# TEST REPORT

| | |
|---|---|
| Applicant | YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD. |
| Address | 309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China |

| | |
|---|---|
| Manufacturer or Supplier | YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD. |
| Address | 309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China |
| Product Name | Smart Business Phone |
| Brand Name | YEALINK |
| Model | MP56 |
| Additional Model & Model Difference | N/A |
| Date of tests | Feb. 26, 2020 ~ Apr. 23, 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**

| Tested by Lucas Chen<br>Project Engineer / EMC Department | Approved by Glyn He<br>Assistant Manager / EMC Department |
|---|---|
|  |  <br>Date: May 08, 2020 |

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# RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|---|---|---|
| RF200226N025-4 | Original release. | May 08, 2020 |

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# 1. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

| APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407 UNDER NEW RULE) | | | |
|---|---|---|---|
| **STANDARD SECTION** | **TEST TYPE** | **RESULT** | **REMARK** |
| 15.407(b)(6) | AC Power Conducted Emissions | PASS | Meet the requirement of limit. |
| 15.407(b) (1/2/3/4/6) | Radiated Emissions & Band Edge Measurement | PASS | Meet the requirement of limit. |
| 15.407(a)(1/2/3) | Max Average Transmit Power | PASS | Meet the requirement of limit. |
| 15.407(a)(1/2/3) | Peak Power Spectral Density | PASS | Meet the requirement of limit. |
| 15.407(g) | Frequency Stability | PASS | Meet the requirement of limit. |
| 15.203 | Antenna Requirement | PASS | Antenna connector is i-pex not a standard connector. |

## 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 | FREQUENCY | UNCERTAINTY |
|---|---|---|
| Conducted emissions | 9kHz~30MHz | 2.70dB |
| Radiated emissions | 9KHz ~ 30MHz | 2.16dB |
| | 30MHz ~ 1GMHz | 3.60dB |
| | 1GHz ~ 18GHz | 4.82dB |
| | 18GHz ~ 40GHz | 5.00dB |

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 Business Phone |
| **BRAND** | YEALINK |
| **MODEL NO.** | MP56 |
| **FCC ID** | T2C-MP56 |
| **POWER SUPPLY** | DC 5V from Adapter Input AC 100-240V 50/60Hz 0.5A or POE 48Vdc 0.27A |
| **MODULATION TYPE** | 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM |
| **MODULATION TECHNOLOGY** | OFDM |
| **TRANSFER RATE** | 802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps<br>802.11n: up to 150Mbps<br>802.11ac: up to 433.3Mbps |
| **OPERATING FREQUENCY** | 5180 ~ 5240MHz, 5260 ~ 5320MHz<br>5500 ~ 5700MHz, 5745 ~ 5825MHz |
| **NUMBER OF CHANNEL** | 5180 ~ 5240MHz:<br>4 channels for 802.11a, 802.11n,11ac (20MHz)<br>2 channels for 802.11n,11ac (40MHz):<br>1 channel for 802.11ac 80MHz<br>5260 ~ 5320MHz:<br>4 channels for 802.11a, 802.11n (20MHz)<br>2 channels for 802.11n, 11ac (40MHz)<br>1 channel for 802.11ac (80MHz)<br>5500 ~ 5700MHz:<br>11 channels for 802.11a, 802.11n (20MHz)<br>5 channels for 802.11n (40MHz)<br>2 channel for 802.11ac (80MHz)<br>5745 ~ 5825MHz:<br>5 channels for 802.11a, 802.11n,11ac (20MHz)<br>2 channels for 802.11n,11ac (40MHz)<br>1 channel for 802.11ac (80MHz) |
| **CONDUCTED OUTPUT POWER** | 24.774mW for 5180 ~ 5240MHz (Maximum AVG Power)<br>24.547mW for 5260 ~ 5320MHz (Maximum AVG Power)<br>29.992mW for 5500 ~ 5700MHz (Maximum AVG Power)<br>24.21mW for 5745 ~ 5825MHz (Maximum AVG Power) |
| **ANTENNA TYPE** | 5180 ~ 5240MHz: PCB antenna with 3dBi gain<br>5260 ~ 5320MHz: PCB antenna with 3dBi gain<br>5500 ~ 5700MHz: PCB antenna with 3dBi gain<br>5745 ~ 5825MHz: PCB antenna with 3dBi gain |
| **I/O PORTS** | Refer to user's manual |
| **CABLE SUPPLIED** | Handset Line: Unshielded, Detachable, 330cm.<br>Network Line: Shielded, Detachable, 190cm |

**NOTES:**

1. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
2. Please refer to the EUT photo document (Reference No.: 200226N025) for detailed product photo.
3. The EUT incorporates a SISO function. Physically, the EUT provides 1 completed transmitter and 1 receiver.

| MODULATION MODE | FUNCTION |
|---|---|
| 802.11a | 1TX/1RX |
| 802.11n (HT20), 802.11ac (VHT20) | 1TX/1RX |
| 802.11n (HT40), 802.11ac (VHT40) | 1TX/1RX |
| 802.11ac (VHT80) | 1TX/1RX |

The modulation and bandwidth are similar for 802.11n mode for HT20 / HT40 and 802.11ac mode for VHT20 / VHT40, therefore investigated worst case for final test were chosen 802.11n (HT20/HT40) and record in the report.

4. The EUT were powered by POE and the following adapter, but POE is not available for sale, only the worst case was shown in test report.

| ADAPTER 1 | |
|---|---|
| BRAND: | Yealink |
| MODEL: | YLPS052000C1-US |
| INPUT: | AC 100-240V 50/60Hz 0.5A |
| OUTPUT: | DC 5V, 2A |
| DC LINE: | Unshielded, Non-detachable, 180cm. |

| ADAPTER 2 | |
|---|---|
| BRAND: | Yealink |
| MODEL: | YLPS052000B1-US |
| INPUT: | AC 100-240V 50/60Hz 0.5A |
| OUTPUT: | DC 5V, 2A |
| DC LINE: | Unshielded, Non-detachable, 180cm. |

Remark: The worst case was tested under Adapter2.

## 2.2 DESCRIPTION OF TEST MODES

### FOR 5150 ~ 5250MHz

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

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

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

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

1 channel is provided for 802.11ac (VHT80):

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

### FOR 5250 ~ 5350MHz

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

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

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

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

1 channel is provided for 802.11ac (VHT80):

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

## FOR 5470 ~ 5725MHz

11 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

5 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

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

2 channel is provided for 802.11ac (VHT80):

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

## FOR 5725 ~ 5850MHz

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

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 149 | 5745MHz | 153 | 5765MHz |
| 157 | 5785MHz | 161 | 5805MHz |
| 165 | 5825MHz | -- | -- |

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

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

1 channel is provided for 802.11ac (VHT80):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---|---|---|---|
| 155 | 5775MHz | -- | -- |

## 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** |

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

**NOTE:**
1. 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 TECHNOLOGY | MODULATION TYPE | DATA RATE (Mbps) |
|---|---|---|---|---|---|---|---|
| A | 802.11a | 5150-5250 | 36 to 48 | 36, 40, 48 | OFDM | BPSK | 6.0 |
| | 802.11n (20MHz) | | 36 to 48 | 36, 40, 48 | OFDM | BPSK | 6.5 |
| | 802.11n (40MHz) | | 38 to 46 | 38, 46 | OFDM | BPSK | 13.5 |
| | 802.11ac 80MHz | | 42 | 42 | OFDM | BPSK | 29.3 |
| | 802.11a | 5250-5350 | 52 to 64 | 52, 60, 64 | OFDM | BPSK | 6.0 |
| | 802.11n (20MHz) | | 52 to 64 | 52, 60, 64 | OFDM | BPSK | 6.5 |
| | 802.11n (40MHz) | | 54 to 62 | 54, 62 | OFDM | BPSK | 13.5 |
| | 802.11ac 80MHz | | 58 | 58 | OFDM | BPSK | 29.3 |
| | 802.11a | 5470-5725 | 100 to 140 | 100, 116, 140 | OFDM | BPSK | 6.0 |
| | 802.11n (20MHz) | | 100 to 140 | 100, 116, 140 | OFDM | BPSK | 6.5 |
| | 802.11n (40MHz) | | 102 to 134 | 102, 110, 134 | OFDM | BPSK | 13.5 |
| | 802.11ac 80MHz | | 106, 122 | 106, 122 | OFDM | BPSK | 29.3 |
| | 802.11a | 5725-5850 | 149 to 165 | 149, 157, 165 | OFDM | BPSK | 6.0 |
| | 802.11n (20MHz) | | 149 to 165 | 149, 157, 165 | OFDM | BPSK | 6.5 |
| | 802.11n (40MHz) | | 151 to 159 | 151, 159 | OFDM | BPSK | 13.5 |
| | 802.11ac 80MHz | | 155 | 155 | OFDM | BPSK | 29.3 |

**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 TECHNOLOGY | MODULATION TYPE | DATA RATE (Mbps) |
|---|---|---|---|---|---|---|---|
| A | 802.11a | 5150-5250<br>5470-5725<br>5725-5850 | 36 to 48<br>100 to 140<br>149 to 165 | 36 | OFDM | BPSK | 6.0 |

## 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 TECHNOLOGY | MODULATION TYPE | DATA RATE (Mbps) |
|---|---|---|---|---|---|---|---|
| A | 802.11a | 5150-5250<br>5470-5725<br>5725-5850 | 36 to 48<br>100 to 140<br>149 to 165 | 36 | OFDM | BPSK | 6.0 |

## 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 | MODULATION TYPE | DATA RATE (Mbps) |
|---|---|---|---|---|---|---|---|
| A | 802.11a | 5150-5250 | 36 to 48 | 36, 40, 48 | OFDM | BPSK | 6.0 |
| | 802.11n (20MHz) | | 36 to 48 | 36, 40, 48 | OFDM | BPSK | 6.5 |
| | 802.11n (40MHz) | | 38 to 46 | 38, 46 | OFDM | BPSK | 13.5 |
| | 802.11ac 80MHz | | 42 | 42 | OFDM | BPSK | 29.3 |
| | 802.11a | 5250-5350 | 52 to 64 | 52, 60, 64 | OFDM | BPSK | 6.0 |
| | 802.11n (20MHz) | | 52 to 64 | 52, 60, 64 | OFDM | BPSK | 6.5 |
| | 802.11n (40MHz) | | 54 to 62 | 54, 62 | OFDM | BPSK | 13.5 |
| | 802.11ac 80MHz | | 58 | 58 | OFDM | BPSK | 29.3 |
| | 802.11a | 5470-5725 | 100 to 140 | 100, 116, 140 | OFDM | BPSK | 6.0 |
| | 802.11n (20MHz) | | 100 to 140 | 100, 116, 140 | OFDM | BPSK | 6.5 |
| | 802.11n (40MHz) | | 102 to 134 | 102, 110, 134 | OFDM | BPSK | 13.5 |
| | 802.11ac 80MHz | | 106, 122 | 106, 122 | OFDM | BPSK | 29.3 |
| | 802.11a | 5725-5850 | 149 to 165 | 149, 157, 165 | OFDM | BPSK | 6.0 |
| | 802.11n (20MHz) | | 149 to 165 | 149, 157, 165 | OFDM | BPSK | 6.5 |
| | 802.11n (40MHz) | | 151 to 159 | 151, 159 | OFDM | BPSK | 13.5 |
| | 802.11ac 80MHz | | 155 | 155 | OFDM | BPSK | 29.3 |

## TEST CONDITION:

| APPLICABLE TO | ENVIRONMENTAL CONDITIONS | INPUT POWER(ADAPTER) | TESTED BY |
|---|---|---|---|
| RE<1G | 24deg. C, 55%RH | DC 5V from Adapter | Hu |
| RE≥1G | 24deg. C, 55%RH | DC 5V from Adapter | Hu |
| PLC | 20deg. C, 56%RH | DC 5V from Adapter | Ming Bai |
| APCM | 20deg. C, 55%RH | DC 5V from Adapter | Robert Cheng |

## 2.3 DUTY CYCLE OF TEST SIGNAL

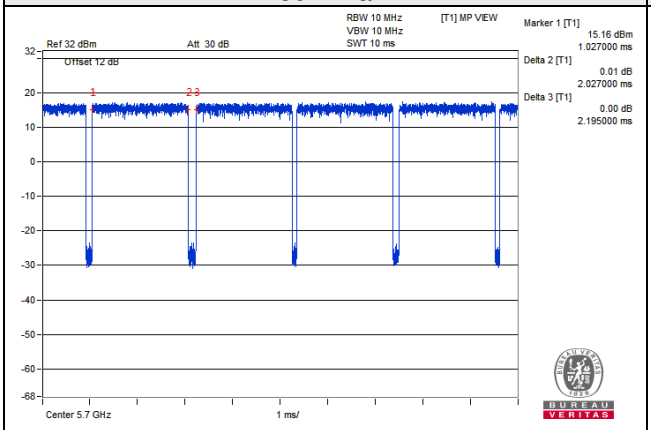
802.11a: Duty cycle = 2.027/2.195 =0.923, Duty factor = 10 * log(1/0.923) = 0.348

802.11n (HT20): Duty cycle = 1.886/2.030 =0.929, Duty factor = 10 * log(1/0.929) = 0.920

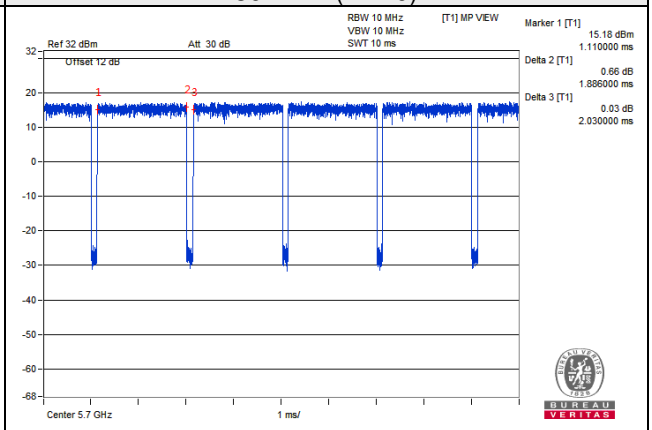
802.11n (HT40): Duty cycle = 0.927/1.097 =0.845, Duty factor = 10 * log(1/0.845) = 0.731

802.11ac (VHT80): Duty cycle = 0.455/0.598 =0.761, Duty factor = 10 * log(1/0.761) = 1.186

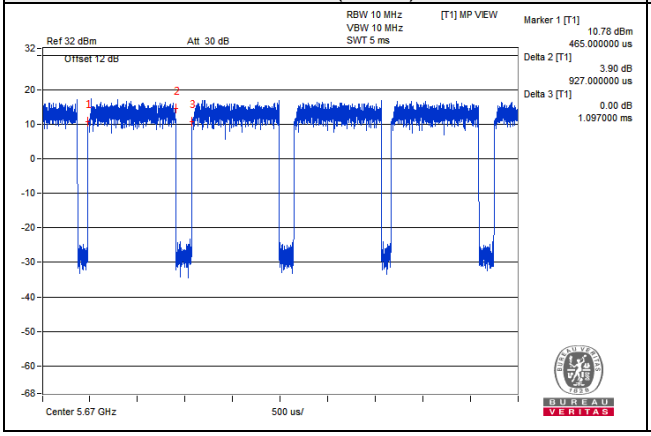
802.11a



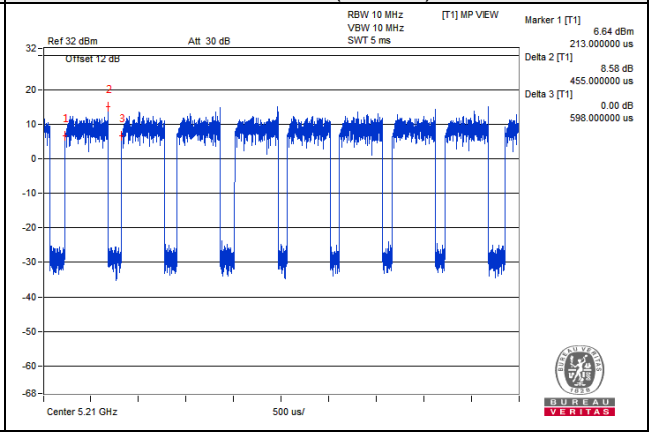

802.11n (HT20)




802.11n (HT40)




802.11ac (VHT80)



## 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 | POE Power | Yealink | YLPOE30 | N/A | N/A |

| NO. | DESCRIPTION OF THE ABOVE SUPPORT UNITS |
|---|---|
| 1 | AC Line: Unshielded, detachable 1.75m; RJ45 Line: Shielded, detachable 10m |

## 2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

**FCC Part 15, Subpart E (15.407)**
**789033 D02 General UNII Test Procedures New Rules v01r03**
**ANSI C63.10-2013**

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

# 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 |

**NOTES**:
1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 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 30dB under any condition of modulation.

## 3.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

| APPLICABLE TO | LIMIT | |
|---|---|---|
| 789033 D02 General UNII Test Procedures New Rules v01r03 | FIELD STRENGTH AT 3m | |
| | PK: 74 (dBμV/m) | AV: 54 (dBμV/m) |
| **APPLICABLE TO** | **EIRP LIMIT** | **EQUIVALENT FIELD STRENGTH AT 3m** |
| 15.407(b)(1) | PK: -27 (dBm/MHz) | PK: 68.2 (dBμV/m) |
| 15.407(b)(2) | | |
| 15.407(b)(3) | | |
| 15.407(b)(4) | Note | Note |

**NOTE:** For transmitters operating in the 5.725-5.85 GHz band:

Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the alternative limit.

15.407(b)(4)(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.

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).

