

# TEST REPORT

## CERTIFICATE OF CONFORMITY

**Standard:** 47 CFR FCC Part 15, Subpart E (Section 15.407)  
**Report No.:** RFBDKG-WTW-P25060041-2  
**FCC ID:** JNZVR0040  
**Product:** Wireless Camera  
**Brand:** Logitech  
**Model No.:** VR0040  
**Received Date:** 2025/6/6  
**Test Date:** 2025/9/3 ~ 2025/9/24  
**Issued Date:** 2025/11/20  
**Applicant:** LOGITECH FAR EAST LTD.  
**Address:** No. 2 Creation Rd. 4, Science-Based Ind. Part Hsinchu Taiwan, R.O.C.  
**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Hsin Chu Laboratory  
**Lab Address:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan  
**Test Location:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan  
**FCC Registration /** 723255 / TW2022  
**Designation Number:**

Approved by: \_\_\_\_\_

Wen Yu / Assistant Manager

, Date: \_\_\_\_\_

2025/11/20

This test report consists of 134 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The test results in the report only apply to the tested sample. The test results in this report are traceable to the national or international standards.

Prepared by: Vito Lung / Specialist



This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

## Table of Contents

|                                                                     |           |
|---------------------------------------------------------------------|-----------|
| <b>Release Control Record .....</b>                                 | <b>4</b>  |
| <b>1 Certificate.....</b>                                           | <b>5</b>  |
| <b>2 Summary of Test Results .....</b>                              | <b>6</b>  |
| 2.1 Measurement Uncertainty .....                                   | 6         |
| 2.2 Supplementary Information .....                                 | 6         |
| <b>3 General Information .....</b>                                  | <b>7</b>  |
| 3.1 General Description of EUT .....                                | 7         |
| 3.2 Antenna Description of EUT .....                                | 8         |
| 3.3 Channel List.....                                               | 9         |
| 3.4 Test Mode Applicability and Tested Channel Detail.....          | 11        |
| 3.5 Duty Cycle of Test Signal.....                                  | 13        |
| 3.6 Test Program Used and Operation Descriptions .....              | 15        |
| 3.7 Connection Diagram of EUT and Peripheral Devices .....          | 15        |
| 3.8 Configuration of Peripheral Devices and Cable Connections ..... | 15        |
| <b>4 Test Instruments .....</b>                                     | <b>16</b> |
| 4.1 26 dB Bandwidth .....                                           | 16        |
| 4.2 RF Output Power.....                                            | 16        |
| 4.3 Power Spectral Density .....                                    | 16        |
| 4.4 6 dB Bandwidth .....                                            | 16        |
| 4.5 Occupied Bandwidth.....                                         | 17        |
| 4.6 AC Power Conducted Emissions .....                              | 17        |
| 4.7 Unwanted Emissions below 1 GHz .....                            | 17        |
| 4.8 Unwanted Emissions above 1 GHz.....                             | 18        |
| <b>5 Limits of Test Items.....</b>                                  | <b>19</b> |
| 5.1 26 dB Bandwidth .....                                           | 19        |
| 5.2 RF Output Power.....                                            | 19        |
| 5.3 Power Spectral Density .....                                    | 19        |
| 5.4 6 dB Bandwidth .....                                            | 19        |
| 5.5 Occupied Bandwidth.....                                         | 19        |
| 5.6 AC Power Conducted Emissions .....                              | 20        |
| 5.7 Unwanted Emissions below 1 GHz .....                            | 20        |
| 5.8 Unwanted Emissions above 1 GHz.....                             | 21        |
| <b>6 Test Arrangements.....</b>                                     | <b>23</b> |
| 6.1 26 dB Bandwidth .....                                           | 23        |
| 6.1.1 Test Setup .....                                              | 23        |
| 6.1.2 Test Procedure.....                                           | 23        |
| 6.2 RF Output Power.....                                            | 24        |
| 6.2.1 Test Setup .....                                              | 24        |
| 6.2.2 Test Procedure.....                                           | 24        |
| 6.3 Power Spectral Density .....                                    | 25        |
| 6.3.1 Test Setup .....                                              | 25        |
| 6.3.2 Test Procedure.....                                           | 25        |
| 6.4 6 dB Bandwidth .....                                            | 25        |
| 6.4.1 Test Setup .....                                              | 25        |
| 6.4.2 Test Procedure.....                                           | 25        |
| 6.5 Occupied Bandwidth.....                                         | 26        |
| 6.5.1 Test Setup .....                                              | 26        |
| 6.5.2 Test Procedure.....                                           | 26        |
| 6.6 AC Power Conducted Emissions .....                              | 27        |
| 6.6.1 Test Setup .....                                              | 27        |
| 6.6.2 Test Procedure.....                                           | 27        |
| 6.7 Unwanted Emissions below 1 GHz .....                            | 28        |
| 6.7.1 Test Setup .....                                              | 28        |
| 6.7.2 Test Procedure.....                                           | 29        |

|          |                                                      |            |
|----------|------------------------------------------------------|------------|
| 6.8      | Unwanted Emissions above 1 GHz.....                  | 30         |
| 6.8.1    | Test Setup .....                                     | 30         |
| 6.8.2    | Test Procedure .....                                 | 30         |
| <b>7</b> | <b>Test Results of Test Item .....</b>               | <b>31</b>  |
| 7.1      | 26 dB Bandwidth .....                                | 31         |
| 7.2      | RF Output Power.....                                 | 35         |
| 7.3      | Power Spectral Density .....                         | 43         |
| 7.4      | 6 dB Bandwidth .....                                 | 48         |
| 7.5      | Occupied Bandwidth.....                              | 50         |
| 7.6      | AC Power Conducted Emissions .....                   | 58         |
| 7.7      | Unwanted Emissions below 1 GHz .....                 | 60         |
| 7.8      | Unwanted Emissions above 1 GHz.....                  | 62         |
| <b>8</b> | <b>Pictures of Test Arrangements .....</b>           | <b>133</b> |
| <b>9</b> | <b>Information of the Testing Laboratories .....</b> | <b>134</b> |

## Release Control Record

| Issue No.              | Description       | Date Issued |
|------------------------|-------------------|-------------|
| RFBDKG-WTW-P25060041-2 | Original release. | 2025/11/20  |

## 1 Certificate

**Product:** Wireless Camera

**Brand:** Logitech

**Test Model:** VR0040

**Sample Status:** Engineering sample

**Applicant:** LOGITECH FAR EAST LTD.

**Test Date:** 2025/9/3 ~ 2025/9/24

**Standard:** 47 CFR FCC Part 15, Subpart E (Section 15.407)

**Measurement** ANSI C63.10-2020

**procedure:** KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

## 2 Summary of Test Results

| 47 CFR FCC Part 15, Subpart E (Section 15.407)                                  |                                |        |                                                                                            |
|---------------------------------------------------------------------------------|--------------------------------|--------|--------------------------------------------------------------------------------------------|
| Clause                                                                          | Test Item                      | Result | Remark                                                                                     |
| 15.407(a)(2)                                                                    | 26 dB Bandwidth                | -      | For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth. |
| 15.407(a)(1)<br>15.407(a)(2)<br>15.407(a)(3)                                    | RF Output Power                | Pass   | Meet the requirement of limit.                                                             |
| 15.407(a)(1)<br>15.407(a)(2)<br>15.407(a)(3)                                    | Power Spectral Density         | Pass   | Meet the requirement of limit.                                                             |
| 15.407(e)                                                                       | 6 dB Bandwidth                 | Pass   | Meet the requirement of limit. (U-NII-3 Band only)                                         |
| ---                                                                             | Occupied Bandwidth             | -      | Reference only.                                                                            |
| 15.407(b)(9)                                                                    | AC Power Conducted Emissions   | Pass   | Minimum passing margin is -15.22 dB at 55.22 MHz                                           |
| 15.407(b)(9)                                                                    | Unwanted Emissions below 1 GHz | Pass   | Minimum passing margin is -12.8 dB at 750.00 MHz                                           |
| 15.407(b) (1/10)<br>15.407(b) (2/10)<br>15.407(b) (3/10)<br>15.407(b) (4(i)/10) | Unwanted Emissions above 1 GHz | Pass   | Minimum passing margin is -4.1 dB at 5150.00 MHz and 5350.00 MHz                           |
| 15.203                                                                          | Antenna Requirement            | Pass   | Antenna connector is ipex(MHF) not a standard connector.                                   |

### Notes:

- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- The "Dynamic Frequency Selection measurement" was recorded in DFS test report.

### 2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Measurement                    | Specification    | Expanded Uncertainty (k=2)<br>(±) |
|--------------------------------|------------------|-----------------------------------|
| 26 dB Bandwidth                | -                | 1050.00 Hz                        |
| RF Output Power                | -                | 1.1 dB                            |
| Power Spectral Density         | -                | 1.3 dB                            |
| 6 dB Bandwidth                 | -                | 1050.00 Hz                        |
| Occupied Bandwidth             | -                | 1050.00 Hz                        |
| AC Power Conducted Emissions   | 150 kHz ~ 30 MHz | 1.9 dB                            |
| Unwanted Emissions below 1 GHz | 9 kHz ~ 30 MHz   | 3.1 dB                            |
|                                | 30 MHz ~ 1 GHz   | 5.1 dB                            |
| Unwanted Emissions above 1 GHz | 1 GHz ~ 18 GHz   | 5.1 dB                            |
|                                | 18 GHz ~ 40 GHz  | 5.3 dB                            |

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

### 2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

|                       |                                                                                                                                                                                                               |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product               | Wireless Camera                                                                                                                                                                                               |
| Brand                 | Logitech                                                                                                                                                                                                      |
| Test Model            | VR0040                                                                                                                                                                                                        |
| Status of EUT         | Engineering sample                                                                                                                                                                                            |
| Power Supply Rating   | 3.6 Vdc from battery or<br>5 Vdc / 9 Vdc / 12 Vdc from adapter                                                                                                                                                |
| Modulation Type       | 64QAM, 16QAM, QPSK, BPSK for OFDM<br>256QAM for OFDM in 11ac mode                                                                                                                                             |
| Modulation Technology | OFDM                                                                                                                                                                                                          |
| Transfer Rate         | 802.11a: up to 54 Mbps<br>802.11n: up to 300 Mbps<br>802.11ac: up to 866.7 Mbps                                                                                                                               |
| Operating Frequency   | 5.18 GHz ~ 5.24 GHz<br>5.26 GHz ~ 5.32 GHz<br>5.5 GHz ~ 5.58 GHz & 5.66 GHz ~ 5.72 GHz<br>5.745 GHz ~ 5.825 GHz                                                                                               |
| Number of Channel     | 802.11a, 802.11n (HT20), 802.11ac (VHT20): 22<br>802.11n (HT40), 802.11ac (VHT40): 10<br>802.11ac (VHT80): 5                                                                                                  |
| Output Power          | 5.18 GHz ~ 5.24 GHz: 133.994 mW (21.27 dBm)<br>5.26 GHz ~ 5.32 GHz: 155.398 mW (21.91 dBm)<br>5.5 GHz ~ 5.58 GHz & 5.66 GHz ~ 5.72 GHz: 174.763 mW (22.42 dBm)<br>5.745 GHz ~ 5.825 GHz: 140.9 mW (21.49 dBm) |
| EUT Category          | Client device                                                                                                                                                                                                 |

Note:

1. The EUT uses following accessories.

| Item              | Brand                                      | Model                   | Specification                        |
|-------------------|--------------------------------------------|-------------------------|--------------------------------------|
| Battery           | Fuji<br>ELECTRONICS(SHENZHEN)<br>CO., Ltd. | INR21700-50E(1INR22/71) | Rating: 3.6 Vdc, 4900 mAh, 17.64 Wh  |
| Type C to C cable | -                                          | -                       | Length: shielded, 2 m, with one core |

2. There are Bluetooth and WLAN (2.4 GHz & 5 GHz) technology used for the EUT.

3. The device of WLAN and Bluetooth technology can't transmit simultaneously, it was used timely shared coexistence technology.

4. The EUT supports streaming in WiFi configuration mode, which is only permissible in the 2.4 GHz and 5725-5850 MHz bands. In this configuration mode, the output power remains the same as in client mode.

5. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

### 3.2 Antenna Description of EUT

1. The antenna information is listed as below.

| Antenna NO.         | RF Chain NO. | Brand  | Antenna Net Gain (dBi) | Frequency Range (GHz) | Antenna Type | Connector Type |
|---------------------|--------------|--------|------------------------|-----------------------|--------------|----------------|
| 1<br>(WiFi 1/ BT 1) | 0            | Wieson | 1.4                    | 2.4~2.4835            | Dipole       | ipex(MHF)      |
|                     |              |        | 2.27                   | 5.15~5.25             |              |                |
|                     |              |        | 2.42                   | 5.25~5.35             |              |                |
|                     |              |        | 2.38                   | 5.47~5.725            |              |                |
|                     |              |        | 2.36                   | 5.725~5.85            |              |                |
| 2<br>(WiFi 2)       | 1            | Wieson | 1.48                   | 2.4~2.4835            | PIFA         | ipex(MHF)      |
|                     |              |        | 2.74                   | 5.15~5.25             |              |                |
|                     |              |        | 1.87                   | 5.25~5.35             |              |                |
|                     |              |        | 2.24                   | 5.47~5.725            |              |                |
|                     |              |        | 2.16                   | 5.725~5.85            |              |                |

\* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

2. The EUT incorporates a MIMO function:

| 5 GHz Band       |                       |     |
|------------------|-----------------------|-----|
| Modulation Mode  | TX & RX Configuration |     |
| 802.11a          | 2TX                   | 2RX |
| 802.11n (HT20)   | 2TX                   | 2RX |
| 802.11n (HT40)   | 2TX                   | 2RX |
| 802.11ac (VHT20) | 2TX                   | 2RX |
| 802.11ac (VHT40) | 2TX                   | 2RX |
| 802.11ac (VHT80) | 2TX                   | 2RX |

Note:

1. All of modulation mode support beamforming function except 802.11a modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
3. The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 802.11ac mode for 20 MHz (40 MHz), Therefore the investigated worst case is the representative mode in test report.

### 3.3 Channel List

#### FOR 5180 ~ 5320 MHz

8 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 36      | 5180 MHz  | 52      | 5260 MHz  |
| 40      | 5200 MHz  | 56      | 5280 MHz  |
| 44      | 5220 MHz  | 60      | 5300 MHz  |
| 48      | 5240 MHz  | 64      | 5320 MHz  |

4 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 38      | 5190 MHz  | 54      | 5270 MHz  |
| 46      | 5230 MHz  | 62      | 5310 MHz  |

2 channels are provided for 802.11ac (VHT80):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 42      | 5210 MHz  | 58      | 5290 MHz  |

#### FOR 5500 ~ 5580 MHz & 5660 MHz ~ 5720 MHz

9 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 100     | 5500 MHz  | 132     | 5660 MHz  |
| 104     | 5520 MHz  | 136     | 5680 MHz  |
| 108     | 5540 MHz  | 140     | 5700 MHz  |
| 112     | 5560 MHz  | 144     | 5720 MHz  |
| 116     | 5580 MHz  |         |           |

4 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 102     | 5510 MHz  | 134     | 5670 MHz  |
| 110     | 5550 MHz  | 142     | 5710 MHz  |

2 channels are provided for 802.11ac (VHT80):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 106     | 5530 MHz  | 138     | 5690 MHz  |

# **FOR 5745 ~ 5825 MHz:**

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 149     | 5745 MHz  | 161     | 5805 MHz  |
| 153     | 5765 MHz  | 165     | 5825 MHz  |
| 157     | 5785 MHz  |         |           |

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 151     | 5755 MHz  | 159     | 5795 MHz  |

1 channel is provided for 802.11ac (VHT80):

| Channel | Frequency |
|---------|-----------|
| 155     | 5775 MHz  |

### 3.4 Test Mode Applicability and Tested Channel Detail

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Scan:   | <p>1. EUT can be used in the following ways: X-axis/ Y-axis / Z-axis. Pre-scan these ways and find the worst case as a representative test condition.</p> <p>2. EUT has support multiple power sources: USB-C (with Laptop or AC adapter) / Battery. Pre-scan these sources and find the worst case as a representative test condition.</p> <p>3. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).</p> |
| Worst Case: | <p>1. X-axis/ Y-axis/ Z-axis Worst Condition: Y-axis</p> <p>2. Worst-Case Power Source Conditions for the Following Test Items:</p> <ul style="list-style-type: none"> <li>➤ Unwanted Emission Test: USB-C with AC adapter</li> <li>➤ AC Conducted Emission Test: USB-C with AC adapter</li> </ul>                                                                                                                                                                                                                                                          |

Following channel(s) was (were) selected for the final test as listed below:

| Test Item              | Mode             | Signal Mode       | Tested Channel                                            | Modulation | Data Rate Parameter |
|------------------------|------------------|-------------------|-----------------------------------------------------------|------------|---------------------|
| 26 dB Bandwidth        | 802.11a          | CDD               | 52, 60, 64, 100, 116, 140, 144                            | BPSK       | 6Mb/s               |
|                        | 802.11ac (VHT20) | CDD               | 52, 60, 64, 100, 116, 140, 144                            | BPSK       | MCS0                |
|                        | 802.11ac (VHT40) | CDD               | 54, 62, 102, 110, 134, 142                                | BPSK       | MCS0                |
|                        | 802.11ac (VHT80) | CDD               | 58, 106, 138                                              | BPSK       | MCS0                |
| RF Output Power        | 802.11a          | CDD               | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | 6Mb/s               |
|                        | 802.11ac (VHT20) | CDD & Beamforming | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | MCS0                |
|                        | 802.11ac (VHT40) | CDD & Beamforming | 38, 46, 54, 62, 102, 110, 134, 142, 151, 159              | BPSK       | MCS0                |
|                        | 802.11ac (VHT80) | CDD & Beamforming | 42, 58, 106, 138, 155                                     | BPSK       | MCS0                |
| Power Spectral Density | 802.11a          | CDD               | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | 6Mb/s               |
|                        | 802.11ac (VHT20) | CDD               | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | MCS0                |
|                        | 802.11ac (VHT40) | CDD               | 38, 46, 54, 62, 102, 110, 134, 142, 151, 159              | BPSK       | MCS0                |
|                        | 802.11ac (VHT80) | CDD               | 42, 58, 106, 138, 155                                     | BPSK       | MCS0                |

| Test Item                      | Mode             | Signal Mode | Tested Channel                                            | Modulation | Data Rate Parameter |
|--------------------------------|------------------|-------------|-----------------------------------------------------------|------------|---------------------|
| 6 dB Bandwidth                 | 802.11a          | CDD         | 144, 149, 157, 165                                        | BPSK       | 6Mb/s               |
|                                | 802.11ac (VHT20) | CDD         | 144, 149, 157, 165                                        | BPSK       | MCS0                |
|                                | 802.11ac (VHT40) | CDD         | 142, 151, 159                                             | BPSK       | MCS0                |
|                                | 802.11ac (VHT80) | CDD         | 138, 155                                                  | BPSK       | MCS0                |
| Occupied Bandwidth             | 802.11a          | CDD         | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | 6Mb/s               |
|                                | 802.11ac (VHT20) | CDD         | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | MCS0                |
|                                | 802.11ac (VHT40) | CDD         | 38, 46, 54, 62, 102, 110, 134, 142, 151, 159              | BPSK       | MCS0                |
|                                | 802.11ac (VHT80) | CDD         | 42, 58, 106, 138, 155                                     | BPSK       | MCS0                |
| AC Power Conducted Emissions   | 802.11ac (VHT40) | CDD         | 54                                                        | BPSK       | MCS0                |
| Unwanted Emissions below 1 GHz | 802.11ac (VHT40) | CDD         | 54                                                        | BPSK       | MCS0                |
| Unwanted Emissions above 1 GHz | 802.11a          | CDD         | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | 6Mb/s               |
|                                | 802.11ac (VHT20) | CDD         | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | MCS0                |
|                                | 802.11ac (VHT40) | CDD         | 38, 46, 54, 62, 102, 110, 134, 142, 151, 159              | BPSK       | MCS0                |
|                                | 802.11ac (VHT80) | CDD         | 42, 58, 106, 138, 155                                     | BPSK       | MCS0                |

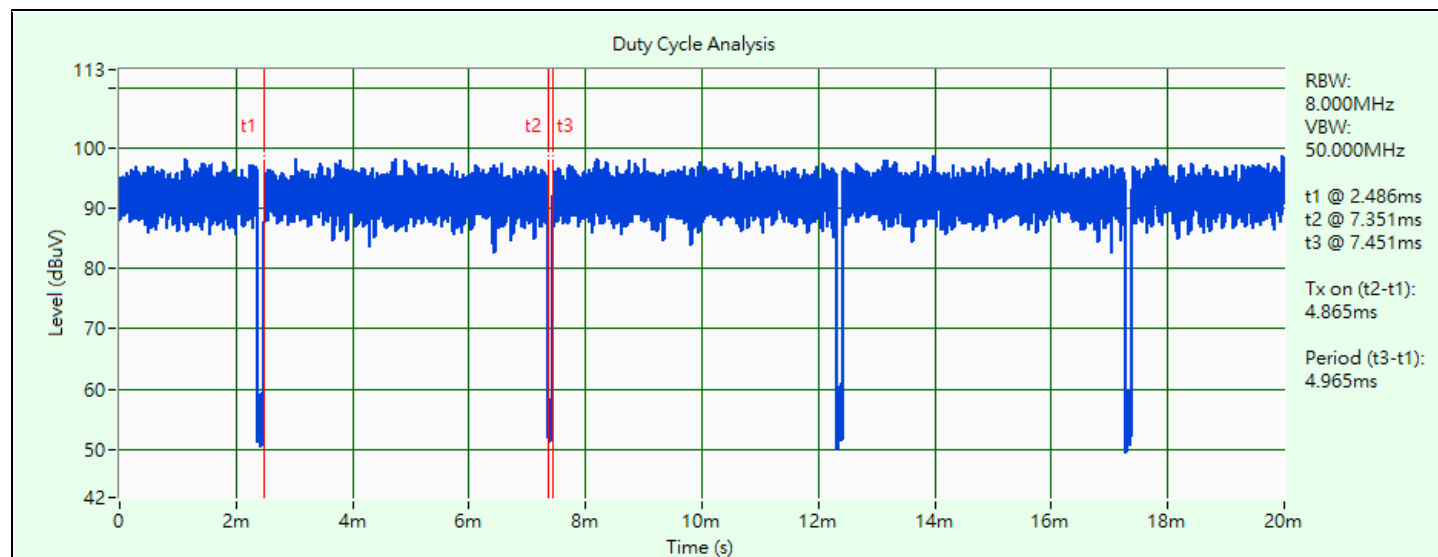
### 3.5 Duty Cycle of Test Signal

**802.11a CDD:** Duty cycle = 4.865 ms / 4.965 ms x 100% = 98.0%

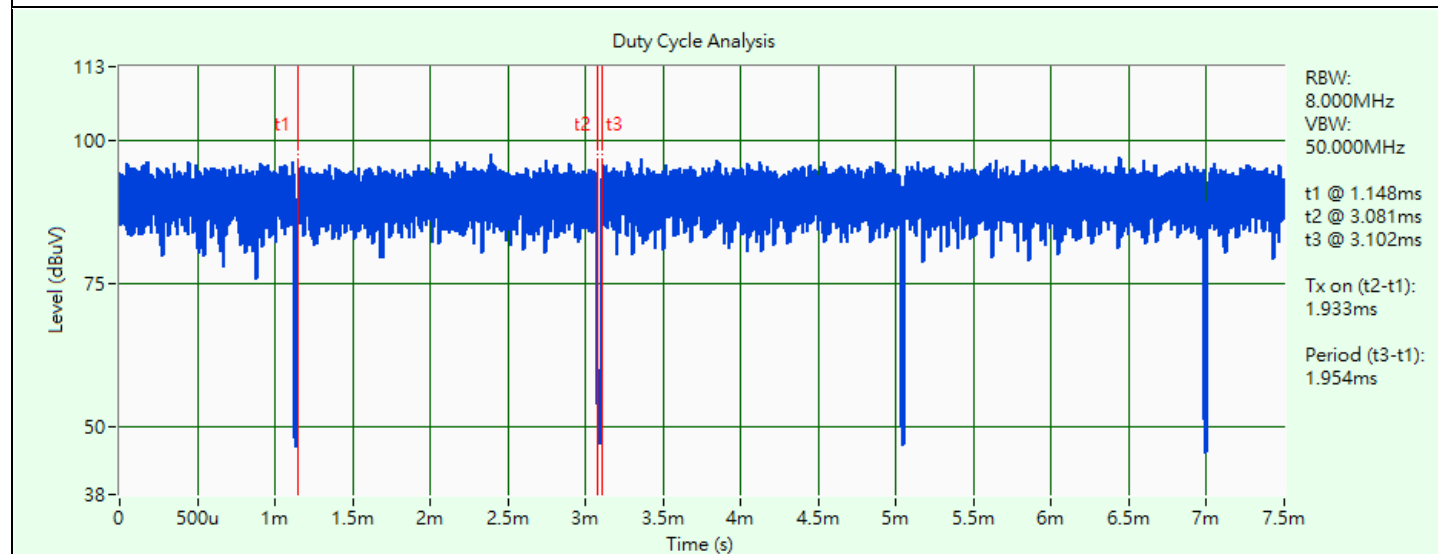
**802.11ac (VHT20) CDD:** Duty cycle = 1.933 ms / 1.954 ms x 100% = 98.9%

**802.11ac (VHT40) CDD:** Duty cycle = 2.197 ms / 2.217 ms x 100% = 99.1%

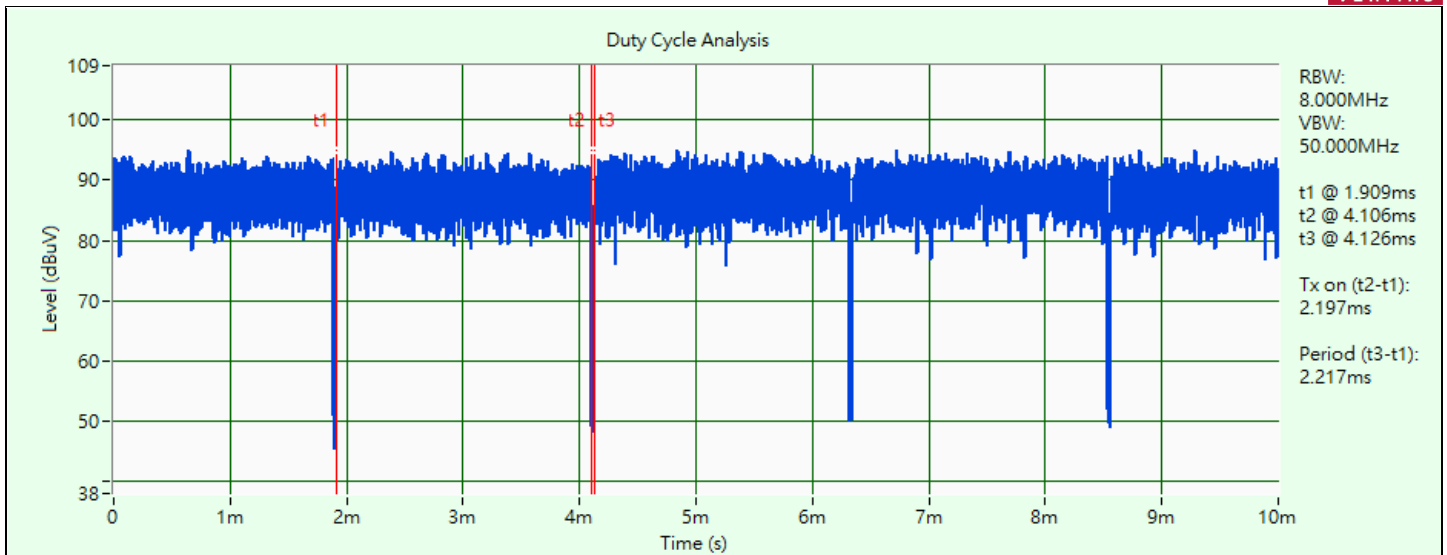
**802.11ac (VHT80) CDD:** Duty cycle = 1.284 ms / 1.305 ms x 100% = 98.4%



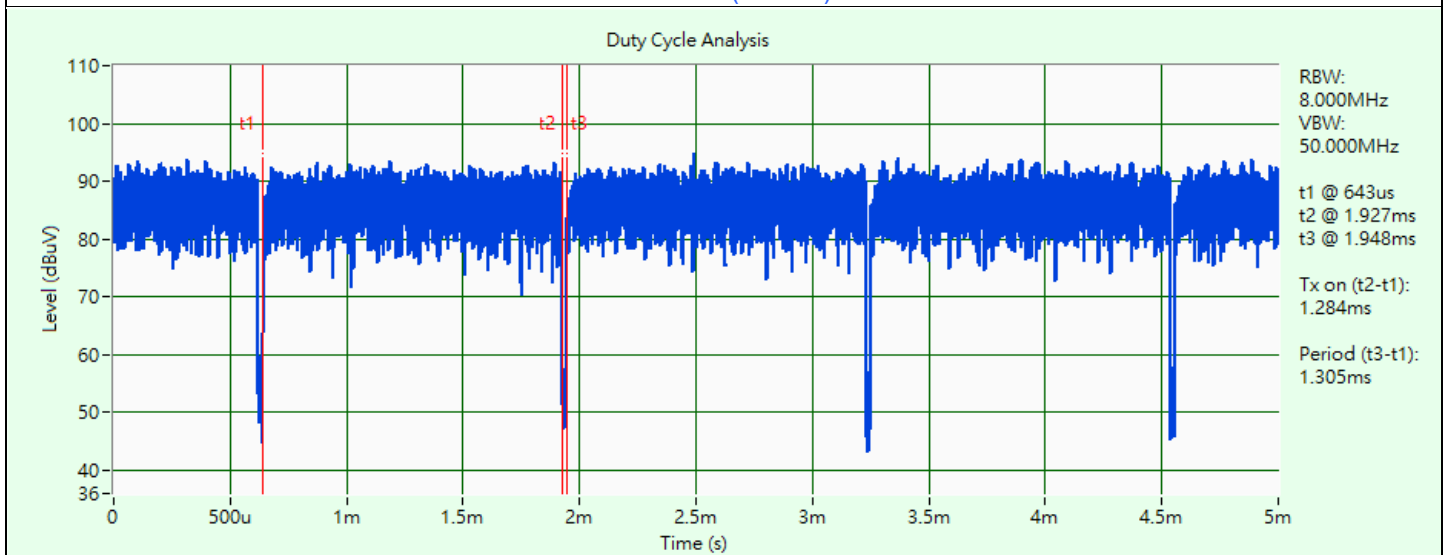
802.11a



802.11ac (VHT20)



802.11ac (VHT40)

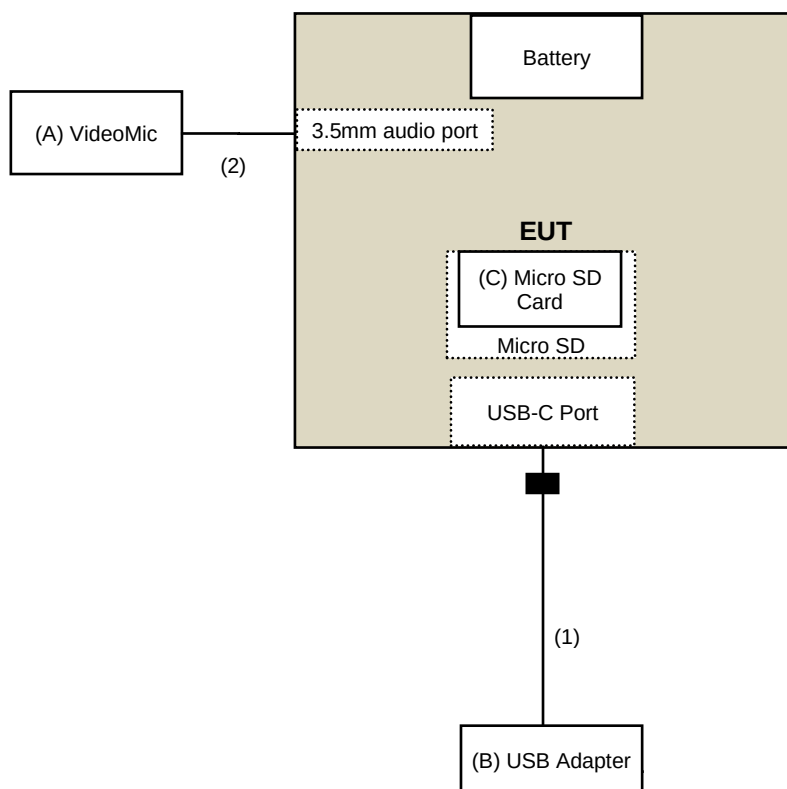


802.11ac (VHT80)

### 3.6 Test Program Used and Operation Descriptions

Controlling software (HyperTerminal paste WIFI\_BF command.txt) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

### 3.7 Connection Diagram of EUT and Peripheral Devices



### 3.8 Configuration of Peripheral Devices and Cable Connections

| ID | Product       | Brand     | Model No.            | Serial No. | FCC ID | Remarks               |
|----|---------------|-----------|----------------------|------------|--------|-----------------------|
| A  | VideoMic      | RODE      | VideoMic Go II HELIX | N/A        | N/A    | Supplied by applicant |
| B  | Adapter       | ASUS      | AN65A-59FKB          | N/A        | N/A    | Supplied by applicant |
| C  | Micro SD Card | Transcend | TS4GUSD300S          | N/A        | N/A    | Provided by Lab       |

| ID | Cable Descriptions | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks               |
|----|--------------------|------|------------|--------------------|--------------|-----------------------|
| 1  | Type-C Cable       | 1    | 2          | Yes                | 1            | Supplied by applicant |
| 2  | Audio Cable        | 1    | 0.3        | No                 | 0            | Supplied by applicant |

## 4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

### 4.1 26 dB Bandwidth

| Description<br>Manufacturer     | Model No.                  | Serial No.        | Calibrated<br>Date | Calibrated<br>Until |
|---------------------------------|----------------------------|-------------------|--------------------|---------------------|
| Fixed Attenuator<br>Woken       | 00800A1K01A-10             | 00800A1K01A-10-01 | 2025/5/23          | 2026/5/22           |
| MXA Signal Analyzer<br>Keysight | N9020B                     | MY60112408        | 2025/3/12          | 2026/3/11           |
| Software                        | ADT_RF Test Software<br>V8 | N/A               | N/A                | N/A                 |

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2025/9/6 ~ 2025/9/8

### 4.2 RF Output Power

| Description<br>Manufacturer     | Model No.                  | Serial No.        | Calibrated<br>Date | Calibrated<br>Until |
|---------------------------------|----------------------------|-------------------|--------------------|---------------------|
| Fixed Attenuator<br>Woken       | 00800A1K01A-10             | 00800A1K01A-10-01 | 2025/5/23          | 2026/5/22           |
|                                 | 00800A1K01A-20             | 00800A1K01A-20-02 | 2025/5/23          | 2026/5/22           |
| MXA Signal Analyzer<br>Keysight | N9020B                     | MY60112408        | 2025/3/12          | 2026/3/11           |
| Pulse Power Sensor<br>Anritsu   | MA2411B                    | 1726434           | 2025/6/3           | 2026/6/2            |
| RF Power Meter<br>Anritsu       | ML2495A                    | 1529002           | 2025/6/3           | 2026/6/2            |
| Software                        | ADT_RF Test Software<br>V8 | N/A               | N/A                | N/A                 |

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2025/9/6 ~ 2025/9/8

### 4.3 Power Spectral Density

Refer to section 4.1 to get the tested date and information of the instruments.

### 4.4 6 dB Bandwidth

Refer to section 4.1 to get the tested date and information of the instruments.

#### 4.5 Occupied Bandwidth

Refer to section 4.1 to get the tested date and information of the instruments.

#### 4.6 AC Power Conducted Emissions

| Description<br>Manufacturer               | Model No.           | Serial No. | Calibrated<br>Date | Calibrated<br>Until |
|-------------------------------------------|---------------------|------------|--------------------|---------------------|
| 50 ohm terminal resistance<br>Telegartner | 50 ohm              | 3          | 2024/11/1          | 2025/10/31          |
| EMI Test Receiver<br>R&S                  | ESCS 30             | 100375     | 2025/5/21          | 2026/5/20           |
| Fixed Attenuator<br>STI                   | STI02-2200-10       | 005        | 2025/2/17          | 2026/2/16           |
| LISN<br>R&S                               | ESH3-Z5             | 835239/001 | 2025/3/27          | 2026/3/26           |
|                                           |                     | 848773/004 | 2024/10/7          | 2025/10/6           |
| RF Coaxial Cable<br>JYEBAO                | 5D-FB               | COCCAB-001 | 2025/2/17          | 2026/2/16           |
| Software<br>BVADT                         | BVADT_Conc_V7.3.7.4 | N/A        | N/A                | N/A                 |

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2025/9/24

#### 4.7 Unwanted Emissions below 1 GHz

| Description<br>Manufacturer                         | Model No.            | Serial No.  | Calibrated<br>Date | Calibrated<br>Until |
|-----------------------------------------------------|----------------------|-------------|--------------------|---------------------|
| Bi_Log Antenna<br>Schwarzbeck                       | VULB 9168            | 9168-0842   | 2024/10/8          | 2025/10/7           |
| Boresight Antenna Tower & Turn<br>Table<br>Max-Full | MF-7802BS            | MF780208530 | N/A                | N/A                 |
| EMI Test Receiver<br>R&S                            | ESR7                 | 102026      | 2025/3/25          | 2026/3/24           |
| Fixed Attenuator<br>Mini-Circuits                   | UNAT-5+              | PAD-ATT5-02 | 2025/3/29          | 2026/3/28           |
| Loop Antenna<br>TESEQ                               | HLA 6121             | 63620       | 2024/10/17         | 2025/10/16          |
| Preamplifier<br>EMCI                                | EMC330N              | 980538      | 2025/3/29          | 2026/3/28           |
|                                                     | EMC001340            | 980142      | 2025/2/17          | 2026/2/16           |
| PXA Signal Analyzer<br>Keysight                     | N9030B               | MY57141948  | 2025/5/20          | 2026/5/19           |
| RF Coaxial Cable<br>PEWC                            | 8D                   | 966-5-1     | 2025/3/29          | 2026/3/28           |
|                                                     |                      | 966-5-2     | 2025/3/29          | 2026/3/28           |
|                                                     |                      | 966-5-3     | 2025/3/29          | 2026/3/28           |
| Software                                            | ADT_Radiated_V8.7.08 | N/A         | N/A                | N/A                 |

Notes:

1. The test was performed in 966 Chamber No. 5.
2. Tested Date: 2025/9/4

#### 4.8 Unwanted Emissions above 1 GHz

| Description<br>Manufacturer                         | Model No.            | Serial No.  | Calibrated<br>Date | Calibrated<br>Until |
|-----------------------------------------------------|----------------------|-------------|--------------------|---------------------|
| Boresight Antenna Tower & Turn<br>Table<br>Max-Full | MF-7802BS            | MF780208530 | N/A                | N/A                 |
| EMI Test Receiver<br>R&S                            | ESR7                 | 102026      | 2025/3/25          | 2026/3/24           |
| Horn Antenna<br>Schwarzbeck                         | BBHA 9120D           | 9120D-1819  | 2024/11/10         | 2025/11/9           |
|                                                     | BBHA 9170            | 9170-739    | 2024/11/10         | 2025/11/9           |
| Preamplifier<br>EMCI                                | EMC12630SE           | 980509      | 2025/1/18          | 2026/1/17           |
|                                                     | EMC184045SE          | 980387      | 2025/8/7           | 2026/8/6            |
| PXA Signal Analyzer<br>Keysight                     | N9030B               | MY57141948  | 2025/5/20          | 2026/5/19           |
| RF Coaxial Cable<br>EMCI                            | EMC102-KM-KM-1200    | 160924      | 2025/1/24          | 2026/1/23           |
|                                                     | EMC102-KM-KM-4000    | 200214      | 2025/1/24          | 2026/1/23           |
|                                                     | EMC104-SM-SM-1500    | 180503      | 2025/3/8           | 2026/3/7            |
|                                                     | EMC104-SM-SM-2000    | 180501      | 2025/3/8           | 2026/3/7            |
|                                                     | EMC104-SM-SM-6000    | 180506      | 2025/3/8           | 2026/3/7            |
| Software                                            | ADT_Radiated_V8.7.08 | N/A         | N/A                | N/A                 |

Notes:

1. The test was performed in 966 Chamber No. 5.
2. Tested Date: 2025/9/3 ~ 2025/9/17

## 5 Limits of Test Items

### 5.1 26 dB Bandwidth

The results are for reference only.

### 5.2 RF Output Power

| Operation Band | EUT Category                       | Limit                                                                                                                       |
|----------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| U-NII-1        | Outdoor Access Point               | 1 Watt (30 dBm)<br>(Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon) |
|                | Fixed point-to-point Access Points | 1 Watt (30 dBm)                                                                                                             |
|                | Indoor Access Point                | 1 Watt (30 dBm)                                                                                                             |
|                | Client devices                     | 250mW (24 dBm)                                                                                                              |

| Operation Band | Limit                               |
|----------------|-------------------------------------|
| U-NII-2A       | 250 mW (24 dBm) or 11 dBm+10 log B* |
| U-NII-2C       | 250 mW (24 dBm) or 11 dBm+10 log B* |
| U-NII-3        | 1 Watt (30 dBm)                     |

\*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

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

Array Gain = 0 dB (i.e., no array gain) for channel widths  $\geq 40$  MHz for any  $N_{ANT}$ ;

Array Gain =  $5 \log(N_{ANT}/N_{SS})$  dB or 3 dB, whichever is less, for 20-MHz channel widths with  $N_{ANT} \geq 5$ .

For power measurements on all other devices: Array Gain =  $10 \log(N_{ANT}/N_{SS})$  dB.

### 5.3 Power Spectral Density

| Operation Band | EUT Category                       | Limit      |
|----------------|------------------------------------|------------|
| U-NII-1        | Outdoor Access Point               | 17 dBm/MHz |
|                | Fixed point-to-point Access Points |            |
|                | Indoor Access Point                |            |
|                | Client devices                     | 11 dBm/MHz |

| Operation Band | Limit          |
|----------------|----------------|
| U-NII-2A       | 11 dBm/MHz     |
| U-NII-2C       | 11 dBm/MHz     |
| U-NII-3        | 30 dBm/500 kHz |

### 5.4 6 dB Bandwidth

Within the 5.725-5.850 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

### 5.5 Occupied Bandwidth

The results are for reference only.

## 5.6 AC Power Conducted Emissions

| Frequency (MHz) | Conducted Limit (dBuV) |         |
|-----------------|------------------------|---------|
|                 | Quasi-peak             | Average |
| 0.15 - 0.5      | 66 - 56                | 56 - 46 |
| 0.50 - 5.0      | 56                     | 46      |
| 5.0 - 30.0      | 60                     | 50      |

Notes:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

## 5.7 Unwanted Emissions below 1 GHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

| Frequencies (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|-------------------|-----------------------------------|-------------------------------|
| 0.009 ~ 0.490     | 2400/F(kHz)                       | 300                           |
| 0.490 ~ 1.705     | 24000/F(kHz)                      | 30                            |
| 1.705 ~ 30.0      | 30                                | 30                            |
| 30 ~ 88           | 100                               | 3                             |
| 88 ~ 216          | 150                               | 3                             |
| 216 ~ 960         | 200                               | 3                             |
| Above 960         | 500                               | 3                             |

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

## 5.8 Unwanted Emissions above 1 GHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

| Frequencies (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|-------------------|-----------------------------------|-------------------------------|
| Above 960         | 500                               | 3                             |

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

| Applicable To                                              | Limit                 |                 |
|------------------------------------------------------------|-----------------------|-----------------|
| 789033 D02 General UNII Test Procedure New Rules<br>v02r01 | Field Strength at 3 m |                 |
|                                                            | PK: 74 (dBμV/m)       | AV: 54 (dBμV/m) |

For transmitters operating in the 5.15-5.25 GHz band:

| Applicable To | EIRP Limit        | Equivalent Field Strength at 3 m |
|---------------|-------------------|----------------------------------|
| 15.407(b)(1)  | PK: -27 (dBm/MHz) | PK: 68.2 (dBμV/m)                |

For transmitters operating in the 5.25-5.35 GHz band:

| Applicable To | EIRP Limit        | Equivalent Field Strength at 3 m |
|---------------|-------------------|----------------------------------|
| 15.407(b)(2)  | PK: -27 (dBm/MHz) | PK: 68.2 (dBμV/m)                |

For transmitters operating in the 5.47-5.725 GHz band:

| Applicable To | EIRP Limit        | Equivalent Field Strength at 3 m |
|---------------|-------------------|----------------------------------|
| 15.407(b)(3)  | PK: -27 (dBm/MHz) | PK: 68.2 (dBμV/m)                |

For transmitters operating in the 5.725-5.850 GHz band:

| Applicable To                                                                                                                                                                                                                                                                                                                                                                   | EIRP Limit                                                                                                                              | Equivalent Field Strength at 3 m                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 15.407(b)(4)(i)                                                                                                                                                                                                                                                                                                                                                                 | PK: -27 (dBm/MHz) <sup>*1</sup><br>PK: 10 (dBm/MHz) <sup>*2</sup><br>PK: 15.6 (dBm/MHz) <sup>*3</sup><br>PK: 27 (dBm/MHz) <sup>*4</sup> | PK: 68.2 (dBμV/m) <sup>*1</sup><br>PK: 105.2 (dBμV/m) <sup>*2</sup><br>PK: 110.8 (dBμV/m) <sup>*3</sup><br>PK: 122.2 (dBμV/m) <sup>*4</sup> |
| <sup>*1</sup> beyond 75 MHz or more above of the band edge.<br><sup>*2</sup> below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.<br><sup>*3</sup> below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.<br><sup>*4</sup> from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. |                                                                                                                                         |                                                                                                                                             |

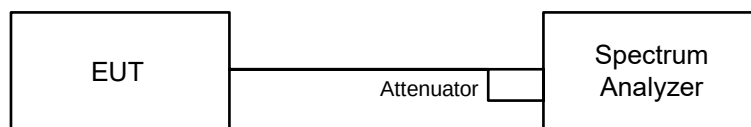
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

## 6 Test Arrangements

### 6.1 26 dB Bandwidth

#### 6.1.1 Test Setup

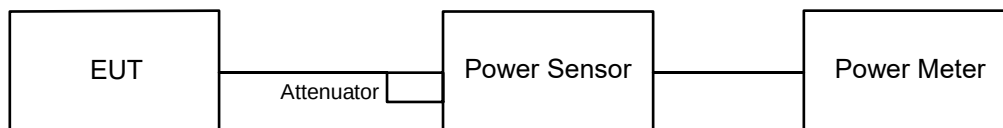


#### 6.1.2 Test Procedure

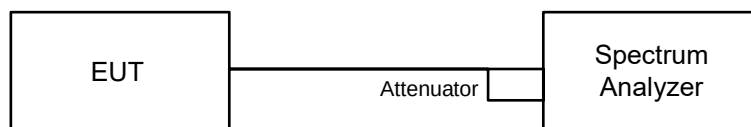
- Set RBW = shall be in the range of 1% to 5% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = peak.
- Trace mode = max-hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

## 6.2 RF Output Power

### 6.2.1 Test Setup



#### For channel straddling:



### 6.2.2 Test Procedure

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to average. Duty factor is not added to measured value.

#### For channel straddling:

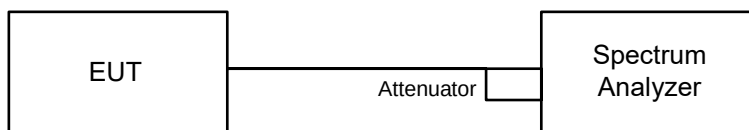
##### Method SA-1

- Set span to encompass the entire 99% OBW of the signal.
- Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, Detector = RMS.
- Number of points in sweep  $\geq [2 \times \text{span} / \text{RBW}]$ . (This gives bin-to-bin spacing  $\leq \text{RBW} / 2$ , so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging (rms) mode.
- Compute power by integrating the spectrum across the 99% OBW of the signal using the instrument's band-power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band-power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 99% OBW of the spectrum.
- Record the max value.

Note: When measuring straddle channel power, use compute power by integrating the spectrum across the 99% OBW of the signal using the instrument's band power measurement function, with band limits set equal to the 99% OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 99% OBW of the spectrum.

## 6.3 Power Spectral Density

### 6.3.1 Test Setup



### 6.3.2 Test Procedure

#### For specified measurement bandwidth 1 MHz:

##### Method SA-1

- Set span to encompass the entire 99% OBW of the signal.
- Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, Detector = RMS.
- Sweep points  $\geq [2 \times \text{span} / \text{RBW}]$ . (This gives bin-to-bin spacing  $\leq \text{RBW} / 2$ , so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to “free run”.
- Trace average at least 100 traces in power averaging mode.
- Record the max value

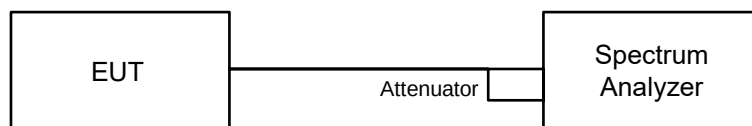
#### For specified measurement bandwidth 500 kHz:

##### Method SA-1

- Set span to encompass the entire 99% OBW of the signal
- Set RBW = 300 kHz, Set VBW  $\geq$  1 MHz, Detector = RMS.
- Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where  $\text{BWCF} = 10\log(500 \text{ kHz}/300 \text{ kHz})$ .
- Sweep points  $\geq [2 \times \text{span} / \text{RBW}]$ . (This gives bin-to-bin spacing  $\leq \text{RBW} / 2$ , so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to “free run”.
- Trace average at least 100 traces in power averaging mode.
- Record the max value.

