# FCC TEST REPORT

# (Part 15, Subpart E)

| | |
|---|---|
| Applicant: | PAX Technology Limited |
| Address: | Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour Hong Kong, China |

| | |
|---|---|
| Manufacturer or Supplier: | PAX Computer Technology (Shenzhen) Co., Ltd. |
| Address: | 4/F, No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen, Guangdong, P.R.C. |
| Product: | Smart Mobile Payment Terminal |
| Brand Name: | PAX |
| Model Name: | A920Pro |
| FCC ID: | V5PA920PRO |
| Date of tests: | Mar. 25, 2020 ~ May. 14, 2020 |
| The tests have been carried out according to the requirements of the following standard: | |
| ☒ **FCC Part 15, Subpart E, Section 15.407** | |
| **CONCLUSION: The submitted sample was found to COMPLY with the test requirement** | |

| Prepared by Alex Chen<br>Engineer / Mobile Department | Approved by Luke Lu<br>Manager / Mobile Department |
|---|---|
| Alex<br>Date: May. 14, 2020 | Luke Lu<br>Date: May. 14, 2020 |

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# RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|---|---|---|
| RF200324W001-3 | Original release | May. 14, 2020 |

BV 7Layers Communications Technology (Shenzhen) Co. Ltd
No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China
Tel: +86 755 8869 6566
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Email: customerservice.sw@bureauveritas.com

# 1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

| APPLIED STANDARD: FCC PART 15, SUBPART E | | | |
|---|---|---|---|
| **STANDARD SECTION** | **TEST TYPE AND LIMIT** | **RESULT** | **TEST LAB*** |
| 15.407(b)(6) | AC Power Conducted Emission | Compliance | A |
| 15.407(b) (1/2/3/4/5) | Radiated Emission & Band Edge Measurement | Compliance | B |
| 15.407(a/1/2/3) | Maximum conducted output Power | Compliance | A |
| 15.407(a/1/2/3) | Peak Power Spectral Density | Compliance | A |
| 15.403(i) | 26 dB Bandwidth | Compliance | A |
| 15.407(e) | 6 dB Bandwidth | Compliance | A |
| 15.203 | Antenna Requirement | Compliance | A |

***Test Lab Information Reference**
**Lab A:**
BV 7Layers Communications Technology (Shenzhen) Co. Ltd
**Lab Address:**
No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China
**The FCC Site Registration No. is 525120; The Designation No. is CN1171.**

**Lab B:**
Bureau Veritas (Shenzhen) Consumer Products Service
**Lab Address:**
Zone A, Floor 1, Building 2 Wan Ye Long Technology Park
South Side of Zhoushi Road, Bao'an District, Shenzhen, Guangdong China 518108
**The FCC Site Registration No. is 535293.**

## 1.1 MEASUREMENT UNCERTAINTY

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

| MEASUREMENT | UNCERTAINTY |
|---|---|
| AC Power Conducted emissions | ±2.70dB |
| Radiated emissions (30MHz~1GMHz) | ±4.98dB |
| Radiated emissions (1GMHz ~6GMHz) | ±4.70dB |
| Radiated emissions (6GMHz ~18GMHz) | ±4.60dB |
| Radiated emissions (18GMHz ~40GMHz) | ±4.12dB |
| Conducted emissions | ±4.01dB |
| Occupied Channel Bandwidth | ±43.58KHz |
| Conducted Output power | ±2.06dB |
| Power Spectral Density | ±0.85 dB |

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

# 2 GENERAL INFORMATION

## 2.1 GENERAL DESCRIPTION OF EUT

| | |
|---|---|
| **PRODUCT** | Smart Mobile Payment Terminal |
| **BRAND NAME** | PAX |
| **MODEL NAME** | A920Pro |
| **NOMINAL VOLTAGE** | DC 3.7V |
| **MODULATION** | OFDM |
| **TRANSFER RATE** | 802.11a: 6 Mbps(Measured Worst)<br>802.11n20/ac 20: MCS0 (Measured Worst)<br>802.11n40/ac 40: MCS0 (Measured Worst)<br>802.11ac80: MCS0 (Measured Worst) |
| **OPERATING FREQUENCY** | 5180 ~ 5240MHz, 5260 ~ 5320MHz,<br>5500 ~ 5720MHz, 5745 ~ 5825MHz |
| **NUMBER OF CHANNEL** | 5180 ~ 5240MHz: 4 for 802.11a, 802.11n/11ac (20MHz)<br>2 for 802.11n/11ac (40MHz)<br>1 for 802.11ac (80MHz)<br>5260 ~ 5320MHz: 4 for 802.11a, 802.11n/11ac (20MHz)<br>2 for 802.11n/11ac (40MHz)<br>1 for 802.11ac (80MHz)<br>5500 ~ 5720MHz: 12 for 802.11a, 802.11n, 802.11ac(20MHz)<br>6 for 802.11n, 802.11ac (40MHz)<br>3 for 802.11ac (80MHz)<br>5745 ~ 5825MHz: 6 for 802.11a, 802.11n/11ac (20MHz)<br>3 for 802.11n/11ac (40MHz)<br>2 for 802.11ac (80MHz) |
| **AVERAGE POWER** | 31.48mW for 5180 ~ 5240MHz<br>31.48mW for 5260 ~ 5320MHz<br>31.48mW for 5500 ~ 5720MHz<br>31.41mW for 5745 ~ 5825MHz |
| **ANTENNA TYPE** | FPC Antenna with 1.5dBi gain |
| **HW VERSION** | N/A |
| **SW VERSION** | N/A |
| **I/O PORTS** | Refer to user's manual |
| **CABLE SUPPLIED** | N/A |

**NOTE**:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. The EUT incorporates a SISO function. Physically, the EUT provides one transmitters and one receivers

| MODULATION MODE | TX FUNCTION |
|---|---|
| **802.11a** | 1TX /1RX |
| **802.11n/802.11ac (20MHz)** | 1TX /1RX |
| **802.11n/802.11ac (40MHz)** | 1TX /1RX |
| **802.11ac (80MHz)** | 1TX /1RX |

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

4. **List of Accessory:**

| ACCESSORIES | BRAND | MODEL | MANUFACTURER | SPECIFICATION |
|---|---|---|---|---|
| AC Adapter | N/A | GLH50D2000HW | / | Input: 100-240V⁓50/60Hz 0.40A<br>Output: 5.0V⎓2000mA |
| Battery | VEKEN | YW-008 | NingBo Veken Battery Co., Ltd. | Rating : 3.7V⎓5150mAh 19.05Wh, Rechargeable Li-ion Battery |

5. The device will automatically discontinue transmission in case of either absence of information to transmit or operational failure.

## 2.2 DESCRIPTION OF TEST MODES

### FOR 5150 ~ 5250MHz

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

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 36 | 5180 MHz | 44 | 5220 MHz |
| 40 | 5200 MHz | 48 | 5240 MHz |

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

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 38 | 5190 MHz | 46 | 5230 MHz |

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

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 42 | 5210 MHz | | |

### FOR 5250 ~ 5350MHz

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

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 52 | 5260 MHz | 60 | 5300 MHz |
| 56 | 5280 MHz | 64 | 5320 MHz |

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

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 54 | 5270 MHz | 62 | 5310 MHz |

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

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 58 | 5290 MHz | | |

## FOR 5470 ~ 5725MHz

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

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

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

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 102 | 5510 MHz | 126 | 5630MHz |
| 110 | 5550 MHz | 134 | 5670 MHz |
| 118 | 5590 MHz | 142 | 5710 MHz |

3 channel is provided for 802.11ac (80MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 106 | 5530 MHz | 122 | 5610 MHz |
| 138 | 5690 MHz | | |

## FOR 5725 ~ 5825MHz

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

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 149 | 5745 MHz | 157 | 5785 MHz |
| 153 | 5765 MHz | 165 | 5825 MHz |
| 144 | 5720 MHz | | |

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

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 151 | 5755 MHz | 159 | 5795 MHz |
| 142 | 5710 MHz | | |

2 channel is provided for 802.11ac (80MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 155 | 5775 MHz | 138 | 5690 MHz |

## 2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

| EUT CONFIGURE MODE | APPLICABLE TO | | | | DESCRIPTION |
|---|---|---|---|---|---|
| | RE≥1G | RE<1G | PLC | APCM | |
| **A** | √ | √ | √ | **-** | **Powered by Adapter with wifi(5G) link** |
| B | - | - | - | √ | Powered by Battery with wifi(5G) link |
| C | - | - | - | - | Powered by USB with wifi(5G) link |

Where **RE≥1G:** Radiated Emission above 1GHz **RE<1G:** Radiated Emission below 1GHz
**PLC:** Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

**NOTE:**
The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane.**
**NOTE:** "-"means no effect.

## RADIATED EMISSION TEST (ABOVE 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

| EUT CONFIGURE MODE | MODE | FREQ. BAND (MHz) | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION | DATA RATE (Mbps) |
|---|---|---|---|---|---|---|
| A | 802.11a | 5180-5240 | 36 to 48 | 36, 40, 48 | OFDM | 6.0 |
| A | 802.11n (20MHz) | | 36 to 48 | 36, 40, 48 | OFDM | MCS0 |
| A | 802.11n (40MHz) | | 38 to 46 | 38, 46 | OFDM | MCS0 |
| A | 802.11ac (80MHz) | | 42 | 42 | OFDM | MCS0 |
| A | 802.11a | 5260-5320 | 52 to 64 | 52, 60, 64 | OFDM | 6.0 |
| A | 802.11n (20MHz) | | 52 to 64 | 52, 60, 64 | OFDM | MCS0 |
| A | 802.11n (40MHz) | | 54 to 62 | 54, 62 | OFDM | MCS0 |
| A | 802.11ac (80MHz) | | 58 | 58 | OFDM | MCS0 |
| A | 802.11a | 5500-5720 | 100 to 144 | 100, 116, 140, 144 | OFDM | 6.0 |
| A | 802.11n (20MHz) | | 100 to 144 | 100, 116, 140, 144 | OFDM | MCS0 |
| A | 802.11n (40MHz) | | 102 to 142 | 102, 110, 134, 142 | OFDM | MCS0 |
| A | 802.11ac (80MHz) | | 106 to 138 | 106, 122, 138 | OFDM | MCS0 |
| A | 802.11a | 5745-5825 | 144 to 165 | 144, 149, 157,165 | OFDM | 6.0 |
| A | 802.11n (20MHz) | | 144 to 165 | 144, 149, 157,165 | OFDM | MCS0 |
| A | 802.11n (40MHz) | | 142 to 159 | 142, 151, 159 | OFDM | MCS0 |
| A | 802.11ac (80MHz) | | 138 to 155 | 138, 155 | OFDM | MCS0 |

## RADIATED EMISSION TEST (BELOW 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

| EUT CONFIGURE MODE | MODE | FREQ. BAND (MHz) | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION | DATA RATE (Mbps) |
|---|---|---|---|---|---|---|
| A | 802.11n40 | 5180-5240 | 38 to 46 | 38 | OFDM | MCS0 |

## POWER LINE CONDUCTED EMISSION TEST:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

| EUT CONFIGURE MODE | MODE | FREQ. BAND (MHz) | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION | DATA RATE (Mbps) |
|---|---|---|---|---|---|---|
| A | 802.11n40 | 5180-5240 | 38 to 46 | 38 | OFDM | MCS0 |

## BANDEDGE MEASUREMENT:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

| EUT CONFIGURE MODE | MODE | FREQ. BAND (MHz) | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION | DATA RATE (Mbps) |
|---|---|---|---|---|---|---|
| A | 802.11a | 5180-5240 | 36 to 48 | 36, 48 | OFDM | 6.0 |
| A | 802.11n (20MHz) | | 36 to 48 | 36, 48 | OFDM | MCS0 |
| A | 802.11n (40MHz) | | 38 to 46 | 38, 46 | OFDM | MCS0 |
| A | 802.11ac (80MHz) | | 42 | 42 | OFDM | MCS0 |
| A | 802.11a | 5260-5320 | 52 to 64 | 52, 64 | OFDM | 6.0 |
| A | 802.11n (20MHz) | | 52 to 64 | 52, 64 | OFDM | MCS0 |
| A | 802.11n (40MHz) | | 54 to 62 | 54, 62 | OFDM | MCS0 |
| A | 802.11ac (80MHz) | | 58 | 58 | OFDM | MCS0 |
| A | 802.11a | 5500-5720 | 100 to 144 | 100, 116, 140, 144 | OFDM | 6.0 |
| A | 802.11n (20MHz) | | 100 to 144 | 100, 116, 140, 144 | OFDM | MCS0 |
| A | 802.11n (40MHz) | | 102 to 142 | 102, 110, 134, 142 | OFDM | MCS0 |
| A | 802.11ac (80MHz) | | 106 to 138 | 106, 122, 138 | OFDM | MCS0 |
| A | 802.11a | 5745-5825 | 144 to 165 | 144, 149, 157,165 | OFDM | 6.0 |
| A | 802.11n (20MHz) | | 144 to 165 | 144, 149, 157,165 | OFDM | MCS0 |
| A | 802.11n (40MHz) | | 142 to 159 | 142, 151, 159 | OFDM | MCS0 |
| A | 802.11ac (80MHz) | | 138 to 155 | 138, 155 | OFDM | MCS0 |

## ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

| EUT CONFIGURE MODE | MODE | FREQ. BAND (MHz) | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION TECHNOLOGY | DATA RATE (Mbps) |
|---|---|---|---|---|---|---|
| B | 802.11a | 5180-5240 | 36 to 48 | 36, 40, 48 | OFDM | 6.0 |
| B | 802.11n (20MHz) | | 36 to 48 | 36, 40, 48 | OFDM | MCS0 |
| B | 802.11n (40MHz) | | 38 to 46 | 38, 46 | OFDM | MCS0 |
| B | 802.11ac (80MHz) | | 42 | 42 | OFDM | MCS0 |
| B | 802.11a | 5260-5320 | 52 to 64 | 52, 60, 64 | OFDM | 6.0 |
| B | 802.11n (20MHz) | | 52 to 64 | 52, 60, 64 | OFDM | MCS0 |
| B | 802.11n (40MHz) | | 54 to 62 | 54, 62 | OFDM | MCS0 |
| B | 802.11ac (80MHz) | | 58 | 58 | OFDM | MCS0 |
| B | 802.11a | 5500-5720 | 100 to 144 | 100, 116, 140, 144 | OFDM | 6.0 |
| B | 802.11n (20MHz) | | 100 to 144 | 100, 116, 140, 144 | OFDM | MCS0 |
| B | 802.11n (40MHz) | | 102 to 142 | 102, 110, 134, 142 | OFDM | MCS0 |
| B | 802.11ac (80MHz) | | 106 to 138 | 106, 122, 138 | OFDM | MCS0 |
| B | 802.11a | 5745-5825 | 144 to 165 | 144, 149, 157,165 | OFDM | 6.0 |
| B | 802.11n (20MHz) | | 144 to 165 | 144, 149, 157,165 | OFDM | MCS0 |
| B | 802.11n (40MHz) | | 142 to 159 | 142, 151, 159 | OFDM | MCS0 |
| B | 802.11ac (80MHz) | | 138 to 155 | 138, 155 | OFDM | MCS0 |

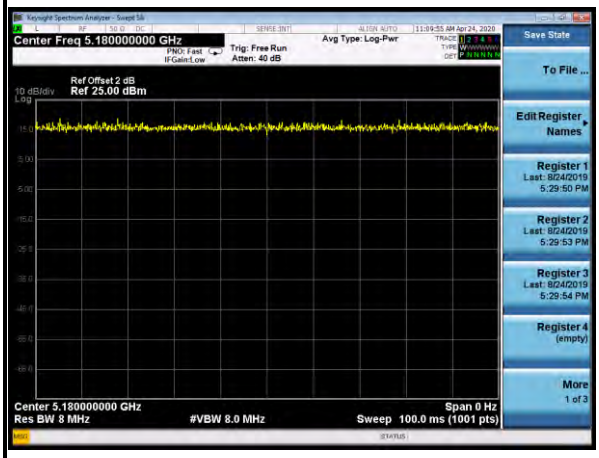
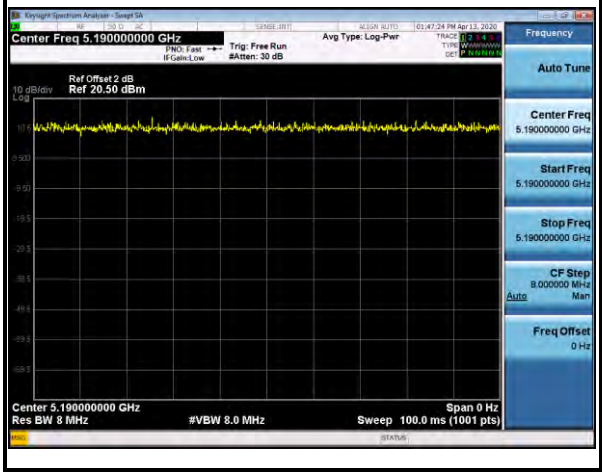
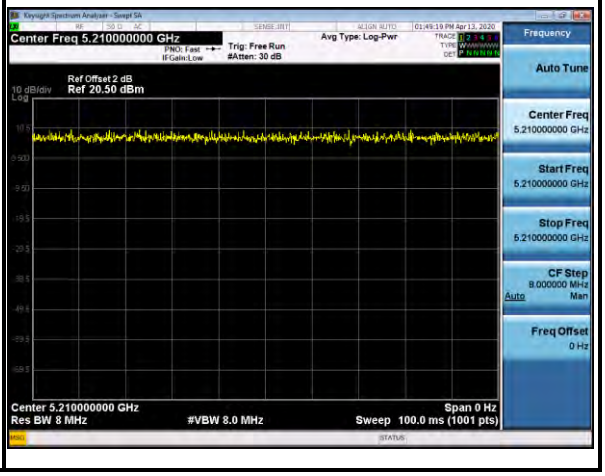
## TEST CONDITION:

| APPLICABLE TO | ENVIRONMENTAL CONDITIONS | INPUT POWER | TESTED BY |
|---|---|---|---|
| RE<1G | 23deg. C, 70%RH | DC 3.7V | Aaron Liang |
| RE≥1G | 23deg. C, 70%RH | DC 3.7V | Aaron Liang |
| PLC | 25deg. C, 52%RH | DC 3.7V | Chase Zhou |
| APCM | 25deg. C, 60%RH | DC 3.7V | Harris Wang |

## 2.3 DUTY CYCLE OF TEST SIGNAL

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

802.11a: Duty cycle = 100%, Duty factor shall not be considered
802.11n (20MHz): Duty cycle = 100%, Duty factor shall not be considered
802.11n (40MHz): Duty cycle = 100%, Duty factor shall not be considered
802.11ac (80MHz): Duty cycle = 100%, Duty factor shall not be considered

| 802.11a | 802.11n (20MHz) |
|---|---|
|  |  |
| **802.11n (40MHz)** | **802.11ac (80MHz)** |
|  |  |

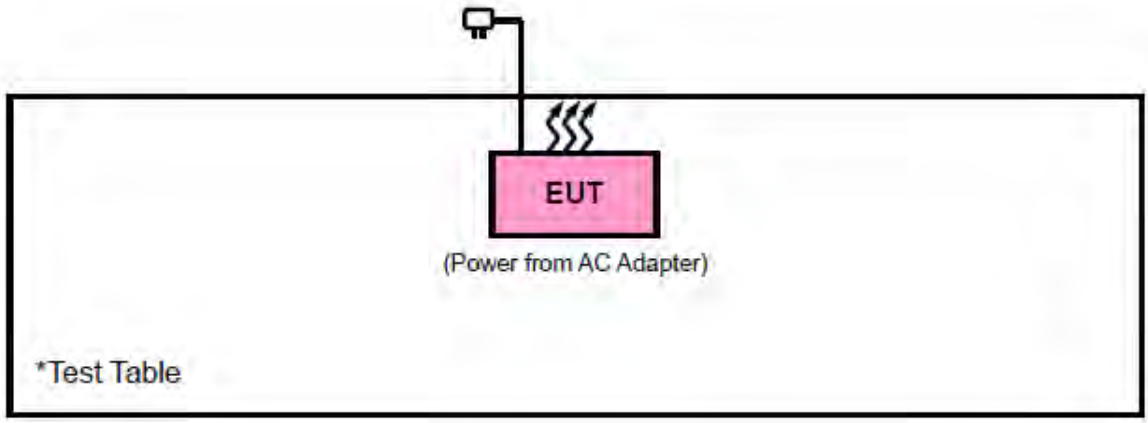
## 2.4 DESCRIPTION OF SUPPORT UNITS

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

| NO. | PRODUCT | BRAND | MODEL NO. | SERIAL NO. | FCC ID |
|---|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A | N/A |

| NO. | SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS |
|---|---|
| 1 | N/A |

### 2.4.1 CONFIGURATION OF SYSTEM UNDER TEST




## 2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

**FCC Part 15, Subpart E (15.407)**
**KDB 789033 D02 General U-NII Test Procedures New Rules v02r01**
ANSI C63.10-2013

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

**NOTE:** The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (Sdoc). The test report has been issued separately.

# 3 TEST TYPES AND RESULTS

## 3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

### 3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

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

| FREQUENCIES (MHz) | FIELD STRENGTH (microvolts/meter) | MEASUREMENT DISTANCE (meters) |
|---|---|---|
| 0.009 ~ 0.490 | 2400/F(kHz) | 300 |
| 0.490 ~ 1.705 | 24000/F(kHz) | 30 |
| 1.705 ~ 30.0 | 30 | 30 |
| 30 ~ 88 | 100 | 3 |
| 88 ~ 216 | 150 | 3 |
| 216 ~ 960 | 200 | 3 |
| Above 960 | 500 | 3 |

**NOTE**:

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

### 3.1.2 LIMITS OF UNWANTED EMISSION

<table>
<tr><td rowspan="2">RESTRICTED BANDS</td><td>APPLICABLE TO</td><td colspan="2">LIMIT</td></tr>
<tr><td rowspan="2">789033 D02 General UNII Test Procedures New Rules v02r01</td><td colspan="2">FIELD STRENGTH AT 3m (dBµV/m)</td></tr>
<tr><td>PK : 74</td><td>AV : 54</td></tr>
<tr><td rowspan="5">OUT OF THE RESTRICTED BANDS</td><td>APPLICABLE TO</td><td>EIRP LIMIT (dBm/MHz)</td><td>EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)</td></tr>
<tr><td>15.407(b)(1)</td><td rowspan="3">PK : -27</td><td rowspan="3">PK : 68.3</td></tr>
<tr><td>15.407(b)(2)</td></tr>
<tr><td>15.407(b)(3)</td></tr>
<tr><td>15.407(b)(4)</td><td colspan="2">See note 2 (FCC 16-24)</td></tr>
</table>

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

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

2. 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.

## 3.1.3 TEST INSTRUMENTS

**FREQUENCY RANGE BELOW 1GHz**

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|---|---|---|---|---|---|
| EMI Test Receiver | Rohde&Schwarz | ESL6 | 1300.5001K06-100262-eQ | Mar. 24,20 | Mar. 24,21 |
| Bilog Antenna | Sunol Sciences | JB6 | A110712 | Apr. 08, 20 | Apr. 07,21 |
| Active Antenna | CMO-POWER | AL-130 | 121031 | Mar. 27, 20 | Mar. 26, 21 |
| Signal Amplifier | HP | 8447E | 443008 | Mar. 24, 20 | Mar. 24, 21 |
| 3m Semi-anechoic Chamber | SAEMC | 9m*6m*6m | N/A | Oct. 18,18 | Oct. 17,21 |
| Test Software | EZ-EMC | ICP-03A1 | N/A | N/A | N/A |
| Universal Radio Communication | ROHDE&SCHWARZ | CMU200 | 112012 | Mar. 24,20 | Mar. 24,21 |
| Wireless Communication Test Set | ROHDE&SCHWARZ | CMW500 | 1201.0002K500-155842-Gd | Nov. 1, 19 | Oct. 31, 20 |

**FREQUENCY RANGE ABOVE 1GHz**

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|---|---|---|---|---|---|
| MXA signal analyzer | Agilent | N9020A | MY49100060 | Mar. 24, 20 | Mar. 24, 21 |
| Horn Antenna | COM-POWER | HAH-118 | 71259 | Apr. 17, 20 | Apr. 17, 21 |
| Horn Antenna | COM-POWER | HAH-118 | 71283 | Mar. 20, 20 | Mar. 19, 21 |
| SHF-EHF Horn | Schwarzbeck | BBHA9170 | BBHA9170147 | Jun. 30, 20 | Jun. 29, 21 |
| SHF-EHF Horn | Schwarzbeck | BBHA9170 | BBHA9170242 | Jun. 30, 20 | Jun. 29, 21 |
| AMPLIFIER | EM Electornic Corporation | EM01G26G | 60613 | Mar. 24, 20 | Mar. 24, 21 |
| 3m Semi-anechoic Chamber | SAEMC | 9m*6m*6m | N/A | Oct. 18,18 | Oct. 17,21 |
| Test Software | EZ-EMC | ICP-03A1 | N/A | N/A | N/A |
| Universal Radio Communication | ROHDE&SCHWARZ | CMU200 | 112012 | Mar. 24,20 | Mar. 24,21 |
| Wireless Communication Test Set | ROHDE&SCHWARZ | CMW500 | 1201.0002K500-155842-Gd | Nov. 1, 19 | Oct. 31, 20 |

**NOTE:**

1. The calibration interval of the above test instruments is 12 months (except 3m Semi-anechoic Chamber). And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.

