

## FCC Test Report (WLAN)

**Report No.:** RFBEIH-WTW-P20110721-1

**FCC ID:** P27-XIONESCM1

**Test Model:** SCXI13AEI-BCO

**Series Model:** SCXIxxAEI-xCO  
(xx For Marketing purpose (e.g.11, 12,13,14~);  
x External Body Color for Product (e.g. Black=B; Gray=G; White= W))

**Received Date:** Nov. 24, 2020

**Test Date:** Dec. 7, 2020 to Jan. 5, 2021

**Issued Date:** Jan. 15, 2021

**Applicant:** Sercomm Corp.

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

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**FCC Registration /**  
**Designation Number:** 198487 / TW2021



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### Release Control Record

| Issue No.              | Description      | Date Issued   |
|------------------------|------------------|---------------|
| RFBEIH-WTW-P20110721-1 | Original release | Jan. 15, 2021 |

## 1 Certificate of Conformity

**Product:** Xione-SC

**Brand:** Comcast Xfinity

**Test Model:** SCXI13AEI-BCO

**Series Model:** SCXIxxAEI-xCO  
(xx For Marketing purpose (e.g.11, 12,13,14~);  
x External Body Color for Product (e.g. Black=B; Gray=G; White= W))

**Sample Status:** Engineering sample

**Applicant:** Sercomm Corp.

**Test Date:** Dec. 7, 2020 to Jan. 5, 2021

**Standards:** 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 RF characteristics under the conditions specified in this report.

**Prepared by :** Annie Chang, **Date:** Jan. 15, 2021  
Annie Chang / Senior Specialist

**Approved by :** Rex Lai, **Date:** Jan. 15, 2021  
Rex Lai / Associate 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. Minimum passing margin is -10.81dB at 0.59531MHz. |
| 15.407(b)(1/2/3/4(i/ii)/6)                     | Radiated Emissions & Band Edge Measurement | Pass   | Meet the requirement of limit. Minimum passing margin is -1.08dB at 5150.00MHz.  |
| 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. (U-NII-3 Band only)                               |
| 15.407(g)                                      | Frequency Stability                        | Pass   | Meet the requirement of limit.                                                   |
| 15.203                                         | Antenna Requirement                        | Pass   | No antenna connector is used.                                                    |

Note:

1. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A. Test Procedures refer to report 4.1.3.
2. For U-NII-1 band compliance with rule 15.407(b) of the band-edge items, the test plots were recorded in Annex B. Test Procedures refer to report 4.1.3.
3. 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 | 2.94 dB                              |
| Conducted Emissions                | 9kHz ~ 40GHz   | 2.63 dB                              |
| Radiated Emissions up to 1 GHz     | 9kHz ~ 30MHz   | 2.61 dB                              |
|                                    | 30MHz ~ 1GHz   | 5.43 dB                              |
| Radiated Emissions above 1 GHz     | Above 1GHz     | 5.14 dB                              |

### 2.2 Modification Record

There were no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product               | Xione-SC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Brand                 | Comcast Xnifity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Test Model            | SCXI13AEI-BCO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Series Model          | SCXIxxAEI-xCO<br>(xx For Marketing purpose (e.g.11, 12,13,14~);<br>x External Body Color for Product (e.g. Black=B; Gray=G; White= W))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Model Difference      | Marketing Differentiation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Sample Status         | Engineering sample                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Power Supply Rating   | 5Vdc from Adapter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Modulation Type       | 802.11a: BPSK, QPSK, 16QAM, 64QAM<br>802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM<br>802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Modulation Technology | OFDM, OFDMA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Transfer Rate         | 802.11a: 54/48/36/24/18/12/9/6Mbps<br>802.11n (20MHz/40MHz): up to 300Mbps<br>802.11ac (20MHz/40MHz/80MHz): up to 866.7Mbps<br>802.11ax (20MHz/40MHz/80MHz): up to 1201Mbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Operating Frequency   | 5180~5240MHz, 5260~5320MHz, 5500~5720MHz, 5745~5825MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Number of Channel     | 5180~5240MHz:<br>802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz): 4<br>802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz): 2<br>802.11ac (80MHz), 802.11ax (80MHz): 1<br>5260~5320MHz:<br>802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz): 4<br>802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz): 2<br>802.11ac (80MHz), 802.11ax (80MHz): 1<br>5500~5720MHz:<br>802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz): 12<br>802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz): 6<br>802.11ac (80MHz), 802.11ax (80MHz): 3<br>5745~5825MHz:<br>802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz): 5<br>802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz): 2<br>802.11ac (80MHz), 802.11ax (80MHz): 1 |
| Output Power          | <b>CDD Mode:</b><br>5180~5240MHz: 227.627mW<br>5260~5320MHz: 218.592mW<br>5500~5720MHz: 222.695mW<br>5745~5825MHz: 424.365mW<br><b>Beamforming Mode:</b><br>5180~5240MHz: 113.822mW<br>5260~5320MHz: 109.303mW<br>5500~5720MHz: 111.355mW<br>5745~5825MHz: 212.197mW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Antenna Type          | Ant. 0: Printed Antenna with 3.84dBi gain<br>Ant. 1: Printed Antenna with 4.03dBi gain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Antenna Connector     | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Accessory Device      | Adapter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

|                |    |
|----------------|----|
| Cable Supplied | NA |
|----------------|----|

Note:

1. The EUT provides 2 completed transmitters and 2 receivers.

| Modulation Mode  | CDD Mode | Beamforming Mode | TX Function |
|------------------|----------|------------------|-------------|
| 802.11a          | Support  | Not Support      | 2TX         |
| 802.11n (20MHz)  | Support  | Not Support      | 2TX         |
| 802.11n (40MHz)  | Support  | Not Support      | 2TX         |
| 802.11ac (20MHz) | Support  | Support          | 2TX         |
| 802.11ac (40MHz) | Support  | Support          | 2TX         |
| 802.11ac (80MHz) | Support  | Support          | 2TX         |
| 802.11ax (20MHz) | Support  | Support          | 2TX         |
| 802.11ax (40MHz) | Support  | Support          | 2TX         |
| 802.11ax (80MHz) | Support  | Support          | 2TX         |

\* The bandwidth and modulation are similar for 20MHz/40MHz on 802.11n mode and 20MHz/40MHz on 802.11n mode and 20MHz/40MHz on 802.11ax mode. Therefore the investigated worst case is the representative mode in test report. (Final test mode refer section 3.2.1)

\* For 802.11n/ac/ax, CDD mode and Beamforming mode are presented in power output test item. For other test items, CDD mode is the worst case for final tests after pretesting.

2. WLAN & Bluetooth technologies can transmit at same time. 2.4GHz & 5GHz WLAN technologies cannot transmit at same time.

3. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

4. The EUT consumes power from a switching power adapter, which has several models could be chosen, as the following:

| Adapter | Brand | Model No.       | Specification                                                                                    |
|---------|-------|-----------------|--------------------------------------------------------------------------------------------------|
| 1       | LEI   | ML08-7050150-A1 | AC I/P: 100-120V, 50/60Hz, 0.25A<br>DC O/P: 5V, 1.5A<br>AC 2 Pin<br>Non-shielded DC cable (1.8m) |
| 2       | Acbel | WAK010          | AC I/P: 100-120V, 50/60Hz, 0.25A<br>DC O/P: 5V, 1.5A<br>AC 2 Pin<br>Non-shielded DC cable (1.8m) |

The above two adapters were pre-tested, and Adapter 1 was the worst case for final test.

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



### 3.2 Description of Test Modes

#### For 5180 ~ 5240MHz:

4 channels are provided for 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz):

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

2 channels are provided for 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz):

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

1 channel is provided for 802.11ac (80MHz), 802.11ax (80MHz):

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

#### 5260~5320MHz:

4 channels are provided for 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 52      | 5260 MHz  | 60      | 5300 MHz  |
| 56      | 5280 MHz  | 64      | 5320 MHz  |

2 channels are provided for 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 54      | 5270 MHz  | 62      | 5310 MHz  |

1 channel is provided for 802.11ac (80MHz), 802.11ax (80MHz):

| Channel | Frequency |
|---------|-----------|
| 58      | 5290MHz   |

#### 5500~5720MHz:

12 channels are provided for 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz):

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

6 channels are provided for 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 102     | 5510 MHz  | 126     | 5630 MHz  |
| 110     | 5550 MHz  | 134     | 5670 MHz  |
| 118     | 5590 MHz  | 142     | 5710 MHz  |

3 channels are provided for 802.11ac (80MHz), 802.11ax (80MHz):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 106     | 5530 MHz  | 122     | 5610 MHz  |
| 138     | 5690 MHz  |         |           |

#### 5745~5825MHz:

5 channels are provided for 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz):

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

2 channels are provided for 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz):

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

1 channel is provided for 802.11ac (80MHz), 802.11ax (80MHz):

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

### 3.2.1 Test Mode Applicability and Tested Channel Detail

| EUT Configure Mode | Applicable To |       |     |      | Description |
|--------------------|---------------|-------|-----|------|-------------|
|                    | RE≥1G         | RE<1G | PLC | APCM |             |
| -                  | √             | √     | √   | √    | -           |

Where **RE≥1G**: Radiated Emission above 1GHz & Bandedge Measurement

**RE<1G**: Radiated Emission below 1GHz

**PLC**: Power Line Conducted Emission

**APCM**: Antenna Port Conducted Measurement

The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.

#### 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.

| EUT Configure Mode | Mode             | Frequency Band (MHz) | Available Channel | Tested Channel     | Modulation Technology | Data Rate (Mbps) |
|--------------------|------------------|----------------------|-------------------|--------------------|-----------------------|------------------|
| CDD Mode           |                  |                      |                   |                    |                       |                  |
| -                  | 802.11a          | 5180-5240            | 36 to 48          | 36, 40, 48         | OFDM                  | 6.0              |
|                    | 802.11ax (20MHz) |                      | 36 to 48          | 36, 40, 48         | OFDMA                 | MCS0             |
|                    | 802.11ax (40MHz) |                      | 38 to 46          | 38, 46             | OFDMA                 | MCS0             |
|                    | 802.11ax (80MHz) |                      | 42                | 42                 | OFDMA                 | MCS0             |
| -                  | 802.11a          | 5260-5320            | 52 to 64          | 52, 60, 64         | OFDM                  | 6.0              |
|                    | 802.11ax (20MHz) |                      | 52 to 64          | 52, 60, 64         | OFDMA                 | MCS0             |
|                    | 802.11ax (40MHz) |                      | 54 to 62          | 54, 62             | OFDMA                 | MCS0             |
|                    | 802.11ax (80MHz) |                      | 58                | 58                 | OFDMA                 | MCS0             |
| -                  | 802.11a          | 5500-5720            | 100 to 144        | 100, 116, 140, 144 | OFDM                  | 6.0              |
|                    | 802.11ax (20MHz) |                      | 100 to 144        | 100, 116, 140, 144 | OFDMA                 | MCS0             |
|                    | 802.11ax (40MHz) |                      | 102 to 142        | 102, 110, 134, 142 | OFDMA                 | MCS0             |
|                    | 802.11ax (80MHz) |                      | 106 to 138        | 106, 122, 138      | OFDMA                 | MCS0             |
| -                  | 802.11a          | 5745-5825            | 149 to 165        | 149, 157, 165      | OFDM                  | 6.0              |
|                    | 802.11ax (20MHz) |                      | 149 to 165        | 149, 157, 165      | OFDMA                 | MCS0             |
|                    | 802.11ax (40MHz) |                      | 151 to 159        | 151, 159           | OFDMA                 | MCS0             |
|                    | 802.11ax (80MHz) |                      | 155               | 155                | OFDMA                 | 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.

| EUT Configure Mode | Mode             | Frequency Band (MHz) | Available Channel | Tested Channel | Modulation Technology | Data Rate (Mbps) |
|--------------------|------------------|----------------------|-------------------|----------------|-----------------------|------------------|
| CDD Mode           |                  |                      |                   |                |                       |                  |
| -                  | 802.11ax (20MHz) | 5180-5240            | 36 to 48          | 157            | OFDMA                 | MCS0             |
| -                  | 802.11ax (20MHz) | 5260-5320            | 52 to 64          |                | OFDMA                 | MCS0             |
| -                  | 802.11ax (20MHz) | 5500-5720            | 100 to 144        |                | OFDMA                 | MCS0             |
| -                  | 802.11ax (20MHz) | 5745-5825            | 149 to 165        |                | OFDMA                 | MCS0             |

### 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.

| EUT Configure Mode | Mode             | Frequency Band (MHz) | Available Channel | Tested Channel | Modulation Technology | Data Rate (Mbps) |
|--------------------|------------------|----------------------|-------------------|----------------|-----------------------|------------------|
| CDD Mode           |                  |                      |                   |                |                       |                  |
| -                  | 802.11ax (20MHz) | 5180-5240            | 36 to 48          | 157            | OFDMA                 | MCS0             |
| -                  | 802.11ax (20MHz) | 5260-5320            | 52 to 64          |                | OFDMA                 | MCS0             |
| -                  | 802.11ax (20MHz) | 5500-5720            | 100 to 144        |                | OFDMA                 | MCS0             |
| -                  | 802.11ax (20MHz) | 5745-5825            | 149 to 165        |                | OFDMA                 | MCS0             |

### 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.

| EUT Configure Mode | Mode              | Frequency Band (MHz) | Available Channel | Tested Channel     | Modulation Technology | Data Rate (Mbps) |
|--------------------|-------------------|----------------------|-------------------|--------------------|-----------------------|------------------|
| CDD Mode           |                   |                      |                   |                    |                       |                  |
| -                  | 802.11a           | 5180-5240            | 36 to 48          | 36, 40, 48         | OFDM                  | 6.0              |
|                    | 802.11n (20MHz)*  |                      | 36 to 48          | 36, 40, 48         | OFDM                  | 6.5              |
|                    | 802.11n (40MHz)*  |                      | 38 to 46          | 38, 46             | OFDM                  | 13.5             |
|                    | 802.11ac (20MHz)* |                      | 36 to 48          | 36, 40, 48         | OFDM                  | 6.5              |
|                    | 802.11ac (40MHz)* |                      | 38 to 46          | 38, 46             | OFDM                  | 13.5             |
|                    | 802.11ac (80MHz)* |                      | 42                | 42                 | OFDM                  | 65.0             |
|                    | 802.11ax (20MHz)  |                      | 36 to 48          | 36, 40, 48         | OFDMA                 | MCS0             |
|                    | 802.11ax (40MHz)  |                      | 38 to 46          | 38, 46             | OFDMA                 | MCS0             |
|                    | 802.11ax (80MHz)  |                      | 42                | 42                 | OFDMA                 | MCS0             |
| -                  | 802.11a           | 5260-5320            | 52 to 64          | 52, 60, 64         | OFDM                  | 6.0              |
|                    | 802.11n (20MHz)*  |                      | 52 to 64          | 52, 60, 64         | OFDM                  | 6.5              |
|                    | 802.11n (40MHz)*  |                      | 54 to 62          | 54, 62             | OFDM                  | 13.5             |
|                    | 802.11ac (20MHz)* |                      | 52 to 64          | 52, 60, 64         | OFDM                  | 6.5              |
|                    | 802.11ac (40MHz)* |                      | 54 to 62          | 54, 62             | OFDM                  | 13.5             |
|                    | 802.11ac (80MHz)* |                      | 58                | 58                 | OFDM                  | 65.0             |
|                    | 802.11ax (20MHz)  |                      | 52 to 64          | 52, 60, 64         | OFDMA                 | MCS0             |
|                    | 802.11ax (40MHz)  |                      | 54 to 62          | 54, 62             | OFDMA                 | MCS0             |
|                    | 802.11ax (80MHz)  |                      | 58                | 58                 | OFDMA                 | MCS0             |
| -                  | 802.11a           | 5500-5720            | 100 to 144        | 100, 116, 140, 144 | OFDM                  | 6.0              |
|                    | 802.11n (20MHz)*  |                      | 100 to 144        | 100, 116, 140, 144 | OFDM                  | 6.5              |
|                    | 802.11n (40MHz)*  |                      | 102 to 142        | 102, 110, 134, 142 | OFDM                  | 13.5             |
|                    | 802.11ac (20MHz)* |                      | 100 to 144        | 100, 116, 140, 144 | OFDM                  | 6.5              |
|                    | 802.11ac (40MHz)* |                      | 102 to 142        | 102, 110, 134, 142 | OFDM                  | 13.5             |
|                    | 802.11ac (80MHz)* |                      | 106 to 138        | 106, 122, 138      | OFDM                  | 65.0             |
|                    | 802.11ax (20MHz)  |                      | 100 to 144        | 100, 116, 140, 144 | OFDMA                 | MCS0             |
|                    | 802.11ax (40MHz)  |                      | 102 to 142        | 102, 110, 134, 142 | OFDMA                 | MCS0             |
|                    | 802.11ax (80MHz)  |                      | 106 to 138        | 106, 122, 138      | OFDMA                 | MCS0             |

|                                                                                                        |                   |           |            |                    |       |      |
|--------------------------------------------------------------------------------------------------------|-------------------|-----------|------------|--------------------|-------|------|
| -                                                                                                      | 802.11a           | 5745-5825 | 149 to 165 | 149, 157, 165      | OFDM  | 6.0  |
|                                                                                                        | 802.11n (20MHz)*  |           | 149 to 165 | 149, 157, 165      | OFDM  | 6.5  |
|                                                                                                        | 802.11n (40MHz)*  |           | 151 to 159 | 151, 159           | OFDM  | 13.5 |
|                                                                                                        | 802.11ac (20MHz)* |           | 149 to 165 | 149, 157, 165      | OFDM  | 6.5  |
|                                                                                                        | 802.11ac (40MHz)* |           | 151 to 159 | 151, 159           | OFDM  | 13.5 |
|                                                                                                        | 802.11ac (80MHz)* |           | 155        | 155                | OFDM  | 65.0 |
|                                                                                                        | 802.11ax (20MHz)  |           | 149 to 165 | 149, 157, 165      | OFDMA | MCS0 |
|                                                                                                        | 802.11ax (40MHz)  |           | 151 to 159 | 151, 159           | OFDMA | MCS0 |
|                                                                                                        | 802.11ax (80MHz)  |           | 155        | 155                | OFDMA | MCS0 |
| *802.11ac (20MHz), 802.11ac (40MHz), 802.11ac (80MHz) are for Conducted Output Power Measurement only. |                   |           |            |                    |       |      |
| Beamforming Mode (Conducted Power Measurement only)                                                    |                   |           |            |                    |       |      |
| -                                                                                                      | 802.11ac (20MHz)  | 5180-5240 | 36 to 48   | 36, 40, 48         | OFDM  | 6.5  |
|                                                                                                        | 802.11ac (40MHz)  |           | 38 to 46   | 38, 46             | OFDM  | 13.5 |
|                                                                                                        | 802.11ac (80MHz)  |           | 42         | 42                 | OFDM  | 65.0 |
|                                                                                                        | 802.11ax (20MHz)  |           | 36 to 48   | 36, 40, 48         | OFDMA | MCS0 |
|                                                                                                        | 802.11ax (40MHz)  |           | 38 to 46   | 38, 46             | OFDMA | MCS0 |
|                                                                                                        | 802.11ax (80MHz)  |           | 42         | 42                 | OFDMA | MCS0 |
| -                                                                                                      | 802.11ac (20MHz)* | 5260-5320 | 52 to 64   | 52, 60, 64         | OFDM  | 6.5  |
|                                                                                                        | 802.11ac (40MHz)* |           | 54 to 62   | 54, 62             | OFDM  | 13.5 |
|                                                                                                        | 802.11ac (80MHz)* |           | 58         | 58                 | OFDM  | 65.0 |
|                                                                                                        | 802.11ax (20MHz)  |           | 52 to 64   | 52, 60, 64         | OFDMA | MCS0 |
|                                                                                                        | 802.11ax (40MHz)  |           | 54 to 62   | 54, 62             | OFDMA | MCS0 |
|                                                                                                        | 802.11ax (80MHz)  |           | 58         | 58                 | OFDMA | MCS0 |
| -                                                                                                      | 802.11ac (20MHz)* | 5500-5720 | 100 to 144 | 100, 116, 140, 144 | OFDM  | 6.5  |
|                                                                                                        | 802.11ac (40MHz)* |           | 102 to 142 | 102, 110, 134, 142 | OFDM  | 13.5 |
|                                                                                                        | 802.11ac (80MHz)* |           | 106 to 138 | 106, 122, 138      | OFDM  | 65.0 |
|                                                                                                        | 802.11ax (20MHz)  |           | 100 to 144 | 100, 116, 140, 144 | OFDMA | MCS0 |
|                                                                                                        | 802.11ax (40MHz)  |           | 102 to 142 | 102, 110, 134, 142 | OFDMA | MCS0 |
|                                                                                                        | 802.11ax (80MHz)  |           | 106 to 138 | 106, 122, 138      | OFDMA | MCS0 |
| -                                                                                                      | 802.11ac (20MHz)  | 5745-5825 | 149 to 165 | 149, 157, 165      | OFDM  | 6.5  |
|                                                                                                        | 802.11ac (40MHz)  |           | 151 to 159 | 151, 159           | OFDM  | 13.5 |
|                                                                                                        | 802.11ac (80MHz)  |           | 155        | 155                | OFDM  | 65.0 |
|                                                                                                        | 802.11ax (20MHz)  |           | 149 to 165 | 149, 157, 165      | OFDMA | MCS0 |
|                                                                                                        | 802.11ax (40MHz)  |           | 151 to 159 | 151, 159           | OFDMA | MCS0 |
|                                                                                                        | 802.11ax (80MHz)  |           | 155        | 155                | OFDMA | MCS0 |

#### Test Condition:

| Applicable to | Environmental Conditions | Input Power  | Tested by   |
|---------------|--------------------------|--------------|-------------|
| RE≥1G         | 17deg. C, 75%RH          | 120Vac, 60Hz | Dalen Dai   |
| RE<1G         | 19deg. C, 77%RH          | 120Vac, 60Hz | Dalen Dai   |
| PLC           | 25deg. C, 75%RH          | 120Vac, 60Hz | Pirar Hsieh |
| APCM          | 25deg. C, 76%RH          | 120Vac, 60Hz | Saxon Lee   |

### 3.3 Duty Cycle of Test Signal

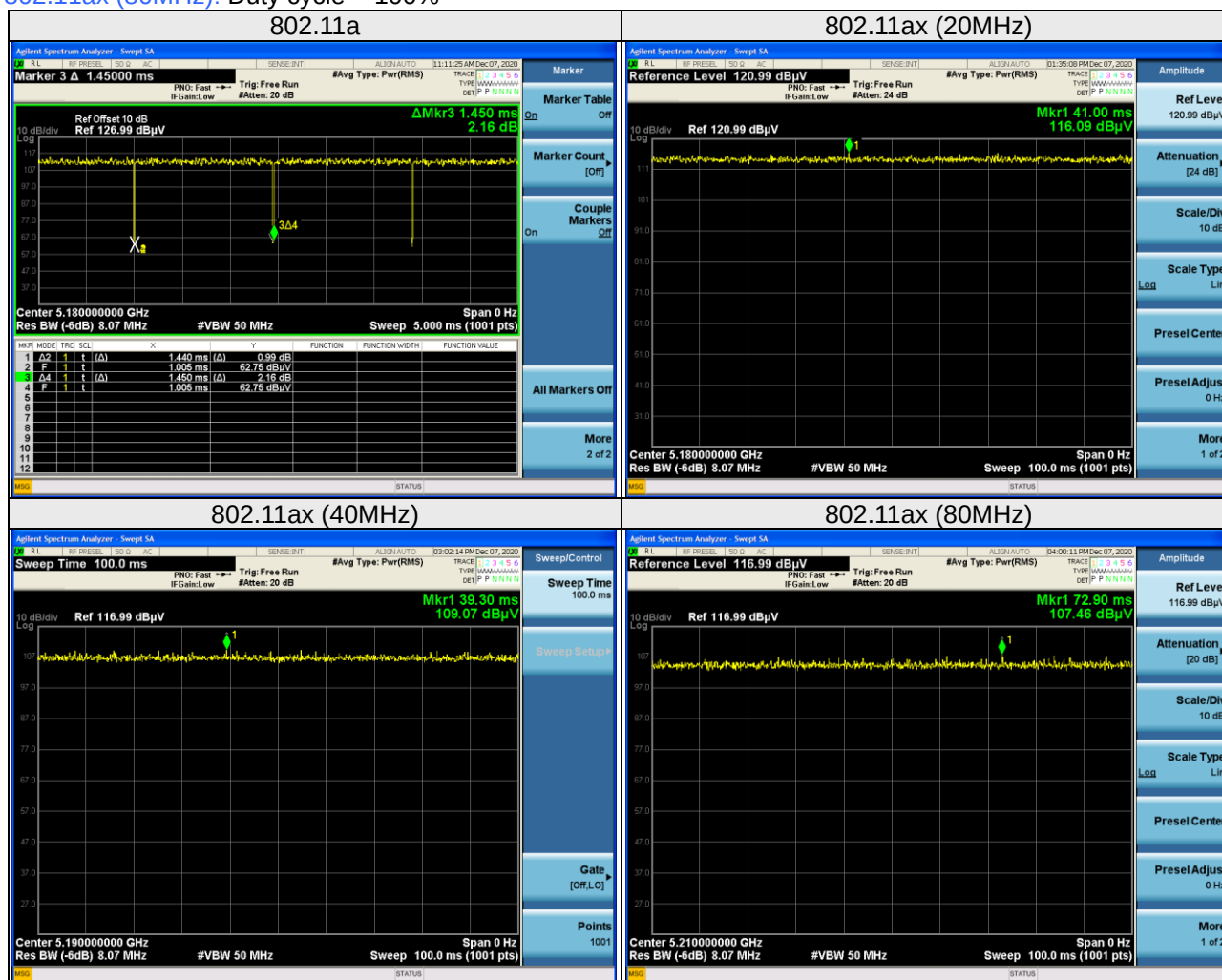
Duty cycle of test signal is  $\geq 98\%$ , duty factor is not required.

802.11a: Duty cycle =  $1.44/1.45 = 0.993$

802.11ax (20MHz): Duty cycle = 100%

802.11ax (40MHz): Duty cycle = 100%

802.11ax (80MHz): Duty cycle = 100%



### 3.4 Description of Support Units

The ET 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. | LCD Monitor | ASUS   | MG28UQ    | H8LMTF147978 | N/A    | Supplied by client |
| B. | Notebook PC | Lenovo | 81LG      | PHNGBDP      | N/A    | Provided by Lab    |

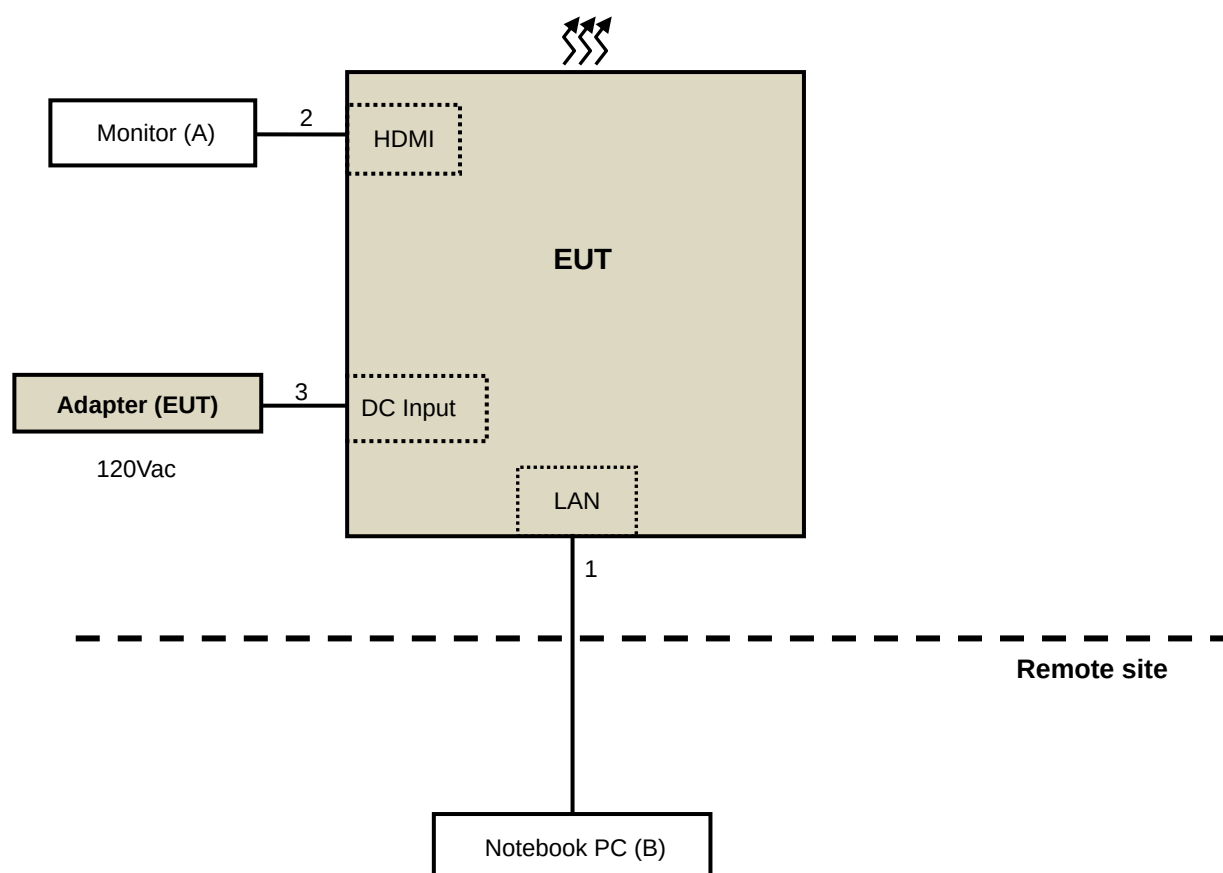
Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item B acted as communication partners to transfer data.

| No. | Cable Descriptions | Qty. | Length (m) | Shielding (Yes/ No) | Cores (Qty.) | Remarks                        |
|-----|--------------------|------|------------|---------------------|--------------|--------------------------------|
| 1.  | LAN cable          | 1    | 10         | N                   | 0            | Provided by Lab (RJ45, Cat.5e) |
| 2.  | HDMI cable         | 1    | 1.5        | Y                   | 0            | Provided by Lab                |
| 3.  | DC cable           | 1    | 1.8        | N                   | 0            | Supplied by client             |

**NOTE:** The core(s) is(are) originally attached to the cable(s).

#### 3.4.1 Configuration of System under Test



### 3.5 General Description of Applied Standards 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:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 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 (dBμV/m)                                                                                                                         | AV: 54 (dBμV/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(dBμV/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(dBμV/m) <sup>*1</sup><br>PK: 105.2 (dBμV/m) <sup>*2</sup><br>PK: 110.8(dBμV/m) <sup>*3</sup><br>PK: 122.2 (dBμV/m) <sup>*4</sup> |
|                                                                                                  | <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:

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

#### 4.1.2 Test Instruments

| DESCRIPTION & MANUFACTURER                    | MODEL NO.            | SERIAL NO.   | CALIBRATED DATE | CALIBRATED UNTIL |
|-----------------------------------------------|----------------------|--------------|-----------------|------------------|
| HP Preamplifier                               | 8447D                | 2432A03504   | Feb. 19, 2020   | Feb. 18, 2021    |
| HP Preamplifier                               | 8449B                | 3008A01201   | Feb. 20, 2020   | Feb. 19, 2021    |
| MITEQ Preamplifier                            | AMF-6F-260400-33-8P  | 892164       | Feb. 19, 2020   | Feb. 18, 2021    |
| Agilent TEST RECEIVER                         | N9038A               | MY51210129   | Mar. 18, 2020   | Mar. 17, 2021    |
| Schwarzbeck Antenna                           | VULB 9168            | 139          | Nov. 6, 2020    | Nov. 5, 2021     |
| Schwarzbeck Antenna                           | VHBA 9123            | 480          | Jun. 3, 2019    | Jun. 2, 2021     |
| Schwarzbeck Horn Antenna                      | BBHA-9170            | 212          | Nov. 22, 2020   | Nov. 21, 2021    |
| EMCO Horn Antenna                             | 3115                 | 00027024     | Nov. 22, 2020   | Nov.21, 2021     |
| ADT. Turn Table                               | TT100                | 0306         | NA              | NA               |
| ADT. Tower                                    | AT100                | 0306         | NA              | NA               |
| Software                                      | Radiated_V7.6.15.9.5 | NA           | NA              | NA               |
| SUHNER RF cable<br>With 4dB PAD               | SF102                | Cable-CH6-01 | Jul. 9, 2020    | Jul. 8, 2021     |
| EMEC RF cable<br>With 3/4dB PAD               | EM102-KMKM           | 01           | Aug. 21, 2020   | Aug. 20, 2021    |
| KEYSIGHT MIMO<br>Powermeasurement Test<br>set | U2021XA              | U2021XA-001  | Jun. 16, 2020   | Jun. 15, 2021    |
| KEYSIGHT<br>Spectrum Analyzer                 | N9030A               | MY54490260   | Jul. 22, 2020   | Jul. 21, 2021    |
| Loop Antenna EMCI                             | LPA600               | 270          | Aug. 23, 2019   | Aug. 22, 2021    |
| EMCO Horn Antenna                             | 3115                 | 00028257     | Nov. 22, 2020   | Nov. 21, 2021    |
| Highpass filter<br>Wainwright Instruments     | WHK 3.1/18G-10SS     | SN 8         | NA              | NA               |
| ROHDE & SCHWARZ<br>Spectrum Analyzer          | FSV40                | 101042       | Sep. 8, 2020    | Sep. 7, 2021     |
| Anritsu<br>Power Sensor                       | MA2411B              | 0738404      | Apr. 13, 2020   | Apr. 12, 2021    |
| Anritsu<br>Power Meter                        | ML2495A              | 0842014      | Apr. 13, 2020   | Apr. 12, 2021    |

- NOTE:** 1. The calibration interval of the above test instruments is 12/24 months. And the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in Chamber No. 6.

#### 4.1.3 Test Procedures

##### 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 detect 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:

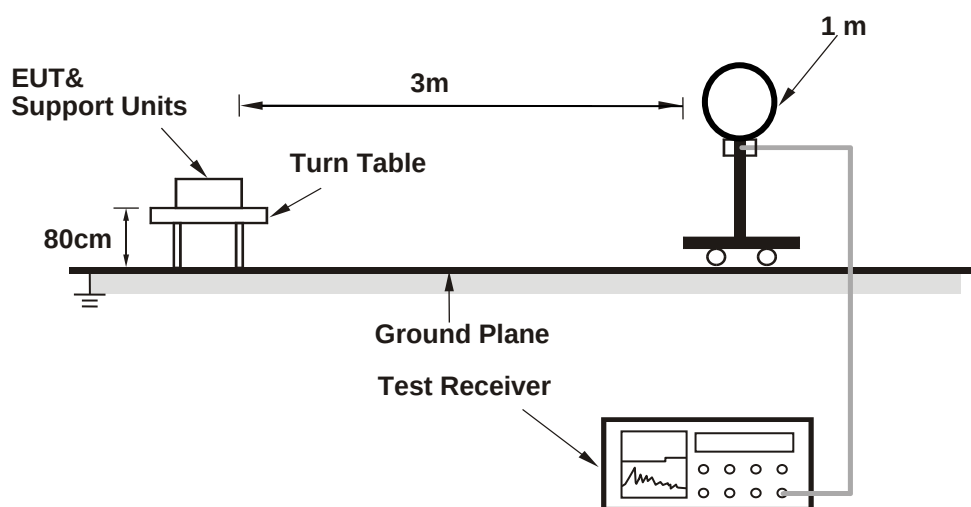
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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.  
(802.11a: RBW = 1MHz, VBW = 10Hz; 802.11ax (20MHz): RBW = 1MHz, VBW = 10Hz;  
802.11ax (40MHz): RBW = 1MHz, VBW = 10Hz; 802.11ax (80MHz): RBW = 1MHz, VBW = 10Hz)
4. All modes of operation were investigated and the worst-case emissions are reported.

#### 4.1.4 Deviation from Test Standard

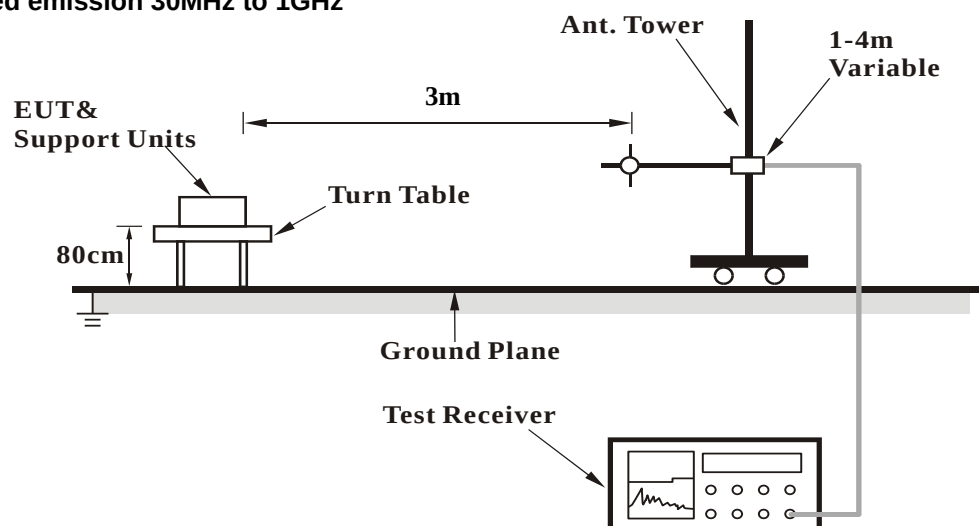
No deviation.

#### 4.1.5 Test Setup

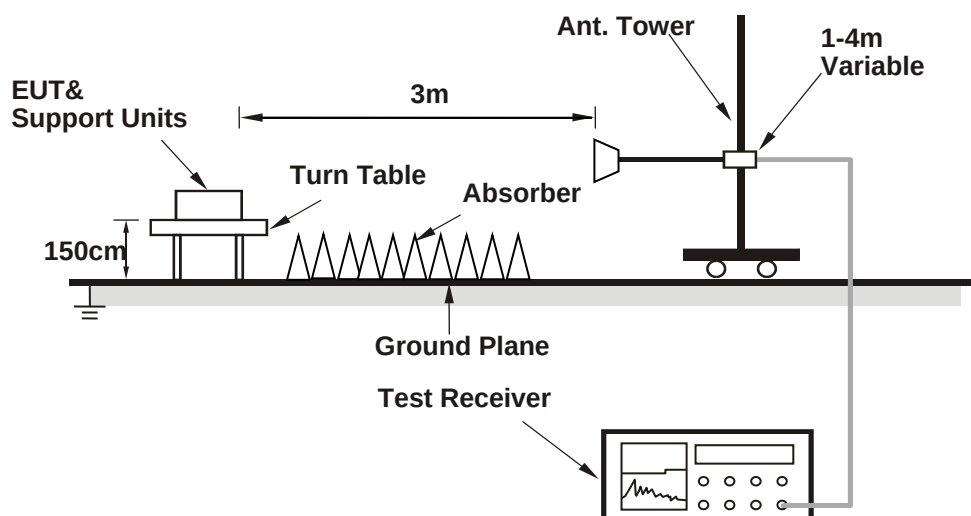
##### For Radiated emission below 30MHz



##### 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 Conditions

- Placed the EUT on the testing table.
- Prepared a notebook to act as a communication partner and placed it outside of testing area.
- The communication partner connected with EUT via a RJ45 cable and ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
- The communication partner sent data to EUT by command "PING".

