

**ATC**

## FCC PART 15.407

### TEST REPORT

For

### Winner Wave Limited

Unit 1615 Peninsula Tower, 538 Castle Peak Road, Lai Chi Kok Kowloon, Hong Kong

**FCC ID: 2ADFS-WT02**

|  |  |
|--|--|
| <b>Report Type:</b><br>Original Report | <b>Product Type:</b><br>ProAV  |
| <b>Report Number:</b>                  | <u>SZ5210728-52737E-RF-00</u>  |
| <b>Report Date:</b>                    | <u>2021-10-29</u>  |
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## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

|  |  |
|--|--|
| Product                                | ProAV  |
| Tested Model                           | WT02   |
| Multiple Model                         | WT01   |
| Model Differences                      | Refer to the DoS letter  |
| Frequency Range                        | 5G Wi-Fi: 5150-5250MHz; 5725-5850MHz   |
| Maximum Average Conducted Output Power | 5150-5250MHz: 17.3dBm<br>5725-5850MHz: 18.2dBm   |
| Modulation Technique                   | OFDM   |
| Antenna Specification                  | 5150-5250MHz:2.52dBi<br>5725-5850MHz:3.85dBi(It is provided by the manufacturer)             |
| Voltage Range                          | DC 12V from adapter  |
| Date of Test                           | 2021-08-13 to 2021-10-26   |
| Sample serial number                   | SZ5210728-52737E-RF-S1   |
| Received date                          | 2021-07-28   |
| Sample/EUT Status                      | Good condition   |
| Adapter information                    | Model: ICP12-120-1000D<br>Input: AC 100-240V, 50/60Hz, 0.3A<br>Output: DC 12.0V, 1.0A, 12.0W |

### Objective

This type approval report is in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And KDB789033D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd.. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

## Measurement Uncertainty

| Parameter                    | Uncertainty   |        |
|------------------------------|---------------|--------|
| Occupied Channel Bandwidth   | 5%            |        |
| RF output power, conducted   | 0.73dB        |        |
| Unwanted Emission, conducted | 1.6dB         |        |
| Emissions,<br>Radiated       | 30MHz - 1GHz  | 4.28dB |
|                              | 1GHz- 18GHz   | 4.98dB |
|                              | 18GHz-26.5GHz | 5.06dB |
|                              | 26.5GHz-40GHz | 4.72dB |
| Temperature                  | 1°C           |        |
| Humidity                     | 6%            |        |
| Supply voltages              | 0.4%          |        |

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

## Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 429 7.01.

Listed by Innovation, Science and Economic Development Canada (ISED), the Registration Number is 5077A-2.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in an engineering mode, which was provided by manufacturer.

The device supports 5GWi-Fi 802.11a/n20/n40/ac20/ac40/ac80modes, which was declared by manufacturer.

For 5150-5250MHz Band, 7channels are provided to testing:

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|
| 36      | 5180            | 44      | 5220            |
| 38      | 5190            | 46      | 5230            |
| 40      | 5200            | 48      | 5240            |
| 42      | 5210            | /       | /               |

For 802.11a, 802.11n20, 802.11ac20 mode, channel 36, 40, 48 were tested;

For 802.11n40, 802.11ac40 mode, channel 38, 46 were tested;

For 802.11ac80 channel 42 was tested.

For 5725-5850MHz Band, 8 channels are provided to testing:

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|
| 149     | 5745            | 157     | 5785            |
| 151     | 5755            | 159     | 5795            |
| 153     | 5765            | 161     | 5805            |
| 155     | 5775            | 165     | 5825            |

For 802.11a, 802.11n20, 802.11ac20 mode, channel 149, 157, 165 were tested;

For 802.11n40, 802.11ac40 mode, channel 151, 159 were tested;

For 802.11ac80, channel 155 were tested.

### EUT Exercise Software

“REALTEK 11ac 8822BU USB WLAN NIC Massproduction”software was used to test, which provided by manufacturer and power level as below:

| Mode         | Data Rate (Mbps) | Power Level* |
|--------------|------------------|--------------|
| 802.11a      | 6Mbps            | Default      |
| 802.11n-HT20 | MCS0             | Default      |
| 802.11n-HT40 | MCS0             | Default      |
| 802.11ac20   | MCS0             | Default      |
| 802.11ac40   | MCS0             | Default      |
| 802.11ac80   | MCS0             | Default      |

Note: EUT have two antennas, for 802.11a mode only support SISO mode; for other modes, support SISO and MIMO mode, the SISO/MIMO mode has same parameter setting, the worst case MIMO mode was select to test.

### Duty cycle

Test Result: Pass. Please refer to the Appendix.

### Equipment Modifications

No modification was made to the EUT tested.

### Support Equipment List and Details

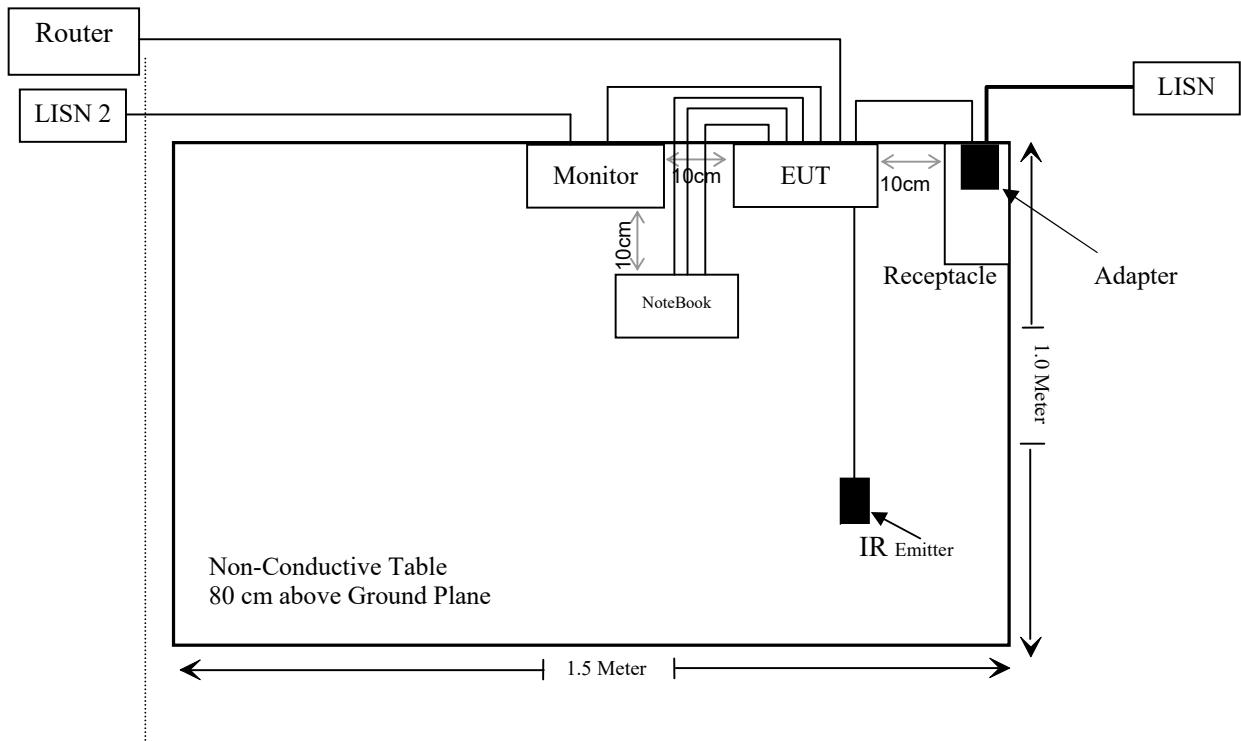
| Manufacturer | Description | Model          | Serial Number  |
|--------------|-------------|----------------|----------------|
| DELL         | Monitor     | RVE A00        | 506250042400R  |
| DELL         | NoteBook    | Latitude E4710 | PC201911252059 |
| HUAWEI       | Router      | WS5100         | A4933FEF1D01   |

### External I/O Cable

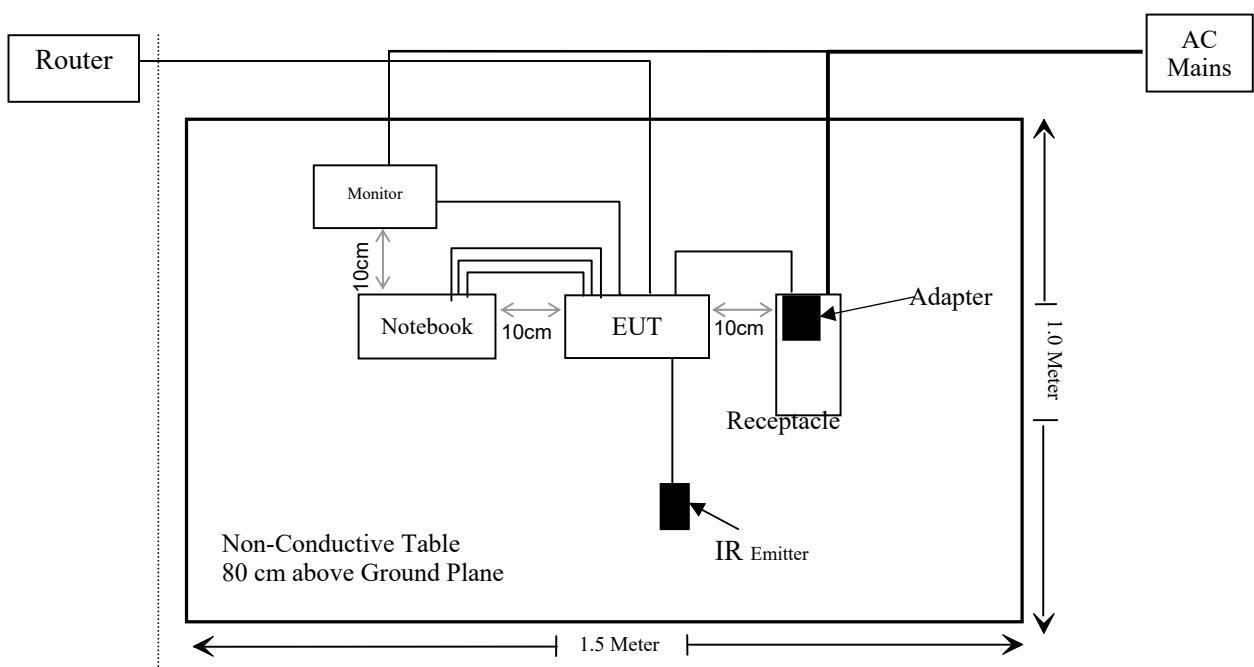
| Cable Description                   | Length(m) | From Port  | To       |
|-------------------------------------|-----------|------------|----------|
| Un-shielded Un-detachable AC cable  | 1.0       | Socket     | LISN     |
| Un-shielded Un-detachable DC cable  | 1.2       | Adapter    | EUT      |
| Un-Shielded Detachable HDMI Cable   | 1.0       | EUT        | NoteBook |
| Un-Shielded Detachable HDMI Cable   | 1.0       | Monitor    | EUT      |
| Un-shielded Un-detachable USB cable | 1.0       | EUT        | NoteBook |
| Un-shielded Un-detachable AUX cable | 0.5       | EUT        | NoteBook |
| Un-shielded Un-detachable DC cable  | 1.3       | IR emitter | EUT      |
| Un-shielded detachable RJ45 cable   | 4.0       | EUT        | Router   |

