

## FCC Test Report

**Report No.:** RF191023E01-1

**FCC ID:** UDX-60094010

**Test Model:** MR86-HW

**Received Date:** Oct. 22, 2019

**Test Date:** Oct. 22, 2019 to Jan. 30, 2020

**Issued Date:** Mar. 02, 2020

**Applicant:** Cisco Systems, Inc.

**Address:** 170 West Tasman Drive, San Jose, CA 95134 USA

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
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**Test Location:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
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**FCC Registration /  
Designation Number:** 723255 / TW2022



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### Release Control Record

| Issue No.     | Description       | Date Issued   |
|---------------|-------------------|---------------|
| RF191023E01-1 | Original release. | Mar. 02, 2020 |

## 1 Certificate of Conformity

**Product:** 4x4 WiFi6 Outdoor Access Point

**Brand:** Cisco

**Test Model:** MR86-HW

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** Cisco Systems, Inc.

**Test Date:** Oct. 22, 2019 to Jan. 30, 2020

**Standard:** 47 CFR FCC Part 15, Subpart E (Section 15.407)  
ANSI C63.10: 2013

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 EMC characteristics under the conditions specified in this report.

**Prepared by :** Joyce Kuo , **Date:** Mar. 02, 2020  
Joyce Kuo / Specialist

**Approved by :** Clark Lin , **Date:** Mar. 02, 2020  
Clark Lin / Technical Manager

## 2 Summary of Test Results

| 47 CFR FCC Part 15, Subpart E (Section 15.407) |                                             |        |                                                                                                                                                   |
|------------------------------------------------|---------------------------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| FCC Clause                                     | Test Item                                   | Result | Remarks                                                                                                                                           |
| 15.407(b)(6)                                   | AC Power Conducted Emissions                | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -5.43dB at 23.65234MHz.                                                               |
| 15.407(b)<br>(1/2/3/4(i/ii)/6)                 | Radiated Emissions & Band Edge Measurement* | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -0.1dB at 5150.00MHz, 15600.00MHz, 17235.00MHz, 51720.00MHz, 17265.00MHz, 5936.28MHz. |
| 15.407(a)(1/2/3)                               | Max Average Transmit Power                  | Pass   | Meet the requirement of limit.                                                                                                                    |
| ---                                            | Occupied Bandwidth Measurement              | -      | Reference only.                                                                                                                                   |
| 15.407(a)(1/2/3)                               | Peak Power Spectral Density                 | Pass   | Meet the requirement of limit.                                                                                                                    |
| 15.407(e)                                      | 6dB bandwidth                               | Pass   | Meet the requirement of limit.<br>(U-NII-3 Band only)                                                                                             |
| 15.407(g)                                      | Frequency Stability                         | Pass   | Meet the requirement of limit.                                                                                                                    |
| 15.203                                         | Antenna Requirement                         | PASS   | Antenna connector is R-N type(F) not a standard connector.                                                                                        |

\*For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A.

Note:

Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

### 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                        | Frequency      | Expanded Uncertainty (k=2) ( $\pm$ ) |
|------------------------------------|----------------|--------------------------------------|
| Conducted Emissions at mains ports | 150kHz ~ 30MHz | 1.8 dB                               |
| Radiated Emissions up to 1 GHz     | 9kHz ~ 30MHz   | 3.0 dB                               |
|                                    | 30MHz ~ 1GHz   | 4.9 dB                               |
| Radiated Emissions above 1 GHz     | 1GHz ~ 6GHz    | 5.1 dB                               |
|                                    | 6GHz ~ 18GHz   | 4.9 dB                               |
|                                    | 18GHz ~ 40GHz  | 5.2 dB                               |

### 2.2 Modification Record

There were no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product               | 4x4 WiFi6 Outdoor Access Point                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Brand                 | Cisco                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Test Model            | MR86-HW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Status of EUT         | ENGINEERING SAMPLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Power Supply Rating   | 55Vdc or 56Vdc from PoE adapter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Modulation Type       | CCK, DQPSK, DBPSK for DSSS<br>64QAM, 16QAM, QPSK, BPSK for OFDM<br>256QAM for OFDM in 11ac mode<br>1024QAM for OFDMA in 11ax HE mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Modulation Technology | DSSS, OFDM, OFDMA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Transfer Rate         | 802.11b: up to 11Mbps<br>802.11a/g: up to 54Mbps<br>802.11n: up to 600Mbps<br>802.11ac: up to 1733.3Mbps<br>802.11ax: up to 2401.9Mbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Operating Frequency   | <b>2.4GHz:</b> 2.412 ~ 2.462GHz<br><b>5GHz:</b> 5.18 ~ 5.24GHz, 5.745 ~ 5.825GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Number of Channel     | <b>2.4GHz:</b><br>802.11b, 802.11g, 802.11n (HT20), 802.11ax (HE20): 11<br>802.11n (HT40), 802.11ax (HE40): 7<br><b>5GHz:</b><br>802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 9<br>802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 4<br>802.11ac (VHT80), 802.11ax (HE80): 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Output Power          | <b>Mode 1</b><br><b>Non-Beamforming Mode:</b><br><b>2.4GHz:</b> 198.326mW<br><b>5.18 ~ 5.24GHz:</b> 6.013mW<br><b>5.745 ~ 5.825GHz:</b> 196.2mW<br><b>Beamforming Mode:</b><br><b>2.4GHz:</b> 48.923mW<br><b>5.18 ~ 5.24GHz:</b> 1.5644mW<br><b>5.745 ~ 5.825GHz:</b> 48.4mW<br><br><b>Mode 2</b><br><b>Non-Beamforming Mode:</b><br><b>2.4GHz:</b> 577.777mW<br><b>5.18 ~ 5.24GHz:</b> 24.06mW<br><b>5.745 ~ 5.825GHz:</b> 529.361mW<br><b>Beamforming Mode:</b><br><b>2.4GHz:</b> 379.494mW<br><b>5.18 ~ 5.24GHz:</b> 6.15mW<br><b>5.745 ~ 5.825GHz:</b> 191.739mW<br><br><b>Mode 3</b><br><b>Non-Beamforming Mode:</b><br><b>2.4GHz:</b> 470.66mW<br><b>5.18 ~ 5.24GHz:</b> 27.236mW<br><b>5.745 ~ 5.825GHz:</b> 335.941mW<br><b>Beamforming Mode:</b><br><b>2.4GHz:</b> 156.267mW<br><b>5.18 ~ 5.24GHz:</b> 6.772mW<br><b>5.745 ~ 5.825GHz:</b> 218.391mW |

|                     |                                                                                                                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | <b>Mode 4</b><br><b>Non-Beamforming Mode:</b><br><b>2.4GHz:</b> 495.227mW<br><b>5.18 ~ 5.24GHz:</b> 7.59mW<br><b>5.745 ~ 5.825GHz:</b> 247.721mW<br><b>Beamforming Mode:</b><br><b>2.4GHz:</b> 120.979mW<br><b>5.18 ~ 5.24GHz:</b> 1.8793mW<br><b>5.745 ~ 5.825GHz:</b> 61.056mW |
| Antenna Type        | Refer to Note                                                                                                                                                                                                                                                                    |
| Antenna Connector   | Refer to Note                                                                                                                                                                                                                                                                    |
| Accessory Device    | NA                                                                                                                                                                                                                                                                               |
| Data Cable Supplied | NA                                                                                                                                                                                                                                                                               |

Note:

1. There are WLAN, Bluetooth technology used for the EUT.
2. The EUT power needs to be supplied from a PoE adapter, the information is as below table:

| Only for test, not for sale |         |              |                                                                                             |
|-----------------------------|---------|--------------|---------------------------------------------------------------------------------------------|
| No.                         | Brand   | Model No.    | Spec.                                                                                       |
| 1                           | PHIHONG | POEA30U-1ATE | Input: 100-240Vac, 50/60Hz, 0.8A<br>Output: 56V, 0.536A<br>DC Output Cable: shielded, 1.5 m |
| 2                           | CISCO   | MA-INJ-5     | Input: 100-240Vac, 50/60Hz, 1.5A<br>Output: 55V, 0.63A<br>DC Output Cable: shielded, 1.5 m  |
| 3                           | CISCO   | MA-INJ-4     | Input: 100-240Vac, 50/60Hz, 0.67A<br>Output: 55V, 0.6A<br>DC Output Cable: shielded, 1.5 m  |

From the above adapters, the Emissions worse case was found in **Adapter 1**. Therefore only the test data of the mode was recorded in this report.

3. Simultaneously transmission condition

| Condition | Technology  |           |           |
|-----------|-------------|-----------|-----------|
| 1         | WLAN 2.4GHz |           | WLAN 5GHz |
| 2         | WLAN 2.4GHz | WLAN 5GHz | Bluetooth |

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

4. There are WLAN, Bluetooth technology used for the EUT. The EUT has below radios as following table:

| Radio 1  | Radio 2 | Radio 3                    | Radio 4   |
|----------|---------|----------------------------|-----------|
| WLAN2.4G | WLAN 5G | 2.4G/5G 1x1 scanning radio | Bluetooth |



5. The antennas provided to the EUT, please refer to the following table:

| WLAN 2.4GHz + WLAN 5GHz |                        |       |                  |                    |                       |                                            |                |
|-------------------------|------------------------|-------|------------------|--------------------|-----------------------|--------------------------------------------|----------------|
| Antenna set             | Chain No.              | Brand | Model            | Antenna Gain (dBi) | Frequency Range (GHz) | Antenna Type                               | Connector Type |
| 1                       | Chain 0/1<br>Chain 2/3 | Cisco | AIR-ANT2513P4M-N | 13                 | 2.4~2.4835            | Dual-Band Polarization Diverse Patch Array | R-N type(F)    |
|                         |                        |       |                  | 13                 | 5.15~5.85             |                                            |                |
| 2                       | Chain 0/1<br>Chain 2/3 | Cisco | MA-ANT-20        | 4                  | 2.4~2.4835            | omni-directional                           |                |
|                         |                        |       |                  | 7                  | 5.15~5.85             |                                            |                |
| 3                       | Chain 0/1<br>Chain 2/3 | Cisco | MA-ANT-25        | 8                  | 2.4~2.4835            | Patch Array                                |                |
|                         |                        |       |                  | 6.5                | 5.15~5.85             |                                            |                |
| 4                       | Chain 0/1<br>Chain 2/3 | Cisco | MA-ANT-27        | 9                  | 2.4~2.4835            | Sector                                     |                |
|                         |                        |       |                  | 12                 | 5.15~5.85             |                                            |                |
| Scanning Radio          |                        |       |                  |                    |                       |                                            |                |
| -                       | -                      | -     | -                | 4                  | 2.4~2.4835            | PIFA                                       | I-PEX          |
|                         |                        |       |                  | 6.63               | 5.15~5.85             |                                            |                |
| Bluetooth               |                        |       |                  |                    |                       |                                            |                |
| -                       | -                      | -     | -                | 4.13               | 2.4~2.4835            | PIFA                                       | I-PEX          |

6. The EUT could be supplied with components and following different brand names could be chosen:

| PART DES     | Main source |                         | 2nd source |                   |
|--------------|-------------|-------------------------|------------|-------------------|
| Item list    | Vendor      | Vendor PN               | Vendor     | Vendor PN         |
| DDR          | MICRON      | MT40A512M16LY-062E IT:E | SAMSUNG    | K4A8G165WC-BITD   |
| NAND         | WINBOND     | W29N02GZBJBF            | CYPRESS    | S34MS02G200BHV000 |
| M-SMART CONN | GTT         | 1020G00000340           | UDE        | R65-MK-0002       |

From the above sources, the Emissions worse case was found in **Main source**. Therefore only the test data of the mode was recorded in this report.

7. The EUT incorporates a MIMO function:

| 2.4GHz Band      |                       |     |
|------------------|-----------------------|-----|
| MODULATION MODE  | TX & RX CONFIGURATION |     |
| 802.11b          | 4TX                   | 4RX |
| 802.11g          | 4TX                   | 4RX |
| 802.11n (HT20)   | 4TX                   | 4RX |
| 802.11n (HT40)   | 4TX                   | 4RX |
| 802.11ax (HE20)  | 4TX                   | 4RX |
| 802.11ax (HE40)  | 4TX                   | 4RX |
| 5GHz Band        |                       |     |
| MODULATION MODE  | TX & RX CONFIGURATION |     |
| 802.11a          | 4TX                   | 4RX |
| 802.11n (HT20)   | 4TX                   | 4RX |
| 802.11n (HT40)   | 4TX                   | 4RX |
| 802.11ac (VHT20) | 4TX                   | 4RX |
| 802.11ac (VHT40) | 4TX                   | 4RX |
| 802.11ac (VHT80) | 4TX                   | 4RX |
| 802.11ax (HE20)  | 4TX                   | 4RX |
| 802.11ax (HE40)  | 4TX                   | 4RX |
| 802.11ax (HE80)  | 4TX                   | 4RX |

Note:

1. All of modulation mode support beamforming function except 802.11a/b/g modulation mode.
2. The EUT support Beamforming and non-beamforming mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
3. The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz), 802.11ac mode for 20MHz (40MHz) and 802.11ax mode for 20MHz (40MHz), therefore the manufacturer will control the power for 802.11n/ac mode is the same as the 802.11ax or more lower than it and investigated worst case to representative mode in test report. (Final test mode refer to section 3.2.1)

#### Radio 3 - Scanning (only RX)

| 2.4GHZ           |                  |
|------------------|------------------|
| MODULATION MODE  | RX CONFIGURATION |
| 802.11b          | 1RX              |
| 802.11g          | 1RX              |
| 802.11n (HT20)   | 1RX              |
| 802.11n (HT40)   | 1RX              |
| 802.11ax (HE20)  | 1RX              |
| 802.11ax (HE40)  | 1RX              |
| 5GHz             |                  |
| MODULATION MODE  | RX CONFIGURATION |
| 802.11a          | 1RX              |
| 802.11n (HT20)   | 1RX              |
| 802.11n (HT40)   | 1RX              |
| 802.11ac (VHT20) | 1RX              |
| 802.11ac (VHT40) | 1RX              |
| 802.11ac (VHT80) | 1RX              |
| 802.11ax (HE20)  | 1RX              |
| 802.11ax (HE40)  | 1RX              |
| 802.11ax (HE80)  | 1RX              |

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

## 3.2 Description of Test Modes

### FOR 5180 ~ 5240MHz

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

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 36      | 5180 MHz  | 44      | 5220 MHz  |
| 40      | 5200 MHz  | 48      | 5240 MHz  |

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 38      | 5190 MHz  | 46      | 5230 MHz  |

1 channel is provided for 802.11ac (VHT80), 802.11ax (VHT80):

| Channel | Frequency |
|---------|-----------|
| 42      | 5210 MHz  |

### FOR 5745 ~ 5825MHz:

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  |         |           |

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

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

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80):

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

### 3.2.1 Test Mode Applicability and Tested Channel Detail

| EUT CONFIGURE MODE | APPLICABLE TO |       |     |      | DESCRIPTION               |
|--------------------|---------------|-------|-----|------|---------------------------|
|                    | RE $\geq$ 1G  | RE<1G | PLC | APCM |                           |
| 1                  | √             | √     | -   | √    | Antenna: AIR-ANT2513P4M-N |
| 2                  | √             | √     | √   | √    | Antenna: MA-ANT-20        |
| 3                  | √             | √     | -   | √    | Antenna: MA-ANT-25        |
| 4                  | √             | √     | -   | √    | Antenna: MA-ANT-27        |

Where **RE $\geq$ 1G:** Radiated Emission above 1GHz & Bandedge Measurement  
**PLC:** Power Line Conducted Emission

**RE<1G:** Radiated Emission below 1GHz  
**APCM:** Antenna Port Conducted Measurement

#### **Radiated Emission Test (Above 1GHz):**

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| Non-Beamforming Mode |                  |                   |                |                       |                 |                     |
|----------------------|------------------|-------------------|----------------|-----------------------|-----------------|---------------------|
| Mode                 | FREQ. Band (MHz) | Available Channel | Tested Channel | Modulation Technology | Modulation Type | Data Rate Parameter |
| 802.11a              | 5180-5240        | 36 to 48          | 36, 40, 48     | OFDM                  | BPSK            | 6Mb/s               |
| 802.11ax (HE20)      |                  | 36 to 48          | 36, 40, 48     | OFDMA                 | BPSK            | MCS0                |
| 802.11ax (HE40)      |                  | 38 to 46          | 38, 46         | OFDMA                 | BPSK            | MCS0                |
| 802.11ax (HE80)      |                  | 42                | 42             | OFDMA                 | BPSK            | MCS0                |
| 802.11a              | 5745-5825        | 149 to 165        | 149, 157, 165  | OFDM                  | BPSK            | 6Mb/s               |
| 802.11ax (HE20)      |                  | 149 to 165        | 149, 157, 165  | OFDMA                 | BPSK            | MCS0                |
| 802.11ax (HE40)      |                  | 151 to 159        | 151, 159       | OFDMA                 | BPSK            | MCS0                |
| 802.11ax (HE80)      |                  | 155               | 155            | OFDMA                 | BPSK            | MCS0                |