### 3.1.3 TEST INSTRUMENTS

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|---|---|---|---|---|---|
| EMI Test Receiver | Rohde&Schwarz | ESU40 | 100449 | Mar. 18,20 | Mar. 17,21 |
| Signal and Spectrum Analyzer | Rohde&Schwarz | FSV7 | 102331 | May 22,19 | May 21,20 |
| Active Loop Antenna (9KHz -30MHz) | SCHWARZBECK | FMZB 1519B | 1519B-045 | May 28,19 | May 27,20 |
| Amplifier (9KHz -1GHz) | Burgeon | BPA-530 | 100210 | Mar. 15,20 | Mar. 14,21 |
| Bilog Antenna (20MHz -2GHz) | Teseq | CBL 6111D | 30643 | Jun. 23,19 | Jun. 22,20 |
| Horn Antenna (1GHz -18GHz) | ETS -Lindgren | 3117 | 00062558 | Jun. 23,19 | Jun. 22,20 |
| Horn Antenna (18GHz -40GHz) | SCHWARZBECK | BBHA 9170 | BBHA9170147 | Jun. 23,19 | Jun. 22,20 |
| 3m Semi-anechoic Chamber | ETS-LINDGREN | 9m*6m*6m | NSEMC003 | Apr. 20,19 | Apr. 19, 20 |
| Test Software | ADT | ADT_Radiated_V7.6.15.9.2 | N/A | N/A | N/A |
| Broadband Preamplifier (1GHz~18GHz) | SCHWARZBECK | BBV9718 | 305 | Apr. 20,19 | Apr. 19, 20 |
| Pre-Amplifier (18GHz-40GHz) | EMCI | EMC 184045 | 980102 | Mar. 04,20 | Mar. 03,21 |
| Test Software | ADT | ADT_Radiated_V7.6.15.9.2 | N/A | N/A | N/A |
| BLUETOOTH TESTER | Rohde&Schwarz | CBT32 | 100811 | May 20,19 | May 19,20 |

**NOTES:**

1. The test was performed in 966 Chamber.
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. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 749762.
5. Test date: Mar. 20, 2020~ Apr. 15, 2020

### 3.1.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 1.5 meters(above 1GHz) and 0.8 meters(below 1GHz) above the ground at a 3 meters semi-anechoic chamber. 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.

**NOTES:**

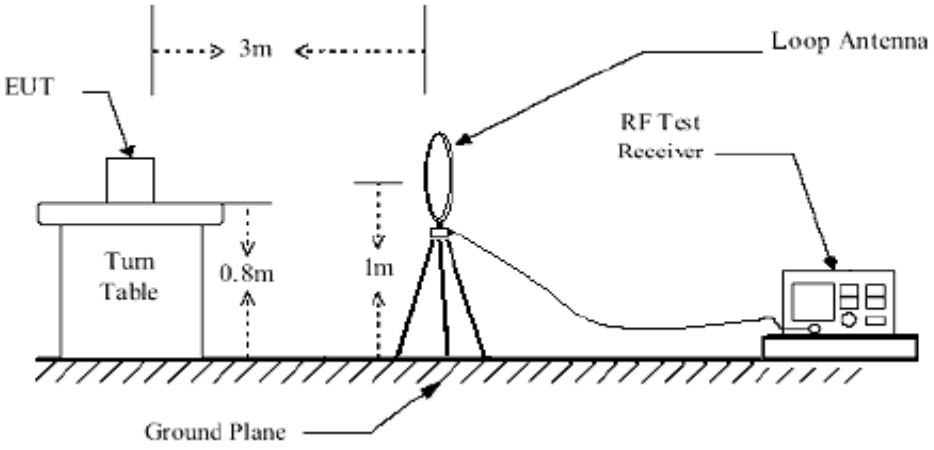
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution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

### 3.1.5 DEVIATION FROM TEST STANDARD

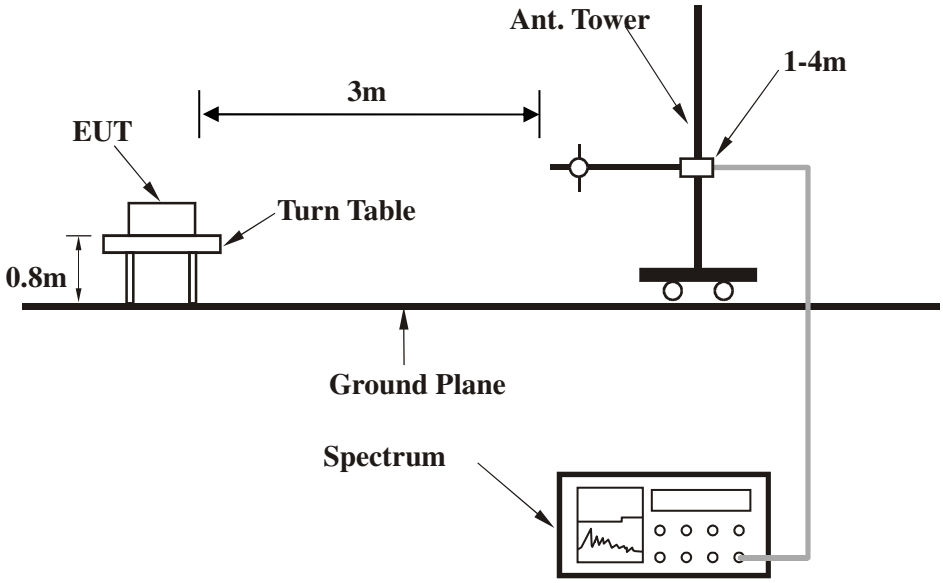
No deviation.

### 3.1.6 TEST SETUP

## Below 30MHz

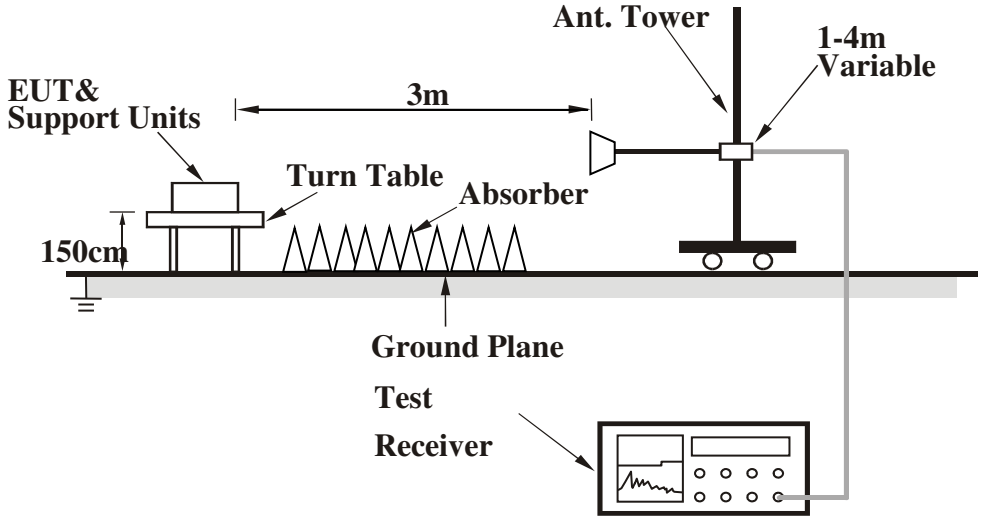



## Below 1GHz test setup




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

## Above 1GHz test setup




**Note:** 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

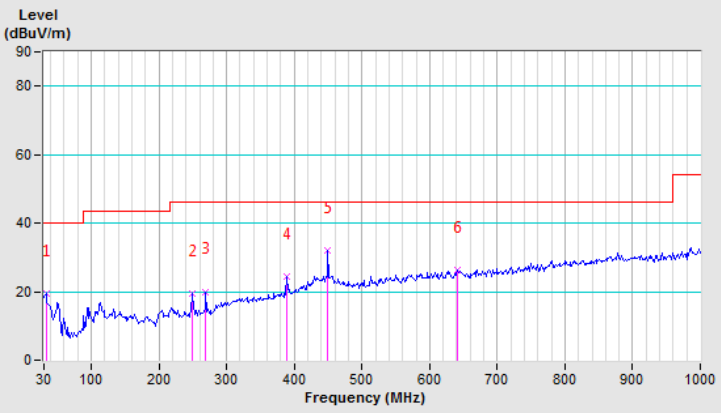
### 802.11a

| CHANNEL | TX Channel 36 | DETECTOR FUNCTION | Quasi-Peak (QP) |
|---|---|---|---|
| FREQUENCY RANGE | 9KHz ~ 1GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 33.11 | 19.53 QP | 40.00 | -20.47 | 1.00 H | 152 | 31.64 | -12.11 |
| 2 | 249.18 | 19.38 QP | 46.00 | -26.62 | 1.00 H | 303 | 35.15 | -15.77 |
| 3 | 269.39 | 20.01 QP | 46.00 | -25.99 | 1.00 H | 179 | 34.63 | -14.62 |
| 4 | 389.09 | 24.30 QP | 46.00 | -21.70 | 1.00 H | 204 | 33.48 | -9.18 |
| **5** | **449.71** | **32.08 QP** | **46.00** | **-13.92** | **1.00 H** | **82** | **39.65** | **-7.57** |
| 6 | 640.91 | 26.21 QP | 46.00 | -19.79 | 1.00 H | 77 | 29.37 | -3.16 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.

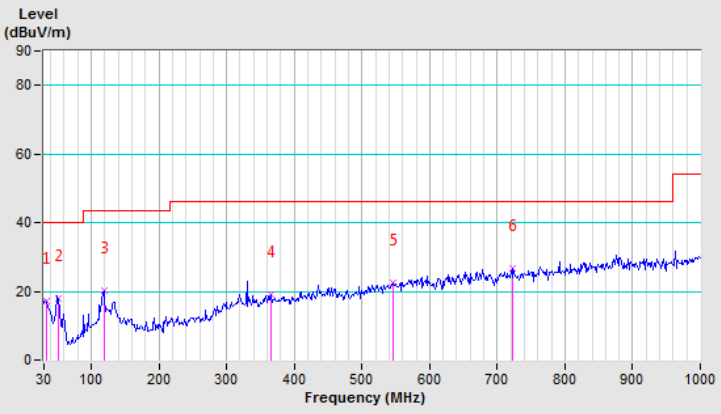


| CHANNEL | TX Channel 36 | DETECTOR FUNCTION | Quasi-Peak (QP) |
|---|---|---|---|
| FREQUENCY RANGE | 9KHz ~ 1GHz | | |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 33.11 | 17.14 QP | 40.00 | -22.86 | 1.00 V | 61 | 29.25 | -12.11 |
| 2 | 51.76 | 18.03 QP | 40.00 | -21.97 | 1.00 V | 46 | 39.59 | -21.56 |
| 3 | 118.61 | 20.25 QP | 43.50 | -23.25 | 1.00 V | 34 | 37.40 | -17.15 |
| 4 | 365.77 | 18.98 QP | 46.00 | -27.02 | 1.00 V | 23 | 28.95 | -9.97 |
| 5 | 546.09 | 22.53 QP | 46.00 | -23.47 | 1.00 V | 12 | 27.46 | -4.93 |
| 6 | 723.30 | 26.61 QP | 46.00 | -19.39 | 1.00 V | 2 | 28.80 | -2.19 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.



## Band 1 (5150-5250MHz): ABOVE 1GHz DATA 802.11a

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

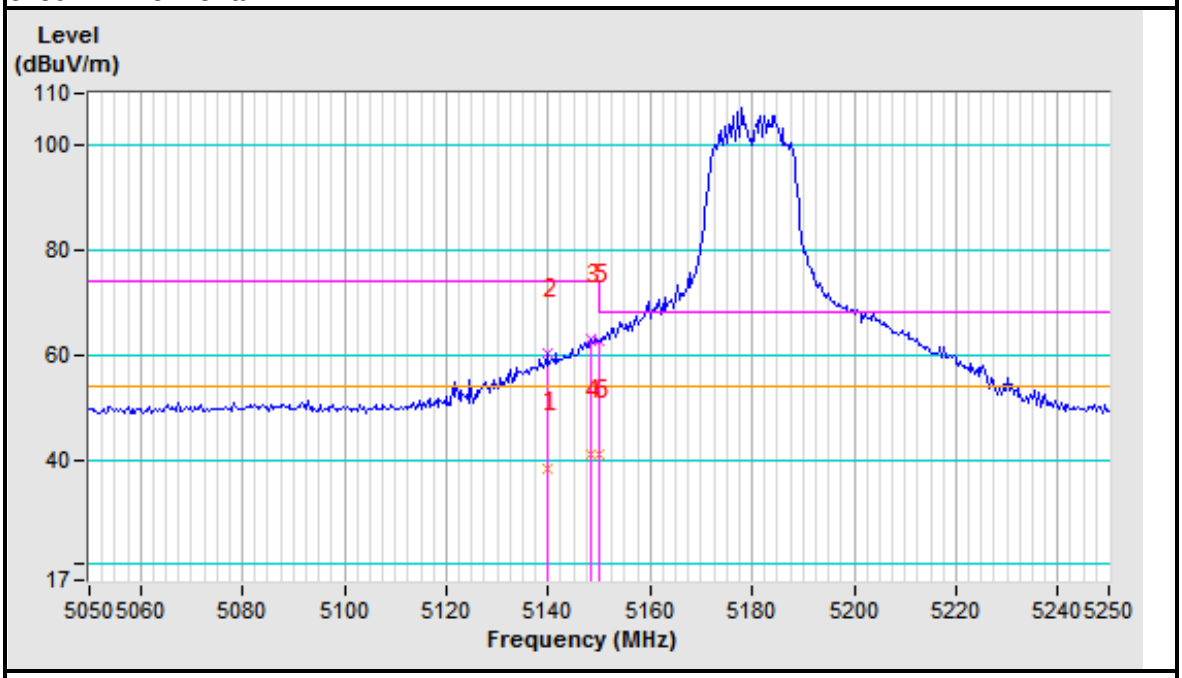
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5139.74 | 60.22 PK | 74.00 | -13.78 | 1.00 H | 320 | 52.01 | 8.21 |
| 2 | 5139.74 | 38.29 AV | 54.00 | -15.71 | 1.00 H | 320 | 30.08 | 8.21 |
| 3 | 5148.40 | 62.96 PK | 74.00 | -11.04 | 1.00 H | 320 | 54.73 | 8.23 |
| 4 | 5148.40 | 40.95 AV | 54.00 | -13.05 | 1.00 H | 320 | 32.72 | 8.23 |
| 5 | 5150.00 | 62.81 PK | 74.00 | -11.19 | 1.00 H | 320 | 54.58 | 8.23 |
| 6 | 5150.00 | 40.88 AV | 54.00 | -13.12 | 1.00 H | 320 | 32.65 | 8.23 |
| 7 | *5180.00 | 108.03 PK | | | 1.00 H | 123 | 99.74 | 8.29 |
| 8 | *5180.00 | 93.97 AV | | | 1.00 H | 123 | 85.68 | 8.29 |
| 9 | #10360.00 | 59.58 PK | 68.20 | -8.62 | 1.00 H | 0 | 41.72 | 17.86 |
| 10 | 15540.00 | 66.85 PK | 74.00 | -7.15 | 1.00 H | 0 | 42.58 | 24.27 |
| 11 | 15540.00 | 45.63 AV | 54.00 | -8.37 | 1.00 H | 0 | 21.36 | 24.27 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5142.95 | 59.76 PK | 74.00 | -14.24 | 1.00 V | 209 | 51.54 | 8.22 |
| 2 | 5142.95 | 37.56 AV | 54.00 | -16.44 | 1.00 V | 209 | 29.34 | 8.22 |
| 3 | 5147.12 | 60.75 PK | 74.00 | -13.25 | 1.00 V | 209 | 52.52 | 8.23 |
| 4 | 5147.12 | 38.41 AV | 54.00 | -15.59 | 1.00 V | 209 | 30.18 | 8.23 |
| 5 | 5150.00 | 61.57 PK | 74.00 | -12.43 | 1.00 V | 209 | 53.34 | 8.23 |
| 6 | 5150.00 | 39.99 AV | 54.00 | -14.01 | 1.00 V | 209 | 31.76 | 8.23 |
| 7 | *5180.00 | 104.70 PK | | | 1.00 V | 108 | 96.41 | 8.29 |
| 8 | *5180.00 | 89.64 AV | | | 1.00 V | 108 | 81.35 | 8.29 |
| 9 | #10360.00 | 58.67 PK | 68.20 | -9.53 | 1.00 V | 0 | 40.81 | 17.86 |
| 10 | 15540.00 | 65.34 PK | 74.00 | -8.66 | 1.00 V | 0 | 41.07 | 24.27 |
| 11 | 15540.00 | 44.99 AV | 54.00 | -9.01 | 1.00 V | 0 | 20.72 | 24.27 |

**REMARKS:**

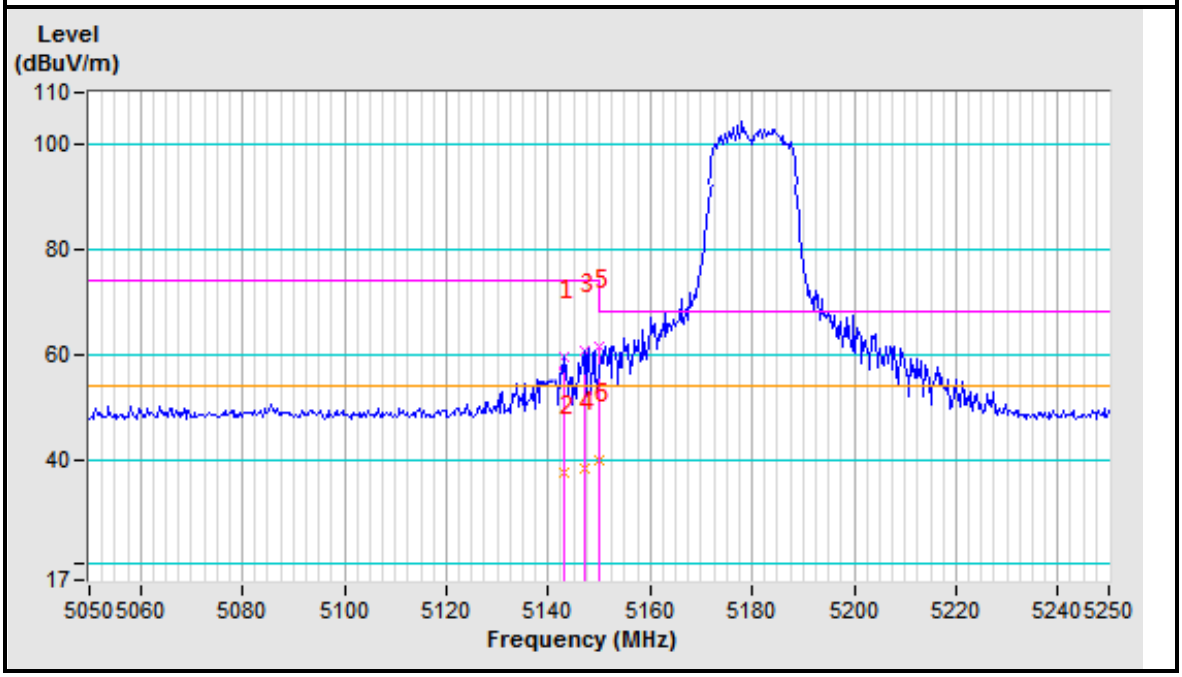
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5180MHz Horizontal**