## 6.4 6 dB Bandwidth

### 6.4.1 Test Setup

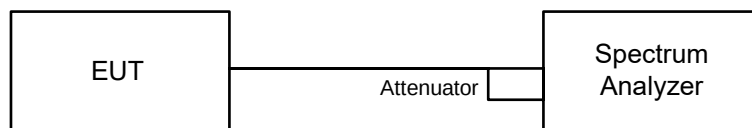


### 6.4.2 Test Procedure

- Set RBW = 100 kHz.
- Set the VBW  $\geq [3 \times \text{RBW}]$ .
- Detector = peak.
- Trace mode = max-hold.
- Sweep = No faster than coupled (auto) time.
- Allow the trace to stabilize.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

## 6.5 Occupied Bandwidth

### 6.5.1 Test Setup



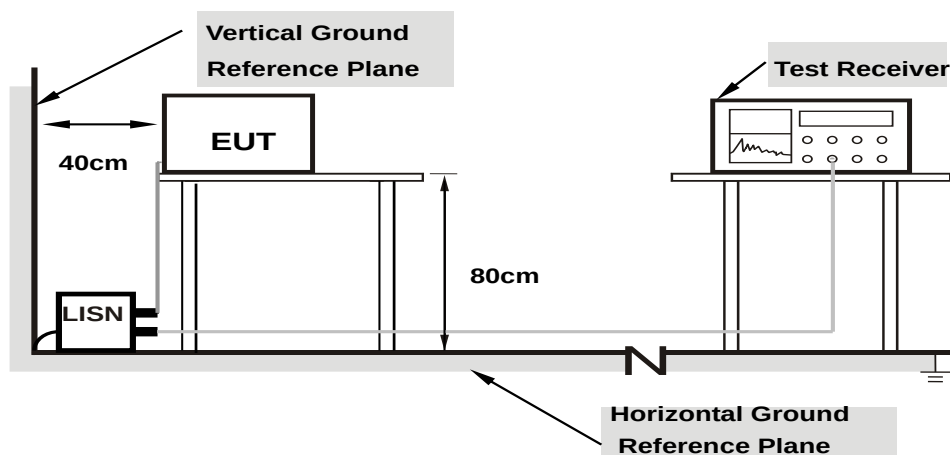
### 6.5.2 Test Procedure

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- a. The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b. The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.
- c. Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than  $[10 \log (OBW/RBW)]$  below the reference level.
- d. Step a) through step c) might require iteration to adjust within the specified range.
- e. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max-hold mode (until the trace stabilizes) shall be used.
- f. Use the 99% power bandwidth function of the instrument and report the measured bandwidth.

## 6.6 AC Power Conducted Emissions

### 6.6.1 Test Setup



**Note: 1. Support units were connected to second LISN.**

For the actual test configuration, please refer to the attached file (Test Setup Photo).

### 6.6.2 Test Procedure

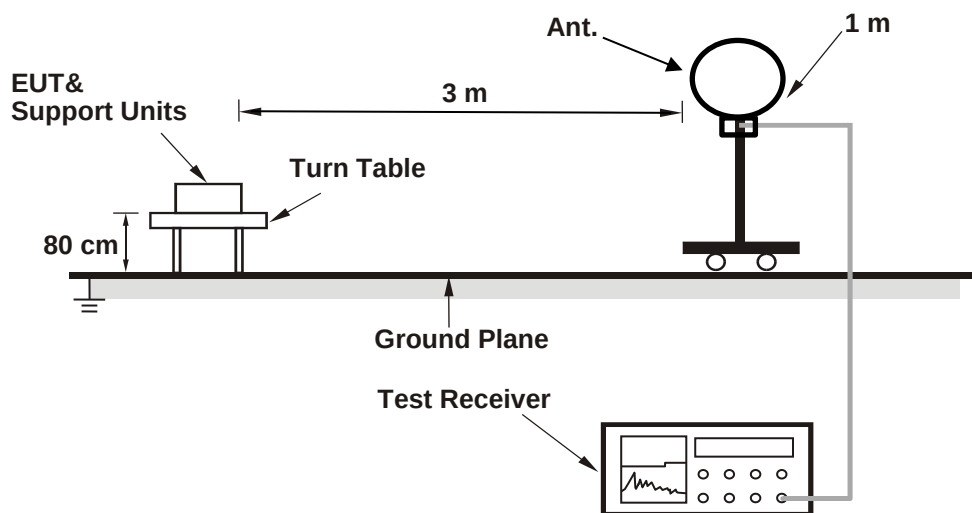
- Exploratory ac power-line conducted emission measurements: The EUT shall be operated on the mid channel and in the mode with highest output power unless the fundamental operates in the AC power-line emission test range then the EUT shall be operated in the range of typical modes of operation.
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

**Note:** The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

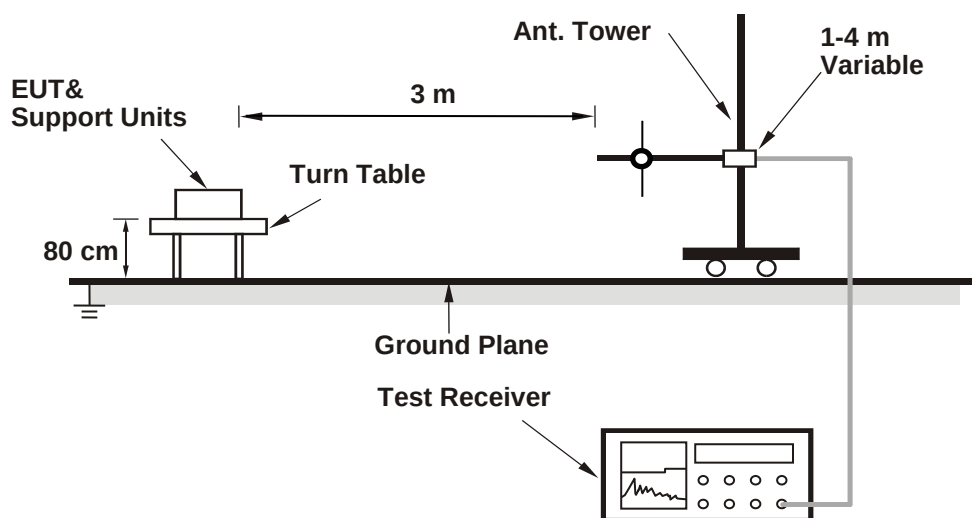
## 6.7 Unwanted Emissions below 1 GHz

### 6.7.1 Test Setup

#### For Radiated emission below 30 MHz



#### For Radiated emission above 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

## 6.7.2 Test Procedure

### For Radiated emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

#### Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

### For Radiated emission above 30 MHz

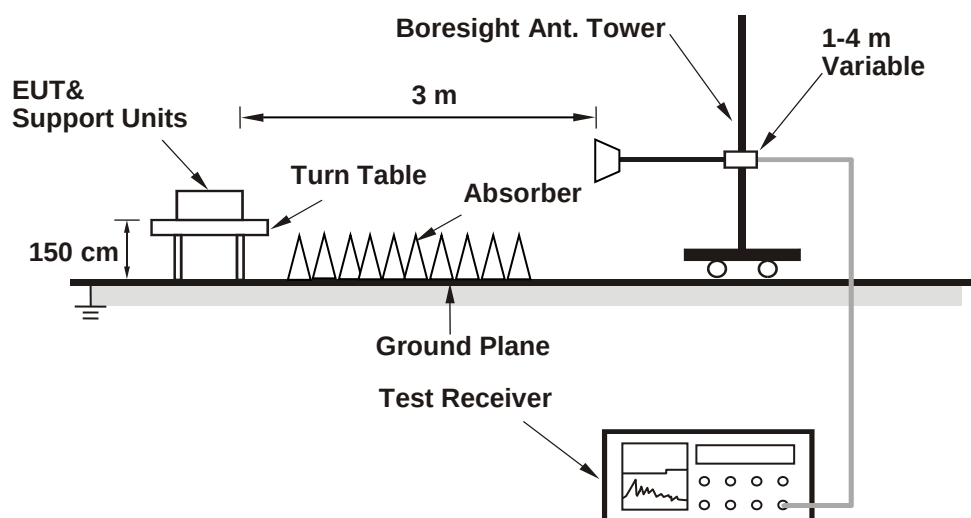
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-peak(QP) detect function, Average(AV) detect function, Peak(PK) detect function and specified bandwidth with maximum hold mode when the test frequencies less than or equal to 1 GHz.

#### Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

## 6.8 Unwanted Emissions above 1 GHz

### 6.8.1 Test Setup



For the actual test configuration, please refer to the attached file (Test Setup Photo).

### 6.8.2 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

#### Notes:

- The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
- For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle  $< 98\%$ ) or 10 Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1 GHz.
- All modes of operation were investigated and the worst-case emissions are reported.

## 7 Test Results of Test Item

### 7.1 26 dB Bandwidth

|              |         |                           |              |            |           |
|--------------|---------|---------------------------|--------------|------------|-----------|
| Input Power: | 3.6 Vdc | Environmental Conditions: | 25°C, 60% RH | Tested By: | Henry Hsu |
|--------------|---------|---------------------------|--------------|------------|-----------|

#### 802.11a CDD

| Channel        | Frequency (MHz) | 26 dB Bandwidth (MHz) |         |
|----------------|-----------------|-----------------------|---------|
|                |                 | Chain 0               | Chain 1 |
| 52             | 5260            | 43.70                 | 41.23   |
| 60             | 5300            | 22.17                 | 21.69   |
| 64             | 5320            | 21.71                 | 21.68   |
| 100            | 5500            | 21.83                 | 21.56   |
| 116            | 5580            | 47.43                 | 46.27   |
| 140            | 5700            | 21.61                 | 21.57   |
| 144 (U-NII-2C) | 5720            | 28.96                 | 28.59   |
| 144 (U-NII-3)  | 5720            | 18.19                 | 18.00   |

| Determined Output Power Limit |            |             |                                        |
|-------------------------------|------------|-------------|----------------------------------------|
| Channel Number                | Freq.(MHz) | Min. B(MHz) | Determined Conducted Power Limit (dBm) |
| 52                            | 5260       | 41.23       | 27.15 > 24                             |
| 60                            | 5300       | 21.69       | 24.36 > 24                             |
| 64                            | 5320       | 21.68       | 24.36 > 24                             |
| 100                           | 5500       | 21.56       | 24.33 > 24                             |
| 116                           | 5580       | 46.27       | 27.65 > 24                             |
| 140                           | 5700       | 21.57       | 24.33 > 24                             |
| 144 (U-NII-2C)                | 5720       | 28.59       | 25.56 > 24                             |

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

## 802.11ac (VHT20) CDD

| Channel        | Frequency (MHz) | 26 dB Bandwidth (MHz) |         |
|----------------|-----------------|-----------------------|---------|
|                |                 | Chain 0               | Chain 1 |
| 52             | 5260            | 45.01                 | 43.36   |
| 60             | 5300            | 31.21                 | 32.85   |
| 64             | 5320            | 21.45                 | 21.47   |
| 100            | 5500            | 21.40                 | 21.27   |
| 116            | 5580            | 49.26                 | 44.80   |
| 140            | 5700            | 21.49                 | 21.43   |
| 144 (U-NII-2C) | 5720            | 28.28                 | 25.53   |
| 144 (U-NII-3)  | 5720            | 18.47                 | 16.31   |

| Determined Output Power Limit |            |             |                                        |
|-------------------------------|------------|-------------|----------------------------------------|
| Channel Number                | Freq.(MHz) | Min. B(MHz) | Determined Conducted Power Limit (dBm) |
| 52                            | 5260       | 43.36       | 27.37 > 24                             |
| 60                            | 5300       | 31.21       | 25.94 > 24                             |
| 64                            | 5320       | 21.45       | 24.31 > 24                             |
| 100                           | 5500       | 21.27       | 24.27 > 24                             |
| 116                           | 5580       | 44.80       | 27.51 > 24                             |
| 140                           | 5700       | 21.43       | 24.31 > 24                             |
| 144 (U-NII-2C)                | 5720       | 25.53       | 25.07 > 24                             |

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

### 802.11ac (VHT40) CDD

| Channel        | Frequency (MHz) | 26 dB Bandwidth (MHz) |         |
|----------------|-----------------|-----------------------|---------|
|                |                 | Chain 0               | Chain 1 |
| 54             | 5270            | 62.20                 | 60.76   |
| 62             | 5310            | 39.23                 | 39.27   |
| 102            | 5510            | 39.21                 | 39.24   |
| 110            | 5550            | 44.54                 | 44.67   |
| 134            | 5670            | 40.18                 | 40.79   |
| 142 (U-NII-2C) | 5710            | 55.45                 | 51.24   |
| 142 (U-NII-3)  | 5710            | 23.12                 | 21.64   |

| Determined Output Power Limit |            |             |                                        |
|-------------------------------|------------|-------------|----------------------------------------|
| Channel Number                | Freq.(MHz) | Min. B(MHz) | Determined Conducted Power Limit (dBm) |
| 54                            | 5270       | 60.76       | 28.83 > 24                             |
| 62                            | 5310       | 39.23       | 26.93 > 24                             |
| 102                           | 5510       | 39.21       | 26.93 > 24                             |
| 110                           | 5550       | 44.54       | 27.48 > 24                             |
| 134                           | 5670       | 40.18       | 27.04 > 24                             |
| 142 (U-NII-2C)                | 5710       | 51.24       | 28.09 > 24                             |

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

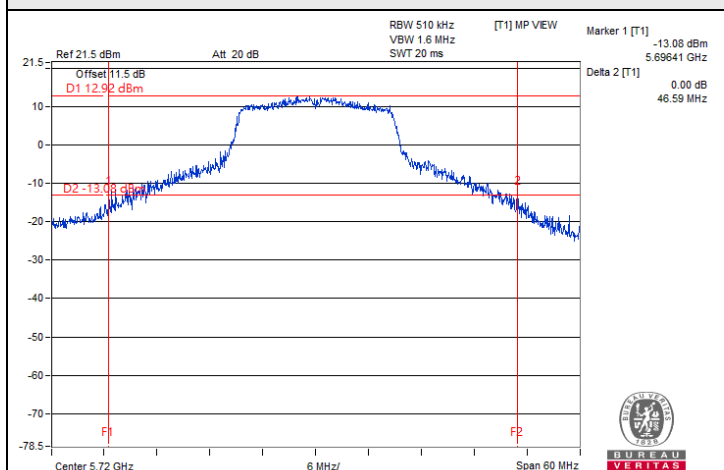
### 802.11ac (VHT80) CDD

| Channel        | Frequency (MHz) | 26 dB Bandwidth (MHz) |         |
|----------------|-----------------|-----------------------|---------|
|                |                 | Chain 0               | Chain 1 |
| 58             | 5290            | 80.67                 | 80.37   |
| 106            | 5530            | 80.26                 | 80.59   |
| 138 (U-NII-2C) | 5690            | 127.88                | 124.06  |
| 138 (U-NII-3)  | 5690            | 55.32                 | 54.32   |

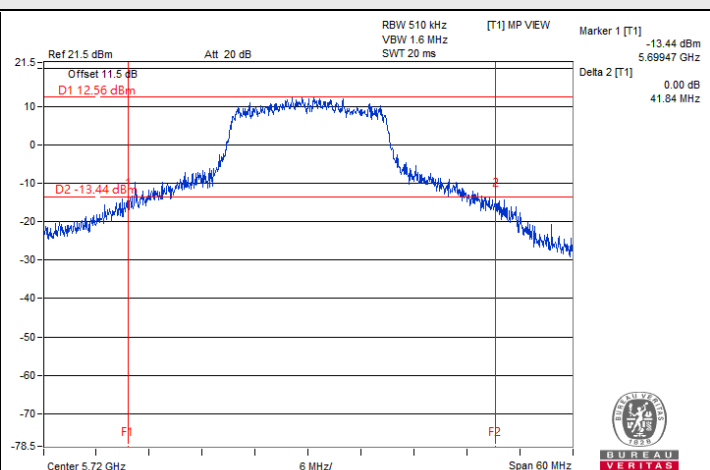
| Determined Output Power Limit |            |             |                                        |
|-------------------------------|------------|-------------|----------------------------------------|
| Channel Number                | Freq.(MHz) | Min. B(MHz) | Determined Conducted Power Limit (dBm) |
| 58                            | 5290       | 80.37       | 30.05 > 24                             |
| 106                           | 5530       | 80.26       | 30.04 > 24                             |
| 138 (U-NII-2C)                | 5690       | 124.06      | 31.93 > 24                             |

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

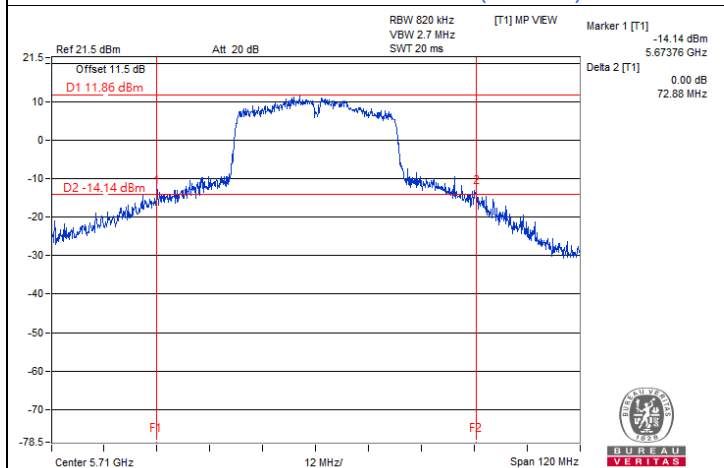
## Spectrum Plot of Minimum Value



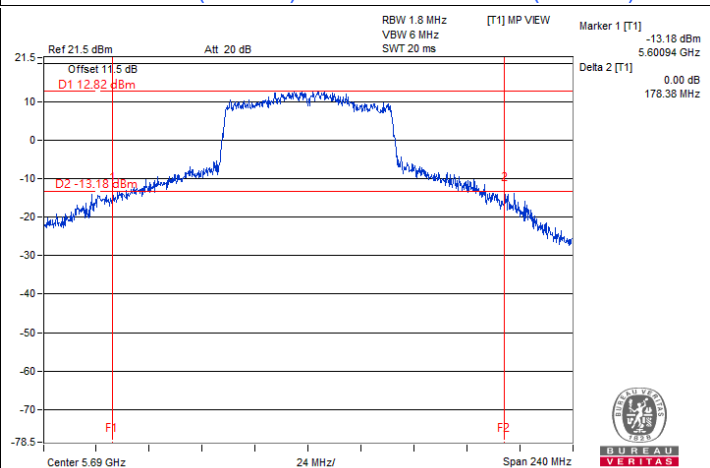
802.11a / Chain 1 : CH 144 (U-NII-3)



802.11ac (VHT20) / Chain 1 : CH 144 (U-NII-3)



802.11ac (VHT40) / Chain 1 : CH 142 (U-NII-3)



802.11ac (VHT80) / Chain 1 : CH 138 (U-NII-3)

### Notes:

1. For U-NII-2C straddle channel = 5725 MHz - Marker 1
2. For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz

## 7.2 RF Output Power

|              |         |                           |              |            |           |
|--------------|---------|---------------------------|--------------|------------|-----------|
| Input Power: | 3.6 Vdc | Environmental Conditions: | 25°C, 60% RH | Tested By: | Henry Hsu |
|--------------|---------|---------------------------|--------------|------------|-----------|

### 802.11a CDD

| Chan.           | Chan. Freq. (MHz) | Average Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|-----------------|-------------------|---------------------|---------|------------------|-------------------|-------------------|-------------|
|                 |                   | Chain 0             | Chain 1 |                  |                   |                   |             |
| 36              | 5180              | 12.77               | 12.42   | 36.382           | 15.61             | 24                | Pass        |
| 40              | 5200              | 14.77               | 14.56   | 58.568           | 17.68             | 24                | Pass        |
| 48              | 5240              | 17.92               | 17.60   | 119.488          | 20.77             | 24                | Pass        |
| 52              | 5260              | 19.09               | 18.71   | 155.398          | 21.91             | 24                | Pass        |
| 60              | 5300              | 14.12               | 13.99   | 50.884           | 17.07             | 24                | Pass        |
| 64              | 5320              | 13.52               | 13.15   | 43.144           | 16.35             | 24                | Pass        |
| 100             | 5500              | 8.48                | 8.04    | 13.415           | 11.28             | 24                | Pass        |
| 116             | 5580              | 20.02               | 18.71   | 174.763          | 22.42             | 24                | Pass        |
| 140             | 5700              | 12.94               | 12.52   | 37.544           | 15.75             | 24                | Pass        |
| *144 (U-NII-2C) | 5720              | 17.89               | 16.86   | 110.047          | 20.42             | 24                | Pass        |
| *144 (U-NII-3)  | 5720              | 11.16               | 10.09   | 23.271           | 13.67             | 30                | Pass        |
| 149             | 5745              | 19.11               | 17.74   | 140.9            | 21.49             | 30                | Pass        |
| 157             | 5785              | 18.56               | 17.24   | 124.746          | 20.96             | 30                | Pass        |
| 165             | 5825              | 17.84               | 17.04   | 111.396          | 20.47             | 30                | Pass        |

#### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 2.74 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 2.42 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 2.36 dBi < 6 dBi, so the output power limit shall not be reduced.

## 802.11ac (VHT20) CDD

| Chan.           | Chan. Freq.<br>(MHz) | Average Power (dBm) |         | Total Power<br>(mW) | Total Power<br>(dBm) | Power Limit<br>(dBm) | Test Result |
|-----------------|----------------------|---------------------|---------|---------------------|----------------------|----------------------|-------------|
|                 |                      | Chain 0             | Chain 1 |                     |                      |                      |             |
| 36              | 5180                 | 13.50               | 13.06   | 42.617              | 16.30                | 24                   | Pass        |
| 40              | 5200                 | 14.62               | 14.35   | 56.2                | 17.50                | 24                   | Pass        |
| 48              | 5240                 | 18.33               | 18.19   | 133.994             | 21.27                | 24                   | Pass        |
| 52              | 5260                 | 18.89               | 18.56   | 149.226             | 21.74                | 24                   | Pass        |
| 60              | 5300                 | 15.33               | 14.97   | 65.524              | 18.16                | 24                   | Pass        |
| 64              | 5320                 | 13.41               | 12.99   | 41.835              | 16.22                | 24                   | Pass        |
| 100             | 5500                 | 10.28               | 9.79    | 20.194              | 13.05                | 24                   | Pass        |
| 116             | 5580                 | 18.83               | 17.36   | 130.834             | 21.17                | 24                   | Pass        |
| 140             | 5700                 | 12.41               | 11.75   | 32.38               | 15.10                | 24                   | Pass        |
| *144 (U-NII-2C) | 5720                 | 18.19               | 16.62   | 111.837             | 20.49                | 24                   | Pass        |
| *144 (U-NII-3)  | 5720                 | 11.43               | 9.72    | 23.275              | 13.67                | 30                   | Pass        |
| 149             | 5745                 | 19.10               | 17.56   | 138.299             | 21.41                | 30                   | Pass        |
| 157             | 5785                 | 18.65               | 17.01   | 123.517             | 20.92                | 30                   | Pass        |
| 165             | 5825                 | 17.65               | 16.52   | 103.085             | 20.13                | 30                   | Pass        |

### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 2.74 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 2.42 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 2.36 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ac (VHT40) CDD

| Chan.           | Chan. Freq.<br>(MHz) | Average Power (dBm) |         | Total Power<br>(mW) | Total Power<br>(dBm) | Power Limit<br>(dBm) | Test Result |
|-----------------|----------------------|---------------------|---------|---------------------|----------------------|----------------------|-------------|
|                 |                      | Chain 0             | Chain 1 |                     |                      |                      |             |
| 38              | 5190                 | 11.23               | 10.94   | 25.69               | 14.10                | 24                   | Pass        |
| 46              | 5230                 | 15.93               | 15.65   | 75.902              | 18.80                | 24                   | Pass        |
| 54              | 5270                 | 16.96               | 16.38   | 93.11               | 19.69                | 24                   | Pass        |
| 62              | 5310                 | 12.02               | 11.88   | 31.339              | 14.96                | 24                   | Pass        |
| 102             | 5510                 | 15.79               | 15.66   | 74.744              | 18.74                | 24                   | Pass        |
| 110             | 5550                 | 16.26               | 16.05   | 82.539              | 19.17                | 24                   | Pass        |
| 134             | 5670                 | 15.02               | 14.51   | 60.018              | 17.78                | 24                   | Pass        |
| *142 (U-NII-2C) | 5710                 | 18.21               | 16.73   | 113.319             | 20.54                | 24                   | Pass        |
| *142 (U-NII-3)  | 5710                 | 6.15                | 4.57    | 6.985               | 8.44                 | 30                   | Pass        |
| 151             | 5755                 | 18.49               | 16.67   | 117.083             | 20.68                | 30                   | Pass        |
| 159             | 5795                 | 18.16               | 16.30   | 108.122             | 20.34                | 30                   | Pass        |

#### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 2.74 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 2.42 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 2.36 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ac (VHT80) CDD

| Chan.           | Chan. Freq.<br>(MHz) | Average Power (dBm) |         | Total Power<br>(mW) | Total Power<br>(dBm) | Power Limit<br>(dBm) | Test Result |
|-----------------|----------------------|---------------------|---------|---------------------|----------------------|----------------------|-------------|
|                 |                      | Chain 0             | Chain 1 |                     |                      |                      |             |
| 42              | 5210                 | 8.90                | 8.67    | 15.125              | 11.80                | 24                   | Pass        |
| 58              | 5290                 | 10.81               | 11.37   | 25.759              | 14.11                | 24                   | Pass        |
| 106             | 5530                 | 10.35               | 10.13   | 21.143              | 13.25                | 24                   | Pass        |
| *138 (U-NII-2C) | 5690                 | 18.01               | 17.41   | 118.322             | 20.73                | 24                   | Pass        |
| *138 (U-NII-3)  | 5690                 | 3.23                | 1.96    | 3.674               | 5.65                 | 30                   | Pass        |
| 155             | 5775                 | 17.88               | 16.89   | 110.241             | 20.42                | 30                   | Pass        |

#### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 2.74 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 2.42 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 2.36 dBi < 6 dBi, so the output power limit shall not be reduced.

## 802.11ac (VHT20) Beamforming

| Chan.           | Chan. Freq.<br>(MHz) | Average Power (dBm) |         | Total Power<br>(mW) | Total Power<br>(dBm) | Power Limit<br>(dBm) | Test Result |
|-----------------|----------------------|---------------------|---------|---------------------|----------------------|----------------------|-------------|
|                 |                      | Chain 0             | Chain 1 |                     |                      |                      |             |
| 36              | 5180                 | 13.50               | 13.06   | 42.617              | 16.30                | 24                   | Pass        |
| 40              | 5200                 | 14.62               | 14.35   | 56.2                | 17.50                | 24                   | Pass        |
| 48              | 5240                 | 18.33               | 18.19   | 133.994             | 21.27                | 24                   | Pass        |
| 52              | 5260                 | 18.89               | 18.56   | 149.226             | 21.74                | 24                   | Pass        |
| 60              | 5300                 | 15.33               | 14.97   | 65.524              | 18.16                | 24                   | Pass        |
| 64              | 5320                 | 13.41               | 12.99   | 41.835              | 16.22                | 24                   | Pass        |
| 100             | 5500                 | 10.28               | 9.79    | 20.194              | 13.05                | 24                   | Pass        |
| 116             | 5580                 | 18.83               | 17.36   | 130.834             | 21.17                | 24                   | Pass        |
| 140             | 5700                 | 12.41               | 11.75   | 32.38               | 15.10                | 24                   | Pass        |
| *144 (U-NII-2C) | 5720                 | 18.19               | 16.62   | 111.837             | 20.49                | 24                   | Pass        |
| *144 (U-NII-3)  | 5720                 | 11.43               | 9.72    | 23.275              | 13.67                | 30                   | Pass        |
| 149             | 5745                 | 19.10               | 17.56   | 138.299             | 21.41                | 30                   | Pass        |
| 157             | 5785                 | 18.65               | 17.01   | 123.517             | 20.92                | 30                   | Pass        |
| 165             | 5825                 | 17.65               | 16.52   | 103.085             | 20.13                | 30                   | Pass        |

### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-1, the directional gain is 5.52 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.32 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.27 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11ac (VHT40) Beamforming

| Chan.           | Chan. Freq.<br>(MHz) | Average Power (dBm) |         | Total Power<br>(mW) | Total Power<br>(dBm) | Power Limit<br>(dBm) | Test Result |
|-----------------|----------------------|---------------------|---------|---------------------|----------------------|----------------------|-------------|
|                 |                      | Chain 0             | Chain 1 |                     |                      |                      |             |
| 38              | 5190                 | 11.23               | 10.94   | 25.69               | 14.10                | 24                   | Pass        |
| 46              | 5230                 | 15.93               | 15.65   | 75.902              | 18.80                | 24                   | Pass        |
| 54              | 5270                 | 16.96               | 16.38   | 93.11               | 19.69                | 24                   | Pass        |
| 62              | 5310                 | 12.02               | 11.88   | 31.339              | 14.96                | 24                   | Pass        |
| 102             | 5510                 | 15.79               | 15.66   | 74.744              | 18.74                | 24                   | Pass        |
| 110             | 5550                 | 16.26               | 16.05   | 82.539              | 19.17                | 24                   | Pass        |
| 134             | 5670                 | 15.02               | 14.51   | 60.018              | 17.78                | 24                   | Pass        |
| *142 (U-NII-2C) | 5710                 | 18.21               | 16.73   | 113.319             | 20.54                | 24                   | Pass        |
| *142 (U-NII-3)  | 5710                 | 6.15                | 4.57    | 6.985               | 8.44                 | 30                   | Pass        |
| 151             | 5755                 | 18.49               | 16.67   | 117.083             | 20.68                | 30                   | Pass        |
| 159             | 5795                 | 18.16               | 16.30   | 108.122             | 20.34                | 30                   | Pass        |

Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-1, the directional gain is 5.52 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.32 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.27 dBi < 6 dBi, so the output power limit shall not be reduced.

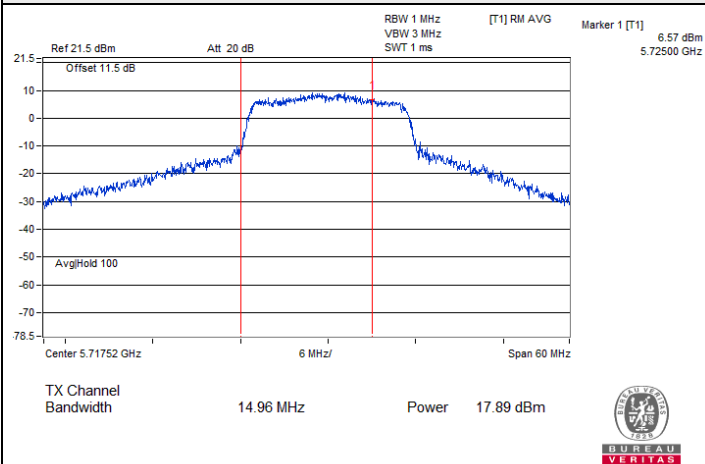
### 802.11ac (VHT80) Beamforming

| Chan.           | Chan. Freq.<br>(MHz) | Average Power (dBm) |         | Total Power<br>(mW) | Total Power<br>(dBm) | Power Limit<br>(dBm) | Test Result |
|-----------------|----------------------|---------------------|---------|---------------------|----------------------|----------------------|-------------|
|                 |                      | Chain 0             | Chain 1 |                     |                      |                      |             |
| 42              | 5210                 | 8.90                | 8.67    | 15.125              | 11.80                | 24                   | Pass        |
| 58              | 5290                 | 10.81               | 11.37   | 25.759              | 14.11                | 24                   | Pass        |
| 106             | 5530                 | 10.35               | 10.13   | 21.143              | 13.25                | 24                   | Pass        |
| *138 (U-NII-2C) | 5690                 | 18.01               | 17.41   | 118.322             | 20.73                | 24                   | Pass        |
| *138 (U-NII-3)  | 5690                 | 3.23                | 1.96    | 3.674               | 5.65                 | 30                   | Pass        |
| 155             | 5775                 | 17.88               | 16.89   | 110.241             | 20.42                | 30                   | Pass        |

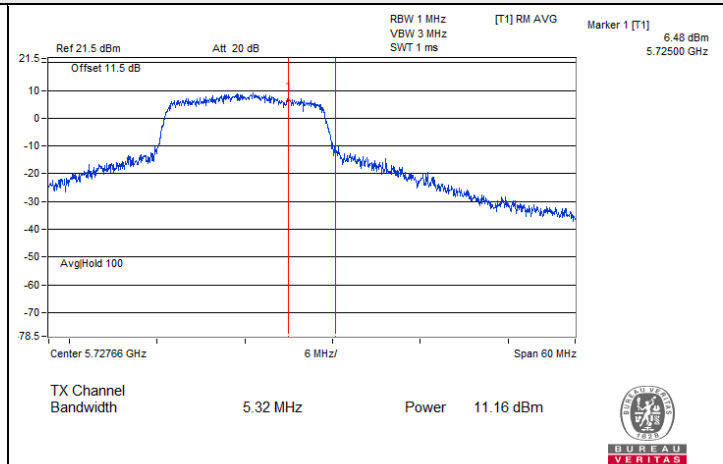
Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-1, the directional gain is 5.52 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 5.16 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 5.32 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 5.27 dBi < 6 dBi, so the output power limit shall not be reduced.

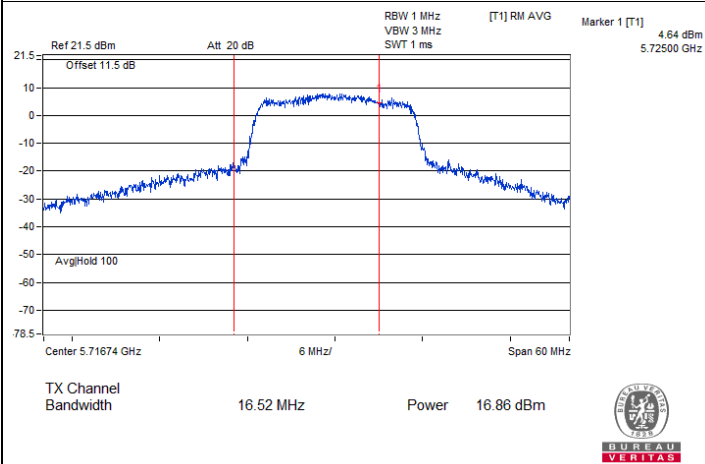
## Spectrum Plot for channel straddling



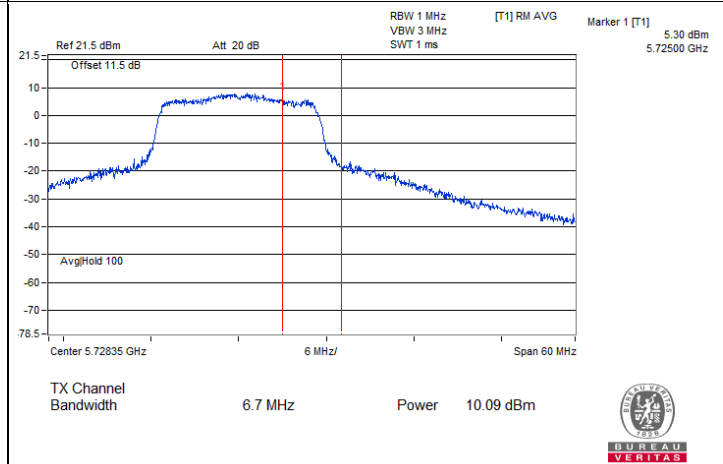
802.11a / Chain 0 : CH 144 (U-NII-2C)



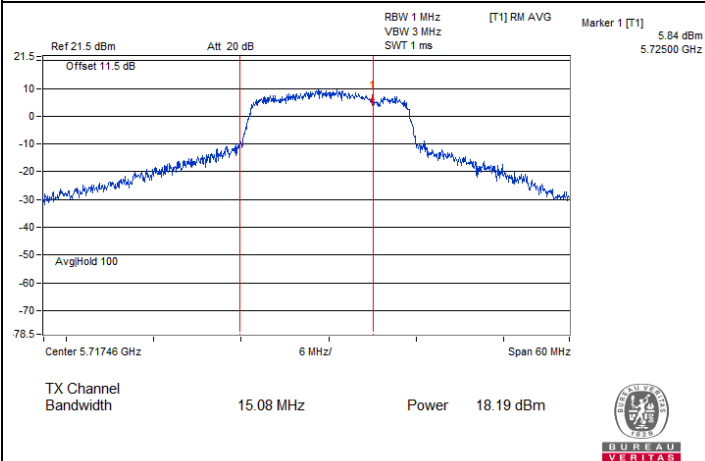
802.11a / Chain 0 : CH 144 (U-NII-3)



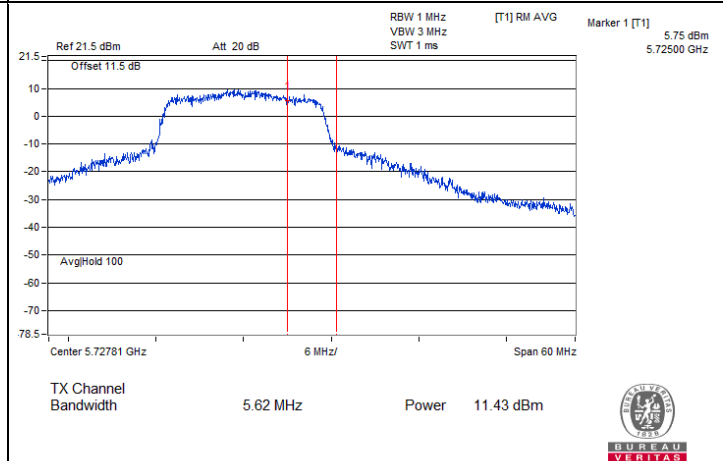
802.11a / Chain 1 : CH 144 (U-NII-2C)



802.11a / Chain 1 : CH 144 (U-NII-3)

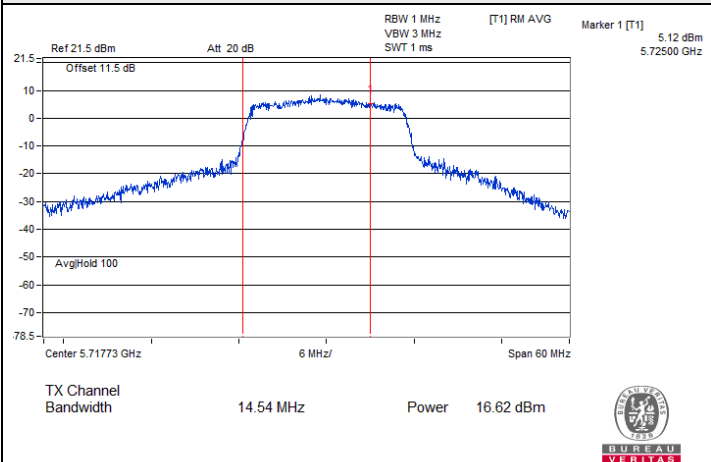


802.11ac (VHT20) / Chain 0 : CH 144 (U-NII-2C)

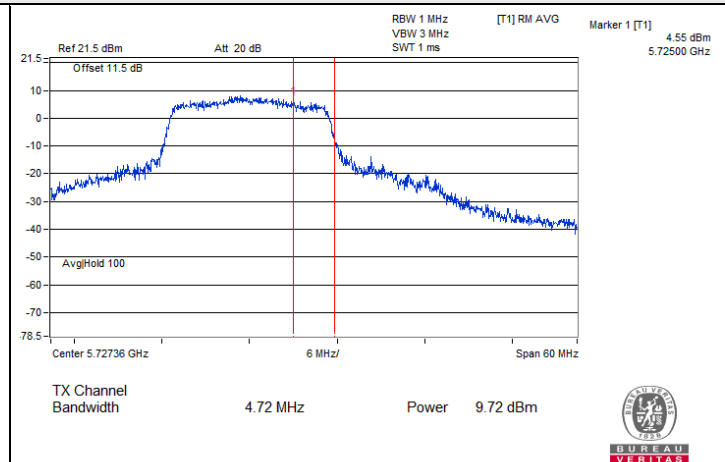


802.11ac (VHT20) / Chain 0 : CH 144 (U-NII-3)

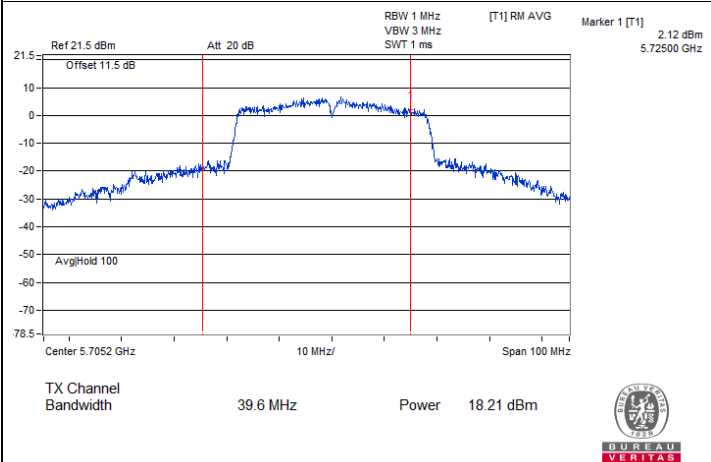
## Spectrum Plot for channel straddling



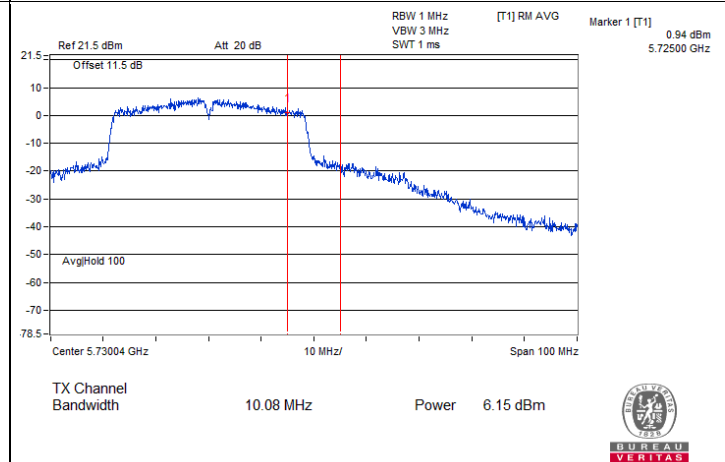
802.11ac (VHT20) / Chain 1 : CH 144 (U-NII-2C)



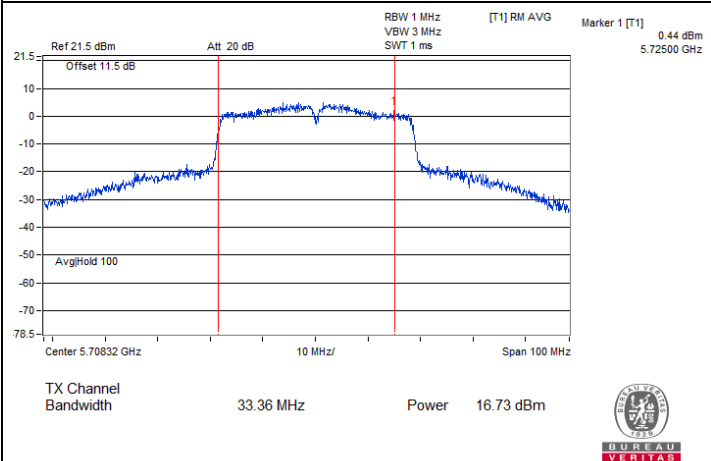
802.11ac (VHT20) / Chain 1 : CH 144 (U-NII-3)



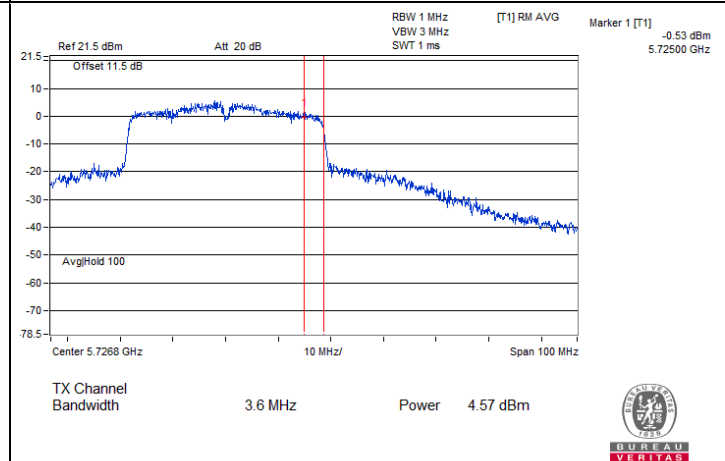
802.11ac (VHT40) / Chain 0 : CH 142 (U-NII-2C)



802.11ac (VHT40) / Chain 0 : CH 142 (U-NII-3)

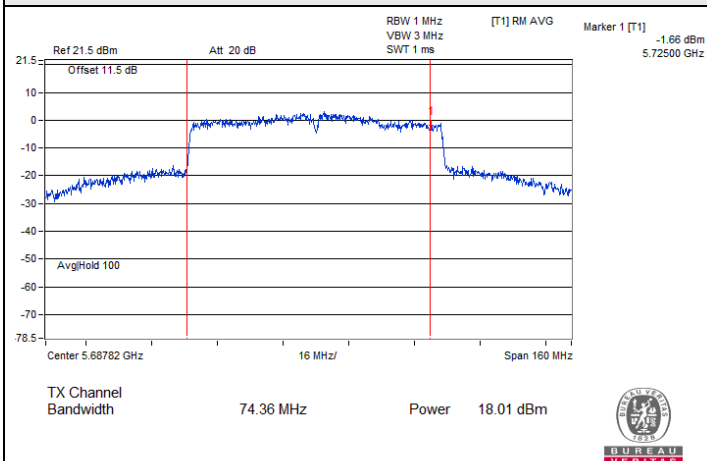


802.11ac (VHT40) / Chain 1 : CH 142 (U-NII-2C)

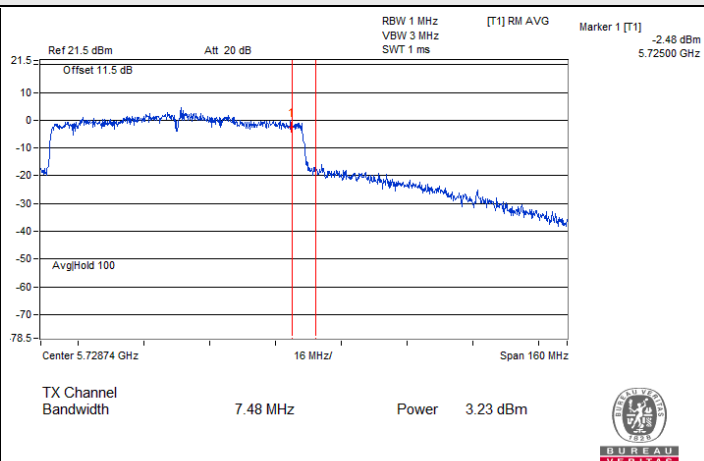


802.11ac (VHT40) / Chain 1 : CH 142 (U-NII-3)

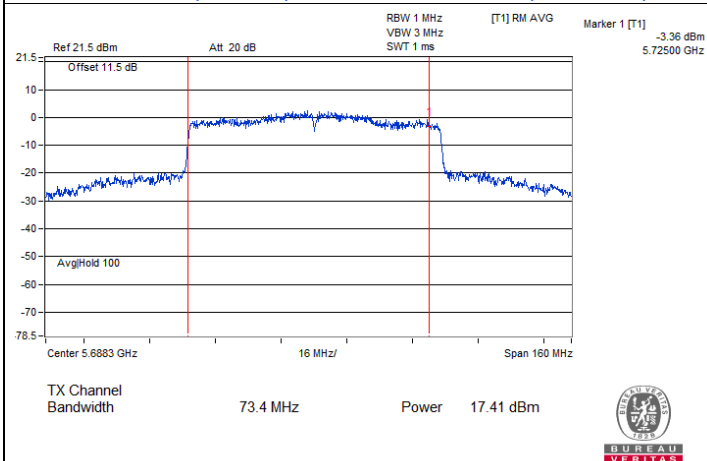
# Spectrum Plot for channel straddling



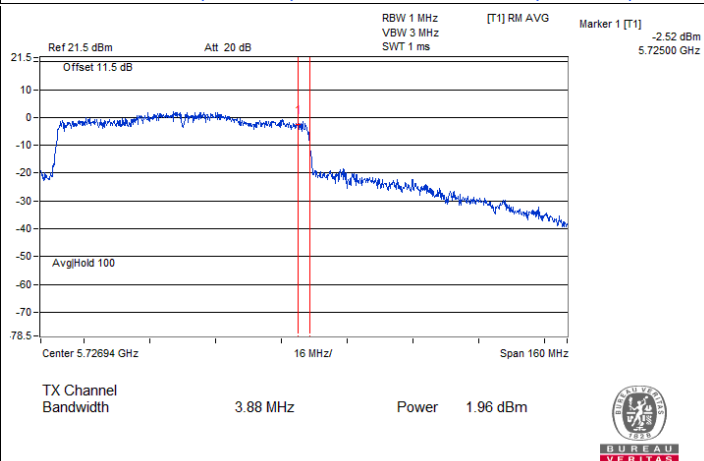
802.11ac (VHT80) / Chain 0 : CH 138 (U-NII-2C)



802.11ac (VHT80) / Chain 0 : CH 138 (U-NII-3)



802.11ac (VHT80) / Chain 1 : CH 138 (U-NII-2C)



802.11ac (VHT80) / Chain 1 : CH 138 (U-NII-3)

### 7.3 Power Spectral Density

|              |         |                           |              |            |           |
|--------------|---------|---------------------------|--------------|------------|-----------|
| Input Power: | 3.6 Vdc | Environmental Conditions: | 25°C, 60% RH | Tested By: | Henry Hsu |
|--------------|---------|---------------------------|--------------|------------|-----------|

#### 802.11a CDD

| Chan.          | Chan. Freq. (MHz) | PSD (dBm/MHz) |         | Total PSD (dBm/MHz) | Max. PSD Limit (dBm/MHz) | Test Result |
|----------------|-------------------|---------------|---------|---------------------|--------------------------|-------------|
|                |                   | Chain 0       | Chain 1 |                     |                          |             |
| 36             | 5180              | 1.04          | 0.90    | 3.98                | 11                       | Pass        |
| 40             | 5200              | 2.89          | 2.73    | 5.82                | 11                       | Pass        |
| 48             | 5240              | 6.58          | 6.37    | 9.49                | 11                       | Pass        |
| 52             | 5260              | 7.82          | 7.40    | 10.63               | 11                       | Pass        |
| 60             | 5300              | 1.69          | 1.48    | 4.60                | 11                       | Pass        |
| 64             | 5320              | 0.94          | 0.76    | 3.86                | 11                       | Pass        |
| 100            | 5500              | -3.26         | -3.63   | -0.43               | 11                       | Pass        |
| 116            | 5580              | 8.54          | 7.19    | 10.93               | 11                       | Pass        |
| 140            | 5700              | 0.88          | 0.49    | 3.70                | 11                       | Pass        |
| 144 (U-NII-2C) | 5720              | 7.87          | 6.92    | 10.43               | 11                       | Pass        |

#### Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-1, the directional gain is 5.52 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.16 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.32 dBi < 6 dBi, so the power density limit shall not be reduced.