### Radiated Emission Test (Below 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| Non-Beamforming Mode      |                        |                        |                |                       |                 |                     |
|---------------------------|------------------------|------------------------|----------------|-----------------------|-----------------|---------------------|
| Antenna: AIR-ANT2513P4M-N |                        |                        |                |                       |                 |                     |
| Mode                      | FREQ. Band (MHz)       | Available Channel      | Tested Channel | Modulation Technology | Modulation Type | Data Rate Parameter |
| 802.11a                   | 5180-5240<br>5745-5825 | 36 to 48<br>149 to 165 | 149            | OFDM                  | BPSK            | 6Mb/s               |
| Antenna: MA-ANT-20        |                        |                        |                |                       |                 |                     |
| Mode                      | FREQ. Band (MHz)       | Available Channel      | Tested Channel | Modulation Technology | Modulation Type | Data Rate Parameter |
| 802.11ax (HE40)           | 5180-5240<br>5745-5825 | 38 to 46<br>151 to 159 | 159            | OFDMA                 | BPSK            | MCS0                |
| Antenna: MA-ANT-25        |                        |                        |                |                       |                 |                     |
| Mode                      | FREQ. Band (MHz)       | Available Channel      | Tested Channel | Modulation Technology | Modulation Type | Data Rate Parameter |
| 802.11ax (HE80)           | 5180-5240<br>5745-5825 | 42<br>155              | 155            | OFDMA                 | BPSK            | MCS0                |
| Antenna: MA-ANT-27        |                        |                        |                |                       |                 |                     |
| Mode                      | FREQ. Band (MHz)       | Available Channel      | Tested Channel | Modulation Technology | Modulation Type | Data Rate Parameter |
| 802.11a                   | 5180-5240<br>5745-5825 | 36 to 48<br>149 to 165 | 149            | OFDM                  | BPSK            | 6Mb/s               |

### Power Line Conducted Emission Test:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| Non-Beamforming Mode |                        |                        |                |                       |                 |                     |
|----------------------|------------------------|------------------------|----------------|-----------------------|-----------------|---------------------|
| Mode                 | FREQ. Band (MHz)       | Available Channel      | Tested Channel | Modulation Technology | Modulation Type | Data Rate Parameter |
| 802.11a              | 5180-5240<br>5745-5825 | 36 to 48<br>149 to 165 | 149            | OFDM                  | BPSK            | 6Mb/s               |

### Antenna Port Conducted Measurement:

- ☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| Non-Beamforming Mode                 |                  |                   |                |                       |                 |                     |  |
|--------------------------------------|------------------|-------------------|----------------|-----------------------|-----------------|---------------------|--|
| Mode                                 | FREQ. Band (MHz) | Available Channel | Tested Channel | Modulation Technology | Modulation Type | Data Rate Parameter |  |
| 802.11a                              | 5180-5240        | 36 to 48          | 36, 40, 48     | OFDM                  | BPSK            | 6Mb/s               |  |
| 802.11ac (VHT20) (Output power only) |                  | 36 to 48          | 36, 40, 48     | OFDM                  | BPSK            | MCS0                |  |
| 802.11ac (VHT40) (Output power only) |                  | 38 to 46          | 38, 46         | OFDM                  | BPSK            | MCS0                |  |
| 802.11ac (VHT80) (Output power only) |                  | 42                | 42             | OFDM                  | BPSK            | MCS0                |  |
| 802.11ax (HE20)                      |                  | 36 to 48          | 36, 40, 48     | OFDMA                 | BPSK            | MCS0                |  |
| 802.11ax (HE40)                      |                  | 38 to 46          | 38, 46         | OFDMA                 | BPSK            | MCS0                |  |
| 802.11ax (HE80)                      |                  | 42                | 42             | OFDMA                 | BPSK            | MCS0                |  |
| 802.11a                              | 5745-5825        | 149 to 165        | 149, 157, 165  | OFDM                  | BPSK            | 6Mb/s               |  |
| 802.11ac (VHT20) (Output power only) |                  | 149 to 165        | 149, 157, 165  | OFDM                  | BPSK            | MCS0                |  |
| 802.11ac (VHT40) (Output power only) |                  | 151 to 159        | 151, 159       | OFDM                  | BPSK            | MCS0                |  |
| 802.11ac (VHT80) (Output power only) |                  | 155               | 155            | OFDM                  | BPSK            | MCS0                |  |
| 802.11ax (HE20)                      |                  | 149 to 165        | 149, 157, 165  | OFDMA                 | BPSK            | MCS0                |  |
| 802.11ax (HE40)                      |                  | 151 to 159        | 151, 159       | OFDMA                 | BPSK            | MCS0                |  |
| 802.11ax (HE80)                      |                  | 155               | 155            | OFDMA                 | BPSK            | MCS0                |  |
| Beamforming Mode (output power only) |                  |                   |                |                       |                 |                     |  |
| Mode                                 | FREQ. Band (MHz) | Available Channel | Tested Channel | Modulation Technology | Modulation Type | Data Rate Parameter |  |
| 802.11ac (VHT20)                     | 5180-5240        | 36 to 48          | 36, 40, 48     | OFDM                  | BPSK            | MCS0                |  |
| 802.11ac (VHT40)                     |                  | 38 to 46          | 38, 46         | OFDM                  | BPSK            | MCS0                |  |
| 802.11ac (VHT80)                     |                  | 42                | 42             | OFDM                  | BPSK            | MCS0                |  |
| 802.11ax (HE20)                      |                  | 36 to 48          | 36, 40, 48     | OFDMA                 | BPSK            | MCS0                |  |
| 802.11ax (HE40)                      |                  | 38 to 46          | 38, 46         | OFDMA                 | BPSK            | MCS0                |  |
| 802.11ax (HE80)                      |                  | 42                | 42             | OFDMA                 | BPSK            | MCS0                |  |
| 802.11ac (VHT20)                     | 5745-5825        | 149 to 165        | 149, 157, 165  | OFDM                  | BPSK            | MCS0                |  |
| 802.11ac (VHT40)                     |                  | 151 to 159        | 151, 159       | OFDM                  | BPSK            | MCS0                |  |
| 802.11ac (VHT80)                     |                  | 155               | 155            | OFDM                  | BPSK            | MCS0                |  |
| 802.11ax (HE20)                      |                  | 149 to 165        | 149, 157, 165  | OFDMA                 | BPSK            | MCS0                |  |
| 802.11ax (HE40)                      |                  | 151 to 159        | 151, 159       | OFDMA                 | BPSK            | MCS0                |  |
| 802.11ax (HE80)                      |                  | 155               | 155            | OFDMA                 | BPSK            | MCS0                |  |

**Test Condition:**

| Applicable To | Environmental Conditions | INPUT POWER<br>(SYSTEM) | Tested By |
|---------------|--------------------------|-------------------------|-----------|
| RE≥1G         | 22deg. C, 70%RH          | 120Vac, 60Hz            | Andy Ho   |
| RE<1G         | 22deg. C, 67%RH          | 120Vac, 60Hz            | Ryan Du   |
| PLC           | 25deg. C, 62%RH          | 120Vac, 60Hz            | Andy Ho   |
| APCM          | 25deg. C, 60%RH          | 120Vac, 60Hz            | Andy Ho   |

### 3.3 Duty Cycle of Test Signal

If duty cycle of test signal is < 98%, duty factor shall be considered.

**802.11a:** Duty cycle = 1.429 ms/1.548 ms = 0.923, Duty factor =  $10 * \log(1/\text{Duty cycle}) = 0.35$

**802.11ac (VHT20):** Duty cycle = 5.447 ms/5.683 ms = 0.958, Duty factor =  $10 * \log(1/\text{Duty cycle}) = 0.18$

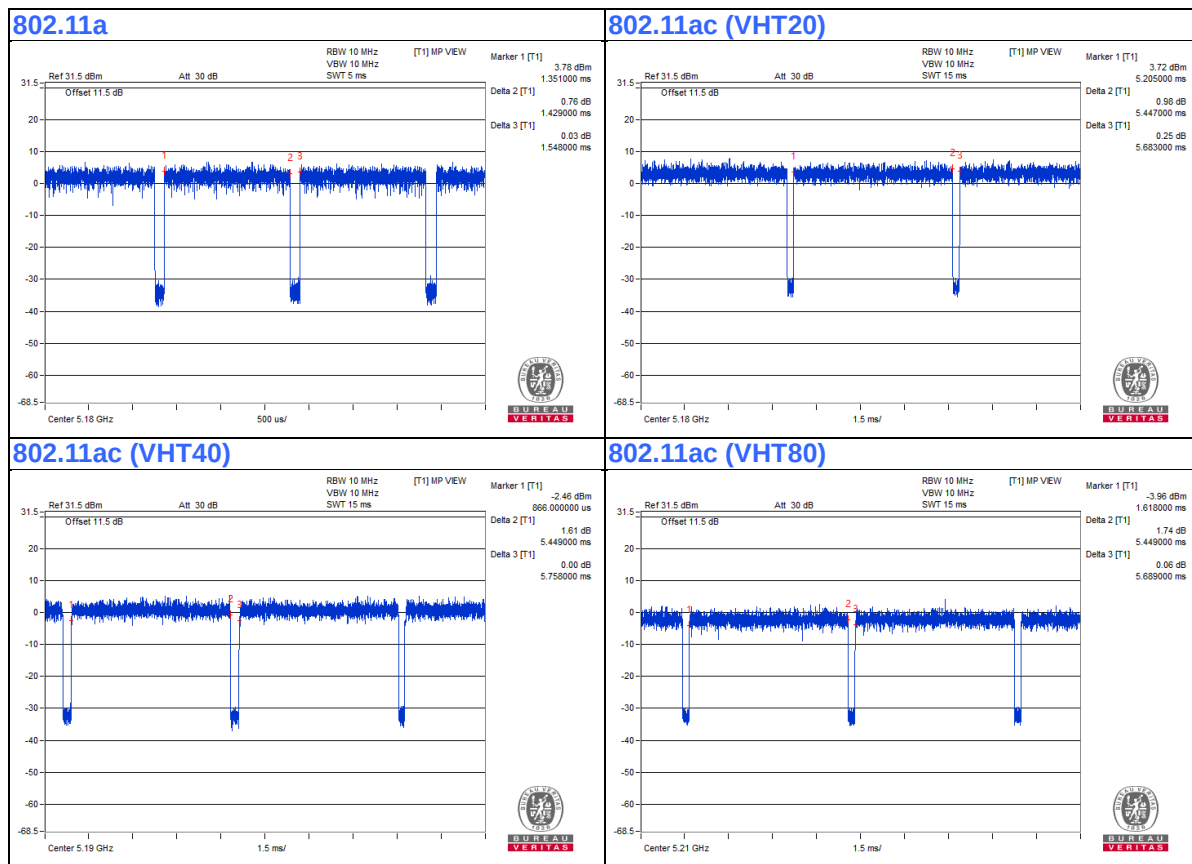
**802.11ac (VHT40):** Duty cycle = 5.449 ms/5.758 ms = 0.946, Duty factor =  $10 * \log(1/\text{Duty cycle}) = 0.24$

**802.11ac (VHT80):** Duty cycle = 5.449 ms/5.689 ms = 0.958, Duty factor =  $10 * \log(1/\text{Duty cycle}) = 0.19$

**802.11ax (HE20):** Duty cycle = 5.447 ms/5.683 ms = 0.958, Duty factor =  $10 * \log(1/\text{Duty cycle}) = 0.18$

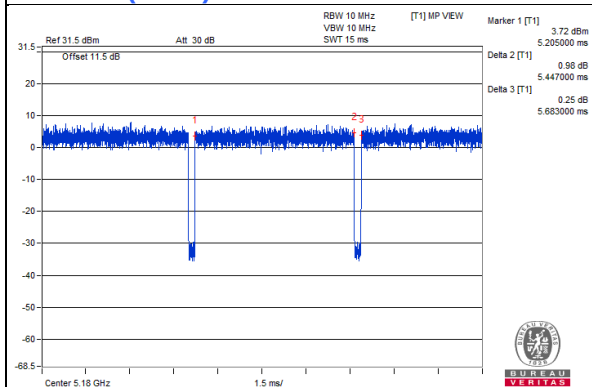
**802.11ax (HE40):** Duty cycle = 5.449 ms/5.758 ms = 0.946, Duty factor =  $10 * \log(1/\text{Duty cycle}) = 0.24$

**802.11ax (HE80):** Duty cycle = 5.449 ms/5.689 ms = 0.958, Duty factor =  $10 * \log(1/\text{Duty cycle}) = 0.19$

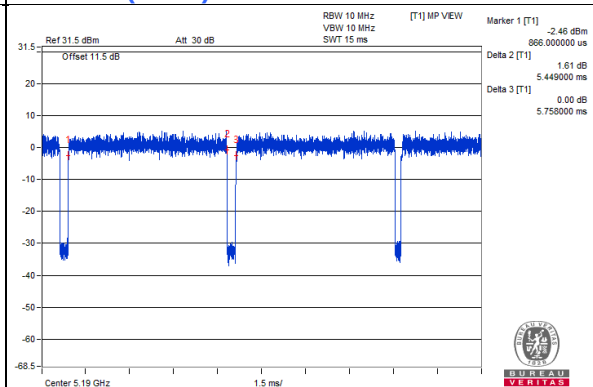




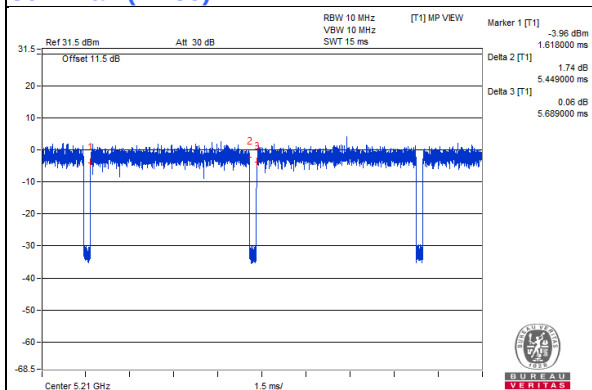
### 802.11ax (HE20)



### 802.11ax (HE40)



### 802.11ax (HE80)



### 3.4 Description of Support Units

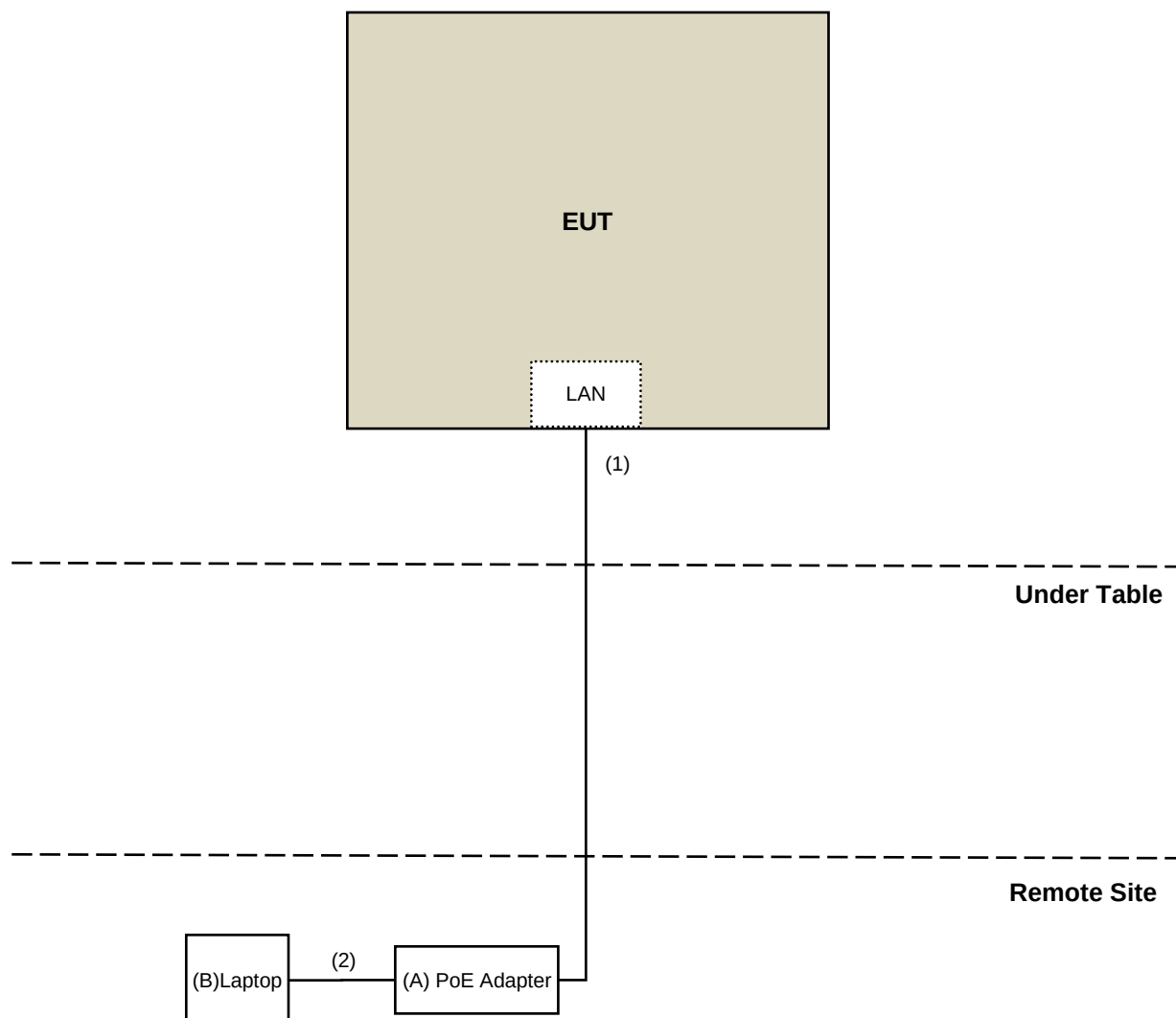
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| ID | Product     | Brand   | Model No.    | Serial No. | FCC ID  | Remarks            |
|----|-------------|---------|--------------|------------|---------|--------------------|
| A. | PoE Adapter | PHIHONG | POEA30U-1ATE | NA         | NA      | Supplied by client |
| B. | Laptop      | DELL    | E6420        | B92T3R1    | FCC DoC | Provided by Lab    |

