

# TEST REPORT

## CERTIFICATE OF CONFORMITY

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

**Report No.:** RFBEDV-WTW-P25090197-3

**FCC ID:** M72-EDV650

**Product:** Poly Edge V650

**Brand:** HP

**Model No.:** PVAN-EDGE-V650

**Received Date:** 2025/9/4

**Test Date:** 2025/9/12 ~ 2025/10/22

**Issued Date:** 2025/11/20

**Applicant:** HP Inc.

**Address:** 1501 Page Mill Road, Palo Alto, CA 94304, USA

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Lin Kou Laboratories

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

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**Test Location(2):** No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

**FCC Registration /** 788550 / TW0003 for Test Location(1)

**Designation Number:** 281270 / TW0032 for Test Location(2)

Approved by:

Jeremy Lin

Jeremy Lin / Project Engineer

, Date:

2025/11/20

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Prepared by : Pettie Chen / Senior Specialist

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## Release Control Record

| Issue No.              | Description       | Date Issued |
|------------------------|-------------------|-------------|
| RFBEDV-WTW-P25090197-3 | Original release. | 2025/11/20  |

## 1 Certificate

**Product:** Poly Edge V650

**Brand:** HP

**Test Model:** PVAN-EDGE-V650

**Sample Status:** Engineering sample

**Applicant:** HP Inc.

**Test Date:** 2025/9/12 ~ 2025/10/22

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

**Measurement procedure:** ANSI C63.10-2020

KDB 789033 D02 General UNII Test Procedure New Rules 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 -15.57 dB at 0.16200 MHz                                         |
| 15.407(b)(9)                                                                    | Unwanted Emissions below 1 GHz | Pass   | Minimum passing margin is -1.6 dB at 499.48 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 -0.20 dB at 15720.00 MHz and 15960.00 MHz                        |
| 15.203                                                                          | Antenna Requirement            | Pass   | Antenna connector is ipex(MHF) not a standard connector.                                   |

### Notes:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. 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                | -               | 206.5 Hz                          |
| RF Output Power                | -               | 1.371 dB                          |
| Power Spectral Density         | -               | 1.017 dB                          |
| 6 dB Bandwidth                 | -               | 206.5 Hz                          |
| Occupied Bandwidth             | -               | 72 Hz                             |
| AC Power Conducted Emissions   | 9 kHz ~ 30 MHz  | 2.88 dB                           |
| Unwanted Emissions below 1 GHz | 9 kHz ~ 30 MHz  | 3 dB                              |
|                                | 30 MHz ~ 1 GHz  | 2.93 dB                           |
| Unwanted Emissions above 1 GHz | 1 GHz ~ 18 GHz  | 1.76 dB                           |
|                                | 18 GHz ~ 40 GHz | 1.77 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               | Poly Edge V650                                                                                                                                                                         |
| Brand                 | HP                                                                                                                                                                                     |
| Test Model            | PVAN-EDGE-V650                                                                                                                                                                         |
| Status of EUT         | Engineering sample                                                                                                                                                                     |
| Power Supply Rating   | 5Vdc from adapter<br>48Vdc from PoE                                                                                                                                                    |
| Modulation Type       | 64QAM, 16QAM, QPSK, BPSK for OFDM<br>256QAM for OFDM in 802.11ac mode<br>1024QAM for OFDMA in 802.11ax mode                                                                            |
| Modulation Technology | OFDM, OFDMA                                                                                                                                                                            |
| Transfer Rate         | Up to 143.4 Mbps                                                                                                                                                                       |
| Operating Frequency   | 5.18 GHz ~ 5.24 GHz<br>5.26 GHz ~ 5.32 GHz<br>5.5 GHz ~ 5.72 GHz<br>5.745 GHz ~ 5.825 GHz                                                                                              |
| Number of Channel     | 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 25                                                                                                                         |
| Output Power          | 5.18 GHz ~ 5.24 GHz: 72.277 mW (18.59 dBm)<br>5.26 GHz ~ 5.32 GHz: 70.146 mW (18.46 dBm)<br>5.5 GHz ~ 5.72 GHz: 109.144 mW (20.38 dBm)<br>5.745 GHz ~ 5.825 GHz: 143.88 mW (21.58 dBm) |
| EUT Category          | Client device                                                                                                                                                                          |

Note:

1. The EUT uses following accessories.

| Item        | Brand    | Model   | Specification |
|-------------|----------|---------|---------------|
| RJ-45 Cable | EXCELTEK | PO02008 | 1.5m          |
| Coil Cable  | EXCELTEK | PE0003  | 570mm         |

2. The EUT uses following support unit.

| Item            | Brand      | Model                              | Specification                                                                                                                                                                          |
|-----------------|------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| USB Adapter     | HP         | TPN-DA20                           | AC Input power: 100-240Vac; 50-60Hz; 1.7A<br>DC Output power: 5.0Vdc; 3.0A or 9.0Vdc; 3.0A or 12.0Vdc; 5.0A or 15.0Vdc; 4.33A or 20.0Vdc; 3.25A<br>DC Output Cable: 1.73m without core |
| Adapter         | Mass Power | S018-1A050300VU                    | AC Input power: 100-240Vac; 50/60Hz; 0.6A<br>DC Output power: 5Vdc; 3A<br>DC Output Cable: 1.5m non-shielded cable without core                                                        |
| PoE Injector    | CERIO      | POE-S48G2                          | 48Vdc                                                                                                                                                                                  |
| Adapter for POE | L.T.E      | LTE36ES-S5-1                       | AC Input power: 100-240Vac; 50/60Hz; 0.75A<br>DC Output power: 48Vdc; 0.75A<br>DC Output Cable: 1.85m non-shielded cable without core                                                  |
| Console Board   | PEGATRON   | REVLON_CONSOLE_BOARD<br>Rev : 1.00 | -                                                                                                                                                                                      |
| Console Cable   | XINYA      | H2530-04SVB-060/030                | 0.2m                                                                                                                                                                                   |

3. The above EUT information is declared by manufacturer and for more detailed features description, please refer 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    | Model | Antenna Net Gain(dBi) | Frequency range      | Antenna Type | Connector Type |
|-------------|--------------|----------|-------|-----------------------|----------------------|--------------|----------------|
| 1           | 0            | PEGATRON | NA    | 2.89                  | 2.4 GHz ~ 2.4835 GHz | PCB          | ipex(MHF)      |
|             |              |          |       | 2.7                   | 5.15 GHz ~ 5.25 GHz  | PCB          | ipex(MHF)      |
|             |              |          |       | 2.91                  | 5.25 GHz ~ 5.35 GHz  | PCB          | ipex(MHF)      |
|             |              |          |       | 2.75                  | 5.47 GHz ~ 5.725 GHz | PCB          | ipex(MHF)      |
|             |              |          |       | 2.72                  | 5.725 GHz ~ 5.85 GHz | PCB          | ipex(MHF)      |

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

2. The EUT incorporates a SISO function:

| 5 GHz Band       |                       |     |
|------------------|-----------------------|-----|
| Modulation Mode  | TX & RX Configuration |     |
| 802.11a          | 1TX                   | 1RX |
| 802.11n (HT20)   | 1TX                   | 1RX |
| 802.11ac (VHT20) | 1TX                   | 1RX |
| 802.11ax (HE20)  | 1TX                   | 1RX |

Note: The modulation and bandwidth are similar for 802.11n mode for 20 MHz, 802.11ac mode for 20 MHz, 802.11ax mode for 20 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), 802.11ax (HE20):

| 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  |

#### FOR 5500 ~ 5720 MHz

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 100     | 5500 MHz  | 124     | 5620 MHz  |
| 104     | 5520 MHz  | 128     | 5640 MHz  |
| 108     | 5540 MHz  | 132     | 5660 MHz  |
| 112     | 5560 MHz  | 136     | 5680 MHz  |
| 116     | 5580 MHz  | 140     | 5700 MHz  |
| 120     | 5600 MHz  | 144     | 5720 MHz  |

#### FOR 5745 ~ 5825 MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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

### 3.4 Test Mode Applicability and Tested Channel Detail

|             |                                                                                                                                                                                                      |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Scan:   | 1. The AC Adapter has the following models: AC adapter (S018-1A050300VU) / USB Adapter (TPN-DA20) / POE (POE-S48G2). Pre-scan these ways and find the worst case as a representative test condition. |
| Worst Case: | 1. Worst Condition: X-axis+AC adapter (S018-1A050300VU)                                                                                                                                              |

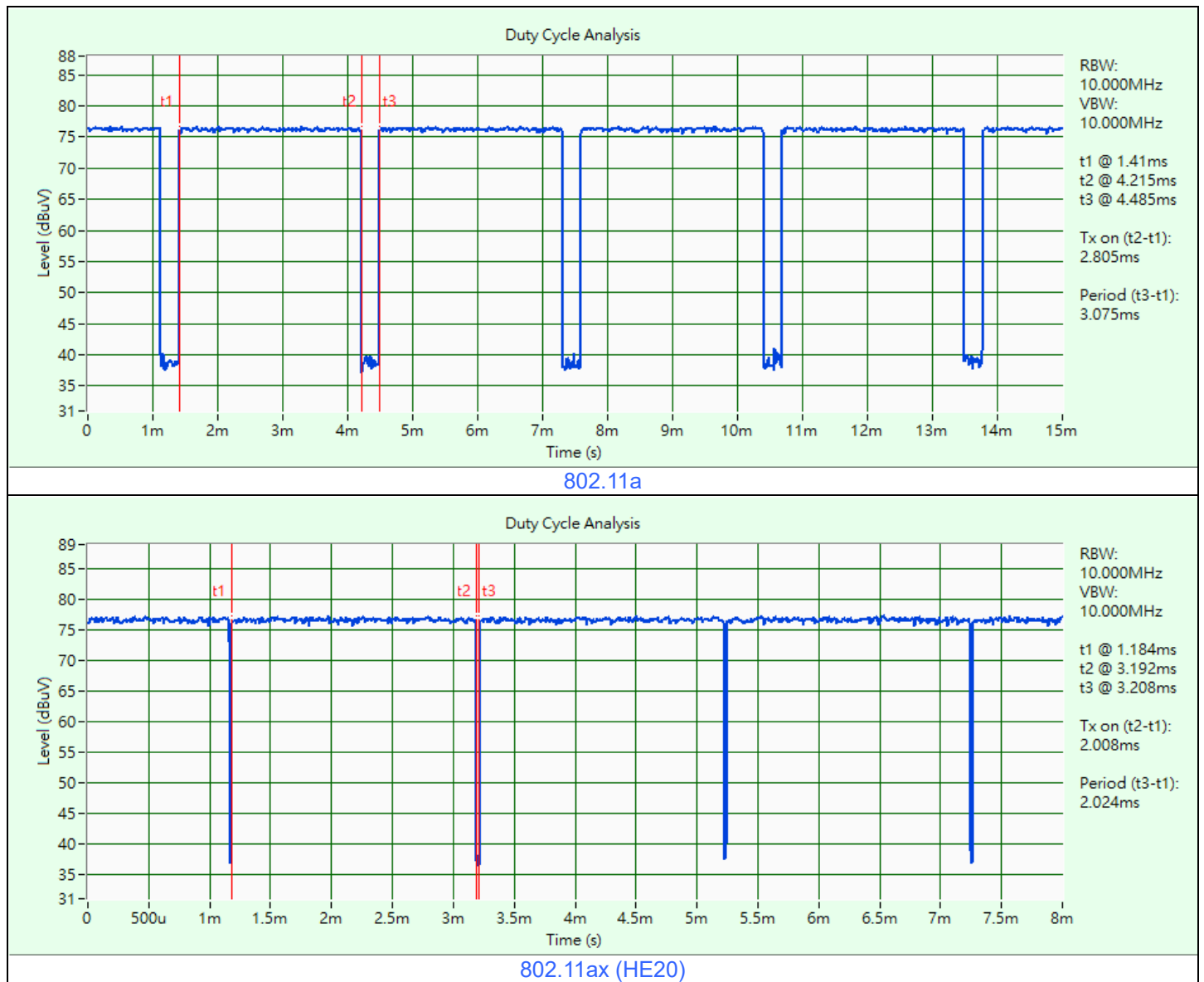
Following channel(s) was (were) selected for the final test as listed below:

| Test Item                      | Mode            | Tested Channel                                            | Modulation | Data Rate Parameter |
|--------------------------------|-----------------|-----------------------------------------------------------|------------|---------------------|
| 26 dB Bandwidth                | 802.11a         | 52, 60, 64, 100, 116, 140, 144                            | BPSK       | 6Mb/s               |
|                                | 802.11ax (HE20) | 52, 60, 64, 100, 116, 140, 144                            | BPSK       | MCS0                |
| RF Output Power                | 802.11a         | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | 6Mb/s               |
|                                | 802.11ax (HE20) | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | MCS0                |
| Power Spectral Density         | 802.11a         | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | 6Mb/s               |
|                                | 802.11ax (HE20) | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | MCS0                |
| 6 dB Bandwidth                 | 802.11a         | 144, 149, 157, 165                                        | BPSK       | 6Mb/s               |
|                                | 802.11ax (HE20) | 144, 149, 157, 165                                        | BPSK       | MCS0                |
| Occupied Bandwidth             | 802.11a         | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | 6Mb/s               |
|                                | 802.11ax (HE20) | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | MCS0                |
| AC Power Conducted Emissions   | 802.11a         | 157                                                       | BPSK       | 6Mb/s               |
| Unwanted Emissions below 1 GHz | 802.11a         | 157                                                       | BPSK       | 6Mb/s               |
| Unwanted Emissions above 1 GHz | 802.11a         | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | 6Mb/s               |
|                                | 802.11ax (HE20) | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK       | MCS0                |

### 3.5 Duty Cycle of Test Signal

**802.11a:** Duty cycle = 2.805 ms / 3.075 ms x 100% = 91.2%, duty factor =  $10 \cdot \log(1/\text{Duty cycle}) = 0.40 \text{ dB}$

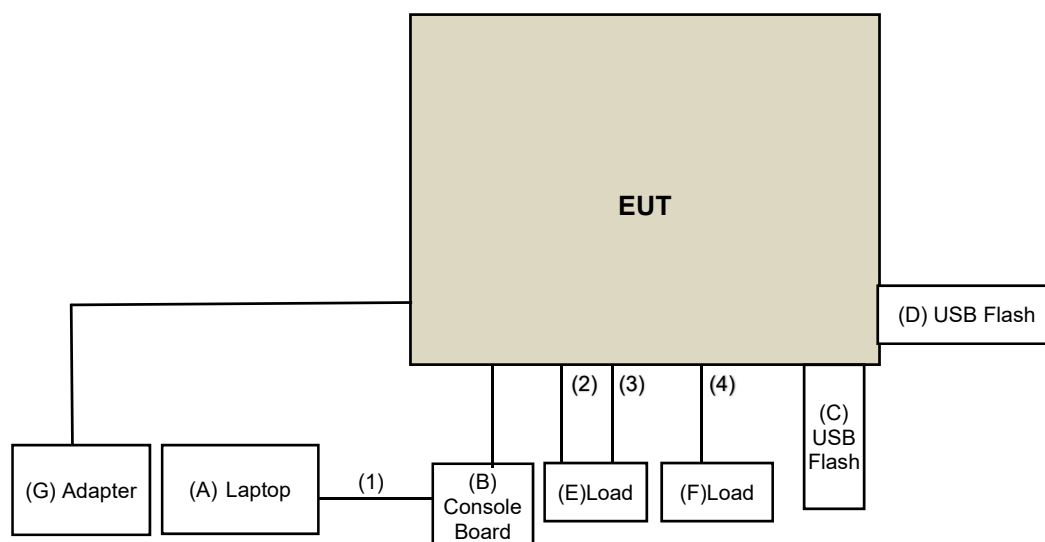
**802.11ax (HE20):** Duty cycle = 2.008 ms / 2.024 ms x 100% = 99.2%



### 3.6 Test Program Used and Operation Descriptions

Controlling software Tera Term V4.106 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  | 14" Laptop    | Lenovo   | L440                               | R9-0GFJKK  | N/A    | Provided by Lab       |
| B  | Console Board | PEGATRON | REVLON_CONSOLE_BOARD<br>Rev : 1.00 | N/A        | N/A    | Supplied by applicant |
| C  | USB Flash     | SanDisk  | SDDDC3-032G                        | N/A        | N/A    | Provided by Lab       |
| D  | USB Flash     | SanDisk  | SDDDC3-032G                        | N/A        | N/A    | Provided by Lab       |
| E  | Load          | BV       | LP-4                               | N/A        | N/A    | Provided by Lab       |
| F  | Load          | BV       | LP-4                               | N/A        | N/A    | Provided by Lab       |
| G  | Adapter       | HP       | S018-1A050300VU                    | N/A        | N/A    | Supplied by applicant |

| ID | Cable Descriptions | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks               |
|----|--------------------|------|------------|--------------------|--------------|-----------------------|
| 1  | USB Cable          | 1    | 1          | No                 | 0            | Provided by Lab       |
| 2  | RJ45 Cable         | 1    | 1.5        | No                 | 0            | Provided by Lab       |
| 3  | RJ45 Cable         | 1    | 1.5        | No                 | 0            | Supplied by applicant |
| 4  | Coil Cable         | 1    | 0.57       | 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           |
| Signal & Spectrum Analyzer<br>R&S | FSV3044                          | 101504            | 2025/6/18          | 2026/6/17           |
| Software<br>BV                    | ADT_RF Test Software<br>V7.6.5.4 | N/A               | N/A                | N/A                 |

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/10/7

### 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           |
| Peak Power Analyzer<br>Keysight   | 8990B                            | MY51000485        | 2025/1/20          | 2026/1/19           |
| Signal & Spectrum Analyzer<br>R&S | FSV3044                          | 101504            | 2025/6/18          | 2026/6/17           |
| Software<br>BV                    | ADT_RF Test Software<br>V7.6.5.4 | N/A               | N/A                | N/A                 |
| USB Power Sensor<br>Anritsu       | MA24408A                         | 12994             | 2024/12/4          | 2025/12/3           |
| Wideband Power Sensor<br>Keysight | N1923A                           | MY58020002        | 2025/1/21          | 2026/1/20           |
|                                   |                                  | MY58140009        | 2025/1/21          | 2026/1/20           |

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/10/7

### 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         | E1-011279               | 04             | 2024/11/28         | 2025/11/27          |
|                                    | E1-011280               | 05             | 2024/11/28         | 2025/11/27          |
|                                    | E1-011311               | 09             | 2024/11/28         | 2025/11/27          |
| DC LISN<br>Schwarzbeck             | NNBM 8126G              | 8126G-069      | 2024/11/5          | 2025/11/4           |
| Diode Pulse Limiter<br>Schwarzbeck | VTSD 9561 F-N           | 01445          | 2025/4/27          | 2026/4/26           |
| EMI Test Receiver<br>R&S           | ESCI                    | 100613         | 2024/11/25         | 2025/11/24          |
| LISN<br>R&S                        | ENV216                  | 101826         | 2025/3/24          | 2026/3/23           |
|                                    | ESH3-Z5                 | 100311         | 2025/8/28          | 2026/8/27           |
| RF Coaxial Cable<br>Woken          | 5D-FB                   | Cable-cond1-01 | 2025/1/5           | 2026/1/4            |
| Software<br>BVADT                  | BVADT_Conc_<br>V7.4.1.0 | N/A            | N/A                | N/A                 |
| V-LISN<br>Schwarzbeck              | NNBL 8226-2             | 8226-142       | 2025/8/27          | 2026/8/26           |

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2025/10/22

#### 4.7 Unwanted Emissions below 1 GHz

| Description<br>Manufacturer       | Model No.                    | Serial No.       | Calibrated<br>Date | Calibrated<br>Until |
|-----------------------------------|------------------------------|------------------|--------------------|---------------------|
| Antenna Tower<br>Max-Full         | MFA-515BSN                   | N/A              | N/A                | N/A                 |
| Bi_Log Antenna<br>Schwarzbeck     | VULB 9168                    | 9168-1214        | 2025/9/18          | 2026/9/17           |
| EXA Signal Analyzer<br>Agilent    | N9010A                       | MY52220207       | 2024/12/30         | 2025/12/29          |
| Loop Antenna<br>TESEQ             | HLA 6121                     | 45745            | 2025/9/1           | 2026/8/31           |
| MXE EMI Receiver<br>Keysight      | N9038B                       | MY60180019       | 2025/1/15          | 2026/1/14           |
| Preamplifier<br>EMCI              | EMC330N                      | 980798           | 2025/1/14          | 2026/1/13           |
| RF Coaxial Cable<br>EMCI          | EMCCFD400-NM-NM-500          | 201248           | 2025/1/14          | 2026/1/13           |
|                                   | EMCCFD400-NM-NM-3000         | 201249           | 2025/1/14          | 2026/1/13           |
|                                   | EMCCFD400-NM-NM-9000         | 201251(with PAD) | 2025/1/14          | 2026/1/13           |
| Software<br>BV ADT                | ADT_Radiated_<br>V7.6.15.9.5 | N/A              | N/A                | N/A                 |
| Turn Table<br>Max-Full            | MFT-201SS                    | N/A              | N/A                | N/A                 |
| Turn Table Controller<br>Max-Full | MF-7802BS                    | MF780208676      | N/A                | N/A                 |

Notes:

1. The test was performed in WM - 966 chamber 9.
2. Tested Date: 2025/9/26 ~ 2025/10/22

#### 4.8 Unwanted Emissions above 1 GHz

| Description<br>Manufacturer       | Model No.                    | Serial No.  | Calibrated<br>Date | Calibrated<br>Until |
|-----------------------------------|------------------------------|-------------|--------------------|---------------------|
| Antenna Tower<br>Max-Full         | MFA-515BSN                   | N/A         | N/A                | N/A                 |
| EXA Signal Analyzer<br>Agilent    | N9010A                       | MY52220207  | 2024/12/30         | 2025/12/29          |
| Horn Antenna<br>RFSPIN            | DRH18-E                      | 210104A18E  | 2024/11/10         | 2025/11/9           |
| Horn Antenna<br>Schwarzbeck       | BBHA 9170                    | 9170-1049   | 2024/11/10         | 2025/11/9           |
| MXE EMI Receiver<br>Keysight      | N9038B                       | MY60180019  | 2025/1/15          | 2026/1/14           |
| Preamplifier<br>Agilent           | 83017A                       | MY39501357  | 2025/6/11          | 2026/6/10           |
| Preamplifier<br>EMCI              | EMC184045SE                  | 980788      | 2025/1/14          | 2026/1/13           |
| RF Coaxial Cable<br>EMCI          | EMC101G-KM-KM-2000           | 201254      | 2025/1/14          | 2026/1/13           |
|                                   | EMC101G-KM-KM-3000           | 201258      | 2025/1/14          | 2026/1/13           |
|                                   | EMC101G-KM-KM-5000           | 201261      | 2025/1/14          | 2026/1/13           |
|                                   | EMC104-SM-SM-1000            | 210103      | 2025/1/14          | 2026/1/13           |
|                                   | EMC104-SM-SM-3000            | 201241      | 2025/1/14          | 2026/1/13           |
|                                   | EMC104-SM-SM-9000            | 201244      | 2025/1/14          | 2026/1/13           |
| Software<br>BV ADT                | ADT_Radiated_<br>V7.6.15.9.5 | N/A         | N/A                | N/A                 |
| Turn Table<br>Max-Full            | MFT-201SS                    | N/A         | N/A                | N/A                 |
| Turn Table Controller<br>Max-Full | MF-7802BS                    | MF780208676 | N/A                | N/A                 |

**Notes:**

1. The test was performed in WM - 966 chamber 9.
2. Tested Date: 2025/9/12 ~ 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

### 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>  | PK: 68.2 (dBμV/m) <sup>*1</sup>  |
|                 | PK: 10 (dBm/MHz) <sup>*2</sup>   | PK: 105.2 (dBμV/m) <sup>*2</sup> |
|                 | PK: 15.6 (dBm/MHz) <sup>*3</sup> | PK: 110.8 (dBμV/m) <sup>*3</sup> |
|                 | PK: 27 (dBm/MHz) <sup>*4</sup>   | PK: 122.2 (dBμV/m) <sup>*4</sup> |

<sup>\*1</sup> beyond 75 MHz or more above of the band edge.

<sup>\*2</sup> below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

<sup>\*3</sup> below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

<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.