## Block Diagram of Test Setup

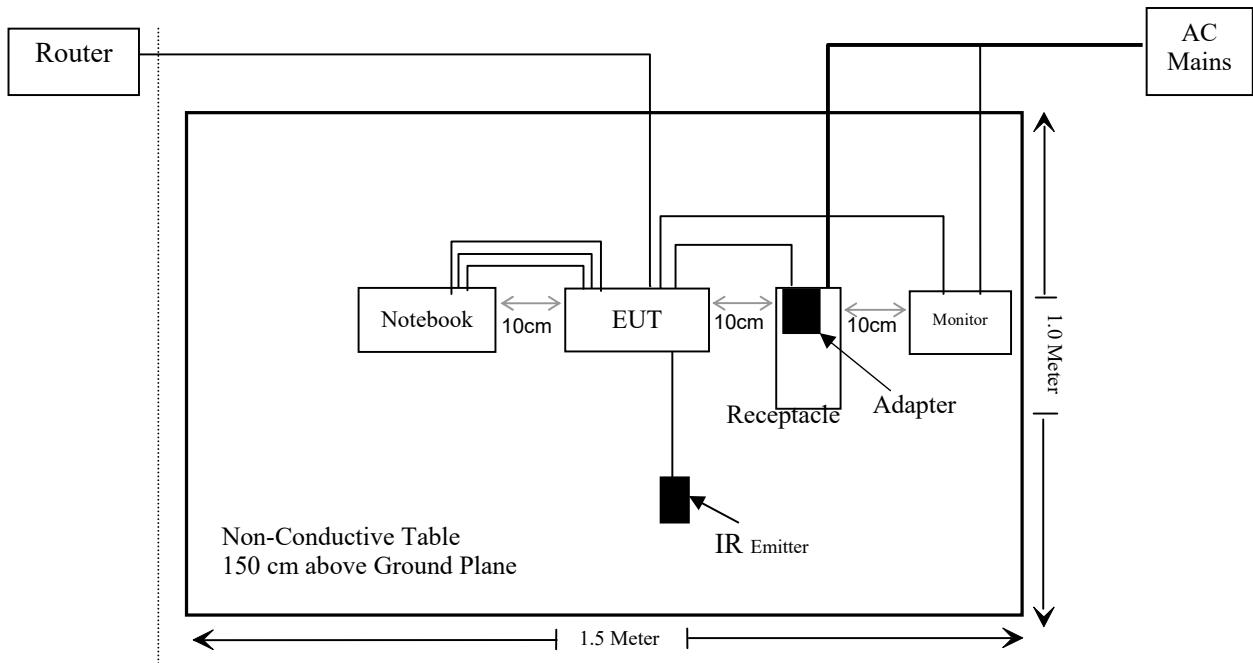
For conducted emission:



For radiated emission: (below 1GHz)



For radiated emission: (above 1GHz)



## SUMMARY OF TEST RESULTS

| FCC Rules   | Description of Test                    | Result    |
|---|--|-----------|
| §1.1307(b)(1) &§2.1091                                    | Maximum Permissible Exposure(MPE)      | Compliant |
| §15.203   | Antenna Requirement                    | Compliant |
| §15.407(b)(8)& §15.207(a)                                 | Conducted Emissions                    | Compliant |
| §15.205 & §15.209<br>&§15.407(b) (1), (4), (8), (9), (10) | Undesirable Emission& Restricted Bands | Compliant |
| §15.407(a) (12), (e)                                      | Bandwidth                              | Compliant |
| §15.407(a) (1), (3)                                       | Conducted Transmitter Output Power     | Compliant |
| §15.407 (a)(1),(3)  | Power Spectral Density                 | Compliant |

## TEST EQUIPMENT LIST

| Manufacturer                                      | Description       | Model               | Serial Number | Calibration Date | Calibration Due Date |
|---|-------------------|---------------------|---------------|------------------|----------------------|
| Conducted emission test                           |                   |                     |               |                  |                      |
| Rohde & Schwarz                                   | Test Receiver     | ESCS30              | 100307        | 2020/12/25       | 2021/12/24           |
| Schwarzbeck                                       | L.I.S.N.          | NLSK8126            | 8126431       | 2020/12/25       | 2021/12/24           |
| Rohde & Schwarz                                   | Pulse Limiter     | ESH3-Z2             | 100815        | 2020/12/25       | 2021/12/24           |
| Unknown   | RF Coaxial Cable  | N-2m                | No.2          | 2020/12/25       | 2021/12/24           |
| Conducted Emission Test Software: ES-K1 V1.71     |                   |                     |               |                  |                      |
| Radiated emission test                            |                   |                     |               |                  |                      |
| Rohde& Schwarz                                    | Test Receiver     | ESR                 | 101817        | 2020/12/24       | 2021/12/23           |
| Rohde&Schwarz                                     | Spectrum Analyzer | FSV40               | 101495        | 2020/12/24       | 2021/12/23           |
| SONOMA INSTRUMENT                                 | Amplifier         | 310 N               | 186131        | 2020/12/25       | 2021/12/24           |
| A.H. Systems, inc.                                | Preamplifier      | PAM-0118P           | 531           | 2021/07/08       | 2022/07/07           |
| Quinstar  | Amplifier         | QLW-184055<br>36-J0 | 15964001002   | 2020/11/28       | 2021/11/27           |
| Anritsu Corp                                      | 50 Coaxial Switch | MP59B               | 6100237248    | 2020/12/25       | 2021/12/24           |
| Schwarzbeck                                       | Bilog Antenna     | VULB9163            | 9163-323      | 2020/01/05       | 2023/01/04           |
| Schwarzbeck                                       | Horn Antenna      | BBHA9120D           | 9120D-1067    | 2020/01/05       | 2023/01/04           |
| Schwarzbeck                                       | HORN ANTENNA      | BBHA9170            | 9170-359      | 2020/01/05       | 2023/01/04           |
| Unknown   | RF Coaxial Cable  | N-5m                | No.3          | 2020/12/25       | 2021/12/24           |
| Unknown   | RF Coaxial Cable  | N-5m                | No.4          | 2020/12/25       | 2021/12/24           |
| Unknown   | RF Coaxial Cable  | N-1m                | No.5          | 2020/12/25       | 2021/12/24           |
| Unknown   | RF Coaxial Cable  | N-1m                | No.6          | 2020/12/25       | 2021/12/24           |
| Radiated Emission Test Software: EZ_EMC V 1.1.4.2 |                   |                     |               |                  |                      |
| RF conducted test                                 |                   |                     |               |                  |                      |
| Rohde & Schwarz                                   | Spectrum Analyzer | FSV-40              | 101495        | 2020/12/24       | 2021/12/23           |
| Tonscend  | RF Control Unit   | JS0806-2            | 19G8060182    | 2021/07/06       | 2022/07/05           |

\* **Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## FCC §1.1307 (b) (1) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### Applicable Standard

According to subpart 1.1307(b)(1) and subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

#### Limits for General Population/Uncontrolled Exposure

| Limits for General Population/Uncontrolled Exposure |                               |                               |                                     |                          |
|---|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| Frequency Range (MHz)                               | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm <sup>2</sup> ) | Averaging Time (Minutes) |
| 0.3-1.34  | 614                           | 1.63                          | *(100)                              | 30                       |
| 1.34-30   | 824/f                         | 2.19/f                        | *(180/f <sup>2</sup> )              | 30                       |
| 30-300  | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300-1500  | /                             | /                             | f/1500                              | 30                       |
| 1500-100,000  | /                             | /                             | 1.0                                 | 30                       |

f = frequency in MHz

\* = Plane-wave equivalent power density

### Result

#### Calculated Formulary:

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

For worst case:

| Mode     | Frequency (MHz) | Antenna Gain |           | Tune up conducted power |       | Evaluation Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | MPE Limit (mW/cm <sup>2</sup> ) |
|----------|-----------------|--------------|-----------|-------------------------|-------|--------------------------|-------------------------------------|---------------------------------|
|          |                 | (dBi)        | (numeric) | (dBm)                   | (mW)  |                          |                                     |                                 |
| 5G Wi-Fi | 5150-5250       | 2.52         | 1.79      | 17.5                    | 56.23 | 20                       | 0.020                               | 1                               |
| 5G Wi-Fi | 5725-5850       | 3.85         | 2.43      | 18.5                    | 70.79 | 20                       | 0.034                               | 1                               |

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliance

## FCC §15.203 – ANTENNA REQUIREMENT

### Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407 (a), if the transmitting antennas of directional gain greater than 6dBi are used, the transmit power and power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### Antenna Connector Construction

The EUT has two external antennas with unique antenna connector. Please refer to the EUT photos.

| Antenna No. | Type             | Antenna Gain                                 | Impedance |
|-------------|------------------|--|-----------|
| Antenna 1   | Omni-Directional | 5150-5250MHz:2.52dBi<br>5725-5850MHz:3.85dBi | 50Ω       |
| Antenna 2   | Omni-Directional | 5150-5250MHz:2.52dBi<br>5725-5850MHz:3.85dBi | 50Ω       |

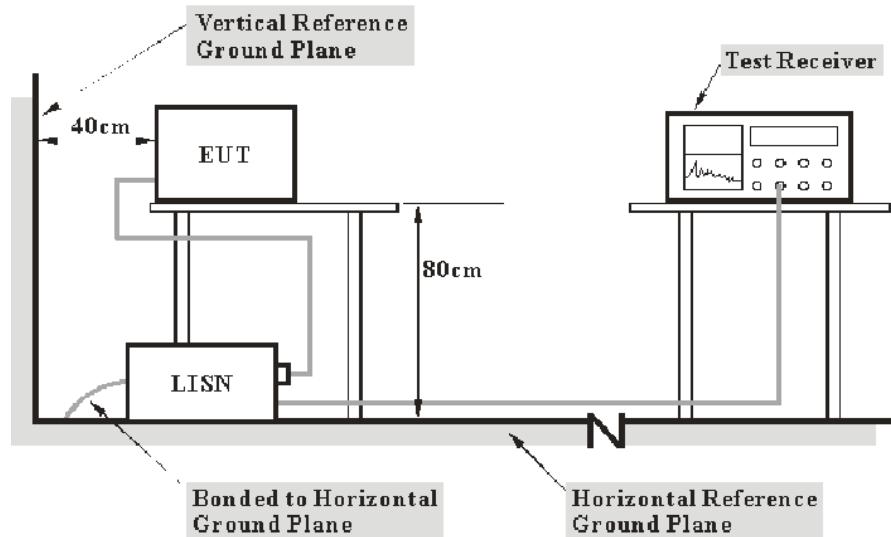
**Result:** Compliance.

## FCC §15.407 (B) (8) §15.207 (A) – CONDUCTED EMISSIONS

### Applicable Standard

FCC §15.207, §15.407(b) (8)

### EUT Setup



- Note:
1. Support units were connected to second LISN.
  2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10cm.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

| Frequency Range | IF B/W |
|-----------------|--------|
| 150 kHz – 30MHz | 9 kHz  |

### Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

## TransdFactor & Margin Calculation

The Transdfactor is calculated by addingLISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

$$\text{TransdFactor} = \text{LISN VDF} + \text{Cable Loss}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicablelimit. For example, a margin of 7dB means the emission is 7 dB below the limit. The equation for margincalculation is as follows:

$$\text{Margin} = \text{Limit} - \text{level}$$

$$\text{Level} = \text{reading level} + \text{TransdFactor}$$

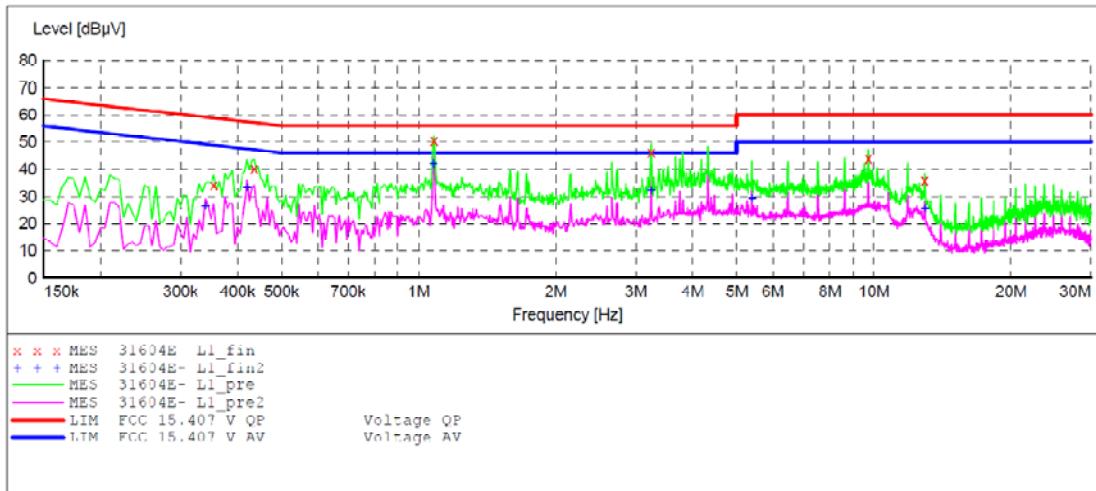
## Test Data

### Environmental Conditions

|                           |           |
|---------------------------|-----------|
| <b>Temperature:</b>       | 25 °C     |
| <b>Relative Humidity:</b> | 65%       |
| <b>ATM Pressure:</b>      | 101.0 kPa |