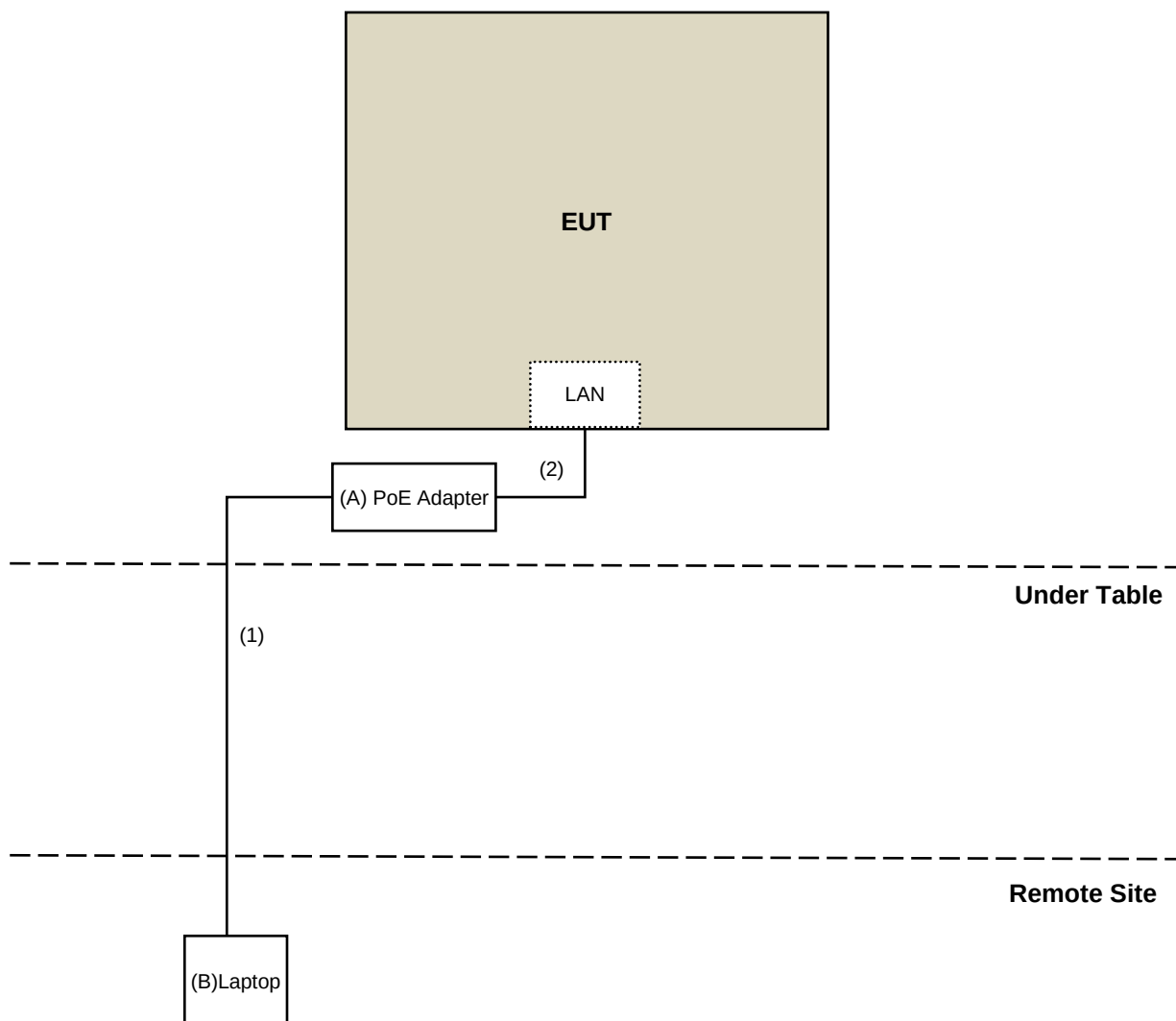
| ID | Descriptions | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks         |
|----|--------------|------|------------|--------------------|--------------|-----------------|
| 1. | RJ-45 Cable  | 1    | 10         | No                 | 0            | Provided by Lab |
| 2. | RJ-45 Cable  | 1    | 3          | No                 | 0            | Provided by Lab |

### 3.4.1 Configuration of System under Test

#### POE Mode for Radiation



## POE Mode for Conduction



### 3.5 General Description of Applied Standard and references

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

**Test Standard:**

**FCC Part 15, Subpart E (15.407)**  
**ANSI C63.10-2013**

All test items have been performed and recorded as per the above standards.

**References Test Guidance:**

**KDB 789033 D02 General UNII Test Procedure New Rules v02r01**  
**KDB 662911 D01 Multiple Transmitter Output v02r01**

All test items have been performed as a reference to the above KDB test guidance.

## 4 Test Types and Results

### 4.1 Radiated Emission and Bandedge Measurement

#### 4.1.1 Limits of Radiated Emission and Bandedge Measurement

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                             |

#### NOTE:

- The lower limit shall apply at the transition frequencies.
- Emission level (dBuV/m) = 20 log Emission level (uV/m).
- For frequencies above 1000MHz, 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 20dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

| Applicable To                                                                                    |                                                     | Limit                                                                                                                               |                                                                                                                                         |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 789033 D02 General UNII Test Procedure<br>New Rules v02r01                                       |                                                     | Field Strength at 3m                                                                                                                |                                                                                                                                         |
|                                                                                                  |                                                     | PK:74 (dBuV/m)                                                                                                                      | AV:54 (dBuV/m)                                                                                                                          |
| Frequency Band                                                                                   | Applicable To                                       | EIRP Limit                                                                                                                          | Equivalent Field Strength at 3m                                                                                                         |
| 5150~5250 MHz                                                                                    | 15.407(b)(1)                                        | PK:-27 (dBm/MHz)                                                                                                                    | PK:68.2(dBuV/m)                                                                                                                         |
| 5250~5350 MHz                                                                                    | 15.407(b)(2)                                        |                                                                                                                                     |                                                                                                                                         |
| 5470~5725 MHz                                                                                    | 15.407(b)(3)                                        |                                                                                                                                     |                                                                                                                                         |
| 5725~5850 MHz                                                                                    | <input checked="" type="checkbox"/> 15.407(b)(4)(i) | PK:-27 (dBm/MHz) <sup>*1</sup><br>PK:10 (dBm/MHz) <sup>*2</sup><br>PK:15.6 (dBm/MHz) <sup>*3</sup><br>PK:27 (dBm/MHz) <sup>*4</sup> | PK: 68.2(dBuV/m) <sup>*1</sup><br>PK:105.2 (dBuV/m) <sup>*2</sup><br>PK: 110.8(dBuV/m) <sup>*3</sup><br>PK:122.2 (dBuV/m) <sup>*4</sup> |
|                                                                                                  | <input type="checkbox"/> 15.407(b)(4)(ii)           | Emission limits in section 15.247(d)                                                                                                |                                                                                                                                         |
| <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:

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

#### 4.1.2 Test Instruments

##### For OOB test:

| DESCRIPTION & MANUFACTURER                          | MODEL NO.            | SERIAL NO.  | CALIBRATED DATE | CALIBRATED UNTIL |
|-----------------------------------------------------|----------------------|-------------|-----------------|------------------|
| Test Receiver<br>Keysight                           | N9038A               | MY54450088  | July 03, 2019   | July 02, 2020    |
| Horn_Antenna<br>SCHWARZBECK                         | BBHA9120-D           | 9120D-406   | Nov. 25, 2018   | Nov. 24, 2019    |
| Pre-Amplifier<br>EMCI                               | EMC12630SE           | 980385      | Aug. 15, 2019   | Aug. 14, 2020    |
| RF Cable                                            | EMC102-KM-KM-1200    | 160924      | Jan. 28, 2019   | Jan. 27, 2020    |
| RF Cable                                            | EMC102-KM-KM-1200    | 160925      | Jan. 28, 2019   | Jan. 27, 2020    |
| Pre-Amplifier<br>EMCI                               | EMC184045SE          | 980387      | Jan. 28, 2019   | Jan. 27, 2020    |
| Horn_Antenna<br>SCHWARZBECK                         | BBHA9120-D           | 9120D-406   | Nov. 25, 2018   | Nov. 24, 2019    |
| RF Cable                                            | EMC102-KM-KM-1200    | 160924      | Jan. 28, 2019   | Jan. 27, 2020    |
| RF Cable                                            | EMC102-KM-KM-1200    | 160925      | Jan. 28, 2019   | Jan. 27, 2020    |
| Software                                            | ADT_Radiated_V8.7.08 | NA          | NA              | NA               |
| Boresight Antenna Tower &<br>Turn Table<br>Max-Full | MF-7802BS            | MF780208530 | NA              | NA               |

##### Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. Loop antenna was used for all emissions below 30 MHz.
4. Tested Date: Oct. 22 to Nov. 22, 2019

**For Radiated Emission test:**

| DESCRIPTION & MANUFACTURER                 | MODEL NO.            | SERIAL NO.  | CALIBRATED DATE | CALIBRATED UNTIL |
|--------------------------------------------|----------------------|-------------|-----------------|------------------|
| Test Receiver Keysight                     | N9038A               | MY54450088  | July 03, 2019   | July 02, 2020    |
| Pre-Amplifier EMCi                         | EMC001340            | 980142      | May 30, 2019    | May 29, 2020     |
| Loop Antenna Electro-Metrics               | EM-6879              | 264         | Jan. 22, 2019   | Jan. 21, 2020    |
| RF Cable                                   | NA                   | LOOPCAB-001 | Jan. 14, 2019   | Jan. 13, 2020    |
| RF Cable                                   | NA                   | LOOPCAB-002 | Jan. 14, 2019   | Jan. 13, 2020    |
| Pre-Amplifier Mini-Circuits                | ZFL-1000VH2B         | AMP-ZFL-05  | Apr. 30, 2019   | Apr. 29, 2020    |
| Trilog Broadband Antenna SCHWARZBECK       | VULB 9168            | 9168-361    | Nov. 11, 2019   | Nov. 10, 2020    |
| RF Cable                                   | 8D                   | 966-3-1     | Mar. 18, 2019   | Mar. 17, 2020    |
| RF Cable                                   | 8D                   | 966-3-2     | Mar. 18, 2019   | Mar. 17, 2020    |
| RF Cable                                   | 8D                   | 966-3-3     | Mar. 18, 2019   | Mar. 17, 2020    |
| Fixed attenuator Mini-Circuits             | UNAT-5+              | PAD-3m-3-01 | Sep. 26, 2019   | Sep. 25, 2020    |
| Horn_Antenna SCHWARZBECK                   | BBHA9120-D           | 9120D-406   | Nov. 24, 2019   | Nov. 23, 2020    |
| Pre-Amplifier Mini-Circuits                | ZFL-1000VH2B         | AMP-ZFL-05  | Apr. 30, 2019   | Apr. 29, 2020    |
| Trilog Broadband Antenna SCHWARZBECK       | VULB 9168            | 9168-361    | Nov. 11, 2019   | Nov. 10, 2020    |
| RF Cable                                   | EMC104-SM-SM-2000    | 180601      | June 10, 2019   | June 09, 2020    |
| RF Cable                                   | EMC104-SM-SM-6000    | 180602      | June 10, 2019   | June 09, 2020    |
| Spectrum Analyzer Keysight                 | N9030A               | MY54490679  | July 17, 2019   | July 16, 2020    |
| Pre-Amplifier EMCi                         | EMC184045SE          | 980387      | Jan. 28, 2019   | Jan. 27, 2020    |
| Horn_Antenna SCHWARZBECK                   | BBHA 9170            | BBHA9170519 | Nov. 24, 2019   | Nov. 23, 2020    |
| RF Cable                                   | EMC102-KM-KM-1200    | 160924      | Jan. 28, 2019   | Jan. 27, 2020    |
| RF Cable                                   | EMC102-KM-KM-1200    | 160925      | Jan. 28, 2019   | Jan. 27, 2020    |
| Software                                   | ADT_Radiated_V8.7.08 | NA          | NA              | NA               |
| Antenna Tower & Turn Table Max-Full        | MF-7802              | MF780208406 | NA              | NA               |
| Boresight Antenna Fixture                  | FBA-01               | FBA-SIP01   | NA              | NA               |
| AC Power Source Extech Electronics         | 6205                 | 1440452     | NA              | NA               |
| Temperature & Humidity Chamber Giant Force | GTH-150-40-SP-AR     | MAA0812-008 | Jan. 09, 2019   | Jan. 08, 2020    |
| True RMS Clamp Meter FLUKE                 | 325                  | 31130711WS  | May 21, 2019    | May 20, 2020     |

**NOTE:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. Loop antenna was used for all emissions below 30 MHz.
4. Tested Date: Nov. 30, 2019 to Jan. 07, 2020



**For other test:**

| Description & Manufacturer        | Model no.  | Serial No.    | Calibrated DATE | Calibrated Until |
|-----------------------------------|------------|---------------|-----------------|------------------|
| Spectrum Analyzer<br>R&S          | FSV40      | 100964        | June 04, 2019   | June 03, 2020    |
| Power meter<br>Anritsu            | ML2495A    | 1014008       | May 13, 2019    | May 12, 2020     |
| Power sensor<br>Anritsu           | MA2411B    | 0917122       | May 13, 2019    | May 12, 2020     |
| Fixed Attenuator<br>Mini-Circuits | MDCS18N-10 | MDCS18N-10-01 | Apr. 15, 2019   | Apr. 14, 2020    |

- NOTE:**
1. The test was performed in Oven room 2.
  2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
  3. Tested Date: Jan. 21 to 30, 2020

#### 4.1.3 Test Procedure

##### **For Radiated emission below 30MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. 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.

##### **NOTE:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

##### **For Radiated emission above 30MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) 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 detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. 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.

**Note:**

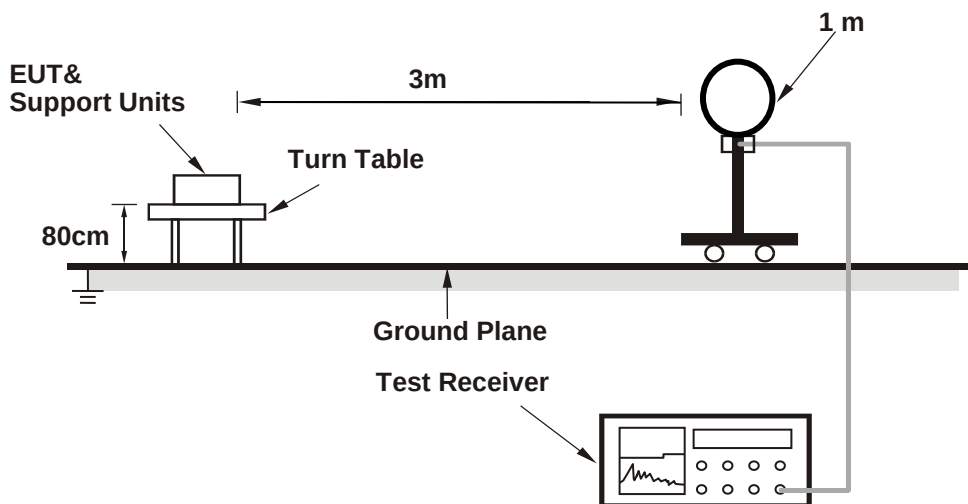
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle  $< 98\%$ ) or 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

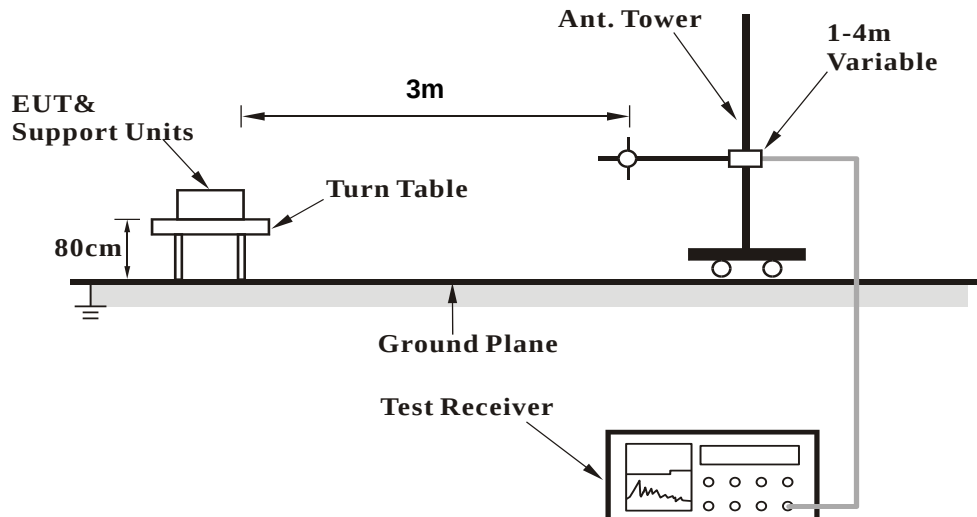
No deviation.