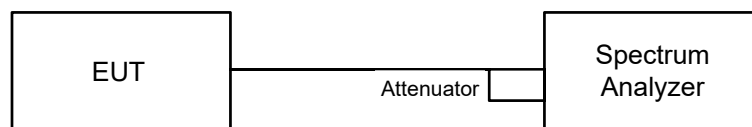
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

## 6 Test Arrangements

### 6.1 26 dB Bandwidth

#### 6.1.1 Test Setup

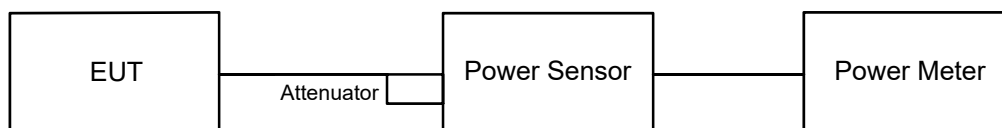


#### 6.1.2 Test Procedure

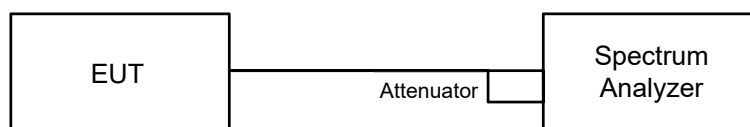
- Set RBW = shall be in the range of 1% to 5% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = peak.
- Trace mode = max-hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and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

### For channel straddling:

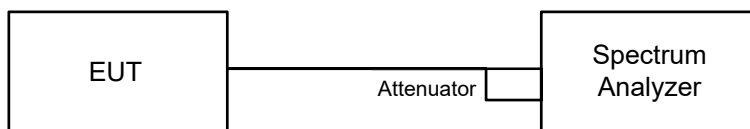
#### Method SA-2A

- Measure the duty cycle of the transmitter output signal.
- 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.)
- Manually set sweep time  $\geq [10 \times (\text{number of points in sweep}) \times (\text{total ON/OFF period of the transmitted signal})]$ .
- Perform a single sweep.
- 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 and add  $10 \log (1/\text{duty cycle})$ .

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 1 MHz:

##### Method SA-2A

- Measure the duty cycle of the transmitter output signal.
- 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.)
- Manually set sweep time  $\geq [10 \times (\text{number of points in sweep}) \times (\text{total ON/OFF period of the transmitted signal})]$ .
- Perform a single sweep.
- Record the max value and add  $10 \log (1/\text{duty cycle})$ .

#### 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.

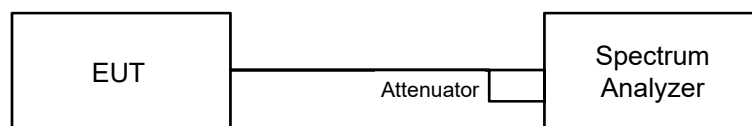
## For specified measurement bandwidth 500 kHz:

### Method SA-2A

- Measure the duty cycle of the transmitter output signal.
- 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  $BWCF = 10\log(500 \text{ kHz}/300 \text{ kHz})$ .
- 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.)
- Manually set sweep time  $\geq 10 \times (\text{number of points in sweep}) \times (\text{total on/off period of the transmitted signal})$ .
- Perform a single sweep.
- Record the max value and add  $10 \log (1/\text{duty cycle})$ .

## 6.4 6 dB Bandwidth

### 6.4.1 Test Setup

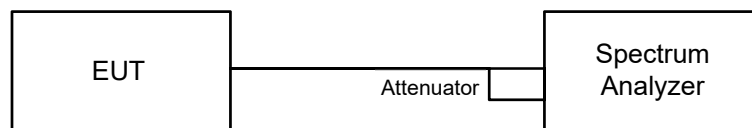


### 6.4.2 Test Procedure

- 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



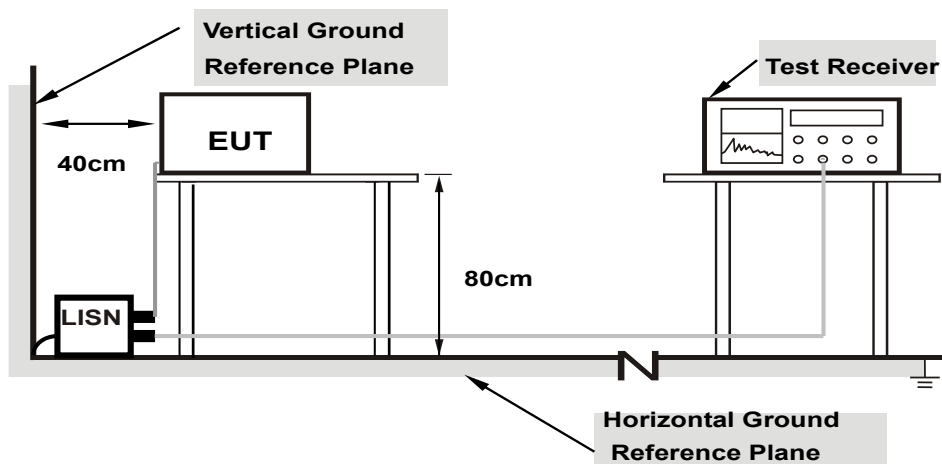
### 6.5.2 Test Procedure

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:

- 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.
- 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.
- 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.
- Step a) through step c) might require iteration to adjust within the specified range.
- 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.
- 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

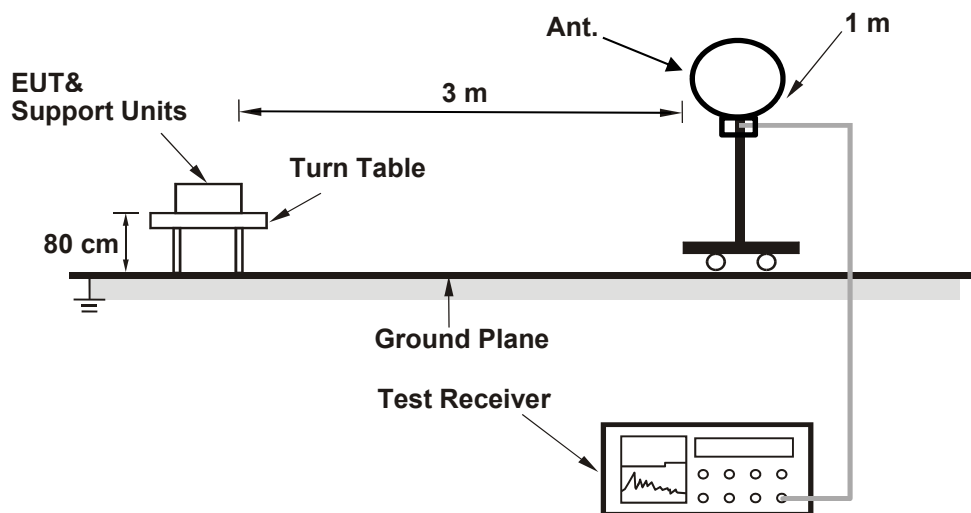
- Exploratory ac power-line conducted emission measurements: The EUT shall be operated on the mid channel and in the mode with highest output power unless the fundamental operates in the AC power-line emission test range then the EUT shall be operated in the range of typical modes of operation.
- The 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.

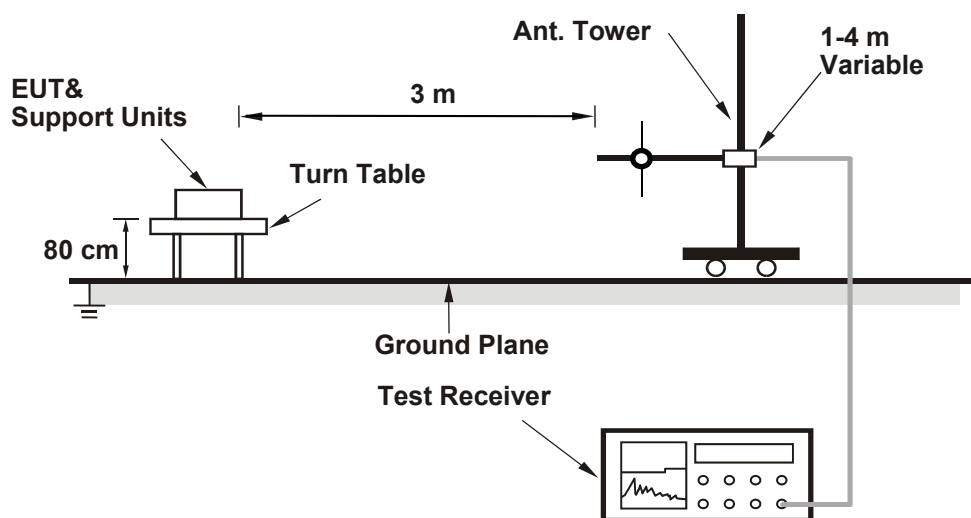
## 6.7 Unwanted Emissions below 1 GHz

### 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

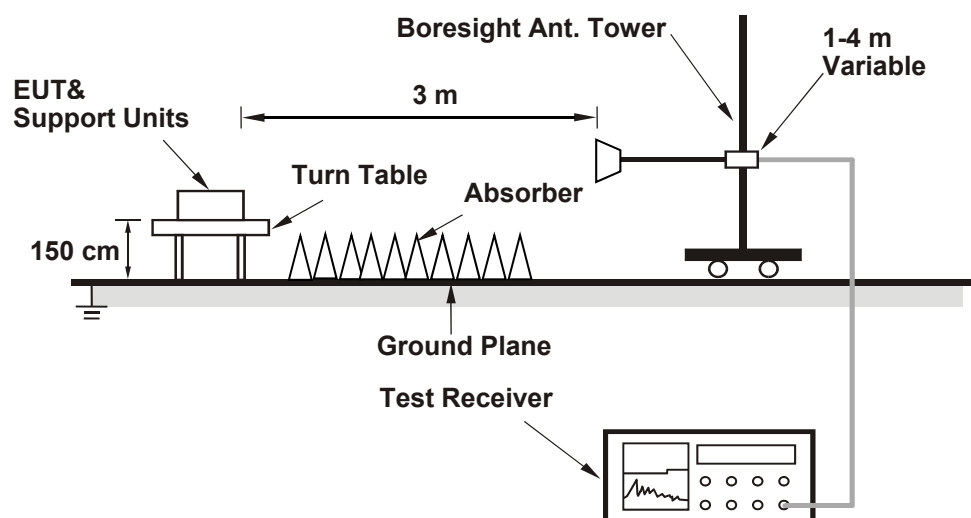
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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

|                           |              |            |           |
|---------------------------|--------------|------------|-----------|
| Environmental Conditions: | 25°C, 60% RH | Tested By: | Ian Chang |
|---------------------------|--------------|------------|-----------|

#### 802.11a

| Channel        | Frequency (MHz) | 26 dB Bandwidth (MHz) |
|----------------|-----------------|-----------------------|
| 52             | 5260            | 21.62                 |
| 60             | 5300            | 21.65                 |
| 64             | 5320            | 21.69                 |
| 100            | 5500            | 21.63                 |
| 116            | 5580            | 21.54                 |
| 140            | 5700            | 21.68                 |
| 144 (U-NII-2C) | 5720            | 15.74                 |
| 144 (U-NII-3)  | 5720            | 10.3                  |

| Determined Output Power Limit |            |             |                                        |   |    |
|-------------------------------|------------|-------------|----------------------------------------|---|----|
| Channel Number                | Freq.(MHz) | Min. B(MHz) | Determined Conducted Power Limit (dBm) |   |    |
| 52                            | 5260       | 21.62       | 24.34                                  | > | 24 |
| 60                            | 5300       | 21.65       | 24.35                                  | > | 24 |
| 64                            | 5320       | 21.69       | 24.36                                  | > | 24 |
| 100                           | 5500       | 21.63       | 24.35                                  | > | 24 |
| 116                           | 5580       | 21.54       | 24.33                                  | > | 24 |
| 140                           | 5700       | 21.68       | 24.36                                  | > | 24 |
| 144 (U-NII-2C)                | 5720       | 15.74       | 22.97                                  | < | 24 |

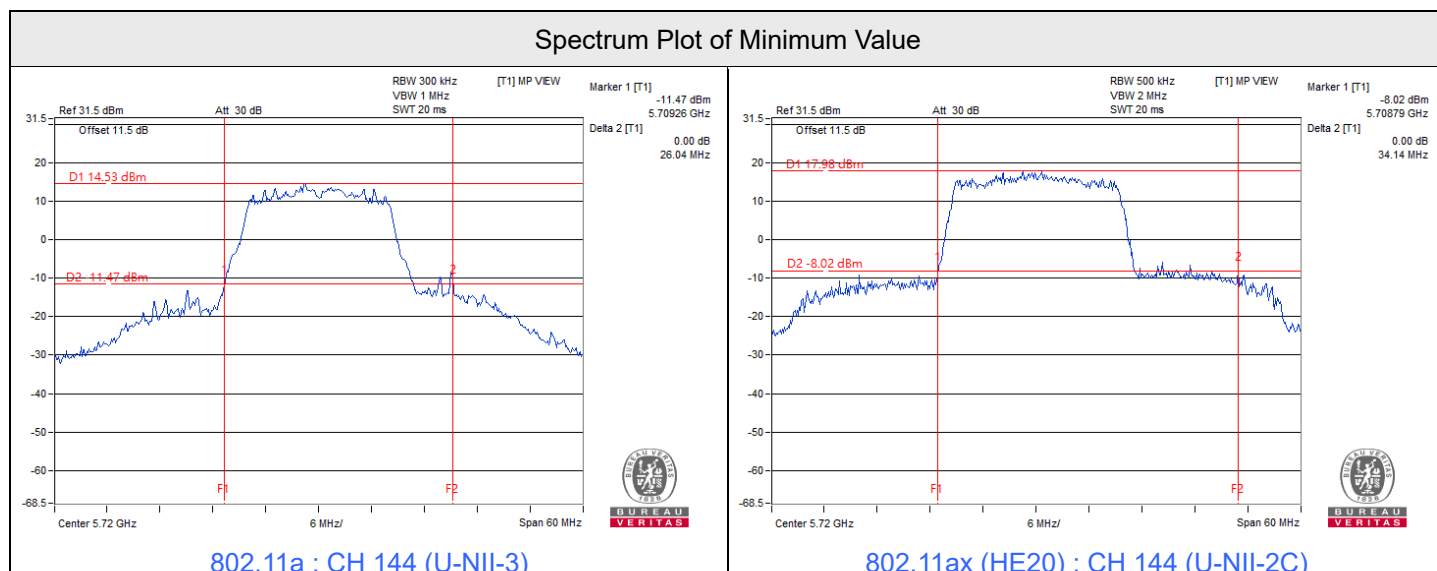
Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

## 802.11ax (HE20)

| Channel        | Frequency (MHz) | 26 dB Bandwidth (MHz) |
|----------------|-----------------|-----------------------|
| 52             | 5260            | 21.66                 |
| 60             | 5300            | 21.8                  |
| 64             | 5320            | 21.93                 |
| 100            | 5500            | 21.96                 |
| 116            | 5580            | 21.7                  |
| 140            | 5700            | 21.65                 |
| 144 (U-NII-2C) | 5720            | 16.21                 |
| 144 (U-NII-3)  | 5720            | 17.93                 |

| Determined Output Power Limit |            |             |                                        |
|-------------------------------|------------|-------------|----------------------------------------|
| Channel Number                | Freq.(MHz) | Min. B(MHz) | Determined Conducted Power Limit (dBm) |
| 52                            | 5260       | 21.66       | 24.35 > 24                             |
| 60                            | 5300       | 21.80       | 24.38 > 24                             |
| 64                            | 5320       | 21.93       | 24.41 > 24                             |
| 100                           | 5500       | 21.96       | 24.41 > 24                             |
| 116                           | 5580       | 21.70       | 24.36 > 24                             |
| 140                           | 5700       | 21.65       | 24.35 > 24                             |
| 144 (U-NII-2C)                | 5720       | 16.21       | 23.09 < 24                             |

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



### 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

|                           |              |            |           |
|---------------------------|--------------|------------|-----------|
| Environmental Conditions: | 25°C, 60% RH | Tested By: | Ian Chang |
|---------------------------|--------------|------------|-----------|

### 802.11a

| Chan.           | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|-----------------|-------------------|--------------------|---------------------|-------------------|-------------|
| 36              | 5180              | 54.075             | 17.33               | 24                | Pass        |
| 40              | 5200              | 65.615             | 18.17               | 24                | Pass        |
| 48              | 5240              | 70.632             | 18.49               | 24                | Pass        |
| 52              | 5260              | 67.764             | 18.31               | 24                | Pass        |
| 60              | 5300              | 67.298             | 18.28               | 24                | Pass        |
| 64              | 5320              | 64.269             | 18.08               | 24                | Pass        |
| 100             | 5500              | 83.368             | 19.21               | 24                | Pass        |
| 116             | 5580              | 91.833             | 19.63               | 24                | Pass        |
| 140             | 5700              | 64.863             | 18.12               | 24                | Pass        |
| *144 (U-NII-2C) | 5720              | 61.364             | 17.88               | 22.97             | Pass        |
| *144 (U-NII-3)  | 5720              | 10.16              | 10.07               | 30                | Pass        |
| 149             | 5745              | 141.906            | 21.52               | 30                | Pass        |
| 157             | 5785              | 143.88             | 21.58               | 30                | Pass        |
| 165             | 5825              | 140.929            | 21.49               | 30                | Pass        |

#### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 2.7 dBi  $\leq$  6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 2.91 dBi  $\leq$  6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 2.75 dBi  $\leq$  6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 2.72 dBi  $\leq$  6 dBi, so the output power limit shall not be reduced.

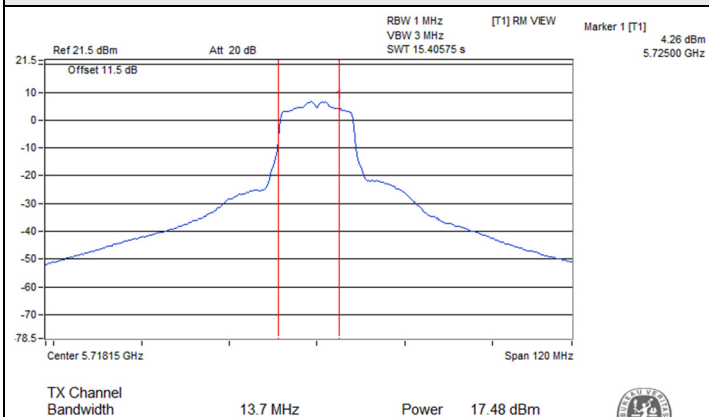
## 802.11ax (HE20)

| Chan.           | Chan. Freq.<br>(MHz) | Average Power<br>(mW) | Average Power<br>(dBm) | Power Limit<br>(dBm) | Test Result |
|-----------------|----------------------|-----------------------|------------------------|----------------------|-------------|
| 36              | 5180                 | 66.527                | 18.23                  | 24                   | Pass        |
| 40              | 5200                 | 70.146                | 18.46                  | 24                   | Pass        |
| 48              | 5240                 | 72.277                | 18.59                  | 24                   | Pass        |
| 52              | 5260                 | 70.146                | 18.46                  | 24                   | Pass        |
| 60              | 5300                 | 69.343                | 18.41                  | 24                   | Pass        |
| 64              | 5320                 | 58.614                | 17.68                  | 24                   | Pass        |
| 100             | 5500                 | 87.902                | 19.44                  | 24                   | Pass        |
| 116             | 5580                 | 109.144               | 20.38                  | 24                   | Pass        |
| 140             | 5700                 | 52.845                | 17.23                  | 24                   | Pass        |
| *144 (U-NII-2C) | 5720                 | 40.458                | 16.07                  | 23.09                | Pass        |
| *144 (U-NII-3)  | 5720                 | 12.647                | 11.02                  | 30                   | Pass        |
| 149             | 5745                 | 142.889               | 21.55                  | 30                   | Pass        |
| 157             | 5785                 | 137.404               | 21.38                  | 30                   | Pass        |
| 165             | 5825                 | 136.773               | 21.36                  | 30                   | Pass        |

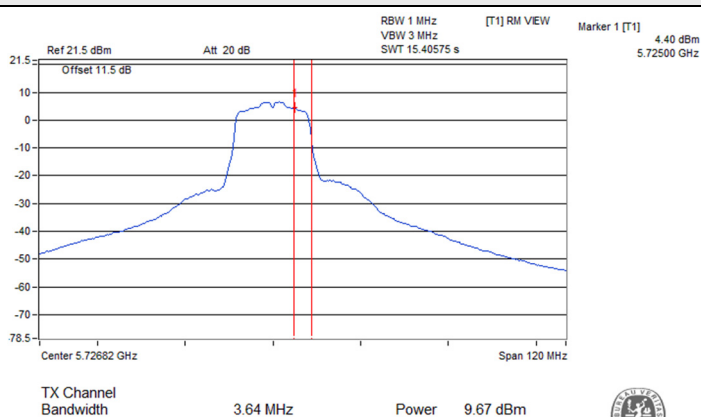
### Notes:

- \* : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- For U-NII-1, the antenna gain is 2.7 dBi  $\leq$  6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 2.91 dBi  $\leq$  6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 2.75 dBi  $\leq$  6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 2.72 dBi  $\leq$  6 dBi, so the output power limit shall not be reduced.

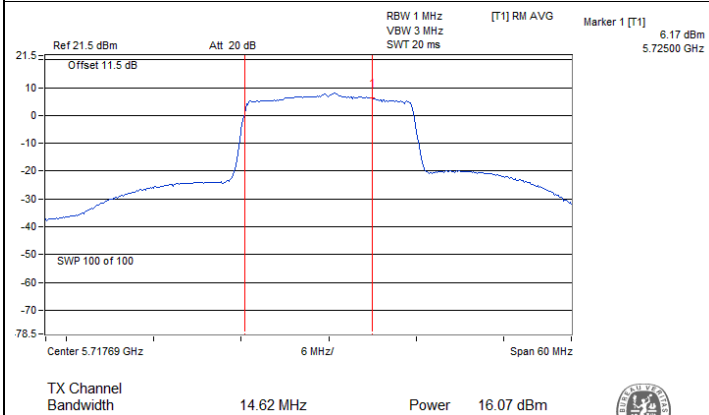
## Spectrum Plot for channel straddling



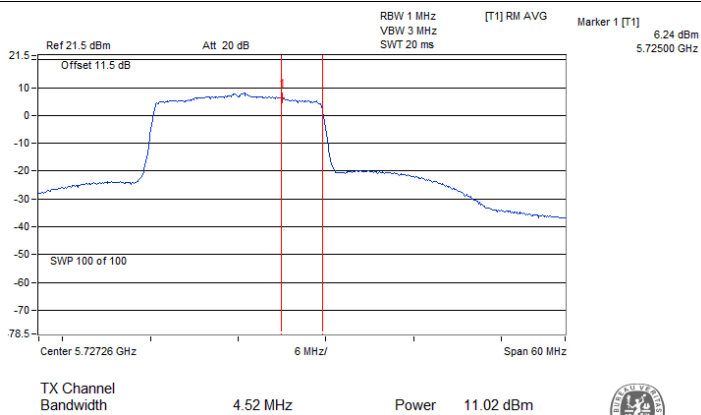
802.11a : CH 144 (U-NII-2C)



802.11a : CH 144 (U-NII-3)



802.11ax (HE20) : CH 144 (U-NII-2C)



802.11ax (HE20) : CH 144 (U-NII-3)

### 7.3 Power Spectral Density

|                           |              |            |           |
|---------------------------|--------------|------------|-----------|
| Environmental Conditions: | 25°C, 60% RH | Tested By: | Ian Chang |
|---------------------------|--------------|------------|-----------|

#### 802.11a

| Chan.          | Chan. Freq. (MHz) | PSD w/o Duty Factor (dBm/MHz) | Duty Factor (dB) | PSD (dBm/MHz) | Max. PSD Limit (dBm/MHz) | Test Result |
|----------------|-------------------|-------------------------------|------------------|---------------|--------------------------|-------------|
| 36             | 5180              | 3.71                          | 0.40             | 4.11          | 11                       | Pass        |
| 40             | 5200              | 4.53                          | 0.40             | 4.93          | 11                       | Pass        |
| 48             | 5240              | 4.71                          | 0.40             | 5.11          | 11                       | Pass        |
| 52             | 5260              | 4.85                          | 0.40             | 5.25          | 11                       | Pass        |
| 60             | 5300              | 4.71                          | 0.40             | 5.11          | 11                       | Pass        |
| 64             | 5320              | 4.56                          | 0.40             | 4.96          | 11                       | Pass        |
| 100            | 5500              | 5.61                          | 0.40             | 6.01          | 11                       | Pass        |
| 116            | 5580              | 6.12                          | 0.40             | 6.52          | 11                       | Pass        |
| 140            | 5700              | 4.54                          | 0.40             | 4.94          | 11                       | Pass        |
| 144 (U-NII-2C) | 5720              | 7.45                          | 0.40             | 7.85          | 11                       | Pass        |

#### Notes:

1. For U-NII-1, the antenna gain is 2.7 dBi  $\leq$  6 dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.91 dBi  $\leq$  6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.75 dBi  $\leq$  6 dBi, so the power density limit shall not be reduced.

