46.81                   | 34.2                          | 11.24                  | 35.05                      | 381                  | 170                     | P                     | H             |
|                                       |                                                                                             | 5150                 | 49.75               | -4.25                   | 54                          | 39.21                   | 34.3                          | 11.29                  | 35.05                      | 381                  | 170                     | A                     | H             |
|                                       | *                                                                                           | 5210                 | 107.11              | -                       | -                           | 96.49                   | 34.33                         | 11.34                  | 35.05                      | 381                  | 170                     | P                     | H             |
|                                       | *                                                                                           | 5210                 | 99.69               | -                       | -                           | 89.07                   | 34.33                         | 11.34                  | 35.05                      | 381                  | 170                     | A                     | H             |
|                                       |                                                                                             | 5355.84              | 50.86               | -23.14                  | 74                          | 40.02                   | 34.4                          | 11.49                  | 35.05                      | 381                  | 170                     | P                     | H             |
|                                       |                                                                                             | 5350.24              | 41.94               | -12.06                  | 54                          | 31.1                    | 34.4                          | 11.49                  | 35.05                      | 381                  | 170                     | A                     | H             |
|                                       |                                                                                             | 5144.82              | 60.48               | -13.52                  | 74                          | 49.94                   | 34.3                          | 11.29                  | 35.05                      | 232                  | 242                     | P                     | V             |
|                                       |                                                                                             | 5145.08              | 51.76               | -2.24                   | 54                          | 41.22                   | 34.3                          | 11.29                  | 35.05                      | 232                  | 242                     | A                     | V             |
|                                       | *                                                                                           | 5210                 | 108.07              | -                       | -                           | 97.45                   | 34.33                         | 11.34                  | 35.05                      | 232                  | 242                     | P                     | V             |
|                                       | *                                                                                           | 5210                 | 100.43              | -                       | -                           | 89.81                   | 34.33                         | 11.34                  | 35.05                      | 232                  | 242                     | A                     | V             |
|                                       |                                                                                             | 5362.84              | 50.58               | -23.42                  | 74                          | 39.67                   | 34.47                         | 11.49                  | 35.05                      | 232                  | 242                     | P                     | V             |
|                                       |                                                                                             | 5353.04              | 41.76               | -12.24                  | 54                          | 30.92                   | 34.4                          | 11.49                  | 35.05                      | 232                  | 242                     | A                     | V             |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       |               |

**Band 1 5150~5250MHz****WIFI 802.11ac VHT80 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1+2+3+4               | 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 42<br>5210MHz |                                                                                             | 10420                | 47.07               | -21.13                  | 68.2                        | 51.79                   | 37.4                          | 17.43                  | 59.55                      | 100                  | 0                       | P                     | H             |
|                                       |                                                                                             | 15630                | 50.35               | -23.65                  | 74                          | 46.37                   | 40.27                         | 20.39                  | 56.68                      | 100                  | 0                       | P                     | H             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                                       |                                                                                             | 10420                | 48.59               | -19.61                  | 68.2                        | 53.31                   | 37.4                          | 17.43                  | 59.55                      | 100                  | 0                       | P                     | V             |
|                                       |                                                                                             | 15630                | 50.11               | -23.89                  | 74                          | 46.13                   | 40.27                         | 20.39                  | 56.68                      | 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

## WIFI 802.11a (LF @ 3m)

| WIFI          | Note                                                                       | Frequency | Level      | Over   | Limit      | Read     | Antenna  | Path   | Preamp | Ant    | Table   | Peak    | Pol.    |
|---------------|----------------------------------------------------------------------------|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|
| Ant.          |                                                                            |           |            | Limit  | Line       | Level    | Factor   | Loss   | Factor | Pos    | Pos     | Avg.    |         |
| 1+2+3+4       |                                                                            | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | ( P/A ) | ( H/V ) |
| 802.11a<br>LF |                                                                            | 30.54     | 23.82      | -16.18 | 40         | 28.39    | 24.09    | 1.32   | 29.98  | -      | -       | P       | H       |
|               |                                                                            | 123.42    | 31.3       | -12.2  | 43.5       | 41.66    | 17.59    | 2.01   | 29.96  | -      | -       | P       | H       |
|               |                                                                            | 169.05    | 28.35      | -15.15 | 43.5       | 40.31    | 15.67    | 2.26   | 29.89  | -      | -       | P       | H       |
|               |                                                                            | 378.4     | 33.73      | -12.27 | 46         | 39.53    | 20.91    | 3.07   | 29.78  | -      | -       | P       | H       |
|               |                                                                            | 505.1     | 34.05      | -11.95 | 46         | 36.23    | 23.88    | 3.74   | 29.8   | 100    | 0       | P       | H       |
|               |                                                                            | 944       | 33.98      | -12.02 | 46         | 27.48    | 30.03    | 5.08   | 28.61  | -      | -       | P       | H       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|               |                                                                            | 40.53     | 28.82      | -11.18 | 40         | 38.67    | 18.81    | 1.33   | 29.99  | -      | -       | P       | V       |
|               |                                                                            | 49.17     | 31.9       | -8.1   | 40         | 45.9     | 14.66    | 1.33   | 29.99  | 100    | 0       | P       | V       |
|               |                                                                            | 123.15    | 33.82      | -9.68  | 43.5       | 44.18    | 17.59    | 2.01   | 29.96  | -      | -       | P       | V       |
|               |                                                                            | 412.7     | 30.1       | -15.9  | 46         | 34.32    | 22.27    | 3.3    | 29.79  | -      | -       | P       | V       |
|               |                                                                            | 492.5     | 34.65      | -11.35 | 46         | 37.08    | 23.73    | 3.64   | 29.8   | -      | -       | P       | V       |
|               |                                                                            | 953.8     | 34.39      | -11.61 | 46         | 27.31    | 30.54    | 5.08   | 28.54  | -      | -       | P       | V       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|               |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark        | 1. No other spurious found.<br>2. All results are PASS against limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



&lt;TXBF Mode&gt;

Band 1 - 5150~5250MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

| WIFI Ant.                             | Note | Frequency | Level      | Over Limit | Limit Line | Read Level | Antenna Factor | Path Loss | Preampl Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|---------------------------------------|------|-----------|------------|------------|------------|------------|----------------|-----------|----------------|---------|-----------|-----------|---------|
| 1+2+3+4                               |      | ( MHz )   | ( dBμV/m ) | ( dB )     | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )    | ( dB )         | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11ac<br>VHT20<br>CH 36<br>5180MHz |      | 5147.68   | 55.93      | -18.07     | 74         | 45.39      | 34.3           | 11.29     | 35.05          | 365     | 172       | P         | H       |
|                                       |      | 5148.2    | 50.31      | -3.69      | 54         | 39.77      | 34.3           | 11.29     | 35.05          | 365     | 172       | A         | H       |
|                                       | *    | 5180      | 119.65     | -          | -          | 109.11     | 34.3           | 11.29     | 35.05          | 365     | 172       | P         | H       |
|                                       | *    | 5180      | 111.99     | -          | -          | 101.45     | 34.3           | 11.29     | 35.05          | 365     | 172       | A         | H       |
|                                       |      |           |            |            |            |            |                |           |                |         |           |           | H       |
|                                       |      |           |            |            |            |            |                |           |                |         |           |           | H       |
|                                       |      | 5149.24   | 58.16      | -15.84     | 74         | 47.62      | 34.3           | 11.29     | 35.05          | 234     | 269       | P         | V       |
|                                       |      | 5142.22   | 52.08      | -1.92      | 54         | 41.54      | 34.3           | 11.29     | 35.05          | 234     | 269       | A         | V       |
|                                       | *    | 5180      | 119.68     | -          | -          | 109.14     | 34.3           | 11.29     | 35.05          | 234     | 269       | P         | V       |
|                                       | *    | 5180      | 112        | -          | -          | 101.46     | 34.3           | 11.29     | 35.05          | 234     | 269       | A         | V       |
|                                       |      |           |            |            |            |            |                |           |                |         |           |           | V       |
|                                       |      |           |            |            |            |            |                |           |                |         |           |           | V       |
| 802.11ac<br>VHT20<br>CH 40<br>5200MHz |      | 5147.94   | 54.47      | -19.53     | 74         | 43.93      | 34.3           | 11.29     | 35.05          | 385     | 172       | P         | H       |
|                                       |      | 5149.24   | 46.57      | -7.43      | 54         | 36.03      | 34.3           | 11.29     | 35.05          | 385     | 172       | A         | H       |
|                                       | *    | 5200      | 120.71     | -          | -          | 110.12     | 34.3           | 11.34     | 35.05          | 385     | 172       | P         | H       |
|                                       | *    | 5200      | 112.94     | -          | -          | 102.35     | 34.3           | 11.34     | 35.05          | 385     | 172       | A         | H       |
|                                       |      | 5359.48   | 51.68      | -22.32     | 74         | 40.84      | 34.4           | 11.49     | 35.05          | 385     | 172       | P         | H       |
|                                       |      | 5350      | 42.99      | -11.01     | 54         | 32.15      | 34.4           | 11.49     | 35.05          | 385     | 172       | A         | H       |
|                                       |      | 5144.56   | 55.4       | -18.6      | 74         | 44.86      | 34.3           | 11.29     | 35.05          | 238     | 265       | P         | V       |
|                                       |      | 5149.5    | 46.52      | -7.48      | 54         | 35.98      | 34.3           | 11.29     | 35.05          | 238     | 265       | A         | V       |
|                                       | *    | 5200      | 121.17     | -          | -          | 110.58     | 34.3           | 11.34     | 35.05          | 238     | 265       | P         | V       |
|                                       | *    | 5200      | 113.76     | -          | -          | 103.17     | 34.3           | 11.34     | 35.05          | 238     | 265       | A         | V       |
|                                       |      | 5366.76   | 51.92      | -22.08     | 74         | 41.01      | 34.47          | 11.49     | 35.05          | 238     | 265       | P         | V       |
|                                       |      | 5424.16   | 42.9       | -11.1      | 54         | 31.77      | 34.63          | 11.56     | 35.06          | 238     | 265       | A         | V       |



| WIFI<br>Ant.<br>1+2+3+4                                           | 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) |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| <b>802.11ac</b><br><b>VHT20</b><br><b>CH 48</b><br><b>5240MHz</b> |                                                                                             | 5141.96              | 53.3                | -20.7                   | 74                          | 42.76                   | 34.3                          | 11.29                  | 35.05                      | 355                  | 174                     | P                     | H             |
|                                                                   |                                                                                             | 5135.98              | 44.97               | -9.03                   | 54                          | 34.58                   | 34.2                          | 11.24                  | 35.05                      | 355                  | 174                     | A                     | H             |
|                                                                   | *                                                                                           | 5240                 | 119.65              | -                       | -                           | 108.95                  | 34.37                         | 11.38                  | 35.05                      | 355                  | 174                     | P                     | H             |
|                                                                   | *                                                                                           | 5240                 | 112.15              | -                       | -                           | 101.45                  | 34.37                         | 11.38                  | 35.05                      | 355                  | 174                     | A                     | H             |
|                                                                   |                                                                                             | 5410.44              | 52.18               | -21.82                  | 74                          | 41.11                   | 34.6                          | 11.53                  | 35.06                      | 355                  | 174                     | P                     | H             |
|                                                                   |                                                                                             | 5423.88              | 42.94               | -11.06                  | 54                          | 31.81                   | 34.63                         | 11.56                  | 35.06                      | 355                  | 174                     | A                     | H             |
|                                                                   |                                                                                             | 5139.36              | 52.62               | -21.38                  | 74                          | 42.23                   | 34.2                          | 11.24                  | 35.05                      | 230                  | 232                     | P                     | V             |
|                                                                   |                                                                                             | 5150                 | 44.31               | -9.69                   | 54                          | 33.77                   | 34.3                          | 11.29                  | 35.05                      | 230                  | 232                     | A                     | V             |
|                                                                   | *                                                                                           | 5240                 | 121.2               | -                       | -                           | 110.5                   | 34.37                         | 11.38                  | 35.05                      | 230                  | 232                     | P                     | V             |
|                                                                   | *                                                                                           | 5240                 | 113.38              | -                       | -                           | 102.68                  | 34.37                         | 11.38                  | 35.05                      | 230                  | 232                     | A                     | V             |
|                                                                   |                                                                                             | 5448.52              | 53.38               | -20.62                  | 74                          | 42.18                   | 34.7                          | 11.56                  | 35.06                      | 230                  | 232                     | P                     | V             |
|                                                                   |                                                                                             | 5376                 | 43.17               | -10.83                  | 54                          | 32.27                   | 34.47                         | 11.49                  | 35.06                      | 230                  | 232                     | A                     | V             |
| <b>Remark</b>                                                     | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       |               |



## Band 1 5150~5250MHz

## WIFI 802.11ac VHT20 (Harmonic @ 3m)

| WIFI<br>Ant.<br>1+2+3+4               | 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>VHT20<br>CH 36<br>5180MHz |                                                                                             | 10360                | 46.64               | -21.56                  | 68.2                        | 51.47                     | 37.33                         | 17.42                  | 59.58                      | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             | 15540                | 50.89               | -23.11                  | 74                          | 46.82                     | 40.27                         | 20.32                  | 56.52                      | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                       |                                                                                             | 10360                | 46.95               | -21.25                  | 68.2                        | 51.78                     | 37.33                         | 17.42                  | 59.58                      | 100                  | 0                       | P                       | V               |
|                                       |                                                                                             | 15540                | 50.87               | -23.13                  | 74                          | 46.8                      | 40.27                         | 20.32                  | 56.52                      | 100                  | 0                       | P                       | V               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| 802.11ac<br>VHT20<br>CH 40<br>5200MHz |                                                                                             | 10400                | 47.42               | -20.78                  | 68.2                        | 52.15                     | 37.4                          | 17.43                  | 59.56                      | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             | 15600                | 49.49               | -24.51                  | 74                          | 45.55                     | 40.2                          | 20.37                  | 56.63                      | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                       |                                                                                             | 10400                | 47.6                | -20.6                   | 68.2                        | 52.33                     | 37.4                          | 17.43                  | 59.56                      | 100                  | 0                       | P                       | V               |
|                                       |                                                                                             | 15600                | 49.47               | -24.53                  | 74                          | 45.53                     | 40.2                          | 20.37                  | 56.63                      | 100                  | 0                       | P                       | V               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| 802.11ac<br>VHT20<br>CH 48<br>5240MHz |                                                                                             | 10480                | 47.57               | -20.63                  | 68.2                        | 52.21                     | 37.4                          | 17.46                  | 59.5                       | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             | 15720                | 50.8                | -23.2                   | 74                          | 46.76                     | 40.43                         | 20.42                  | 56.81                      | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                       |                                                                                             | 10480                | 47.84               | -20.36                  | 68.2                        | 52.48                     | 37.4                          | 17.46                  | 59.5                       | 100                  | 0                       | P                       | V               |
|                                       |                                                                                             | 15720                | 50.38               | -23.62                  | 74                          | 46.34                     | 40.43                         | 20.42                  | 56.81                      | 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 1 5150~5250MHz