4.1.5 Test Setup

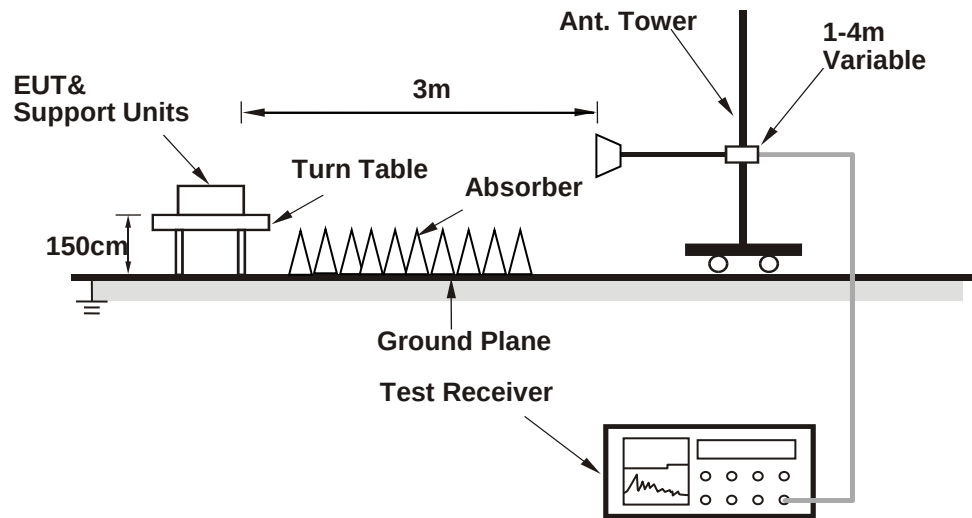
**For Radiated emission below 30MHz**



**For Radiated emission 30MHz to 1GHz**



### For Radiated emission above 1GHz



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

#### 4.1.6 EUT Operating Condition

- Connected the EUT with the Laptop which is placed on remote site.
- Controlling software (QSPR (5.0-00161)) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

#### 4.1.7 Test Results (Mode 1)

##### Above 1GHz Data:

##### 802.11a

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 36 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |             |                         |                |             |                    |                      |                  |                          |
|-----------------------------------------------------|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO.                                                 | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1                                                   | 5150.00     | 65.2 PK                 | 74.0           | -8.8        | 2.06 H             | 1                    | 62.2             | 3.0                      |
| 2                                                   | 5150.00     | 53.5 AV                 | 54.0           | -0.5        | 2.06 H             | 1                    | 50.5             | 3.0                      |
| 3                                                   | *5180.00    | 123.2 PK                |                |             | 2.06 H             | 1                    | 120.3            | 2.9                      |
| 4                                                   | *5180.00    | 114.2 AV                |                |             | 2.06 H             | 1                    | 111.3            | 2.9                      |
| 5                                                   | #10360.00   | 49.5 PK                 | 68.2           | -18.7       | 2.04 H             | 136                  | 37.5             | 12.0                     |
| 6                                                   | 15540.00    | 62.7 PK                 | 74.0           | -11.3       | 3.10 H             | 133                  | 49.7             | 13.0                     |
| 7                                                   | 15540.00    | 47.3 AV                 | 54.0           | -6.7        | 3.10 H             | 133                  | 34.3             | 13.0                     |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |             |                         |                |             |                    |                      |                  |                          |
| NO.                                                 | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1                                                   | 5150.00     | 66.1 PK                 | 74.0           | -7.9        | 1.67 V             | 360                  | 63.1             | 3.0                      |
| 2                                                   | 5150.00     | 53.9 AV                 | 54.0           | -0.1        | 1.67 V             | 360                  | 50.9             | 3.0                      |
| 3                                                   | *5180.00    | 123.3 PK                |                |             | 1.67 V             | 360                  | 120.4            | 2.9                      |
| 4                                                   | *5180.00    | 114.4 AV                |                |             | 1.67 V             | 360                  | 111.5            | 2.9                      |
| 5                                                   | #10360.00   | 49.8 PK                 | 68.2           | -18.4       | 2.04 V             | 305                  | 37.8             | 12.0                     |
| 6                                                   | 15540.00    | 65.5 PK                 | 74.0           | -8.5        | 1.77 V             | 212                  | 52.5             | 13.0                     |
| 7                                                   | 15540.00    | 52.2 AV                 | 54.0           | -1.8        | 1.77 V             | 212                  | 39.2             | 13.0                     |

#### REMARKS:

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

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 40 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5200.00       | 123.1 PK                      |                   |                | 2.10 H                   | 12                         | 120.3                  | 2.8                            |
| 2                                                   | *5200.00       | 113.2 AV                      |                   |                | 2.10 H                   | 12                         | 110.4                  | 2.8                            |
| 3                                                   | #10400.00      | 47.9 PK                       | 68.2              | -20.3          | 1.36 H                   | 201                        | 35.8                   | 12.1                           |
| 4                                                   | 15600.00       | 62.5 PK                       | 74.0              | -11.5          | 1.48 H                   | 202                        | 49.6                   | 12.9                           |
| 5                                                   | 15600.00       | 48.9 AV                       | 54.0              | -5.1           | 1.48 H                   | 202                        | 36.0                   | 12.9                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5200.00       | 123.9 PK                      |                   |                | 1.46 V                   | 360                        | 121.1                  | 2.8                            |
| 2                                                   | *5200.00       | 113.5 AV                      |                   |                | 1.46 V                   | 360                        | 110.7                  | 2.8                            |
| 3                                                   | #10400.00      | 48.7 PK                       | 68.2              | -19.5          | 2.25 V                   | 307                        | 36.6                   | 12.1                           |
| 4                                                   | 15600.00       | 67.5 PK                       | 74.0              | -6.5           | 1.58 V                   | 213                        | 54.6                   | 12.9                           |
| 5                                                   | 15600.00       | 53.9 AV                       | 54.0              | -0.1           | 1.58 V                   | 213                        | 41.0                   | 12.9                           |

**REMARKS:**

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

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 48 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5240.00       | 123.2 PK                      |                   |                | 2.10 H                   | 11                         | 120.6                  | 2.6                            |
| 2                                                   | *5240.00       | 112.1 AV                      |                   |                | 2.10 H                   | 11                         | 109.5                  | 2.6                            |
| 3                                                   | 5350.00        | 64.8 PK                       | 74.0              | -9.2           | 2.10 H                   | 11                         | 62.2                   | 2.6                            |
| 4                                                   | 5350.00        | 53.2 AV                       | 54.0              | -0.8           | 2.10 H                   | 11                         | 50.6                   | 2.6                            |
| 5                                                   | #10480.00      | 46.8 PK                       | 68.2              | -21.4          | 1.25 H                   | 302                        | 34.3                   | 12.5                           |
| 6                                                   | 15720.00       | 61.2 PK                       | 74.0              | -12.8          | 1.56 H                   | 215                        | 49.0                   | 12.2                           |
| 7                                                   | 15720.00       | 47.6 AV                       | 54.0              | -6.4           | 1.56 H                   | 215                        | 35.4                   | 12.2                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5240.00       | 123.4 PK                      |                   |                | 2.03 V                   | 5                          | 120.8                  | 2.6                            |
| 2                                                   | *5240.00       | 113.2 AV                      |                   |                | 2.03 V                   | 5                          | 110.6                  | 2.6                            |
| 3                                                   | 5350.00        | 55.7 PK                       | 74.0              | -18.3          | 2.03 V                   | 5                          | 53.1                   | 2.6                            |
| 4                                                   | 5350.00        | 45.6 AV                       | 54.0              | -8.4           | 2.03 V                   | 5                          | 43.0                   | 2.6                            |
| 5                                                   | #10480.00      | 48.6 PK                       | 68.2              | -19.6          | 1.36 V                   | 205                        | 36.1                   | 12.5                           |
| 6                                                   | 15720.00       | 66.2 PK                       | 74.0              | -7.8           | 3.12 V                   | 146                        | 54.0                   | 12.2                           |
| 7                                                   | 15720.00       | 53.6 AV                       | 54.0              | -0.4           | 3.12 V                   | 146                        | 41.4                   | 12.2                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 149 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5568.28       | 62.4 PK                       | 68.2              | -5.8           | 1.90 H                   | 359                        | 59.1                   | 3.3                            |
| 2                                                   | *5745.00       | 122.5 PK                      |                   |                | 1.91 H                   | 360                        | 119.2                  | 3.3                            |
| 3                                                   | *5745.00       | 112.5 AV                      |                   |                | 1.91 H                   | 360                        | 109.2                  | 3.3                            |
| 4                                                   | #5936.77       | 61.1 PK                       | 68.2              | -7.1           | 1.90 H                   | 359                        | 56.9                   | 4.2                            |
| 5                                                   | 11490.00       | 46.8 PK                       | 74.0              | -27.2          | 1.52 H                   | 202                        | 34.2                   | 12.6                           |
| 6                                                   | 11490.00       | 36.2 AV                       | 54.0              | -17.8          | 1.52 H                   | 202                        | 23.6                   | 12.6                           |
| 7                                                   | #17235.00      | 62.1 PK                       | 68.2              | -6.1           | 1.55 H                   | 232                        | 45.3                   | 16.8                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5568.20       | 64.2 PK                       | 68.2              | -4.0           | 2.00 V                   | 10                         | 60.9                   | 3.3                            |
| 2                                                   | *5745.00       | 122.6 PK                      |                   |                | 2.00 V                   | 10                         | 119.3                  | 3.3                            |
| 3                                                   | *5745.00       | 112.9 AV                      |                   |                | 2.00 V                   | 10                         | 109.6                  | 3.3                            |
| 4                                                   | #5954.14       | 63.0 PK                       | 68.2              | -5.2           | 2.00 V                   | 10                         | 58.8                   | 4.2                            |
| 5                                                   | 11490.00       | 46.2 PK                       | 74.0              | -27.8          | 1.21 V                   | 208                        | 33.6                   | 12.6                           |
| 6                                                   | 11490.00       | 36.7 AV                       | 54.0              | -17.3          | 1.21 V                   | 208                        | 24.1                   | 12.6                           |
| 7                                                   | #17235.00      | 67.3 PK                       | 68.2              | -0.9           | 2.65 V                   | 218                        | 50.5                   | 16.8                           |

**REMARKS:**

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



|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 157 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5622.03       | 63.2 PK                       | 68.2              | -5.0           | 1.91 H                   | 0                          | 59.9                   | 3.3                            |
| 2                                                   | *5785.00       | 122.9 PK                      |                   |                | 1.92 H                   | 0                          | 119.5                  | 3.4                            |
| 3                                                   | *5785.00       | 112.8 AV                      |                   |                | 1.92 H                   | 0                          | 109.4                  | 3.4                            |
| 4                                                   | #5960.66       | 62.0 PK                       | 68.2              | -6.2           | 1.91 H                   | 0                          | 57.8                   | 4.2                            |
| 5                                                   | 11570.00       | 46.2 PK                       | 74.0              | -27.8          | 1.40 H                   | 189                        | 34.0                   | 12.2                           |
| 6                                                   | 11570.00       | 36.7 AV                       | 54.0              | -17.3          | 1.40 H                   | 189                        | 24.5                   | 12.2                           |
| 7                                                   | #17355.00      | 62.7 PK                       | 68.2              | -5.5           | 1.50 H                   | 222                        | 46.1                   | 16.6                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5588.68       | 63.3 PK                       | 68.2              | -4.9           | 1.47 V                   | 0                          | 60.0                   | 3.3                            |
| 2                                                   | *5785.00       | 123.5 PK                      |                   |                | 1.47 V                   | 0                          | 120.1                  | 3.4                            |
| 3                                                   | *5785.00       | 113.6 AV                      |                   |                | 1.47 V                   | 0                          | 110.2                  | 3.4                            |
| 4                                                   | #6010.92       | 62.9 PK                       | 68.2              | -5.3           | 1.47 V                   | 0                          | 58.8                   | 4.1                            |
| 5                                                   | 11570.00       | 46.2 PK                       | 74.0              | -27.8          | 1.49 V                   | 228                        | 34.0                   | 12.2                           |
| 6                                                   | 11570.00       | 35.7 AV                       | 54.0              | -18.3          | 1.49 V                   | 228                        | 23.5                   | 12.2                           |
| 7                                                   | #17355.00      | 67.7 PK                       | 68.2              | -0.5           | 2.18 V                   | 219                        | 51.1                   | 16.6                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 165 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5565.05       | 61.7 PK                       | 68.2              | -6.5           | 1.89 H                   | 359                        | 58.4                   | 3.3                            |
| 2                                                   | *5825.00       | 122.5 PK                      |                   |                | 1.90 H                   | 360                        | 118.9                  | 3.6                            |
| 3                                                   | *5825.00       | 112.6 AV                      |                   |                | 1.90 H                   | 360                        | 109.0                  | 3.6                            |
| 4                                                   | #5953.10       | 61.3 PK                       | 68.2              | -6.9           | 1.89 H                   | 359                        | 57.1                   | 4.2                            |
| 5                                                   | 11650.00       | 46.2 PK                       | 74.0              | -27.8          | 1.63 H                   | 202                        | 33.8                   | 12.4                           |
| 6                                                   | 11650.00       | 35.2 AV                       | 54.0              | -18.8          | 1.63 H                   | 202                        | 22.8                   | 12.4                           |
| 7                                                   | #17475.00      | 63.8 PK                       | 68.2              | -4.4           | 1.68 H                   | 232                        | 46.8                   | 17.0                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5617.15       | 64.4 PK                       | 68.2              | -3.8           | 1.62 V                   | 358                        | 61.1                   | 3.3                            |
| 2                                                   | *5825.00       | 123.2 PK                      |                   |                | 1.62 V                   | 358                        | 119.6                  | 3.6                            |
| 3                                                   | *5825.00       | 113.2 AV                      |                   |                | 1.62 V                   | 358                        | 109.6                  | 3.6                            |
| 4                                                   | #5940.81       | 63.3 PK                       | 68.2              | -4.9           | 1.62 V                   | 358                        | 59.1                   | 4.2                            |
| 5                                                   | 11650.00       | 46.7 PK                       | 74.0              | -27.3          | 1.57 V                   | 208                        | 34.3                   | 12.4                           |
| 6                                                   | 11650.00       | 36.8 AV                       | 54.0              | -17.2          | 1.57 V                   | 208                        | 24.4                   | 12.4                           |
| 7                                                   | #17475.00      | 67.5 PK                       | 68.2              | -0.7           | 2.19 V                   | 218                        | 50.5                   | 17.0                           |

**REMARKS:**

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

# 802.11ax (HE20)

|                 |               |                      |              |
|-----------------|---------------|----------------------|--------------|
| CHANNEL         | TX Channel 36 | DETECTOR<br>FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                      | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 65.7 PK                       | 74.0              | -8.3           | 1.57 H                   | 302                        | 62.7                   | 3.0                            |
| 2                                                   | 5150.00        | 53.1 AV                       | 54.0              | -0.9           | 1.57 H                   | 302                        | 50.1                   | 3.0                            |
| 3                                                   | *5180.00       | 123.1 PK                      |                   |                | 1.57 H                   | 302                        | 120.2                  | 2.9                            |
| 4                                                   | *5180.00       | 112.9 AV                      |                   |                | 1.57 H                   | 302                        | 110.0                  | 2.9                            |
| 5                                                   | #10360.00      | 46.2 PK                       | 68.2              | -22.0          | 2.14 H                   | 310                        | 34.2                   | 12.0                           |
| 6                                                   | 15540.00       | 64.3 PK                       | 74.0              | -9.7           | 2.07 H                   | 258                        | 51.3                   | 13.0                           |
| 7                                                   | 15540.00       | 48.9 AV                       | 54.0              | -5.1           | 2.07 H                   | 258                        | 35.9                   | 13.0                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 66.2 PK                       | 74.0              | -7.8           | 1.51 V                   | 4                          | 63.2                   | 3.0                            |
| 2                                                   | 5150.00        | 53.9 AV                       | 54.0              | -0.1           | 1.51 V                   | 4                          | 50.9                   | 3.0                            |
| 3                                                   | *5180.00       | 123.8 PK                      |                   |                | 1.51 V                   | 4                          | 120.9                  | 2.9                            |
| 4                                                   | *5180.00       | 113.5 AV                      |                   |                | 1.51 V                   | 4                          | 110.6                  | 2.9                            |
| 5                                                   | #10360.00      | 46.8 PK                       | 68.2              | -21.4          | 1.28 V                   | 208                        | 34.8                   | 12.0                           |
| 6                                                   | 15540.00       | 69.5 PK                       | 74.0              | -4.5           | 3.44 V                   | 142                        | 56.5                   | 13.0                           |
| 7                                                   | 15540.00       | 53.3 AV                       | 54.0              | -0.7           | 3.44 V                   | 142                        | 40.3                   | 13.0                           |

## REMARKS:

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

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 40 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5200.00       | 122.6 PK                      |                   |                | 1.61 H                   | 342                        | 119.8                  | 2.8                            |
| 2                                                   | *5200.00       | 112.9 AV                      |                   |                | 1.61 H                   | 342                        | 110.1                  | 2.8                            |
| 3                                                   | #10400.00      | 45.7 PK                       | 68.2              | -22.5          | 1.46 H                   | 202                        | 33.6                   | 12.1                           |
| 4                                                   | 15600.00       | 60.5 PK                       | 74.0              | -13.5          | 2.01 H                   | 258                        | 47.6                   | 12.9                           |
| 5                                                   | 15600.00       | 48.9 AV                       | 54.0              | -5.1           | 2.01 H                   | 258                        | 36.0                   | 12.9                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5200.00       | 123.4 PK                      |                   |                | 1.58 V                   | 360                        | 120.6                  | 2.8                            |
| 2                                                   | *5200.00       | 113.5 AV                      |                   |                | 1.58 V                   | 360                        | 110.7                  | 2.8                            |
| 3                                                   | #10400.00      | 46.2 PK                       | 68.2              | -22.0          | 1.37 V                   | 202                        | 34.1                   | 12.1                           |
| 4                                                   | 15600.00       | 65.3 PK                       | 74.0              | -8.7           | 3.49 V                   | 142                        | 52.4                   | 12.9                           |
| 5                                                   | 15600.00       | 53.2 AV                       | 54.0              | -0.8           | 3.49 V                   | 142                        | 40.3                   | 12.9                           |