#### 802.11ax (HE20)

| Chan.          | Chan. Freq. (MHz) | PSD (dBm/MHz) | Max. PSD Limit (dBm/MHz) | Test Result |
|----------------|-------------------|---------------|--------------------------|-------------|
| 36             | 5180              | 5.28          | 11                       | Pass        |
| 40             | 5200              | 5.80          | 11                       | Pass        |
| 48             | 5240              | 5.57          | 11                       | Pass        |
| 52             | 5260              | 5.17          | 11                       | Pass        |
| 60             | 5300              | 5.23          | 11                       | Pass        |
| 64             | 5320              | 4.65          | 11                       | Pass        |
| 100            | 5500              | 5.94          | 11                       | Pass        |
| 116            | 5580              | 7.08          | 11                       | Pass        |
| 140            | 5700              | 3.81          | 11                       | Pass        |
| 144 (U-NII-2C) | 5720              | 7.98          | 11                       | Pass        |

#### Notes:

1. For U-NII-1, the antenna gain is 2.7 dBi  $\leq$  6 dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.91 dBi  $\leq$  6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.75 dBi  $\leq$  6 dBi, so the power density limit shall not be reduced.

### 802.11a

| Chan.         | Chan. Freq. (MHz) | PSD w/o Duty Factor (dBm/300kHz) | Duty Factor (dB) | PSD (dBm/500kHz) | PSD Limit (dBm/500kHz) | Test Result |
|---------------|-------------------|----------------------------------|------------------|------------------|------------------------|-------------|
| 144 (U-NII-3) | 5720              | -2.1                             | 0.4              | 0.52             | 30                     | Pass        |
| 149           | 5745              | 0.23                             | 0.4              | 2.85             | 30                     | Pass        |
| 157           | 5785              | 0.4                              | 0.4              | 3.02             | 30                     | Pass        |
| 165           | 5825              | -0.65                            | 0.4              | 1.97             | 30                     | Pass        |

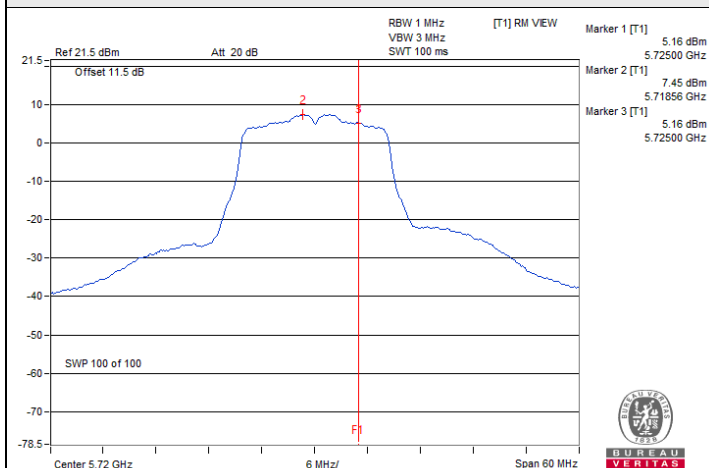
Note: For U-NII-3, the antenna gain is 2.72 dBi  $\leq$  6 dBi, so the power density limit shall not be reduced.

### 802.11ax (HE20)

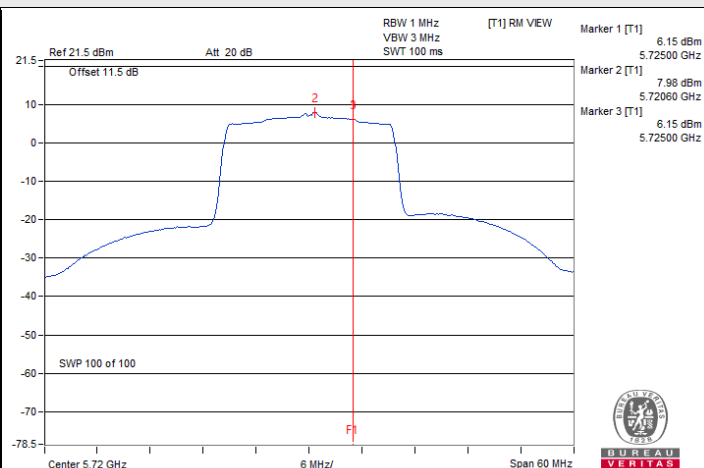
| Chan.         | Chan. Freq. (MHz) | PSD (dBm/300kHz) | PSD (dBm/500kHz) | PSD Limit (dBm/500kHz) | Test Result |
|---------------|-------------------|------------------|------------------|------------------------|-------------|
| 144 (U-NII-3) | 5720              | -2.28            | -0.06            | 30                     | Pass        |
| 149           | 5745              | -0.56            | 1.66             | 30                     | Pass        |
| 157           | 5785              | -0.28            | 1.94             | 30                     | Pass        |
| 165           | 5825              | -0.7             | 1.52             | 30                     | Pass        |

Note: For U-NII-3, the antenna gain is 2.72 dBi  $\leq$  6 dBi, so the power density limit shall not be reduced.

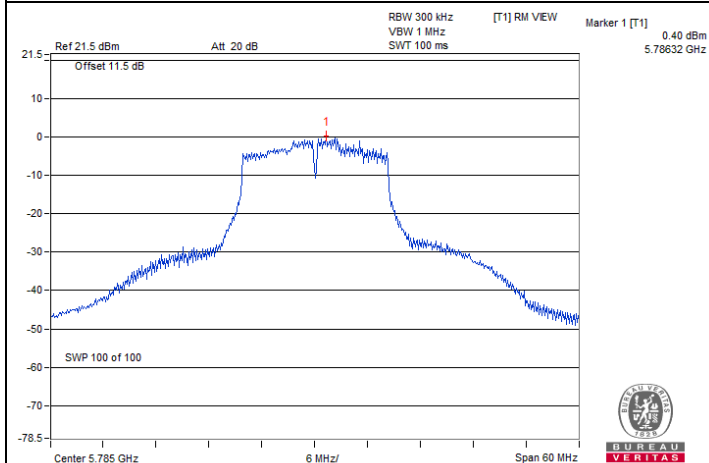
## Spectrum Plot of Maximum Value



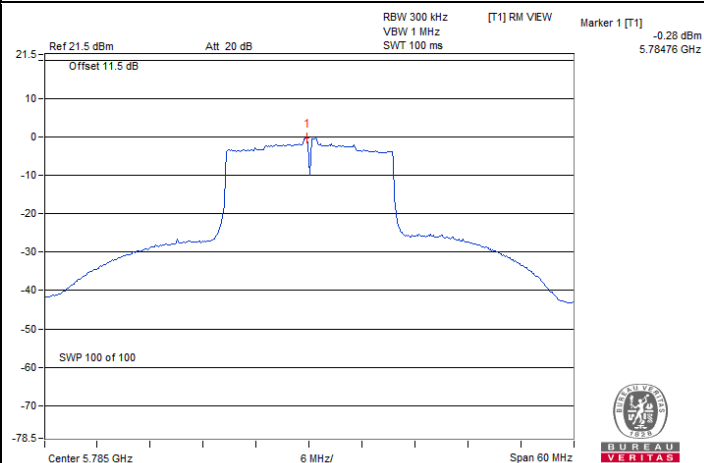
802.11a : CH 144 (U-NII-2C)



802.11ax (HE20) : CH 144 (U-NII-2C)



802.11a : CH 157



802.11ax (HE20) : CH 157

## 7.4 6 dB Bandwidth

|                           |              |            |           |
|---------------------------|--------------|------------|-----------|
| Environmental Conditions: | 25°C, 60% RH | Tested By: | Ian Chang |
|---------------------------|--------------|------------|-----------|

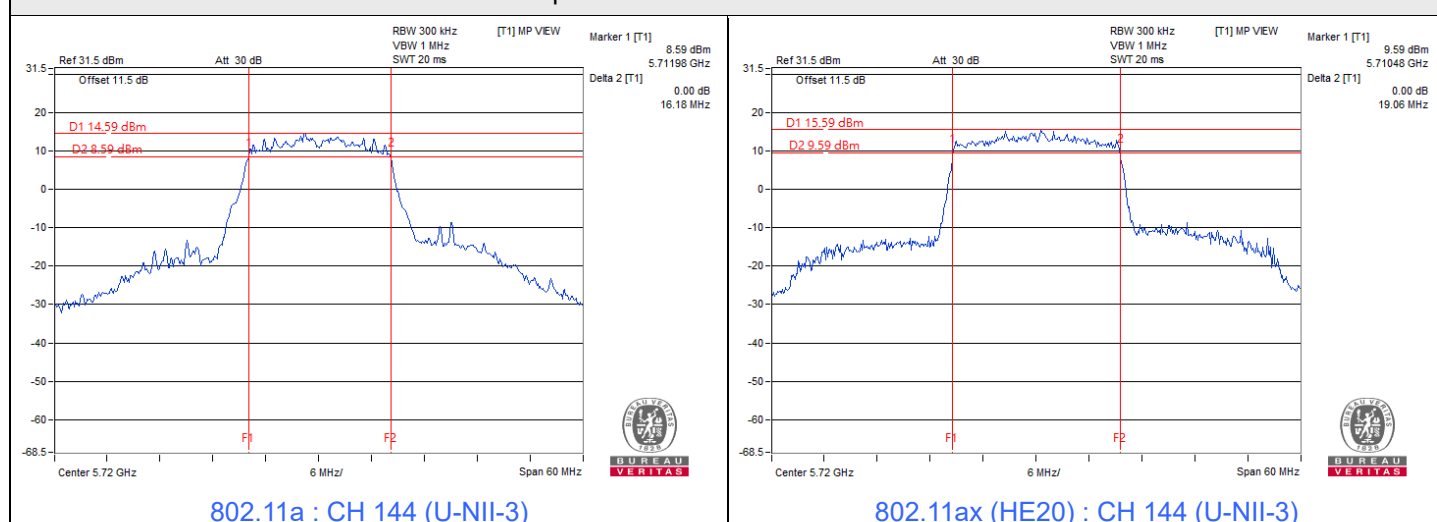
### 802.11a

| Channel       | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) | Test Result |
|---------------|-----------------|----------------------|---------------------|-------------|
| 144 (U-NII-3) | 5720            | 3.16                 | 0.5                 | Pass        |
| 149           | 5745            | 16.21                | 0.5                 | Pass        |
| 157           | 5785            | 16.18                | 0.5                 | Pass        |
| 165           | 5825            | 16.16                | 0.5                 | Pass        |

### 802.11ax (HE20)

| Channel       | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) | Test Result |
|---------------|-----------------|----------------------|---------------------|-------------|
| 144 (U-NII-3) | 5720            | 4.54                 | 0.5                 | Pass        |
| 149           | 5745            | 18.99                | 0.5                 | Pass        |
| 157           | 5785            | 18.98                | 0.5                 | Pass        |
| 165           | 5825            | 18.96                | 0.5                 | Pass        |

Spectrum Plot of Minimum Value



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

## 7.5 Occupied Bandwidth

|                           |              |            |           |
|---------------------------|--------------|------------|-----------|
| Environmental Conditions: | 25°C, 60% RH | Tested By: | Ian Chang |
|---------------------------|--------------|------------|-----------|

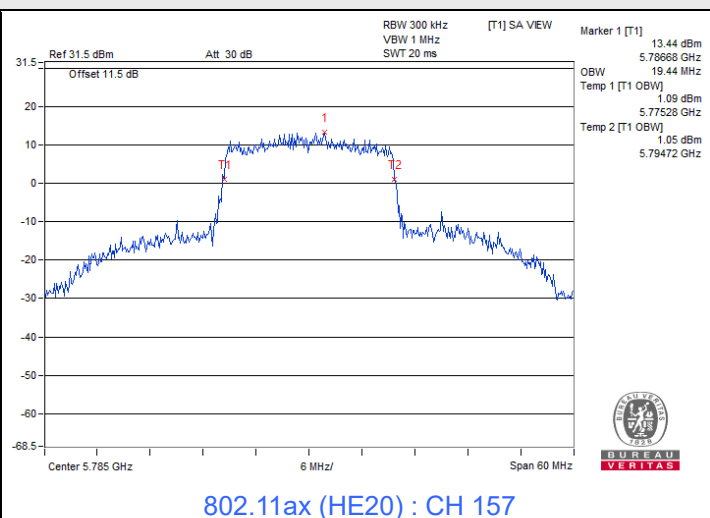
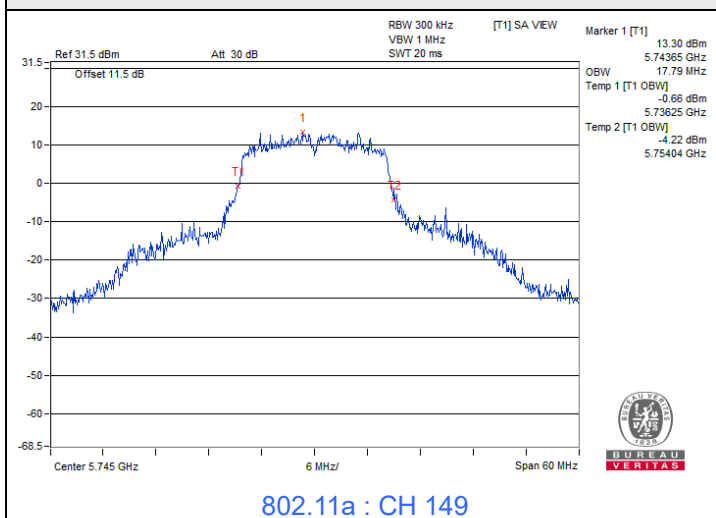
### 802.11a

| Channel        | Frequency (MHz) | Occupied Bandwidth (MHz) |
|----------------|-----------------|--------------------------|
| 36             | 5180            | 16.8                     |
| 40             | 5200            | 16.68                    |
| 48             | 5240            | 17.04                    |
| 52             | 5260            | 16.8                     |
| 60             | 5300            | 16.92                    |
| 64             | 5320            | 16.8                     |
| 100            | 5500            | 16.68                    |
| 116            | 5580            | 16.8                     |
| 140            | 5700            | 16.68                    |
| 144 (U-NII-2C) | 5720            | 13.7                     |
| 144 (U-NII-3)  | 5720            | 3.64                     |
| 149            | 5745            | 17.79                    |
| 157            | 5785            | 17.4                     |
| 165            | 5825            | 17.52                    |

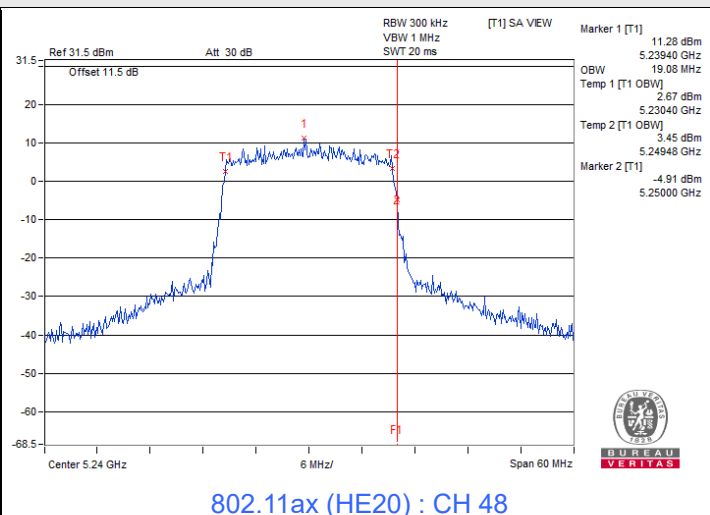
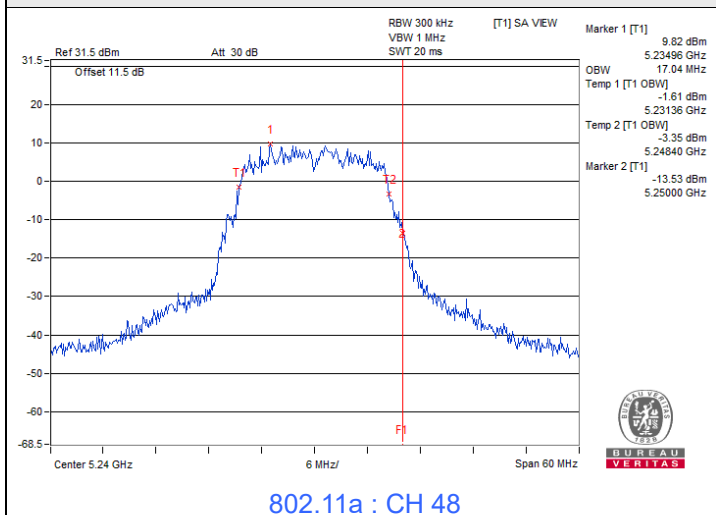
### 802.11ax (HE20)

| Channel        | Frequency (MHz) | Occupied Bandwidth (MHz) |
|----------------|-----------------|--------------------------|
| 36             | 5180            | 19.08                    |
| 40             | 5200            | 18.96                    |
| 48             | 5240            | 19.08                    |
| 52             | 5260            | 19.08                    |
| 60             | 5300            | 19.08                    |
| 64             | 5320            | 19.08                    |
| 100            | 5500            | 18.96                    |
| 116            | 5580            | 19.2                     |
| 140            | 5700            | 19.2                     |
| 144 (U-NII-2C) | 5720            | 14.62                    |
| 144 (U-NII-3)  | 5720            | 4.52                     |
| 149            | 5745            | 19.2                     |
| 157            | 5785            | 19.44                    |
| 165            | 5825            | 19.32                    |

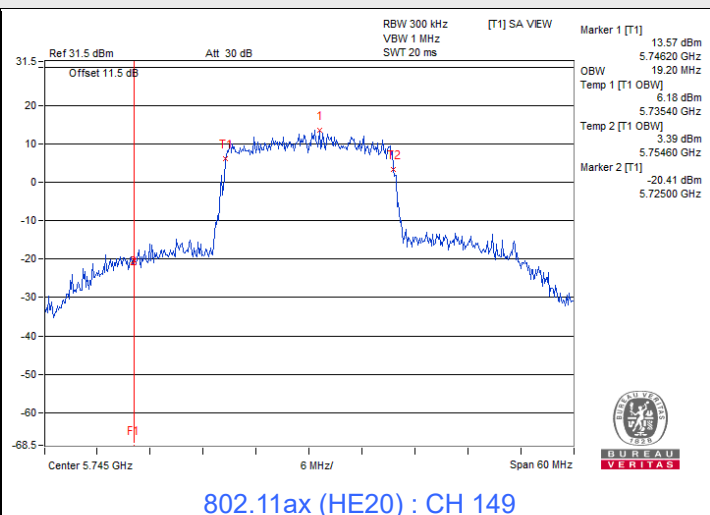
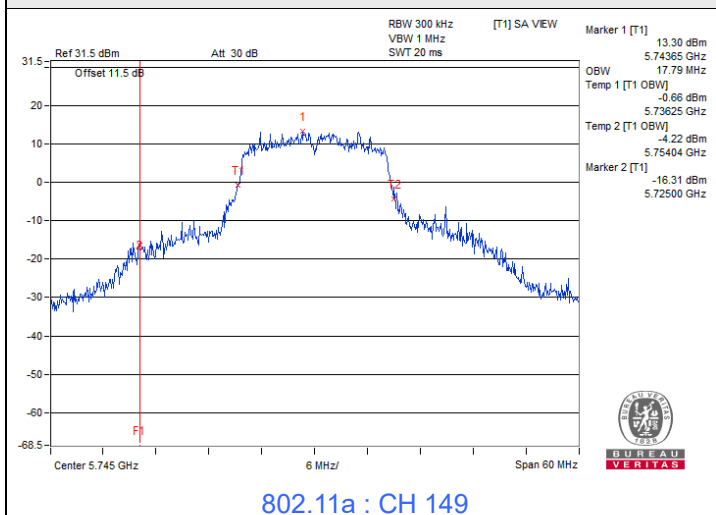
### Spectrum Plot of Maximum Value



### 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-2C)



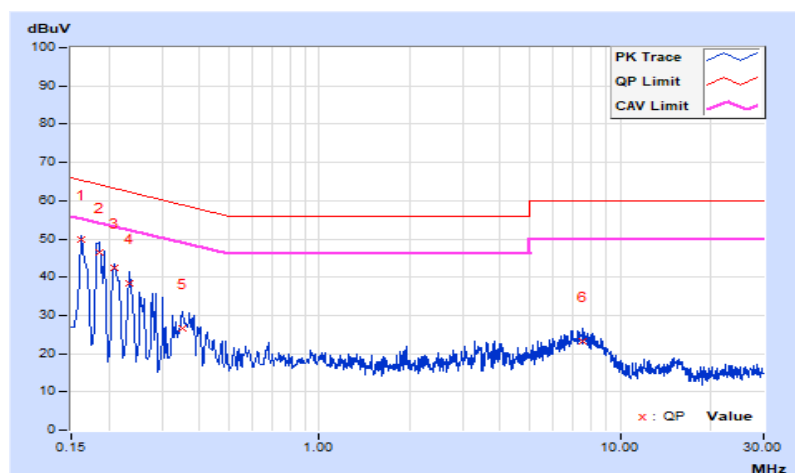
## 7.6 AC Power Conducted Emissions

|                 |                  |                                          |                                       |
|-----------------|------------------|------------------------------------------|---------------------------------------|
| RF Mode         | 802.11a          | Channel                                  | CH 157 : 5785 MHz                     |
| Frequency Range | 150 kHz ~ 30 MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9 kHz |
| Input Power     | 120 Vac, 60 Hz   | Environmental Conditions                 | 25 °C, 75% RH                         |
| Tested By       | Greg Lin         |                                          |                                       |

| 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                         | 0.16200         | 9.76                   | 40.03                | 19.07 | 49.79                 | 28.83 | 65.36        | 55.36 | -15.57      | -26.53 |
| 2                         | 0.18519         | 9.78                   | 36.76                | 17.21 | 46.54                 | 26.99 | 64.25        | 54.25 | -17.71      | -27.26 |
| 3                         | 0.21000         | 9.79                   | 32.62                | 13.29 | 42.41                 | 23.08 | 63.21        | 53.21 | -20.80      | -30.13 |
| 4                         | 0.23400         | 9.81                   | 28.54                | 9.50  | 38.35                 | 19.31 | 62.31        | 52.31 | -23.96      | -33.00 |
| 5                         | 0.35000         | 9.86                   | 16.59                | 8.61  | 26.45                 | 18.47 | 58.96        | 48.96 | -32.51      | -30.49 |
| 6                         | 7.51400         | 10.31                  | 13.09                | 5.37  | 23.40                 | 15.68 | 60.00        | 50.00 | -36.60      | -34.32 |

### 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

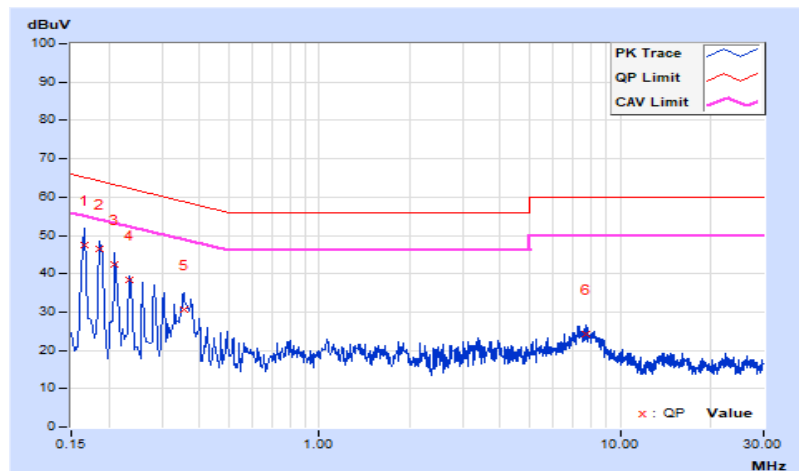


|                 |                  |                                          |                                       |
|-----------------|------------------|------------------------------------------|---------------------------------------|
| RF Mode         | 802.11a          | Channel                                  | CH 157 : 5785 MHz                     |
| Frequency Range | 150 kHz ~ 30 MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9 kHz |
| Input Power     | 120 Vac, 60 Hz   | Environmental Conditions                 | 25 °C, 75% RH                         |
| Tested By       | Greg Lin         |                                          |                                       |

| 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                            | 0.16600         | 9.71                   | 37.60                | 16.34 | 47.31                 | 26.05 | 65.16        | 55.16 | -17.85      | -29.11 |
| 2                            | 0.18600         | 9.72                   | 36.59                | 17.70 | 46.31                 | 27.42 | 64.21        | 54.21 | -17.90      | -26.79 |
| 3                            | 0.21000         | 9.73                   | 32.58                | 14.54 | 42.31                 | 24.27 | 63.21        | 53.21 | -20.90      | -28.94 |
| 4                            | 0.23400         | 9.75                   | 28.50                | 10.15 | 38.25                 | 19.90 | 62.31        | 52.31 | -24.06      | -32.41 |
| 5                            | 0.35400         | 9.87                   | 20.69                | 13.95 | 30.56                 | 23.82 | 58.87        | 48.87 | -28.31      | -25.05 |
| 6                            | 7.70600         | 10.37                  | 13.86                | 4.95  | 24.23                 | 15.32 | 60.00        | 50.00 | -35.77      | -34.68 |