#### 4.1.7 Test Results

##### CDD Mode

Above 1GHz data:

|                        |              |                          |                           |
|------------------------|--------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 36 : 5180 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 65.14 PK                | 74.00          | -8.86       | 1.00 H             | 17                   | 55.13            | 10.01                    |
| 2                                                    | 5150.00         | 52.92 AV                | 54.00          | -1.08       | 1.00 H             | 17                   | 42.91            | 10.01                    |
| 3                                                    | *5180.00        | 115.63 PK               |                |             | 1.00 H             | 17                   | 105.56           | 10.07                    |
| 4                                                    | *5180.00        | 108.04 AV               |                |             | 1.00 H             | 17                   | 97.97            | 10.07                    |
| 5                                                    | #10360.00       | 57.11 PK                | 68.20          | -11.09      | 1.06 H             | 138                  | 40.93            | 16.18                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 61.14 PK                | 74.00          | -12.86      | 2.66 V             | 266                  | 51.13            | 10.01                    |
| 2                                                    | 5150.00         | 48.95 AV                | 54.00          | -5.05       | 2.66 V             | 266                  | 38.94            | 10.01                    |
| 3                                                    | *5180.00        | 111.76 PK               |                |             | 2.66 V             | 266                  | 101.69           | 10.07                    |
| 4                                                    | *5180.00        | 103.81 AV               |                |             | 2.66 V             | 266                  | 93.74            | 10.07                    |
| 5                                                    | #10360.00       | 56.83 PK                | 68.20          | -11.37      | 1.39 V             | 231                  | 40.65            | 16.18                    |

##### 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>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 40 : 5200 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5200.00        | 117.14 PK               |                |             | 1.14 H             | 18                   | 107.04           | 10.10                    |
| 2                                                    | *5200.00        | 109.76 AV               |                |             | 1.14 H             | 18                   | 99.66            | 10.10                    |
| 3                                                    | #10400.00       | 57.39 PK                | 68.20          | -10.81      | 1.21 H             | 153                  | 41.19            | 16.20                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5200.00        | 113.08 PK               |                |             | 2.41 V             | 269                  | 102.98           | 10.10                    |
| 2                                                    | *5200.00        | 104.96 AV               |                |             | 2.41 V             | 269                  | 94.86            | 10.10                    |
| 3                                                    | #10400.00       | 56.94 PK                | 68.20          | -11.26      | 1.52 V             | 227                  | 40.74            | 16.20                    |

**Remarks:**

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

|                        |              |                          |                           |
|------------------------|--------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 48 : 5240 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5240.00        | 117.45 PK               |                |             | 1.01 H             | 16                   | 107.18           | 10.27                    |
| 2                                                    | *5240.00        | 109.35 AV               |                |             | 1.01 H             | 16                   | 99.08            | 10.27                    |
| 3                                                    | 5350.00         | 52.29 PK                | 74.00          | -21.71      | 1.01 H             | 16                   | 41.30            | 10.99                    |
| 4                                                    | 5350.00         | 42.38 AV                | 54.00          | -11.62      | 1.01 H             | 16                   | 31.39            | 10.99                    |
| 5                                                    | #10480.00       | 57.33 PK                | 68.20          | -10.87      | 1.18 H             | 145                  | 41.19            | 16.14                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5240.00        | 112.86 PK               |                |             | 2.47 V             | 265                  | 102.59           | 10.27                    |
| 2                                                    | *5240.00        | 104.59 AV               |                |             | 2.47 V             | 265                  | 94.32            | 10.27                    |
| 3                                                    | 5350.00         | 50.16 PK                | 74.00          | -23.84      | 2.47 V             | 265                  | 39.17            | 10.99                    |
| 4                                                    | 5350.00         | 41.08 AV                | 54.00          | -12.92      | 2.47 V             | 265                  | 30.09            | 10.99                    |
| 5                                                    | #10480.00       | 56.90 PK                | 68.20          | -11.30      | 1.45 V             | 238                  | 40.76            | 16.14                    |

**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>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 52 : 5260 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 52.48 PK                | 74.00          | -21.52      | 1.00 H             | 19                   | 42.47            | 10.01                    |
| 2                                                    | 5150.00         | 42.32 AV                | 54.00          | -11.68      | 1.00 H             | 19                   | 32.31            | 10.01                    |
| 3                                                    | *5260.00        | 117.85 PK               |                |             | 1.00 H             | 19                   | 107.47           | 10.38                    |
| 4                                                    | *5260.00        | 109.92 AV               |                |             | 1.00 H             | 19                   | 99.54            | 10.38                    |
| 5                                                    | #10520.00       | 57.30 PK                | 68.20          | -10.90      | 1.13 H             | 150                  | 41.21            | 16.09                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 52.12 PK                | 74.00          | -21.88      | 2.63 V             | 269                  | 42.11            | 10.01                    |
| 2                                                    | 5150.00         | 42.09 AV                | 54.00          | -11.91      | 2.63 V             | 269                  | 32.08            | 10.01                    |
| 3                                                    | *5260.00        | 113.27 PK               |                |             | 2.63 V             | 269                  | 102.89           | 10.38                    |
| 4                                                    | *5260.00        | 105.40 AV               |                |             | 2.63 V             | 269                  | 95.02            | 10.38                    |
| 5                                                    | #10520.00       | 56.98 PK                | 68.20          | -11.22      | 1.51 V             | 225                  | 40.89            | 16.09                    |

**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>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 60 : 5300 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5300.00        | 118.18 PK               |                |             | 1.01 H             | 18                   | 107.51           | 10.67                    |
| 2                                                    | *5300.00        | 110.44 AV               |                |             | 1.01 H             | 18                   | 99.77            | 10.67                    |
| 3                                                    | 10600.00        | 57.33 PK                | 74.00          | -16.67      | 1.09 H             | 156                  | 41.38            | 15.95                    |
| 4                                                    | 10600.00        | 46.79 AV                | 54.00          | -7.21       | 1.09 H             | 156                  | 30.84            | 15.95                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5300.00        | 114.34 PK               |                |             | 2.66 V             | 267                  | 103.67           | 10.67                    |
| 2                                                    | *5300.00        | 116.49 AV               |                |             | 2.66 V             | 267                  | 105.82           | 10.67                    |
| 3                                                    | 10600.00        | 57.11 PK                | 74.00          | -16.89      | 1.48 V             | 233                  | 41.16            | 15.95                    |
| 4                                                    | 10600.00        | 46.57 AV                | 54.00          | -7.43       | 1.48 V             | 233                  | 30.62            | 15.95                    |

**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.

|                        |              |                          |                           |
|------------------------|--------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 64 : 5320 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5320.00        | 116.32 PK               |                |             | 1.00 H             | 17                   | 105.52           | 10.80                    |
| 2                                                    | *5320.00        | 107.99 AV               |                |             | 1.00 H             | 17                   | 97.19            | 10.80                    |
| 3                                                    | 5350.00         | 63.39 PK                | 74.00          | -10.61      | 1.00 H             | 17                   | 52.40            | 10.99                    |
| 4                                                    | 5350.00         | 52.41 AV                | 54.00          | -1.59       | 1.00 H             | 17                   | 41.42            | 10.99                    |
| 5                                                    | 10640.00        | 57.16 PK                | 74.00          | -16.84      | 1.12 H             | 158                  | 41.02            | 16.14                    |
| 6                                                    | 10640.00        | 46.62 AV                | 54.00          | -7.38       | 1.12 H             | 158                  | 30.48            | 16.14                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5320.00        | 111.81 PK               |                |             | 2.65 V             | 266                  | 101.01           | 10.80                    |
| 2                                                    | *5320.00        | 103.66 AV               |                |             | 2.65 V             | 266                  | 92.86            | 10.80                    |
| 3                                                    | 5350.00         | 59.38 PK                | 74.00          | -14.62      | 2.65 V             | 266                  | 48.39            | 10.99                    |
| 4                                                    | 5350.00         | 48.18 AV                | 54.00          | -5.82       | 2.65 V             | 266                  | 37.19            | 10.99                    |
| 5                                                    | 10640.00        | 56.75 PK                | 74.00          | -17.25      | 1.44 V             | 229                  | 40.61            | 16.14                    |
| 6                                                    | 10640.00        | 46.39 AV                | 54.00          | -7.61       | 1.44 V             | 229                  | 30.25            | 16.14                    |

**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.

|                 |              |                   |                           |
|-----------------|--------------|-------------------|---------------------------|
| RF Mode         | TX 802.11a   | Channel           | CH 100 : 5500 MHz         |
| Frequency Range | 1GHz ~ 40GHz | Detector Function | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 60.93 PK                | 74.00          | -13.07      | 1.02 H             | 28                   | 49.33            | 11.60                    |
| 2                                                    | 5460.00         | 47.28 AV                | 54.00          | -6.72       | 1.02 H             | 28                   | 35.68            | 11.60                    |
| 3                                                    | #5470.00        | 66.54 PK                | 68.20          | -1.66       | 1.02 H             | 28                   | 54.87            | 11.67                    |
| 4                                                    | *5500.00        | 116.43 PK               |                |             | 1.02 H             | 28                   | 104.59           | 11.84                    |
| 5                                                    | *5500.00        | 108.27 AV               |                |             | 1.02 H             | 28                   | 96.43            | 11.84                    |
| 6                                                    | 11000.00        | 57.13 PK                | 74.00          | -16.87      | 1.16 H             | 157                  | 40.15            | 16.98                    |
| 7                                                    | 11000.00        | 46.70 AV                | 54.00          | -7.30       | 1.16 H             | 157                  | 29.72            | 16.98                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 56.71 PK                | 74.00          | -17.29      | 2.66 V             | 268                  | 45.11            | 11.60                    |
| 2                                                    | 5460.00         | 45.03 AV                | 54.00          | -8.97       | 2.66 V             | 268                  | 33.43            | 11.60                    |
| 3                                                    | #5470.00        | 64.85 PK                | 68.20          | -3.35       | 2.66 V             | 268                  | 53.18            | 11.67                    |
| 4                                                    | *5500.00        | 111.95 PK               |                |             | 2.66 V             | 268                  | 100.11           | 11.84                    |
| 5                                                    | *5500.00        | 103.64 AV               |                |             | 2.66 V             | 268                  | 91.80            | 11.84                    |
| 6                                                    | 11000.00        | 56.84 PK                | 74.00          | -17.16      | 1.52 V             | 238                  | 39.86            | 16.98                    |
| 7                                                    | 11000.00        | 46.63 AV                | 54.00          | -7.37       | 1.52 V             | 238                  | 29.65            | 16.98                    |

**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>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 116 : 5580 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5580.00        | 116.94 PK               |                |             | 1.00 H             | 26                   | 105.80           | 11.14                    |
| 2                                                    | *5580.00        | 108.70 AV               |                |             | 1.00 H             | 26                   | 97.56            | 11.14                    |
| 3                                                    | 11160.00        | 57.29 PK                | 74.00          | -16.71      | 1.11 H             | 164                  | 39.47            | 17.82                    |
| 4                                                    | 11160.00        | 46.92 AV                | 54.00          | -7.08       | 1.11 H             | 164                  | 29.10            | 17.82                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5580.00        | 112.66 PK               |                |             | 2.62 V             | 273                  | 101.52           | 11.14                    |
| 2                                                    | *5580.00        | 104.37 AV               |                |             | 2.62 V             | 273                  | 93.23            | 11.14                    |
| 3                                                    | 11160.00        | 56.97 PK                | 74.00          | -17.03      | 1.58 V             | 231                  | 39.15            | 17.82                    |
| 4                                                    | 11160.00        | 46.75 AV                | 54.00          | -7.25       | 1.58 V             | 231                  | 28.93            | 17.82                    |

**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.

|                        |              |                          |                           |
|------------------------|--------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 140 : 5700 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5700.00        | 115.82 PK               |                |             | 1.01 H             | 24                   | 105.07           | 10.75                    |
| 2                                                    | *5700.00        | 107.84 AV               |                |             | 1.01 H             | 24                   | 97.09            | 10.75                    |
| 3                                                    | #5725.00        | 67.06 PK                | 68.20          | -1.14       | 1.01 H             | 24                   | 56.35            | 10.71                    |
| 4                                                    | 11400.00        | 57.20 PK                | 74.00          | -16.80      | 1.08 H             | 155                  | 39.25            | 17.95                    |
| 5                                                    | 11400.00        | 46.73 AV                | 54.00          | -7.27       | 1.08 H             | 155                  | 28.78            | 17.95                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5700.00        | 110.99 PK               |                |             | 2.65 V             | 269                  | 100.24           | 10.75                    |
| 2                                                    | *5700.00        | 103.27 AV               |                |             | 2.65 V             | 269                  | 92.52            | 10.75                    |
| 3                                                    | #5725.00        | 63.24 PK                | 68.20          | -4.96       | 2.65 V             | 269                  | 52.53            | 10.71                    |
| 4                                                    | 11400.00        | 56.90 PK                | 74.00          | -17.10      | 1.61 V             | 227                  | 38.95            | 17.95                    |
| 5                                                    | 11400.00        | 46.68 AV                | 54.00          | -7.32       | 1.61 V             | 227                  | 28.73            | 17.95                    |

**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>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 144 : 5720 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5470.00        | 50.46 PK                | 68.20          | -17.74      | 1.00 H             | 22                   | 38.79            | 11.67                    |
| 2                                                    | *5720.00        | 117.65 PK               |                |             | 1.00 H             | 22                   | 106.92           | 10.73                    |
| 3                                                    | *5720.00        | 109.32 AV               |                |             | 1.00 H             | 22                   | 98.59            | 10.73                    |
| 4                                                    | 11440.00        | 57.25 PK                | 74.00          | -16.75      | 1.12 H             | 165                  | 39.05            | 18.20                    |
| 5                                                    | 11440.00        | 46.96 AV                | 54.00          | -7.04       | 1.12 H             | 165                  | 28.76            | 18.20                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5470.00        | 49.93 PK                | 68.20          | -18.27      | 2.63 V             | 270                  | 38.26            | 11.67                    |
| 2                                                    | *5720.00        | 112.66 PK               |                |             | 2.63 V             | 270                  | 101.93           | 10.73                    |
| 3                                                    | *5720.00        | 104.78 AV               |                |             | 2.63 V             | 270                  | 94.05            | 10.73                    |
| 4                                                    | 11440.00        | 56.90 PK                | 74.00          | -17.10      | 1.55 V             | 234                  | 38.70            | 18.20                    |
| 5                                                    | 11440.00        | 46.68 AV                | 54.00          | -7.32       | 1.55 V             | 234                  | 28.48            | 18.20                    |

**Remarks:**

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

|                        |              |                          |                           |
|------------------------|--------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 149 : 5745 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5608.57        | 56.29 PK                | 68.20          | -11.91      | 2.74 H             | 22                   | 45.36            | 10.93                    |
| 2                                                    | *5745.00        | 119.68 PK               |                |             | 2.74 H             | 22                   | 108.99           | 10.69                    |
| 3                                                    | *5745.00        | 111.59 AV               |                |             | 2.74 H             | 22                   | 100.90           | 10.69                    |
| 4                                                    | #6010.92        | 57.56 PK                | 68.20          | -10.64      | 2.74 H             | 22                   | 46.59            | 10.97                    |
| 5                                                    | 11490.00        | 58.88 PK                | 74.00          | -15.12      | 1.52 H             | 236                  | 40.36            | 18.52                    |
| 6                                                    | 11490.00        | 47.83 AV                | 54.00          | -6.17       | 1.52 H             | 236                  | 29.31            | 18.52                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5611.54        | 56.50 PK                | 68.20          | -11.70      | 2.78 V             | 198                  | 45.58            | 10.92                    |
| 2                                                    | *5745.00        | 115.31 PK               |                |             | 2.78 V             | 198                  | 104.62           | 10.69                    |
| 3                                                    | *5745.00        | 107.08 AV               |                |             | 2.78 V             | 198                  | 96.39            | 10.69                    |
| 4                                                    | #5993.41        | 56.86 PK                | 68.20          | -11.34      | 2.78 V             | 198                  | 45.90            | 10.96                    |
| 5                                                    | 11490.00        | 58.15 PK                | 74.00          | -15.85      | 2.22 V             | 152                  | 39.63            | 18.52                    |
| 6                                                    | 11490.00        | 47.19 AV                | 54.00          | -6.81       | 2.22 V             | 152                  | 28.67            | 18.52                    |

**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>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 157 : 5785 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5612.15        | 55.47 PK                | 68.20          | -12.73      | 2.50 H             | 17                   | 44.55            | 10.92                    |
| 2                                                    | *5785.00        | 119.59 PK               |                |             | 2.50 H             | 17                   | 108.96           | 10.63                    |
| 3                                                    | *5785.00        | 110.99 AV               |                |             | 2.50 H             | 17                   | 100.36           | 10.63                    |
| 4                                                    | #5942.79        | 56.92 PK                | 68.20          | -11.28      | 2.50 H             | 17                   | 46.17            | 10.75                    |
| 5                                                    | 11570.00        | 59.00 PK                | 74.00          | -15.00      | 1.45 H             | 163                  | 40.20            | 18.80                    |
| 6                                                    | 11570.00        | 48.44 AV                | 54.00          | -5.56       | 1.45 H             | 163                  | 29.64            | 18.80                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5605.85        | 56.07 PK                | 68.20          | -12.13      | 2.81 V             | 188                  | 45.13            | 10.94                    |
| 2                                                    | *5785.00        | 114.89 PK               |                |             | 2.81 V             | 188                  | 104.26           | 10.63                    |
| 3                                                    | *5785.00        | 107.17 AV               |                |             | 2.81 V             | 188                  | 96.54            | 10.63                    |
| 4                                                    | #6000.55        | 56.76 PK                | 68.20          | -11.44      | 2.81 V             | 188                  | 45.77            | 10.99                    |
| 5                                                    | 11570.00        | 58.14 PK                | 74.00          | -15.86      | 2.39 V             | 204                  | 39.34            | 18.80                    |
| 6                                                    | 11570.00        | 47.44 AV                | 54.00          | -6.56       | 2.39 V             | 204                  | 28.64            | 18.80                    |

**Remarks:**

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

|                        |              |                          |                           |
|------------------------|--------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11a   | <b>Channel</b>           | CH 165 : 5825 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5597.51        | 56.21 PK                | 68.20          | -11.99      | 2.57 H             | 25                   | 45.25            | 10.96                    |
| 2                                                    | *5825.00        | 119.54 PK               |                |             | 2.57 H             | 25                   | 108.96           | 10.58                    |
| 3                                                    | *5825.00        | 111.04 AV               |                |             | 2.57 H             | 25                   | 100.46           | 10.58                    |
| 4                                                    | #5997.77        | 56.73 PK                | 68.20          | -11.47      | 2.57 H             | 25                   | 45.75            | 10.98                    |
| 5                                                    | 11650.00        | 58.78 PK                | 74.00          | -15.22      | 2.26 H             | 321                  | 40.19            | 18.59                    |
| 6                                                    | 11650.00        | 47.93 AV                | 54.00          | -6.07       | 2.26 H             | 321                  | 29.34            | 18.59                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5617.93        | 56.26 PK                | 68.20          | -11.94      | 2.84 V             | 186                  | 45.35            | 10.91                    |
| 2                                                    | *5825.00        | 115.32 PK               |                |             | 2.84 V             | 186                  | 104.74           | 10.58                    |
| 3                                                    | *5825.00        | 106.78 AV               |                |             | 2.84 V             | 186                  | 96.20            | 10.58                    |
| 4                                                    | #5955.91        | 57.06 PK                | 68.20          | -11.14      | 2.84 V             | 186                  | 46.25            | 10.81                    |
| 5                                                    | 11650.00        | 57.78 PK                | 74.00          | -16.22      | 1.84 V             | 234                  | 39.19            | 18.59                    |
| 6                                                    | 11650.00        | 46.93 AV                | 54.00          | -7.07       | 1.84 V             | 234                  | 28.34            | 18.59                    |

**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>RF Mode</b>         | TX 802.11ax (20MHz) | <b>Channel</b>           | CH 36 : 5180 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 67.86 PK                | 74.00          | -6.14       | 1.01 H             | 19                   | 57.85            | 10.01                    |
| 2                                                    | 5150.00         | 52.36 AV                | 54.00          | -1.64       | 1.01 H             | 19                   | 42.35            | 10.01                    |
| 3                                                    | *5180.00        | 118.59 PK               |                |             | 1.01 H             | 19                   | 108.52           | 10.07                    |
| 4                                                    | *5180.00        | 107.51 AV               |                |             | 1.01 H             | 19                   | 97.44            | 10.07                    |
| 5                                                    | #10360.00       | 57.06 PK                | 68.20          | -11.14      | 1.23 H             | 142                  | 40.88            | 16.18                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 62.63 PK                | 74.00          | -11.37      | 2.66 V             | 267                  | 52.62            | 10.01                    |
| 2                                                    | 5150.00         | 49.77 AV                | 54.00          | -4.23       | 2.66 V             | 267                  | 39.76            | 10.01                    |
| 3                                                    | *5180.00        | 113.51 PK               |                |             | 2.66 V             | 267                  | 103.44           | 10.07                    |
| 4                                                    | *5180.00        | 102.43 AV               |                |             | 2.66 V             | 267                  | 92.36            | 10.07                    |
| 5                                                    | #10360.00       | 56.85 PK                | 68.20          | -11.35      | 1.46 V             | 259                  | 40.67            | 16.18                    |

**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>RF Mode</b>         | TX 802.11ax (20MHz) | <b>Channel</b>           | CH 40 : 5200 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5200.00        | 120.04 PK               |                |             | 1.00 H             | 20                   | 109.94           | 10.10                    |
| 2                                                    | *5200.00        | 108.58 AV               |                |             | 1.00 H             | 20                   | 98.48            | 10.10                    |
| 3                                                    | #10400.00       | 57.34 PK                | 68.20          | -10.86      | 1.18 H             | 135                  | 41.14            | 16.20                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5200.00        | 114.93 PK               |                |             | 2.64 V             | 266                  | 104.83           | 10.10                    |
| 2                                                    | *5200.00        | 103.88 AV               |                |             | 2.64 V             | 266                  | 93.78            | 10.10                    |
| 3                                                    | #10400.00       | 57.12 PK                | 68.20          | -11.08      | 1.43 V             | 241                  | 40.92            | 16.20                    |

**Remarks:**

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

|                        |                     |                          |                           |
|------------------------|---------------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11ax (20MHz) | <b>Channel</b>           | CH 48 : 5240 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5240.00        | 119.41 PK               |                |             | 1.00 H             | 18                   | 109.14           | 10.27                    |
| 2                                                    | *5240.00        | 108.34 AV               |                |             | 1.00 H             | 18                   | 98.07            | 10.27                    |
| 3                                                    | 5350.00         | 53.16 PK                | 74.00          | -20.84      | 1.00 H             | 18                   | 42.17            | 10.99                    |
| 4                                                    | 5350.00         | 42.22 AV                | 54.00          | -11.78      | 1.00 H             | 18                   | 31.23            | 10.99                    |
| 5                                                    | #10480.00       | 57.22 PK                | 68.20          | -10.98      | 1.13 H             | 131                  | 41.08            | 16.14                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5240.00        | 114.29 PK               |                |             | 2.65 V             | 268                  | 104.02           | 10.27                    |
| 2                                                    | *5240.00        | 103.33 AV               |                |             | 2.65 V             | 268                  | 93.06            | 10.27                    |
| 3                                                    | 5350.00         | 51.27 PK                | 74.00          | -22.73      | 2.65 V             | 268                  | 40.28            | 10.99                    |
| 4                                                    | 5350.00         | 40.93 AV                | 54.00          | -13.07      | 2.65 V             | 268                  | 29.94            | 10.99                    |
| 5                                                    | #10480.00       | 56.99 PK                | 68.20          | -11.21      | 1.52 V             | 237                  | 40.85            | 16.14                    |

**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>RF Mode</b>         | TX 802.11ax (20MHz) | <b>Channel</b>           | CH 52 : 5260 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 52.54 PK                | 74.00          | -21.46      | 1.00 H             | 20                   | 42.53            | 10.01                    |
| 2                                                    | 5150.00         | 42.44 AV                | 54.00          | -11.56      | 1.00 H             | 20                   | 32.43            | 10.01                    |
| 3                                                    | *5260.00        | 119.81 PK               |                |             | 1.00 H             | 20                   | 109.43           | 10.38                    |
| 4                                                    | *5260.00        | 109.02 AV               |                |             | 1.00 H             | 20                   | 98.64            | 10.38                    |
| 5                                                    | #10520.00       | 57.28 PK                | 68.20          | -10.92      | 1.16 H             | 154                  | 41.19            | 16.09                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 52.33 PK                | 74.00          | -21.67      | 2.61 V             | 266                  | 42.32            | 10.01                    |
| 2                                                    | 5150.00         | 42.25 AV                | 54.00          | -11.75      | 2.61 V             | 266                  | 32.24            | 10.01                    |
| 3                                                    | *5260.00        | 115.26 PK               |                |             | 2.61 V             | 266                  | 104.88           | 10.38                    |
| 4                                                    | *5260.00        | 104.48 AV               |                |             | 2.61 V             | 266                  | 94.10            | 10.38                    |
| 5                                                    | #10520.00       | 56.97 PK                | 68.20          | -11.23      | 1.56 V             | 229                  | 40.88            | 16.09                    |

**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>RF Mode</b>         | TX 802.11ax (20MHz) | <b>Channel</b>           | CH 60 : 5300 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5300.00        | 120.01 PK               |                |             | 1.01 H             | 25                   | 109.34           | 10.67                    |
| 2                                                    | *5300.00        | 109.28 AV               |                |             | 1.01 H             | 25                   | 98.61            | 10.67                    |
| 3                                                    | 10600.00        | 57.27 PK                | 74.00          | -16.73      | 1.08 H             | 151                  | 41.32            | 15.95                    |
| 4                                                    | 10600.00        | 46.73 AV                | 54.00          | -7.27       | 1.08 H             | 151                  | 30.78            | 15.95                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5300.00        | 114.96 PK               |                |             | 2.65 V             | 268                  | 104.29           | 10.67                    |
| 2                                                    | *5300.00        | 104.22 AV               |                |             | 2.65 V             | 268                  | 93.55            | 10.67                    |
| 3                                                    | 10600.00        | 57.04 PK                | 74.00          | -16.96      | 1.49 V             | 232                  | 41.09            | 15.95                    |
| 4                                                    | 10600.00        | 46.52 AV                | 54.00          | -7.48       | 1.49 V             | 232                  | 30.57            | 15.95                    |

**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.

|                        |                     |                          |                           |
|------------------------|---------------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11ax (20MHz) | <b>Channel</b>           | CH 64 : 5320 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5320.00        | 118.64 PK               |                |             | 1.00 H             | 16                   | 107.84           | 10.80                    |
| 2                                                    | *5320.00        | 107.89 AV               |                |             | 1.00 H             | 16                   | 97.09            | 10.80                    |
| 3                                                    | 5350.00         | 64.31 PK                | 74.00          | -9.69       | 1.00 H             | 16                   | 53.32            | 10.99                    |
| 4                                                    | 5350.00         | 52.27 AV                | 54.00          | -1.73       | 1.00 H             | 16                   | 41.28            | 10.99                    |
| 5                                                    | 10640.00        | 57.11 PK                | 74.00          | -16.89      | 1.11 H             | 157                  | 40.97            | 16.14                    |
| 6                                                    | 10640.00        | 46.60 AV                | 54.00          | -7.40       | 1.11 H             | 157                  | 30.46            | 16.14                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5320.00        | 114.52 PK               |                |             | 2.63 V             | 269                  | 103.72           | 10.80                    |
| 2                                                    | *5320.00        | 103.68 AV               |                |             | 2.63 V             | 269                  | 92.88            | 10.80                    |
| 3                                                    | 5350.00         | 51.98 PK                | 74.00          | -22.02      | 2.63 V             | 269                  | 40.99            | 10.99                    |
| 4                                                    | 5350.00         | 49.36 AV                | 54.00          | -4.64       | 2.63 V             | 269                  | 38.37            | 10.99                    |
| 5                                                    | 10640.00        | 56.85 PK                | 74.00          | -17.15      | 1.52 V             | 225                  | 40.71            | 16.14                    |
| 6                                                    | 10640.00        | 46.41 AV                | 54.00          | -7.59       | 1.52 V             | 225                  | 30.27            | 16.14                    |

**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.



|                 |                     |                   |                           |
|-----------------|---------------------|-------------------|---------------------------|
| RF Mode         | TX 802.11ax (20MHz) | Channel           | CH 100 : 5500 MHz         |
| Frequency Range | 1GHz ~ 40GHz        | Detector Function | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 58.94 PK                | 74.00          | -15.06      | 1.00 H             | 22                   | 47.34            | 11.60                    |
| 2                                                    | 5460.00         | 44.56 AV                | 54.00          | -9.44       | 1.00 H             | 22                   | 32.96            | 11.60                    |
| 3                                                    | #5470.00        | 66.59 PK                | 68.20          | -1.61       | 1.00 H             | 22                   | 54.92            | 11.67                    |
| 4                                                    | *5500.00        | 117.49 PK               |                |             | 1.00 H             | 22                   | 105.65           | 11.84                    |
| 5                                                    | *5500.00        | 106.32 AV               |                |             | 1.00 H             | 22                   | 94.48            | 11.84                    |
| 6                                                    | 11000.00        | 57.08 PK                | 74.00          | -16.92      | 1.13 H             | 155                  | 40.10            | 16.98                    |
| 7                                                    | 11000.00        | 46.62 AV                | 54.00          | -7.38       | 1.13 H             | 155                  | 29.64            | 16.98                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 57.01 PK                | 74.00          | -16.99      | 2.63 V             | 272                  | 45.41            | 11.60                    |
| 2                                                    | 5460.00         | 44.07 AV                | 54.00          | -9.93       | 2.63 V             | 272                  | 32.47            | 11.60                    |
| 3                                                    | #5470.00        | 63.25 PK                | 68.20          | -4.95       | 2.63 V             | 272                  | 51.58            | 11.67                    |
| 4                                                    | *5500.00        | 112.62 PK               |                |             | 2.63 V             | 272                  | 100.78           | 11.84                    |
| 5                                                    | *5500.00        | 101.81 AV               |                |             | 2.63 V             | 272                  | 89.97            | 11.84                    |
| 6                                                    | 11000.00        | 56.79 PK                | 74.00          | -17.21      | 1.56 V             | 224                  | 39.81            | 16.98                    |
| 7                                                    | 11000.00        | 46.55 AV                | 54.00          | -7.45       | 1.56 V             | 224                  | 29.57            | 16.98                    |

**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>RF Mode</b>         | TX 802.11ax (20MHz) | <b>Channel</b>           | CH 116 : 5580 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5580.00        | 117.97 PK               |                |             | 1.01 H             | 26                   | 106.83           | 11.14                    |
| 2                                                    | *5580.00        | 106.88 AV               |                |             | 1.01 H             | 26                   | 95.74            | 11.14                    |
| 3                                                    | 11160.00        | 57.14 PK                | 74.00          | -16.86      | 1.15 H             | 149                  | 39.32            | 17.82                    |
| 4                                                    | 11160.00        | 46.70 AV                | 54.00          | -7.30       | 1.15 H             | 149                  | 28.88            | 17.82                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5580.00        | 113.93 PK               |                |             | 2.66 V             | 268                  | 102.79           | 11.14                    |
| 2                                                    | *5580.00        | 102.85 AV               |                |             | 2.66 V             | 268                  | 91.71            | 11.14                    |
| 3                                                    | 11160.00        | 56.90 PK                | 74.00          | -17.10      | 1.53 V             | 231                  | 39.08            | 17.82                    |
| 4                                                    | 11160.00        | 46.64 AV                | 54.00          | -7.36       | 1.53 V             | 231                  | 28.82            | 17.82                    |

**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.

|                        |                     |                          |                           |
|------------------------|---------------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11ax (20MHz) | <b>Channel</b>           | CH 140 : 5700 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5700.00        | 117.31 PK               |                |             | 1.01 H             | 23                   | 106.56           | 10.75                    |
| 2                                                    | *5700.00        | 106.63 AV               |                |             | 1.01 H             | 23                   | 95.88            | 10.75                    |
| 3                                                    | #5725.00        | 67.09 PK                | 68.20          | -1.11       | 1.01 H             | 23                   | 56.38            | 10.71                    |
| 4                                                    | 11400.00        | 57.08 PK                | 74.00          | -16.92      | 1.09 H             | 152                  | 39.13            | 17.95                    |
| 5                                                    | 11400.00        | 46.56 AV                | 54.00          | -7.44       | 1.09 H             | 152                  | 28.61            | 17.95                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5700.00        | 113.19 PK               |                |             | 2.58 V             | 263                  | 102.44           | 10.75                    |
| 2                                                    | *5700.00        | 102.63 AV               |                |             | 2.58 V             | 263                  | 91.88            | 10.75                    |
| 3                                                    | #5725.00        | 63.14 PK                | 68.20          | -5.06       | 2.58 V             | 263                  | 52.43            | 10.71                    |
| 4                                                    | 11400.00        | 56.85 PK                | 74.00          | -17.15      | 1.56 V             | 237                  | 38.90            | 17.95                    |
| 5                                                    | 11400.00        | 46.44 AV                | 54.00          | -7.56       | 1.56 V             | 237                  | 28.49            | 17.95                    |

**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>RF Mode</b>         | TX 802.11ax (20MHz) | <b>Channel</b>           | CH 144 : 5720 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5470.00        | 53.46 PK                | 68.20          | -14.74      | 1.00 H             | 24                   | 41.79            | 11.67                    |
| 2                                                    | *5720.00        | 119.96 PK               |                |             | 1.00 H             | 24                   | 109.23           | 10.73                    |
| 3                                                    | *5720.00        | 108.93 AV               |                |             | 1.00 H             | 24                   | 98.20            | 10.73                    |
| 4                                                    | 11440.00        | 57.29 PK                | 74.00          | -16.71      | 1.14 H             | 129                  | 39.09            | 18.20                    |
| 5                                                    | 11440.00        | 46.75 AV                | 54.00          | -7.25       | 1.14 H             | 129                  | 28.55            | 18.20                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5470.00        | 53.19 PK                | 68.20          | -15.01      | 2.68 V             | 271                  | 41.52            | 11.67                    |
| 2                                                    | *5720.00        | 115.52 PK               |                |             | 2.68 V             | 271                  | 104.79           | 10.73                    |
| 3                                                    | *5720.00        | 104.67 AV               |                |             | 2.68 V             | 271                  | 93.94            | 10.73                    |
| 4                                                    | 11440.00        | 57.06 PK                | 74.00          | -16.94      | 1.56 V             | 228                  | 38.86            | 18.20                    |
| 5                                                    | 11440.00        | 46.59 AV                | 54.00          | -7.41       | 1.56 V             | 228                  | 28.39            | 18.20                    |

**Remarks:**

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

|                 |                     |                   |                           |
|-----------------|---------------------|-------------------|---------------------------|
| RF Mode         | TX 802.11ax (20MHz) | Channel           | CH 149 : 5745 MHz         |
| Frequency Range | 1GHz ~ 40GHz        | Detector Function | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5644.63        | 56.67 PK                | 68.20          | -11.53      | 2.60 H             | 17                   | 45.83            | 10.84                    |
| 2                                                    | *5745.00        | 121.97 PK               |                |             | 2.60 H             | 17                   | 111.28           | 10.69                    |
| 3                                                    | *5745.00        | 111.04 AV               |                |             | 2.60 H             | 17                   | 100.35           | 10.69                    |
| 4                                                    | #5983.38        | 56.22 PK                | 68.20          | -11.98      | 2.60 H             | 17                   | 45.30            | 10.92                    |
| 5                                                    | 11490.00        | 58.88 PK                | 74.00          | -15.12      | 1.55 H             | 235                  | 40.36            | 18.52                    |
| 6                                                    | 11490.00        | 48.16 AV                | 54.00          | -5.84       | 1.55 H             | 235                  | 29.64            | 18.52                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5625.25        | 55.84 PK                | 68.20          | -12.36      | 2.84 V             | 192                  | 44.95            | 10.89                    |
| 2                                                    | *5745.00        | 118.15 PK               |                |             | 2.84 V             | 192                  | 107.46           | 10.69                    |
| 3                                                    | *5745.00        | 107.04 AV               |                |             | 2.84 V             | 192                  | 96.35            | 10.69                    |
| 4                                                    | #5954.38        | 56.32 PK                | 68.20          | -11.88      | 2.84 V             | 192                  | 45.52            | 10.80                    |
| 5                                                    | 11490.00        | 57.84 PK                | 74.00          | -16.16      | 1.52 V             | 263                  | 39.32            | 18.52                    |
| 6                                                    | 11490.00        | 47.20 AV                | 54.00          | -6.80       | 1.52 V             | 263                  | 28.68            | 18.52                    |

**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.

|                 |                     |                   |                           |
|-----------------|---------------------|-------------------|---------------------------|
| RF Mode         | TX 802.11ax (20MHz) | Channel           | CH 157 : 5785 MHz         |
| Frequency Range | 1GHz ~ 40GHz        | Detector Function | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5616.37        | 56.83 PK                | 68.20          | -11.37      | 2.59 H             | 17                   | 45.92            | 10.91                    |
| 2                                                    | *5785.00        | 122.59 PK               |                |             | 2.59 H             | 17                   | 111.96           | 10.63                    |
| 3                                                    | *5785.00        | 111.47 AV               |                |             | 2.59 H             | 17                   | 100.84           | 10.63                    |
| 4                                                    | #5942.79        | 56.67 PK                | 68.20          | -11.53      | 2.59 H             | 17                   | 45.92            | 10.75                    |
| 5                                                    | 11570.00        | 59.04 PK                | 74.00          | -14.96      | 1.54 H             | 231                  | 40.24            | 18.80                    |
| 6                                                    | 11570.00        | 48.11 AV                | 54.00          | -5.89       | 1.54 H             | 231                  | 29.31            | 18.80                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5628.54        | 55.43 PK                | 68.20          | -12.77      | 2.68 V             | 197                  | 44.55            | 10.88                    |
| 2                                                    | *5785.00        | 118.15 PK               |                |             | 2.68 V             | 197                  | 107.52           | 10.63                    |
| 3                                                    | *5785.00        | 107.26 AV               |                |             | 2.68 V             | 197                  | 96.63            | 10.63                    |
| 4                                                    | #5964.47        | 56.79 PK                | 68.20          | -11.41      | 2.68 V             | 197                  | 45.95            | 10.84                    |
| 5                                                    | 11570.00        | 57.94 PK                | 74.00          | -16.06      | 2.41 V             | 222                  | 39.14            | 18.80                    |
| 6                                                    | 11570.00        | 47.12 AV                | 54.00          | -6.88       | 2.41 V             | 222                  | 28.32            | 18.80                    |

**Remarks:**

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

|                        |                     |                          |                           |
|------------------------|---------------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11ax (20MHz) | <b>Channel</b>           | CH 165 : 5825 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5580.23        | 56.40 PK                | 68.20          | -11.80      | 2.68 H             | 20                   | 45.26            | 11.14                    |
| 2                                                    | *5825.00        | 122.03 PK               |                |             | 2.68 H             | 20                   | 111.45           | 10.58                    |
| 3                                                    | *5825.00        | 111.21 AV               |                |             | 2.68 H             | 20                   | 100.63           | 10.58                    |
| 4                                                    | #5965.06        | 57.42 PK                | 68.20          | -10.78      | 2.68 H             | 20                   | 46.56            | 10.86                    |
| 5                                                    | 11650.00        | 58.82 PK                | 74.00          | -15.18      | 1.24 H             | 215                  | 40.23            | 18.59                    |
| 6                                                    | 11650.00        | 47.90 AV                | 54.00          | -6.10       | 1.24 H             | 215                  | 29.31            | 18.59                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5585.68        | 56.24 PK                | 68.20          | -11.96      | 2.63 V             | 199                  | 45.15            | 11.09                    |
| 2                                                    | *5825.00        | 117.67 PK               |                |             | 2.63 V             | 199                  | 107.09           | 10.58                    |
| 3                                                    | *5825.00        | 106.82 AV               |                |             | 2.63 V             | 199                  | 96.24            | 10.58                    |
| 4                                                    | #5991.55        | 56.47 PK                | 68.20          | -11.73      | 2.63 V             | 199                  | 45.51            | 10.96                    |
| 5                                                    | 11650.00        | 57.85 PK                | 74.00          | -16.15      | 1.47 V             | 121                  | 39.26            | 18.59                    |
| 6                                                    | 11650.00        | 47.11 AV                | 54.00          | -6.89       | 1.47 V             | 121                  | 28.52            | 18.59                    |