**REMARKS:**

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

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 48 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5240.00       | 123.9 PK                      |                   |                | 1.61 H                   | 342                        | 121.3                  | 2.6                            |
| 2                                                   | *5240.00       | 112.5 AV                      |                   |                | 1.61 H                   | 342                        | 109.9                  | 2.6                            |
| 3                                                   | 5350.00        | 56.9 PK                       | 74.0              | -17.1          | 1.61 H                   | 342                        | 54.3                   | 2.6                            |
| 4                                                   | 5350.00        | 46.1 AV                       | 54.0              | -7.9           | 1.61 H                   | 342                        | 43.5                   | 2.6                            |
| 5                                                   | #10480.00      | 46.3 PK                       | 68.2              | -21.9          | 1.24 H                   | 223                        | 33.8                   | 12.5                           |
| 6                                                   | 15720.00       | 62.8 PK                       | 74.0              | -11.2          | 2.01 H                   | 249                        | 50.6                   | 12.2                           |
| 7                                                   | 15720.00       | 48.9 AV                       | 54.0              | -5.1           | 2.01 H                   | 249                        | 36.7                   | 12.2                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5240.00       | 124.2 PK                      |                   |                | 1.88 V                   | 358                        | 121.6                  | 2.6                            |
| 2                                                   | *5240.00       | 113.5 AV                      |                   |                | 1.88 V                   | 358                        | 110.9                  | 2.6                            |
| 3                                                   | 5350.00        | 57.3 PK                       | 74.0              | -16.7          | 1.88 V                   | 358                        | 54.7                   | 2.6                            |
| 4                                                   | 5350.00        | 46.5 AV                       | 54.0              | -7.5           | 1.88 V                   | 358                        | 43.9                   | 2.6                            |
| 5                                                   | #10480.00      | 45.7 PK                       | 68.2              | -22.5          | 1.29 V                   | 207                        | 33.2                   | 12.5                           |
| 6                                                   | 15720.00       | 67.5 PK                       | 74.0              | -6.5           | 1.84 V                   | 206                        | 55.3                   | 12.2                           |
| 7                                                   | 15720.00       | 53.1 AV                       | 54.0              | -0.9           | 1.84 V                   | 206                        | 40.9                   | 12.2                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 149 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5632.78       | 61.7 PK                       | 68.2              | -6.5           | 1.91 H                   | 359                        | 58.4                   | 3.3                            |
| 2                                                   | *5745.00       | 121.5 PK                      |                   |                | 1.92 H                   | 360                        | 118.2                  | 3.3                            |
| 3                                                   | *5745.00       | 110.3 AV                      |                   |                | 1.92 H                   | 360                        | 107.0                  | 3.3                            |
| 4                                                   | #5932.93       | 61.2 PK                       | 68.2              | -7.0           | 1.91 H                   | 359                        | 57.1                   | 4.1                            |
| 5                                                   | 11490.00       | 46.2 PK                       | 74.0              | -27.8          | 1.33 H                   | 123                        | 33.6                   | 12.6                           |
| 6                                                   | 11490.00       | 36.9 AV                       | 54.0              | -17.1          | 1.33 H                   | 123                        | 24.3                   | 12.6                           |
| 7                                                   | #17235.00      | 63.4 PK                       | 68.2              | -4.8           | 1.47 H                   | 202                        | 46.6                   | 16.8                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5642.45       | 64.1 PK                       | 68.2              | -4.1           | 1.89 V                   | 360                        | 60.8                   | 3.3                            |
| 2                                                   | *5745.00       | 124.5 PK                      |                   |                | 1.89 V                   | 360                        | 121.2                  | 3.3                            |
| 3                                                   | *5745.00       | 113.5 AV                      |                   |                | 1.89 V                   | 360                        | 110.2                  | 3.3                            |
| 4                                                   | #5984.53       | 62.7 PK                       | 68.2              | -5.5           | 1.89 V                   | 360                        | 58.6                   | 4.1                            |
| 5                                                   | 11490.00       | 46.2 PK                       | 74.0              | -27.8          | 1.28 V                   | 307                        | 33.6                   | 12.6                           |
| 6                                                   | 11490.00       | 36.8 AV                       | 54.0              | -17.2          | 1.28 V                   | 307                        | 24.2                   | 12.6                           |
| 7                                                   | #17235.00      | 68.1 PK                       | 68.2              | -0.1           | 3.01 V                   | 179                        | 51.3                   | 16.8                           |

**REMARKS:**

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

|                 |                |                      |              |
|-----------------|----------------|----------------------|--------------|
| CHANNEL         | TX Channel 157 | DETECTOR<br>FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz   |                      | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5639.47       | 62.2 PK                       | 68.2              | -6.0           | 1.90 H                   | 0                          | 58.9                   | 3.3                            |
| 2                                                   | *5785.00       | 121.4 PK                      |                   |                | 1.91 H                   | 0                          | 118.0                  | 3.4                            |
| 3                                                   | *5785.00       | 110.5 AV                      |                   |                | 1.91 H                   | 0                          | 107.1                  | 3.4                            |
| 4                                                   | #5947.61       | 61.2 PK                       | 68.2              | -7.0           | 1.90 H                   | 0                          | 57.0                   | 4.2                            |
| 5                                                   | 11570.00       | 46.6 PK                       | 74.0              | -27.4          | 1.62 H                   | 302                        | 34.4                   | 12.2                           |
| 6                                                   | 11570.00       | 37.1 AV                       | 54.0              | -16.9          | 1.62 H                   | 302                        | 24.9                   | 12.2                           |
| 7                                                   | #17355.00      | 62.8 PK                       | 68.2              | -5.4           | 2.02 H                   | 170                        | 46.2                   | 16.6                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5590.70       | 63.5 PK                       | 68.2              | -4.7           | 1.78 V                   | 360                        | 60.2                   | 3.3                            |
| 2                                                   | *5785.00       | 124.3 PK                      |                   |                | 1.78 V                   | 360                        | 120.9                  | 3.4                            |
| 3                                                   | *5785.00       | 113.5 AV                      |                   |                | 1.78 V                   | 360                        | 110.1                  | 3.4                            |
| 4                                                   | #5938.13       | 63.4 PK                       | 68.2              | -4.8           | 1.78 V                   | 360                        | 59.2                   | 4.2                            |
| 5                                                   | 11570.00       | 46.8 PK                       | 74.0              | -27.2          | 1.40 V                   | 208                        | 34.6                   | 12.2                           |
| 6                                                   | 11570.00       | 37.5 AV                       | 54.0              | -16.5          | 1.40 V                   | 208                        | 25.3                   | 12.2                           |
| 7                                                   | #17355.00      | 67.3 PK                       | 68.2              | -0.9           | 2.27 V                   | 218                        | 50.7                   | 16.6                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 165 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5640.70       | 61.0 PK                       | 68.2              | -7.2           | 1.92 H                   | 359                        | 57.7                   | 3.3                            |
| 2                                                   | *5825.00       | 121.7 PK                      |                   |                | 1.92 H                   | 359                        | 118.1                  | 3.6                            |
| 3                                                   | *5825.00       | 110.9 AV                      |                   |                | 1.92 H                   | 359                        | 107.3                  | 3.6                            |
| 4                                                   | #5928.21       | 61.4 PK                       | 68.2              | -6.8           | 1.92 H                   | 359                        | 57.3                   | 4.1                            |
| 5                                                   | 11650.00       | 46.5 PK                       | 74.0              | -27.5          | 1.55 H                   | 202                        | 34.1                   | 12.4                           |
| 6                                                   | 11650.00       | 37.9 AV                       | 54.0              | -16.1          | 1.55 H                   | 202                        | 25.5                   | 12.4                           |
| 7                                                   | #17475.00      | 62.7 PK                       | 68.2              | -5.5           | 1.37 H                   | 202                        | 45.7                   | 17.0                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5634.49       | 63.8 PK                       | 68.2              | -4.4           | 1.90 V                   | 357                        | 60.5                   | 3.3                            |
| 2                                                   | *5825.00       | 123.7 PK                      |                   |                | 1.90 V                   | 357                        | 120.1                  | 3.6                            |
| 3                                                   | *5825.00       | 113.5 AV                      |                   |                | 1.90 V                   | 357                        | 109.9                  | 3.6                            |
| 4                                                   | #5988.57       | 63.1 PK                       | 68.2              | -5.1           | 1.90 V                   | 357                        | 59.0                   | 4.1                            |
| 5                                                   | 11650.00       | 46.7 PK                       | 74.0              | -27.3          | 1.40 V                   | 206                        | 34.3                   | 12.4                           |
| 6                                                   | 11650.00       | 37.9 AV                       | 54.0              | -16.1          | 1.40 V                   | 206                        | 25.5                   | 12.4                           |
| 7                                                   | #17475.00      | 67.2 PK                       | 68.2              | -1.0           | 3.45 V                   | 218                        | 50.2                   | 17.0                           |

**REMARKS:**

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



# 802.11ax (HE40)

|                 |               |                      |              |
|-----------------|---------------|----------------------|--------------|
| CHANNEL         | TX Channel 38 | DETECTOR<br>FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                      | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 64.8 PK                       | 74.0              | -9.2           | 1.52 H                   | 22                         | 61.8                   | 3.0                            |
| 2                                                   | 5150.00        | 52.9 AV                       | 54.0              | -1.1           | 1.52 H                   | 22                         | 49.9                   | 3.0                            |
| 3                                                   | *5190.00       | 119.1 PK                      |                   |                | 1.52 H                   | 22                         | 116.2                  | 2.9                            |
| 4                                                   | *5190.00       | 107.6 AV                      |                   |                | 1.52 H                   | 22                         | 104.7                  | 2.9                            |
| 5                                                   | #10380.00      | 46.3 PK                       | 68.2              | -21.9          | 1.62 H                   | 178                        | 34.1                   | 12.2                           |
| 6                                                   | 15570.00       | 62.3 PK                       | 74.0              | -11.7          | 1.52 H                   | 302                        | 49.3                   | 13.0                           |
| 7                                                   | 15570.00       | 46.7 AV                       | 54.0              | -7.3           | 1.52 H                   | 302                        | 33.7                   | 13.0                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 65.3 PK                       | 74.0              | -8.7           | 1.44 V                   | 0                          | 62.3                   | 3.0                            |
| 2                                                   | 5150.00        | 53.5 AV                       | 54.0              | -0.5           | 1.44 V                   | 0                          | 50.5                   | 3.0                            |
| 3                                                   | *5190.00       | 119.5 PK                      |                   |                | 1.44 V                   | 0                          | 116.6                  | 2.9                            |
| 4                                                   | *5190.00       | 108.5 AV                      |                   |                | 1.44 V                   | 0                          | 105.6                  | 2.9                            |
| 5                                                   | #10380.00      | 46.5 PK                       | 68.2              | -21.7          | 1.30 V                   | 202                        | 34.3                   | 12.2                           |
| 6                                                   | 15570.00       | 65.4 PK                       | 74.0              | -8.6           | 3.49 V                   | 143                        | 52.4                   | 13.0                           |
| 7                                                   | 15570.00       | 51.9 AV                       | 54.0              | -2.1           | 3.49 V                   | 143                        | 38.9                   | 13.0                           |

## REMARKS:

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

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 46 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5230.00       | 120.9 PK                      |                   |                | 1.76 H                   | 352                        | 118.3                  | 2.6                            |
| 2                                                   | *5230.00       | 110.8 AV                      |                   |                | 1.76 H                   | 352                        | 108.2                  | 2.6                            |
| 3                                                   | 5350.00        | 57.9 PK                       | 74.0              | -16.1          | 1.76 H                   | 352                        | 55.3                   | 2.6                            |
| 4                                                   | 5350.00        | 47.1 AV                       | 54.0              | -6.9           | 1.76 H                   | 352                        | 44.5                   | 2.6                            |
| 5                                                   | #10460.00      | 46.1 PK                       | 68.2              | -22.1          | 1.64 H                   | 202                        | 33.7                   | 12.4                           |
| 6                                                   | 15690.00       | 59.4 PK                       | 74.0              | -14.6          | 1.57 H                   | 301                        | 47.0                   | 12.4                           |
| 7                                                   | 15690.00       | 49.7 AV                       | 54.0              | -4.3           | 1.57 H                   | 301                        | 37.3                   | 12.4                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5230.00       | 121.2 PK                      |                   |                | 1.90 V                   | 360                        | 118.6                  | 2.6                            |
| 2                                                   | *5230.00       | 111.3 AV                      |                   |                | 1.90 V                   | 360                        | 108.7                  | 2.6                            |
| 3                                                   | 5350.00        | 58.5 PK                       | 74.0              | -15.5          | 1.90 V                   | 360                        | 55.9                   | 2.6                            |
| 4                                                   | 5350.00        | 47.9 AV                       | 54.0              | -6.1           | 1.90 V                   | 360                        | 45.3                   | 2.6                            |
| 5                                                   | #10460.00      | 46.7 PK                       | 68.2              | -21.5          | 1.34 V                   | 208                        | 34.3                   | 12.4                           |
| 6                                                   | 15690.00       | 63.4 PK                       | 74.0              | -10.6          | 3.51 V                   | 143                        | 51.0                   | 12.4                           |
| 7                                                   | 15690.00       | 53.2 AV                       | 54.0              | -0.8           | 3.51 V                   | 143                        | 40.8                   | 12.4                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 151 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5644.47       | 62.3 PK                       | 68.2              | -5.9           | 1.95 H                   | 0                          | 59.0                   | 3.3                            |
| 2                                                   | *5755.00       | 119.4 PK                      |                   |                | 1.95 H                   | 0                          | 116.1                  | 3.3                            |
| 3                                                   | *5755.00       | 108.3 AV                      |                   |                | 1.95 H                   | 0                          | 105.0                  | 3.3                            |
| 4                                                   | #5944.93       | 61.4 PK                       | 68.2              | -6.8           | 1.95 H                   | 0                          | 57.2                   | 4.2                            |
| 5                                                   | 11510.00       | 46.2 PK                       | 74.0              | -27.8          | 1.33 H                   | 205                        | 33.7                   | 12.5                           |
| 6                                                   | 11510.00       | 36.1 AV                       | 54.0              | -17.9          | 1.33 H                   | 205                        | 23.6                   | 12.5                           |
| 7                                                   | #17265.00      | 62.5 PK                       | 68.2              | -5.7           | 1.48 H                   | 222                        | 45.9                   | 16.6                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5612.51       | 63.8 PK                       | 68.2              | -4.4           | 1.41 V                   | 360                        | 60.5                   | 3.3                            |
| 2                                                   | *5755.00       | 120.2 PK                      |                   |                | 1.41 V                   | 360                        | 116.9                  | 3.3                            |
| 3                                                   | *5755.00       | 110.3 AV                      |                   |                | 1.41 V                   | 360                        | 107.0                  | 3.3                            |
| 4                                                   | #5925.32       | 63.3 PK                       | 68.2              | -4.9           | 1.41 V                   | 360                        | 59.2                   | 4.1                            |
| 5                                                   | 11510.00       | 45.7 PK                       | 74.0              | -28.3          | 1.18 V                   | 202                        | 33.2                   | 12.5                           |
| 6                                                   | 11510.00       | 35.9 AV                       | 54.0              | -18.1          | 1.18 V                   | 202                        | 23.4                   | 12.5                           |
| 7                                                   | #17265.00      | 67.8 PK                       | 68.2              | -0.4           | 3.45 V                   | 192                        | 51.2                   | 16.6                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 159 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5634.05       | 60.8 PK                       | 68.2              | -7.4           | 1.94 H                   | 359                        | 57.5                   | 3.3                            |
| 2                                                   | *5795.00       | 119.7 PK                      |                   |                | 1.94 H                   | 359                        | 116.2                  | 3.5                            |
| 3                                                   | *5795.00       | 108.5 AV                      |                   |                | 1.94 H                   | 359                        | 105.0                  | 3.5                            |
| 4                                                   | #5956.56       | 61.4 PK                       | 68.2              | -6.8           | 1.94 H                   | 359                        | 57.2                   | 4.2                            |
| 5                                                   | 11590.00       | 46.9 PK                       | 74.0              | -27.1          | 1.36 H                   | 218                        | 34.6                   | 12.3                           |
| 6                                                   | 11590.00       | 36.5 AV                       | 54.0              | -17.5          | 1.36 H                   | 218                        | 24.2                   | 12.3                           |
| 7                                                   | #17385.00      | 62.7 PK                       | 68.2              | -5.5           | 1.55 H                   | 240                        | 46.2                   | 16.5                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5616.13       | 64.1 PK                       | 68.2              | -4.1           | 1.88 V                   | 0                          | 60.8                   | 3.3                            |
| 2                                                   | *5795.00       | 120.6 PK                      |                   |                | 1.88 V                   | 0                          | 117.1                  | 3.5                            |
| 3                                                   | *5795.00       | 110.7 AV                      |                   |                | 1.88 V                   | 0                          | 107.2                  | 3.5                            |
| 4                                                   | #5928.08       | 64.0 PK                       | 68.2              | -4.2           | 1.88 V                   | 0                          | 59.9                   | 4.1                            |
| 5                                                   | 11590.00       | 45.7 PK                       | 74.0              | -28.3          | 1.13 V                   | 230                        | 33.4                   | 12.3                           |
| 6                                                   | 11590.00       | 35.8 AV                       | 54.0              | -18.2          | 1.13 V                   | 230                        | 23.5                   | 12.3                           |
| 7                                                   | #17385.00      | 67.9 PK                       | 68.2              | -0.3           | 3.51 V                   | 192                        | 51.4                   | 16.5                           |