**5180MHz Vertical**



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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5143.00 | 63.03 PK | 74.00 | -10.97 | 1.00 H | 148 | 54.81 | 8.22 |
| 2 | 5143.00 | 40.20 AV | 54.00 | -13.80 | 1.00 H | 148 | 31.98 | 8.22 |
| 3 | 5150.00 | 62.94 PK | 74.00 | -11.06 | 1.00 H | 148 | 54.71 | 8.23 |
| 4 | 5150.00 | 40.11 AV | 54.00 | -13.89 | 1.00 H | 148 | 31.88 | 8.23 |
| 5 | *5200.00 | 110.49 PK | | | 1.00 H | 148 | 102.15 | 8.34 |
| 6 | *5200.00 | 95.49 AV | | | 1.00 H | 148 | 87.15 | 8.34 |
| 7 | #10400.00 | 60.28 PK | 68.20 | -7.92 | 1.00 H | 0 | 42.33 | 17.95 |
| 8 | 15600.00 | 67.36 PK | 74.00 | -6.64 | 1.00 H | 0 | 42.96 | 24.40 |
| 9 | 15600.00 | 46.05 AV | 54.00 | -7.95 | 1.00 H | 0 | 21.65 | 24.40 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5142.00 | 60.49 PK | 74.00 | -13.51 | 1.00 V | 155 | 52.27 | 8.22 |
| 2 | 5142.00 | 38.23 AV | 54.00 | -15.77 | 1.00 V | 155 | 30.01 | 8.22 |
| 3 | 5150.00 | 61.81 PK | 74.00 | -12.19 | 1.00 V | 155 | 53.58 | 8.23 |
| 4 | 5150.00 | 39.68 AV | 54.00 | -14.32 | 1.00 V | 155 | 31.45 | 8.23 |
| 5 | *5200.00 | 106.70 PK | | | 1.00 V | 155 | 98.36 | 8.34 |
| 6 | *5200.00 | 91.42 AV | | | 1.00 V | 155 | 83.08 | 8.34 |
| 7 | #10400.00 | 59.23 PK | 68.20 | -8.97 | 1.00 V | 0 | 41.28 | 17.95 |
| 8 | 15600.00 | 64.29 PK | 74.00 | -9.71 | 1.00 V | 0 | 39.89 | 24.40 |
| 9 | 15600.00 | 43.87 AV | 54.00 | -10.13 | 1.00 V | 0 | 19.47 | 24.40 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5147.00 | 50.20 PK | 74.00 | -23.80 | 1.00 H | 106 | 41.97 | 8.23 |
| 2 | 5147.00 | 38.30 AV | 54.00 | -15.70 | 1.00 H | 106 | 30.07 | 8.23 |
| 3 | 5150.00 | 49.70 PK | 74.00 | -24.30 | 1.00 H | 106 | 41.47 | 8.23 |
| 4 | 5150.00 | 38.40 AV | 54.00 | -15.60 | 1.00 H | 106 | 30.17 | 8.23 |
| 5 | *5240.00 | 109.08 PK | | | 1.00 H | 106 | 100.65 | 8.43 |
| 6 | *5240.00 | 94.03 AV | | | 1.00 H | 106 | 85.60 | 8.43 |
| 7 | 5350.00 | 50.97 PK | 74.00 | -23.03 | 1.00 H | 106 | 42.31 | 8.66 |
| 8 | 5350.00 | 39.13 AV | 54.00 | -14.87 | 1.00 H | 106 | 30.47 | 8.66 |
| 9 | 5359.00 | 51.23 PK | 74.00 | -22.77 | 1.00 H | 106 | 42.56 | 8.67 |
| 10 | 5359.00 | 39.48 AV | 54.00 | -14.52 | 1.00 H | 106 | 30.81 | 8.67 |
| 11 | #10480.00 | 61.22 PK | 68.20 | -6.98 | 1.00 H | 0 | 43.09 | 18.13 |
| 12 | 15720.00 | 67.32 PK | 74.00 | -6.68 | 1.00 H | 0 | 42.66 | 24.66 |
| 13 | 15720.00 | 46.30 AV | 54.00 | -7.70 | 1.00 H | 0 | 21.64 | 24.66 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5142.00 | 49.96 PK | 74.00 | -24.04 | 1.00 V | 335 | 41.74 | 8.22 |
| 2 | 5142.00 | 38.02 AV | 54.00 | -15.98 | 1.00 V | 335 | 29.80 | 8.22 |
| 3 | 5150.00 | 49.61 PK | 74.00 | -24.39 | 1.00 V | 335 | 41.38 | 8.23 |
| 4 | 5150.00 | 38.76 AV | 54.00 | -15.24 | 1.00 V | 335 | 30.53 | 8.23 |
| 5 | *5240.00 | 104.37 PK | | | 1.00 V | 335 | 95.94 | 8.43 |
| 6 | *5240.00 | 88.92 AV | | | 1.00 V | 335 | 80.49 | 8.43 |
| 7 | 5350.00 | 50.36 PK | 74.00 | -23.64 | 1.00 V | 335 | 41.70 | 8.66 |
| 8 | 5350.00 | 39.64 AV | 54.00 | -14.36 | 1.00 V | 335 | 30.98 | 8.66 |
| 9 | 5360.00 | 49.67 PK | 74.00 | -24.33 | 1.00 V | 335 | 40.99 | 8.68 |
| 10 | 5360.00 | 38.77 AV | 54.00 | -15.23 | 1.00 V | 335 | 30.09 | 8.68 |
| 11 | #10480.00 | 60.02 PK | 68.20 | -8.18 | 1.00 V | 0 | 41.89 | 18.13 |
| 12 | 15720.00 | 66.46 PK | 74.00 | -7.54 | 1.00 V | 0 | 41.80 | 24.66 |
| 13 | 15720.00 | 45.20 AV | 54.00 | -8.80 | 1.00 V | 0 | 20.54 | 24.66 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## 802.11n (20MHz)

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

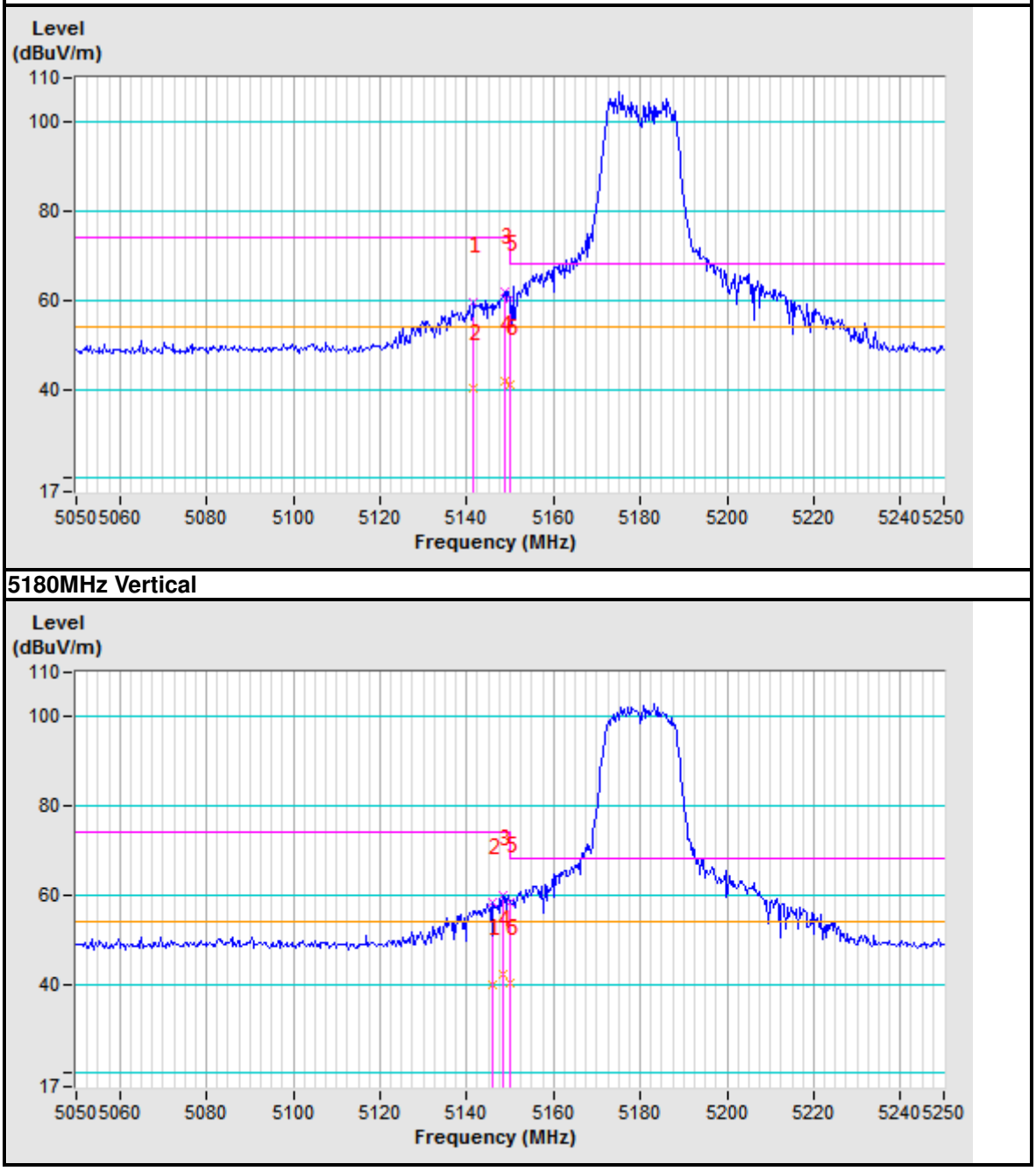
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5141.67 | 59.65 PK | 74.00 | -14.35 | 1.00 H | 329 | 51.43 | 8.22 |
| 2 | 5141.67 | 40.13 AV | 54.00 | -13.87 | 1.00 H | 329 | 31.91 | 8.22 |
| 3 | 5148.72 | 61.83 PK | 74.00 | -12.17 | 1.00 H | 329 | 53.60 | 8.23 |
| 4 | 5148.72 | 42.02 AV | 54.00 | -11.98 | 1.00 H | 329 | 33.79 | 8.23 |
| 5 | 5150.00 | 60.23 PK | 74.00 | -13.77 | 1.00 H | 329 | 52.00 | 8.23 |
| 6 | 5150.00 | 41.05 AV | 54.00 | -12.95 | 1.00 H | 329 | 32.82 | 8.23 |
| 7 | *5180.00 | 107.96 PK | | | 1.00 H | 165 | 99.67 | 8.29 |
| 8 | *5180.00 | 93.38 AV | | | 1.00 H | 165 | 85.09 | 8.29 |
| 9 | #10360.00 | 59.63 PK | 68.20 | -8.57 | 1.00 H | 0 | 41.77 | 17.86 |
| 10 | 15540.00 | 67.43 PK | 74.00 | -6.57 | 1.00 H | 0 | 43.16 | 24.27 |
| 11 | 15540.00 | 46.32 AV | 54.00 | -7.68 | 1.00 H | 0 | 22.05 | 24.27 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5146.15 | 58.18 PK | 74.00 | -15.82 | 1.00 V | 188 | 49.96 | 8.22 |
| 2 | 5146.15 | 40.01 AV | 54.00 | -13.99 | 1.00 V | 188 | 31.79 | 8.22 |
| 3 | 5148.40 | 60.14 PK | 74.00 | -13.86 | 1.00 V | 188 | 51.91 | 8.23 |
| 4 | 5148.40 | 42.08 AV | 54.00 | -11.92 | 1.00 V | 188 | 33.85 | 8.23 |
| 5 | 5150.00 | 58.44 PK | 74.00 | -15.56 | 1.00 V | 188 | 50.21 | 8.23 |
| 6 | 5150.00 | 40.12 AV | 54.00 | -13.88 | 1.00 V | 188 | 31.89 | 8.23 |
| 7 | *5180.00 | 102.26 PK | | | 1.00 V | 188 | 93.97 | 8.29 |
| 8 | *5180.00 | 87.44 AV | | | 1.00 V | 188 | 79.15 | 8.29 |
| 9 | #10360.00 | 58.63 PK | 68.20 | -9.57 | 1.00 V | 0 | 40.77 | 17.86 |
| 10 | 15540.00 | 65.75 PK | 74.00 | -8.25 | 1.00 V | 0 | 41.48 | 24.27 |
| 11 | 15540.00 | 46.30 AV | 54.00 | -7.70 | 1.00 V | 0 | 22.03 | 24.27 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5180MHz Horizontal**




**5180MHz Vertical**

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5140.00 | 62.49 PK | 74.00 | -11.51 | 1.00 H | 147 | 54.28 | 8.21 |
| 2 | 5140.00 | 39.62 AV | 54.00 | -14.38 | 1.00 H | 147 | 31.41 | 8.21 |
| 3 | 5150.00 | 63.35 PK | 74.00 | -10.65 | 1.00 H | 147 | 55.12 | 8.23 |
| 4 | 5150.00 | 40.23 AV | 54.00 | -13.77 | 1.00 H | 147 | 32.00 | 8.23 |
| 5 | *5200.00 | 109.70 PK | | | 1.00 H | 147 | 101.36 | 8.34 |
| 6 | *5200.00 | 95.34 AV | | | 1.00 H | 147 | 87.00 | 8.34 |
| 7 | #10400.00 | 59.38 PK | 68.20 | -8.82 | 1.00 H | 0 | 41.43 | 17.95 |
| 8 | 15540.00 | 67.49 PK | 74.00 | -6.51 | 1.00 H | 0 | 43.22 | 24.27 |
| 9 | 15540.00 | 46.30 AV | 54.00 | -7.70 | 1.00 H | 0 | 22.03 | 24.27 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5145.00 | 60.47 PK | 74.00 | -13.53 | 1.00 V | 125 | 52.25 | 8.22 |
| 2 | 5145.00 | 39.98 AV | 54.00 | -14.02 | 1.00 V | 125 | 31.76 | 8.22 |
| 3 | 5150.00 | 62.48 PK | 74.00 | -11.52 | 1.00 V | 125 | 54.25 | 8.23 |
| 4 | 5150.00 | 40.22 AV | 54.00 | -13.78 | 1.00 V | 125 | 31.99 | 8.23 |
| 5 | *5200.00 | 103.64 PK | | | 1.00 V | 125 | 95.30 | 8.34 |
| 6 | *5200.00 | 90.67 AV | | | 1.00 V | 125 | 82.33 | 8.34 |
| 7 | #10400.00 | 58.64 PK | 68.20 | -9.56 | 1.00 V | 0 | 40.69 | 17.95 |
| 8 | 15600.00 | 66.92 PK | 74.00 | -7.08 | 1.00 V | 0 | 42.52 | 24.40 |
| 9 | 15600.00 | 45.36 AV | 54.00 | -8.64 | 1.00 V | 0 | 20.96 | 24.40 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5142.00 | 50.36 PK | 74.00 | -23.64 | 1.00 H | 105 | 42.14 | 8.22 |
| 2 | 5142.00 | 39.03 AV | 54.00 | -14.97 | 1.00 H | 105 | 30.81 | 8.22 |
| 3 | 5150.00 | 49.91 PK | 74.00 | -24.09 | 1.00 H | 105 | 41.68 | 8.23 |
| 4 | 5150.00 | 39.42 AV | 54.00 | -14.58 | 1.00 H | 105 | 31.19 | 8.23 |
| 5 | *5240.00 | 108.93 PK | | | 1.00 H | 105 | 100.50 | 8.43 |
| 6 | *5240.00 | 94.49 AV | | | 1.00 H | 105 | 86.06 | 8.43 |
| 7 | 5350.00 | 50.78 PK | 74.00 | -23.22 | 1.00 H | 105 | 42.12 | 8.66 |
| 8 | 5350.00 | 40.10 AV | 54.00 | -13.90 | 1.00 H | 105 | 31.44 | 8.66 |
| 9 | 5360.00 | 49.98 PK | 74.00 | -24.02 | 1.00 H | 105 | 41.30 | 8.68 |
| 10 | 5360.00 | 39.68 AV | 54.00 | -14.32 | 1.00 H | 105 | 31.00 | 8.68 |
| 11 | #10480.00 | 60.33 PK | 68.20 | -7.87 | 1.00 H | 0 | 42.20 | 18.13 |
| 12 | 15720.00 | 67.26 PK | 74.00 | -6.74 | 1.00 H | 0 | 42.60 | 24.66 |
| 13 | 15720.00 | 46.30 AV | 54.00 | -7.70 | 1.00 H | 0 | 21.64 | 24.66 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5144.00 | 48.67 PK | 74.00 | -25.33 | 1.00 V | 0 | 40.45 | 8.22 |
| 2 | 5144.00 | 37.97 AV | 54.00 | -16.03 | 1.00 V | 0 | 29.75 | 8.22 |
| 3 | 5150.00 | 49.67 PK | 74.00 | -24.33 | 1.00 V | 0 | 41.44 | 8.23 |
| 4 | 5150.00 | 39.79 AV | 54.00 | -14.21 | 1.00 V | 0 | 31.56 | 8.23 |
| 5 | *5240.00 | 104.55 PK | | | 1.00 V | 0 | 96.12 | 8.43 |
| 6 | *5240.00 | 90.75 AV | | | 1.00 V | 0 | 82.32 | 8.43 |
| 7 | 5350.00 | 50.19 PK | 74.00 | -23.81 | 1.00 V | 0 | 41.53 | 8.66 |
| 8 | 5350.00 | 39.93 AV | 54.00 | -14.07 | 1.00 V | 0 | 31.27 | 8.66 |
| 9 | 5355.00 | 51.36 PK | 74.00 | -22.64 | 1.00 V | 0 | 42.69 | 8.67 |
| 10 | 5355.00 | 38.76 AV | 54.00 | -15.24 | 1.00 V | 0 | 30.09 | 8.67 |
| 11 | #10480.00 | 59.06 PK | 68.20 | -9.14 | 1.00 V | 0 | 40.93 | 18.13 |
| 12 | 15720.00 | 67.34 PK | 74.00 | -6.66 | 1.00 V | 0 | 42.68 | 24.66 |
| 13 | 15720.00 | 46.22 AV | 54.00 | -7.78 | 1.00 V | 0 | 21.56 | 24.66 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## 802.11n (40MHz)