*The testing was performed by Bin Duanon 2021-10-22*

*EUT operation mode: Transmitting (worst case is 802.11 n20, 5785MHz)*

**AC 120V/60 Hz, Line****MEASUREMENT RESULT: "31604E- L1\_fin"**

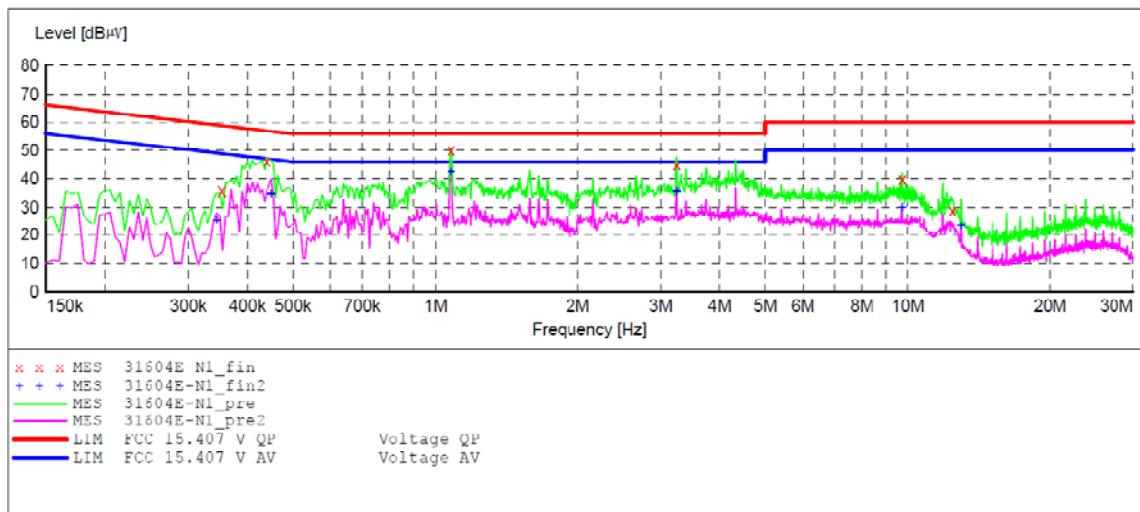
2021-10-22 10:01

| Frequency<br>MHz | Level<br>dB $\mu$ V | Transd<br>dB | Limit<br>dB $\mu$ V | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------------|--------------|---------------------|--------------|----------|------|-----|
| 0.355000         | 34.50               | 10.9         | 59                  | 24.5         | QP       | L1   | GND |
| 0.435000         | 40.20               | 11.0         | 57                  | 16.8         | QP       | L1   | GND |
| 1.080000         | 50.60               | 11.1         | 56                  | 5.4          | QP       | L1   | GND |
| 3.240000         | 46.10               | 11.4         | 56                  | 9.9          | QP       | L1   | GND |
| 9.710000         | 44.00               | 11.6         | 60                  | 16.0         | QP       | L1   | GND |
| 12.925000        | 36.00               | 11.6         | 60                  | 24.0         | QP       | L1   | GND |

**MEASUREMENT RESULT: "31604E- L1\_fin2"**

2021-10-22 10:01

| Frequency<br>MHz | Level<br>dB $\mu$ V | Transd<br>dB | Limit<br>dB $\mu$ V | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------------|--------------|---------------------|--------------|----------|------|-----|
| 0.340000         | 26.30               | 10.9         | 49                  | 22.7         | AV       | L1   | GND |
| 0.420000         | 33.30               | 11.0         | 47                  | 13.7         | AV       | L1   | GND |
| 1.080000         | 42.60               | 11.1         | 46                  | 3.4          | AV       | L1   | GND |
| 3.240000         | 32.30               | 11.4         | 46                  | 13.7         | AV       | L1   | GND |
| 5.400000         | 29.30               | 11.5         | 50                  | 20.7         | AV       | L1   | GND |
| 12.950000        | 25.40               | 11.6         | 50                  | 24.6         | AV       | L1   | GND |

**AC 120V/60 Hz, Neutral****MEASUREMENT RESULT: "31604E-N1\_fin"**

2021-10-22 10:06

| Frequency<br>MHz | Level<br>dB $\mu$ V | Transd<br>dB | Limit<br>dB $\mu$ V | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------------|--------------|---------------------|--------------|----------|------|-----|
| 0.360000         | 35.40               | 10.9         | 59                  | 23.6         | QP       | N    | GND |
| 0.440000         | 46.10               | 11.0         | 57                  | 10.9         | QP       | N    | GND |
| 1.080000         | 50.10               | 11.1         | 56                  | 5.9          | QP       | N    | GND |
| 3.240000         | 44.60               | 11.4         | 56                  | 11.4         | QP       | N    | GND |
| 9.740000         | 39.70               | 11.6         | 60                  | 20.3         | QP       | N    | GND |
| 12.450000        | 28.90               | 11.6         | 60                  | 31.1         | QP       | N    | GND |

**MEASUREMENT RESULT: "31604E-N1\_fin2"**

2021-10-22 10:06

| Frequency<br>MHz | Level<br>dB $\mu$ V | Transd<br>dB | Limit<br>dB $\mu$ V | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------------|--------------|---------------------|--------------|----------|------|-----|
| 0.345000         | 25.10               | 10.9         | 49                  | 23.9         | AV       | N    | GND |
| 0.450000         | 34.70               | 11.0         | 47                  | 12.3         | AV       | N    | GND |
| 1.080000         | 42.90               | 11.1         | 46                  | 3.1          | AV       | N    | GND |
| 3.240000         | 35.60               | 11.4         | 46                  | 10.4         | AV       | N    | GND |
| 9.730000         | 29.90               | 11.6         | 50                  | 20.1         | AV       | N    | GND |
| 12.975000        | 23.20               | 11.6         | 50                  | 26.8         | AV       | N    | GND |

## §15.205& §15.209&§15.407(B) (1),(4), (8) , (9),(10)– UNDESIRABLE EMISSION

### Applicable Standard

FCC §15.407 (b) (1),(4), (8), (9), (10); §15.209;§15.205;

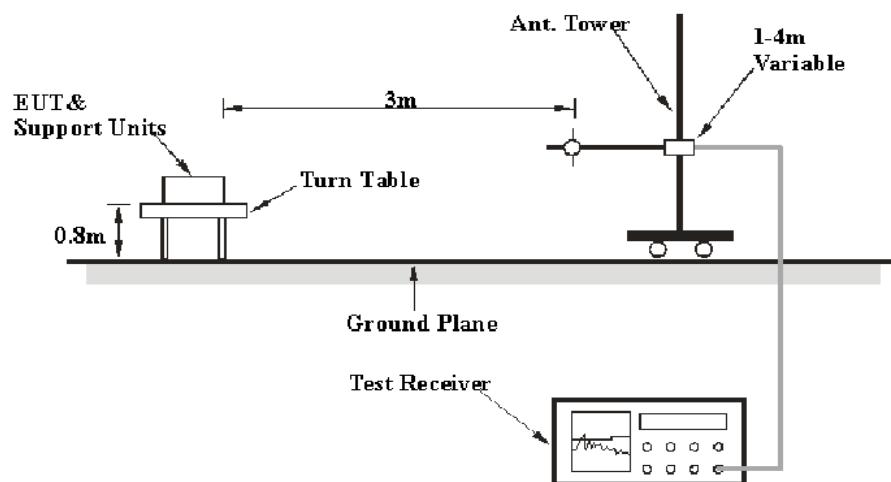
(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

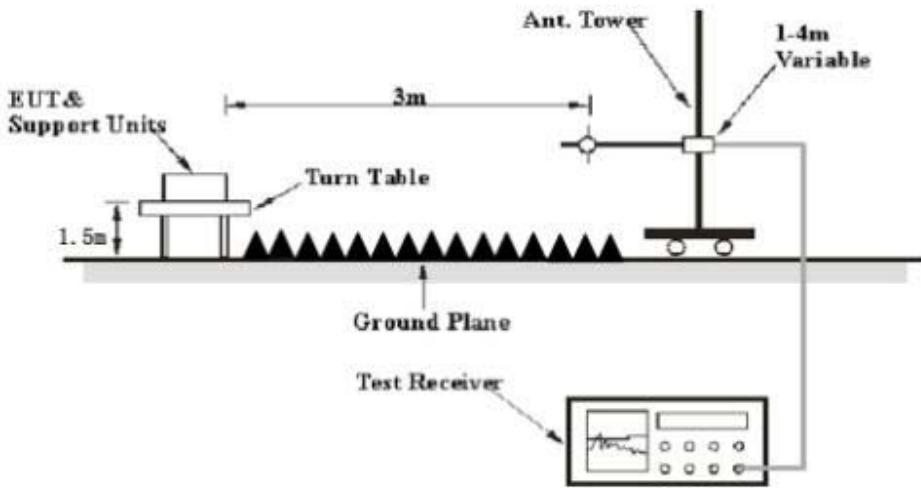
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
  - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Unwanted emissions below 1 GHz must comply with the general fieldstrength limits set forth in §15.209.

### EUT Setup

Below 1 GHz:



**Above 1GHz:**

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.209 and FCC 15.407 limits.

**EMI Test Receiver&Spectrum Analyzer Setup**

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

| Frequency Range  | RBW     | Video B/W               | IF B/W | Measurement |
|------------------|---------|-------------------------|--------|-------------|
| 30MHz – 1000 MHz | 100 kHz | 300 kHz                 | 120kHz | QP          |
|                  | 1MHz    | 3 MHz                   | /      | PK          |
|                  | 1MHz    | 10 Hz <sup>Note 1</sup> | /      | Average     |
|                  | 1MHz    | >1/T <sup>Note 2</sup>  | /      | Average     |

Note 1: when duty cycle is no less than 98%

Note 2: when duty cycle is less than 98%

**Test Procedure****Radiated Spurious Emission**

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all the installation combinations.