## WIFI 802.11ac VHT40 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1+2+3+4               | 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>VHT40<br>CH 38<br>5190MHz |                                                                                             | 5139.36              | 59.95               | -14.05                  | 74                          | 49.56                     | 34.2                          | 11.24                  | 35.05                      | 364                  | 176                     | P                       | H               |
|                                       |                                                                                             | 5149.5               | 48.81               | -5.19                   | 54                          | 38.27                     | 34.3                          | 11.29                  | 35.05                      | 364                  | 176                     | A                       | H               |
|                                       | *                                                                                           | 5190                 | 113.42              | -                       | -                           | 102.83                    | 34.3                          | 11.34                  | 35.05                      | 364                  | 176                     | P                       | H               |
|                                       | *                                                                                           | 5190                 | 108.36              | -                       | -                           | 97.77                     | 34.3                          | 11.34                  | 35.05                      | 364                  | 176                     | A                       | H               |
|                                       |                                                                                             | 5435.92              | 50.32               | -23.68                  | 74                          | 39.15                     | 34.67                         | 11.56                  | 35.06                      | 364                  | 176                     | P                       | H               |
|                                       |                                                                                             | 5360.88              | 41.69               | -12.31                  | 54                          | 30.78                     | 34.47                         | 11.49                  | 35.05                      | 364                  | 176                     | A                       | H               |
|                                       |                                                                                             | 5139.62              | 59.63               | -14.37                  | 74                          | 49.14                     | 34.3                          | 11.24                  | 35.05                      | 225                  | 274                     | P                       | V               |
|                                       |                                                                                             | 5150                 | 50.32               | -3.68                   | 54                          | 39.78                     | 34.3                          | 11.29                  | 35.05                      | 225                  | 274                     | A                       | V               |
|                                       | *                                                                                           | 5190                 | 113.15              | -                       | -                           | 102.56                    | 34.3                          | 11.34                  | 35.05                      | 225                  | 274                     | P                       | V               |
|                                       | *                                                                                           | 5190                 | 107.44              | -                       | -                           | 96.85                     | 34.3                          | 11.34                  | 35.05                      | 225                  | 274                     | A                       | V               |
|                                       |                                                                                             | 5400.36              | 50.97               | -23.03                  | 74                          | 39.9                      | 34.6                          | 11.53                  | 35.06                      | 225                  | 274                     | P                       | V               |
|                                       |                                                                                             | 5412.96              | 41.97               | -12.03                  | 54                          | 30.87                     | 34.63                         | 11.53                  | 35.06                      | 225                  | 274                     | A                       | V               |
| 802.11ac<br>VHT40<br>CH 46<br>5230MHz |                                                                                             | 5145.34              | 59.15               | -14.85                  | 74                          | 48.61                     | 34.3                          | 11.29                  | 35.05                      | 378                  | 179                     | P                       | H               |
|                                       |                                                                                             | 5145.08              | 49.94               | -4.06                   | 54                          | 39.4                      | 34.3                          | 11.29                  | 35.05                      | 378                  | 179                     | A                       | H               |
|                                       | *                                                                                           | 5230                 | 121.36              | -                       | -                           | 110.66                    | 34.37                         | 11.38                  | 35.05                      | 378                  | 179                     | P                       | H               |
|                                       | *                                                                                           | 5230                 | 113.55              | -                       | -                           | 102.85                    | 34.37                         | 11.38                  | 35.05                      | 378                  | 179                     | A                       | H               |
|                                       |                                                                                             | 5365.64              | 53.04               | -20.96                  | 74                          | 42.13                     | 34.47                         | 11.49                  | 35.05                      | 378                  | 179                     | P                       | H               |
|                                       |                                                                                             | 5355.28              | 43.27               | -10.73                  | 54                          | 32.43                     | 34.4                          | 11.49                  | 35.05                      | 378                  | 179                     | A                       | H               |
|                                       |                                                                                             | 5147.42              | 62.05               | -11.95                  | 74                          | 51.51                     | 34.3                          | 11.29                  | 35.05                      | 248                  | 236                     | P                       | V               |
|                                       |                                                                                             | 5133.64              | 51.91               | -2.09                   | 54                          | 41.52                     | 34.2                          | 11.24                  | 35.05                      | 248                  | 236                     | A                       | V               |
|                                       | *                                                                                           | 5230                 | 121.27              | -                       | -                           | 110.57                    | 34.37                         | 11.38                  | 35.05                      | 248                  | 236                     | P                       | V               |
|                                       | *                                                                                           | 5230                 | 113.95              | -                       | -                           | 103.25                    | 34.37                         | 11.38                  | 35.05                      | 248                  | 236                     | A                       | V               |
|                                       |                                                                                             | 5355.84              | 53.34               | -20.66                  | 74                          | 42.5                      | 34.4                          | 11.49                  | 35.05                      | 248                  | 236                     | P                       | V               |
|                                       |                                                                                             | 5355.84              | 43.91               | -10.09                  | 54                          | 33.07                     | 34.4                          | 11.49                  | 35.05                      | 248                  | 236                     | A                       | V               |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         |                 |



## Band 1 5150~5250MHz

## WIFI 802.11ac VHT40 (Harmonic @ 3m)

| WIFI<br>Ant.<br>1+2+3+4               | 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>VHT40<br>CH 38<br>5190MHz |                                                                                             | 10380                | 47.57               | -20.63                  | 68.2                        | 52.35                     | 37.37                         | 17.42                  | 59.57                      | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             | 15570                | 50.3                | -23.7                   | 74                          | 46.29                     | 40.23                         | 20.35                  | 56.57                      | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                       |                                                                                             | 10380                | 47.62               | -20.58                  | 68.2                        | 52.4                      | 37.37                         | 17.42                  | 59.57                      | 100                  | 0                       | P                       | V               |
|                                       |                                                                                             | 15570                | 50.82               | -23.18                  | 74                          | 46.81                     | 40.23                         | 20.35                  | 56.57                      | 100                  | 0                       | P                       | V               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | V               |
| 802.11ac<br>VHT40<br>CH 46<br>5230MHz |                                                                                             | 10460                | 47.32               | -20.88                  | 68.2                        | 51.99                     | 37.4                          | 17.45                  | 59.52                      | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             | 15690                | 50.52               | -23.48                  | 74                          | 46.5                      | 40.37                         | 20.4                   | 56.75                      | 100                  | 0                       | P                       | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                       |                                                                                             |                      |                     |                         |                             |                           |                               |                        |                            |                      |                         |                         | H               |
|                                       |                                                                                             | 10460                | 47.73               | -20.47                  | 68.2                        | 52.4                      | 37.4                          | 17.45                  | 59.52                      | 100                  | 0                       | P                       | V               |
|                                       |                                                                                             | 15690                | 50.95               | -23.05                  | 74                          | 46.93                     | 40.37                         | 20.4                   | 56.75                      | 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 1 5150~5250MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1+2+3+4               | 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 42<br>5210MHz |                                                                                             | 5121.68              | 54.52               | -19.48                  | 74                          | 44.23                   | 34.1                          | 11.24                  | 35.05                      | 272                  | 172                     | P                     | H             |
|                                       |                                                                                             | 5122.46              | 46.36               | -7.64                   | 54                          | 36.07                   | 34.1                          | 11.24                  | 35.05                      | 272                  | 172                     | A                     | H             |
|                                       | *                                                                                           | 5210                 | 108.24              | -                       | -                           | 97.62                   | 34.33                         | 11.34                  | 35.05                      | 272                  | 172                     | P                     | H             |
|                                       | *                                                                                           | 5210                 | 102.29              | -                       | -                           | 91.67                   | 34.33                         | 11.34                  | 35.05                      | 272                  | 172                     | A                     | H             |
|                                       |                                                                                             | 5353.88              | 51.51               | -22.49                  | 74                          | 40.67                   | 34.4                          | 11.49                  | 35.05                      | 272                  | 172                     | P                     | H             |
|                                       |                                                                                             | 5350                 | 42.63               | -11.37                  | 54                          | 31.79                   | 34.4                          | 11.49                  | 35.05                      | 272                  | 172                     | A                     | H             |
|                                       |                                                                                             | 5139.62              | 59.96               | -14.04                  | 74                          | 49.47                   | 34.3                          | 11.24                  | 35.05                      | 235                  | 234                     | P                     | V             |
|                                       |                                                                                             | 5133.9               | 51.81               | -2.19                   | 54                          | 41.42                   | 34.2                          | 11.24                  | 35.05                      | 235                  | 234                     | A                     | V             |
|                                       | *                                                                                           | 5210                 | 111.76              | -                       | -                           | 101.14                  | 34.33                         | 11.34                  | 35.05                      | 235                  | 234                     | P                     | V             |
|                                       | *                                                                                           | 5210                 | 104.17              | -                       | -                           | 93.55                   | 34.33                         | 11.34                  | 35.05                      | 235                  | 234                     | A                     | V             |
|                                       |                                                                                             | 5351.08              | 52.42               | -21.58                  | 74                          | 41.58                   | 34.4                          | 11.49                  | 35.05                      | 235                  | 234                     | P                     | V             |
|                                       |                                                                                             | 5351.92              | 43.4                | -10.6                   | 54                          | 32.56                   | 34.4                          | 11.49                  | 35.05                      | 235                  | 234                     | A                     | V             |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       |               |

**Band 1 5150~5250MHz****WIFI 802.11ac VHT80 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1+2+3+4               | 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 42<br>5210MHz |                                                                                             | 10420                | 47.67               | -20.53                  | 68.2                        | 52.39                   | 37.4                          | 17.43                  | 59.55                      | 100                  | 0                       | P                     | H             |
|                                       |                                                                                             | 15630                | 50.24               | -23.76                  | 74                          | 46.26                   | 40.27                         | 20.39                  | 56.68                      | 100                  | 0                       | P                     | H             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                                       |                                                                                             |                      |                     |                         |                             |                         |                               |                        |                            |                      |                         |                       | H             |
|                                       |                                                                                             | 10420                | 47.88               | -20.32                  | 68.2                        | 52.6                    | 37.4                          | 17.43                  | 59.55                      | 100                  | 0                       | P                     | V             |
|                                       |                                                                                             | 15630                | 50.22               | -23.78                  | 74                          | 46.24                   | 40.27                         | 20.39                  | 56.68                      | 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

## WIFI 802.11ac VHT20 (LF @ 3m)

| WIFI                            | Note                                                                       | Frequency | Level      | Over   | Limit      | Read   | Antenna  | Path   | Preamp | Ant    | Table   | Peak  | Pol.  |
|---------------------------------|----------------------------------------------------------------------------|-----------|------------|--------|------------|--------|----------|--------|--------|--------|---------|-------|-------|
| Ant.                            |                                                                            |           |            | Limit  | Line       | Level  | Factor   | Loss   | Factor | Pos    | Pos     | Avg.  |       |
| 1+2+3+4                         |                                                                            | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | (dBμV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11ac<br><br>VHT20<br><br>LF |                                                                            | 130.71    | 29.53      | -13.97 | 43.5       | 40.05  | 17.42    | 2.01   | 29.95  | -      | -       | P     | H     |
|                                 |                                                                            | 172.02    | 28.14      | -15.36 | 43.5       | 40.32  | 15.45    | 2.26   | 29.89  | -      | -       | P     | H     |
|                                 |                                                                            | 273.27    | 30.55      | -15.45 | 46         | 38.46  | 19.01    | 2.86   | 29.78  | -      | -       | P     | H     |
|                                 |                                                                            | 381.9     | 34.16      | -11.84 | 46         | 39.65  | 21.01    | 3.28   | 29.78  | -      | -       | P     | H     |
|                                 |                                                                            | 455.4     | 36.11      | -9.89  | 46         | 39.33  | 23.08    | 3.5    | 29.8   | 100    | 0       | P     | H     |
|                                 |                                                                            | 956.6     | 34.44      | -11.56 | 46         | 27.19  | 30.69    | 5.08   | 28.52  | -      | -       | P     | H     |
|                                 |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                 |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                 |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                 |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                 |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                 |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                 |                                                                            | 40.8      | 31.61      | -8.39  | 40         | 41.46  | 18.81    | 1.33   | 29.99  | 100    | 0       | P     | V     |
|                                 |                                                                            | 48.36     | 31.02      | -8.98  | 40         | 44.61  | 15.07    | 1.33   | 29.99  | -      | -       | P     | V     |
|                                 |                                                                            | 273.27    | 26.26      | -19.74 | 46         | 34.17  | 19.01    | 2.86   | 29.78  | -      | -       | P     | V     |
|                                 |                                                                            | 454.7     | 33.78      | -12.22 | 46         | 37.02  | 23.06    | 3.5    | 29.8   | -      | -       | P     | V     |
|                                 |                                                                            | 499.5     | 33.94      | -12.06 | 46         | 36.26  | 23.84    | 3.64   | 29.8   | -      | -       | P     | V     |
|                                 |                                                                            | 959.4     | 34.88      | -11.12 | 46         | 27.45  | 30.85    | 5.08   | 28.5   | -      | -       | 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+2+3+4 |      | ( 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

|                 |                                   |                     |         |
|-----------------|-----------------------------------|---------------------|---------|
| Test Engineer : | Jesse Wang, Stan Hsieh and Ken Wu | Temperature :       | 21~28°C |
|                 |                                   | Relative Humidity : | 51~68%  |

### Note symbol

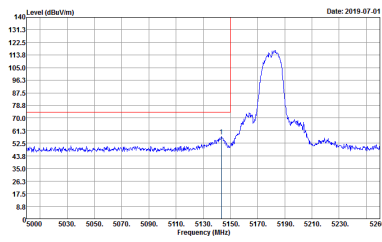
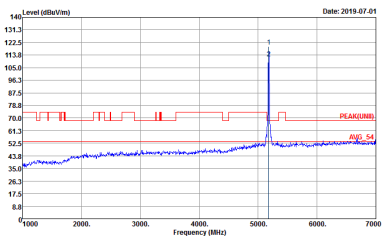
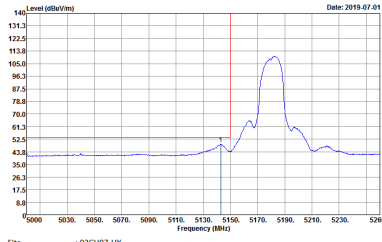
|    |                       |
|----|-----------------------|
| -L | Low channel location  |
| -R | High channel location |