**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>RF Mode</b>         | TX 802.11ax (40MHz) | <b>Channel</b>           | CH 38 : 5190 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 67.23 PK                | 74.00          | -6.77       | 1.01 H             | 19                   | 57.22            | 10.01                    |
| 2                                                    | 5150.00         | 52.82 AV                | 54.00          | -1.18       | 1.01 H             | 19                   | 42.81            | 10.01                    |
| 3                                                    | *5190.00        | 112.43 PK               |                |             | 1.01 H             | 19                   | 102.34           | 10.09                    |
| 4                                                    | *5190.00        | 101.88 AV               |                |             | 1.01 H             | 19                   | 91.79            | 10.09                    |
| 5                                                    | #10380.00       | 56.39 PK                | 68.20          | -11.81      | 1.31 H             | 158                  | 40.20            | 16.19                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 61.36 PK                | 74.00          | -12.64      | 2.66 V             | 277                  | 51.35            | 10.01                    |
| 2                                                    | 5150.00         | 49.24 AV                | 54.00          | -4.76       | 2.66 V             | 277                  | 39.23            | 10.01                    |
| 3                                                    | *5190.00        | 107.57 PK               |                |             | 2.66 V             | 277                  | 97.48            | 10.09                    |
| 4                                                    | *5190.00        | 96.29 AV                |                |             | 2.66 V             | 277                  | 86.20            | 10.09                    |
| 5                                                    | #10380.00       | 56.25 PK                | 68.20          | -11.95      | 1.43 V             | 234                  | 40.06            | 16.19                    |

**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>RF Mode</b>         | TX 802.11ax (40MHz) | <b>Channel</b>           | CH 46 : 5230 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 65.04 PK                | 74.00          | -8.96       | 1.00 H             | 18                   | 55.03            | 10.01                    |
| 2                                                    | 5150.00         | 52.09 AV                | 54.00          | -1.91       | 1.00 H             | 18                   | 42.08            | 10.01                    |
| 3                                                    | *5230.00        | 117.36 PK               |                |             | 1.00 H             | 18                   | 107.13           | 10.23                    |
| 4                                                    | *5230.00        | 105.61 AV               |                |             | 1.00 H             | 18                   | 95.38            | 10.23                    |
| 5                                                    | 5350.00         | 52.69 PK                | 74.00          | -21.31      | 1.00 H             | 18                   | 41.70            | 10.99                    |
| 6                                                    | 5350.00         | 42.95 AV                | 54.00          | -11.05      | 1.00 H             | 18                   | 31.96            | 10.99                    |
| 7                                                    | #10460.00       | 57.03 PK                | 68.20          | -11.17      | 1.22 H             | 145                  | 40.87            | 16.16                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 59.42 PK                | 74.00          | -14.58      | 2.64 V             | 273                  | 49.41            | 10.01                    |
| 2                                                    | 5150.00         | 48.82 AV                | 54.00          | -5.18       | 2.64 V             | 273                  | 38.81            | 10.01                    |
| 3                                                    | *5230.00        | 112.18 PK               |                |             | 2.64 V             | 273                  | 101.95           | 10.23                    |
| 4                                                    | *5230.00        | 100.56 AV               |                |             | 2.64 V             | 273                  | 90.33            | 10.23                    |
| 5                                                    | 5350.00         | 51.93 PK                | 74.00          | -22.07      | 2.64 V             | 273                  | 40.94            | 10.99                    |
| 6                                                    | 5350.00         | 42.27 AV                | 54.00          | -11.73      | 2.64 V             | 273                  | 31.28            | 10.99                    |
| 7                                                    | #10460.00       | 56.79 PK                | 68.20          | -11.41      | 1.55 V             | 231                  | 40.63            | 16.16                    |

**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>RF Mode</b>         | TX 802.11ax (40MHz) | <b>Channel</b>           | CH 54 : 5270 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5270.00        | 117.81 PK               |                |             | 1.00 H             | 2                    | 107.36           | 10.45                    |
| 2                                                    | *5270.00        | 106.75 AV               |                |             | 1.00 H             | 2                    | 96.30            | 10.45                    |
| 3                                                    | 5350.00         | 68.94 PK                | 74.00          | -5.06       | 1.00 H             | 2                    | 57.95            | 10.99                    |
| 4                                                    | 5350.00         | 52.85 AV                | 54.00          | -1.15       | 1.00 H             | 2                    | 41.86            | 10.99                    |
| 5                                                    | #10540.00       | 56.91 PK                | 68.20          | -11.29      | 1.10 H             | 160                  | 40.86            | 16.05                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5270.00        | 113.30 PK               |                |             | 2.59 V             | 264                  | 102.85           | 10.45                    |
| 2                                                    | *5270.00        | 103.32 AV               |                |             | 2.59 V             | 264                  | 92.87            | 10.45                    |
| 3                                                    | 5350.00         | 63.14 PK                | 74.00          | -10.86      | 2.59 V             | 264                  | 52.15            | 10.99                    |
| 4                                                    | 5350.00         | 49.66 AV                | 54.00          | -4.34       | 2.59 V             | 264                  | 38.67            | 10.99                    |
| 5                                                    | #10540.00       | 56.77 PK                | 68.20          | -11.43      | 1.63 V             | 237                  | 40.72            | 16.05                    |

**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.

|                 |                     |                   |                           |
|-----------------|---------------------|-------------------|---------------------------|
| RF Mode         | TX 802.11ax (40MHz) | Channel           | CH 62 : 5310 MHz          |
| Frequency Range | 1GHz ~ 40GHz        | Detector Function | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5310.00        | 113.59 PK               |                |             | 1.00 H             | 14                   | 102.85           | 10.74                    |
| 2                                                    | *5310.00        | 102.32 AV               |                |             | 1.00 H             | 14                   | 91.58            | 10.74                    |
| 3                                                    | 5350.00         | 65.09 PK                | 74.00          | -8.91       | 1.00 H             | 14                   | 54.10            | 10.99                    |
| 4                                                    | 5350.00         | 52.76 AV                | 54.00          | -1.24       | 1.00 H             | 14                   | 41.77            | 10.99                    |
| 5                                                    | 10620.00        | 56.81 PK                | 74.00          | -17.19      | 1.12 H             | 163                  | 40.77            | 16.04                    |
| 6                                                    | 10620.00        | 46.58 AV                | 54.00          | -7.42       | 1.12 H             | 163                  | 30.54            | 16.04                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5310.00        | 108.52 PK               |                |             | 2.71 V             | 262                  | 97.78            | 10.74                    |
| 2                                                    | *5310.00        | 97.48 AV                |                |             | 2.71 V             | 262                  | 86.74            | 10.74                    |
| 3                                                    | 5350.00         | 60.85 PK                | 74.00          | -13.15      | 2.71 V             | 262                  | 49.86            | 10.99                    |
| 4                                                    | 5350.00         | 50.19 AV                | 54.00          | -3.81       | 2.71 V             | 262                  | 39.20            | 10.99                    |
| 5                                                    | 10620.00        | 56.69 PK                | 74.00          | -17.31      | 1.60 V             | 233                  | 40.65            | 16.04                    |
| 6                                                    | 10620.00        | 46.43 AV                | 54.00          | -7.57       | 1.60 V             | 233                  | 30.39            | 16.04                    |

**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.

|                        |                     |                          |                           |
|------------------------|---------------------|--------------------------|---------------------------|
| <b>RF Mode</b>         | TX 802.11ax (40MHz) | <b>Channel</b>           | CH 102 : 5510 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 60.01 PK                | 74.00          | -13.99      | 2.69 H             | 17                   | 48.41            | 11.60                    |
| 2                                                    | 5460.00         | 45.33 AV                | 54.00          | -8.67       | 2.69 H             | 17                   | 33.73            | 11.60                    |
| 3                                                    | #5470.00        | 67.01 PK                | 68.20          | -1.19       | 2.69 H             | 17                   | 55.34            | 11.67                    |
| 4                                                    | *5510.00        | 116.48 PK               |                |             | 2.69 H             | 17                   | 104.73           | 11.75                    |
| 5                                                    | *5510.00        | 104.99 AV               |                |             | 2.69 H             | 17                   | 93.24            | 11.75                    |
| 6                                                    | 11020.00        | 57.24 PK                | 74.00          | -16.76      | 1.65 H             | 241                  | 40.16            | 17.08                    |
| 7                                                    | 11020.00        | 46.71 AV                | 54.00          | -7.29       | 1.65 H             | 241                  | 29.63            | 17.08                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 55.79 PK                | 74.00          | -18.21      | 2.68 V             | 159                  | 44.19            | 11.60                    |
| 2                                                    | 5460.00         | 42.19 AV                | 54.00          | -11.81      | 2.68 V             | 159                  | 30.59            | 11.60                    |
| 3                                                    | #5470.00        | 62.86 PK                | 68.20          | -5.34       | 2.68 V             | 159                  | 51.19            | 11.67                    |
| 4                                                    | *5510.00        | 112.01 PK               |                |             | 2.68 V             | 159                  | 100.26           | 11.75                    |
| 5                                                    | *5510.00        | 101.51 AV               |                |             | 2.68 V             | 159                  | 89.76            | 11.75                    |
| 6                                                    | 11020.00        | 56.34 PK                | 74.00          | -17.66      | 2.14 V             | 154                  | 39.26            | 17.08                    |
| 7                                                    | 11020.00        | 46.21 AV                | 54.00          | -7.79       | 2.14 V             | 154                  | 29.13            | 17.08                    |

**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>RF Mode</b>         | TX 802.11ax (40MHz) | <b>Channel</b>           | CH 110 : 5550 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 61.24 PK                | 74.00          | -12.76      | 2.76 H             | 22                   | 49.64            | 11.60                    |
| 2                                                    | 5460.00         | 48.66 AV                | 54.00          | -5.34       | 2.76 H             | 22                   | 37.06            | 11.60                    |
| 3                                                    | #5470.00        | 66.90 PK                | 68.20          | -1.30       | 2.76 H             | 22                   | 55.23            | 11.67                    |
| 4                                                    | *5550.00        | 118.49 PK               |                |             | 2.76 H             | 22                   | 107.08           | 11.41                    |
| 5                                                    | *5550.00        | 107.41 AV               |                |             | 2.76 H             | 22                   | 96.00            | 11.41                    |
| 6                                                    | 11100.00        | 58.34 PK                | 74.00          | -15.66      | 1.62 H             | 234                  | 40.84            | 17.50                    |
| 7                                                    | 11100.00        | 47.18 AV                | 54.00          | -6.82       | 1.62 H             | 234                  | 29.68            | 17.50                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 56.96 PK                | 74.00          | -17.04      | 2.74 V             | 187                  | 45.36            | 11.60                    |
| 2                                                    | 5460.00         | 44.86 AV                | 54.00          | -9.14       | 2.74 V             | 187                  | 33.26            | 11.60                    |
| 3                                                    | #5470.00        | 63.16 PK                | 68.20          | -5.04       | 2.74 V             | 187                  | 51.49            | 11.67                    |
| 4                                                    | *5550.00        | 114.87 PK               |                |             | 2.74 V             | 187                  | 103.46           | 11.41                    |
| 5                                                    | *5550.00        | 103.77 AV               |                |             | 2.74 V             | 187                  | 92.36            | 11.41                    |
| 6                                                    | 11100.00        | 57.76 PK                | 74.00          | -16.24      | 1.25 V             | 263                  | 40.26            | 17.50                    |
| 7                                                    | 11100.00        | 46.63 AV                | 54.00          | -7.37       | 1.25 V             | 263                  | 29.13            | 17.50                    |

**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>RF Mode</b>         | TX 802.11ax (40MHz) | <b>Channel</b>           | CH 134 : 5670 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5670.00        | 115.41 PK               |                |             | 2.55 H             | 15                   | 104.62           | 10.79                    |
| 2                                                    | *5670.00        | 104.74 AV               |                |             | 2.55 H             | 15                   | 93.95            | 10.79                    |
| 3                                                    | #5725.00        | 66.79 PK                | 68.20          | -1.41       | 2.55 H             | 15                   | 56.08            | 10.71                    |
| 4                                                    | 11340.00        | 58.15 PK                | 74.00          | -15.85      | 1.84 H             | 265                  | 40.66            | 17.49                    |
| 5                                                    | 11340.00        | 47.23 AV                | 54.00          | -6.77       | 1.84 H             | 265                  | 29.74            | 17.49                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5670.00        | 110.95 PK               |                |             | 2.69 V             | 196                  | 100.16           | 10.79                    |
| 2                                                    | *5670.00        | 100.43 AV               |                |             | 2.69 V             | 196                  | 89.64            | 10.79                    |
| 3                                                    | #5725.00        | 62.89 PK                | 68.20          | -5.31       | 2.69 V             | 196                  | 52.18            | 10.71                    |
| 4                                                    | 11340.00        | 57.70 PK                | 74.00          | -16.30      | 2.41 V             | 266                  | 40.21            | 17.49                    |
| 5                                                    | 11340.00        | 46.80 AV                | 54.00          | -7.20       | 2.41 V             | 266                  | 29.31            | 17.49                    |

**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>RF Mode</b>         | TX 802.11ax (40MHz) | <b>Channel</b>           | CH 142 : 5710 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5470.00        | 54.20 PK                | 68.20          | -14.00      | 2.76 H             | 14                   | 42.53            | 11.67                    |
| 2                                                    | *5710.00        | 119.09 PK               |                |             | 2.76 H             | 14                   | 108.36           | 10.73                    |
| 3                                                    | *5710.00        | 107.68 AV               |                |             | 2.76 H             | 14                   | 96.95            | 10.73                    |
| 4                                                    | 11420.00        | 58.76 PK                | 74.00          | -15.24      | 1.84 H             | 156                  | 40.68            | 18.08                    |
| 5                                                    | 11420.00        | 47.77 AV                | 54.00          | -6.23       | 1.84 H             | 156                  | 29.69            | 18.08                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5470.00        | 51.83 PK                | 68.20          | -16.37      | 2.78 V             | 187                  | 40.16            | 11.67                    |
| 2                                                    | *5710.00        | 115.27 PK               |                |             | 2.78 V             | 187                  | 104.54           | 10.73                    |
| 3                                                    | *5710.00        | 103.09 AV               |                |             | 2.78 V             | 187                  | 92.36            | 10.73                    |
| 4                                                    | 11420.00        | 58.23 PK                | 74.00          | -15.77      | 1.63 V             | 263                  | 40.15            | 18.08                    |
| 5                                                    | 11420.00        | 47.32 AV                | 54.00          | -6.68       | 1.63 V             | 263                  | 29.24            | 18.08                    |

**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>RF Mode</b>         | TX 802.11ax (40MHz) | <b>Channel</b>           | CH 151 : 5755 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5649.49        | 67.12 PK                | 68.20          | -1.08       | 2.72 H             | 14                   | 56.29            | 10.83                    |
| 2                                                    | *5755.00        | 117.10 PK               |                |             | 2.72 H             | 14                   | 106.44           | 10.66                    |
| 3                                                    | *5755.00        | 105.92 AV               |                |             | 2.72 H             | 14                   | 95.26            | 10.66                    |
| 4                                                    | #5971.03        | 55.47 PK                | 68.20          | -12.73      | 2.72 H             | 14                   | 44.60            | 10.87                    |
| 5                                                    | 11510.00        | 58.83 PK                | 74.00          | -15.17      | 2.35 H             | 264                  | 40.22            | 18.61                    |
| 6                                                    | 11510.00        | 47.95 AV                | 54.00          | -6.05       | 2.35 H             | 264                  | 29.34            | 18.61                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5643.63        | 63.97 PK                | 68.20          | -4.23       | 2.85 V             | 189                  | 53.13            | 10.84                    |
| 2                                                    | *5755.00        | 114.09 PK               |                |             | 2.85 V             | 189                  | 103.43           | 10.66                    |
| 3                                                    | *5755.00        | 103.01 AV               |                |             | 2.85 V             | 189                  | 92.35            | 10.66                    |
| 4                                                    | #5930.63        | 56.26 PK                | 68.20          | -11.94      | 2.85 V             | 189                  | 45.59            | 10.67                    |
| 5                                                    | 11510.00        | 57.95 PK                | 74.00          | -16.05      | 1.94 V             | 235                  | 39.34            | 18.61                    |
| 6                                                    | 11510.00        | 46.96 AV                | 54.00          | -7.04       | 1.94 V             | 235                  | 28.35            | 18.61                    |

**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>RF Mode</b>         | TX 802.11ax (40MHz) | <b>Channel</b>           | CH 159 : 5795 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5645.37        | 58.48 PK                | 68.20          | -9.72       | 2.70 H             | 22                   | 47.64            | 10.84                    |
| 2                                                    | *5795.00        | 118.25 PK               |                |             | 2.70 H             | 22                   | 107.64           | 10.61                    |
| 3                                                    | *5795.00        | 107.14 AV               |                |             | 2.70 H             | 22                   | 96.53            | 10.61                    |
| 4                                                    | #5928.11        | 58.79 PK                | 68.20          | -9.41       | 2.70 H             | 22                   | 48.13            | 10.66                    |
| 5                                                    | 11590.00        | 59.01 PK                | 74.00          | -14.99      | 1.84 H             | 235                  | 40.15            | 18.86                    |
| 6                                                    | 11590.00        | 48.12 AV                | 54.00          | -5.88       | 1.84 H             | 235                  | 29.26            | 18.86                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5644.00        | 56.28 PK                | 68.20          | -11.92      | 2.78 V             | 191                  | 45.44            | 10.84                    |
| 2                                                    | *5795.00        | 114.13 PK               |                |             | 2.78 V             | 191                  | 103.52           | 10.61                    |
| 3                                                    | *5795.00        | 103.26 AV               |                |             | 2.78 V             | 191                  | 92.65            | 10.61                    |
| 4                                                    | #5958.07        | 56.98 PK                | 68.20          | -11.22      | 2.78 V             | 191                  | 46.16            | 10.82                    |
| 5                                                    | 11590.00        | 58.41 PK                | 74.00          | -15.59      | 1.45 V             | 239                  | 39.55            | 18.86                    |
| 6                                                    | 11590.00        | 47.28 AV                | 54.00          | -6.72       | 1.45 V             | 239                  | 28.42            | 18.86                    |

**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.

|                 |                     |                   |                           |
|-----------------|---------------------|-------------------|---------------------------|
| RF Mode         | TX 802.11ax (80MHz) | Channel           | CH 42 : 5210 MHz          |
| Frequency Range | 1GHz ~ 40GHz        | Detector Function | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 67.64 PK                | 74.00          | -6.36       | 1.00 H             | 18                   | 57.63            | 10.01                    |
| 2                                                    | 5150.00         | 52.61 AV                | 54.00          | -1.39       | 1.00 H             | 18                   | 42.60            | 10.01                    |
| 3                                                    | *5210.00        | 110.49 PK               |                |             | 1.00 H             | 18                   | 100.35           | 10.14                    |
| 4                                                    | *5210.00        | 99.60 AV                |                |             | 1.00 H             | 18                   | 89.46            | 10.14                    |
| 5                                                    | 5350.00         | 52.51 PK                | 74.00          | -21.49      | 1.00 H             | 18                   | 41.52            | 10.99                    |
| 6                                                    | 5350.00         | 42.67 AV                | 54.00          | -11.33      | 1.00 H             | 18                   | 31.68            | 10.99                    |
| 7                                                    | #10420.00       | 56.40 PK                | 68.20          | -11.80      | 1.28 H             | 149                  | 40.22            | 16.18                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5150.00         | 60.82 PK                | 74.00          | -13.18      | 2.50 V             | 270                  | 50.81            | 10.01                    |
| 2                                                    | 5150.00         | 49.36 AV                | 54.00          | -4.64       | 2.50 V             | 270                  | 39.35            | 10.01                    |
| 3                                                    | *5210.00        | 105.19 PK               |                |             | 2.50 V             | 270                  | 95.05            | 10.14                    |
| 4                                                    | *5210.00        | 94.42 AV                |                |             | 2.50 V             | 270                  | 84.28            | 10.14                    |
| 5                                                    | 5350.00         | 52.30 PK                | 74.00          | -21.70      | 2.50 V             | 270                  | 41.31            | 10.99                    |
| 6                                                    | 5350.00         | 42.38 AV                | 54.00          | -11.62      | 2.50 V             | 270                  | 31.39            | 10.99                    |
| 7                                                    | #10420.00       | 56.23 PK                | 68.20          | -11.97      | 1.48 V             | 227                  | 40.05            | 16.18                    |

#### 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>RF Mode</b>         | TX 802.11ax (80MHz) | <b>Channel</b>           | CH 58 : 5290 MHz          |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5290.00        | 108.96 PK               |                |             | 1.00 H             | 17                   | 98.36            | 10.60                    |
| 2                                                    | *5290.00        | 98.37 AV                |                |             | 1.00 H             | 17                   | 87.77            | 10.60                    |
| 3                                                    | 5350.00         | 64.41 PK                | 74.00          | -9.59       | 1.00 H             | 17                   | 53.42            | 10.99                    |
| 4                                                    | 5350.00         | 52.81 AV                | 54.00          | -1.19       | 1.00 H             | 17                   | 41.82            | 10.99                    |
| 5                                                    | #10580.00       | 56.82 PK                | 68.20          | -11.38      | 1.16 H             | 159                  | 40.84            | 15.98                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5290.00        | 104.11 PK               |                |             | 2.66 V             | 270                  | 93.51            | 10.60                    |
| 2                                                    | *5290.00        | 93.82 AV                |                |             | 2.66 V             | 270                  | 83.22            | 10.60                    |
| 3                                                    | 5350.00         | 59.48 PK                | 74.00          | -14.52      | 2.66 V             | 270                  | 48.49            | 10.99                    |
| 4                                                    | 5350.00         | 49.67 AV                | 54.00          | -4.33       | 2.66 V             | 270                  | 38.68            | 10.99                    |
| 5                                                    | #10580.00       | 56.64 PK                | 68.20          | -11.56      | 1.57 V             | 227                  | 40.66            | 15.98                    |

**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>RF Mode</b>         | TX 802.11ax (80MHz) | <b>Channel</b>           | CH 106 : 5530 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 64.63 PK                | 74.00          | -9.37       | 2.65 H             | 18                   | 53.03            | 11.60                    |
| 2                                                    | 5460.00         | 50.95 AV                | 54.00          | -3.05       | 2.65 H             | 18                   | 39.35            | 11.60                    |
| 3                                                    | #5470.00        | 66.80 PK                | 68.20          | -1.40       | 2.65 H             | 18                   | 55.13            | 11.67                    |
| 4                                                    | *5530.00        | 112.48 PK               |                |             | 2.65 H             | 18                   | 100.90           | 11.58                    |
| 5                                                    | *5530.00        | 101.05 AV               |                |             | 2.65 H             | 18                   | 89.47            | 11.58                    |
| 6                                                    | 11060.00        | 58.04 PK                | 74.00          | -15.96      | 1.57 H             | 163                  | 40.75            | 17.29                    |
| 7                                                    | 11060.00        | 46.97 AV                | 54.00          | -7.03       | 1.57 H             | 163                  | 29.68            | 17.29                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 5460.00         | 61.27 PK                | 74.00          | -12.73      | 2.96 V             | 193                  | 49.67            | 11.60                    |
| 2                                                    | 5460.00         | 47.44 AV                | 54.00          | -6.56       | 2.96 V             | 193                  | 35.84            | 11.60                    |
| 3                                                    | #5470.00        | 62.76 PK                | 68.20          | -5.44       | 2.96 V             | 193                  | 51.09            | 11.67                    |
| 4                                                    | *5530.00        | 107.73 PK               |                |             | 2.96 V             | 193                  | 96.15            | 11.58                    |
| 5                                                    | *5530.00        | 97.07 AV                |                |             | 2.96 V             | 193                  | 85.49            | 11.58                    |
| 6                                                    | 11060.00        | 57.42 PK                | 74.00          | -16.58      | 2.25 V             | 236                  | 40.13            | 17.29                    |
| 7                                                    | 11060.00        | 46.57 AV                | 54.00          | -7.43       | 2.25 V             | 236                  | 29.28            | 17.29                    |

**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>RF Mode</b>         | TX 802.11ax (80MHz) | <b>Channel</b>           | CH 122 : 5610 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5610.00        | 114.00 PK               |                |             | 2.71 H             | 15                   | 103.07           | 10.93                    |
| 2                                                    | *5610.00        | 102.70 AV               |                |             | 2.71 H             | 15                   | 91.77            | 10.93                    |
| 3                                                    | #5725.00        | 66.69 PK                | 68.20          | -1.51       | 2.71 H             | 15                   | 55.98            | 10.71                    |
| 4                                                    | 11220.00        | 58.56 PK                | 74.00          | -15.44      | 1.74 H             | 185                  | 40.69            | 17.87                    |
| 5                                                    | 11220.00        | 47.71 AV                | 54.00          | -6.29       | 1.74 H             | 185                  | 29.84            | 17.87                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | *5610.00        | 110.39 PK               |                |             | 2.78 V             | 296                  | 99.46            | 10.93                    |
| 2                                                    | *5610.00        | 99.60 AV                |                |             | 2.78 V             | 296                  | 88.67            | 10.93                    |
| 3                                                    | #5725.00        | 61.97 PK                | 68.20          | -6.23       | 2.78 V             | 296                  | 51.26            | 10.71                    |
| 4                                                    | 11220.00        | 57.92 PK                | 74.00          | -16.08      | 1.74 V             | 152                  | 40.05            | 17.87                    |
| 5                                                    | 11220.00        | 46.95 AV                | 54.00          | -7.05       | 1.74 V             | 152                  | 29.08            | 17.87                    |

**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>RF Mode</b>         | TX 802.11ax (80MHz) | <b>Channel</b>           | CH 138 : 5690 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5470.00        | 59.71 PK                | 68.20          | -8.49       | 2.65 H             | 15                   | 48.04            | 11.67                    |
| 2                                                    | *5690.00        | 115.59 PK               |                |             | 2.65 H             | 15                   | 104.83           | 10.76                    |
| 3                                                    | *5690.00        | 104.39 AV               |                |             | 2.65 H             | 15                   | 93.63            | 10.76                    |
| 4                                                    | 11380.00        | 58.15 PK                | 74.00          | -15.85      | 1.89 H             | 265                  | 40.36            | 17.79                    |
| 5                                                    | 11380.00        | 47.33 AV                | 54.00          | -6.67       | 1.89 H             | 265                  | 29.54            | 17.79                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5470.00        | 55.93 PK                | 68.20          | -12.27      | 2.79 V             | 198                  | 44.26            | 11.67                    |
| 2                                                    | *5690.00        | 111.28 PK               |                |             | 2.79 V             | 198                  | 100.52           | 10.76                    |
| 3                                                    | *5690.00        | 100.43 AV               |                |             | 2.79 V             | 198                  | 89.67            | 10.76                    |
| 4                                                    | 11380.00        | 57.80 PK                | 74.00          | -16.20      | 2.23 V             | 263                  | 40.01            | 17.79                    |
| 5                                                    | 11380.00        | 46.90 AV                | 54.00          | -7.10       | 2.23 V             | 263                  | 29.11            | 17.79                    |

**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>RF Mode</b>         | TX 802.11ax (80MHz) | <b>Channel</b>           | CH 155 : 5775 MHz         |
| <b>Frequency Range</b> | 1GHz ~ 40GHz        | <b>Detector Function</b> | Peak (PK)<br>Average (AV) |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5647.76        | 67.10 PK                | 68.20          | -1.10       | 2.73 H             | 14                   | 56.27            | 10.83                    |
| 2                                                    | *5775.00        | 113.22 PK               |                |             | 2.73 H             | 14                   | 102.58           | 10.64                    |
| 3                                                    | *5775.00        | 101.97 AV               |                |             | 2.73 H             | 14                   | 91.33            | 10.64                    |
| 4                                                    | #5929.54        | 60.22 PK                | 68.20          | -7.98       | 2.73 H             | 14                   | 49.56            | 10.66                    |
| 5                                                    | 11550.00        | 58.84 PK                | 74.00          | -15.16      | 1.42 H             | 236                  | 40.11            | 18.73                    |
| 6                                                    | 11550.00        | 48.08 AV                | 54.00          | -5.92       | 1.42 H             | 236                  | 29.35            | 18.73                    |
| Antenna Polarity & Test Distance : Vertical at 3 m   |                 |                         |                |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | #5640.38        | 63.77 PK                | 68.20          | -4.43       | 2.85 V             | 191                  | 52.92            | 10.85                    |
| 2                                                    | *5775.00        | 110.53 PK               |                |             | 2.85 V             | 191                  | 99.89            | 10.64                    |
| 3                                                    | *5775.00        | 99.29 AV                |                |             | 2.85 V             | 191                  | 88.65            | 10.64                    |
| 4                                                    | #5924.87        | 59.50 PK                | 68.30          | -8.80       | 2.85 V             | 191                  | 48.86            | 10.64                    |
| 5                                                    | 11550.00        | 57.99 PK                | 74.00          | -16.01      | 2.36 V             | 210                  | 39.26            | 18.73                    |
| 6                                                    | 11550.00        | 47.37 AV                | 54.00          | -6.63       | 2.36 V             | 210                  | 28.64            | 18.73                    |

**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.

## CDD Mode

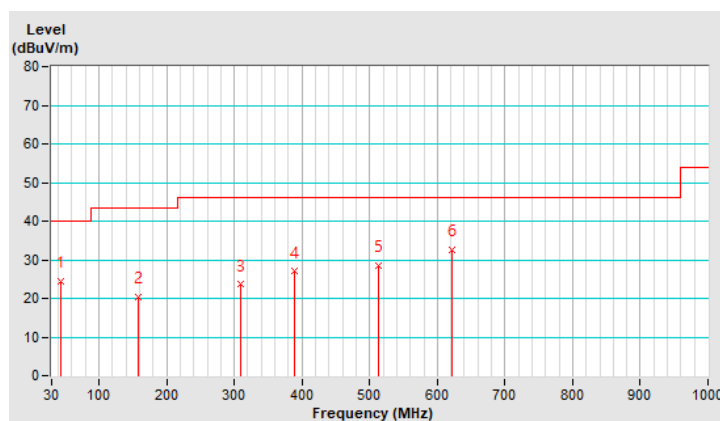
Below 1GHz Worst-Case Data:

|                 |                     |                   |                   |
|-----------------|---------------------|-------------------|-------------------|
| RF Mode         | TX 802.11ax (20MHz) | Channel           | CH 157 : 5785 MHz |
| Frequency Range | 9kHz ~ 1GHz         | Detector Function | Quasi-Peak (QP)   |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 42.90           | 24.52 QP                | 40.00          | -15.48      | 1.41 H             | 0                    | 32.04            | -7.52                    |
| 2                                                    | 157.94          | 20.45 QP                | 43.50          | -23.05      | 1.53 H             | 17                   | 26.96            | -6.51                    |
| 3                                                    | 309.12          | 23.61 QP                | 46.00          | -22.39      | 1.08 H             | 266                  | 27.75            | -4.14                    |
| 4                                                    | 388.46          | 26.96 QP                | 46.00          | -19.04      | 1.59 H             | 302                  | 29.40            | -2.44                    |
| 5                                                    | 513.50          | 28.45 QP                | 46.00          | -17.55      | 2.18 H             | 81                   | 28.16            | 0.29                     |
| 6                                                    | 622.38          | 32.56 QP                | 46.00          | -13.44      | 1.84 H             | 294                  | 29.78            | 2.78                     |

### 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.



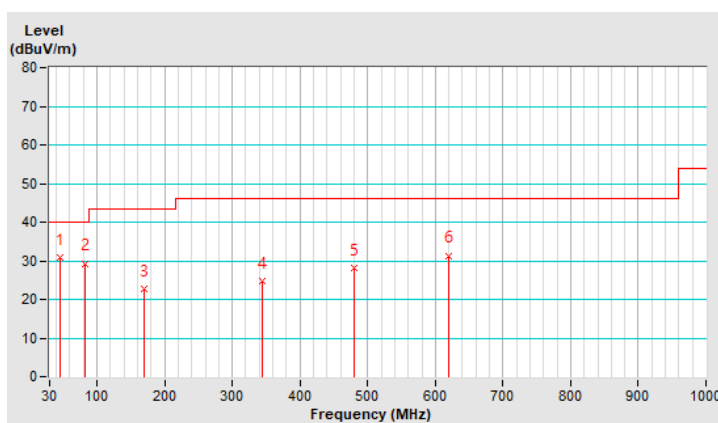


|                 |                     |                   |                   |
|-----------------|---------------------|-------------------|-------------------|
| RF Mode         | TX 802.11ax (20MHz) | Channel           | CH 157 : 5785 MHz |
| Frequency Range | 9kHz ~ 1GHz         | Detector Function | Quasi-Peak (QP)   |

| Antenna Polarity & Test Distance : Vertical at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|----------------------------------------------------|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No                                                 | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                  | 44.70           | 30.72 QP                | 40.00          | -9.28       | 1.44 V             | 222                  | 38.09            | -7.37                    |
| 2                                                  | 82.33           | 29.18 QP                | 40.00          | -10.82      | 1.58 V             | 255                  | 41.32            | -12.14                   |
| 3                                                  | 170.02          | 22.56 QP                | 43.50          | -20.94      | 1.13 V             | 297                  | 29.28            | -6.72                    |
| 4                                                  | 345.20          | 24.61 QP                | 46.00          | -21.39      | 1.76 V             | 277                  | 28.10            | -3.49                    |
| 5                                                  | 479.84          | 28.02 QP                | 46.00          | -17.98      | 2.08 V             | 292                  | 28.33            | -0.31                    |
| 6                                                  | 618.94          | 31.13 QP                | 46.00          | -14.87      | 1.91 V             | 164                  | 28.45            | 2.68                     |

#### 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.



## 4.2 Conducted Emission Measurement

### 4.2.1 Limits of Conducted Emission Measurement

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

Note: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

### 4.2.2 Test Instruments

| Description & Manufacturer                           | Model No.     | Serial No.   | Cal. Date     | Cal. Due      |
|------------------------------------------------------|---------------|--------------|---------------|---------------|
| ROHDE & SCHWARZ<br>TEST RECEIVER                     | ESCS30        | 100276       | Apr. 16, 2020 | Apr. 15, 2021 |
| SCHWARZBECK<br>Artificial Mains Network<br>(for EUT) | NSLK 8128     | 8128-244     | Nov. 19, 2020 | Nov. 18, 2021 |
| LISN With Adapter (for EUT)                          | AD10          | C05Ada-001   | Nov. 19, 2020 | Nov. 18, 2021 |
| R&S Artificial Mains Network<br>(for peripheral)     | ESH3-Z5       | 100220       | Dec. 1, 2020  | Nov. 30, 2021 |
| Software                                             | Cond_V7.3.7.4 | NA           | NA            | NA            |
| RF cable (JYEBAO)<br>With 10dB PAD                   | 5D-FB         | Cable-C05.01 | Jan. 30, 2020 | Jan. 29, 2021 |
| LYNICS Terminator<br>(For R&S LISN)                  | 0900510       | E1-01-305    | Feb. 17, 2020 | Feb. 16, 2021 |

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 Shielded Room No. 5. (Conduction 5)

3. The VCCI Site Registration No. C-11093.

### 4.2.3 Test Procedures

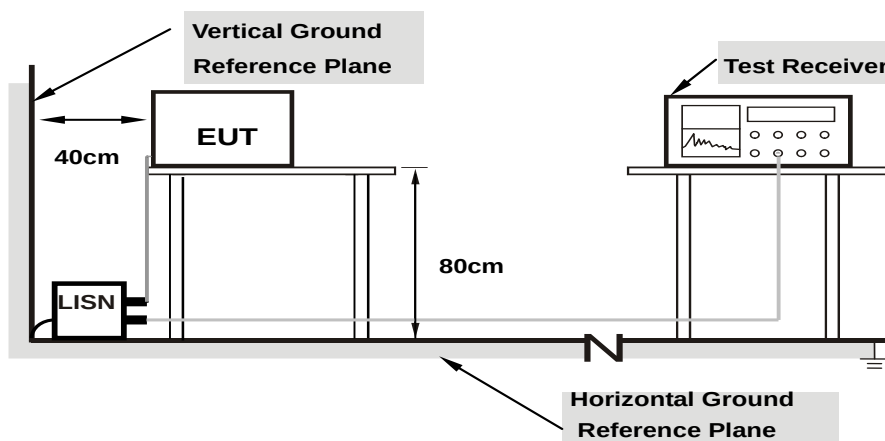
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

### 4.2.4 Deviation from Test Standard

No deviation.

### 4.2.5 Test Setup



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

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

### 4.2.6 EUT Operating Conditions

Same as 4.1.6.

## 4.2.7 Test Results

### CDD Mode

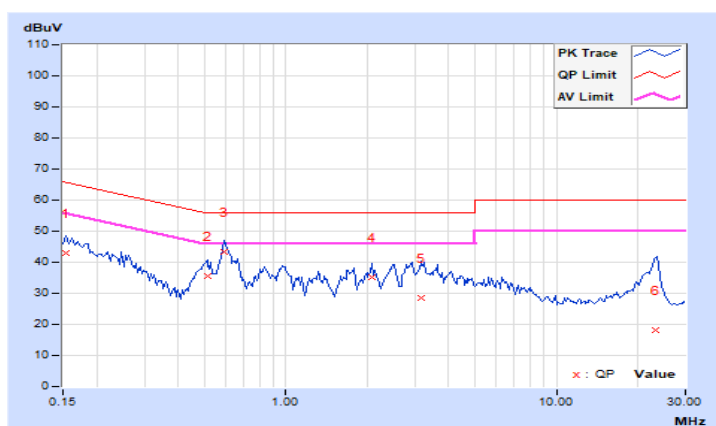
802.11ax (20MHz)

| Phase | Line (L) | Detector Function | Quasi-Peak (QP) / Average (AV) |
|-------|----------|-------------------|--------------------------------|
|-------|----------|-------------------|--------------------------------|

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |              | Emission Level<br>[dB (uV)] |              | Limit<br>[dB (uV)] |              | Margin<br>(dB) |               |
|----|----------------|-------------------------|----------------------------|--------------|-----------------------------|--------------|--------------------|--------------|----------------|---------------|
|    |                |                         |                            |              |                             |              |                    |              |                |               |
|    |                |                         | Q.P.                       | AV.          | Q.P.                        | AV.          | Q.P.               | AV.          | Q.P.           | AV.           |
| 1  | 0.15391        | 9.93                    | 33.21                      | 22.38        | 43.14                       | 32.31        | 65.79              | 55.79        | -22.65         | -23.48        |
| 2  | 0.51328        | 9.96                    | 25.53                      | 16.18        | 35.49                       | 26.14        | 56.00              | 46.00        | -20.51         | -19.86        |
| 3  | <b>0.59531</b> | <b>9.97</b>             | <b>33.35</b>               | <b>25.22</b> | <b>43.32</b>                | <b>35.19</b> | <b>56.00</b>       | <b>46.00</b> | <b>-12.68</b>  | <b>-10.81</b> |
| 4  | 2.08203        | 10.08                   | 24.99                      | 16.71        | 35.07                       | 26.79        | 56.00              | 46.00        | -20.93         | -19.21        |
| 5  | 3.15625        | 10.18                   | 18.32                      | 10.86        | 28.50                       | 21.04        | 56.00              | 46.00        | -27.50         | -24.96        |
| 6  | 23.20313       | 11.45                   | 6.75                       | 0.25         | 18.20                       | 11.70        | 60.00              | 50.00        | -41.80         | -38.30        |

Remarks:

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

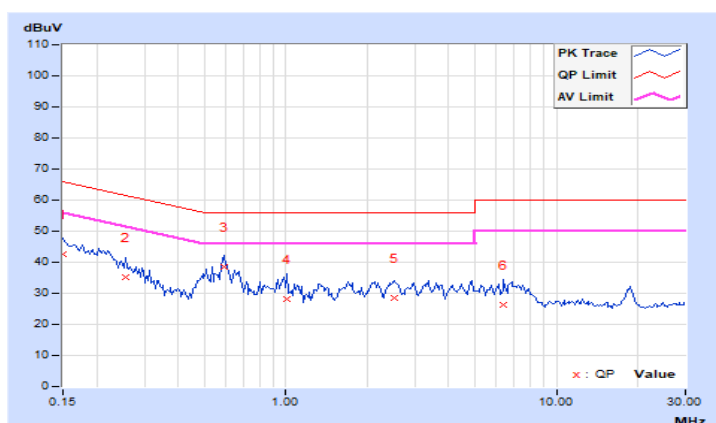


|       |             |                   |                                |
|-------|-------------|-------------------|--------------------------------|
| Phase | Neutral (N) | Detector Function | Quasi-Peak (QP) / Average (AV) |
|-------|-------------|-------------------|--------------------------------|

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value |       | Emission Level |       | Limit     |       | Margin |        |
|----|----------------|-------------------------|---------------|-------|----------------|-------|-----------|-------|--------|--------|
|    |                |                         | [dB (uV)]     |       | [dB (uV)]      |       | [dB (uV)] |       | (dB)   |        |
|    |                |                         | Q.P.          | AV.   | Q.P.           | AV.   | Q.P.      | AV.   | Q.P.   | AV.    |
| 1  | 0.15000        | 9.96                    | 32.70         | 21.87 | 42.66          | 31.83 | 66.00     | 56.00 | -23.34 | -24.17 |
| 2  | 0.25547        | 9.98                    | 25.07         | 12.06 | 35.05          | 22.04 | 61.58     | 51.58 | -26.53 | -29.54 |
| 3  | 0.59141        | 10.01                   | 28.37         | 20.86 | 38.38          | 30.87 | 56.00     | 46.00 | -17.62 | -15.13 |
| 4  | 1.00781        | 10.04                   | 18.05         | 8.58  | 28.09          | 18.62 | 56.00     | 46.00 | -27.91 | -27.38 |
| 5  | 2.51563        | 10.16                   | 18.50         | 8.11  | 28.66          | 18.27 | 56.00     | 46.00 | -27.34 | -27.73 |
| 6  | 6.40625        | 10.42                   | 15.93         | 6.61  | 26.35          | 17.03 | 60.00     | 50.00 | -33.65 | -32.97 |

Remarks:

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



### 4.3 Transmit Power Measurement

#### 4.3.1 Limits of Transmit Power Measurement

| Operation Band | EUT Category |                                   | Limit                                                                                                                       |
|----------------|--------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| U-NII-1        |              | Outdoor Access Point              | 1 Watt (30 dBm)<br>(Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon) |
|                |              | Fixed point-to-point Access Point | 1 Watt (30 dBm)                                                                                                             |
|                |              | Indoor Access Point               | 1 Watt (30 dBm)                                                                                                             |
|                | √            | Mobile and Portable client device | 250mW (24 dBm)                                                                                                              |
| U-NII-2A       |              | √                                 | 250mW (24 dBm) or 11 dBm+10 log B*                                                                                          |
| U-NII-2C       |              | √                                 | 250mW (24 dBm) or 11 dBm+10 log B*                                                                                          |
| U-NII-3        |              | √                                 | 1 Watt (30 dBm)                                                                                                             |

\*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

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

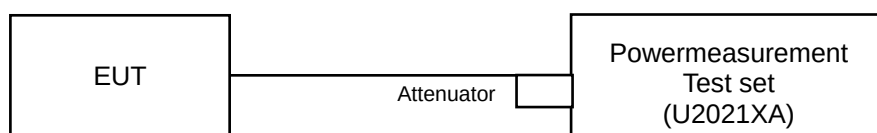
Array Gain = 0 dB (i.e., no array gain) for channel widths  $\geq 40$  MHz for any  $N_{ANT}$ ;

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

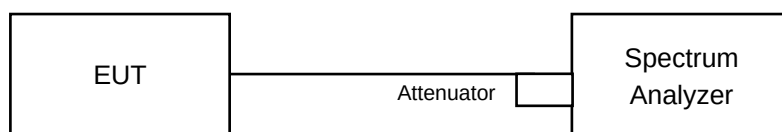
For power measurements on all other devices: Array Gain =  $10 \log(N_{ANT}/N_{SS})$  dB.