## Factor& Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the MeterReading. The basic equation is as follows:

$$\text{Factor} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Result-Limit}$$

$$\text{Result} = \text{Reading} + \text{Factor}$$

## Test Data

### Environmental Conditions

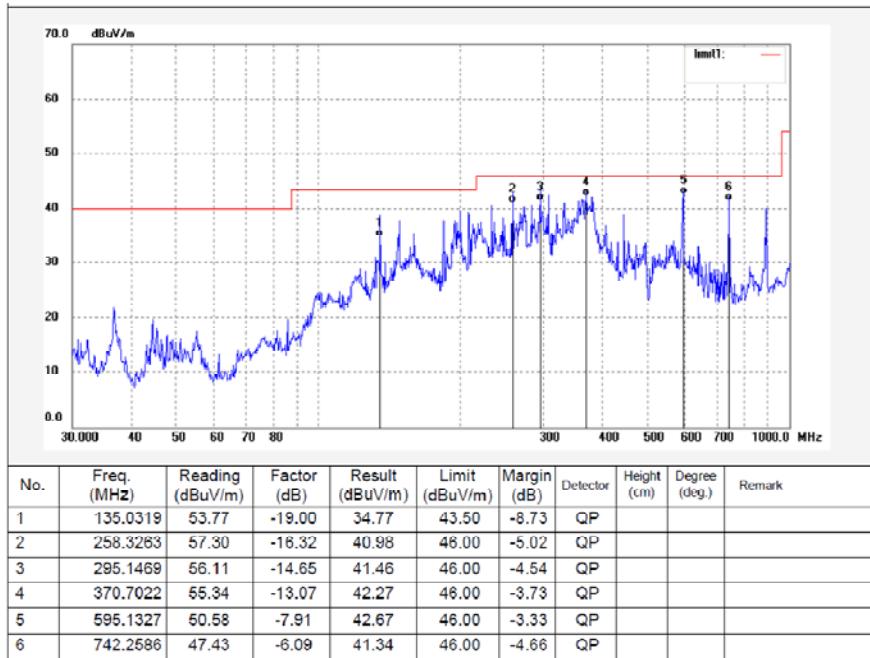
|                    |           |
|--------------------|-----------|
| Temperature:       | 23~28.1°C |
| Relative Humidity: | 48~52 %   |
| ATM Pressure:      | 101.0 kPa |

*The testing was performed by Caro huon 2021-10-26 for below 1GHz and 2021-10-23 for above 1GHz.*

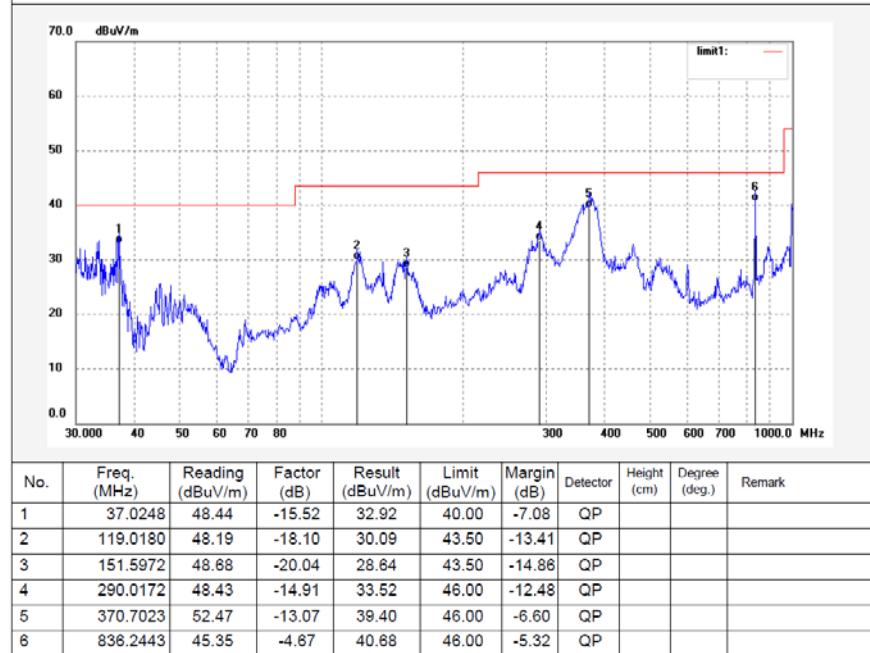
*EUT operation mode: Transmitting*

**30 MHz~1 GHz:**(worst case is 802.11 n20, 5785MHz)

### Horizontal



### Vertical



**1 ~ 40 GHz:****5150-5250MHz:**

| Frequency<br>(MHz)      | Receiver                |          | Turntable<br>Degree | Rx Antenna    |                  | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Part<br>15.407/205/209 |                |  |  |  |
|-------------------------|-------------------------|----------|---------------------|---------------|------------------|-------------------------------|--|----------------------------|----------------|--|--|--|
|                         | Reading<br>(dB $\mu$ V) | PK/QP/AV |                     | Height<br>(m) | Polar<br>(H / V) |                               |  | Limit<br>(dB $\mu$ V/m)    | Margin<br>(dB) |  |  |  |
| 802.11a SISO-Ant1       |                         |          |                     |               |                  |                               |  |                            |                |  |  |  |
| Low Channel, 5180MHz    |                         |          |                     |               |                  |                               |  |                            |                |  |  |  |
| 4500                    | 57.16                   | PK       | 191                 | 1.8           | H                | 1.89                          | 59.05                                    | 74                         | -14.95         |  |  |  |
| 4500                    | 43.35                   | Ave      | 191                 | 1.8           | H                | 1.89                          | 45.24                                    | 54                         | -8.76          |  |  |  |
| 4500                    | 57.37                   | PK       | 203                 | 2.0           | V                | 1.89                          | 59.26                                    | 74                         | -14.74         |  |  |  |
| 4500                    | 42.96                   | Ave      | 203                 | 2.0           | V                | 1.89                          | 44.85                                    | 54                         | -9.15          |  |  |  |
| 5150                    | 54.75                   | PK       | 13                  | 1.7           | H                | 3.37                          | 58.12                                    | 74                         | -15.88         |  |  |  |
| 5150                    | 40.88                   | Ave      | 13                  | 1.7           | H                | 3.37                          | 44.25                                    | 54                         | -9.75          |  |  |  |
| 5150                    | 57.61                   | PK       | 67                  | 1.8           | V                | 3.37                          | 60.98                                    | 74                         | -13.02         |  |  |  |
| 5150                    | 43.52                   | Ave      | 67                  | 1.8           | V                | 3.37                          | 46.89                                    | 54                         | -7.11          |  |  |  |
| 10360                   | 34.63                   | PK       | 155                 | 1.8           | H                | 14.41                         | 49.04                                    | 68.2                       | -19.16         |  |  |  |
| 10360                   | 42.83                   | PK       | 72                  | 1.8           | V                | 14.41                         | 57.24                                    | 68.2                       | -10.96         |  |  |  |
| Middle Channel, 5200MHz |                         |          |                     |               |                  |                               |  |                            |                |  |  |  |
| 10400                   | 44.39                   | PK       | 7                   | 1.5           | H                | 11.46                         | 55.85                                    | 68.2                       | -12.35         |  |  |  |
| 10400                   | 44.57                   | PK       | 255                 | 1.8           | V                | 11.46                         | 56.03                                    | 68.2                       | -12.17         |  |  |  |
| High Channel, 5240MHz   |                         |          |                     |               |                  |                               |  |                            |                |  |  |  |
| 5350                    | 54.81                   | PK       | 142                 | 1.7           | H                | 3.43                          | 58.24                                    | 74                         | -15.76         |  |  |  |
| 5350                    | 41.93                   | Ave      | 142                 | 1.7           | H                | 3.43                          | 45.36                                    | 54                         | -8.64          |  |  |  |
| 5350                    | 56.58                   | PK       | 256                 | 2.0           | V                | 3.43                          | 60.01                                    | 74                         | -13.99         |  |  |  |
| 5350                    | 42.47                   | Ave      | 256                 | 2.0           | V                | 3.43                          | 45.90                                    | 54                         | -8.10          |  |  |  |
| 5460                    | 56.94                   | PK       | 258                 | 1.6           | H                | 3.58                          | 60.52                                    | 74                         | -13.48         |  |  |  |
| 5460                    | 41.67                   | Ave      | 258                 | 1.6           | H                | 3.58                          | 45.25                                    | 54                         | -8.75          |  |  |  |
| 5460                    | 58.13                   | PK       | 6                   | 1.9           | V                | 3.58                          | 61.71                                    | 74                         | -12.29         |  |  |  |
| 5460                    | 43.40                   | Ave      | 6                   | 1.9           | V                | 3.58                          | 46.98                                    | 54                         | -7.02          |  |  |  |
| 10480                   | 43.49                   | PK       | 99                  | 1.8           | H                | 11.53                         | 55.02                                    | 68.2                       | -13.18         |  |  |  |
| 10480                   | 46.78                   | PK       | 78                  | 1.6           | V                | 11.53                         | 58.31                                    | 68.2                       | -9.89          |  |  |  |

Note: for 802.11a mode pre-scan ANT 1 and ANT 2, the worst case is ANT 1 was recorded

| Frequency<br>(MHz)      | Receiver                |          | Turtable | Rx Antenna    |                  | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Part<br>15.407/205/209 |                |  |  |
|-------------------------|-------------------------|----------|----------|---------------|------------------|-------------------------------|--|----------------------------|----------------|--|--|
|                         | Reading<br>(dB $\mu$ V) | PK/QP/AV | Degree   | Height<br>(m) | Polar<br>(H / V) |                               |  | Limit<br>(dB $\mu$ V/m)    | Margin<br>(dB) |  |  |
| 802.11N20, MIMO mode    |                         |          |          |               |                  |                               |  |                            |                |  |  |
| Low Channel, 5180MHz    |                         |          |          |               |                  |                               |  |                            |                |  |  |
| 4500                    | 58.32                   | PK       | 265      | 2.0           | H                | 1.89                          | 60.21                                    | 74                         | -13.79         |  |  |
| 4500                    | 43.12                   | Ave      | 265      | 2.0           | H                | 1.89                          | 45.01                                    | 54                         | -8.99          |  |  |
| 4500                    | 59.49                   | PK       | 319      | 1.8           | V                | 1.89                          | 61.38                                    | 74                         | -12.62         |  |  |
| 4500                    | 44.13                   | Ave      | 319      | 1.8           | V                | 1.89                          | 46.02                                    | 54                         | -7.98          |  |  |
| 5150                    | 57.65                   | PK       | 286      | 2.1           | H                | 3.37                          | 61.02                                    | 74                         | -12.98         |  |  |
| 5150                    | 42.70                   | Ave      | 286      | 2.1           | H                | 3.37                          | 46.07                                    | 54                         | -7.93          |  |  |
| 5150                    | 58.63                   | PK       | 224      | 2.0           | V                | 3.37                          | 62.00                                    | 74                         | -12.00         |  |  |
| 5150                    | 43.40                   | Ave      | 224      | 2.0           | V                | 3.37                          | 46.77                                    | 54                         | -7.23          |  |  |
| 10360                   | 38.88                   | PK       | 21       | 1.6           | H                | 14.41                         | 53.29                                    | 68.2                       | -14.91         |  |  |
| 10360                   | 41.10                   | PK       | 288      | 2.1           | V                | 14.41                         | 55.51                                    | 68.2                       | -12.69         |  |  |
| Middle Channel, 5200MHz |                         |          |          |               |                  |                               |  |                            |                |  |  |
| 10400                   | 42.65                   | PK       | 333      | 1.8           | H                | 11.46                         | 54.11                                    | 68.2                       | -14.09         |  |  |
| 10400                   | 44.12                   | PK       | 246      | 1.7           | V                | 11.46                         | 55.58                                    | 68.2                       | -12.62         |  |  |
| High Channel, 5240MHz   |                         |          |          |               |                  |                               |  |                            |                |  |  |
| 5350                    | 54.93                   | PK       | 173      | 1.6           | H                | 3.43                          | 58.36                                    | 74                         | -15.64         |  |  |
| 5350                    | 45.17                   | Ave      | 173      | 1.6           | H                | 3.43                          | 48.60                                    | 54                         | -5.40          |  |  |
| 5350                    | 57.20                   | PK       | 349      | 2.0           | V                | 3.43                          | 60.63                                    | 74                         | -13.37         |  |  |
| 5350                    | 42.39                   | Ave      | 349      | 2.0           | V                | 3.43                          | 45.82                                    | 54                         | -8.18          |  |  |
| 5460                    | 55.80                   | PK       | 62       | 1.6           | H                | 3.58                          | 59.38                                    | 74                         | -14.62         |  |  |
| 5460                    | 43.79                   | Ave      | 62       | 1.6           | V                | 3.58                          | 47.37                                    | 54                         | -6.63          |  |  |
| 5460                    | 58.11                   | PK       | 277      | 2.0           | V                | 3.58                          | 61.69                                    | 74                         | -12.31         |  |  |
| 5460                    | 43.09                   | Ave      | 277      | 2.0           | V                | 3.58                          | 46.67                                    | 54                         | -7.33          |  |  |
| 10480                   | 44.46                   | PK       | 290      | 1.9           | H                | 11.53                         | 55.99                                    | 68.2                       | -12.21         |  |  |
| 10480                   | 45.50                   | PK       | 313      | 1.5           | V                | 11.53                         | 57.03                                    | 68.2                       | -11.17         |  |  |