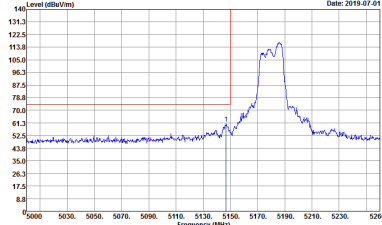
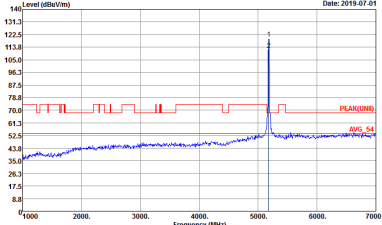
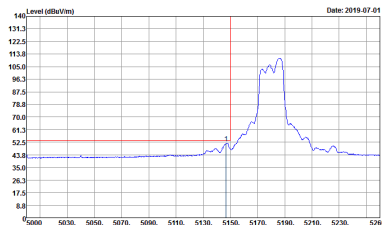


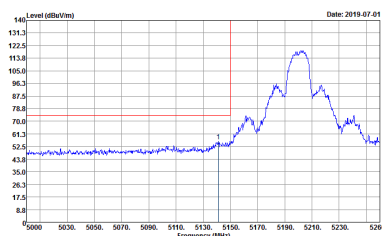
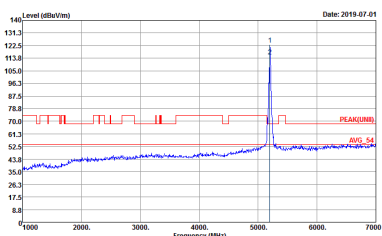
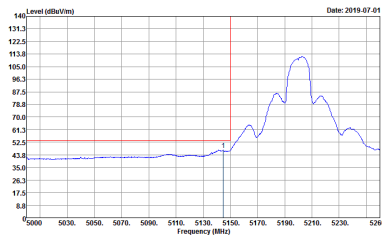
&lt;CCD Mode&gt;

Band 1 - 5150~5250MHz

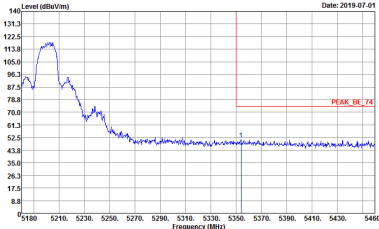
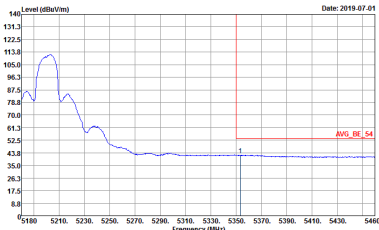
WIFI 802.11a (Band Edge @ 3m)

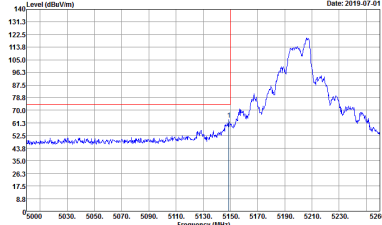
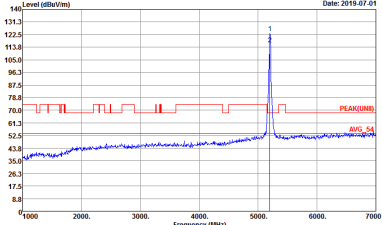
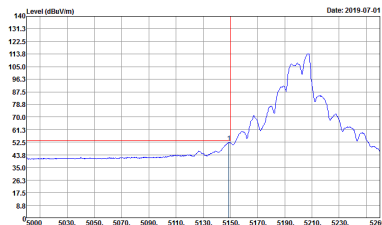
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                         |                                                                                                                                                                                                                                           |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11a CH36 5180MHz                                                                                                                                                                                                                       |                                                                                                                                                                                                                                           |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                 | Fundamental                                                                                                                                                                                                                               |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 1<br/>Setting : 18</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 1<br/>Setting : 18</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_34 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 1<br/>Setting : 18</p> | Left blank                                                                                                                                                                                                                                |

| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                         |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11a CH36 5180MHz                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                         |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                                                               | Fundamental                                                                                                                                                                                                                                                                             |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Peak :<br/>Project : 960558<br/>Mode : 1<br/>Setting : 18</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Peak :<br/>Project : 960558<br/>Mode : 1<br/>Setting : 18</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_SA 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000kHz VBW:1.000kHz SWT:Auto<br/>Peak :<br/>Project : 960558<br/>Mode : 1<br/>Setting : 18</p>   | Left blank                                                                                                                                                                                                                                                                              |

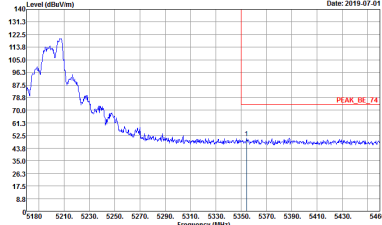
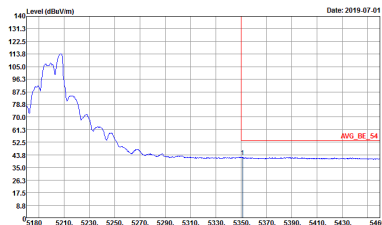
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                           |                                                                                                                                                                                                                                              |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11a CH40 5200MHz - L                                                                                                                                                                                                                     |                                                                                                                                                                                                                                              |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                   | Fundamental                                                                                                                                                                                                                                  |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 2<br/>Setting : 22.5</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 2<br/>Setting : 22.5</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 2<br/>Setting : 22.5</p> | Left blank                                                                                                                                                                                                                                   |

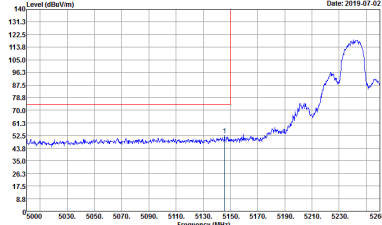
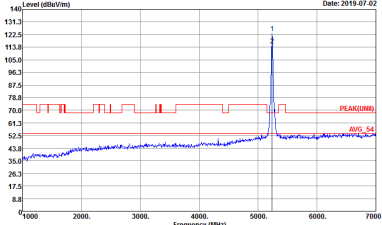
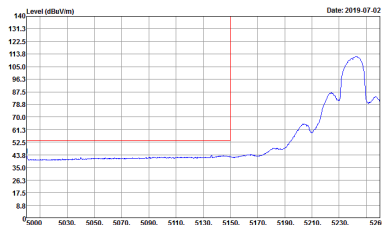


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                     |             |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11a CH40 5200MHz - R                                                                                                                                                                                                                               |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                             | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 2<br/>Setting : 22.5</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 2<br/>Setting : 22.5</p></div> | Left blank  |

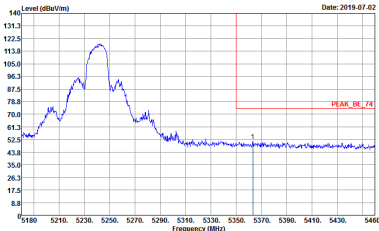
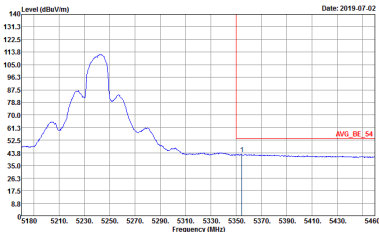
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                 |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11a CH40 5200MHz - L                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                 |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                                                                                                                                                       | Fundamental                                                                                                                                                                                                                                                                                                                                                                     |
| Peak    |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK_BE_74 3m HF_ANT_0007596Z VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 2<br/>           Setting : 22.5         </p> |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK(UNII) 3m HF_ANT_0007596Z VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 2<br/>           Setting : 22.5         </p> |
| Avg.    |  <p>           Site : 03CH07-HY<br/>           Condition : AVG_BE_54 3m HF_ANT_0007596Z VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:1.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 2<br/>           Setting : 22.5         </p>   | Left blank                                                                                                                                                                                                                                                                                                                                                                      |

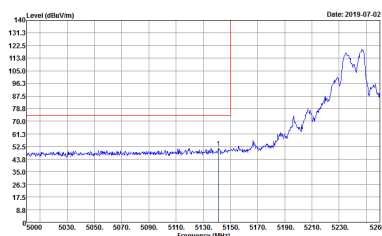
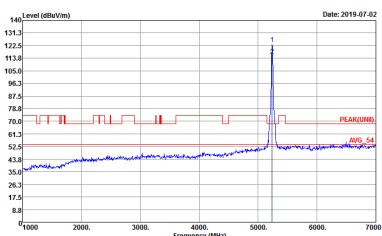
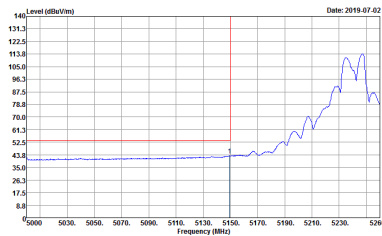


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                         |             |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11a CH40 5200MHz - R                                                                                                                                                                                                                   |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                   | Fundamental |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 2<br/>Setting : 22.5</p>  | Left blank  |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 2<br/>Setting : 22.5</p> | Left blank  |

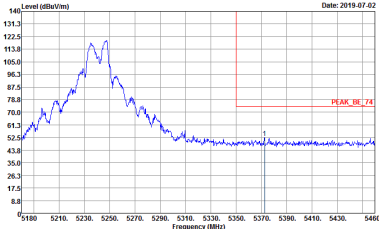
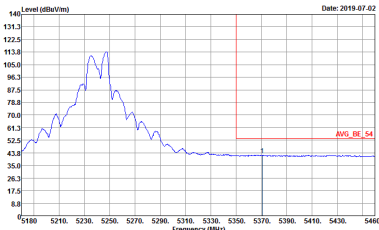
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                           |                                                                                                                                                                                                                                              |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11a CH48 5240MHz - L                                                                                                                                                                                                                     |                                                                                                                                                                                                                                              |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                   | Fundamental                                                                                                                                                                                                                                  |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 3<br/>Setting : 22.5</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 3<br/>Setting : 22.5</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 3<br/>Setting : 22.5</p> | Left blank                                                                                                                                                                                                                                   |



| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                           |             |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11a CH48 5240MHz - R                                                                                                                                                                                                                     |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                   | Fundamental |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 3<br/>Setting : 22.5</p>  | Left blank  |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 3<br/>Setting : 22.5</p> | Left blank  |

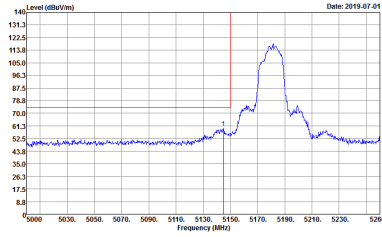
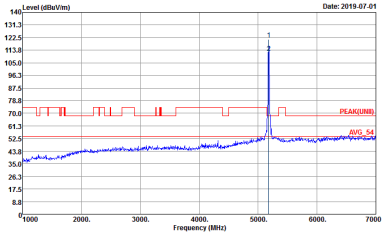
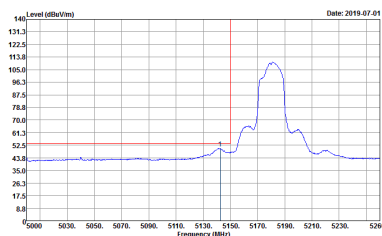
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                 |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11a CH48 5240MHz - L                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                 |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                                                                                                                                                       | Fundamental                                                                                                                                                                                                                                                                                                                                                                     |
| Peak    |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK_BE_74 3m HF_ANT_0007596Z VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 3<br/>           Setting : 22.5         </p> |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK(UNII) 3m HF_ANT_0007596Z VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 3<br/>           Setting : 22.5         </p> |
| Avg.    |  <p>           Site : 03CH07-HY<br/>           Condition : AVG_BE_54 3m HF_ANT_0007596Z VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:1.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 3<br/>           Setting : 22.5         </p>   | Left blank                                                                                                                                                                                                                                                                                                                                                                      |

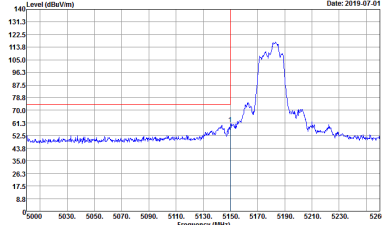
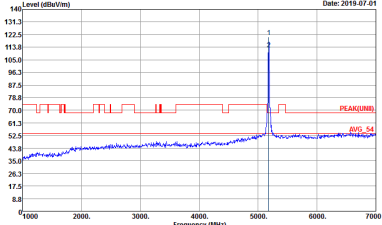
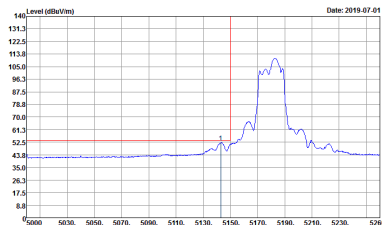


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                   |             |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11a CH48 5240MHz - R                                                                                                                                                                                                                             |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                             | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 3<br/>Setting : 22.5</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 3<br/>Setting : 22.5</p></div> | Left blank  |

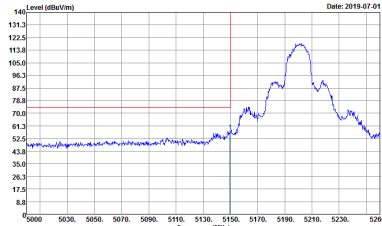
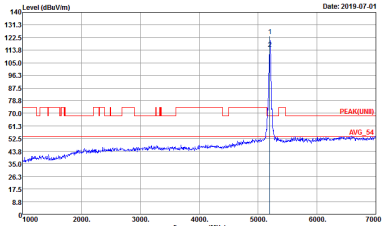
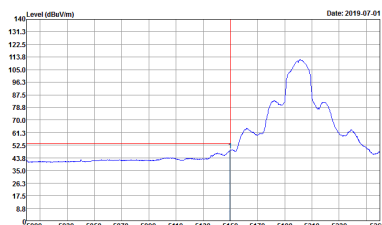


Band 1 5150~5250MHz  
WIFI 802.11n HT20 (Band Edge @ 3m)

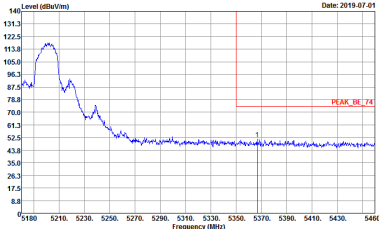
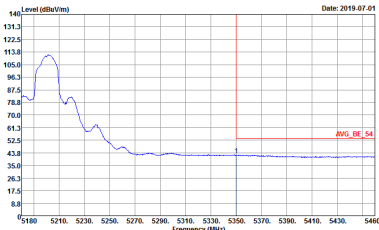
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                         |                                                                                                                                                                                                                                            |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11n HT20 CH36 5180MHz                                                                                                                                                                                                                  |                                                                                                                                                                                                                                            |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                 | Fundamental                                                                                                                                                                                                                                |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_78.3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 4<br/>Setting : 19</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNIT) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 4<br/>Setting : 19</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54.3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 4<br/>Setting : 19</p> | Left blank                                                                                                                                                                                                                                 |