#### 4.3.2 Test Setup

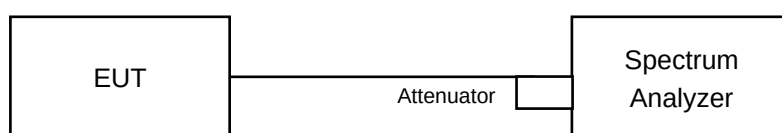
##### For Power Output Measurement



For Straddle Channel:



##### For 26dB Bandwidth Measurement



#### 4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

#### 4.3.4 Test Procedure

##### For Average Power Measurement

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

For Straddle Channel:

- a) Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- b) Set sweep trigger to "free run".
- c) Set RBW = 1 MHz.
- d) Set VBW  $\geq$  3 MHz
- e) Number of points in sweep  $\geq$  2 Span / RBW.
- f) Sweep time  $\leq$  (number of points in sweep) \* T
- g) Using emission bandwidth to determine the frequency span for integration the channel bandwidth.
- h) Detector = RMS.
- i) Trace mode = max hold.
- j) Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
- k) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

##### For 26dB Bandwidth Measurement

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

#### 4.3.5 Deviation from Test Standard

No deviation.

#### 4.3.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

#### 4.3.7 Test Result

Power Output:

CDD Mode

802.11a

| Chan. | Freq.<br>(MHz)       | Maximum Conducted Power (dBm) |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Power<br>Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|------------------------|-------------------------|-------------------------|----------------|
|       |                      | Chain 0                       | Chain 1 |                        |                         |                         |                |
| 36    | 5180                 | 17.64                         | 17.84   | 118.89                 | 20.75                   | 24.00                   | Pass           |
| 40    | 5200                 | 20.29                         | 20.58   | 221.193                | 23.45                   | 24.00                   | Pass           |
| 48    | 5240                 | 20.20                         | 20.67   | 221.394                | 23.45                   | 24.00                   | Pass           |
| 52    | 5260                 | 20.26                         | 20.32   | 213.816                | 23.30                   | 24.00                   | Pass           |
| 60    | 5300                 | 20.23                         | 20.36   | 214.081                | 23.31                   | 24.00                   | Pass           |
| 64    | 5320                 | 18.19                         | 18.31   | 133.682                | 21.26                   | 24.00                   | Pass           |
| 100   | 5500                 | 18.75                         | 19.11   | 156.460                | 21.94                   | 24.00                   | Pass           |
| 116   | 5580                 | 20.18                         | 20.54   | 217.472                | 23.37                   | 24.00                   | Pass           |
| 140   | 5700                 | 17.72                         | 18.14   | 124.319                | 20.95                   | 24.00                   | Pass           |
| 144   | 5720<br>For U-NII-2C | 17.27                         | 17.23   | 106.178                | 20.26                   | 22.90                   | Pass           |
| 144   | 5720<br>For U-NII-3  | 10.82                         | 11.09   | 24.931                 | 13.97                   | 30.00                   | Pass           |
| 149   | 5745                 | 22.43                         | 22.49   | 352.404                | 25.47                   | 30.00                   | Pass           |
| 157   | 5785                 | 22.14                         | 22.05   | 324.006                | 25.11                   | 30.00                   | Pass           |
| 165   | 5825                 | 22.78                         | 22.93   | 386.007                | 25.87                   | 30.00                   | Pass           |

**NOTE:**

For U-NII-2A, U-NII-2C Band:

**Chain 0**

1.  $11\text{dBm} + 10\log(32.15) = 26.07\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(26.41) = 25.22\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(20.84) = 24.19\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(20.65) = 24.14\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(20.80) = 24.18\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(20.96) = 24.21\text{ dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.49) = 22.90\text{ dBm} < 24\text{dBm}$ .

**Chain 1**

1.  $11\text{dBm} + 10\log(33.00) = 26.19\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.11) = 24.99\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(20.82) = 24.18\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(20.82) = 24.18\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(20.76) = 24.17\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(20.54) = 24.12\text{ dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.35) = 22.95\text{ dBm} < 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 144   | 5720        | 131.109              | 21.18                 |



## 802.11n (20MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 36    | 5180                 | 16.78                         | 16.97   | 97.417           | 19.89             | 24.00             | Pass        |
| 40    | 5200                 | 19.47                         | 19.75   | 182.918          | 22.62             | 24.00             | Pass        |
| 48    | 5240                 | 19.53                         | 19.80   | 185.242          | 22.68             | 24.00             | Pass        |
| 52    | 5260                 | 19.39                         | 19.61   | 178.307          | 22.51             | 24.00             | Pass        |
| 60    | 5300                 | 19.35                         | 19.48   | 174.815          | 22.43             | 24.00             | Pass        |
| 64    | 5320                 | 17.21                         | 17.31   | 106.429          | 20.27             | 24.00             | Pass        |
| 100   | 5500                 | 17.14                         | 17.36   | 106.211          | 20.26             | 24.00             | Pass        |
| 116   | 5580                 | 19.21                         | 19.35   | 169.467          | 22.29             | 24.00             | Pass        |
| 140   | 5700                 | 15.61                         | 15.96   | 75.837           | 18.80             | 24.00             | Pass        |
| 144   | 5720<br>For U-NII-2C | 16.07                         | 16.09   | 81.102           | 19.09             | 22.96             | Pass        |
| 144   | 5720<br>For U-NII-3  | 10.10                         | 10.28   | 20.899           | 13.20             | 30.00             | Pass        |
| 149   | 5745                 | 21.44                         | 21.63   | 284.862          | 24.55             | 30.00             | Pass        |
| 157   | 5785                 | 21.15                         | 21.08   | 258.55           | 24.13             | 30.00             | Pass        |
| 165   | 5825                 | 21.81                         | 21.98   | 309.466          | 24.91             | 30.00             | Pass        |

### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(28.27) = 25.51\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.47) = 25.06\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(21.44) = 24.31\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(21.15) = 24.25\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(21.49) = 24.32\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(21.16) = 24.26\text{ dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.06) = 23.03\text{ dBm} < 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(28.08) = 25.48\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.56) = 25.08\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(21.50) = 24.32\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(21.20) = 24.26\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(21.49) = 24.32\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(21.07) = 24.23\text{ dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.27) = 22.96\text{ dBm} < 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 144   | 5720        | 102.001              | 20.09                 |

## 802.11n (40MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 38    | 5190                 | 14.52                         | 14.79   | 58.444           | 17.67             | 24.00             | Pass        |
| 46    | 5230                 | 17.20                         | 17.46   | 108.199          | 20.34             | 24.00             | Pass        |
| 54    | 5270                 | 18.24                         | 18.52   | 137.802          | 21.39             | 24.00             | Pass        |
| 62    | 5310                 | 14.46                         | 14.72   | 57.574           | 17.60             | 24.00             | Pass        |
| 102   | 5510                 | 14.59                         | 14.86   | 59.394           | 17.74             | 24.00             | Pass        |
| 110   | 5550                 | 19.43                         | 19.71   | 181.241          | 22.58             | 24.00             | Pass        |
| 134   | 5670                 | 16.85                         | 17.16   | 100.417          | 20.02             | 24.00             | Pass        |
| 142   | 5710<br>For U-NII-2C | 17.62                         | 17.60   | 115.354          | 20.62             | 24.00             | Pass        |
| 142   | 5710<br>For U-NII-3  | 7.32                          | 6.68    | 10.051           | 10.02             | 30.00             | Pass        |
| 151   | 5755                 | 22.22                         | 22.50   | 344.553          | 25.37             | 30.00             | Pass        |
| 159   | 5795                 | 22.19                         | 22.48   | 342.588          | 25.35             | 30.00             | Pass        |

### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(61.32) = 28.87\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(40.74) = 27.10\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(40.70) = 27.10\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(40.92) = 27.12\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(41.07) = 27.14\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(5725.00 - 5679.09) = 27.61\text{ dBm} > 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(66.44) = 29.22\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(40.63) = 27.08\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(40.68) = 27.09\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(40.88) = 27.11\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(40.49) = 27.07\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(5725.00 - 5680.52) = 27.48\text{ dBm} > 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 142   | 5710        | 125.405              | 20.98                 |

## 802.11ac (20MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 36    | 5180                 | 16.99                         | 17.23   | 102.848          | 20.12             | 24.00             | Pass        |
| 40    | 5200                 | 19.71                         | 19.98   | 193.081          | 22.86             | 24.00             | Pass        |
| 48    | 5240                 | 19.74                         | 20.07   | 195.814          | 22.92             | 24.00             | Pass        |
| 52    | 5260                 | 19.61                         | 19.80   | 186.911          | 22.72             | 24.00             | Pass        |
| 60    | 5300                 | 19.58                         | 19.72   | 184.538          | 22.66             | 24.00             | Pass        |
| 64    | 5320                 | 17.44                         | 17.57   | 112.61           | 20.52             | 24.00             | Pass        |
| 100   | 5500                 | 17.38                         | 17.62   | 112.511          | 20.51             | 24.00             | Pass        |
| 116   | 5580                 | 19.49                         | 19.60   | 180.121          | 22.56             | 24.00             | Pass        |
| 140   | 5700                 | 15.88                         | 16.16   | 80.031           | 19.03             | 24.00             | Pass        |
| 144   | 5720<br>For U-NII-2C | 16.29                         | 16.31   | 85.316           | 19.31             | 22.96             | Pass        |
| 144   | 5720<br>For U-NII-3  | 10.32                         | 10.50   | 21.985           | 13.42             | 30.00             | Pass        |
| 149   | 5745                 | 22.35                         | 22.48   | 348.802          | 25.43             | 30.00             | Pass        |
| 157   | 5785                 | 22.03                         | 21.97   | 316.986          | 25.01             | 30.00             | Pass        |
| 165   | 5825                 | 22.67                         | 22.83   | 376.794          | 25.76             | 30.00             | Pass        |

### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(28.27) = 25.51\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.47) = 25.06\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(21.44) = 24.31\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(21.15) = 24.25\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(21.49) = 24.32\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(21.16) = 24.26\text{ dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.06) = 23.03\text{ dBm} < 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(28.08) = 25.48\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.56) = 25.08\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(21.50) = 24.32\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(21.20) = 24.26\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(21.49) = 24.32\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(21.07) = 24.23\text{ dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.27) = 22.96\text{ dBm} < 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 144   | 5720        | 107.301              | 20.31                 |

### 802.11ac (40MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 38    | 5190                 | 14.78                         | 15.05   | 62.050           | 17.93             | 24.00             | Pass        |
| 46    | 5230                 | 17.47                         | 17.74   | 115.276          | 20.62             | 24.00             | Pass        |
| 54    | 5270                 | 18.50                         | 18.68   | 144.585          | 21.60             | 24.00             | Pass        |
| 62    | 5310                 | 14.69                         | 14.92   | 60.490           | 17.82             | 24.00             | Pass        |
| 102   | 5510                 | 14.84                         | 15.15   | 63.213           | 18.01             | 24.00             | Pass        |
| 110   | 5550                 | 19.70                         | 19.97   | 192.637          | 22.85             | 24.00             | Pass        |
| 134   | 5670                 | 17.13                         | 17.37   | 106.217          | 20.26             | 24.00             | Pass        |
| 142   | 5710<br>For U-NII-2C | 17.84                         | 17.82   | 121.348          | 20.84             | 24.00             | Pass        |
| 142   | 5710<br>For U-NII-3  | 7.54                          | 6.90    | 10.573           | 10.24             | 30.00             | Pass        |
| 151   | 5755                 | 22.47                         | 22.69   | 362.384          | 25.59             | 30.00             | Pass        |
| 159   | 5795                 | 22.52                         | 22.76   | 367.448          | 25.65             | 30.00             | Pass        |

#### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(61.32) = 28.87\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(40.74) = 27.10\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(40.70) = 27.10\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(40.92) = 27.12\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(41.07) = 27.14\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(5725.00 - 5679.09) = 27.61\text{ dBm} > 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(66.44) = 29.22\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(40.63) = 27.08\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(40.68) = 27.09\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(40.88) = 27.11\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(40.49) = 27.07\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(5725.00 - 5680.52) = 27.48\text{ dBm} > 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 142   | 5710        | 131.921              | 21.20                 |

### 802.11ac (80MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 42    | 5210                 | 14.61                         | 14.90   | 59.810           | 17.77             | 24.00             | Pass        |
| 58    | 5290                 | 13.50                         | 13.69   | 45.776           | 16.61             | 24.00             | Pass        |
| 106   | 5530                 | 14.50                         | 14.80   | 58.383           | 17.66             | 24.00             | Pass        |
| 122   | 5610                 | 17.53                         | 17.78   | 116.603          | 20.67             | 24.00             | Pass        |
| 138   | 5690<br>For U-NII-2C | 17.58                         | 17.57   | 114.427          | 20.59             | 24.00             | Pass        |
| 138   | 5690<br>For U-NII-3  | 4.09                          | 3.95    | 5.048            | 7.03              | 30.00             | Pass        |
| 155   | 5775                 | 17.55                         | 17.74   | 116.315          | 20.66             | 30.00             | Pass        |

#### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(82.15) = 30.14\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(82.87) = 30.18\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(83.07) = 30.19\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(5725.00 - 5646.99) = 29.92\text{ dBm} > 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(82.87) = 30.18\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(82.53) = 30.16\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(83.12) = 30.20\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(5725.00 - 5648.20) = 29.85\text{ dBm} > 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 138   | 5690        | 119.475              | 20.77                 |

## 802.11ax (20MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 36    | 5180                 | 17.62                         | 17.89   | 119.327          | 20.77             | 24.00             | Pass        |
| 40    | 5200                 | 20.34                         | 20.61   | 223.223          | 23.49             | 24.00             | Pass        |
| 48    | 5240                 | 20.43                         | 20.69   | <b>227.627</b>   | 23.57             | 24.00             | Pass        |
| 52    | 5260                 | 20.29                         | 20.48   | <b>218.592</b>   | 23.40             | 24.00             | Pass        |
| 60    | 5300                 | 20.23                         | 20.35   | 213.831          | 23.30             | 24.00             | Pass        |
| 64    | 5320                 | 18.11                         | 18.21   | 130.936          | 21.17             | 24.00             | Pass        |
| 100   | 5500                 | 18.02                         | 18.26   | 130.375          | 21.15             | 24.00             | Pass        |
| 116   | 5580                 | 20.13                         | 20.27   | 209.453          | 23.21             | 24.00             | Pass        |
| 140   | 5700                 | 16.53                         | 16.84   | 93.284           | 19.70             | 24.00             | Pass        |
| 144   | 5720<br>For U-NII-2C | 16.92                         | 16.94   | 98.635           | 19.94             | 22.96             | Pass        |
| 144   | 5720<br>For U-NII-3  | 10.95                         | 11.13   | 25.417           | 14.05             | 30.00             | Pass        |
| 149   | 5745                 | 22.35                         | 22.48   | 348.802          | 25.43             | 30.00             | Pass        |
| 157   | 5785                 | 22.03                         | 21.97   | 316.986          | 25.01             | 30.00             | Pass        |
| 165   | 5825                 | 22.67                         | 22.83   | 376.794          | 25.76             | 30.00             | Pass        |

### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(28.27) = 25.51\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.47) = 25.06\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(21.44) = 24.31\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(21.15) = 24.25\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(21.49) = 24.32\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(21.16) = 24.26\text{ dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.06) = 23.03\text{ dBm} < 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(28.08) = 25.48\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.56) = 25.08\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(21.50) = 24.32\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(21.20) = 24.26\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(21.49) = 24.32\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(21.07) = 24.23\text{ dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.27) = 22.96\text{ dBm} < 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 144   | 5720        | 124.052              | 20.94                 |

### 802.11ax (40MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 38    | 5190                 | 15.40                         | 15.67   | 71.571           | 18.55             | 24.00             | Pass        |
| 46    | 5230                 | 18.12                         | 18.37   | 133.570          | 21.26             | 24.00             | Pass        |
| 54    | 5270                 | 19.15                         | 19.36   | 168.522          | 22.27             | 24.00             | Pass        |
| 62    | 5310                 | 15.37                         | 15.59   | 70.659           | 18.49             | 24.00             | Pass        |
| 102   | 5510                 | 15.47                         | 15.78   | 73.081           | 18.64             | 24.00             | Pass        |
| 110   | 5550                 | 20.34                         | 20.59   | <b>222.695</b>   | 23.48             | 24.00             | Pass        |
| 134   | 5670                 | 17.76                         | 18.02   | 123.090          | 20.90             | 24.00             | Pass        |
| 142   | 5710<br>For U-NII-2C | 18.48                         | 18.46   | 140.615          | 21.48             | 24.00             | Pass        |
| 142   | 5710<br>For U-NII-3  | 8.18                          | 7.54    | 12.252           | 10.88             | 30.00             | Pass        |
| 151   | 5755                 | 23.11                         | 23.36   | 421.415          | 26.25             | 30.00             | Pass        |
| 159   | 5795                 | 23.13                         | 23.40   | <b>424.365</b>   | 26.28             | 30.00             | Pass        |

#### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(61.32) = 28.87\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(40.74) = 27.10\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(40.70) = 27.10\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(40.92) = 27.12\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(41.07) = 27.14\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(5725.00 - 5679.09) = 27.61\text{ dBm} > 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(66.44) = 29.22\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(40.63) = 27.08\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(40.68) = 27.09\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(40.88) = 27.11\text{ dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(40.49) = 27.07\text{ dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(5725.00 - 5680.52) = 27.48\text{ dBm} > 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 142   | 5710        | 152.867              | 21.84                 |

### 802.11ax (80MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 42    | 5210                 | 15.27                         | 15.54   | 69.461           | 18.42             | 24.00             | Pass        |
| 58    | 5290                 | 14.19                         | 14.31   | 53.220           | 17.26             | 24.00             | Pass        |
| 106   | 5530                 | 15.17                         | 15.42   | 67.719           | 18.31             | 24.00             | Pass        |
| 122   | 5610                 | 18.14                         | 18.46   | 135.308          | 21.31             | 24.00             | Pass        |
| 138   | 5690<br>For U-NII-2C | 18.20                         | 18.19   | 131.987          | 21.21             | 24.00             | Pass        |
| 138   | 5690<br>For U-NII-3  | 4.71                          | 4.57    | 5.822            | 7.65              | 30.00             | Pass        |
| 155   | 5775                 | 18.22                         | 18.37   | 135.081          | 21.31             | 30.00             | Pass        |

#### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(82.15) = 30.14\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(82.87) = 30.18\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(83.07) = 30.19\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(5725.00 - 5646.99) = 29.92\text{ dBm} > 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(82.87) = 30.18\text{ dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(82.53) = 30.16\text{ dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(83.12) = 30.20\text{ dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(5725.00 - 5648.20) = 29.85\text{ dBm} > 24\text{dBm}$ .

For Reference only-Power meter value

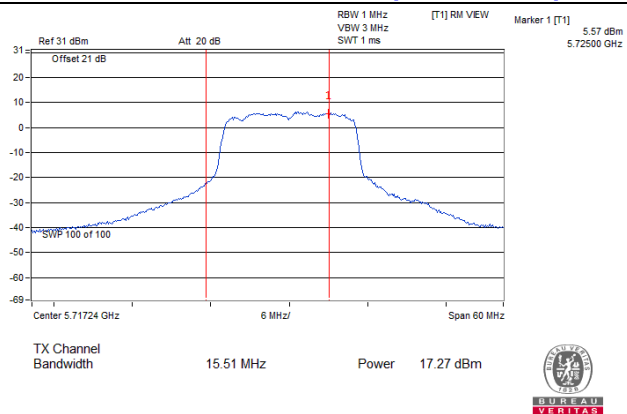
The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 138   | 5690        | 137.809              | 21.39                 |

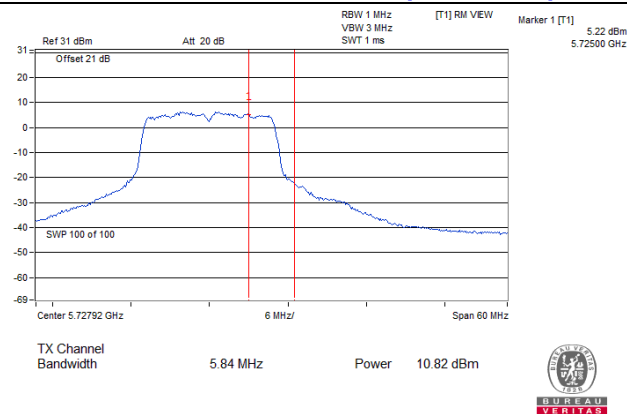


## Spectrum Plot of Straddle channel

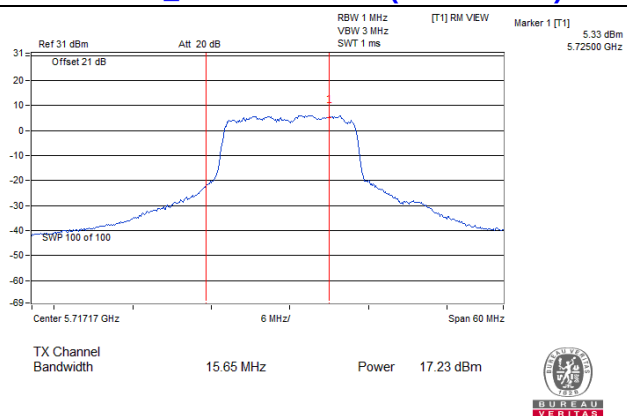
### 802.11a\_Chain 0: CH 144 (For U-NII-2C)



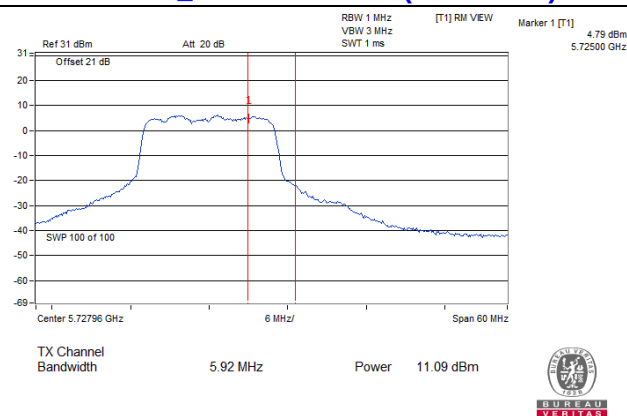
### 802.11a\_Chain 0: CH 144 (For U-NII-3)



### 802.11a\_Chain 1: CH 144 (For U-NII-2C)

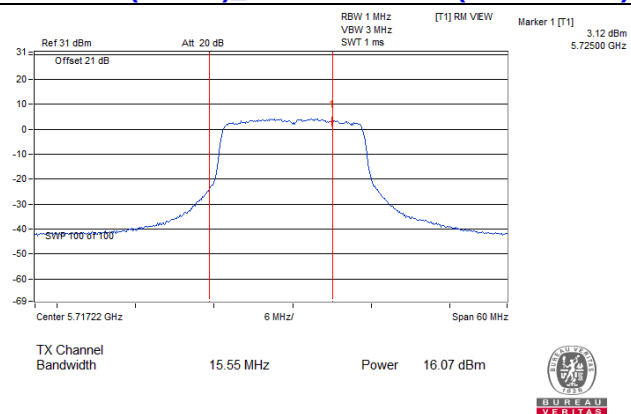


### 802.11a\_Chain 1: CH 144 (For U-NII-3)

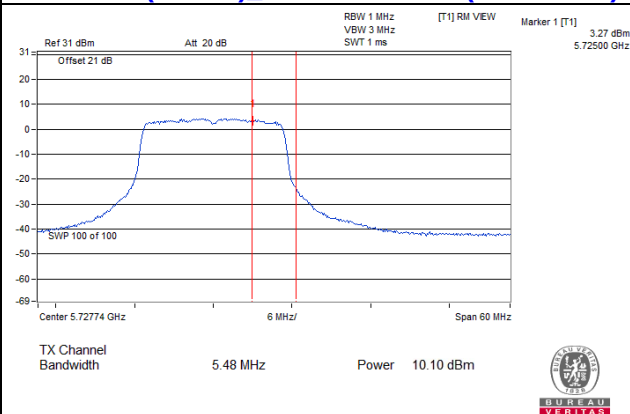


# Spectrum Plot of Straddle channel

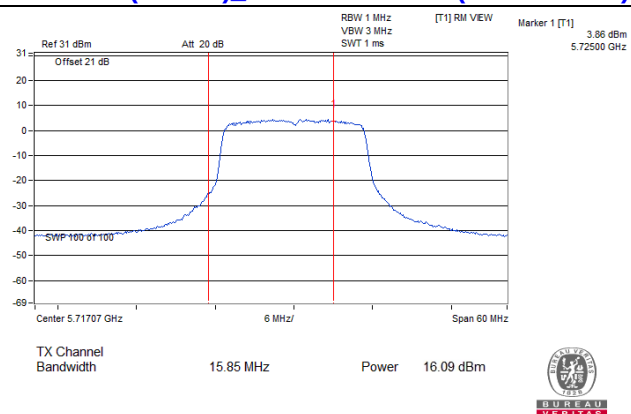
## 802.11an (20MHz) Chain 0: CH 144 (For U-NII-2C)



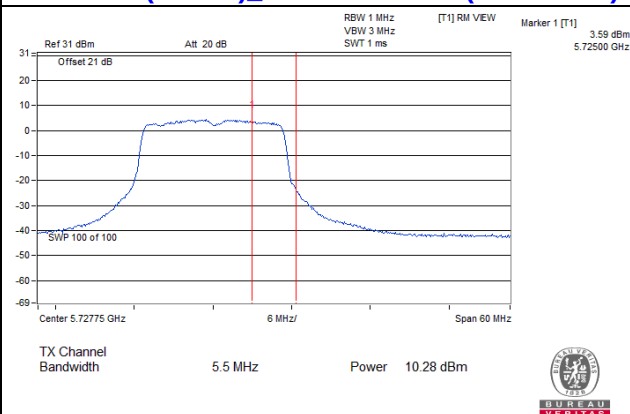
## 802.11an (20MHz) Chain 0: CH 144(For U-NII-3)



## 802.11an (20MHz) Chain 1: CH 144 (For U-NII-2C)

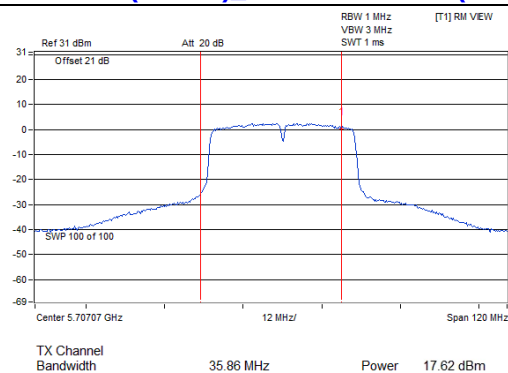


## 802.11an (20MHz) Chain 1: CH 144(For U-NII-3)

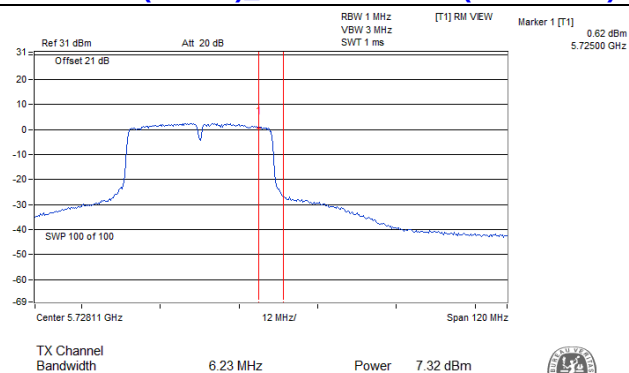


# Spectrum Plot of Straddle channel

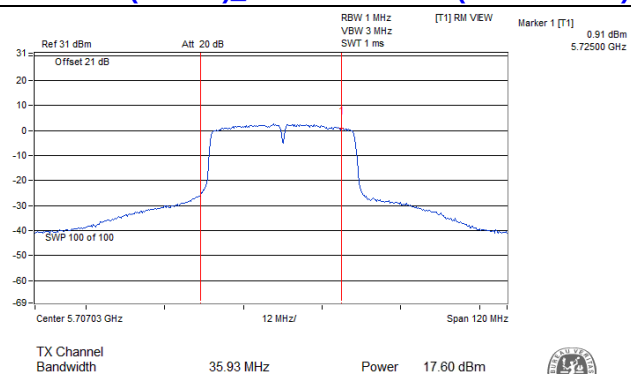
## 802.11an (40MHz)\_Chain 0: CH 142 (For U-NII-2C)



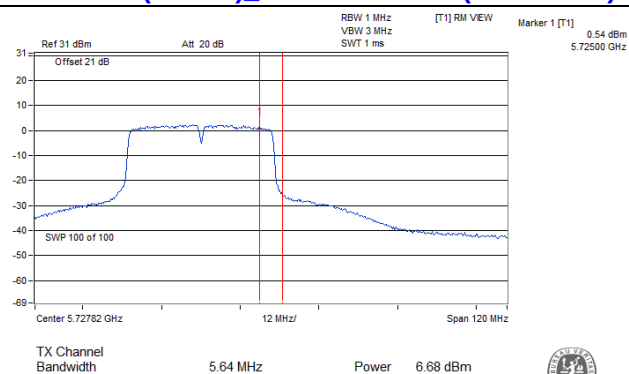
## 802.11an (40MHz)\_Chain 0: CH 142(For U-NII-3)



## 802.11an (40MHz)\_Chain 1: CH 142 (For U-NII-2C)

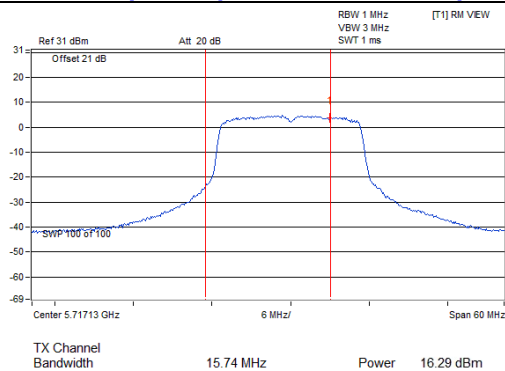


## 802.11an (40MHz)\_Chain 1: CH 142(For U-NII-3)

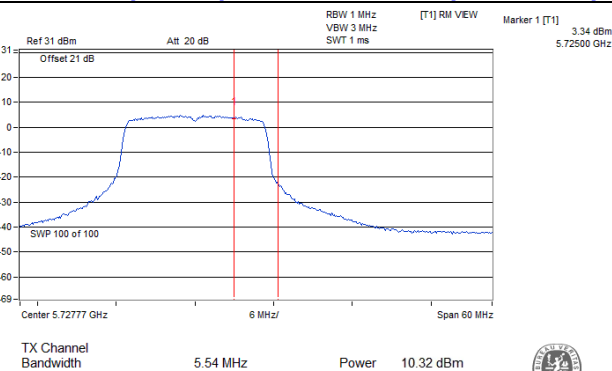


### Spectrum Plot of Straddle channel

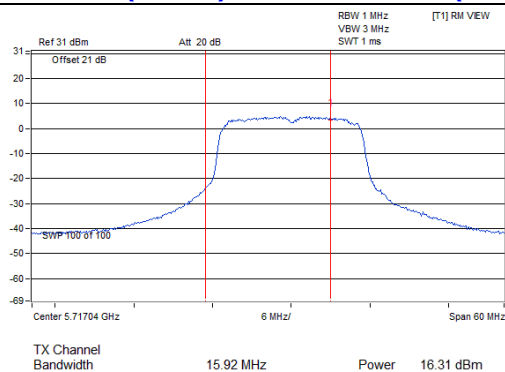
#### 802.11ac (20MHz)\_Chain 0: CH 144 (For U-NII-2C)



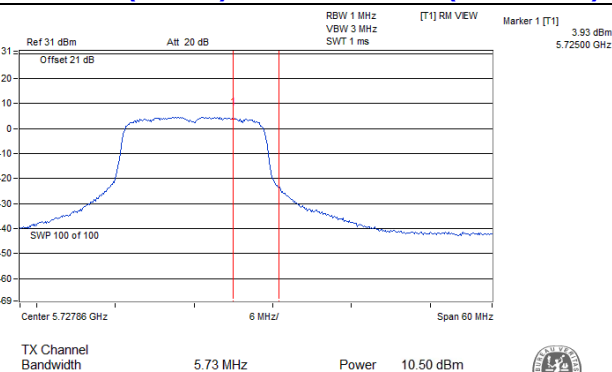
#### 802.11ac (20MHz)\_Chain 0: CH 144(For U-NII-3)



#### 802.11ac (20MHz)\_Chain 1: CH 144 (For U-NII-2C)

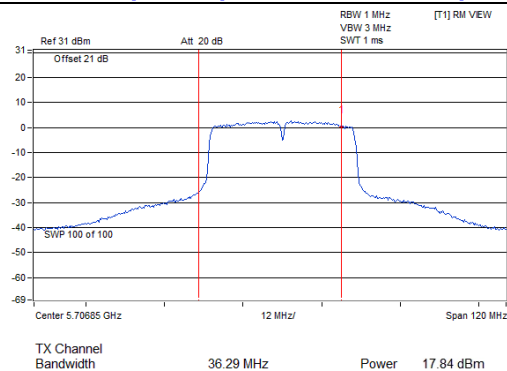


#### 802.11ac (20MHz)\_Chain 1: CH 144(For U-NII-3)

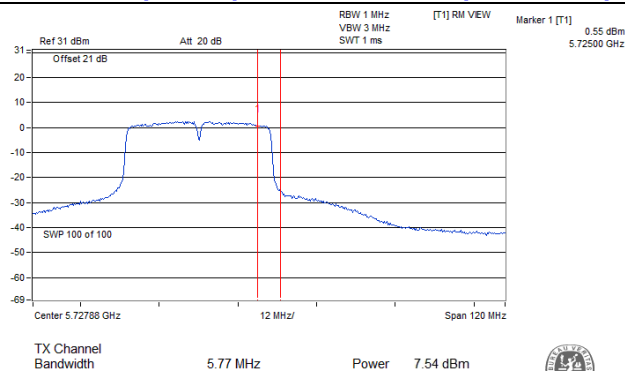


# Spectrum Plot of Straddle channel

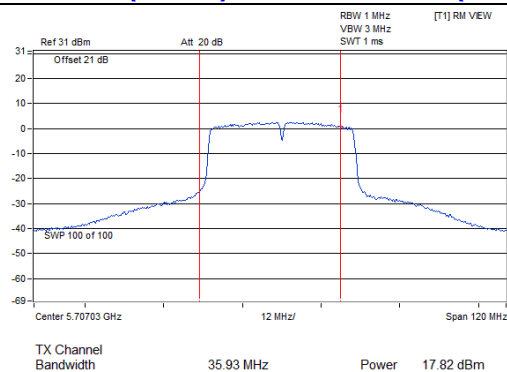
## 802.11ac (40MHz)\_Chain 0: CH 142 (For U-NII-2C)



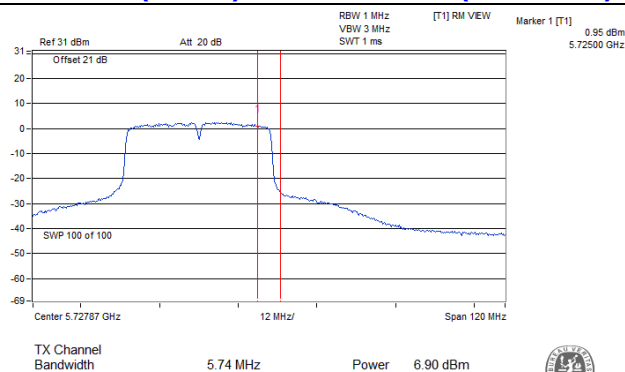
## 802.11ac (40MHz)\_Chain 0: CH 142(For U-NII-3)



## 802.11ac (40MHz)\_Chain 1: CH 142 (For U-NII-2C)

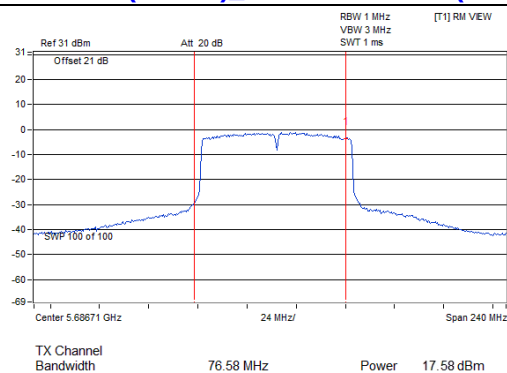


## 802.11ac (40MHz)\_Chain 1: CH 142(For U-NII-3)

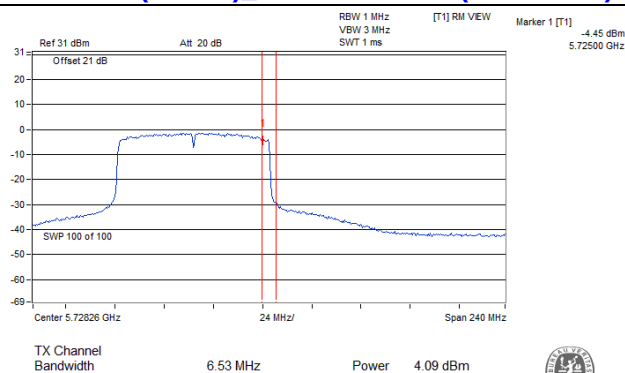


# Spectrum Plot of Straddle channel

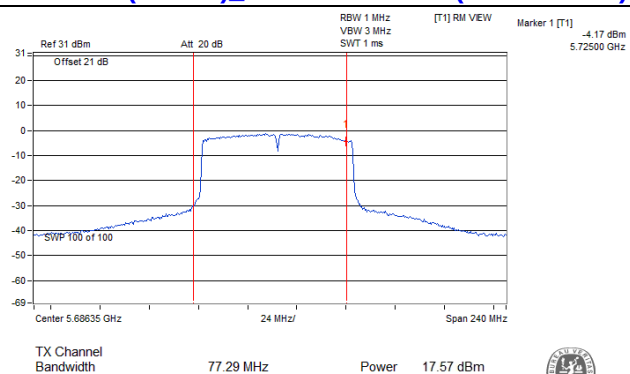
## 802.11ac (80MHz)\_Chain 0: CH 138 (For U-NII-2C)