| Frequency<br>(MHz)    | Receiver                |          | Turtable | Rx Antenna    |                  | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Part<br>15.407/205/209 |                |  |  |
|-----------------------|-------------------------|----------|----------|---------------|------------------|-------------------------------|--|----------------------------|----------------|--|--|
|                       | Reading<br>(dB $\mu$ V) | PK/QP/AV | Degree   | Height<br>(m) | Polar<br>(H / V) |                               |  | Limit<br>(dB $\mu$ V/m)    | Margin<br>(dB) |  |  |
| 802.11N40, MIMO mode  |                         |          |          |               |                  |                               |  |                            |                |  |  |
| Low Channel, 5190MHz  |                         |          |          |               |                  |                               |  |                            |                |  |  |
| 4500                  | 57.92                   | PK       | 79       | 2.0           | H                | 1.89                          | 59.81                                    | 74                         | -14.19         |  |  |
| 4500                  | 45.39                   | Ave      | 79       | 2.0           | V                | 1.89                          | 47.28                                    | 54                         | -6.72          |  |  |
| 4500                  | 59.66                   | PK       | 220      | 1.5           | V                | 1.89                          | 61.55                                    | 74                         | -12.45         |  |  |
| 4500                  | 44.29                   | Ave      | 220      | 1.5           | V                | 1.89                          | 46.18                                    | 54                         | -7.82          |  |  |
| 5150                  | 56.38                   | PK       | 305      | 1.7           | H                | 3.37                          | 59.75                                    | 74                         | -14.25         |  |  |
| 5150                  | 44.02                   | Ave      | 305      | 1.7           | V                | 3.37                          | 47.39                                    | 54                         | -6.61          |  |  |
| 5150                  | 58.21                   | PK       | 228      | 1.6           | V                | 3.37                          | 61.58                                    | 74                         | -12.42         |  |  |
| 5150                  | 43.29                   | Ave      | 228      | 1.6           | V                | 3.37                          | 46.66                                    | 54                         | -7.34          |  |  |
| 10380                 | 39.56                   | PK       | 300      | 1.9           | H                | 11.43                         | 50.99                                    | 68.2                       | -17.21         |  |  |
| 10380                 | 40.61                   | PK       | 151      | 1.6           | V                | 11.43                         | 52.04                                    | 68.2                       | -16.16         |  |  |
| High Channel, 5230MHz |                         |          |          |               |                  |                               |  |                            |                |  |  |
| 5350                  | 54.30                   | PK       | 191      | 1.6           | H                | 3.43                          | 57.73                                    | 74                         | -16.27         |  |  |
| 5350                  | 46.00                   | Ave      | 191      | 1.6           | V                | 3.43                          | 49.43                                    | 54                         | -4.57          |  |  |
| 5350                  | 56.22                   | PK       | 343      | 1.9           | V                | 3.43                          | 59.65                                    | 74                         | -14.35         |  |  |
| 5350                  | 42.44                   | Ave      | 343      | 1.9           | V                | 3.43                          | 45.87                                    | 54                         | -8.13          |  |  |
| 5460                  | 55.84                   | PK       | 262      | 1.6           | H                | 3.58                          | 59.42                                    | 74                         | -14.58         |  |  |
| 5460                  | 43.71                   | Ave      | 262      | 1.6           | V                | 3.58                          | 47.29                                    | 54                         | -6.71          |  |  |
| 5460                  | 58.42                   | PK       | 98       | 1.6           | V                | 3.58                          | 62.00                                    | 74                         | -12.00         |  |  |
| 5460                  | 43.06                   | Ave      | 98       | 1.6           | V                | 3.58                          | 46.64                                    | 54                         | -7.36          |  |  |
| 10460                 | 39.95                   | PK       | 324      | 2.1           | H                | 11.5                          | 51.45                                    | 68.2                       | -16.75         |  |  |
| 10460                 | 41.16                   | PK       | 313      | 1.8           | V                | 11.5                          | 52.66                                    | 68.2                       | -15.54         |  |  |

| Frequency<br>(MHz)      | Receiver                |          | Turtable | Rx Antenna    |                  | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Part<br>15.407/205/209 |                |  |  |
|-------------------------|-------------------------|----------|----------|---------------|------------------|-------------------------------|--|----------------------------|----------------|--|--|
|                         | Reading<br>(dB $\mu$ V) | PK/QP/AV | Degree   | Height<br>(m) | Polar<br>(H / V) |                               |  | Limit<br>(dB $\mu$ V/m)    | Margin<br>(dB) |  |  |
| 802.11AC20, MIMO mode   |                         |          |          |               |                  |                               |  |                            |                |  |  |
| Low Channel, 5180MHz    |                         |          |          |               |                  |                               |  |                            |                |  |  |
| 4500                    | 56.90                   | PK       | 59       | 1.7           | H                | 1.89                          | 58.79                                    | 74                         | -15.21         |  |  |
| 4500                    | 46.16                   | Ave      | 59       | 1.7           | V                | 1.89                          | 48.05                                    | 54                         | -5.95          |  |  |
| 4500                    | 58.89                   | PK       | 207      | 1.7           | V                | 1.89                          | 60.78                                    | 74                         | -13.22         |  |  |
| 4500                    | 44.09                   | Ave      | 207      | 1.7           | V                | 1.89                          | 45.98                                    | 54                         | -8.02          |  |  |
| 5150                    | 55.82                   | PK       | 165      | 1.8           | H                | 3.37                          | 59.19                                    | 74                         | -14.81         |  |  |
| 5150                    | 44.59                   | Ave      | 165      | 1.8           | V                | 3.37                          | 47.96                                    | 54                         | -6.04          |  |  |
| 5150                    | 57.73                   | PK       | 332      | 1.6           | V                | 3.37                          | 61.10                                    | 74                         | -12.90         |  |  |
| 5150                    | 43.47                   | Ave      | 332      | 1.6           | V                | 3.37                          | 46.84                                    | 54                         | -7.16          |  |  |
| 10360                   | 39.84                   | PK       | 236      | 1.7           | H                | 14.41                         | 54.25                                    | 68.2                       | -13.95         |  |  |
| 10360                   | 40.86                   | PK       | 338      | 1.8           | V                | 14.41                         | 55.27                                    | 68.2                       | -12.93         |  |  |
| Middle Channel, 5200MHz |                         |          |          |               |                  |                               |  |                            |                |  |  |
| 10400                   | 42.43                   | PK       | 47       | 1.7           | H                | 11.46                         | 53.89                                    | 68.2                       | -14.31         |  |  |
| 10400                   | 43.58                   | PK       | 217      | 1.6           | V                | 11.46                         | 55.04                                    | 68.2                       | -13.16         |  |  |
| High Channel, 5240MHz   |                         |          |          |               |                  |                               |  |                            |                |  |  |
| 5350                    | 54.02                   | PK       | 340      | 1.6           | H                | 3.43                          | 57.45                                    | 74                         | -16.55         |  |  |
| 5350                    | 46.09                   | Ave      | 340      | 1.6           | V                | 3.43                          | 49.52                                    | 54                         | -4.48          |  |  |
| 5350                    | 56.25                   | PK       | 237      | 1.9           | V                | 3.43                          | 59.68                                    | 74                         | -14.32         |  |  |
| 5350                    | 42.18                   | Ave      | 237      | 1.9           | V                | 3.43                          | 45.61                                    | 54                         | -8.39          |  |  |
| 5460                    | 55.26                   | PK       | 73       | 1.9           | H                | 3.58                          | 58.84                                    | 74                         | -15.16         |  |  |
| 5460                    | 44.55                   | Ave      | 73       | 1.9           | V                | 3.58                          | 48.13                                    | 54                         | -5.87          |  |  |
| 5460                    | 57.54                   | PK       | 343      | 1.9           | V                | 3.58                          | 61.12                                    | 74                         | -12.88         |  |  |
| 5460                    | 43.25                   | Ave      | 343      | 1.9           | V                | 3.58                          | 46.83                                    | 54                         | -7.17          |  |  |
| 10480                   | 43.62                   | PK       | 96       | 2.1           | H                | 11.53                         | 55.15                                    | 68.2                       | -13.05         |  |  |
| 10480                   | 44.71                   | PK       | 85       | 2.0           | V                | 11.53                         | 56.24                                    | 68.2                       | -11.96         |  |  |

| Frequency<br>(MHz)       | Receiver                |          | Turntable | Rx Antenna    |                  | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Part<br>15.407/205/209 |                |  |  |
|--------------------------|-------------------------|----------|-----------|---------------|------------------|-------------------------------|--|----------------------------|----------------|--|--|
|                          | Reading<br>(dB $\mu$ V) | PK/QP/AV | Degree    | Height<br>(m) | Polar<br>(H / V) |                               |  | Limit<br>(dB $\mu$ V/m)    | Margin<br>(dB) |  |  |
| 802.11AC40, MIMO mode    |                         |          |           |               |                  |                               |  |                            |                |  |  |
| Low Channel, 5190MHz     |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 4500                     | 56.74                   | PK       | 259       | 1.8           | H                | 1.89                          | 58.63                                    | 74                         | -15.37         |  |  |
| 4500                     | 46.51                   | Ave      | 259       | 1.8           | V                | 1.89                          | 48.40                                    | 54                         | -5.60          |  |  |
| 4500                     | 58.74                   | PK       | 278       | 1.8           | V                | 1.89                          | 60.63                                    | 74                         | -13.37         |  |  |
| 4500                     | 43.93                   | Ave      | 278       | 1.8           | V                | 1.89                          | 45.82                                    | 54                         | -8.18          |  |  |
| 5150                     | 55.90                   | PK       | 92        | 1.9           | H                | 3.37                          | 59.27                                    | 74                         | -14.73         |  |  |
| 5150                     | 44.45                   | Ave      | 92        | 1.9           | V                | 3.37                          | 47.82                                    | 54                         | -6.18          |  |  |
| 5150                     | 57.97                   | PK       | 208       | 1.7           | V                | 3.37                          | 61.34                                    | 74                         | -12.66         |  |  |
| 5150                     | 43.44                   | Ave      | 208       | 1.7           | V                | 3.37                          | 46.81                                    | 54                         | -7.19          |  |  |
| 10380                    | 42.35                   | PK       | 269       | 1.6           | H                | 11.43                         | 53.78                                    | 68.2                       | -14.42         |  |  |
| 10380                    | 43.59                   | PK       | 6         | 2.0           | V                | 11.43                         | 55.02                                    | 68.2                       | -13.18         |  |  |
| 802.11AC40, High Channel |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5350                     | 53.92                   | PK       | 235       | 1.8           | H                | 3.43                          | 57.35                                    | 74                         | -16.65         |  |  |
| 5350                     | 46.05                   | Ave      | 235       | 1.8           | V                | 3.43                          | 49.48                                    | 54                         | -4.52          |  |  |
| 5350                     | 56.02                   | PK       | 173       | 2.1           | V                | 3.43                          | 59.45                                    | 74                         | -14.55         |  |  |
| 5350                     | 42.49                   | Ave      | 173       | 2.1           | V                | 3.43                          | 45.92                                    | 54                         | -8.08          |  |  |
| 5460                     | 55.42                   | PK       | 210       | 1.9           | H                | 3.58                          | 59.00                                    | 74                         | -15.00         |  |  |
| 5460                     | 44.57                   | Ave      | 210       | 1.9           | V                | 3.58                          | 48.15                                    | 54                         | -5.85          |  |  |
| 5460                     | 57.20                   | PK       | 176       | 1.7           | V                | 3.58                          | 60.78                                    | 74                         | -13.22         |  |  |
| 5460                     | 43.08                   | Ave      | 176       | 1.7           | V                | 3.58                          | 46.66                                    | 54                         | -7.34          |  |  |
| 10460                    | 38.78                   | PK       | 179       | 1.8           | H                | 11.5                          | 50.28                                    | 68.2                       | -17.92         |  |  |
| 10460                    | 40.04                   | PK       | 88        | 1.6           | V                | 11.5                          | 51.54                                    | 68.2                       | -16.66         |  |  |
| 802.11AC80, MIMO mode    |                         |          |           |               |                  |                               |  |                            |                |  |  |
| Middle Channel, 5210MHz  |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 4500                     | 56.88                   | PK       | 10        | 1.8           | H                | 1.89                          | 58.77                                    | 74                         | -15.23         |  |  |
| 4500                     | 46.34                   | Ave      | 10        | 1.8           | V                | 1.89                          | 48.23                                    | 54                         | -5.77          |  |  |
| 4500                     | 59.12                   | PK       | 298       | 1.8           | V                | 1.89                          | 61.01                                    | 74                         | -12.99         |  |  |
| 4500                     | 44.80                   | Ave      | 298       | 1.8           | V                | 1.89                          | 46.69                                    | 54                         | -7.31          |  |  |
| 5150                     | 55.47                   | PK       | 260       | 1.9           | H                | 3.37                          | 58.84                                    | 74                         | -15.16         |  |  |
| 5150                     | 44.58                   | Ave      | 260       | 1.9           | V                | 3.37                          | 47.95                                    | 54                         | -6.05          |  |  |
| 5150                     | 57.64                   | PK       | 149       | 2.1           | V                | 3.37                          | 61.01                                    | 74                         | -12.99         |  |  |
| 5150                     | 43.32                   | Ave      | 149       | 2.1           | V                | 3.37                          | 46.69                                    | 54                         | -7.31          |  |  |
| 5350                     | 54.07                   | PK       | 251       | 1.8           | H                | 3.43                          | 57.50                                    | 74                         | -16.50         |  |  |
| 5350                     | 46.24                   | Ave      | 251       | 1.8           | V                | 3.43                          | 49.67                                    | 54                         | -4.33          |  |  |
| 5350                     | 55.98                   | PK       | 228       | 2.0           | V                | 3.43                          | 59.41                                    | 74                         | -14.59         |  |  |
| 5350                     | 41.62                   | Ave      | 228       | 2.0           | V                | 3.43                          | 45.05                                    | 54                         | -8.95          |  |  |
| 5460                     | 54.19                   | PK       | 192       | 1.7           | H                | 3.58                          | 57.77                                    | 74                         | -16.23         |  |  |
| 5460                     | 45.44                   | Ave      | 192       | 1.7           | V                | 3.58                          | 49.02                                    | 54                         | -4.98          |  |  |
| 5460                     | 56.44                   | PK       | 192       | 1.7           | V                | 3.58                          | 60.02                                    | 74                         | -13.98         |  |  |
| 5460                     | 42.30                   | Ave      | 192       | 1.7           | V                | 3.58                          | 45.88                                    | 54                         | -8.12          |  |  |
| 10420                    | 39.40                   | PK       | 176       | 1.7           | H                | 11.49                         | 50.89                                    | 68.2                       | -17.31         |  |  |
| 10420                    | 40.53                   | PK       | 93        | 1.6           | V                | 11.49                         | 52.02                                    | 68.2                       | -16.18         |  |  |