3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.

4. The FCC Site Registration No. is 535293.

### 3.1.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

**NOTE:**

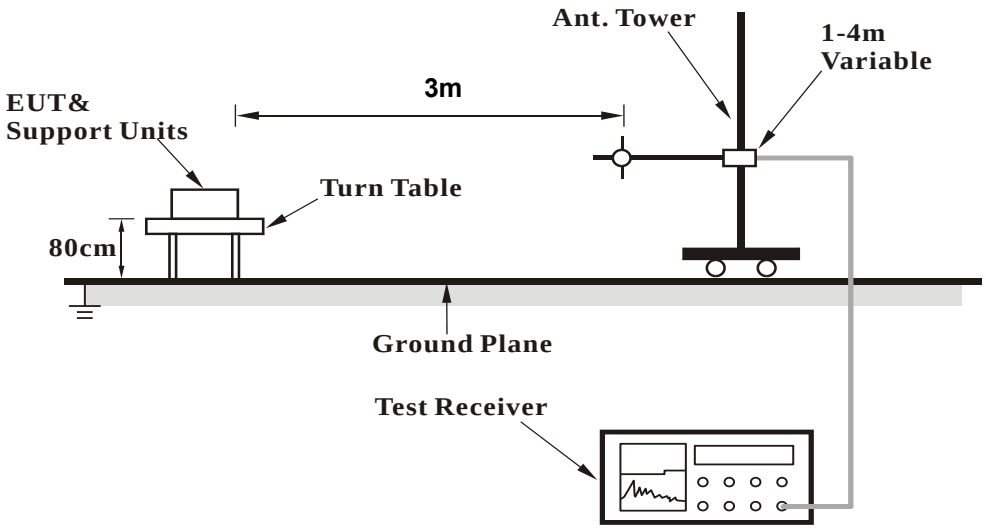
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (10 log(1/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

### 3.1.5 DEVIATION FROM TEST STANDARD

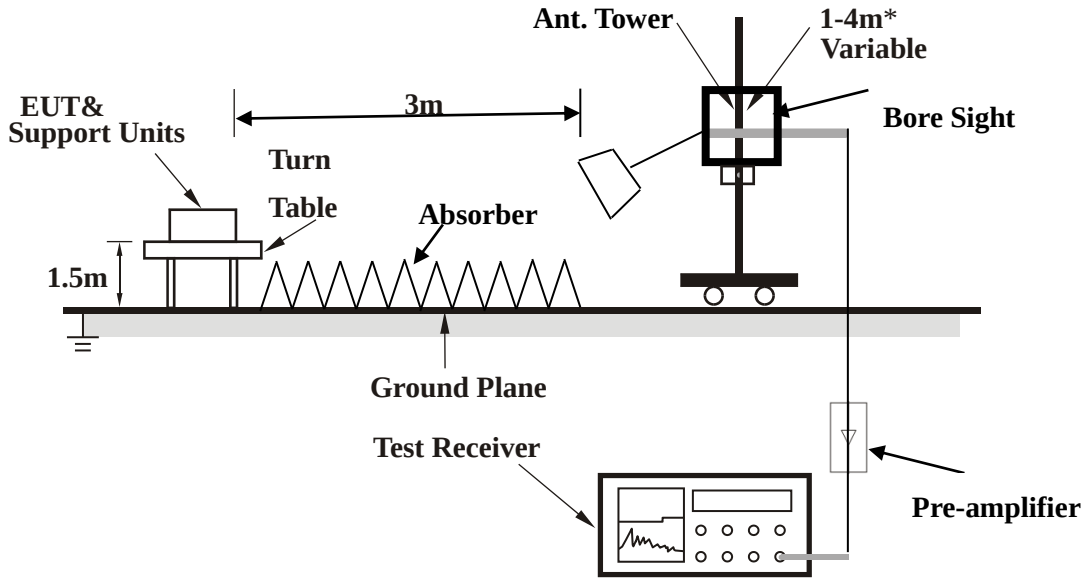
No deviation.

## 3.1.6 TEST SETUP

**< Frequency Range 30MHz~1GHz >**




**<Frequency Range above 1GHz>**




**Note**: Above 1G is a directional antenna

Depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

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

### 3.1.7 EUT OPERATING CONDITION

a. Set the EUT under full load condition and placed them on a testing table.

b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.

c. The necessary accessories enable the EUT in full functions.

## 3.1.8 TEST RESULTS

**BELOW 1GHz WORST-CASE DATA:**

**30 MHz – 1GHz data:**

**802.11n (40MHZ)**

| CHANNEL | TX Channel 38 | DETECTOR FUNCTION | Quasi-Peak (QP) |
|---|---|---|---|
| FREQUENCY RANGE | 30MHz ~ 1GHz | | |

| Frequency | Reading | Detector | Ant_F | PA_G | Cab_L | Result | Limit | Margin | Height | Degree |
|---|---|---|---|---|---|---|---|---|---|---|
| (MHz) | (dBuV/m) | | (dB/m) | (dB) | (dB) | (dBuV/m) | (dBuV/m) | (dB) | (cm) | ( ) |
| 39.4372 | 33.85 | peak | 13.17 | 22.28 | 0.18 | 24.92 | 40.00 | -15.08 | 100 | 126 |
| 89.2764 | 34.80 | peak | 7.63 | 22.33 | 0.62 | 20.72 | 43.50 | -22.78 | 200 | 272 |
| 152.1297 | 36.19 | peak | 10.93 | 22.33 | 1.28 | 26.07 | 43.50 | -17.43 | 100 | 330 |
| 195.1365 | 44.69 | peak | 11.44 | 22.35 | 1.53 | 35.31 | 43.50 | -8.19 | 100 | 340 |
| 283.9792 | 36.20 | peak | 13.32 | 22.29 | 1.68 | 28.91 | 46.00 | -17.09 | 100 | 127 |
| 322.1886 | 34.90 | peak | 14.14 | 22.23 | 1.78 | 28.59 | 46.00 | -17.41 | 100 | 17 |

**REMARKS:**

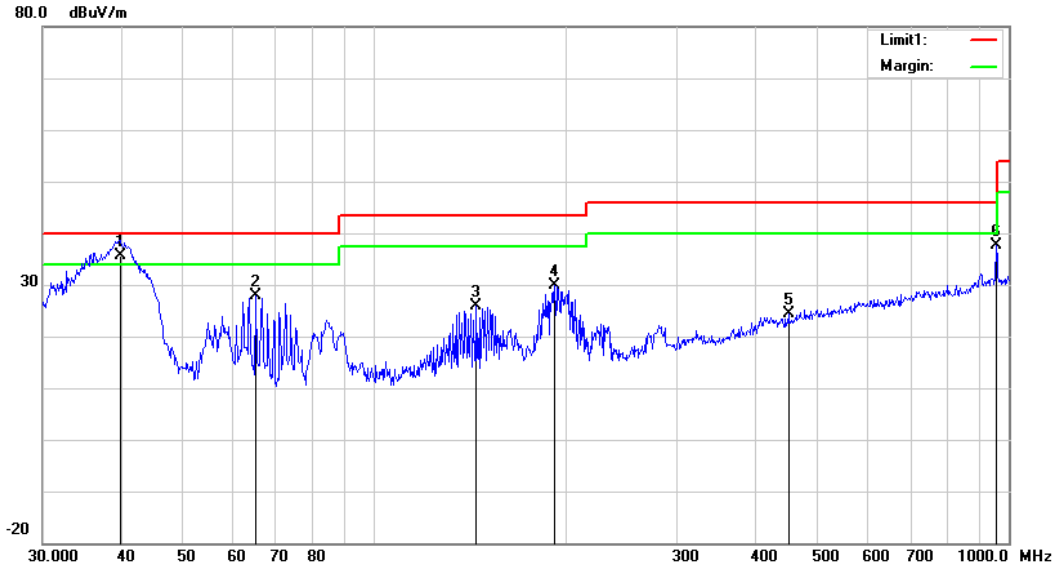
1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

| CHANNEL | Channel 38 | DETECTOR FUNCTION | Quasi-Peak (QP) |
|---|---|---|---|
| FREQUENCY RANGE | 30MHz ~ 1GHz | | |

| Frequency (MHz) | Reading (dBuV/m) | Detector | Ant_F (dB/m) | PA_G (dB) | Cab_L (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Height (cm) | Degree ( ) |
|---|---|---|---|---|---|---|---|---|---|---|
| 39.7147 | 44.77 | QP | 12.94 | 22.28 | 0.18 | 35.61 | 40.00 | -4.39 | 100 | 208 |
| 64.8865 | 43.14 | peak | 6.81 | 22.40 | 0.30 | 27.85 | 40.00 | -12.15 | 100 | 298 |
| 144.8418 | 35.88 | peak | 11.07 | 22.38 | 1.24 | 25.81 | 43.50 | -17.69 | 100 | 109 |
| 192.4186 | 39.23 | peak | 11.41 | 22.33 | 1.52 | 29.83 | 43.50 | -13.67 | 200 | 91 |
| 449.5558 | 27.10 | peak | 17.10 | 21.91 | 2.01 | 24.30 | 46.00 | -21.70 | 100 | 323 |
| 955.4381 | 32.09 | peak | 23.70 | 20.77 | 2.71 | 37.73 | 46.00 | -8.27 | 100 | 118 |

**REMARKS:**

1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.



## ABOVE 1GHz WORST-CASE DATA:

**Note:** For higher frequency, the emission is too low to be detected.

### Band 1

### 802.11a

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FREQ. (MHz)** | **EMISSION LEVEL (dBuV/m)** | **DETECTOR(PK/AV)** | **LIMIT (dBuV/m)** | **MARGIN (dB)** | **ANTENNA HEIGHT (m)** | **TABLE ANGLE (Degree)** | **RAW VALUE (dBuV)** | **CORRECTION FACTOR (dB/m)** |
| 5149.9 | 56.51 | PK | 74 | -17.49 | 215 | 122 | 52.39 | -4.12 |
| 5149.9 | 44.39 | AV | 54 | -9.61 | 215 | 122 | 40.27 | -4.12 |
| *5180.00 | 94.67 | PK | | | 146 | 268 | 90.63 | -4.04 |
| *5180.00 | 83.51 | AV | | | 146 | 268 | 79.47 | -4.04 |
| #10360.00 | 48.26 | PK | 74 | -25.74 | 157 | 131 | 53.64 | 5.38 |
| #10360.00 | 36.46 | AV | 54 | -17.54 | 157 | 131 | 41.84 | 5.38 |
| 15540 | 43.65 | PK | 74 | -30.35 | 181 | 34 | 52.38 | 8.73 |
| 15540 | 32.81 | AV | 54 | -21.19 | 181 | 34 | 41.54 | 8.73 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| **FREQ. (MHz)** | **EMISSION LEVEL (dBuV/m)** | **DETECTOR(PK/AV)** | **LIMIT (dBuV/m)** | **MARGIN (dB)** | **ANTENNA HEIGHT (m)** | **TABLE ANGLE (Degree)** | **RAW VALUE (dBuV)** | **CORRECTION FACTOR (dB/m)** |
| 5149.9 | 57.98 | PK | 74 | -16.02 | 196 | 326 | 53.86 | -4.12 |
| 5149.9 | 45.53 | AV | 54 | -8.47 | 196 | 326 | 41.41 | -4.12 |
| *5180.00 | 101.07 | PK | | | 167 | 81 | 97.03 | -4.04 |
| *5180.00 | 89.26 | AV | | | 167 | 81 | 85.22 | -4.04 |
| #10360.00 | 48.81 | PK | 74 | -25.19 | 139 | 354 | 54.19 | 5.38 |
| #10360.00 | 36.27 | AV | 54 | -17.73 | 139 | 354 | 41.65 | 5.38 |
| 15540 | 43.62 | PK | 74 | -30.38 | 122 | 106 | 52.35 | 8.73 |
| 15540 | 31.64 | AV | 54 | -22.36 | 122 | 106 | 40.37 | 8.73 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 57.43 | PK | 74 | -16.57 | 221 | 176 | 53.31 | -4.12 |
| 5149.9 | 45.63 | AV | 54 | -8.37 | 221 | 176 | 41.51 | -4.12 |
| *5200.00 | 94.91 | PK | | | 150 | 73 | 90.92 | -3.99 |
| *5200.00 | 82.71 | AV | | | 150 | 73 | 78.72 | -3.99 |
| #10400 | 54.07 | PK | 74 | -19.93 | 190 | 94 | 59.45 | 5.38 |
| #10400 | 42.54 | AV | 54 | -11.46 | 190 | 94 | 47.92 | 5.38 |
| 15600 | 51.77 | PK | 74 | -22.23 | 242 | 225 | 60.55 | 8.78 |
| 15600 | 39.68 | AV | 54 | -14.32 | 242 | 225 | 48.46 | 8.78 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 55.64 | PK | 74 | -18.36 | 114 | 126 | 51.52 | -4.12 |
| 5149.9 | 43.74 | AV | 54 | -10.26 | 114 | 126 | 39.62 | -4.12 |
| *5200.00 | 101.75 | PK | | | 182 | 47 | 97.76 | -3.99 |
| *5200.00 | 89.15 | AV | | | 182 | 47 | 85.16 | -3.99 |
| #10400.00 | 48.44 | PK | 74 | -25.56 | 213 | 35 | 53.82 | 5.38 |
| #10400.00 | 36.57 | AV | 54 | -17.43 | 213 | 35 | 41.95 | 5.38 |
| 15600 | 43.17 | PK | 74 | -30.83 | 241 | 5 | 51.95 | 8.78 |
| 15600 | 32.92 | AV | 54 | -21.08 | 241 | 5 | 41.7 | 8.78 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 56.31 | PK | 74 | -17.69 | 145 | 289 | 52.19 | -4.12 |
| 5149.9 | 45.47 | AV | 54 | -8.53 | 145 | 289 | 41.35 | -4.12 |
| *5240.00 | 95.09 | PK | | | 125 | 32 | 91.2 | -3.89 |
| *5240.00 | 83.64 | AV | | | 125 | 32 | 79.75 | -3.89 |
| 5350 | 56.56 | PK | 74 | -17.44 | 174 | 327 | 53.3 | -3.26 |
| 5350 | 43.3 | AV | 54 | -10.7 | 174 | 327 | 40.04 | -3.26 |
| #10480.00 | 48.83 | PK | 74 | -25.17 | 170 | 44 | 54.45 | 5.62 |
| #10480.00 | 36.24 | AV | 54 | -17.76 | 170 | 44 | 41.86 | 5.62 |
| 15720 | 43.93 | PK | 74 | -30.07 | 160 | 86 | 52.66 | 8.73 |
| 15720 | 31.72 | AV | 54 | -22.28 | 160 | 86 | 40.45 | 8.73 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 60.07 | PK | 74 | -13.93 | 174 | 187 | 55.95 | -4.12 |
| 5149.9 | 48.92 | AV | 54 | -5.08 | 174 | 187 | 44.8 | -4.12 |
| *5240.00 | 101.77 | PK | | | 140 | 203 | 97.88 | -3.89 |
| *5240.00 | 90.34 | AV | | | 140 | 203 | 86.45 | -3.89 |
| 5350 | 60.76 | PK | 74 | -13.24 | 189 | 280 | 57.5 | -3.26 |
| 5350 | 48.37 | AV | 54 | -5.63 | 189 | 280 | 45.11 | -3.26 |
| #10480.00 | 49.5 | PK | 74 | -24.5 | 197 | 123 | 55.12 | 5.62 |
| #10480.00 | 37.62 | AV | 54 | -16.38 | 197 | 123 | 43.24 | 5.62 |
| 15720 | 44.04 | AV | 74 | -29.96 | 178 | 237 | 52.77 | 8.73 |
| 15720 | 33.28 | AV | 54 | -20.72 | 178 | 237 | 42.01 | 8.73 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.

802.11n (20MHz)

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 57.92 | PK | 74 | -16.08 | 242 | 6 | 53.8 | -4.12 |
| 5149.9 | 46.11 | AV | 54 | -7.89 | 242 | 6 | 41.99 | -4.12 |
| *5180.00 | 100.88 | PK | | | 169 | 238 | 96.84 | -4.04 |
| *5180.00 | 89.61 | AV | | | 169 | 238 | 85.57 | -4.04 |
| #10360.00 | 49.37 | PK | 74 | -24.63 | 247 | 15 | 54.75 | 5.38 |
| #10360.00 | 36.57 | AV | 54 | -17.43 | 247 | 15 | 41.95 | 5.38 |
| 15540 | 43.64 | PK | 74 | -30.36 | 128 | 352 | 52.37 | 8.73 |
| 15540 | 30.16 | AV | 54 | -23.84 | 128 | 352 | 38.89 | 8.73 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 59.13 | PK | 74 | -14.87 | 165 | 280 | 55.01 | -4.12 |
| 5149.9 | 47.83 | AV | 54 | -6.17 | 165 | 280 | 43.71 | -4.12 |
| *5180.00 | 99.47 | PK | | | 113 | 92 | 95.43 | -4.04 |
| *5180.00 | 89.17 | AV | | | 113 | 92 | 85.13 | -4.04 |
| #10360.00 | 48.3 | PK | 74 | -25.7 | 149 | 220 | 53.68 | 5.38 |
| #10360.00 | 36.79 | AV | 54 | -17.21 | 149 | 220 | 42.17 | 5.38 |
| 15540 | 44.66 | PK | 74 | -29.34 | 226 | 252 | 53.39 | 8.73 |
| 15540 | 43.69 | AV | 54 | -10.31 | 226 | 252 | 52.42 | 8.73 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 56.59 | PK | 74 | -17.41 | 162 | 20 | 52.47 | -4.12 |
| 5149.9 | 45.35 | AV | 54 | -8.65 | 162 | 20 | 41.23 | -4.12 |
| *5200.00 | 100.77 | PK | | | 227 | 42 | 96.78 | -3.99 |
| *5200.00 | 88.64 | AV | | | 227 | 42 | 84.65 | -3.99 |
| #10400 | 48.51 | PK | 74 | -25.49 | 112 | 218 | 53.89 | 5.38 |
| #10400 | 37.29 | AV | 54 | -16.71 | 112 | 218 | 42.67 | 5.38 |
| 15600 | 43.29 | PK | 74 | -30.71 | 179 | 76 | 52.07 | 8.78 |
| 15600 | 32.58 | AV | 54 | -21.42 | 179 | 76 | 41.36 | 8.78 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 56.16 | PK | 74 | -17.84 | 179 | 90 | 52.04 | -4.12 |
| 5149.9 | 45.23 | AV | 54 | -8.77 | 179 | 90 | 41.11 | -4.12 |
| *5200.00 | 100.2 | PK | | | 199 | 330 | 96.21 | -3.99 |
| *5200.00 | 88.51 | AV | | | 199 | 330 | 84.52 | -3.99 |
| #10400.00 | 48.98 | PK | 74 | -25.02 | 247 | 75 | 54.36 | 5.38 |
| #10400.00 | 37.65 | AV | 54 | -16.35 | 247 | 75 | 43.03 | 5.38 |
| 15600 | 43.35 | PK | 74 | -30.65 | 228 | 146 | 52.13 | 8.78 |
| 15600 | 31.82 | AV | 54 | -22.18 | 228 | 146 | 40.6 | 8.78 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 56.74 | PK | 74 | -17.26 | 192 | 342 | 52.62 | -4.12 |
| 5149.9 | 45.62 | AV | 54 | -8.38 | 192 | 342 | 41.5 | -4.12 |
| *5240.00 | 99.45 | PK | | | 127 | 110 | 95.56 | -3.89 |
| *5240.00 | 87.32 | AV | | | 127 | 110 | 83.43 | -3.89 |
| 5350 | 56.84 | PK | 74 | -17.16 | 127 | 162 | 53.58 | -3.26 |
| 5350 | 45.76 | AV | 54 | -8.24 | 127 | 162 | 42.5 | -3.26 |
| #10480.00 | 49.08 | PK | 74 | -24.92 | 195 | 213 | 54.7 | 5.62 |
| #10480.00 | 38.34 | AV | 54 | -15.66 | 195 | 213 | 43.96 | 5.62 |
| 15720 | 44.23 | PK | 74 | -29.77 | 194 | 319 | 52.96 | 8.73 |
| 15720 | 32.92 | AV | 54 | -21.08 | 194 | 319 | 41.65 | 8.73 |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 57.31 | PK | 74 | -16.69 | 220 | 322 | 53.19 | -4.12 |
| 5149.9 | 46.56 | AV | 54 | -7.44 | 220 | 322 | 42.44 | -4.12 |
| *5240.00 | 96.24 | PK | | | 249 | 322 | 92.35 | -3.89 |
| *5240.00 | 84.47 | AV | | | 249 | 322 | 80.58 | -3.89 |
| 5350 | 56.96 | PK | 74 | -17.04 | 164 | 158 | 53.7 | -3.26 |
| 5350 | 45.37 | AV | 54 | -8.63 | 164 | 158 | 42.11 | -3.26 |
| #10480.00 | 48.6 | PK | 74 | -25.4 | 127 | 83 | 54.22 | 5.62 |
| #10480.00 | 37.64 | AV | 54 | -16.36 | 127 | 83 | 43.26 | 5.62 |
| 15720 | 44.65 | AV | 74 | -29.35 | 127 | 236 | 53.38 | 8.73 |
| 15720 | 32.21 | AV | 54 | -21.79 | 127 | 236 | 40.94 | 8.73 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.

802.11n (40MHz)

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 60.89 | PK | 74 | -13.11 | 229 | 278 | 56.77 | -4.12 |
| 5149.9 | 48.38 | AV | 54 | -5.62 | 229 | 278 | 44.26 | -4.12 |
| *5190.00 | 97.55 | PK | | | 220 | 284 | 93.54 | -4.01 |
| *5190.00 | 85.62 | AV | | | 220 | 284 | 81.61 | -4.01 |
| #10380.00 | 48.16 | PK | 74 | -25.84 | 217 | 22 | 53.54 | 5.38 |
| #10380.00 | 36.41 | AV | 54 | -17.59 | 217 | 22 | 41.79 | 5.38 |
| 15570 | 44.41 | PK | 74 | -29.59 | 151 | 161 | 53.16 | 8.75 |
| 15570 | 32.17 | AV | 54 | -21.83 | 151 | 161 | 40.92 | 8.75 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 61.25 | PK | 74 | -12.75 | 135 | 347 | 57.13 | -4.12 |
| 5149.9 | 50.73 | AV | 54 | -3.27 | 135 | 347 | 46.61 | -4.12 |
| *5190.00 | 97.55 | PK | | | 233 | 40 | 93.54 | -4.01 |
| *5190.00 | 84.56 | AV | | | 233 | 40 | 80.55 | -4.01 |
| #10380.00 | 48 | PK | 74 | -26 | 152 | 70 | 53.38 | 5.38 |
| #10380.00 | 36.37 | AV | 54 | -17.63 | 152 | 70 | 41.75 | 5.38 |
| 15570 | 43.63 | PK | 74 | -30.37 | 207 | 35 | 52.38 | 8.75 |
| 15570 | 32.67 | AV | 54 | -21.33 | 207 | 35 | 41.42 | 8.75 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5190MHz: Fundamental frequency.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 56.74 | PK | 74 | -17.26 | 224 | 84 | 52.62 | -4.12 |
| 5149.9 | 41.69 | AV | 54 | -12.31 | 224 | 84 | 37.57 | -4.12 |
| *5230.00 | 95.52 | PK | | | 208 | 98 | 91.61 | -3.91 |
| *5230.00 | 83.42 | AV | | | 208 | 98 | 79.51 | -3.91 |
| 5350 | 56.64 | PK | 74 | -17.36 | 200 | 125 | 53.38 | -3.26 |
| 5350 | 43.97 | AV | 54 | -10.03 | 200 | 125 | 40.71 | -3.26 |
| #10460.00 | 48.7 | PK | 74 | -25.3 | 115 | 157 | 54.26 | 5.56 |
| #10460.00 | 36.42 | AV | 54 | -17.58 | 115 | 157 | 41.98 | 5.56 |
| 15690 | 44.42 | PK | 74 | -29.58 | 169 | 332 | 53.08 | 8.66 |
| 15690 | 31.27 | AV | 54 | -22.73 | 169 | 332 | 39.93 | 8.66 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 56.46 | PK | 74 | -17.54 | 110 | 272 | 52.34 | -4.12 |
| 5149.9 | 42.34 | AV | 54 | -11.66 | 110 | 272 | 38.22 | -4.12 |
| *5230.00 | 96.06 | PK | | | 146 | 315 | 92.15 | -3.91 |
| *5230.00 | 83.3 | AV | | | 146 | 315 | 79.39 | -3.91 |
| 5350 | 56.66 | PK | 74 | -17.34 | 229 | 269 | 53.4 | -3.26 |
| 5350 | 45.14 | AV | 54 | -8.86 | 229 | 269 | 41.88 | -3.26 |
| #10460.00 | 48.75 | PK | 74 | -25.25 | 207 | 182 | 54.31 | 5.56 |
| #10460.00 | 36.51 | AV | 54 | -17.49 | 207 | 182 | 42.07 | 5.56 |
| 15690 | 44.13 | PK | 74 | -29.87 | 128 | 128 | 52.79 | 8.66 |
| 15690 | 33.49 | AV | 54 | -20.51 | 128 | 128 | 42.15 | 8.66 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5230MHz: Fundamental frequency.