### 802.11ac (VHT20) CDD

| Chan.          | Chan. Freq. (MHz) | PSD (dBm/MHz) |         | Total PSD (dBm/MHz) | Max. PSD Limit (dBm/MHz) | Test Result |
|----------------|-------------------|---------------|---------|---------------------|--------------------------|-------------|
|                |                   | Chain 0       | Chain 1 |                     |                          |             |
| 36             | 5180              | 1.55          | 1.07    | 4.33                | 11                       | Pass        |
| 40             | 5200              | 2.51          | 2.14    | 5.34                | 11                       | Pass        |
| 48             | 5240              | 6.42          | 6.16    | 9.30                | 11                       | Pass        |
| 52             | 5260              | 7.58          | 7.18    | 10.39               | 11                       | Pass        |
| 60             | 5300              | 3.32          | 3.24    | 6.29                | 11                       | Pass        |
| 64             | 5320              | 1.21          | 0.75    | 4.00                | 11                       | Pass        |
| 100            | 5500              | -1.88         | -2.23   | 0.96                | 11                       | Pass        |
| 116            | 5580              | 7.86          | 7.08    | 10.50               | 11                       | Pass        |
| 140            | 5700              | -0.64         | -0.83   | 2.28                | 11                       | Pass        |
| 144 (U-NII-2C) | 5720              | 7.02          | 5.27    | 9.24                | 11                       | Pass        |

#### Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-1, the directional gain is 5.52 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.16 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.32 dBi < 6 dBi, so the power density limit shall not be reduced.

### 802.11ac (VHT40) CDD

| Chan.          | Chan. Freq. (MHz) | PSD (dBm/MHz) |         | Total PSD (dBm/MHz) | Max. PSD Limit (dBm/MHz) | Test Result |
|----------------|-------------------|---------------|---------|---------------------|--------------------------|-------------|
|                |                   | Chain 0       | Chain 1 |                     |                          |             |
| 38             | 5190              | -3.67         | -4.13   | -0.88               | 11                       | Pass        |
| 46             | 5230              | -3.79         | -4.37   | -1.06               | 11                       | Pass        |
| 54             | 5270              | 1.65          | 0.99    | 4.34                | 11                       | Pass        |
| 62             | 5310              | -2.63         | -2.98   | 0.21                | 11                       | Pass        |
| 102            | 5510              | -2.62         | -3.48   | -0.02               | 11                       | Pass        |
| 110            | 5550              | 0.97          | 0.48    | 3.74                | 11                       | Pass        |
| 134            | 5670              | 0.63          | -0.01   | 3.33                | 11                       | Pass        |
| 142 (U-NII-2C) | 5710              | 2.71          | 1.63    | 5.21                | 11                       | Pass        |

#### Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-1, the directional gain is 5.52 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.16 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.32 dBi < 6 dBi, so the power density limit shall not be reduced.

### 802.11ac (VHT80) CDD

| Chan.          | Chan. Freq. (MHz) | PSD (dBm/MHz) |         | Total PSD (dBm/MHz) | Max. PSD Limit (dBm/MHz) | Test Result |
|----------------|-------------------|---------------|---------|---------------------|--------------------------|-------------|
|                |                   | Chain 0       | Chain 1 |                     |                          |             |
| 42             | 5210              | -8.71         | -9.17   | -5.92               | 11                       | Pass        |
| 58             | 5290              | -6.07         | -5.71   | -2.88               | 11                       | Pass        |
| 106            | 5530              | -7.72         | -8.11   | -4.90               | 11                       | Pass        |
| 138 (U-NII-2C) | 5690              | 0.40          | -1.18   | 2.69                | 11                       | Pass        |

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-1, the directional gain is 5.52 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 5.16 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 5.32 dBi < 6 dBi, so the power density limit shall not be reduced.

### 802.11a CDD

| Chan.         | Chan. Freq. (MHz) | PSD (dBm/300kHz) |         | Total PSD (dBm/300kHz) | Total PSD (dBm/500kHz) | PSD Limit (dBm/500kHz) | Test Result |
|---------------|-------------------|------------------|---------|------------------------|------------------------|------------------------|-------------|
|               |                   | Chain 0          | Chain 1 |                        |                        |                        |             |
| 144 (U-NII-3) | 5720              | 0.50             | -0.54   | 3.02                   | 5.24                   | 30                     | Pass        |
| 149           | 5745              | 2.45             | 1.32    | 4.93                   | 7.15                   | 30                     | Pass        |
| 157           | 5785              | 1.87             | 0.69    | 4.33                   | 6.55                   | 30                     | Pass        |
| 165           | 5825              | 1.31             | 0.48    | 3.93                   | 6.15                   | 30                     | Pass        |

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 5.27 dBi < 6 dBi, so the power density limit shall not be reduced.

### 802.11ac (VHT20) CDD

| Chan.         | Chan. Freq. (MHz) | PSD (dBm/300kHz) |         | Total PSD (dBm/300kHz) | Total PSD (dBm/500kHz) | PSD Limit (dBm/500kHz) | Test Result |
|---------------|-------------------|------------------|---------|------------------------|------------------------|------------------------|-------------|
|               |                   | Chain 0          | Chain 1 |                        |                        |                        |             |
| 144 (U-NII-3) | 5720              | -0.40            | -2.16   | 1.82                   | 4.04                   | 30                     | Pass        |
| 149           | 5745              | 2.15             | 0.94    | 4.6                    | 6.82                   | 30                     | Pass        |
| 157           | 5785              | 1.72             | 0.70    | 4.25                   | 6.47                   | 30                     | Pass        |
| 165           | 5825              | 0.68             | 0.00    | 3.36                   | 5.58                   | 30                     | Pass        |

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 5.27 dBi < 6 dBi, so the power density limit shall not be reduced.

## 802.11ac (VHT40) CDD

| Chan.         | Chan. Freq. (MHz) | PSD (dBm/300kHz) |         | Total PSD (dBm/300kHz) | Total PSD (dBm/500kHz) | PSD Limit (dBm/500kHz) | Test Result |
|---------------|-------------------|------------------|---------|------------------------|------------------------|------------------------|-------------|
|               |                   | Chain 0          | Chain 1 |                        |                        |                        |             |
| 142 (U-NII-3) | 5710              | -5.96            | -7.18   | -3.52                  | -1.30                  | 30                     | Pass        |
| 151           | 5755              | -1.37            | -2.44   | 1.14                   | 3.36                   | 30                     | Pass        |
| 159           | 5795              | -1.57            | -2.48   | 1.01                   | 3.23                   | 30                     | Pass        |

Notes:

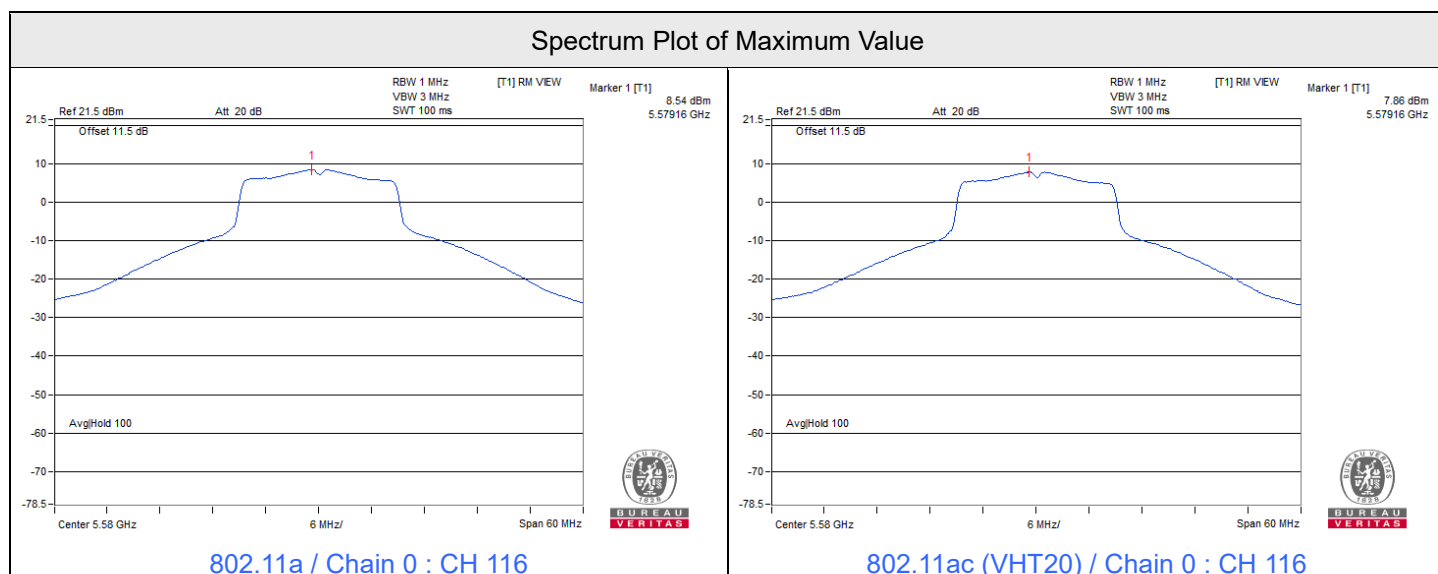
- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-3, the directional gain is 5.27 dBi < 6 dBi, so the power density limit shall not be reduced.

## 802.11ac (VHT80) CDD

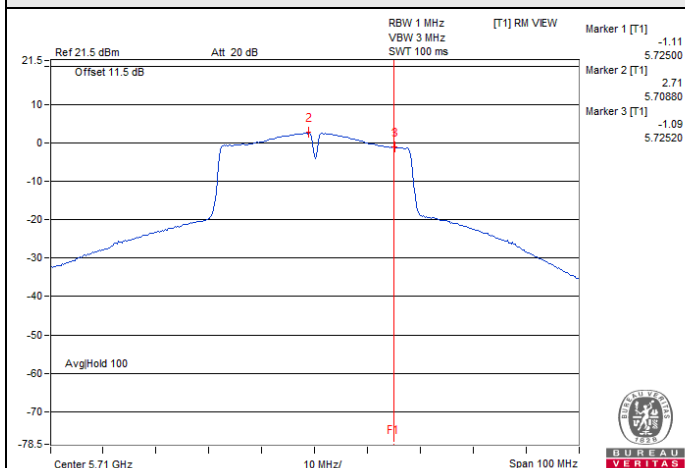
| Chan.         | Chan. Freq. (MHz) | PSD (dBm/300kHz) |         | Total PSD (dBm/300kHz) | Total PSD (dBm/500kHz) | PSD Limit (dBm/500kHz) | Test Result |
|---------------|-------------------|------------------|---------|------------------------|------------------------|------------------------|-------------|
|               |                   | Chain 0          | Chain 1 |                        |                        |                        |             |
| 138 (U-NII-3) | 5690              | -8.28            | -9.71   | -5.93                  | -3.71                  | 30                     | Pass        |
| 155           | 5775              | -5.22            | -6.32   | -2.72                  | -0.50                  | 30                     | Pass        |

Notes:

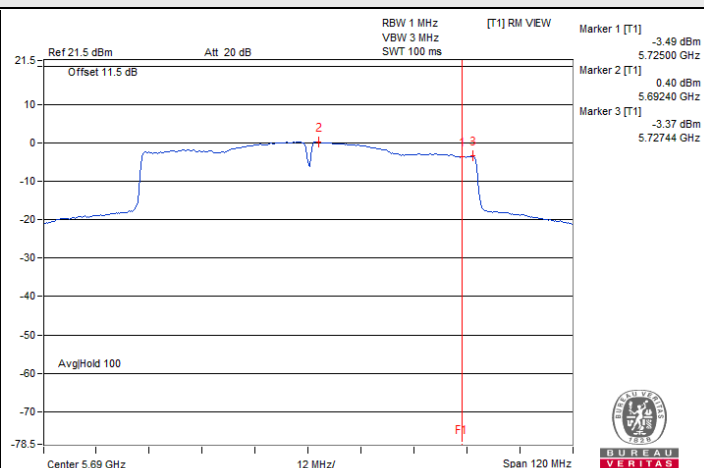
- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain =  $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-3, the directional gain is 5.27 dBi < 6 dBi, so the power density limit shall not be reduced.



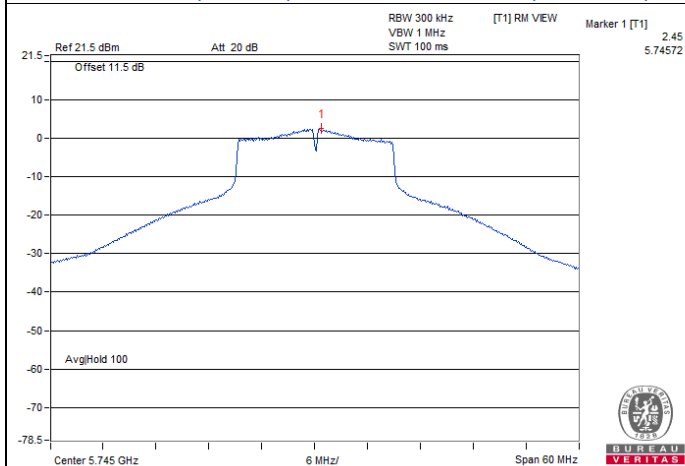
## Spectrum Plot of Maximum Value



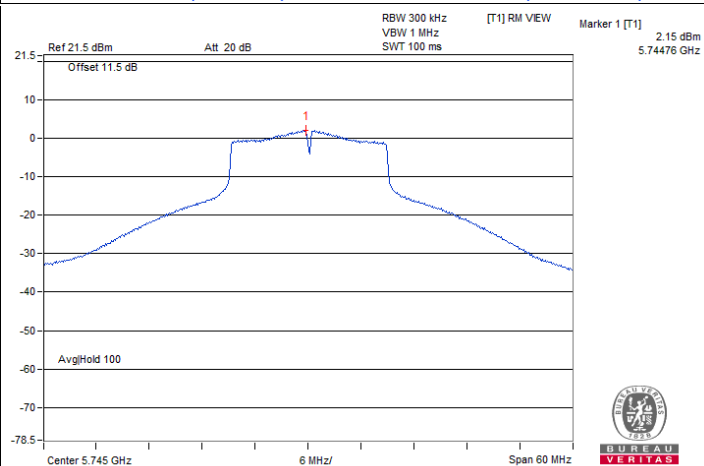
802.11ac (VHT40) / Chain 0 : CH 142 (U-NII-2C)



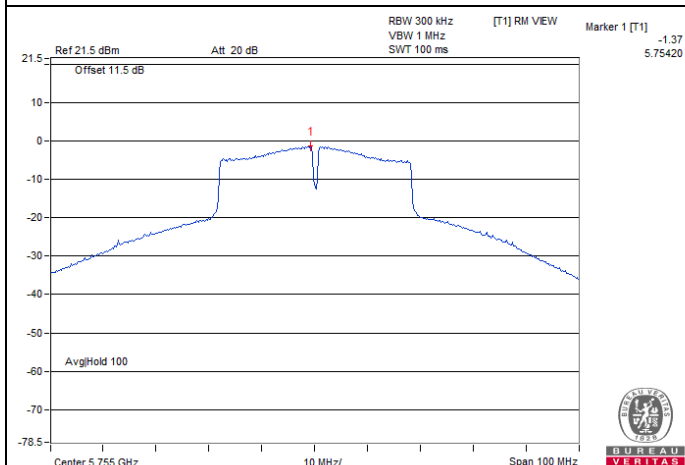
802.11ac (VHT80) / Chain 0 : CH 138 (U-NII-2C)



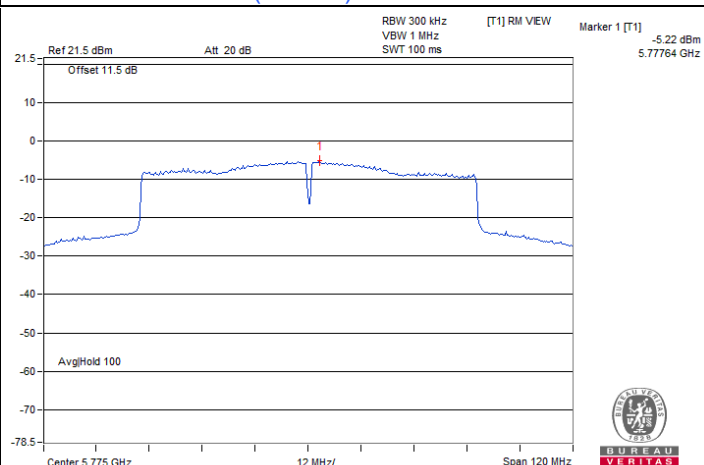
802.11a / Chain 0 : CH 149



802.11ac (VHT20) / Chain 0 : CH 149



802.11ac (VHT40) / Chain 0 : CH 151



802.11ac (VHT80) / Chain 0 : CH 155

#### 7.4 6 dB Bandwidth

|              |         |                           |              |            |           |
|--------------|---------|---------------------------|--------------|------------|-----------|
| Input Power: | 3.6 Vdc | Environmental Conditions: | 25°C, 60% RH | Tested By: | Henry Hsu |
|--------------|---------|---------------------------|--------------|------------|-----------|

#### 802.11a CDD

| Channel       | Frequency (MHz) | 6 dB Bandwidth (MHz) |         | Minimum Limit (MHz) | Test Result |
|---------------|-----------------|----------------------|---------|---------------------|-------------|
|               |                 | Chain 0              | Chain 1 |                     |             |
| 144 (U-NII-3) | 5720            | 3.83                 | 2.63    | 0.5                 | Pass        |
| 149           | 5745            | 17.56                | 16.96   | 0.5                 | Pass        |
| 157           | 5785            | 17.53                | 17.13   | 0.5                 | Pass        |
| 165           | 5825            | 17.56                | 17.56   | 0.5                 | Pass        |

#### 802.11ac (VHT20) CDD

| Channel       | Frequency (MHz) | 6 dB Bandwidth (MHz) |         | Minimum Limit (MHz) | Test Result |
|---------------|-----------------|----------------------|---------|---------------------|-------------|
|               |                 | Chain 0              | Chain 1 |                     |             |
| 144 (U-NII-3) | 5720            | 3.85                 | 3.59    | 0.5                 | Pass        |
| 149           | 5745            | 15.92                | 17.54   | 0.5                 | Pass        |
| 157           | 5785            | 17.35                | 17.61   | 0.5                 | Pass        |
| 165           | 5825            | 17.29                | 16.62   | 0.5                 | Pass        |

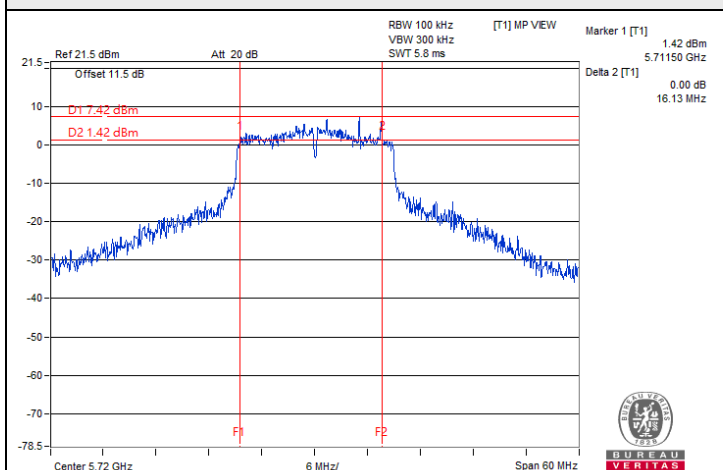
#### 802.11ac (VHT40) CDD

| Channel       | Frequency (MHz) | 6 dB Bandwidth (MHz) |         | Minimum Limit (MHz) | Test Result |
|---------------|-----------------|----------------------|---------|---------------------|-------------|
|               |                 | Chain 0              | Chain 1 |                     |             |
| 142 (U-NII-3) | 5710            | 2.06                 | 2.65    | 0.5                 | Pass        |
| 151           | 5755            | 35.04                | 33.99   | 0.5                 | Pass        |
| 159           | 5795            | 34.22                | 33.94   | 0.5                 | Pass        |

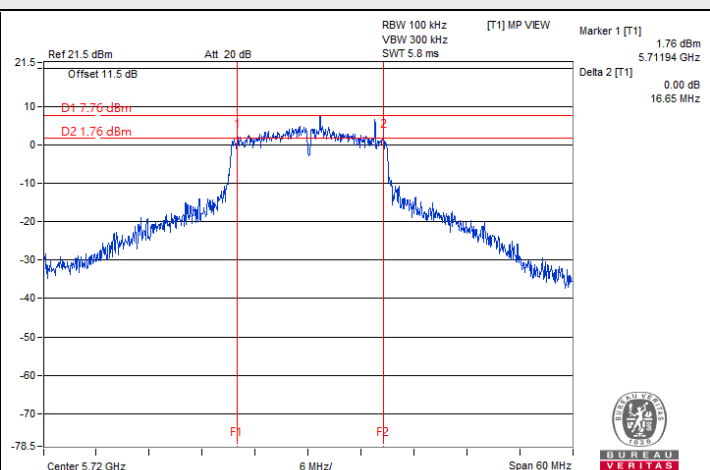
#### 802.11ac (VHT80) CDD

| Channel       | Frequency (MHz) | 6 dB Bandwidth (MHz) |         | Minimum Limit (MHz) | Test Result |
|---------------|-----------------|----------------------|---------|---------------------|-------------|
|               |                 | Chain 0              | Chain 1 |                     |             |
| 138 (U-NII-3) | 5690            | 2.84                 | 2.82    | 0.5                 | Pass        |
| 155           | 5775            | 75.31                | 75.41   | 0.5                 | Pass        |

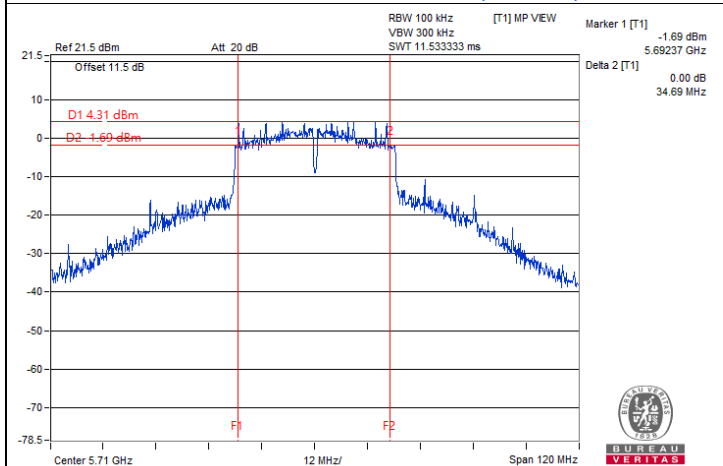
## Spectrum Plot of Minimum Value



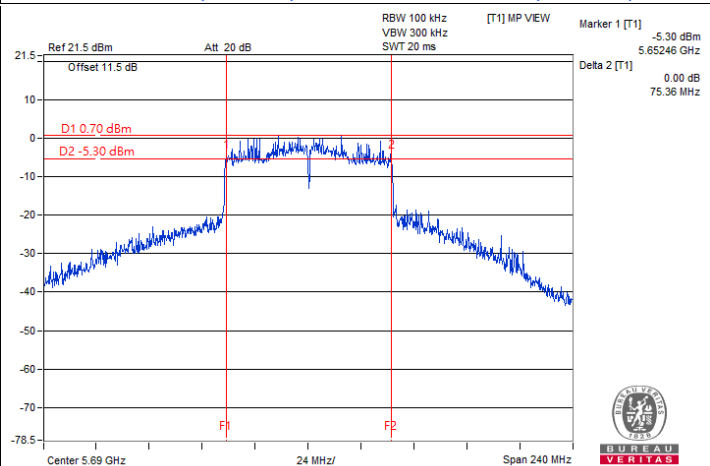
802.11a / Chain 1 : CH 144 (U-NII-3)



802.11ac (VHT20) / Chain 1 : CH 144 (U-NII-3)



802.11ac (VHT40) / Chain 0 : CH 142 (U-NII-3)



802.11ac (VHT80) / Chain 1 : CH 138 (U-NII-3)

Note: For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz

## 7.5 Occupied Bandwidth

|              |         |                           |              |            |           |
|--------------|---------|---------------------------|--------------|------------|-----------|
| Input Power: | 3.6 Vdc | Environmental Conditions: | 25°C, 60% RH | Tested By: | Henry Hsu |
|--------------|---------|---------------------------|--------------|------------|-----------|

### 802.11a CDD

| Channel        | Frequency (MHz) | Occupied Bandwidth (MHz) |         |
|----------------|-----------------|--------------------------|---------|
|                |                 | Chain 0                  | Chain 1 |
| 36             | 5180            | 17.88                    | 17.82   |
| 40             | 5200            | 17.88                    | 17.88   |
| 48             | 5240            | 18.78                    | 18.42   |
| 52             | 5260            | 22.98                    | 22.20   |
| 60             | 5300            | 17.82                    | 17.88   |
| 64             | 5320            | 17.82                    | 17.88   |
| 100            | 5500            | 17.76                    | 17.82   |
| 116            | 5580            | 29.28                    | 27.24   |
| 140            | 5700            | 17.88                    | 17.82   |
| 144 (U-NII-2C) | 5720            | 14.96                    | 16.52   |
| 144 (U-NII-3)  | 5720            | 5.32                     | 6.70    |
| 149            | 5745            | 28.50                    | 20.28   |
| 157            | 5785            | 26.28                    | 20.76   |
| 165            | 5825            | 24.00                    | 21.06   |

### 802.11ac (VHT20) CDD

| Channel        | Frequency (MHz) | Occupied Bandwidth (MHz) |         |
|----------------|-----------------|--------------------------|---------|
|                |                 | Chain 0                  | Chain 1 |
| 36             | 5180            | 17.88                    | 17.88   |
| 40             | 5200            | 17.76                    | 17.88   |
| 48             | 5240            | 19.56                    | 19.08   |
| 52             | 5260            | 25.92                    | 23.64   |
| 60             | 5300            | 18.06                    | 18.36   |
| 64             | 5320            | 17.76                    | 17.82   |
| 100            | 5500            | 17.70                    | 17.82   |
| 116            | 5580            | 25.14                    | 22.86   |
| 140            | 5700            | 17.76                    | 17.76   |
| 144 (U-NII-2C) | 5720            | 15.08                    | 14.54   |
| 144 (U-NII-3)  | 5720            | 5.62                     | 4.72    |
| 149            | 5745            | 28.62                    | 21.78   |
| 157            | 5785            | 26.46                    | 20.76   |
| 165            | 5825            | 23.04                    | 21.18   |

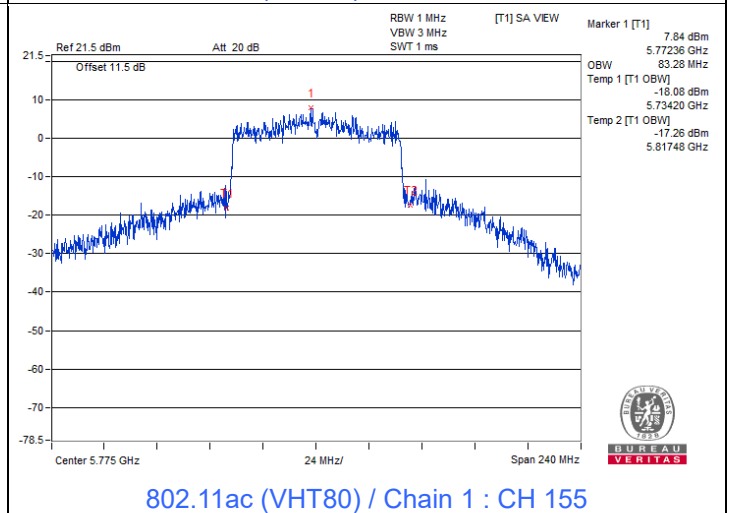
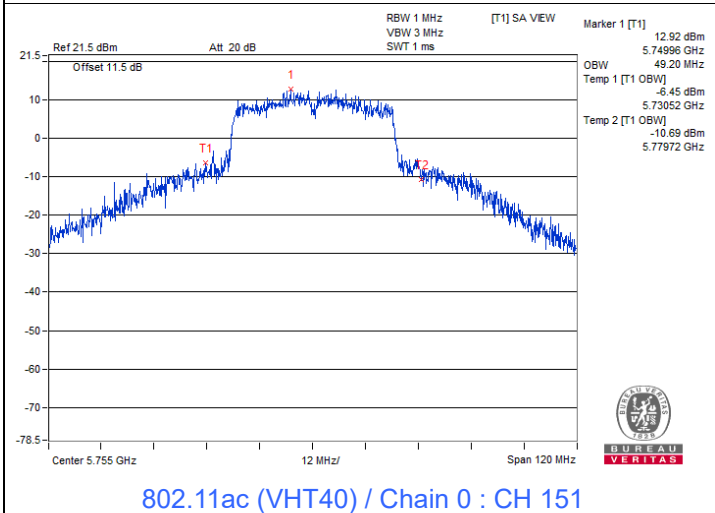
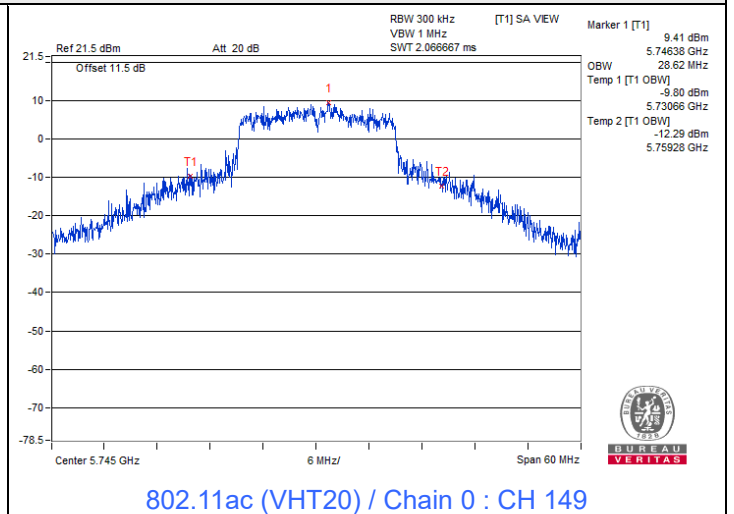
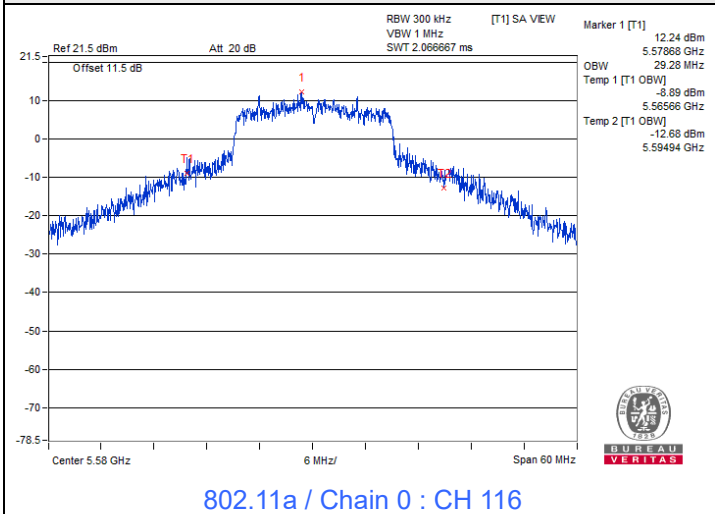
### 802.11ac (VHT40) CDD

| Channel        | Frequency (MHz) | Occupied Bandwidth (MHz) |         |
|----------------|-----------------|--------------------------|---------|
|                |                 | Chain 0                  | Chain 1 |
| 38             | 5190            | 36.12                    | 36.36   |
| 46             | 5230            | 36.12                    | 36.12   |
| 54             | 5270            | 36.72                    | 36.72   |
| 62             | 5310            | 36.12                    | 36.36   |
| 102            | 5510            | 36.12                    | 36.12   |
| 110            | 5550            | 36.48                    | 36.24   |
| 134            | 5670            | 36.48                    | 36.36   |
| 142 (U-NII-2C) | 5710            | 39.60                    | 33.36   |
| 142 (U-NII-3)  | 5710            | 10.08                    | 3.60    |
| 151            | 5755            | 49.20                    | 37.08   |
| 159            | 5795            | 47.16                    | 37.80   |

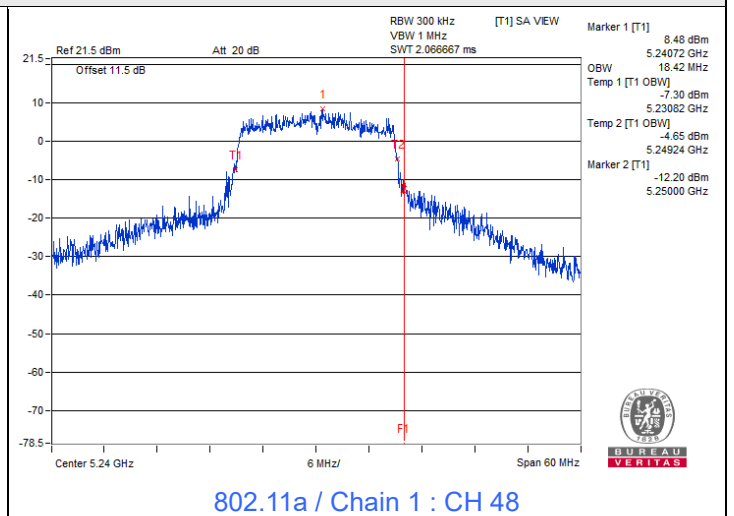
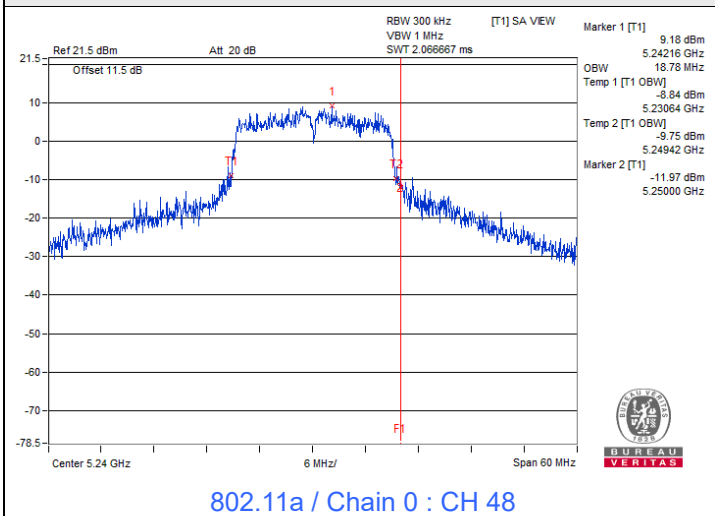
### 802.11ac (VHT80) CDD

| Channel        | Frequency (MHz) | Occupied Bandwidth (MHz) |         |
|----------------|-----------------|--------------------------|---------|
|                |                 | Chain 0                  | Chain 1 |
| 42             | 5210            | 75.60                    | 75.60   |
| 58             | 5290            | 75.12                    | 75.60   |
| 106            | 5530            | 75.36                    | 75.12   |
| 138 (U-NII-2C) | 5690            | 74.36                    | 73.40   |
| 138 (U-NII-3)  | 5690            | 7.48                     | 3.88    |
| 155            | 5775            | 78.48                    | 83.28   |

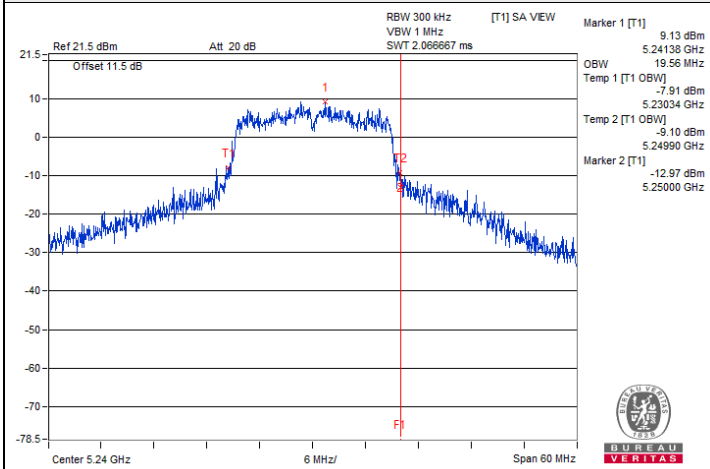
### Spectrum Plot of Maximum Value



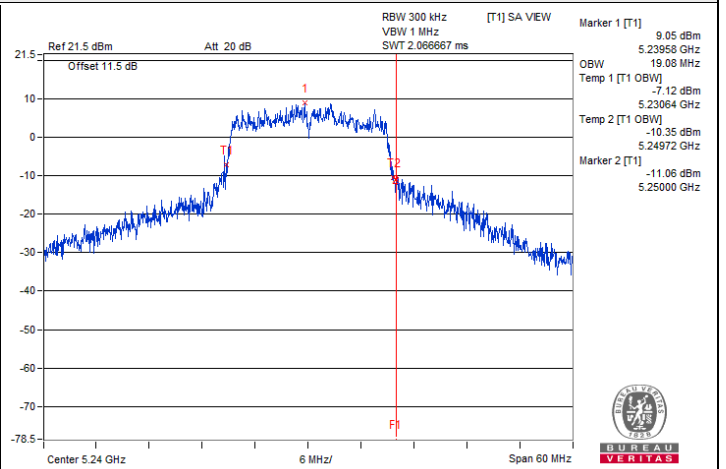
### Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



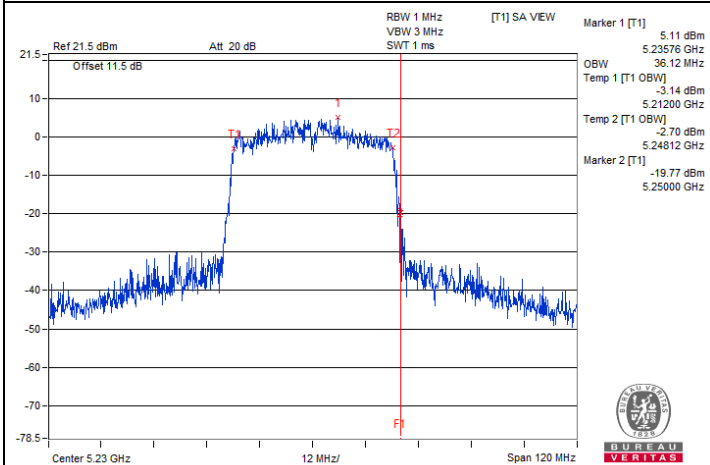
# Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



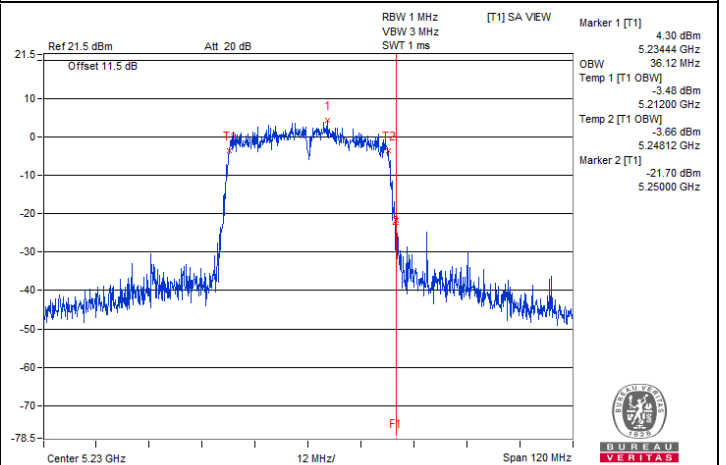
802.11ac (VHT20) / Chain 0 : CH 48



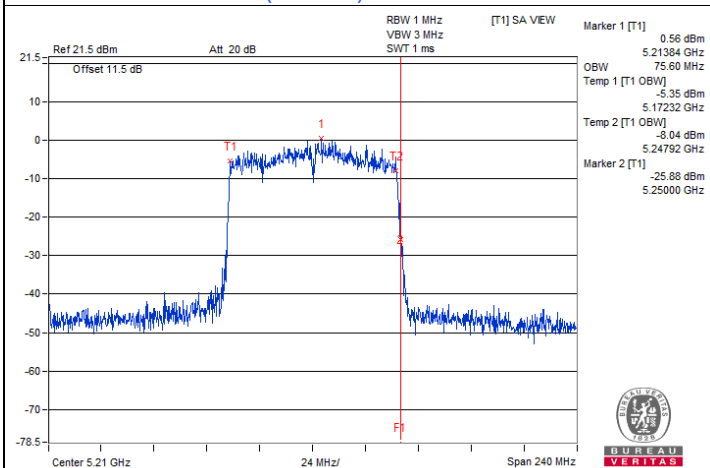
802.11ac (VHT20) / Chain 1 : CH 48



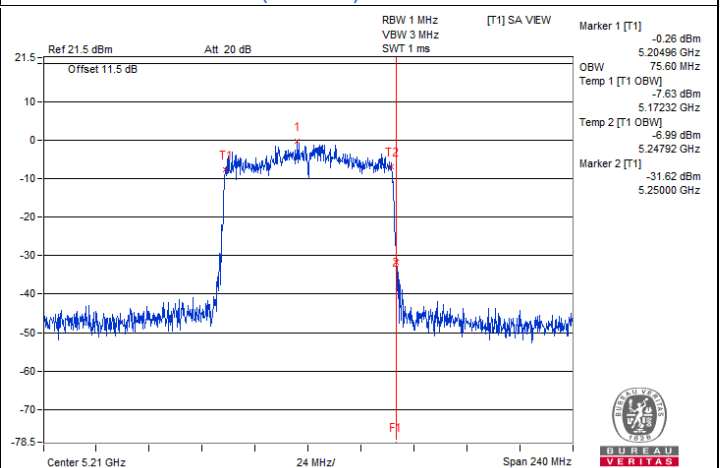
802.11ac (VHT40) / Chain 0 : CH 46



802.11ac (VHT40) / Chain 1 : CH 46

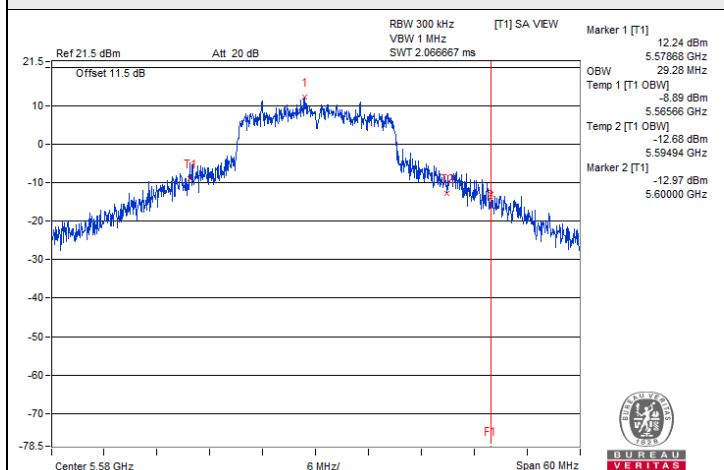


802.11ac (VHT80) / Chain 0 : CH 42

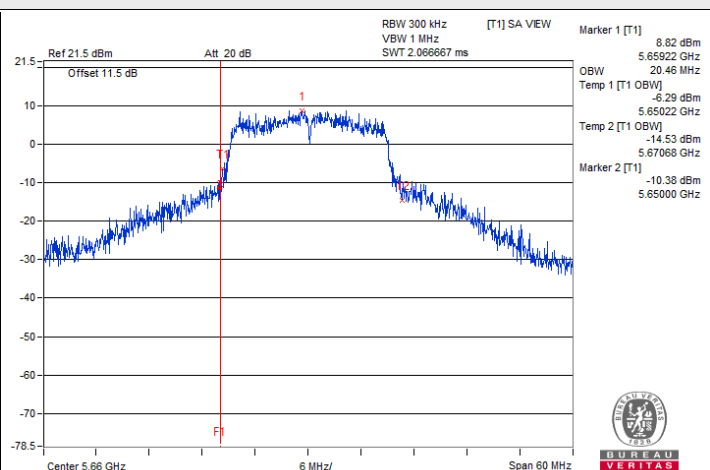


802.11ac (VHT80) / Chain 1 : CH 42

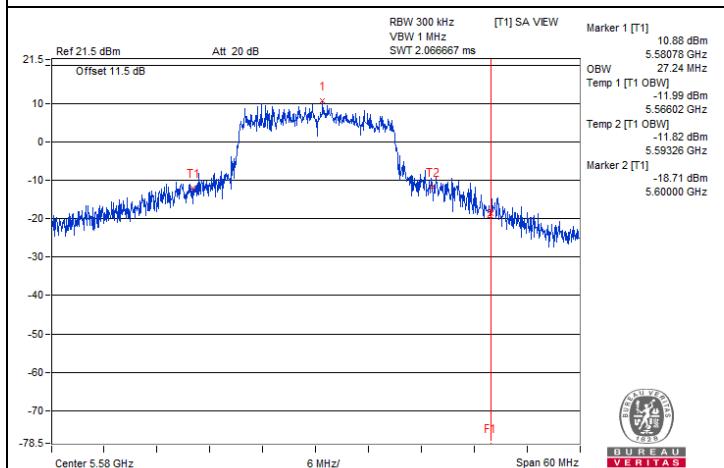
Verify that the 5600 - 5650 MHz band is notched  
Test results demonstrating last channel shall not exceed the band edge on 5600 - 5650 MHz