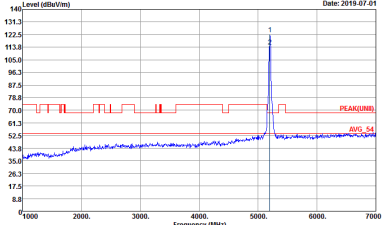
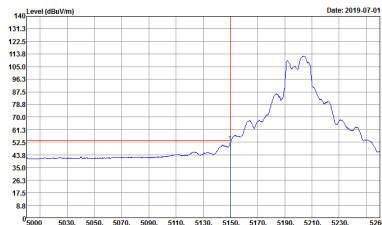
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                               |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11n HT20 CH36 5180MHz                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                               |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                                                                                                                                                     | Fundamental                                                                                                                                                                                                                                                                                                                                                                   |
| Peak    |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 4<br/>           Setting : 19         </p> |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 4<br/>           Setting : 19         </p> |
| Avg.    |  <p>           Site : 03CH07-HY<br/>           Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:1.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 4<br/>           Setting : 19         </p>   | Left blank                                                                                                                                                                                                                                                                                                                                                                    |



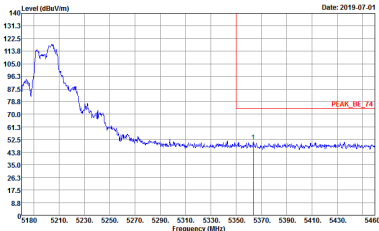
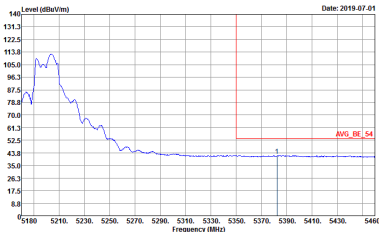
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                        |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11n HT20 CH40 5200MHz - L                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                        |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                             | Fundamental                                                                                                                                                                                                                                            |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p></div>  | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p></div> |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_SA 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p></div> | Left blank                                                                                                                                                                                                                                             |

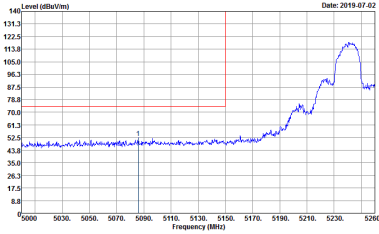
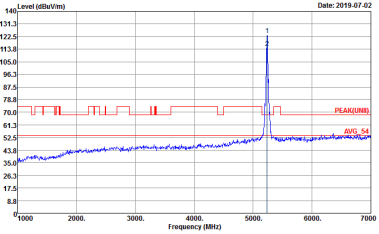
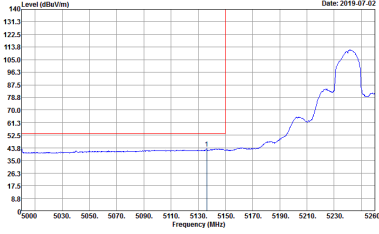


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                     |             |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11n HT20 CH40 5200MHz - R                                                                                                                                                                                                                          |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                             | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p></div> | Left blank  |

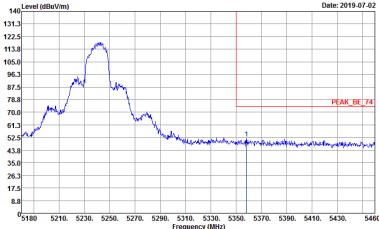
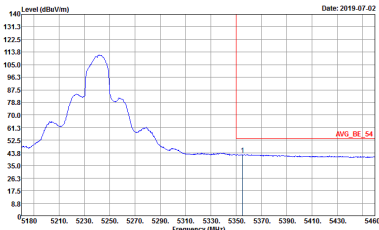
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                           |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11n HT20 CH40 5200MHz - L                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                           |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                                                                 | Fundamental                                                                                                                                                                                                                                                                               |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Peak :<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Peak :<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_SA 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000kHz VBW:1.000kHz SWT:Auto<br/>Peak :<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p>   | Left blank                                                                                                                                                                                                                                                                                |



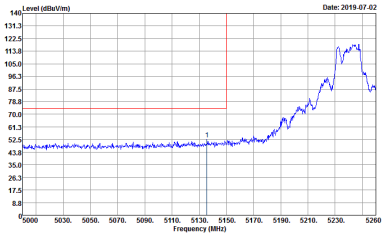
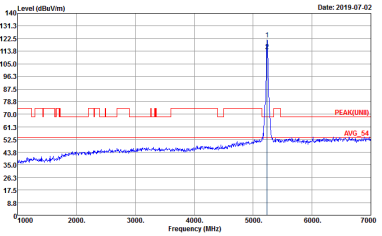
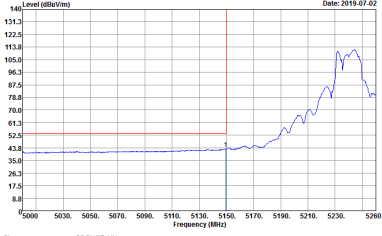
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                   |             |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11n HT20 CH40 5200MHz - R                                                                                                                                                                                                                        |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                             | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p></div> | Left blank  |

| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                           |                                                                                                                                                                                                                                              |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11n HT20 CH48 5240MHz - L                                                                                                                                                                                                                |                                                                                                                                                                                                                                              |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                   | Fundamental                                                                                                                                                                                                                                  |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p> | Left blank                                                                                                                                                                                                                                   |

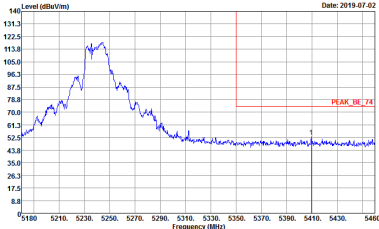
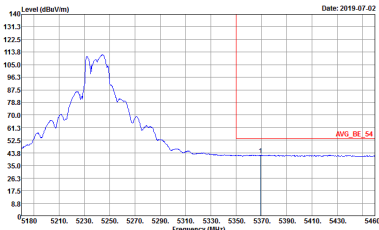


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                     |             |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11n HT20 CH48 5240MHz - R                                                                                                                                                                                                                          |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                             | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p></div> | Left blank  |



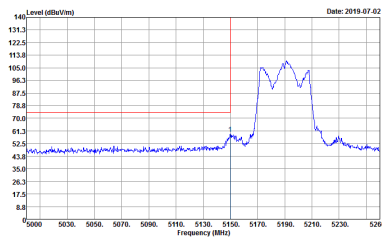
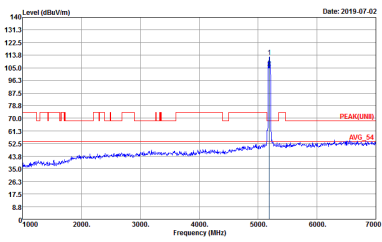
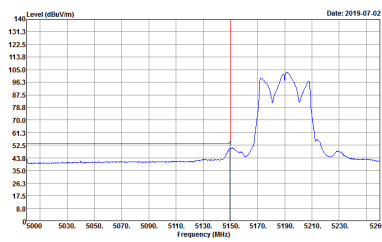
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                         |                                                                                                                                                                                                                                            |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11n HT20 CH48 5240MHz - L                                                                                                                                                                                                              |                                                                                                                                                                                                                                            |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                   | Fundamental                                                                                                                                                                                                                                |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p> | Left blank                                                                                                                                                                                                                                 |



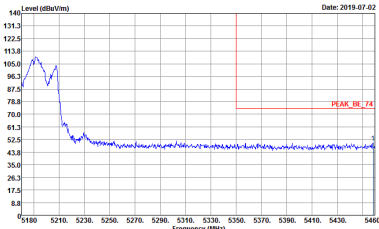
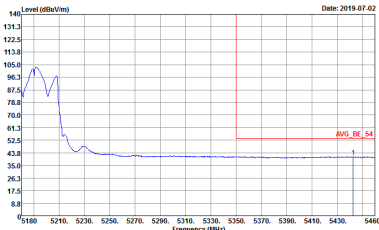
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                   |             |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11n HT20 CH48 5240MHz - R                                                                                                                                                                                                                        |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                             | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p></div> | Left blank  |

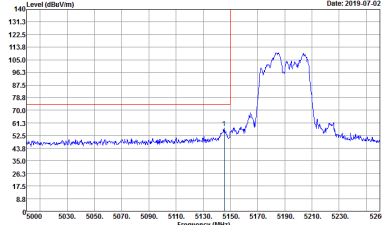
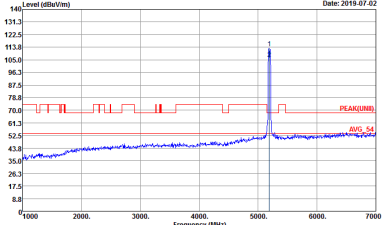


Band 1 5150~5250MHz  
WIFI 802.11n HT40 (Band Edge @ 3m)

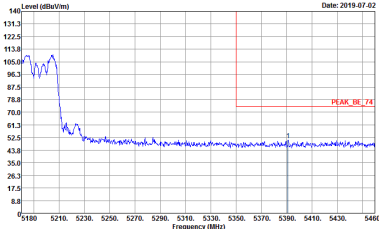
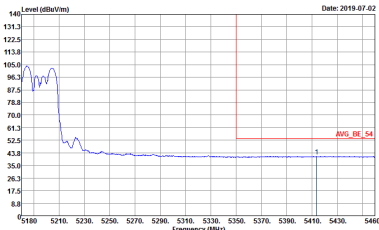
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                           |                                                                                                                                                                                                                                              |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11n HT40 CH38 5190MHz - L                                                                                                                                                                                                                |                                                                                                                                                                                                                                              |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                   | Fundamental                                                                                                                                                                                                                                  |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_78.3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 7<br/>Setting : 13.5</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(FUND) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 7<br/>Setting : 13.5</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54.3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 7<br/>Setting : 13.5</p> | Left blank                                                                                                                                                                                                                                   |

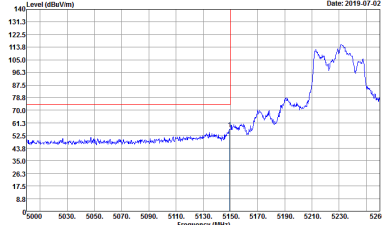
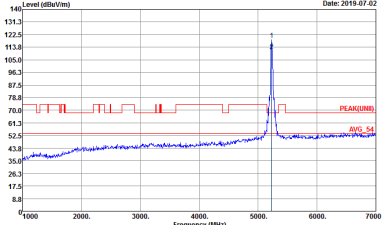


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                     |             |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11n HT40 CH38 5190MHz - R                                                                                                                                                                                                                          |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                             | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 7<br/>Setting : 13.5</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 7<br/>Setting : 13.5</p></div> | Left blank  |

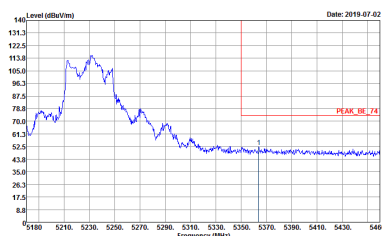
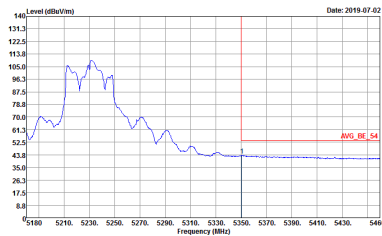
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                 |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11n HT40 CH38 5190MHz - L                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                 |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                                                                                                                                                       | Fundamental                                                                                                                                                                                                                                                                                                                                                                     |
| Peak    |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 7<br/>           Setting : 13.5         </p> |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 7<br/>           Setting : 13.5         </p> |
| Avg.    |  <p>           Site : 03CH07-HY<br/>           Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>           Detector : RBW:1000.000kHz VBW:1.000kHz SWT:Auto<br/>           Peak :<br/>           Project : 960558<br/>           Mode : 7<br/>           Setting : 13.5         </p>   | Left blank                                                                                                                                                                                                                                                                                                                                                                      |

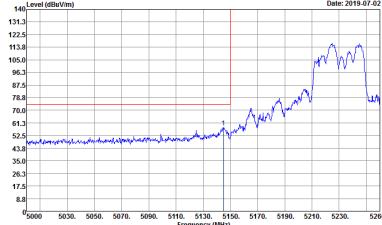
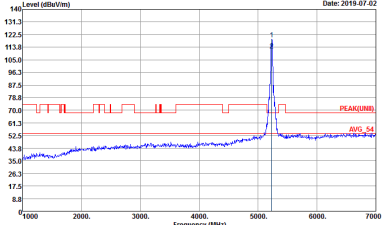


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                   |             |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11n HT40 CH38 5190MHz - R                                                                                                                                                                                                                        |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                             | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 7<br/>Setting : 13.5</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 7<br/>Setting : 13.5</p></div> | Left blank  |

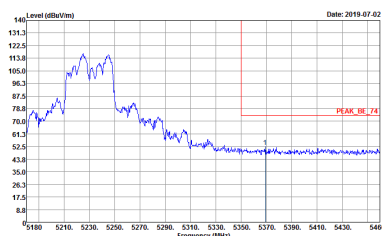
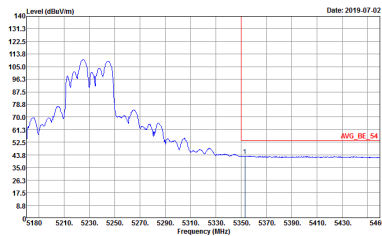
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                               |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11n HT40 CH46 5230MHz - L                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                               |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                                                                   | Fundamental                                                                                                                                                                                                                                                                                   |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Peak : 960558<br/>Project : 8<br/>Mode : 8<br/>Setting : 19.5</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Peak : 960558<br/>Project : 8<br/>Mode : 8<br/>Setting : 19.5</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : RBW:1000.000kHz VBW:1.000kHz SWT:Auto<br/>Peak : 960558<br/>Project : 8<br/>Mode : 8<br/>Setting : 19.5</p>   | Left blank                                                                                                                                                                                                                                                                                    |



| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                           |             |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11n HT40 CH46 5230MHz - R                                                                                                                                                                                                                |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                   | Fundamental |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 8<br/>Setting : 19.5</p>  | Left blank  |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 8<br/>Setting : 19.5</p> | Left blank  |

| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                           |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11n HT40 CH46 5230MHz - L                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                           |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                                                                 | Fundamental                                                                                                                                                                                                                                                                               |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Peak :<br/>Project : 960558<br/>Mode : 8<br/>Setting : 19.5</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Peak :<br/>Project : 960558<br/>Mode : 8<br/>Setting : 19.5</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_SA 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000kHz VBW:1.000kHz SWT:Auto<br/>Peak :<br/>Project : 960558<br/>Mode : 8<br/>Setting : 19.5</p>   | Left blank                                                                                                                                                                                                                                                                                |