## 802.11ac (80MHz)

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 62.11 | PK | 74 | -11.89 | 246 | 277 | 57.99 | -4.12 |
| 5149.9 | 50.31 | AV | 54 | -3.69 | 246 | 277 | 46.19 | -4.12 |
| *5210.00 | 94.49 | PK | | | 124 | 107 | 90.52 | -3.97 |
| *5210.00 | 83.24 | AV | | | 124 | 107 | 79.27 | -3.97 |
| #10420.00 | 49.62 | PK | 74 | -24.38 | 186 | 44 | 55.06 | 5.44 |
| #10420.00 | 38.64 | AV | 54 | -15.36 | 186 | 44 | 44.08 | 5.44 |
| 15630 | 43.53 | PK | 74 | -30.47 | 156 | 49 | 52.26 | 8.73 |
| 15630 | 31.25 | AV | 54 | -22.75 | 156 | 49 | 39.98 | 8.73 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5149.9 | 59.64 | PK | 74 | -14.36 | 204 | 53 | 55.52 | -4.12 |
| 5149.9 | 47.52 | AV | 54 | -6.48 | 204 | 53 | 43.4 | -4.12 |
| *5210.00 | 93.55 | PK | | | 118 | 15 | 89.58 | -3.97 |
| *5210.00 | 81.37 | AV | | | 118 | 15 | 77.4 | -3.97 |
| #10420.00 | 48.16 | PK | 74 | -25.84 | 111 | 72 | 53.6 | 5.44 |
| #10420.00 | 36.87 | AV | 54 | -17.13 | 111 | 72 | 42.31 | 5.44 |
| 15630 | 44.99 | PK | 74 | -29.01 | 125 | 308 | 53.72 | 8.73 |
| 15630 | 31.54 | AV | 54 | -22.46 | 125 | 308 | 40.27 | 8.73 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5210MHz: Fundamental frequency.

**Band 2**

**802.11a**

| CHANNEL | TX Channel 52 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5260.00 | 98.85 | PK | | | 132 | 327 | 95.01 | -3.84 |
| *5260.00 | 76.75 | AV | | | 132 | 327 | 72.91 | -3.84 |
| 5350 | 56.85 | PK | 74 | -17.15 | 149 | 88 | 53.59 | -3.26 |
| 5350 | 43.2 | AV | 54 | -10.8 | 149 | 88 | 39.94 | -3.26 |
| 10520 | 54.1 | PK | 74 | -19.9 | 125 | 273 | 59.81 | 5.71 |
| 10520 | 42.39 | AV | 54 | -11.61 | 125 | 273 | 48.1 | 5.71 |
| 15780 | 53.92 | PK | 74 | -20.08 | 243 | 139 | 62.87 | 8.95 |
| 15780 | 40.21 | AV | 54 | -13.79 | 243 | 139 | 49.16 | 8.95 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5260.00 | 102.01 | PK | | | 153 | 207 | 98.17 | -3.84 |
| *5260.00 | 90.74 | AV | | | 153 | 207 | 86.9 | -3.84 |
| 5350 | 56.58 | PK | 74 | -17.42 | 239 | 88 | 53.32 | -3.26 |
| 5350 | 43.26 | AV | 54 | -10.74 | 239 | 88 | 40 | -3.26 |
| 10520 | 48.83 | PK | 74 | -25.17 | 232 | 67 | 54.54 | 5.71 |
| 10520 | 36.74 | AV | 54 | -17.26 | 232 | 67 | 42.45 | 5.71 |
| 15780 | 44.93 | PK | 74 | -29.07 | 247 | 226 | 53.88 | 8.95 |
| 15780 | 33.16 | AV | 54 | -20.84 | 247 | 226 | 42.11 | 8.95 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5260MHz: Fundamental frequency.

| CHANNEL | TX Channel 60 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5300.00 | 94.59 | PK | | | 121 | 0 | 90.85 | -3.74 |
| *5300.00 | 83.16 | AV | | | 121 | 0 | 79.42 | -3.74 |
| 5350 | 57.03 | PK | 74 | -16.97 | 159 | 292 | 53.77 | -3.26 |
| 5350 | 45.81 | AV | 54 | -8.19 | 159 | 292 | 42.55 | -3.26 |
| 10600 | 48.39 | PK | 74 | -25.61 | 159 | 150 | 54.22 | 5.83 |
| 10600 | 36.5 | AV | 54 | -17.5 | 159 | 150 | 42.33 | 5.83 |
| 15900 | 43.74 | PK | 74 | -30.26 | 134 | 294 | 52.64 | 8.9 |
| 15900 | 30.62 | AV | 54 | -23.38 | 134 | 294 | 39.52 | 8.9 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5300.00 | 98.89 | PK | | | 156 | 319 | 95.15 | -3.74 |
| *5300.00 | 86.31 | AV | | | 156 | 319 | 82.57 | -3.74 |
| 5350 | 55.93 | PK | 74 | -18.07 | 237 | 228 | 52.67 | -3.26 |
| 5350 | 43.72 | AV | 54 | -10.28 | 237 | 228 | 40.46 | -3.26 |
| 10600 | 47.91 | PK | 74 | -26.09 | 247 | 345 | 53.74 | 5.83 |
| 10600 | 36.31 | AV | 54 | -17.69 | 247 | 345 | 42.14 | 5.83 |
| 15900 | 43.57 | PK | 74 | -30.43 | 205 | 211 | 52.47 | 8.9 |
| 15900 | 30.58 | AV | 54 | -23.42 | 205 | 211 | 39.48 | 8.9 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5300MHz: Fundamental frequency.

| CHANNEL | TX Channel 64 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5320.00 | 95.19 | PK | | | 193 | 108 | 91.64 | -3.55 |
| *5320.00 | 83.28 | AV | | | 193 | 108 | 79.73 | -3.55 |
| 5350 | 56.65 | PK | 74 | -17.35 | 248 | 130 | 53.39 | -3.26 |
| 5350 | 43.74 | AV | 54 | -10.26 | 248 | 130 | 40.48 | -3.26 |
| 10640 | 47.65 | PK | 74 | -26.35 | 187 | 105 | 53.46 | 5.81 |
| 10640 | 36.54 | AV | 54 | -17.46 | 187 | 105 | 42.35 | 5.81 |
| 15960 | 43.34 | PK | 74 | -30.66 | 125 | 248 | 52.59 | 9.25 |
| 15960 | 30.2 | AV | 54 | -23.8 | 125 | 248 | 39.45 | 9.25 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5320.00 | 98.85 | PK | | | 223 | 6 | 95.3 | -3.55 |
| *5320.00 | 86.37 | AV | | | 223 | 6 | 82.82 | -3.55 |
| 5350 | 59.44 | PK | 74 | -14.56 | 145 | 122 | 56.18 | -3.26 |
| 5350 | 48.61 | AV | 54 | -5.39 | 145 | 122 | 45.35 | -3.26 |
| 10640 | 48.22 | PK | 74 | -25.78 | 126 | 209 | 54.03 | 5.81 |
| 10640 | 37.1 | AV | 54 | -16.9 | 126 | 209 | 42.91 | 5.81 |
| 15960 | 43.16 | PK | 74 | -30.84 | 174 | 188 | 52.41 | 9.25 |
| 15960 | 31.26 | AV | 54 | -22.74 | 174 | 188 | 40.51 | 9.25 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5320MHz: Fundamental frequency.

802.11n (20MHz)

| CHANNEL | TX Channel 52 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5260.00 | 99.51 | PK | | | 158 | 178 | 95.67 | -3.84 |
| *5260.00 | 88.34 | AV | | | 158 | 178 | 84.5 | -3.84 |
| 5350 | 58.03 | PK | 74 | -15.97 | 127 | 312 | 54.77 | -3.26 |
| 5350 | 46.31 | AV | 54 | -7.69 | 127 | 312 | 43.05 | -3.26 |
| 10520 | 49.27 | PK | 74 | -24.73 | 240 | 204 | 54.98 | 5.71 |
| 10520 | 37.65 | AV | 54 | -16.35 | 240 | 204 | 43.36 | 5.71 |
| 15780 | 44.72 | PK | 74 | -29.28 | 230 | 46 | 53.67 | 8.95 |
| 15780 | 41.39 | AV | 54 | -12.61 | 230 | 46 | 50.34 | 8.95 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5260.00 | 96.63 | PK | | | 203 | 212 | 92.79 | -3.84 |
| *5260.00 | 84.58 | AV | | | 203 | 212 | 80.74 | -3.84 |
| 5350 | 56.62 | PK | 74 | -17.38 | 192 | 265 | 53.36 | -3.26 |
| 5350 | 46.93 | AV | 54 | -7.07 | 192 | 265 | 43.67 | -3.26 |
| 10520 | 48.41 | PK | 74 | -25.59 | 151 | 60 | 54.12 | 5.71 |
| 10520 | 36.15 | AV | 54 | -17.85 | 151 | 60 | 41.86 | 5.71 |
| 15780 | 45.16 | PK | 74 | -28.84 | 208 | 110 | 54.11 | 8.95 |
| 15780 | 34.98 | AV | 54 | -19.02 | 208 | 110 | 43.93 | 8.95 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5260MHz: Fundamental frequency.

| CHANNEL | TX Channel 60 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5300.00 | 97.8 | PK | | | 127 | 229 | 94.06 | -3.74 |
| *5300.00 | 86.35 | AV | | | 127 | 229 | 82.61 | -3.74 |
| 5350 | 56.69 | PK | 74 | -17.31 | 172 | 47 | 53.43 | -3.26 |
| 5350 | 43.32 | AV | 54 | -10.68 | 172 | 47 | 40.06 | -3.26 |
| 10600 | 48.37 | PK | 74 | -25.63 | 187 | 279 | 54.2 | 5.83 |
| 10600 | 36.69 | AV | 54 | -17.31 | 187 | 279 | 42.52 | 5.83 |
| 15900 | 43.96 | PK | 74 | -30.04 | 133 | 349 | 52.86 | 8.9 |
| 15900 | 32.51 | AV | 54 | -21.49 | 133 | 349 | 41.41 | 8.9 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5300.00 | 98.7 | PK | | | 203 | 255 | 94.96 | -3.74 |
| *5300.00 | 86.67 | AV | | | 203 | 255 | 82.93 | -3.74 |
| 5350 | 56.26 | PK | 74 | -17.74 | 226 | 297 | 53 | -3.26 |
| 5350 | 45.13 | AV | 54 | -8.87 | 226 | 297 | 41.87 | -3.26 |
| 10600 | 48.46 | PK | 74 | -25.54 | 114 | 277 | 54.29 | 5.83 |
| 10600 | 36.65 | AV | 54 | -17.35 | 114 | 277 | 42.48 | 5.83 |
| 15900 | 43.59 | PK | 74 | -30.41 | 169 | 331 | 52.49 | 8.9 |
| 15900 | 32.73 | AV | 54 | -21.27 | 169 | 331 | 41.63 | 8.9 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5300MHz: Fundamental frequency.

| CHANNEL | TX Channel 64 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5320.00 | 97.38 | PK | | | 214 | 156 | 93.83 | -3.55 |
| *5320.00 | 86.25 | AV | | | 214 | 156 | 82.7 | -3.55 |
| 5350 | 59.18 | PK | 74 | -14.82 | 234 | 316 | 55.92 | -3.26 |
| 5350 | 47.31 | AV | 54 | -6.69 | 234 | 316 | 44.05 | -3.26 |
| 10640 | 47.54 | PK | 74 | -26.46 | 226 | 74 | 53.35 | 5.81 |
| 10640 | 36.81 | AV | 54 | -17.19 | 226 | 74 | 42.62 | 5.81 |
| 15960 | 43.03 | PK | 74 | -30.97 | 154 | 309 | 52.28 | 9.25 |
| 15960 | 40.21 | AV | 54 | -13.79 | 154 | 309 | 49.46 | 9.25 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5320.00 | 99.08 | PK | | | 233 | 89 | 95.53 | -3.55 |
| *5320.00 | 87.34 | AV | | | 233 | 89 | 83.79 | -3.55 |
| 5350 | 60.85 | PK | 74 | -13.15 | 200 | 264 | 57.59 | -3.26 |
| 5350 | 49.35 | AV | 54 | -4.65 | 200 | 264 | 46.09 | -3.26 |
| 10640 | 49.04 | PK | 74 | -24.96 | 171 | 9 | 54.85 | 5.81 |
| 10640 | 37.31 | AV | 54 | -16.69 | 171 | 9 | 43.12 | 5.81 |
| 15960 | 42.93 | PK | 74 | -31.07 | 113 | 263 | 52.18 | 9.25 |
| 15960 | 31.74 | AV | 54 | -22.26 | 113 | 263 | 40.99 | 9.25 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5320MHz: Fundamental frequency.

802.11n (40MHz)

| CHANNEL | TX Channel 54 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5270.00 | 87.39 | PK | | | 141 | 10 | 83.57 | -3.82 |
| *5270.00 | 75.31 | AV | | | 141 | 10 | 71.49 | -3.82 |
| 5350 | 54.78 | PK | 74 | -19.22 | 127 | 347 | 51.52 | -3.26 |
| 5350 | 42.51 | AV | 54 | -11.49 | 127 | 347 | 39.25 | -3.26 |
| 10540 | 48.77 | PK | 74 | -25.23 | 141 | 262 | 54.51 | 5.74 |
| 10540 | 36.28 | AV | 54 | -17.72 | 141 | 262 | 42.02 | 5.74 |
| 15810 | 44.98 | PK | 74 | -29.02 | 237 | 192 | 53.99 | 9.01 |
| 15810 | 31.17 | AV | 54 | -22.83 | 237 | 192 | 40.18 | 9.01 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5270.00 | 95.63 | PK | | | 134 | 314 | 91.81 | -3.82 |
| *5270.00 | 84.34 | AV | | | 134 | 314 | 80.52 | -3.82 |
| 5350 | 56.19 | PK | 74 | -17.81 | 205 | 269 | 52.93 | -3.26 |
| 5350 | 43.75 | AV | 54 | -10.25 | 205 | 269 | 40.49 | -3.26 |
| 10540 | 49.53 | PK | 74 | -24.47 | 138 | 20 | 55.27 | 5.74 |
| 10540 | 37.24 | AV | 54 | -16.76 | 138 | 20 | 42.98 | 5.74 |
| 15810 | 45.44 | PK | 74 | -28.56 | 223 | 358 | 54.45 | 9.01 |
| 15810 | 32.61 | AV | 54 | -21.39 | 223 | 358 | 41.62 | 9.01 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5270MHz: Fundamental frequency.

| CHANNEL | TX Channel 62 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5310.00 | 95.37 | PK | | | 210 | 235 | 91.73 | -3.64 |
| *5310.00 | 83.27 | AV | | | 210 | 235 | 79.63 | -3.64 |
| 5350 | 58.55 | PK | 74 | -15.45 | 171 | 9 | 55.29 | -3.26 |
| 5350 | 46.31 | AV | 54 | -7.69 | 171 | 9 | 43.05 | -3.26 |
| 10620 | 46.88 | PK | 74 | -27.12 | 176 | 176 | 52.7 | 5.82 |
| 10620 | 34.95 | AV | 54 | -19.05 | 176 | 176 | 40.77 | 5.82 |
| 15930 | 43.59 | PK | 74 | -30.41 | 196 | 74 | 52.67 | 9.08 |
| 15930 | 32.67 | AV | 54 | -21.33 | 196 | 74 | 41.75 | 9.08 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5310.00 | 97.32 | PK | | | 172 | 221 | 93.68 | -3.64 |
| *5310.00 | 86.14 | AV | | | 172 | 221 | 82.5 | -3.64 |
| 5350 | 60.69 | PK | 74 | -13.31 | 144 | 243 | 57.43 | -3.26 |
| 5350 | 48.26 | AV | 54 | -5.74 | 144 | 243 | 45 | -3.26 |
| 10620 | 47.93 | PK | 74 | -26.07 | 147 | 59 | 53.75 | 5.82 |
| 10620 | 35.24 | AV | 54 | -18.76 | 147 | 59 | 41.06 | 5.82 |
| 15930 | 43.05 | PK | 74 | -30.95 | 216 | 10 | 52.13 | 9.08 |
| 15930 | 30.63 | AV | 54 | -23.37 | 216 | 10 | 39.71 | 9.08 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5310MHz: Fundamental frequency.

## 802.11ac (80MHz)

| CHANNEL | TX Channel 58 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5290.00 | 93.15 | PK | | | 239 | 100 | 89.39 | -3.76 |
| *5290.00 | 81.47 | AV | | | 239 | 100 | 77.71 | -3.76 |
| 5350 | 57.21 | PK | 74 | -16.79 | 160 | 260 | 53.95 | -3.26 |
| 5350 | 45.83 | AV | 54 | -8.17 | 160 | 260 | 42.57 | -3.26 |
| #10580.00 | 48.75 | PK | 74 | -25.25 | 181 | 325 | 54.54 | 5.79 |
| #10580.00 | 36.97 | AV | 54 | -17.03 | 181 | 325 | 42.76 | 5.79 |
| 15870 | 44.96 | PK | 74 | -29.04 | 184 | 327 | 53.91 | 8.95 |
| 15870 | 32.46 | AV | 54 | -21.54 | 184 | 327 | 41.41 | 8.95 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5290.00 | 94.34 | PK | | | 194 | 77 | 90.58 | -3.76 |
| *5290.00 | 82.63 | AV | | | 194 | 77 | 78.87 | -3.76 |
| 5350 | 60.3 | PK | 74 | -13.7 | 199 | 102 | 57.04 | -3.26 |
| 5350 | 48.52 | AV | 54 | -5.48 | 199 | 102 | 45.26 | -3.26 |
| #10580.00 | 47.3 | PK | 74 | -26.7 | 112 | 57 | 53.09 | 5.79 |
| #10580.00 | 35.62 | AV | 54 | -18.38 | 112 | 57 | 41.41 | 5.79 |
| 15870 | 45.8 | PK | 74 | -28.2 | 114 | 295 | 54.75 | 8.95 |
| 15870 | 32.35 | AV | 54 | -21.65 | 114 | 295 | 41.3 | 8.95 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5290MHz: Fundamental frequency.

## Band 3

### 802.11a

| CHANNEL | TX Channel 100 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 57.12 | PK | 74 | -16.88 | 181 | 343 | 54.93 | -2.19 |
| 5470 | 45.62 | AV | 54 | -8.38 | 181 | 343 | 43.43 | -2.19 |
| *5500.00 | 91 | PK | | | 169 | 360 | 89.07 | -1.93 |
| *5500.00 | 80.31 | AV | | | 169 | 360 | 78.38 | -1.93 |
| 11000 | 48.97 | PK | 74 | -25.03 | 210 | 262 | 54.98 | 6.01 |
| 11000 | 36.81 | AV | 54 | -17.19 | 210 | 262 | 42.82 | 6.01 |
| #16500.00 | 42.71 | PK | 74 | -31.29 | 207 | 55 | 52.81 | 10.1 |
| #16500.00 | 30.6 | AV | 54 | -23.4 | 207 | 55 | 40.7 | 10.1 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 58.44 | PK | 74 | -15.56 | 223 | 294 | 56.25 | -2.19 |
| 5470 | 46.32 | AV | 54 | -7.68 | 223 | 294 | 44.13 | -2.19 |
| *5500.00 | 96.82 | PK | | | 174 | 196 | 94.89 | -1.93 |
| *5500.00 | 84.5 | AV | | | 174 | 196 | 82.57 | -1.93 |
| 11000 | 49.54 | PK | 74 | -24.46 | 141 | 245 | 55.55 | 6.01 |
| 11000 | 37.52 | AV | 54 | -16.48 | 141 | 245 | 43.53 | 6.01 |
| #16500.00 | 42.85 | PK | 74 | -31.15 | 217 | 172 | 52.95 | 10.1 |
| #16500.00 | 30.4 | AV | 54 | -23.6 | 217 | 172 | 40.5 | 10.1 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 116 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 56.57 | PK | 74 | -17.43 | 208 | 349 | 54.38 | -2.19 |
| 5470 | 44.37 | AV | 54 | -9.63 | 208 | 349 | 42.18 | -2.19 |
| *5580.00 | 92.46 | PK | | | 234 | 356 | 90.71 | -1.75 |
| *5580.00 | 80.6 | AV | | | 234 | 356 | 78.85 | -1.75 |
| #5725.00 | 56.09 | PK | 74 | -17.91 | 230 | 67 | 54.47 | -1.62 |
| 11160 | 48.59 | PK | 74 | -25.41 | 129 | 194 | 54.62 | 6.03 |
| 11160 | 36.7 | AV | 54 | -17.3 | 129 | 194 | 42.73 | 6.03 |
| #16740.00 | 40.26 | PK | 74 | -33.74 | 224 | 28 | 50.85 | 10.59 |
| #16740.00 | 28.35 | AV | 54 | -25.65 | 224 | 28 | 38.94 | 10.59 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 56.04 | PK | 74 | -17.96 | 244 | 332 | 53.85 | -2.19 |
| 5470 | 44.47 | AV | 54 | -9.53 | 244 | 332 | 42.28 | -2.19 |
| *5580.00 | 97.56 | PK | | | 248 | 170 | 95.81 | -1.75 |
| *5580.00 | 85.64 | AV | | | 248 | 170 | 83.89 | -1.75 |
| #5725.00 | 55.85 | PK | 74 | -18.15 | 145 | 158 | 54.23 | -1.62 |
| 11160 | 49.04 | PK | 74 | -24.96 | 178 | 36 | 55.07 | 6.03 |
| 11160 | 38.64 | AV | 54 | -15.36 | 178 | 36 | 44.67 | 6.03 |
| #16740.00 | 39.51 | PK | 74 | -34.49 | 147 | 33 | 50.1 | 10.59 |
| #16740.00 | 27.63 | AV | 54 | -26.37 | 147 | 33 | 38.22 | 10.59 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5580MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 140 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5700.00 | 94.3 | PK | | | 125 | 219 | 92.6 | -1.7 |
| *5700.00 | 82.7 | AV | | | 125 | 219 | 81 | -1.7 |
| #5725.00 | 61.2 | PK | 74 | -12.8 | 246 | 119 | 59.58 | -1.62 |
| 11400 | 50.62 | PK | 74 | -23.38 | 226 | 346 | 56.83 | 6.21 |
| 11400 | 38.73 | AV | 54 | -15.27 | 226 | 346 | 44.94 | 6.21 |
| #17100.00 | 43.05 | PK | 74 | -30.95 | 236 | 218 | 54.24 | 11.19 |
| #17100.00 | 31.69 | AV | 54 | -22.31 | 236 | 218 | 42.88 | 11.19 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5700.00 | 100.98 | PK | | | 222 | 106 | 99.28 | -1.7 |
| *5700.00 | 88.24 | AV | | | 222 | 106 | 86.54 | -1.7 |
| #5725.00 | 65.63 | PK | 74 | -8.37 | 139 | 214 | 64.01 | -1.62 |
| 11400 | 50.17 | PK | 74 | -23.83 | 131 | 247 | 56.38 | 6.21 |
| 11400 | 37.43 | AV | 54 | -16.57 | 131 | 247 | 43.64 | 6.21 |
| #17100.00 | 42.16 | PK | 74 | -31.84 | 164 | 117 | 53.35 | 11.19 |
| #17100.00 | 30.25 | AV | 54 | -23.75 | 164 | 117 | 41.44 | 11.19 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 144 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5720.00 | 99.15 | PK | | | 117 | 211 | 97.51 | -1.64 |
| *5720.00 | 88.91 | AV | | | 117 | 211 | 87.27 | -1.64 |
| 11440 | 52.11 | PK | 74 | -21.89 | 137 | 349 | 55.19 | 6.43 |
| 11440 | 42.48 | AV | 54 | -11.52 | 137 | 349 | 45.39 | 6.43 |
| #17160.00 | 43.14 | PK | 74 | -30.86 | 242 | 22 | 52.03 | 11.51 |
| #17160.00 | 33.46 | AV | 54 | -20.54 | 242 | 22 | 42.36 | 11.51 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5720.00 | 101.96 | PK | | | 112 | 291 | 100.32 | -1.64 |
| *5720.00 | 91.25 | AV | | | 112 | 291 | 89.61 | -1.64 |
| 11440 | 47.4 | PK | 74 | -26.6 | 193 | 318 | 54.61 | 6.43 |
| 11440 | 37.49 | AV | 54 | -16.51 | 193 | 318 | 44.96 | 6.43 |
| #17160.00 | 43.34 | PK | 74 | -30.66 | 191 | 275 | 53.91 | 11.51 |
| #17160.00 | 33.51 | AV | 54 | -20.49 | 191 | 275 | 44.28 | 11.51 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5720MHz: Fundamental frequency.
3. #: Out of restricted band.