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

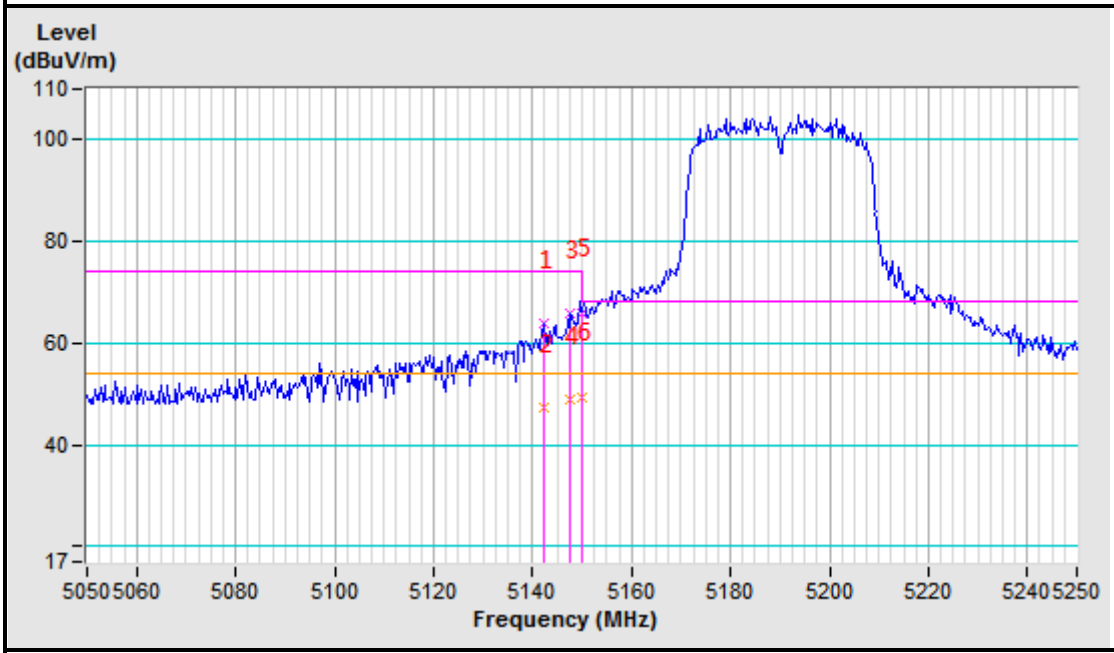
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5142.31 | 63.72 PK | 74.00 | -10.28 | 1.00 H | 166 | 55.50 | 8.22 |
| 2 | 5142.31 | 47.16 AV | 54.00 | -6.84 | 1.00 H | 166 | 38.94 | 8.22 |
| 3 | 5147.44 | 65.79 PK | 74.00 | -8.21 | 1.00 H | 166 | 57.56 | 8.23 |
| 4 | 5147.44 | 48.74 AV | 54.00 | -5.26 | 1.00 H | 166 | 40.51 | 8.23 |
| 5 | 5150.00 | 65.93 PK | 74.00 | -8.07 | 1.00 H | 166 | 57.70 | 8.23 |
| 6 | 5150.00 | 49.29 AV | 54.00 | -4.71 | 1.00 H | 166 | 41.06 | 8.23 |
| 7 | *5190.00 | 103.24 PK | | | 1.00 H | 166 | 94.92 | 8.32 |
| 8 | *5190.00 | 85.69 AV | | | 1.00 H | 166 | 77.37 | 8.32 |
| 9 | #10380.00 | 60.33 PK | 68.20 | -7.87 | 1.00 H | 0 | 42.43 | 17.90 |
| 10 | 15570.00 | 67.95 PK | 74.00 | -6.05 | 1.00 H | 0 | 43.62 | 24.33 |
| 11 | 15570.00 | 45.30 AV | 54.00 | -8.70 | 1.00 H | 0 | 20.97 | 24.33 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5144.55 | 62.56 PK | 74.00 | -11.44 | 1.00 V | 130 | 54.34 | 8.22 |
| 2 | 5144.55 | 46.03 AV | 54.00 | -7.97 | 1.00 V | 130 | 37.81 | 8.22 |
| 3 | 5148.40 | 64.23 PK | 74.00 | -9.77 | 1.00 V | 130 | 56.00 | 8.23 |
| 4 | 5148.40 | 47.99 AV | 54.00 | -6.01 | 1.00 V | 130 | 39.76 | 8.23 |
| 5 | 5150.00 | 63.83 PK | 74.00 | -10.17 | 1.00 V | 130 | 55.60 | 8.23 |
| 6 | 5150.00 | 47.97 AV | 54.00 | -6.03 | 1.00 V | 130 | 39.74 | 8.23 |
| 7 | *5190.00 | 99.42 PK | | | 1.00 V | 130 | 91.10 | 8.32 |
| 8 | *5190.00 | 84.11 AV | | | 1.00 V | 130 | 75.79 | 8.32 |
| 9 | #10380.00 | 58.44 PK | 68.20 | -9.76 | 1.00 V | 0 | 40.54 | 17.90 |
| 10 | 15570.00 | 66.34 PK | 74.00 | -7.66 | 1.00 V | 0 | 42.01 | 24.33 |
| 11 | 15570.00 | 44.92 AV | 54.00 | -9.08 | 1.00 V | 0 | 20.59 | 24.33 |

**REMARKS:**

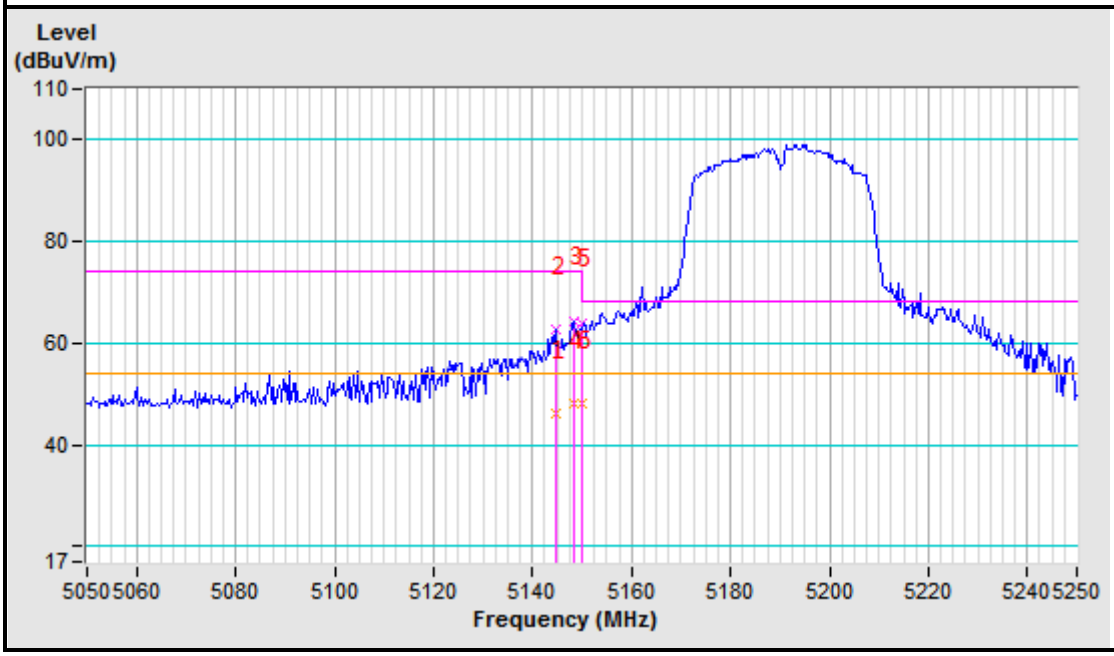
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5190MHz Horizontal**




**5190MHz Vertical**



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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5143.00 | 58.66 PK | 74.00 | -15.34 | 1.00 H | 100 | 50.44 | 8.22 |
| 2 | 5143.00 | 37.55 AV | 54.00 | -16.45 | 1.00 H | 100 | 29.33 | 8.22 |
| 3 | 5150.00 | 59.75 PK | 74.00 | -14.25 | 1.00 H | 100 | 51.52 | 8.23 |
| 4 | 5150.00 | 39.69 AV | 54.00 | -14.31 | 1.00 H | 100 | 31.46 | 8.23 |
| 5 | *5230.00 | 106.14 PK | | | 1.00 H | 100 | 97.74 | 8.40 |
| 6 | *5230.00 | 88.35 AV | | | 1.00 H | 100 | 79.95 | 8.40 |
| 7 | #10460.00 | 61.28 PK | 68.20 | -6.92 | 1.00 H | 0 | 43.20 | 18.08 |
| 8 | 15690.00 | 67.64 PK | 74.00 | -6.36 | 1.00 H | 0 | 43.05 | 24.59 |
| 9 | 15690.00 | 46.33 AV | 54.00 | -7.67 | 1.00 H | 0 | 21.74 | 24.59 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5140.00 | 59.42 PK | 74.00 | -14.58 | 1.00 V | 360 | 51.21 | 8.21 |
| 2 | 5140.00 | 38.60 AV | 54.00 | -15.40 | 1.00 V | 360 | 30.39 | 8.21 |
| 3 | 5150.00 | 60.23 PK | 74.00 | -13.77 | 1.00 V | 360 | 52.00 | 8.23 |
| 4 | 5150.00 | 40.10 AV | 54.00 | -13.90 | 1.00 V | 360 | 31.87 | 8.23 |
| 5 | *5230.00 | 101.77 PK | | | 1.00 V | 360 | 93.37 | 8.40 |
| 6 | *5230.00 | 83.24 AV | | | 1.00 V | 360 | 74.84 | 8.40 |
| 7 | #10460.00 | 59.42 PK | 68.20 | -8.78 | 1.00 V | 0 | 41.34 | 18.08 |
| 8 | 15690.00 | 66.63 PK | 74.00 | -7.37 | 1.00 V | 0 | 42.04 | 24.59 |
| 9 | 15690.00 | 45.92 AV | 54.00 | -8.08 | 1.00 V | 0 | 21.33 | 24.59 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## 802.11ac (80MHz)

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

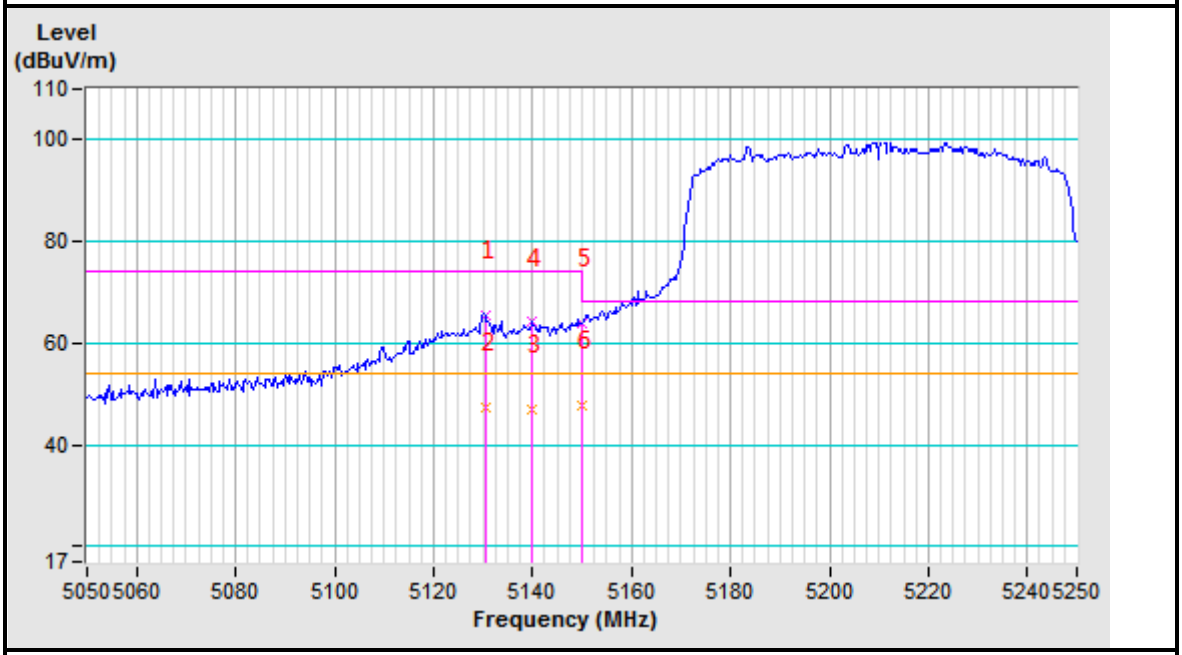
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5130.45 | 65.65 PK | 74.00 | -8.35 | 1.00 H | 166 | 57.45 | 8.20 |
| 2 | 5130.45 | 47.51 AV | 54.00 | -6.49 | 1.00 H | 166 | 39.31 | 8.20 |
| 3 | 5140.06 | 64.15 PK | 74.00 | -9.85 | 1.00 H | 166 | 55.94 | 8.21 |
| 4 | 5140.06 | 47.01 AV | 54.00 | -6.99 | 1.00 H | 166 | 38.80 | 8.21 |
| 5 | 5150.00 | 63.85 PK | 74.00 | -10.15 | 1.00 H | 166 | 55.62 | 8.23 |
| 6 | 5150.00 | 47.92 AV | 54.00 | -6.08 | 1.00 H | 166 | 39.69 | 8.23 |
| 7 | *5210.00 | 100.82 PK | | | 1.00 H | 166 | 92.45 | 8.37 |
| 8 | *5210.00 | 79.58 AV | | | 1.00 H | 166 | 71.21 | 8.37 |
| 9 | #10420.00 | 61.17 PK | 68.20 | -7.03 | 1.00 H | 0 | 43.18 | 17.99 |
| 10 | 15630.00 | 67.49 PK | 74.00 | -6.51 | 1.00 H | 0 | 43.03 | 24.46 |
| 11 | 15630.00 | 45.58 AV | 54.00 | -8.42 | 1.00 H | 0 | 21.12 | 24.46 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5139.42 | 46.82 AV | 54.00 | -7.18 | 1.00 V | 144 | 38.61 | 8.21 |
| 2 | 5139.42 | 63.17 PK | 74.00 | -10.83 | 1.00 V | 144 | 54.96 | 8.21 |
| 3 | 5146.15 | 63.59 PK | 74.00 | -10.41 | 1.00 V | 144 | 55.37 | 8.22 |
| 4 | 5146.15 | 46.93 AV | 54.00 | -7.07 | 1.00 V | 144 | 38.71 | 8.22 |
| 5 | 5150.00 | 61.69 PK | 74.00 | -12.31 | 1.00 V | 144 | 53.46 | 8.23 |
| 6 | 5150.00 | 46.97 AV | 54.00 | -7.03 | 1.00 V | 144 | 38.74 | 8.23 |
| 7 | *5210.00 | 95.73 PK | | | 1.00 V | 144 | 87.36 | 8.37 |
| 8 | *5210.00 | 74.85 AV | | | 1.00 V | 144 | 66.48 | 8.37 |
| 9 | #10420.00 | 58.64 PK | 68.20 | -9.56 | 1.00 V | 0 | 40.65 | 17.99 |
| 10 | 15630.00 | 65.65 PK | 74.00 | -8.35 | 1.00 V | 0 | 41.19 | 24.46 |
| 11 | 15630.00 | 45.05 AV | 54.00 | -8.95 | 1.00 V | 0 | 20.59 | 24.46 |

**REMARKS:**

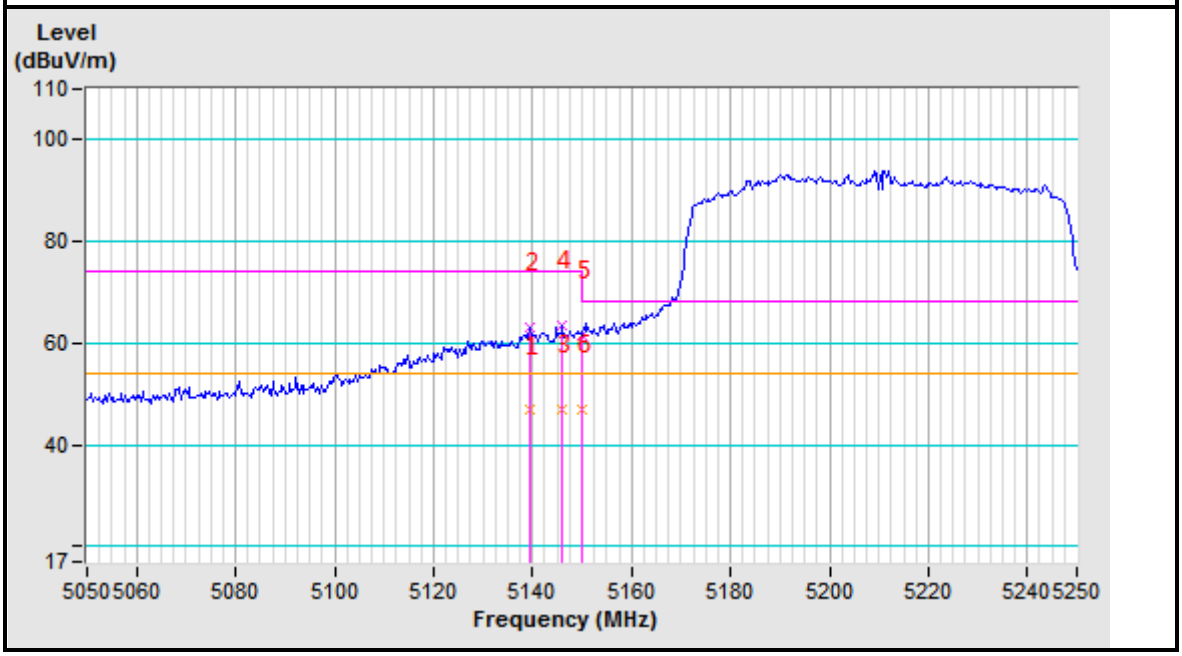
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5210MHz Horizontal**