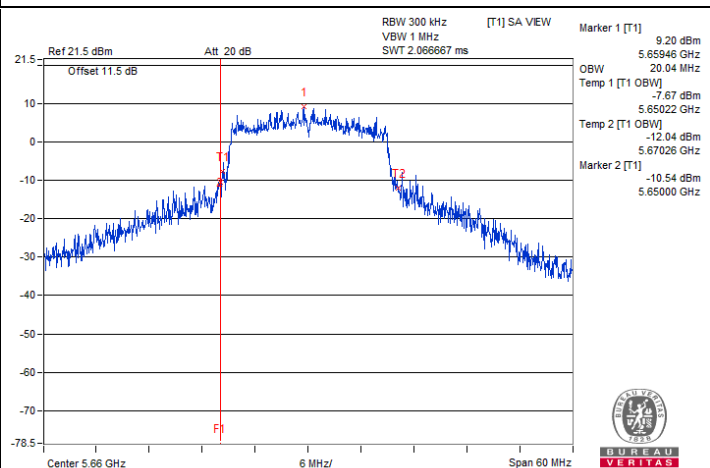
802.11a / Chain 0 : CH 116



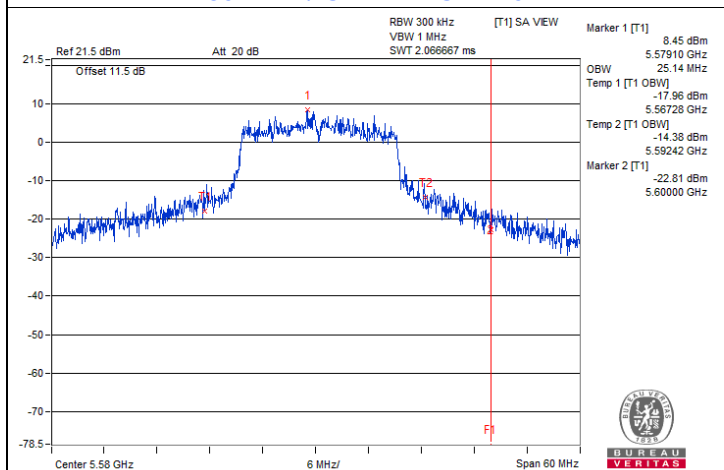
802.11a / Chain 0 : CH 132



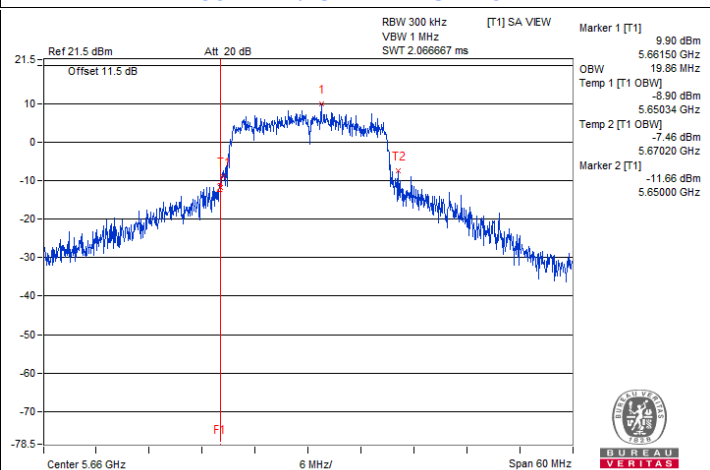
802.11a / Chain 1 : CH 116



802.11a / Chain 1 : CH 132



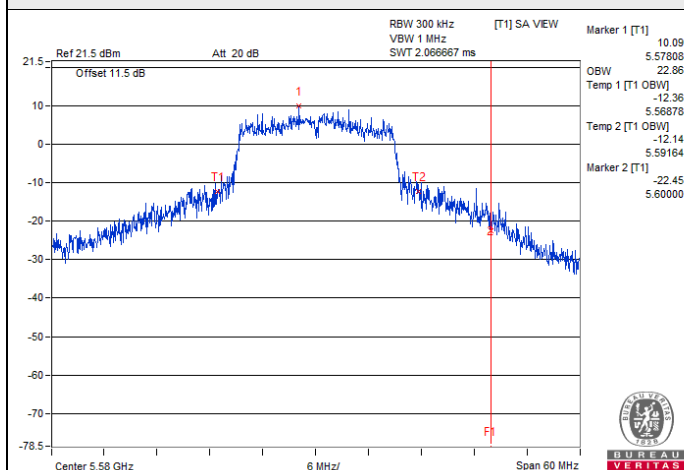
802.11ac (VHT20) / Chain 0 : CH 116



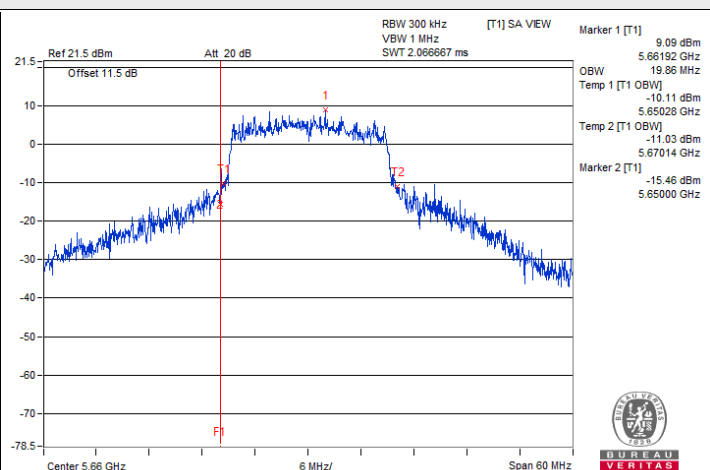
802.11ac (VHT20) / Chain 0 : CH 132

Verify that the 5600 - 5650 MHz band is notched

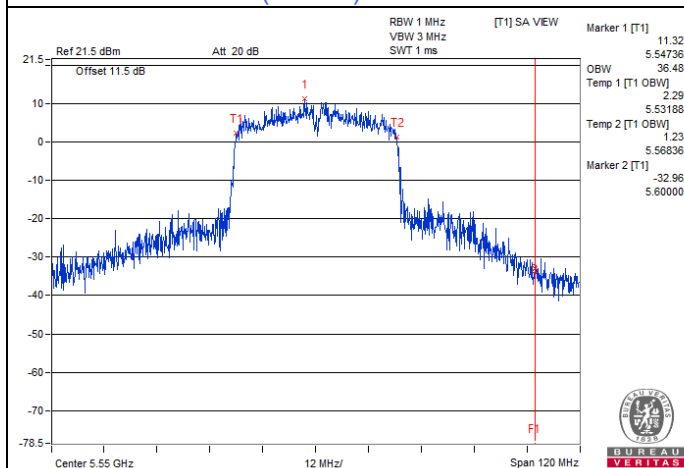
Test results demonstrating last channel shall not exceed the band edge on 5600 - 5650 MHz



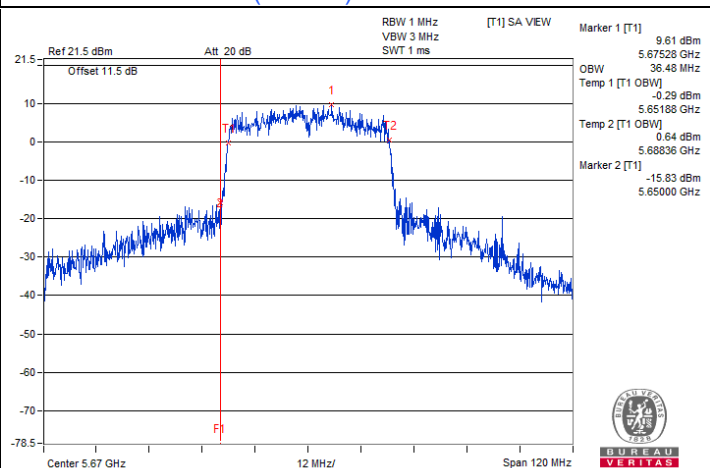
802.11ac (VHT20) / Chain 1 : CH 116



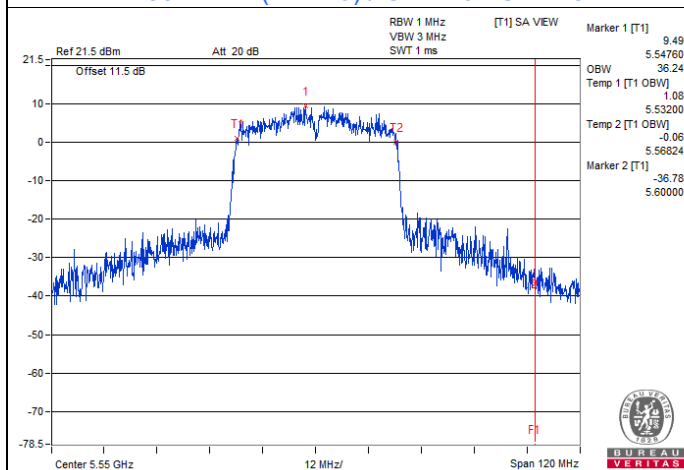
802.11ac (VHT20) / Chain 1 : CH 132



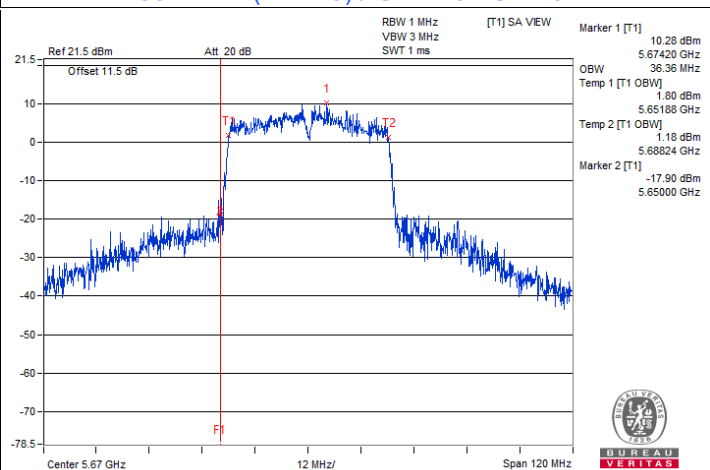
802.11ac (VHT40) / Chain 0 : CH 110



802.11ac (VHT40) / Chain 0 : CH 134

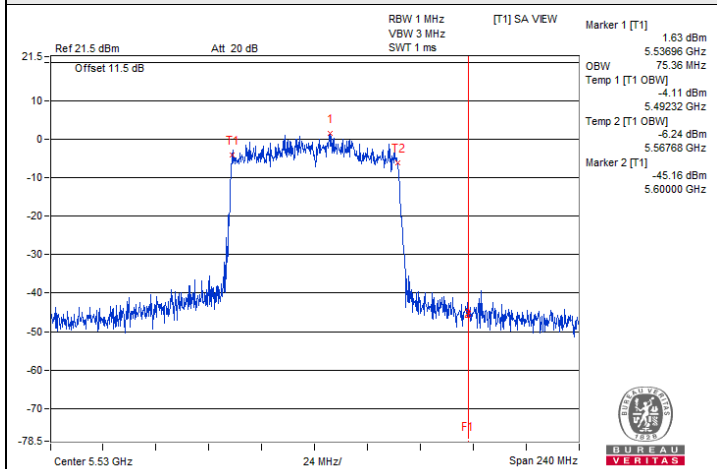


802.11ac (VHT40) / Chain 1 : CH 110

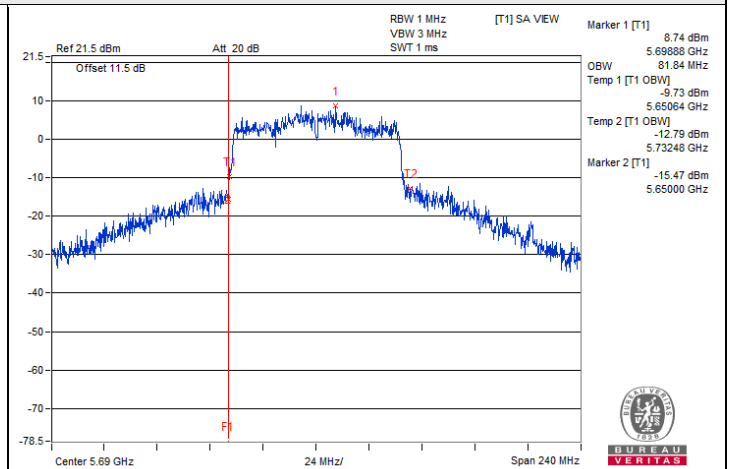


802.11ac (VHT40) / Chain 1 : CH 134

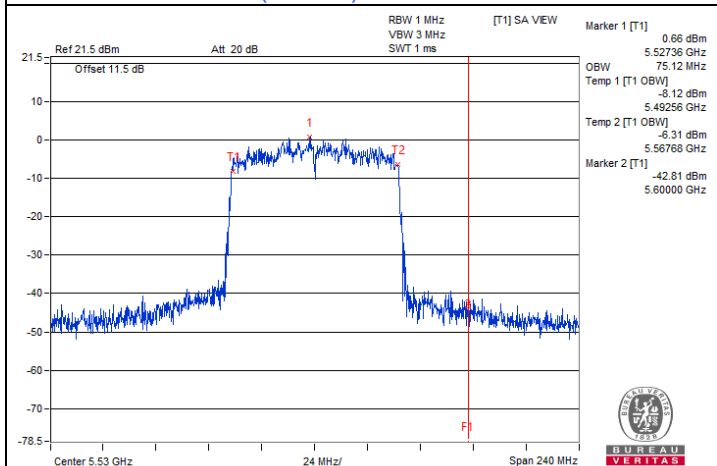
Verify that the 5600 - 5650 MHz band is notched  
Test results demonstrating last channel shall not exceed the band edge on 5600 - 5650 MHz



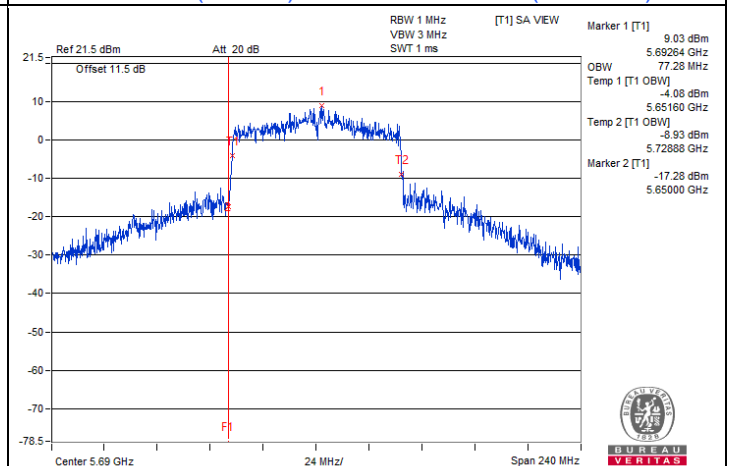
802.11ac (VHT80) / Chain 0 : CH 106



802.11ac (VHT80) / Chain 0 : CH 138 (U-NII-2C)

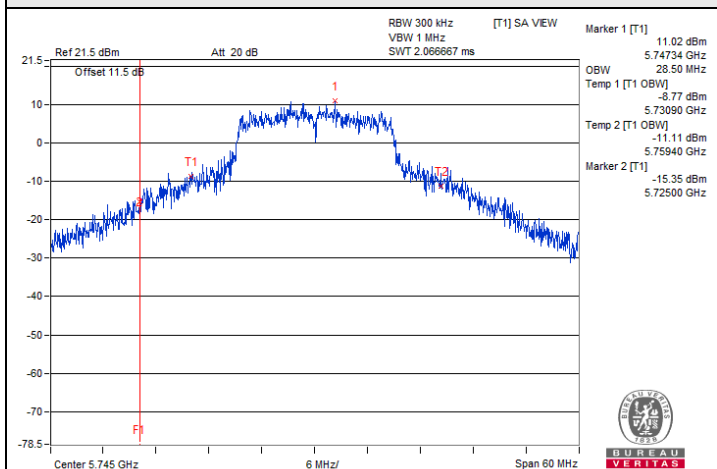


802.11ac (VHT80) / Chain 1 : CH 106

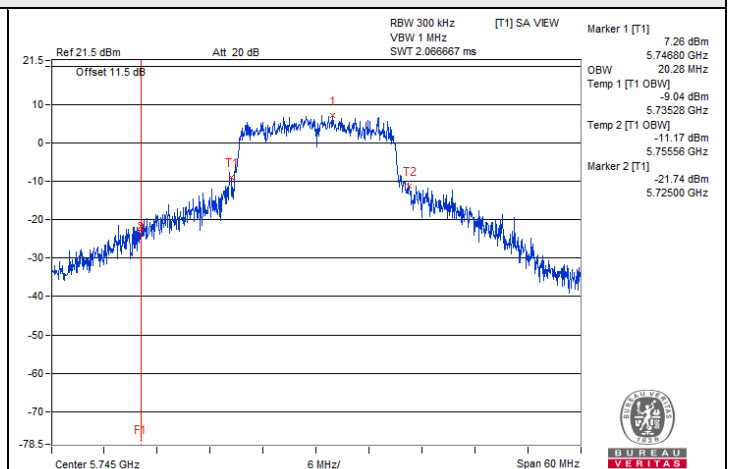


802.11ac (VHT80) / Chain 1 : CH 138 (U-NII-2C)

Spectrum Plot for nearby DFS band  
(DFS is required, if 99% OCP straddle into U-NII-2C)

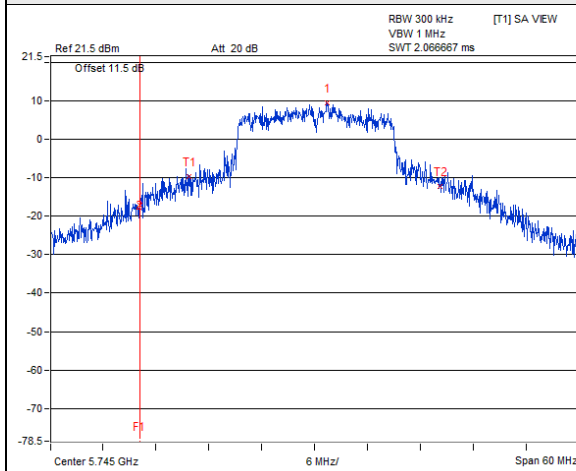


802.11a / Chain 0 : CH 149

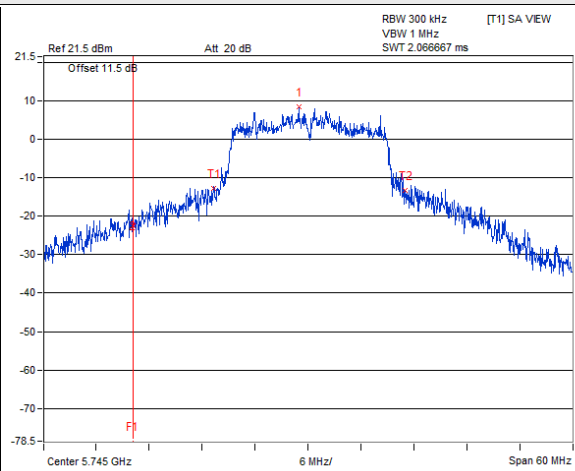


802.11a / Chain 1 : CH 149

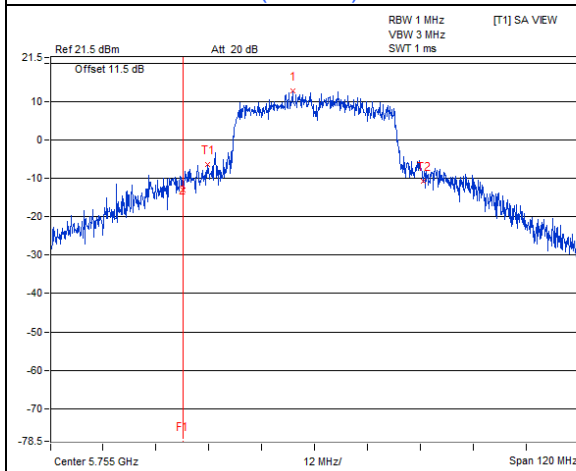
# Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C)



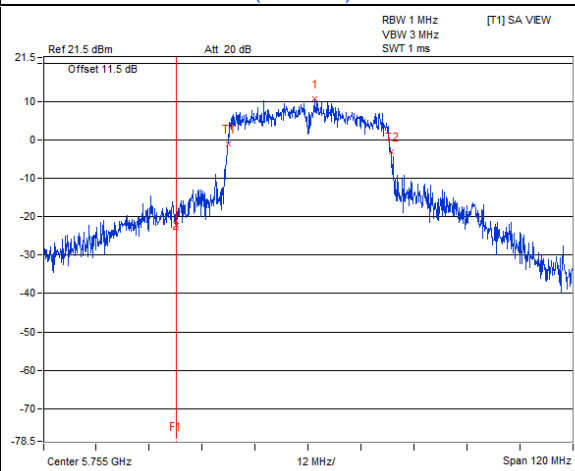
802.11ac (VHT20) / Chain 0 : CH 149



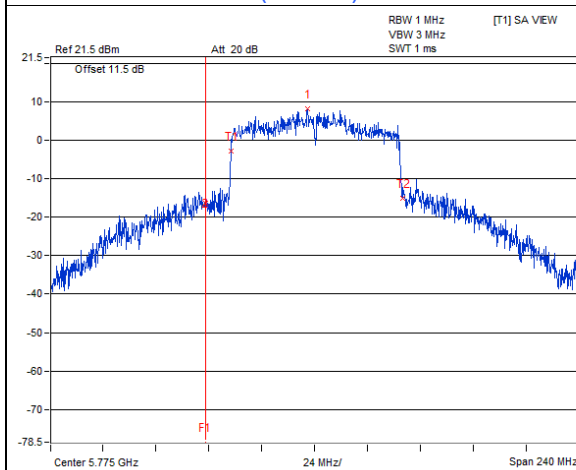
802.11ac (VHT20) / Chain 1 : CH 149



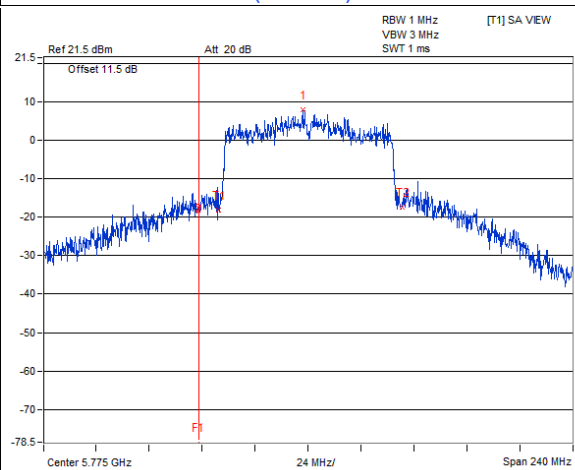
802.11ac (VHT40) / Chain 0 : CH 151



802.11ac (VHT40) / Chain 1 : CH 151



802.11ac (VHT80) / Chain 0 : CH 155



802.11ac (VHT80) / Chain 1 : CH 155

## 7.6 AC Power Conducted Emissions

|                      |                  |                                          |                                       |
|----------------------|------------------|------------------------------------------|---------------------------------------|
| RF Mode              | 802.11ac (VHT40) | Channel                                  | CH 54 : 5270 MHz                      |
| Frequency Range      | 150 kHz ~ 30 MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9 kHz |
| Input Power (System) | 120 Vac, 60 Hz   | Environmental Conditions                 | 28 °C, 67% RH                         |
| Tested By            | Roy Mai          |                                          |                                       |

| Phase Of Power : Line (L) |                 |                        |                      |       |                       |       |              |       |             |        |
|---------------------------|-----------------|------------------------|----------------------|-------|-----------------------|-------|--------------|-------|-------------|--------|
| No                        | Frequency (MHz) | Correction Factor (dB) | Reading Value (dBuV) |       | Emission Level (dBuV) |       | Limit (dBuV) |       | Margin (dB) |        |
|                           |                 |                        | Q.P.                 | AV.   | Q.P.                  | AV.   | Q.P.         | AV.   | Q.P.        | AV.    |
| 1                         | 0.15391         | 9.96                   | 36.02                | 9.48  | 45.98                 | 19.44 | 65.79        | 55.79 | -19.81      | -36.35 |
| 2                         | 0.18516         | 9.98                   | 30.49                | 6.46  | 40.47                 | 16.44 | 64.25        | 54.25 | -23.78      | -37.81 |
| 3                         | 0.38828         | 9.99                   | 32.01                | 14.63 | 42.00                 | 24.62 | 58.10        | 48.10 | -16.10      | -23.48 |
| 4                         | 0.66953         | 10.01                  | 10.50                | -3.95 | 20.51                 | 6.06  | 56.00        | 46.00 | -35.49      | -39.94 |
| 5                         | 1.75781         | 10.07                  | 11.32                | -4.19 | 21.39                 | 5.88  | 56.00        | 46.00 | -34.61      | -40.12 |
| 6                         | 7.46484         | 10.34                  | 7.25                 | -6.67 | 17.59                 | 3.67  | 60.00        | 50.00 | -42.41      | -46.33 |

### Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

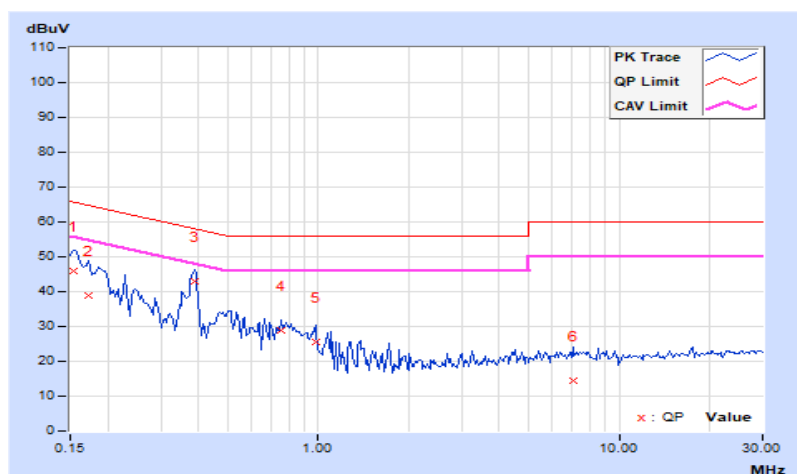


|                      |                  |                                          |                                       |
|----------------------|------------------|------------------------------------------|---------------------------------------|
| RF Mode              | 802.11ac (VHT40) | Channel                                  | CH 54 : 5270 MHz                      |
| Frequency Range      | 150 kHz ~ 30 MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9 kHz |
| Input Power (System) | 120 Vac, 60 Hz   | Environmental Conditions                 | 28 °C, 67% RH                         |
| Tested By            | Roy Mai          |                                          |                                       |

| Phase Of Power : Neutral (N) |                 |                        |                      |       |                       |       |              |       |             |        |
|------------------------------|-----------------|------------------------|----------------------|-------|-----------------------|-------|--------------|-------|-------------|--------|
| No                           | Frequency (MHz) | Correction Factor (dB) | Reading Value (dBuV) |       | Emission Level (dBuV) |       | Limit (dBuV) |       | Margin (dB) |        |
|                              |                 |                        | Q.P.                 | AV.   | Q.P.                  | AV.   | Q.P.         | AV.   | Q.P.        | AV.    |
| 1                            | 0.15391         | 10.01                  | 35.98                | 11.55 | 45.99                 | 21.56 | 65.79        | 55.79 | -19.80      | -34.23 |
| 2                            | 0.17344         | 10.01                  | 28.99                | 6.62  | 39.00                 | 16.63 | 64.79        | 54.79 | -25.79      | -38.16 |
| 3                            | 0.38828         | 10.00                  | 32.88                | 15.49 | 42.88                 | 25.49 | 58.10        | 48.10 | -15.22      | -22.61 |
| 4                            | 0.75547         | 10.03                  | 18.90                | 2.65  | 28.93                 | 12.68 | 56.00        | 46.00 | -27.07      | -33.32 |
| 5                            | 0.98203         | 10.05                  | 15.65                | 0.01  | 25.70                 | 10.06 | 56.00        | 46.00 | -30.30      | -35.94 |
| 6                            | 7.05469         | 10.29                  | 4.00                 | -9.16 | 14.29                 | 1.13  | 60.00        | 50.00 | -45.71      | -48.87 |

**Remarks:**

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



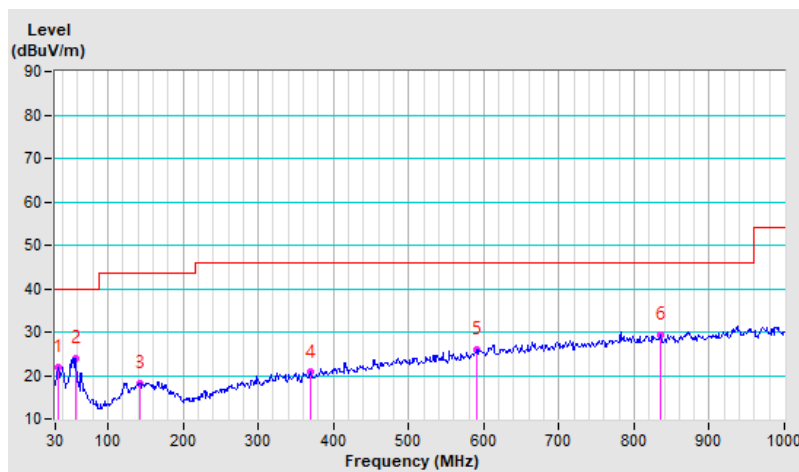
## 7.7 Unwanted Emissions below 1 GHz

|                             |                  |                                          |                                |
|-----------------------------|------------------|------------------------------------------|--------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 54 : 5270 MHz               |
| <b>Frequency Range</b>      | 30 MHz ~ 1 GHz   | <b>Detector Function &amp; Bandwidth</b> | QP: RB=120 kHz, DET=Quasi-Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 23 °C, 71% RH                  |
| <b>Tested By</b>            | Roy Mai          |                                          |                                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 32.91           | 22.0 QP                 | 40.0           | -18.0       | 1.00 H             | 22                   | 35.5             | -13.5                    |
| 2                                                    | 56.19           | 24.0 QP                 | 40.0           | -16.0       | 2.00 H             | 12                   | 36.5             | -12.5                    |
| 3                                                    | 141.55          | 18.2 QP                 | 43.5           | -25.3       | 1.50 H             | 257                  | 30.8             | -12.6                    |
| 4                                                    | 369.50          | 20.7 QP                 | 46.0           | -25.3       | 1.00 H             | 36                   | 30.7             | -10.0                    |
| 5                                                    | 591.63          | 26.0 QP                 | 46.0           | -20.0       | 1.50 H             | 148                  | 30.7             | -4.7                     |
| 6                                                    | 834.13          | 29.4 QP                 | 46.0           | -16.6       | 1.00 H             | 246                  | 30.6             | -1.2                     |

### Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

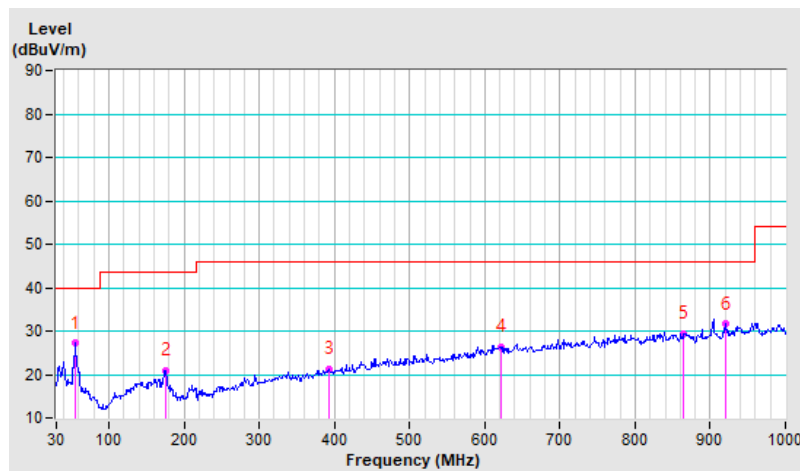


|                             |                  |                                          |                                |
|-----------------------------|------------------|------------------------------------------|--------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 54 : 5270 MHz               |
| <b>Frequency Range</b>      | 30 MHz ~ 1 GHz   | <b>Detector Function &amp; Bandwidth</b> | QP: RB=120 kHz, DET=Quasi-Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 23 °C, 71% RH                  |
| <b>Tested By</b>            | Roy Mai          |                                          |                                |

| Antenna Polarity & Test Distance : Vertical at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|----------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                 | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                  | 55.22           | 27.2 QP                 | 40.0           | -12.8       | 1.00 V             | 22                   | 39.8             | -12.6                    |
| 2                                                  | 174.53          | 20.8 QP                 | 43.5           | -22.7       | 1.50 V             | 255                  | 33.9             | -13.1                    |
| 3                                                  | 391.81          | 21.2 QP                 | 46.0           | -24.8       | 1.00 V             | 354                  | 30.4             | -9.2                     |
| 4                                                  | 620.73          | 26.4 QP                 | 46.0           | -19.6       | 1.00 V             | 224                  | 30.5             | -4.1                     |
| 5                                                  | 865.17          | 29.4 QP                 | 46.0           | -16.6       | 1.50 V             | 334                  | 30.1             | -0.7                     |
| 6                                                  | 919.49          | 31.6 QP                 | 46.0           | -14.4       | 1.50 V             | 9                    | 31.4             | 0.2                      |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



## 7.8 Unwanted Emissions above 1 GHz

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 36 : 5180 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 66.6 PK                 | 74.0           | -7.4        | 2.87 H             | 51                   | 63.9             | 2.7                      |
| 2                                                    | 5150.00         | 49.4 AV                 | 54.0           | -4.6        | 2.87 H             | 51                   | 46.7             | 2.7                      |
| 3                                                    | *5180.00        | 105.8 PK                |                |             | 2.87 H             | 51                   | 103.2            | 2.6                      |
| 4                                                    | *5180.00        | 96.3 AV                 |                |             | 2.87 H             | 51                   | 93.7             | 2.6                      |
| 5                                                    | #10360.00       | 43.7 PK                 | 68.2           | -24.5       | 2.45 H             | 102                  | 31.4             | 12.3                     |
| 6                                                    | 15540.00        | 43.1 PK                 | 74.0           | -30.9       | 1.09 H             | 314                  | 31.2             | 11.9                     |
| 7                                                    | 15540.00        | 27.9 AV                 | 54.0           | -26.1       | 1.09 H             | 314                  | 16.0             | 11.9                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 65.7 PK                 | 74.0           | -8.3        | 1.64 V             | 21                   | 63.0             | 2.7                      |
| 2                                                    | 5150.00         | 49.5 AV                 | 54.0           | -4.5        | 1.64 V             | 21                   | 46.8             | 2.7                      |
| 3                                                    | *5180.00        | 108.3 PK                |                |             | 1.64 V             | 21                   | 105.7            | 2.6                      |
| 4                                                    | *5180.00        | 98.2 AV                 |                |             | 1.64 V             | 21                   | 95.6             | 2.6                      |
| 5                                                    | #10360.00       | 45.5 PK                 | 68.2           | -22.7       | 1.27 V             | 247                  | 33.2             | 12.3                     |
| 6                                                    | 15540.00        | 45.0 PK                 | 74.0           | -29.0       | 1.13 V             | 236                  | 33.1             | 11.9                     |
| 7                                                    | 15540.00        | 31.0 AV                 | 54.0           | -23.0       | 1.13 V             | 236                  | 19.1             | 11.9                     |

### Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 40 : 5200 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 62.1 PK                 | 74.0           | -11.9       | 1.92 H             | 50                   | 59.4             | 2.7                      |
| 2                                                    | 5150.00         | 49.3 AV                 | 54.0           | -4.7        | 1.92 H             | 50                   | 46.6             | 2.7                      |
| 3                                                    | *5200.00        | 107.2 PK                |                |             | 1.92 H             | 50                   | 104.6            | 2.6                      |
| 4                                                    | *5200.00        | 97.8 AV                 |                |             | 1.92 H             | 50                   | 95.2             | 2.6                      |
| 5                                                    | 5350.00         | 50.4 PK                 | 74.0           | -23.6       | 1.92 H             | 50                   | 48.1             | 2.3                      |
| 6                                                    | 5350.00         | 40.2 AV                 | 54.0           | -13.8       | 1.92 H             | 50                   | 37.9             | 2.3                      |
| 7                                                    | #10400.00       | 44.2 PK                 | 68.2           | -24.0       | 2.51 H             | 107                  | 31.8             | 12.4                     |
| 8                                                    | 15600.00        | 43.1 PK                 | 74.0           | -30.9       | 1.11 H             | 338                  | 31.3             | 11.8                     |
| 9                                                    | 15600.00        | 28.0 AV                 | 54.0           | -26.0       | 1.11 H             | 338                  | 16.2             | 11.8                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 63.8 PK                 | 74.0           | -10.2       | 2.03 V             | 38                   | 61.1             | 2.7                      |
| 2                                                    | 5150.00         | 49.4 AV                 | 54.0           | -4.6        | 2.03 V             | 38                   | 46.7             | 2.7                      |
| 3                                                    | *5200.00        | 110.5 PK                |                |             | 2.03 V             | 38                   | 107.9            | 2.6                      |
| 4                                                    | *5200.00        | 101.0 AV                |                |             | 2.03 V             | 38                   | 98.4             | 2.6                      |
| 5                                                    | 5350.00         | 51.2 PK                 | 74.0           | -22.8       | 2.03 V             | 38                   | 48.9             | 2.3                      |
| 6                                                    | 5350.00         | 40.3 AV                 | 54.0           | -13.7       | 2.03 V             | 38                   | 38.0             | 2.3                      |
| 7                                                    | #10400.00       | 45.4 PK                 | 68.2           | -22.8       | 1.24 V             | 269                  | 33.0             | 12.4                     |
| 8                                                    | 15600.00        | 44.9 PK                 | 74.0           | -29.1       | 1.15 V             | 266                  | 33.1             | 11.8                     |
| 9                                                    | 15600.00        | 31.1 AV                 | 54.0           | -22.9       | 1.15 V             | 266                  | 19.3             | 11.8                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 48 : 5240 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 54.4 PK                 | 74.0           | -19.6       | 2.89 H             | 201                  | 51.7             | 2.7                      |
| 2                                                    | 5150.00         | 40.8 AV                 | 54.0           | -13.2       | 2.89 H             | 201                  | 38.1             | 2.7                      |
| 3                                                    | *5240.00        | 112.9 PK                |                |             | 2.89 H             | 201                  | 110.5            | 2.4                      |
| 4                                                    | *5240.00        | 101.7 AV                |                |             | 2.89 H             | 201                  | 99.3             | 2.4                      |
| 5                                                    | 5350.00         | 51.0 PK                 | 74.0           | -23.0       | 2.89 H             | 201                  | 48.7             | 2.3                      |
| 6                                                    | 5350.00         | 38.3 AV                 | 54.0           | -15.7       | 2.89 H             | 201                  | 36.0             | 2.3                      |
| 7                                                    | #10480.00       | 43.8 PK                 | 68.2           | -24.4       | 2.53 H             | 114                  | 31.4             | 12.4                     |
| 8                                                    | 15720.00        | 42.2 PK                 | 74.0           | -31.8       | 1.15 H             | 327                  | 29.9             | 12.3                     |
| 9                                                    | 15720.00        | 27.4 AV                 | 54.0           | -26.6       | 1.15 H             | 327                  | 15.1             | 12.3                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 53.7 PK                 | 74.0           | -20.3       | 1.77 V             | 25                   | 51.0             | 2.7                      |
| 2                                                    | 5150.00         | 44.2 AV                 | 54.0           | -9.8        | 1.77 V             | 25                   | 41.5             | 2.7                      |
| 3                                                    | *5240.00        | 112.6 PK                |                |             | 1.77 V             | 25                   | 110.2            | 2.4                      |
| 4                                                    | *5240.00        | 102.9 AV                |                |             | 1.77 V             | 25                   | 100.5            | 2.4                      |
| 5                                                    | 5350.00         | 53.2 PK                 | 74.0           | -20.8       | 1.77 V             | 25                   | 50.9             | 2.3                      |
| 6                                                    | 5350.00         | 40.2 AV                 | 54.0           | -13.8       | 1.77 V             | 25                   | 37.9             | 2.3                      |
| 7                                                    | #10480.00       | 46.2 PK                 | 68.2           | -22.0       | 1.23 V             | 271                  | 33.8             | 12.4                     |
| 8                                                    | 15720.00        | 45.2 PK                 | 74.0           | -28.8       | 1.15 V             | 253                  | 32.9             | 12.3                     |
| 9                                                    | 15720.00        | 31.1 AV                 | 54.0           | -22.9       | 1.15 V             | 253                  | 18.8             | 12.3                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 52 : 5260 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 54.2 PK                 | 74.0           | -19.8       | 2.88 H             | 202                  | 51.5             | 2.7                      |
| 2                                                    | 5150.00         | 40.5 AV                 | 54.0           | -13.5       | 2.88 H             | 202                  | 37.8             | 2.7                      |
| 3                                                    | *5260.00        | 112.5 PK                |                |             | 2.88 H             | 202                  | 110.2            | 2.3                      |
| 4                                                    | *5260.00        | 101.5 AV                |                |             | 2.88 H             | 202                  | 99.2             | 2.3                      |
| 5                                                    | 5350.00         | 50.4 PK                 | 74.0           | -23.6       | 2.88 H             | 202                  | 48.1             | 2.3                      |
| 6                                                    | 5350.00         | 37.9 AV                 | 54.0           | -16.1       | 2.88 H             | 202                  | 35.6             | 2.3                      |
| 7                                                    | #10520.00       | 43.6 PK                 | 68.2           | -24.6       | 2.47 H             | 108                  | 31.3             | 12.3                     |
| 8                                                    | 15780.00        | 42.4 PK                 | 74.0           | -31.6       | 1.16 H             | 333                  | 30.4             | 12.0                     |
| 9                                                    | 15780.00        | 27.2 AV                 | 54.0           | -26.8       | 1.16 H             | 333                  | 15.2             | 12.0                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 53.0 PK                 | 74.0           | -21.0       | 2.40 V             | 308                  | 50.3             | 2.7                      |
| 2                                                    | 5150.00         | 42.1 AV                 | 54.0           | -11.9       | 2.40 V             | 308                  | 39.4             | 2.7                      |
| 3                                                    | *5260.00        | 111.9 PK                |                |             | 2.40 V             | 308                  | 109.6            | 2.3                      |
| 4                                                    | *5260.00        | 102.4 AV                |                |             | 2.40 V             | 308                  | 100.1            | 2.3                      |
| 5                                                    | 5350.00         | 53.1 PK                 | 74.0           | -20.9       | 2.40 V             | 308                  | 50.8             | 2.3                      |
| 6                                                    | 5350.00         | 42.0 AV                 | 54.0           | -12.0       | 2.40 V             | 308                  | 39.7             | 2.3                      |
| 7                                                    | #10520.00       | 45.4 PK                 | 68.2           | -22.8       | 1.26 V             | 246                  | 33.1             | 12.3                     |
| 8                                                    | 15780.00        | 45.1 PK                 | 74.0           | -28.9       | 1.20 V             | 265                  | 33.1             | 12.0                     |
| 9                                                    | 15780.00        | 30.9 AV                 | 54.0           | -23.1       | 1.20 V             | 265                  | 18.9             | 12.0                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 60 : 5300 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 52.1 PK                 | 74.0           | -21.9       | 1.61 H             | 192                  | 49.4             | 2.7                      |
| 2                                                    | 5150.00         | 39.5 AV                 | 54.0           | -14.5       | 1.61 H             | 192                  | 36.8             | 2.7                      |
| 3                                                    | *5300.00        | 109.5 PK                |                |             | 1.61 H             | 192                  | 107.2            | 2.3                      |
| 4                                                    | *5300.00        | 97.5 AV                 |                |             | 1.61 H             | 192                  | 95.2             | 2.3                      |
| 5                                                    | 5350.00         | 60.8 PK                 | 74.0           | -13.2       | 1.61 H             | 192                  | 58.5             | 2.3                      |
| 6                                                    | 5350.00         | 49.9 AV                 | 54.0           | -4.1        | 1.61 H             | 192                  | 47.6             | 2.3                      |
| 7                                                    | 10600.00        | 43.9 PK                 | 74.0           | -30.1       | 2.54 H             | 113                  | 31.5             | 12.4                     |
| 8                                                    | 10600.00        | 30.6 AV                 | 54.0           | -23.4       | 2.54 H             | 113                  | 18.2             | 12.4                     |
| 9                                                    | 15900.00        | 43.3 PK                 | 74.0           | -30.7       | 1.12 H             | 331                  | 31.1             | 12.2                     |
| 10                                                   | 15900.00        | 28.1 AV                 | 54.0           | -25.9       | 1.12 H             | 331                  | 15.9             | 12.2                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 52.6 PK                 | 74.0           | -21.4       | 2.15 V             | 303                  | 49.9             | 2.7                      |
| 2                                                    | 5150.00         | 40.3 AV                 | 54.0           | -13.7       | 2.15 V             | 303                  | 37.6             | 2.7                      |
| 3                                                    | *5300.00        | 108.4 PK                |                |             | 2.15 V             | 303                  | 106.1            | 2.3                      |
| 4                                                    | *5300.00        | 98.2 AV                 |                |             | 2.15 V             | 303                  | 95.9             | 2.3                      |
| 5                                                    | 5350.00         | 62.9 PK                 | 74.0           | -11.1       | 2.15 V             | 303                  | 60.6             | 2.3                      |
| 6                                                    | 5350.00         | 47.7 AV                 | 54.0           | -6.3        | 2.15 V             | 303                  | 45.4             | 2.3                      |
| 7                                                    | 10600.00        | 45.5 PK                 | 74.0           | -28.5       | 1.29 V             | 244                  | 33.1             | 12.4                     |
| 8                                                    | 10600.00        | 34.0 AV                 | 54.0           | -20.0       | 1.29 V             | 244                  | 21.6             | 12.4                     |
| 9                                                    | 15900.00        | 44.7 PK                 | 74.0           | -29.3       | 1.18 V             | 255                  | 32.5             | 12.2                     |
| 10                                                   | 15900.00        | 30.7 AV                 | 54.0           | -23.3       | 1.18 V             | 255                  | 18.5             | 12.2                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 64 : 5320 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5320.00        | 106.8 PK                |                |             | 1.48 H             | 50                   | 104.5            | 2.3                      |
| 2                                                    | *5320.00        | 96.3 AV                 |                |             | 1.48 H             | 50                   | 94.0             | 2.3                      |
| 3                                                    | 5350.00         | 62.0 PK                 | 74.0           | -12.0       | 1.48 H             | 50                   | 59.7             | 2.3                      |
| 4                                                    | 5350.00         | 47.5 AV                 | 54.0           | -6.5        | 1.48 H             | 50                   | 45.2             | 2.3                      |
| 5                                                    | 10640.00        | 43.7 PK                 | 74.0           | -30.3       | 2.49 H             | 119                  | 31.4             | 12.3                     |
| 6                                                    | 10640.00        | 30.5 AV                 | 54.0           | -23.5       | 2.49 H             | 119                  | 18.2             | 12.3                     |
| 7                                                    | 15960.00        | 41.9 PK                 | 74.0           | -32.1       | 1.19 H             | 327                  | 30.2             | 11.7                     |
| 8                                                    | 15960.00        | 27.2 AV                 | 54.0           | -26.8       | 1.19 H             | 327                  | 15.5             | 11.7                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5320.00        | 108.5 PK                |                |             | 1.82 V             | 305                  | 106.2            | 2.3                      |
| 2                                                    | *5320.00        | 98.2 AV                 |                |             | 1.82 V             | 305                  | 95.9             | 2.3                      |
| 3                                                    | 5350.00         | 63.1 PK                 | 74.0           | -10.9       | 1.82 V             | 305                  | 60.8             | 2.3                      |
| 4                                                    | 5350.00         | 49.2 AV                 | 54.0           | -4.8        | 1.82 V             | 305                  | 46.9             | 2.3                      |
| 5                                                    | 10640.00        | 45.9 PK                 | 74.0           | -28.1       | 1.23 V             | 273                  | 33.6             | 12.3                     |
| 6                                                    | 10640.00        | 34.3 AV                 | 54.0           | -19.7       | 1.23 V             | 273                  | 22.0             | 12.3                     |
| 7                                                    | 15960.00        | 45.1 PK                 | 74.0           | -28.9       | 1.15 V             | 250                  | 33.4             | 11.7                     |
| 8                                                    | 15960.00        | 30.9 AV                 | 54.0           | -23.1       | 1.15 V             | 250                  | 19.2             | 11.7                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 100 : 5500 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 55.6 PK                 | 74.0           | -18.4       | 1.74 H             | 64                   | 53.2             | 2.4                      |
| 2                                                    | 5460.00         | 43.1 AV                 | 54.0           | -10.9       | 1.74 H             | 64                   | 40.7             | 2.4                      |
| 3                                                    | #5470.00        | 55.3 PK                 | 68.2           | -12.9       | 1.74 H             | 64                   | 52.9             | 2.4                      |
| 4                                                    | *5500.00        | 102.7 PK                |                |             | 1.74 H             | 64                   | 100.2            | 2.5                      |
| 5                                                    | *5500.00        | 92.6 AV                 |                |             | 1.74 H             | 64                   | 90.1             | 2.5                      |
| 6                                                    | 11000.00        | 43.9 PK                 | 74.0           | -30.1       | 2.52 H             | 127                  | 31.0             | 12.9                     |
| 7                                                    | 11000.00        | 30.6 AV                 | 54.0           | -23.4       | 2.52 H             | 127                  | 17.7             | 12.9                     |
| 8                                                    | #16500.00       | 42.8 PK                 | 68.2           | -25.4       | 1.18 H             | 310                  | 28.3             | 14.5                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 60.9 PK                 | 74.0           | -13.1       | 1.97 V             | 309                  | 58.5             | 2.4                      |
| 2                                                    | 5460.00         | 45.7 AV                 | 54.0           | -8.3        | 1.97 V             | 309                  | 43.3             | 2.4                      |
| 3                                                    | #5470.00        | 63.9 PK                 | 68.2           | -4.3        | 1.97 V             | 305                  | 61.5             | 2.4                      |
| 4                                                    | *5500.00        | 104.2 PK                |                |             | 1.97 V             | 309                  | 101.7            | 2.5                      |
| 5                                                    | *5500.00        | 93.8 AV                 |                |             | 1.97 V             | 309                  | 91.3             | 2.5                      |
| 6                                                    | 11000.00        | 45.3 PK                 | 74.0           | -28.7       | 1.27 V             | 274                  | 32.4             | 12.9                     |
| 7                                                    | 11000.00        | 33.6 AV                 | 54.0           | -20.4       | 1.27 V             | 274                  | 20.7             | 12.9                     |
| 8                                                    | #16500.00       | 45.0 PK                 | 68.2           | -23.2       | 1.12 V             | 253                  | 30.5             | 14.5                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 116 : 5580 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 49.8 PK                 | 74.0           | -24.2       | 3.12 H             | 64                   | 47.4             | 2.4                      |
| 2                                                    | 5460.00         | 42.4 AV                 | 54.0           | -11.6       | 3.12 H             | 64                   | 40.0             | 2.4                      |
| 3                                                    | #5470.00        | 49.2 PK                 | 68.2           | -19.0       | 3.12 H             | 64                   | 46.8             | 2.4                      |
| 4                                                    | *5580.00        | 111.4 PK                |                |             | 3.12 H             | 64                   | 109.0            | 2.4                      |
| 5                                                    | *5580.00        | 101.3 AV                |                |             | 3.12 H             | 64                   | 98.9             | 2.4                      |
| 6                                                    | 11160.00        | 43.2 PK                 | 74.0           | -30.8       | 2.46 H             | 106                  | 30.2             | 13.0                     |
| 7                                                    | 11160.00        | 30.0 AV                 | 54.0           | -24.0       | 2.46 H             | 106                  | 17.0             | 13.0                     |
| 8                                                    | #16740.00       | 42.4 PK                 | 68.2           | -25.8       | 1.14 H             | 330                  | 26.8             | 15.6                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 53.9 PK                 | 74.0           | -20.1       | 1.73 V             | 301                  | 51.5             | 2.4                      |
| 2                                                    | 5460.00         | 40.2 AV                 | 54.0           | -13.8       | 1.73 V             | 301                  | 37.8             | 2.4                      |
| 3                                                    | #5470.00        | 51.6 PK                 | 68.2           | -16.6       | 1.73 V             | 301                  | 49.2             | 2.4                      |
| 4                                                    | *5580.00        | 113.6 PK                |                |             | 1.73 V             | 301                  | 111.2            | 2.4                      |
| 5                                                    | *5580.00        | 102.9 AV                |                |             | 1.73 V             | 301                  | 100.5            | 2.4                      |
| 6                                                    | 11160.00        | 45.3 PK                 | 74.0           | -28.7       | 1.29 V             | 252                  | 32.3             | 13.0                     |
| 7                                                    | 11160.00        | 33.8 AV                 | 54.0           | -20.2       | 1.29 V             | 252                  | 20.8             | 13.0                     |
| 8                                                    | #16740.00       | 44.8 PK                 | 68.2           | -23.4       | 1.14 V             | 243                  | 29.2             | 15.6                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 140 : 5700 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5700.00        | 105.9 PK                |                |             | 1.59 H             | 198                  | 103.4            | 2.5                      |
| 2                                                    | *5700.00        | 95.1 AV                 |                |             | 1.59 H             | 198                  | 92.6             | 2.5                      |
| 3                                                    | #5725.00        | 63.6 PK                 | 68.2           | -4.6        | 1.59 H             | 198                  | 61.0             | 2.6                      |
| 4                                                    | 11400.00        | 44.3 PK                 | 74.0           | -29.7       | 2.50 H             | 97                   | 31.3             | 13.0                     |
| 5                                                    | 11400.00        | 30.8 AV                 | 54.0           | -23.2       | 2.50 H             | 97                   | 17.8             | 13.0                     |
| 6                                                    | #17100.00       | 42.6 PK                 | 68.2           | -25.6       | 1.11 H             | 318                  | 25.5             | 17.1                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5700.00        | 106.9 PK                |                |             | 1.88 V             | 307                  | 104.4            | 2.5                      |
| 2                                                    | *5700.00        | 98.1 AV                 |                |             | 1.88 V             | 307                  | 95.6             | 2.5                      |
| 3                                                    | #5725.00        | 63.1 PK                 | 68.2           | -5.1        | 1.88 V             | 307                  | 60.5             | 2.6                      |
| 4                                                    | 11400.00        | 45.8 PK                 | 74.0           | -28.2       | 1.21 V             | 253                  | 32.8             | 13.0                     |
| 5                                                    | 11400.00        | 34.3 AV                 | 54.0           | -19.7       | 1.21 V             | 253                  | 21.3             | 13.0                     |
| 6                                                    | #17100.00       | 44.8 PK                 | 68.2           | -23.4       | 1.12 V             | 248                  | 27.7             | 17.1                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 144 : 5720 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 51.5 PK                 | 74.0           | -22.5       | 2.21 H             | 158                  | 49.1             | 2.4                      |
| 2                                                    | 5460.00         | 40.3 AV                 | 54.0           | -13.7       | 2.21 H             | 158                  | 37.9             | 2.4                      |
| 3                                                    | #5470.00        | 51.2 PK                 | 68.2           | -17.0       | 2.21 H             | 158                  | 48.8             | 2.4                      |
| 4                                                    | *5720.00        | 112.2 PK                |                |             | 2.21 H             | 158                  | 109.6            | 2.6                      |
| 5                                                    | *5720.00        | 100.6 AV                |                |             | 2.21 H             | 158                  | 98.0             | 2.6                      |
| 6                                                    | #5850.00        | 50.9 PK                 | 68.2           | -17.3       | 2.21 H             | 158                  | 47.9             | 3.0                      |
| 7                                                    | 11440.00        | 44.2 PK                 | 74.0           | -29.8       | 2.54 H             | 98                   | 31.2             | 13.0                     |
| 8                                                    | 11440.00        | 30.9 AV                 | 54.0           | -23.1       | 2.54 H             | 98                   | 17.9             | 13.0                     |
| 9                                                    | #17160.00       | 42.1 PK                 | 68.2           | -26.1       | 1.15 H             | 324                  | 25.0             | 17.1                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 52.2 PK                 | 74.0           | -21.8       | 4.00 V             | 305                  | 49.8             | 2.4                      |
| 2                                                    | 5460.00         | 39.4 AV                 | 54.0           | -14.6       | 4.00 V             | 305                  | 37.0             | 2.4                      |
| 3                                                    | #5470.00        | 51.2 PK                 | 68.2           | -17.0       | 4.00 V             | 305                  | 48.8             | 2.4                      |
| 4                                                    | *5720.00        | 110.5 PK                |                |             | 4.00 V             | 305                  | 107.9            | 2.6                      |
| 5                                                    | *5720.00        | 101.2 AV                |                |             | 4.00 V             | 305                  | 98.6             | 2.6                      |
| 6                                                    | #5850.00        | 52.0 PK                 | 68.2           | -16.2       | 4.00 V             | 305                  | 49.0             | 3.0                      |
| 7                                                    | 11440.00        | 45.3 PK                 | 74.0           | -28.7       | 1.20 V             | 263                  | 32.3             | 13.0                     |
| 8                                                    | 11440.00        | 33.4 AV                 | 54.0           | -20.6       | 1.20 V             | 263                  | 20.4             | 13.0                     |
| 9                                                    | #17160.00       | 44.6 PK                 | 68.2           | -23.6       | 1.12 V             | 243                  | 27.5             | 17.1                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 149 : 5745 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5634.80        | 49.8 PK                 | 68.2           | -18.4       | 2.03 H             | 150                  | 47.4             | 2.4                      |
| 2                                                    | *5745.00        | 113.6 PK                |                |             | 2.03 H             | 150                  | 110.9            | 2.7                      |
| 3                                                    | *5745.00        | 100.6 AV                |                |             | 2.03 H             | 150                  | 97.9             | 2.7                      |
| 4                                                    | #5984.10        | 48.4 PK                 | 68.2           | -19.8       | 2.03 H             | 150                  | 45.5             | 2.9                      |
| 5                                                    | 11490.00        | 44.1 PK                 | 74.0           | -29.9       | 2.44 H             | 125                  | 31.0             | 13.1                     |
| 6                                                    | 11490.00        | 30.4 AV                 | 54.0           | -23.6       | 2.44 H             | 125                  | 17.3             | 13.1                     |
| 7                                                    | #17235.00       | 42.0 PK                 | 68.2           | -26.2       | 1.17 H             | 322                  | 24.7             | 17.3                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5631.90        | 53.6 PK                 | 68.2           | -14.6       | 2.35 V             | 333                  | 51.2             | 2.4                      |
| 2                                                    | *5745.00        | 110.3 PK                |                |             | 2.35 V             | 333                  | 107.6            | 2.7                      |
| 3                                                    | *5745.00        | 100.3 AV                |                |             | 2.35 V             | 333                  | 97.6             | 2.7                      |
| 4                                                    | #5938.80        | 51.6 PK                 | 68.2           | -16.6       | 2.35 V             | 333                  | 48.5             | 3.1                      |
| 5                                                    | 11490.00        | 46.4 PK                 | 74.0           | -27.6       | 1.20 V             | 253                  | 33.3             | 13.1                     |
| 6                                                    | 11490.00        | 34.4 AV                 | 54.0           | -19.6       | 1.20 V             | 253                  | 21.3             | 13.1                     |
| 7                                                    | #17235.00       | 45.5 PK                 | 68.2           | -22.7       | 1.12 V             | 255                  | 28.2             | 17.3                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* " : Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # " : The radiated frequency is out of the restricted band.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 157 : 5785 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5640.30        | 51.2 PK                 | 68.2           | -17.0       | 2.04 H             | 149                  | 48.8             | 2.4                      |
| 2                                                    | *5785.00        | 112.3 PK                |                |             | 2.04 H             | 149                  | 109.5            | 2.8                      |
| 3                                                    | *5785.00        | 100.8 AV                |                |             | 2.04 H             | 149                  | 98.0             | 2.8                      |
| 4                                                    | #5983.90        | 52.0 PK                 | 68.2           | -16.2       | 2.04 H             | 149                  | 49.1             | 2.9                      |
| 5                                                    | 11570.00        | 44.0 PK                 | 74.0           | -30.0       | 2.44 H             | 110                  | 30.8             | 13.2                     |
| 6                                                    | 11570.00        | 30.5 AV                 | 54.0           | -23.5       | 2.44 H             | 110                  | 17.3             | 13.2                     |
| 7                                                    | #17355.00       | 42.5 PK                 | 68.2           | -25.7       | 1.19 H             | 314                  | 24.4             | 18.1                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5638.20        | 52.3 PK                 | 68.2           | -15.9       | 1.90 V             | 336                  | 49.9             | 2.4                      |
| 2                                                    | *5785.00        | 110.3 PK                |                |             | 1.90 V             | 336                  | 107.5            | 2.8                      |
| 3                                                    | *5785.00        | 100.0 AV                |                |             | 1.90 V             | 336                  | 97.2             | 2.8                      |
| 4                                                    | #5930.30        | 51.6 PK                 | 68.2           | -16.6       | 1.90 V             | 336                  | 48.5             | 3.1                      |
| 5                                                    | 11570.00        | 46.0 PK                 | 74.0           | -28.0       | 1.19 V             | 266                  | 32.8             | 13.2                     |
| 6                                                    | 11570.00        | 34.3 AV                 | 54.0           | -19.7       | 1.19 V             | 266                  | 21.1             | 13.2                     |
| 7                                                    | #17355.00       | 44.3 PK                 | 68.2           | -23.9       | 1.10 V             | 253                  | 26.2             | 18.1                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                |                                          |                                                                      |
|-----------------------------|----------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11a        | <b>Channel</b>                           | CH 165 : 5825 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai        |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5603.30        | 48.4 PK                 | 68.2           | -19.8       | 1.14 H             | 86                   | 46.0             | 2.4                      |
| 2                                                    | *5825.00        | 107.5 PK                |                |             | 1.14 H             | 86                   | 104.5            | 3.0                      |
| 3                                                    | *5825.00        | 98.6 AV                 |                |             | 1.14 H             | 86                   | 95.6             | 3.0                      |
| 4                                                    | #5946.30        | 51.5 PK                 | 68.2           | -16.7       | 1.14 H             | 86                   | 48.4             | 3.1                      |
| 5                                                    | 11650.00        | 40.6 PK                 | 74.0           | -33.4       | 1.13 H             | 256                  | 27.7             | 12.9                     |
| 6                                                    | 11650.00        | 33.9 AV                 | 54.0           | -20.1       | 1.13 H             | 256                  | 21.0             | 12.9                     |
| 7                                                    | #17475.00       | 42.8 PK                 | 68.2           | -25.4       | 1.25 H             | 113                  | 23.7             | 19.1                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5639.00        | 50.6 PK                 | 68.2           | -17.6       | 3.22 V             | 28                   | 48.2             | 2.4                      |
| 2                                                    | *5825.00        | 109.4 PK                |                |             | 3.22 V             | 28                   | 106.4            | 3.0                      |
| 3                                                    | *5825.00        | 99.5 AV                 |                |             | 3.22 V             | 28                   | 96.5             | 3.0                      |
| 4                                                    | #5948.10        | 51.8 PK                 | 68.2           | -16.4       | 3.22 V             | 28                   | 48.8             | 3.0                      |
| 5                                                    | 11650.00        | 45.8 PK                 | 74.0           | -28.2       | 1.28 V             | 274                  | 32.9             | 12.9                     |
| 6                                                    | 11650.00        | 34.2 AV                 | 54.0           | -19.8       | 1.28 V             | 274                  | 21.3             | 12.9                     |
| 7                                                    | #17475.00       | 44.5 PK                 | 68.2           | -23.7       | 1.17 V             | 259                  | 25.4             | 19.1                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 36 : 5180 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 66.1 PK                 | 74.0           | -7.9        | 1.67 H             | 170                  | 63.4             | 2.7                      |
| 2                                                    | 5150.00         | 48.8 AV                 | 54.0           | -5.2        | 1.67 H             | 170                  | 46.1             | 2.7                      |
| 3                                                    | *5180.00        | 105.4 PK                |                |             | 1.67 H             | 170                  | 102.8            | 2.6                      |
| 4                                                    | *5180.00        | 95.8 AV                 |                |             | 1.67 H             | 170                  | 93.2             | 2.6                      |
| 5                                                    | #10360.00       | 43.7 PK                 | 68.2           | -24.5       | 2.43 H             | 116                  | 31.4             | 12.3                     |
| 6                                                    | 15540.00        | 42.6 PK                 | 74.0           | -31.4       | 1.19 H             | 326                  | 30.7             | 11.9                     |
| 7                                                    | 15540.00        | 27.7 AV                 | 54.0           | -26.3       | 1.19 H             | 326                  | 15.8             | 11.9                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 66.8 PK                 | 74.0           | -7.2        | 1.93 V             | 34                   | 64.1             | 2.7                      |
| 2                                                    | 5150.00         | 49.7 AV                 | 54.0           | -4.3        | 1.93 V             | 34                   | 47.0             | 2.7                      |
| 3                                                    | *5180.00        | 107.9 PK                |                |             | 1.93 V             | 34                   | 105.3            | 2.6                      |
| 4                                                    | *5180.00        | 98.0 AV                 |                |             | 1.93 V             | 34                   | 95.4             | 2.6                      |
| 5                                                    | #10360.00       | 45.6 PK                 | 68.2           | -22.6       | 1.26 V             | 243                  | 33.3             | 12.3                     |
| 6                                                    | 15540.00        | 44.4 PK                 | 74.0           | -29.6       | 1.19 V             | 265                  | 32.5             | 11.9                     |
| 7                                                    | 15540.00        | 30.5 AV                 | 54.0           | -23.5       | 1.19 V             | 265                  | 18.6             | 11.9                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 40 : 5200 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5130.00         | 49.3 PK                 | 74.0           | -24.7       | 1.52 H             | 171                  | 46.6             | 2.7                      |
| 2                                                    | 5130.00         | 38.1 AV                 | 54.0           | -15.9       | 1.52 H             | 171                  | 35.4             | 2.7                      |
| 3                                                    | 5150.00         | 57.1 PK                 | 74.0           | -16.9       | 1.52 H             | 171                  | 54.4             | 2.7                      |
| 4                                                    | 5150.00         | 46.3 AV                 | 54.0           | -7.7        | 1.52 H             | 171                  | 43.6             | 2.7                      |
| 5                                                    | *5200.00        | 107.3 PK                |                |             | 1.52 H             | 171                  | 104.7            | 2.6                      |
| 6                                                    | *5200.00        | 97.6 AV                 |                |             | 1.52 H             | 171                  | 95.0             | 2.6                      |
| 7                                                    | #10400.00       | 43.6 PK                 | 68.2           | -24.6       | 2.54 H             | 127                  | 31.2             | 12.4                     |
| 8                                                    | 15600.00        | 42.9 PK                 | 74.0           | -31.1       | 1.18 H             | 316                  | 31.1             | 11.8                     |
| 9                                                    | 15600.00        | 28.1 AV                 | 54.0           | -25.9       | 1.18 H             | 316                  | 16.3             | 11.8                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5130.00         | 50.2 PK                 | 74.0           | -23.8       | 2.06 V             | 32                   | 47.5             | 2.7                      |
| 2                                                    | 5130.00         | 38.8 AV                 | 54.0           | -15.2       | 2.06 V             | 32                   | 36.1             | 2.7                      |
| 3                                                    | 5150.00         | 60.6 PK                 | 74.0           | -13.4       | 2.06 V             | 32                   | 57.9             | 2.7                      |
| 4                                                    | 5150.00         | 49.4 AV                 | 54.0           | -4.6        | 2.06 V             | 32                   | 46.7             | 2.7                      |
| 5                                                    | *5200.00        | 108.9 PK                |                |             | 2.06 V             | 32                   | 106.3            | 2.6                      |
| 6                                                    | *5200.00        | 99.2 AV                 |                |             | 2.06 V             | 32                   | 96.6             | 2.6                      |
| 7                                                    | #10400.00       | 46.4 PK                 | 68.2           | -21.8       | 1.20 V             | 265                  | 34.0             | 12.4                     |
| 8                                                    | 15600.00        | 44.7 PK                 | 74.0           | -29.3       | 1.16 V             | 266                  | 32.9             | 11.8                     |
| 9                                                    | 15600.00        | 30.8 AV                 | 54.0           | -23.2       | 1.16 V             | 266                  | 19.0             | 11.8                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 48 : 5240 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 57.1 PK                 | 74.0           | -16.9       | 2.64 H             | 231                  | 54.4             | 2.7                      |
| 2                                                    | 5150.00         | 43.5 AV                 | 54.0           | -10.5       | 2.64 H             | 231                  | 40.8             | 2.7                      |
| 3                                                    | *5240.00        | 112.5 PK                |                |             | 2.64 H             | 231                  | 110.1            | 2.4                      |
| 4                                                    | *5240.00        | 103.0 AV                |                |             | 2.64 H             | 231                  | 100.6            | 2.4                      |
| 5                                                    | 5350.00         | 53.7 PK                 | 74.0           | -20.3       | 2.64 H             | 231                  | 51.4             | 2.3                      |
| 6                                                    | 5350.00         | 42.6 AV                 | 54.0           | -11.4       | 2.64 H             | 231                  | 40.3             | 2.3                      |
| 7                                                    | #10480.00       | 43.5 PK                 | 68.2           | -24.7       | 2.54 H             | 115                  | 31.1             | 12.4                     |
| 8                                                    | 15720.00        | 42.6 PK                 | 74.0           | -31.4       | 1.16 H             | 315                  | 30.3             | 12.3                     |
| 9                                                    | 15720.00        | 27.6 AV                 | 54.0           | -26.4       | 1.16 H             | 315                  | 15.3             | 12.3                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 54.4 PK                 | 74.0           | -19.6       | 1.81 V             | 27                   | 51.7             | 2.7                      |
| 2                                                    | 5150.00         | 44.1 AV                 | 54.0           | -9.9        | 1.81 V             | 27                   | 41.4             | 2.7                      |
| 3                                                    | *5240.00        | 113.0 PK                |                |             | 1.81 V             | 27                   | 110.6            | 2.4                      |
| 4                                                    | *5240.00        | 103.4 AV                |                |             | 1.81 V             | 27                   | 101.0            | 2.4                      |
| 5                                                    | 5350.00         | 50.6 PK                 | 74.0           | -23.4       | 1.81 V             | 27                   | 48.3             | 2.3                      |
| 6                                                    | 5350.00         | 40.4 AV                 | 54.0           | -13.6       | 1.81 V             | 27                   | 38.1             | 2.3                      |
| 7                                                    | #10480.00       | 45.4 PK                 | 68.2           | -22.8       | 1.26 V             | 245                  | 33.0             | 12.4                     |
| 8                                                    | 15720.00        | 45.0 PK                 | 74.0           | -29.0       | 1.16 V             | 243                  | 32.7             | 12.3                     |
| 9                                                    | 15720.00        | 31.0 AV                 | 54.0           | -23.0       | 1.16 V             | 243                  | 18.7             | 12.3                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 52 : 5260 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 51.9 PK                 | 74.0           | -22.1       | 2.86 H             | 230                  | 49.2             | 2.7                      |
| 2                                                    | 5150.00         | 41.9 AV                 | 54.0           | -12.1       | 2.86 H             | 230                  | 39.2             | 2.7                      |
| 3                                                    | *5260.00        | 111.2 PK                |                |             | 2.86 H             | 230                  | 108.9            | 2.3                      |
| 4                                                    | *5260.00        | 103.1 AV                |                |             | 2.86 H             | 230                  | 100.8            | 2.3                      |
| 5                                                    | 5350.00         | 54.4 PK                 | 74.0           | -19.6       | 2.86 H             | 230                  | 52.1             | 2.3                      |
| 6                                                    | 5350.00         | 43.3 AV                 | 54.0           | -10.7       | 2.86 H             | 230                  | 41.0             | 2.3                      |
| 7                                                    | #10520.00       | 43.7 PK                 | 68.2           | -24.5       | 2.45 H             | 105                  | 31.4             | 12.3                     |
| 8                                                    | 15780.00        | 42.5 PK                 | 74.0           | -31.5       | 1.12 H             | 313                  | 30.5             | 12.0                     |
| 9                                                    | 15780.00        | 27.7 AV                 | 54.0           | -26.3       | 1.12 H             | 313                  | 15.7             | 12.0                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 52.9 PK                 | 74.0           | -21.1       | 2.34 V             | 323                  | 50.2             | 2.7                      |
| 2                                                    | 5150.00         | 42.1 AV                 | 54.0           | -11.9       | 2.34 V             | 323                  | 39.4             | 2.7                      |
| 3                                                    | *5260.00        | 111.5 PK                |                |             | 2.34 V             | 323                  | 109.2            | 2.3                      |
| 4                                                    | *5260.00        | 103.2 AV                |                |             | 2.34 V             | 323                  | 100.9            | 2.3                      |
| 5                                                    | 5350.00         | 54.6 PK                 | 74.0           | -19.4       | 2.34 V             | 323                  | 52.3             | 2.3                      |
| 6                                                    | 5350.00         | 42.2 AV                 | 54.0           | -11.8       | 2.34 V             | 323                  | 39.9             | 2.3                      |
| 7                                                    | #10520.00       | 45.6 PK                 | 68.2           | -22.6       | 1.23 V             | 271                  | 33.3             | 12.3                     |
| 8                                                    | 15780.00        | 44.6 PK                 | 74.0           | -29.4       | 1.11 V             | 251                  | 32.6             | 12.0                     |
| 9                                                    | 15780.00        | 30.6 AV                 | 54.0           | -23.4       | 1.11 V             | 251                  | 18.6             | 12.0                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 60 : 5300 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 50.8 PK                 | 74.0           | -23.2       | 1.72 H             | 54                   | 48.1             | 2.7                      |
| 2                                                    | 5150.00         | 39.5 AV                 | 54.0           | -14.5       | 1.72 H             | 54                   | 36.8             | 2.7                      |
| 3                                                    | *5300.00        | 109.4 PK                |                |             | 1.72 H             | 54                   | 107.1            | 2.3                      |
| 4                                                    | *5300.00        | 99.0 AV                 |                |             | 1.72 H             | 54                   | 96.7             | 2.3                      |
| 5                                                    | 5350.00         | 59.5 PK                 | 74.0           | -14.5       | 1.72 H             | 54                   | 57.2             | 2.3                      |
| 6                                                    | 5350.00         | 48.6 AV                 | 54.0           | -5.4        | 1.72 H             | 54                   | 46.3             | 2.3                      |
| 7                                                    | 10600.00        | 43.6 PK                 | 74.0           | -30.4       | 2.48 H             | 125                  | 31.2             | 12.4                     |
| 8                                                    | 10600.00        | 30.1 AV                 | 54.0           | -23.9       | 2.48 H             | 125                  | 17.7             | 12.4                     |
| 9                                                    | 15900.00        | 43.2 PK                 | 74.0           | -30.8       | 1.13 H             | 321                  | 31.0             | 12.2                     |
| 10                                                   | 15900.00        | 27.9 AV                 | 54.0           | -26.1       | 1.13 H             | 321                  | 15.7             | 12.2                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 52.1 PK                 | 74.0           | -21.9       | 2.24 V             | 313                  | 49.4             | 2.7                      |
| 2                                                    | 5150.00         | 41.5 AV                 | 54.0           | -12.5       | 2.24 V             | 313                  | 38.8             | 2.7                      |
| 3                                                    | *5300.00        | 109.5 PK                |                |             | 2.24 V             | 313                  | 107.2            | 2.3                      |
| 4                                                    | *5300.00        | 99.5 AV                 |                |             | 2.24 V             | 313                  | 97.2             | 2.3                      |
| 5                                                    | 5350.00         | 61.3 PK                 | 74.0           | -12.7       | 2.24 V             | 313                  | 59.0             | 2.3                      |
| 6                                                    | 5350.00         | 49.7 AV                 | 54.0           | -4.3        | 2.24 V             | 313                  | 47.4             | 2.3                      |
| 7                                                    | 10600.00        | 45.2 PK                 | 74.0           | -28.8       | 1.26 V             | 267                  | 32.8             | 12.4                     |
| 8                                                    | 10600.00        | 33.7 AV                 | 54.0           | -20.3       | 1.26 V             | 267                  | 21.3             | 12.4                     |
| 9                                                    | 15900.00        | 45.1 PK                 | 74.0           | -28.9       | 1.20 V             | 247                  | 32.9             | 12.2                     |
| 10                                                   | 15900.00        | 30.9 AV                 | 54.0           | -23.1       | 1.20 V             | 247                  | 18.7             | 12.2                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.

|                      |                  |                               |                                                                      |
|----------------------|------------------|-------------------------------|----------------------------------------------------------------------|
| RF Mode              | 802.11ac (VHT20) | Channel                       | CH 64 : 5320 MHz                                                     |
| Frequency Range      | 1 GHz ~ 40 GHz   | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| Input Power (System) | 120 Vac, 60 Hz   | Environmental Conditions      | 22 °C, 66% RH                                                        |
| Tested By            | Roy Mai          |                               |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5320.00        | 106.2 PK                |                |             | 1.71 H             | 55                   | 103.9            | 2.3                      |
| 2                                                    | *5320.00        | 96.5 AV                 |                |             | 1.71 H             | 55                   | 94.2             | 2.3                      |
| 3                                                    | 5350.00         | 63.7 PK                 | 74.0           | -10.3       | 1.71 H             | 55                   | 61.4             | 2.3                      |
| 4                                                    | 5350.00         | 49.0 AV                 | 54.0           | -5.0        | 1.71 H             | 55                   | 46.7             | 2.3                      |
| 5                                                    | 10640.00        | 44.0 PK                 | 74.0           | -30.0       | 2.46 H             | 112                  | 31.7             | 12.3                     |
| 6                                                    | 10640.00        | 30.3 AV                 | 54.0           | -23.7       | 2.46 H             | 112                  | 18.0             | 12.3                     |
| 7                                                    | 15960.00        | 42.9 PK                 | 74.0           | -31.1       | 1.19 H             | 314                  | 31.2             | 11.7                     |
| 8                                                    | 15960.00        | 28.0 AV                 | 54.0           | -26.0       | 1.19 H             | 314                  | 16.3             | 11.7                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5320.00        | 106.3 PK                |                |             | 2.21 V             | 313                  | 104.0            | 2.3                      |
| 2                                                    | *5320.00        | 96.7 AV                 |                |             | 2.21 V             | 313                  | 94.4             | 2.3                      |
| 3                                                    | 5350.00         | 61.4 PK                 | 74.0           | -12.6       | 2.21 V             | 313                  | 59.1             | 2.3                      |
| 4                                                    | 5350.00         | 49.9 AV                 | 54.0           | -4.1        | 2.21 V             | 313                  | 47.6             | 2.3                      |
| 5                                                    | 10640.00        | 45.8 PK                 | 74.0           | -28.2       | 1.28 V             | 264                  | 33.5             | 12.3                     |
| 6                                                    | 10640.00        | 34.3 AV                 | 54.0           | -19.7       | 1.28 V             | 264                  | 22.0             | 12.3                     |
| 7                                                    | 15960.00        | 44.2 PK                 | 74.0           | -29.8       | 1.15 V             | 246                  | 32.5             | 11.7                     |
| 8                                                    | 15960.00        | 30.4 AV                 | 54.0           | -23.6       | 1.15 V             | 246                  | 18.7             | 11.7                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 100 : 5500 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 63.7 PK                 | 74.0           | -10.3       | 1.00 H             | 60                   | 61.3             | 2.4                      |
| 2                                                    | 5460.00         | 44.7 AV                 | 54.0           | -9.3        | 1.00 H             | 60                   | 42.3             | 2.4                      |
| 3                                                    | #5470.00        | 62.9 PK                 | 68.2           | -5.3        | 1.00 H             | 60                   | 60.5             | 2.4                      |
| 4                                                    | *5500.00        | 106.5 PK                |                |             | 1.00 H             | 60                   | 104.0            | 2.5                      |
| 5                                                    | *5500.00        | 95.0 AV                 |                |             | 1.00 H             | 60                   | 92.5             | 2.5                      |
| 6                                                    | 11000.00        | 43.9 PK                 | 74.0           | -30.1       | 2.44 H             | 121                  | 31.0             | 12.9                     |
| 7                                                    | 11000.00        | 30.8 AV                 | 54.0           | -23.2       | 2.44 H             | 121                  | 17.9             | 12.9                     |
| 8                                                    | #16500.00       | 42.9 PK                 | 68.2           | -25.3       | 1.14 H             | 324                  | 28.4             | 14.5                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 61.7 PK                 | 74.0           | -12.3       | 1.80 V             | 309                  | 59.3             | 2.4                      |
| 2                                                    | 5460.00         | 45.5 AV                 | 54.0           | -8.5        | 1.80 V             | 309                  | 43.1             | 2.4                      |
| 3                                                    | #5470.00        | 64.0 PK                 | 68.2           | -4.2        | 1.80 V             | 309                  | 61.6             | 2.4                      |
| 4                                                    | *5500.00        | 104.8 PK                |                |             | 1.80 V             | 309                  | 102.3            | 2.5                      |
| 5                                                    | *5500.00        | 94.6 AV                 |                |             | 1.80 V             | 309                  | 92.1             | 2.5                      |
| 6                                                    | 11000.00        | 45.9 PK                 | 74.0           | -28.1       | 1.20 V             | 268                  | 33.0             | 12.9                     |
| 7                                                    | 11000.00        | 34.0 AV                 | 54.0           | -20.0       | 1.20 V             | 268                  | 21.1             | 12.9                     |
| 8                                                    | #16500.00       | 44.9 PK                 | 68.2           | -23.3       | 1.11 V             | 242                  | 30.4             | 14.5                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 116 : 5580 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 51.3 PK                 | 74.0           | -22.7       | 1.66 H             | 224                  | 48.9             | 2.4                      |
| 2                                                    | 5460.00         | 40.8 AV                 | 54.0           | -13.2       | 1.66 H             | 224                  | 38.4             | 2.4                      |
| 3                                                    | #5470.00        | 51.6 PK                 | 68.2           | -16.6       | 1.66 H             | 224                  | 49.2             | 2.4                      |
| 4                                                    | *5580.00        | 108.2 PK                |                |             | 1.66 H             | 224                  | 105.8            | 2.4                      |
| 5                                                    | *5580.00        | 103.7 AV                |                |             | 1.66 H             | 224                  | 101.3            | 2.4                      |
| 6                                                    | 11160.00        | 44.0 PK                 | 74.0           | -30.0       | 2.39 H             | 110                  | 31.0             | 13.0                     |
| 7                                                    | 11160.00        | 30.8 AV                 | 54.0           | -23.2       | 2.39 H             | 110                  | 17.8             | 13.0                     |
| 8                                                    | #16740.00       | 43.2 PK                 | 68.2           | -25.0       | 1.09 H             | 318                  | 27.6             | 15.6                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 52.1 PK                 | 74.0           | -21.9       | 1.71 V             | 308                  | 49.7             | 2.4                      |
| 2                                                    | 5460.00         | 41.6 AV                 | 54.0           | -12.4       | 1.71 V             | 308                  | 39.2             | 2.4                      |
| 3                                                    | #5470.00        | 50.9 PK                 | 68.2           | -17.3       | 1.71 V             | 308                  | 48.5             | 2.4                      |
| 4                                                    | *5580.00        | 109.3 PK                |                |             | 1.71 V             | 308                  | 106.9            | 2.4                      |
| 5                                                    | *5580.00        | 104.6 AV                |                |             | 1.71 V             | 308                  | 102.2            | 2.4                      |
| 6                                                    | 11160.00        | 45.3 PK                 | 74.0           | -28.7       | 1.27 V             | 269                  | 32.3             | 13.0                     |
| 7                                                    | 11160.00        | 33.6 AV                 | 54.0           | -20.4       | 1.27 V             | 269                  | 20.6             | 13.0                     |
| 8                                                    | #16740.00       | 44.9 PK                 | 68.2           | -23.3       | 1.15 V             | 259                  | 29.3             | 15.6                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 140 : 5700 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5700.00        | 105.5 PK                |                |             | 1.75 H             | 199                  | 103.0            | 2.5                      |
| 2                                                    | *5700.00        | 95.4 AV                 |                |             | 1.75 H             | 199                  | 92.9             | 2.5                      |
| 3                                                    | #5725.00        | 63.8 PK                 | 68.2           | -4.4        | 1.75 H             | 199                  | 61.2             | 2.6                      |
| 4                                                    | 11400.00        | 44.2 PK                 | 74.0           | -29.8       | 2.54 H             | 106                  | 31.2             | 13.0                     |
| 5                                                    | 11400.00        | 30.5 AV                 | 54.0           | -23.5       | 2.54 H             | 106                  | 17.5             | 13.0                     |
| 6                                                    | #17100.00       | 42.6 PK                 | 68.2           | -25.6       | 1.11 H             | 309                  | 25.5             | 17.1                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5700.00        | 106.9 PK                |                |             | 2.02 V             | 338                  | 104.4            | 2.5                      |
| 2                                                    | *5700.00        | 97.3 AV                 |                |             | 2.02 V             | 338                  | 94.8             | 2.5                      |
| 3                                                    | #5725.00        | 63.5 PK                 | 68.2           | -4.7        | 2.02 V             | 338                  | 60.9             | 2.6                      |
| 4                                                    | 11400.00        | 45.6 PK                 | 74.0           | -28.4       | 1.26 V             | 269                  | 32.6             | 13.0                     |
| 5                                                    | 11400.00        | 34.0 AV                 | 54.0           | -20.0       | 1.26 V             | 269                  | 21.0             | 13.0                     |
| 6                                                    | #17100.00       | 44.9 PK                 | 68.2           | -23.3       | 1.12 V             | 240                  | 27.8             | 17.1                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 144 : 5720 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 52.7 PK                 | 74.0           | -21.3       | 2.11 H             | 331                  | 50.3             | 2.4                      |
| 2                                                    | 5460.00         | 35.5 AV                 | 54.0           | -18.5       | 2.11 H             | 331                  | 33.1             | 2.4                      |
| 3                                                    | #5470.00        | 51.4 PK                 | 68.2           | -16.8       | 2.11 H             | 331                  | 49.0             | 2.4                      |
| 4                                                    | *5720.00        | 108.8 PK                |                |             | 2.11 H             | 331                  | 106.2            | 2.6                      |
| 5                                                    | *5720.00        | 98.4 AV                 |                |             | 2.11 H             | 331                  | 95.8             | 2.6                      |
| 6                                                    | #5850.00        | 48.3 PK                 | 68.2           | -19.9       | 2.11 H             | 331                  | 45.3             | 3.0                      |
| 7                                                    | 11440.00        | 44.0 PK                 | 74.0           | -30.0       | 2.50 H             | 98                   | 31.0             | 13.0                     |
| 8                                                    | 11440.00        | 30.9 AV                 | 54.0           | -23.1       | 2.50 H             | 98                   | 17.9             | 13.0                     |
| 9                                                    | #17160.00       | 42.4 PK                 | 68.2           | -25.8       | 1.17 H             | 320                  | 25.3             | 17.1                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 51.1 PK                 | 74.0           | -22.9       | 2.35 V             | 330                  | 48.7             | 2.4                      |
| 2                                                    | 5460.00         | 36.8 AV                 | 54.0           | -17.2       | 2.35 V             | 330                  | 34.4             | 2.4                      |
| 3                                                    | #5470.00        | 50.6 PK                 | 68.2           | -17.6       | 2.35 V             | 330                  | 48.2             | 2.4                      |
| 4                                                    | *5720.00        | 109.2 PK                |                |             | 2.35 V             | 330                  | 106.6            | 2.6                      |
| 5                                                    | *5720.00        | 99.3 AV                 |                |             | 2.35 V             | 330                  | 96.7             | 2.6                      |
| 6                                                    | #5850.00        | 49.9 PK                 | 68.2           | -18.3       | 2.35 V             | 330                  | 46.9             | 3.0                      |
| 7                                                    | 11440.00        | 46.1 PK                 | 74.0           | -27.9       | 1.25 V             | 244                  | 33.1             | 13.0                     |
| 8                                                    | 11440.00        | 34.3 AV                 | 54.0           | -19.7       | 1.25 V             | 244                  | 21.3             | 13.0                     |
| 9                                                    | #17160.00       | 45.2 PK                 | 68.2           | -23.0       | 1.14 V             | 236                  | 28.1             | 17.1                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 149 : 5745 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5647.80        | 52.5 PK                 | 68.2           | -15.7       | 2.55 H             | 223                  | 50.1             | 2.4                      |
| 2                                                    | *5745.00        | 109.6 PK                |                |             | 2.55 H             | 223                  | 106.9            | 2.7                      |
| 3                                                    | *5745.00        | 99.1 AV                 |                |             | 2.55 H             | 223                  | 96.4             | 2.7                      |
| 4                                                    | #5959.50        | 53.1 PK                 | 68.2           | -15.1       | 2.55 H             | 223                  | 50.1             | 3.0                      |
| 5                                                    | 11490.00        | 43.4 PK                 | 74.0           | -30.6       | 2.44 H             | 101                  | 30.3             | 13.1                     |
| 6                                                    | 11490.00        | 30.2 AV                 | 54.0           | -23.8       | 2.44 H             | 101                  | 17.1             | 13.1                     |
| 7                                                    | #17235.00       | 43.1 PK                 | 68.2           | -25.1       | 1.11 H             | 322                  | 25.8             | 17.3                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5628.10        | 51.8 PK                 | 68.2           | -16.4       | 2.20 V             | 328                  | 49.4             | 2.4                      |
| 2                                                    | *5745.00        | 108.9 PK                |                |             | 2.20 V             | 328                  | 106.2            | 2.7                      |
| 3                                                    | *5745.00        | 98.7 AV                 |                |             | 2.20 V             | 328                  | 96.0             | 2.7                      |
| 4                                                    | #5961.10        | 51.3 PK                 | 68.2           | -16.9       | 2.20 V             | 328                  | 48.4             | 2.9                      |
| 5                                                    | 11490.00        | 45.4 PK                 | 74.0           | -28.6       | 1.20 V             | 250                  | 32.3             | 13.1                     |
| 6                                                    | 11490.00        | 33.7 AV                 | 54.0           | -20.3       | 1.20 V             | 250                  | 20.6             | 13.1                     |
| 7                                                    | #17235.00       | 44.2 PK                 | 68.2           | -24.0       | 1.10 V             | 236                  | 26.9             | 17.3                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* " : Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # " : The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 157 : 5785 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5643.70        | 51.0 PK                 | 68.2           | -17.2       | 1.77 H             | 220                  | 48.6             | 2.4                      |
| 2                                                    | *5785.00        | 110.9 PK                |                |             | 1.77 H             | 220                  | 108.1            | 2.8                      |
| 3                                                    | *5785.00        | 100.3 AV                |                |             | 1.77 H             | 220                  | 97.5             | 2.8                      |
| 4                                                    | #5999.90        | 53.6 PK                 | 68.2           | -14.6       | 1.77 H             | 220                  | 50.7             | 2.9                      |
| 5                                                    | 11570.00        | 44.3 PK                 | 74.0           | -29.7       | 2.47 H             | 107                  | 31.1             | 13.2                     |
| 6                                                    | 11570.00        | 30.8 AV                 | 54.0           | -23.2       | 2.47 H             | 107                  | 17.6             | 13.2                     |
| 7                                                    | #17355.00       | 42.7 PK                 | 68.2           | -25.5       | 1.11 H             | 336                  | 24.6             | 18.1                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5637.30        | 51.3 PK                 | 68.2           | -16.9       | 2.22 V             | 332                  | 48.9             | 2.4                      |
| 2                                                    | *5785.00        | 109.6 PK                |                |             | 2.22 V             | 332                  | 106.8            | 2.8                      |
| 3                                                    | *5785.00        | 99.2 AV                 |                |             | 2.22 V             | 332                  | 96.4             | 2.8                      |
| 4                                                    | #5932.30        | 52.1 PK                 | 68.2           | -16.1       | 2.22 V             | 332                  | 49.0             | 3.1                      |
| 5                                                    | 11570.00        | 44.9 PK                 | 74.0           | -29.1       | 1.22 V             | 247                  | 31.7             | 13.2                     |
| 6                                                    | 11570.00        | 33.5 AV                 | 54.0           | -20.5       | 1.22 V             | 247                  | 20.3             | 13.2                     |
| 7                                                    | #17355.00       | 44.4 PK                 | 68.2           | -23.8       | 1.17 V             | 239                  | 26.3             | 18.1                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT20) | <b>Channel</b>                           | CH 165 : 5825 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5633.70        | 48.9 PK                 | 68.2           | -19.3       | 1.83 H             | 140                  | 46.5             | 2.4                      |
| 2                                                    | *5825.00        | 108.5 PK                |                |             | 1.83 H             | 140                  | 105.5            | 3.0                      |
| 3                                                    | *5825.00        | 98.8 AV                 |                |             | 1.83 H             | 140                  | 95.8             | 3.0                      |
| 4                                                    | #5935.00        | 48.7 PK                 | 68.2           | -19.5       | 1.83 H             | 140                  | 45.6             | 3.1                      |
| 5                                                    | 11650.00        | 43.9 PK                 | 74.0           | -30.1       | 2.49 H             | 111                  | 31.0             | 12.9                     |
| 6                                                    | 11650.00        | 30.5 AV                 | 54.0           | -23.5       | 2.49 H             | 111                  | 17.6             | 12.9                     |
| 7                                                    | #17475.00       | 42.6 PK                 | 68.2           | -25.6       | 1.15 H             | 325                  | 23.5             | 19.1                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5633.70        | 50.4 PK                 | 68.2           | -17.8       | 2.54 V             | 325                  | 48.0             | 2.4                      |
| 2                                                    | *5825.00        | 107.5 PK                |                |             | 2.54 V             | 325                  | 104.5            | 3.0                      |
| 3                                                    | *5825.00        | 97.2 AV                 |                |             | 2.54 V             | 325                  | 94.2             | 3.0                      |
| 4                                                    | #5935.00        | 52.9 PK                 | 68.2           | -15.3       | 2.54 V             | 325                  | 49.8             | 3.1                      |
| 5                                                    | 11650.00        | 45.6 PK                 | 74.0           | -28.4       | 1.24 V             | 258                  | 32.7             | 12.9                     |
| 6                                                    | 11650.00        | 33.9 AV                 | 54.0           | -20.1       | 1.24 V             | 258                  | 21.0             | 12.9                     |
| 7                                                    | #17475.00       | 44.8 PK                 | 68.2           | -23.4       | 1.14 V             | 252                  | 25.7             | 19.1                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 38 : 5190 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 63.9 PK                 | 74.0           | -10.1       | 1.68 H             | 176                  | 61.2             | 2.7                      |
| 2                                                    | 5150.00         | 49.7 AV                 | 54.0           | -4.3        | 1.68 H             | 176                  | 47.0             | 2.7                      |
| 3                                                    | *5190.00        | 101.2 PK                |                |             | 1.68 H             | 176                  | 98.6             | 2.6                      |
| 4                                                    | *5190.00        | 90.8 AV                 |                |             | 1.68 H             | 176                  | 88.2             | 2.6                      |
| 5                                                    | #10380.00       | 43.7 PK                 | 68.2           | -24.5       | 2.48 H             | 125                  | 31.4             | 12.3                     |
| 6                                                    | 15570.00        | 43.1 PK                 | 74.0           | -30.9       | 1.13 H             | 335                  | 31.3             | 11.8                     |
| 7                                                    | 15570.00        | 27.8 AV                 | 54.0           | -26.2       | 1.13 H             | 335                  | 16.0             | 11.8                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 63.9 PK                 | 74.0           | -10.1       | 2.04 V             | 16                   | 61.2             | 2.7                      |
| 2                                                    | 5150.00         | 49.8 AV                 | 54.0           | -4.2        | 2.04 V             | 16                   | 47.1             | 2.7                      |
| 3                                                    | *5190.00        | 102.3 PK                |                |             | 2.04 V             | 16                   | 99.7             | 2.6                      |
| 4                                                    | *5190.00        | 91.4 AV                 |                |             | 2.04 V             | 16                   | 88.8             | 2.6                      |
| 5                                                    | #10380.00       | 45.4 PK                 | 68.2           | -22.8       | 1.25 V             | 271                  | 33.1             | 12.3                     |
| 6                                                    | 15570.00        | 44.9 PK                 | 74.0           | -29.1       | 1.13 V             | 246                  | 33.1             | 11.8                     |
| 7                                                    | 15570.00        | 30.9 AV                 | 54.0           | -23.1       | 1.13 V             | 246                  | 19.1             | 11.8                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 46 : 5230 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 63.1 PK                 | 74.0           | -10.9       | 2.52 H             | 54                   | 60.4             | 2.7                      |
| 2                                                    | <b>5150.00</b>  | <b>49.9 AV</b>          | <b>54.0</b>    | <b>-4.1</b> | <b>2.52 H</b>      | <b>54</b>            | <b>47.2</b>      | <b>2.7</b>               |
| 3                                                    | *5230.00        | 105.6 PK                |                |             | 2.52 H             | 54                   | 103.2            | 2.4                      |
| 4                                                    | *5230.00        | 94.8 AV                 |                |             | 2.52 H             | 54                   | 92.4             | 2.4                      |
| 5                                                    | 5350.00         | 51.0 PK                 | 74.0           | -23.0       | 2.52 H             | 54                   | 48.7             | 2.3                      |
| 6                                                    | 5350.00         | 39.8 AV                 | 54.0           | -14.2       | 2.52 H             | 54                   | 37.5             | 2.3                      |
| 7                                                    | #10460.00       | 44.1 PK                 | 68.2           | -24.1       | 2.43 H             | 104                  | 31.7             | 12.4                     |
| 8                                                    | 15690.00        | 42.6 PK                 | 74.0           | -31.4       | 1.15 H             | 324                  | 30.2             | 12.4                     |
| 9                                                    | 15690.00        | 27.7 AV                 | 54.0           | -26.3       | 1.15 H             | 324                  | 15.3             | 12.4                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 62.8 PK                 | 74.0           | -11.2       | 1.93 V             | 331                  | 60.1             | 2.7                      |
| 2                                                    | 5150.00         | 49.2 AV                 | 54.0           | -4.8        | 1.93 V             | 331                  | 46.5             | 2.7                      |
| 3                                                    | *5230.00        | 105.1 PK                |                |             | 1.93 V             | 331                  | 102.7            | 2.4                      |
| 4                                                    | *5230.00        | 94.0 AV                 |                |             | 1.93 V             | 331                  | 91.6             | 2.4                      |
| 5                                                    | 5350.00         | 50.9 PK                 | 74.0           | -23.1       | 1.93 V             | 331                  | 48.6             | 2.3                      |
| 6                                                    | 5350.00         | 40.5 AV                 | 54.0           | -13.5       | 1.93 V             | 331                  | 38.2             | 2.3                      |
| 7                                                    | #10460.00       | 45.4 PK                 | 68.2           | -22.8       | 1.22 V             | 252                  | 33.0             | 12.4                     |
| 8                                                    | 15690.00        | 44.7 PK                 | 74.0           | -29.3       | 1.08 V             | 267                  | 32.3             | 12.4                     |
| 9                                                    | 15690.00        | 30.7 AV                 | 54.0           | -23.3       | 1.08 V             | 267                  | 18.3             | 12.4                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 54 : 5270 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5270.00        | 105.2 PK                |                |             | 1.68 H             | 186                  | 102.9            | 2.3                      |
| 2                                                    | *5270.00        | 94.5 AV                 |                |             | 1.68 H             | 186                  | 92.2             | 2.3                      |
| 3                                                    | 5350.00         | 62.9 PK                 | 74.0           | -11.1       | 1.68 H             | 186                  | 60.6             | 2.3                      |
| 4                                                    | 5350.00         | 49.6 AV                 | 54.0           | -4.4        | 1.68 H             | 186                  | 47.3             | 2.3                      |
| 5                                                    | #10540.00       | 43.9 PK                 | 68.2           | -24.3       | 2.54 H             | 124                  | 31.6             | 12.3                     |
| 6                                                    | 15810.00        | 42.6 PK                 | 74.0           | -31.4       | 1.13 H             | 312                  | 30.7             | 11.9                     |
| 7                                                    | 15810.00        | 27.9 AV                 | 54.0           | -26.1       | 1.13 H             | 312                  | 16.0             | 11.9                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5270.00        | 106.2 PK                |                |             | 2.23 V             | 319                  | 103.9            | 2.3                      |
| 2                                                    | *5270.00        | 95.6 AV                 |                |             | 2.23 V             | 319                  | 93.3             | 2.3                      |
| 3                                                    | 5350.00         | 60.7 PK                 | 74.0           | -13.3       | 2.23 V             | 319                  | 58.4             | 2.3                      |
| 4                                                    | 5350.00         | 49.3 AV                 | 54.0           | -4.7        | 2.23 V             | 319                  | 47.0             | 2.3                      |
| 5                                                    | #10540.00       | 46.1 PK                 | 68.2           | -22.1       | 1.21 V             | 273                  | 33.8             | 12.3                     |
| 6                                                    | 15810.00        | 45.2 PK                 | 74.0           | -28.8       | 1.18 V             | 246                  | 33.3             | 11.9                     |
| 7                                                    | 15810.00        | 30.8 AV                 | 54.0           | -23.2       | 1.18 V             | 246                  | 18.9             | 11.9                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 62 : 5310 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5310.00        | 102.2 PK                |                |             | 1.71 H             | 62                   | 99.9             | 2.3                      |
| 2                                                    | *5310.00        | 91.5 AV                 |                |             | 1.71 H             | 62                   | 89.2             | 2.3                      |
| 3                                                    | 5350.00         | 61.2 PK                 | 74.0           | -12.8       | 1.71 H             | 62                   | 58.9             | 2.3                      |
| 4                                                    | 5350.00         | 49.6 AV                 | 54.0           | -4.4        | 1.71 H             | 62                   | 47.3             | 2.3                      |
| 5                                                    | 10620.00        | 43.7 PK                 | 74.0           | -30.3       | 2.43 H             | 101                  | 31.4             | 12.3                     |
| 6                                                    | 10620.00        | 30.1 AV                 | 54.0           | -23.9       | 2.43 H             | 101                  | 17.8             | 12.3                     |
| 7                                                    | 15930.00        | 43.0 PK                 | 74.0           | -31.0       | 1.15 H             | 324                  | 31.0             | 12.0                     |
| 8                                                    | 15930.00        | 27.9 AV                 | 54.0           | -26.1       | 1.15 H             | 324                  | 15.9             | 12.0                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5310.00        | 102.5 PK                |                |             | 2.48 V             | 312                  | 100.2            | 2.3                      |
| 2                                                    | *5310.00        | 91.9 AV                 |                |             | 2.48 V             | 312                  | 89.6             | 2.3                      |
| 3                                                    | 5350.00         | 59.7 PK                 | 74.0           | -14.3       | 2.48 V             | 312                  | 57.4             | 2.3                      |
| 4                                                    | 5350.00         | 49.1 AV                 | 54.0           | -4.9        | 2.48 V             | 312                  | 46.8             | 2.3                      |
| 5                                                    | 10620.00        | 45.7 PK                 | 74.0           | -28.3       | 1.28 V             | 273                  | 33.4             | 12.3                     |
| 6                                                    | 10620.00        | 33.9 AV                 | 54.0           | -20.1       | 1.28 V             | 273                  | 21.6             | 12.3                     |
| 7                                                    | 15930.00        | 44.6 PK                 | 74.0           | -29.4       | 1.10 V             | 252                  | 32.6             | 12.0                     |
| 8                                                    | 15930.00        | 30.8 AV                 | 54.0           | -23.2       | 1.10 V             | 252                  | 18.8             | 12.0                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 102 : 5510 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 64.9 PK                 | 74.0           | -9.1        | 1.94 H             | 66                   | 62.5             | 2.4                      |
| 2                                                    | 5460.00         | 47.8 AV                 | 54.0           | -6.2        | 1.94 H             | 66                   | 45.4             | 2.4                      |
| 3                                                    | #5470.00        | 63.9 PK                 | 68.2           | -4.3        | 1.94 H             | 66                   | 61.5             | 2.4                      |
| 4                                                    | *5510.00        | 104.0 PK                |                |             | 1.94 H             | 66                   | 101.5            | 2.5                      |
| 5                                                    | *5510.00        | 93.3 AV                 |                |             | 1.94 H             | 66                   | 90.8             | 2.5                      |
| 6                                                    | 11020.00        | 43.9 PK                 | 74.0           | -30.1       | 2.54 H             | 120                  | 31.0             | 12.9                     |
| 7                                                    | 11020.00        | 30.4 AV                 | 54.0           | -23.6       | 2.54 H             | 120                  | 17.5             | 12.9                     |
| 8                                                    | #16530.00       | 42.4 PK                 | 68.2           | -25.8       | 1.17 H             | 318                  | 27.5             | 14.9                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 60.1 PK                 | 74.0           | -13.9       | 2.15 V             | 307                  | 57.7             | 2.4                      |
| 2                                                    | 5460.00         | 47.4 AV                 | 54.0           | -6.6        | 2.15 V             | 307                  | 45.0             | 2.4                      |
| 3                                                    | #5470.00        | 63.6 PK                 | 68.2           | -4.6        | 2.15 V             | 307                  | 61.2             | 2.4                      |
| 4                                                    | *5510.00        | 103.1 PK                |                |             | 2.15 V             | 307                  | 100.6            | 2.5                      |
| 5                                                    | *5510.00        | 92.5 AV                 |                |             | 2.15 V             | 307                  | 90.0             | 2.5                      |
| 6                                                    | 11020.00        | 45.8 PK                 | 74.0           | -28.2       | 1.18 V             | 274                  | 32.9             | 12.9                     |
| 7                                                    | 11020.00        | 33.8 AV                 | 54.0           | -20.2       | 1.18 V             | 274                  | 20.9             | 12.9                     |
| 8                                                    | #16530.00       | 44.7 PK                 | 68.2           | -23.5       | 1.11 V             | 239                  | 29.8             | 14.9                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 110 : 5550 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 61.0 PK                 | 74.0           | -13.0       | 1.60 H             | 46                   | 58.6             | 2.4                      |
| 2                                                    | 5460.00         | 49.2 AV                 | 54.0           | -4.8        | 1.60 H             | 46                   | 46.8             | 2.4                      |
| 3                                                    | #5470.00        | 63.7 PK                 | 68.2           | -4.5        | 1.60 H             | 46                   | 61.3             | 2.4                      |
| 4                                                    | *5550.00        | 106.8 PK                |                |             | 1.60 H             | 46                   | 104.3            | 2.5                      |
| 5                                                    | *5550.00        | 95.5 AV                 |                |             | 1.60 H             | 46                   | 93.0             | 2.5                      |
| 6                                                    | 11100.00        | 44.2 PK                 | 74.0           | -29.8       | 2.51 H             | 102                  | 31.2             | 13.0                     |
| 7                                                    | 11100.00        | 30.6 AV                 | 54.0           | -23.4       | 2.51 H             | 102                  | 17.6             | 13.0                     |
| 8                                                    | #16650.00       | 42.4 PK                 | 68.2           | -25.8       | 1.16 H             | 324                  | 26.6             | 15.8                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 62.8 PK                 | 74.0           | -11.2       | 1.96 V             | 314                  | 60.4             | 2.4                      |
| 2                                                    | 5460.00         | 48.1 AV                 | 54.0           | -5.9        | 1.96 V             | 314                  | 45.7             | 2.4                      |
| 3                                                    | #5470.00        | 63.5 PK                 | 68.2           | -4.7        | 1.96 V             | 314                  | 61.1             | 2.4                      |
| 4                                                    | *5550.00        | 106.3 PK                |                |             | 1.96 V             | 314                  | 103.8            | 2.5                      |
| 5                                                    | *5550.00        | 95.7 AV                 |                |             | 1.96 V             | 314                  | 93.2             | 2.5                      |
| 6                                                    | 11100.00        | 45.0 PK                 | 74.0           | -29.0       | 1.22 V             | 256                  | 32.0             | 13.0                     |
| 7                                                    | 11100.00        | 33.5 AV                 | 54.0           | -20.5       | 1.22 V             | 256                  | 20.5             | 13.0                     |
| 8                                                    | #16650.00       | 44.7 PK                 | 68.2           | -23.5       | 1.12 V             | 264                  | 28.9             | 15.8                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 134 : 5670 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5670.00        | 106.0 PK                |                |             | 1.59 H             | 204                  | 103.6            | 2.4                      |
| 2                                                    | *5670.00        | 96.0 AV                 |                |             | 1.59 H             | 204                  | 93.6             | 2.4                      |
| 3                                                    | #5725.00        | 64.0 PK                 | 68.2           | -4.2        | 1.59 H             | 204                  | 61.4             | 2.6                      |
| 4                                                    | 11340.00        | 44.2 PK                 | 74.0           | -29.8       | 2.43 H             | 123                  | 31.5             | 12.7                     |
| 5                                                    | 11340.00        | 30.6 AV                 | 54.0           | -23.4       | 2.43 H             | 123                  | 17.9             | 12.7                     |
| 6                                                    | #17010.00       | 42.4 PK                 | 68.2           | -25.8       | 1.14 H             | 331                  | 26.0             | 16.4                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5670.00        | 106.2 PK                |                |             | 2.10 V             | 303                  | 103.8            | 2.4                      |
| 2                                                    | *5670.00        | 96.5 AV                 |                |             | 2.10 V             | 303                  | 94.1             | 2.4                      |
| 3                                                    | #5725.00        | 63.9 PK                 | 68.2           | -4.3        | 2.10 V             | 303                  | 61.3             | 2.6                      |
| 4                                                    | 11340.00        | 45.5 PK                 | 74.0           | -28.5       | 1.29 V             | 257                  | 32.8             | 12.7                     |
| 5                                                    | 11340.00        | 33.8 AV                 | 54.0           | -20.2       | 1.29 V             | 257                  | 21.1             | 12.7                     |
| 6                                                    | #17010.00       | 45.0 PK                 | 68.2           | -23.2       | 1.16 V             | 246                  | 28.6             | 16.4                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 142 : 5710 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 50.9 PK                 | 74.0           | -23.1       | 2.23 H             | 321                  | 48.5             | 2.4                      |
| 2                                                    | 5460.00         | 39.0 AV                 | 54.0           | -15.0       | 2.23 H             | 321                  | 36.6             | 2.4                      |
| 3                                                    | #5470.00        | 51.4 PK                 | 68.2           | -16.8       | 2.23 H             | 321                  | 49.0             | 2.4                      |
| 4                                                    | *5710.00        | 104.7 PK                |                |             | 2.23 H             | 321                  | 102.1            | 2.6                      |
| 5                                                    | *5710.00        | 94.3 AV                 |                |             | 2.23 H             | 321                  | 91.7             | 2.6                      |
| 6                                                    | #5850.00        | 52.6 PK                 | 68.2           | -15.6       | 2.23 H             | 321                  | 49.6             | 3.0                      |
| 7                                                    | 11420.00        | 43.9 PK                 | 74.0           | -30.1       | 2.49 H             | 120                  | 31.0             | 12.9                     |
| 8                                                    | 11420.00        | 30.6 AV                 | 54.0           | -23.4       | 2.49 H             | 120                  | 17.7             | 12.9                     |
| 9                                                    | #17130.00       | 42.9 PK                 | 68.2           | -25.3       | 1.12 H             | 312                  | 25.8             | 17.1                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 51.1 PK                 | 74.0           | -22.9       | 2.52 V             | 326                  | 48.7             | 2.4                      |
| 2                                                    | 5460.00         | 40.0 AV                 | 54.0           | -14.0       | 2.52 V             | 326                  | 37.6             | 2.4                      |
| 3                                                    | #5470.00        | 51.5 PK                 | 68.2           | -16.7       | 2.52 V             | 326                  | 49.1             | 2.4                      |
| 4                                                    | *5710.00        | 105.9 PK                |                |             | 2.52 V             | 326                  | 103.3            | 2.6                      |
| 5                                                    | *5710.00        | 95.7 AV                 |                |             | 2.52 V             | 326                  | 93.1             | 2.6                      |
| 6                                                    | #5850.00        | 53.2 PK                 | 68.2           | -15.0       | 2.52 V             | 326                  | 50.2             | 3.0                      |
| 7                                                    | 11420.00        | 45.9 PK                 | 74.0           | -28.1       | 1.29 V             | 250                  | 33.0             | 12.9                     |
| 8                                                    | 11420.00        | 34.2 AV                 | 54.0           | -19.8       | 1.29 V             | 250                  | 21.3             | 12.9                     |
| 9                                                    | #17130.00       | 45.1 PK                 | 68.2           | -23.1       | 1.18 V             | 257                  | 28.0             | 17.1                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 151 : 5755 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5642.10        | 57.1 PK                 | 68.2           | -11.1       | 1.86 H             | 227                  | 54.7             | 2.4                      |
| 2                                                    | *5755.00        | 106.2 PK                |                |             | 1.86 H             | 227                  | 103.5            | 2.7                      |
| 3                                                    | *5755.00        | 95.3 AV                 |                |             | 1.86 H             | 227                  | 92.6             | 2.7                      |
| 4                                                    | #5961.30        | 50.9 PK                 | 68.2           | -17.3       | 1.86 H             | 227                  | 48.0             | 2.9                      |
| 5                                                    | 11510.00        | 44.2 PK                 | 74.0           | -29.8       | 2.51 H             | 101                  | 31.0             | 13.2                     |
| 6                                                    | 11510.00        | 30.8 AV                 | 54.0           | -23.2       | 2.51 H             | 101                  | 17.6             | 13.2                     |
| 7                                                    | #17265.00       | 42.2 PK                 | 68.2           | -26.0       | 1.11 H             | 331                  | 24.7             | 17.5                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5643.80        | 56.3 PK                 | 68.2           | -11.9       | 2.07 V             | 333                  | 53.9             | 2.4                      |
| 2                                                    | *5755.00        | 105.6 PK                |                |             | 2.07 V             | 333                  | 102.9            | 2.7                      |
| 3                                                    | *5755.00        | 94.8 AV                 |                |             | 2.07 V             | 333                  | 92.1             | 2.7                      |
| 4                                                    | #5960.70        | 51.9 PK                 | 68.2           | -16.3       | 2.07 V             | 333                  | 48.9             | 3.0                      |
| 5                                                    | 11510.00        | 45.7 PK                 | 74.0           | -28.3       | 1.27 V             | 254                  | 32.5             | 13.2                     |
| 6                                                    | 11510.00        | 34.2 AV                 | 54.0           | -19.8       | 1.27 V             | 254                  | 21.0             | 13.2                     |
| 7                                                    | #17265.00       | 44.8 PK                 | 68.2           | -23.4       | 1.16 V             | 264                  | 27.3             | 17.5                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* " : Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # " : The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT40) | <b>Channel</b>                           | CH 159 : 5795 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5645.80        | 50.8 PK                 | 68.2           | -17.4       | 1.76 H             | 270                  | 48.4             | 2.4                      |
| 2                                                    | *5795.00        | 106.8 PK                |                |             | 1.76 H             | 270                  | 103.8            | 3.0                      |
| 3                                                    | *5795.00        | 95.8 AV                 |                |             | 1.76 H             | 270                  | 92.8             | 3.0                      |
| 4                                                    | #5942.70        | 51.4 PK                 | 68.2           | -16.8       | 1.76 H             | 270                  | 48.3             | 3.1                      |
| 5                                                    | 11590.00        | 43.5 PK                 | 74.0           | -30.5       | 2.54 H             | 109                  | 30.4             | 13.1                     |
| 6                                                    | 11590.00        | 30.1 AV                 | 54.0           | -23.9       | 2.54 H             | 109                  | 17.0             | 13.1                     |
| 7                                                    | #17385.00       | 42.9 PK                 | 68.2           | -25.3       | 1.18 H             | 332                  | 24.5             | 18.4                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5647.20        | 51.0 PK                 | 68.2           | -17.2       | 2.22 V             | 339                  | 48.6             | 2.4                      |
| 2                                                    | *5795.00        | 105.5 PK                |                |             | 2.22 V             | 339                  | 102.5            | 3.0                      |
| 3                                                    | *5795.00        | 94.7 AV                 |                |             | 2.22 V             | 339                  | 91.7             | 3.0                      |
| 4                                                    | #5939.20        | 51.7 PK                 | 68.2           | -16.5       | 2.22 V             | 339                  | 48.6             | 3.1                      |
| 5                                                    | 11590.00        | 45.4 PK                 | 74.0           | -28.6       | 1.28 V             | 264                  | 32.3             | 13.1                     |
| 6                                                    | 11590.00        | 34.0 AV                 | 54.0           | -20.0       | 1.28 V             | 264                  | 20.9             | 13.1                     |
| 7                                                    | #17385.00       | 45.0 PK                 | 68.2           | -23.2       | 1.16 V             | 247                  | 26.6             | 18.4                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT80) | <b>Channel</b>                           | CH 42 : 5210 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 58.3 PK                 | 74.0           | -15.7       | 1.68 H             | 177                  | 55.6             | 2.7                      |
| 2                                                    | 5150.00         | 46.4 AV                 | 54.0           | -7.6        | 1.68 H             | 177                  | 43.7             | 2.7                      |
| 3                                                    | *5210.00        | 96.2 PK                 |                |             | 1.68 H             | 177                  | 93.7             | 2.5                      |
| 4                                                    | *5210.00        | 84.3 AV                 |                |             | 1.68 H             | 177                  | 81.8             | 2.5                      |
| 5                                                    | 5350.00         | 50.4 PK                 | 74.0           | -23.6       | 1.68 H             | 177                  | 48.1             | 2.3                      |
| 6                                                    | 5350.00         | 40.2 AV                 | 54.0           | -13.8       | 1.68 H             | 177                  | 37.9             | 2.3                      |
| 7                                                    | #10420.00       | 43.6 PK                 | 68.2           | -24.6       | 2.47 H             | 114                  | 31.2             | 12.4                     |
| 8                                                    | 15630.00        | 42.5 PK                 | 74.0           | -31.5       | 1.18 H             | 315                  | 30.5             | 12.0                     |
| 9                                                    | 15630.00        | 27.3 AV                 | 54.0           | -26.7       | 1.18 H             | 315                  | 15.3             | 12.0                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 61.8 PK                 | 74.0           | -12.2       | 2.20 V             | 43                   | 59.1             | 2.7                      |
| 2                                                    | 5150.00         | 49.5 AV                 | 54.0           | -4.5        | 2.20 V             | 43                   | 46.8             | 2.7                      |
| 3                                                    | *5210.00        | 97.8 PK                 |                |             | 2.20 V             | 43                   | 95.3             | 2.5                      |
| 4                                                    | *5210.00        | 85.6 AV                 |                |             | 2.20 V             | 43                   | 83.1             | 2.5                      |
| 5                                                    | 5350.00         | 51.6 PK                 | 74.0           | -22.4       | 2.20 V             | 43                   | 49.3             | 2.3                      |
| 6                                                    | 5350.00         | 39.9 AV                 | 54.0           | -14.1       | 2.20 V             | 43                   | 37.6             | 2.3                      |
| 7                                                    | #10420.00       | 45.0 PK                 | 68.2           | -23.2       | 1.27 V             | 264                  | 32.6             | 12.4                     |
| 8                                                    | 15630.00        | 45.5 PK                 | 74.0           | -28.5       | 1.11 V             | 254                  | 33.5             | 12.0                     |
| 9                                                    | 15630.00        | 31.1 AV                 | 54.0           | -22.9       | 1.11 V             | 254                  | 19.1             | 12.0                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT80) | <b>Channel</b>                           | CH 58 : 5290 MHz                                                     |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 53.3 PK                 | 74.0           | -20.7       | 2.55 H             | 56                   | 50.6             | 2.7                      |
| 2                                                    | 5150.00         | 42.2 AV                 | 54.0           | -11.8       | 2.55 H             | 56                   | 39.5             | 2.7                      |
| 3                                                    | *5290.00        | 98.3 PK                 |                |             | 2.55 H             | 56                   | 96.0             | 2.3                      |
| 4                                                    | *5290.00        | 86.3 AV                 |                |             | 2.55 H             | 56                   | 84.0             | 2.3                      |
| 5                                                    | 5350.00         | 62.0 PK                 | 74.0           | -12.0       | 2.55 H             | 56                   | 59.7             | 2.3                      |
| 6                                                    | 5350.00         | 48.7 AV                 | 54.0           | -5.3        | 2.55 H             | 56                   | 46.4             | 2.3                      |
| 7                                                    | #10580.00       | 44.5 PK                 | 68.2           | -23.7       | 2.43 H             | 109                  | 32.1             | 12.4                     |
| 8                                                    | 15870.00        | 42.2 PK                 | 74.0           | -31.8       | 1.11 H             | 320                  | 30.1             | 12.1                     |
| 9                                                    | 15870.00        | 27.4 AV                 | 54.0           | -26.6       | 1.11 H             | 320                  | 15.3             | 12.1                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 55.3 PK                 | 74.0           | -18.7       | 1.67 V             | 320                  | 52.6             | 2.7                      |
| 2                                                    | 5150.00         | 43.2 AV                 | 54.0           | -10.8       | 1.67 V             | 320                  | 40.5             | 2.7                      |
| 3                                                    | *5290.00        | 99.3 PK                 |                |             | 1.67 V             | 320                  | 97.0             | 2.3                      |
| 4                                                    | *5290.00        | 86.9 AV                 |                |             | 1.67 V             | 320                  | 84.6             | 2.3                      |
| 5                                                    | 5350.00         | 63.9 PK                 | 74.0           | -10.1       | 1.67 V             | 320                  | 61.6             | 2.3                      |
| 6                                                    | 5350.00         | 49.0 AV                 | 54.0           | -5.0        | 1.67 V             | 320                  | 46.7             | 2.3                      |
| 7                                                    | #10580.00       | 45.6 PK                 | 68.2           | -22.6       | 1.23 V             | 250                  | 33.2             | 12.4                     |
| 8                                                    | 15870.00        | 44.4 PK                 | 74.0           | -29.6       | 1.17 V             | 267                  | 32.3             | 12.1                     |
| 9                                                    | 15870.00        | 30.4 AV                 | 54.0           | -23.6       | 1.17 V             | 267                  | 18.3             | 12.1                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT80) | <b>Channel</b>                           | CH 106 : 5530 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 63.5 PK                 | 74.0           | -10.5       | 1.85 H             | 60                   | 61.1             | 2.4                      |
| 2                                                    | 5460.00         | 49.0 AV                 | 54.0           | -5.0        | 1.85 H             | 60                   | 46.6             | 2.4                      |
| 3                                                    | #5470.00        | 63.4 PK                 | 68.2           | -4.8        | 1.85 H             | 60                   | 61.0             | 2.4                      |
| 4                                                    | *5530.00        | 98.7 PK                 |                |             | 1.85 H             | 60                   | 96.2             | 2.5                      |
| 5                                                    | *5530.00        | 85.8 AV                 |                |             | 1.85 H             | 60                   | 83.3             | 2.5                      |
| 6                                                    | #5725.00        | 49.0 PK                 | 68.2           | -19.2       | 1.85 H             | 60                   | 46.4             | 2.6                      |
| 7                                                    | 11060.00        | 44.5 PK                 | 74.0           | -29.5       | 2.50 H             | 105                  | 31.5             | 13.0                     |
| 8                                                    | 11060.00        | 30.9 AV                 | 54.0           | -23.1       | 2.50 H             | 105                  | 17.9             | 13.0                     |
| 9                                                    | #16590.00       | 42.4 PK                 | 68.2           | -25.8       | 1.10 H             | 311                  | 26.5             | 15.9                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 61.9 PK                 | 74.0           | -12.1       | 2.12 V             | 304                  | 59.5             | 2.4                      |
| 2                                                    | 5460.00         | 49.2 AV                 | 54.0           | -4.8        | 2.12 V             | 304                  | 46.8             | 2.4                      |
| 3                                                    | #5470.00        | 63.6 PK                 | 68.2           | -4.6        | 2.12 V             | 304                  | 61.2             | 2.4                      |
| 4                                                    | *5530.00        | 97.8 PK                 |                |             | 2.12 V             | 304                  | 95.3             | 2.5                      |
| 5                                                    | *5530.00        | 85.5 AV                 |                |             | 2.12 V             | 304                  | 83.0             | 2.5                      |
| 6                                                    | #5725.00        | 52.6 PK                 | 68.2           | -15.6       | 2.12 V             | 304                  | 50.0             | 2.6                      |
| 7                                                    | 11060.00        | 45.5 PK                 | 74.0           | -28.5       | 1.27 V             | 259                  | 32.5             | 13.0                     |
| 8                                                    | 11060.00        | 33.7 AV                 | 54.0           | -20.3       | 1.27 V             | 259                  | 20.7             | 13.0                     |
| 9                                                    | #16590.00       | 44.8 PK                 | 68.2           | -23.4       | 1.18 V             | 237                  | 28.9             | 15.9                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT80) | <b>Channel</b>                           | CH 138 : 5690 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 53.6 PK                 | 74.0           | -20.4       | 2.52 H             | 360                  | 51.2             | 2.4                      |
| 2                                                    | 5460.00         | 43.8 AV                 | 54.0           | -10.2       | 2.52 H             | 360                  | 41.4             | 2.4                      |
| 3                                                    | #5470.00        | 54.7 PK                 | 68.2           | -13.5       | 2.52 H             | 360                  | 52.3             | 2.4                      |
| 4                                                    | *5690.00        | 103.7 PK                |                |             | 2.52 H             | 360                  | 101.3            | 2.4                      |
| 5                                                    | *5690.00        | 92.0 AV                 |                |             | 2.52 H             | 360                  | 89.6             | 2.4                      |
| 6                                                    | #5850.00        | 55.1 PK                 | 68.2           | -13.1       | 2.52 H             | 360                  | 52.1             | 3.0                      |
| 7                                                    | 11380.00        | 43.8 PK                 | 74.0           | -30.2       | 2.45 H             | 108                  | 31.0             | 12.8                     |
| 8                                                    | 11380.00        | 30.7 AV                 | 54.0           | -23.3       | 2.45 H             | 108                  | 17.9             | 12.8                     |
| 9                                                    | #17070.00       | 42.1 PK                 | 68.2           | -26.1       | 1.16 H             | 331                  | 25.1             | 17.0                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 54.2 PK                 | 74.0           | -19.8       | 3.86 V             | 322                  | 51.8             | 2.4                      |
| 2                                                    | 5460.00         | 45.6 AV                 | 54.0           | -8.4        | 3.86 V             | 322                  | 43.2             | 2.4                      |
| 3                                                    | #5470.00        | 56.3 PK                 | 68.2           | -11.9       | 3.86 V             | 322                  | 53.9             | 2.4                      |
| 4                                                    | *5690.00        | 104.2 PK                |                |             | 3.86 V             | 322                  | 101.8            | 2.4                      |
| 5                                                    | *5690.00        | 93.0 AV                 |                |             | 3.86 V             | 322                  | 90.6             | 2.4                      |
| 6                                                    | #5850.00        | 56.7 PK                 | 68.2           | -11.5       | 3.86 V             | 322                  | 53.7             | 3.0                      |
| 7                                                    | 11380.00        | 45.4 PK                 | 74.0           | -28.6       | 1.25 V             | 255                  | 32.6             | 12.8                     |
| 8                                                    | 11380.00        | 33.5 AV                 | 54.0           | -20.5       | 1.25 V             | 255                  | 20.7             | 12.8                     |
| 9                                                    | #17070.00       | 44.1 PK                 | 68.2           | -24.1       | 1.14 V             | 247                  | 27.1             | 17.0                     |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