**5725-5850MHz:**

| Frequency<br>(MHz)      | Receiver                |          | Turntable | Rx Antenna    |                  | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Part<br>15.407/205/209 |                |  |  |
|-------------------------|-------------------------|----------|-----------|---------------|------------------|-------------------------------|--|----------------------------|----------------|--|--|
|                         | Reading<br>(dB $\mu$ V) | PK/QP/AV | Degree    | Height<br>(m) | Polar<br>(H / V) |                               |  | Limit<br>(dB $\mu$ V/m)    | Margin<br>(dB) |  |  |
| 802.11a SISO-Ant1       |                         |          |           |               |                  |                               |  |                            |                |  |  |
| Low Channel, 5745MHz    |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5725                    | 65.63                   | PK       | 338       | 1.9           | H                | 3.97                          | 69.6                                     | 122.2                      | -52.6          |  |  |
| 5725                    | 66.92                   | PK       | 216       | 1.9           | V                | 3.97                          | 70.89                                    | 122.2                      | -51.31         |  |  |
| 5720                    | 59.52                   | PK       | 263       | 1.8           | H                | 3.95                          | 63.47                                    | 110.8                      | -47.33         |  |  |
| 5720                    | 60.35                   | PK       | 136       | 1.7           | V                | 3.95                          | 64.3                                     | 110.8                      | -46.5          |  |  |
| 5700                    | 59.84                   | PK       | 15        | 1.8           | H                | 3.89                          | 63.73                                    | 105.2                      | -41.47         |  |  |
| 5700                    | 61.06                   | PK       | 78        | 1.7           | V                | 3.89                          | 64.95                                    | 105.2                      | -40.25         |  |  |
| 5650                    | 56.93                   | PK       | 64        | 1.5           | H                | 3.75                          | 60.68                                    | 68.2                       | -7.52          |  |  |
| 5650                    | 58.03                   | PK       | 357       | 1.9           | V                | 3.75                          | 61.78                                    | 68.2                       | -6.42          |  |  |
| 11490                   | 37.01                   | PK       | 60        | 1.7           | H                | 14.74                         | 51.75                                    | 74                         | -22.25         |  |  |
| 11490                   | 38.02                   | PK       | 42        | 1.9           | V                | 14.74                         | 52.76                                    | 74                         | -21.24         |  |  |
| Middle Channel, 5785MHz |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 11570                   | 39.41                   | PK       | 278       | 2.0           | H                | 14.74                         | 54.15                                    | 74                         | -19.85         |  |  |
| 11570                   | 22.24                   | Ave      | 278       | 2.0           | H                | 14.74                         | 36.98                                    | 54                         | -17.02         |  |  |
| 11570                   | 40.46                   | PK       | 133       | 1.9           | V                | 14.74                         | 55.2                                     | 74                         | -18.80         |  |  |
| 11570                   | 23.41                   | Ave      | 133       | 1.9           | V                | 14.74                         | 38.15                                    | 54                         | -15.85         |  |  |
| High Channel, 5825MHz   |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5850                    | 61.63                   | PK       | 354       | 2.0           | H                | 4.33                          | 65.96                                    | 122.2                      | -56.24         |  |  |
| 5850                    | 62.6                    | PK       | 321       | 1.7           | V                | 4.33                          | 66.93                                    | 122.2                      | -55.27         |  |  |
| 5855                    | 59.97                   | PK       | 169       | 2.0           | H                | 4.35                          | 64.32                                    | 110.8                      | -46.48         |  |  |
| 5855                    | 60.91                   | PK       | 273       | 2.0           | V                | 4.35                          | 65.26                                    | 110.8                      | -45.54         |  |  |
| 5875                    | 59.67                   | PK       | 141       | 1.9           | H                | 4.41                          | 64.08                                    | 105.2                      | -41.12         |  |  |
| 5875                    | 60.54                   | PK       | 146       | 1.7           | V                | 4.41                          | 64.95                                    | 105.2                      | -40.25         |  |  |
| 5925                    | 58.37                   | PK       | 86        | 1.6           | H                | 4.55                          | 62.92                                    | 68.2                       | -5.28          |  |  |
| 5925                    | 59.3                    | PK       | 85        | 1.9           | V                | 4.55                          | 63.85                                    | 68.2                       | -4.35          |  |  |
| 11650                   | 41.58                   | PK       | 289       | 1.6           | H                | 14.79                         | 56.37                                    | 74                         | -17.63         |  |  |
| 11650                   | 24.87                   | Ave      | 289       | 1.6           | H                | 14.79                         | 39.66                                    | 54                         | -14.34         |  |  |
| 11650                   | 42.58                   | PK       | 250       | 2.0           | V                | 14.79                         | 57.37                                    | 74                         | -16.63         |  |  |
| 11650                   | 25.68                   | Ave      | 250       | 2.0           | V                | 14.79                         | 40.47                                    | 54                         | -13.53         |  |  |

Note: for 802.11a mode pre-scan ANT 1 and ANT 2, the worst case is ANT 1 was recorded

| Frequency<br>(MHz)      | Receiver                |          | Turntable | Rx Antenna    |                  | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Part<br>15.407/205/209 |                |  |  |
|-------------------------|-------------------------|----------|-----------|---------------|------------------|-------------------------------|--|----------------------------|----------------|--|--|
|                         | Reading<br>(dB $\mu$ V) | PK/QP/AV | Degree    | Height<br>(m) | Polar<br>(H / V) |                               |  | Limit<br>(dB $\mu$ V/m)    | Margin<br>(dB) |  |  |
| 802.11N20, MIMO mode    |                         |          |           |               |                  |                               |  |                            |                |  |  |
| Low Channel, 5745MHz    |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5725                    | 66.96                   | PK       | 121       | 1.9           | H                | 3.97                          | 70.93                                    | 122.2                      | -51.27         |  |  |
| 5725                    | 67.95                   | PK       | 55        | 1.7           | V                | 3.97                          | 71.92                                    | 122.2                      | -50.28         |  |  |
| 5720                    | 60.94                   | PK       | 73        | 1.7           | H                | 3.95                          | 64.89                                    | 110.8                      | -45.91         |  |  |
| 5720                    | 62.13                   | PK       | 191       | 1.5           | V                | 3.95                          | 66.08                                    | 110.8                      | -44.72         |  |  |
| 5700                    | 60.57                   | PK       | 303       | 2.0           | H                | 3.89                          | 64.46                                    | 105.2                      | -40.74         |  |  |
| 5700                    | 61.79                   | PK       | 216       | 2.1           | V                | 3.89                          | 65.68                                    | 105.2                      | -39.52         |  |  |
| 5650                    | 57.28                   | PK       | 8         | 1.6           | H                | 3.75                          | 61.03                                    | 68.2                       | -7.17          |  |  |
| 5650                    | 58.25                   | PK       | 124       | 2.0           | V                | 3.75                          | 62                                       | 68.2                       | -6.2           |  |  |
| 11490                   | 35.84                   | PK       | 108       | 1.7           | H                | 14.74                         | 50.58                                    | 74                         | -23.42         |  |  |
| 11490                   | 36.81                   | PK       | 344       | 2.0           | V                | 14.74                         | 51.55                                    | 74                         | -22.45         |  |  |
| Middle Channel, 5785MHz |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 11570                   | 35.97                   | PK       | 234       | 1.6           | H                | 14.74                         | 50.71                                    | 74                         | -23.29         |  |  |
| 11570                   | 37.12                   | PK       | 79        | 1.7           | V                | 14.74                         | 51.86                                    | 74                         | -22.14         |  |  |
| High Channel, 5825MHz   |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5850                    | 63.38                   | PK       | 54        | 1.7           | H                | 4.33                          | 67.71                                    | 122.2                      | -54.49         |  |  |
| 5850                    | 64.21                   | PK       | 255       | 1.7           | V                | 4.33                          | 68.54                                    | 122.2                      | -53.66         |  |  |
| 5855                    | 60.59                   | PK       | 239       | 1.5           | H                | 4.35                          | 64.94                                    | 110.8                      | -45.86         |  |  |
| 5855                    | 61.63                   | PK       | 193       | 2.0           | V                | 4.35                          | 65.98                                    | 110.8                      | -44.82         |  |  |
| 5875                    | 59.49                   | PK       | 11        | 1.6           | H                | 4.41                          | 63.9                                     | 105.2                      | -41.3          |  |  |
| 5875                    | 60.77                   | PK       | 153       | 2.1           | V                | 4.41                          | 65.18                                    | 105.2                      | -40.02         |  |  |
| 5925                    | 58.42                   | PK       | 96        | 2.0           | H                | 4.55                          | 62.97                                    | 68.2                       | -5.23          |  |  |
| 5925                    | 59.27                   | PK       | 194       | 2.1           | V                | 4.55                          | 63.82                                    | 68.2                       | -4.38          |  |  |
| 11650                   | 37.65                   | PK       | 39        | 1.6           | H                | 14.79                         | 52.44                                    | 74                         | -21.56         |  |  |
| 11650                   | 38.91                   | PK       | 222       | 1.6           | V                | 14.79                         | 53.7                                     | 74                         | -20.3          |  |  |