**REMARKS:**

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

# 802.11ax (HE80)

|                 |               |                      |              |
|-----------------|---------------|----------------------|--------------|
| CHANNEL         | TX Channel 42 | DETECTOR<br>FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                      | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 63.9 PK                       | 74.0              | -10.1          | 1.37 H                   | 226                        | 60.9                   | 3.0                            |
| 2                                                   | 5150.00        | 52.9 AV                       | 54.0              | -1.1           | 1.37 H                   | 226                        | 49.9                   | 3.0                            |
| 3                                                   | *5210.00       | 112.1 PK                      |                   |                | 1.37 H                   | 226                        | 109.4                  | 2.7                            |
| 4                                                   | *5210.00       | 100.9 AV                      |                   |                | 1.37 H                   | 226                        | 98.2                   | 2.7                            |
| 5                                                   | 5350.00        | 52.9 PK                       | 74.0              | -21.1          | 1.37 H                   | 226                        | 50.3                   | 2.6                            |
| 6                                                   | 5350.00        | 42.2 AV                       | 54.0              | -11.8          | 1.37 H                   | 226                        | 39.6                   | 2.6                            |
| 7                                                   | #10420.00      | 45.7 PK                       | 68.2              | -22.5          | 1.64 H                   | 235                        | 33.4                   | 12.3                           |
| 8                                                   | 15630.00       | 53.4 PK                       | 74.0              | -20.6          | 1.75 H                   | 252                        | 40.7                   | 12.7                           |
| 9                                                   | 15630.00       | 43.6 AV                       | 54.0              | -10.4          | 1.75 H                   | 252                        | 30.9                   | 12.7                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 64.2 PK                       | 74.0              | -9.8           | 2.05 V                   | 358                        | 61.2                   | 3.0                            |
| 2                                                   | 5150.00        | 53.4 AV                       | 54.0              | -0.6           | 2.05 V                   | 358                        | 50.4                   | 3.0                            |
| 3                                                   | *5210.00       | 112.5 PK                      |                   |                | 2.05 V                   | 358                        | 109.8                  | 2.7                            |
| 4                                                   | *5210.00       | 101.8 AV                      |                   |                | 2.05 V                   | 358                        | 99.1                   | 2.7                            |
| 5                                                   | 5350.00        | 53.4 PK                       | 74.0              | -20.6          | 2.05 V                   | 358                        | 50.8                   | 2.6                            |
| 6                                                   | 5350.00        | 42.6 AV                       | 54.0              | -11.4          | 2.05 V                   | 358                        | 40.0                   | 2.6                            |
| 7                                                   | #10420.00      | 46.8 PK                       | 68.2              | -21.4          | 1.24 V                   | 302                        | 34.5                   | 12.3                           |
| 8                                                   | 15630.00       | 58.5 PK                       | 74.0              | -15.5          | 3.42 V                   | 143                        | 45.8                   | 12.7                           |
| 9                                                   | 15630.00       | 47.3 AV                       | 54.0              | -6.7           | 3.42 V                   | 143                        | 34.6                   | 12.7                           |

## REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " \* ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 155 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5648.79       | 67.1 PK                       | 68.2              | -1.1           | 1.82 H                   | 359                        | 63.8                   | 3.3                            |
| 2                                                   | *5775.00       | 116.4 PK                      |                   |                | 1.82 H                   | 359                        | 113.0                  | 3.4                            |
| 3                                                   | *5775.00       | 105.6 AV                      |                   |                | 1.82 H                   | 359                        | 102.2                  | 3.4                            |
| 4                                                   | #5931.26       | 64.1 PK                       | 68.2              | -4.1           | 1.82 H                   | 359                        | 60.0                   | 4.1                            |
| 5                                                   | 11550.00       | 45.7 PK                       | 74.0              | -28.3          | 1.82 H                   | 217                        | 33.3                   | 12.4                           |
| 6                                                   | 11550.00       | 35.9 AV                       | 54.0              | -18.1          | 1.82 H                   | 217                        | 23.5                   | 12.4                           |
| 7                                                   | #17325.00      | 60.4 PK                       | 68.2              | -7.8           | 1.70 H                   | 302                        | 43.7                   | 16.7                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5649.85       | 67.9 PK                       | 68.2              | -0.3           | 1.94 V                   | 3                          | 64.6                   | 3.3                            |
| 2                                                   | *5775.00       | 116.8 PK                      |                   |                | 1.94 V                   | 3                          | 113.4                  | 3.4                            |
| 3                                                   | *5775.00       | 105.7 AV                      |                   |                | 1.94 V                   | 3                          | 102.3                  | 3.4                            |
| 4                                                   | #5938.56       | 66.7 PK                       | 68.2              | -1.5           | 1.94 V                   | 3                          | 62.5                   | 4.2                            |
| 5                                                   | 11550.00       | 46.8 PK                       | 74.0              | -27.2          | 1.75 V                   | 207                        | 34.4                   | 12.4                           |
| 6                                                   | 11550.00       | 36.5 AV                       | 54.0              | -17.5          | 1.75 V                   | 207                        | 24.1                   | 12.4                           |
| 7                                                   | #17325.00      | 64.4 PK                       | 68.2              | -3.8           | 2.12 V                   | 218                        | 47.7                   | 16.7                           |

**REMARKS:**

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

# Below 1GHz Data:

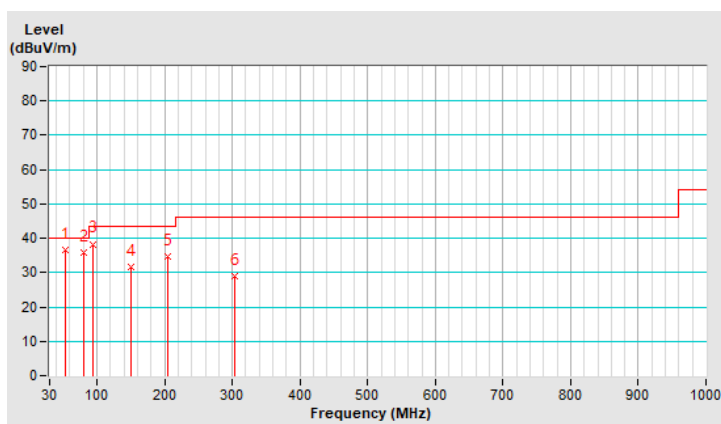
## 802.11a

|                 |                |                      |                 |
|-----------------|----------------|----------------------|-----------------|
| CHANNEL         | TX Channel 149 | DETECTOR<br>FUNCTION | Quasi-Peak (QP) |
| FREQUENCY RANGE | 9kHz ~ 1GHz    |                      |                 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 53.66          | 36.5 QP                       | 40.0              | -3.5           | 2.00 H                   | 81                         | 44.4                   | -7.9                           |
| 2                                                   | 80.15          | 35.7 QP                       | 40.0              | -4.3           | 3.00 H                   | 332                        | 48.4                   | -12.7                          |
| 3                                                   | 94.80          | 38.3 QP                       | 43.5              | -5.2           | 2.50 H                   | 111                        | 51.1                   | -12.8                          |
| 4                                                   | 149.73         | 31.8 QP                       | 43.5              | -11.7          | 2.00 H                   | 80                         | 38.9                   | -7.1                           |
| 5                                                   | 205.20         | 34.7 QP                       | 43.5              | -8.8           | 1.50 H                   | 106                        | 44.9                   | -10.2                          |
| 6                                                   | 303.94         | 28.9 QP                       | 46.0              | -17.1          | 1.00 H                   | 300                        | 35.1                   | -6.2                           |

### REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

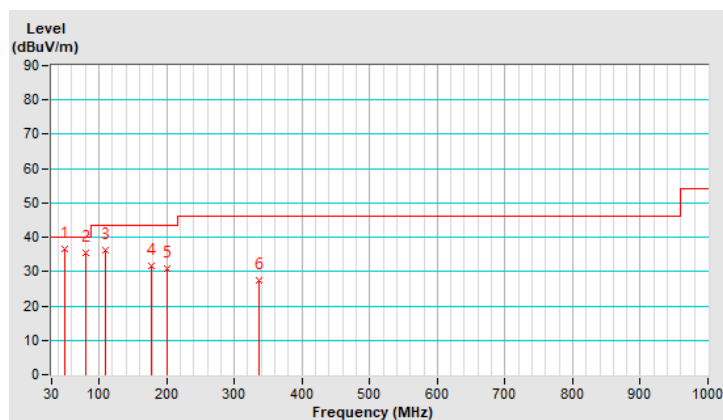


|                        |                |                              |                 |
|------------------------|----------------|------------------------------|-----------------|
| <b>CHANNEL</b>         | TX Channel 149 | <b>DETECTOR<br/>FUNCTION</b> | Quasi-Peak (QP) |
| <b>FREQUENCY RANGE</b> | 9kHz ~ 1GHz    |                              |                 |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|---------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                               | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                 | 49.08          | 36.7 QP                       | 40.0              | -3.3           | 1.50 V                   | 189                        | 44.4                   | -7.7                           |
| 2                                                 | 79.96          | 35.4 QP                       | 40.0              | -4.6           | 3.00 V                   | 15                         | 48.0                   | -12.6                          |
| 3                                                 | 109.05         | 36.2 QP                       | 43.5              | -7.3           | 1.00 V                   | 262                        | 46.6                   | -10.4                          |
| 4                                                 | 177.97         | 31.7 QP                       | 43.5              | -11.8          | 1.00 V                   | 23                         | 40.1                   | -8.4                           |
| 5                                                 | 200.98         | 30.7 QP                       | 43.5              | -12.8          | 1.00 V                   | 132                        | 41.1                   | -10.4                          |
| 6                                                 | 336.18         | 27.5 QP                       | 46.0              | -18.5          | 1.50 V                   | 214                        | 32.8                   | -5.3                           |

#### REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.





#### 4.1.8 Test Results (Mode 2)

##### Above 1GHz Data:

##### 802.11a

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 36 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 48.8 PK                       | 74.0              | -25.2          | 1.41 H                   | 31                         | 45.8                   | 3.0                            |
| 2                                                   | 5150.00        | 40.6 AV                       | 54.0              | -13.4          | 1.41 H                   | 31                         | 37.6                   | 3.0                            |
| 3                                                   | *5180.00       | 102.8 PK                      |                   |                | 1.41 H                   | 31                         | 99.9                   | 2.9                            |
| 4                                                   | *5180.00       | 93.7 AV                       |                   |                | 1.41 H                   | 31                         | 90.8                   | 2.9                            |
| 5                                                   | #10360.00      | 45.9 PK                       | 68.2              | -22.3          | 1.50 H                   | 202                        | 33.9                   | 12.0                           |
| 6                                                   | 15540.00       | 57.4 PK                       | 74.0              | -16.6          | 1.51 H                   | 70                         | 44.4                   | 13.0                           |
| 7                                                   | 15540.00       | 44.9 AV                       | 54.0              | -9.1           | 1.51 H                   | 70                         | 31.9                   | 13.0                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 65.5 PK                       | 74.0              | -8.5           | 1.90 V                   | 141                        | 62.5                   | 3.0                            |
| 2                                                   | 5150.00        | 53.9 AV                       | 54.0              | -0.1           | 1.90 V                   | 141                        | 50.9                   | 3.0                            |
| 3                                                   | *5180.00       | 119.1 PK                      |                   |                | 1.90 V                   | 141                        | 116.2                  | 2.9                            |
| 4                                                   | *5180.00       | 109.5 AV                      |                   |                | 1.90 V                   | 141                        | 106.6                  | 2.9                            |
| 5                                                   | #10360.00      | 46.8 PK                       | 68.2              | -21.4          | 1.22 V                   | 302                        | 34.8                   | 12.0                           |
| 6                                                   | 15540.00       | 62.1 PK                       | 74.0              | -11.9          | 2.60 V                   | 206                        | 49.1                   | 13.0                           |
| 7                                                   | 15540.00       | 51.3 AV                       | 54.0              | -2.7           | 2.60 V                   | 206                        | 38.3                   | 13.0                           |

#### REMARKS:

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

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 40 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 49.7 PK                       | 74.0              | -24.3          | 1.75 H                   | 225                        | 46.7                   | 3.0                            |
| 2                                                   | 5150.00        | 41.5 AV                       | 54.0              | -12.5          | 1.75 H                   | 225                        | 38.5                   | 3.0                            |
| 3                                                   | *5200.00       | 104.8 PK                      |                   |                | 1.75 H                   | 225                        | 102.0                  | 2.8                            |
| 4                                                   | *5200.00       | 94.5 AV                       |                   |                | 1.75 H                   | 225                        | 91.7                   | 2.8                            |
| 5                                                   | #10400.00      | 45.8 PK                       | 68.2              | -22.4          | 1.60 H                   | 235                        | 33.7                   | 12.1                           |
| 6                                                   | 15600.00       | 56.8 PK                       | 74.0              | -17.2          | 1.85 H                   | 302                        | 43.9                   | 12.9                           |
| 7                                                   | 15600.00       | 45.8 AV                       | 54.0              | -8.2           | 1.85 H                   | 302                        | 32.9                   | 12.9                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 62.9 PK                       | 74.0              | -11.1          | 1.52 V                   | 200                        | 59.9                   | 3.0                            |
| 2                                                   | 5150.00        | 53.1 AV                       | 54.0              | -0.9           | 1.52 V                   | 200                        | 50.1                   | 3.0                            |
| 3                                                   | *5200.00       | 120.1 PK                      |                   |                | 1.52 V                   | 200                        | 117.3                  | 2.8                            |
| 4                                                   | *5200.00       | 110.6 AV                      |                   |                | 1.52 V                   | 200                        | 107.8                  | 2.8                            |
| 5                                                   | #10400.00      | 46.2 PK                       | 68.2              | -22.0          | 1.20 V                   | 315                        | 34.1                   | 12.1                           |
| 6                                                   | 15600.00       | 63.3 PK                       | 74.0              | -10.7          | 2.66 V                   | 192                        | 50.4                   | 12.9                           |
| 7                                                   | 15600.00       | 52.8 AV                       | 54.0              | -1.2           | 2.66 V                   | 192                        | 39.9                   | 12.9                           |

**REMARKS:**

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

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 48 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5240.00       | 103.8 PK                      |                   |                | 2.01 H                   | 249                        | 101.2                  | 2.6                            |
| 2                                                   | *5240.00       | 93.9 AV                       |                   |                | 2.01 H                   | 249                        | 91.3                   | 2.6                            |
| 3                                                   | 5350.00        | 49.5 PK                       | 74.0              | -24.5          | 2.01 H                   | 249                        | 46.9                   | 2.6                            |
| 4                                                   | 5350.00        | 41.7 AV                       | 54.0              | -12.3          | 2.01 H                   | 249                        | 39.1                   | 2.6                            |
| 5                                                   | #10480.00      | 45.8 PK                       | 68.2              | -22.4          | 3.02 H                   | 225                        | 33.3                   | 12.5                           |
| 6                                                   | 15720.00       | 56.1 PK                       | 74.0              | -17.9          | 1.56 H                   | 214                        | 43.9                   | 12.2                           |
| 7                                                   | 15720.00       | 45.2 AV                       | 54.0              | -8.8           | 1.56 H                   | 214                        | 33.0                   | 12.2                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5240.00       | 119.7 PK                      |                   |                | 1.49 V                   | 194                        | 117.1                  | 2.6                            |
| 2                                                   | *5240.00       | 109.9 AV                      |                   |                | 1.49 V                   | 194                        | 107.3                  | 2.6                            |
| 3                                                   | 5350.00        | 50.7 PK                       | 74.0              | -23.3          | 1.49 V                   | 194                        | 48.1                   | 2.6                            |
| 4                                                   | 5350.00        | 40.8 AV                       | 54.0              | -13.2          | 1.49 V                   | 194                        | 38.2                   | 2.6                            |
| 5                                                   | #10480.00      | 46.5 PK                       | 68.2              | -21.7          | 1.48 V                   | 225                        | 34.0                   | 12.5                           |
| 6                                                   | 15720.00       | 64.9 PK                       | 74.0              | -9.1           | 2.08 V                   | 204                        | 52.7                   | 12.2                           |
| 7                                                   | 15720.00       | 53.9 AV                       | 54.0              | -0.1           | 2.08 V                   | 204                        | 41.7                   | 12.2                           |