## 802.11n (20MHz)

| CHANNEL | TX Channel 100 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 58.24 | PK | 74 | -15.76 | 173 | 221 | 56.05 | -2.19 |
| 5470 | 47.35 | AV | 54 | -6.65 | 173 | 221 | 45.16 | -2.19 |
| *5500.00 | 96.76 | PK | | | 147 | 160 | 94.83 | -1.93 |
| *5500.00 | 84.12 | AV | | | 147 | 160 | 82.19 | -1.93 |
| 11000 | 50.23 | PK | 74 | -23.77 | 131 | 181 | 56.24 | 6.01 |
| 11000 | 38.27 | AV | 54 | -15.73 | 131 | 181 | 44.28 | 6.01 |
| #16500.00 | 42.83 | PK | 74 | -31.17 | 175 | 133 | 52.93 | 10.1 |
| #16500.00 | 31.62 | AV | 54 | -22.38 | 175 | 133 | 41.72 | 10.1 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 56.26 | PK | 74 | -17.74 | 137 | 226 | 54.07 | -2.19 |
| 5470 | 42.31 | AV | 54 | -11.69 | 137 | 226 | 40.12 | -2.19 |
| *5500.00 | 94.46 | PK | | | 132 | 234 | 92.53 | -1.93 |
| *5500.00 | 81.69 | AV | | | 132 | 234 | 79.76 | -1.93 |
| 11000 | 48.95 | PK | 74 | -25.05 | 193 | 257 | 54.96 | 6.01 |
| 11000 | 36.37 | AV | 54 | -17.63 | 193 | 257 | 42.38 | 6.01 |
| #16500.00 | 42.89 | PK | 74 | -31.11 | 132 | 181 | 52.99 | 10.1 |
| #16500.00 | 40.86 | AV | 54 | -13.14 | 132 | 181 | 50.96 | 10.1 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 116 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 56.16 | PK | 74 | -17.84 | 219 | 350 | 53.97 | -2.19 |
| 5470 | 44.72 | AV | 54 | -9.28 | 219 | 350 | 42.53 | -2.19 |
| *5580.00 | 97.94 | PK | | | 226 | 164 | 96.19 | -1.75 |
| *5580.00 | 84.61 | AV | | | 226 | 164 | 82.86 | -1.75 |
| #5725.00 | 56.09 | PK | 74 | -17.91 | 215 | 358 | 54.47 | -1.62 |
| 11160 | 49.23 | PK | 74 | -24.77 | 204 | 196 | 55.26 | 6.03 |
| 11160 | 37.31 | AV | 54 | -16.69 | 204 | 196 | 43.34 | 6.03 |
| #16740.00 | 40.1 | PK | 74 | -33.9 | 229 | 250 | 50.69 | 10.59 |
| #16740.00 | 28.72 | AV | 54 | -25.28 | 229 | 250 | 39.31 | 10.59 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 56.05 | PK | 74 | -17.95 | 130 | 101 | 53.86 | -2.19 |
| 5470 | 44.24 | AV | 54 | -9.76 | 130 | 101 | 42.05 | -2.19 |
| *5580.00 | 98.51 | PK | | | 218 | 10 | 96.76 | -1.75 |
| *5580.00 | 86.34 | AV | | | 218 | 10 | 84.59 | -1.75 |
| #5725.00 | 56.28 | PK | 74 | -17.72 | 199 | 330 | 54.66 | -1.62 |
| 11160 | 50.41 | PK | 74 | -23.59 | 180 | 168 | 56.44 | 6.03 |
| 11160 | 38.36 | AV | 54 | -15.64 | 180 | 168 | 44.39 | 6.03 |
| #16740.00 | 40.22 | PK | 74 | -33.78 | 201 | 154 | 50.81 | 10.59 |
| #16740.00 | 29.35 | AV | 54 | -24.65 | 201 | 154 | 39.94 | 10.59 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5580MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 140 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5700.00 | 97.27 | PK | | | 129 | 332 | 95.57 | -1.7 |
| *5700.00 | 85.38 | AV | | | 129 | 332 | 83.68 | -1.7 |
| #5725.00 | 63.43 | PK | 74 | -10.57 | 166 | 215 | 61.81 | -1.62 |
| 11400 | 50.26 | PK | 74 | -23.74 | 152 | 105 | 56.47 | 6.21 |
| 11400 | 38.34 | AV | 54 | -15.66 | 152 | 105 | 44.55 | 6.21 |
| #17100.00 | 42.59 | PK | 74 | -31.41 | 219 | 332 | 53.78 | 11.19 |
| #17100.00 | 31.82 | AV | 54 | -22.18 | 219 | 332 | 43.01 | 11.19 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5700.00 | 99.01 | PK | | | 126 | 186 | 97.31 | -1.7 |
| *5700.00 | 87.21 | AV | | | 126 | 186 | 85.51 | -1.7 |
| #5725.00 | 63.17 | PK | 74 | -10.83 | 228 | 36 | 61.55 | -1.62 |
| 11400 | 49.28 | PK | 74 | -24.72 | 120 | 97 | 55.49 | 6.21 |
| 11400 | 37.39 | AV | 54 | -16.61 | 120 | 97 | 43.6 | 6.21 |
| #17100.00 | 43.36 | PK | 74 | -30.64 | 241 | 101 | 54.55 | 11.19 |
| #17100.00 | 32.65 | AV | 54 | -21.35 | 241 | 101 | 43.84 | 11.19 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 144 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5720.00 | 97.91 | PK | | | 130 | 305 | 96.27 | -1.64 |
| *5720.00 | 88.64 | AV | | | 130 | 305 | 86.92 | -1.64 |
| 11440 | 52.96 | PK | 74 | -21.04 | 206 | 153 | 56.85 | 6.43 |
| 11440 | 43.67 | AV | 54 | -10.33 | 206 | 153 | 47.44 | 6.43 |
| #17160.00 | 44.41 | PK | 74 | -29.59 | 141 | 173 | 54.2 | 11.51 |
| #17160.00 | 35.38 | AV | 54 | -18.62 | 141 | 173 | 44.69 | 11.51 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5720.00 | 101.51 | PK | | | 196 | 58 | 99.87 | -1.64 |
| *5720.00 | 91.53 | AV | | | 196 | 58 | 89.96 | -1.64 |
| 11440 | 48.93 | PK | 74 | -25.07 | 185 | 276 | 58.63 | 6.43 |
| 11440 | 39.53 | AV | 54 | -14.47 | 185 | 276 | 49.37 | 6.43 |
| #17160.00 | 42.54 | PK | 74 | -31.46 | 246 | 181 | 54.44 | 11.51 |
| #17160.00 | 33.22 | AV | 54 | -20.78 | 246 | 181 | 44.58 | 11.51 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5720MHz: Fundamental frequency.
3. #: Out of restricted band.

## 802.11n (40MHz)

| CHANNEL | TX Channel 102 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 59.32 | PK | 74 | -14.68 | 243 | 283 | 57.13 | -2.19 |
| 5470 | 47.41 | AV | 54 | -6.59 | 243 | 283 | 45.22 | -2.19 |
| *5510.00 | 93.63 | PK | | | 139 | 77 | 91.72 | -1.91 |
| *5510.00 | 80.35 | AV | | | 139 | 77 | 78.44 | -1.91 |
| 11020 | 48.96 | PK | 74 | -25.04 | 174 | 206 | 54.98 | 6.02 |
| 11020 | 36.35 | AV | 54 | -17.65 | 174 | 206 | 42.37 | 6.02 |
| #16530.00 | 41.75 | PK | 74 | -32.25 | 222 | 270 | 51.91 | 10.16 |
| #16530.00 | 29.97 | AV | 54 | -24.03 | 222 | 270 | 40.13 | 10.16 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 58.88 | PK | 74 | -15.12 | 238 | 223 | 56.69 | -2.19 |
| 5470 | 46.34 | AV | 54 | -7.66 | 238 | 223 | 44.15 | -2.19 |
| *5510.00 | 93.58 | PK | | | 167 | 211 | 91.67 | -1.91 |
| *5510.00 | 80.47 | AV | | | 167 | 211 | 78.56 | -1.91 |
| 11020 | 49.47 | PK | 74 | -24.53 | 145 | 108 | 55.49 | 6.02 |
| 11020 | 37.32 | AV | 54 | -16.68 | 145 | 108 | 43.34 | 6.02 |
| #16530.00 | 42.53 | PK | 74 | -31.47 | 171 | 121 | 52.69 | 10.16 |
| #16530.00 | 29.81 | AV | 54 | -24.19 | 171 | 121 | 39.97 | 10.16 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5510MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 110 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5550.00 | 92.61 | PK | | | 184 | 320 | 90.79 | -1.82 |
| *5550.00 | 80.72 | AV | | | 184 | 320 | 78.9 | -1.82 |
| #5725.00 | 55.6 | PK | 74 | -18.4 | 128 | 301 | 53.98 | -1.62 |
| 11100 | 49.97 | PK | 74 | -24.03 | 229 | 266 | 56.03 | 6.06 |
| 11100 | 37.36 | AV | 54 | -16.64 | 229 | 266 | 43.42 | 6.06 |
| #16650.00 | 40.37 | PK | 74 | -33.63 | 191 | 107 | 50.76 | 10.39 |
| #16650.00 | 28.59 | AV | 54 | -25.41 | 191 | 107 | 38.98 | 10.39 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5550.00 | 93.69 | PK | | | 118 | 236 | 91.87 | -1.82 |
| *5550.00 | 82.41 | AV | | | 118 | 236 | 80.59 | -1.82 |
| #5725.00 | 55.3 | PK | 74 | -18.7 | 205 | 19 | 53.68 | -1.62 |
| 11100 | 48.63 | PK | 74 | -25.37 | 193 | 201 | 54.69 | 6.06 |
| 11100 | 36.74 | AV | 54 | -17.26 | 193 | 201 | 42.8 | 6.06 |
| #16650.00 | 40.03 | PK | 74 | -33.97 | 205 | 354 | 50.42 | 10.39 |
| #16650.00 | 28.65 | AV | 54 | -25.35 | 205 | 354 | 39.04 | 10.39 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5550MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 134 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5670.00 | 95.29 | PK | | | 212 | 31 | 93.59 | -1.7 |
| *5670.00 | 83.47 | AV | | | 212 | 31 | 81.77 | -1.7 |
| #5725.00 | 57.64 | PK | 74 | -16.36 | 224 | 27 | 56.02 | -1.62 |
| 11340 | 48.83 | PK | 74 | -25.17 | 178 | 138 | 54.89 | 6.06 |
| 11340 | 36.29 | AV | 54 | -17.71 | 178 | 138 | 42.35 | 6.06 |
| #17010.00 | 40.44 | PK | 74 | -33.56 | 247 | 233 | 51.23 | 10.79 |
| #17010.00 | 27.34 | AV | 54 | -26.66 | 247 | 233 | 38.13 | 10.79 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5670.00 | 97.07 | PK | | | 185 | 183 | 95.37 | -1.7 |
| *5670.00 | 84.36 | AV | | | 185 | 183 | 82.66 | -1.7 |
| #5725.00 | 55.49 | PK | 74 | -18.51 | 205 | 102 | 53.87 | -1.62 |
| 11340 | 48.52 | PK | 74 | -25.48 | 220 | 300 | 54.58 | 6.06 |
| 11340 | 36.27 | AV | 54 | -17.73 | 220 | 300 | 42.33 | 6.06 |
| #17010.00 | 39.71 | PK | 74 | -34.29 | 151 | 141 | 50.5 | 10.79 |
| #17010.00 | 26.82 | AV | 54 | -27.18 | 151 | 141 | 37.61 | 10.79 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5670MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 142 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5710.00 | 95.15 | PK | | | 219 | 142 | 93.48 | -1.67 |
| *5710.00 | 85.7 | AV | | | 219 | 142 | 83.92 | -1.67 |
| 11420 | 47.21 | PK | 74 | -26.79 | 178 | 310 | 55.53 | 6.32 |
| 11420 | 37.21 | AV | 54 | -16.79 | 178 | 310 | 45.72 | 6.32 |
| #17130.00 | 42.34 | PK | 74 | -31.66 | 172 | 272 | 52.95 | 11.34 |
| #17130.00 | 32.84 | AV | 54 | -21.16 | 172 | 272 | 42.96 | 11.34 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5710.00 | 98.94 | PK | | | 172 | 176 | 97.27 | -1.67 |
| *5710.00 | 89.27 | AV | | | 172 | 176 | 87.76 | -1.67 |
| 11420 | 52.47 | PK | 74 | -21.53 | 117 | 212 | 54.53 | 6.32 |
| 11420 | 43.34 | AV | 54 | -10.66 | 117 | 212 | 45.11 | 6.32 |
| #17130.00 | 42.29 | PK | 74 | -31.71 | 238 | 259 | 54.83 | 11.34 |
| #17130.00 | 32.86 | AV | 54 | -21.14 | 238 | 259 | 45.38 | 11.34 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5710MHz: Fundamental frequency.
3. #: Out of restricted band.

## 802.11ac (80MHz)

| CHANNEL | TX Channel 106 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 58.22 | PK | 74 | -15.78 | 192 | 268 | 56.03 | -2.19 |
| 5470 | 46.31 | AV | 54 | -7.69 | 192 | 268 | 44.12 | -2.19 |
| *5530.00 | 89.36 | PK | | | 155 | 331 | 87.5 | -1.86 |
| *5530.00 | 77.49 | AV | | | 155 | 331 | 75.63 | -1.86 |
| #5725.00 | 55.37 | PK | 74 | -18.63 | 149 | 84 | 53.75 | -1.62 |
| 11060 | 49.62 | PK | 74 | -24.38 | 181 | 29 | 55.66 | 6.04 |
| 11060 | 37.68 | AV | 54 | -16.32 | 181 | 29 | 43.72 | 6.04 |
| #16590.00 | 41.19 | PK | 74 | -32.81 | 161 | 310 | 51.46 | 10.27 |
| #16590.00 | 29.72 | AV | 54 | -24.28 | 161 | 310 | 39.99 | 10.27 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 58.55 | PK | 74 | -15.45 | 159 | 289 | 56.36 | -2.19 |
| 5470 | 46.36 | AV | 54 | -7.64 | 159 | 289 | 44.17 | -2.19 |
| *5530.00 | 90.84 | PK | | | 206 | 197 | 88.98 | -1.86 |
| *5530.00 | 78.72 | AV | | | 206 | 197 | 76.86 | -1.86 |
| #5725.00 | 55.7 | PK | 74 | -18.3 | 217 | 36 | 54.08 | -1.62 |
| 11060 | 49.38 | PK | 74 | -24.62 | 195 | 151 | 55.42 | 6.04 |
| 11060 | 37.56 | AV | 54 | -16.44 | 195 | 151 | 43.6 | 6.04 |
| #16590.00 | 41.66 | PK | 74 | -32.34 | 113 | 5 | 51.93 | 10.27 |
| #16590.00 | 38.63 | AV | 54 | -15.37 | 113 | 5 | 48.9 | 10.27 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5530MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 122 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 56.24 | PK | 74 | -17.76 | 243 | 51 | 54.05 | -2.19 |
| 5470 | 44.63 | AV | 54 | -9.37 | 243 | 51 | 42.44 | -2.19 |
| *5610.00 | 91.79 | PK | | | 169 | 348 | 90.08 | -1.71 |
| *5610.00 | 78.34 | AV | | | 184 | 81 | 76.63 | -1.71 |
| #5725.00 | 56.42 | PK | 74 | -17.58 | 184 | 81 | 54.8 | -1.62 |
| 11220 | 49.26 | PK | 74 | -24.74 | 219 | 257 | 55.26 | 6 |
| 11220 | 37.26 | AV | 54 | -16.74 | 219 | 257 | 43.26 | 6 |
| #16830.00 | 39.69 | PK | 74 | -34.31 | 123 | 185 | 50.43 | 10.74 |
| #16830.00 | 27.83 | AV | 54 | -26.17 | 123 | 185 | 38.57 | 10.74 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 5470 | 57.58 | PK | 74 | -16.42 | 204 | 280 | 55.39 | -2.19 |
| 5470 | 45.28 | AV | 54 | -8.72 | 204 | 280 | 43.09 | -2.19 |
| *5610.00 | 92.36 | PK | | | 162 | 218 | 90.65 | -1.71 |
| *5610.00 | 80.34 | AV | | | 223 | 138 | 78.63 | -1.71 |
| #5725.00 | 55.59 | PK | 74 | -18.41 | 223 | 138 | 53.97 | -1.62 |
| 11220 | 49.35 | PK | 74 | -24.65 | 215 | 124 | 55.35 | 6 |
| 11220 | 37.26 | AV | 54 | -16.74 | 215 | 124 | 43.26 | 6 |
| #16830.00 | 40.25 | PK | 74 | -33.75 | 189 | 286 | 50.99 | 10.74 |
| #16830.00 | 29.72 | AV | 54 | -24.28 | 189 | 286 | 40.46 | 10.74 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5610MHz: Fundamental frequency.
3. #: Out of restricted band.

| CHANNEL | TX Channel 138 | DETECTOR FUNCTION | Peak (PK)<br>Average (AV) |
|---|---|---|---|
| FREQUENCY RANGE | 1GHz ~ 40GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5690.00 | 93.05 | PK | | | 152 | 315 | 91.36 | -1.69 |
| *5690.00 | 83.92 | AV | | | 152 | 315 | 81.88 | -1.69 |
| 11380 | 47.03 | PK | 74 | -26.97 | 118 | 90 | 53.51 | 6.16 |
| 11380 | 37.82 | AV | 54 | -16.18 | 118 | 90 | 44.49 | 6.16 |
| #17070.00 | 43.35 | PK | 74 | -30.65 | 194 | 225 | 55.63 | 11.06 |
| #17070.00 | 34.32 | AV | 54 | -19.68 | 194 | 225 | 46.11 | 11.06 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5690.00 | 95.49 | PK | | | 132 | 215 | 93.8 | -1.69 |
| *5690.00 | 85.83 | AV | | | 132 | 215 | 84.03 | -1.69 |
| 11380 | 52.38 | PK | 74 | -21.62 | 137 | 58 | 54.66 | 6.16 |
| 11380 | 43.22 | AV | 54 | -10.78 | 137 | 58 | 45.37 | 6.16 |
| #17070.00 | 42.75 | PK | 74 | -31.25 | 234 | 249 | 51.4 | 11.06 |
| #17070.00 | 33.24 | AV | 54 | -20.76 | 234 | 249 | 41.95 | 11.06 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5690MHz: Fundamental frequency.
3. #: Out of restricted band.

## Band 4:

### 802.11a

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 56.95 | PK | 74 | -17.05 | 192 | 151 | 55.25 | -1.7 |
| #5700.00 | 56 | PK | 74 | -18 | 220 | 15 | 54.3 | -1.7 |
| #5720.00 | 61.74 | PK | 74 | -12.26 | 194 | 313 | 60.1 | -1.64 |
| #5725.00 | 66.11 | PK | 74 | -7.89 | 121 | 62 | 64.49 | -1.62 |
| *5745.00 | 95.84 | PK | | | 250 | 295 | 94.29 | -1.55 |
| *5745.00 | 83.31 | AV | | | 250 | 295 | 81.76 | -1.55 |
| 11490 | 48.9 | PK | 74 | -25.1 | 159 | 176 | 55.61 | 6.71 |
| 11490 | 36.25 | AV | 54 | -17.75 | 159 | 176 | 42.96 | 6.71 |
| #17235.00 | 40.66 | PK | 74 | -33.34 | 179 | 127 | 52.47 | 11.81 |
| #17235.00 | 37.53 | AV | 54 | -16.47 | 179 | 127 | 49.34 | 11.81 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 55.88 | PK | 74 | -18.12 | 213 | 175 | 54.18 | -1.7 |
| #5700.00 | 56.6 | PK | 74 | -17.4 | 239 | 163 | 54.9 | -1.7 |
| #5720.00 | 65.76 | PK | 74 | -8.24 | 193 | 318 | 64.12 | -1.64 |
| #5725.00 | 69.19 | PK | 74 | -4.81 | 170 | 335 | 67.57 | -1.62 |
| *5745.00 | 99.62 | PK | | | 116 | 124 | 98.07 | -1.55 |
| *5745.00 | 87.64 | AV | | | 116 | 124 | 86.09 | -1.55 |
| 11490 | 49.47 | PK | 74 | -24.53 | 234 | 29 | 56.18 | 6.71 |
| 11490 | 37.62 | AV | 54 | -16.38 | 234 | 29 | 44.33 | 6.71 |
| #17235.00 | 40.98 | PK | 74 | -33.02 | 158 | 223 | 52.79 | 11.81 |
| #17235.00 | 28.27 | AV | 54 | -25.73 | 158 | 223 | 40.08 | 11.81 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 56.42 | PK | 74 | -17.58 | 237 | 282 | 54.72 | -1.7 |
| #5700.00 | 55.82 | PK | 74 | -18.18 | 230 | 258 | 54.12 | -1.7 |
| #5720.00 | 55.69 | PK | 74 | -18.31 | 200 | 154 | 54.05 | -1.64 |
| #5725.00 | 56.28 | PK | 74 | -17.72 | 208 | 44 | 54.66 | -1.62 |
| *5785.00 | 96.03 | PK | | | 126 | 125 | 94.61 | -1.42 |
| *5785.00 | 85.34 | AV | | | 126 | 125 | 83.92 | -1.42 |
| #5850.00 | 56.08 | PK | 74 | -17.92 | 195 | 309 | 54.66 | -1.42 |
| #5855.00 | 56.99 | PK | 74 | -17.01 | 195 | 309 | 55.57 | -1.42 |
| #5875.00 | 56.78 | PK | 74 | -17.22 | 248 | 234 | 55.34 | -1.44 |
| #5925.00 | 56.6 | PK | 74 | -17.4 | 248 | 234 | 55.03 | -1.57 |
| 11570 | 55.59 | PK | 74 | -18.41 | 124 | 34 | 62.35 | 6.76 |
| 11570 | 43.28 | AV | 54 | -10.72 | 124 | 34 | 50.04 | 6.76 |
| #17355.00 | 52.55 | PK | 74 | -21.45 | 117 | 225 | 64.8 | 12.25 |
| #17355.00 | 40.26 | AV | 54 | -13.74 | 117 | 225 | 52.51 | 12.25 |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 55.44 | PK | 74 | -18.56 | 204 | 101 | 53.74 | -1.7 |
| #5700.00 | 55.44 | PK | 74 | -18.56 | 197 | 41 | 53.74 | -1.7 |
| #5720.00 | 56.09 | PK | 74 | -17.91 | 243 | 164 | 54.45 | -1.64 |
| #5725.00 | 56.15 | PK | 74 | -17.85 | 200 | 91 | 54.53 | -1.62 |
| *5785.00 | 99.78 | PK | | | 120 | 306 | 98.36 | -1.42 |
| *5785.00 | 88.23 | AV | | | 120 | 306 | 86.81 | -1.42 |
| #5850.00 | 57.67 | PK | 74 | -16.33 | 190 | 195 | 56.25 | -1.42 |
| #5855.00 | 58.45 | PK | 74 | -15.55 | 190 | 195 | 57.03 | -1.42 |
| #5875.00 | 57.59 | PK | 74 | -16.41 | 233 | 120 | 56.15 | -1.44 |
| #5925.00 | 57.15 | PK | 74 | -16.85 | 233 | 120 | 55.58 | -1.57 |
| 11570 | 49.52 | PK | 74 | -24.48 | 206 | 10 | 56.28 | 6.76 |
| 11570 | 38.34 | AV | 54 | -15.66 | 206 | 10 | 45.1 | 6.76 |
| #17355.00 | 40.99 | PK | 74 | -33.01 | 232 | 7 | 53.24 | 12.25 |
| #17355.00 | 28.61 | AV | 54 | -25.39 | 232 | 7 | 40.86 | 12.25 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5825.00 | 95.61 | PK | | | 249 | 126 | 94.22 | -1.39 |
| *5825.00 | 83.37 | AV | | | 249 | 126 | 81.98 | -1.39 |
| #5850.00 | 61.68 | PK | 74 | -12.32 | 146 | 114 | 60.26 | -1.42 |
| #5855.00 | 57.59 | PK | 74 | -16.41 | 158 | 84 | 56.17 | -1.42 |
| #5875.00 | 56.57 | PK | 74 | -17.43 | 177 | 326 | 55.13 | -1.44 |
| #5925.00 | 56.92 | PK | 74 | -17.08 | 204 | 348 | 55.35 | -1.57 |
| 11650 | 48.19 | PK | 74 | -25.81 | 238 | 296 | 54.79 | 6.6 |
| 11650 | 37.23 | AV | 54 | -16.77 | 238 | 296 | 43.83 | 6.6 |
| #17475.00 | 41.04 | PK | 74 | -32.96 | 202 | 138 | 53.78 | 12.74 |
| #17475.00 | 28.9 | AV | 54 | -25.1 | 202 | 138 | 41.64 | 12.74 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5825.00 | 99.62 | PK | | | 210 | 36 | 98.23 | -1.39 |
| *5825.00 | 87.54 | AV | | | 210 | 36 | 86.15 | -1.39 |
| #5850.00 | 63.17 | PK | 74 | -10.83 | 127 | 342 | 61.75 | -1.42 |
| #5855.00 | 58.12 | PK | 74 | -15.88 | 231 | 248 | 56.7 | -1.42 |
| #5875.00 | 56.83 | PK | 74 | -17.17 | 188 | 286 | 55.39 | -1.44 |
| #5925.00 | 57.02 | PK | 74 | -16.98 | 170 | 309 | 55.45 | -1.57 |
| 11650 | 48.61 | PK | 74 | -25.39 | 161 | 243 | 55.21 | 6.6 |
| 11650 | 36.43 | AV | 54 | -17.57 | 161 | 243 | 43.03 | 6.6 |
| #17475.00 | 40.96 | PK | 74 | -33.04 | 215 | 184 | 53.7 | 12.74 |
| #17475.00 | 28.91 | AV | 54 | -25.09 | 215 | 184 | 41.65 | 12.74 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