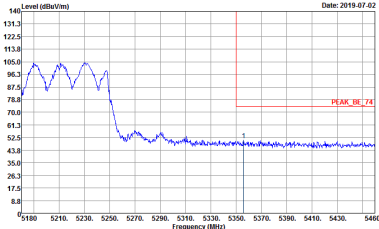
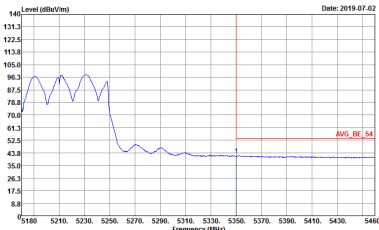
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                         |             |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11n HT40 CH46 5230MHz - R                                                                                                                                                                                                              |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                   | Fundamental |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 8<br/>Setting : 19.5</p>  | Left blank  |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 8<br/>Setting : 19.5</p> | Left blank  |

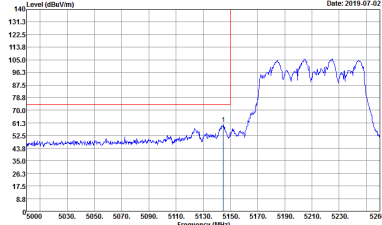
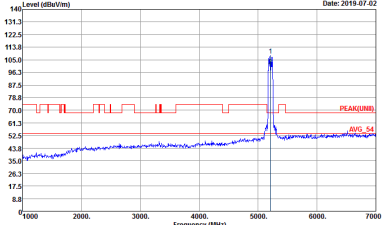


**Band 1 5150~5250MHz**  
**WIFI 802.11ac VHT80 (Band Edge @ 3m)**

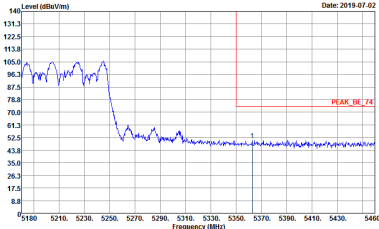
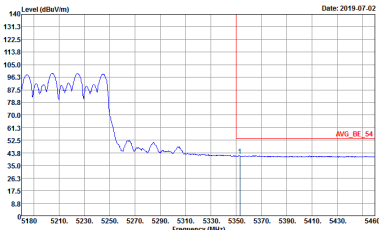
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                |                                                                                                                                                                                                     |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT80 CH42 5210MHz - L                                                                                                                                                                   |                                                                                                                                                                                                     |
| 1+2+3+4 | Horizontal                                                                                                                                                                                        | Fundamental                                                                                                                                                                                         |
| Peak    | <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_3m HF_ANT_00075962 HORIZONTAL<br/>RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 9<br/>Setting : 12</p> | <p>Site : 03CH07-HY<br/>Condition : PEAK(FUN) 3m HF_ANT_00075962 HORIZONTAL<br/>RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 9<br/>Setting : 12</p> |
| Avg.    | <p>Site : 03CH07-HY<br/>Condition : AVG_BE_3m HF_ANT_00075962 HORIZONTAL<br/>RBW:1000.000kHz VBW:1.000kHz SWT:Auto<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 9<br/>Setting : 12</p>     | Left blank                                                                                                                                                                                          |



| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                   |             |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT80 CH42 5210MHz - R                                                                                                                                                                                                                      |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                           | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 9<br/>Setting : 12</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 9<br/>Setting : 12</p></div> | Left blank  |

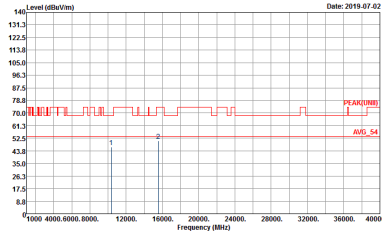
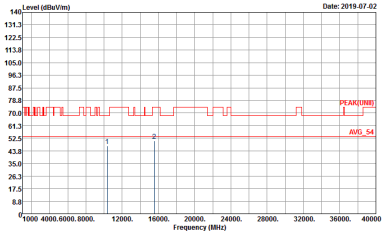
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                     |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT80 CH42 5210MHz - L                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                     |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                                                                                            | Fundamental                                                                                                                                                                                                                                                                                                         |
| Peak    |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>           Detector : Peak<br/>           Project : 960558<br/>           Mode : 9<br/>           Setting : 12         </p>  |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>           Detector : Peak<br/>           Project : 960558<br/>           Mode : 9<br/>           Setting : 12         </p> |
| Avg.    |  <p>           Site : 03CH07-HY<br/>           Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>           Detector : Peak<br/>           Project : 960558<br/>           Mode : 9<br/>           Setting : 12         </p> | Left blank                                                                                                                                                                                                                                                                                                          |



| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                 |             |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT80 CH42 5210MHz - R                                                                                                                                                                                                                    |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                           | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 9<br/>Setting : 12</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_S4 3m HF_ANT_0007596Z VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 9<br/>Setting : 12</p></div> | Left blank  |



**Band 1 - 5150~5250MHz**  
**WIFI 802.11a (Harmonic @ 3m)**

| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                  |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11a CH36 5180MHz                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                  |
| 1+2+3+4      | Horizontal                                                                                                                                                                                                                                        | Vertical                                                                                                                                                                                                                                         |
| Peak<br>Avg. | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 1<br/>Setting : 18</p></div> | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 1<br/>Setting : 18</p></div> |



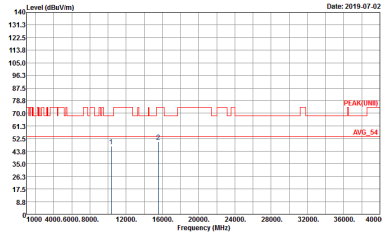
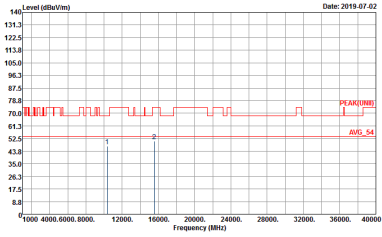
| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                  |                                                                                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11a CH40 5200MHz                                                                                                                                               |                                                                                                                                                                  |
| 1+2+3+4      | Horizontal                                                                                                                                                         | Vertical                                                                                                                                                         |
| Peak<br>Avg. | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 2<br/>Setting : 22.5</p></div> | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 2<br/>Setting : 22.5</p></div> |



| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                   |                                                                                                                                                                   |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11a CH48 5240MHz                                                                                                                                                |                                                                                                                                                                   |
| 1+2+3+4      | Horizontal                                                                                                                                                          | Vertical                                                                                                                                                          |
| Peak<br>Avg. | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 3<br/>Setting : 22.5</p></div> | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 3<br/>Setting : 22.5</p></div> |



Band 1 5150~5250MHz  
WIFI 802.11n HT20 (Harmonic @ 3m)

| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                                                                                        |                                                                                                                                                                                                                                         |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11n HT20 CH36 5180MHz                                                                                                                                                                                                                |                                                                                                                                                                                                                                         |
| 1+2+3+4      | Horizontal                                                                                                                                                                                                                               | Vertical                                                                                                                                                                                                                                |
| Peak<br>Avg. |  <p>Site : 03CH07-HY<br/>Condition : PEAK(LNII) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 4<br/>Setting : 19</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(LNII) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 4<br/>Setting : 19</p> |



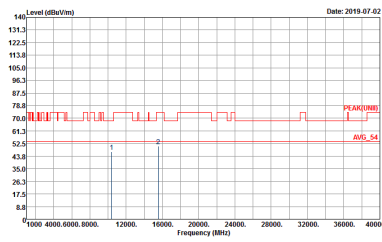
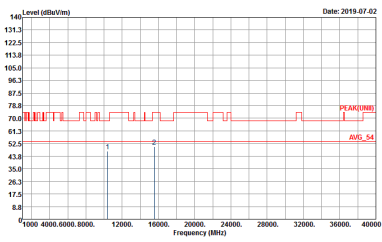
| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                       |                                                                                                                                                       |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11n HT20 CH40 5200MHz                                                                                                                               |                                                                                                                                                       |
| 1+2+3+4      | Horizontal                                                                                                                                              | Vertical                                                                                                                                              |
| Peak<br>Avg. | <p>Site : 03CH07-HY<br/>Condition : PEAK(100) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p> | <p>Site : 03CH07-HY<br/>Condition : PEAK(100) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 5<br/>Setting : 22.5</p> |
|              |                                                                                                                                                         |                                                                                                                                                       |



| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                  |                                                                                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11n HT20 CH48 5240MHz                                                                                                                                          |                                                                                                                                                                  |
| 1+2+3+4      | Horizontal                                                                                                                                                         | Vertical                                                                                                                                                         |
| Peak<br>Avg. | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p></div> | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 6<br/>Setting : 22.5</p></div> |
|              |                                                                                                                                                                    |                                                                                                                                                                  |



Band 1 5150~5250MHz  
WIFI 802.11n HT40 (Harmonic @ 3m)

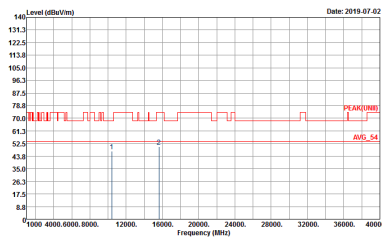
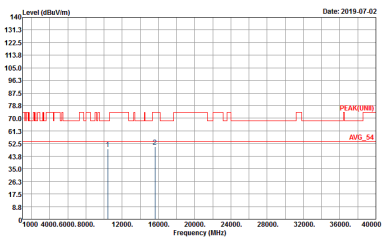
| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                                                                                          |                                                                                                                                                                                                                                           |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11n HT40 CH38 5190MHz                                                                                                                                                                                                                  |                                                                                                                                                                                                                                           |
| 1+2+3+4      | Horizontal                                                                                                                                                                                                                                 | Vertical                                                                                                                                                                                                                                  |
| Peak<br>Avg. |  <p>Site : 03CH07-HY<br/>Condition : PEAK(LNII) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 7<br/>Setting : 13.5</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(LNII) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 7<br/>Setting : 13.5</p> |



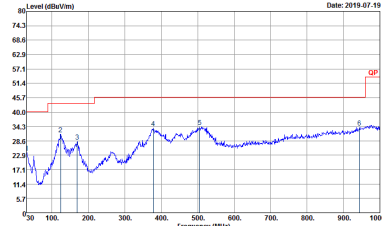
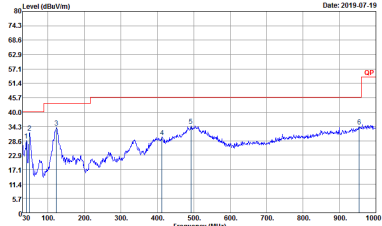
| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                       |                                                                                                                                                       |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11n HT40 CH46 5230MHz                                                                                                                               |                                                                                                                                                       |
| 1+2+3+4      | Horizontal                                                                                                                                              | Vertical                                                                                                                                              |
| Peak<br>Avg. | <p>Site : 03CH07-HY<br/>Condition : PEAK(100) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 8<br/>Setting : 19.5</p> | <p>Site : 03CH07-HY<br/>Condition : PEAK(100) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 8<br/>Setting : 19.5</p> |
|              |                                                                                                                                                         |                                                                                                                                                       |



Band 1 5150~5250MHz  
WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                                                                                        |                                                                                                                                                                                                                                         |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11ac VHT80 CH42 5210MHz                                                                                                                                                                                                              |                                                                                                                                                                                                                                         |
| 1+2+3+4      | Horizontal                                                                                                                                                                                                                               | Vertical                                                                                                                                                                                                                                |
| Peak<br>Avg. |  <p>Site : 03CH07-HY<br/>Condition : PEAK(LNII) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 9<br/>Setting : 12</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(LNII) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 9<br/>Setting : 12</p> |

**Emission below 1GHz**  
**5GHz WIFI 802.11a (LF)**

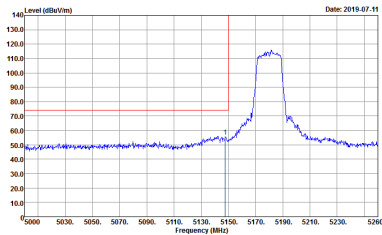
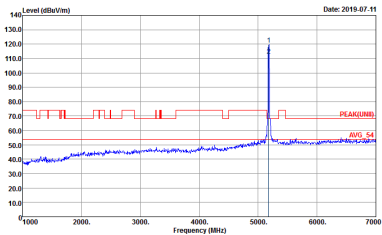
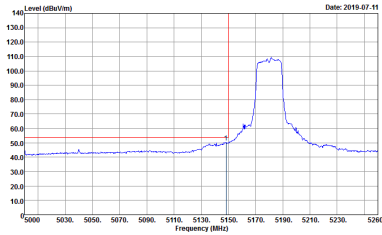
| WIFI                 | 5GHz WIFI                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                  |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT                  | 802.11a LF                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                  |
| 1+2+3+4              | Horizontal                                                                                                                                                                                                                                                                        | Vertical                                                                                                                                                                                                                                                                         |
| <b>QP /<br/>Peak</b> |  <p>           Site : 03CH07-HY<br/>           Condition : QP 3m LF-ANT-35419(6) HORIZONTAL<br/>           Detector : Peak<br/>           Project : 960558<br/>           Mode : 58         </p> |  <p>           Site : 03CH07-HY<br/>           Condition : QP 3m LF-ANT-35419(6) VERTICAL<br/>           Detector : Peak<br/>           Project : 960558<br/>           Mode : 58         </p> |
|                      |                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                  |



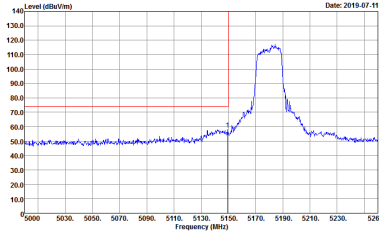
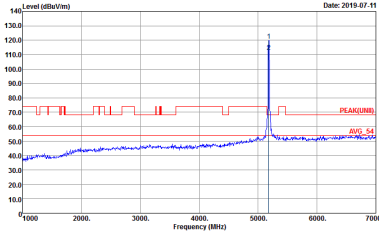
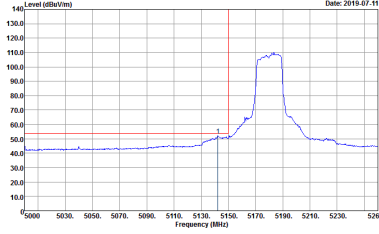
## &lt;TXBF Mode&gt;