|                             |                  |                                          |                                                                      |
|-----------------------------|------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>RF Mode</b>              | 802.11ac (VHT80) | <b>Channel</b>                           | CH 155 : 5775 MHz                                                    |
| <b>Frequency Range</b>      | 1 GHz ~ 40 GHz   | <b>Detector Function &amp; Bandwidth</b> | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
| <b>Input Power (System)</b> | 120 Vac, 60 Hz   | <b>Environmental Conditions</b>          | 22 °C, 66% RH                                                        |
| <b>Tested By</b>            | Roy Mai          |                                          |                                                                      |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5647.20        | 60.1 PK                 | 68.2           | -8.1        | 1.92 H             | 226                  | 57.7             | 2.4                      |
| 2                                                    | *5775.00        | 101.2 PK                |                |             | 1.92 H             | 226                  | 98.4             | 2.8                      |
| 3                                                    | *5775.00        | 89.2 AV                 |                |             | 1.92 H             | 226                  | 86.4             | 2.8                      |
| 4                                                    | #5934.90        | 54.7 PK                 | 68.2           | -13.5       | 1.92 H             | 226                  | 51.6             | 3.1                      |
| 5                                                    | 11550.00        | 43.5 PK                 | 74.0           | -30.5       | 2.48 H             | 107                  | 30.4             | 13.1                     |
| 6                                                    | 11550.00        | 30.4 AV                 | 54.0           | -23.6       | 2.48 H             | 107                  | 17.3             | 13.1                     |
| 7                                                    | #17325.00       | 42.6 PK                 | 68.2           | -25.6       | 1.16 H             | 310                  | 24.7             | 17.9                     |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5647.60        | 63.9 PK                 | 68.2           | -4.3        | 2.07 V             | 337                  | 61.5             | 2.4                      |
| 2                                                    | *5775.00        | 102.5 PK                |                |             | 2.07 V             | 337                  | 99.7             | 2.8                      |
| 3                                                    | *5775.00        | 91.8 AV                 |                |             | 2.07 V             | 337                  | 89.0             | 2.8                      |
| 4                                                    | #5930.50        | 57.2 PK                 | 68.2           | -11.0       | 2.07 V             | 337                  | 54.1             | 3.1                      |
| 5                                                    | 11550.00        | 46.0 PK                 | 74.0           | -28.0       | 1.24 V             | 244                  | 32.9             | 13.1                     |
| 6                                                    | 11550.00        | 34.2 AV                 | 54.0           | -19.8       | 1.24 V             | 244                  | 21.1             | 13.1                     |
| 7                                                    | #17325.00       | 44.5 PK                 | 68.2           | -23.7       | 1.16 V             | 265                  | 26.6             | 17.9                     |

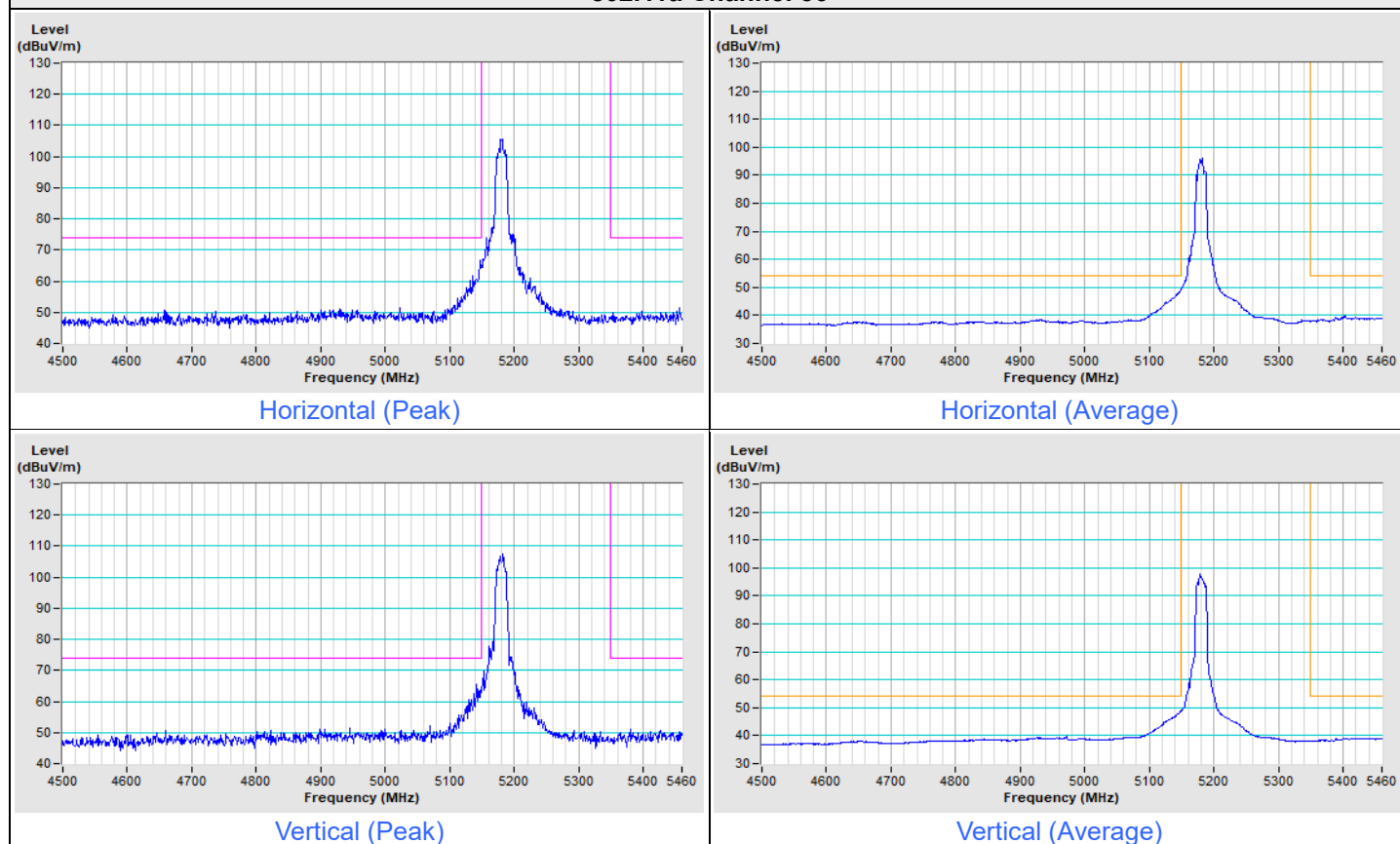
**Remarks:**

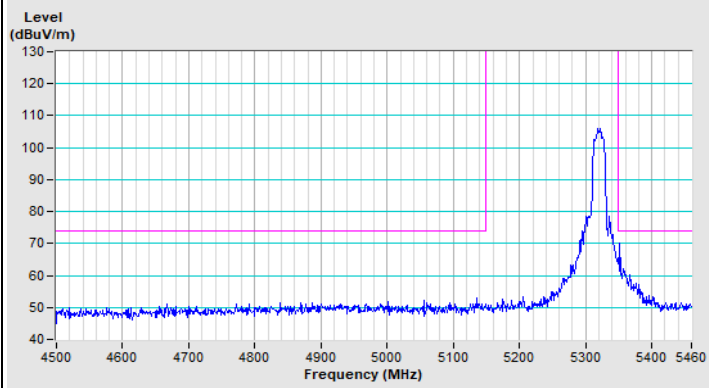
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* " : Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # " : The radiated frequency is out of the restricted band.

## Plot of Band Edge

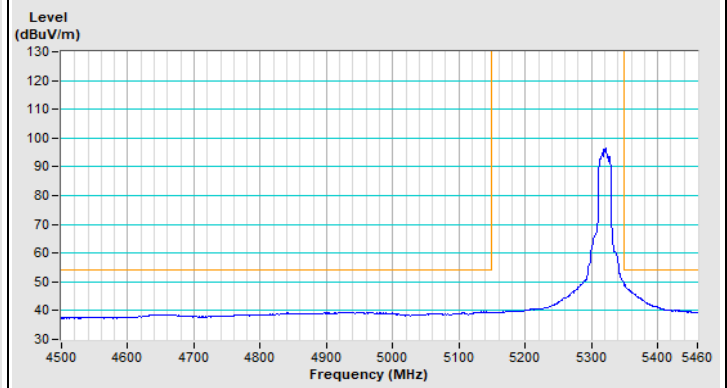
|                 |                    |                               |                                                                      |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 4.5 GHz ~ 5.46 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|

### 802.11a Channel 36

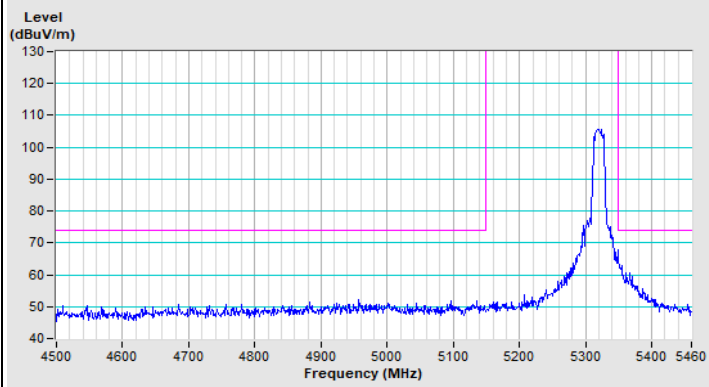


**802.11a Channel 64**

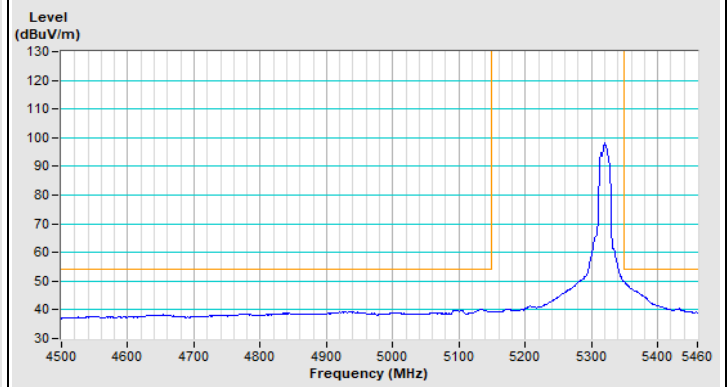
Horizontal (Peak)



Horizontal (Average)



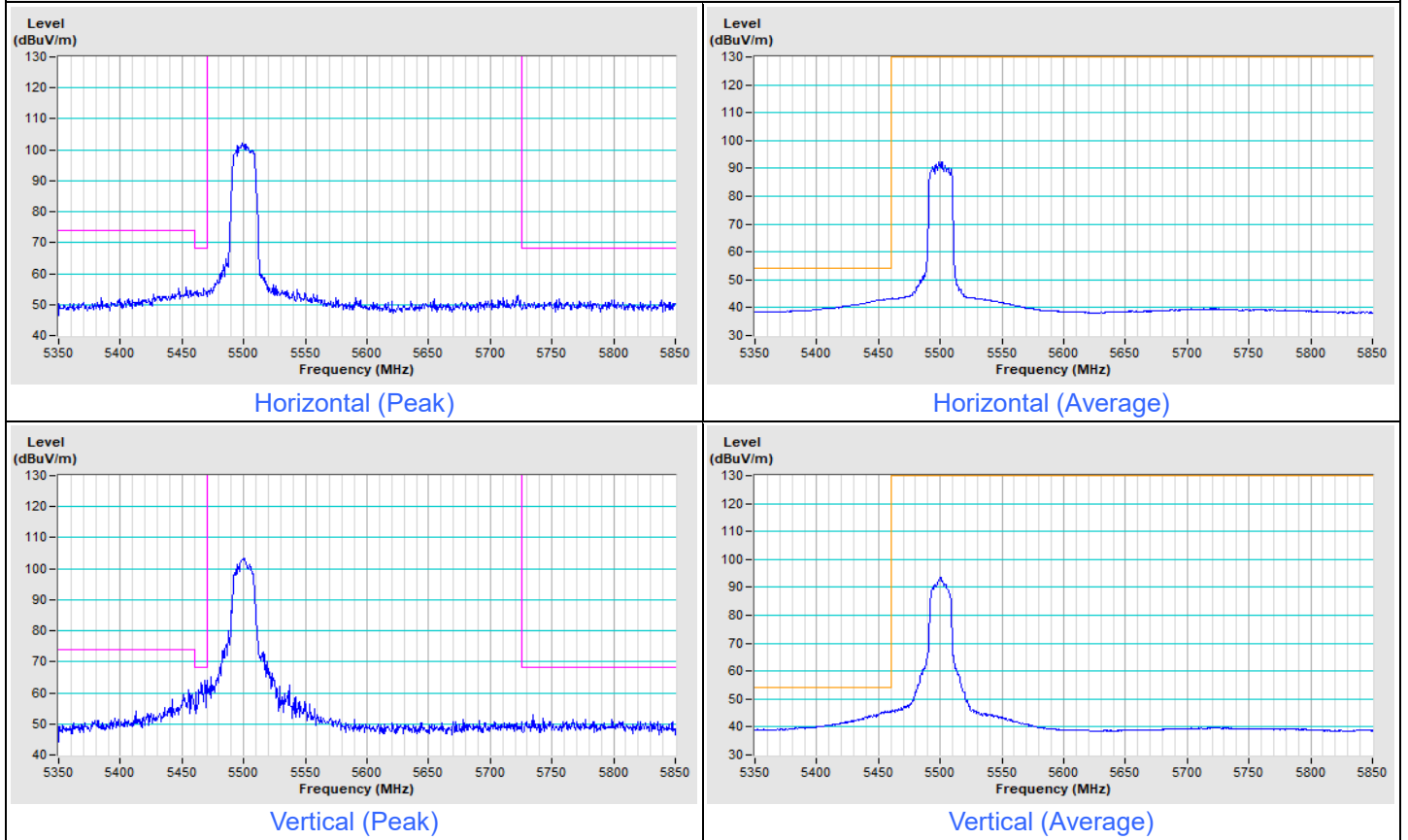
Vertical (Peak)



Vertical (Average)

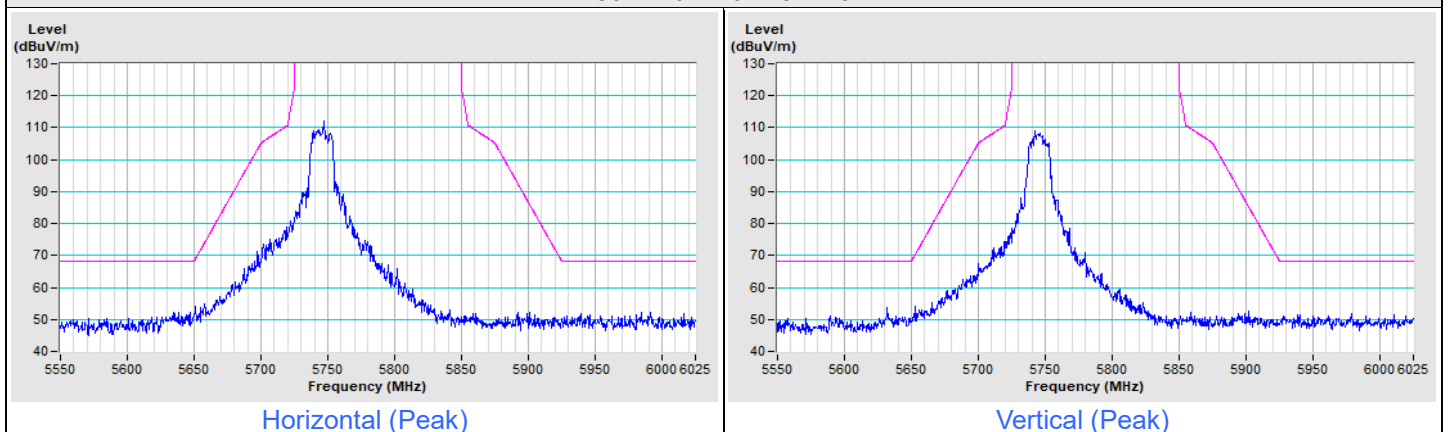
|                 |                     |                               |                                                                      |
|-----------------|---------------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 5.35 GHz ~ 5.85 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|---------------------|-------------------------------|----------------------------------------------------------------------|

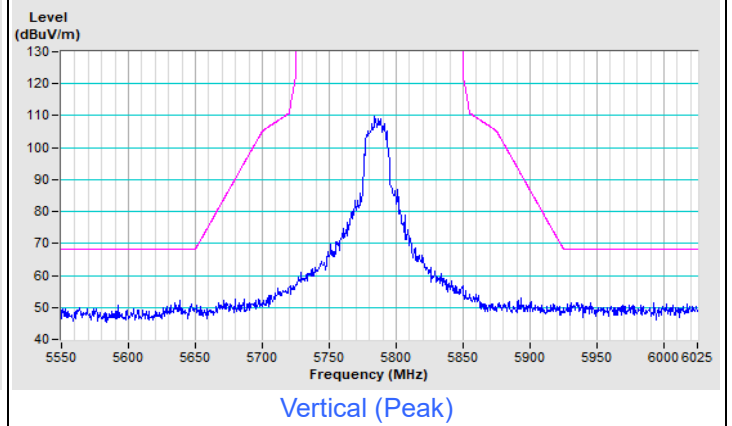
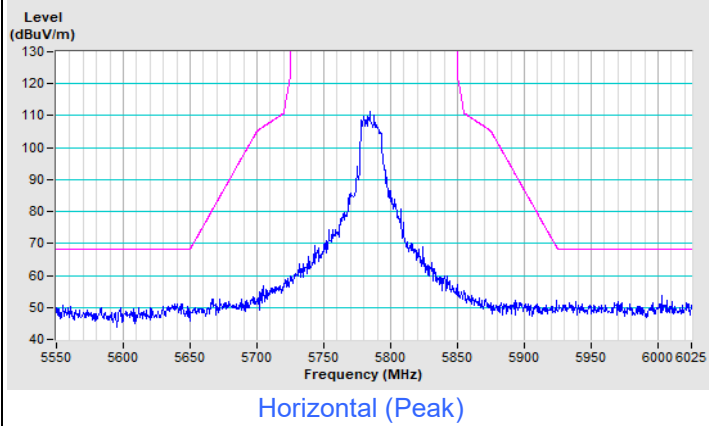
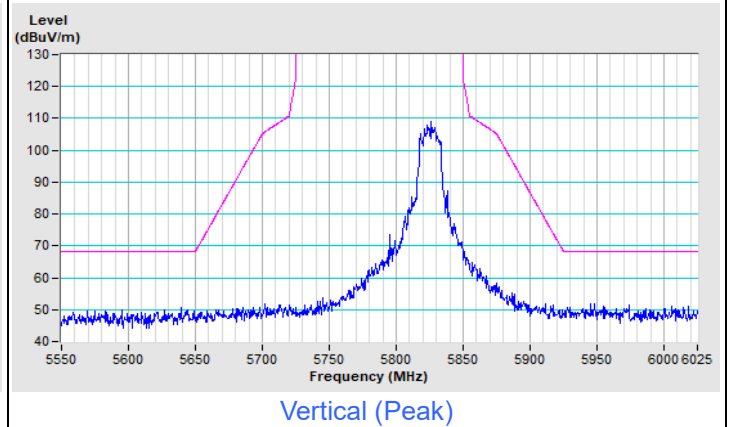
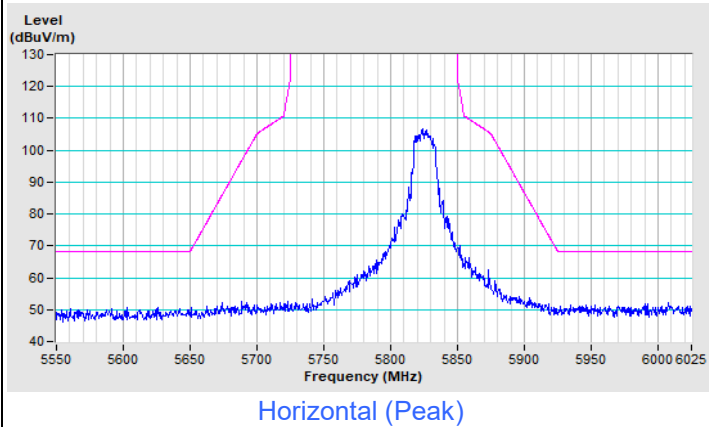
### 802.11a Channel 100



|                 |                      |                               |                                  |
|-----------------|----------------------|-------------------------------|----------------------------------|
| Frequency Range | 5.55 GHz ~ 6.025 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak |
|-----------------|----------------------|-------------------------------|----------------------------------|

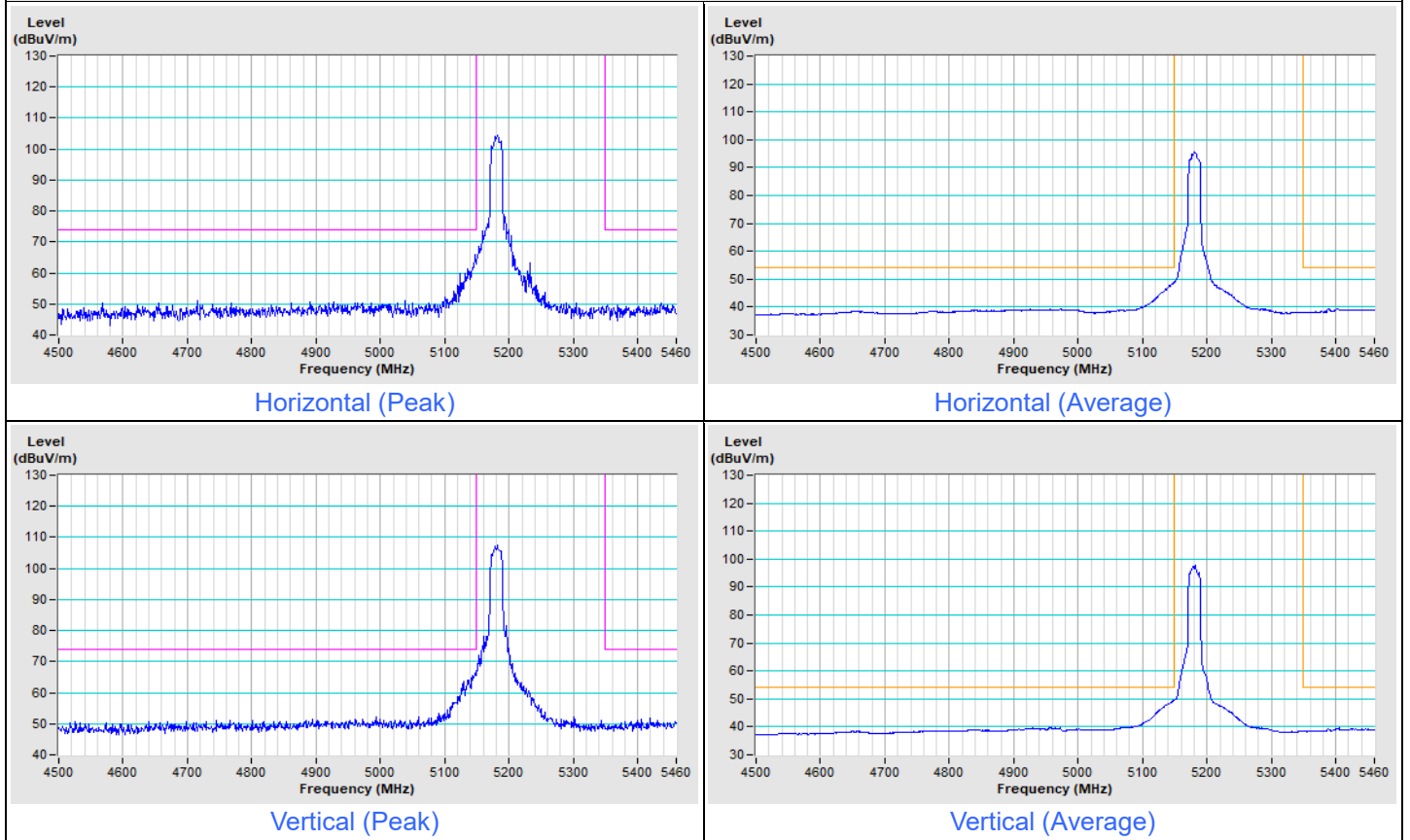
### 802.11a Channel 149



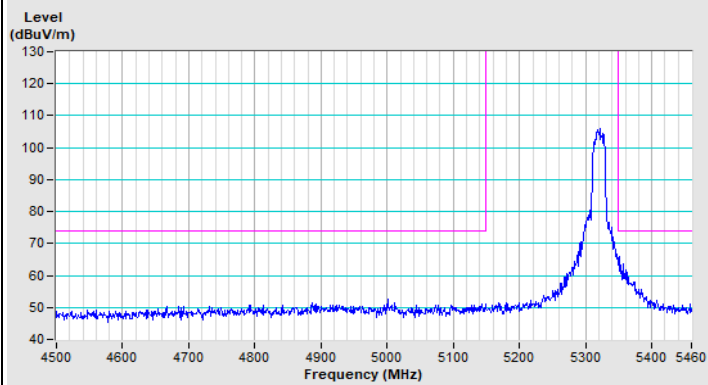
**802.11a Channel 157****802.11a Channel 165**

|                 |                    |                               |                                                                      |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 4.5 GHz ~ 5.46 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|