**REMARKS:**

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

|                 |                |                      |              |
|-----------------|----------------|----------------------|--------------|
| CHANNEL         | TX Channel 149 | DETECTOR<br>FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz   |                      | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5578.17       | 61.1 PK                       | 68.2              | -7.1           | 1.51 H                   | 51                         | 57.8                   | 3.3                            |
| 2                                                   | *5745.00       | 107.9 PK                      |                   |                | 1.51 H                   | 51                         | 104.6                  | 3.3                            |
| 3                                                   | *5745.00       | 99.1 AV                       |                   |                | 1.51 H                   | 51                         | 95.8                   | 3.3                            |
| 4                                                   | #5946.97       | 61.6 PK                       | 68.2              | -6.6           | 1.51 H                   | 51                         | 57.4                   | 4.2                            |
| 5                                                   | 11490.00       | 45.7 PK                       | 74.0              | -28.3          | 2.14 H                   | 226                        | 33.1                   | 12.6                           |
| 6                                                   | 11490.00       | 36.5 AV                       | 54.0              | -17.5          | 2.14 H                   | 226                        | 23.9                   | 12.6                           |
| 7                                                   | #17235.00      | 57.8 PK                       | 68.2              | -10.4          | 3.02 H                   | 256                        | 41.0                   | 16.8                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5643.82       | 61.0 PK                       | 68.2              | -7.2           | 1.75 V                   | 147                        | 57.7                   | 3.3                            |
| 2                                                   | *5745.00       | 121.7 PK                      |                   |                | 1.75 V                   | 147                        | 118.4                  | 3.3                            |
| 3                                                   | *5745.00       | 112.6 AV                      |                   |                | 1.75 V                   | 147                        | 109.3                  | 3.3                            |
| 4                                                   | #5931.76       | 61.0 PK                       | 68.2              | -7.2           | 1.75 V                   | 147                        | 56.9                   | 4.1                            |
| 5                                                   | 11490.00       | 46.5 PK                       | 74.0              | -27.5          | 1.53 V                   | 306                        | 33.9                   | 12.6                           |
| 6                                                   | 11490.00       | 36.5 AV                       | 54.0              | -17.5          | 1.53 V                   | 306                        | 23.9                   | 12.6                           |
| 7                                                   | #17235.00      | 67.9 PK                       | 68.2              | -0.3           | 2.42 V                   | 28                         | 51.1                   | 16.8                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 157 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5569.75       | 61.6 PK                       | 68.2              | -6.6           | 1.58 H                   | 151                        | 58.3                   | 3.3                            |
| 2                                                   | *5785.00       | 106.9 PK                      |                   |                | 1.58 H                   | 151                        | 103.5                  | 3.4                            |
| 3                                                   | *5785.00       | 97.7 AV                       |                   |                | 1.58 H                   | 151                        | 94.3                   | 3.4                            |
| 4                                                   | #5977.45       | 61.0 PK                       | 68.2              | -7.2           | 1.58 H                   | 151                        | 56.9                   | 4.1                            |
| 5                                                   | 11570.00       | 45.8 PK                       | 74.0              | -28.2          | 1.34 H                   | 242                        | 33.6                   | 12.2                           |
| 6                                                   | 11570.00       | 36.5 AV                       | 54.0              | -17.5          | 1.34 H                   | 242                        | 24.3                   | 12.2                           |
| 7                                                   | #17355.00      | 56.7 PK                       | 68.2              | -11.5          | 2.22 H                   | 148                        | 40.1                   | 16.6                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5626.37       | 61.1 PK                       | 68.2              | -7.1           | 1.52 V                   | 166                        | 57.8                   | 3.3                            |
| 2                                                   | *5785.00       | 123.9 PK                      |                   |                | 1.63 V                   | 223                        | 120.5                  | 3.4                            |
| 3                                                   | *5785.00       | 113.9 AV                      |                   |                | 1.63 V                   | 223                        | 110.5                  | 3.4                            |
| 4                                                   | #5934.06       | 61.4 PK                       | 68.2              | -6.8           | 1.52 V                   | 166                        | 57.2                   | 4.2                            |
| 5                                                   | 11570.00       | 46.7 PK                       | 74.0              | -27.3          | 1.48 V                   | 224                        | 34.5                   | 12.2                           |
| 6                                                   | 11570.00       | 35.8 AV                       | 54.0              | -18.2          | 1.48 V                   | 224                        | 23.6                   | 12.2                           |
| 7                                                   | #17355.00      | 68.0 PK                       | 68.2              | -0.2           | 2.38 V                   | 32                         | 51.4                   | 16.6                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 165 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5625.15       | 61.4 PK                       | 68.2              | -6.8           | 1.59 H                   | 49                         | 58.1                   | 3.3                            |
| 2                                                   | *5825.00       | 107.5 PK                      |                   |                | 1.59 H                   | 49                         | 103.9                  | 3.6                            |
| 3                                                   | *5825.00       | 98.9 AV                       |                   |                | 1.59 H                   | 49                         | 95.3                   | 3.6                            |
| 4                                                   | #5957.94       | 61.0 PK                       | 68.2              | -7.2           | 1.59 H                   | 49                         | 56.8                   | 4.2                            |
| 5                                                   | 11650.00       | 45.7 PK                       | 74.0              | -28.3          | 3.02 H                   | 224                        | 33.3                   | 12.4                           |
| 6                                                   | 11650.00       | 35.4 AV                       | 54.0              | -18.6          | 3.02 H                   | 224                        | 23.0                   | 12.4                           |
| 7                                                   | #17475.00      | 55.7 PK                       | 68.2              | -12.5          | 1.45 H                   | 302                        | 38.7                   | 17.0                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5629.25       | 62.1 PK                       | 68.2              | -6.1           | 1.43 V                   | 142                        | 58.8                   | 3.3                            |
| 2                                                   | *5825.00       | 122.7 PK                      |                   |                | 1.56 V                   | 42                         | 119.1                  | 3.6                            |
| 3                                                   | *5825.00       | 113.2 AV                      |                   |                | 1.56 V                   | 42                         | 109.6                  | 3.6                            |
| 4                                                   | #5950.25       | 62.5 PK                       | 68.2              | -5.7           | 1.43 V                   | 142                        | 58.3                   | 4.2                            |
| 5                                                   | 11650.00       | 46.3 PK                       | 74.0              | -27.7          | 1.48 V                   | 302                        | 33.9                   | 12.4                           |
| 6                                                   | 11650.00       | 36.8 AV                       | 54.0              | -17.2          | 1.48 V                   | 302                        | 24.4                   | 12.4                           |
| 7                                                   | #17475.00      | 68.0 PK                       | 68.2              | -0.2           | 1.98 V                   | 24                         | 51.0                   | 17.0                           |

**REMARKS:**

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

### 802.11ax (HE20)

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 36 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 48.6 PK                       | 74.0              | -25.4          | 1.40 H                   | 17                         | 45.6                   | 3.0                            |
| 2                                                   | 5150.00        | 40.1 AV                       | 54.0              | -13.9          | 1.40 H                   | 17                         | 37.1                   | 3.0                            |
| 3                                                   | *5180.00       | 102.9 PK                      |                   |                | 1.40 H                   | 17                         | 100.0                  | 2.9                            |
| 4                                                   | *5180.00       | 94.1 AV                       |                   |                | 1.40 H                   | 17                         | 91.2                   | 2.9                            |
| 5                                                   | #10360.00      | 45.9 PK                       | 68.2              | -22.3          | 1.45 H                   | 194                        | 33.9                   | 12.0                           |
| 6                                                   | 15540.00       | 57.1 PK                       | 74.0              | -16.9          | 1.47 H                   | 71                         | 44.1                   | 13.0                           |
| 7                                                   | 15540.00       | 44.7 AV                       | 54.0              | -9.3           | 1.47 H                   | 71                         | 31.7                   | 13.0                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 66.9 PK                       | 74.0              | -7.1           | 1.47 V                   | 144                        | 63.9                   | 3.0                            |
| 2                                                   | 5150.00        | 53.2 AV                       | 54.0              | -0.8           | 1.47 V                   | 144                        | 50.2                   | 3.0                            |
| 3                                                   | *5180.00       | 120.2 PK                      |                   |                | 1.47 V                   | 144                        | 117.3                  | 2.9                            |
| 4                                                   | *5180.00       | 110.1 AV                      |                   |                | 1.47 V                   | 144                        | 107.2                  | 2.9                            |
| 5                                                   | #10360.00      | 46.5 PK                       | 68.2              | -21.7          | 1.24 V                   | 302                        | 34.5                   | 12.0                           |
| 6                                                   | 15540.00       | 66.2 PK                       | 74.0              | -7.8           | 1.49 V                   | 207                        | 53.2                   | 13.0                           |
| 7                                                   | 15540.00       | 51.2 AV                       | 54.0              | -2.8           | 1.49 V                   | 207                        | 38.2                   | 13.0                           |

#### REMARKS:

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

|                 |               |                      |              |
|-----------------|---------------|----------------------|--------------|
| CHANNEL         | TX Channel 40 | DETECTOR<br>FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                      | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 51.7 PK                       | 74.0              | -22.3          | 1.59 H                   | 214                        | 48.7                   | 3.0                            |
| 2                                                   | 5150.00        | 42.6 AV                       | 54.0              | -11.4          | 1.59 H                   | 214                        | 39.6                   | 3.0                            |
| 3                                                   | *5200.00       | 105.3 PK                      |                   |                | 1.59 H                   | 214                        | 102.5                  | 2.8                            |
| 4                                                   | *5200.00       | 94.7 AV                       |                   |                | 1.59 H                   | 214                        | 91.9                   | 2.8                            |
| 5                                                   | #10400.00      | 45.8 PK                       | 68.2              | -22.4          | 1.34 H                   | 211                        | 33.7                   | 12.1                           |
| 6                                                   | 15600.00       | 56.7 PK                       | 74.0              | -17.3          | 2.06 H                   | 148                        | 43.8                   | 12.9                           |
| 7                                                   | 15600.00       | 44.2 AV                       | 54.0              | -9.8           | 2.06 H                   | 148                        | 31.3                   | 12.9                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 65.6 PK                       | 74.0              | -8.4           | 1.44 V                   | 144                        | 62.6                   | 3.0                            |
| 2                                                   | 5150.00        | 53.9 AV                       | 54.0              | -0.1           | 1.44 V                   | 144                        | 50.9                   | 3.0                            |
| 3                                                   | *5200.00       | 121.5 PK                      |                   |                | 1.44 V                   | 144                        | 118.7                  | 2.8                            |
| 4                                                   | *5200.00       | 111.5 AV                      |                   |                | 1.44 V                   | 144                        | 108.7                  | 2.8                            |
| 5                                                   | #10400.00      | 46.2 PK                       | 68.2              | -22.0          | 1.56 V                   | 215                        | 34.1                   | 12.1                           |
| 6                                                   | 15600.00       | 63.4 PK                       | 74.0              | -10.6          | 3.96 V                   | 205                        | 50.5                   | 12.9                           |
| 7                                                   | 15600.00       | 52.9 AV                       | 54.0              | -1.1           | 3.96 V                   | 205                        | 40.0                   | 12.9                           |

**REMARKS:**

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



|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 48 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5240.00       | 103.8 PK                      |                   |                | 1.66 H                   | 215                        | 101.2                  | 2.6                            |
| 2                                                   | *5240.00       | 94.0 AV                       |                   |                | 1.66 H                   | 215                        | 91.4                   | 2.6                            |
| 3                                                   | 5350.00        | 49.7 PK                       | 74.0              | -24.3          | 1.66 H                   | 215                        | 47.1                   | 2.6                            |
| 4                                                   | 5350.00        | 42.0 AV                       | 54.0              | -12.0          | 1.66 H                   | 215                        | 39.4                   | 2.6                            |
| 5                                                   | #10480.00      | 45.7 PK                       | 68.2              | -22.5          | 1.27 H                   | 302                        | 33.2                   | 12.5                           |
| 6                                                   | 15720.00       | 55.9 PK                       | 74.0              | -18.1          | 2.18 H                   | 226                        | 43.7                   | 12.2                           |
| 7                                                   | 15720.00       | 44.9 AV                       | 54.0              | -9.1           | 2.18 H                   | 226                        | 32.7                   | 12.2                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | *5240.00       | 123.4 PK                      |                   |                | 1.47 V                   | 144                        | 120.8                  | 2.6                            |
| 2                                                   | *5240.00       | 112.9 AV                      |                   |                | 1.47 V                   | 144                        | 110.3                  | 2.6                            |
| 3                                                   | 5350.00        | 52.5 PK                       | 74.0              | -21.5          | 1.47 V                   | 144                        | 49.9                   | 2.6                            |
| 4                                                   | 5350.00        | 43.2 AV                       | 54.0              | -10.8          | 1.47 V                   | 144                        | 40.6                   | 2.6                            |
| 5                                                   | #10480.00      | 46.5 PK                       | 68.2              | -21.7          | 1.48 V                   | 302                        | 34.0                   | 12.5                           |
| 6                                                   | 15720.00       | 64.8 PK                       | 74.0              | -9.2           | 1.48 V                   | 237                        | 52.6                   | 12.2                           |
| 7                                                   | 15720.00       | 53.5 AV                       | 54.0              | -0.5           | 1.48 V                   | 237                        | 41.3                   | 12.2                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 149 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5650.70       | 61.2 PK                       | 68.7              | -7.5           | 1.48 H                   | 151                        | 57.9                   | 3.3                            |
| 2                                                   | *5745.00       | 106.9 PK                      |                   |                | 1.48 H                   | 151                        | 103.6                  | 3.3                            |
| 3                                                   | *5745.00       | 97.2 AV                       |                   |                | 1.48 H                   | 151                        | 93.9                   | 3.3                            |
| 4                                                   | #5978.45       | 61.4 PK                       | 68.2              | -6.8           | 1.48 H                   | 151                        | 57.3                   | 4.1                            |
| 5                                                   | 11490.00       | 45.6 PK                       | 74.0              | -28.4          | 1.34 H                   | 206                        | 33.0                   | 12.6                           |
| 6                                                   | 11490.00       | 36.5 AV                       | 54.0              | -17.5          | 1.34 H                   | 206                        | 23.9                   | 12.6                           |
| 7                                                   | #17235.00      | 55.6 PK                       | 68.2              | -12.6          | 1.53 H                   | 306                        | 38.8                   | 16.8                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5622.75       | 61.5 PK                       | 68.2              | -6.7           | 1.69 V                   | 140                        | 58.2                   | 3.3                            |
| 2                                                   | *5745.00       | 121.8 PK                      |                   |                | 1.69 V                   | 140                        | 118.5                  | 3.3                            |
| 3                                                   | *5745.00       | 111.3 AV                      |                   |                | 1.69 V                   | 140                        | 108.0                  | 3.3                            |
| 4                                                   | #5950.69       | 61.5 PK                       | 68.2              | -6.7           | 1.69 V                   | 140                        | 57.3                   | 4.2                            |
| 5                                                   | 11490.00       | 46.9 PK                       | 74.0              | -27.1          | 1.48 V                   | 222                        | 34.3                   | 12.6                           |
| 6                                                   | 11490.00       | 36.5 AV                       | 54.0              | -17.5          | 1.48 V                   | 222                        | 23.9                   | 12.6                           |
| 7                                                   | #17235.00      | 67.8 PK                       | 68.2              | -0.4           | 1.49 V                   | 25                         | 51.0                   | 16.8                           |

**REMARKS:**

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

|                 |                |                      |              |
|-----------------|----------------|----------------------|--------------|
| CHANNEL         | TX Channel 157 | DETECTOR<br>FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz   |                      | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5602.45       | 61.1 PK                       | 68.2              | -7.1           | 1.62 H                   | 152                        | 57.8                   | 3.3                            |
| 2                                                   | *5785.00       | 108.4 PK                      |                   |                | 1.62 H                   | 152                        | 105.0                  | 3.4                            |
| 3                                                   | *5785.00       | 98.5 AV                       |                   |                | 1.62 H                   | 152                        | 95.1                   | 3.4                            |
| 4                                                   | #5980.42       | 60.5 PK                       | 68.2              | -7.7           | 1.62 H                   | 152                        | 56.4                   | 4.1                            |
| 5                                                   | 11570.00       | 45.6 PK                       | 74.0              | -28.4          | 2.01 H                   | 223                        | 33.4                   | 12.2                           |
| 6                                                   | 11570.00       | 35.9 AV                       | 54.0              | -18.1          | 2.01 H                   | 223                        | 23.7                   | 12.2                           |
| 7                                                   | #17355.00      | 55.9 PK                       | 68.2              | -12.3          | 1.74 H                   | 202                        | 39.3                   | 16.6                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5575.98       | 62.4 PK                       | 68.2              | -5.8           | 1.51 V                   | 162                        | 59.1                   | 3.3                            |
| 2                                                   | *5785.00       | 121.5 PK                      |                   |                | 1.51 V                   | 162                        | 118.1                  | 3.4                            |
| 3                                                   | *5785.00       | 111.1 AV                      |                   |                | 1.51 V                   | 162                        | 107.7                  | 3.4                            |
| 4                                                   | #5996.92       | 61.5 PK                       | 68.2              | -6.7           | 1.51 V                   | 162                        | 57.4                   | 4.1                            |
| 5                                                   | 11570.00       | 47.9 PK                       | 74.0              | -26.1          | 1.54 V                   | 29                         | 35.7                   | 12.2                           |
| 6                                                   | 11570.00       | 39.2 AV                       | 54.0              | -14.8          | 1.54 V                   | 29                         | 27.0                   | 12.2                           |
| 7                                                   | #17355.00      | 67.7 PK                       | 68.2              | -0.5           | 1.54 V                   | 26                         | 51.1                   | 16.6                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 165 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5572.61       | 61.2 PK                       | 68.2              | -7.0           | 1.59 H                   | 49                         | 57.9                   | 3.3                            |
| 2                                                   | *5825.00       | 107.5 PK                      |                   |                | 1.59 H                   | 49                         | 103.9                  | 3.6                            |
| 3                                                   | *5825.00       | 97.8 AV                       |                   |                | 1.59 H                   | 49                         | 94.2                   | 3.6                            |
| 4                                                   | #5977.87       | 61.9 PK                       | 68.2              | -6.3           | 1.59 H                   | 49                         | 57.8                   | 4.1                            |
| 5                                                   | 11650.00       | 45.7 PK                       | 74.0              | -28.3          | 1.66 H                   | 206                        | 33.3                   | 12.4                           |
| 6                                                   | 11650.00       | 36.5 AV                       | 54.0              | -17.5          | 1.66 H                   | 206                        | 24.1                   | 12.4                           |
| 7                                                   | #17475.00      | 55.2 PK                       | 68.2              | -13.0          | 1.45 H                   | 264                        | 38.2                   | 17.0                           |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|---------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                               | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                 | #5599.11       | 61.4 PK                       | 68.2              | -6.8           | 1.50 V                   | 147                        | 58.1                   | 3.3                            |
| 2                                                 | *5825.00       | 122.7 PK                      |                   |                | 1.50 V                   | 147                        | 119.1                  | 3.6                            |
| 3                                                 | *5825.00       | 111.5 AV                      |                   |                | 1.50 V                   | 147                        | 107.9                  | 3.6                            |
| 4                                                 | #5924.22       | 62.2 PK                       | 68.8              | -6.6           | 1.50 V                   | 147                        | 58.1                   | 4.1                            |
| 5                                                 | 11650.00       | 46.7 PK                       | 74.0              | -27.3          | 1.48 V                   | 224                        | 34.3                   | 12.4                           |
| 6                                                 | 11650.00       | 36.8 AV                       | 54.0              | -17.2          | 1.48 V                   | 224                        | 24.4                   | 12.4                           |
| 7                                                 | #17475.00      | 67.7 PK                       | 68.2              | -0.5           | 1.50 V                   | 24                         | 50.7                   | 17.0                           |