## Band 1 - 5150~5250MHz

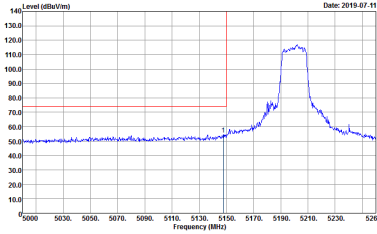
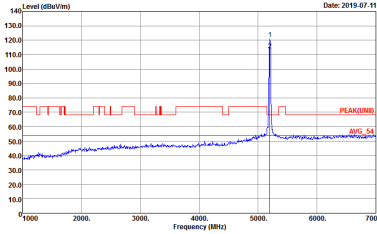
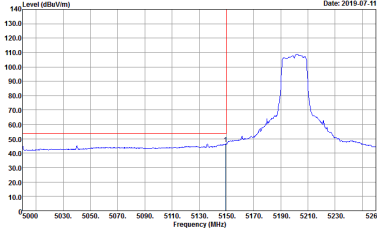
## WIFI 802.11ac VHT20 (Band Edge @ 3m)

| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                          |                                                                                                                                                                                                                                             |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT20 CH36 5180MHz                                                                                                                                                                                                                 |                                                                                                                                                                                                                                             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                  | Fundamental                                                                                                                                                                                                                                 |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 10<br/>Setting : 24</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 10<br/>Setting : 24</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 10<br/>Setting : 24</p> | Left blank                                                                                                                                                                                                                                  |

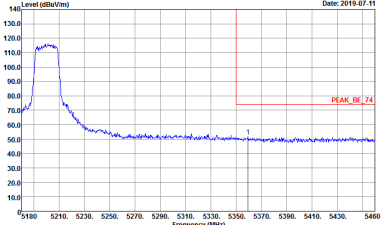
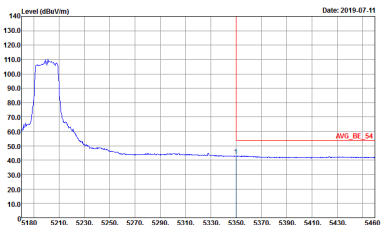


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                             |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT20 CH36 5180MHz                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                                                   | Fundamental                                                                                                                                                                                                                                                                 |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : Peak<br/>Mode : 10<br/>Setting : 24</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/>Project : Peak<br/>Mode : 10<br/>Setting : 24</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : RBW:1000.000KHz VBW:1.000KHz SWT:Auto<br/>Project : Peak<br/>Mode : 10<br/>Setting : 24</p>   | Left blank                                                                                                                                                                                                                                                                  |

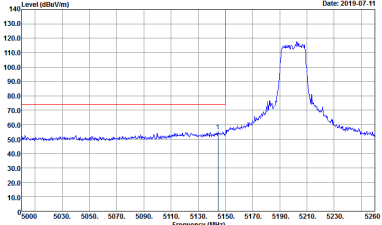
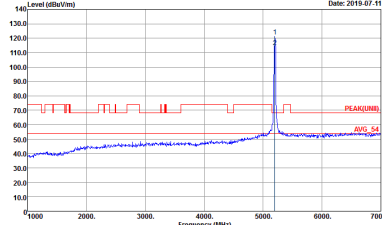
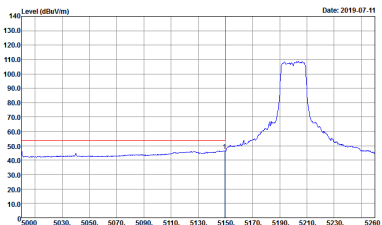


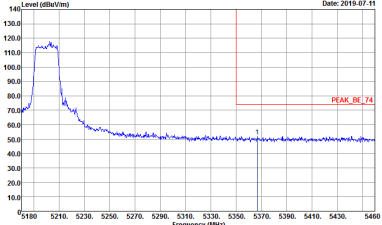
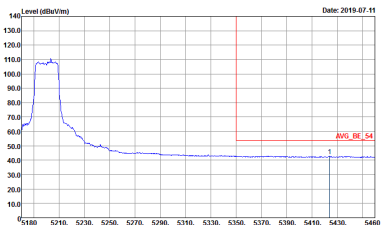
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                          |                                                                                                                                                                                                                                             |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT20 CH40 5200MHz - L                                                                                                                                                                                                             |                                                                                                                                                                                                                                             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                  | Fundamental                                                                                                                                                                                                                                 |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 11<br/>Setting : 25</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 11<br/>Setting : 25</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 11<br/>Setting : 25</p> | Left blank                                                                                                                                                                                                                                  |



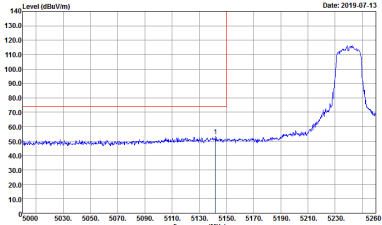
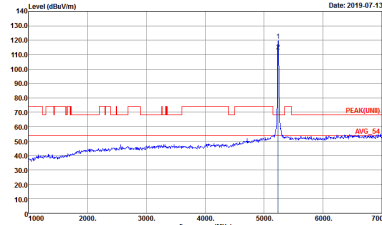
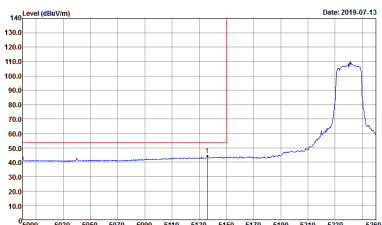
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                    |             |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT20 CH40 5200MHz - R                                                                                                                                                                                                                       |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                            | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 11<br/>Setting : 25</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 11<br/>Setting : 25</p></div> | Left blank  |



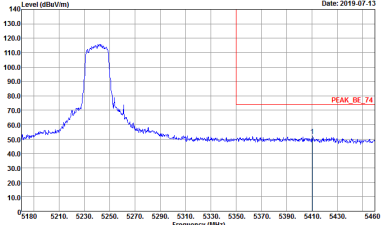
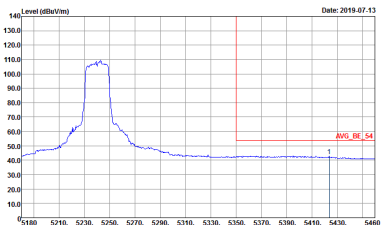
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                        |                                                                                                                                                                                                                                           |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT20 CH40 5200MHz - L                                                                                                                                                                                                           |                                                                                                                                                                                                                                           |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                  | Fundamental                                                                                                                                                                                                                               |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 11<br/>Setting : 25</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 11<br/>Setting : 25</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 11<br/>Setting : 25</p> | Left blank                                                                                                                                                                                                                                |

| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                                                   |             |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT20 CH40 5200MHz - R                                                                                                                                                                                                                                                                                      |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                                                                                             | Fundamental |
| Peak    |  <p>           Site : 03CH07-HY<br/>           Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>           Detector : Peak<br/>           Project : 960558<br/>           Mode : 11<br/>           Setting : 25         </p>  | Left blank  |
| Avg.    |  <p>           Site : 03CH07-HY<br/>           Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>           Detector : Peak<br/>           Project : 960558<br/>           Mode : 11<br/>           Setting : 25         </p> | Left blank  |

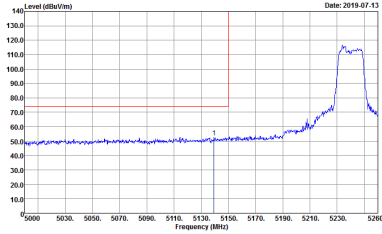
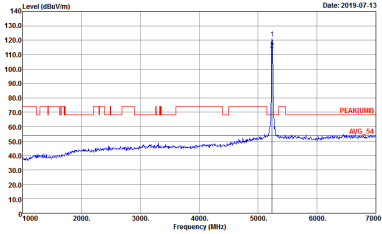
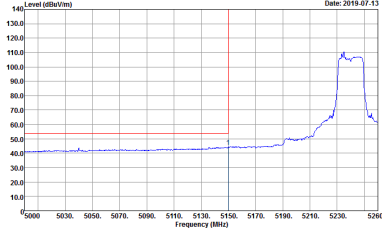


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                          |                                                                                                                                                                                                                                             |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT20 CH48 5240MHz - L                                                                                                                                                                                                             |                                                                                                                                                                                                                                             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                  | Fundamental                                                                                                                                                                                                                                 |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p> | Left blank                                                                                                                                                                                                                                  |

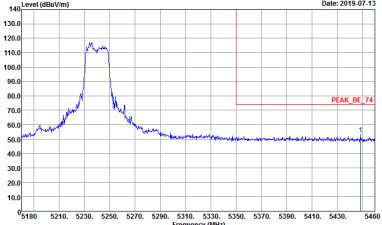
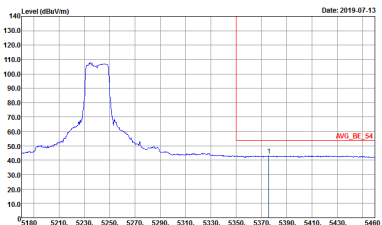


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                    |             |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT20 CH48 5240MHz - R                                                                                                                                                                                                                       |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                            | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p></div> | Left blank  |

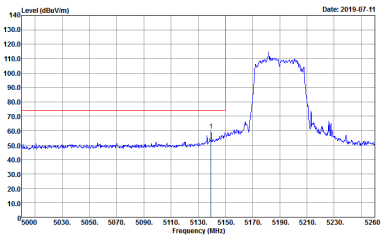
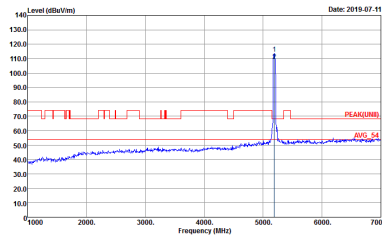
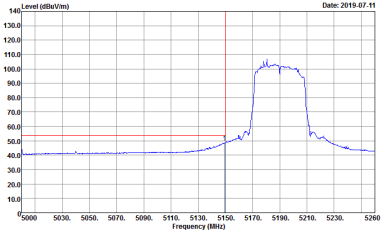


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                        |                                                                                                                                                                                                                                           |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT20 CH48 5240MHz - L                                                                                                                                                                                                           |                                                                                                                                                                                                                                           |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                  | Fundamental                                                                                                                                                                                                                               |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p> | Left blank                                                                                                                                                                                                                                |

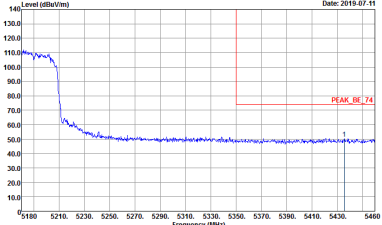
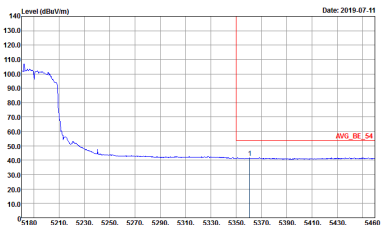


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                  |             |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT20 CH48 5240MHz - R                                                                                                                                                                                                                     |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                            | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p></div> | Left blank  |

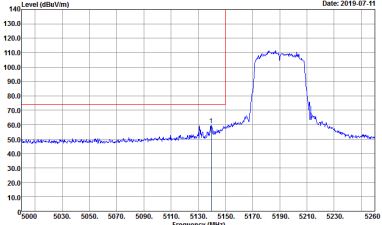
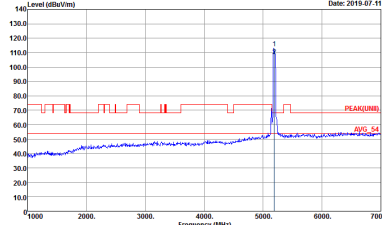
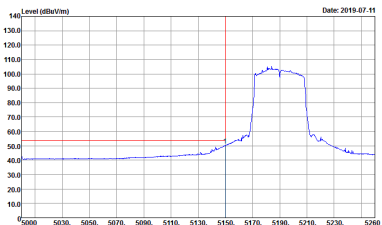
**Band 1 5150~5250MHz**  
**WIFI 802.11ac VHT40 (Band Edge @ 3m)**

| WIFI        | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT         | 802.11ac VHT40 CH38 5190MHz - L                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                |
| 1+2+3+4     | Horizontal                                                                                                                                                                                                                                                                                    | Fundamental                                                                                                                                                                                                                                                                                    |
| <b>Peak</b> |  <p>Site : 03CH07-HY<br/> Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/> RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/> Detector : Peak<br/> Project : 960558<br/> Mode : 13<br/> Setting : 20</p> |  <p>Site : 03CH07-HY<br/> Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/> RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br/> Detector : Peak<br/> Project : 960558<br/> Mode : 13<br/> Setting : 20</p> |
| <b>Avg.</b> |  <p>Site : 03CH07-HY<br/> Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/> RBW:1000.000KHz VBW:1.000KHz SWT:Auto<br/> Detector : Peak<br/> Project : 960558<br/> Mode : 13<br/> Setting : 20</p>   | <b>Left blank</b>                                                                                                                                                                                                                                                                              |

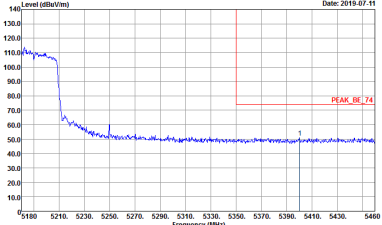
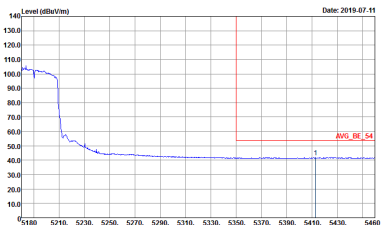


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                    |             |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT40 CH38 5190MHz - R                                                                                                                                                                                                                       |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                            | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 13<br/>Setting : 20</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 13<br/>Setting : 20</p></div> | Left blank  |