| Frequency<br>(MHz)    | Receiver                |          | Turntable | Rx Antenna    |                  | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Part<br>15.407/205/209 |                |  |  |
|-----------------------|-------------------------|----------|-----------|---------------|------------------|-------------------------------|--|----------------------------|----------------|--|--|
|                       | Reading<br>(dB $\mu$ V) | PK/QP/AV | Degree    | Height<br>(m) | Polar<br>(H / V) |                               |  | Limit<br>(dB $\mu$ V/m)    | Margin<br>(dB) |  |  |
| 802.11N40, MIMO mode  |                         |          |           |               |                  |                               |  |                            |                |  |  |
| Low Channel, 5755MHz  |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5725                  | 70.19                   | PK       | 149       | 1.8           | H                | 3.97                          | 74.16                                    | 122.2                      | -48.04         |  |  |
| 5725                  | 71.32                   | PK       | 61        | 1.8           | V                | 3.97                          | 75.29                                    | 122.2                      | -46.91         |  |  |
| 5720                  | 67.93                   | PK       | 235       | 2.1           | H                | 3.95                          | 71.88                                    | 110.8                      | -38.92         |  |  |
| 5720                  | 69                      | PK       | 263       | 2.0           | V                | 3.95                          | 72.95                                    | 110.8                      | -37.85         |  |  |
| 5700                  | 64.43                   | PK       | 263       | 2.0           | H                | 3.89                          | 68.32                                    | 105.2                      | -36.88         |  |  |
| 5700                  | 65.46                   | PK       | 49        | 2.0           | V                | 3.89                          | 69.35                                    | 105.2                      | -35.85         |  |  |
| 5650                  | 57.61                   | PK       | 149       | 2.0           | H                | 3.75                          | 61.36                                    | 68.2                       | -6.84          |  |  |
| 5650                  | 58.7                    | PK       | 267       | 1.6           | V                | 3.75                          | 62.45                                    | 68.2                       | -5.75          |  |  |
| 11510                 | 35.45                   | PK       | 110       | 2.1           | H                | 14.74                         | 50.19                                    | 74                         | -23.81         |  |  |
| 11510                 | 36.49                   | PK       | 256       | 1.9           | V                | 14.74                         | 51.23                                    | 74                         | -22.77         |  |  |
| High Channel, 5795MHz |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5850                  | 62.73                   | PK       | 183       | 1.6           | H                | 4.33                          | 67.06                                    | 122.2                      | -55.14         |  |  |
| 5850                  | 63.54                   | PK       | 266       | 1.8           | V                | 4.33                          | 67.87                                    | 122.2                      | -54.33         |  |  |
| 5855                  | 62.32                   | PK       | 280       | 1.6           | H                | 4.35                          | 66.67                                    | 110.8                      | -44.13         |  |  |
| 5855                  | 63.29                   | PK       | 234       | 1.6           | V                | 4.35                          | 67.64                                    | 110.8                      | -43.16         |  |  |
| 5875                  | 60.13                   | PK       | 314       | 1.9           | H                | 4.41                          | 64.54                                    | 105.2                      | -40.66         |  |  |
| 5875                  | 61.27                   | PK       | 233       | 1.8           | V                | 4.41                          | 65.68                                    | 105.2                      | -39.52         |  |  |
| 5925                  | 58.13                   | PK       | 266       | 1.6           | H                | 4.55                          | 62.68                                    | 68.2                       | -5.52          |  |  |
| 5925                  | 59.04                   | PK       | 194       | 1.5           | V                | 4.55                          | 63.59                                    | 68.2                       | -4.61          |  |  |
| 11590                 | 36.84                   | PK       | 214       | 1.5           | H                | 14.74                         | 51.58                                    | 74                         | -22.42         |  |  |
| 11590                 | 37.77                   | PK       | 339       | 1.8           | V                | 14.74                         | 52.51                                    | 74                         | -21.49         |  |  |

| Frequency<br>(MHz)      | Receiver                |          | Turntable | Rx Antenna    |                  | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Part<br>15.407/205/209 |                |  |  |
|-------------------------|-------------------------|----------|-----------|---------------|------------------|-------------------------------|--|----------------------------|----------------|--|--|
|                         | Reading<br>(dB $\mu$ V) | PK/QP/AV | Degree    | Height<br>(m) | Polar<br>(H / V) |                               |  | Limit<br>(dB $\mu$ V/m)    | Margin<br>(dB) |  |  |
| 802.11AC20, MIMO mode   |                         |          |           |               |                  |                               |  |                            |                |  |  |
| Low Channel, 5745MHz    |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5725                    | 66.16                   | PK       | 345       | 1.5           | H                | 3.97                          | 70.13                                    | 122.2                      | -52.07         |  |  |
| 5725                    | 66.97                   | PK       | 245       | 1.7           | V                | 3.97                          | 70.94                                    | 122.2                      | -51.26         |  |  |
| 5720                    | 60                      | PK       | 64        | 1.5           | H                | 3.95                          | 63.95                                    | 110.8                      | -46.85         |  |  |
| 5720                    | 61.16                   | PK       | 43        | 1.5           | V                | 3.95                          | 65.11                                    | 110.8                      | -45.69         |  |  |
| 5700                    | 60.11                   | PK       | 223       | 1.9           | H                | 3.89                          | 64                                       | 105.2                      | -41.2          |  |  |
| 5700                    | 61.32                   | PK       | 111       | 2.1           | V                | 3.89                          | 65.21                                    | 105.2                      | -39.99         |  |  |
| 5650                    | 56.76                   | PK       | 4         | 1.8           | H                | 3.75                          | 60.51                                    | 68.2                       | -7.69          |  |  |
| 5650                    | 57.97                   | PK       | 185       | 1.9           | V                | 3.75                          | 61.72                                    | 68.2                       | -6.48          |  |  |
| 11490                   | 37.13                   | PK       | 250       | 1.8           | H                | 14.74                         | 51.87                                    | 74                         | -22.13         |  |  |
| 11490                   | 37.98                   | PK       | 55        | 1.6           | V                | 14.74                         | 52.72                                    | 74                         | -21.28         |  |  |
| Middle Channel, 5785MHz |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 11570                   | 39.82                   | PK       | 345       | 1.6           | H                | 14.74                         | 54.56                                    | 74                         | -19.44         |  |  |
| 11570                   | 23.06                   | Ave      | 345       | 1.6           | H                | 14.74                         | 37.8                                     | 54                         | -16.2          |  |  |
| 11570                   | 40.86                   | PK       | 216       | 1.7           | V                | 14.74                         | 55.6                                     | 74                         | -18.4          |  |  |
| 11570                   | 24.28                   | Ave      | 216       | 1.7           | V                | 14.74                         | 39.02                                    | 54                         | -14.98         |  |  |
| High Channel, 5825MHz   |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5850                    | 61.84                   | PK       | 276       | 2.1           | H                | 4.33                          | 66.17                                    | 122.2                      | -56.03         |  |  |
| 5850                    | 62.99                   | PK       | 93        | 1.8           | V                | 4.33                          | 67.32                                    | 122.2                      | -54.88         |  |  |
| 5855                    | 59.71                   | PK       | 250       | 2.0           | H                | 4.35                          | 64.06                                    | 110.8                      | -46.74         |  |  |
| 5855                    | 60.62                   | PK       | 142       | 2.0           | V                | 4.35                          | 64.97                                    | 110.8                      | -45.83         |  |  |
| 5875                    | 58.34                   | PK       | 21        | 1.8           | H                | 4.41                          | 62.75                                    | 105.2                      | -42.45         |  |  |
| 5875                    | 59.27                   | PK       | 197       | 1.6           | V                | 4.41                          | 63.68                                    | 105.2                      | -41.52         |  |  |
| 5925                    | 58.23                   | PK       | 322       | 1.6           | H                | 4.55                          | 62.78                                    | 68.2                       | -5.42          |  |  |
| 5925                    | 59.17                   | PK       | 166       | 1.9           | V                | 4.55                          | 63.72                                    | 68.2                       | -4.48          |  |  |
| 11650                   | 41.4                    | PK       | 121       | 1.8           | H                | 14.79                         | 56.19                                    | 74                         | -17.81         |  |  |
| 11650                   | 24.76                   | Ave      | 121       | 1.8           | H                | 14.79                         | 39.55                                    | 54                         | -14.45         |  |  |
| 11650                   | 42.46                   | PK       | 250       | 1.6           | V                | 14.79                         | 57.25                                    | 74                         | -16.75         |  |  |
| 11650                   | 25.85                   | Ave      | 250       | 1.6           | V                | 14.79                         | 40.64                                    | 54                         | -13.36         |  |  |

| Frequency<br>(MHz)    | Receiver                |          | Turntable | Rx Antenna    |                  | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Part<br>15.407/205/209 |                |  |  |
|-----------------------|-------------------------|----------|-----------|---------------|------------------|-------------------------------|--|----------------------------|----------------|--|--|
|                       | Reading<br>(dB $\mu$ V) | PK/QP/AV | Degree    | Height<br>(m) | Polar<br>(H / V) |                               |  | Limit<br>(dB $\mu$ V/m)    | Margin<br>(dB) |  |  |
| 802.11AC40, MIMO mode |                         |          |           |               |                  |                               |  |                            |                |  |  |
| Low Channel, 5755MHz  |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5725                  | 70.26                   | PK       | 318       | 1.8           | H                | 3.97                          | 74.23                                    | 122.2                      | -47.97         |  |  |
| 5725                  | 71.35                   | PK       | 255       | 1.8           | V                | 3.97                          | 75.32                                    | 122.2                      | -46.88         |  |  |
| 5720                  | 67.86                   | PK       | 323       | 1.6           | H                | 3.95                          | 71.81                                    | 110.8                      | -38.99         |  |  |
| 5720                  | 68.9                    | PK       | 113       | 2.0           | V                | 3.95                          | 72.85                                    | 110.8                      | -37.95         |  |  |
| 5700                  | 63.88                   | PK       | 181       | 2.1           | H                | 3.89                          | 67.77                                    | 105.2                      | -37.43         |  |  |
| 5700                  | 65.06                   | PK       | 16        | 1.9           | V                | 3.89                          | 68.95                                    | 105.2                      | -36.25         |  |  |
| 5650                  | 57.25                   | PK       | 350       | 1.6           | H                | 3.75                          | 61                                       | 68.2                       | -7.2           |  |  |
| 5650                  | 58.44                   | PK       | 66        | 1.7           | V                | 3.75                          | 62.19                                    | 68.2                       | -6.01          |  |  |
| 11510                 | 36.61                   | PK       | 203       | 1.9           | H                | 14.74                         | 51.35                                    | 74                         | -22.65         |  |  |
| 11510                 | 37.45                   | PK       | 18        | 1.7           | V                | 14.74                         | 52.19                                    | 74                         | -21.81         |  |  |
| High Channel, 5795MHz |                         |          |           |               |                  |                               |  |                            |                |  |  |
| 5850                  | 63.39                   | PK       | 354       | 1.5           | H                | 4.33                          | 67.72                                    | 122.2                      | -54.48         |  |  |
| 5850                  | 63.39                   | PK       | 312       | 1.8           | V                | 4.33                          | 67.72                                    | 122.2                      | -54.48         |  |  |
| 5855                  | 59.29                   | PK       | 295       | 1.7           | H                | 4.35                          | 63.64                                    | 110.8                      | -47.16         |  |  |
| 5855                  | 60.53                   | PK       | 304       | 1.9           | V                | 4.35                          | 64.88                                    | 110.8                      | -45.92         |  |  |
| 5875                  | 58.9                    | PK       | 188       | 1.8           | H                | 4.41                          | 63.31                                    | 105.2                      | -41.89         |  |  |
| 5875                  | 60.14                   | PK       | 289       | 1.6           | V                | 4.41                          | 64.55                                    | 105.2                      | -40.65         |  |  |
| 5925                  | 58.11                   | PK       | 276       | 1.8           | H                | 4.55                          | 62.66                                    | 68.2                       | -5.54          |  |  |
| 5925                  | 59                      | PK       | 115       | 1.7           | V                | 4.55                          | 63.55                                    | 68.2                       | -4.65          |  |  |
| 11590                 | 36.24                   | PK       | 5         | 1.6           | H                | 14.74                         | 50.98                                    | 74                         | -23.02         |  |  |
| 11590                 | 37.45                   | PK       | 181       | 1.6           | V                | 14.74                         | 52.19                                    | 74                         | -21.81         |  |  |