#### REMARKS:

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

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|                 |               |                      |              |
|-----------------|---------------|----------------------|--------------|
| CHANNEL         | TX Channel 38 | DETECTOR<br>FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                      | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 58.8 PK                       | 74.0              | -15.2          | 1.50 H                   | 37                         | 55.8                   | 3.0                            |
| 2                                                   | 5150.00        | 50.6 AV                       | 54.0              | -3.4           | 1.50 H                   | 37                         | 47.6                   | 3.0                            |
| 3                                                   | *5190.00       | 100.5 PK                      |                   |                | 1.50 H                   | 37                         | 97.6                   | 2.9                            |
| 4                                                   | *5190.00       | 89.9 AV                       |                   |                | 1.50 H                   | 37                         | 87.0                   | 2.9                            |
| 5                                                   | 5350.00        | 47.8 PK                       | 74.0              | -26.2          | 1.50 H                   | 37                         | 45.2                   | 2.6                            |
| 6                                                   | 5350.00        | 36.9 AV                       | 54.0              | -17.1          | 1.50 H                   | 37                         | 34.3                   | 2.6                            |
| 7                                                   | #10380.00      | 45.6 PK                       | 68.2              | -22.6          | 1.36 H                   | 178                        | 33.4                   | 12.2                           |
| 8                                                   | 15570.00       | 51.6 PK                       | 74.0              | -22.4          | 1.66 H                   | 214                        | 38.6                   | 13.0                           |
| 9                                                   | 15570.00       | 41.2 AV                       | 54.0              | -12.8          | 1.66 H                   | 214                        | 28.2                   | 13.0                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 64.5 PK                       | 74.0              | -9.5           | 1.60 V                   | 143                        | 61.5                   | 3.0                            |
| 2                                                   | 5150.00        | 53.1 AV                       | 54.0              | -0.9           | 1.60 V                   | 143                        | 50.1                   | 3.0                            |
| 3                                                   | *5190.00       | 113.5 PK                      |                   |                | 1.60 V                   | 143                        | 110.6                  | 2.9                            |
| 4                                                   | *5190.00       | 103.5 AV                      |                   |                | 1.60 V                   | 143                        | 100.6                  | 2.9                            |
| 5                                                   | 5350.00        | 51.8 PK                       | 74.0              | -22.2          | 1.60 V                   | 143                        | 49.2                   | 2.6                            |
| 6                                                   | 5350.00        | 40.9 AV                       | 54.0              | -13.1          | 1.60 V                   | 143                        | 38.3                   | 2.6                            |
| 7                                                   | #10380.00      | 46.5 PK                       | 68.2              | -21.7          | 2.55 V                   | 112                        | 34.3                   | 12.2                           |
| 8                                                   | 15570.00       | 56.9 PK                       | 74.0              | -17.1          | 2.56 V                   | 205                        | 43.9                   | 13.0                           |
| 9                                                   | 15570.00       | 49.2 AV                       | 54.0              | -4.8           | 2.56 V                   | 205                        | 36.2                   | 13.0                           |

## REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " \* ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 46 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 53.6 PK                       | 74.0              | -20.4          | 1.66 H                   | 258                        | 50.6                   | 3.0                            |
| 2                                                   | 5150.00        | 38.9 AV                       | 54.0              | -15.1          | 1.66 H                   | 258                        | 35.9                   | 3.0                            |
| 3                                                   | *5230.00       | 102.9 PK                      |                   |                | 1.66 H                   | 258                        | 100.3                  | 2.6                            |
| 4                                                   | *5230.00       | 92.9 AV                       |                   |                | 1.66 H                   | 258                        | 90.3                   | 2.6                            |
| 5                                                   | 5350.00        | 42.8 PK                       | 74.0              | -31.2          | 1.66 H                   | 258                        | 40.2                   | 2.6                            |
| 6                                                   | 5350.00        | 35.9 AV                       | 54.0              | -18.1          | 1.66 H                   | 258                        | 33.3                   | 2.6                            |
| 7                                                   | #10460.00      | 45.6 PK                       | 68.2              | -22.6          | 1.56 H                   | 215                        | 33.2                   | 12.4                           |
| 8                                                   | 15690.00       | 50.8 PK                       | 74.0              | -23.2          | 1.48 H                   | 232                        | 38.4                   | 12.4                           |
| 9                                                   | 15690.00       | 42.6 AV                       | 54.0              | -11.4          | 1.48 H                   | 232                        | 30.2                   | 12.4                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 65.5 PK                       | 74.0              | -8.5           | 1.46 V                   | 160                        | 62.5                   | 3.0                            |
| 2                                                   | 5150.00        | 53.2 AV                       | 54.0              | -0.8           | 1.46 V                   | 160                        | 50.2                   | 3.0                            |
| 3                                                   | *5230.00       | 115.8 PK                      |                   |                | 1.46 V                   | 160                        | 113.2                  | 2.6                            |
| 4                                                   | *5230.00       | 105.9 AV                      |                   |                | 1.46 V                   | 160                        | 103.3                  | 2.6                            |
| 5                                                   | 5350.00        | 56.5 PK                       | 74.0              | -17.5          | 1.46 V                   | 160                        | 53.9                   | 2.6                            |
| 6                                                   | 5350.00        | 47.9 AV                       | 54.0              | -6.1           | 1.46 V                   | 160                        | 45.3                   | 2.6                            |
| 7                                                   | #10460.00      | 45.8 PK                       | 68.2              | -22.4          | 1.48 V                   | 223                        | 33.4                   | 12.4                           |
| 8                                                   | 15690.00       | 62.2 PK                       | 74.0              | -11.8          | 2.70 V                   | 218                        | 49.8                   | 12.4                           |
| 9                                                   | 15690.00       | 51.2 AV                       | 54.0              | -2.8           | 2.70 V                   | 218                        | 38.8                   | 12.4                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 151 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5592.54       | 61.4 PK                       | 68.2              | -6.8           | 1.68 H                   | 51                         | 58.1                   | 3.3                            |
| 2                                                   | *5755.00       | 106.9 PK                      |                   |                | 1.68 H                   | 51                         | 103.6                  | 3.3                            |
| 3                                                   | *5755.00       | 96.9 AV                       |                   |                | 1.68 H                   | 51                         | 93.6                   | 3.3                            |
| 4                                                   | #5951.60       | 60.8 PK                       | 68.2              | -7.4           | 1.68 H                   | 51                         | 56.6                   | 4.2                            |
| 5                                                   | 11510.00       | 45.3 PK                       | 74.0              | -28.7          | 1.34 H                   | 206                        | 32.8                   | 12.5                           |
| 6                                                   | 11510.00       | 35.5 AV                       | 54.0              | -18.5          | 1.34 H                   | 206                        | 23.0                   | 12.5                           |
| 7                                                   | #17265.00      | 56.8 PK                       | 68.2              | -11.4          | 1.48 H                   | 202                        | 40.2                   | 16.6                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5632.76       | 67.8 PK                       | 68.2              | -0.4           | 1.55 V                   | 142                        | 64.5                   | 3.3                            |
| 2                                                   | *5755.00       | 119.5 PK                      |                   |                | 1.55 V                   | 142                        | 116.2                  | 3.3                            |
| 3                                                   | *5755.00       | 109.5 AV                      |                   |                | 1.55 V                   | 142                        | 106.2                  | 3.3                            |
| 4                                                   | #5938.84       | 63.0 PK                       | 68.2              | -5.2           | 1.55 V                   | 142                        | 58.8                   | 4.2                            |
| 5                                                   | 11510.00       | 46.2 PK                       | 74.0              | -27.8          | 1.48 V                   | 226                        | 33.7                   | 12.5                           |
| 6                                                   | 11510.00       | 35.5 AV                       | 54.0              | -18.5          | 1.48 V                   | 226                        | 23.0                   | 12.5                           |
| 7                                                   | #17265.00      | 68.1 PK                       | 68.2              | -0.1           | 1.52 V                   | 25                         | 51.5                   | 16.6                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 159 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5647.27       | 60.2 PK                       | 68.2              | -8.0           | 1.56 H                   | 153                        | 56.9                   | 3.3                            |
| 2                                                   | *5795.00       | 106.8 PK                      |                   |                | 1.56 H                   | 153                        | 103.3                  | 3.5                            |
| 3                                                   | *5795.00       | 96.8 AV                       |                   |                | 1.56 H                   | 153                        | 93.3                   | 3.5                            |
| 4                                                   | #5936.33       | 62.3 PK                       | 68.2              | -5.9           | 1.56 H                   | 153                        | 58.1                   | 4.2                            |
| 5                                                   | 11590.00       | 45.2 PK                       | 74.0              | -28.8          | 1.65 H                   | 214                        | 32.9                   | 12.3                           |
| 6                                                   | 11590.00       | 34.5 AV                       | 54.0              | -19.5          | 1.65 H                   | 214                        | 22.2                   | 12.3                           |
| 7                                                   | #17385.00      | 55.6 PK                       | 68.2              | -12.6          | 1.34 H                   | 66                         | 39.1                   | 16.5                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5637.41       | 63.2 PK                       | 68.2              | -5.0           | 1.45 V                   | 169                        | 59.9                   | 3.3                            |
| 2                                                   | *5795.00       | 119.8 PK                      |                   |                | 1.45 V                   | 169                        | 116.3                  | 3.5                            |
| 3                                                   | *5795.00       | 110.9 AV                      |                   |                | 1.45 V                   | 169                        | 107.4                  | 3.5                            |
| 4                                                   | #5936.28       | 68.1 PK                       | 68.2              | -0.1           | 1.45 V                   | 169                        | 63.9                   | 4.2                            |
| 5                                                   | 11590.00       | 45.6 PK                       | 74.0              | -28.4          | 1.74 V                   | 226                        | 33.3                   | 12.3                           |
| 6                                                   | 11590.00       | 36.2 AV                       | 54.0              | -17.8          | 1.74 V                   | 226                        | 23.9                   | 12.3                           |
| 7                                                   | #17385.00      | 67.9 PK                       | 68.2              | -0.3           | 1.51 V                   | 25                         | 51.4                   | 16.5                           |

#### REMARKS:

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



**802.11ax (HE80)**

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 42 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 53.2 PK                       | 74.0              | -20.8          | 1.48 H                   | 215                        | 50.2                   | 3.0                            |
| 2                                                   | 5150.00        | 42.5 AV                       | 54.0              | -11.5          | 1.48 H                   | 215                        | 39.5                   | 3.0                            |
| 3                                                   | *5210.00       | 97.8 PK                       |                   |                | 1.48 H                   | 215                        | 95.1                   | 2.7                            |
| 4                                                   | *5210.00       | 87.5 AV                       |                   |                | 1.48 H                   | 215                        | 84.8                   | 2.7                            |
| 5                                                   | 5350.00        | 42.6 PK                       | 74.0              | -31.4          | 1.48 H                   | 215                        | 40.0                   | 2.6                            |
| 6                                                   | 5350.00        | 32.9 AV                       | 54.0              | -21.1          | 1.48 H                   | 215                        | 30.3                   | 2.6                            |
| 7                                                   | #10420.00      | 45.2 PK                       | 68.2              | -23.0          | 1.34 H                   | 206                        | 32.9                   | 12.3                           |
| 8                                                   | 15630.00       | 46.8 PK                       | 74.0              | -27.2          | 2.19 H                   | 226                        | 34.1                   | 12.7                           |
| 9                                                   | 15630.00       | 41.5 AV                       | 54.0              | -12.5          | 2.19 H                   | 226                        | 28.8                   | 12.7                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 5150.00        | 63.5 PK                       | 74.0              | -10.5          | 2.05 V                   | 147                        | 60.5                   | 3.0                            |
| 2                                                   | 5150.00        | 53.1 AV                       | 54.0              | -0.9           | 2.05 V                   | 147                        | 50.1                   | 3.0                            |
| 3                                                   | *5210.00       | 110.1 PK                      |                   |                | 2.05 V                   | 147                        | 107.4                  | 2.7                            |
| 4                                                   | *5210.00       | 100.3 AV                      |                   |                | 2.05 V                   | 147                        | 97.6                   | 2.7                            |
| 5                                                   | 5350.00        | 49.9 PK                       | 74.0              | -24.1          | 2.05 V                   | 147                        | 47.3                   | 2.6                            |
| 6                                                   | 5350.00        | 40.9 AV                       | 54.0              | -13.1          | 2.05 V                   | 147                        | 38.3                   | 2.6                            |
| 7                                                   | #10420.00      | 45.9 PK                       | 68.2              | -22.3          | 2.06 V                   | 322                        | 33.6                   | 12.3                           |
| 8                                                   | 15630.00       | 55.9 PK                       | 74.0              | -18.1          | 2.58 V                   | 27                         | 43.2                   | 12.7                           |
| 9                                                   | 15630.00       | 48.1 AV                       | 54.0              | -5.9           | 2.58 V                   | 27                         | 35.4                   | 12.7                           |

**REMARKS:**

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

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 155 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5568.16       | 61.1 PK                       | 68.2              | -7.1           | 1.58 H                   | 48                         | 57.8                   | 3.3                            |
| 2                                                   | *5775.00       | 101.8 PK                      |                   |                | 1.58 H                   | 48                         | 98.4                   | 3.4                            |
| 3                                                   | *5775.00       | 91.5 AV                       |                   |                | 1.58 H                   | 48                         | 88.1                   | 3.4                            |
| 4                                                   | #6011.87       | 60.5 PK                       | 68.2              | -7.7           | 1.58 H                   | 48                         | 56.4                   | 4.1                            |
| 5                                                   | 11550.00       | 45.6 PK                       | 74.0              | -28.4          | 1.08 H                   | 179                        | 33.2                   | 12.4                           |
| 6                                                   | 11550.00       | 35.2 AV                       | 54.0              | -18.8          | 1.08 H                   | 179                        | 22.8                   | 12.4                           |
| 7                                                   | #17325.00      | 53.9 PK                       | 68.2              | -14.3          | 1.66 H                   | 206                        | 37.2                   | 16.7                           |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                |                               |                   |                |                          |                            |                        |                                |
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | #5648.30       | 66.9 PK                       | 68.2              | -1.3           | 1.51 V                   | 168                        | 63.6                   | 3.3                            |
| 2                                                   | *5775.00       | 115.2 PK                      |                   |                | 1.51 V                   | 168                        | 111.8                  | 3.4                            |
| 3                                                   | *5775.00       | 103.5 AV                      |                   |                | 1.51 V                   | 168                        | 100.1                  | 3.4                            |
| 4                                                   | #5936.82       | 64.4 PK                       | 68.2              | -3.8           | 1.51 V                   | 168                        | 60.2                   | 4.2                            |
| 5                                                   | 11550.00       | 45.2 PK                       | 74.0              | -28.8          | 1.62 V                   | 305                        | 32.8                   | 12.4                           |
| 6                                                   | 11550.00       | 36.5 AV                       | 54.0              | -17.5          | 1.62 V                   | 305                        | 24.1                   | 12.4                           |
| 7                                                   | #17325.00      | 65.8 PK                       | 68.2              | -2.4           | 1.61 V                   | 52                         | 49.1                   | 16.7                           |

**REMARKS:**

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

# Below 1GHz Data:

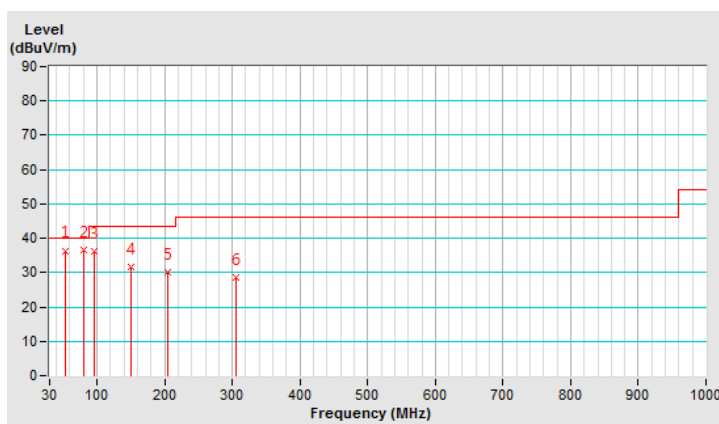
## 802.11ax (HE40)

|                 |                |                      |                 |
|-----------------|----------------|----------------------|-----------------|
| CHANNEL         | TX Channel 159 | DETECTOR<br>FUNCTION | Quasi-Peak (QP) |
| FREQUENCY RANGE | 9kHz ~ 1GHz    |                      |                 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|-----------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                                 | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                   | 52.84          | 36.4 QP                       | 40.0              | -3.6           | 1.50 H                   | 234                        | 44.2                   | -7.8                           |
| 2                                                   | 79.99          | 36.6 QP                       | 40.0              | -3.4           | 2.00 H                   | 34                         | 49.2                   | -12.6                          |
| 3                                                   | 95.12          | 36.2 QP                       | 43.5              | -7.3           | 2.50 H                   | 300                        | 49.0                   | -12.8                          |
| 4                                                   | 150.19         | 31.5 QP                       | 43.5              | -12.0          | 2.00 H                   | 35                         | 38.6                   | -7.1                           |
| 5                                                   | 204.73         | 30.1 QP                       | 43.5              | -13.4          | 1.50 H                   | 96                         | 40.3                   | -10.2                          |
| 6                                                   | 304.55         | 28.5 QP                       | 46.0              | -17.5          | 1.50 H                   | 210                        | 34.7                   | -6.2                           |

### REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



|                        |                |                              |                 |
|------------------------|----------------|------------------------------|-----------------|
| <b>CHANNEL</b>         | TX Channel 159 | <b>DETECTOR<br/>FUNCTION</b> | Quasi-Peak (QP) |
| <b>FREQUENCY RANGE</b> | 9kHz ~ 1GHz    |                              |                 |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|---------------------------------------------------|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.                                               | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1                                                 | 49.04          | 36.6 QP                       | 40.0              | -3.4           | 1.50 V                   | 206                        | 44.3                   | -7.7                           |
| 2                                                 | 79.22          | 36.0 QP                       | 40.0              | -4.0           | 3.00 V                   | 3                          | 48.5                   | -12.5                          |
| 3                                                 | 109.68         | 36.3 QP                       | 43.5              | -7.2           | 1.00 V                   | 290                        | 46.7                   | -10.4                          |
| 4                                                 | 177.03         | 32.2 QP                       | 43.5              | -11.3          | 1.00 V                   | 7                          | 40.6                   | -8.4                           |
| 5                                                 | 202.47         | 30.9 QP                       | 43.5              | -12.6          | 2.00 V                   | 93                         | 41.2                   | -10.3                          |
| 6                                                 | 335.58         | 27.7 QP                       | 46.0              | -18.3          | 1.50 V                   | 243                        | 33.0                   | -5.3                           |

#### REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