802.11n (20MHz)

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 56.74 | PK | 74 | -17.26 | 249 | 336 | 55.04 | -1.7 |
| #5700.00 | 56.2 | PK | 74 | -17.8 | 243 | 153 | 54.5 | -1.7 |
| #5720.00 | 64.43 | PK | 74 | -9.57 | 192 | 246 | 62.79 | -1.64 |
| #5725.00 | 70.45 | PK | 74 | -3.55 | 197 | 131 | 68.83 | -1.62 |
| *5745.00 | 98.62 | PK | | | 229 | 8 | 97.07 | -1.55 |
| *5745.00 | 86.34 | AV | | | 229 | 8 | 84.79 | -1.55 |
| 11490 | 49.45 | PK | 74 | -24.55 | 197 | 90 | 56.16 | 6.71 |
| 11490 | 36.13 | AV | 54 | -17.87 | 197 | 90 | 42.84 | 6.71 |
| #17235.00 | 41.16 | PK | 74 | -32.84 | 245 | 248 | 52.97 | 11.81 |
| #17235.00 | 29.26 | AV | 54 | -24.74 | 245 | 248 | 41.07 | 11.81 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 55.43 | PK | 74 | -18.57 | 166 | 256 | 53.73 | -1.7 |
| #5700.00 | 56.41 | PK | 74 | -17.59 | 236 | 164 | 54.71 | -1.7 |
| #5720.00 | 64.23 | PK | 74 | -9.77 | 193 | 264 | 62.59 | -1.64 |
| #5725.00 | 69.43 | PK | 74 | -4.57 | 245 | 103 | 67.81 | -1.62 |
| *5745.00 | 98.01 | PK | | | 118 | 138 | 96.46 | -1.55 |
| *5745.00 | 87.64 | AV | | | 118 | 138 | 86.09 | -1.55 |
| 11490 | 49.23 | PK | 74 | -24.77 | 112 | 166 | 55.94 | 6.71 |
| 11490 | 37.58 | AV | 54 | -16.42 | 112 | 166 | 44.29 | 6.71 |
| #17235.00 | 41.59 | PK | 74 | -32.41 | 200 | 147 | 53.4 | 11.81 |
| #17235.00 | 30.27 | AV | 54 | -23.73 | 200 | 147 | 42.08 | 11.81 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 56.06 | PK | 74 | -17.94 | 235 | 40 | 54.36 | -1.7 |
| #5700.00 | 55.46 | PK | 74 | -18.54 | 225 | 140 | 53.76 | -1.7 |
| #5720.00 | 55.46 | PK | 74 | -18.54 | 240 | 330 | 53.82 | -1.64 |
| #5725.00 | 55.87 | PK | 74 | -18.13 | 117 | 101 | 54.25 | -1.62 |
| *5785.00 | 96.49 | PK | | | 246 | 4 | 95.07 | -1.42 |
| *5785.00 | 84.36 | AV | | | 246 | 4 | 82.94 | -1.42 |
| #5850.00 | 56.39 | PK | 74 | -17.61 | 153 | 229 | 54.97 | -1.42 |
| #5855.00 | 56.99 | PK | 74 | -17.01 | 153 | 229 | 55.57 | -1.42 |
| #5875.00 | 56.36 | PK | 74 | -17.64 | 112 | 337 | 54.92 | -1.44 |
| #5925.00 | 56.2 | PK | 74 | -17.8 | 112 | 337 | 54.63 | -1.57 |
| 11570 | 48.87 | PK | 74 | -25.13 | 151 | 247 | 55.63 | 6.76 |
| 11570 | 37.24 | AV | 54 | -16.76 | 151 | 247 | 44 | 6.76 |
| #17355.00 | 41.66 | PK | 74 | -32.34 | 150 | 10 | 53.91 | 12.25 |
| #17355.00 | 30.69 | AV | 54 | -23.31 | 150 | 10 | 42.94 | 12.25 |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 52.47 | PK | 74 | -21.53 | 153 | 129 | 50.77 | -1.7 |
| #5700.00 | 53.64 | PK | 74 | -20.36 | 218 | 148 | 51.94 | -1.7 |
| #5720.00 | 54.37 | PK | 74 | -19.63 | 133 | 49 | 52.73 | -1.64 |
| #5725.00 | 52.92 | PK | 74 | -21.08 | 113 | 54 | 51.3 | -1.62 |
| *5785.00 | 90.68 | PK | | | 250 | 280 | 89.26 | -1.42 |
| *5785.00 | 78.34 | AV | | | 250 | 280 | 76.92 | -1.42 |
| #5850.00 | 54.08 | PK | 74 | -19.92 | 234 | 191 | 52.66 | -1.42 |
| #5855.00 | 54.59 | PK | 74 | -19.41 | 234 | 191 | 53.17 | -1.42 |
| #5875.00 | 53.62 | PK | 74 | -20.38 | 224 | 314 | 52.18 | -1.44 |
| #5925.00 | 54.06 | PK | 74 | -19.94 | 224 | 314 | 52.49 | -1.57 |
| 11570 | 48.13 | PK | 74 | -25.87 | 119 | 124 | 54.89 | 6.76 |
| 11570 | 36.71 | AV | 54 | -17.29 | 119 | 124 | 43.47 | 6.76 |
| #17355.00 | 40.49 | PK | 74 | -33.51 | 137 | 195 | 52.74 | 12.25 |
| #17355.00 | 28.25 | AV | 54 | -25.75 | 137 | 195 | 40.5 | 12.25 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5785MHz: Fundamental frequency.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5825.00 | 96.87 | PK | | | 121 | 282 | 95.48 | -1.39 |
| *5825.00 | 84.39 | AV | | | 121 | 282 | 83 | -1.39 |
| #5850.00 | 62.26 | PK | 74 | -11.74 | 249 | 180 | 60.84 | -1.42 |
| #5855.00 | 58.16 | PK | 74 | -15.84 | 135 | 26 | 56.74 | -1.42 |
| #5875.00 | 56.24 | PK | 74 | -17.76 | 168 | 180 | 54.8 | -1.44 |
| #5925.00 | 56.82 | PK | 74 | -17.18 | 204 | 323 | 55.25 | -1.57 |
| 11650 | 47.8 | PK | 74 | -26.2 | 139 | 72 | 54.4 | 6.6 |
| 11650 | 36.21 | AV | 54 | -17.79 | 139 | 72 | 42.81 | 6.6 |
| #17475.00 | 40.68 | PK | 74 | -33.32 | 230 | 334 | 53.42 | 12.74 |
| #17475.00 | 28.92 | AV | 54 | -25.08 | 230 | 334 | 41.66 | 12.74 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5825.00 | 97.96 | PK | | | 213 | 289 | 96.57 | -1.39 |
| *5825.00 | 85.26 | AV | | | 213 | 289 | 83.87 | -1.39 |
| #5850.00 | 64.21 | PK | 74 | -9.79 | 232 | 303 | 62.79 | -1.42 |
| #5855.00 | 58.73 | PK | 74 | -15.27 | 211 | 276 | 57.31 | -1.42 |
| #5875.00 | 56.85 | PK | 74 | -17.15 | 244 | 126 | 55.41 | -1.44 |
| #5925.00 | 56.19 | PK | 74 | -17.81 | 227 | 1 | 54.62 | -1.57 |
| 11650 | 47.88 | PK | 74 | -26.12 | 223 | 297 | 54.48 | 6.6 |
| 11650 | 35.48 | AV | 54 | -18.52 | 223 | 297 | 42.08 | 6.6 |
| #17475.00 | 41.51 | PK | 74 | -32.49 | 124 | 133 | 54.25 | 12.74 |
| #17475.00 | 30.41 | AV | 54 | -23.59 | 124 | 133 | 43.15 | 12.74 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5825MHz: Fundamental frequency.

802.11n (40MHz)

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 56.54 | PK | 74 | -17.46 | 143 | 337 | 54.84 | -1.7 |
| #5700.00 | 56.56 | PK | 74 | -17.44 | 110 | 211 | 54.86 | -1.7 |
| #5720.00 | 63.15 | PK | 74 | -10.85 | 213 | 134 | 61.51 | -1.64 |
| #5725.00 | 64.62 | PK | 74 | -9.38 | 153 | 210 | 63 | -1.62 |
| *5755.00 | 93.3 | PK | | | 195 | 193 | 91.78 | -1.52 |
| *5755.00 | 81.74 | AV | | | 195 | 193 | 80.22 | -1.52 |
| 11510 | 49.42 | PK | 74 | -24.58 | 111 | 80 | 56.18 | 6.76 |
| 11510 | 36.34 | AV | 54 | -17.66 | 111 | 80 | 43.1 | 6.76 |
| #17265.00 | 41.99 | PK | 74 | -32.01 | 141 | 247 | 53.86 | 11.87 |
| #17265.00 | 28.84 | AV | 54 | -25.16 | 141 | 247 | 40.71 | 11.87 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 55.84 | PK | 74 | -18.16 | 223 | 278 | 54.14 | -1.7 |
| #5700.00 | 54.72 | PK | 74 | -19.28 | 237 | 252 | 53.02 | -1.7 |
| #5720.00 | 61.28 | PK | 74 | -12.72 | 166 | 275 | 59.64 | -1.64 |
| #5725.00 | 65.24 | PK | 74 | -8.76 | 124 | 100 | 63.62 | -1.62 |
| *5755.00 | 93.46 | PK | | | 215 | 225 | 91.94 | -1.52 |
| *5755.00 | 81.72 | AV | | | 215 | 225 | 80.2 | -1.52 |
| 11510 | 48.99 | PK | 74 | -25.01 | 173 | 64 | 55.75 | 6.76 |
| 11510 | 36.67 | AV | 54 | -17.33 | 173 | 64 | 43.43 | 6.76 |
| #17265.00 | 41.21 | PK | 74 | -32.79 | 243 | 5 | 53.08 | 11.87 |
| #17265.00 | 29.51 | AV | 54 | -24.49 | 243 | 5 | 41.38 | 11.87 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5795.00 | 93.84 | PK | | | 113 | 345 | 92.45 | -1.39 |
| *5795.00 | 81.46 | AV | | | 113 | 345 | 80.07 | -1.39 |
| #5850.00 | 55.88 | PK | 74 | -18.12 | 198 | 207 | 54.46 | -1.42 |
| #5855.00 | 55.92 | PK | 74 | -18.08 | 191 | 234 | 54.5 | -1.42 |
| #5875.00 | 56.66 | PK | 74 | -17.34 | 164 | 112 | 55.22 | -1.44 |
| #5925.00 | 56.24 | PK | 74 | -17.76 | 141 | 101 | 54.67 | -1.57 |
| 11590 | 49.03 | PK | 74 | -24.97 | 140 | 269 | 55.79 | 6.76 |
| 11590 | 37.48 | AV | 54 | -16.52 | 140 | 269 | 44.24 | 6.76 |
| #17385.00 | 41.04 | PK | 74 | -32.96 | 116 | 205 | 53.45 | 12.41 |
| #17385.00 | 29.37 | AV | 54 | -24.63 | 116 | 205 | 41.78 | 12.41 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| *5795.00 | 94.13 | PK | | | 188 | 32 | 92.74 | -1.39 |
| *5795.00 | 82.35 | AV | | | 188 | 32 | 80.96 | -1.39 |
| #5850.00 | 56.49 | PK | 74 | -17.51 | 218 | 213 | 55.07 | -1.42 |
| #5855.00 | 56.66 | PK | 74 | -17.34 | 195 | 204 | 55.24 | -1.42 |
| #5875.00 | 57.15 | PK | 74 | -16.85 | 115 | 111 | 55.71 | -1.44 |
| #5925.00 | 57.26 | PK | 74 | -16.74 | 223 | 335 | 55.69 | -1.57 |
| 11590 | 48.76 | PK | 74 | -25.24 | 239 | 7 | 55.52 | 6.76 |
| 11590 | 35.68 | AV | 54 | -18.32 | 239 | 7 | 42.44 | 6.76 |
| #17385.00 | 40.19 | PK | 74 | -33.81 | 137 | 158 | 52.6 | 12.41 |
| #17385.00 | 28.65 | AV | 54 | -25.35 | 137 | 158 | 41.06 | 12.41 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5795MHz: Fundamental frequency.

## 802.11ac (80MHz)

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 56.05 | PK | 74 | -17.95 | 188 | 189 | 54.35 | -1.7 |
| #5700.00 | 57.64 | PK | 74 | -16.36 | 142 | 206 | 55.94 | -1.7 |
| #5720.00 | 59.28 | PK | 74 | -14.72 | 116 | 123 | 57.64 | -1.64 |
| #5725.00 | 61.98 | PK | 74 | -12.02 | 213 | 240 | 60.36 | -1.62 |
| *5775.00 | 92.2 | PK | | | 184 | 247 | 90.68 | -1.52 |
| *5775.00 | 80.25 | AV | | | 184 | 247 | 78.73 | -1.52 |
| #5850.00 | 57.26 | PK | 74 | -16.74 | 217 | 108 | 55.84 | -1.42 |
| #5855.00 | 56.83 | PK | 74 | -17.17 | 170 | 134 | 55.41 | -1.42 |
| #5875.00 | 56.76 | PK | 74 | -17.24 | 204 | 281 | 55.32 | -1.44 |
| #5950.00 | 56.45 | PK | 74 | -17.55 | 163 | 337 | 54.88 | -1.57 |
| 11550 | 48.94 | PK | 74 | -25.06 | 153 | 200 | 55.7 | 6.76 |
| 11550 | 36.77 | AV | 54 | -17.23 | 153 | 200 | 43.53 | 6.76 |
| #17325.00 | 40.67 | PK | 74 | -33.33 | 241 | 169 | 52.76 | 12.09 |
| #17325.00 | 28.62 | AV | 54 | -25.38 | 241 | 169 | 40.71 | 12.09 |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | DETECTOR(PK/AV) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| #5650.00 | 56.12 | PK | 74 | -17.88 | 188 | 78 | 54.42 | -1.7 |
| #5700.00 | 57.51 | PK | 74 | -16.49 | 136 | 309 | 55.81 | -1.7 |
| #5720.00 | 58.93 | PK | 74 | -15.07 | 123 | 173 | 57.29 | -1.64 |
| #5725.00 | 60.43 | PK | 74 | -13.57 | 116 | 226 | 58.81 | -1.62 |
| *5775.00 | 92.85 | PK | | | 161 | 114 | 91.33 | -1.52 |
| *5775.00 | 81.37 | AV | | | 161 | 114 | 79.85 | -1.52 |
| #5850.00 | 58.31 | PK | 74 | -15.69 | 133 | 39 | 56.89 | -1.42 |
| #5855.00 | 57.63 | PK | 74 | -16.37 | 124 | 222 | 56.21 | -1.42 |
| #5875.00 | 56.53 | PK | 74 | -17.47 | 168 | 17 | 55.09 | -1.44 |
| #5950.00 | 57.38 | PK | 74 | -16.62 | 134 | 123 | 55.81 | -1.57 |
| 11550 | 49.62 | PK | 74 | -24.38 | 139 | 217 | 56.38 | 6.76 |
| 11550 | 37.76 | AV | 54 | -16.24 | 139 | 217 | 44.52 | 6.76 |
| #17325.00 | 43.28 | PK | 74 | -30.72 | 235 | 125 | 55.37 | 12.09 |
| #17325.00 | 32.91 | AV | 54 | -21.09 | 235 | 125 | 45 | 12.09 |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5775MHz: Fundamental frequency.

Note: Radiated Emission AND BANDEDGE Measurement Test was performed by **Lab B**.

## 3.2 OUT OF BAND EMISSION MEASUREMENT

### 3.2.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

| | APPLICABLE TO | EIRP LIMIT (dBm/MHz) |
|---|---|---|
| OUT OF THE RESTRICTED BANDS | 15.407(b)(1) | -27 |
| | 15.407(b)(2) | |
| | 15.407(b)(3) | |
| | 15.407(b)(4) | See note |

**NOTE:**

(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.

(2) For transmitters operating in the 5.25-5.35 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.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 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.

### 3.2.2 TEST INSTRUMENTS

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|---|---|---|---|---|---|
| 10dB Attenuator | JFW/USA | 50HF-010-SMA | 1505 | Jun. 24,19 | Jun. 23,20 |
| EXA Signal Analyzer | KEYSIGHT | N9010A-544 | MY54510355 | Jun. 24,19 | Jun. 23,20 |

**NOTE:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF OVEN ROOM.
3. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

### 3.2.3 TEST PROCEDURES

a. Cheak the calibration of the measurement instrument using either an internal calibrator or a known signal from an external generator.

b. The resolution bandwidth is set to 1MHzThe Video bandwidth is set to ≥1MHz, report the peak value out of oprating band.

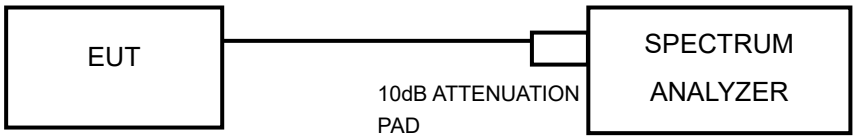
c. Repeat above procedures until all frequencies measured wre complete.

**NOTE:** All modes of operation were investigated and the worst-case emissions are reported,antenna gain was added into the test result.

### 3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

### 3.2.5 TEST SETUP




### 3.2.6 EUT OPERATING CONDITION

a. Set the EUT under full load condition and placed them on a testing table.

b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.

c. The necessary accessories enable the EUT in full functions.

## 3.2.7 TEST RESULTS

**For U-NII-1:**

| SPECTRUM PLOT OF BANDEDGE | |
|---|---|
| **802.11a Left Side** | **802.11a Right Side** |
|  |  |
| **802.11n20 Left Side** | **802.11n20 Right Side** |
|  |  |

| 802.11n40 Left Side | 802.11n40 Right Side |
|---|---|
|  |  |
| **802.11ac80 Left Side** | **802.11ac80 Right Side** |
|  |  |

**For U-NII-2A:**

| SPECTRUM PLOT OF BANDEDGE | |
|---|---|
| 802.11a Left Side | 802.11a Right Side |
|  |  |
| 802.11n20 Left Side | 802.11n20 Right Side |
|  |  |

| 802.11n40 Left Side | 802.11n40 Right Side |
|---|---|
|  |  |
| **802.11ac80 Left Side** | **802.11ac80 Right Side** |
|  |  |

## For U-NII-2C:

| SPECTRUM PLOT OF BANDEDGE | |
|---|---|
| 802.11a Left Side | 802.11a Right Side |
|  |  |
| 802.11n20 Left Side | 802.11n20 Right Side |
|  |  |

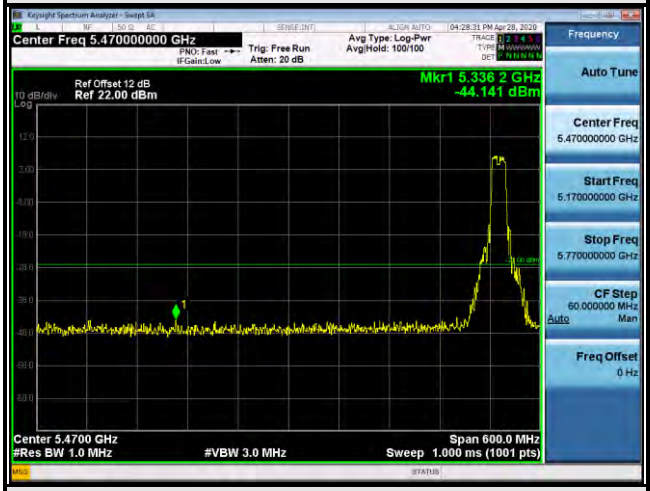
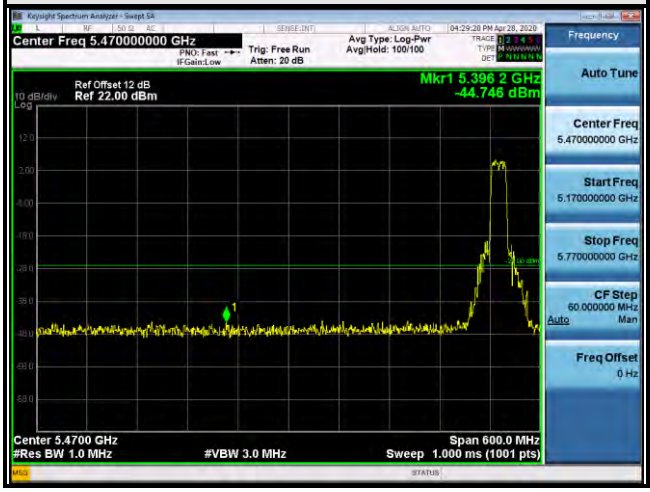
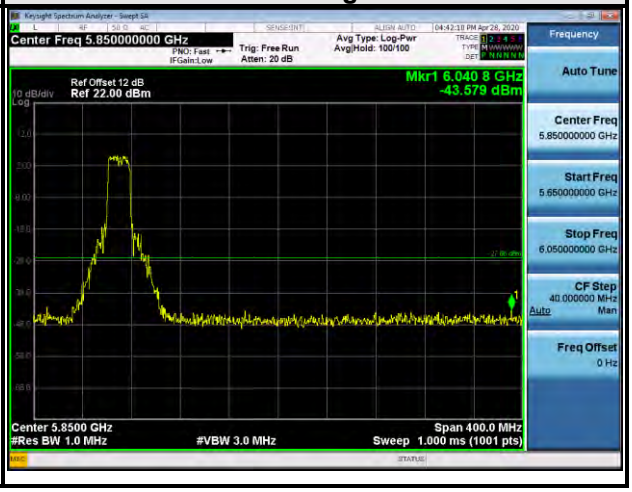
| 802.11n40 Left Side | 802.11n40 Right Side |
|---|---|
|  |  |
| **802.11ac80 Left Side** | **802.11ac80 Right Side** |
|  |  |

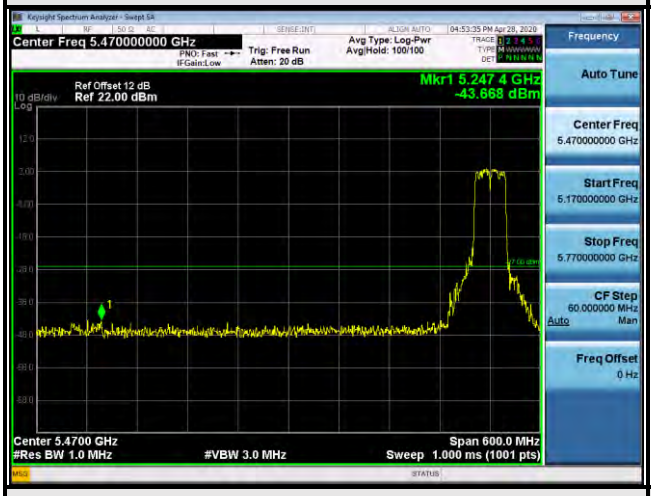
## For U-NII-3:

| SPECTRUM PLOT OF BANDEDGE | |
|---|---|
| 802.11a Left Side | 802.11a Right Side |
|  |  |
| 802.11n20 Left Side | 802.11n20 Right Side |
|  |  |

| 802.11n40 Left Side | 802.11n40 Right Side |
|---|---|
|  |  |
| **802.11ac80 Left Side** | **802.11ac80 Right Side** |
|  |  |

For 144, 142, 138

| SPECTRUM PLOT OF BANDEDGE | |
|---|---|
| 802.11a Left Side | 802.11a Right Side |
|  |  |
| 802.11n20 Left Side | 802.11n20 Right Side |
|  |  |

| 802.11n40 Left Side | 802.11n40 Right Side |
|---|---|
|  |  |
| **802.11ac80 Left Side** | **802.11ac80 Right Side** |
|  |  |

## 3.3 CONDUCTED EMISSION MEASUREMENT

### 3.3.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

| FREQUENCY OF EMISSION (MHz) | CONDUCTED LIMIT (dBμV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15 ~ 0.5 | 66 to 56 | 56 to 46 |
| 0.5 ~ 5 | 56 | 46 |
| 5 ~ 30 | 60 | 50 |

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

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

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

### 3.3.2 TEST INSTRUMENTS

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|---|---|---|---|---|---|
| EMI Test Receiver | Rohde&Schwarz | ESR3 | 101900 | Feb. 28,20 | Feb. 27,21 |
| EMC32 test software | Rohde&Schwarz | EMC32 | NA | NA | NA |
| LISN network | Rohde&Schwarz | ENV216 | 101922 | Feb. 28,20 | Feb. 27,21 |

**NOTE:**

1. The test was performed in CE shielded room.
2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

### 3.3.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

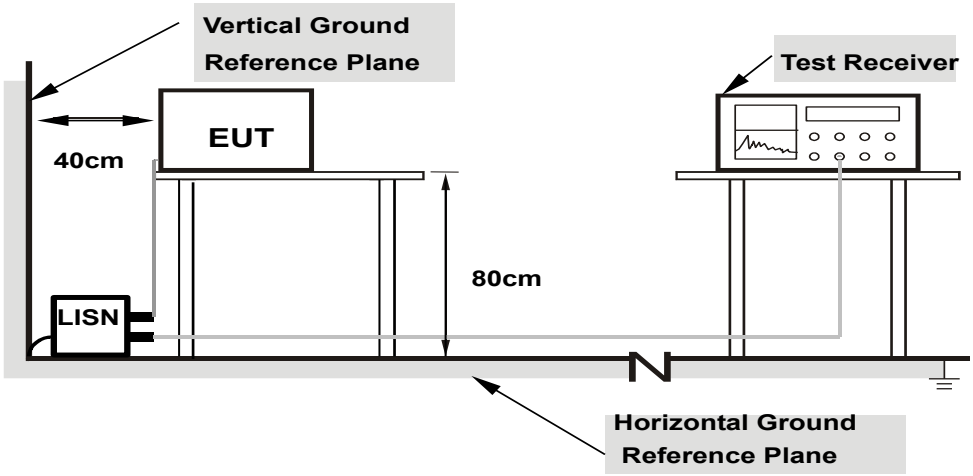
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

**NOTE:** All modes of operation were investigated and the worst-case emissions are reported.

### 3.3.4 DEVIATION FROM TEST STANDARD

No deviation.