#### 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



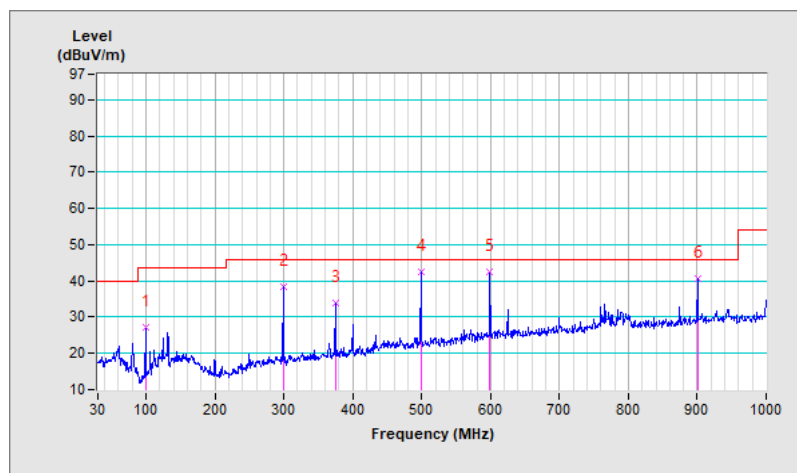
## 7.7 Unwanted Emissions below 1 GHz

|                 |                |                               |                                |
|-----------------|----------------|-------------------------------|--------------------------------|
| RF Mode         | 802.11a        | Channel                       | CH 157 : 5785 MHz              |
| Frequency Range | 30 MHz ~ 1 GHz | Detector Function & Bandwidth | QP: RB=120 kHz, DET=Quasi-Peak |
| Input Power     | 120 Vac, 60 Hz | Environmental Conditions      | 23 °C, 67% RH                  |
| Tested By       | Greg Lin       |                               |                                |

| 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                                                    | 98.87           | 27.0 QP                 | 43.5           | -16.5       | 1.25 H             | 164                  | 44.5             | -17.5                    |
| 2                                                    | 299.66          | 38.4 QP                 | 46.0           | -7.6        | 1.00 H             | 144                  | 50.6             | -12.2                    |
| 3                                                    | 374.35          | 34.0 QP                 | 46.0           | -12.0       | 1.25 H             | 137                  | 44.3             | -10.3                    |
| 4                                                    | 499.48          | 42.5 QP                 | 46.0           | -3.5        | 1.50 H             | 136                  | 50.2             | -7.7                     |
| 5                                                    | 599.39          | 42.3 QP                 | 46.0           | -3.7        | 1.00 H             | 356                  | 47.2             | -4.9                     |
| 6                                                    | 900.09          | 40.8 QP                 | 46.0           | -5.2        | 1.50 H             | 4                    | 41.4             | -0.6                     |

### 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 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.

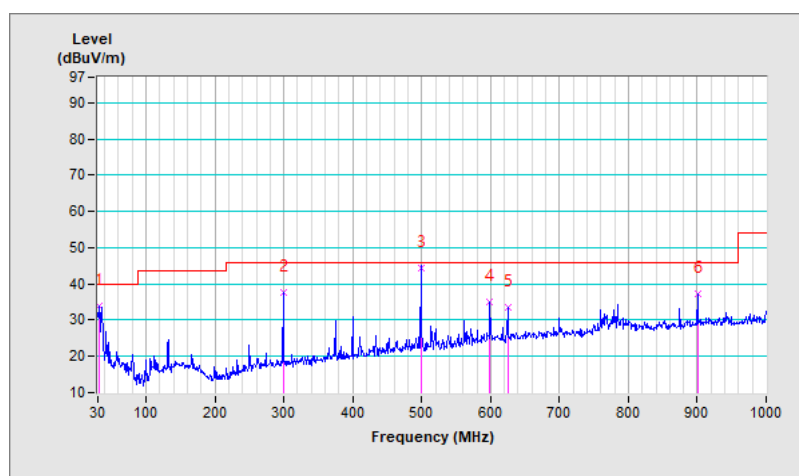


|                 |                |                               |                                |
|-----------------|----------------|-------------------------------|--------------------------------|
| RF Mode         | 802.11a        | Channel                       | CH 157 : 5785 MHz              |
| Frequency Range | 30 MHz ~ 1 GHz | Detector Function & Bandwidth | QP: RB=120 kHz, DET=Quasi-Peak |
| Input Power     | 120 Vac, 60 Hz | Environmental Conditions      | 23 °C, 67% RH                  |
| Tested By       | Greg Lin       |                               |                                |

| 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                                                  | 31.94           | 34.0 QP                 | 40.0           | -6.0        | 1.00 V             | 163                  | 48.2             | -14.2                    |
| 2                                                  | 299.66          | 37.8 QP                 | 46.0           | -8.2        | 1.00 V             | 328                  | 50.0             | -12.2                    |
| 3                                                  | 499.48          | 44.4 QP                 | 46.0           | -1.6        | 1.25 V             | 55                   | 52.1             | -7.7                     |
| 4                                                  | 599.39          | 35.1 QP                 | 46.0           | -10.9       | 1.50 V             | 139                  | 40.0             | -4.9                     |
| 5                                                  | 624.61          | 33.4 QP                 | 46.0           | -12.6       | 1.25 V             | 138                  | 38.1             | -4.7                     |
| 6                                                  | 900.09          | 37.3 QP                 | 46.0           | -8.7        | 1.50 V             | 257                  | 37.9             | -0.6                     |

#### 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 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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin       |                                          |                                                                      |

| 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         | 56.50 PK                | 74.00          | -17.50      | 1.58 H             | 11                   | 52.40            | 4.10                     |
| 2                                                    | 5150.00         | 44.00 AV                | 54.00          | -10.00      | 1.58 H             | 11                   | 39.90            | 4.10                     |
| 3                                                    | *5180.00        | 109.70 PK               |                |             | 1.58 H             | 11                   | 67.92            | 41.78                    |
| 4                                                    | *5180.00        | 99.40 AV                |                |             | 1.58 H             | 11                   | 57.62            | 41.78                    |
| 5                                                    | #10360.00       | 58.50 PK                | 68.20          | -9.70       | 1.66 H             | 127                  | 47.84            | 10.66                    |
| 6                                                    | 15540.00        | 64.73 PK                | 74.00          | -9.27       | 2.19 H             | 317                  | 51.58            | 13.15                    |
| 7                                                    | 15540.00        | 51.73 AV                | 54.00          | -2.27       | 2.19 H             | 317                  | 38.58            | 13.15                    |
| 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         | 57.30 PK                | 74.00          | -16.70      | 2.01 V             | 5                    | 53.10            | 4.20                     |
| 2                                                    | 5150.00         | 44.60 AV                | 54.00          | -9.40       | 2.01 V             | 5                    | 40.40            | 4.20                     |
| 3                                                    | *5180.00        | 110.80 PK               |                |             | 2.01 V             | 5                    | 68.90            | 41.90                    |
| 4                                                    | *5180.00        | 100.30 AV               |                |             | 2.01 V             | 5                    | 58.40            | 41.90                    |
| 5                                                    | #10360.00       | 60.10 PK                | 68.20          | -8.10       | 1.97 V             | 217                  | 49.30            | 10.80                    |
| 6                                                    | 15540.00        | 67.70 PK                | 74.00          | -6.30       | 2.42 V             | 176                  | 54.40            | 13.30                    |
| 7                                                    | 15540.00        | 53.50 AV                | 54.00          | -0.50       | 2.42 V             | 176                  | 40.20            | 13.30                    |

### 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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin       |                                          |                                                                      |

| 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                                                    | *5200.00        | 109.80 PK               |                |             | 1.59 H             | 19                   | 67.90            | 41.90                    |
| 2                                                    | *5200.00        | 99.50 AV                |                |             | 1.59 H             | 19                   | 57.60            | 41.90                    |
| 3                                                    | #10400.00       | 58.20 PK                | 68.20          | -10.00      | 1.63 H             | 116                  | 47.40            | 10.80                    |
| 4                                                    | 15600.00        | 64.90 PK                | 74.00          | -9.10       | 2.15 H             | 320                  | 51.80            | 13.10                    |
| 5                                                    | 15600.00        | 51.70 AV                | 54.00          | -2.30       | 2.15 H             | 320                  | 38.60            | 13.10                    |
| 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                                                    | *5200.00        | 111.50 PK               |                |             | 1.87 V             | 199                  | 69.60            | 41.90                    |
| 2                                                    | *5200.00        | 100.80 AV               |                |             | 1.87 V             | 199                  | 58.90            | 41.90                    |
| 3                                                    | #10400.00       | 60.30 PK                | 68.20          | -7.90       | 1.91 V             | 205                  | 49.50            | 10.80                    |
| 4                                                    | 15600.00        | 66.90 PK                | 74.00          | -7.10       | 2.46 V             | 177                  | 53.80            | 13.10                    |
| 5                                                    | 15600.00        | 53.50 AV                | 54.00          | -0.50       | 2.46 V             | 177                  | 40.40            | 13.10                    |

**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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin       |                                          |                                                                      |

| 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                                                    | *5240.00        | 110.10 PK               |                |             | 1.65 H             | 19                   | 68.40            | 41.70                    |
| 2                                                    | *5240.00        | 99.70 AV                |                |             | 1.65 H             | 19                   | 58.00            | 41.70                    |
| 3                                                    | 5350.00         | 55.00 PK                | 74.00          | -19.00      | 1.65 H             | 19                   | 51.10            | 3.90                     |
| 4                                                    | 5350.00         | 41.70 AV                | 54.00          | -12.30      | 1.65 H             | 19                   | 37.80            | 3.90                     |
| 5                                                    | #10480.00       | 58.50 PK                | 68.20          | -9.70       | 1.58 H             | 113                  | 47.40            | 11.10                    |
| 6                                                    | 15720.00        | 64.30 PK                | 74.00          | -9.70       | 2.23 H             | 316                  | 51.60            | 12.70                    |
| 7                                                    | 15720.00        | 51.10 AV                | 54.00          | -2.90       | 2.23 H             | 316                  | 38.40            | 12.70                    |
| 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                                                    | *5240.00        | 111.10 PK               |                |             | 1.92 V             | 2                    | 69.40            | 41.70                    |
| 2                                                    | *5240.00        | 100.60 AV               |                |             | 1.92 V             | 2                    | 58.90            | 41.70                    |
| 3                                                    | 5350.00         | 55.20 PK                | 74.00          | -18.80      | 1.92 V             | 2                    | 51.30            | 3.90                     |
| 4                                                    | 5350.00         | 42.20 AV                | 54.00          | -11.80      | 1.92 V             | 2                    | 38.30            | 3.90                     |
| 5                                                    | #10480.00       | 60.40 PK                | 68.20          | -7.80       | 1.92 V             | 202                  | 49.30            | 11.10                    |
| 6                                                    | 15720.00        | 67.30 PK                | 74.00          | -6.70       | 2.37 V             | 179                  | 54.60            | 12.70                    |
| 7                                                    | 15720.00        | 53.50 AV                | 54.00          | -0.50       | 2.37 V             | 179                  | 40.80            | 12.70                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin        |                                          |                                                                      |

| 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         | 63.90 PK                | 74.00          | -10.10      | 1.54 H             | 21                   | 59.70            | 4.20                     |
| 2                                                    | 5150.00         | 48.10 AV                | 54.00          | -5.90       | 1.54 H             | 21                   | 43.90            | 4.20                     |
| 3                                                    | *5180.00        | 112.20 PK               |                |             | 1.54 H             | 21                   | 70.30            | 41.90                    |
| 4                                                    | *5180.00        | 99.60 AV                |                |             | 1.54 H             | 21                   | 57.70            | 41.90                    |
| 5                                                    | #10360.00       | 58.30 PK                | 68.20          | -9.90       | 1.62 H             | 115                  | 47.50            | 10.80                    |
| 6                                                    | 15540.00        | 65.00 PK                | 74.00          | -9.00       | 2.13 H             | 314                  | 51.70            | 13.30                    |
| 7                                                    | 15540.00        | 51.60 AV                | 54.00          | -2.40       | 2.13 H             | 314                  | 38.30            | 13.30                    |
| 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         | 66.40 PK                | 74.00          | -7.60       | 1.97 V             | 7                    | 62.20            | 4.20                     |
| 2                                                    | 5150.00         | 48.80 AV                | 54.00          | -5.20       | 1.97 V             | 7                    | 44.60            | 4.20                     |
| 3                                                    | *5180.00        | 113.10 PK               |                |             | 1.97 V             | 7                    | 71.20            | 41.90                    |
| 4                                                    | *5180.00        | 100.50 AV               |                |             | 1.97 V             | 7                    | 58.60            | 41.90                    |
| 5                                                    | #10360.00       | 60.20 PK                | 68.20          | -8.00       | 1.88 V             | 211                  | 49.40            | 10.80                    |
| 6                                                    | 15540.00        | 67.30 PK                | 74.00          | -6.70       | 2.44 V             | 178                  | 54.00            | 13.30                    |
| 7                                                    | 15540.00        | 53.50 AV                | 54.00          | -0.50       | 2.44 V             | 178                  | 40.20            | 13.30                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin        |                                          |                                                                      |

| 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                                                    | *5200.00        | 112.20 PK               |                |             | 1.58 H             | 18                   | 70.30            | 41.90                    |
| 2                                                    | *5200.00        | 100.00 AV               |                |             | 1.58 H             | 18                   | 58.10            | 41.90                    |
| 3                                                    | #10400.00       | 58.40 PK                | 68.20          | -9.80       | 1.68 H             | 114                  | 47.60            | 10.80                    |
| 4                                                    | 15600.00        | 64.70 PK                | 74.00          | -9.30       | 2.16 H             | 324                  | 51.60            | 13.10                    |
| 5                                                    | 15600.00        | 51.70 AV                | 54.00          | -2.30       | 2.16 H             | 324                  | 38.60            | 13.10                    |
| 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                                                    | *5200.00        | 113.20 PK               |                |             | 1.73 V             | 197                  | 71.30            | 41.90                    |
| 2                                                    | *5200.00        | 100.80 AV               |                |             | 1.73 V             | 197                  | 58.90            | 41.90                    |
| 3                                                    | #10400.00       | 60.10 PK                | 68.20          | -8.10       | 1.94 V             | 212                  | 49.30            | 10.80                    |
| 4                                                    | 15600.00        | 66.90 PK                | 74.00          | -7.10       | 2.50 V             | 177                  | 53.80            | 13.10                    |
| 5                                                    | 15600.00        | 53.40 AV                | 54.00          | -0.60       | 2.50 V             | 177                  | 40.30            | 13.10                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin        |                                          |                                                                      |

| 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                                                    | *5240.00        | 112.50 PK               |                |             | 1.64 H             | 17                   | 70.80            | 41.70                    |
| 2                                                    | *5240.00        | 99.90 AV                |                |             | 1.64 H             | 17                   | 58.20            | 41.70                    |
| 3                                                    | 5350.00         | 55.70 PK                | 74.00          | -18.30      | 1.64 H             | 17                   | 51.80            | 3.90                     |
| 4                                                    | 5350.00         | 41.80 AV                | 54.00          | -12.20      | 1.64 H             | 17                   | 37.90            | 3.90                     |
| 5                                                    | #10480.00       | 58.90 PK                | 68.20          | -9.30       | 1.59 H             | 123                  | 47.80            | 11.10                    |
| 6                                                    | 15720.00        | 64.60 PK                | 74.00          | -9.40       | 2.17 H             | 326                  | 51.90            | 12.70                    |
| 7                                                    | 15720.00        | 51.40 AV                | 54.00          | -2.60       | 2.17 H             | 326                  | 38.70            | 12.70                    |
| 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                                                    | *5240.00        | 113.40 PK               |                |             | 2.12 V             | 1                    | 71.70            | 41.70                    |
| 2                                                    | *5240.00        | 100.70 AV               |                |             | 2.12 V             | 1                    | 59.00            | 41.70                    |
| 3                                                    | 5350.00         | 56.20 PK                | 74.00          | -17.80      | 2.12 V             | 1                    | 52.30            | 3.90                     |
| 4                                                    | 5350.00         | 42.30 AV                | 54.00          | -11.70      | 2.12 V             | 1                    | 38.40            | 3.90                     |
| 5                                                    | #10480.00       | 60.80 PK                | 68.20          | -7.40       | 1.87 V             | 202                  | 49.70            | 11.10                    |
| 6                                                    | 15720.00        | 68.20 PK                | 74.00          | -5.80       | 2.47 V             | 178                  | 55.50            | 12.70                    |
| 7                                                    | 15720.00        | 53.80 AV                | 54.00          | -0.20       | 2.47 V             | 178                  | 41.10            | 12.70                    |

**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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Edison Lee     |                                          |                                                                      |

| 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         | 54.20 PK                | 74.00          | -19.80      | 1.84 H             | 239                  | 50.00            | 4.20                     |
| 2                                                    | 5150.00         | 41.20 AV                | 54.00          | -12.80      | 1.84 H             | 239                  | 37.00            | 4.20                     |
| 3                                                    | *5260.00        | 109.60 PK               |                |             | 1.84 H             | 239                  | 68.00            | 41.60                    |
| 4                                                    | *5260.00        | 99.10 AV                |                |             | 1.84 H             | 239                  | 57.50            | 41.60                    |
| 5                                                    | #10520.00       | 58.70 PK                | 68.20          | -9.50       | 1.62 H             | 120                  | 47.50            | 11.20                    |
| 6                                                    | 15780.00        | 63.90 PK                | 74.00          | -10.10      | 2.22 H             | 325                  | 51.50            | 12.40                    |
| 7                                                    | 15780.00        | 50.40 AV                | 54.00          | -3.60       | 2.22 H             | 325                  | 38.00            | 12.40                    |
| 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         | 54.70 PK                | 74.00          | -19.30      | 1.98 V             | 0                    | 50.50            | 4.20                     |
| 2                                                    | 5150.00         | 41.70 AV                | 54.00          | -12.30      | 1.98 V             | 0                    | 37.50            | 4.20                     |
| 3                                                    | *5260.00        | 110.30 PK               |                |             | 1.98 V             | 0                    | 68.70            | 41.60                    |
| 4                                                    | *5260.00        | 99.70 AV                |                |             | 1.98 V             | 0                    | 58.10            | 41.60                    |
| 5                                                    | #10520.00       | 60.20 PK                | 68.20          | -8.00       | 1.97 V             | 206                  | 49.00            | 11.20                    |
| 6                                                    | 15780.00        | 65.10 PK                | 74.00          | -8.90       | 2.19 V             | 184                  | 52.70            | 12.40                    |
| 7                                                    | 15780.00        | 53.50 AV                | 54.00          | -0.50       | 2.19 V             | 184                  | 41.10            | 12.40                    |

**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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Edison Lee     |                                          |                                                                      |

| 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                                                    | *5300.00        | 110.50 PK               |                |             | 1.93 H             | 240                  | 69.00            | 41.50                    |
| 2                                                    | *5300.00        | 100.00 AV               |                |             | 1.93 H             | 240                  | 58.50            | 41.50                    |
| 3                                                    | 10600.00        | 59.00 PK                | 74.00          | -15.00      | 1.66 H             | 111                  | 47.60            | 11.40                    |
| 4                                                    | 10600.00        | 46.70 AV                | 54.00          | -7.30       | 1.66 H             | 111                  | 35.30            | 11.40                    |
| 5                                                    | 15900.00        | 65.90 PK                | 74.00          | -8.10       | 2.08 H             | 323                  | 52.20            | 13.70                    |
| 6                                                    | 15900.00        | 51.80 AV                | 54.00          | -2.20       | 2.08 H             | 323                  | 38.10            | 13.70                    |
| 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                                                    | *5300.00        | 111.10 PK               |                |             | 2.03 V             | 351                  | 69.60            | 41.50                    |
| 2                                                    | *5300.00        | 100.60 AV               |                |             | 2.03 V             | 351                  | 59.10            | 41.50                    |
| 3                                                    | 10600.00        | 59.90 PK                | 74.00          | -14.10      | 1.92 V             | 201                  | 48.50            | 11.40                    |
| 4                                                    | 10600.00        | 47.70 AV                | 54.00          | -6.30       | 1.92 V             | 201                  | 36.30            | 11.40                    |
| 5                                                    | 15900.00        | 66.70 PK                | 74.00          | -7.30       | 2.27 V             | 185                  | 53.00            | 13.70                    |
| 6                                                    | 15900.00        | 53.70 AV                | 54.00          | -0.30       | 2.27 V             | 185                  | 40.00            | 13.70                    |