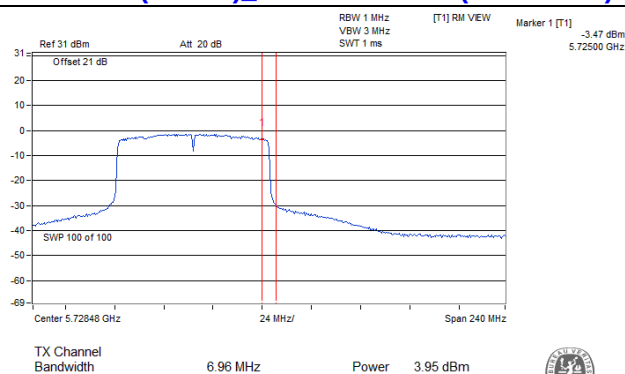
## 802.11ac (80MHz)\_Chain 0: CH 138(For U-NII-3)



## 802.11ac (80MHz)\_Chain 1: CH 138 (For U-NII-2C)

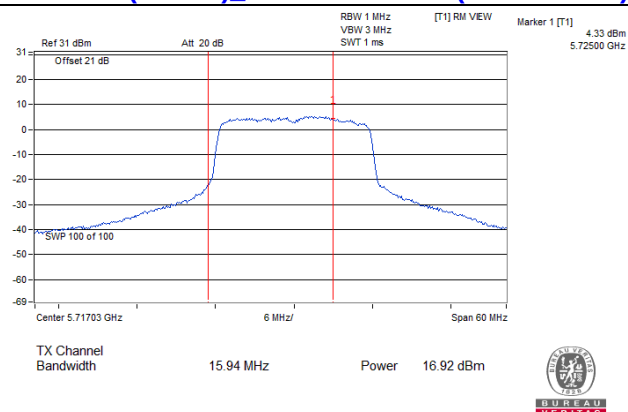


## 802.11ac (80MHz)\_Chain 1: CH 138(For U-NII-3)

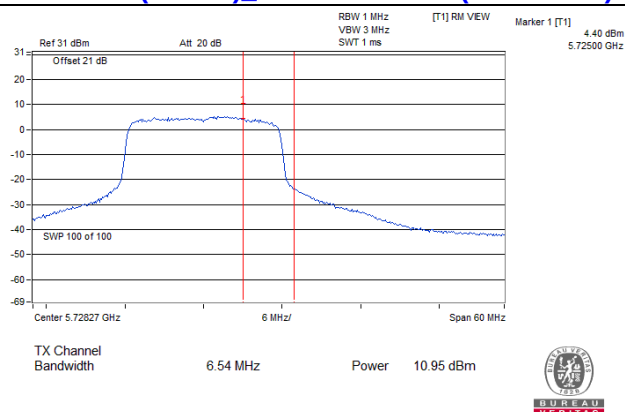


### Spectrum Plot of Straddle channel

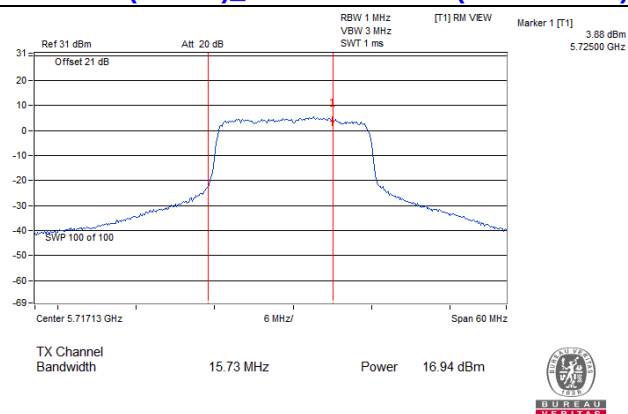
#### 802.11ax (20MHz)\_Chain 0: CH 144 (For U-NII-2C)



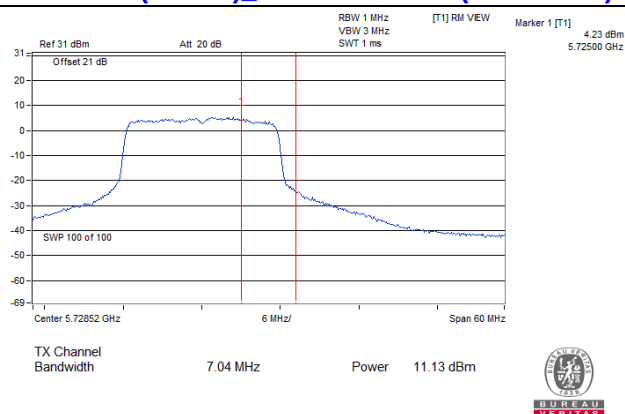
#### 802.11ax (20MHz)\_Chain 0: CH 144(For U-NII-3)



#### 802.11ax (20MHz)\_Chain 1: CH 144 (For U-NII-2C)

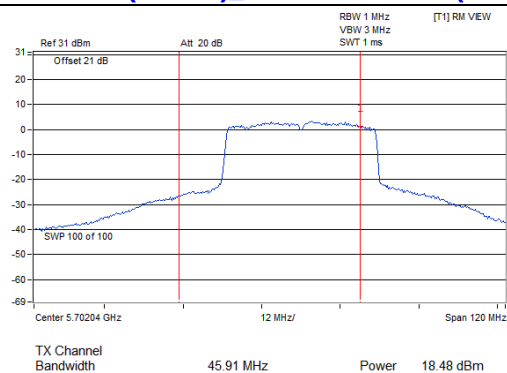


#### 802.11ax (20MHz)\_Chain 1: CH 144(For U-NII-3)

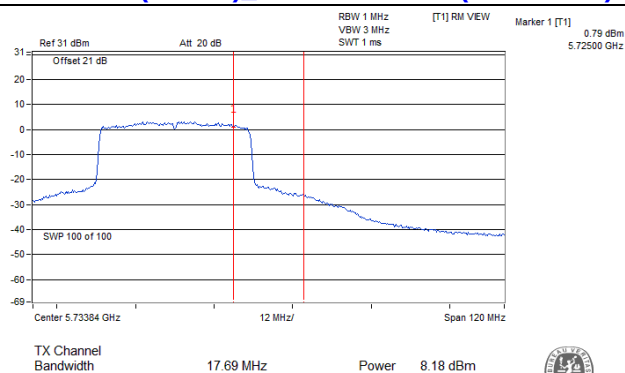


# Spectrum Plot of Straddle channel

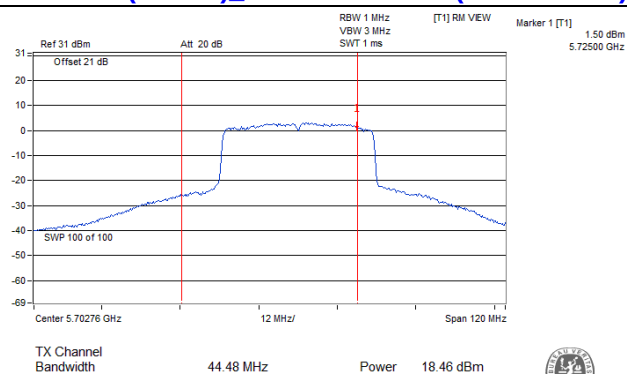
## 802.11ax (40MHz)\_Chain 0: CH 142 (For U-NII-2C)



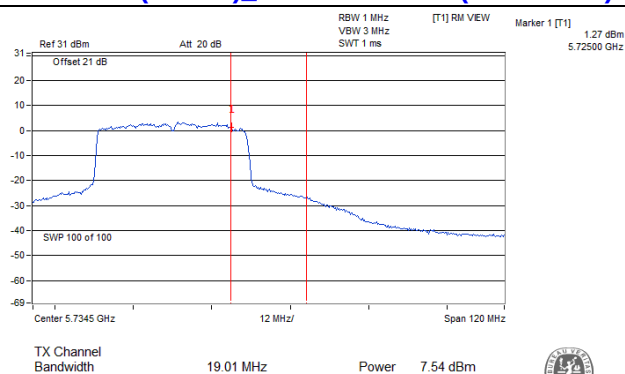
## 802.11ax (40MHz)\_Chain 0: CH 142(For U-NII-3)



## 802.11ax (40MHz)\_Chain 1: CH 142 (For U-NII-2C)



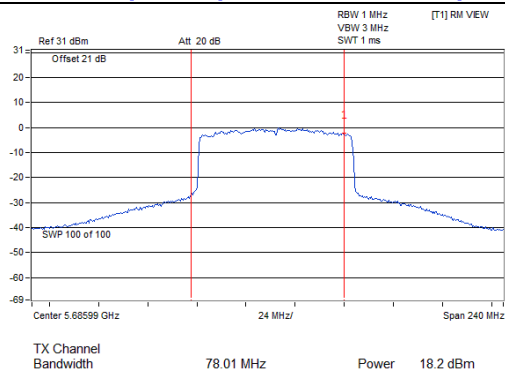
## 802.11ax (40MHz)\_Chain 1: CH 142(For U-NII-3)



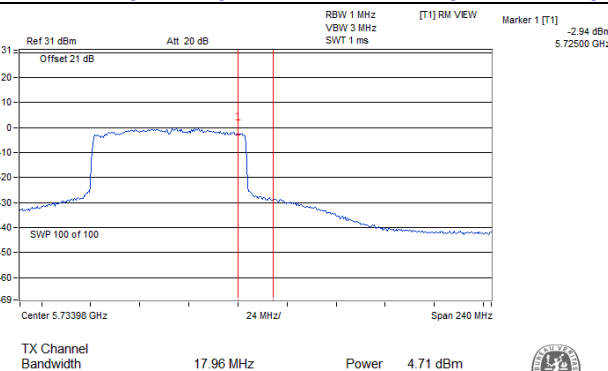


# Spectrum Plot of Straddle channel

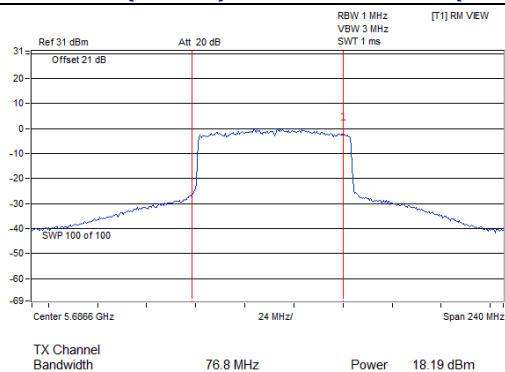
## 802.11ax (80MHz)\_Chain 0: CH 138 (For U-NII-2C)



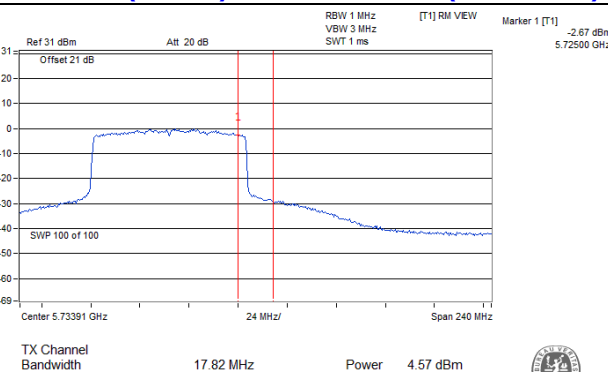
## 802.11ax (80MHz)\_Chain 0: CH 138(For U-NII-3)



## 802.11ax (80MHz)\_Chain 1: CH 138 (For U-NII-2C)



## 802.11ax (80MHz)\_Chain 1: CH 138(For U-NII-3)



## Beamforming Mode

### 802.11ac (20MHz)

| Chan. | Freq.<br>(MHz)       | Maximum Conducted Power (dBm) |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Power<br>Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|------------------------|-------------------------|-------------------------|----------------|
|       |                      | Chain 0                       | Chain 1 |                        |                         |                         |                |
| 36    | 5180                 | 13.98                         | 14.22   | 51.428                 | 17.11                   | 23.05                   | Pass           |
| 40    | 5200                 | 16.70                         | 16.97   | 96.547                 | 19.85                   | 23.05                   | Pass           |
| 48    | 5240                 | 16.73                         | 17.06   | 97.914                 | 19.91                   | 23.05                   | Pass           |
| 52    | 5260                 | 16.60                         | 16.79   | 93.462                 | 19.71                   | 23.05                   | Pass           |
| 60    | 5300                 | 16.57                         | 16.71   | 92.275                 | 19.65                   | 23.05                   | Pass           |
| 64    | 5320                 | 14.43                         | 14.56   | 56.309                 | 17.51                   | 23.05                   | Pass           |
| 100   | 5500                 | 14.37                         | 14.61   | 56.259                 | 17.50                   | 23.05                   | Pass           |
| 116   | 5580                 | 16.48                         | 16.59   | 90.067                 | 19.55                   | 23.05                   | Pass           |
| 140   | 5700                 | 12.87                         | 13.15   | 40.018                 | 16.02                   | 23.05                   | Pass           |
| 144   | 5720<br>For U-NII-2C | 13.28                         | 13.30   | 42.661                 | 16.30                   | 22.01                   | Pass           |
| 144   | 5720<br>For U-NII-3  | 7.31                          | 7.49    | 10.993                 | 10.41                   | 29.05                   | Pass           |
| 149   | 5745                 | 18.68                         | 18.82   | 149.998                | 21.76                   | 29.05                   | Pass           |
| 157   | 5785                 | 18.38                         | 18.30   | 136.474                | 21.35                   | 29.05                   | Pass           |
| 165   | 5825                 | 19.00                         | 19.15   | 161.657                | 22.09                   | 29.05                   | Pass           |

**For U-NII-1, U-NII-2ABand:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $24 - (6.95 - 6) = 23.05\text{dBm}$ .

**For U-NII-2C Band:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $22.96 - (6.95 - 6) = 22.01\text{dBm}$ .

**For U-NII-3:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (6.95 - 6) = 29.05\text{dBm}$ .

#### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(28.27) = 25.51\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.47) = 25.06\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(21.44) = 24.31\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(21.15) = 24.25\text{dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(21.49) = 24.32\text{dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(21.16) = 24.26\text{dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.06) = 23.02\text{dBm} < 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(28.08) = 25.48\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.56) = 25.08\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(21.50) = 24.32\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(21.20) = 24.26\text{dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(21.49) = 24.32\text{dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(21.07) = 24.23\text{dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.27) = 22.96\text{dBm} < 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 144   | 5720        | 53.654               | 17.30                 |

## 802.11ac (40MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 38    | 5190                 | 11.77                         | 12.04   | 31.027           | 14.92             | 23.05             | Pass        |
| 46    | 5230                 | 14.46                         | 14.73   | 57.642           | 17.61             | 23.05             | Pass        |
| 54    | 5270                 | 15.49                         | 15.67   | 72.297           | 18.59             | 23.05             | Pass        |
| 62    | 5310                 | 11.68                         | 11.91   | 30.247           | 14.81             | 23.05             | Pass        |
| 102   | 5510                 | 11.83                         | 12.14   | 31.609           | 15.00             | 23.05             | Pass        |
| 110   | 5550                 | 16.69                         | 16.96   | 96.325           | 19.84             | 23.05             | Pass        |
| 134   | 5670                 | 14.12                         | 14.36   | 53.112           | 17.25             | 23.05             | Pass        |
| 142   | 5710<br>For U-NII-2C | 14.83                         | 14.81   | 60.678           | 17.83             | 23.05             | Pass        |
| 142   | 5710<br>For U-NII-3  | 4.53                          | 3.89    | 5.287            | 7.23              | 29.05             | Pass        |
| 151   | 5755                 | 19.46                         | 19.68   | 181.205          | 22.58             | 29.05             | Pass        |
| 159   | 5795                 | 19.51                         | 19.75   | 183.737          | 22.64             | 29.05             | Pass        |

**For U-NII-1, U-NII-2A, U-NII-2C Band:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $24 - (6.95 - 6) = 23.05\text{dBm}$ .

**For U-NII-3:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (6.95 - 6) = 29.05\text{dBm}$ .

### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(61.32) = 28.87\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(40.74) = 27.10\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(40.70) = 27.10\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(40.92) = 27.12\text{dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(41.07) = 27.14\text{dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(5725.00 - 5679.09) = 27.61\text{dBm} > 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(66.44) = 29.22\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(40.63) = 27.08\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(40.68) = 27.09\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(40.88) = 27.11\text{dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(40.49) = 27.07\text{dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(5725.00 - 5680.52) = 27.48\text{dBm} > 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 142   | 5710        | 65.965               | 18.19                 |

### 802.11ac (80MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 42    | 5210                 | 11.60                         | 11.89   | 29.907           | 14.76             | 23.05             | Pass        |
| 58    | 5290                 | 10.49                         | 10.68   | 22.889           | 13.60             | 23.05             | Pass        |
| 106   | 5530                 | 11.49                         | 11.79   | 29.194           | 14.65             | 23.05             | Pass        |
| 122   | 5610                 | 14.52                         | 14.77   | 58.306           | 17.66             | 23.05             | Pass        |
| 138   | 5690<br>For U-NII-2C | 14.57                         | 14.56   | 57.218           | 17.58             | 23.05             | Pass        |
| 138   | 5690<br>For U-NII-3  | 1.08                          | 0.94    | 2.524            | 4.02              | 29.05             | Pass        |
| 155   | 5775                 | 14.54                         | 14.73   | 58.161           | 17.65             | 29.05             | Pass        |

**For U-NII-1, U-NII-2A, U-NII-2C Band:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $24 - (6.95 - 6) = 23.05\text{dBm}$ .

**For U-NII-3:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (6.95 - 6) = 29.05\text{dBm}$ .

#### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(82.15) = 30.14\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(82.87) = 30.18\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(83.07) = 30.19\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(5725.00 - 5646.99) = 29.92\text{dBm} > 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(82.87) = 30.18\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(82.53) = 30.16\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(83.12) = 30.20\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(5725.00 - 5648.20) = 29.85\text{dBm} > 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 138   | 5690        | 59.742               | 17.76                 |

## 802.11ax (20MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 36    | 5180                 | 14.61                         | 14.88   | 59.668           | 17.76             | 23.05             | Pass        |
| 40    | 5200                 | 17.33                         | 17.60   | 111.619          | 20.48             | 23.05             | Pass        |
| 48    | 5240                 | 17.42                         | 17.68   | <b>113.822</b>   | 20.56             | 23.05             | Pass        |
| 52    | 5260                 | 17.28                         | 17.47   | <b>109.303</b>   | 20.39             | 23.05             | Pass        |
| 60    | 5300                 | 17.22                         | 17.34   | 106.923          | 20.29             | 23.05             | Pass        |
| 64    | 5320                 | 15.10                         | 15.20   | 65.472           | 18.16             | 23.05             | Pass        |
| 100   | 5500                 | 15.01                         | 15.25   | 65.192           | 18.14             | 23.05             | Pass        |
| 116   | 5580                 | 17.12                         | 17.26   | 104.734          | 20.20             | 23.05             | Pass        |
| 140   | 5700                 | 13.52                         | 13.83   | 46.645           | 16.69             | 23.05             | Pass        |
| 144   | 5720<br>For U-NII-2C | 13.91                         | 13.93   | 49.321           | 16.93             | 22.01             | Pass        |
| 144   | 5720<br>For U-NII-3  | 7.94                          | 8.12    | 12.709           | 11.04             | 29.05             | Pass        |
| 149   | 5745                 | 19.34                         | 19.47   | 174.413          | 22.42             | 29.05             | Pass        |
| 157   | 5785                 | 19.02                         | 18.96   | 158.504          | 22.00             | 29.05             | Pass        |
| 165   | 5825                 | 19.66                         | 19.82   | 188.41           | 22.75             | 29.05             | Pass        |

**For U-NII-1, U-NII-2ABand:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $24 - (6.95 - 6) = 23.05\text{dBm}$ .

**For U-NII-2C Band:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $22.96 - (6.95 - 6) = 22.01\text{dBm}$ .

**For U-NII-3:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (6.95 - 6) = 29.05\text{dBm}$ .

### NOTE:

#### For U-NII-2A, U-NII-2C Band:

##### Chain 0

1.  $11\text{dBm} + 10\log(28.27) = 25.51\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.47) = 25.06\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(21.44) = 24.31\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(21.15) = 24.25\text{dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(21.49) = 24.32\text{dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(21.16) = 24.26\text{dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.06) = 23.02\text{dBm} < 24\text{dBm}$ .

##### Chain 1

1.  $11\text{dBm} + 10\log(28.08) = 25.48\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(25.56) = 25.08\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(21.50) = 24.32\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(21.20) = 24.26\text{dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(21.49) = 24.32\text{dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(21.07) = 24.23\text{dBm} > 24\text{dBm}$ .
7.  $11\text{dBm} + 10\log(5725.00 - 5709.27) = 22.96\text{dBm} < 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 144   | 5720        | 62.03                | 17.93                 |

# 802.11ax (40MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 38    | 5190                 | 12.39                         | 12.66   | 35.788           | 15.54             | 23.05             | Pass        |
| 46    | 5230                 | 15.11                         | 15.36   | 66.790           | 18.25             | 23.05             | Pass        |
| 54    | 5270                 | 16.14                         | 16.35   | 84.267           | 19.26             | 23.05             | Pass        |
| 62    | 5310                 | 12.36                         | 12.58   | 35.332           | 15.48             | 23.05             | Pass        |
| 102   | 5510                 | 12.46                         | 12.77   | 36.543           | 15.63             | 23.05             | Pass        |
| 110   | 5550                 | 17.33                         | 17.58   | <b>111.355</b>   | 20.47             | 23.05             | Pass        |
| 134   | 5670                 | 14.75                         | 15.01   | 61.550           | 17.89             | 23.05             | Pass        |
| 142   | 5710<br>For U-NII-2C | 15.47                         | 15.45   | 70.312           | 18.47             | 23.05             | Pass        |
| 142   | 5710<br>For U-NII-3  | 5.17                          | 4.53    | 6.126            | 7.87              | 29.05             | Pass        |
| 151   | 5755                 | 20.10                         | 20.35   | 210.722          | 23.24             | 29.05             | Pass        |
| 159   | 5795                 | 20.12                         | 20.39   | <b>212.197</b>   | 23.27             | 29.05             | Pass        |

**For U-NII-1, U-NII-2A, U-NII-2C Band:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $24 - (6.95 - 6) = 23.05\text{dBm}$ .

**For U-NII-3:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (6.95 - 6) = 29.05\text{dBm}$ .

## NOTE:

### For U-NII-2A, U-NII-2C Band:

#### Chain 0

1.  $11\text{dBm} + 10\log(61.32) = 28.87\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(40.74) = 27.10\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(40.70) = 27.10\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(40.92) = 27.12\text{dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(41.07) = 27.14\text{dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(5725.00 - 5679.09) = 27.61\text{dBm} > 24\text{dBm}$ .

#### Chain 1

1.  $11\text{dBm} + 10\log(66.44) = 29.22\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(40.63) = 27.08\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(40.68) = 27.09\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(40.88) = 27.11\text{dBm} > 24\text{dBm}$ .
5.  $11\text{dBm} + 10\log(40.49) = 27.07\text{dBm} > 24\text{dBm}$ .
6.  $11\text{dBm} + 10\log(5725.00 - 5680.52) = 27.48\text{dBm} > 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 142   | 5710        | 76.438               | 18.83                 |

# 802.11ax (80MHz)

| Chan. | Freq. (MHz)          | Maximum Conducted Power (dBm) |         | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|------------------|-------------------|-------------------|-------------|
|       |                      | Chain 0                       | Chain 1 |                  |                   |                   |             |
| 42    | 5210                 | 12.26                         | 12.53   | 34.733           | 15.41             | 23.05             | Pass        |
| 58    | 5290                 | 11.18                         | 11.30   | 26.612           | 14.25             | 23.05             | Pass        |
| 106   | 5530                 | 12.16                         | 12.41   | 33.862           | 15.30             | 23.05             | Pass        |
| 122   | 5610                 | 15.13                         | 15.45   | 67.659           | 18.30             | 23.05             | Pass        |
| 138   | 5690<br>For U-NII-2C | 15.19                         | 15.18   | 65.998           | 18.20             | 23.05             | Pass        |
| 138   | 5690<br>For U-NII-3  | 1.70                          | 1.56    | 2.911            | 4.64              | 29.05             | Pass        |
| 155   | 5775                 | 15.21                         | 15.36   | 67.545           | 18.30             | 29.05             | Pass        |

**For U-NII-1, U-NII-2A, U-NII-2C Band:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $24 - (6.95 - 6) = 23.05\text{dBm}$ .

**For U-NII-3:** Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (6.95 - 6) = 29.05\text{dBm}$ .

## NOTE:

### For U-NII-2A, U-NII-2C Band:

#### Chain 0

1.  $11\text{dBm} + 10\log(82.15) = 30.14\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(82.87) = 30.18\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(83.07) = 30.19\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(5725.00 - 5646.99) = 29.92\text{dBm} > 24\text{dBm}$ .

#### Chain 1

1.  $11\text{dBm} + 10\log(82.87) = 30.18\text{dBm} > 24\text{dBm}$ .
2.  $11\text{dBm} + 10\log(82.53) = 30.16\text{dBm} > 24\text{dBm}$ .
3.  $11\text{dBm} + 10\log(83.12) = 30.20\text{dBm} > 24\text{dBm}$ .
4.  $11\text{dBm} + 10\log(5725.00 - 5648.20) = 29.85\text{dBm} > 24\text{dBm}$ .

For Reference only-Power meter value

The power value was measured by power meter with average sensor

| Chan. | Freq. (MHz) | Conducted Power (mW) | Conducted Power (dBm) |
|-------|-------------|----------------------|-----------------------|
| 138   | 5690        | 68.909               | 18.38                 |

**26dB Bandwidth:**  
**802.11a**

| Channel | Channel Frequency (MHz) | 26dBc Bandwidth (MHz) |         |
|---------|-------------------------|-----------------------|---------|
|         |                         | Chain 0               | Chain 1 |
| 36      | 5180                    | 20.56                 | 20.75   |
| 40      | 5200                    | 29.2                  | 26.2    |
| 48      | 5240                    | 28.88                 | 24.8    |
| 52      | 5260                    | 32.15                 | 33      |
| 60      | 5300                    | 26.41                 | 25.11   |
| 64      | 5320                    | 20.84                 | 20.82   |
| 100     | 5500                    | 20.65                 | 20.82   |
| 116     | 5580                    | 20.8                  | 20.76   |
| 140     | 5700                    | 20.96                 | 20.54   |
| 144     | 5720<br>For U-NII-2C    | 15.51                 | 15.65   |
| 144     | 5720<br>For U-NII-3     | 5.84                  | 5.92    |

**802.11ax (20MHz)**

| Channel | Channel Frequency (MHz) | 26dBc Bandwidth (MHz) |         |
|---------|-------------------------|-----------------------|---------|
|         |                         | Chain 0               | Chain 1 |
| 36      | 5180                    | 21.47                 | 21.34   |
| 40      | 5200                    | 25.95                 | 27.46   |
| 48      | 5240                    | 26.79                 | 25.51   |
| 52      | 5260                    | 28.27                 | 28.08   |
| 60      | 5300                    | 25.47                 | 25.56   |
| 64      | 5320                    | 21.44                 | 21.5    |
| 100     | 5500                    | 21.15                 | 21.2    |
| 116     | 5580                    | 21.49                 | 21.49   |
| 140     | 5700                    | 21.16                 | 21.07   |
| 144     | 5720<br>For U-NII-2C    | 15.94                 | 15.73   |
| 144     | 5720<br>For U-NII-3     | 6.54                  | 7.04    |



### 802.11ax (40MHz)

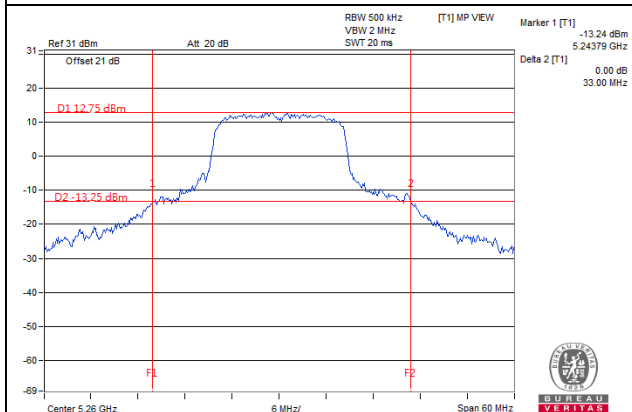
| Channel | Channel Frequency (MHz) | 26dBc Bandwidth (MHz) |         |
|---------|-------------------------|-----------------------|---------|
|         |                         | Chain 0               | Chain 1 |
| 38      | 5190                    | 40.62                 | 40.71   |
| 46      | 5230                    | 40.79                 | 41.05   |
| 54      | 5270                    | 61.32                 | 66.44   |
| 62      | 5310                    | 40.74                 | 40.63   |
| 102     | 5510                    | 40.7                  | 40.68   |
| 110     | 5550                    | 40.92                 | 40.88   |
| 134     | 5670                    | 41.07                 | 40.49   |
| 142     | 5710<br>For U-NII-2C    | 45.91                 | 44.48   |
| 142     | 5710<br>For U-NII-3     | 17.69                 | 19.01   |

### 802.11ax (80MHz)

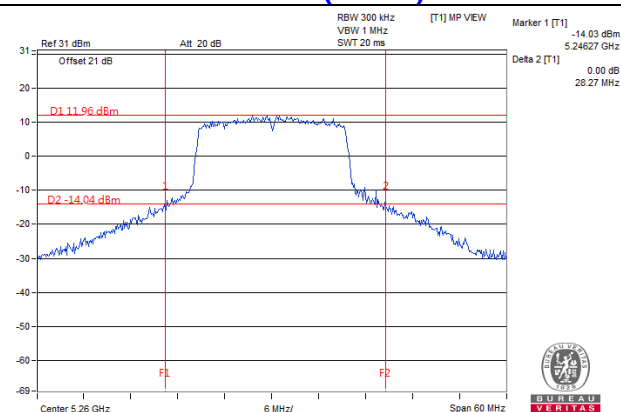
| Channel | Channel Frequency (MHz) | 26dBc Bandwidth (MHz) |         |
|---------|-------------------------|-----------------------|---------|
|         |                         | Chain 0               | Chain 1 |
| 42      | 5210                    | 82.81                 | 82.3    |
| 58      | 5290                    | 82.15                 | 82.87   |
| 106     | 5530                    | 82.87                 | 82.53   |
| 122     | 5610                    | 83.07                 | 83.12   |
| 138     | 5690<br>For U-NII-2C    | 78.01                 | 76.8    |
| 138     | 5690<br>For U-NII-3     | 17.96                 | 17.82   |

## Spectrum Plot of Worst Value

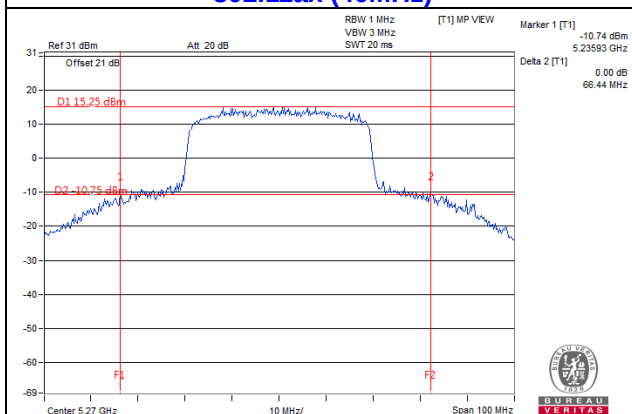
### 802.11a



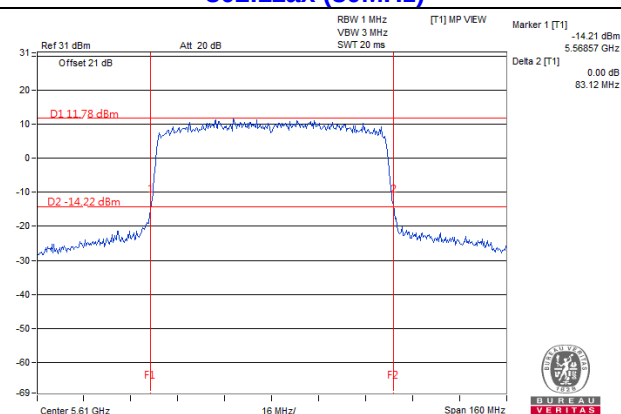
### 802.11ax (20MHz)



### 802.11ax (40MHz)

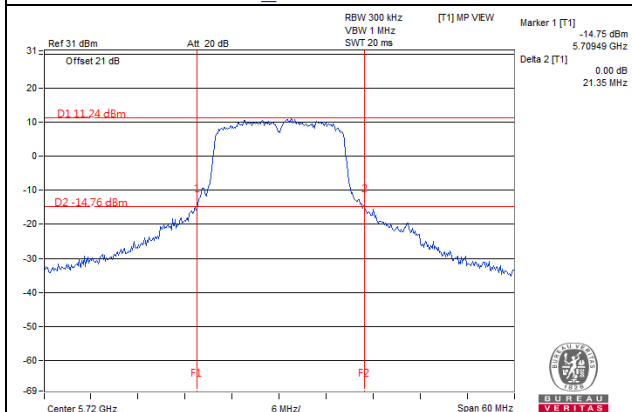


### 802.11ax (80MHz)

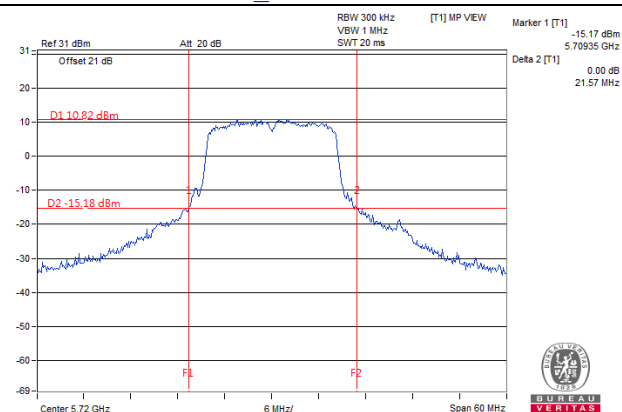


## Spectrum Plot of Straddle Channels

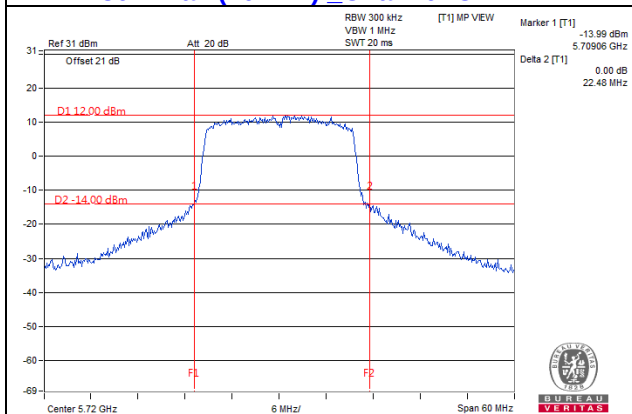
**802.11a Chain 0: CH 144**



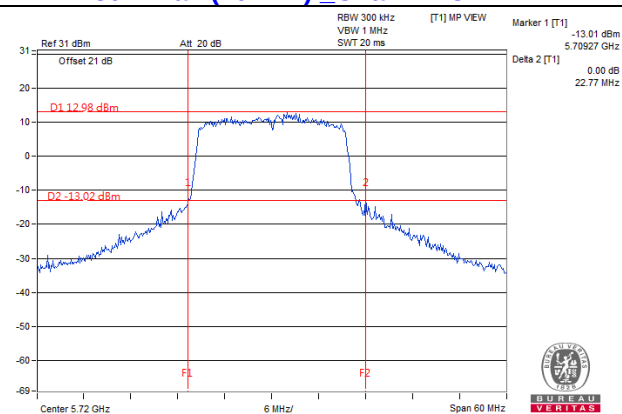
**802.11a Chain 1: CH 144**



**802.11ax (20MHz) Chain 0: CH 144**

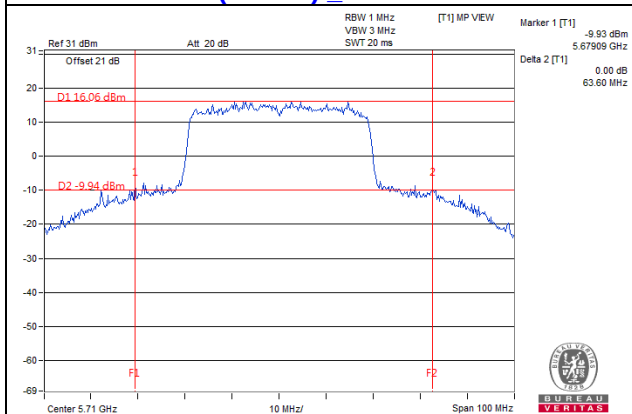


**802.11ax (20MHz) Chain 1: CH 144**

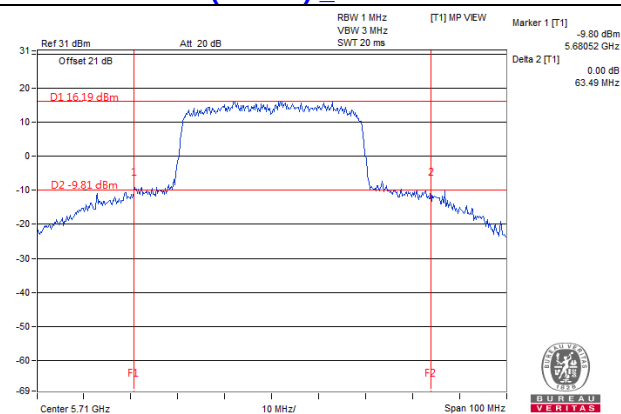


## Spectrum Plot of Straddle Channels

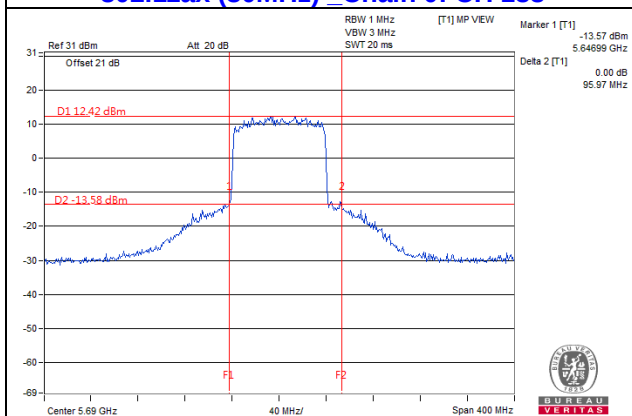
### 802.11ax (40MHz) Chain 0: CH 142



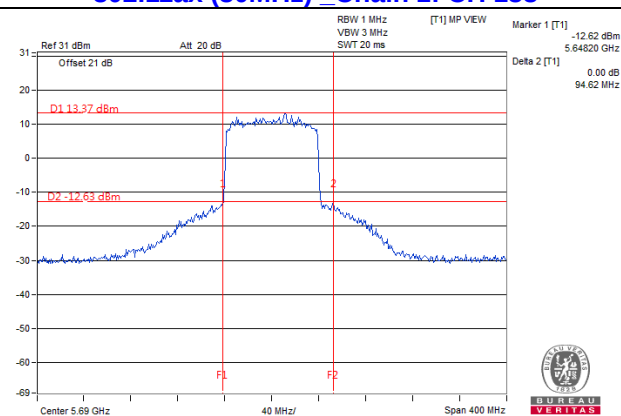
### 802.11ax (40MHz) Chain 1: CH 142



### 802.11ax (80MHz) Chain 0: CH 138

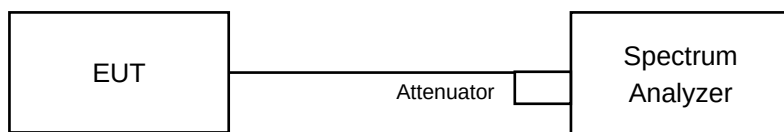


### 802.11ax (80MHz) Chain 1: CH 138



## 4.4 Occupied Bandwidth Measurement

### 4.4.1 Test Setup



### 4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to SAMPLE. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