### 3.3.5 TEST SETUP




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

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

### 3.3.6 EUT OPERATING CONDITIONS

Same as 3.1.6.

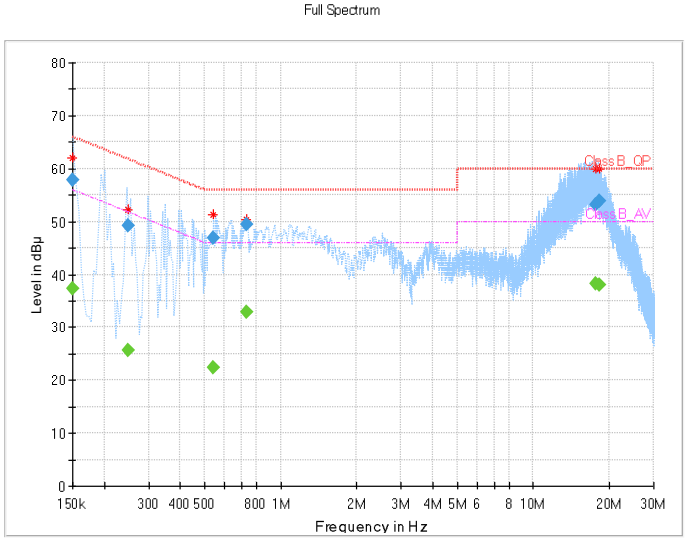
## 3.3.7 TEST RESULTS

**CONDUCTED WORST-CASE DATA :**

| Frequency Range | 150KHz ~ 30MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9 kHz |
|---|---|---|---|
| Input Power | 120Vac, 60Hz | Environmental Conditions | 23deg. C, 55RH |
| Tested By | Chase Zhou | | |

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.150000 | --- | 37.40 | 56.00 | -18.60 | L1 | ON | 9.7 |
| 0.150000 | 57.91 | --- | 66.00 | -8.09 | L1 | ON | 9.7 |
| 0.248000 | --- | 25.60 | 51.82 | -26.22 | L1 | ON | 9.7 |
| 0.248000 | 49.25 | --- | 61.82 | -12.58 | L1 | ON | 9.7 |
| 0.540000 | --- | 22.42 | 46.00 | -23.58 | L1 | ON | 9.7 |
| 0.540000 | 46.82 | --- | 56.00 | -9.18 | L1 | ON | 9.7 |
| 0.736000 | --- | 32.92 | 46.00 | -13.08 | L1 | ON | 9.7 |
| 0.736000 | 49.40 | --- | 56.00 | -6.60 | L1 | ON | 9.7 |
| 17.596000 | --- | 38.14 | 50.00 | -11.86 | L1 | ON | 10.0 |
| 17.596000 | 53.20 | --- | 60.00 | -6.80 | L1 | ON | 10.0 |
| 18.188000 | --- | 37.91 | 50.00 | -12.09 | L1 | ON | 10.0 |
| 18.188000 | 53.84 | --- | 60.00 | -6.16 | L1 | ON | 10.0 |

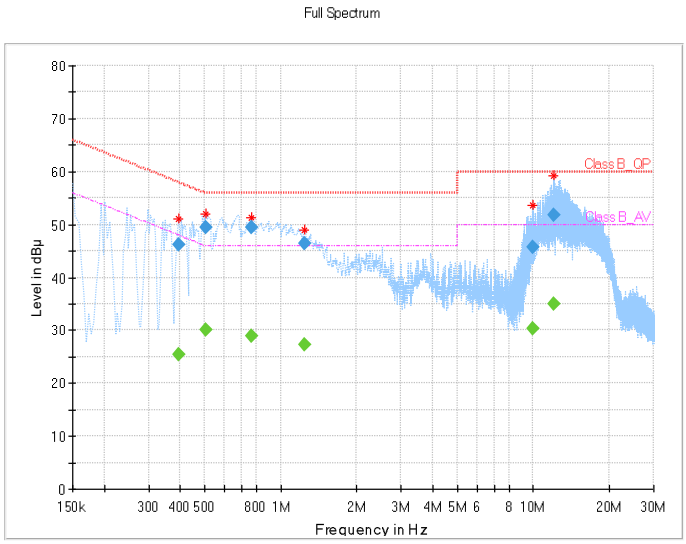
**REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



| Frequency Range | 150KHz ~ 30MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9 kHz |
|---|---|---|---|
| Input Power | 120Vac, 60Hz | Environmental Conditions | 23deg. C, 55RH |
| Tested By | Chase Zhou | | |

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.396000 | --- | 25.37 | 47.94 | -22.57 | N | ON | 9.8 |
| 0.396000 | 46.18 | --- | 57.94 | -11.76 | N | ON | 9.8 |
| 0.508000 | --- | 30.00 | 46.00 | -16.00 | N | ON | 9.8 |
| 0.508000 | 49.49 | --- | 56.00 | -6.51 | N | ON | 9.8 |
| 0.768000 | --- | 28.99 | 46.00 | -17.01 | N | ON | 9.8 |
| 0.768000 | 49.39 | --- | 56.00 | -6.61 | N | ON | 9.8 |
| 1.244000 | --- | 27.37 | 46.00 | -18.63 | N | ON | 9.8 |
| 1.244000 | 46.43 | --- | 56.00 | -9.57 | N | ON | 9.8 |
| 9.964000 | --- | 30.38 | 50.00 | -19.62 | N | ON | 10.0 |
| 9.964000 | 45.65 | --- | 60.00 | -14.35 | N | ON | 10.0 |
| 12.084000 | --- | 34.89 | 50.00 | -15.11 | N | ON | 10.0 |
| 12.084000 | 51.75 | --- | 60.00 | -8.25 | N | ON | 10.0 |

**REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



## 3.4 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

### 3.4.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

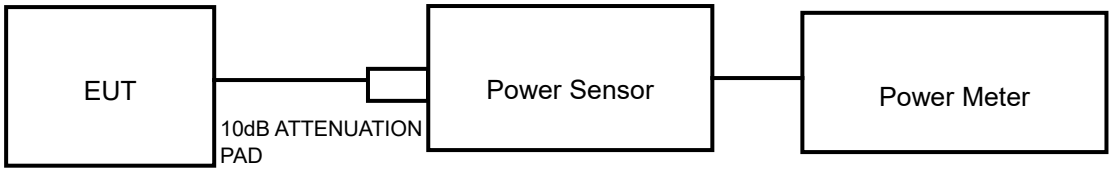
| Operation Band | EUT Category | | LIMIT |
|---|---|---|---|
| U-NII-1 | | Outdoor Access Point | 1 Watt (30 dBm)<br>(Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon) |
| | | Fixed point-to-point Access Point | 1 Watt (30 dBm) |
| | | Indoor Access Point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

**NOTE:** Where B is the 26dB emission bandwidth in MHz.

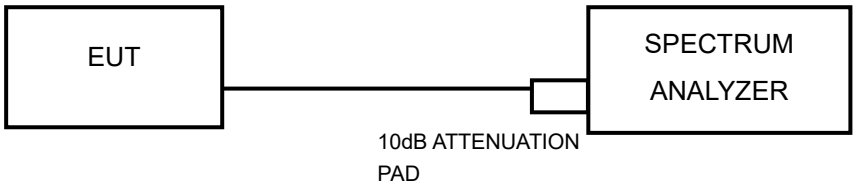
## 3.4.2 TEST SETUP

### FOR POWER OUTPUT MEASUREMENT

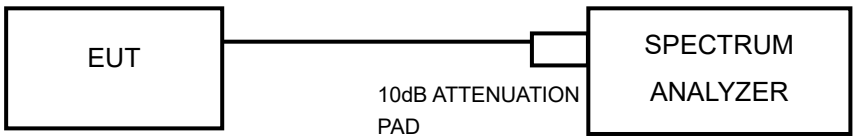
### 802.11a, 802.11n (20MHz), 802.11n (40MHz) TEST CONFIGURATION




### 11ac TEST CONFIGURATION




### FOR 26dB BANDWIDTH




## 3.4.3 TEST INSTRUMENTS

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|---|---|---|---|---|---|
| Power Meter | ANRITSU | ML2495A | 1506002 | Feb. 28,20 | Feb. 27,21 |
| EXA Signal Analyzer | KEYSIGHT | N9010A-526 | MY54510322 | Feb. 28,20 | Feb. 27,21 |
| EXA Signal Analyzer | KEYSIGHT | N9010A-544 | MY54510355 | Feb. 28,20 | Feb. 27,21 |
| Power Sensor | ANRITSU | MA2411B | 1339352 | Feb. 28,20 | Feb. 27,21 |

**NOTE:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.

## 3.4.4 TEST PROCEDURE

### FOR POWER MEASUREMENT

#### For 802.11a, 802.11n (20MHz), 802.11n (40MHz)

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

#### For 802.11ac (80MHz)

1. Measure the duty cycle, x, of the transmitter output signal as described in II.B.
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
3. Set RBW = 1 MHz.
4. Set VBW ≥ 3 MHz.
5. Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto.
7. Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
8. Do not use sweep triggering. Allow the sweep to “free run.”
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
10. Add 10 log (1/x), where x is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add 10 log (1/0.25) = 6 dB if the duty cycle is 25%.

**FOR 99 PERCENT OCCUPIED BANDWIDTH**

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 · RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

**FOR 26dB BANDWIDTH**

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

**FOR 6dB BANDWIDTH**

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### 3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

## 3.4.7 TEST RESULTS

**OUTPUT POWER:**

**802.11a**

| CHANNEL | CHANNEL FREQUENCY (MHz) | AVERAGE POWER (dBm) | Duty Factor | FINAL AVERAGE POWER (dBm) | FINAL AVERAGE POWER (mW) | POWER LIMIT (dBm) | PASS/FAIL |
|---|---|---|---|---|---|---|---|
| 36 | 5180 | 14.91 | 0 | 14.91 | 30.97 | 24 | PASS |
| 40 | 5200 | 14.86 | 0 | 14.86 | 30.62 | 24 | PASS |
| 48 | 5240 | 14.98 | 0 | 14.98 | **31.48** | 24 | PASS |
| 52 | 5260 | 14.83 | 0 | 14.83 | 30.41 | 24 | PASS |
| 60 | 5300 | 14.56 | 0 | 14.56 | 28.58 | 24 | PASS |
| 64 | 5320 | 14.71 | 0 | 14.71 | 29.58 | 24 | PASS |
| 100 | 5500 | 14.33 | 0 | 14.33 | 27.10 | 24 | PASS |
| 116 | 5580 | 14.95 | 0 | 14.95 | 31.26 | 24 | PASS |
| 140 | 5700 | 14.96 | 0 | 14.96 | 31.33 | 24 | PASS |
| 144 | 5720 | 14.85 | 0 | 14.85 | 30.55 | 24 | PASS |
| 144 | 5720 | 14.85 | 0 | 14.85 | 30.55 | 30 | PASS |
| 149 | 5745 | 14.79 | 0 | 14.79 | 30.13 | 30 | PASS |
| 157 | 5785 | 14.86 | 0 | 14.86 | 30.62 | 30 | PASS |
| 165 | 5825 | 14.82 | 0 | 14.82 | 30.34 | 30 | PASS |

802.11n (20MHz)

| CHANNEL | CHANNEL FREQUENCY (MHz) | AVERAGE POWER (dBm) | Duty Factor | FINAL AVERAGE POWER (dBm) | FINAL AVERAGE POWER (mW) | POWER LIMIT (dBm) | PASS/FAIL |
|---|---|---|---|---|---|---|---|
| 36 | 5180 | 14.75 | 0 | 14.75 | 29.85 | 24 | PASS |
| 40 | 5200 | 14.72 | 0 | 14.72 | 29.65 | 24 | PASS |
| 48 | 5240 | 14.85 | 0 | 14.85 | 30.55 | 24 | PASS |
| 52 | 5260 | 14.96 | 0 | 14.96 | 31.33 | 24 | PASS |
| 60 | 5300 | 14.95 | 0 | 14.95 | 31.26 | 24 | PASS |
| 64 | 5320 | 14.48 | 0 | 14.48 | 28.05 | 24 | PASS |
| 100 | 5500 | 14.66 | 0 | 14.66 | 29.24 | 24 | PASS |
| 116 | 5580 | 14.98 | 0 | 14.98 | **31.48** | 24 | PASS |
| 140 | 5700 | 14.88 | 0 | 14.88 | 30.76 | 24 | PASS |
| 144 | 5720 | 14.31 | 0 | 14.31 | 26.98 | 24 | PASS |
| 144 | 5720 | 14.31 | 0 | 14.31 | 26.98 | 30 | PASS |
| 149 | 5745 | 14.68 | 0 | 14.68 | 29.38 | 30 | PASS |
| 157 | 5785 | 14.95 | 0 | 14.95 | 31.26 | 30 | PASS |
| 165 | 5825 | 14.88 | 0 | 14.88 | 30.76 | 30 | PASS |

### 802.11n (40MHz)

| CHANNEL | CHANNEL FREQUENCY (MHz) | AVERAGE POWER (dBm) | Duty Factor | FINAL AVERAGE POWER (dBm) | FINAL AVERAGE POWER (mW) | POWER LIMIT (dBm) | PASS/FAIL |
|---|---|---|---|---|---|---|---|
| 38 | 5190 | 14.95 | 0 | 14.95 | 31.26 | 24 | PASS |
| 46 | 5230 | 14.52 | 0 | 14.52 | 28.31 | 24 | PASS |
| 54 | 5270 | 14.56 | 0 | 14.56 | 28.58 | 24 | PASS |
| 62 | 5310 | 14.98 | 0 | 14.98 | **31.48** | 24 | PASS |
| 102 | 5510 | 14.95 | 0 | 14.95 | 31.26 | 24 | PASS |
| 110 | 5550 | 14.79 | 0 | 14.79 | 30.13 | 24 | PASS |
| 134 | 5670 | 14.32 | 0 | 14.32 | 27.04 | 24 | PASS |
| 142 | 5710 | 14.97 | 0 | 14.97 | 31.41 | 24 | PASS |
| 142 | 5710 | 14.97 | 0 | 14.97 | **31.41** | 30 | PASS |
| 151 | 5755 | 14.31 | 0 | 14.31 | 26.98 | 30 | PASS |
| 159 | 5798 | 14.84 | 0 | 14.84 | 30.48 | 30 | PASS |

### 802.11ac (80MHz)

| CHANNEL | CHANNEL FREQUENCY (MHz) | AVERAGE POWER (dBm) | Duty Factor | FINAL AVERAGE POWER (dBm) | FINAL AVERAGE POWER (mW) | POWER LIMIT (dBm) | PASS/FAIL |
|---|---|---|---|---|---|---|---|
| 42 | 5210 | 14.57 | 0 | 14.57 | 28.64 | 24 | PASS |
| 58 | 5290 | 14.97 | 0 | 14.97 | 31.41 | 24 | PASS |
| 106 | 5530 | 14.71 | 0 | 14.71 | 29.58 | 24 | PASS |
| 122 | 5610 | 14.95 | 0 | 14.95 | 31.26 | 24 | PASS |
| 138 | 5690 | 14.87 | 0 | 14.87 | 30.69 | 24 | PASS |
| 138 | 5690 | 14.87 | 0 | 14.87 | 30.69 | 30 | PASS |
| 155 | 5775 | 14.61 | 0 | 14.61 | 28.91 | 30 | PASS |

## 99% OCCUPIED BANDWIDTH & 26dB BANDWIDTH/6dB BANDWIDTH DATA FROM:

## 802.11a

| CHANNEL | CHANNEL FREQUENCY (MHz) | 99% OCCUPIED BANDWIDTH | 26dB BANDWIDTH (MHz) | PASS/FAIL |
|---|---|---|---|---|
| 36 | 5180 | 16.92 | 28.35 | PASS |
| 40 | 5200 | 16.98 | 27.73 | PASS |
| 48 | 5240 | 16.86 | 27.00 | PASS |
| 52 | 5260 | 16.86 | 30.09 | PASS |
| 60 | 5300 | 16.92 | 29.41 | PASS |
| 64 | 5320 | 16.92 | 28.75 | PASS |
| 100 | 5500 | 16.86 | 28.51 | PASS |
| 116 | 5580 | 16.92 | 28.69 | PASS |
| 140 | 5700 | 16.86 | 29.44 | PASS |
| 144 | 5720 | 16.92 | 28.28 | PASS |
| **CHANNEL** | **CHANNEL FREQUENCY** | **99% OCCUPIED BANDWIDTH** | **6dB BANDWIDTH** | **PASS/FAIL** |
| 144 | 5720 | 16.92 | 16.36 | PASS |
| 149 | 5745 | 16.86 | 16.35 | PASS |
| 157 | 5785 | 16.86 | 16.35 | PASS |
| 165 | 5825 | 16.86 | 16.35 | PASS |

802.11n (20MHz)

| CHANNEL | CHANNEL FREQUENCY (MHz) | 99% OCCUPIED BANDWIDTH | 26dB BANDWIDTH (MHz) | PASS/FAIL |
|---|---|---|---|---|
| 36 | 5180 | 17.82 | 29.71 | PASS |
| 40 | 5200 | 17.82 | 26.54 | PASS |
| 48 | 5240 | 17.76 | 29.53 | PASS |
| 52 | 5260 | 17.82 | 31.75 | PASS |
| 60 | 5300 | 17.70 | 30.39 | PASS |
| 64 | 5320 | 17.82 | 30.07 | PASS |
| 100 | 5500 | 17.82 | 28.30 | PASS |
| 116 | 5580 | 17.88 | 29.39 | PASS |
| 140 | 5700 | 17.76 | 31.04 | PASS |
| 144 | 5720 | 17.82 | 31.11 | PASS |
| **CHANNEL** | **CHANNEL FREQUENCY** | **99% OCCUPIED BANDWIDTH** | **6dB BANDWIDTH** | **PASS/FAIL** |
| 144 | 5720 | 17.82 | 17.57 | PASS |
| 149 | 5745 | 17.82 | 17.56 | PASS |
| 157 | 5785 | 17.88 | 17.59 | PASS |
| 165 | 5825 | 17.82 | 17.54 | PASS |

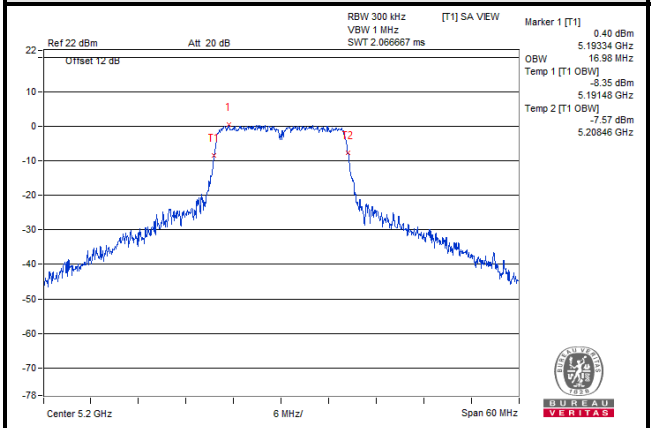
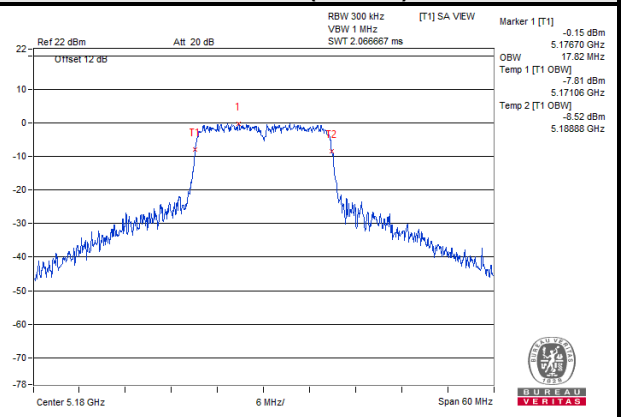
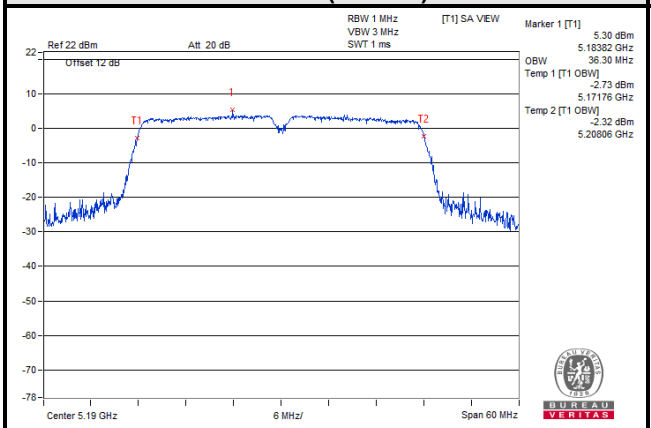
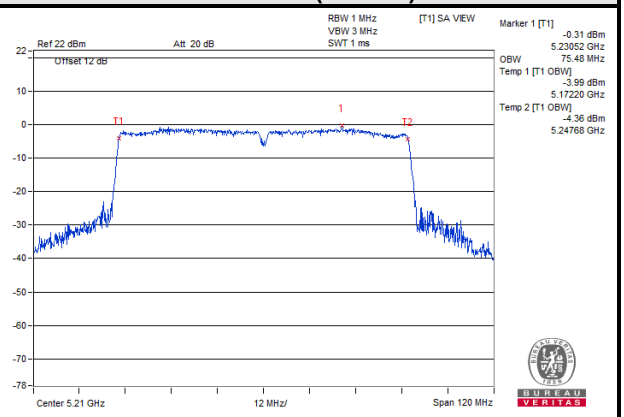
### 802.11n (40MHz)

| CHANNEL | CHANNEL FREQUENCY (MHz) | 99% OCCUPIED BANDWIDTH | 26dB BANDWIDTH (MHz) | PASS/FAIL |
|---|---|---|---|---|
| 38 | 5190 | 36.3 | 49.45 | PASS |
| 46 | 5230 | 36.24 | 52.55 | PASS |
| 54 | 5270 | 36.36 | 51.99 | PASS |
| 62 | 5310 | 36.24 | 47.66 | PASS |
| 102 | 5510 | 36.30 | 45.77 | PASS |
| 110 | 5550 | 36.24 | 45.31 | PASS |
| 134 | 5670 | 36.24 | 53.04 | PASS |
| 142 | 5710 | 36.24 | 49.76 | PASS |
| **CHANNEL** | **CHANNEL FREQUENCY** | **99% OCCUPIED BANDWIDTH** | **6dB BANDWIDTH** | **PASS/FAIL** |
| 142 | 5710 | 36.24 | 35.80 | PASS |
| 151 | 5755 | 36.24 | 36.06 | PASS |
| 159 | 5795 | 36.24 | 35.82 | PASS |