**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         | 802.11a        | 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=1 kHz, DET=Peak |
| Input Power     | 120 Vac, 60 Hz | Environmental Conditions      | 23 °C, 66% RH                                                        |
| Tested By       | Edison Lee     |                               |                                                                      |

| 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        | 109.80 PK               |                |              | 1.86 H             | 246                  | 68.30            | 41.50                    |
| 2                                                    | *5320.00        | 99.10 AV                |                |              | 1.86 H             | 246                  | 57.60            | 41.50                    |
| 3                                                    | 5350.00         | 62.30 PK                | 74.00          | -11.70       | 1.86 H             | 246                  | 58.40            | 3.90                     |
| 4                                                    | 5350.00         | 47.90 AV                | 54.00          | -6.10        | 1.86 H             | 246                  | 44.00            | 3.90                     |
| 5                                                    | 10640.00        | 58.60 PK                | 74.00          | -15.40       | 1.70 H             | 121                  | 47.40            | 11.20                    |
| 6                                                    | 10640.00        | 46.60 AV                | 54.00          | -7.40        | 1.70 H             | 121                  | 35.40            | 11.20                    |
| 7                                                    | 15960.00        | 66.20 PK                | 74.00          | -7.80        | 2.01 H             | 331                  | 52.40            | 13.80                    |
| 8                                                    | 15960.00        | 52.20 AV                | 54.00          | -1.80        | 2.01 H             | 331                  | 38.40            | 13.80                    |
| 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        | 110.90 PK               |                |              | 2.18 V             | 350                  | 69.40            | 41.50                    |
| 2                                                    | *5320.00        | 100.40 AV               |                |              | 2.18 V             | 350                  | 58.90            | 41.50                    |
| 3                                                    | 5350.00         | 63.50 PK                | 74.00          | -10.50       | 2.18 V             | 350                  | 59.60            | 3.90                     |
| 4                                                    | 5350.00         | 48.40 AV                | 54.00          | -5.60        | 2.18 V             | 350                  | 44.50            | 3.90                     |
| 5                                                    | 10640.00        | 59.30 PK                | 74.00          | -14.70       | 1.86 V             | 206                  | 48.10            | 11.20                    |
| 6                                                    | 10640.00        | 47.20 AV                | 54.00          | -6.80        | 1.86 V             | 206                  | 36.00            | 11.20                    |
| 7                                                    | 15960.00        | 67.60 PK                | 74.00          | -6.40        | 2.21 V             | 184                  | 53.80            | 13.80                    |
| 8                                                    | <b>15960.00</b> | <b>53.80 AV</b>         | <b>54.00</b>   | <b>-0.20</b> | <b>2.21 V</b>      | <b>184</b>           | <b>40.00</b>     | <b>13.80</b>             |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Edison Lee      |                                          |                                                                      |

| 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         | 54.00 PK                | 74.00          | -20.00      | 1.94 H             | 247                  | 49.80            | 4.20                     |
| 2                                                    | 5150.00         | 41.00 AV                | 54.00          | -13.00      | 1.94 H             | 247                  | 36.80            | 4.20                     |
| 3                                                    | *5260.00        | 110.60 PK               |                |             | 1.94 H             | 247                  | 69.00            | 41.60                    |
| 4                                                    | *5260.00        | 99.10 AV                |                |             | 1.94 H             | 247                  | 57.50            | 41.60                    |
| 5                                                    | #10520.00       | 58.90 PK                | 68.20          | -9.30       | 1.63 H             | 120                  | 47.70            | 11.20                    |
| 6                                                    | 15780.00        | 63.50 PK                | 74.00          | -10.50      | 2.12 H             | 327                  | 51.10            | 12.40                    |
| 7                                                    | 15780.00        | 52.00 AV                | 54.00          | -2.00       | 2.12 H             | 327                  | 39.60            | 12.40                    |
| 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         | 55.00 PK                | 74.00          | -19.00      | 2.01 V             | 358                  | 50.80            | 4.20                     |
| 2                                                    | 5150.00         | 41.60 AV                | 54.00          | -12.40      | 2.01 V             | 358                  | 37.40            | 4.20                     |
| 3                                                    | *5260.00        | 111.80 PK               |                |             | 2.01 V             | 358                  | 70.20            | 41.60                    |
| 4                                                    | *5260.00        | 99.70 AV                |                |             | 2.01 V             | 358                  | 58.10            | 41.60                    |
| 5                                                    | #10520.00       | 60.00 PK                | 68.20          | -8.20       | 1.92 V             | 199                  | 48.80            | 11.20                    |
| 6                                                    | 15780.00        | 64.80 PK                | 74.00          | -9.20       | 2.47 V             | 185                  | 52.40            | 12.40                    |
| 7                                                    | 15780.00        | 53.60 AV                | 54.00          | -0.40       | 2.47 V             | 185                  | 41.20            | 12.40                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Edison Lee      |                                          |                                                                      |

| 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                                                    | *5300.00        | 110.60 PK               |                |             | 1.91 H             | 242                  | 69.10            | 41.50                    |
| 2                                                    | *5300.00        | 98.40 AV                |                |             | 1.91 H             | 242                  | 56.90            | 41.50                    |
| 3                                                    | 10600.00        | 58.90 PK                | 74.00          | -15.10      | 1.60 H             | 109                  | 47.50            | 11.40                    |
| 4                                                    | 10600.00        | 46.80 AV                | 54.00          | -7.20       | 1.60 H             | 109                  | 35.40            | 11.40                    |
| 5                                                    | 15900.00        | 65.40 PK                | 74.00          | -8.60       | 2.08 H             | 321                  | 51.70            | 13.70                    |
| 6                                                    | 15900.00        | 52.10 AV                | 54.00          | -1.90       | 2.08 H             | 321                  | 38.40            | 13.70                    |
| 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                                                    | *5300.00        | 111.60 PK               |                |             | 1.96 V             | 357                  | 70.10            | 41.50                    |
| 2                                                    | *5300.00        | 99.50 AV                |                |             | 1.96 V             | 357                  | 58.00            | 41.50                    |
| 3                                                    | 10600.00        | 59.80 PK                | 74.00          | -14.20      | 1.90 V             | 208                  | 48.40            | 11.40                    |
| 4                                                    | 10600.00        | 47.50 AV                | 54.00          | -6.50       | 1.90 V             | 208                  | 36.10            | 11.40                    |
| 5                                                    | 15900.00        | 66.40 PK                | 74.00          | -7.60       | 2.24 V             | 186                  | 52.70            | 13.70                    |
| 6                                                    | 15900.00        | 53.60 AV                | 54.00          | -0.40       | 2.24 V             | 186                  | 39.90            | 13.70                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Edison Lee      |                                          |                                                                      |

| 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        | 110.80 PK               |                |             | 1.93 H             | 234                  | 69.30            | 41.50                    |
| 2                                                    | *5320.00        | 98.50 AV                |                |             | 1.93 H             | 234                  | 57.00            | 41.50                    |
| 3                                                    | 5350.00         | 64.90 PK                | 74.00          | -9.10       | 1.93 H             | 234                  | 61.00            | 3.90                     |
| 4                                                    | 5350.00         | 49.80 AV                | 54.00          | -4.20       | 1.93 H             | 234                  | 45.90            | 3.90                     |
| 5                                                    | 10620.00        | 58.00 PK                | 74.00          | -16.00      | 1.67 H             | 124                  | 46.80            | 11.20                    |
| 6                                                    | 10620.00        | 46.00 AV                | 54.00          | -8.00       | 1.67 H             | 124                  | 34.80            | 11.20                    |
| 7                                                    | 15960.00        | 65.20 PK                | 74.00          | -8.80       | 2.01 H             | 332                  | 51.40            | 13.80                    |
| 8                                                    | 15960.00        | 51.80 AV                | 54.00          | -2.20       | 2.01 H             | 332                  | 38.00            | 13.80                    |
| 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        | 111.40 PK               |                |             | 2.09 V             | 345                  | 69.90            | 41.50                    |
| 2                                                    | *5320.00        | 98.70 AV                |                |             | 2.09 V             | 345                  | 57.20            | 41.50                    |
| 3                                                    | 5350.00         | 65.30 PK                | 74.00          | -8.70       | 2.09 V             | 345                  | 61.40            | 3.90                     |
| 4                                                    | 5350.00         | 50.40 AV                | 54.00          | -3.60       | 2.09 V             | 345                  | 46.50            | 3.90                     |
| 5                                                    | 10640.00        | 59.20 PK                | 74.00          | -14.80      | 1.94 V             | 216                  | 48.00            | 11.20                    |
| 6                                                    | 10640.00        | 47.10 AV                | 54.00          | -6.90       | 1.94 V             | 216                  | 35.90            | 11.20                    |
| 7                                                    | 15960.00        | 66.70 PK                | 74.00          | -7.30       | 2.36 V             | 187                  | 52.90            | 13.80                    |
| 8                                                    | 15960.00        | 53.30 AV                | 54.00          | -0.70       | 2.36 V             | 187                  | 39.50            | 13.80                    |

**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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin       |                                          |                                                                      |

| 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         | 62.50 PK                | 74.00          | -11.50      | 2.19 H             | 226                  | 58.40            | 4.10                     |
| 2                                                    | 5460.00         | 46.90 AV                | 54.00          | -7.10       | 2.19 H             | 226                  | 42.80            | 4.10                     |
| 3                                                    | #5470.00        | 63.70 PK                | 68.20          | -4.50       | 2.19 H             | 226                  | 59.60            | 4.10                     |
| 4                                                    | *5500.00        | 111.10 PK               |                |             | 2.19 H             | 226                  | 69.20            | 41.90                    |
| 5                                                    | *5500.00        | 100.80 AV               |                |             | 2.19 H             | 226                  | 58.90            | 41.90                    |
| 6                                                    | 11000.00        | 59.80 PK                | 74.00          | -14.20      | 1.67 H             | 115                  | 48.50            | 11.30                    |
| 7                                                    | 11000.00        | 45.60 AV                | 54.00          | -8.40       | 1.67 H             | 115                  | 34.30            | 11.30                    |
| 8                                                    | #16500.00       | 64.60 PK                | 68.20          | -3.60       | 1.92 H             | 56                   | 51.80            | 12.80                    |
| 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         | 64.90 PK                | 74.00          | -9.10       | 2.10 V             | 352                  | 60.80            | 4.10                     |
| 2                                                    | 5460.00         | 48.60 AV                | 54.00          | -5.40       | 2.10 V             | 352                  | 44.50            | 4.10                     |
| 3                                                    | #5470.00        | 65.70 PK                | 68.20          | -2.50       | 2.10 V             | 352                  | 61.60            | 4.10                     |
| 4                                                    | *5500.00        | 112.00 PK               |                |             | 2.10 V             | 352                  | 70.10            | 41.90                    |
| 5                                                    | *5500.00        | 101.50 AV               |                |             | 2.10 V             | 352                  | 59.60            | 41.90                    |
| 6                                                    | 11000.00        | 60.70 PK                | 74.00          | -13.30      | 1.01 V             | 181                  | 49.40            | 11.30                    |
| 7                                                    | 11000.00        | 46.50 AV                | 54.00          | -7.50       | 1.01 V             | 181                  | 35.20            | 11.30                    |
| 8                                                    | #16500.00       | 67.40 PK                | 68.20          | -0.80       | 2.01 V             | 195                  | 54.60            | 12.80                    |

**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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin       |                                          |                                                                      |

| 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                                                    | *5580.00        | 111.60 PK               |                |             | 1.66 H             | 38                   | 69.40            | 42.20                    |
| 2                                                    | *5580.00        | 101.40 AV               |                |             | 1.66 H             | 38                   | 59.20            | 42.20                    |
| 3                                                    | 11160.00        | 60.20 PK                | 74.00          | -13.80      | 1.66 H             | 120                  | 48.40            | 11.80                    |
| 4                                                    | 11160.00        | 46.00 AV                | 54.00          | -8.00       | 1.66 H             | 120                  | 34.20            | 11.80                    |
| 5                                                    | #16740.00       | 65.70 PK                | 68.20          | -2.50       | 1.90 H             | 63                   | 51.80            | 13.90                    |
| 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                                                    | *5580.00        | 112.60 PK               |                |             | 2.08 V             | 352                  | 70.40            | 42.20                    |
| 2                                                    | *5580.00        | 102.20 AV               |                |             | 2.08 V             | 352                  | 60.00            | 42.20                    |
| 3                                                    | 11160.00        | 61.50 PK                | 74.00          | -12.50      | 1.00 V             | 193                  | 49.70            | 11.80                    |
| 4                                                    | 11160.00        | 47.20 AV                | 54.00          | -6.80       | 1.00 V             | 193                  | 35.40            | 11.80                    |
| 5                                                    | #16740.00       | 67.30 PK                | 68.20          | -0.90       | 1.45 V             | 153                  | 53.40            | 13.90                    |

**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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin       |                                          |                                                                      |

| 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        | 111.30 PK               |                |             | 1.59 H             | 24                   | 68.30            | 43.00                    |
| 2                                                    | *5700.00        | 100.70 AV               |                |             | 1.59 H             | 24                   | 57.70            | 43.00                    |
| 3                                                    | #5725.00        | 66.30 PK                | 68.20          | -1.90       | 1.59 H             | 24                   | 60.70            | 5.60                     |
| 4                                                    | 11400.00        | 61.10 PK                | 74.00          | -12.90      | 1.59 H             | 117                  | 48.60            | 12.50                    |
| 5                                                    | 11400.00        | 46.90 AV                | 54.00          | -7.10       | 1.59 H             | 117                  | 34.40            | 12.50                    |
| 6                                                    | #17100.00       | 63.70 PK                | 68.20          | -4.50       | 1.99 H             | 54                   | 51.40            | 12.30                    |
| 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        | 112.30 PK               |                |             | 2.69 V             | 178                  | 69.30            | 43.00                    |
| 2                                                    | *5700.00        | 101.60 AV               |                |             | 2.69 V             | 178                  | 58.60            | 43.00                    |
| 3                                                    | #5725.00        | 67.80 PK                | 68.20          | -0.40       | 2.69 V             | 178                  | 62.20            | 5.60                     |
| 4                                                    | 11400.00        | 61.90 PK                | 74.00          | -12.10      | 1.08 V             | 176                  | 49.40            | 12.50                    |
| 5                                                    | 11400.00        | 47.70 AV                | 54.00          | -6.30       | 1.08 V             | 176                  | 35.20            | 12.50                    |
| 6                                                    | #17100.00       | 64.00 PK                | 68.20          | -4.20       | 2.08 V             | 193                  | 51.70            | 12.30                    |

**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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Edison Lee     |                                          |                                                                      |

| 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                                                    | #5470.00        | 56.60 PK                | 68.20          | -11.60      | 1.42 H             | 201                  | 52.50            | 4.10                     |
| 2                                                    | *5720.00        | 110.90 PK               |                |             | 1.42 H             | 201                  | 67.70            | 43.20                    |
| 3                                                    | *5720.00        | 101.00 AV               |                |             | 1.42 H             | 201                  | 57.80            | 43.20                    |
| 4                                                    | #5850.00        | 55.90 PK                | 68.20          | -12.30      | 1.42 H             | 201                  | 50.10            | 5.80                     |
| 5                                                    | 11420.00        | 61.20 PK                | 74.00          | -12.80      | 1.75 H             | 116                  | 48.70            | 12.50                    |
| 6                                                    | 11420.00        | 47.00 AV                | 54.00          | -7.00       | 1.75 H             | 116                  | 34.50            | 12.50                    |
| 7                                                    | #17160.00       | 61.40 PK                | 68.20          | -6.80       | 1.92 H             | 56                   | 49.00            | 12.40                    |
| 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                                                    | #5470.00        | 57.10 PK                | 68.20          | -11.10      | 2.13 V             | 229                  | 53.00            | 4.10                     |
| 2                                                    | *5720.00        | 111.70 PK               |                |             | 2.13 V             | 229                  | 68.50            | 43.20                    |
| 3                                                    | *5720.00        | 101.50 AV               |                |             | 2.13 V             | 229                  | 58.30            | 43.20                    |
| 4                                                    | #5850.00        | 56.50 PK                | 68.20          | -11.70      | 2.13 V             | 229                  | 50.70            | 5.80                     |
| 5                                                    | 11420.00        | 62.10 PK                | 74.00          | -11.90      | 1.00 V             | 179                  | 49.60            | 12.50                    |
| 6                                                    | 11420.00        | 48.00 AV                | 54.00          | -6.00       | 1.00 V             | 179                  | 35.50            | 12.50                    |
| 7                                                    | #17160.00       | 61.90 PK                | 68.20          | -6.30       | 2.00 V             | 203                  | 49.50            | 12.40                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin        |                                          |                                                                      |

| 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         | 65.30 PK                | 74.00          | -8.70       | 1.62 H             | 22                   | 61.20            | 4.10                     |
| 2                                                    | 5460.00         | 50.50 AV                | 54.00          | -3.50       | 1.62 H             | 22                   | 46.40            | 4.10                     |
| 3                                                    | #5470.00        | 67.00 PK                | 68.20          | -1.20       | 1.62 H             | 22                   | 62.90            | 4.10                     |
| 4                                                    | *5500.00        | 115.60 PK               |                |             | 1.62 H             | 22                   | 73.70            | 41.90                    |
| 5                                                    | *5500.00        | 103.40 AV               |                |             | 1.62 H             | 22                   | 61.50            | 41.90                    |
| 6                                                    | 11000.00        | 59.90 PK                | 74.00          | -14.10      | 1.73 H             | 112                  | 48.60            | 11.30                    |
| 7                                                    | 11000.00        | 45.70 AV                | 54.00          | -8.30       | 1.73 H             | 112                  | 34.40            | 11.30                    |
| 8                                                    | #16500.00       | 64.40 PK                | 68.20          | -3.80       | 2.12 H             | 197                  | 51.60            | 12.80                    |
| 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         | 65.90 PK                | 74.00          | -8.10       | 2.69 V             | 177                  | 61.80            | 4.10                     |
| 2                                                    | 5460.00         | 51.20 AV                | 54.00          | -2.80       | 2.69 V             | 177                  | 47.10            | 4.10                     |
| 3                                                    | #5470.00        | 67.50 PK                | 68.20          | -0.70       | 2.69 V             | 177                  | 63.40            | 4.10                     |
| 4                                                    | *5500.00        | 116.40 PK               |                |             | 2.69 V             | 177                  | 74.50            | 41.90                    |
| 5                                                    | *5500.00        | 104.30 AV               |                |             | 2.69 V             | 177                  | 62.40            | 41.90                    |
| 6                                                    | 11000.00        | 60.90 PK                | 74.00          | -13.10      | 1.07 V             | 186                  | 49.60            | 11.30                    |
| 7                                                    | 11000.00        | 46.70 AV                | 54.00          | -7.30       | 1.07 V             | 186                  | 35.40            | 11.30                    |
| 8                                                    | #16500.00       | 66.50 PK                | 68.20          | -1.70       | 2.08 V             | 192                  | 53.70            | 12.80                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin        |                                          |                                                                      |

| 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                                                    | *5580.00        | 113.50 PK               |                |             | 1.66 H             | 37                   | 71.30            | 42.20                    |
| 2                                                    | *5580.00        | 101.90 AV               |                |             | 1.66 H             | 37                   | 59.70            | 42.20                    |
| 3                                                    | 11160.00        | 60.80 PK                | 74.00          | -13.20      | 1.62 H             | 131                  | 49.00            | 11.80                    |
| 4                                                    | 11160.00        | 46.90 AV                | 54.00          | -7.10       | 1.62 H             | 131                  | 35.10            | 11.80                    |
| 5                                                    | #16740.00       | 65.00 PK                | 68.20          | -3.20       | 1.89 H             | 54                   | 51.10            | 13.90                    |
| 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                                                    | *5580.00        | 116.00 PK               |                |             | 2.77 V             | 178                  | 73.80            | 42.20                    |
| 2                                                    | *5580.00        | 103.90 AV               |                |             | 2.77 V             | 178                  | 61.70            | 42.20                    |
| 3                                                    | 11160.00        | 61.50 PK                | 74.00          | -12.50      | 1.08 V             | 187                  | 49.70            | 11.80                    |
| 4                                                    | 11160.00        | 47.40 AV                | 54.00          | -6.60       | 1.08 V             | 187                  | 35.60            | 11.80                    |
| 5                                                    | #16740.00       | 67.70 PK                | 68.20          | -0.50       | 1.40 V             | 159                  | 53.80            | 13.90                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin        |                                          |                                                                      |

| 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        | 111.80 PK               |                |             | 1.53 H             | 25                   | 68.80            | 43.00                    |
| 2                                                    | *5700.00        | 99.60 AV                |                |             | 1.53 H             | 25                   | 56.60            | 43.00                    |
| 3                                                    | #5725.00        | 66.30 PK                | 68.20          | -1.90       | 1.53 H             | 25                   | 60.70            | 5.60                     |
| 4                                                    | 11400.00        | 61.00 PK                | 74.00          | -13.00      | 1.73 H             | 117                  | 48.50            | 12.50                    |
| 5                                                    | 11400.00        | 46.90 AV                | 54.00          | -7.10       | 1.73 H             | 117                  | 34.40            | 12.50                    |
| 6                                                    | #17100.00       | 63.40 PK                | 68.20          | -4.80       | 1.94 H             | 55                   | 51.10            | 12.30                    |
| 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        | 112.70 PK               |                |             | 2.68 V             | 178                  | 69.70            | 43.00                    |
| 2                                                    | *5700.00        | 100.60 AV               |                |             | 2.68 V             | 178                  | 57.60            | 43.00                    |
| 3                                                    | #5725.00        | 67.70 PK                | 68.20          | -0.50       | 2.68 V             | 178                  | 62.10            | 5.60                     |
| 4                                                    | 11400.00        | 61.70 PK                | 74.00          | -12.30      | 1.13 V             | 184                  | 49.20            | 12.50                    |
| 5                                                    | 11400.00        | 47.60 AV                | 54.00          | -6.40       | 1.13 V             | 184                  | 35.10            | 12.50                    |
| 6                                                    | #17100.00       | 63.70 PK                | 68.20          | -4.50       | 2.12 V             | 197                  | 51.40            | 12.30                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Edison Lee      |                                          |                                                                      |

| 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                                                    | #5470.00        | 56.80 PK                | 68.20          | -11.40      | 1.44 H             | 201                  | 52.70            | 4.10                     |
| 2                                                    | *5720.00        | 112.40 PK               |                |             | 1.44 H             | 201                  | 69.20            | 43.20                    |
| 3                                                    | *5720.00        | 101.40 AV               |                |             | 1.44 H             | 201                  | 58.20            | 43.20                    |
| 4                                                    | #5850.00        | 56.10 PK                | 68.20          | -12.10      | 1.44 H             | 201                  | 50.30            | 5.80                     |
| 5                                                    | 11420.00        | 61.10 PK                | 74.00          | -12.90      | 1.80 H             | 123                  | 48.60            | 12.50                    |
| 6                                                    | 11420.00        | 47.00 AV                | 54.00          | -7.00       | 1.80 H             | 123                  | 34.50            | 12.50                    |
| 7                                                    | #17160.00       | 61.20 PK                | 68.20          | -7.00       | 1.93 H             | 49                   | 48.80            | 12.40                    |
| 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                                                    | #5470.00        | 57.90 PK                | 68.20          | -10.30      | 2.20 V             | 229                  | 53.80            | 4.10                     |
| 2                                                    | *5720.00        | 114.20 PK               |                |             | 2.20 V             | 229                  | 71.00            | 43.20                    |
| 3                                                    | *5720.00        | 101.60 AV               |                |             | 2.20 V             | 229                  | 58.40            | 43.20                    |
| 4                                                    | #5850.00        | 57.10 PK                | 68.20          | -11.10      | 2.20 V             | 229                  | 51.30            | 5.80                     |
| 5                                                    | 11420.00        | 61.90 PK                | 74.00          | -12.10      | 1.03 V             | 172                  | 49.40            | 12.50                    |
| 6                                                    | 11420.00        | 47.70 AV                | 54.00          | -6.30       | 1.03 V             | 172                  | 35.20            | 12.50                    |
| 7                                                    | #17160.00       | 61.70 PK                | 68.20          | -6.50       | 1.91 V             | 200                  | 49.30            | 12.40                    |

**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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin       |                                          |                                                                      |

| 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                                                    | #5623.60        | 60.30 PK                | 68.20          | -7.90       | 1.54 H             | 21                   | 55.30            | 5.00                     |
| 2                                                    | *5745.00        | 115.00 PK               |                |             | 1.54 H             | 21                   | 71.70            | 43.30                    |
| 3                                                    | *5745.00        | 104.40 AV               |                |             | 1.54 H             | 21                   | 61.10            | 43.30                    |
| 4                                                    | #5995.60        | 60.60 PK                | 68.20          | -7.60       | 1.54 H             | 21                   | 54.80            | 5.80                     |
| 5                                                    | 11490.00        | 60.90 PK                | 74.00          | -13.10      | 1.66 H             | 111                  | 48.70            | 12.20                    |
| 6                                                    | 11490.00        | 46.70 AV                | 54.00          | -7.30       | 1.66 H             | 111                  | 34.50            | 12.20                    |
| 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                                                    | #5611.60        | 60.50 PK                | 68.20          | -7.70       | 2.73 V             | 181                  | 55.60            | 4.90                     |
| 2                                                    | *5745.00        | 115.80 PK               |                |             | 2.73 V             | 181                  | 72.50            | 43.30                    |
| 3                                                    | *5745.00        | 105.20 AV               |                |             | 2.73 V             | 181                  | 61.90            | 43.30                    |
| 4                                                    | #5942.80        | 62.60 PK                | 68.20          | -5.60       | 2.73 V             | 181                  | 56.80            | 5.80                     |
| 5                                                    | 11490.00        | 61.70 PK                | 74.00          | -12.30      | 1.06 V             | 183                  | 49.50            | 12.20                    |
| 6                                                    | 11490.00        | 47.60 AV                | 54.00          | -6.40       | 1.06 V             | 183                  | 35.40            | 12.20                    |

**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 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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin       |                                          |                                                                      |

| 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                                                    | #5642.80        | 60.20 PK                | 68.20          | -8.00       | 1.54 H             | 23                   | 55.10            | 5.10                     |
| 2                                                    | *5785.00        | 77.50 PK                |                |             | 1.54 H             | 23                   | 71.70            | 5.80                     |
| 3                                                    | *5785.00        | 67.10 AV                |                |             | 1.54 H             | 23                   | 61.30            | 5.80                     |
| 4                                                    | #5938.00        | 61.00 PK                | 68.20          | -7.20       | 1.54 H             | 23                   | 55.20            | 5.80                     |
| 5                                                    | 11570.00        | 60.60 PK                | 74.00          | -13.40      | 1.68 H             | 110                  | 48.80            | 11.80                    |
| 6                                                    | 11570.00        | 46.50 AV                | 54.00          | -7.50       | 1.68 H             | 110                  | 34.70            | 11.80                    |
| 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                                                    | #5623.20        | 61.20 PK                | 68.20          | -7.00       | 2.74 V             | 183                  | 56.20            | 5.00                     |
| 2                                                    | *5785.00        | 116.00 PK               |                |             | 2.74 V             | 183                  | 72.60            | 43.40                    |
| 3                                                    | *5785.00        | 105.60 AV               |                |             | 2.74 V             | 183                  | 62.20            | 43.40                    |
| 4                                                    | #5981.60        | 63.30 PK                | 68.20          | -4.90       | 2.74 V             | 183                  | 57.50            | 5.80                     |
| 5                                                    | 11570.00        | 61.40 PK                | 74.00          | -12.60      | 1.08 V             | 184                  | 49.60            | 11.80                    |
| 6                                                    | 11570.00        | 47.40 AV                | 54.00          | -6.60       | 1.08 V             | 184                  | 35.60            | 11.80                    |