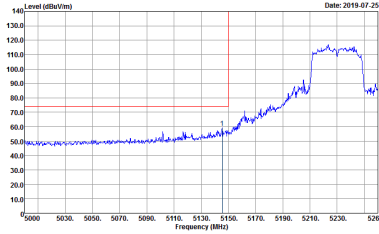
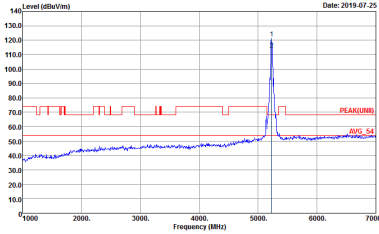
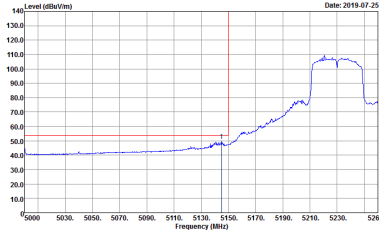


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                        |                                                                                                                                                                                                                                           |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT40 CH38 5190MHz - L                                                                                                                                                                                                           |                                                                                                                                                                                                                                           |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                  | Fundamental                                                                                                                                                                                                                               |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 13<br/>Setting : 20</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 13<br/>Setting : 20</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 13<br/>Setting : 20</p> | Left blank                                                                                                                                                                                                                                |

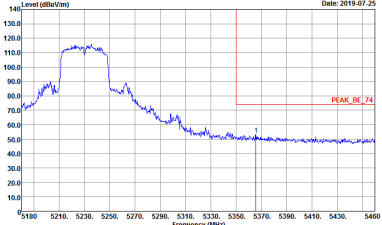
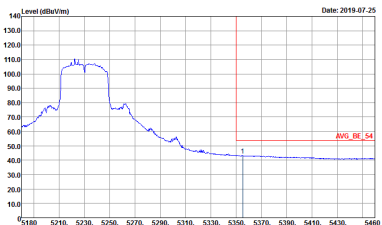


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                  |             |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT40 CH38 5190MHz - R                                                                                                                                                                                                                     |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                            | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 13<br/>Setting : 20</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 13<br/>Setting : 20</p></div> | Left blank  |

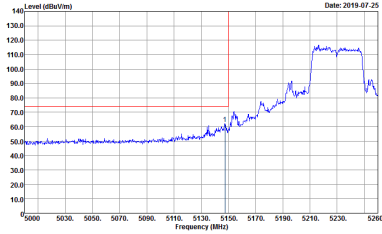
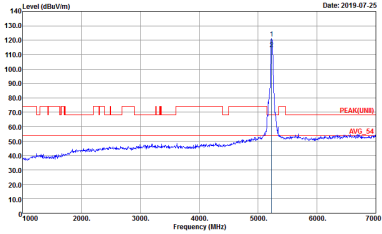
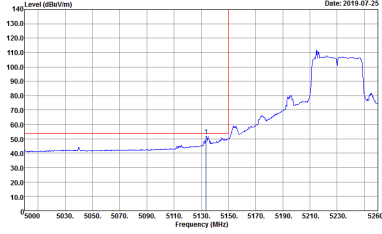


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                          |                                                                                                                                                                                                                                             |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT40 CH46 5230MHz - L                                                                                                                                                                                                             |                                                                                                                                                                                                                                             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                  | Fundamental                                                                                                                                                                                                                                 |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p> | Left blank                                                                                                                                                                                                                                  |

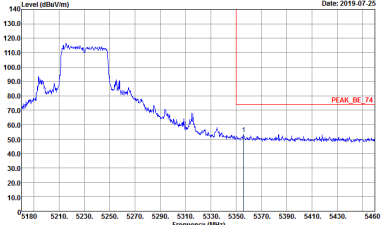


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                    |             |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT40 CH46 5230MHz - R                                                                                                                                                                                                                       |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                            | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p></div> | Left blank  |



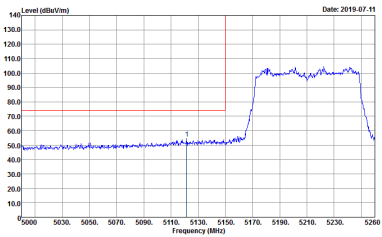
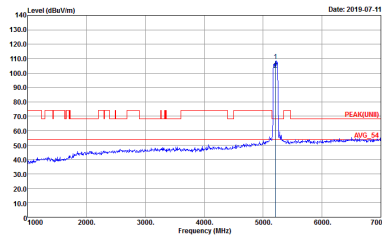
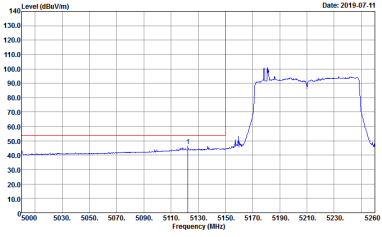
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                        |                                                                                                                                                                                                                                           |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT40 CH46 5230MHz - L                                                                                                                                                                                                           |                                                                                                                                                                                                                                           |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                  | Fundamental                                                                                                                                                                                                                               |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p> | Left blank                                                                                                                                                                                                                                |



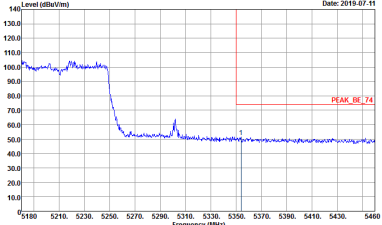
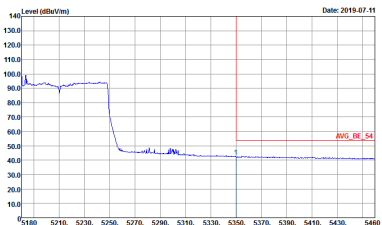
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                  |             |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT40 CH46 5230MHz - R                                                                                                                                                                                                                     |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                            | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p></div> | Left blank  |



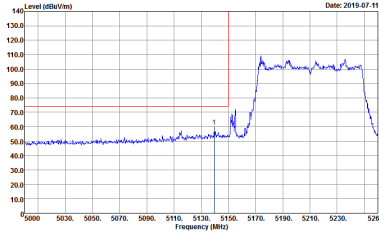
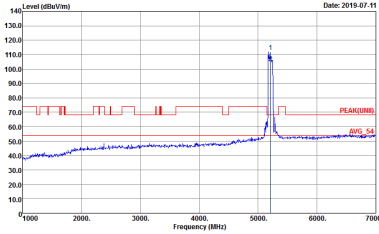
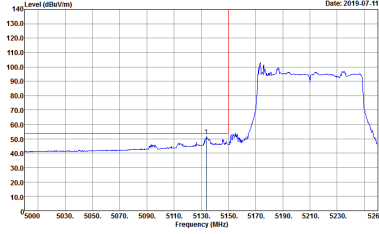
**Band 1 5150~5250MHz**  
**WIFI 802.11ac VHT80 (Band Edge @ 3m)**

| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                          |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT80 CH42 5210MHz - L                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                          |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                                                              | Fundamental                                                                                                                                                                                                                                                                              |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL<br/>RBW:1000.000kHz VBW:3000.000kHz SWT:Auto<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>RBW:1000.000kHz VBW:1.000kHz SWT:Auto<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p>   | Left blank                                                                                                                                                                                                                                                                               |

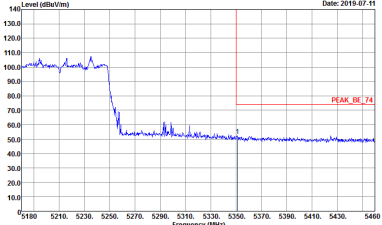
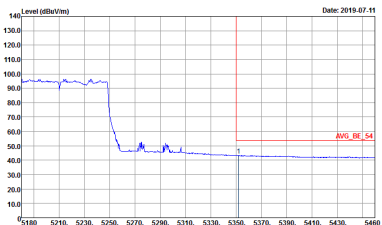


| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                    |             |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT80 CH42 5210MHz - R                                                                                                                                                                                                                       |             |
| 1+2+3+4 | Horizontal                                                                                                                                                                                                                                            | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p></div> | Left blank  |



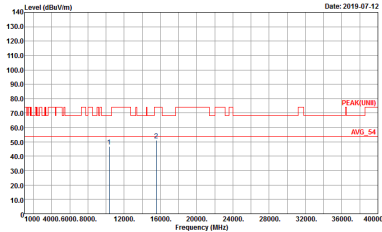
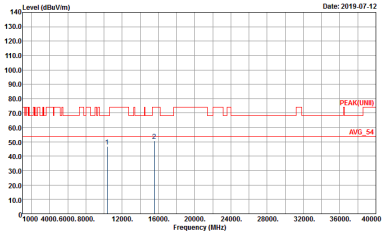
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                        |                                                                                                                                                                                                                                           |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT     | 802.11ac VHT80 CH42 5210MHz - L                                                                                                                                                                                                           |                                                                                                                                                                                                                                           |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                  | Fundamental                                                                                                                                                                                                                               |
| Peak    |  <p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p>  |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p> |
| Avg.    |  <p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p> | Left blank                                                                                                                                                                                                                                |



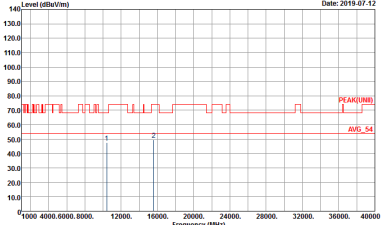
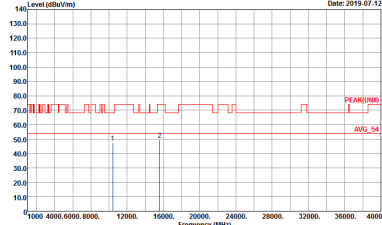
| WIFI    | Band 1 5150~5250MHz Band Edge @ 3m                                                                                                                                                                                                                  |             |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| ANT     | 802.11ac VHT80 CH42 5210MHz - R                                                                                                                                                                                                                     |             |
| 1+2+3+4 | Vertical                                                                                                                                                                                                                                            | Fundamental |
| Peak    | <div><p>Site : 03CH07-HY<br/>Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p></div>  | Left blank  |
| Avg.    | <div><p>Site : 03CH07-HY<br/>Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p></div> | Left blank  |



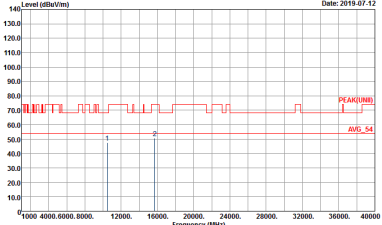
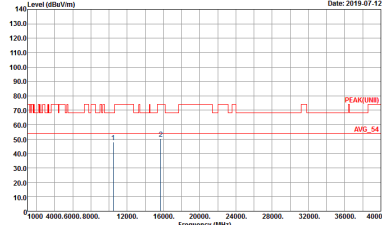
**Band 1 - 5150~5250MHz**  
**WIFI 802.11ac VHT20 (Harmonic @ 3m)**

| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                                                                                         |                                                                                                                                                                                                                                          |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11ac VHT20 CH36 5180MHz                                                                                                                                                                                                               |                                                                                                                                                                                                                                          |
| 1+2+3+4      | Horizontal                                                                                                                                                                                                                                | Vertical                                                                                                                                                                                                                                 |
| Peak<br>Avg. |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 1960558<br/>Mode : 10<br/>Setting : 24</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 1960558<br/>Mode : 10<br/>Setting : 24</p> |
|              |                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                          |



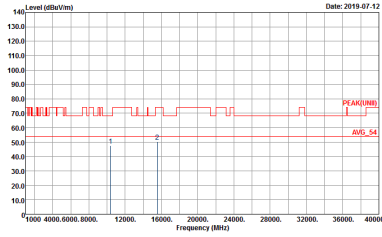
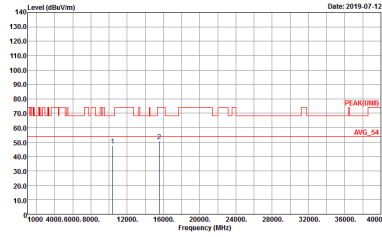
|              |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                    |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                    |
| ANT          | 802.11ac VHT20 CH40 5200MHz                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                    |
| 1+2+3+4      | Horizontal                                                                                                                                                                                                                                          | Vertical                                                                                                                                                                                                                                           |
| Peak<br>Avg. | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 11<br/>Setting : 25</p></div> | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 11<br/>Setting : 25</p></div> |



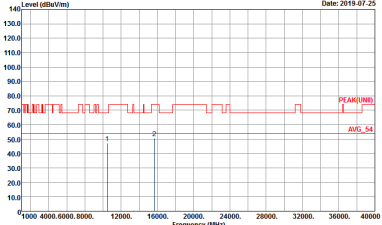
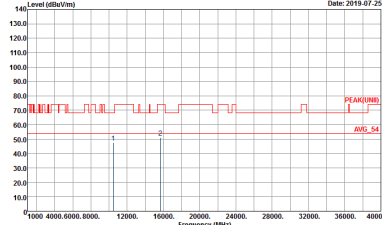
| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                    |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11ac VHT20 CH48 5240MHz                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                    |
| 1+2+3+4      | Horizontal                                                                                                                                                                                                                                          | Vertical                                                                                                                                                                                                                                           |
| Peak<br>Avg. | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p></div> | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNII) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 12<br/>Setting : 25</p></div> |
|              |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                    |



Band 1 5150~5250MHz  
WIFI 802.11ac VHT40 (Harmonic @ 3m)

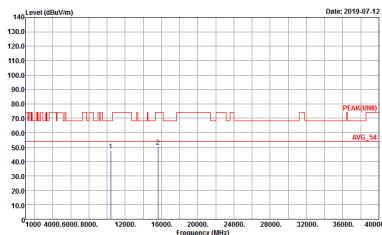
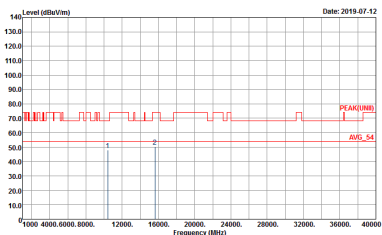
| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                                                                                        |                                                                                                                                                                                                                                         |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11ac VHT40 CH38 5190MHz                                                                                                                                                                                                              |                                                                                                                                                                                                                                         |
| 1+2+3+4      | Horizontal                                                                                                                                                                                                                               | Vertical                                                                                                                                                                                                                                |
| Peak<br>Avg. |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 13<br/>Setting : 20</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 13<br/>Setting : 20</p> |



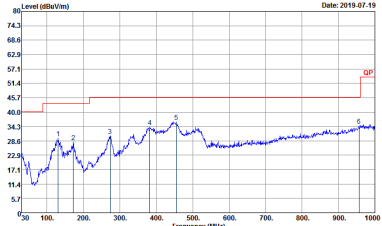
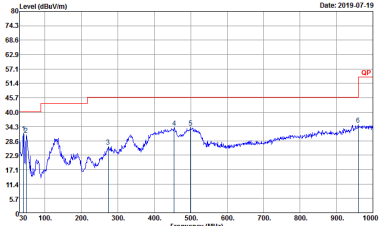
| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                   |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11ac VHT40 CH46 5230MHz                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                   |
| 1+2+3+4      | Horizontal                                                                                                                                                                                                                                         | Vertical                                                                                                                                                                                                                                          |
| Peak<br>Avg. | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNB) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p></div> | <div><p>Site : 03CH07-HY<br/>Condition : PEAK(UNB) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 14<br/>Setting : 26</p></div> |
|              |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                   |