#### 4.4.4 Test Result

##### CDD Mode

##### 802.11a

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |
|---------|-------------------------|--------------------------|---------|
|         |                         | Chain 0                  | Chain 1 |
| 36      | 5180                    | 16.32                    | 16.32   |
| 40      | 5200                    | 16.68                    | 16.80   |
| 48      | 5240                    | 16.68                    | 16.80   |
| 52      | 5260                    | 16.92                    | 16.80   |
| 60      | 5300                    | 16.68                    | 16.68   |
| 64      | 5320                    | 16.44                    | 16.32   |
| 100     | 5500                    | 16.32                    | 16.32   |
| 116     | 5580                    | 16.32                    | 16.32   |
| 140     | 5700                    | 16.32                    | 16.32   |
| 144     | 5720<br>For U-NII-2C    | 13.28                    | 13.28   |
| 144     | 5720<br>For U-NII-3     | 3.28                     | 3.28    |
| 149     | 5745                    | 27.48                    | 25.60   |
| 157     | 5785                    | 25.10                    | 26.00   |
| 165     | 5825                    | 29.30                    | 28.80   |

##### 802.11ax (20MHz)

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |
|---------|-------------------------|--------------------------|---------|
|         |                         | Chain 0                  | Chain 1 |
| 36      | 5180                    | 18.96                    | 18.96   |
| 40      | 5200                    | 18.96                    | 19.08   |
| 48      | 5240                    | 19.08                    | 18.96   |
| 52      | 5260                    | 19.2                     | 19.20   |
| 60      | 5300                    | 19.2                     | 18.96   |
| 64      | 5320                    | 18.96                    | 18.96   |
| 100     | 5500                    | 18.96                    | 18.96   |
| 116     | 5580                    | 18.96                    | 18.96   |
| 140     | 5700                    | 18.96                    | 18.96   |
| 144     | 5720<br>For U-NII-2C    | 14.48                    | 14.48   |
| 144     | 5720<br>For U-NII-3     | 4.48                     | 4.48    |
| 149     | 5745                    | 25.04                    | 25.50   |
| 157     | 5785                    | 23.60                    | 24.10   |
| 165     | 5825                    | 27.60                    | 28.10   |

#### 802.11ax (40MHz)

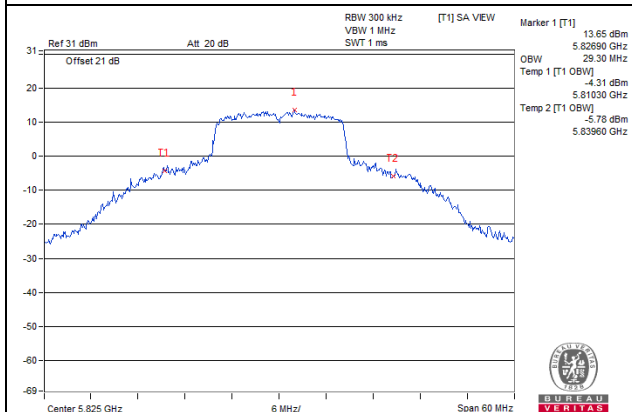
| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |
|---------|-------------------------|--------------------------|---------|
|         |                         | Chain 0                  | Chain 1 |
| 38      | 5190                    | 37.80                    | 37.60   |
| 46      | 5230                    | 38.00                    | 37.60   |
| 54      | 5270                    | 38.00                    | 38.00   |
| 62      | 5310                    | 37.60                    | 37.60   |
| 102     | 5510                    | 37.80                    | 37.80   |
| 110     | 5550                    | 37.80                    | 37.80   |
| 134     | 5670                    | 37.80                    | 37.80   |
| 142     | 5710<br>For U-NII-2C    | 34.20                    | 34.20   |
| 142     | 5710<br>For U-NII-3     | 3.96                     | 3.96    |
| 151     | 5755                    | 49.42                    | 50.67   |
| 159     | 5795                    | 43.50                    | 45.00   |

#### 802.11ax (80MHz)

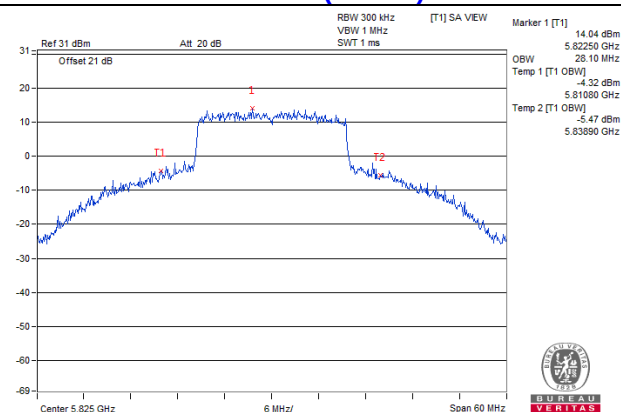
| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |
|---------|-------------------------|--------------------------|---------|
|         |                         | Chain 0                  | Chain 1 |
| 42      | 5210                    | 77.28                    | 77.28   |
| 58      | 5290                    | 77.28                    | 77.04   |
| 106     | 5530                    | 77.04                    | 77.28   |
| 122     | 5610                    | 77.28                    | 77.52   |
| 138     | 5690<br>For U-NII-2C    | 73.88                    | 73.88   |
| 138     | 5690<br>For U-NII-3     | 3.40                     | 3.88    |
| 155     | 5775                    | 77.30                    | 77.28   |

## Spectrum Plot of Worst Value

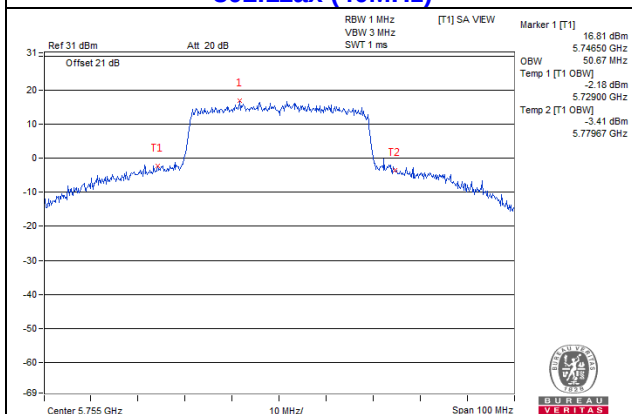
### 802.11a



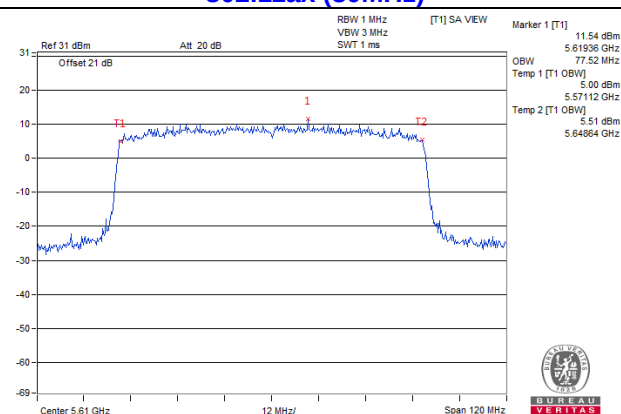
### 802.11ax (20MHz)



### 802.11ax (40MHz)



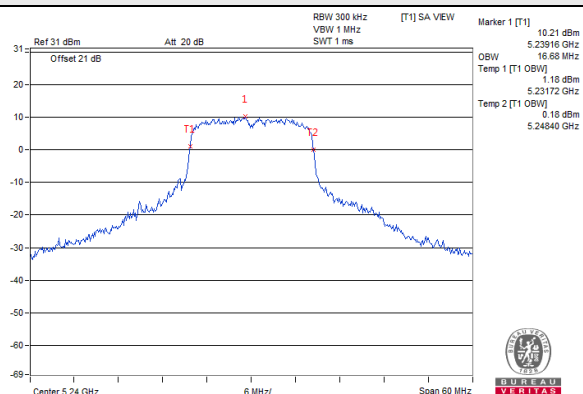
### 802.11ax (80MHz)



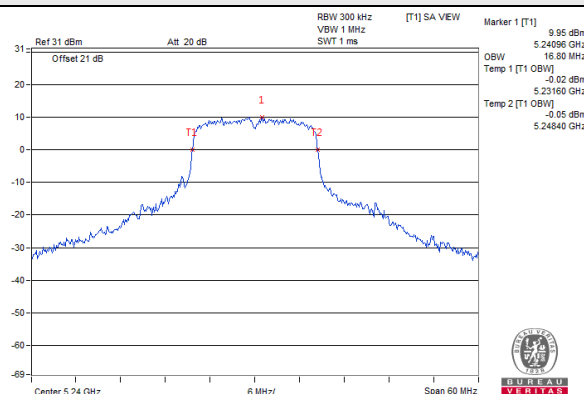


## Spectrum Plot for near By DFS Band

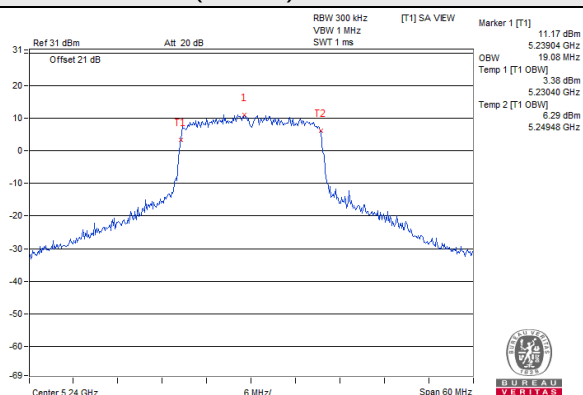
### 802.11a / Chain 0 / CH 48



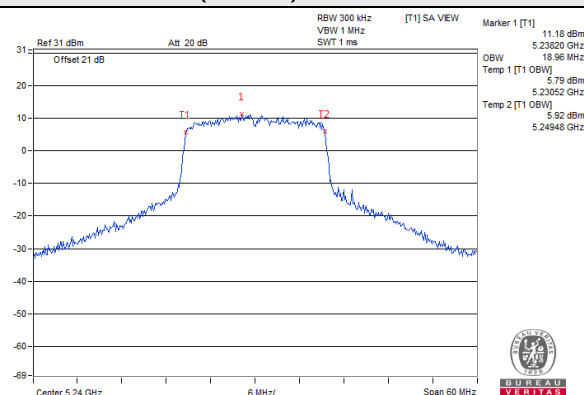
### 802.11a / Chain 1 / CH 48



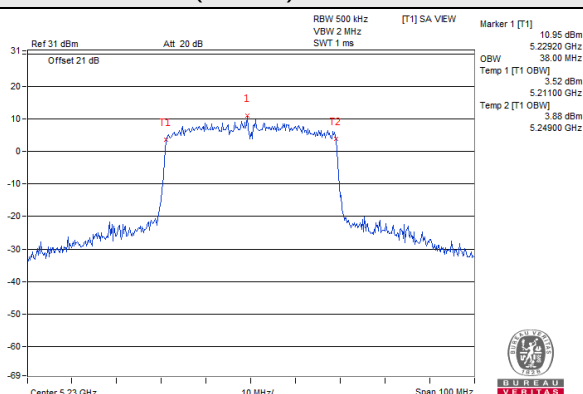
### 802.11ax (20MHz) / Chain 0 / CH 48



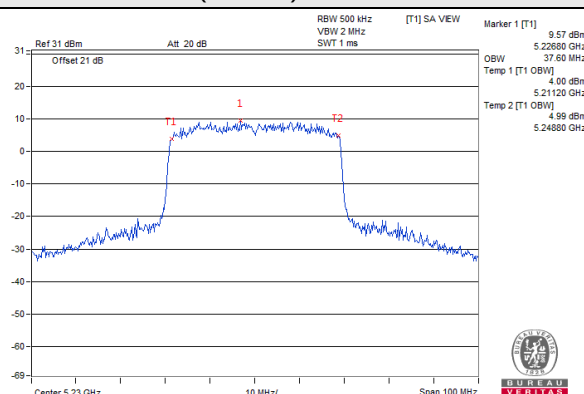
### 802.11ax (20MHz) / Chain 1 / CH 48



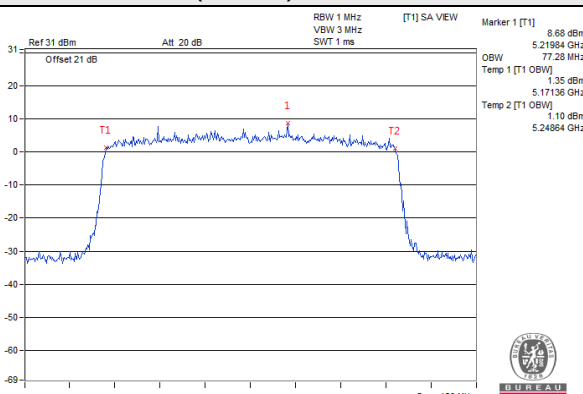
### 802.11ax (40MHz) / Chain 0 / CH 46



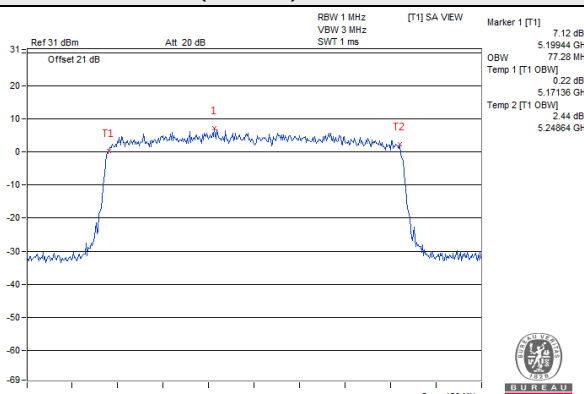
### 802.11ax (40MHz) / Chain 1 / CH 46



### 802.11ax (80MHz) / Chain 0 / CH 42

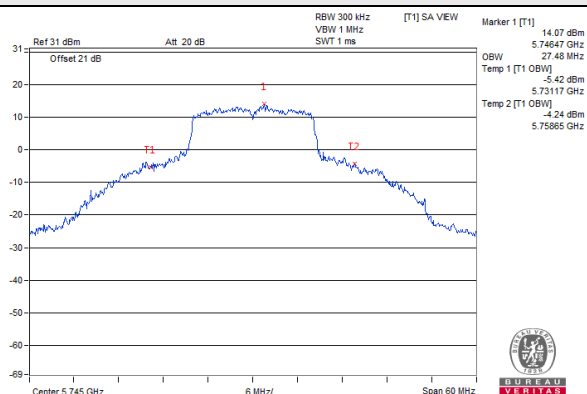


### 802.11ax (80MHz) / Chain 1 / CH 42

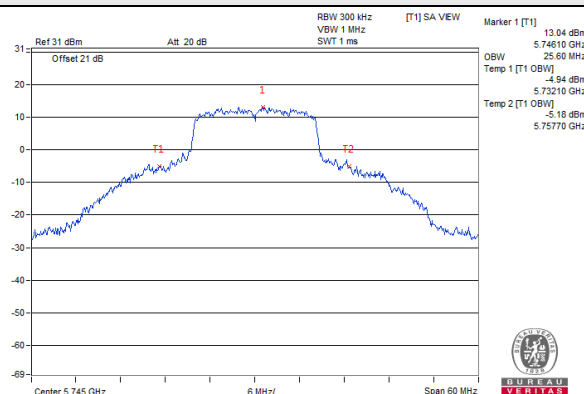


## Spectrum Plot for near By DFS Band

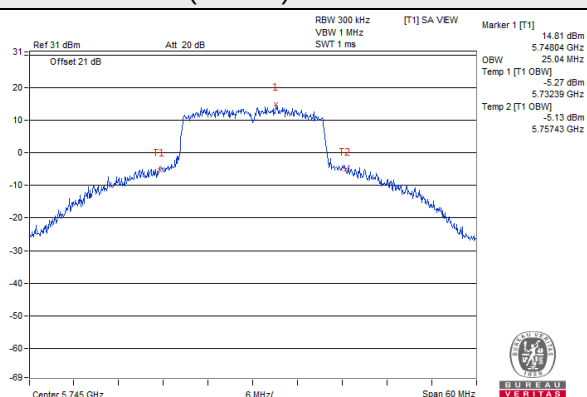
802.11a / Chain 0 / CH 149



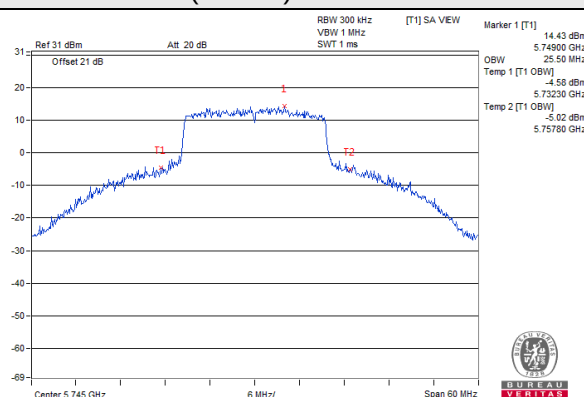
802.11a / Chain 1 / CH 149



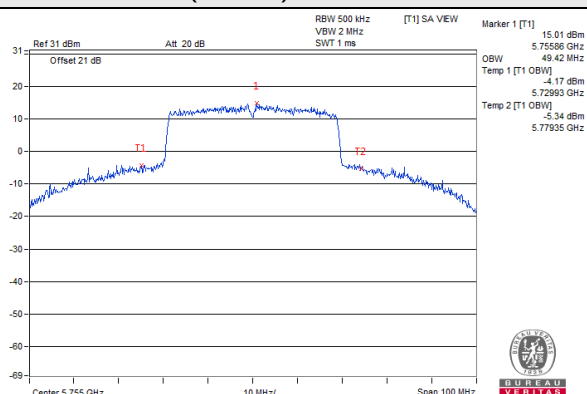
802.11ax (20MHz) / Chain 0 / CH 149



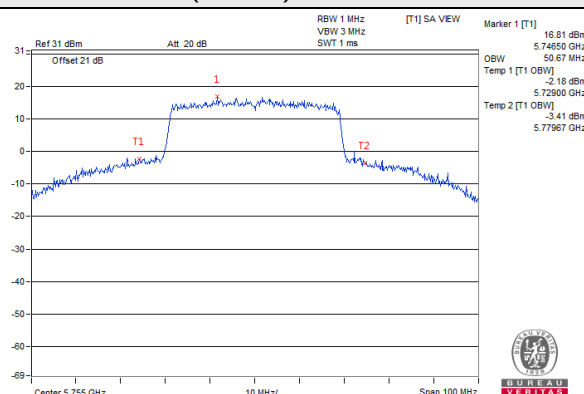
802.11ax (20MHz) / Chain 1 / CH 149



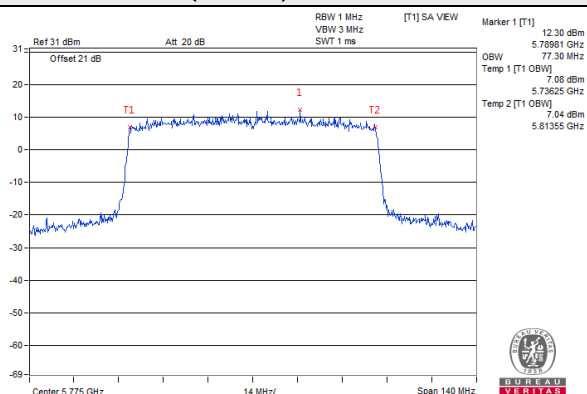
802.11ax (40MHz) / Chain 0 / CH 151



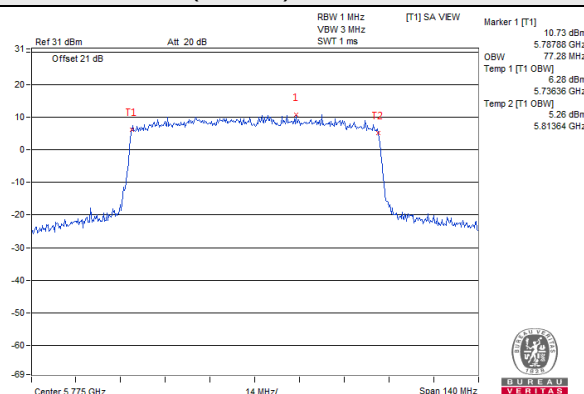
802.11ax (40MHz) / Chain 1 / CH 151



802.11ax (80MHz) / Chain 0 / CH 155



802.11ax (80MHz) / Chain 1 / CH 155

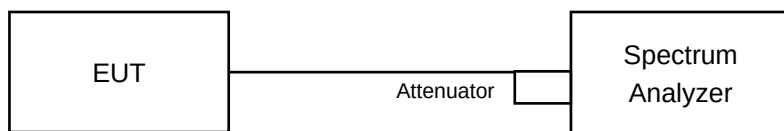


## 4.5 Peak Power Spectral Density Measurement

### 4.5.1 Limits of Peak Power Spectral Density Measurement

| Operation Band | EUT Category |                                   | Limit         |
|----------------|--------------|-----------------------------------|---------------|
| U-NII-1        |              | Outdoor Access Point              | 17dBm/ MHz    |
|                |              | Fixed point-to-point Access Point |               |
|                |              | Indoor Access Point               |               |
|                | √            | Mobile and Portable client device | 11dBm/ MHz    |
| U-NII-2A       | √            |                                   | 11dBm/ MHz    |
| U-NII-2C       | √            |                                   | 11dBm/ MHz    |
| U-NII-3        | √            |                                   | 30dBm/ 500kHz |

### 4.5.2 Test Setup



### 4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.5.4 Test Procedures

For U-NII-1, U-NII-2A, U-NII-2C Band:

Using method SA-2

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1MHz, Set VBW  $\geq$  3 MHz, Detector = RMS
- Set Channel power measure = 1MHz
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.

For U-NII-3 band:

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 500 kHz, Set VBW  $\geq$  1 MHz, Detector = RMS
- Use the peak marker function to determine the maximum power level in any 500 kHz band segment within the fundamental EBW.
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.

### 4.5.5 Deviation from Test Standard

No deviation.

### 4.5.6 EUT Operating Conditions

Same as 4.3.6.

#### 4.5.7 Test Results

##### CDD Mode

For U-NII-1, U-NII-2A, U-NII-2C:

##### 802.11a

| Chan. | Freq.<br>(MHz)       | PSD (dBm/MHz) |         | Total PSD<br>(dBm/MHz) | Max. Limit<br>(dBm/MHz) | Pass / Fail |
|-------|----------------------|---------------|---------|------------------------|-------------------------|-------------|
|       |                      | Chain 0       | Chain 1 |                        |                         |             |
| 36    | 5180                 | 4.62          | 4.59    | 7.62                   | 10.05                   | Pass        |
| 40    | 5200                 | 6.11          | 6.19    | 9.16                   | 10.05                   | Pass        |
| 48    | 5240                 | 6.13          | 6.13    | 9.14                   | 10.05                   | Pass        |
| 52    | 5260                 | 6.49          | 6.52    | 9.52                   | 10.05                   | Pass        |
| 60    | 5300                 | 6.32          | 6.40    | 9.37                   | 10.05                   | Pass        |
| 64    | 5320                 | 5.25          | 5.21    | 8.24                   | 10.05                   | Pass        |
| 100   | 5500                 | 5.50          | 5.50    | 8.51                   | 10.05                   | Pass        |
| 116   | 5580                 | 5.64          | 5.67    | 8.67                   | 10.05                   | Pass        |
| 140   | 5700                 | 4.66          | 4.60    | 7.64                   | 10.05                   | Pass        |
| 144   | 5720<br>For U-NII-2C | 6.57          | 6.48    | 9.54                   | 10.05                   | Pass        |

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power density shall be reduced to  $11 - (6.95 - 6) = 10.05\text{dBm}$ .

### 802.11ax (20MHz)

| Chan. | Freq.<br>(MHz)       | PSD (dBm/MHz) |         | Total PSD<br>(dBm/MHz) | Max. Limit<br>(dBm/MHz) | Pass / Fail |
|-------|----------------------|---------------|---------|------------------------|-------------------------|-------------|
|       |                      | Chain 0       | Chain 1 |                        |                         |             |
| 36    | 5180                 | 3.74          | 3.69    | 6.73                   | 10.05                   | Pass        |
| 40    | 5200                 | 5.23          | 5.23    | 8.24                   | 10.05                   | Pass        |
| 48    | 5240                 | 5.27          | 5.24    | 8.27                   | 10.05                   | Pass        |
| 52    | 5260                 | 5.67          | 5.62    | 8.66                   | 10.05                   | Pass        |
| 60    | 5300                 | 5.39          | 5.41    | 8.41                   | 10.05                   | Pass        |
| 64    | 5320                 | 4.38          | 4.38    | 7.39                   | 10.05                   | Pass        |
| 100   | 5500                 | 4.32          | 4.32    | 7.33                   | 10.05                   | Pass        |
| 116   | 5580                 | 5.01          | 5.02    | 8.03                   | 10.05                   | Pass        |
| 140   | 5700                 | 2.84          | 2.81    | 5.84                   | 10.05                   | Pass        |
| 144   | 5720<br>For U-NII-2C | 5.73          | 5.71    | 8.73                   | 10.05                   | Pass        |

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power density shall be reduced to  $11 - (6.95 - 6) = 10.05\text{dBm}$ .

### 802.11ax (40MHz)

| Chan. | Freq.<br>(MHz)       | PSD (dBm/MHz) |         | Total PSD<br>(dBm/MHz) | Max. Limit<br>(dBm/MHz) | Pass / Fail |
|-------|----------------------|---------------|---------|------------------------|-------------------------|-------------|
|       |                      | Chain 0       | Chain 1 |                        |                         |             |
| 38    | 5190                 | -1.46         | -1.50   | 1.53                   | 10.05                   | Pass        |
| 46    | 5230                 | 1.40          | 1.41    | 4.42                   | 10.05                   | Pass        |
| 54    | 5270                 | 2.69          | 2.69    | 5.70                   | 10.05                   | Pass        |
| 62    | 5310                 | -1.38         | -1.35   | 1.65                   | 10.05                   | Pass        |
| 102   | 5510                 | -1.20         | -1.20   | 1.81                   | 10.05                   | Pass        |
| 110   | 5550                 | 2.79          | 2.80    | 5.81                   | 10.05                   | Pass        |
| 134   | 5670                 | 0.94          | 0.91    | 3.94                   | 10.05                   | Pass        |
| 142   | 5710<br>For U-NII-2C | 3.63          | 3.64    | 6.65                   | 10.05                   | Pass        |

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power density shall be reduced to  $11 - (6.95 - 6) = 10.05\text{dBm}$ .

### 802.11ax (80MHz)

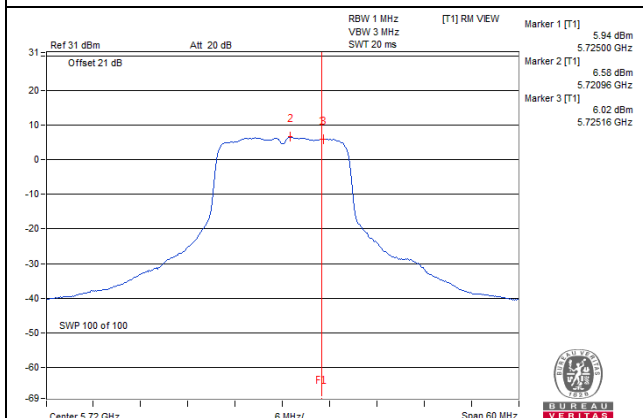
| Chan. | Freq.<br>(MHz)       | PSD (dBm/MHz) |         | Total PSD<br>(dBm/MHz) | Max. Limit<br>(dBm/MHz) | Pass / Fail |
|-------|----------------------|---------------|---------|------------------------|-------------------------|-------------|
|       |                      | Chain 0       | Chain 1 |                        |                         |             |
| 42    | 5210                 | -4.63         | -4.68   | -1.64                  | 10.05                   | Pass        |
| 58    | 5290                 | -5.50         | -5.50   | -2.49                  | 10.05                   | Pass        |
| 106   | 5530                 | -4.20         | -4.22   | -1.20                  | 10.05                   | Pass        |
| 122   | 5610                 | -1.37         | -1.38   | 1.64                   | 10.05                   | Pass        |
| 138   | 5690<br>For U-NII-2C | 0.10          | 0.15    | 3.13                   | 10.05                   | Pass        |

Note:

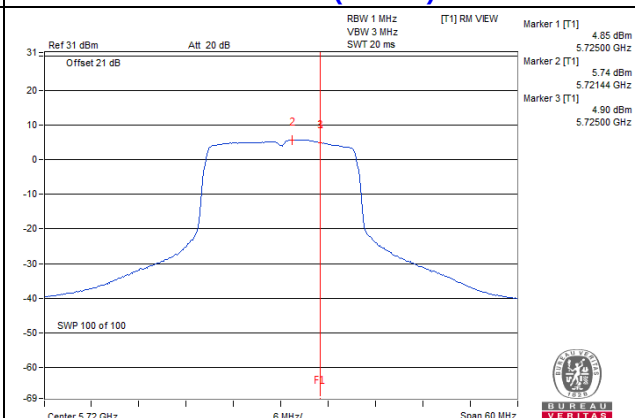
- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power density shall be reduced to  $11 - (6.95 - 6) = 10.05\text{dBm}$ .

## Spectrum Plot of Worst Value

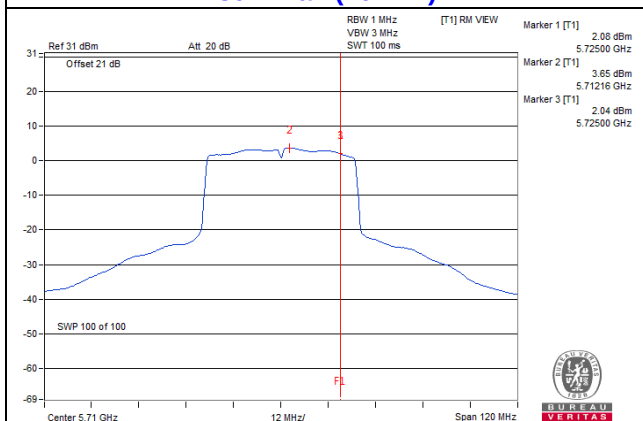
**802.11a**



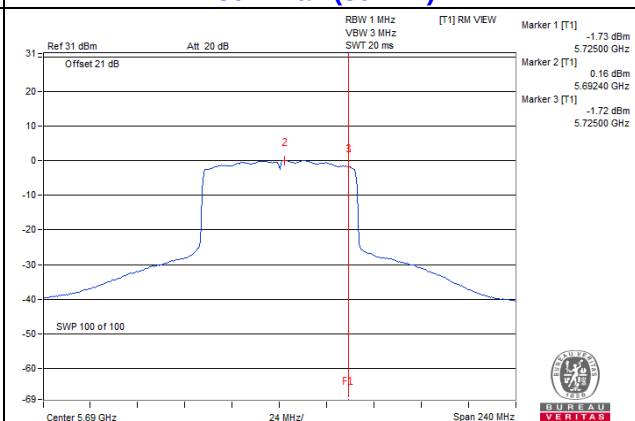
**802.11ax (20MHz)**



**802.11ax (40MHz)**



**802.11ax (80MHz)**



**For U-NII-3 band:**

**802.11a**

| Chan. | Freq.<br>(MHz)      | PSD (dBm/500kHz) |         | Total PSD<br>(dBm/500kHz) | Limit<br>(dBm/500kHz) | Pass / Fail |
|-------|---------------------|------------------|---------|---------------------------|-----------------------|-------------|
|       |                     | Chain 0          | Chain 1 |                           |                       |             |
| 144   | 5720<br>For U-NII-3 | -2.34            | -2.36   | 0.66                      | 29.05                 | Pass        |
| 149   | 5745                | 0.49             | 0.53    | 3.52                      | 29.05                 | Pass        |
| 157   | 5785                | 0.07             | 0.11    | 3.10                      | 29.05                 | Pass        |
| 165   | 5825                | 0.47             | 0.47    | 3.48                      | 29.05                 | Pass        |

Note:

1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power density shall be reduced to  $30 - (6.95 - 6) = 29.05\text{dBm}$ .

**802.11ax (20MHz)**

| Chan. | Freq.<br>(MHz)      | PSD (dBm/500kHz) |         | Total PSD<br>(dBm/500kHz) | Limit<br>(dBm/500kHz) | Pass / Fail |
|-------|---------------------|------------------|---------|---------------------------|-----------------------|-------------|
|       |                     | Chain 0          | Chain 1 |                           |                       |             |
| 144   | 5720<br>For U-NII-3 | -4.32            | -4.35   | -1.32                     | 29.05                 | Pass        |
| 149   | 5745                | -1.07            | -1.04   | 1.96                      | 29.05                 | Pass        |
| 157   | 5785                | -1.49            | -1.39   | 1.57                      | 29.05                 | Pass        |
| 165   | 5825                | -1.12            | -1.17   | 1.87                      | 29.05                 | Pass        |

Note:

1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power density shall be reduced to  $30 - (6.95 - 6) = 29.05\text{dBm}$ .

**802.11ax (40MHz)**

| Chan. | Freq.<br>(MHz)      | PSD (dBm/500kHz) |         | Total PSD<br>(dBm/500kHz) | Limit<br>(dBm/500kHz) | Pass / Fail |
|-------|---------------------|------------------|---------|---------------------------|-----------------------|-------------|
|       |                     | Chain 0          | Chain 1 |                           |                       |             |
| 142   | 5710<br>For U-NII-3 | -7.19            | -7.34   | -4.25                     | 29.05                 | Pass        |
| 151   | 5755                | -3.91            | -3.94   | -0.91                     | 29.05                 | Pass        |
| 159   | 5795                | -4.43            | -4.34   | -1.37                     | 29.05                 | Pass        |

Note:

1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power density shall be reduced to  $30 - (6.95 - 6) = 29.05\text{dBm}$ .

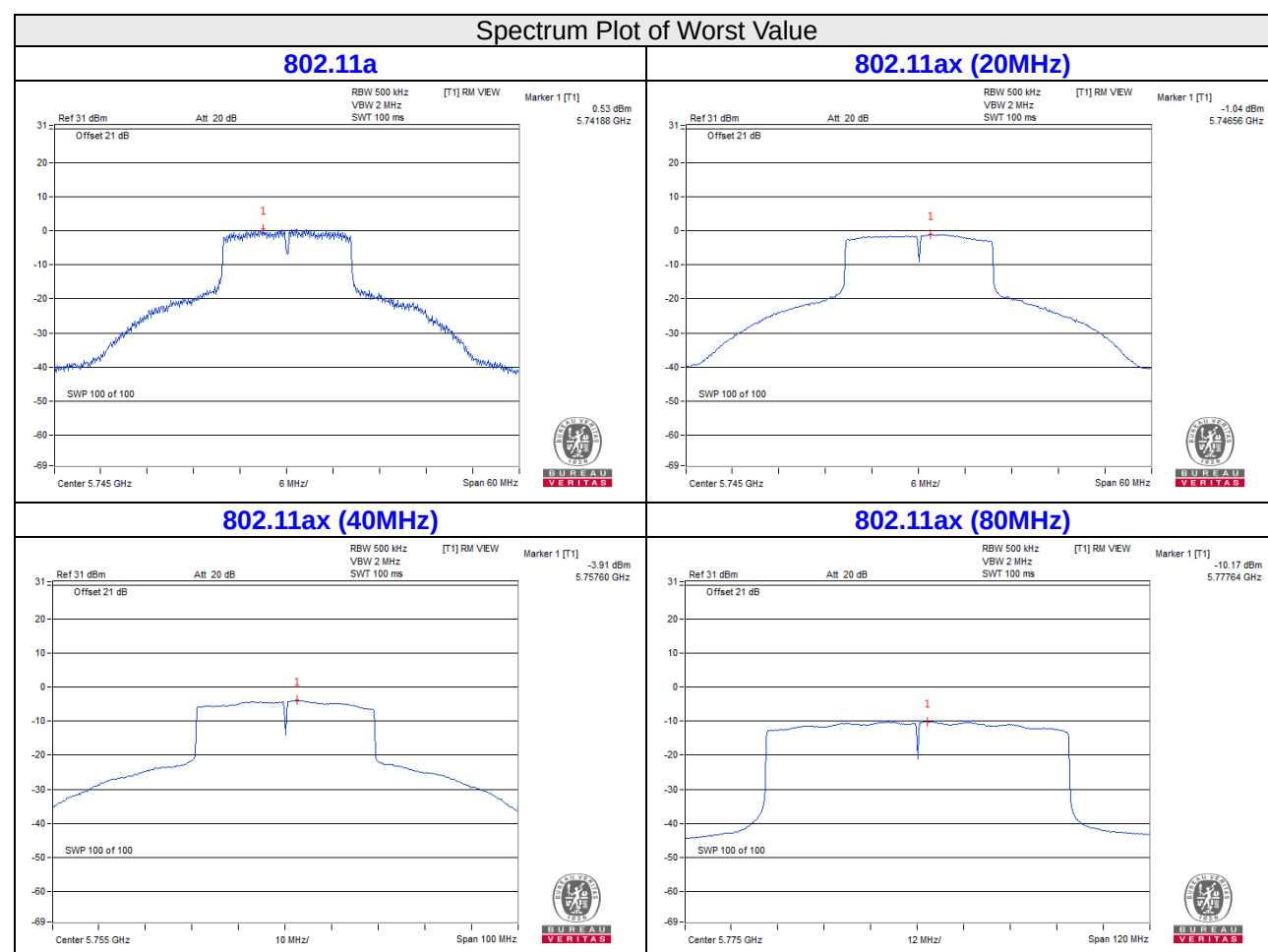


## 802.11ax (80MHz)

| Chan. | Freq.<br>(MHz)      | PSD (dBm/500kHz) |         | Total PSD<br>(dBm/500kHz) | Limit<br>(dBm/500kHz) | Pass / Fail |
|-------|---------------------|------------------|---------|---------------------------|-----------------------|-------------|
|       |                     | Chain 0          | Chain 1 |                           |                       |             |
| 138   | 5690<br>For U-NII-3 | -11.07           | -11.08  | -8.06                     | 29.05                 | Pass        |
| 155   | 5775                | -10.17           | -10.24  | -7.19                     | 29.05                 | Pass        |

Note:

- Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 6.95\text{dBi} > 6\text{dBi}$ , so the power density shall be reduced to  $30 - (6.95 - 6) = 29.05\text{dBm}$ .

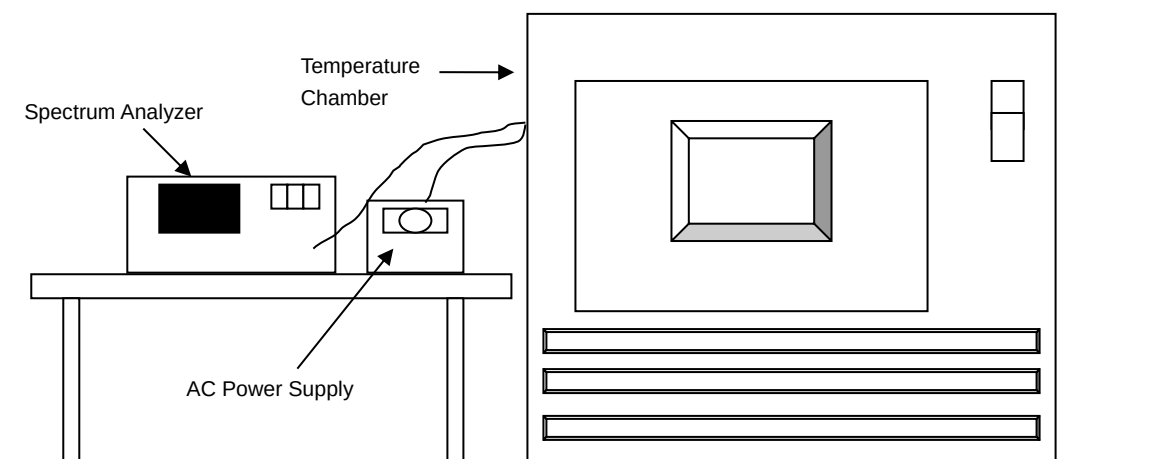


## 4.6 Frequency Stability

### 4.6.1 Limits of Frequency Stability Measurement

The frequency of the carrier signal shall be maintained within band of operation

### 4.6.2 Test Setup



### 4.6.3 Test Instruments

| Description & Manufacturer        | Model No. | Serial No. | Cal. Date     | Cal. Due     |
|-----------------------------------|-----------|------------|---------------|--------------|
| ROHDE & SCHWARZ Spectrum Analyzer | FSV 40    | 101042     | Sep. 8, 2020  | Sep. 7, 2021 |
| Temperature & Humidity Chamber    | MHU-225AU | 920409     | May 22, 2020  | May 21, 2021 |
| DIGITAL POWER METER IDRC          | CP-240    | 240515     | Sep. 10, 2020 | Sep. 9, 2021 |
| AC Power Source ExTech            | CFW-105   | E000603    | NA            | NA           |

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

### 4.6.4 Test Procedure

- The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- Repeat step d with the temperature chamber set to the next desired temperature.
- The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

#### 4.6.5 Deviation from Test Standard

No deviation.