**5210MHz Vertical**



## Band 2 (5250-5350MHz): ABOVE 1GHz DATA 802.11a

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5148.00 | 49.14 PK | 74.00 | -24.86 | 1.00 H | 163 | 40.91 | 8.23 |
| 2 | 5148.00 | 37.11 AV | 54.00 | -16.89 | 1.00 H | 163 | 28.88 | 8.23 |
| 3 | 5150.00 | 49.15 PK | 74.00 | -24.85 | 1.00 H | 163 | 40.92 | 8.23 |
| 4 | 5150.00 | 37.29 AV | 54.00 | -16.71 | 1.00 H | 163 | 29.06 | 8.23 |
| 5 | *5260.00 | 111.24 PK | | | 1.00 H | 163 | 102.78 | 8.46 |
| 6 | *5260.00 | 96.85 AV | | | 1.00 H | 163 | 88.39 | 8.46 |
| 7 | 5350.00 | 52.43 PK | 74.00 | -21.57 | 1.00 H | 163 | 43.77 | 8.66 |
| 8 | 5350.00 | 40.35 AV | 54.00 | -13.65 | 1.00 H | 163 | 31.69 | 8.66 |
| 9 | 5358.00 | 52.79 PK | 74.00 | -21.21 | 1.00 H | 163 | 44.12 | 8.67 |
| 10 | 5358.00 | 40.27 AV | 54.00 | -13.73 | 1.00 H | 163 | 31.60 | 8.67 |
| 11 | #10520.00 | 61.75 PK | 68.20 | -6.45 | 1.00 H | 0 | 43.54 | 18.21 |
| 12 | 15780.00 | 66.44 PK | 74.00 | -7.56 | 1.00 H | 0 | 41.66 | 24.78 |
| 13 | 15780.00 | 45.58 AV | 54.00 | -8.42 | 1.00 H | 0 | 20.80 | 24.78 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5145.00 | 49.02 PK | 74.00 | -24.98 | 1.00 V | 180 | 40.80 | 8.22 |
| 2 | 5145.00 | 37.02 AV | 54.00 | -16.98 | 1.00 V | 180 | 28.80 | 8.22 |
| 3 | 5150.00 | 49.38 PK | 74.00 | -24.62 | 1.00 V | 180 | 41.15 | 8.23 |
| 4 | 5150.00 | 37.10 AV | 54.00 | -16.90 | 1.00 V | 180 | 28.87 | 8.23 |
| 5 | *5260.00 | 105.80 PK | | | 1.00 V | 180 | 97.34 | 8.46 |
| 6 | *5260.00 | 91.46 AV | | | 1.00 V | 180 | 83.00 | 8.46 |
| 7 | 5350.00 | 51.58 PK | 74.00 | -22.42 | 1.00 V | 180 | 42.92 | 8.66 |
| 8 | 5350.00 | 39.44 AV | 54.00 | -14.56 | 1.00 V | 180 | 30.78 | 8.66 |
| 9 | 5360.00 | 51.03 PK | 74.00 | -22.97 | 1.00 V | 180 | 42.35 | 8.68 |
| 10 | 5360.00 | 40.21 AV | 54.00 | -13.79 | 1.00 V | 180 | 31.53 | 8.68 |
| 11 | #10520.00 | 58.33 PK | 68.20 | -9.87 | 1.00 V | 0 | 40.12 | 18.21 |
| 12 | 15780.00 | 65.15 PK | 74.00 | -8.85 | 1.00 V | 0 | 40.37 | 24.78 |
| 13 | 15780.00 | 64.29 AV | | | 1.00 V | 0 | 39.51 | 24.78 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5300.00 | 110.99 PK | | | 1.00 H | 160 | 102.44 | 8.55 |
| 2 | *5300.00 | 97.05 AV | | | 1.00 H | 160 | 88.50 | 8.55 |
| 3 | 5350.00 | 65.18 PK | 74.00 | -8.82 | 1.00 H | 160 | 56.52 | 8.66 |
| 4 | 5350.00 | 41.60 AV | 54.00 | -12.40 | 1.00 H | 160 | 32.94 | 8.66 |
| 5 | 5358.00 | 64.23 PK | 74.00 | -9.77 | 1.00 H | 160 | 55.56 | 8.67 |
| 6 | 5358.00 | 41.12 AV | 54.00 | -12.88 | 1.00 H | 160 | 32.45 | 8.67 |
| 7 | 10600.00 | 59.42 PK | 74.00 | -14.58 | 1.00 H | 0 | 41.08 | 18.34 |
| 8 | 10600.00 | 40.20 AV | 54.00 | -13.80 | 1.00 H | 0 | 21.86 | 18.34 |
| 9 | 15900.00 | 66.92 PK | 74.00 | -7.08 | 1.00 H | 0 | 41.88 | 25.04 |
| 10 | 15900.00 | 45.30 AV | 54.00 | -8.70 | 1.00 H | 0 | 20.26 | 25.04 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5300.00 | 105.10 PK | | | 1.00 V | 230 | 96.55 | 8.55 |
| 2 | *5300.00 | 101.64 AV | | | 1.00 V | 230 | 93.09 | 8.55 |
| 3 | 5350.00 | 63.18 PK | 74.00 | -10.82 | 1.00 V | 230 | 54.52 | 8.66 |
| 4 | 5350.00 | 40.20 AV | 54.00 | -13.80 | 1.00 V | 230 | 31.54 | 8.66 |
| 5 | 5355.00 | 60.47 PK | 74.00 | -13.53 | 1.00 V | 230 | 51.80 | 8.67 |
| 6 | 5355.00 | 39.98 AV | 54.00 | -14.02 | 1.00 V | 230 | 31.31 | 8.67 |
| 7 | 10600.00 | 58.64 PK | 74.00 | -15.36 | 1.00 V | 0 | 40.30 | 18.34 |
| 8 | 10600.00 | 39.96 AV | 54.00 | -14.04 | 1.00 V | 0 | 21.62 | 18.34 |
| 9 | 15900.00 | 65.72 PK | 74.00 | -8.28 | 1.00 V | 0 | 40.68 | 25.04 |
| 10 | 15900.00 | 44.88 AV | 54.00 | -9.12 | 1.00 V | 0 | 19.84 | 25.04 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

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

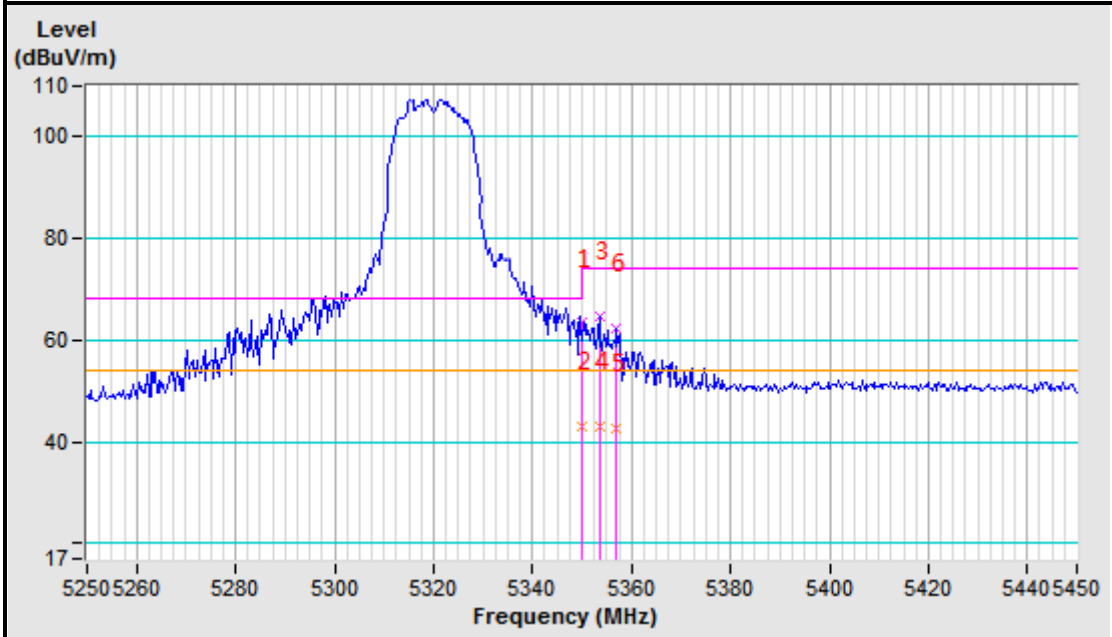
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5320.00 | 108.78 PK | | | 1.00 H | 166 | 100.18 | 8.60 |
| 2 | *5320.00 | 94.13 AV | | | 1.00 H | 166 | 85.53 | 8.60 |
| 3 | 5350.00 | 63.31 PK | 74.00 | -10.69 | 1.00 H | 166 | 54.65 | 8.66 |
| 4 | 5350.00 | 43.05 AV | 54.00 | -10.95 | 1.00 H | 166 | 34.39 | 8.66 |
| 5 | 5353.53 | 64.78 PK | 74.00 | -9.22 | 1.00 H | 166 | 56.11 | 8.67 |
| 6 | 5353.53 | 42.96 AV | 54.00 | -11.04 | 1.00 H | 166 | 34.29 | 8.67 |
| 7 | 5357.05 | 62.38 PK | 74.00 | -11.62 | 1.00 H | 166 | 53.71 | 8.67 |
| 8 | 5357.05 | 42.55 AV | 54.00 | -11.45 | 1.00 H | 166 | 33.88 | 8.67 |
| 9 | 10640.00 | 62.22 PK | 74.00 | -11.78 | 1.00 H | 0 | 43.81 | 18.41 |
| 10 | 10640.00 | 41.30 AV | 54.00 | -12.70 | 1.00 H | 0 | 22.89 | 18.41 |
| 11 | 15960.00 | 67.92 PK | 74.00 | -6.08 | 1.00 H | 0 | 42.75 | 25.17 |
| 12 | 15960.00 | 46.10 AV | 54.00 | -7.90 | 1.00 H | 0 | 20.93 | 25.17 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5320.00 | 102.49 PK | | | 1.00 V | 124 | 93.89 | 8.60 |
| 2 | *5320.00 | 89.01 AV | | | 1.00 V | 124 | 80.41 | 8.60 |
| 3 | 5350.00 | 61.53 PK | 74.00 | -12.47 | 1.00 V | 124 | 52.87 | 8.66 |
| 4 | 5350.00 | 41.22 AV | 54.00 | -12.78 | 1.00 V | 124 | 32.56 | 8.66 |
| 5 | 5351.60 | 60.75 PK | 74.00 | -13.25 | 1.00 V | 124 | 52.09 | 8.66 |
| 6 | 5351.60 | 40.51 AV | 54.00 | -13.49 | 1.00 V | 124 | 31.85 | 8.66 |
| 7 | 5353.21 | 59.30 PK | 74.00 | -14.70 | 1.00 V | 124 | 50.64 | 8.66 |
| 8 | 5353.21 | 39.12 AV | 54.00 | -14.88 | 1.00 V | 124 | 30.46 | 8.66 |
| 9 | 10640.00 | 58.31 PK | 74.00 | -15.69 | 1.00 V | 0 | 39.90 | 18.41 |
| 10 | 10640.00 | 40.20 AV | 54.00 | -13.80 | 1.00 V | 0 | 21.79 | 18.41 |
| 11 | 15960.00 | 65.03 PK | 74.00 | -8.97 | 1.00 V | 0 | 39.86 | 25.17 |
| 12 | 15960.00 | 45.02 AV | 54.00 | -8.98 | 1.00 V | 0 | 19.85 | 25.17 |

**REMARKS:**

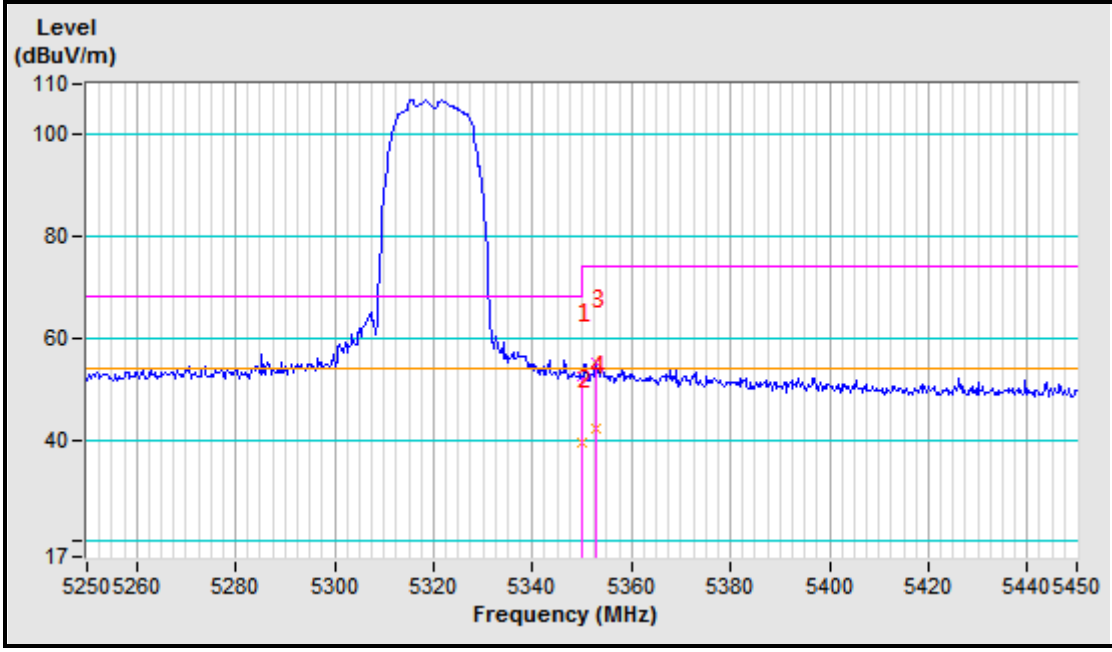
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

## Band edge Plot

**5320MHz Horizontal**




**5320MHz Vertical**



## 802.11n (20MHz)

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5147.00 | 49.03 PK | 74.00 | -24.97 | 1.00 H | 151 | 40.80 | 8.23 |
| 2 | 5147.00 | 37.12 AV | 54.00 | -16.88 | 1.00 H | 151 | 28.89 | 8.23 |
| 3 | 5150.00 | 49.19 PK | 74.00 | -24.81 | 1.00 H | 151 | 40.96 | 8.23 |
| 4 | 5150.00 | 37.25 AV | 54.00 | -16.75 | 1.00 H | 151 | 29.02 | 8.23 |
| 5 | *5260.00 | 110.47 PK | | | 1.00 H | 151 | 102.01 | 8.46 |
| 6 | *5260.00 | 95.56 AV | | | 1.00 H | 151 | 87.10 | 8.46 |
| 7 | 5350.00 | 53.28 PK | 74.00 | -20.72 | 1.00 H | 151 | 44.62 | 8.66 |
| 8 | 5350.00 | 40.10 AV | 54.00 | -13.90 | 1.00 H | 151 | 31.44 | 8.66 |
| 9 | 5354.00 | 52.17 PK | 74.00 | -21.83 | 1.00 H | 151 | 43.50 | 8.67 |
| 10 | 5354.00 | 40.05 AV | 54.00 | -13.95 | 1.00 H | 151 | 31.38 | 8.67 |
| 11 | #10520.00 | 59.63 PK | 68.20 | -8.57 | 1.00 H | 0 | 41.42 | 18.21 |
| 12 | 15780.00 | 66.42 PK | 74.00 | -7.58 | 1.00 H | 0 | 41.64 | 24.78 |
| 13 | 15780.00 | 45.50 AV | 54.00 | -8.50 | 1.00 H | 0 | 20.72 | 24.78 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5142.00 | 48.85 PK | 74.00 | -25.15 | 1.00 V | 154 | 40.63 | 8.22 |
| 2 | 5142.00 | 36.90 AV | 54.00 | -17.10 | 1.00 V | 154 | 28.68 | 8.22 |
| 3 | 5150.00 | 49.30 PK | 74.00 | -24.70 | 1.00 V | 154 | 41.07 | 8.23 |
| 4 | 5150.00 | 37.10 AV | 54.00 | -16.90 | 1.00 V | 154 | 28.87 | 8.23 |
| 5 | *5260.00 | 106.99 PK | | | 1.00 V | 154 | 98.53 | 8.46 |
| 6 | *5260.00 | 91.76 AV | | | 1.00 V | 154 | 83.30 | 8.46 |
| 7 | 5350.00 | 51.63 PK | 74.00 | -22.37 | 1.00 V | 154 | 42.97 | 8.66 |
| 8 | 5350.00 | 39.98 AV | 54.00 | -14.02 | 1.00 V | 154 | 31.32 | 8.66 |
| 9 | 5359.00 | 51.98 PK | 74.00 | -22.02 | 1.00 V | 154 | 43.31 | 8.67 |
| 10 | 5359.00 | 39.48 AV | 54.00 | -14.52 | 1.00 V | 154 | 30.81 | 8.67 |
| 11 | #10520.00 | 61.05 PK | 68.20 | -7.15 | 1.00 V | 0 | 42.84 | 18.21 |
| 12 | 15780.00 | 64.34 PK | 74.00 | -9.66 | 1.00 V | 0 | 39.56 | 24.78 |
| 13 | 15780.00 | 44.92 AV | 54.00 | -9.08 | 1.00 V | 0 | 20.14 | 24.78 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5300.00 | 112.18 PK | | | 1.00 H | 155 | 103.63 | 8.55 |
| 2 | *5300.00 | 97.48 AV | | | 1.00 H | 155 | 88.93 | 8.55 |
| 3 | 5350.00 | 67.09 PK | 74.00 | -6.91 | 1.00 H | 155 | 58.43 | 8.66 |
| 4 | 5350.00 | 41.91 AV | 54.00 | -12.09 | 1.00 H | 155 | 33.25 | 8.66 |
| 5 | 5356.00 | 66.71 PK | 74.00 | -7.29 | 1.00 H | 155 | 58.04 | 8.67 |
| 6 | 5356.00 | 40.70 AV | 54.00 | -13.30 | 1.00 H | 155 | 32.03 | 8.67 |
| 7 | 10600.00 | 60.22 PK | 74.00 | -13.78 | 1.00 H | 0 | 41.88 | 18.34 |
| 8 | 10600.00 | 40.41 AV | 54.00 | -13.59 | 1.00 H | 0 | 22.07 | 18.34 |
| 9 | 15900.00 | 66.34 PK | 74.00 | -7.66 | 1.00 H | 0 | 41.30 | 25.04 |
| 10 | 15900.00 | 44.98 AV | 54.00 | -9.02 | 1.00 H | 0 | 19.94 | 25.04 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5300.00 | 108.17 PK | | | 1.00 V | 200 | 99.62 | 8.55 |
| 2 | *5300.00 | 93.05 AV | | | 1.00 V | 200 | 84.50 | 8.55 |
| 3 | 5350.00 | 62.38 PK | 74.00 | -11.62 | 1.00 V | 200 | 53.72 | 8.66 |
| 4 | 5350.00 | 40.67 AV | 54.00 | -13.33 | 1.00 V | 200 | 32.01 | 8.66 |
| 5 | 5352.00 | 62.11 PK | 74.00 | -11.89 | 1.00 V | 200 | 53.45 | 8.66 |
| 6 | 5352.00 | 40.10 AV | 54.00 | -13.90 | 1.00 V | 200 | 31.44 | 8.66 |
| 7 | 10600.00 | 58.34 PK | 74.00 | -15.66 | 1.00 V | 0 | 40.00 | 18.34 |
| 8 | 10600.00 | 39.60 AV | 54.00 | -14.40 | 1.00 V | 0 | 21.26 | 18.34 |
| 9 | 15900.00 | 67.15 PK | 74.00 | -6.85 | 1.00 V | 0 | 42.11 | 25.04 |
| 10 | 15900.00 | 44.20 AV | 54.00 | -9.80 | 1.00 V | 0 | 19.16 | 25.04 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