Band 1 5150~5250MHz  
WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI         | Band 1 5150~5250MHz Harmonic @ 3m                                                                                                                                                                                                        |                                                                                                                                                                                                                                         |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT          | 802.11ac VHT80 CH42 5210MHz                                                                                                                                                                                                              |                                                                                                                                                                                                                                         |
| 1+2+3+4      | Horizontal                                                                                                                                                                                                                               | Vertical                                                                                                                                                                                                                                |
| Peak<br>Avg. |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 HORIZONTAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p> |  <p>Site : 03CH07-HY<br/>Condition : PEAK(UNI) 3m SHF-EHF_131029 VERTICAL<br/>Detector : Peak<br/>Project : 960558<br/>Mode : 15<br/>Setting : 17</p> |

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

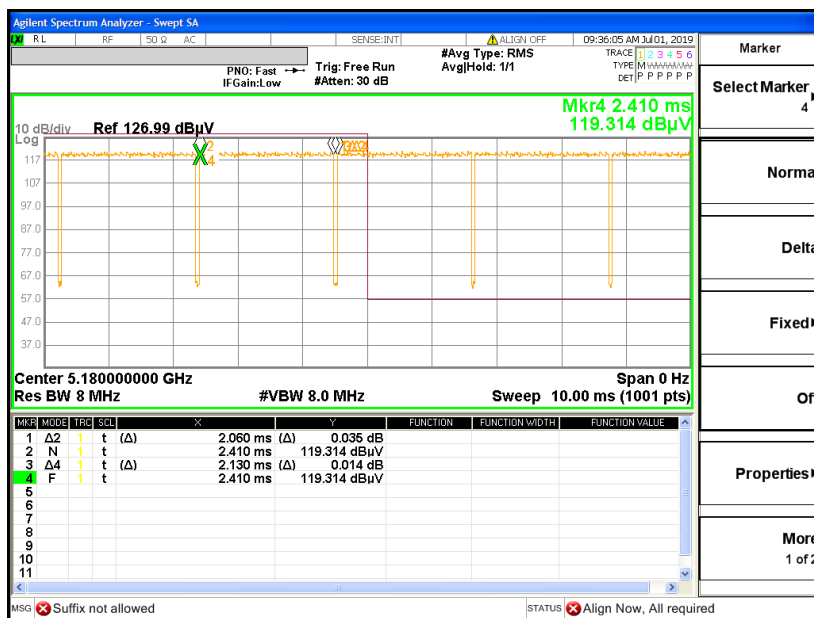
| WIFI                 | 5GHz WIFI                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                  |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANT                  | 802.11ac VHT20 LF                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                  |
| 1+2+3+4              | Horizontal                                                                                                                                                                                                                                                                        | Vertical                                                                                                                                                                                                                                                                         |
| <b>QP /<br/>Peak</b> |  <p>           Site : 03CH07-HY<br/>           Condition : QP 3m LF-ANT-35419(6) HORIZONTAL<br/>           Detector : Peak<br/>           Project : 960558<br/>           Mode : 75         </p> |  <p>           Site : 03CH07-HY<br/>           Condition : QP 3m LF-ANT-35419(6) VERTICAL<br/>           Detector : Peak<br/>           Project : 960558<br/>           Mode : 75         </p> |
|                      |                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                  |

## Appendix E. Duty Cycle Plots

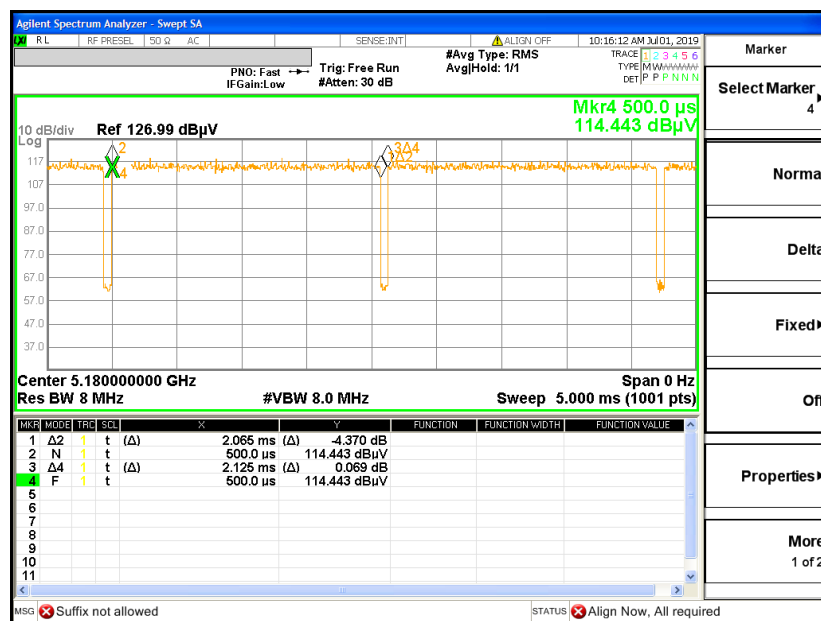
<CDD Mode>

| Antenna | Band                | T(us) | 1/T(kHz) | VBW Setting |
|---------|---------------------|-------|----------|-------------|
| 1+2+3+4 | 802.11a             | 2060  | 0.49     | 1kHz        |
| 1+2+3+4 | 5GHz 802.11n HT20   | 2065  | 0.48     | 1kHz        |
| 1+2+3+4 | 5GHz 802.11n HT40   | 2430  | 0.412    | 1kHz        |
| 1+2+3+4 | 5GHz 802.11ac VHT80 | 1149  | 0.87     | 1kHz        |

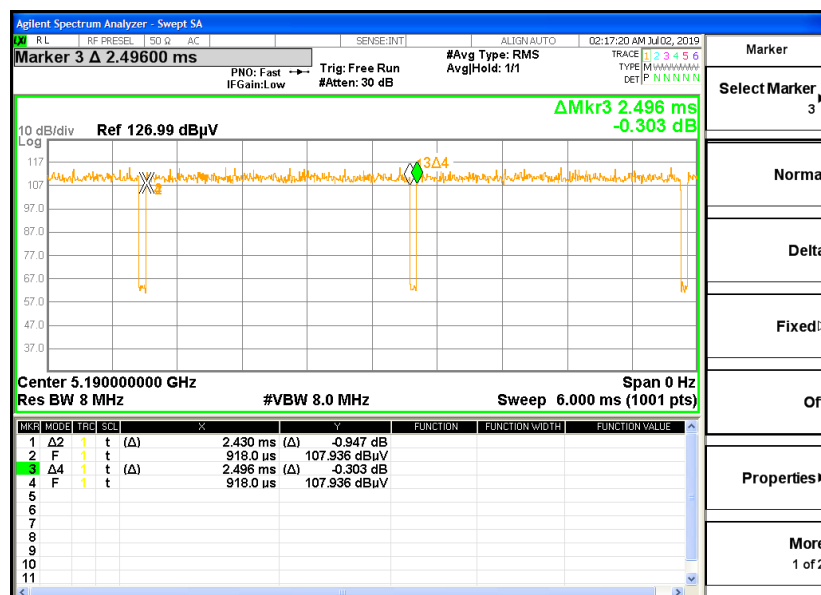
### 802.11a



## 802.11n HT20

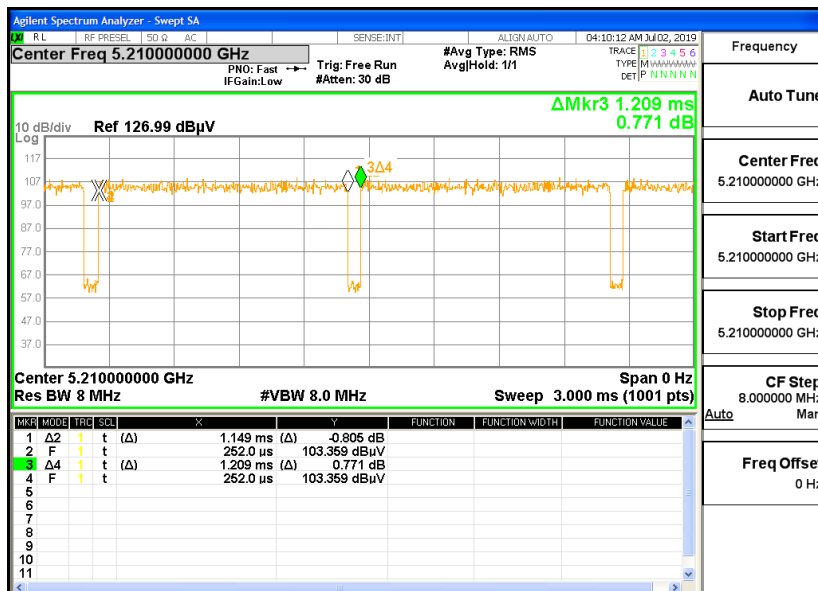


## 802.11n HT40



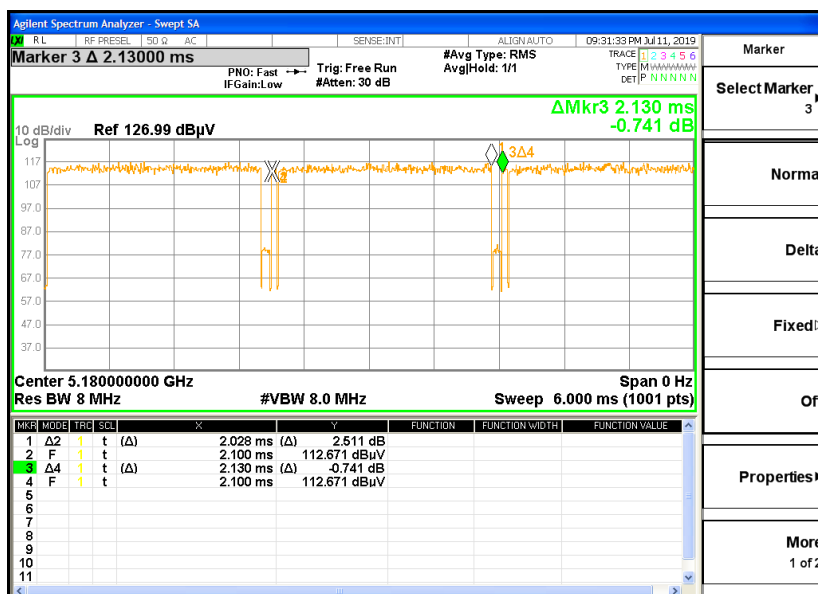


## 802.11ac VHT80

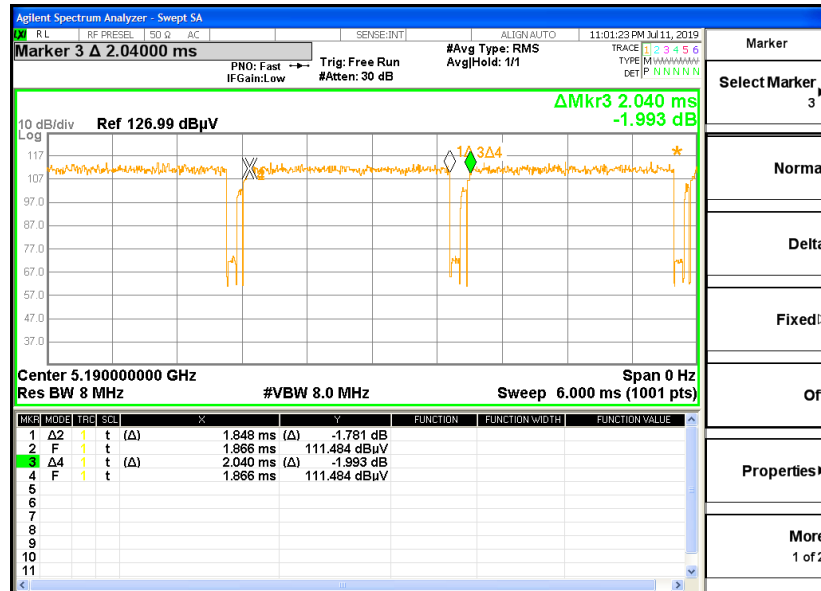


**<TXBF Mode>**

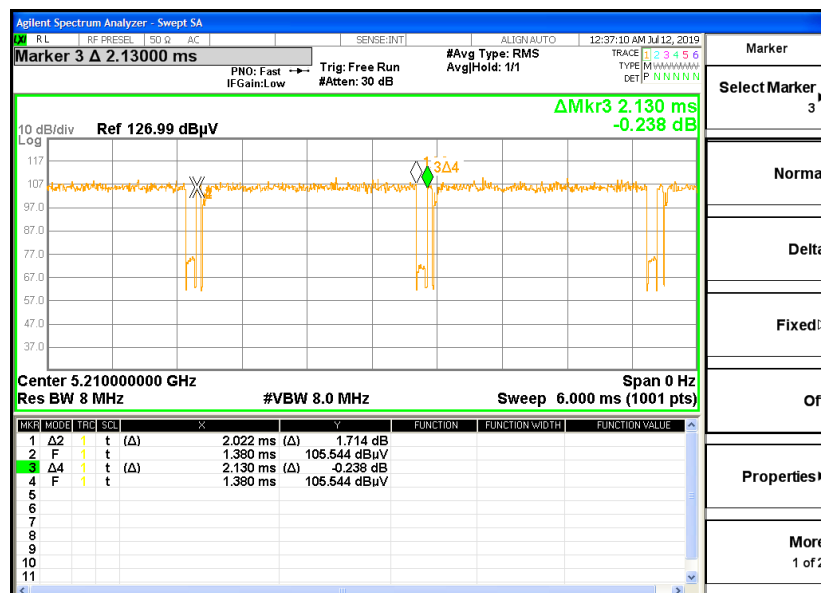
| Antenna | Band                | T(us) | 1/T(kHz) | VBW Setting |
|---------|---------------------|-------|----------|-------------|
| 1+2+3+4 | 5GHz 802.11ac VHT20 | 2028  | 0.49     | 1kHz        |
| 1+2+3+4 | 5GHz 802.11ac VHT40 | 1848  | 0.54     | 1kHz        |
| 1+2+3+4 | 5GHz 802.11ac VHT80 | 2022  | 0.49     | 1kHz        |

**802.11ac VHT20**


## 802.11ac VHT40



## 802.11ac VHT80



—THE END—