**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=1 kHz, DET=Peak |
| <b>Input Power</b>     | 120 Vac, 60 Hz | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin       |                                          |                                                                      |

| 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                                                    | #5644.00        | 59.50 PK                | 68.20          | -8.70       | 1.64 H             | 25                   | 54.40            | 5.10                     |
| 2                                                    | *5825.00        | 114.90 PK               |                |             | 1.64 H             | 25                   | 71.50            | 43.40                    |
| 3                                                    | *5825.00        | 104.50 AV               |                |             | 1.64 H             | 25                   | 61.10            | 43.40                    |
| 4                                                    | #5938.00        | 61.10 PK                | 68.20          | -7.10       | 1.64 H             | 25                   | 55.30            | 5.80                     |
| 5                                                    | 11650.00        | 60.30 PK                | 74.00          | -13.70      | 1.69 H             | 113                  | 48.60            | 11.70                    |
| 6                                                    | 11650.00        | 46.20 AV                | 54.00          | -7.80       | 1.69 H             | 113                  | 34.50            | 11.70                    |
| 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                                                    | #5630.00        | 61.70 PK                | 68.20          | -6.50       | 2.77 V             | 187                  | 56.70            | 5.00                     |
| 2                                                    | *5825.00        | 115.70 PK               |                |             | 2.77 V             | 187                  | 72.30            | 43.40                    |
| 3                                                    | *5825.00        | 105.30 AV               |                |             | 2.77 V             | 187                  | 61.90            | 43.40                    |
| 4                                                    | #5992.40        | 62.60 PK                | 68.20          | -5.60       | 2.77 V             | 187                  | 56.80            | 5.80                     |
| 5                                                    | 11650.00        | 61.40 PK                | 74.00          | -12.60      | 1.10 V             | 192                  | 49.70            | 11.70                    |
| 6                                                    | 11650.00        | 47.40 AV                | 54.00          | -6.60       | 1.10 V             | 192                  | 35.70            | 11.70                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin        |                                          |                                                                      |

| 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                                                    | #5613.60        | 60.00 PK                | 68.20          | -8.20       | 1.61 H             | 27                   | 55.10            | 4.90                     |
| 2                                                    | *5745.00        | 116.50 PK               |                |             | 1.61 H             | 27                   | 73.20            | 43.30                    |
| 3                                                    | *5745.00        | 104.10 AV               |                |             | 1.61 H             | 27                   | 60.80            | 43.30                    |
| 4                                                    | #5965.60        | 62.10 PK                | 68.20          | -6.10       | 1.61 H             | 27                   | 56.30            | 5.80                     |
| 5                                                    | 11490.00        | 61.10 PK                | 74.00          | -12.90      | 1.72 H             | 121                  | 48.90            | 12.20                    |
| 6                                                    | 11490.00        | 47.00 AV                | 54.00          | -7.00       | 1.72 H             | 121                  | 34.80            | 12.20                    |
| 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                                                    | #5644.40        | 61.50 PK                | 68.20          | -6.70       | 2.74 V             | 186                  | 56.40            | 5.10                     |
| 2                                                    | *5745.00        | 117.10 PK               |                |             | 2.74 V             | 186                  | 73.80            | 43.30                    |
| 3                                                    | *5745.00        | 104.90 AV               |                |             | 2.74 V             | 186                  | 61.60            | 43.30                    |
| 4                                                    | #5996.40        | 62.30 PK                | 68.20          | -5.90       | 2.74 V             | 186                  | 56.50            | 5.80                     |
| 5                                                    | 11490.00        | 62.00 PK                | 74.00          | -12.00      | 1.08 V             | 188                  | 49.80            | 12.20                    |
| 6                                                    | 11490.00        | 47.70 AV                | 54.00          | -6.30       | 1.08 V             | 188                  | 35.50            | 12.20                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin        |                                          |                                                                      |

| 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                                                    | #5636.40        | 59.90 PK                | 68.20          | -8.30       | 1.55 H             | 26                   | 54.80            | 5.10                     |
| 2                                                    | *5785.00        | 116.40 PK               |                |             | 1.55 H             | 26                   | 73.00            | 43.40                    |
| 3                                                    | *5785.00        | 104.20 AV               |                |             | 1.55 H             | 26                   | 60.80            | 43.40                    |
| 4                                                    | #5938.80        | 61.80 PK                | 68.20          | -6.40       | 1.55 H             | 26                   | 56.00            | 5.80                     |
| 5                                                    | 11570.00        | 60.60 PK                | 74.00          | -13.40      | 1.73 H             | 119                  | 48.80            | 11.80                    |
| 6                                                    | 11570.00        | 46.40 AV                | 54.00          | -7.60       | 1.73 H             | 119                  | 34.60            | 11.80                    |
| 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                                                    | #5645.20        | 61.70 PK                | 68.20          | -6.50       | 2.71 V             | 180                  | 56.60            | 5.10                     |
| 2                                                    | *5785.00        | 117.30 PK               |                |             | 2.71 V             | 180                  | 73.90            | 43.40                    |
| 3                                                    | *5785.00        | 105.00 AV               |                |             | 2.71 V             | 180                  | 61.60            | 43.40                    |
| 4                                                    | #5971.60        | 62.00 PK                | 68.20          | -6.20       | 2.71 V             | 180                  | 56.20            | 5.80                     |
| 5                                                    | 11570.00        | 61.60 PK                | 74.00          | -12.40      | 1.10 V             | 189                  | 49.80            | 11.80                    |
| 6                                                    | 11570.00        | 47.40 AV                | 54.00          | -6.60       | 1.10 V             | 189                  | 35.60            | 11.80                    |

**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>         | 802.11ax (HE20) | <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</b>     | 120 Vac, 60 Hz  | <b>Environmental Conditions</b>          | 23 °C, 66% RH                                                        |
| <b>Tested By</b>       | Greg Lin        |                                          |                                                                      |

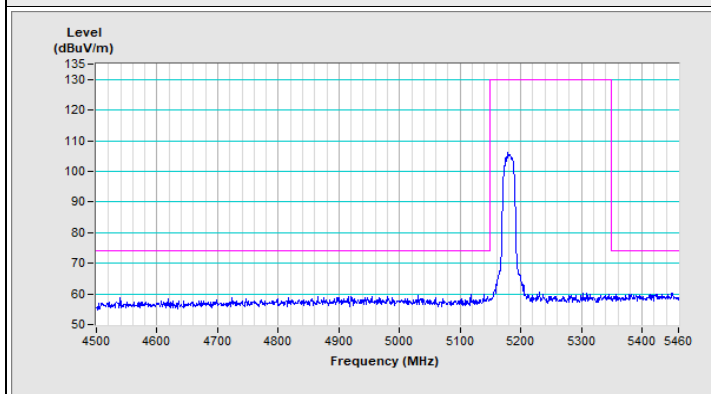
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 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                                                    | #5606.00        | 59.20 PK                | 68.20          | -9.00       | 1.54 H             | 26                   | 54.40            | 4.80                     |
| 2                                                    | *5825.00        | 116.30 PK               |                |             | 1.54 H             | 26                   | 72.90            | 43.40                    |
| 3                                                    | *5825.00        | 104.20 AV               |                |             | 1.54 H             | 26                   | 60.80            | 43.40                    |
| 4                                                    | #5964.00        | 61.00 PK                | 68.20          | -7.20       | 1.54 H             | 26                   | 55.20            | 5.80                     |
| 5                                                    | 11650.00        | 60.30 PK                | 74.00          | -13.70      | 1.64 H             | 114                  | 48.60            | 11.70                    |
| 6                                                    | 11650.00        | 46.10 AV                | 54.00          | -7.90       | 1.64 H             | 114                  | 34.40            | 11.70                    |
| 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                                                    | #5624.80        | 61.20 PK                | 68.20          | -7.00       | 2.79 V             | 185                  | 56.20            | 5.00                     |
| 2                                                    | *5825.00        | 117.20 PK               |                |             | 2.79 V             | 185                  | 73.80            | 43.40                    |
| 3                                                    | *5825.00        | 105.00 AV               |                |             | 2.79 V             | 185                  | 61.60            | 43.40                    |
| 4                                                    | #5945.60        | 62.50 PK                | 68.20          | -5.70       | 2.79 V             | 185                  | 56.70            | 5.80                     |
| 5                                                    | 11650.00        | 61.50 PK                | 74.00          | -12.50      | 1.13 V             | 194                  | 49.80            | 11.70                    |
| 6                                                    | 11650.00        | 47.50 AV                | 54.00          | -6.50       | 1.13 V             | 194                  | 35.80            | 11.70                    |

**Remarks:**

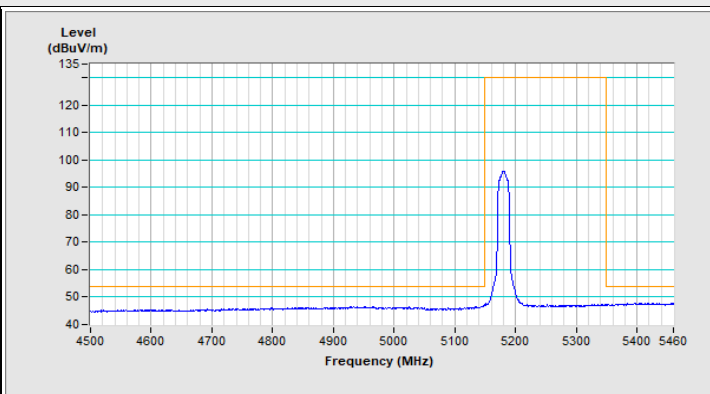
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* " : Fundamental frequency,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

|                 |                    |                               |                                                                      |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|
| 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=1 kHz, DET=Peak |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|

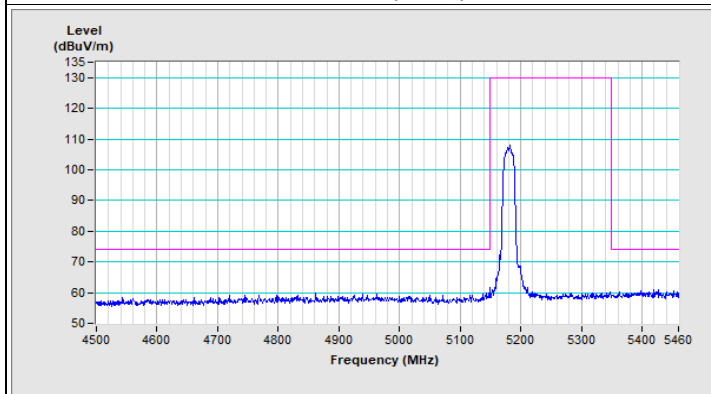
### 802.11a Channel 36



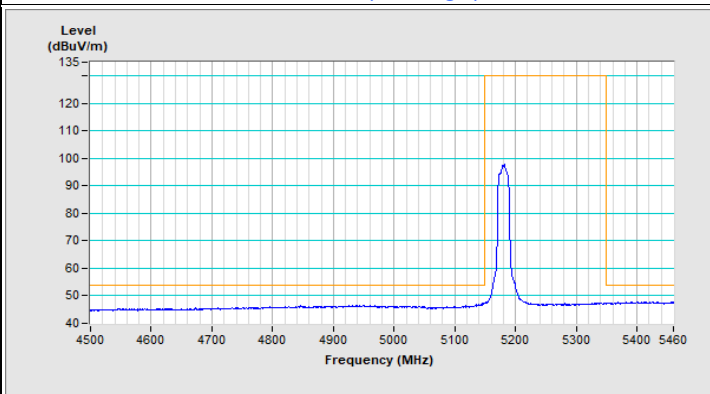
Horizontal (Peak)



Horizontal (Average)

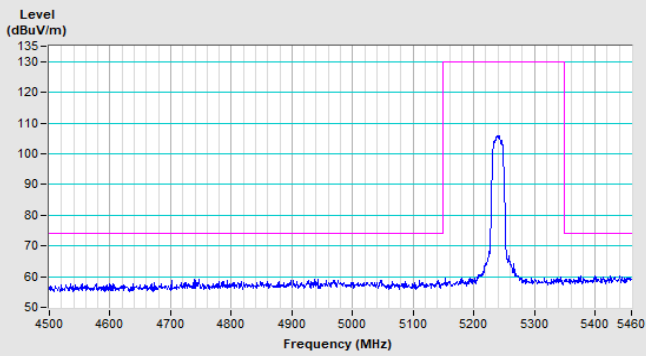


Vertical (Peak)

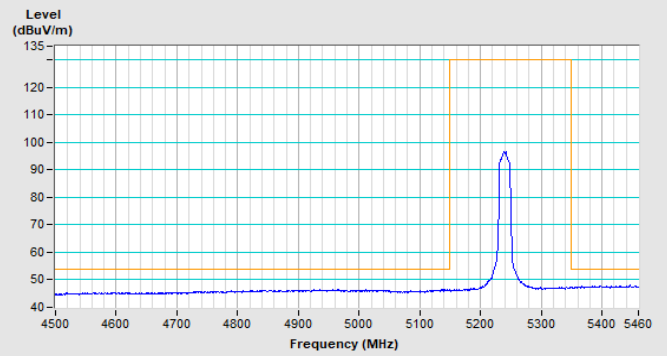


Vertical (Average)

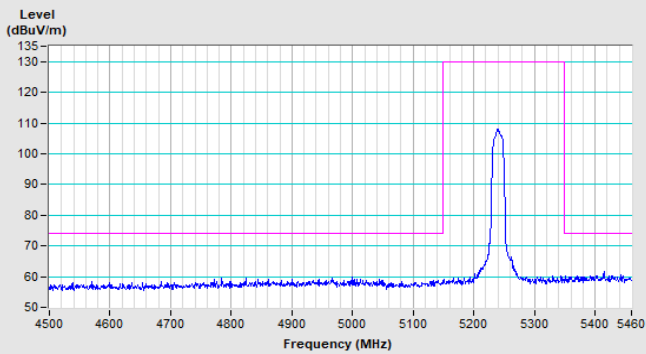
### 802.11a Channel 48



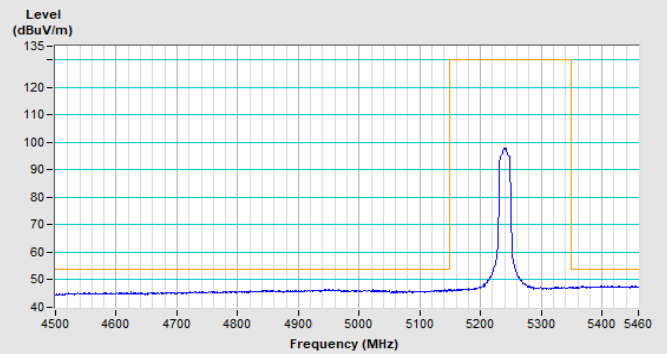
Horizontal (Peak)



Horizontal (Average)

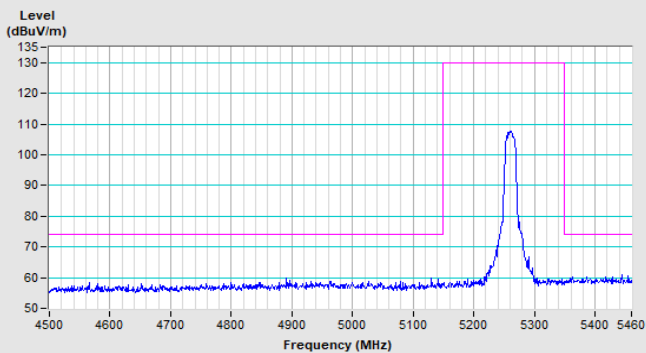


Vertical (Peak)

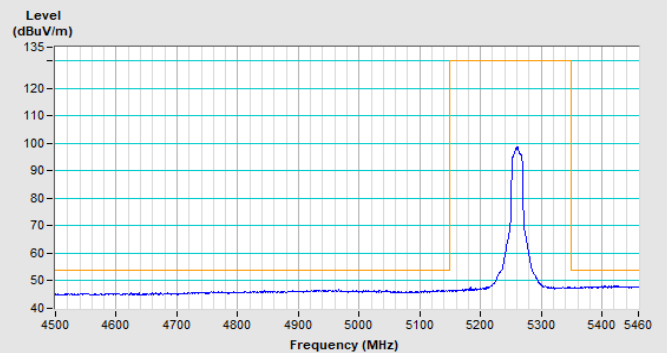


Vertical (Average)

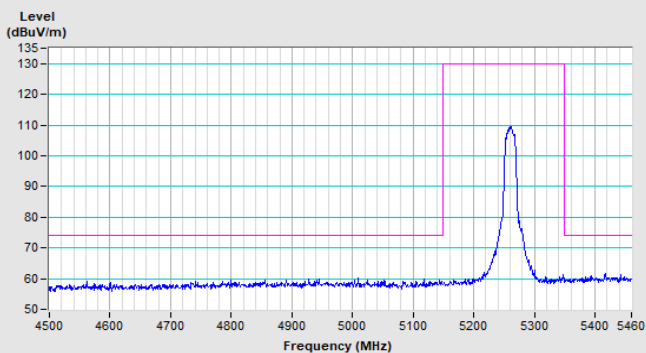
### 802.11a Channel 52



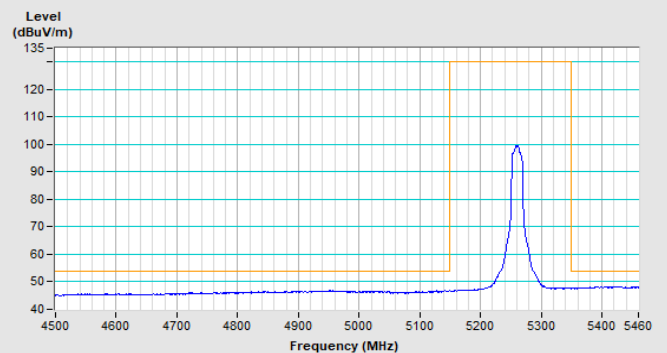
Horizontal (Peak)



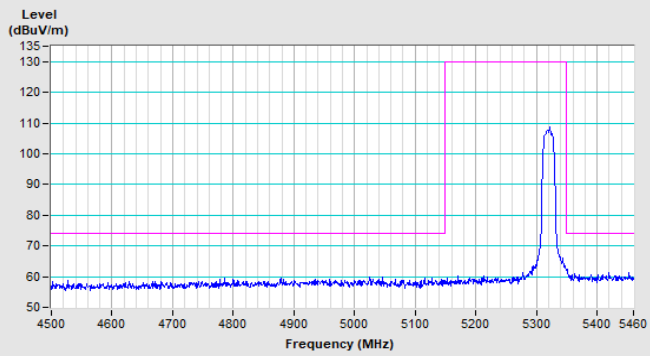
Horizontal (Average)



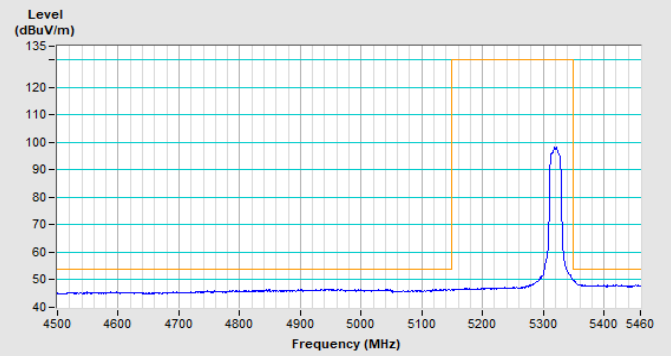
Vertical (Peak)



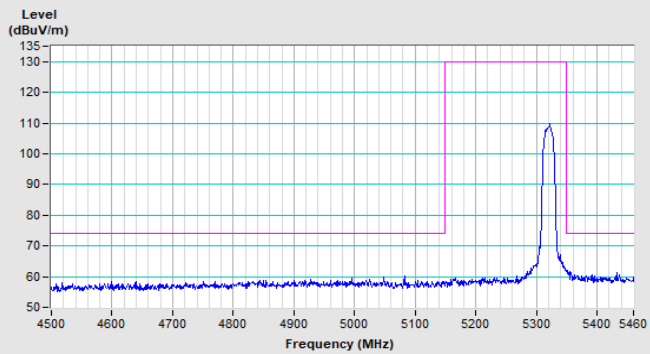
Vertical (Average)

**802.11a Channel 64**

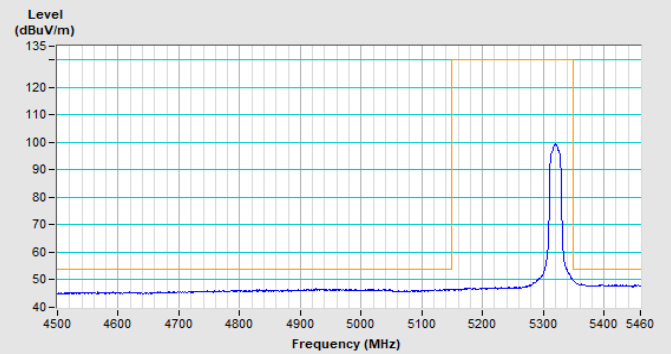
Horizontal (Peak)



Horizontal (Average)



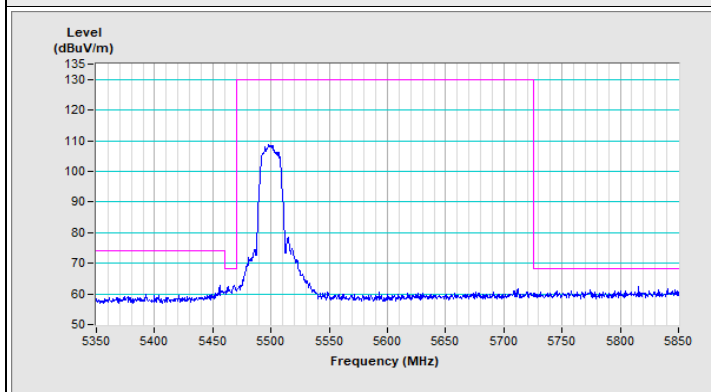
Vertical (Peak)



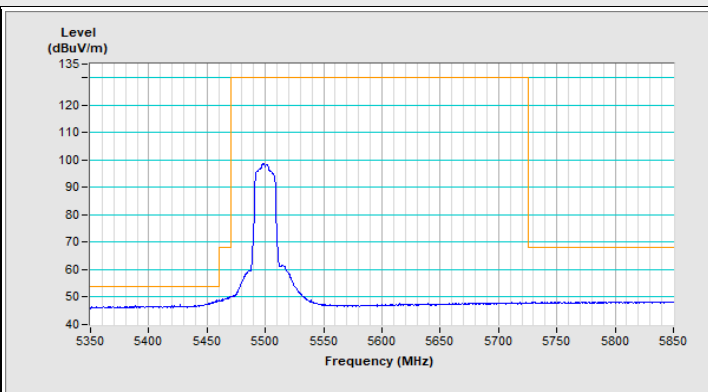
Vertical (Average)

|                 |                     |                               |                                                                      |
|-----------------|---------------------|-------------------------------|----------------------------------------------------------------------|
| 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=1 kHz, DET=Peak |
|-----------------|---------------------|-------------------------------|----------------------------------------------------------------------|

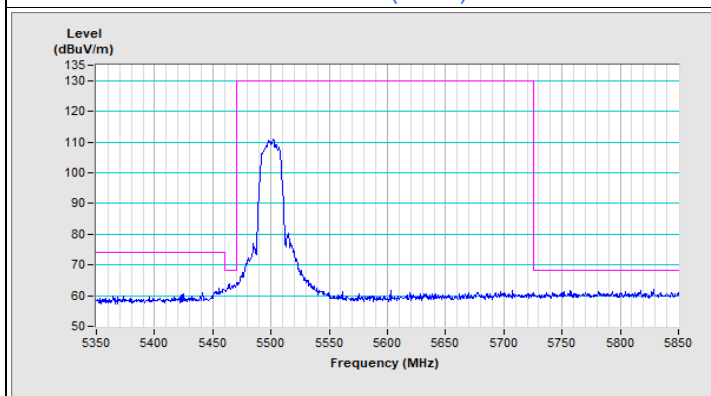
### 802.11a Channel 100



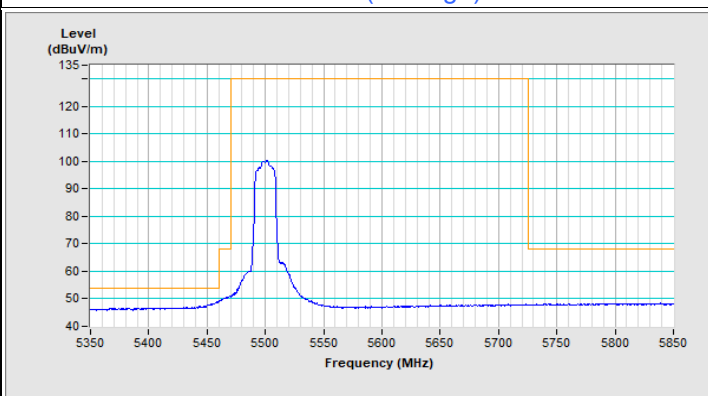
Horizontal (Peak)