#### 4.6.6 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

#### 4.6.7 Test Results

##### CDD Mode

| Frequency Stability Versus Temp. |                          |                                |        |                                |        |                                |        |                                |        |
|----------------------------------|--------------------------|--------------------------------|--------|--------------------------------|--------|--------------------------------|--------|--------------------------------|--------|
| Operating Frequency: 5180MHz     |                          |                                |        |                                |        |                                |        |                                |        |
| Temp.<br>(°C)                    | Power<br>Supply<br>(Vac) | 0 Minute                       |        | 2 Minute                       |        | 5 Minute                       |        | 10 Minute                      |        |
|                                  |                          | Measured<br>Frequency<br>(MHz) | Result | Measured<br>Frequency<br>(MHz) | Result | Measured<br>Frequency<br>(MHz) | Result | Measured<br>Frequency<br>(MHz) | Result |
| 50                               | 120                      | 5180.0178                      | Pass   | 5180.0201                      | Pass   | 5180.0204                      | Pass   | 5180.0168                      | Pass   |
| 40                               | 120                      | 5180.0220                      | Pass   | 5180.0213                      | Pass   | 5180.0227                      | Pass   | 5180.0200                      | Pass   |
| 30                               | 120                      | 5180.0230                      | Pass   | 5180.0239                      | Pass   | 5180.0230                      | Pass   | 5180.0265                      | Pass   |
| 20                               | 120                      | 5180.0174                      | Pass   | 5180.0177                      | Pass   | 5180.0190                      | Pass   | 5180.0207                      | Pass   |
| 10                               | 120                      | 5179.9986                      | Pass   | 5179.9968                      | Pass   | 5179.9951                      | Pass   | 5179.9991                      | Pass   |
| 0                                | 120                      | 5179.9887                      | Pass   | 5179.9873                      | Pass   | 5179.9865                      | Pass   | 5179.9882                      | Pass   |
| -10                              | 120                      | 5179.9855                      | Pass   | 5179.9884                      | Pass   | 5179.9865                      | Pass   | 5179.9886                      | Pass   |
| -20                              | 120                      | 5180.0205                      | Pass   | 5180.0202                      | Pass   | 5180.0222                      | Pass   | 5180.0201                      | Pass   |
| -30                              | 120                      | 5180.0108                      | Pass   | 5180.0080                      | Pass   | 5180.0113                      | Pass   | 5180.0097                      | Pass   |

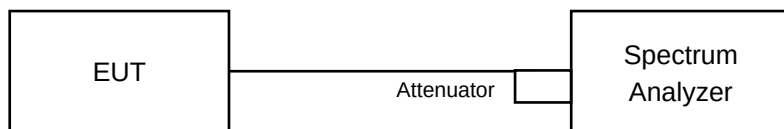
| Frequency Stability Versus Voltage |                          |                                |        |                                |        |                                |        |                                |        |
|------------------------------------|--------------------------|--------------------------------|--------|--------------------------------|--------|--------------------------------|--------|--------------------------------|--------|
| Operating Frequency: 5180MHz       |                          |                                |        |                                |        |                                |        |                                |        |
| Temp.<br>(°C)                      | Power<br>Supply<br>(Vac) | 0 Minute                       |        | 2 Minute                       |        | 5 Minute                       |        | 10 Minute                      |        |
|                                    |                          | Measured<br>Frequency<br>(MHz) | Result | Measured<br>Frequency<br>(MHz) | Result | Measured<br>Frequency<br>(MHz) | Result | Measured<br>Frequency<br>(MHz) | Result |
| 20                                 | 138                      | 5180.0173                      | Pass   | 5180.0177                      | Pass   | 5180.0194                      | Pass   | 5180.0214                      | Pass   |
|                                    | 120                      | 5180.0174                      | Pass   | 5180.0177                      | Pass   | 5180.0190                      | Pass   | 5180.0207                      | Pass   |
|                                    | 102                      | 5180.0184                      | Pass   | 5180.0173                      | Pass   | 5180.0189                      | Pass   | 5180.0202                      | Pass   |

## 4.7 6dB Bandwidth Measurement

### 4.7.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

### 4.7.2 Test Setup



### 4.7.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.7.4 Test Procedure

- Set resolution bandwidth (RBW) = 100kHz
- Set the video bandwidth (VBW)  $\geq 3 \times$  RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

### 4.7.5 Deviation from Test Standard

No deviation.

### 4.7.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

#### 4.7.7 Test Results

##### CDD Mode

##### 802.11a

| Channel | Frequency (MHz)     | 6dB Bandwidth (MHz)   |                       | Minimum Limit (MHz) | Pass / Fail |
|---------|---------------------|-----------------------|-----------------------|---------------------|-------------|
|         |                     | Chain 0               | Chain 1               |                     |             |
| 144     | 5720<br>For U-NII-3 | 2.90 <sup>Note*</sup> | 2.63 <sup>Note*</sup> | 0.5                 | Pass        |
| 149     | 5745                | 16.32                 | 16.32                 | 0.5                 | Pass        |
| 157     | 5785                | 16.30                 | 16.34                 | 0.5                 | Pass        |
| 165     | 5825                | 16.34                 | 16.33                 | 0.5                 | Pass        |

Note\*: 2.90MHz= 5712.24MHz + 15.66MHz-5725MHz

2.63MHz= 5712.24MHz + 15.39MHz-5725MHz

##### 802.11ax (20MHz)

| Channel | Frequency (MHz)     | 6dB Bandwidth (MHz)   |                       | Minimum Limit (MHz) | Pass / Fail |
|---------|---------------------|-----------------------|-----------------------|---------------------|-------------|
|         |                     | Chain 0               | Chain 1               |                     |             |
| 144     | 5720<br>For U-NII-3 | 4.21 <sup>Note*</sup> | 4.11 <sup>Note*</sup> | 0.5                 | Pass        |
| 149     | 5745                | 18.62                 | 18.44                 | 0.5                 | Pass        |
| 157     | 5785                | 18.50                 | 18.40                 | 0.5                 | Pass        |
| 165     | 5825                | 18.61                 | 18.63                 | 0.5                 | Pass        |

Note\*: 4.21MHz= 5710.83MHz + 18.38MHz-5725MHz

4.11MHz= 5710.79MHz + 18.32MHz-5725MHz

##### 802.11ax (40MHz)

| Channel | Frequency (MHz)     | 6dB Bandwidth (MHz)   |                       | Minimum Limit (MHz) | Pass / Fail |
|---------|---------------------|-----------------------|-----------------------|---------------------|-------------|
|         |                     | Chain 0               | Chain 1               |                     |             |
| 142     | 5710<br>For U-NII-3 | 3.47 <sup>Note*</sup> | 3.57 <sup>Note*</sup> | 0.5                 | Pass        |
| 151     | 5755                | 37.71                 | 37.75                 | 0.5                 | Pass        |
| 159     | 5795                | 37.85                 | 37.86                 | 0.5                 | Pass        |

Note\*: 3.47MHz= 5691.14MHz + 37.33MHz-5725MHz

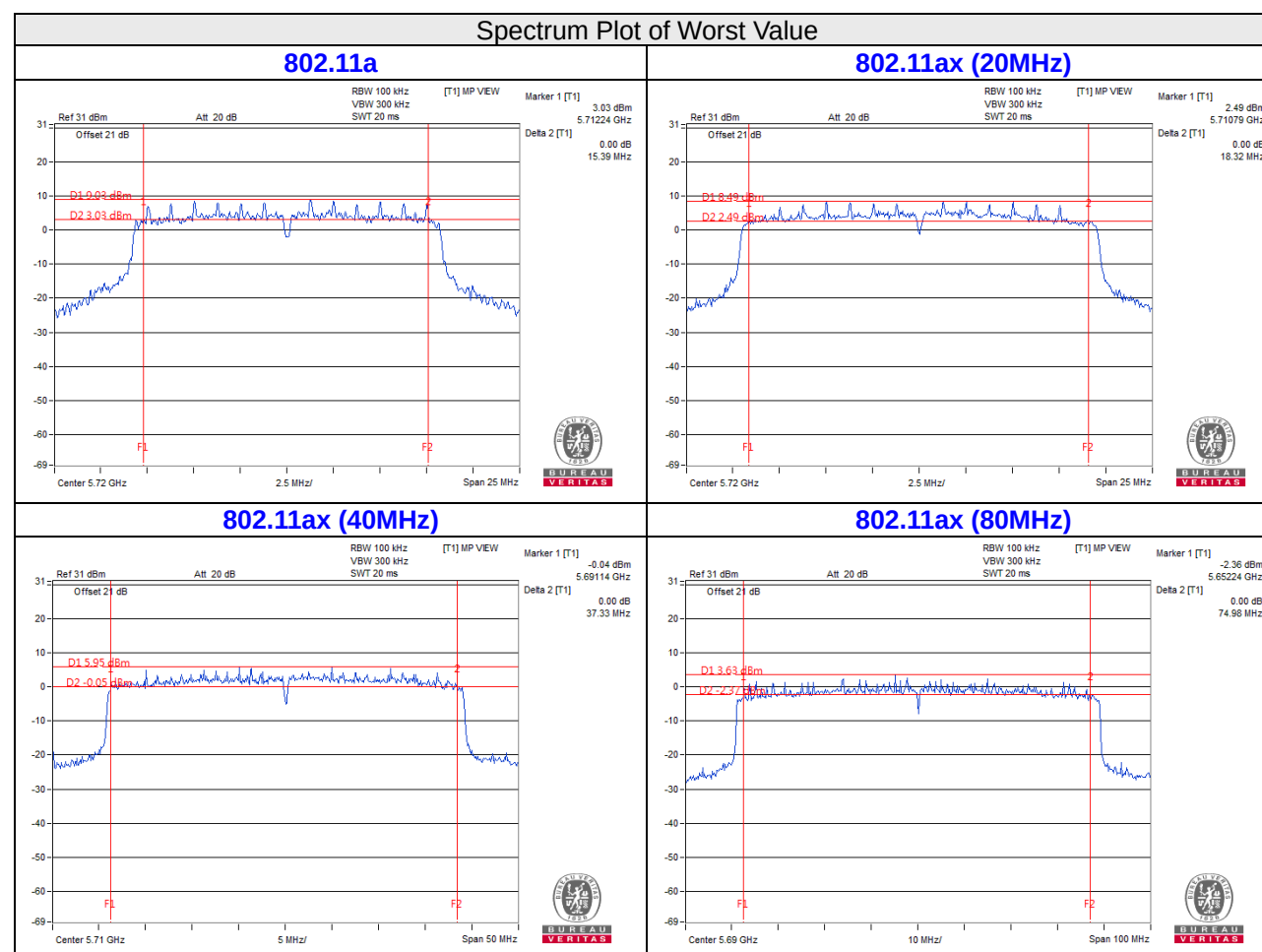
3.57MHz= 5691.16MHz + 37.41MHz-5725MHz

## 802.11ax (80MHz)

| Channel | Frequency (MHz)     | 6dB Bandwidth (MHz) |            | Minimum Limit (MHz) | Pass / Fail |
|---------|---------------------|---------------------|------------|---------------------|-------------|
|         |                     | Chain 0             | Chain 1    |                     |             |
| 138     | 5690<br>For U-NII-3 | 2.22 Note*          | 3.80 Note* | 0.5                 | Pass        |
| 155     | 5775                | 75.77               | 75.52      | 0.5                 | Pass        |

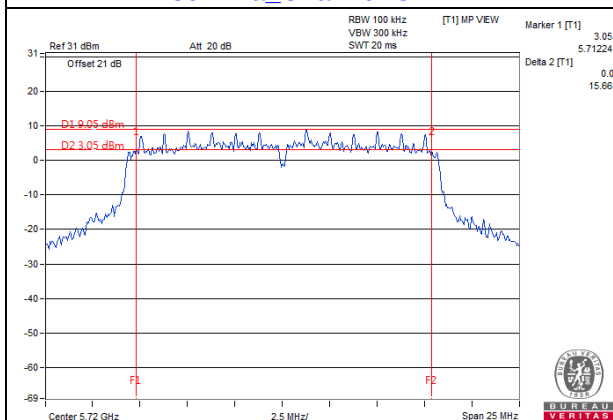
Note\*: 2.22MHz= 5652.24MHz + 74.98MHz-5725MHz

3.80MHz= 5651.87MHz + 76.93MHz-5725MHz

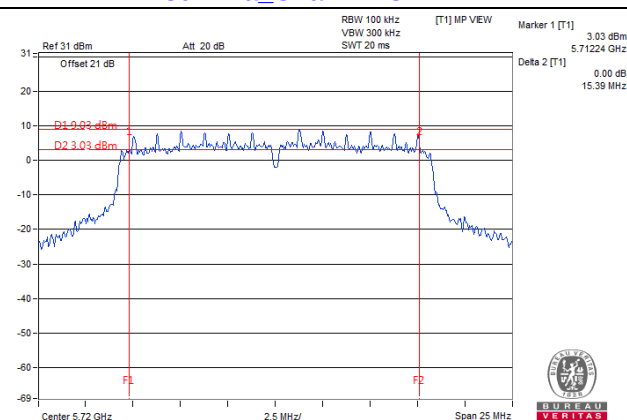


# Spectrum Plot of Straddle channel

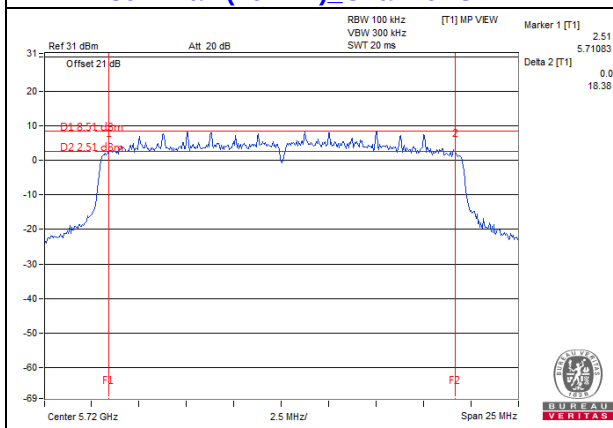
## 802.11a\_Chain 0: CH 144



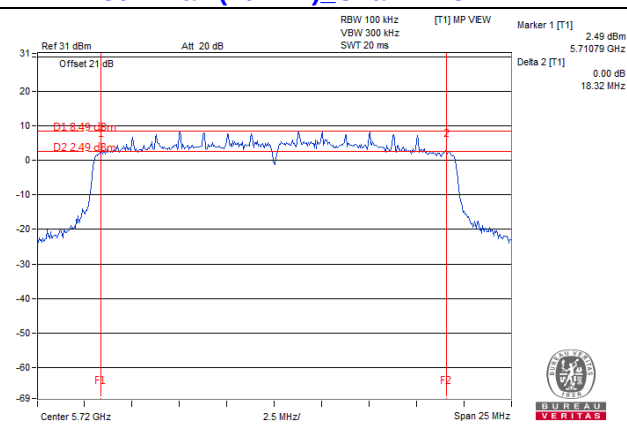
## 802.11a\_Chain 1: CH 144



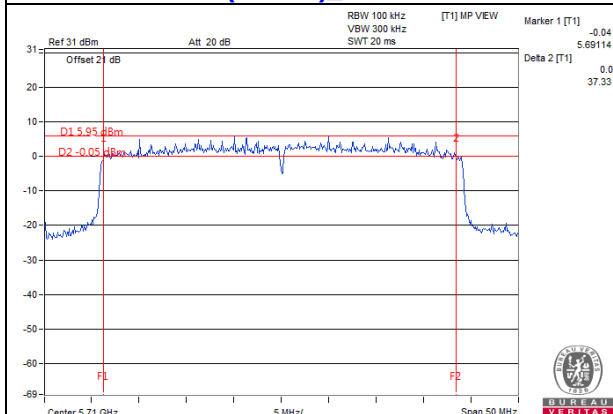
## 802.11ax (20MHz)\_Chain 0: CH 144



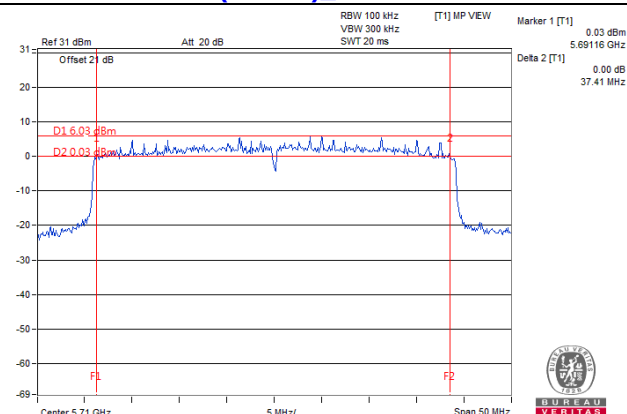
## 802.11ax (20MHz)\_Chain 1: CH 144



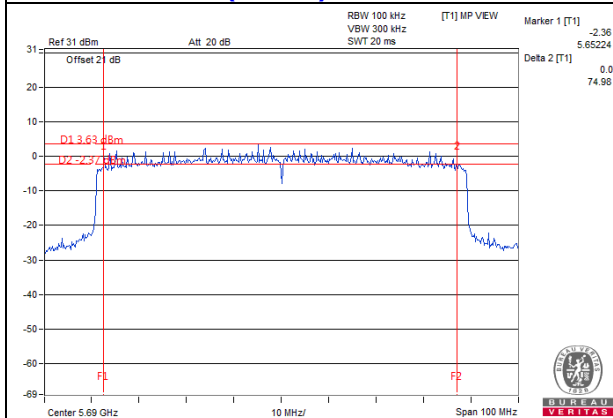
### 802.11ax (40MHz) Chain 0: CH 142



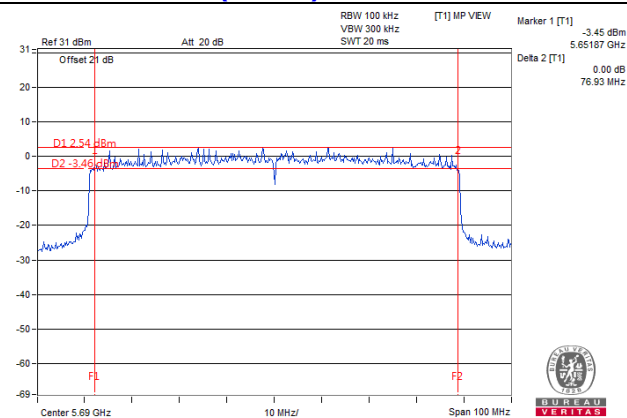
### 802.11ax (40MHz) Chain 1: CH 142



### 802.11ax (80MHz) Chain 0: CH 138



### 802.11ax (80MHz) Chain 1: CH 138





## 5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

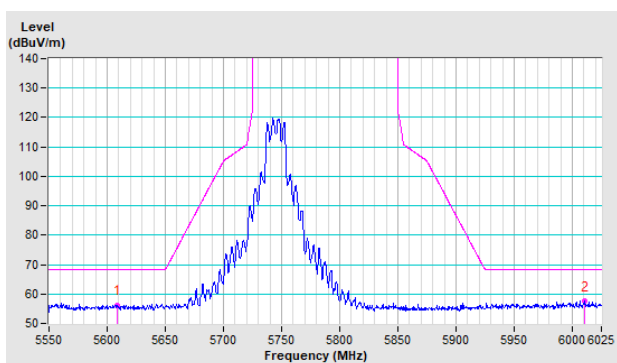
# Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

CDD Mode

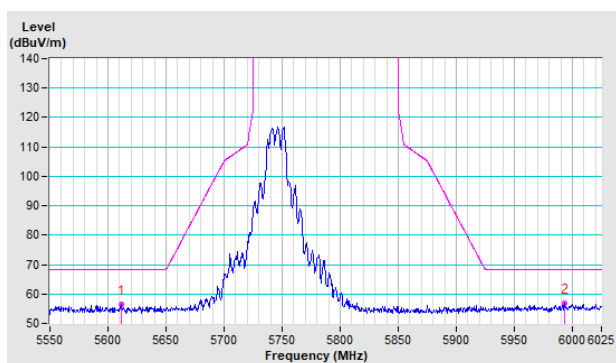
802.11a

CH 149 5745 MHz

Horizontal

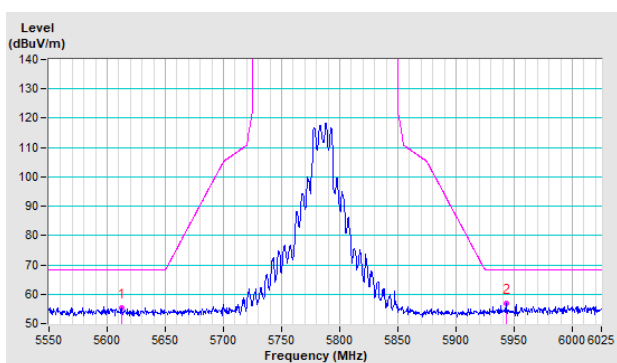


Vertical

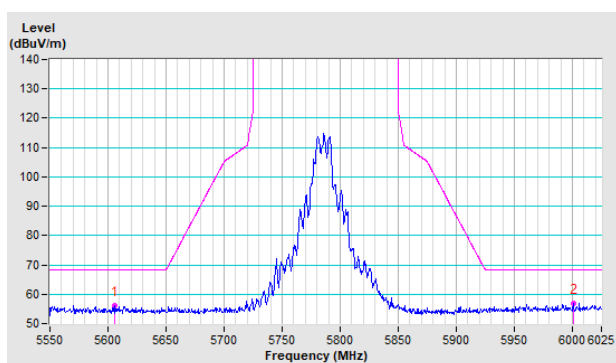


CH 157 5785 MHz

Horizontal

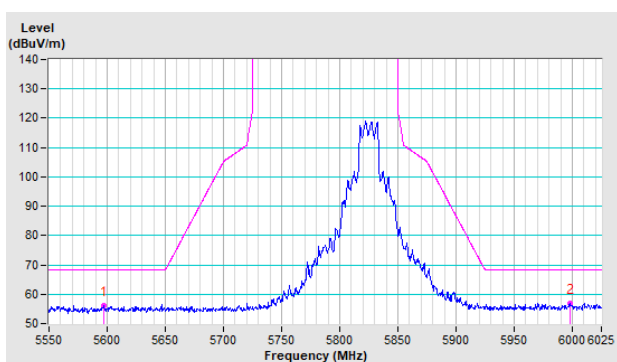


Vertical

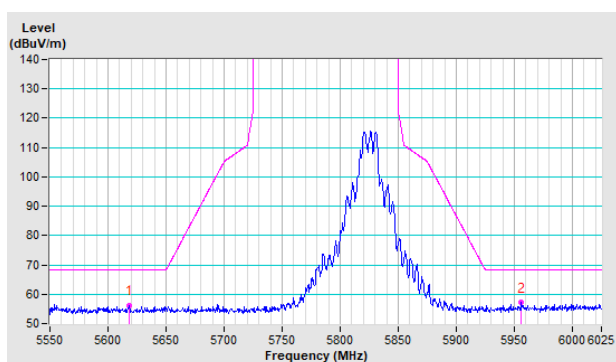


CH 165 5825 MHz

Horizontal



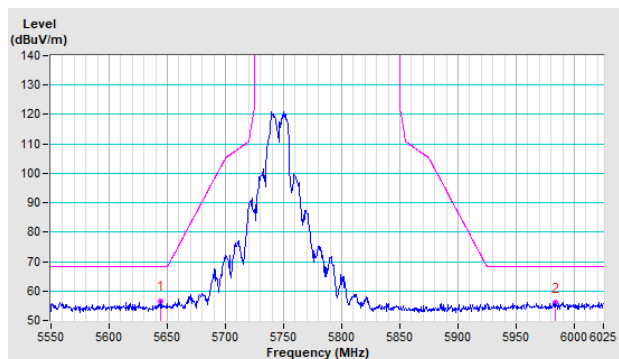
Vertical



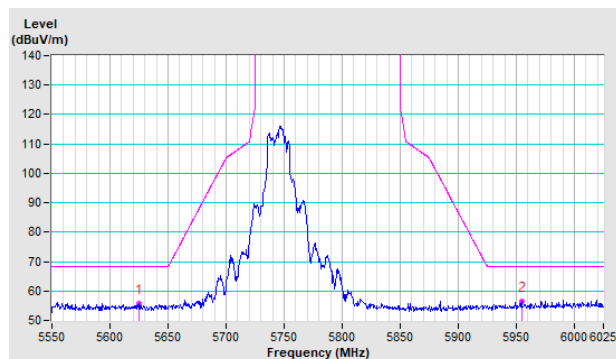
## 802.11ax (20MHz)

CH 149 5745 MHz

Horizontal

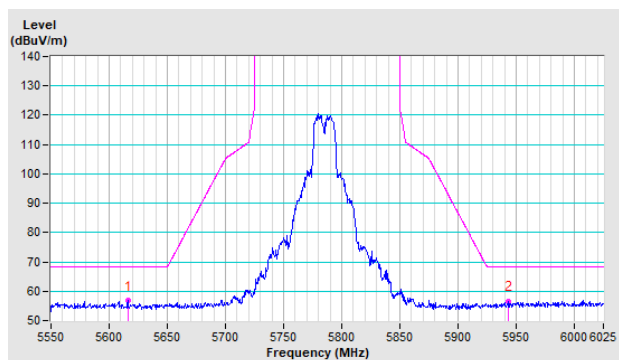


Vertical

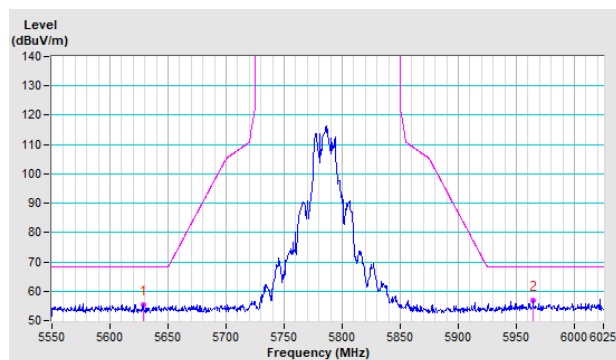


CH 157 5785 MHz

Horizontal

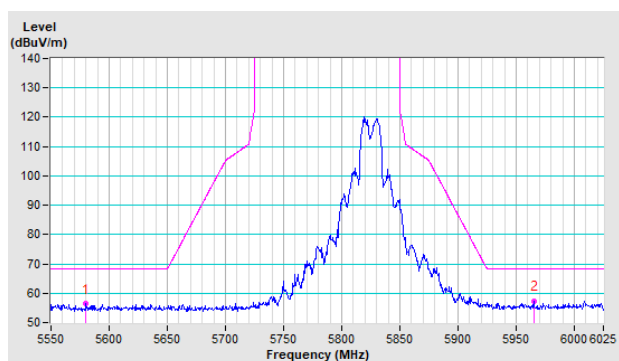


Vertical

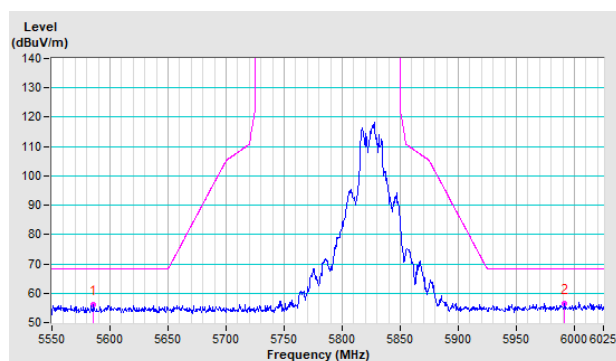


CH 165 5825 MHz

Horizontal



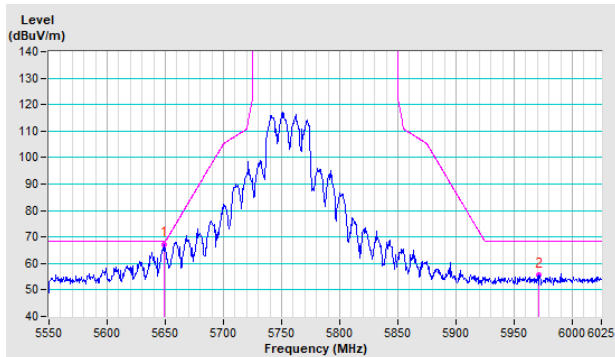
Vertical



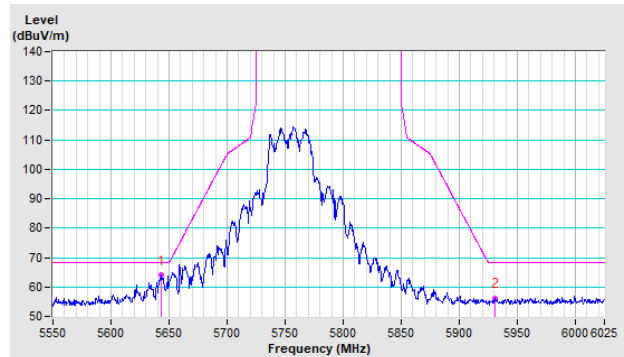
## 802.11ax (40MHz)

CH 151 5755 MHz

Horizontal

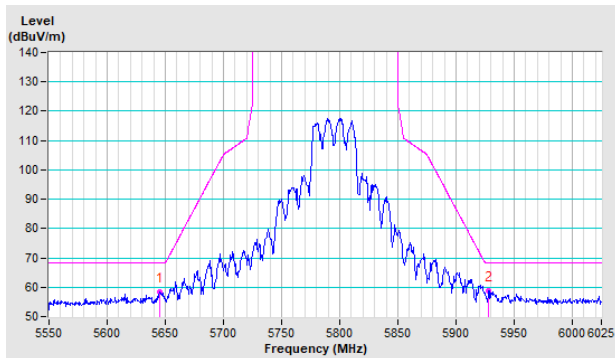


Vertical

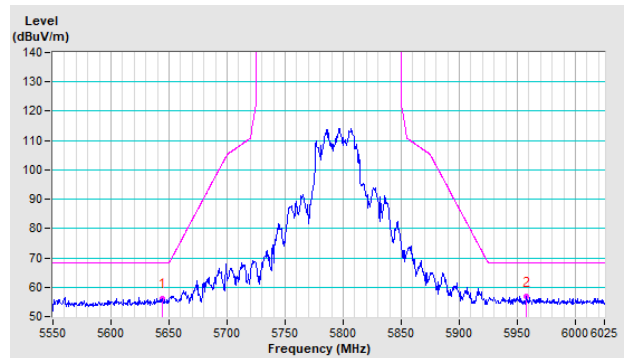


CH 159 5795 MHz

Horizontal



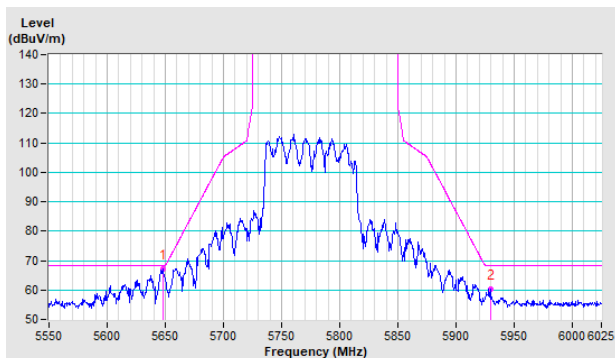
Vertical



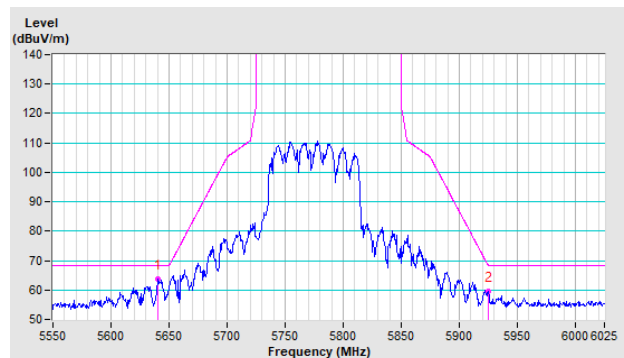
## 802.11ax (80MHz)