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

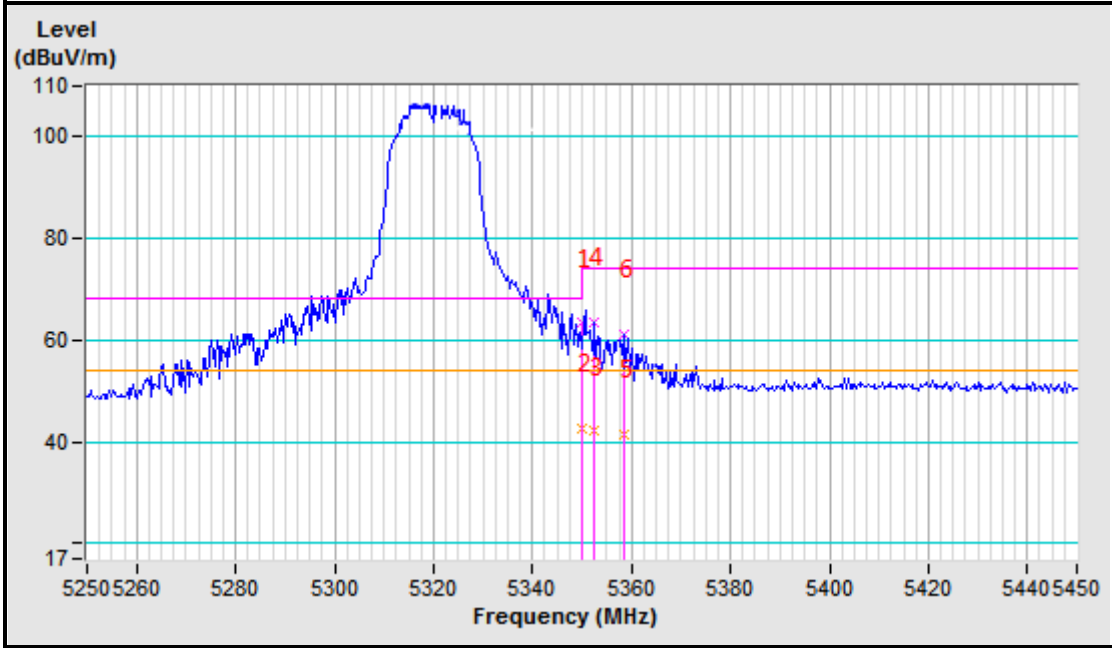
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5320.00 | 107.60 PK | | | 1.00 H | 140 | 99.00 | 8.60 |
| 2 | *5320.00 | 93.10 AV | | | 1.00 H | 140 | 84.50 | 8.60 |
| 3 | 5350.00 | 63.35 PK | 74.00 | -10.65 | 1.00 H | 140 | 54.69 | 8.66 |
| 4 | 5350.00 | 42.72 AV | 54.00 | -11.28 | 1.00 H | 140 | 34.06 | 8.66 |
| 5 | 5352.56 | 63.53 PK | 74.00 | -10.47 | 1.00 H | 140 | 54.87 | 8.66 |
| 6 | 5352.56 | 42.10 AV | 54.00 | -11.90 | 1.00 H | 140 | 33.44 | 8.66 |
| 7 | 5358.33 | 61.18 PK | 74.00 | -12.82 | 1.00 H | 140 | 52.51 | 8.67 |
| 8 | 5358.33 | 41.57 AV | 54.00 | -12.43 | 1.00 H | 140 | 32.90 | 8.67 |
| 9 | 10640.00 | 59.46 PK | 74.00 | -14.54 | 1.00 H | 0 | 41.05 | 18.41 |
| 10 | 10640.00 | 41.20 AV | 54.00 | -12.80 | 1.00 H | 0 | 22.79 | 18.41 |
| 11 | 15960.00 | 66.47 PK | 74.00 | -7.53 | 1.00 H | 0 | 41.30 | 25.17 |
| 12 | 15960.00 | 44.81 AV | 54.00 | -9.19 | 1.00 H | 0 | 19.64 | 25.17 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5320.00 | 102.70 PK | | | 1.00 V | 106 | 94.10 | 8.60 |
| 2 | *5320.00 | 87.43 AV | | | 1.00 V | 106 | 78.83 | 8.60 |
| 3 | 5350.00 | 60.11 PK | 74.00 | -13.89 | 1.00 V | 106 | 51.45 | 8.66 |
| 4 | 5350.00 | 40.05 AV | 54.00 | -13.95 | 1.00 V | 106 | 31.39 | 8.66 |
| 5 | 5353.53 | 60.60 PK | 74.00 | -13.40 | 1.00 V | 106 | 51.93 | 8.67 |
| 6 | 5353.53 | 39.98 AV | 54.00 | -14.02 | 1.00 V | 106 | 31.31 | 8.67 |
| 7 | 5355.77 | 60.72 PK | 74.00 | -13.28 | 1.00 V | 106 | 52.05 | 8.67 |
| 8 | 5355.77 | 39.74 AV | 54.00 | -14.26 | 1.00 V | 106 | 31.07 | 8.67 |
| 9 | 10640.00 | 59.11 PK | 74.00 | -14.89 | 1.00 V | 0 | 40.70 | 18.41 |
| 10 | 10640.00 | 40.08 AV | 54.00 | -13.92 | 1.00 V | 0 | 21.67 | 18.41 |
| 11 | 15960.00 | 65.84 PK | 74.00 | -8.16 | 1.00 V | 0 | 40.67 | 25.17 |
| 12 | 15960.00 | 44.72 AV | 54.00 | -9.28 | 1.00 V | 0 | 19.55 | 25.17 |

**REMARKS:**

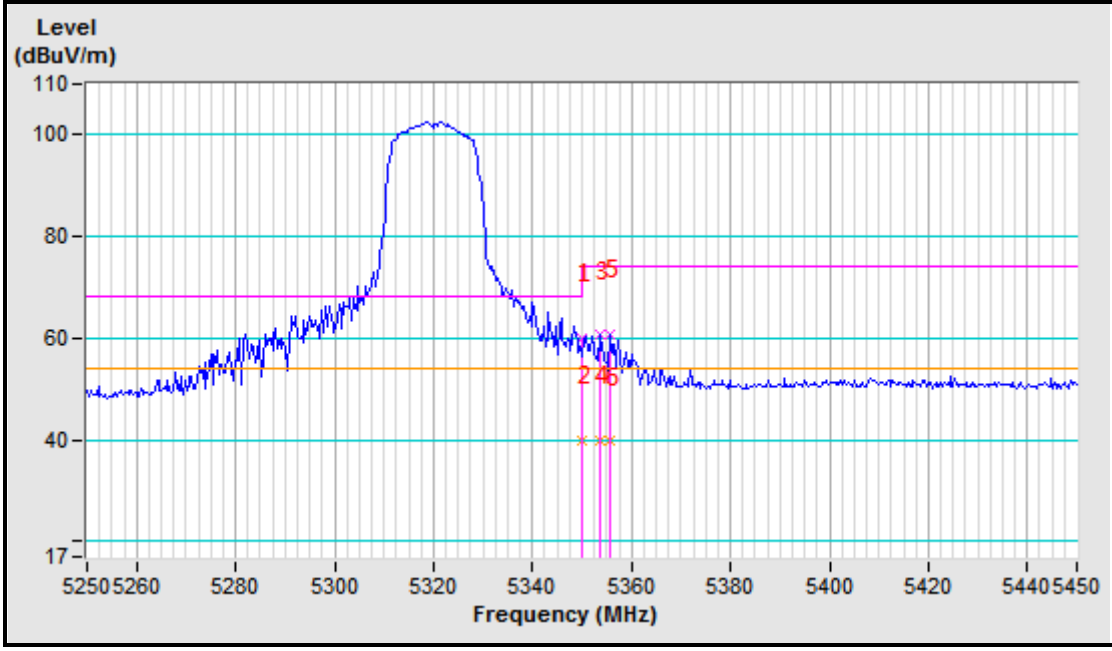
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

## Band edge Plot

**5320MHz Horizontal**




**5320MHz Vertical**



## 802.11n (40MHz)

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5270.00 | 107.64 PK | | | 1.00 H | 107 | 99.15 | 8.49 |
| 2 | *5270.00 | 90.38 AV | | | 1.00 H | 107 | 81.89 | 8.49 |
| 3 | 5350.00 | 67.27 PK | 74.00 | -6.73 | 1.00 H | 107 | 58.61 | 8.66 |
| 4 | 5350.00 | 43.62 AV | 54.00 | -10.38 | 1.00 H | 107 | 34.96 | 8.66 |
| 5 | 5351.00 | 67.40 PK | 74.00 | -6.60 | 1.00 H | 107 | 58.74 | 8.66 |
| 6 | 5351.00 | 43.38 AV | 54.00 | -10.62 | 1.00 H | 107 | 34.72 | 8.66 |
| 7 | #10540.00 | 61.08 PK | 68.20 | -7.12 | 1.00 H | 0 | 42.84 | 18.24 |
| 8 | 15810.00 | 65.34 PK | 74.00 | -8.66 | 1.00 H | 0 | 40.49 | 24.85 |
| 9 | 15810.00 | 45.36 AV | 54.00 | -8.64 | 1.00 H | 0 | 20.51 | 24.85 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5270.00 | 103.29 PK | | | 1.00 V | 136 | 94.80 | 8.49 |
| 2 | *5270.00 | 86.78 AV | | | 1.00 V | 136 | 78.29 | 8.49 |
| 3 | 5350.00 | 62.11 PK | 74.00 | -11.89 | 1.00 V | 136 | 53.45 | 8.66 |
| 4 | 5350.00 | 40.39 AV | 54.00 | -13.61 | 1.00 V | 136 | 31.73 | 8.66 |
| 5 | 5352.00 | 62.23 PK | 74.00 | -11.77 | 1.00 V | 136 | 53.57 | 8.66 |
| 6 | 5352.00 | 40.18 AV | 54.00 | -13.82 | 1.00 V | 136 | 31.52 | 8.66 |
| 7 | #10540.00 | 61.20 PK | 68.20 | -7.00 | 1.00 V | 0 | 42.96 | 18.24 |
| 8 | 15810.00 | 64.44 PK | 74.00 | -9.56 | 1.00 V | 0 | 39.59 | 24.85 |
| 9 | 15810.00 | 44.19 AV | 54.00 | -9.81 | 1.00 V | 0 | 19.34 | 24.85 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

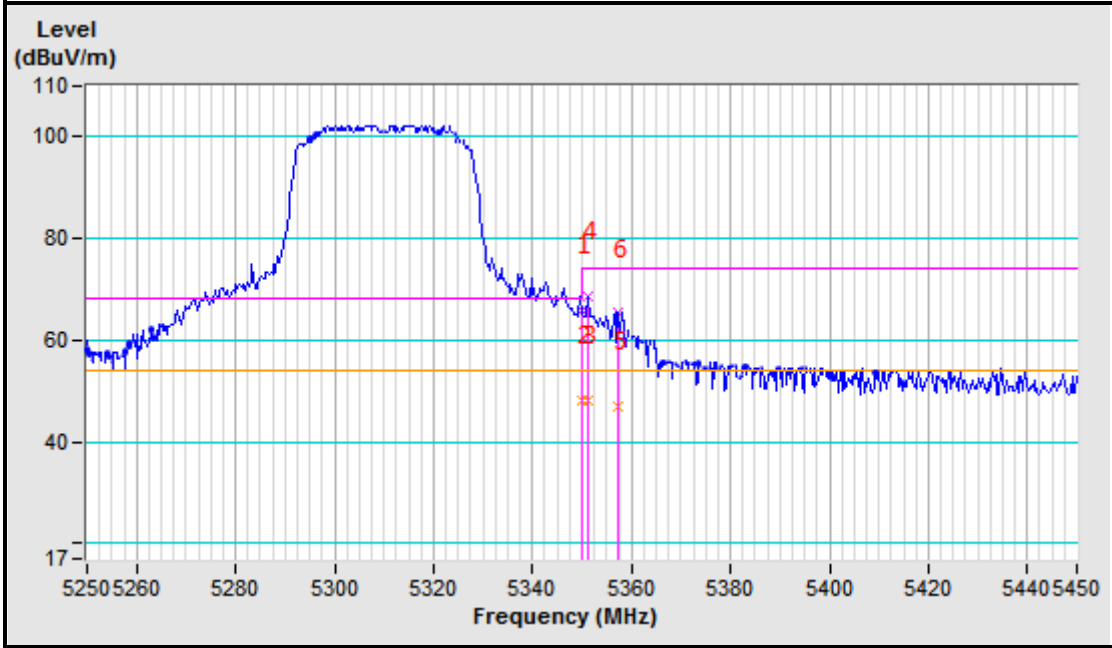
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5310.00 | 103.63 PK | | | 1.00 H | 165 | 95.06 | 8.57 |
| 2 | *5310.00 | 85.75 AV | | | 1.00 H | 165 | 77.18 | 8.57 |
| 3 | 5350.00 | 65.91 PK | 74.00 | -8.09 | 1.00 H | 165 | 57.25 | 8.66 |
| 4 | 5350.00 | 48.22 AV | 54.00 | -5.78 | 1.00 H | 165 | 39.56 | 8.66 |
| 5 | 5351.28 | 68.56 PK | 74.00 | -5.44 | 1.00 H | 165 | 59.90 | 8.66 |
| 6 | 5351.28 | 48.15 AV | 54.00 | -5.85 | 1.00 H | 165 | 39.49 | 8.66 |
| 7 | 5357.37 | 46.97 AV | 54.00 | -7.03 | 1.00 H | 165 | 38.30 | 8.67 |
| 8 | 5357.37 | 65.35 PK | 74.00 | -8.65 | 1.00 H | 165 | 56.68 | 8.67 |
| 9 | 10620.00 | 61.23 PK | 74.00 | -12.77 | 1.00 H | 0 | 42.85 | 18.38 |
| 10 | 10620.00 | 40.88 AV | 54.00 | -13.12 | 1.00 H | 0 | 22.50 | 18.38 |
| 11 | 15930.00 | 65.55 PK | 74.00 | -8.45 | 1.00 H | 0 | 40.44 | 25.11 |
| 12 | 15930.00 | 45.35 AV | 54.00 | -8.65 | 1.00 H | 0 | 20.24 | 25.11 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5310.00 | 97.47 PK | | | 1.00 V | 167 | 88.90 | 8.57 |
| 2 | *5310.00 | 79.57 AV | | | 1.00 V | 167 | 71.00 | 8.57 |
| 3 | 5350.00 | 63.47 PK | 74.00 | -10.53 | 1.00 V | 167 | 54.81 | 8.66 |
| 4 | 5350.00 | 46.62 AV | 54.00 | -7.38 | 1.00 V | 167 | 37.96 | 8.66 |
| 5 | 5356.09 | 61.35 PK | 74.00 | -12.65 | 1.00 V | 167 | 52.68 | 8.67 |
| 6 | 5356.09 | 45.27 AV | 54.00 | -8.73 | 1.00 V | 167 | 36.60 | 8.67 |
| 7 | 5361.86 | 60.19 PK | 74.00 | -13.81 | 1.00 V | 167 | 51.51 | 8.68 |
| 8 | 5361.86 | 45.05 AV | 54.00 | -8.95 | 1.00 V | 167 | 36.37 | 8.68 |
| 9 | 10620.00 | 60.18 PK | 74.00 | -13.82 | 1.00 V | 0 | 41.80 | 18.38 |
| 10 | 10620.00 | 40.17 AV | 54.00 | -13.83 | 1.00 V | 0 | 21.79 | 18.38 |
| 11 | 15930.00 | 64.39 PK | 74.00 | -9.61 | 1.00 V | 0 | 39.28 | 25.11 |
| 12 | 15930.00 | 44.36 AV | 54.00 | -9.64 | 1.00 V | 0 | 19.25 | 25.11 |

**REMARKS:**

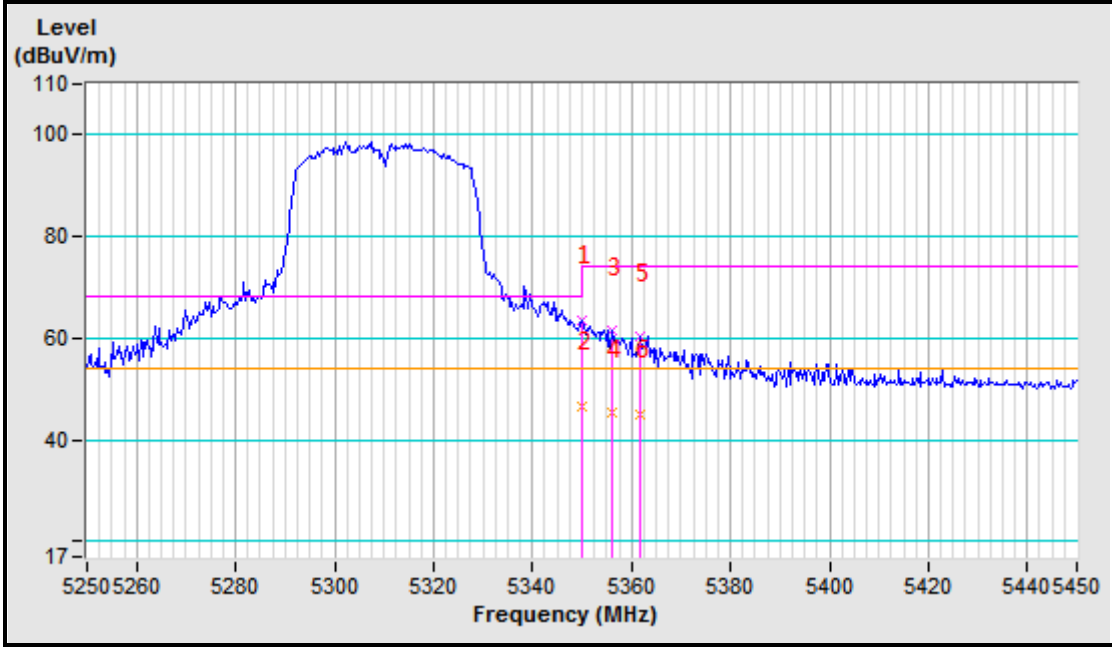
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