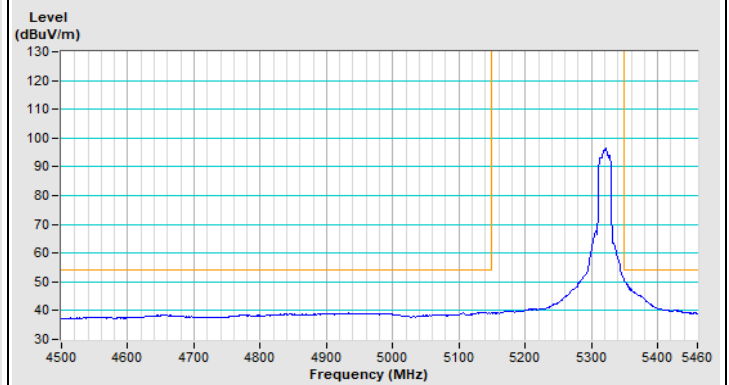
### 802.11ac (VHT20) Channel 36



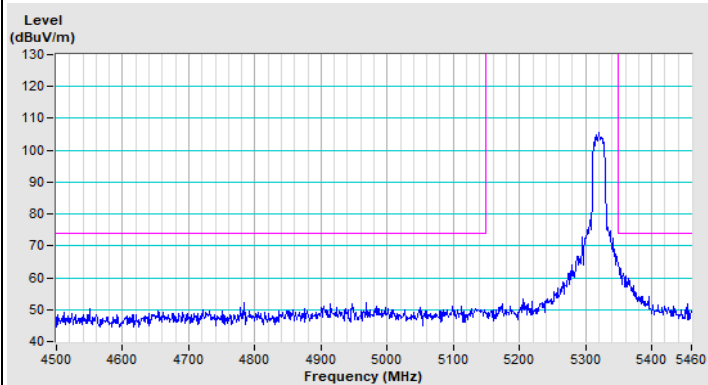
## 802.11ac (VHT20) Channel 64



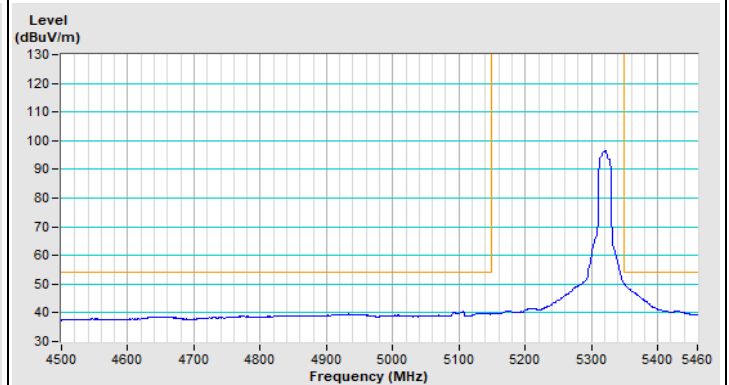
Horizontal (Peak)



Horizontal (Average)



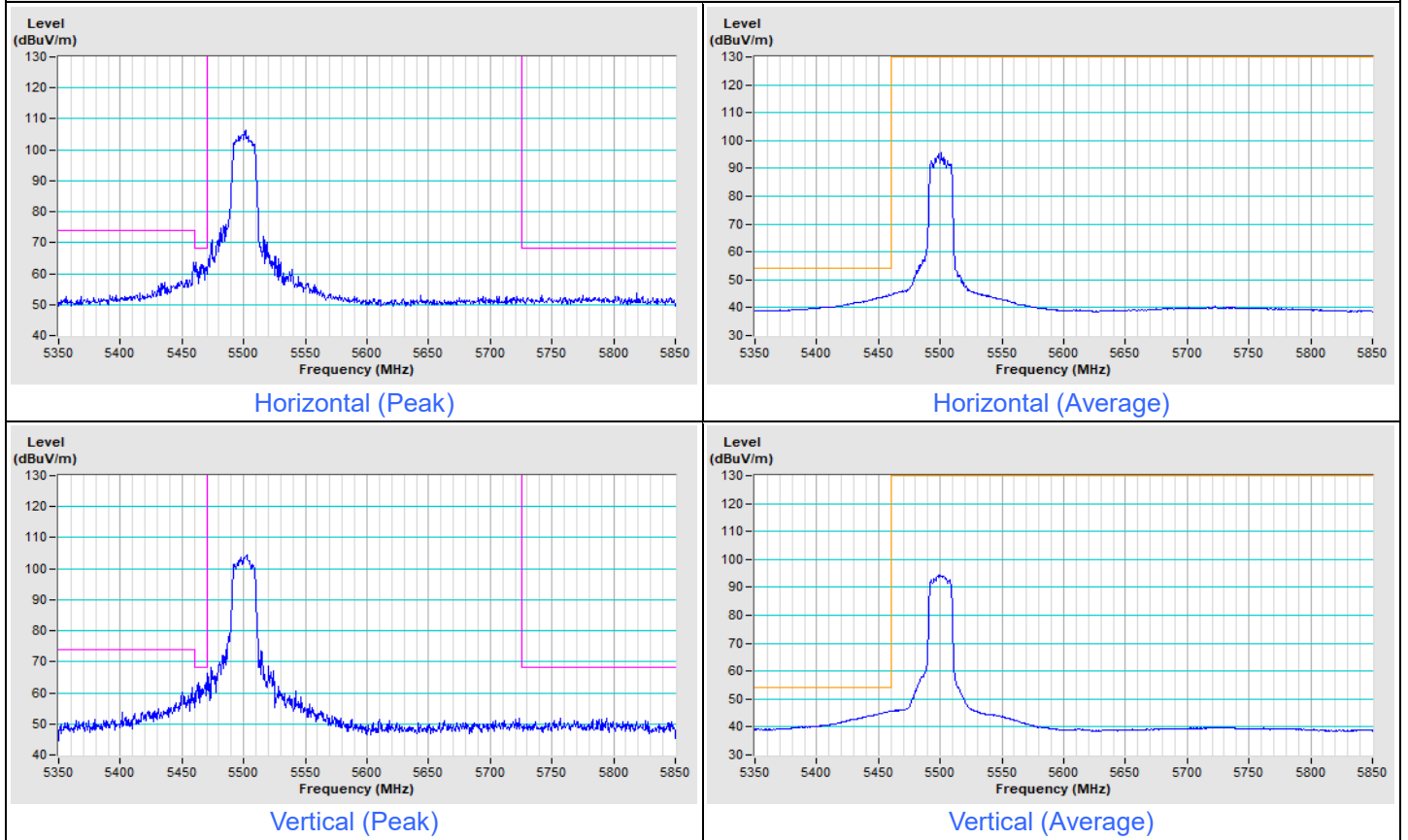
Vertical (Peak)



Vertical (Average)

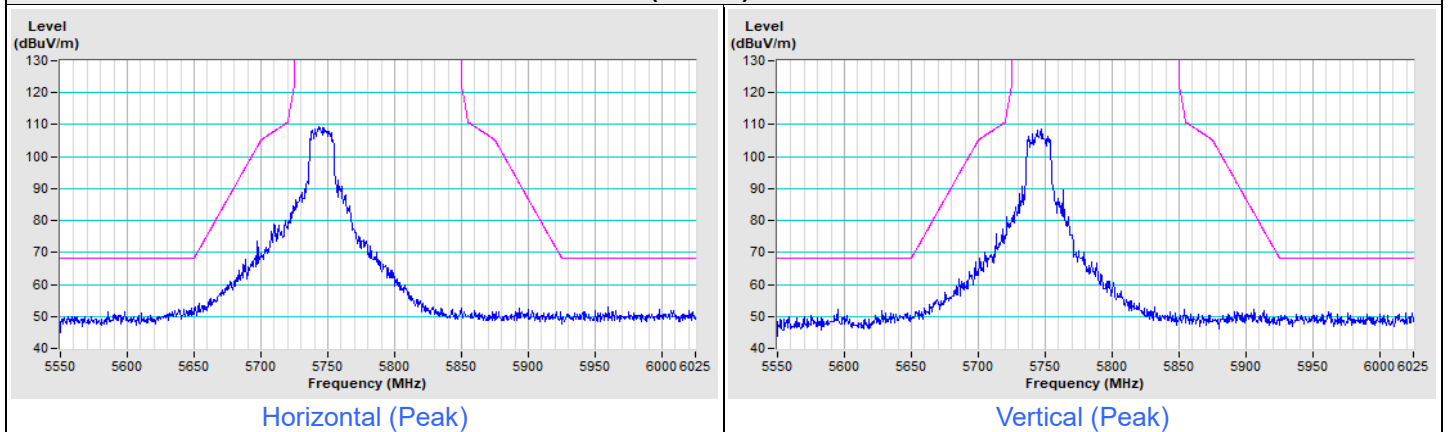
|                 |                     |                               |                                                                      |
|-----------------|---------------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 5.35 GHz ~ 5.85 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|---------------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT20) Channel 100

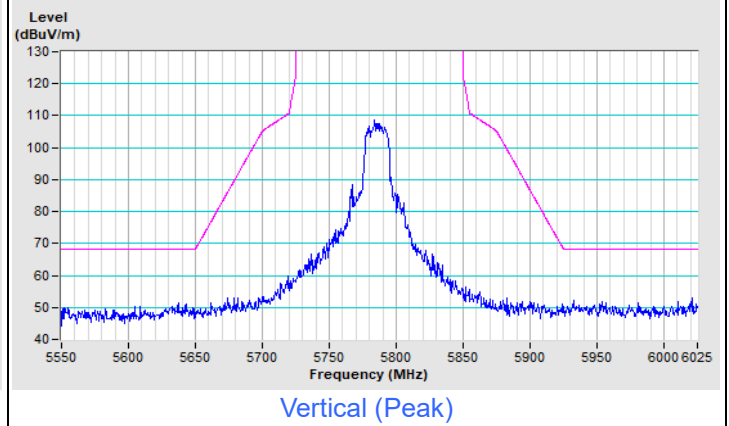
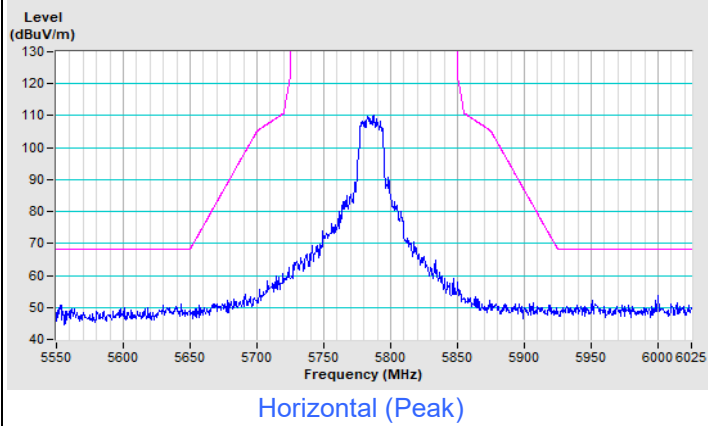


|                 |                      |                               |                                  |
|-----------------|----------------------|-------------------------------|----------------------------------|
| Frequency Range | 5.55 GHz ~ 6.025 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak |
|-----------------|----------------------|-------------------------------|----------------------------------|

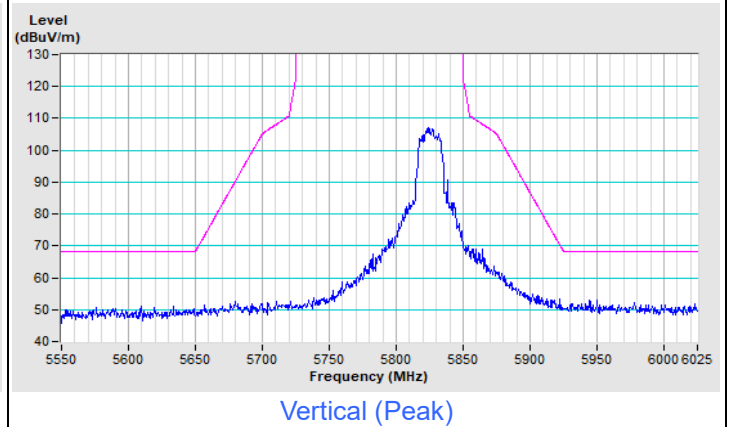
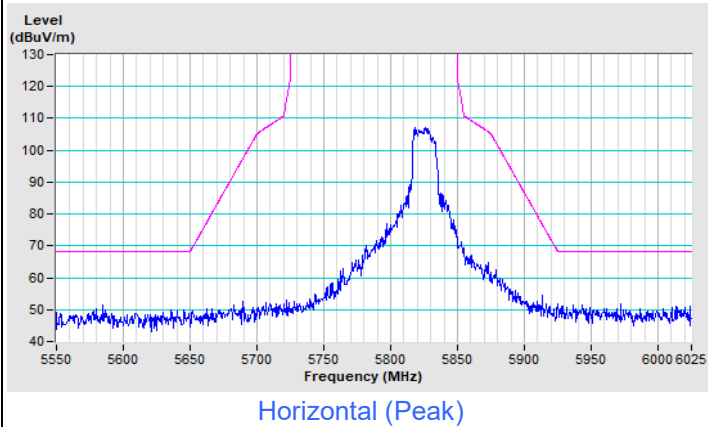
### 802.11ac (VHT20) Channel 149



### 802.11ac (VHT20) Channel 157

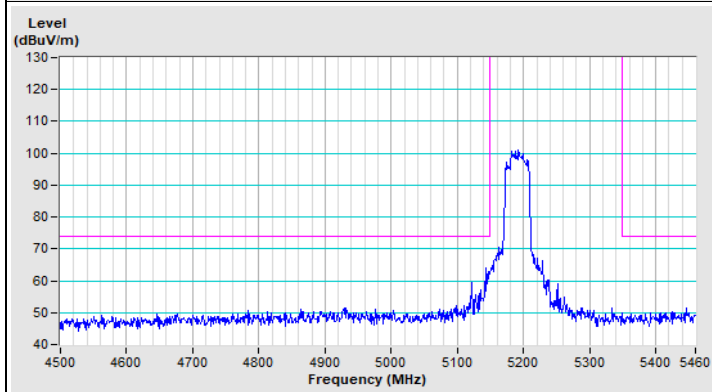


### 802.11ac (VHT20) Channel 165

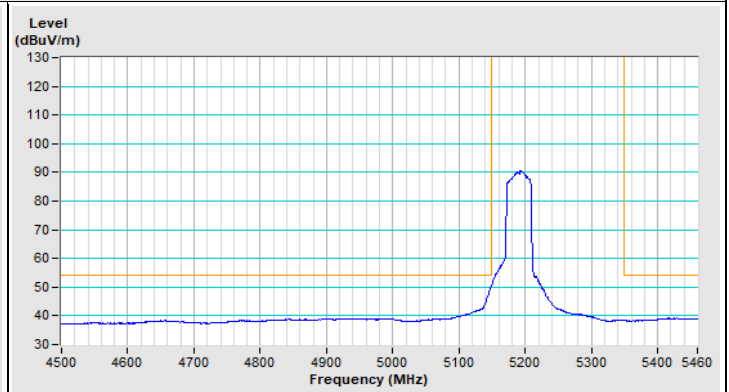


|                 |                    |                               |                                                                      |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 4.5 GHz ~ 5.46 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|

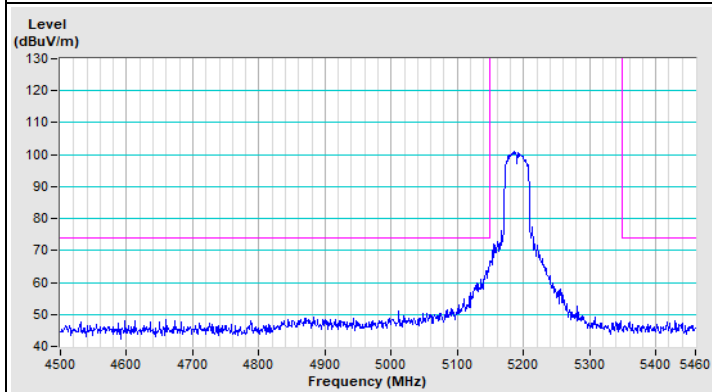
### 802.11ac (VHT40) Channel 38



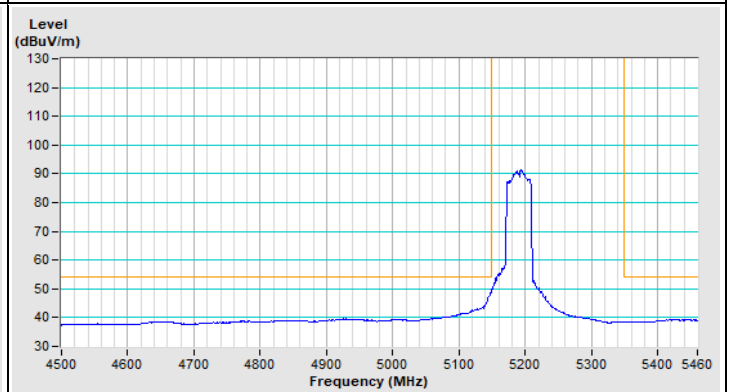
Horizontal (Peak)



Horizontal (Average)

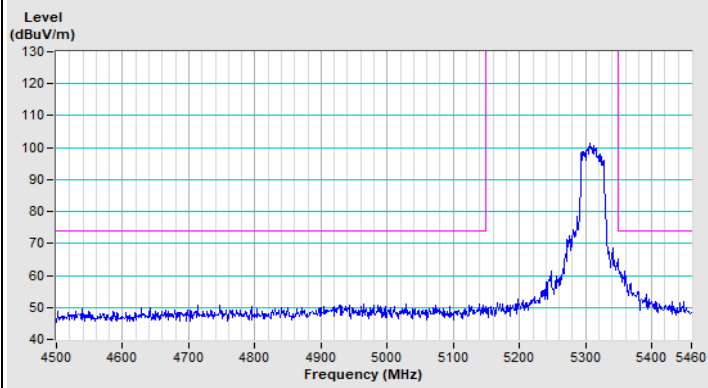


Vertical (Peak)

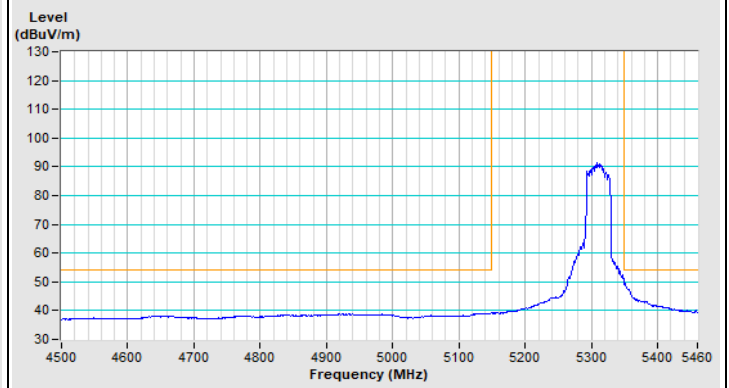


Vertical (Average)

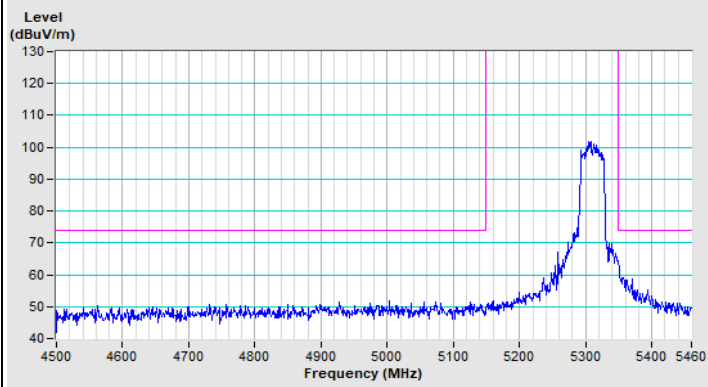
## 802.11ac (VHT40) Channel 62



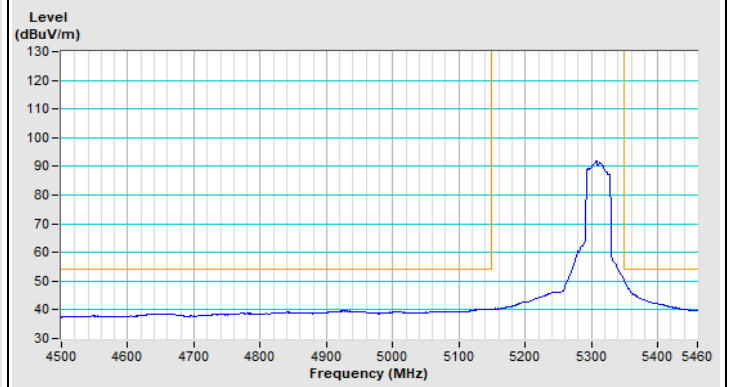
Horizontal (Peak)



Horizontal (Average)



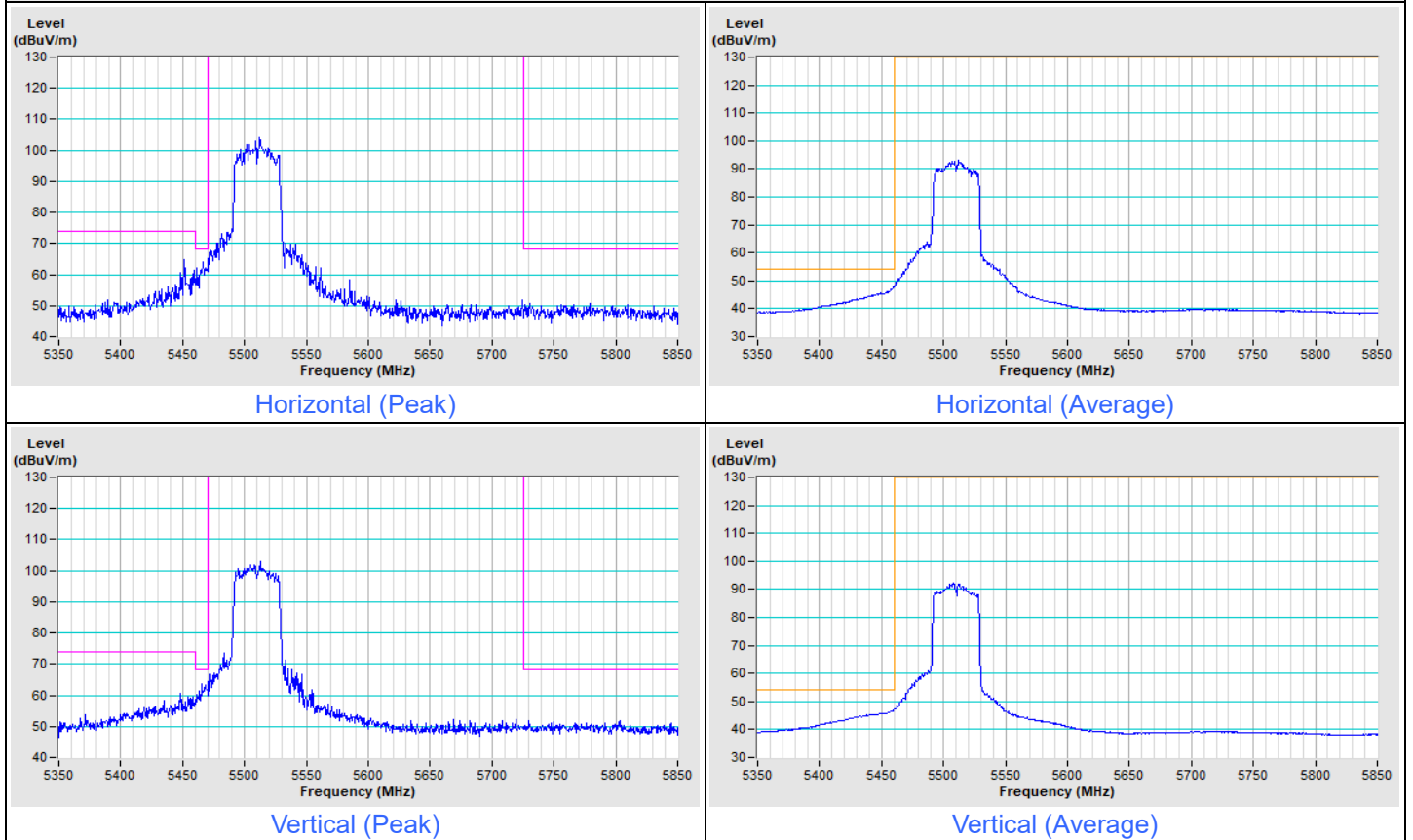
Vertical (Peak)



Vertical (Average)

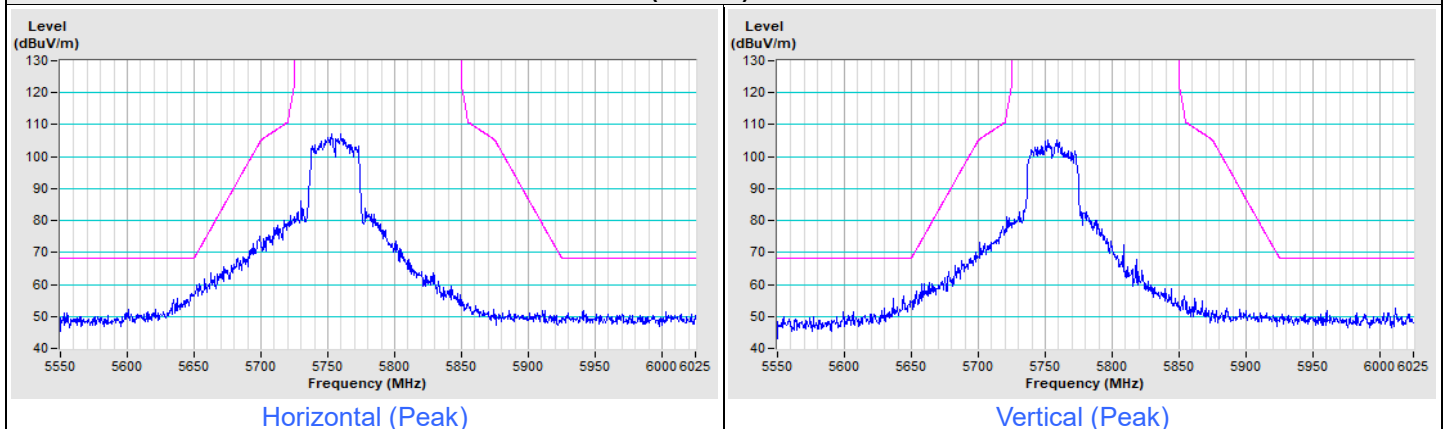
|                 |                     |                               |                                                                      |
|-----------------|---------------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 5.35 GHz ~ 5.85 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|---------------------|-------------------------------|----------------------------------------------------------------------|

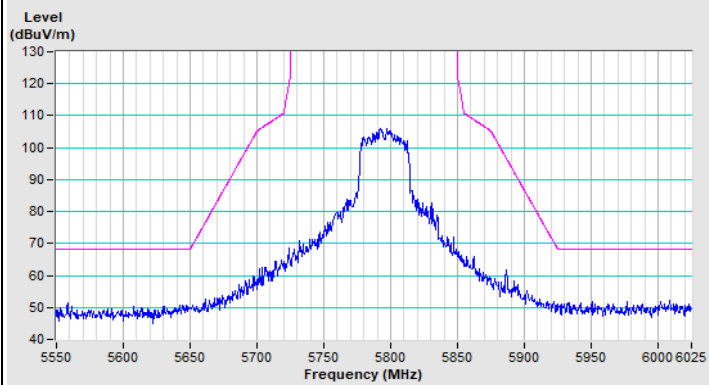
### 802.11ac (VHT40) Channel 102



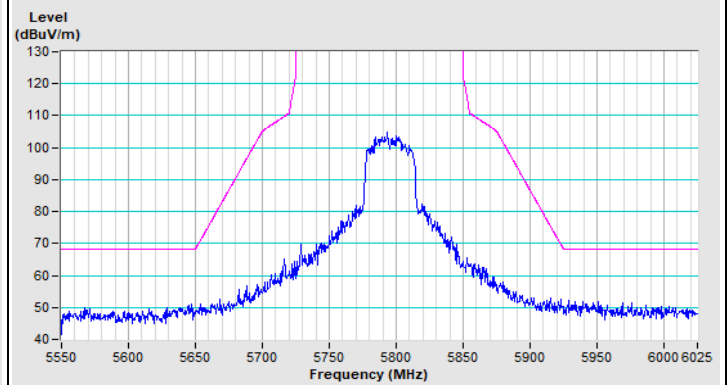
|                 |                      |                               |                                  |
|-----------------|----------------------|-------------------------------|----------------------------------|
| Frequency Range | 5.55 GHz ~ 6.025 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak |
|-----------------|----------------------|-------------------------------|----------------------------------|

### 802.11ac (VHT40) Channel 151



**802.11ac (VHT40) Channel 159**

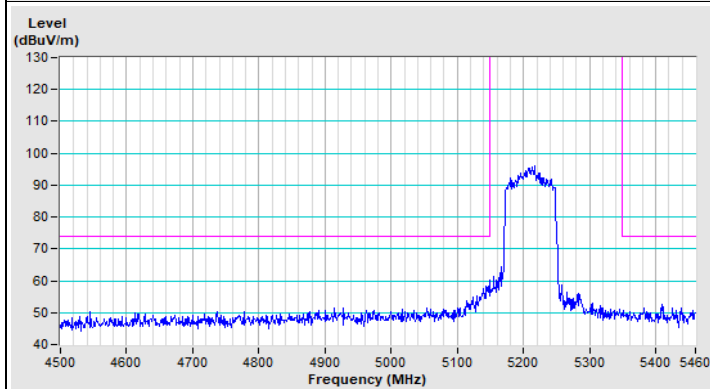
Horizontal (Peak)



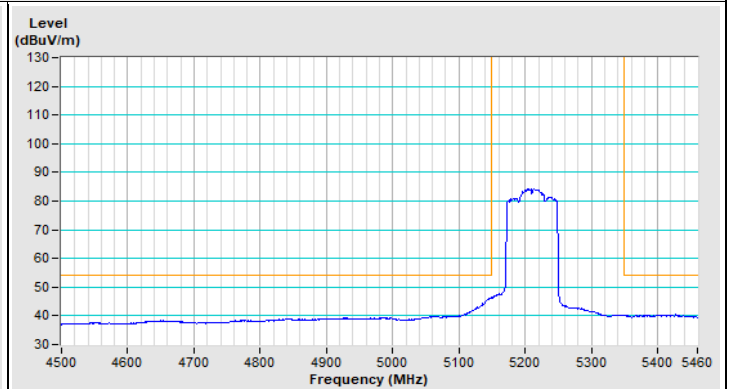
Vertical (Peak)

|                 |                    |                               |                                                                      |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 4.5 GHz ~ 5.46 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|

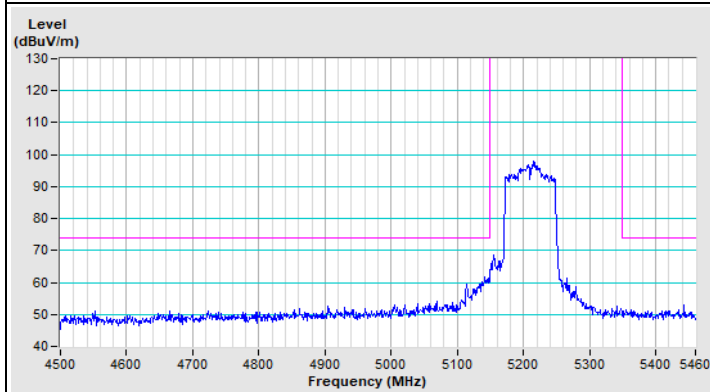
### 802.11ac (VHT80) Channel 42



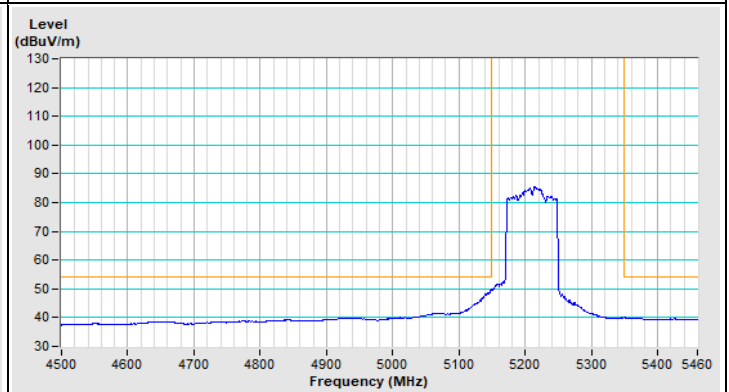
Horizontal (Peak)



Horizontal (Average)

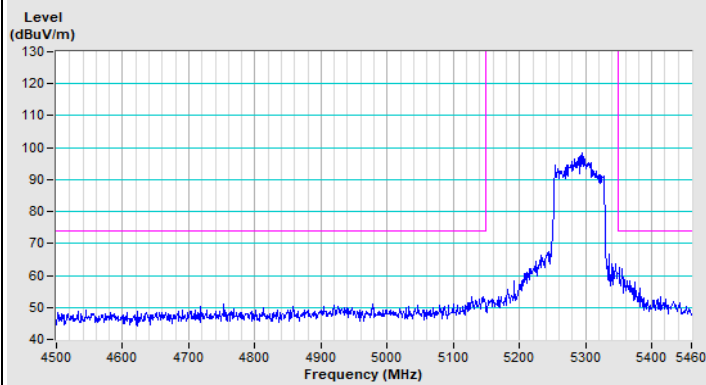


Vertical (Peak)

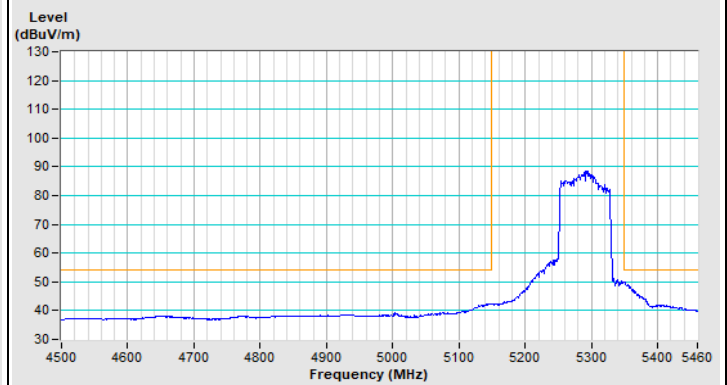


Vertical (Average)

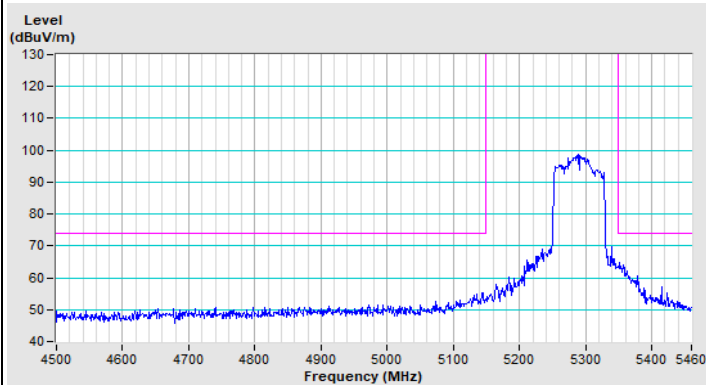
### 802.11ac (VHT80) Channel 58



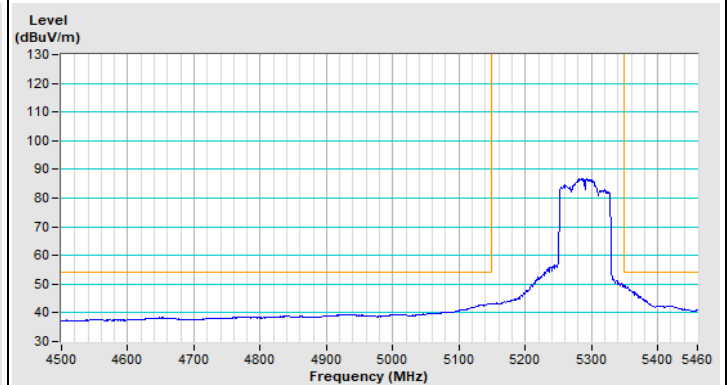
Horizontal (Peak)



Horizontal (Average)



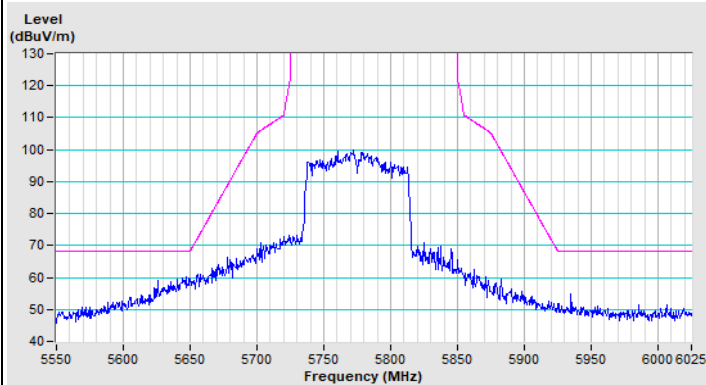
Vertical (Peak)



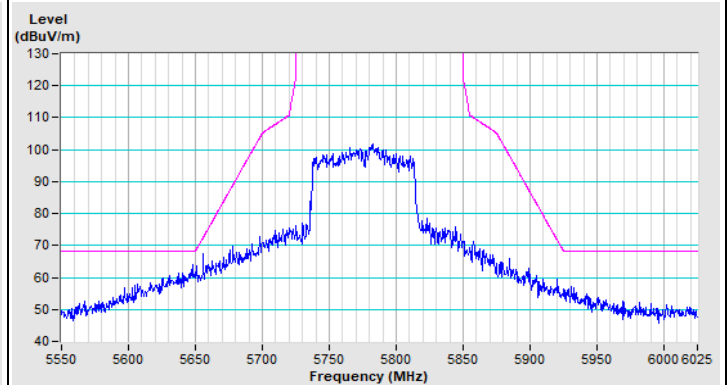
Vertical (Average)

|                 |                      |                               |                                  |
|-----------------|----------------------|-------------------------------|----------------------------------|
| Frequency Range | 5.55 GHz ~ 6.025 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak |
|-----------------|----------------------|-------------------------------|----------------------------------|

### 802.11ac (VHT80) Channel 155



Horizontal (Peak)

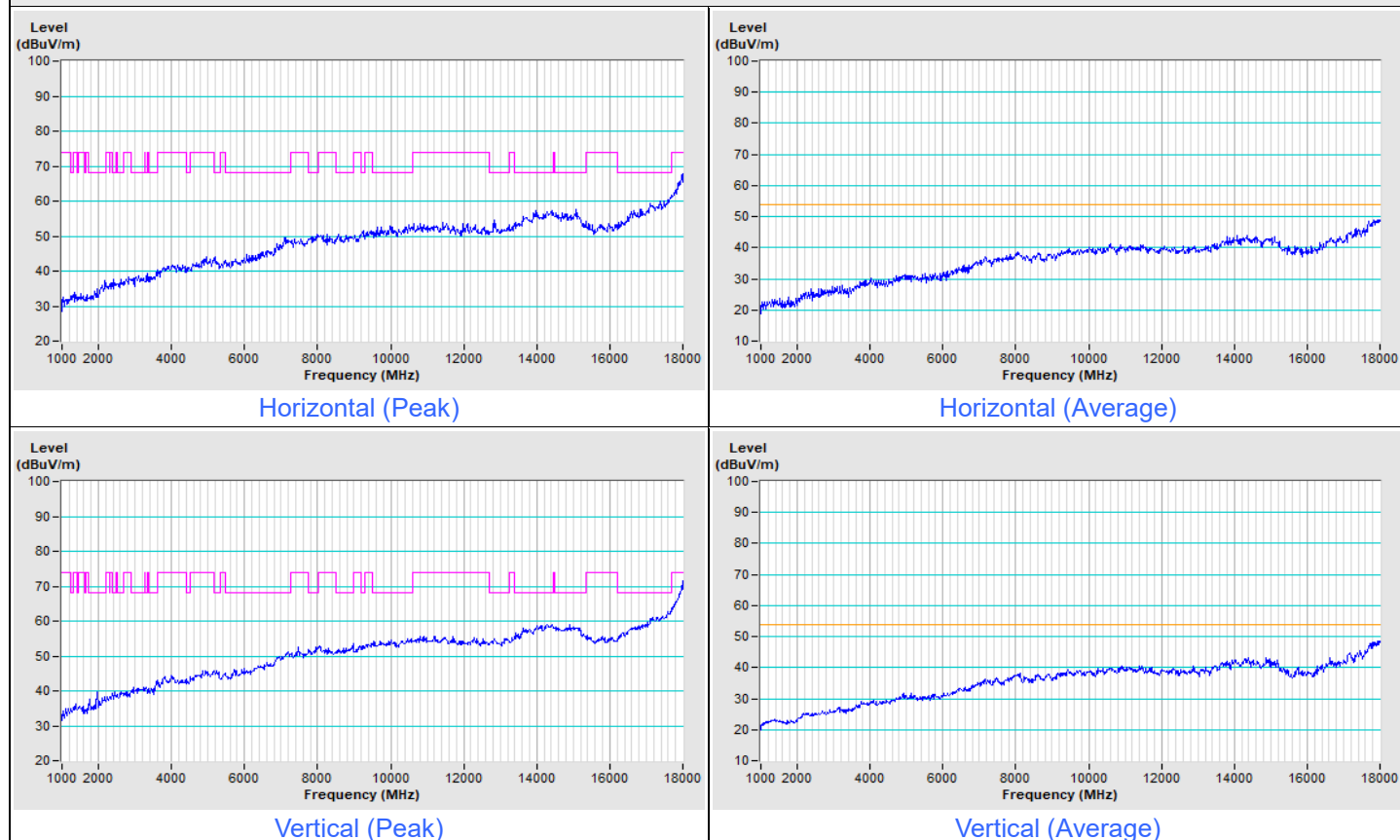


Vertical (Peak)

## Plot of Other Emission

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11a Channel 48

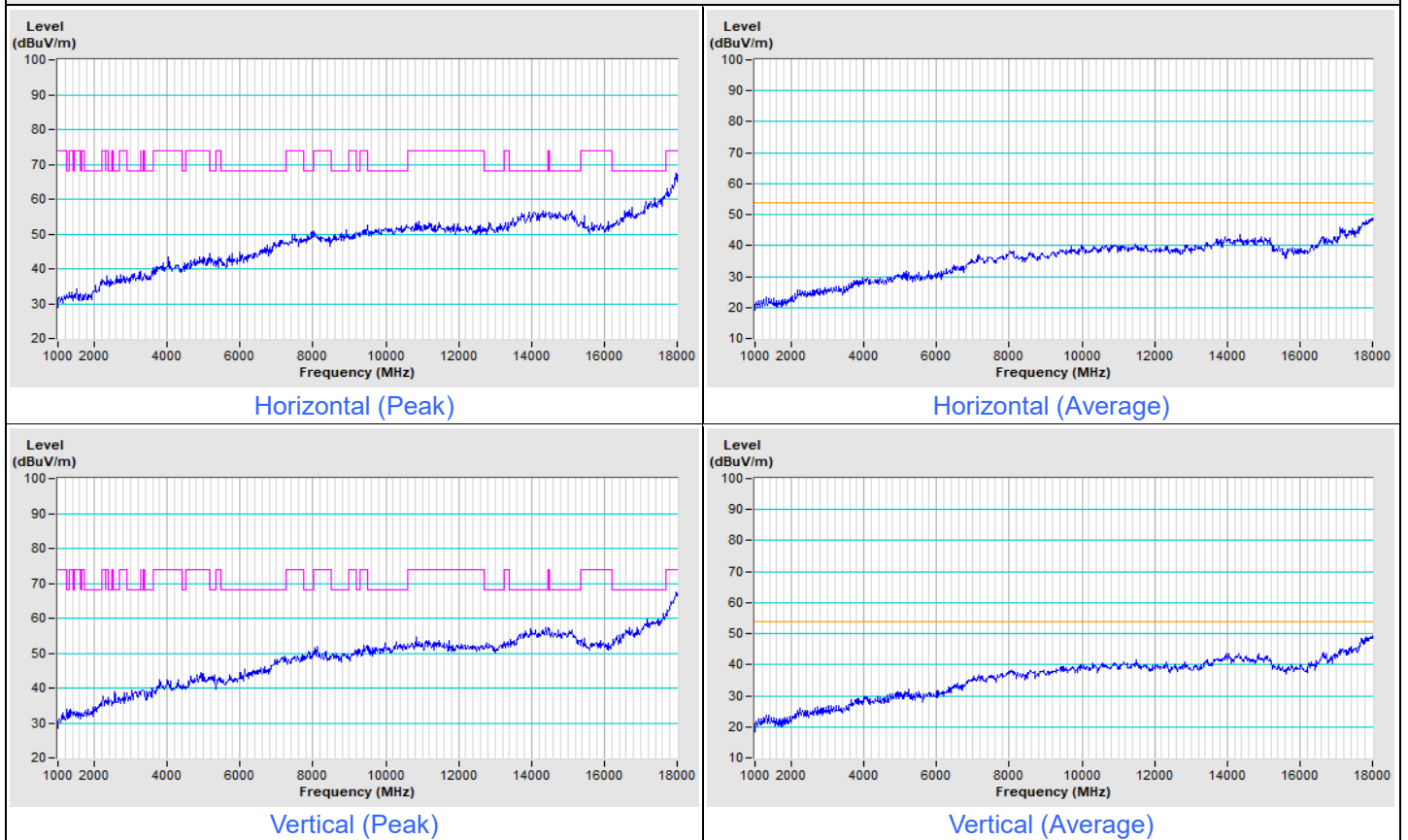


#### Note:

- For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
- The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11a Channel 64