Horizontal (Average)

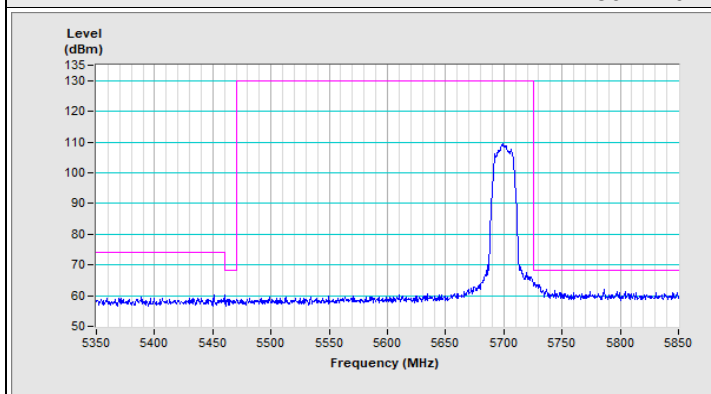


Vertical (Peak)

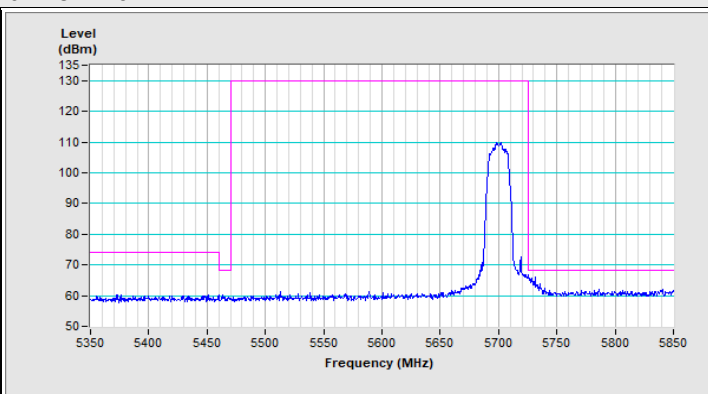


Vertical (Average)

### 802.11a Channel 140



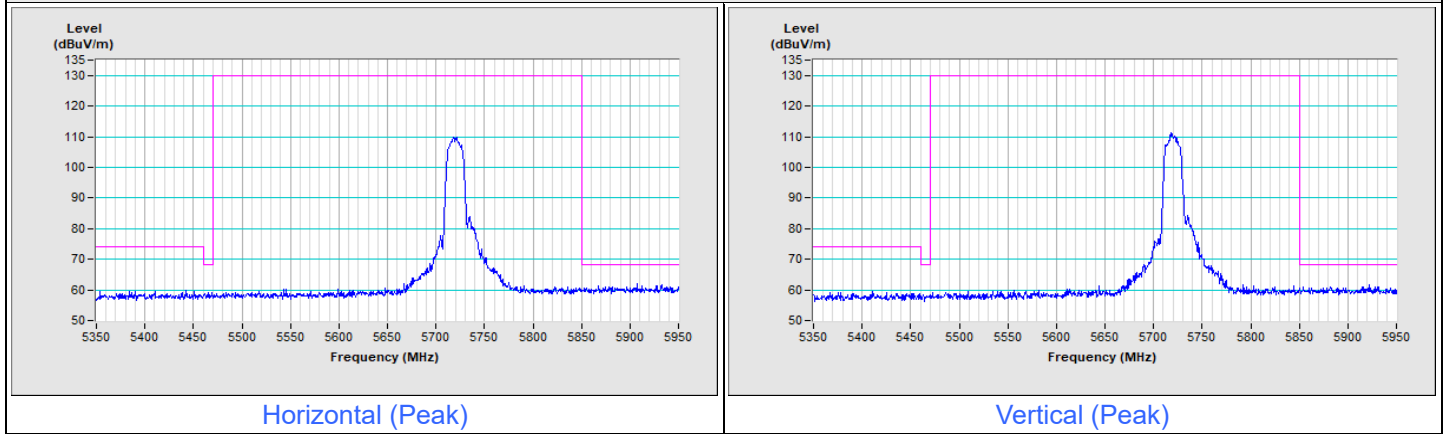
Horizontal (Peak)



Vertical (Peak)

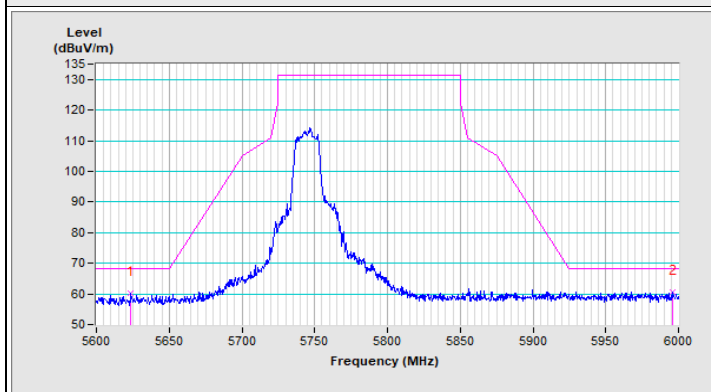
|                 |                     |                               |                                  |
|-----------------|---------------------|-------------------------------|----------------------------------|
| Frequency Range | 5.35 GHz ~ 5.95 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak |
|-----------------|---------------------|-------------------------------|----------------------------------|

### 802.11a Channel 144

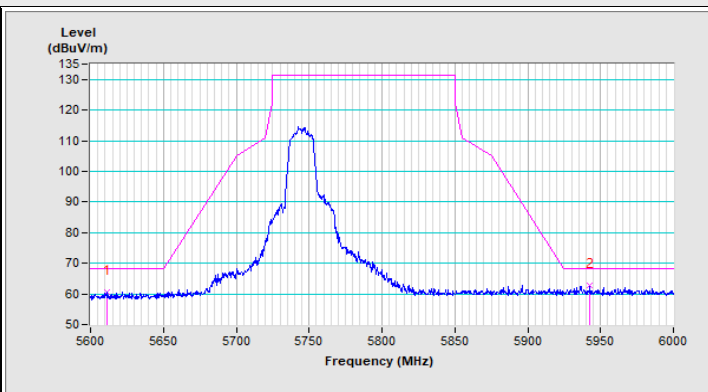


|                 |                 |                               |                                  |
|-----------------|-----------------|-------------------------------|----------------------------------|
| Frequency Range | 5.6 GHz ~ 6 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak |
|-----------------|-----------------|-------------------------------|----------------------------------|

### 802.11a Channel 149

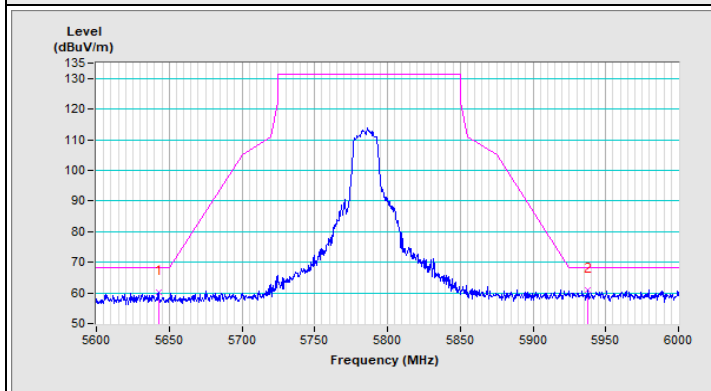


Horizontal (Peak)

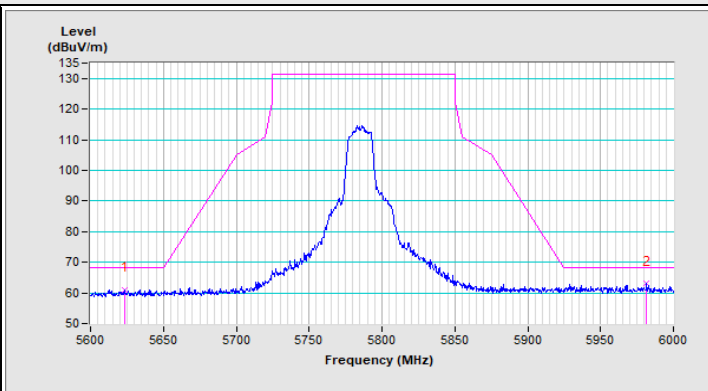


Vertical (Peak)

### 802.11a Channel 157

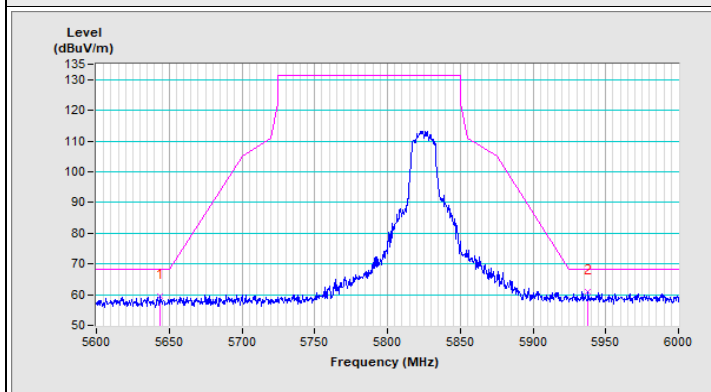


Horizontal (Peak)

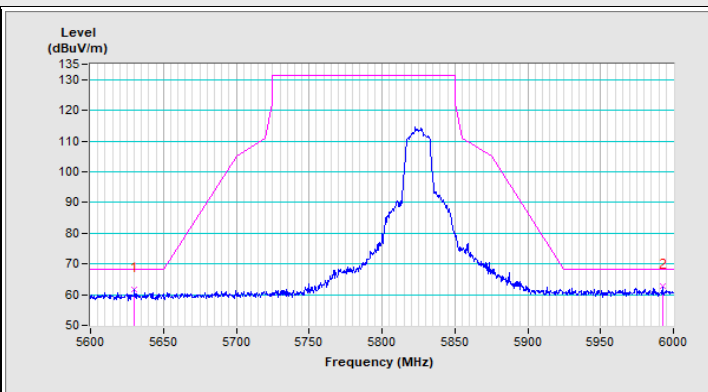


Vertical (Peak)

### 802.11a Channel 165



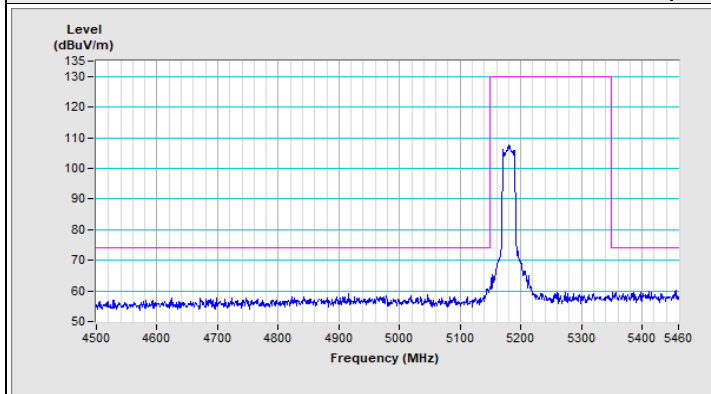
Horizontal (Peak)



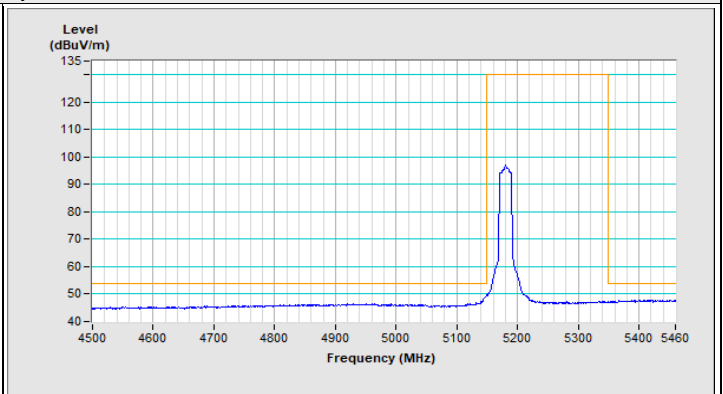
Vertical (Peak)

|                 |                    |                               |                                                                      |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|
| 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 |
|-----------------|--------------------|-------------------------------|----------------------------------------------------------------------|

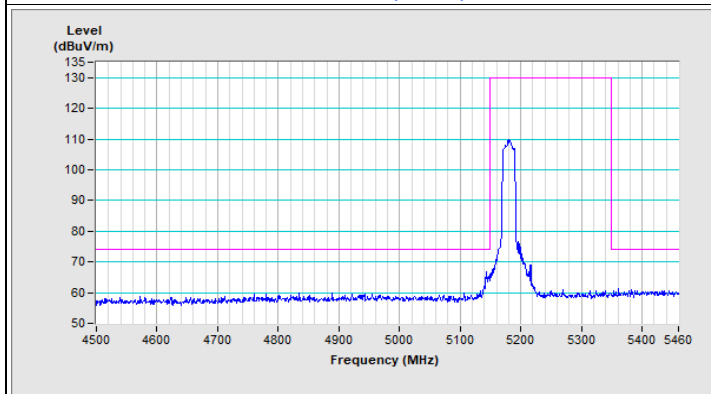
### 802.11ax (HE20) Channel 36



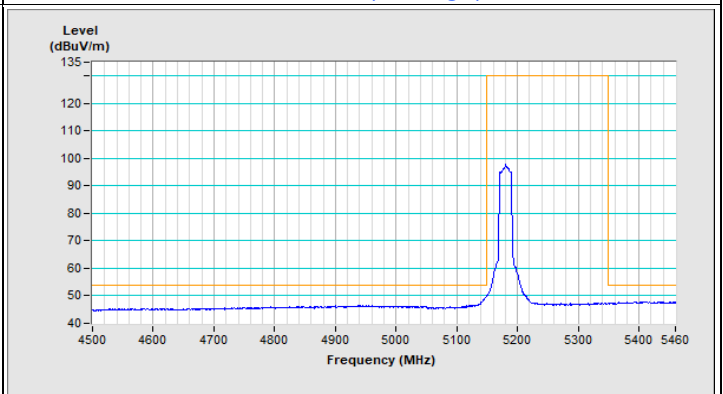
Horizontal (Peak)



Horizontal (Average)

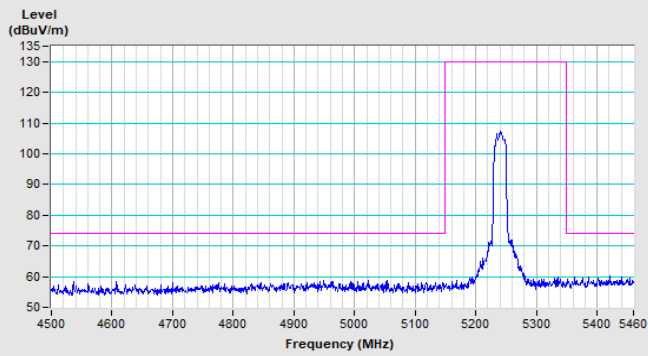


Vertical (Peak)

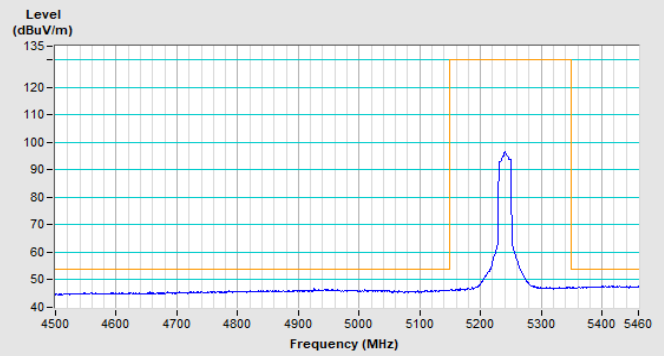


Vertical (Average)

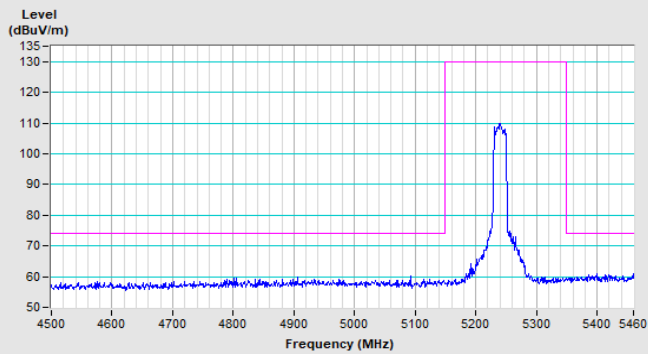
### 802.11ax (HE20) Channel 48



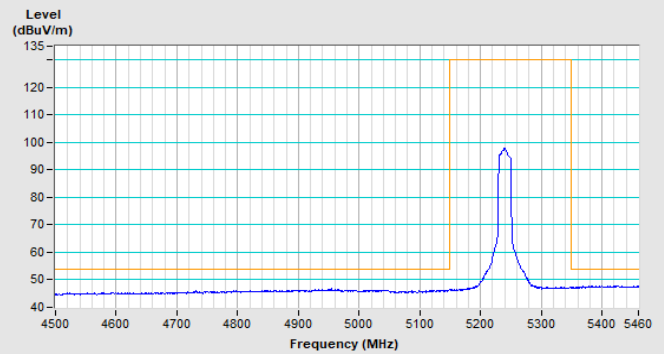
Horizontal (Peak)



Horizontal (Average)

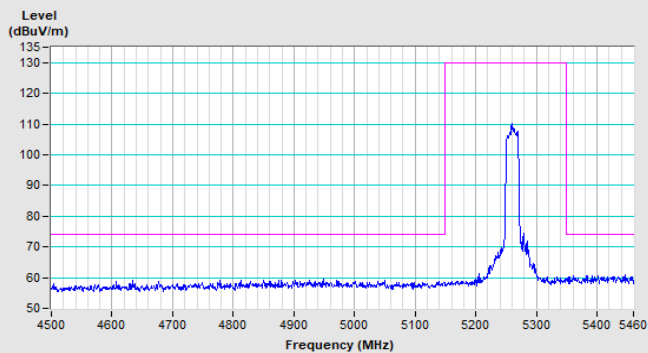


Vertical (Peak)

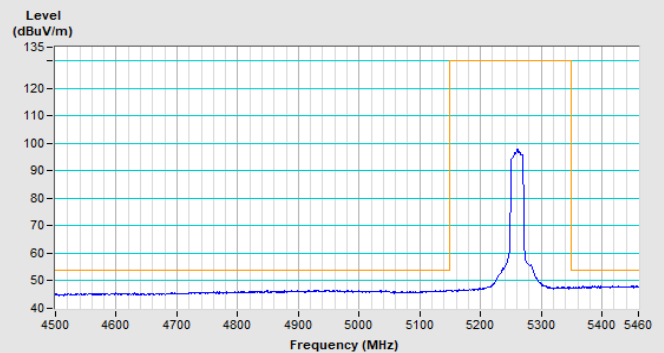


Vertical (Average)

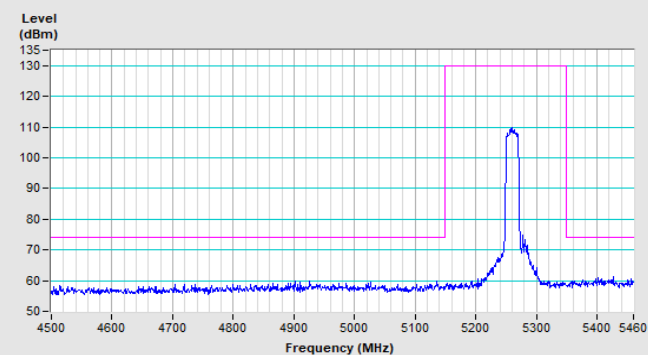
### 802.11ax (HE20) Channel 52



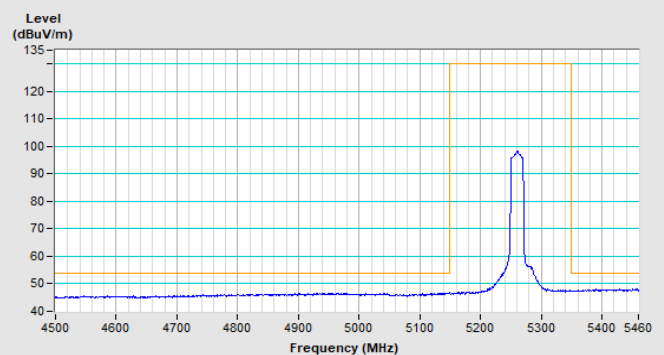
Horizontal (Peak)



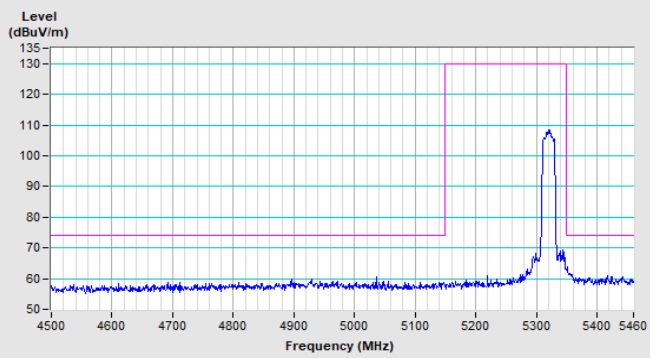
Horizontal (Average)



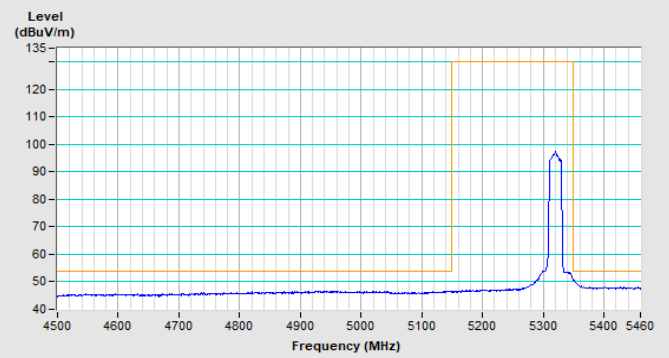
Vertical (Peak)



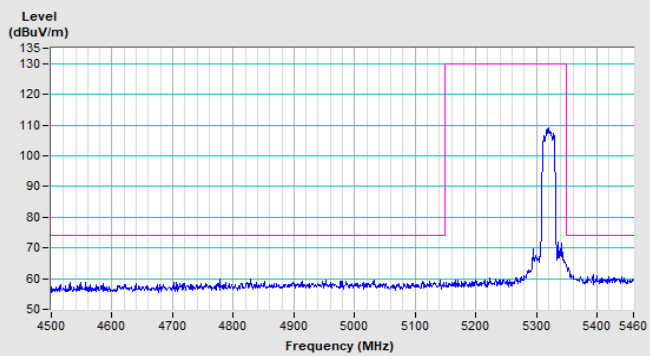
Vertical (Average)

**802.11ax (HE20) Channel 64**

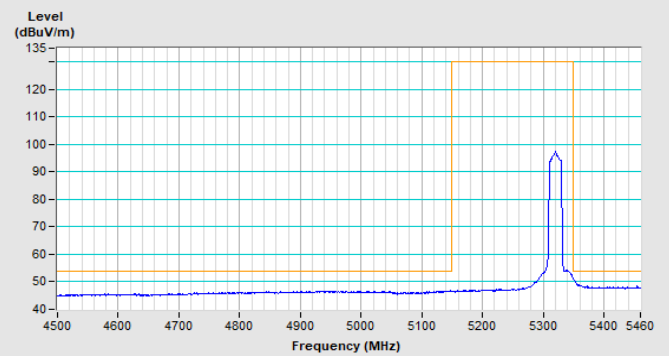
Horizontal (Peak)



Horizontal (Average)



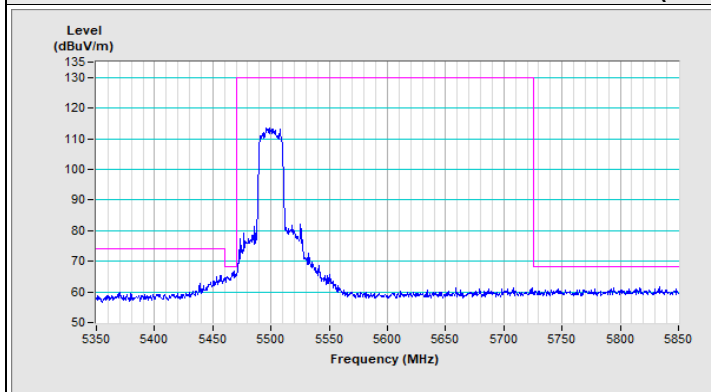
Vertical (Peak)