## Band edge Plot

**5310MHz Horizontal**




**5310MHz Vertical**



## 802.11ac 80MHz

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

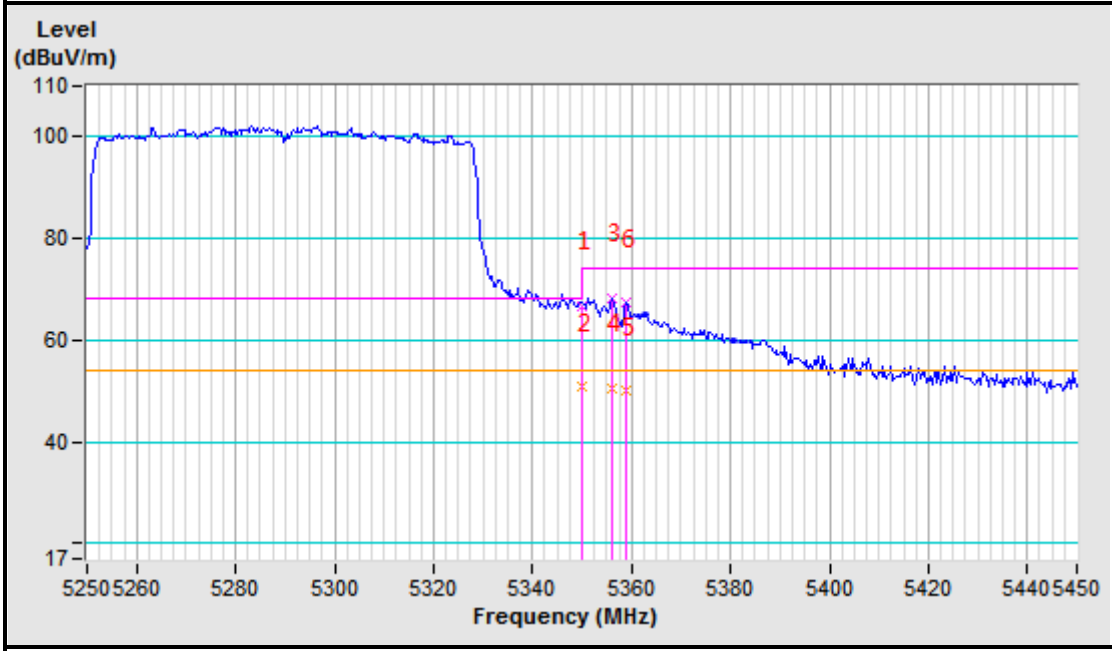
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5290.00 | 103.49 PK | | | 1.00 H | 158 | 94.97 | 8.52 |
| 2 | *5290.00 | 80.28 AV | | | 1.00 H | 158 | 71.76 | 8.52 |
| 3 | 5350.00 | 66.72 PK | 74.00 | -7.28 | 1.00 H | 158 | 58.06 | 8.66 |
| 4 | 5350.00 | 50.73 AV | 54.00 | -3.27 | 1.00 H | 158 | 42.07 | 8.66 |
| 5 | 5356.09 | 68.26 PK | 74.00 | -5.74 | 1.00 H | 158 | 59.59 | 8.67 |
| 6 | 5356.09 | 50.52 AV | 54.00 | -3.48 | 1.00 H | 158 | 41.85 | 8.67 |
| 7 | 5358.97 | 67.31 PK | 74.00 | -6.69 | 1.00 H | 158 | 58.64 | 8.67 |
| 8 | 5358.97 | 50.02 AV | 54.00 | -3.98 | 1.00 H | 158 | 41.35 | 8.67 |
| 9 | #10580.00 | 61.23 PK | 68.20 | -6.97 | 1.00 H | 0 | 42.92 | 18.31 |
| 10 | 15870.00 | 65.29 PK | 74.00 | -8.71 | 1.00 H | 0 | 40.31 | 24.98 |
| 11 | 15870.00 | 45.03 AV | 54.00 | -8.97 | 1.00 H | 0 | 20.05 | 24.98 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5290.00 | 98.41 PK | | | 1.00 V | 178 | 89.89 | 8.52 |
| 2 | *5290.00 | 75.89 AV | | | 1.00 V | 178 | 67.37 | 8.52 |
| 3 | 5350.00 | 64.38 PK | 74.00 | -9.62 | 1.00 V | 178 | 55.72 | 8.66 |
| 4 | 5350.00 | 48.10 AV | 54.00 | -5.90 | 1.00 V | 178 | 39.44 | 8.66 |
| 5 | 5352.88 | 64.17 PK | 74.00 | -9.83 | 1.00 V | 178 | 55.51 | 8.66 |
| 6 | 5352.88 | 47.24 AV | 54.00 | -6.76 | 1.00 V | 178 | 38.58 | 8.66 |
| 7 | 5355.77 | 64.08 PK | 74.00 | -9.92 | 1.00 V | 178 | 55.41 | 8.67 |
| 8 | 5355.77 | 46.96 AV | 54.00 | -7.04 | 1.00 V | 178 | 38.29 | 8.67 |
| 9 | #10580.00 | 60.06 PK | 68.20 | -8.14 | 1.00 V | 0 | 41.75 | 18.31 |
| 10 | 15870.00 | 64.66 PK | 74.00 | -9.34 | 1.00 V | 0 | 39.68 | 24.98 |
| 11 | 15870.00 | 44.19 AV | 54.00 | -9.81 | 1.00 V | 0 | 19.21 | 24.98 |

**REMARKS:**

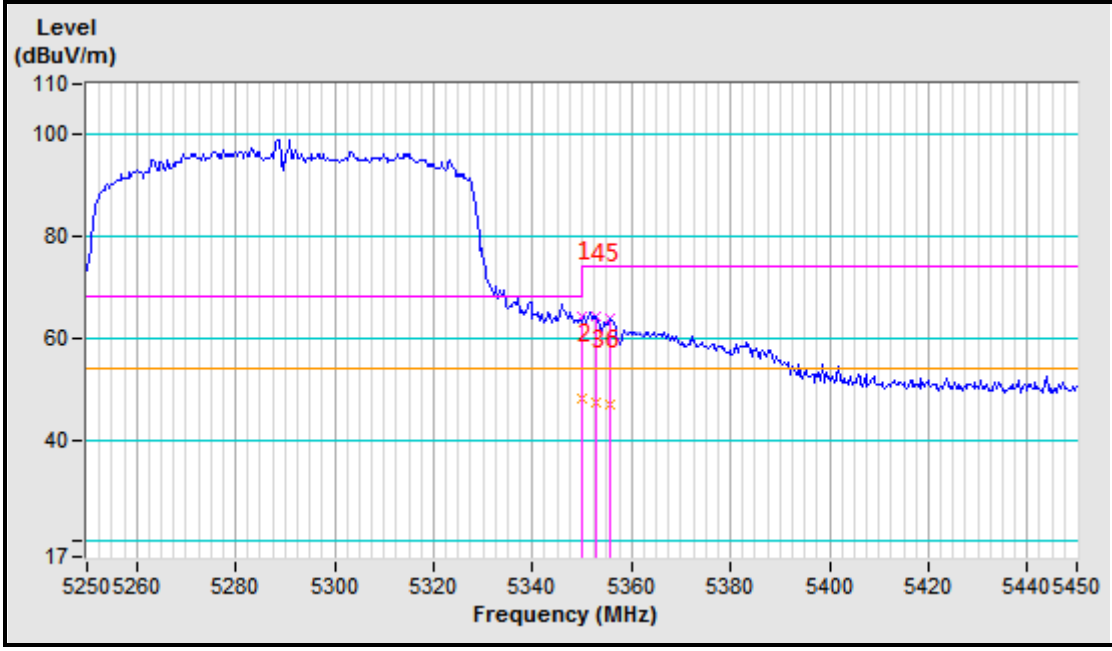
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5290MHz Horizontal**




**5290MHz Vertical**



## Band 3 (5470-5725MHz): ABOVE 1GHz DATA 802.11a

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

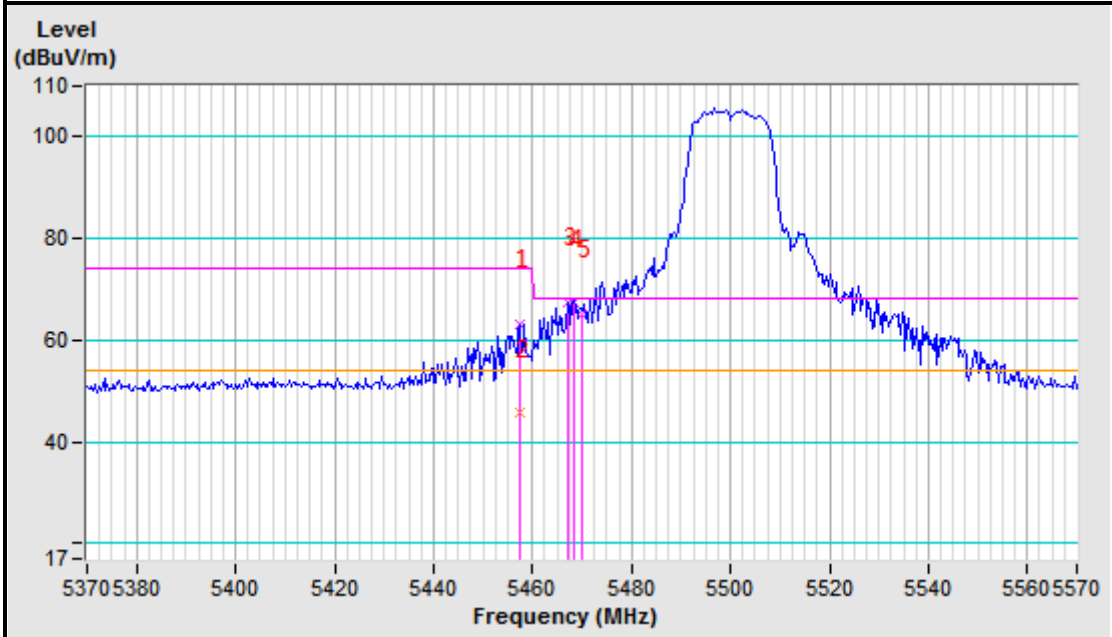
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5457.50 | 63.08 PK | 74.00 | -10.92 | 1.00 H | 180 | 54.20 | 8.88 |
| 2 | 5457.50 | 45.69 AV | 54.00 | -8.31 | 1.00 H | 180 | 36.81 | 8.88 |
| **3** | **#5467.12** | **67.41 PK** | **68.20** | **-0.79** | **1.00 H** | 180 | **58.51** | **8.90** |
| 4 | #5468.40 | 67.35 PK | 68.20 | -0.85 | 1.00 H | 180 | 58.44 | 8.91 |
| 5 | #5470.00 | 65.10 PK | 68.20 | -3.10 | 1.00 H | 180 | 56.19 | 8.91 |
| 6 | *5500.00 | 103.81 PK | | | 1.00 H | 180 | 94.84 | 8.97 |
| 7 | *5500.00 | 89.97 AV | | | 1.00 H | 180 | 81.00 | 8.97 |
| 8 | 11000.00 | 61.32 PK | 74.00 | -12.68 | 1.00 H | 0 | 42.28 | 19.04 |
| 9 | 11000.00 | 41.35 AV | 54.00 | -12.65 | 1.00 H | 0 | 22.31 | 19.04 |
| 10 | #16500.00 | 65.28 PK | 68.20 | -2.92 | 1.00 H | 0 | 39.72 | 25.56 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5454.29 | 57.72 PK | 74.00 | -16.28 | 1.00 V | 161 | 48.85 | 8.87 |
| 2 | 5454.29 | 42.08 AV | 54.00 | -11.92 | 1.00 V | 161 | 33.21 | 8.87 |
| 3 | #5461.67 | 60.55 PK | 68.20 | -7.65 | 1.00 V | 161 | 51.66 | 8.89 |
| 4 | #5467.76 | 61.54 PK | 68.20 | -6.66 | 1.00 V | 161 | 52.64 | 8.90 |
| 5 | #5470.00 | 61.46 PK | 68.20 | -6.74 | 1.00 V | 161 | 52.55 | 8.91 |
| 6 | *5500.00 | 100.39 PK | | | 1.00 V | 161 | 91.42 | 8.97 |
| 7 | *5500.00 | 85.18 AV | | | 1.00 V | 161 | 76.21 | 8.97 |
| 8 | 11000.00 | 59.68 PK | 74.00 | -14.32 | 1.00 V | 0 | 40.64 | 19.04 |
| 9 | 11000.00 | 39.49 AV | 54.00 | -14.51 | 1.00 V | 0 | 20.45 | 19.04 |
| 10 | #16500.00 | 64.77 PK | 68.20 | -3.43 | 1.00 V | 0 | 39.21 | 25.56 |

**REMARKS:**

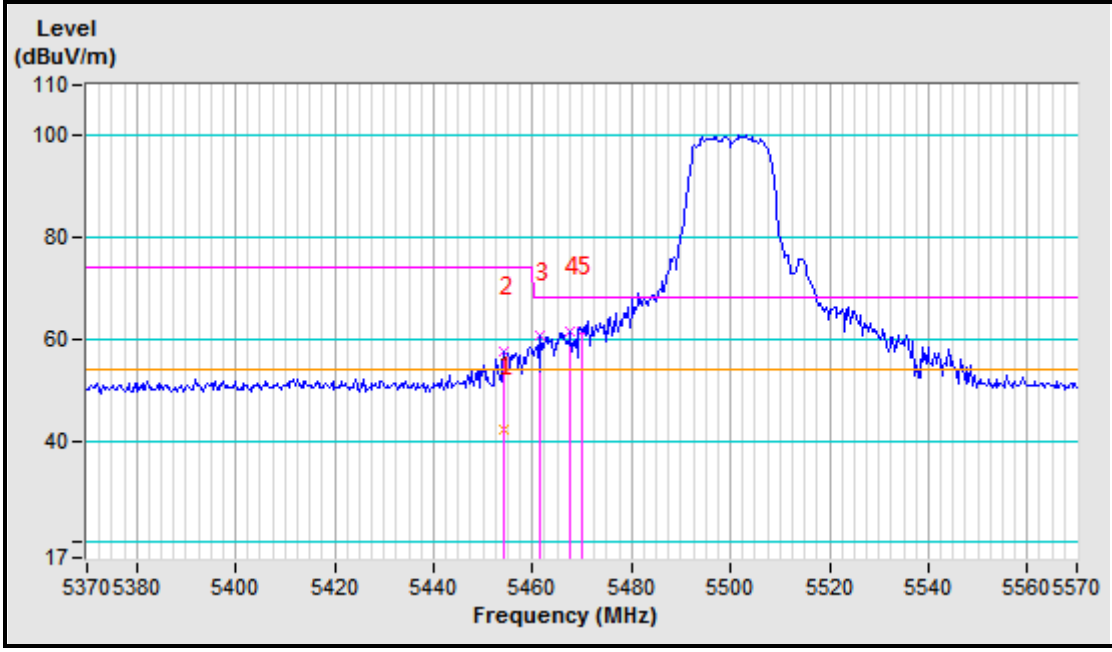
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5500MHz Horizontal**




**5500MHz Vertical**



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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5470.00 | 52.57 PK | 68.20 | -15.63 | 1.00 H | 124 | 43.66 | 8.91 |
| 2 | *5580.00 | 112.71 PK | | | 1.00 H | 124 | 103.53 | 9.18 |
| 3 | *5580.00 | 98.44 AV | | | 1.00 H | 124 | 89.26 | 9.18 |
| 4 | 11160.00 | 65.29 PK | 74.00 | -8.71 | 1.00 H | 0 | 46.06 | 19.23 |
| 5 | 11160.00 | 41.70 AV | 54.00 | -12.30 | 1.00 H | 0 | 22.47 | 19.23 |
| 6 | #16740.00 | 64.19 PK | 68.20 | -4.01 | 1.00 H | 0 | 37.89 | 26.30 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5470.00 | 50.67 PK | 68.20 | -17.53 | 1.00 V | 121 | 41.76 | 8.91 |
| 2 | *5580.00 | 107.00 PK | | | 1.00 V | 121 | 97.82 | 9.18 |
| 3 | *5580.00 | 93.49 AV | | | 1.00 V | 121 | 84.31 | 9.18 |
| 4 | 11160.00 | 64.92 PK | 74.00 | -9.08 | 1.00 V | 0 | 45.69 | 19.23 |
| 5 | 11160.00 | 40.77 AV | 54.00 | -13.23 | 1.00 V | 0 | 21.54 | 19.23 |
| 6 | #16740.00 | 63.90 PK | 68.20 | -4.30 | 1.00 V | 0 | 37.60 | 26.30 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