| Frequency<br>(MHz)      | Receiver                |          | Turntable | Rx Antenna    |                  | Corrected Factor<br>(dB/m) | Corrected Amplitude<br>(dB $\mu$ V/m) | FCC Part 15.407/205/209 |                |  |  |
|-------------------------|-------------------------|----------|-----------|---------------|------------------|----------------------------|---------------------------------------|-------------------------|----------------|--|--|
|                         | Reading<br>(dB $\mu$ V) | PK/QP/AV | Degree    | Height<br>(m) | Polar<br>(H / V) |                            |                                       | Limit<br>(dB $\mu$ V/m) | Margin<br>(dB) |  |  |
| 802.11AC80, MIMO mode   |                         |          |           |               |                  |                            |                                       |                         |                |  |  |
| Middle Channel, 5775MHz |                         |          |           |               |                  |                            |                                       |                         |                |  |  |
| 5725                    | 65.48                   | PK       | 356       | 1.8           | H                | 3.97                       | 69.45                                 | 122.2                   | -52.75         |  |  |
| 5725                    | 66.51                   | PK       | 211       | 1.8           | V                | 3.97                       | 70.48                                 | 122.2                   | -51.72         |  |  |
| 5720                    | 60.76                   | PK       | 215       | 1.9           | H                | 3.95                       | 64.71                                 | 110.8                   | -46.09         |  |  |
| 5720                    | 61.59                   | PK       | 356       | 1.7           | V                | 3.95                       | 65.54                                 | 110.8                   | -45.26         |  |  |
| 5700                    | 60.18                   | PK       | 239       | 1.5           | H                | 3.89                       | 64.07                                 | 105.2                   | -41.13         |  |  |
| 5700                    | 61.16                   | PK       | 83        | 1.7           | V                | 3.89                       | 65.05                                 | 105.2                   | -40.15         |  |  |
| 5650                    | 57.51                   | PK       | 163       | 2.0           | H                | 3.75                       | 61.26                                 | 68.2                    | -6.94          |  |  |
| 5650                    | 58.5                    | PK       | 262       | 1.6           | V                | 3.75                       | 62.25                                 | 68.2                    | -5.95          |  |  |
| 5850                    | 61.76                   | PK       | 216       | 1.6           | H                | 4.33                       | 66.09                                 | 122.2                   | -56.11         |  |  |
| 5850                    | 62.58                   | PK       | 163       | 1.9           | V                | 4.33                       | 66.91                                 | 122.2                   | -55.29         |  |  |
| 5855                    | 62.09                   | PK       | 160       | 1.6           | H                | 4.35                       | 66.44                                 | 110.8                   | -44.36         |  |  |
| 5855                    | 63.25                   | PK       | 262       | 1.5           | V                | 4.35                       | 67.6                                  | 110.8                   | -43.2          |  |  |
| 5875                    | 59.45                   | PK       | 263       | 1.8           | H                | 4.41                       | 63.86                                 | 105.2                   | -41.34         |  |  |
| 5875                    | 60.54                   | PK       | 161       | 1.7           | V                | 4.41                       | 64.95                                 | 105.2                   | -40.25         |  |  |
| 5925                    | 58.4                    | PK       | 268       | 2.0           | H                | 4.55                       | 62.95                                 | 68.2                    | -5.25          |  |  |
| 5925                    | 59.37                   | PK       | 41        | 1.6           | V                | 4.55                       | 63.92                                 | 68.2                    | -4.28          |  |  |
| 11550                   | 36.55                   | PK       | 183       | 2.0           | H                | 14.74                      | 51.29                                 | 74                      | -22.71         |  |  |
| 11550                   | 37.39                   | PK       | 1         | 1.9           | V                | 14.74                      | 52.13                                 | 74                      | -21.87         |  |  |

**Note:**

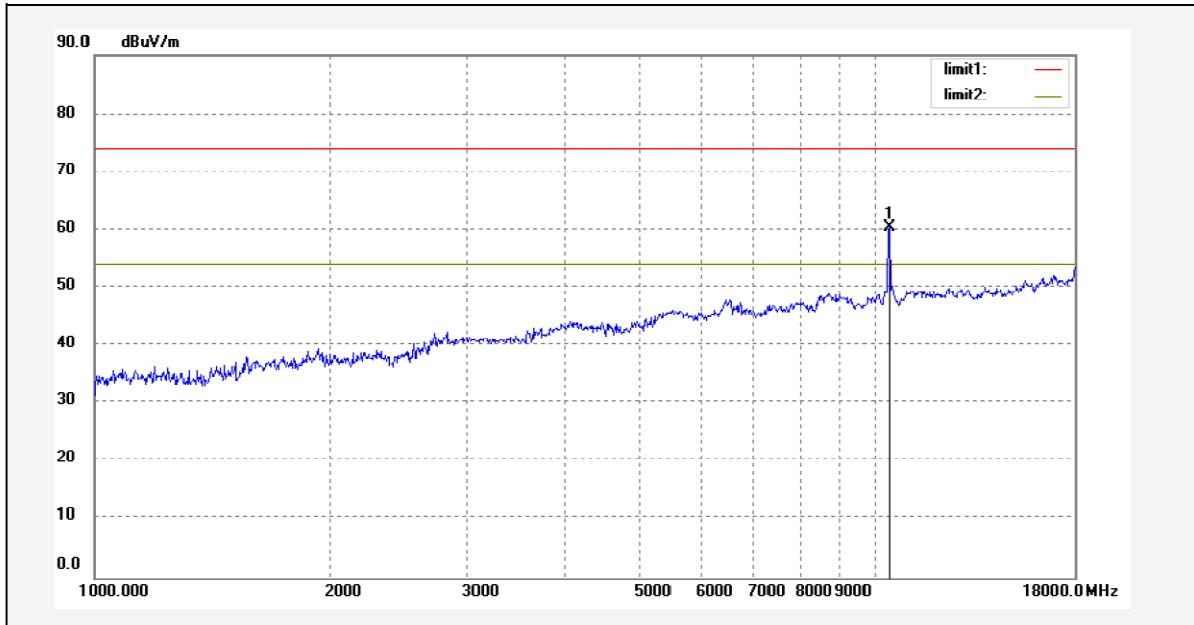
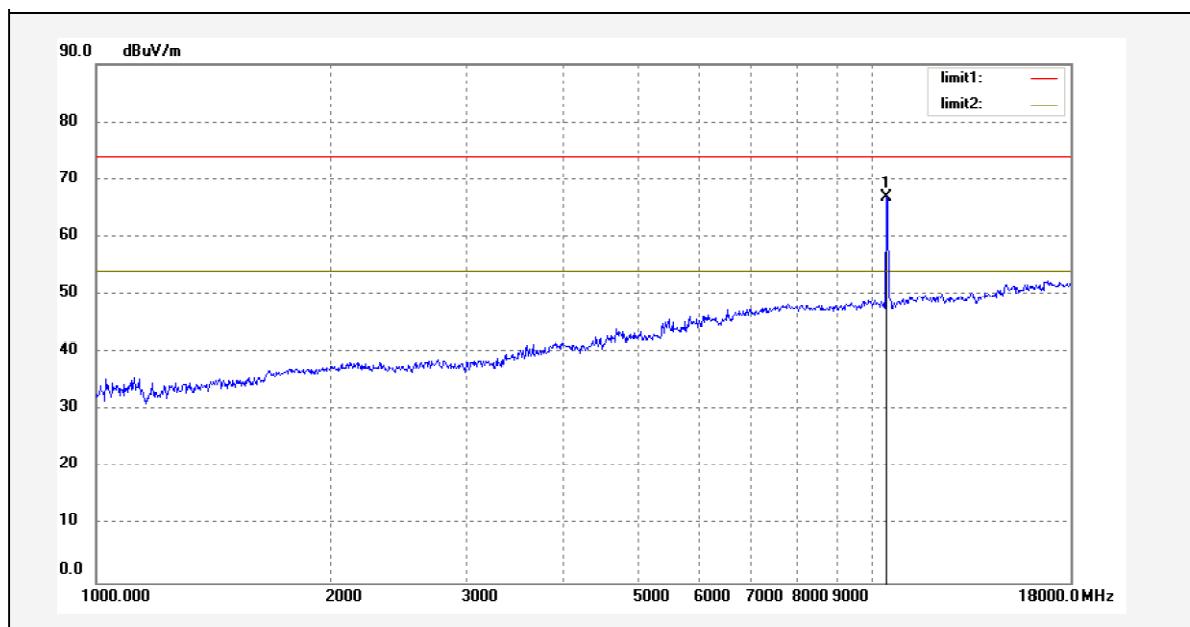
Corrected Factor=Antenna factor (RX) + Cable Loss – Amplifier Factor

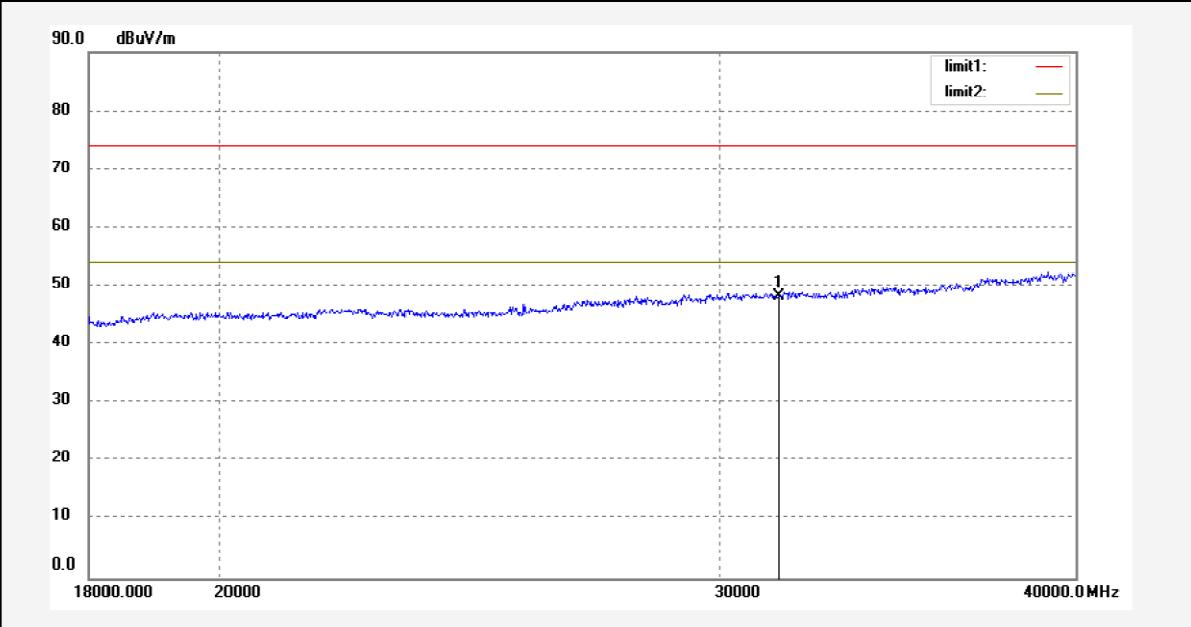
Corrected Amplitude = Corrected Factor + Reading

Margin = Corrected. Amplitude- Limit

The other spurious emission which is in the noise floor level was not recorded.

The test result of peak was less than the limit of average, so just peak values were recorded.

**1-18 GHz:****Pre-scan for Peak  
802.11a 5240MHz****Horizontal:****Vertical:**

**18-40 GHz:****Pre-scan for Peak  
802.11a 5240MHz****Horizontal:****Vertical:**