### 802.11ac (80MHz)

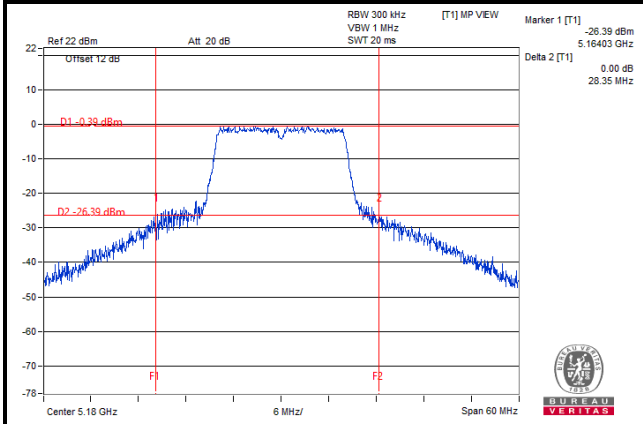
| CHANNEL | CHANNEL FREQUENCY (MHz) | 99% OCCUPIED BANDWIDTH | 26dB BANDWIDTH (MHz) | PASS/FAIL |
|---|---|---|---|---|
| 42 | 5210 | 75.48 | 91.25 | PASS |
| 58 | 5290 | 75.60 | 87.22 | PASS |
| 106 | 5530 | 75.48 | 91.79 | PASS |
| 122 | 5610 | 75.36 | 90.06 | PASS |
| 138 | 5690 | 75.48 | 84.31 | PASS |
| **CHANNEL** | **CHANNEL FREQUENCY** | **99% OCCUPIED BANDWIDTH** | **6dB BANDWIDTH** | **PASS/FAIL** |
| 138 | 5690 | 75.48 | 75.88 | PASS |
| 155 | 5775 | 75.48 | 75.69 | PASS |

## For U-NII-1:

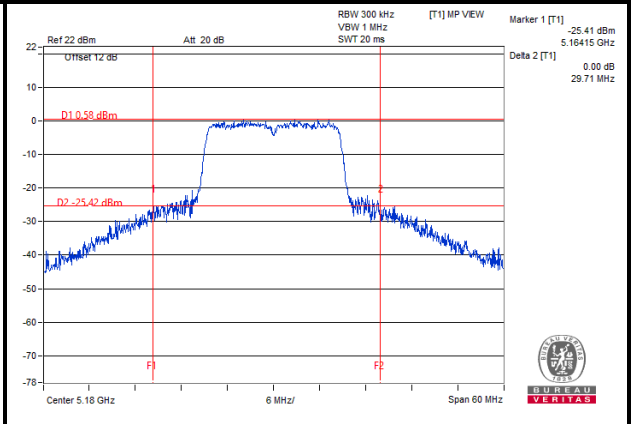
| SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH | |
|---|---|
| 802.11a | 802.11n (20MHz) |
|  |  |
| 802.11n (40MHz) | 802.11ac (80MHz) |
|  |  |

## SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

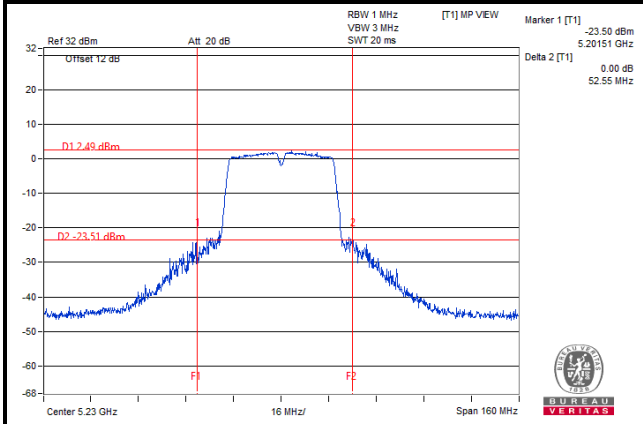
### 802.11a



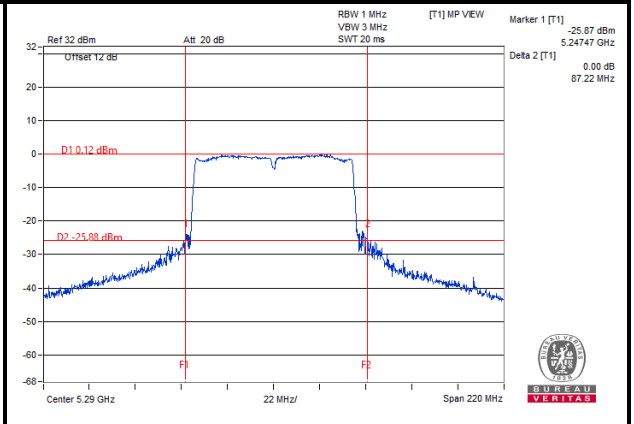

### 802.11n (20MHz)



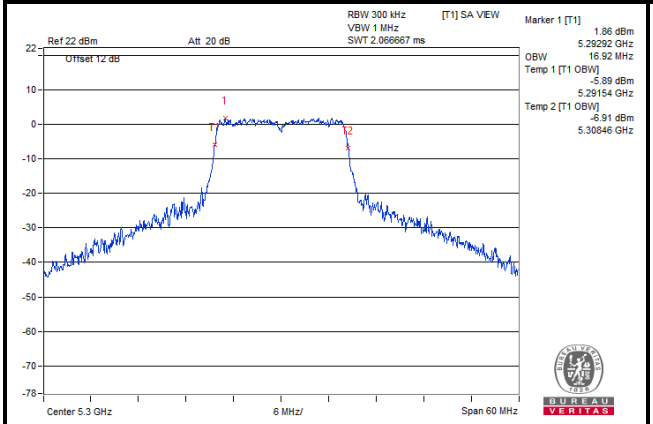
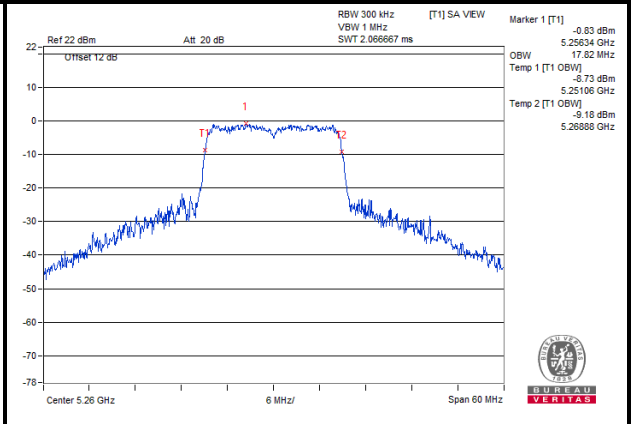
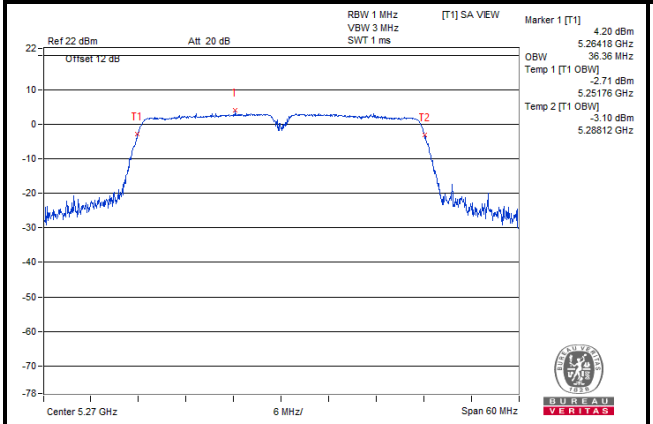
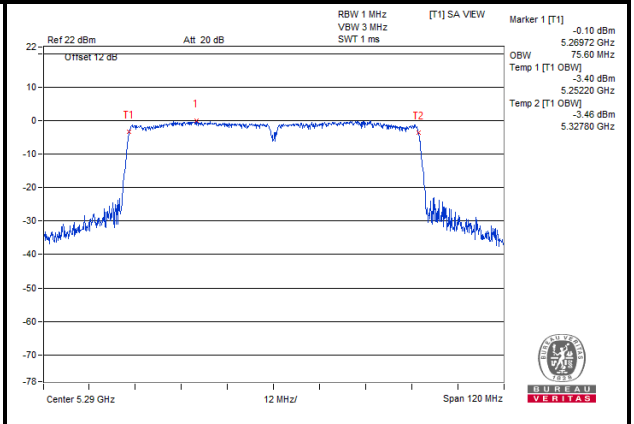

### 802.11n (40MHz)




### 802.11ac (80MHz)

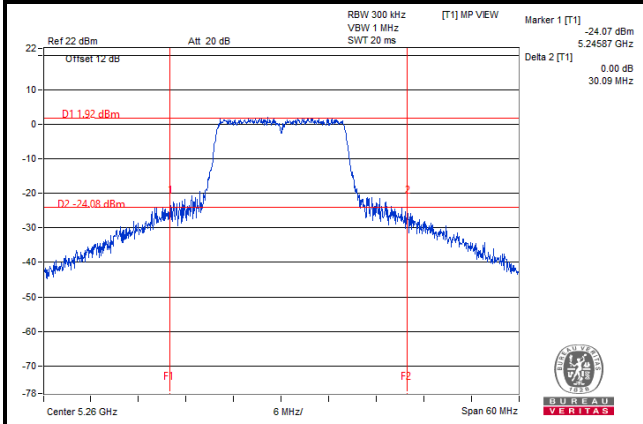


## For U-NII-2A:

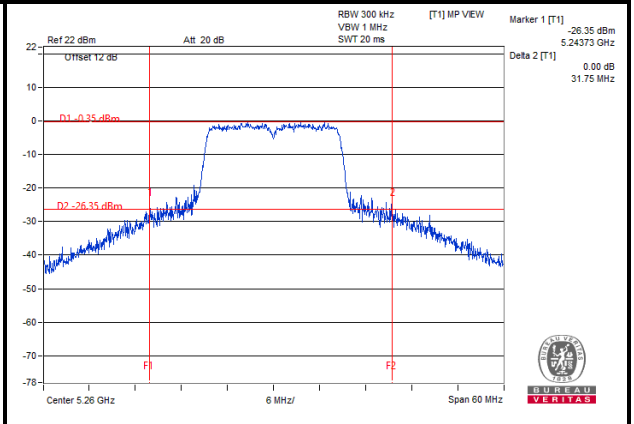
| SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH | |
|---|---|
| 802.11a | 802.11n (20MHz) |
|  |  |
| 802.11n (40MHz) | 802.11ac (80MHz) |
|  |  |

## SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

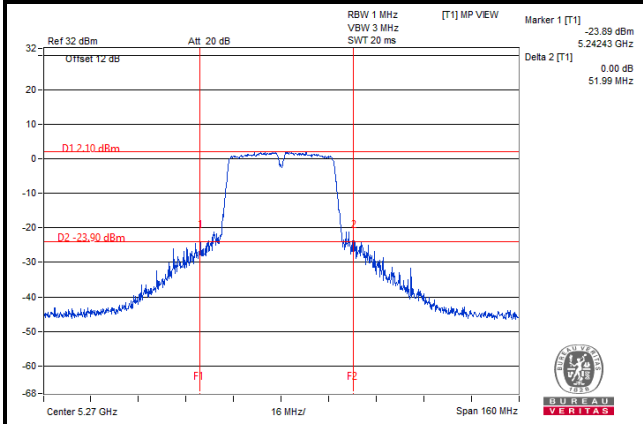
### 802.11a



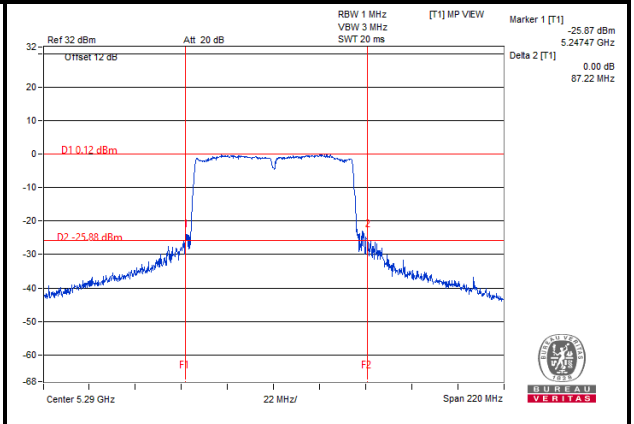

### 802.11n (20MHz)



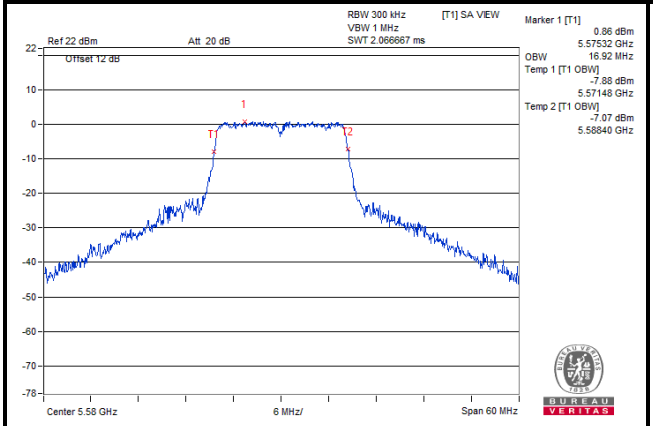
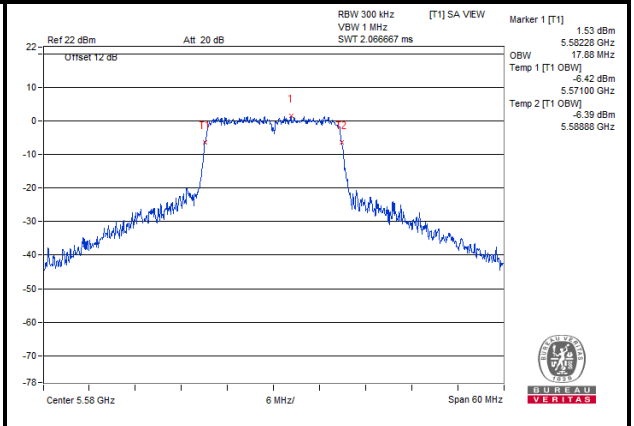
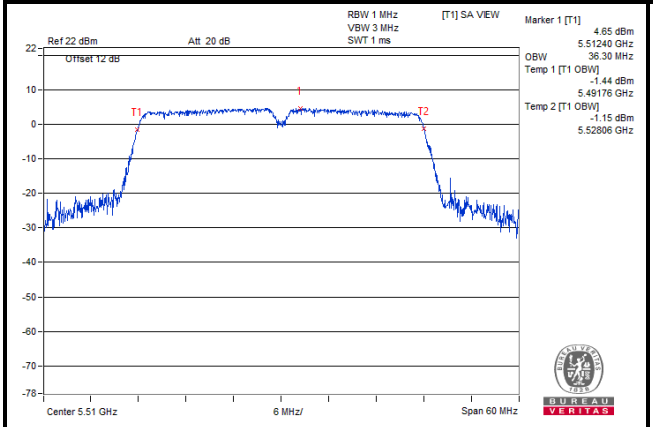
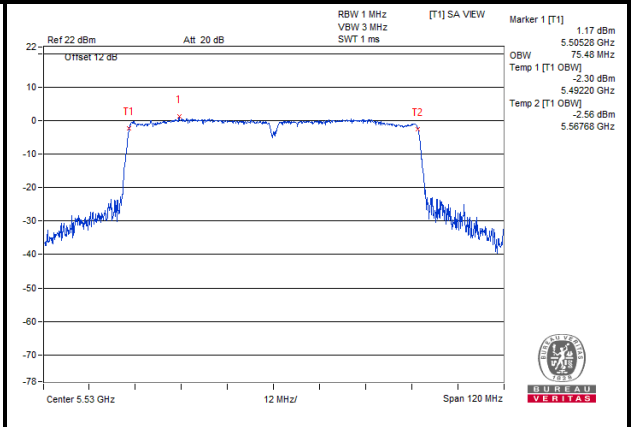

### 802.11n (40MHz)




### 802.11ac (80MHz)

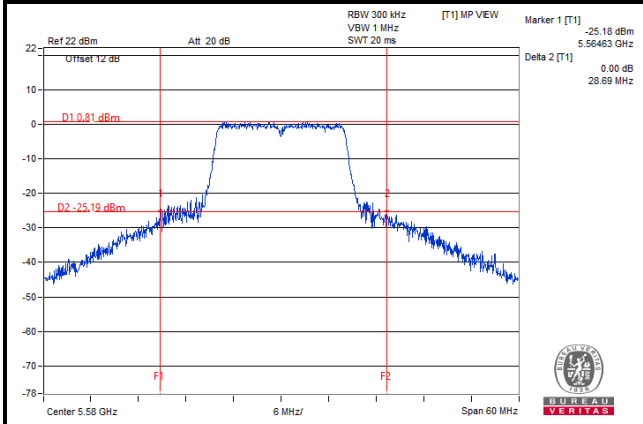


## For U-NII-2C:

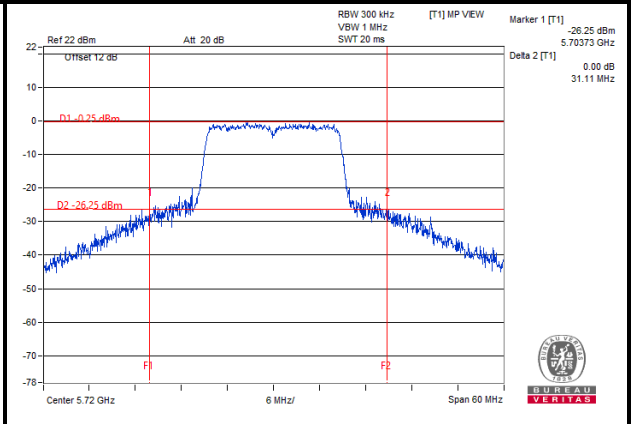
| SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH | |
|---|---|
| 802.11a | 802.11n (20MHz) |
|  |  |
| 802.11n (40MHz) | 802.11ac (80MHz) |
|  |  |

## SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

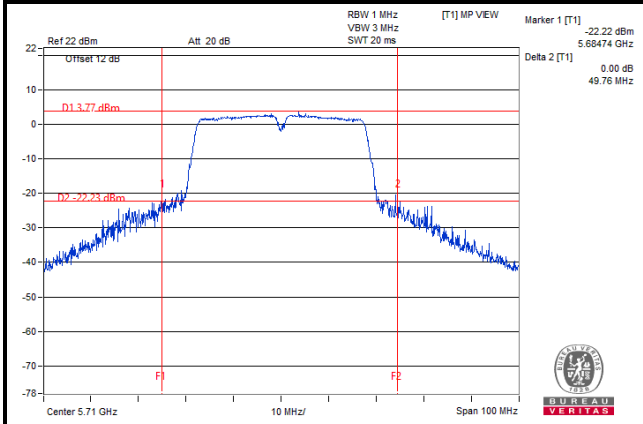
### 802.11a



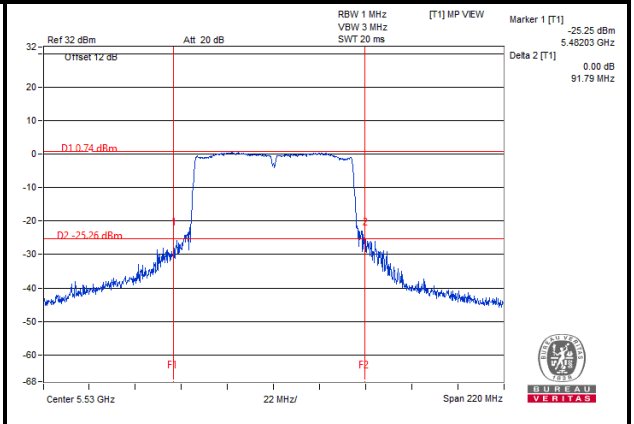

### 802.11n (20MHz)



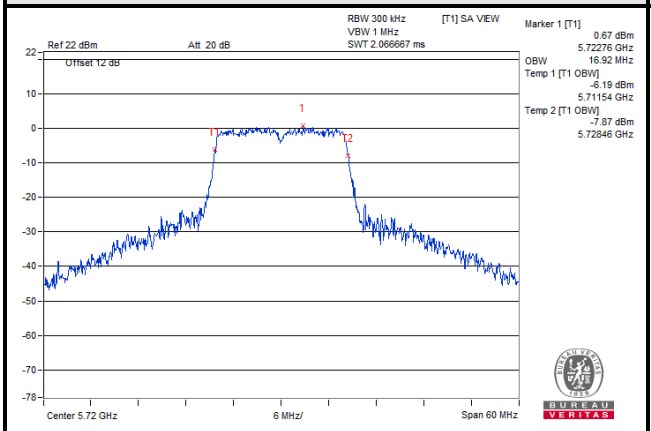
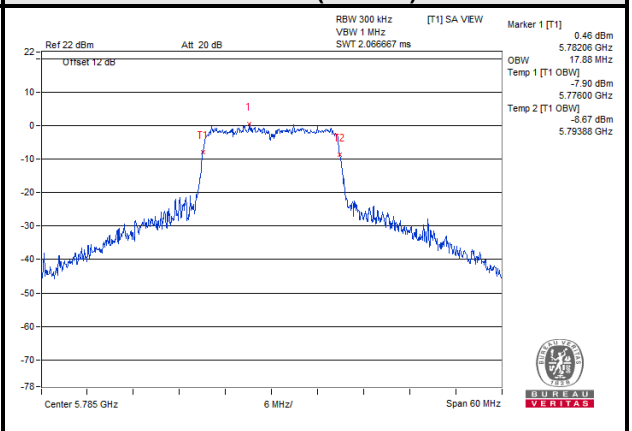
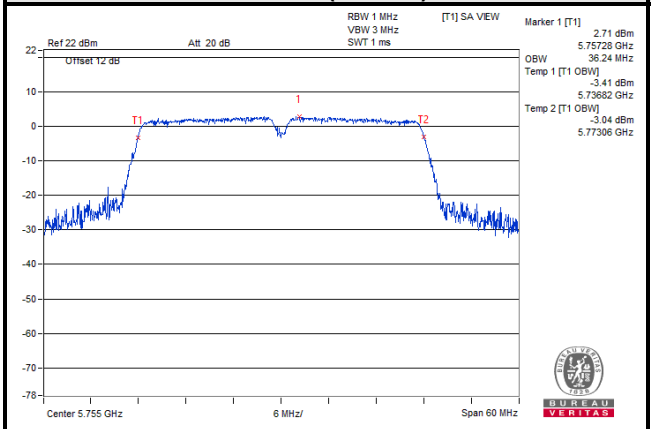
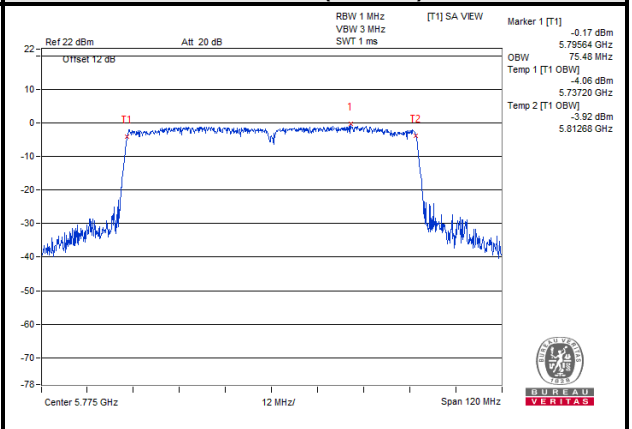

### 802.11n (40MHz)




### 802.11ac (80MHz)

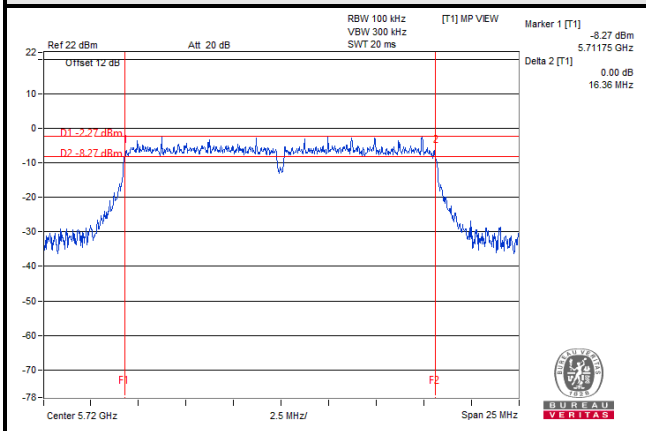


## For U-NII-3:

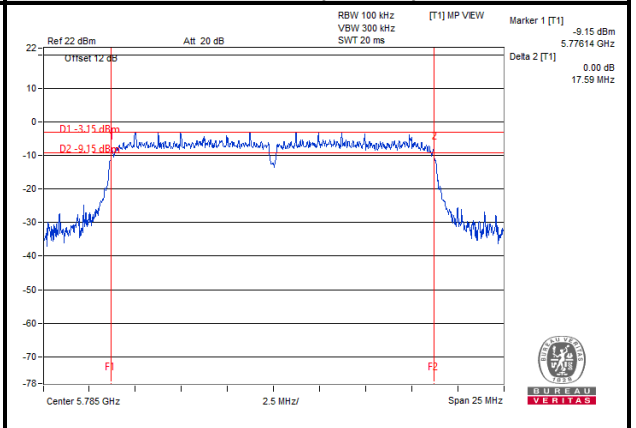
| SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH | |
|---|---|
| 802.11a | 802.11n (20MHz) |
|  |  |
| 802.11n (40MHz) | 802.11ac (80MHz) |
|  |  |

## SPECTRUM PLOT OF WORST VALUE of 6dB Bandwidth

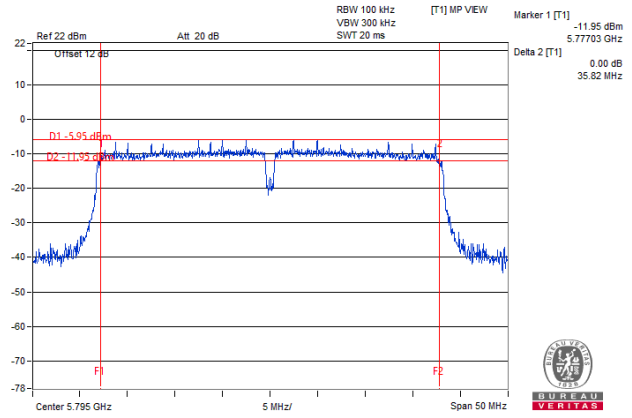
### 802.11a



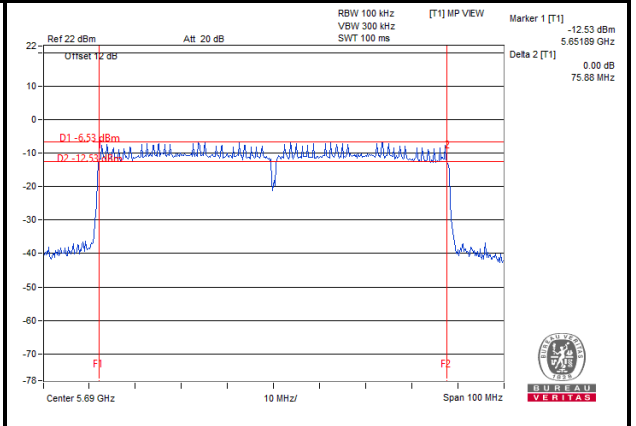

### 802.11n (20MHz)




### 802.11n (40MHz)




### 802.11ac (80MHz)

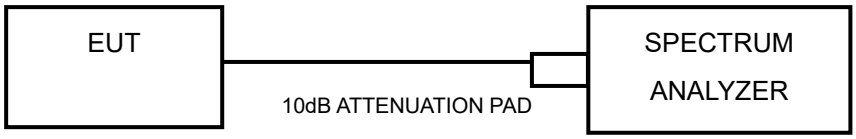


## 3.5 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

### 3.5.1 LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

| Operation Band | EUT Category | | LIMIT |
|---|---|---|---|
| U-NII-1 | | Outdoor Access Point | 17dBm/ MHz |
| | | Fixed point-to-point Access Point | |
| | | Indoor Access Point | |
| | √ | Client devices | 11dBm/ MHz |
| U-NII-2A | √ | | 11dBm/ MHz |
| U-NII-2C | √ | | 11dBm/ MHz |
| U-NII-3 | √ | | 30dBm/ 500kHz |

### 3.5.2 TEST SETUP




### 3.5.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

### 3.5.4 TEST PROCEDURES

Using method SA-2

1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).
7) Record the max value

### 3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.5.6 EUT OPERATING CONDITIONS

Same as 3.1.6.