CH 155 5775 MHz

Horizontal

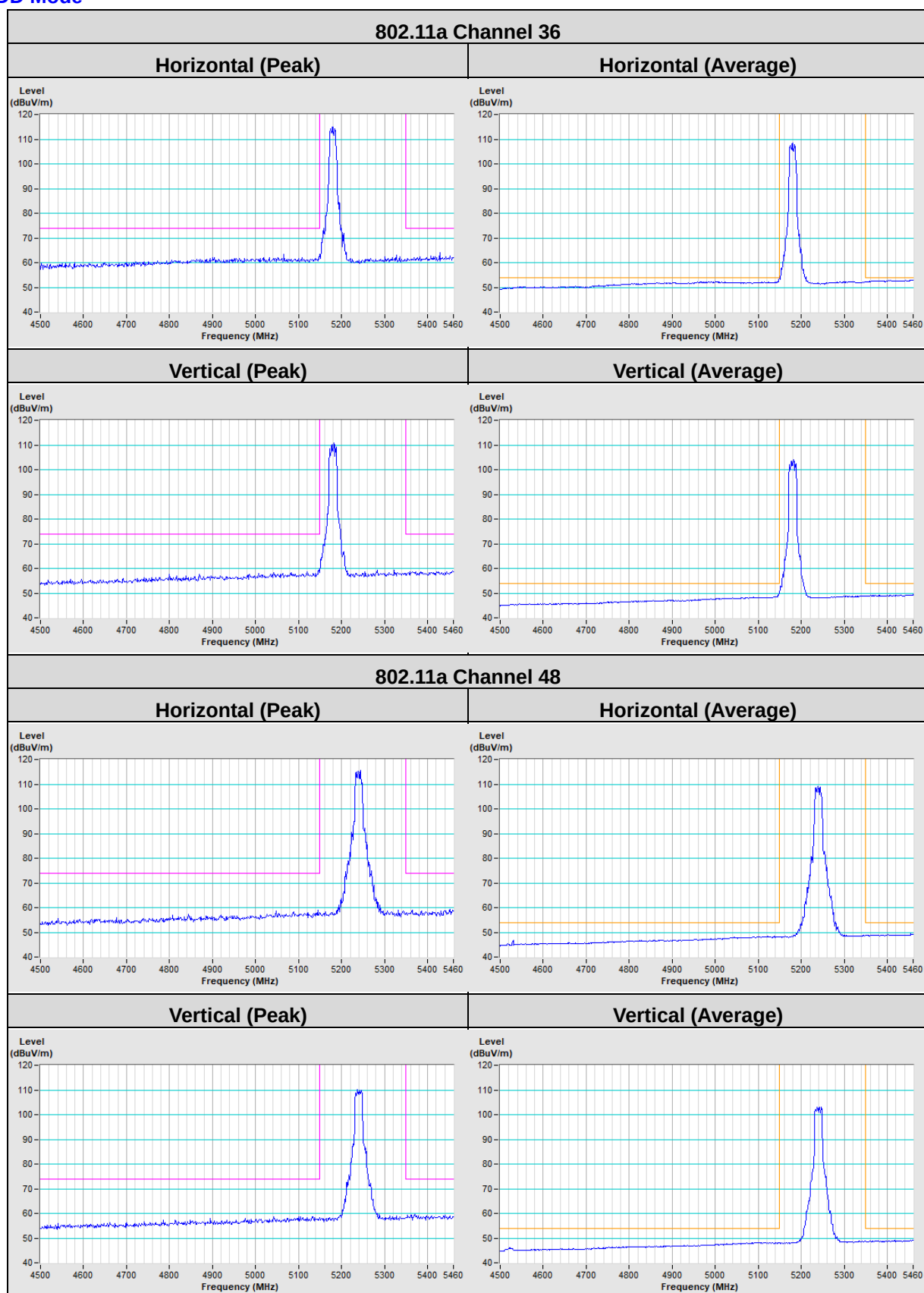


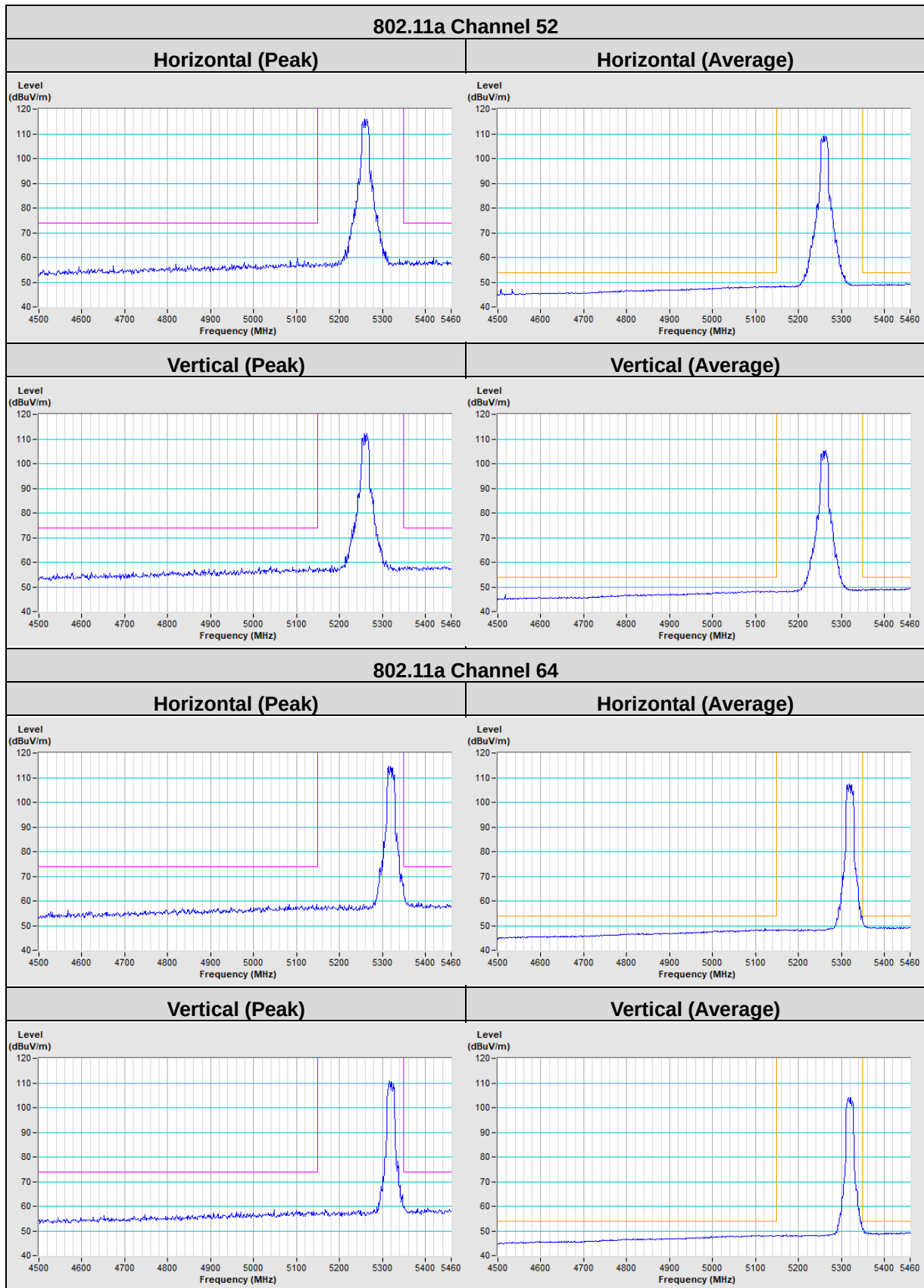
Vertical

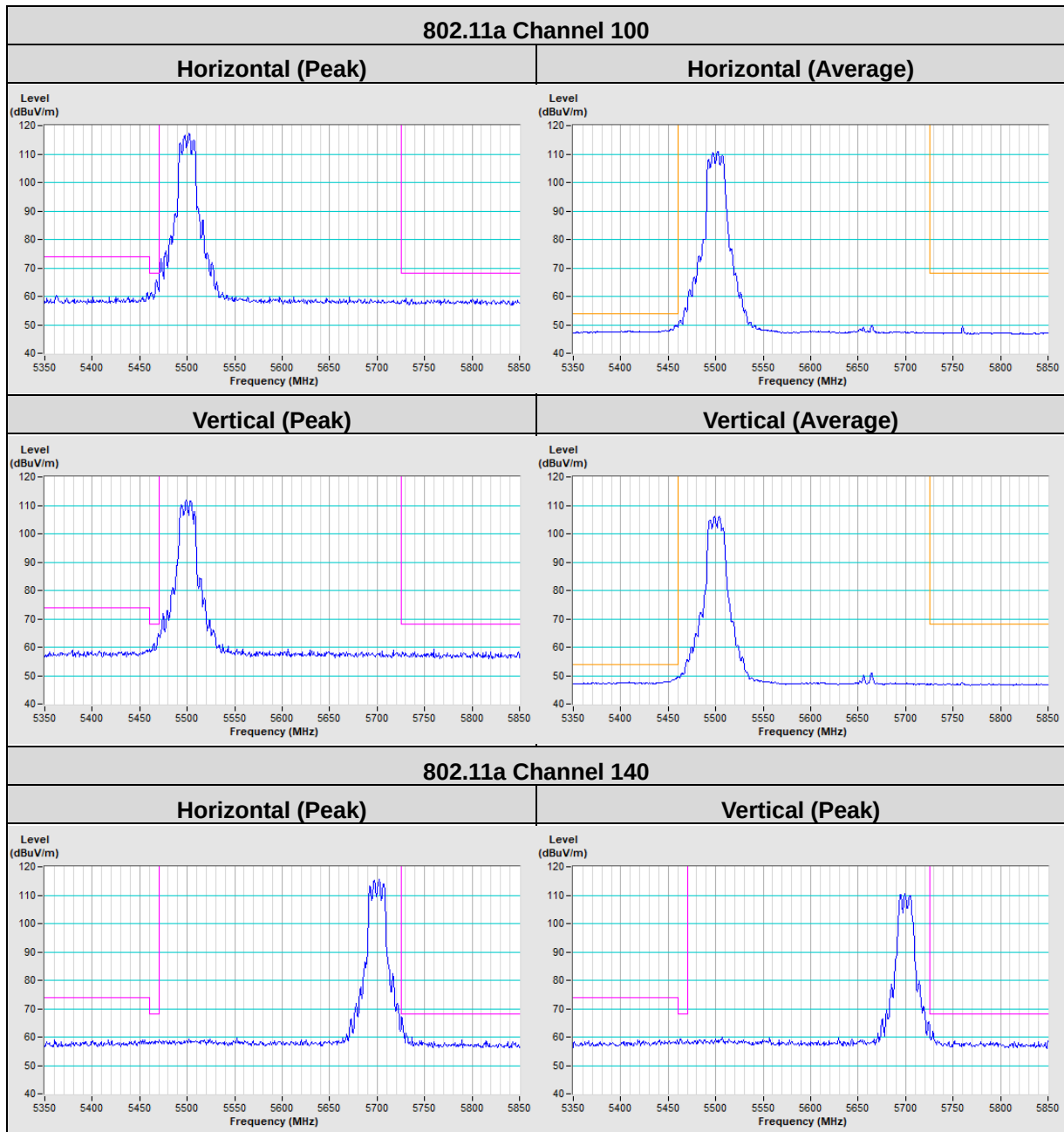


## Annex B- Band Edge Measurement

### CDD Mode

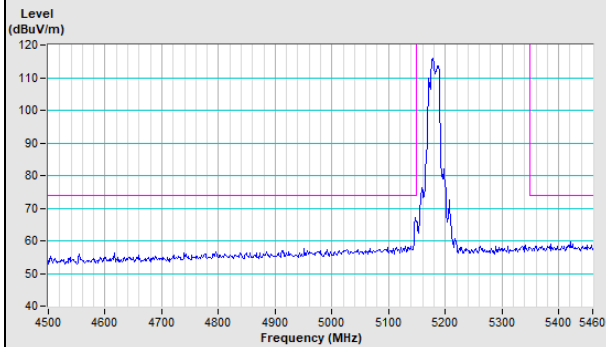




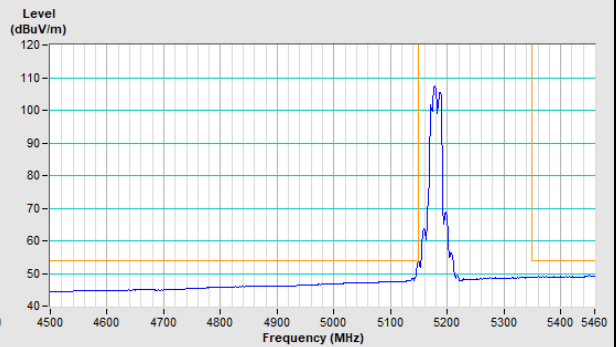


### 802.11ax (20MHz) Channel 36

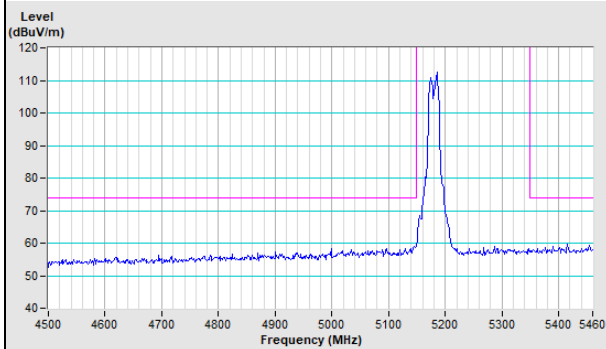
**Horizontal (Peak)**



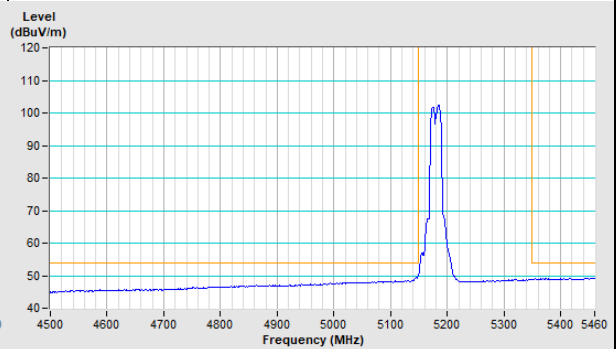
**Horizontal (Average)**



**Vertical (Peak)**

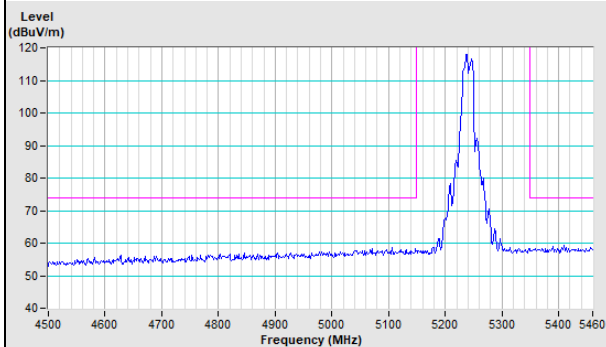


**Vertical (Average)**

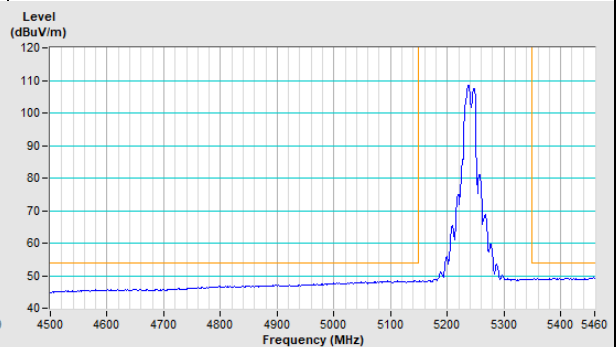


### 802.11ax (20MHz) Channel 48

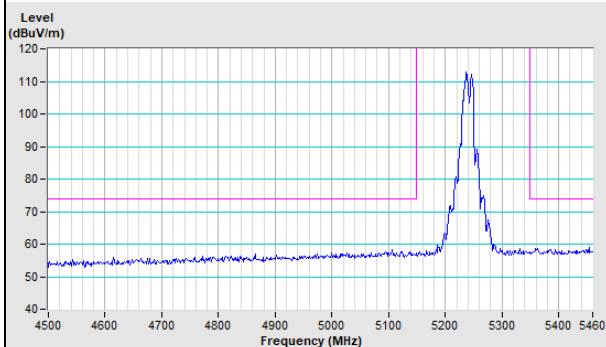
**Horizontal (Peak)**



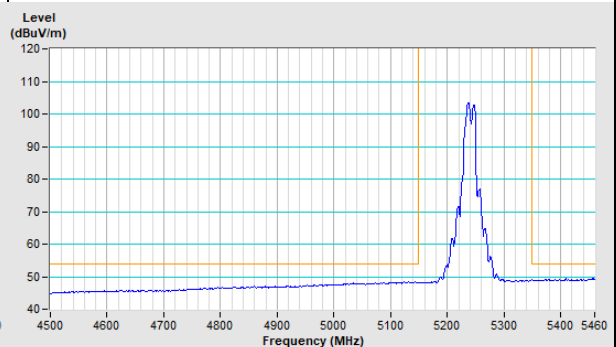
**Horizontal (Average)**



**Vertical (Peak)**



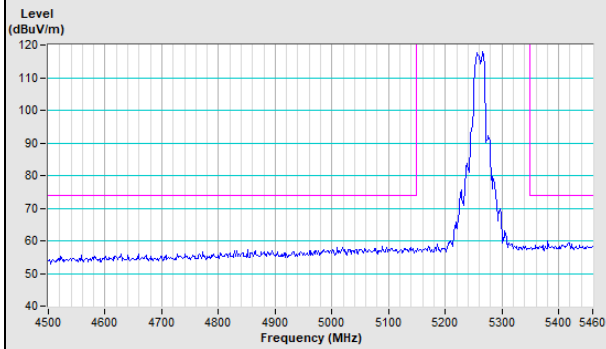
**Vertical (Average)**



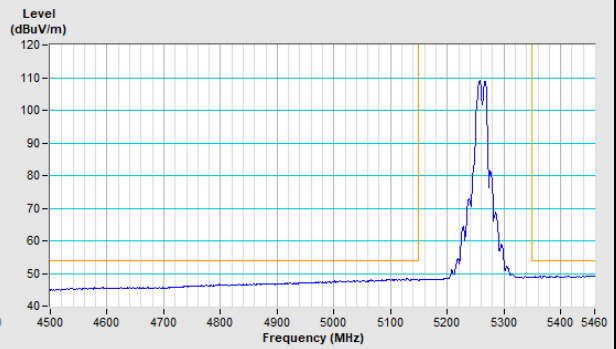


### 802.11ax (20MHz) Channel 52

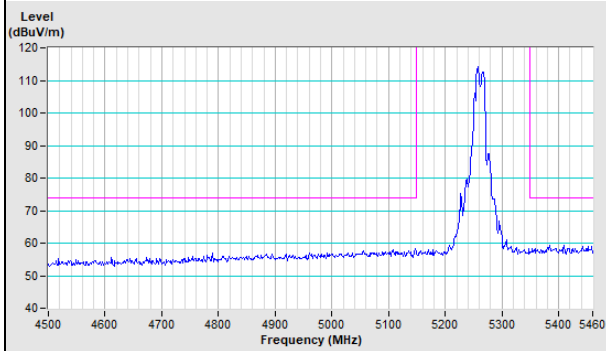
**Horizontal (Peak)**



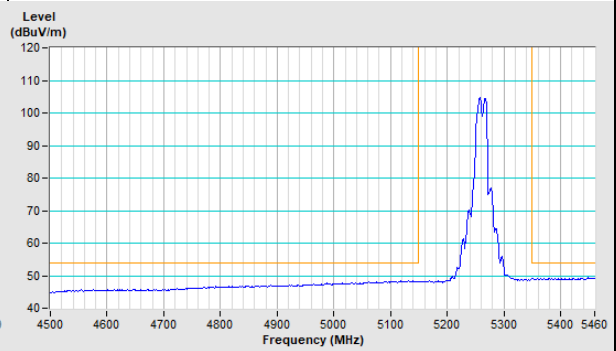
**Horizontal (Average)**



**Vertical (Peak)**

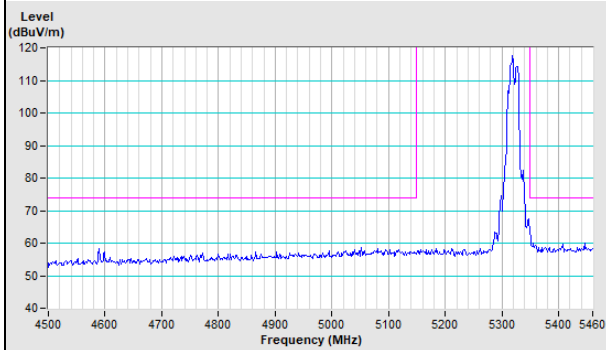


**Vertical (Average)**

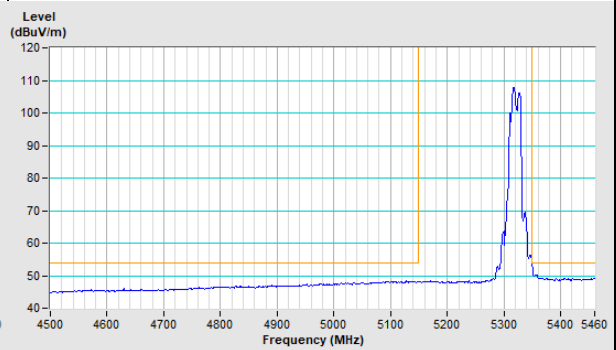


### 802.11ax (20MHz) Channel 64

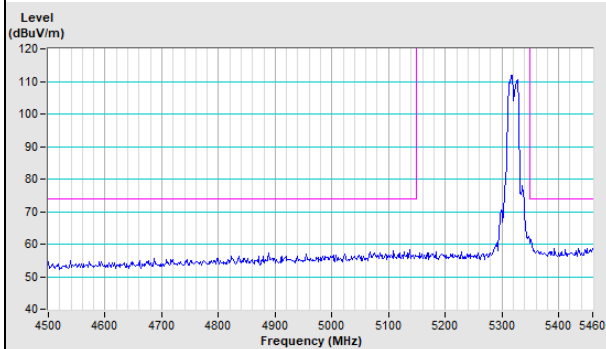
**Horizontal (Peak)**



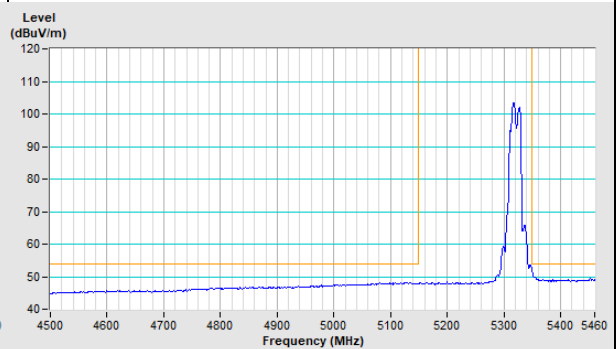
**Horizontal (Average)**

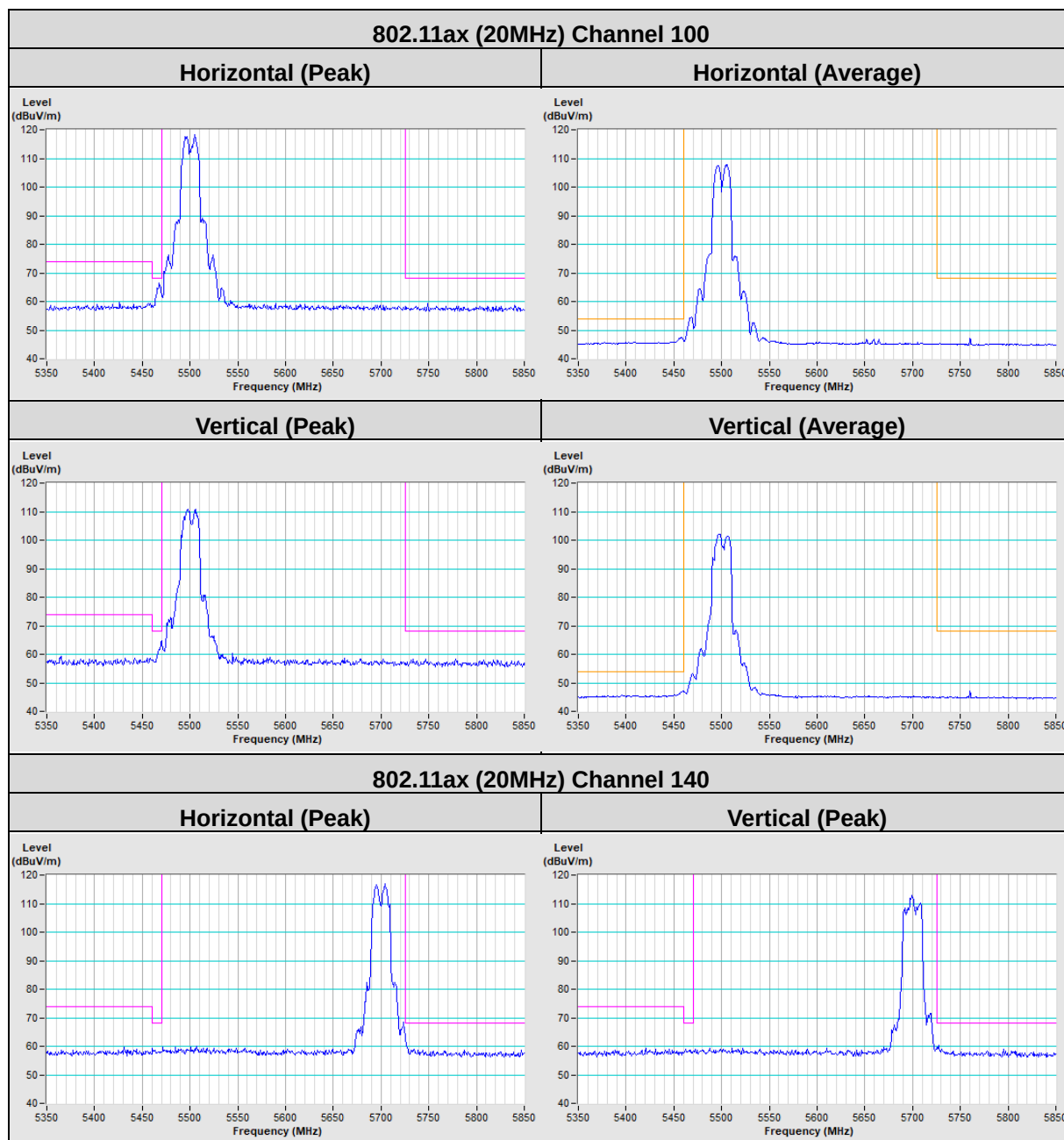


**Vertical (Peak)**



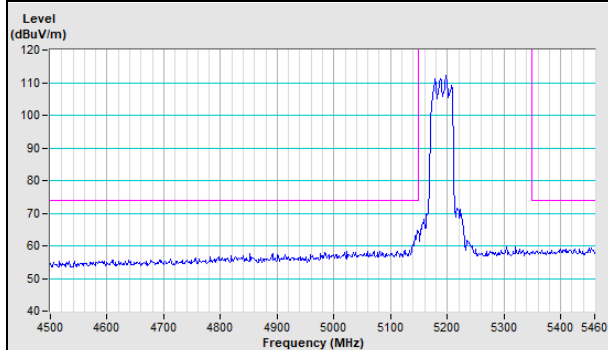
**Vertical (Average)**



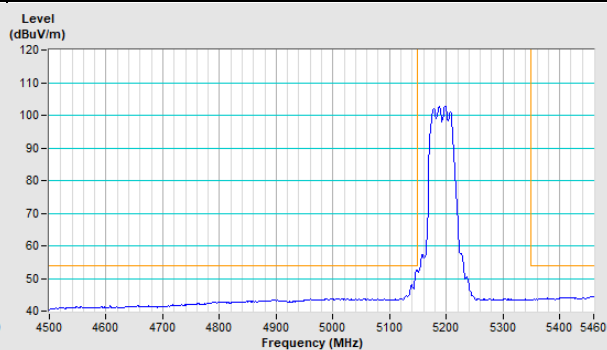


### 802.11ax (40MHz) Channel 38

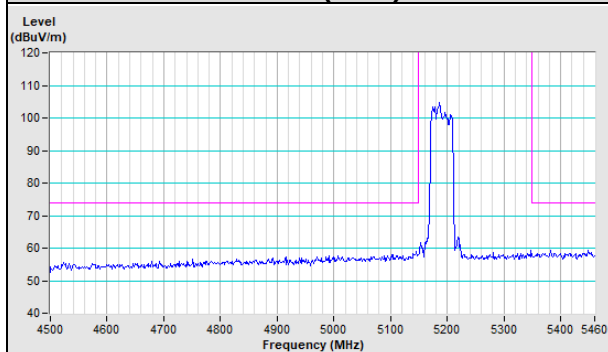
**Horizontal (Peak)**



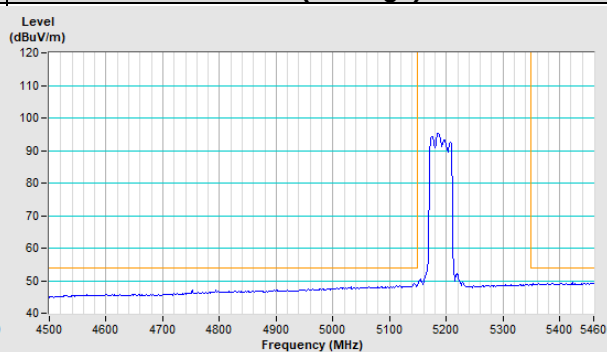
**Horizontal (Average)**



**Vertical (Peak)**

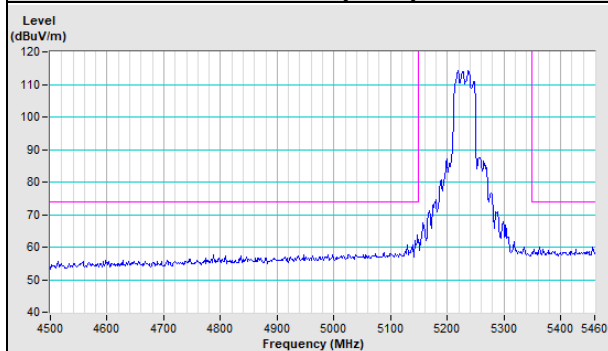


**Vertical (Average)**

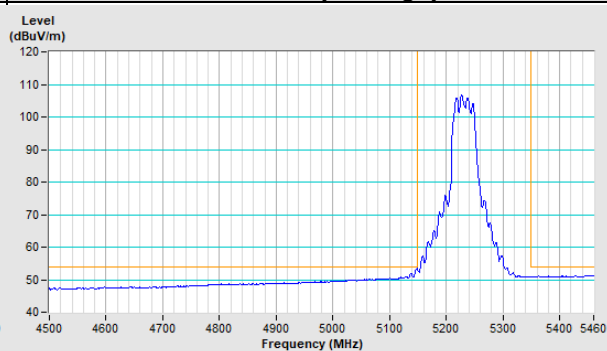


### 802.11ax (40MHz) Channel 46

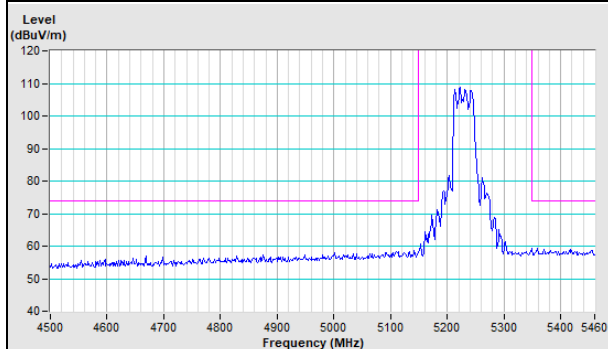
**Horizontal (Peak)**



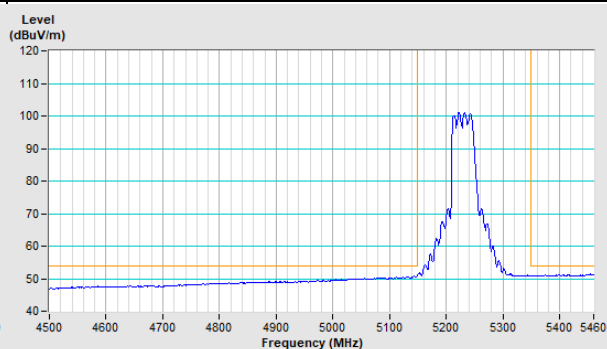
**Horizontal (Average)**

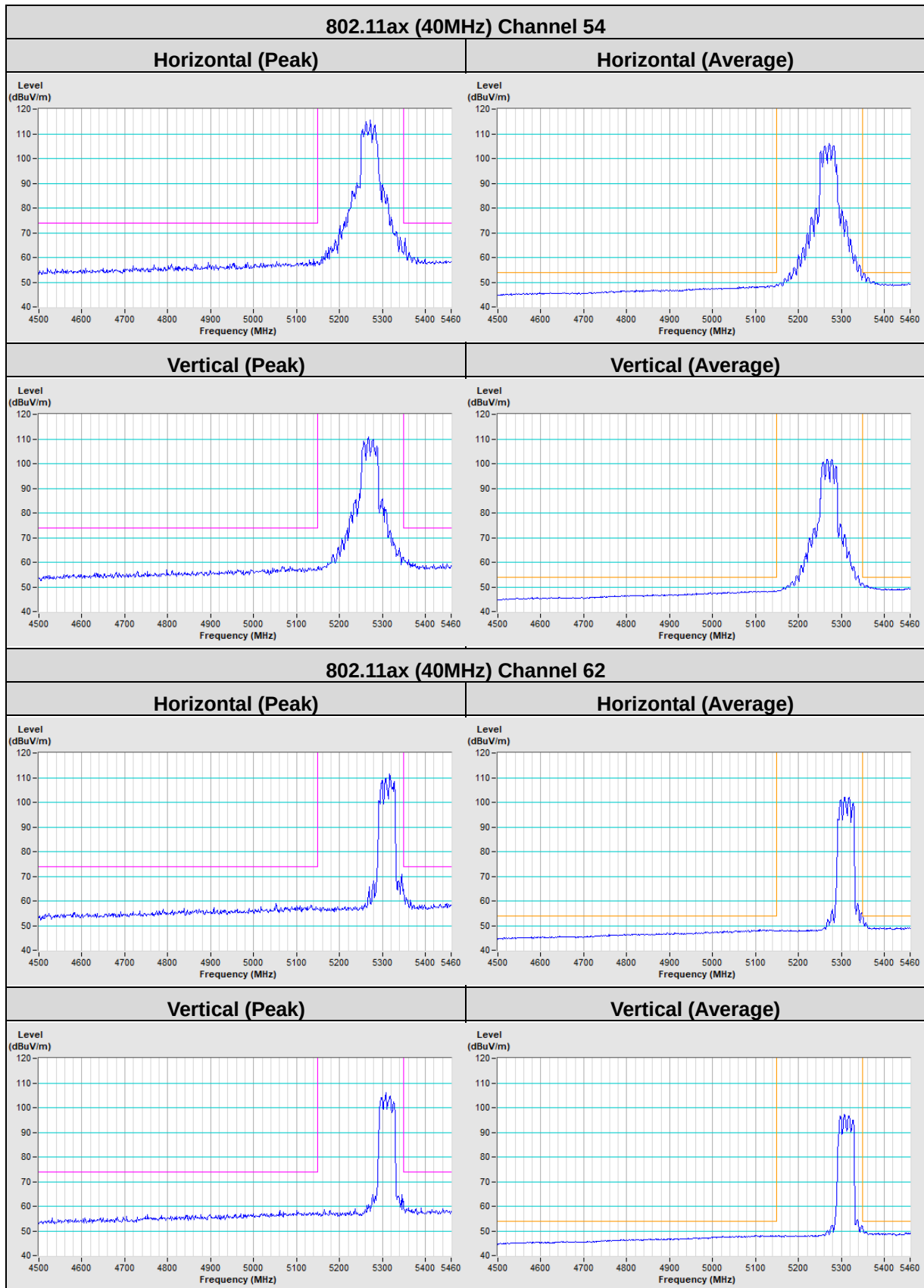


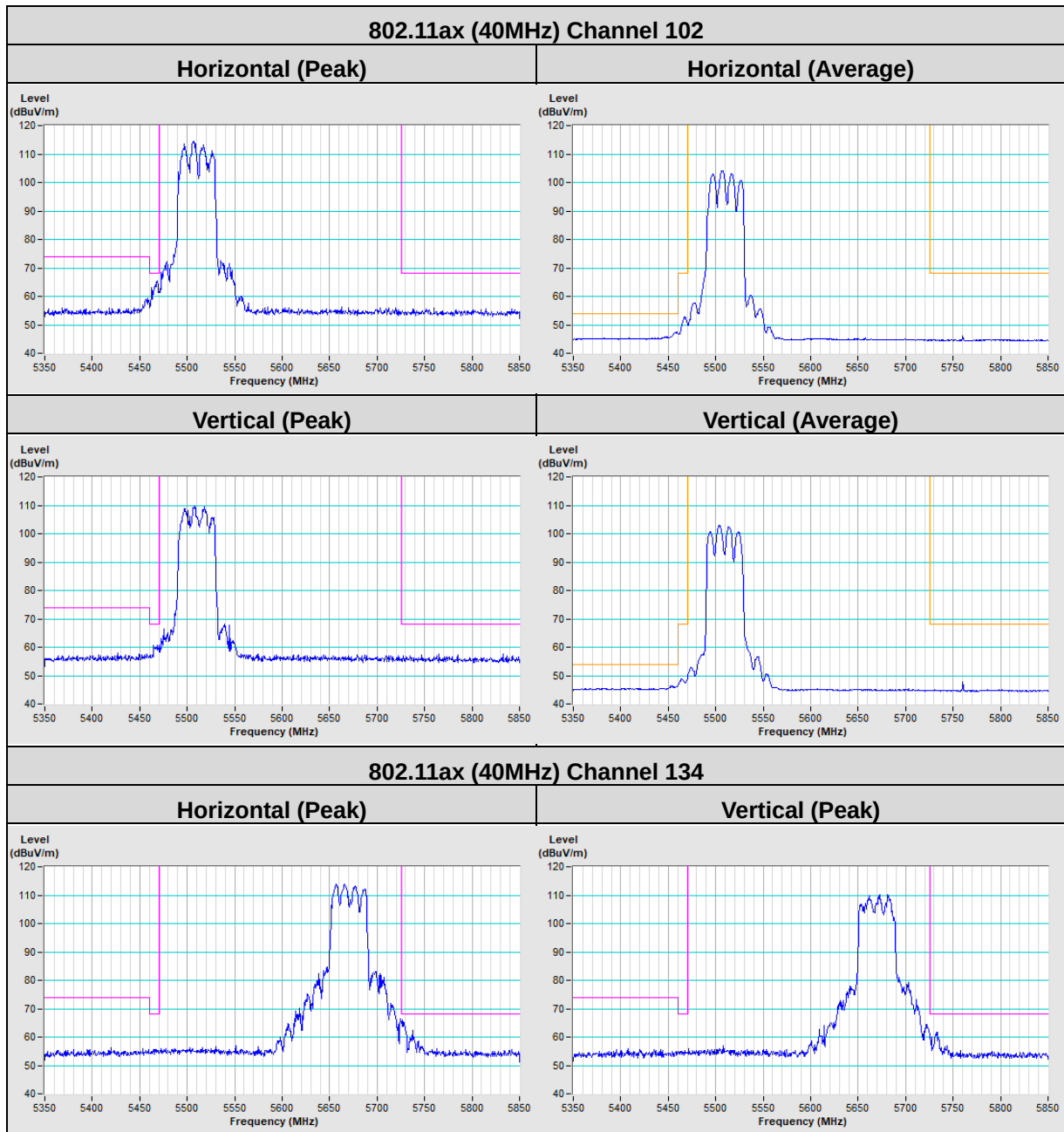
**Vertical (Peak)**

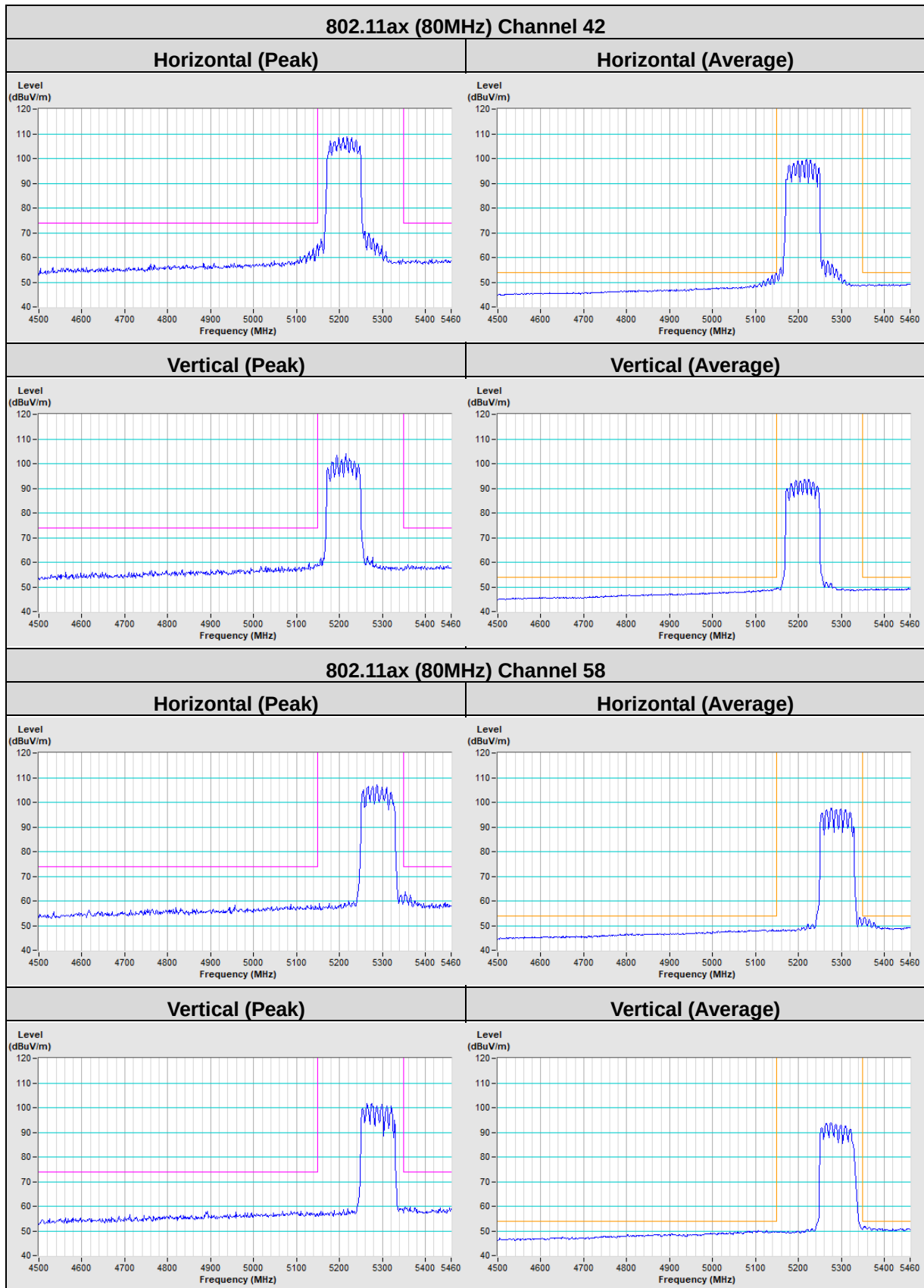


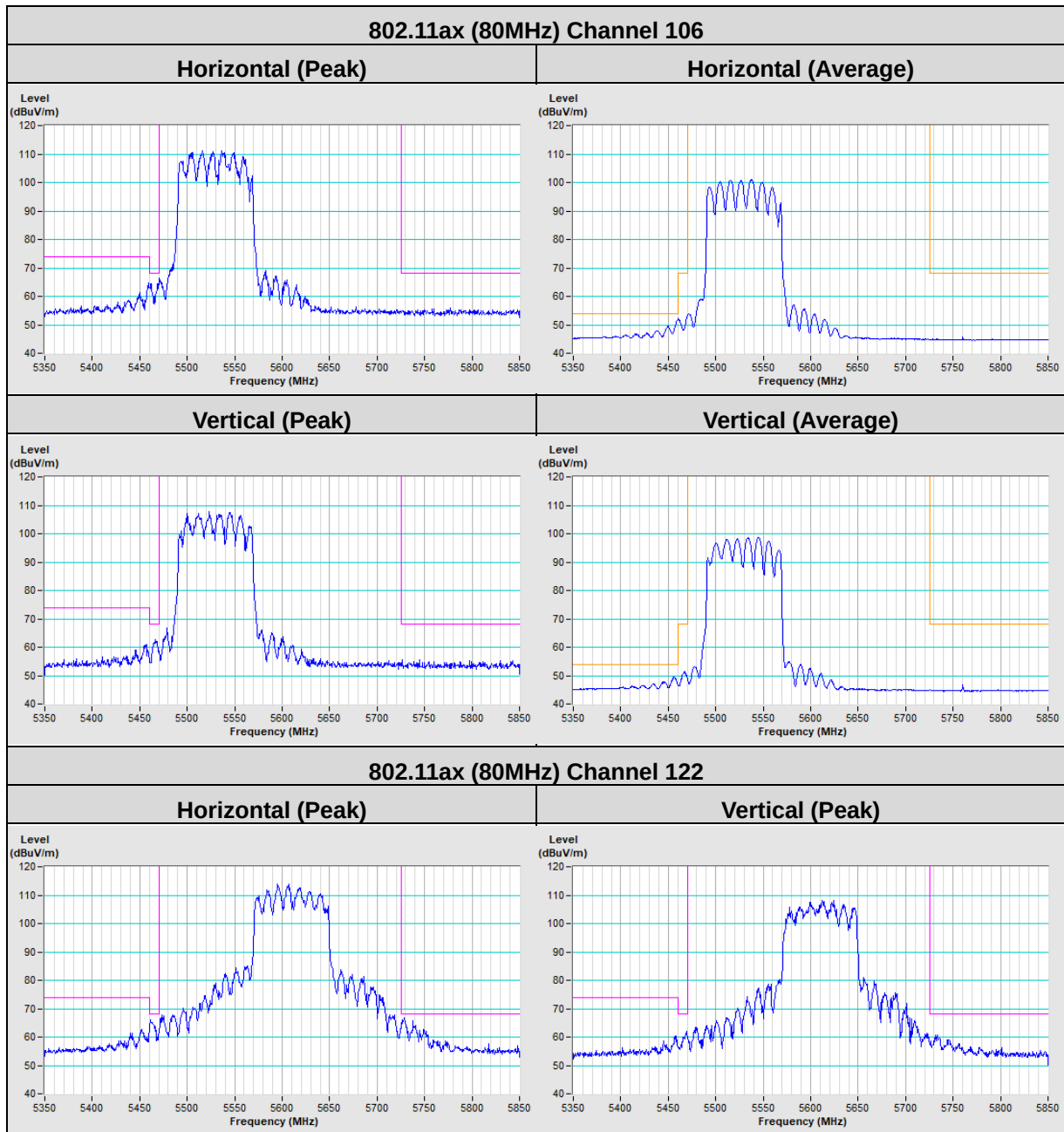
**Vertical (Average)**











## Appendix – Information of the Testing Laboratories

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

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

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**Web Site:** [www.bureauveritas-adt.com](http://www.bureauveritas-adt.com)

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

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