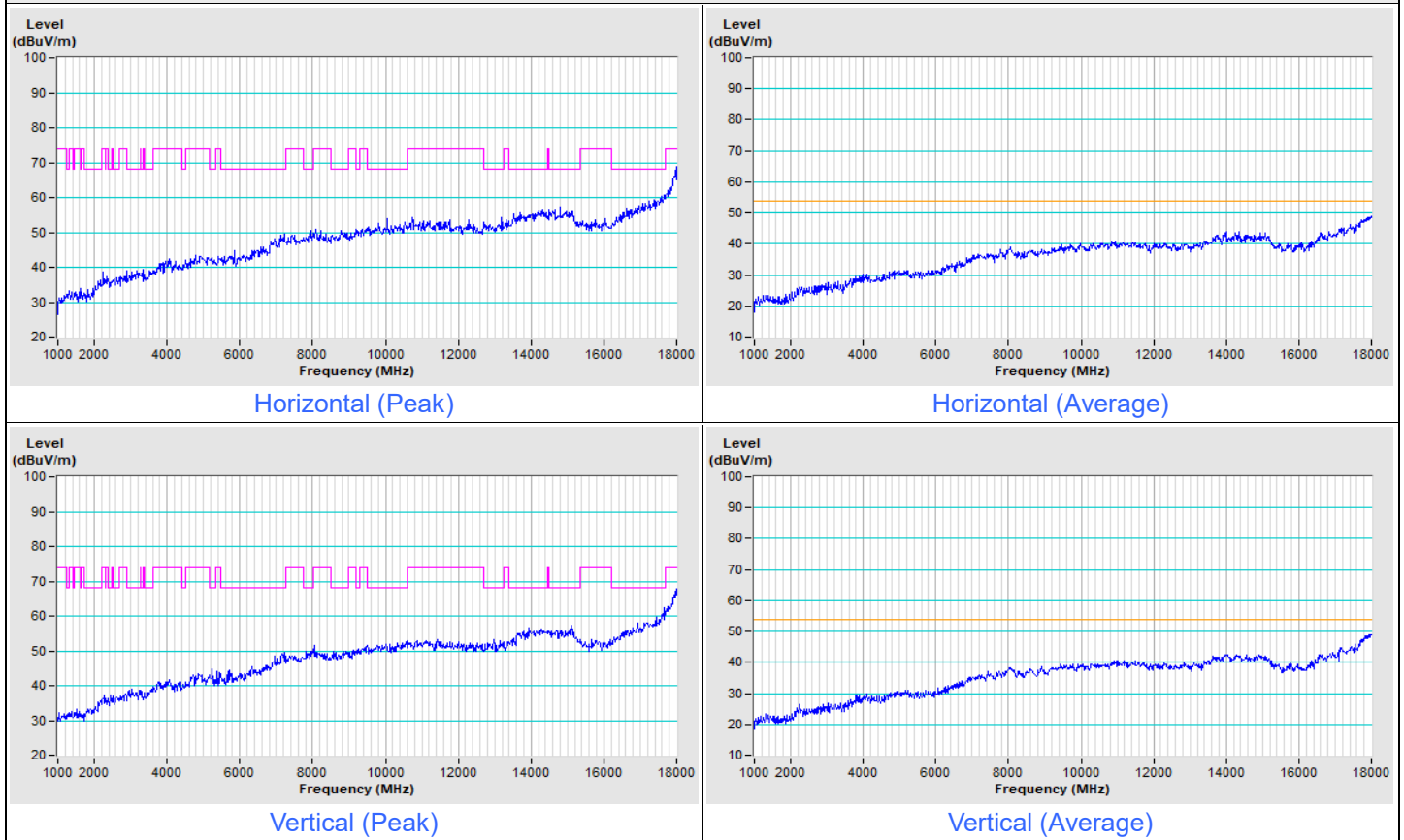


#### Note:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11a Channel 140

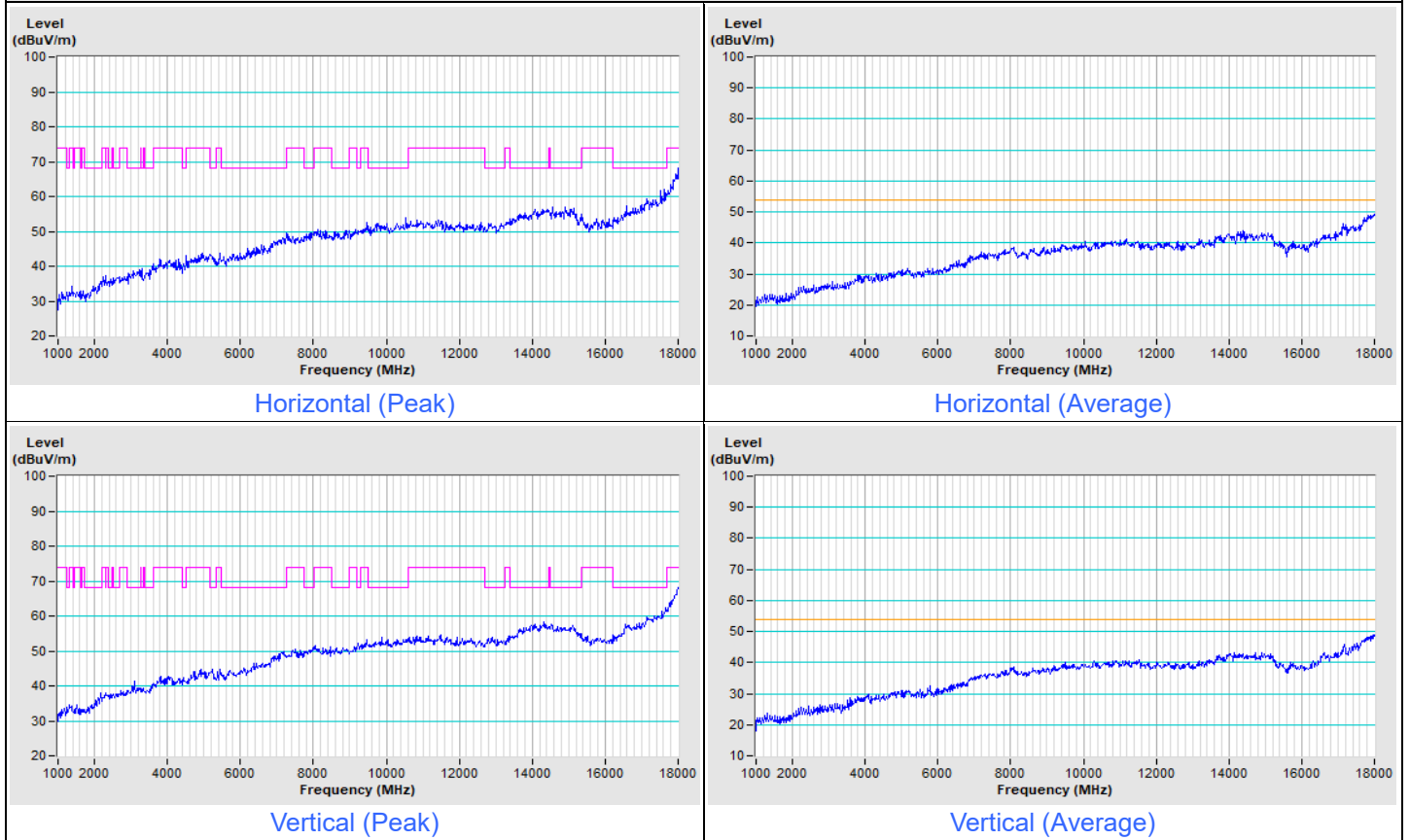


#### Note:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11a Channel 149

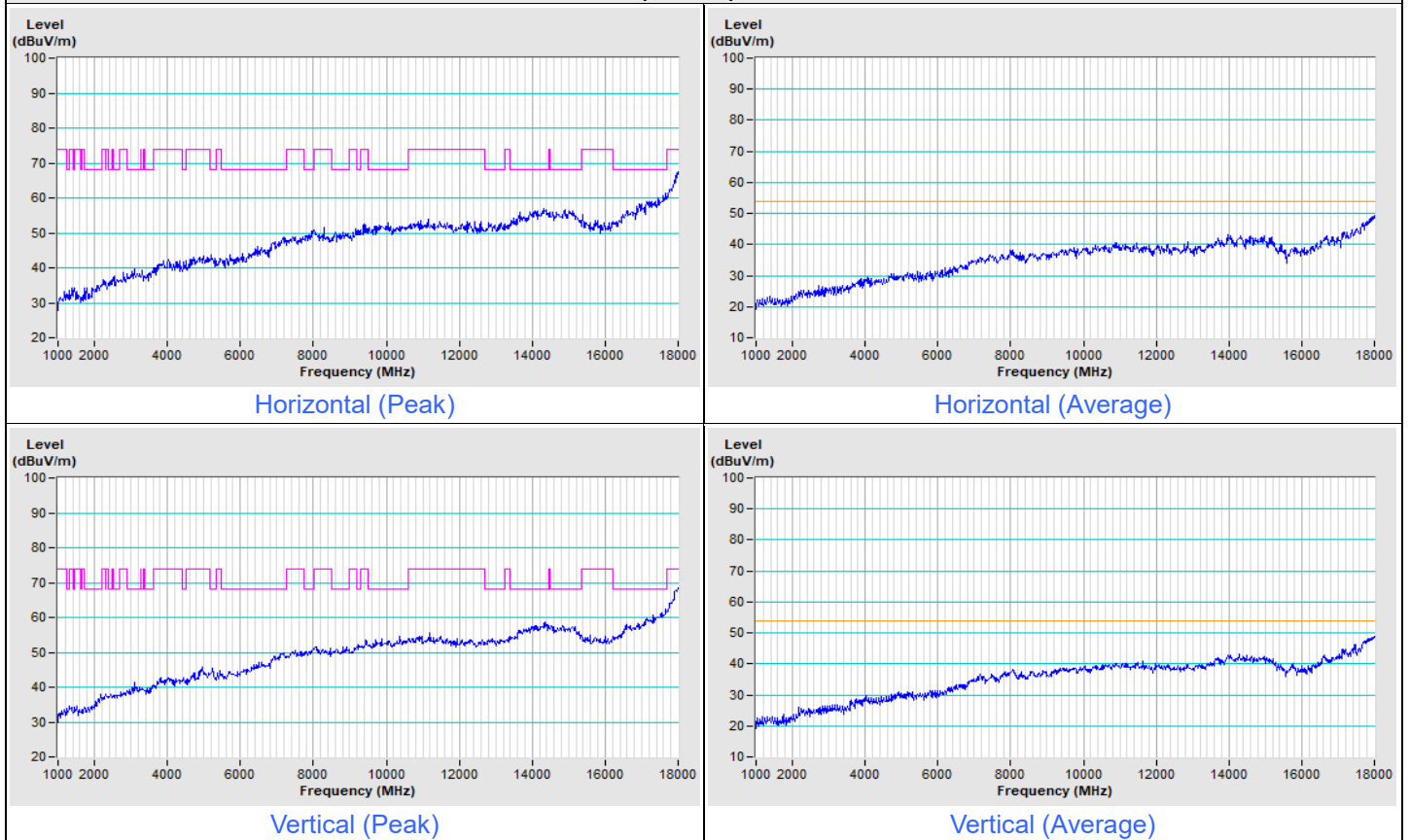


Note:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT20) Channel 40

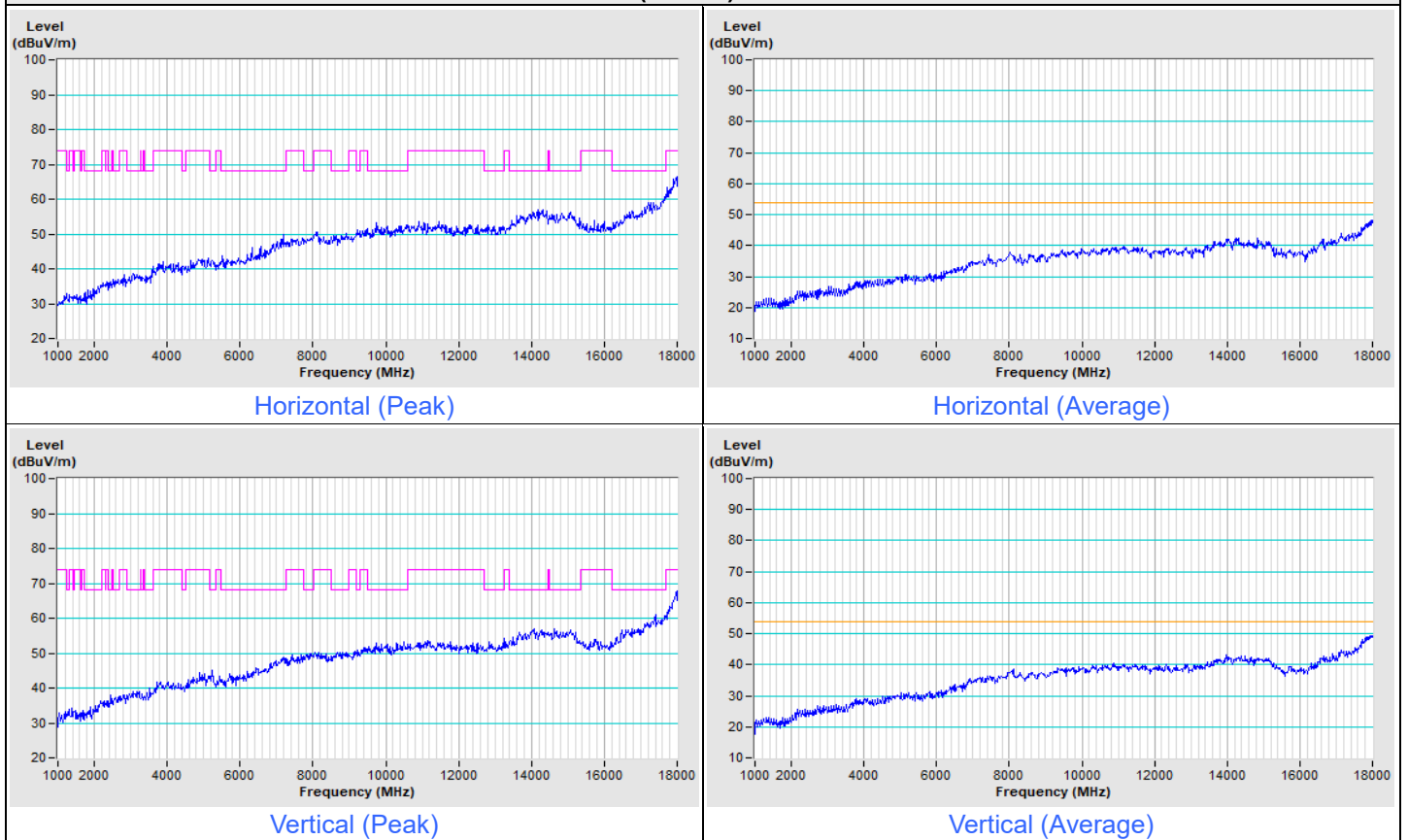


#### Note:

- For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
- The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT20) Channel 64

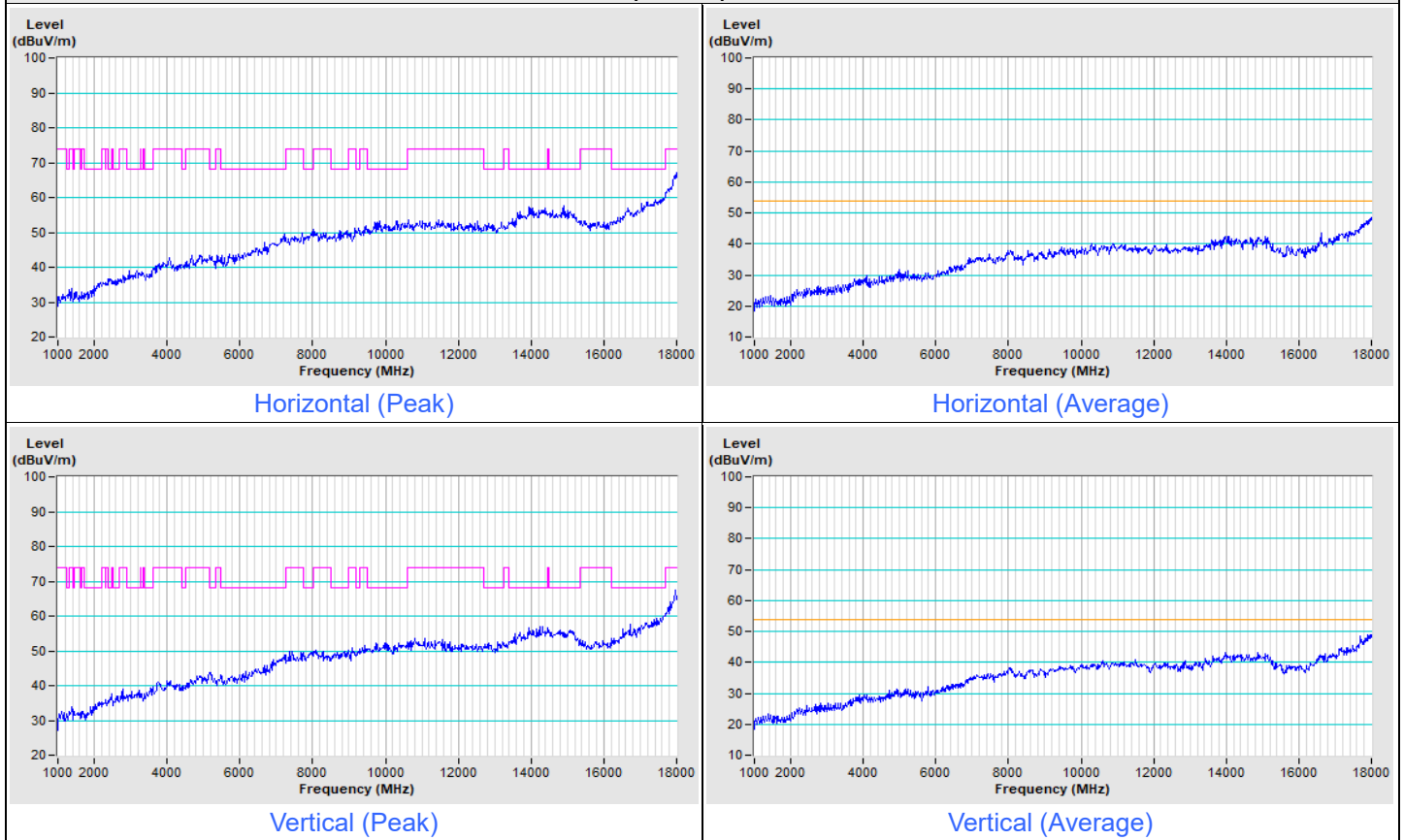


#### Note:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT20) Channel 144

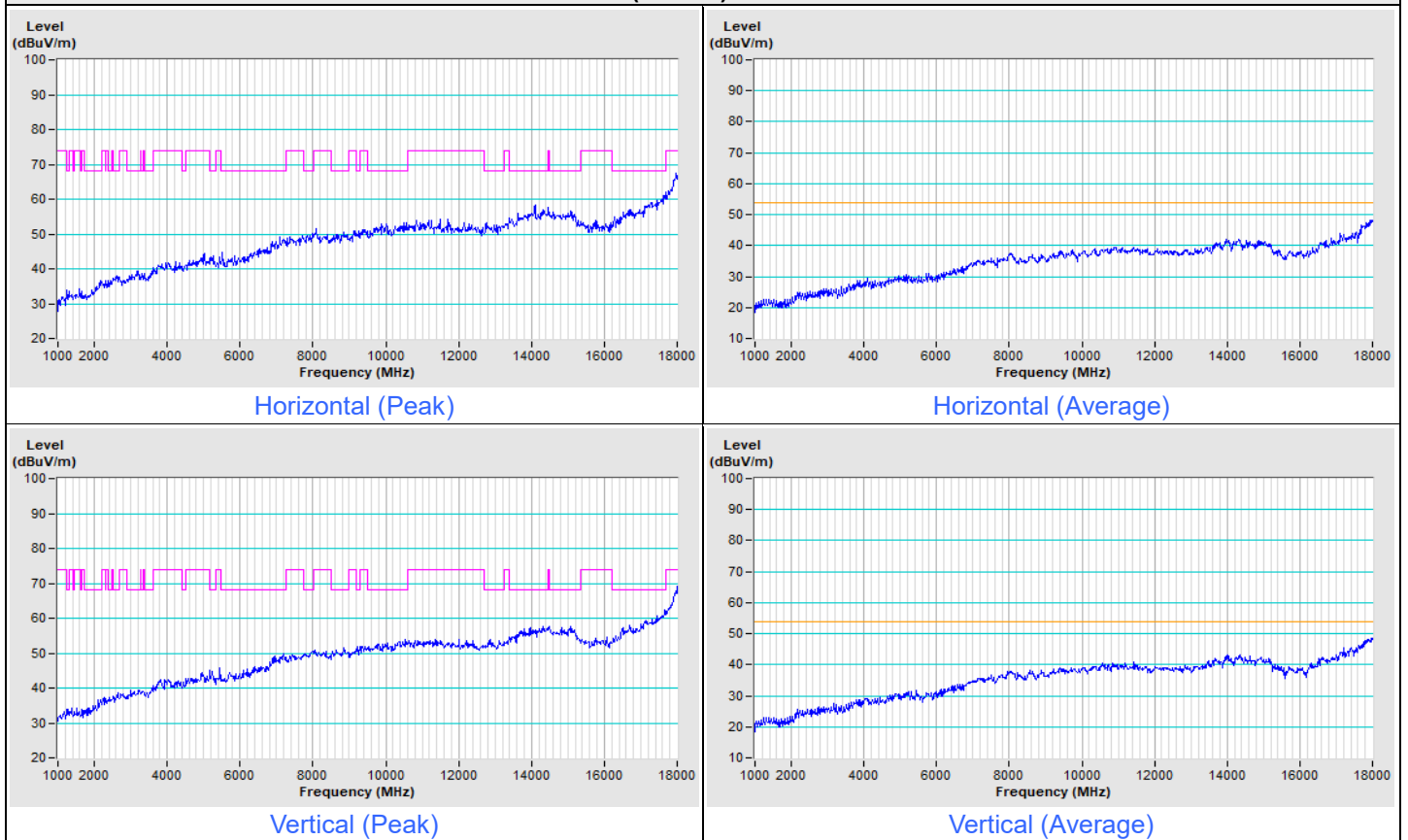


#### Note:

- For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
- The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT20) Channel 165

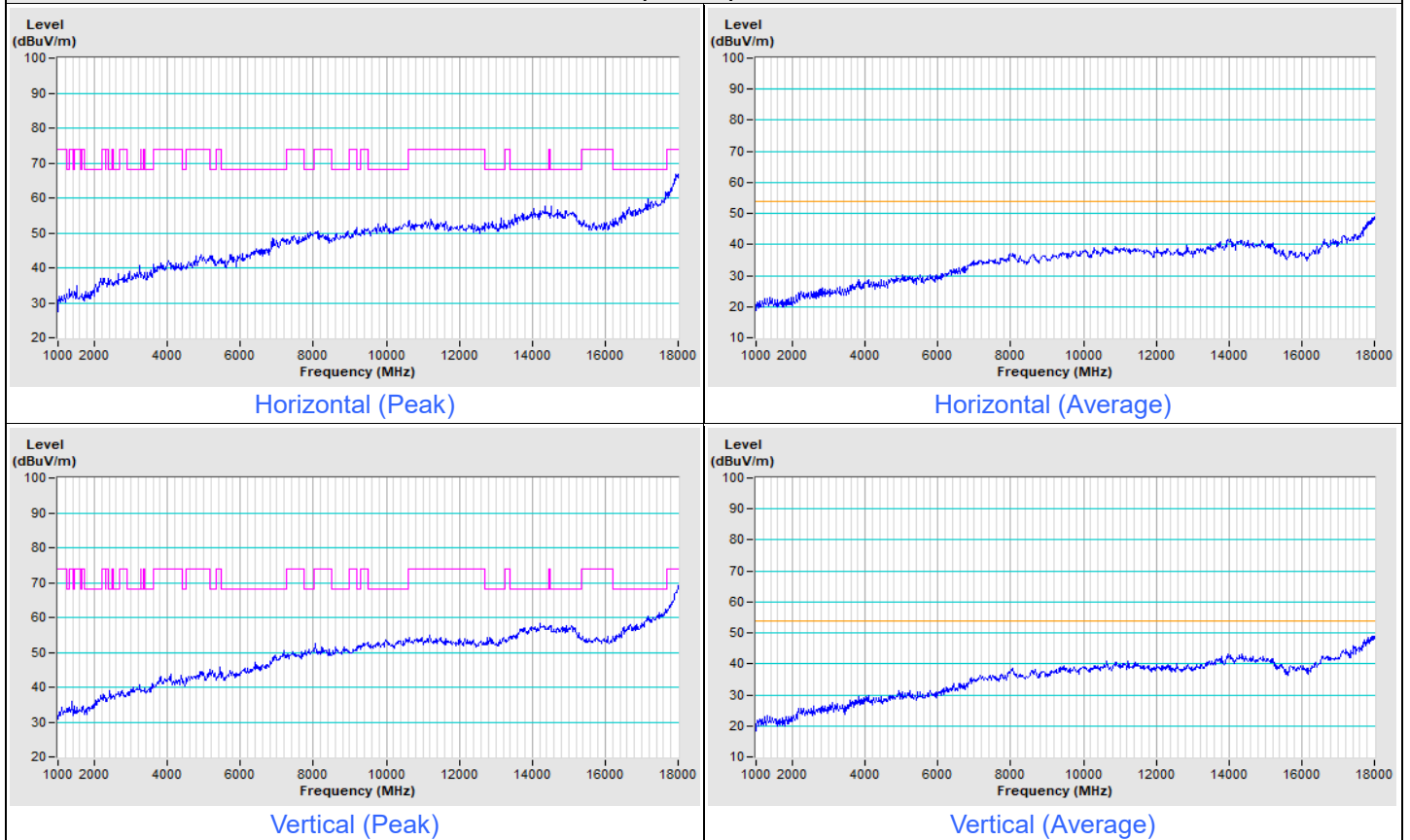


#### Note:

- For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
- The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT40) Channel 38

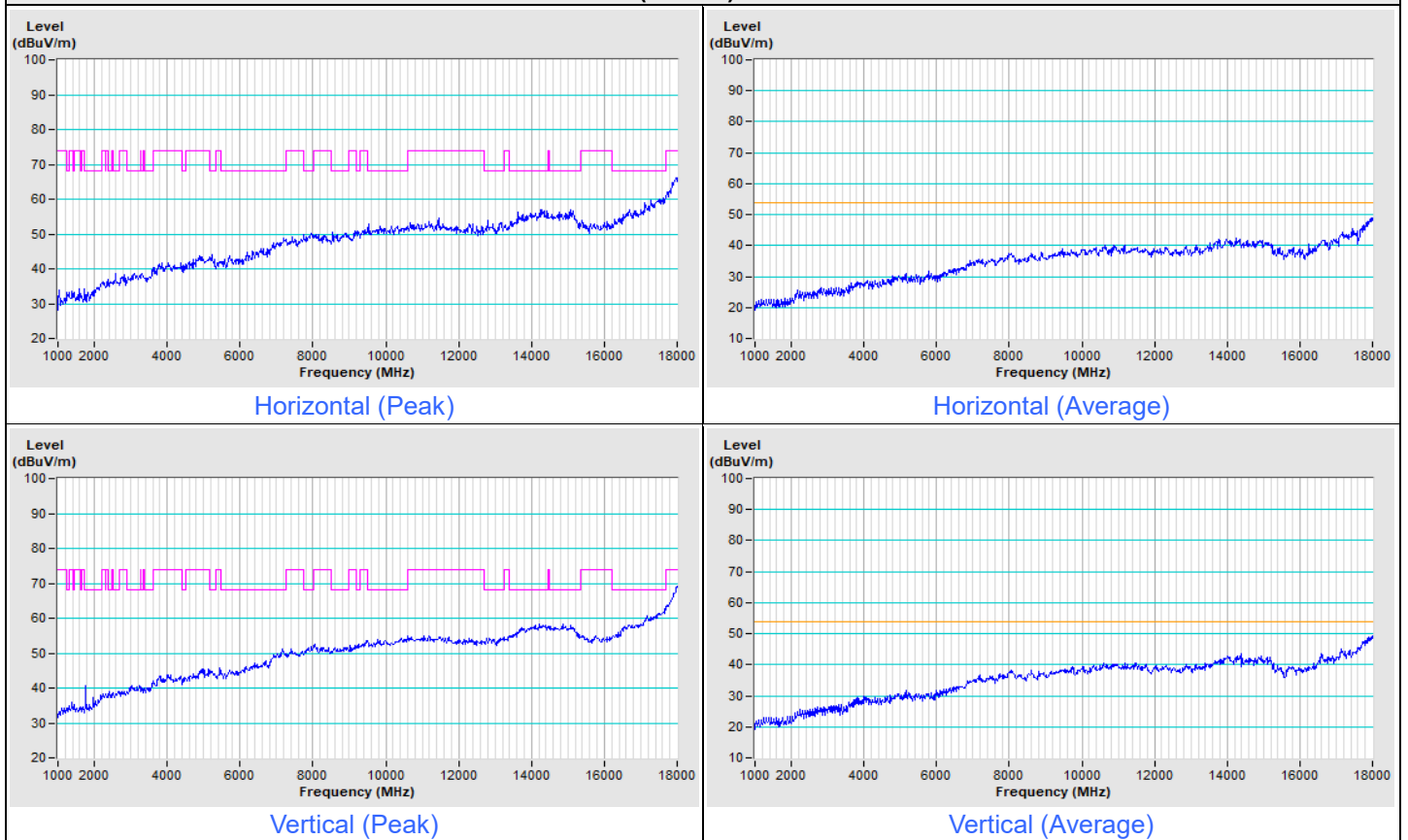


#### Note:

- For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
- The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT40) Channel 54

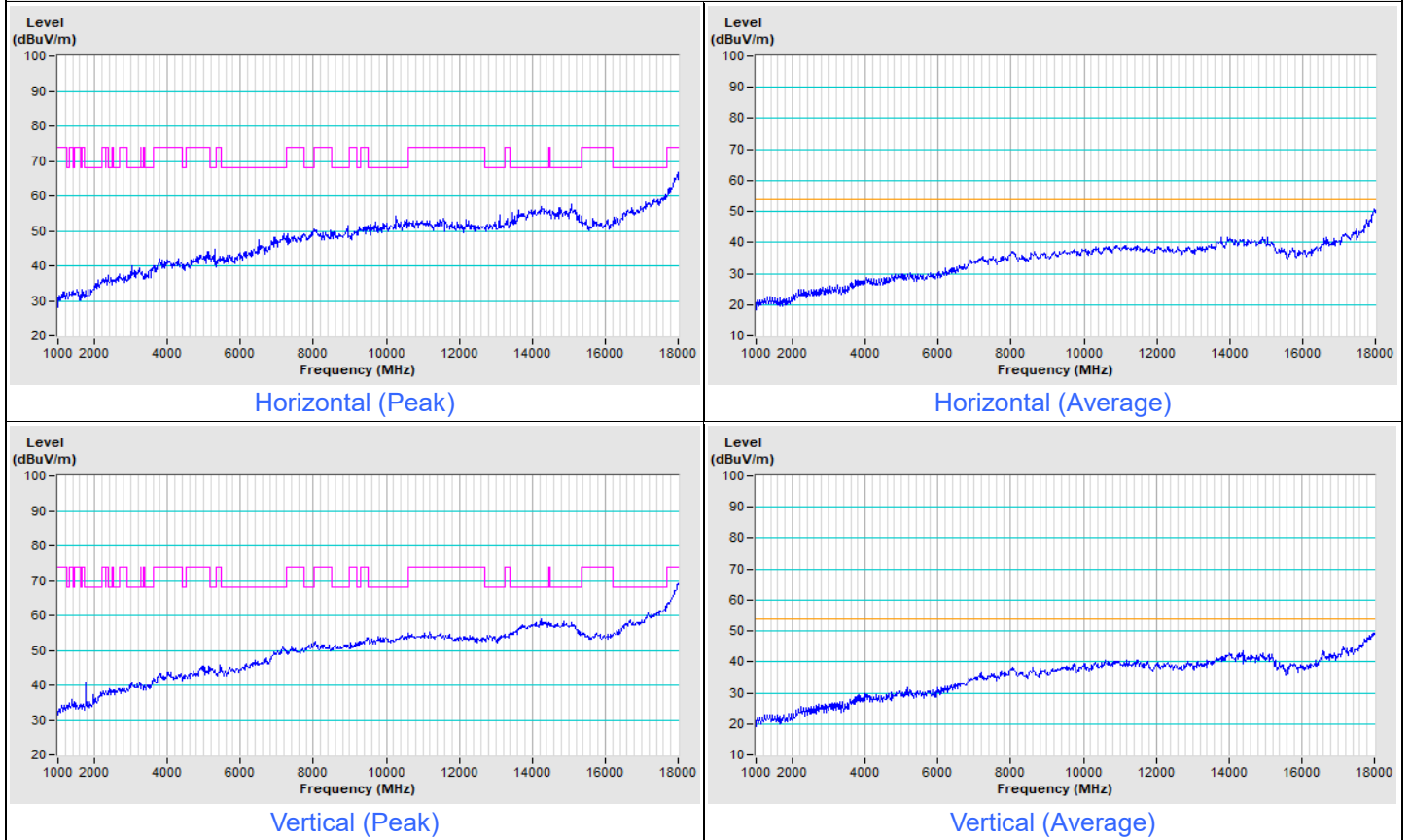


#### Note:

- For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
- The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT40) Channel 142

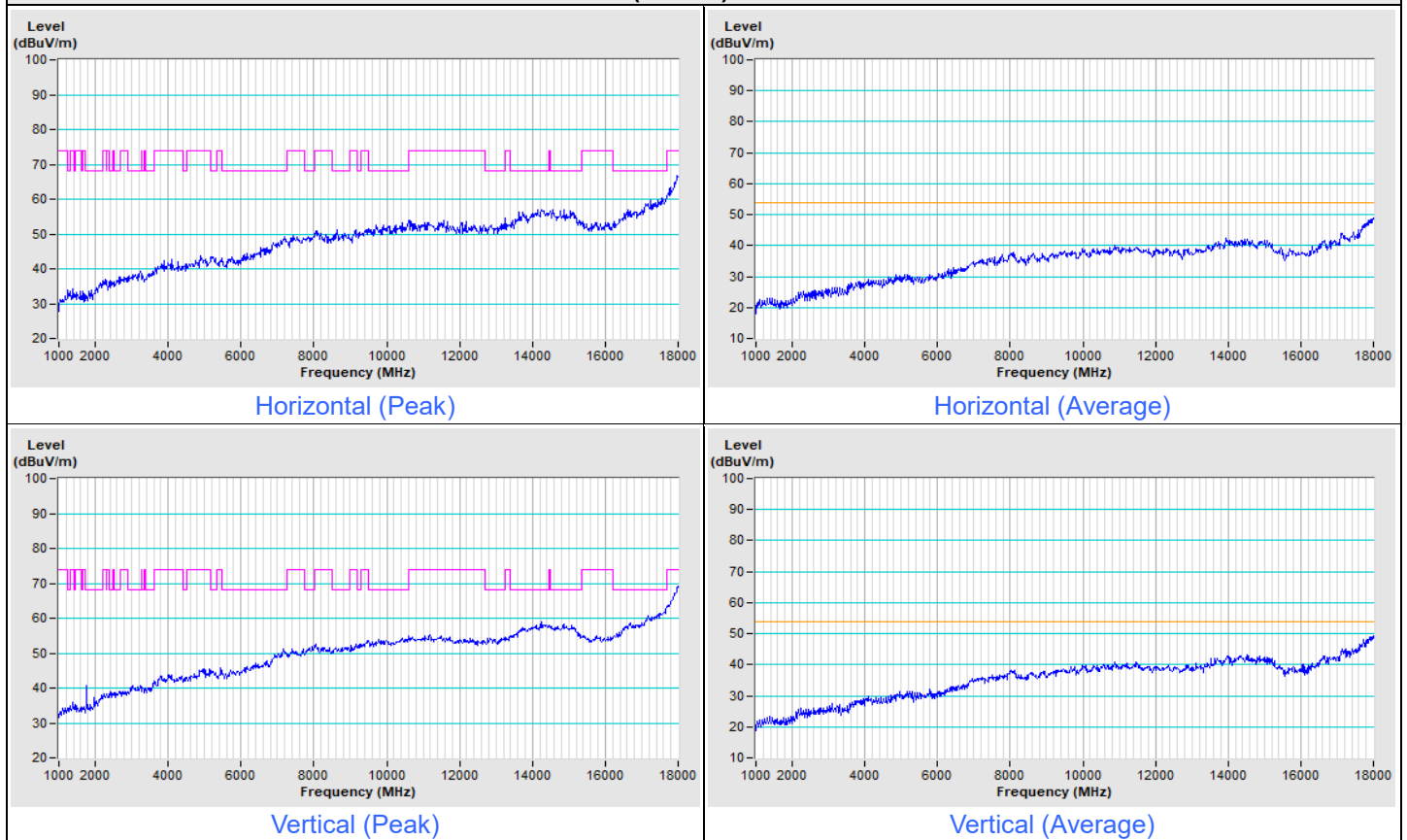


#### Note:

- For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
- The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT40) Channel 151

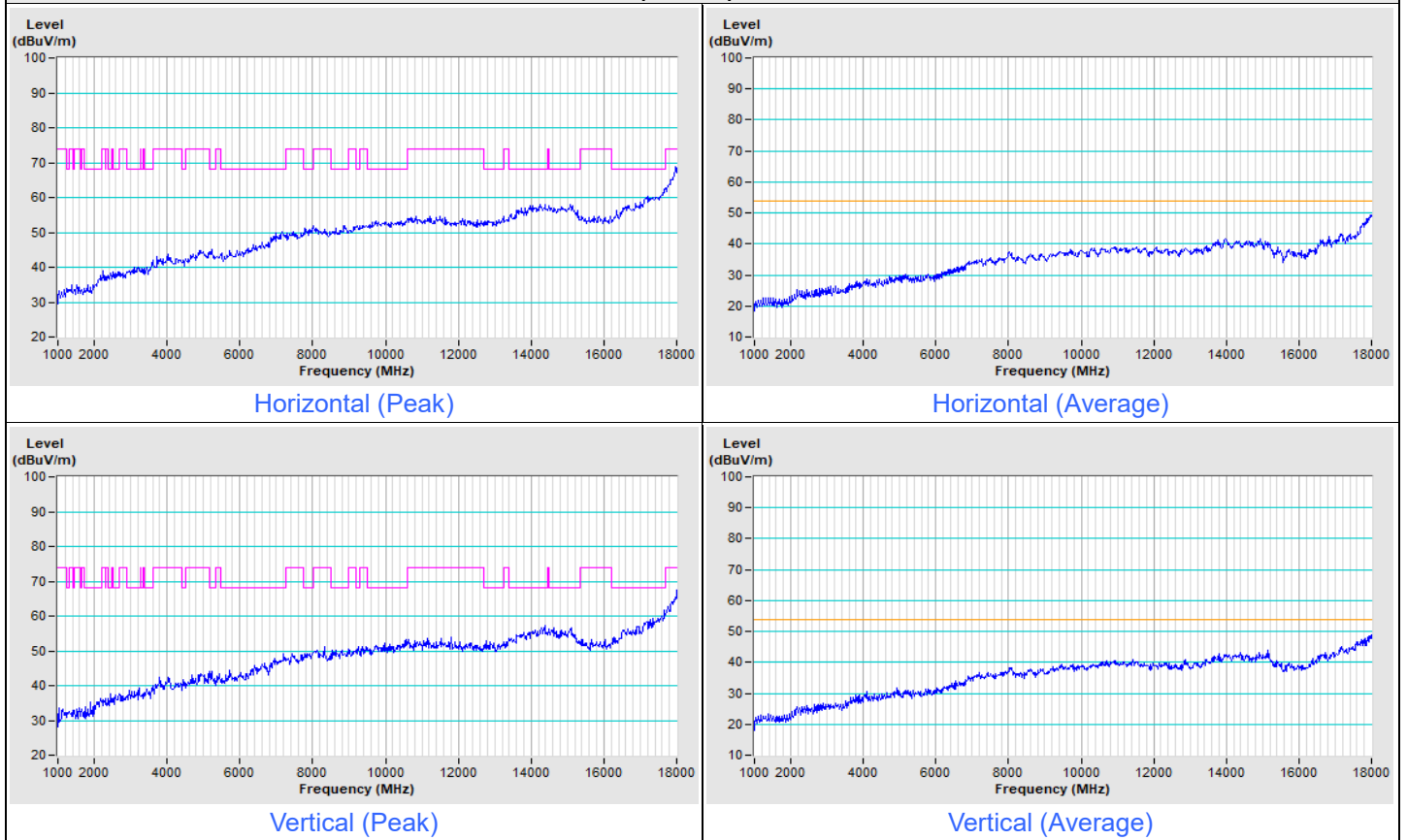


#### Note:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT80) Channel 42

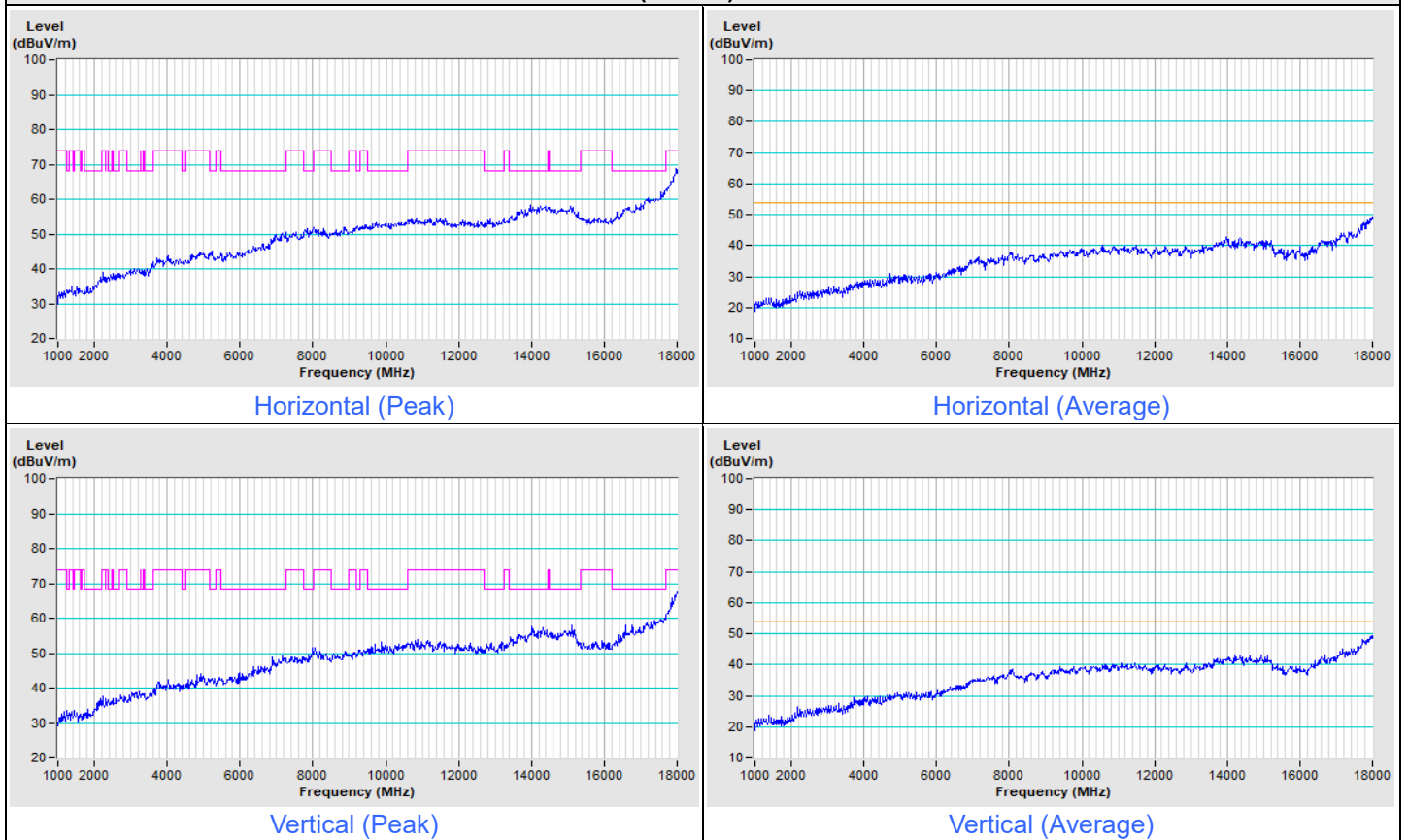


#### Note:

- For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
- The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT80) Channel 58

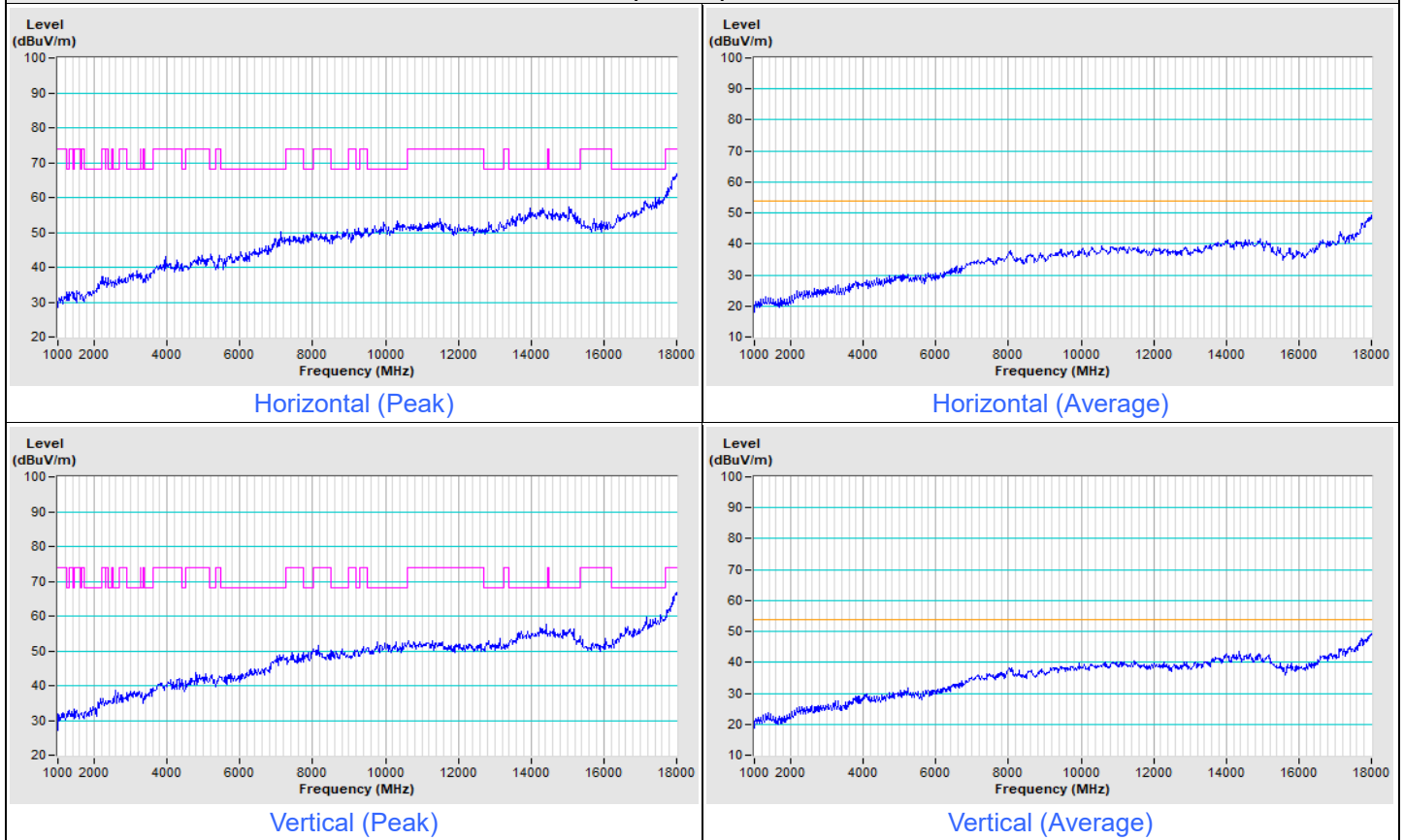


#### Note:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT80) Channel 106

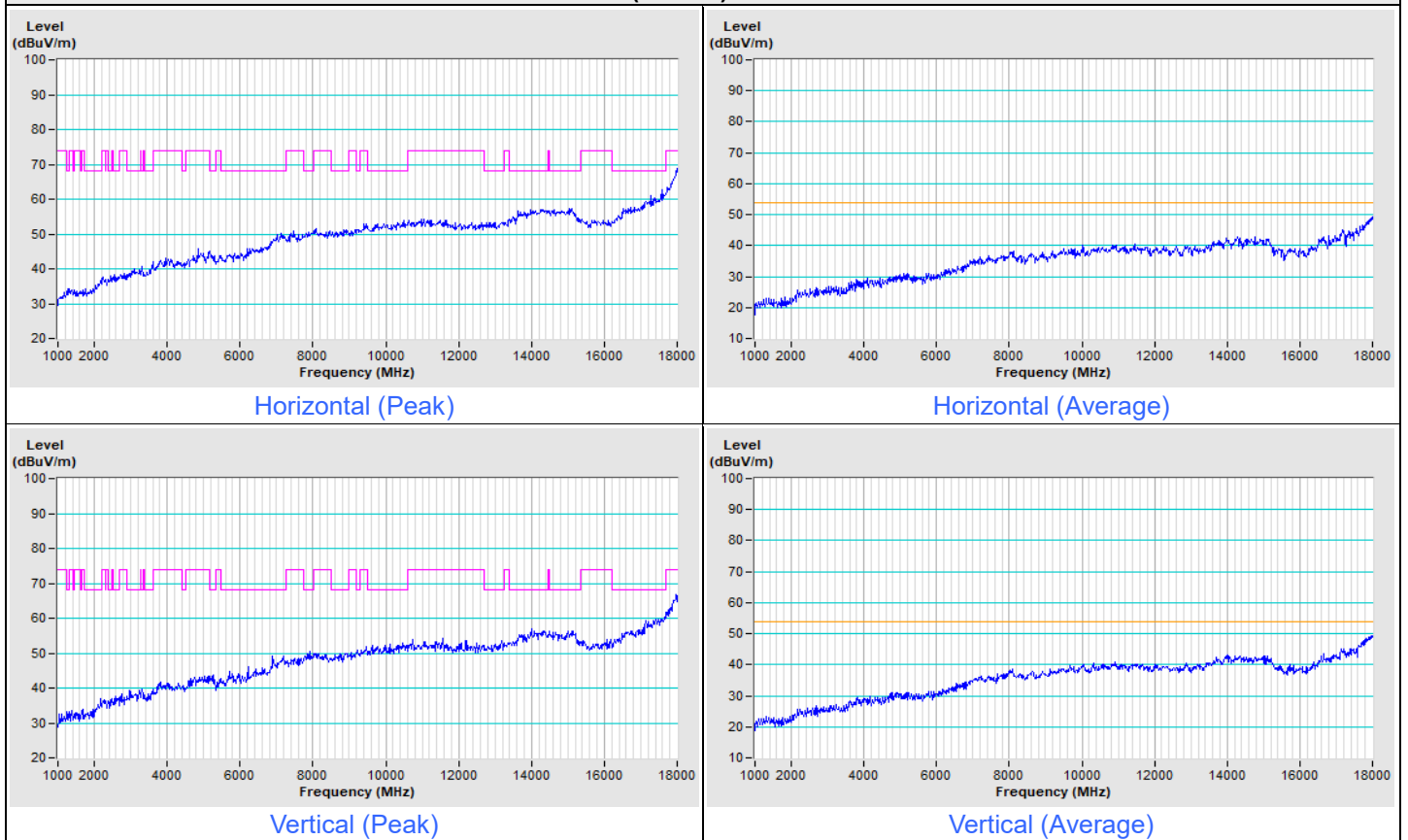


#### Note:

- For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
- The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

|                 |                |                               |                                                                      |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|
| Frequency Range | 1 GHz ~ 18 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT80) Channel 155



#### Note:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

## 8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

## 9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

**Lin Kou EMC/RF Lab**

Tel: 886-2-26052180

Fax: 886-2-26051924

**Hsin Chu EMC/RF/Telecom Lab**

Tel: 886-3-6668565

Fax: 886-3-6668323

**Hwa Ya EMC/RF/Safety Lab**

Tel: 886-3-3183232

Fax: 886-3-3270892

**Email:** [service.adt@bureauveritas.com](mailto:service.adt@bureauveritas.com)

**Web Site:** <http://ee.bureauveritas.com.tw>

The address and road map of all our labs can be found in our web site also.

--- END ---