## 3.5.7 TEST RESULTS

**For U-NII-1 & U-NII-2A& U-NII-2C:**

**802.11a**

| CHANNEL | FREQUENCY (MHz) | PSD w/o Duty Factor (dBm/MHz) | Duty Factor | PSD with Duty Factor (dBm/MHz) | MAXIMUM LIMIT (dBm/MHz) | PASS/FAIL |
|---|---|---|---|---|---|---|
| 36 | 5180 | -4.12 | 0 | -4.12 | 11 | PASS |
| 40 | 5200 | -3.50 | 0 | -3.50 | 11 | PASS |
| 48 | 5240 | -1.56 | 0 | -1.56 | 11 | PASS |
| 52 | 5260 | -1.58 | 0 | -1.58 | 11 | PASS |
| 60 | 5300 | -1.46 | 0 | -1.46 | 11 | PASS |
| 64 | 5320 | -1.40 | 0 | -1.40 | 11 | PASS |
| 100 | 5500 | -2.72 | 0 | -2.72 | 11 | PASS |
| 116 | 5580 | -2.77 | 0 | -2.77 | 11 | PASS |
| 140 | 5700 | -3.12 | 0 | -3.12 | 11 | PASS |
| 144 | 5720 | 2.56 | 0 | 2.56 | 11 | PASS |

**802.11n (20MHz)**

| CHANNEL | FREQUENCY (MHz) | PSD w/o Duty Factor (dBm/MHz) | Duty Factor | PSD with Duty Factor (dBm/MHz) | MAXIMUM LIMIT (dBm/MHz) | PASS/FAIL |
|---|---|---|---|---|---|---|
| 36 | 5180 | -3.42 | 0 | -3.42 | 11 | PASS |
| 40 | 5200 | -4.70 | 0 | -4.70 | 11 | PASS |
| 48 | 5240 | -4.10 | 0 | -4.10 | 11 | PASS |
| 52 | 5260 | -4.14 | 0 | -4.14 | 11 | PASS |
| 60 | 5300 | -3.97 | 0 | -3.97 | 11 | PASS |
| 64 | 5320 | -3.90 | 0 | -3.90 | 11 | PASS |
| 100 | 5500 | -2.94 | 0 | -2.94 | 11 | PASS |
| 116 | 5580 | -1.88 | 0 | -1.88 | 11 | PASS |
| 140 | 5700 | -3.62 | 0 | -3.62 | 11 | PASS |
| 144 | 5720 | 2.63 | 0 | 2.63 | 11 | PASS |

### 802.11n (40MHz)

| CHANNEL | FREQUENCY (MHz) | PSD w/o Duty Factor (dBm/MHz) | Duty Factor | PSD with Duty Factor (dBm/MHz) | MAXIMUM LIMIT (dBm/MHz) | PASS/FAIL |
|---|---|---|---|---|---|---|
| 38 | 5190 | -6.47 | 0 | -6.47 | 11 | PASS |
| 46 | 5230 | -7.24 | 0 | -7.24 | 11 | PASS |
| 54 | 5270 | -7.12 | 0 | -7.12 | 11 | PASS |
| 62 | 5310 | -5.93 | 0 | -5.93 | 11 | PASS |
| 102 | 5510 | -5.26 | 0 | -5.26 | 11 | PASS |
| 110 | 5550 | -5.55 | 0 | -5.55 | 11 | PASS |
| 134 | 5670 | -5.85 | 0 | -5.85 | 11 | PASS |
| 142 | 5710 | -0.77 | 0 | -0.77 | 11 | PASS |

### 802.11ac (80MHz)

| CHANNEL | FREQUENCY (MHz) | PSD w/o Duty Factor (dBm/MHz) | Duty Factor | PSD with Duty Factor (dBm/MHz) | MAXIMUM LIMIT (dBm/MHz) | PASS/FAIL |
|---|---|---|---|---|---|---|
| 42 | 5210 | -10.13 | 0 | -10.13 | 11 | PASS |
| 58 | 5290 | -9.27 | 0 | -9.27 | 11 | PASS |
| 106 | 5530 | -8.57 | 0 | -8.57 | 11 | PASS |
| 122 | 5610 | -7.96 | 0 | -7.96 | 11 | PASS |
| 138 | 5690 | -2.45 | 0 | -2.45 | 11 | PASS |

## For U-NII-3:

**Note: dBm/500kHz= dBm/MHz+10*log(0.5/1)= dBm/MHz-3.01**

### 802.11a

| CHANNEL | FREQUENCY (MHz) | PSD w/o Duty Factor (dBm/300kHz) | PSD w/o Duty Factor (dBm/500kHz) | Duty Factor | PSD with Duty Factor (dBm/500kHz) | LIMIT (dBm/500kHz) | PASS /FAIL |
|---|---|---|---|---|---|---|---|
| 144 | 5720 | -8.01 | -5.79 | 0 | -5.79 | 30 | PASS |
| 149 | 5745 | -7.93 | -5.71 | 0 | -5.71 | 30 | PASS |
| 157 | 5785 | -7.61 | -5.39 | 0 | -5.39 | 30 | PASS |
| 165 | 5825 | -7.94 | -5.72 | 0 | -5.72 | 30 | PASS |

### 802.11n (20MHz)

| CHANNEL | FREQUENCY (MHz) | PSD w/o Duty Factor (dBm/300kHz) | PSD w/o Duty Factor (dBm/500kHz) | Duty Factor | PSD with Duty Factor (dBm/500kHz) | LIMIT (dBm/500kHz) | PASS /FAIL |
|---|---|---|---|---|---|---|---|
| 144 | 5720 | -8.61 | -6.39 | 0 | -6.39 | 30 | PASS |
| 149 | 5745 | -8.89 | -6.67 | 0 | -6.67 | 30 | PASS |
| 157 | 5785 | -8.33 | -6.11 | 0 | -6.11 | 30 | PASS |
| 165 | 5825 | -8.57 | -6.35 | 0 | -6.35 | 30 | PASS |

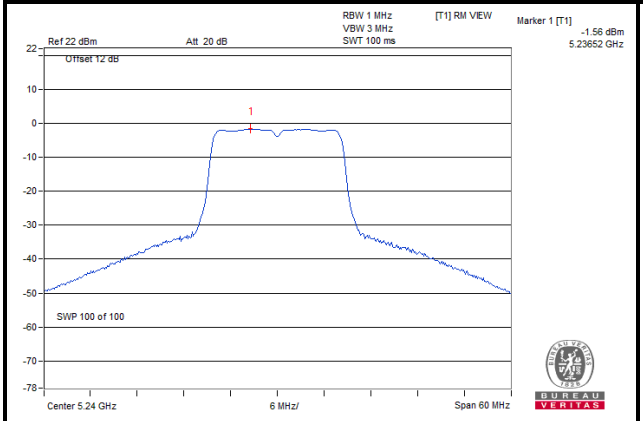
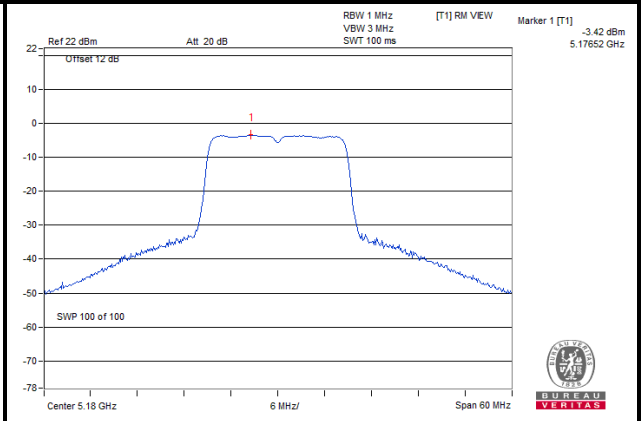
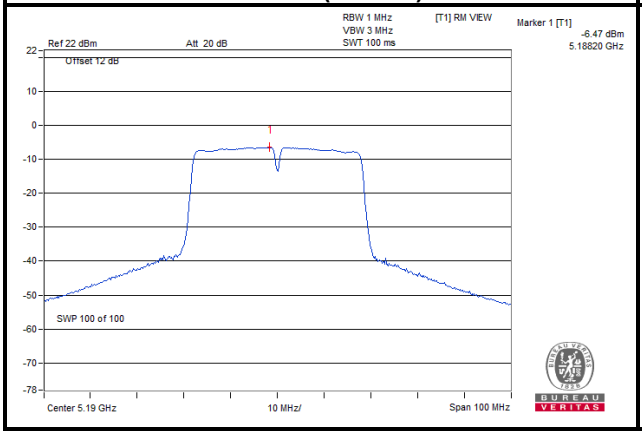
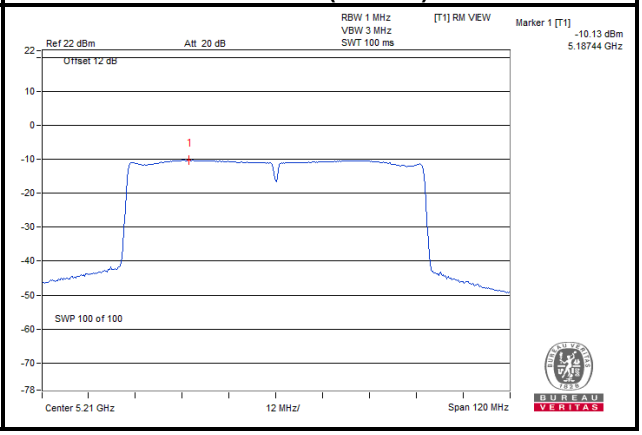
### 802.11n (40MHz)

| CHANNEL | FREQUENCY (MHz) | PSD w/o Duty Factor (dBm/300kHz) | PSD w/o Duty Factor (dBm/500kHz) | Duty Factor | PSD with Duty Factor (dBm/500kHz) | LIMIT (dBm/500kHz) | PASS /FAIL |
|---|---|---|---|---|---|---|---|
| 142 | 5710 | -11.37 | -9.15 | 0 | -9.15 | 30 | PASS |
| 151 | 5755 | -11.93 | -9.71 | 0 | -9.71 | 30 | PASS |
| 159 | 5795 | -11.63 | -9.41 | 0 | -9.41 | 30 | PASS |

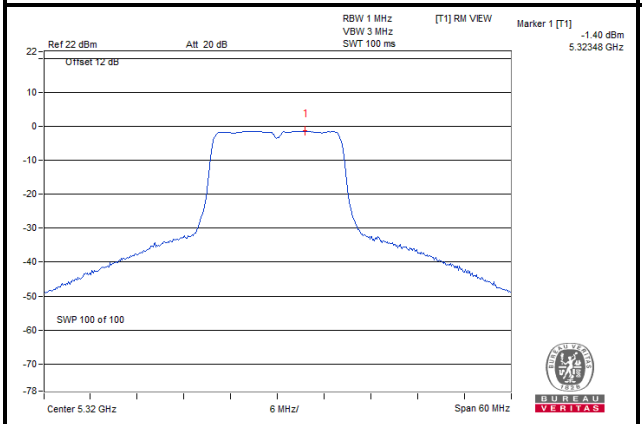
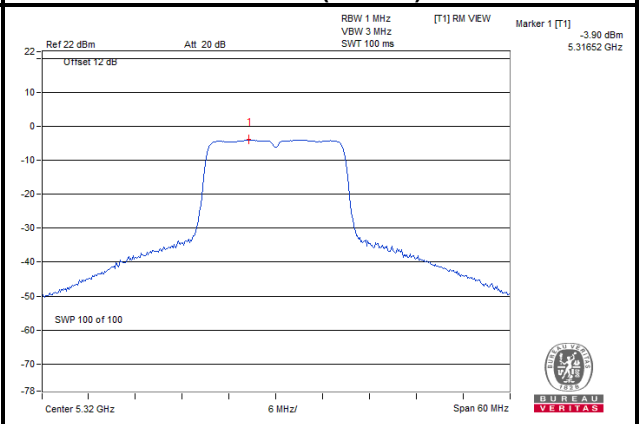
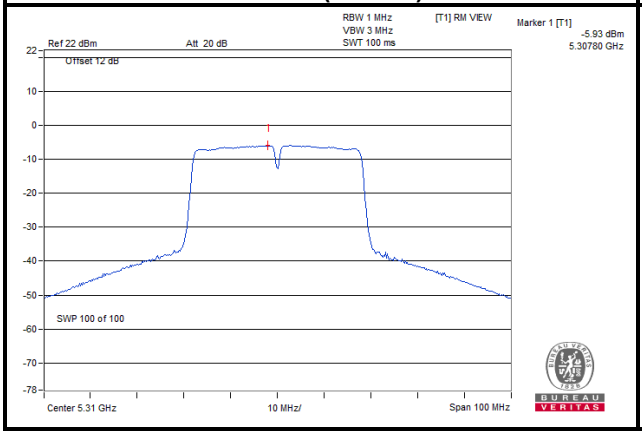
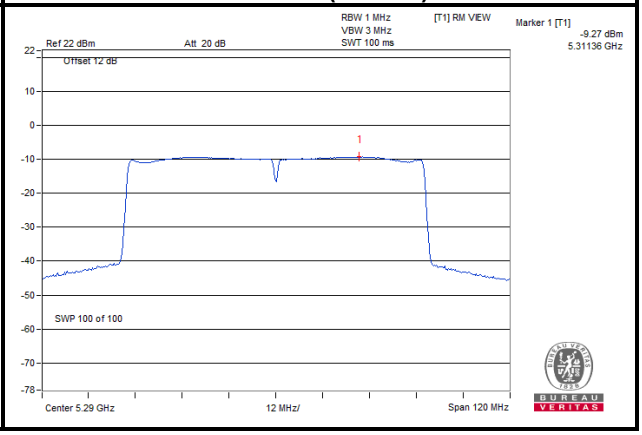
### 802.11ac (80MHz)

| CHANNEL | FREQUENCY (MHz) | PSD w/o Duty Factor (dBm/300kHz) | PSD w/o Duty Factor (dBm/500kHz) | Duty Factor | PSD with Duty Factor (dBm/500kHz) | LIMIT (dBm/500kHz) | PASS /FAIL |
|---|---|---|---|---|---|---|---|
| 138 | 5690 | -12.99 | -10.77 | 0 | -10.77 | 30 | PASS |
| 155 | 5775 | -14.84 | -12.62 | 0 | -12.62 | 30 | PASS |

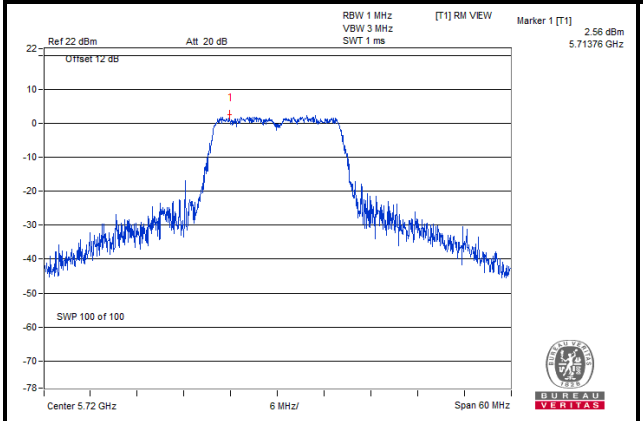
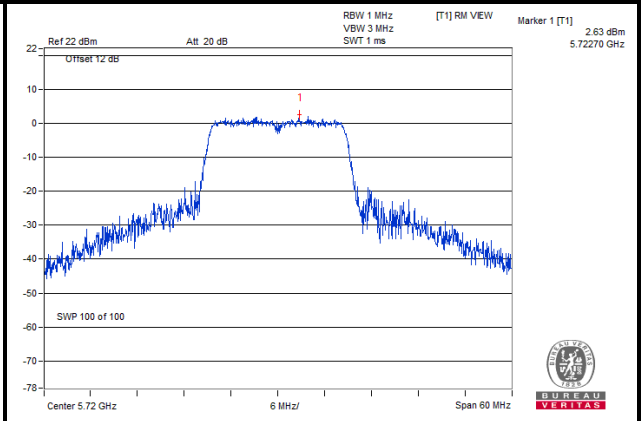
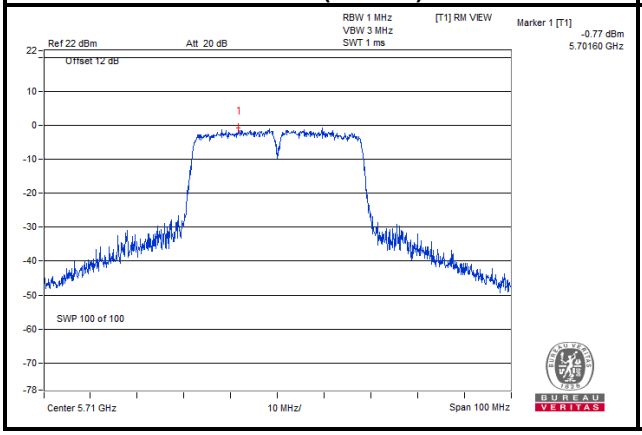
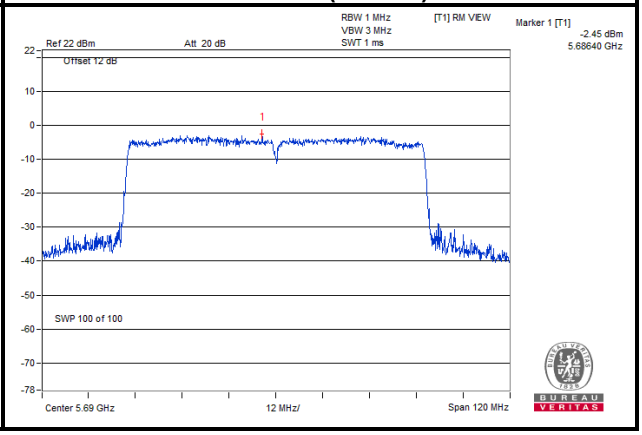
## For 5180~5240MHz

| PSD w/o Duty Factor | |
|---|---|
| 802.11a | 802.11n (20MHz) |
|  |  |
| 802.11n (40MHz) | 802.11ac (80MHz) |
|  |  |

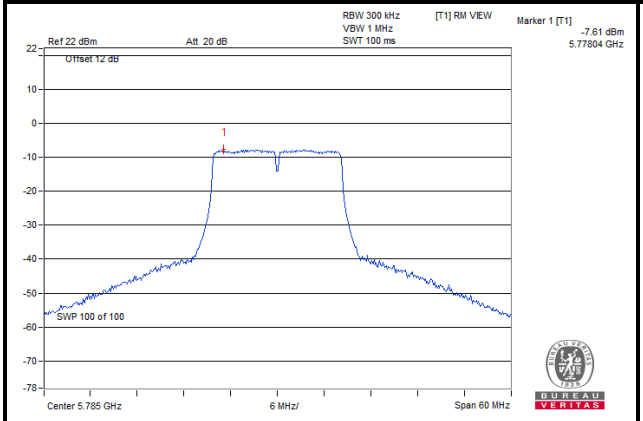
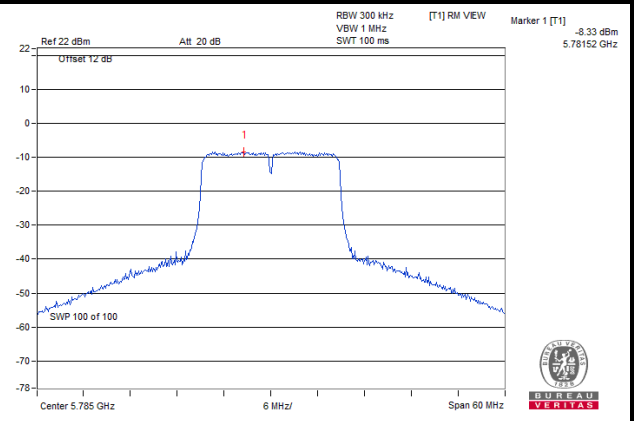
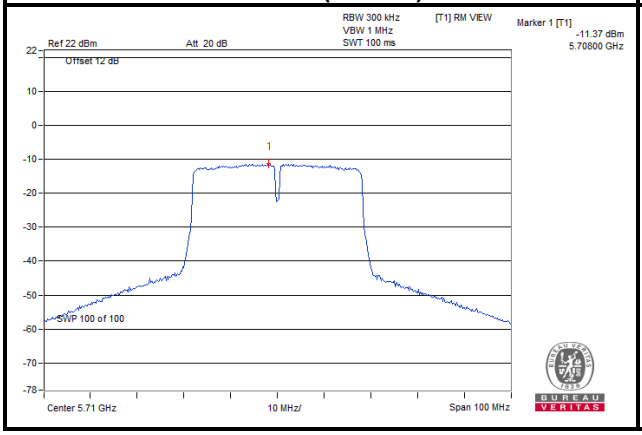
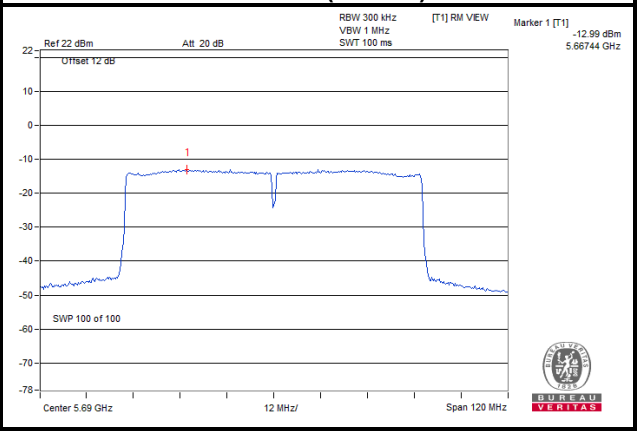
## For 5260~5320MHz

| PSD w/o Duty Factor | |
|---|---|
| 802.11a | 802.11n (20MHz) |
|  |  |
| 802.11n (40MHz) | 802.11ac (80MHz) |
|  |  |

## For 5500~5720MHz

| PSD w/o Duty Factor | |
|---|---|
| 802.11a | 802.11n (20MHz) |
|  |  |
| 802.11n (40MHz) | 802.11ac (80MHz) |
|  |  |

## For 5745~5825MHz

| PSD w/o Duty Factor | |
|---|---|
| 802.11a | 802.11n (20MHz) |
|  |  |
| 802.11n (40MHz) | 802.11ac (80MHz) |
|  |  |

# 4 PHOTOGRAPHS OF THE TEST CONFIGURATION

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

# 5 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

**---END---**