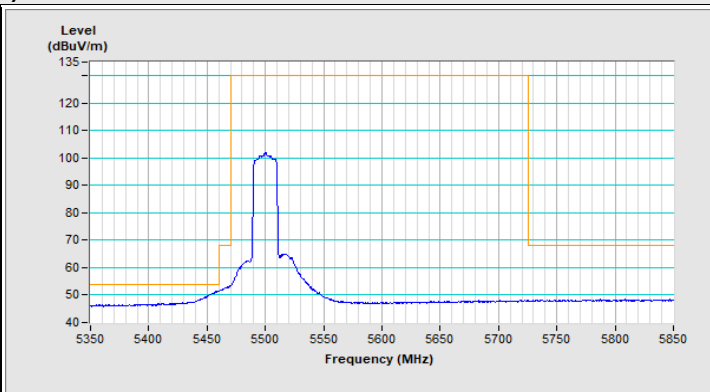
Vertical (Average)

|                 |                     |                               |                                                                      |
|-----------------|---------------------|-------------------------------|----------------------------------------------------------------------|
| 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 |
|-----------------|---------------------|-------------------------------|----------------------------------------------------------------------|

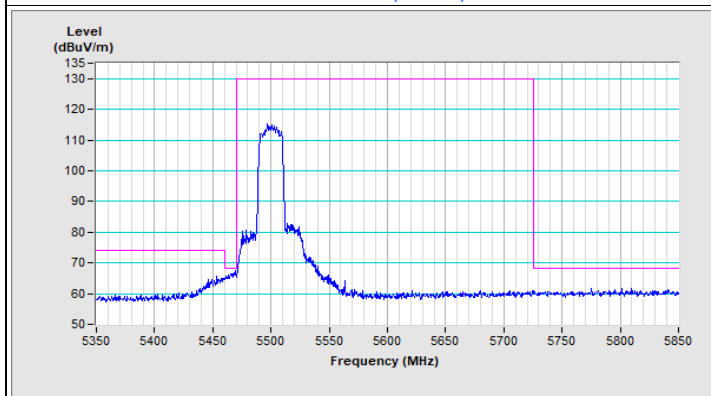
### 802.11ax (HE20) Channel 100



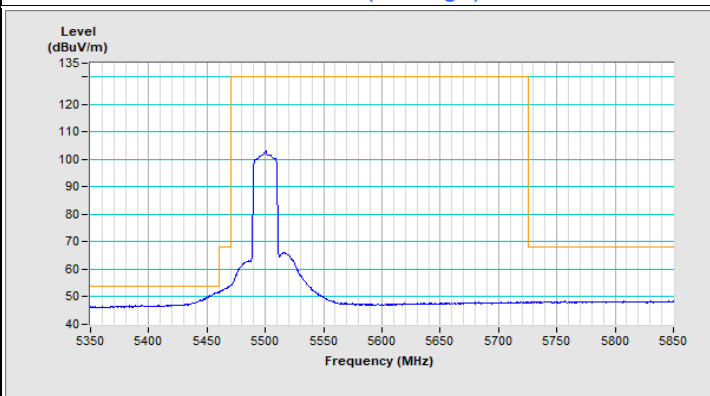
Horizontal (Peak)



Horizontal (Average)

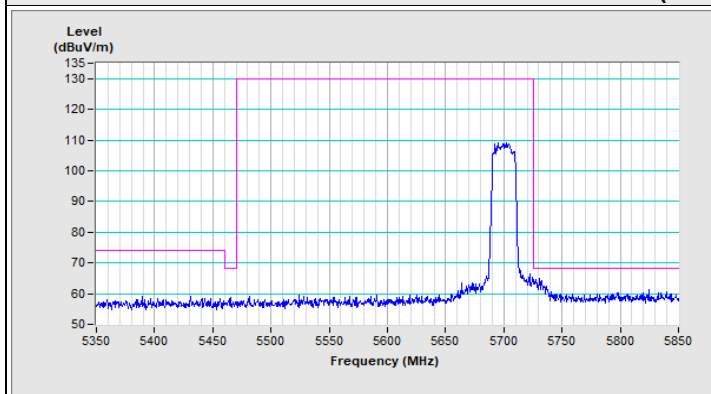


Vertical (Peak)

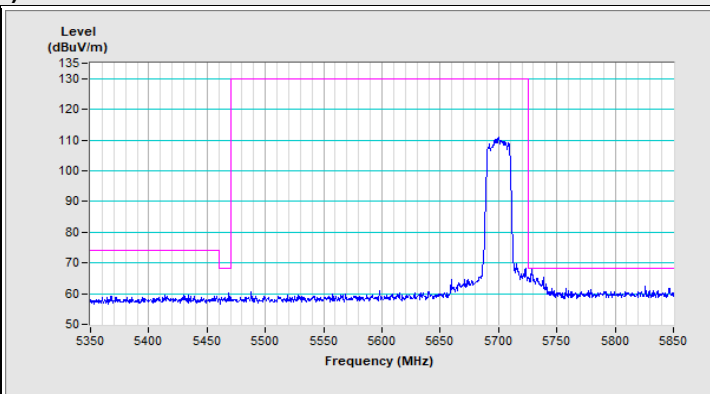


Vertical (Average)

### 802.11ax (HE20) Channel 140



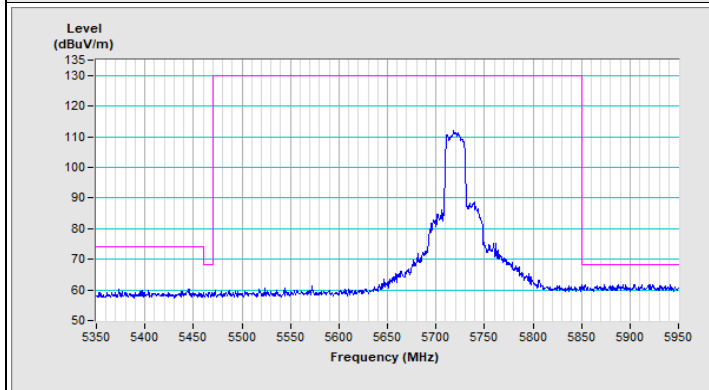
Horizontal (Peak)



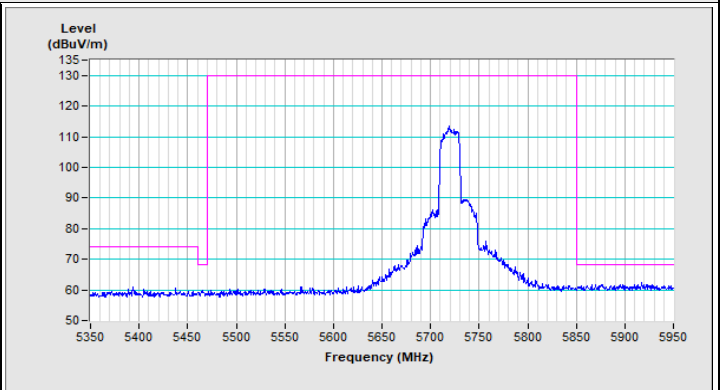
Vertical (Peak)

|                 |                     |                               |                                  |
|-----------------|---------------------|-------------------------------|----------------------------------|
| Frequency Range | 5.35 GHz ~ 5.95 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak |
|-----------------|---------------------|-------------------------------|----------------------------------|

### 802.11ax (HE20) Channel 144



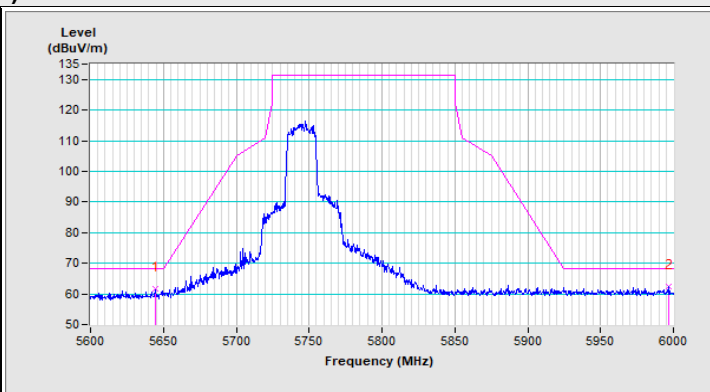
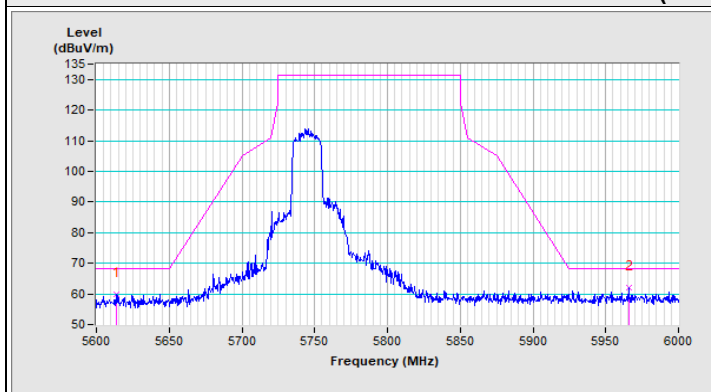
Horizontal (Peak)



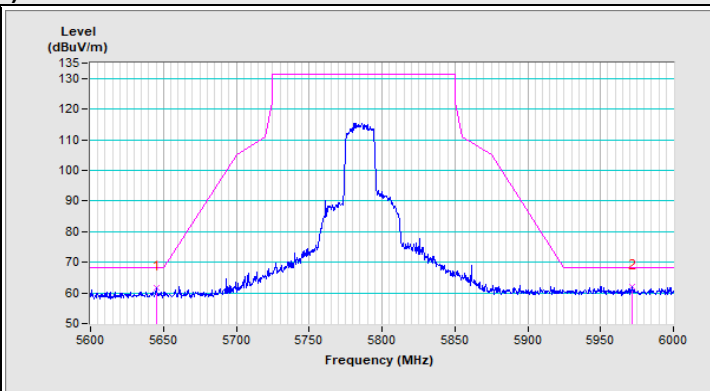
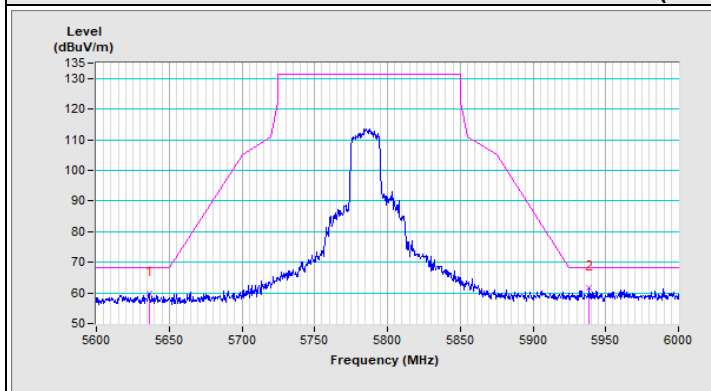
Vertical (Peak)

|                 |                 |                               |                                  |
|-----------------|-----------------|-------------------------------|----------------------------------|
| Frequency Range | 5.6 GHz ~ 6 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak |
|-----------------|-----------------|-------------------------------|----------------------------------|

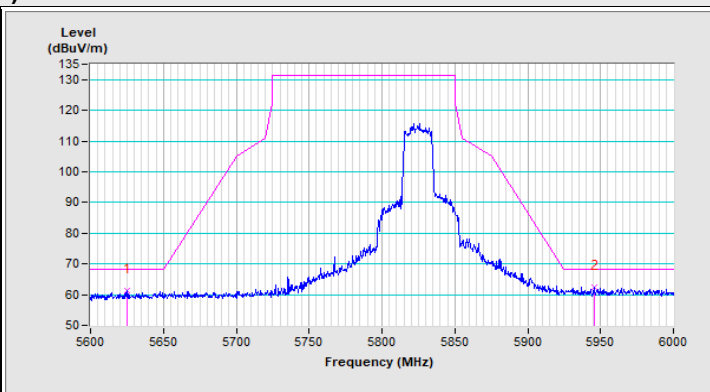
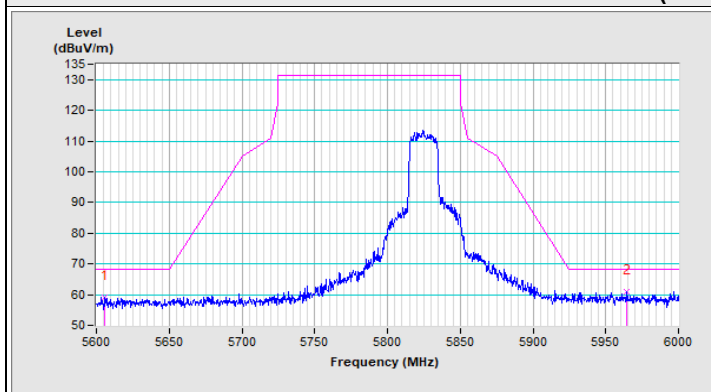
### 802.11ax (HE20) Channel 149



### 802.11ax (HE20) Channel 157



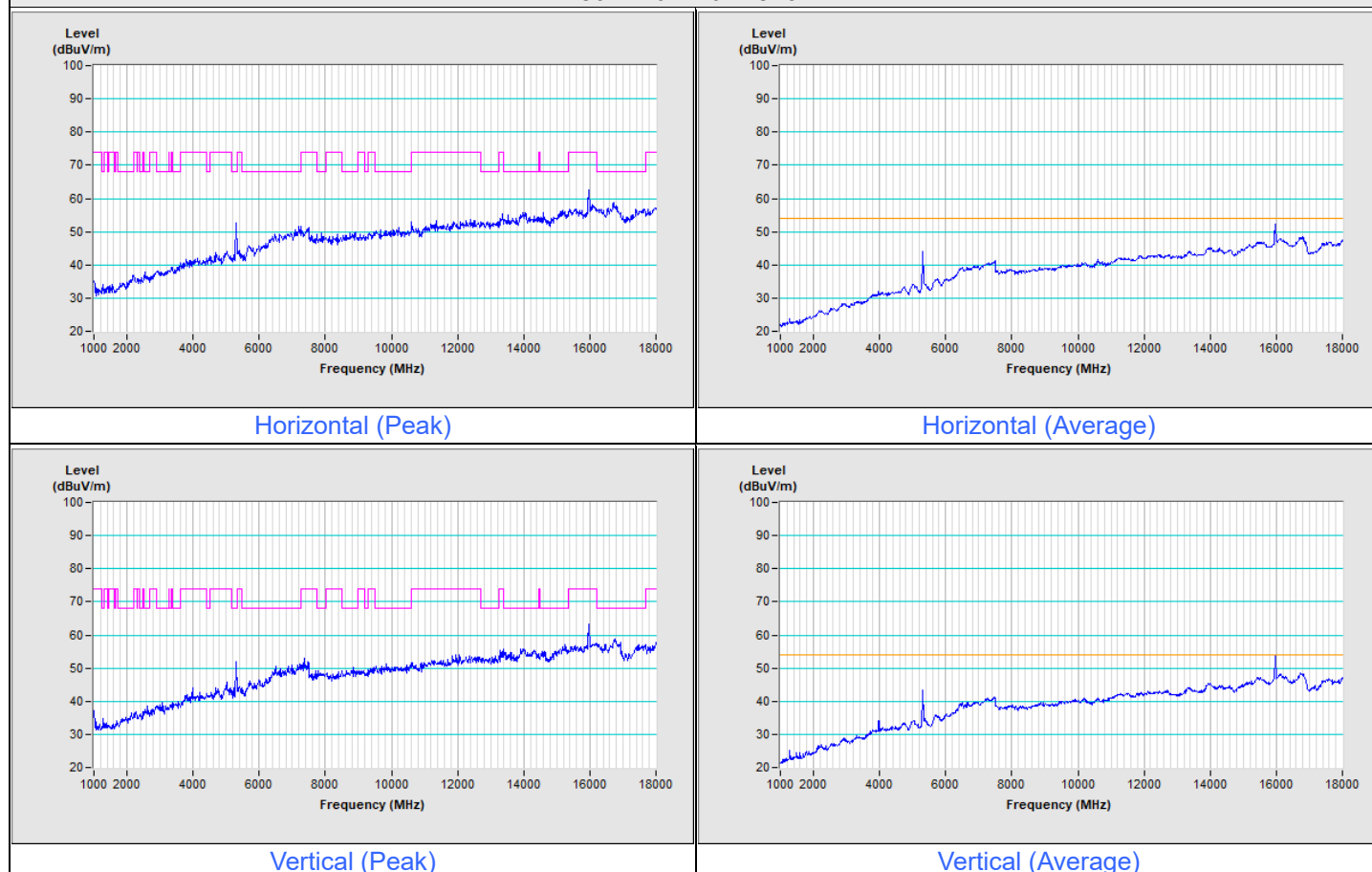
### 802.11ax (HE20) Channel 165



## Plot of Other emissions

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

### 802.11a Channel 64

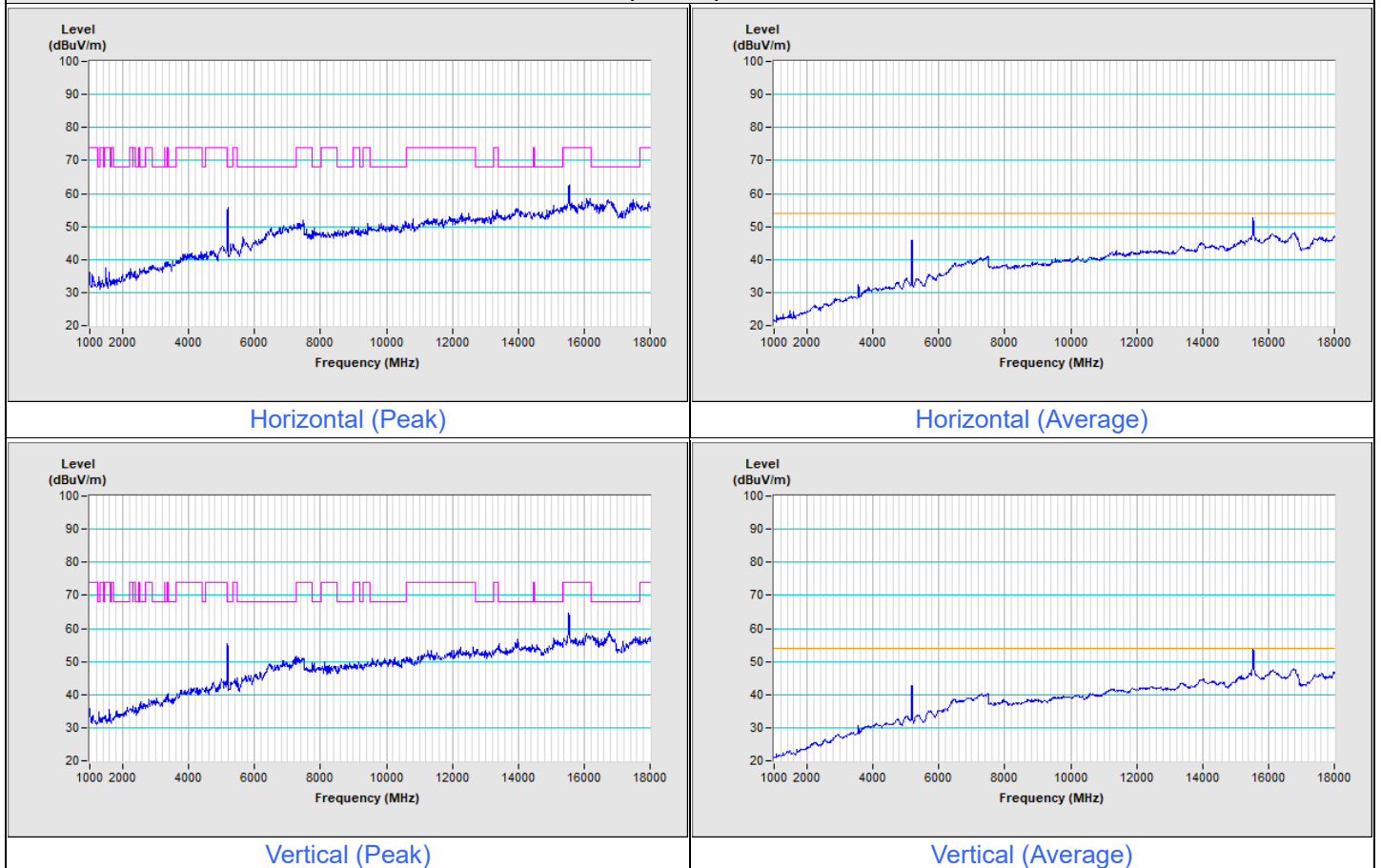


#### Note :

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=1 kHz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ac (VHT20) Channel 36

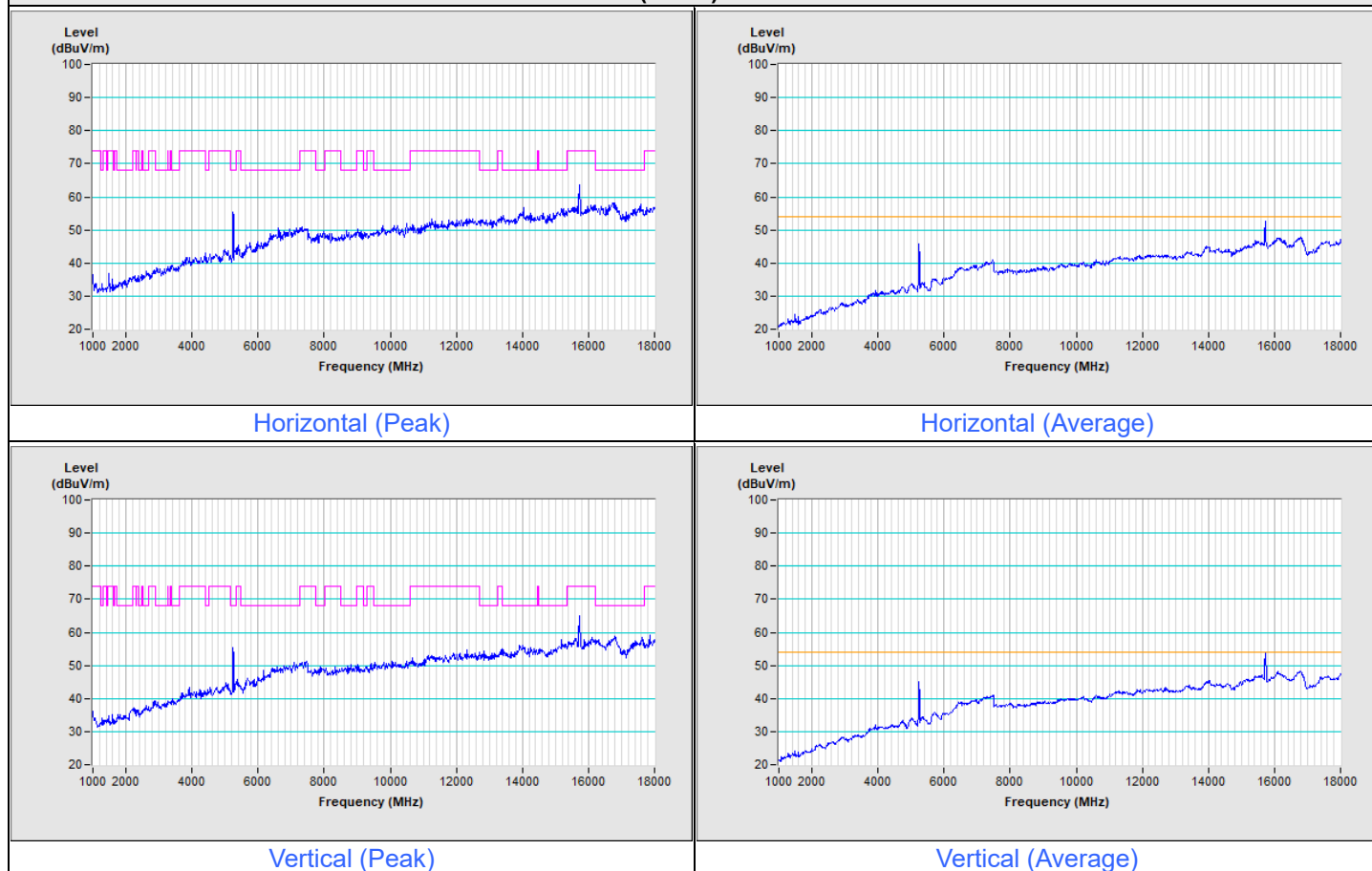


Note :

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=1 kHz, DET=Peak |
|-----------------|----------------|-------------------------------|----------------------------------------------------------------------|

### 802.11ax (HE20) Channel 48



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:

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**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.

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