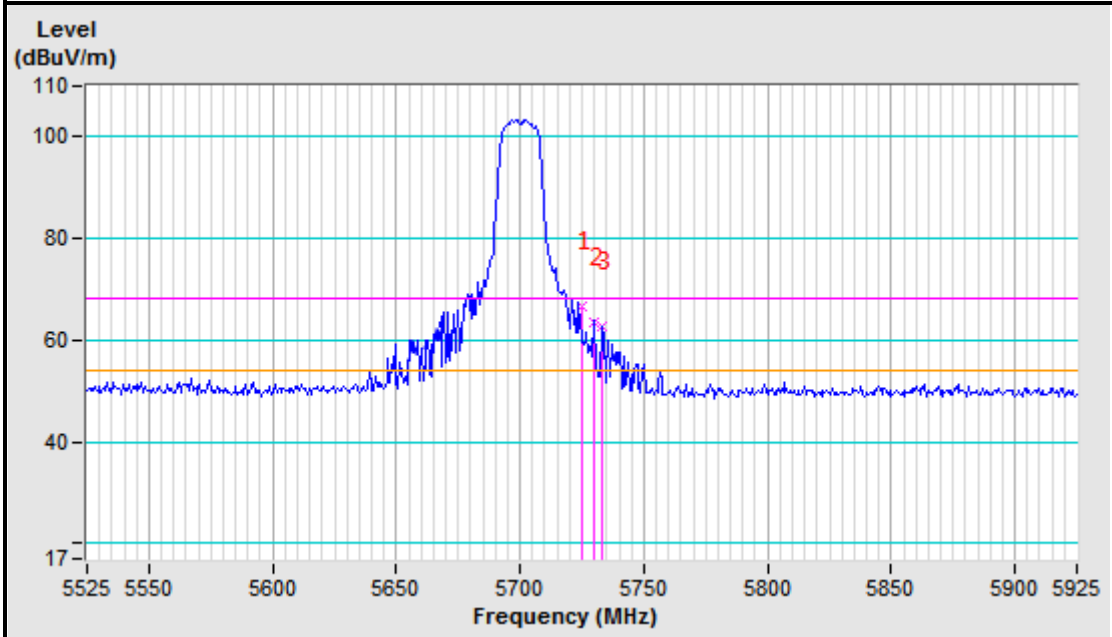
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5700.00 | 103.30 PK | | | 1.00 H | 0 | 93.80 | 9.50 |
| 2 | *5700.00 | 89.23 AV | | | 1.00 H | 0 | 79.73 | 9.50 |
| 3 | #5725.00 | 66.82 PK | 68.20 | -1.38 | 1.00 H | 0 | 57.26 | 9.56 |
| 4 | #5730.13 | 63.68 PK | 68.20 | -4.52 | 1.00 H | 0 | 54.10 | 9.58 |
| 5 | #5733.33 | 62.83 PK | 68.20 | -5.37 | 1.00 H | 0 | 53.25 | 9.58 |
| 6 | 11400.00 | 60.45 PK | 74.00 | -13.55 | 1.00 H | 0 | 40.92 | 19.53 |
| 7 | 11400.00 | 40.47 AV | 54.00 | -13.53 | 1.00 H | 0 | 20.94 | 19.53 |
| 8 | #17100.00 | 64.69 PK | 68.20 | -3.51 | 1.00 H | 0 | 37.49 | 27.20 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5700.00 | 97.31 PK | | | 1.00 V | 153 | 87.81 | 9.50 |
| 2 | *5700.00 | 86.14 AV | | | 1.00 V | 153 | 76.64 | 9.50 |
| 3 | #5725.00 | 63.54 PK | 68.20 | -4.66 | 1.00 V | 153 | 53.98 | 9.56 |
| 4 | #5726.92 | 63.80 PK | 68.20 | -4.40 | 1.00 V | 153 | 54.23 | 9.57 |
| 5 | #5730.77 | 62.07 PK | 68.20 | -6.13 | 1.00 V | 153 | 52.50 | 9.57 |
| 6 | 11400.00 | 60.22 PK | 74.00 | -13.78 | 1.00 V | 0 | 40.69 | 19.53 |
| 7 | 11400.00 | 40.58 AV | 54.00 | -13.42 | 1.00 V | 0 | 21.05 | 19.53 |
| 8 | #17100.00 | 64.36 PK | 68.20 | -3.84 | 1.00 V | 0 | 37.16 | 27.20 |

**REMARKS:**

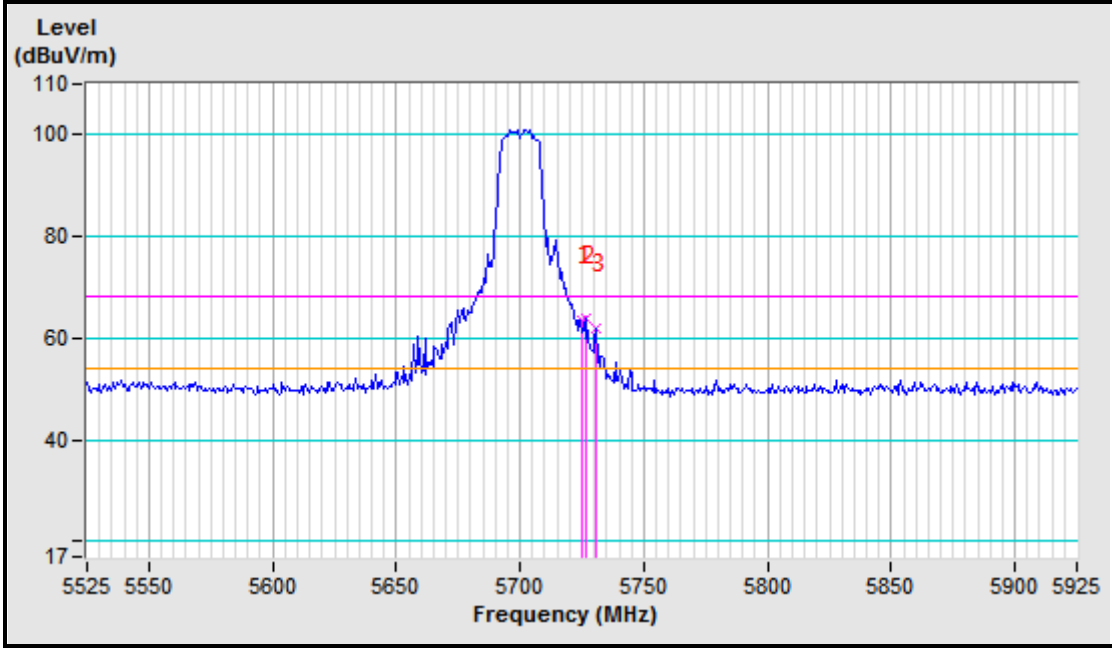
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5700MHz Horizontal**




**5700MHz Vertical**



802.11n (20MHz)

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

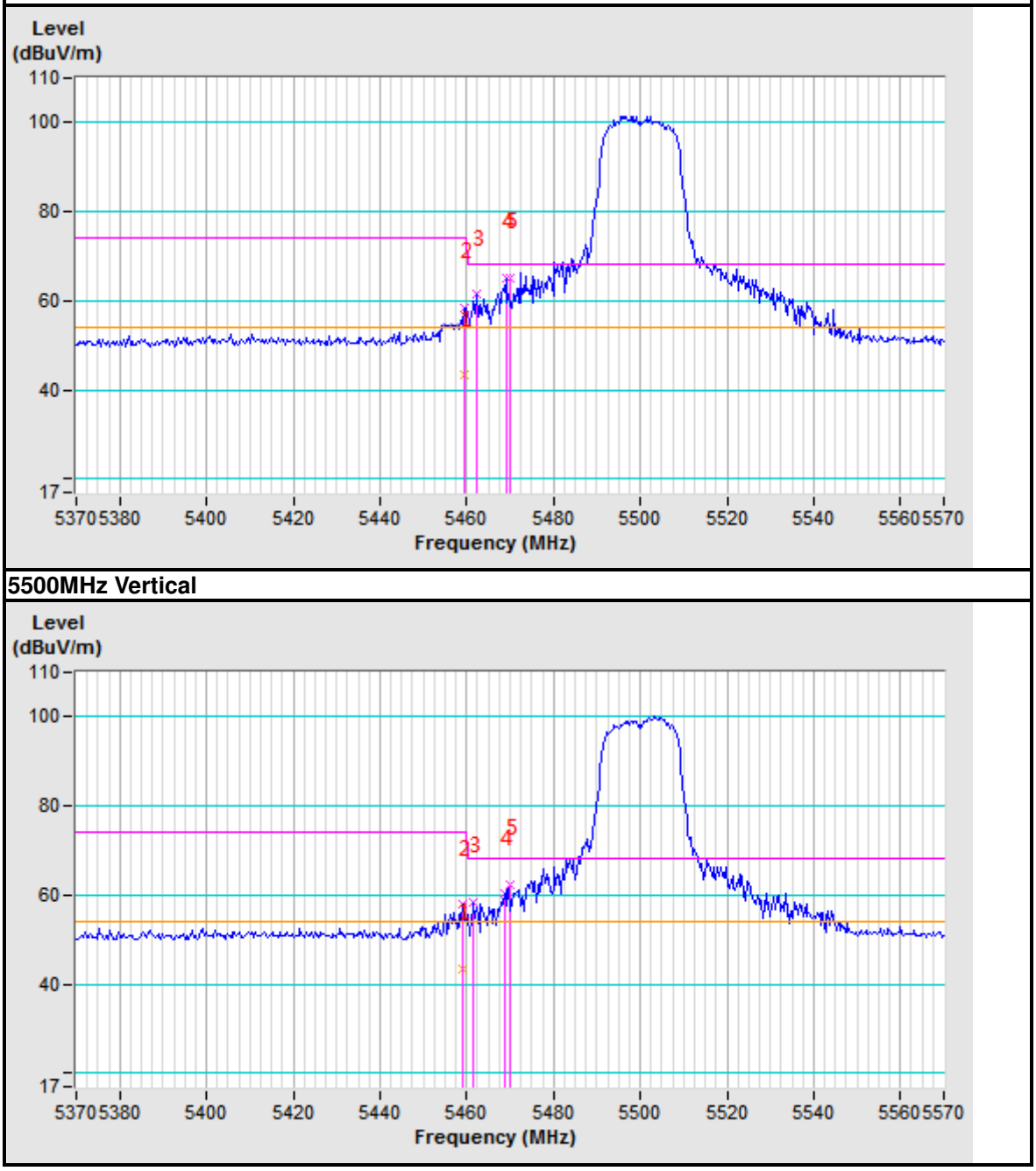
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5459.42 | 58.37 PK | 74.00 | -15.63 | 1.00 H | 0 | 49.48 | 8.89 |
| 2 | 5459.42 | 43.25 AV | 54.00 | -10.75 | 1.00 H | 0 | 34.36 | 8.89 |
| 3 | #5462.31 | 61.42 PK | 68.20 | -6.78 | 1.00 H | 0 | 52.53 | 8.89 |
| 4 | #5469.04 | 65.03 PK | 68.20 | -3.17 | 1.00 H | 0 | 56.12 | 8.91 |
| 5 | #5470.00 | 65.03 PK | 68.20 | -3.17 | 1.00 H | 0 | 56.12 | 8.91 |
| 6 | *5500.00 | 103.03 PK | | | 1.00 H | 0 | 94.06 | 8.97 |
| 7 | *5500.00 | 88.89 AV | | | 1.00 H | 0 | 79.92 | 8.97 |
| 8 | 11000.00 | 60.23 PK | 74.00 | -13.77 | 1.00 H | 0 | 41.19 | 19.04 |
| 9 | 11000.00 | 40.47 AV | 54.00 | -13.53 | 1.00 H | 0 | 21.43 | 19.04 |
| 10 | #16500.00 | 63.37 PK | 68.20 | -4.83 | 1.00 H | 0 | 37.81 | 25.56 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5459.10 | 57.88 PK | 74.00 | -16.12 | 1.00 V | 156 | 48.99 | 8.89 |
| 2 | 5459.10 | 43.51 AV | 54.00 | -10.49 | 1.00 V | 156 | 34.62 | 8.89 |
| 3 | #5461.67 | 58.43 PK | 68.20 | -9.77 | 1.00 V | 156 | 49.54 | 8.89 |
| 4 | #5468.72 | 60.16 PK | 68.20 | -8.04 | 1.00 V | 156 | 51.25 | 8.91 |
| 5 | #5470.00 | 62.40 PK | 68.20 | -5.80 | 1.00 V | 156 | 53.49 | 8.91 |
| 6 | *5500.00 | 97.15 PK | | | 1.00 V | 156 | 88.18 | 8.97 |
| 7 | *5500.00 | 82.84 AV | | | 1.00 V | 156 | 73.87 | 8.97 |
| 8 | 11000.00 | 59.67 PK | 74.00 | -14.33 | 1.00 V | 0 | 40.63 | 19.04 |
| 9 | 11000.00 | 39.48 AV | 54.00 | -14.52 | 1.00 V | 0 | 20.44 | 19.04 |
| 10 | #16500.00 | 63.47 PK | 68.20 | -4.73 | 1.00 V | 0 | 37.91 | 25.56 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5500MHz Horizontal**




**5500MHz Vertical**

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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5470.00 | 51.66 PK | 68.20 | -16.54 | 1.00 H | 170 | 42.75 | 8.91 |
| 2 | *5580.00 | 111.15 PK | | | 1.00 H | 170 | 101.97 | 9.18 |
| 3 | *5580.00 | 96.44 AV | | | 1.00 H | 170 | 87.26 | 9.18 |
| 4 | 11160.00 | 62.23 PK | 74.00 | -11.77 | 1.00 H | 0 | 43.00 | 19.23 |
| 5 | 11160.00 | 42.25 AV | 54.00 | -11.75 | 1.00 H | 0 | 23.02 | 19.23 |
| 6 | #16740.00 | 64.59 PK | 68.20 | -3.61 | 1.00 H | 0 | 38.29 | 26.30 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5470.00 | 52.01 PK | 68.20 | -16.19 | 1.00 V | 187 | 43.10 | 8.91 |
| 2 | *5580.00 | 106.82 PK | | | 1.00 V | 187 | 97.64 | 9.18 |
| 3 | *5580.00 | 91.35 AV | | | 1.00 V | 187 | 82.17 | 9.18 |
| 4 | 11160.00 | 60.08 PK | 74.00 | -13.92 | 1.00 V | 0 | 40.85 | 19.23 |
| 5 | 11160.00 | 39.77 AV | 54.00 | -14.23 | 1.00 V | 0 | 20.54 | 19.23 |
| 6 | #16740.00 | 63.22 PK | 68.20 | -4.98 | 1.00 V | 0 | 36.92 | 26.30 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

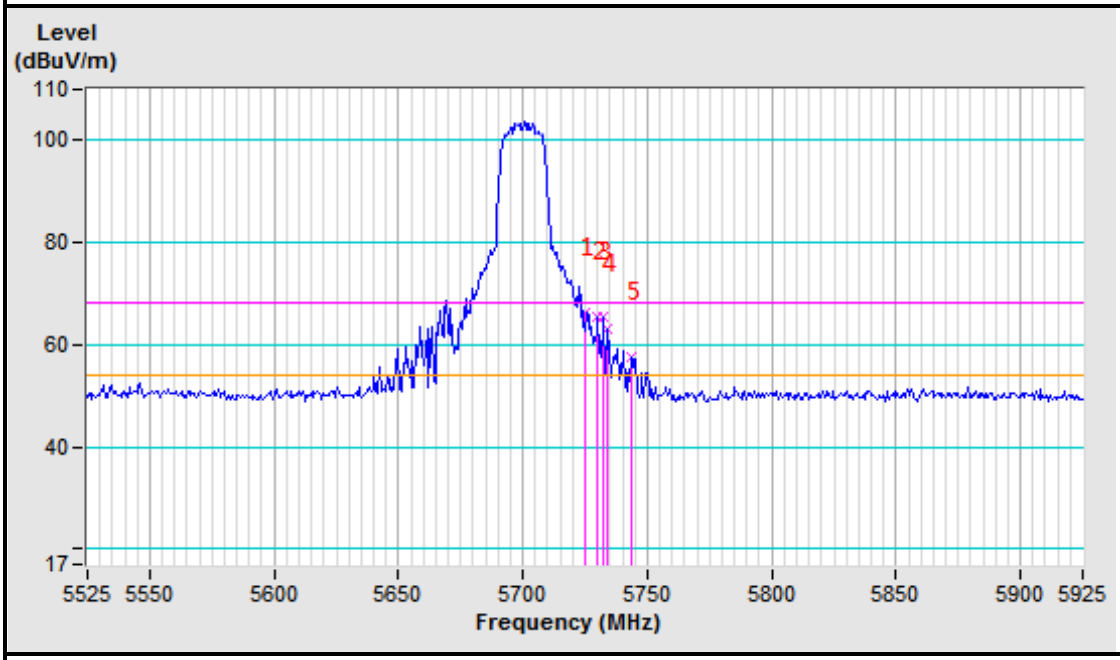
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5700.00 | 102.59 PK | | | 1.00 H | 172 | 93.09 | 9.50 |
| 2 | *5700.00 | 88.17 AV | | | 1.00 H | 172 | 78.67 | 9.50 |
| 3 | #5725.00 | 66.36 PK | 68.20 | -1.84 | 1.00 H | 172 | 56.80 | 9.56 |
| 4 | #5730.13 | 65.55 PK | 68.20 | -2.65 | 1.00 H | 172 | 55.97 | 9.58 |
| 5 | #5732.69 | 65.64 PK | 68.20 | -2.56 | 1.00 H | 172 | 56.06 | 9.58 |
| 6 | #5733.97 | 63.22 PK | 68.20 | -4.98 | 1.00 H | 172 | 53.64 | 9.58 |
| 7 | #5743.59 | 57.66 PK | 68.20 | -10.54 | 1.00 H | 172 | 48.06 | 9.60 |
| 8 | 11400.00 | 60.48 PK | 74.00 | -13.52 | 1.00 H | 0 | 40.95 | 19.53 |
| 9 | 11400.00 | 41.80 AV | 54.00 | -12.20 | 1.00 H | 0 | 22.27 | 19.53 |
| 10 | #17100.00 | 63.47 PK | 68.20 | -4.73 | 1.00 H | 0 | 36.27 | 27.20 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5700.00 | 96.96 PK | | | 1.00 V | 153 | 87.46 | 9.50 |
| 2 | *5700.00 | 80.15 AV | | | 1.00 V | 153 | 70.65 | 9.50 |
| 3 | #5725.00 | 64.99 PK | 68.20 | -3.21 | 1.00 V | 153 | 55.43 | 9.56 |
| 4 | #5727.56 | 65.04 PK | 68.20 | -3.16 | 1.00 V | 153 | 55.47 | 9.57 |
| 5 | #5739.10 | 60.31 PK | 68.20 | -7.89 | 1.00 V | 153 | 50.71 | 9.60 |
| 6 | #5745.51 | 54.76 PK | 68.20 | -13.44 | 1.00 V | 153 | 45.15 | 9.61 |
| 7 | 11400.00 | 59.26 PK | 74.00 | -14.74 | 1.00 V | 0 | 39.73 | 19.53 |
| 8 | 11400.00 | 38.90 AV | 54.00 | -15.10 | 1.00 V | 0 | 19.37 | 19.53 |
| 9 | #17100.00 | 62.25 PK | 68.20 | -5.95 | 1.00 V | N/A | 35.05 | 27.20 |

**REMARKS:**

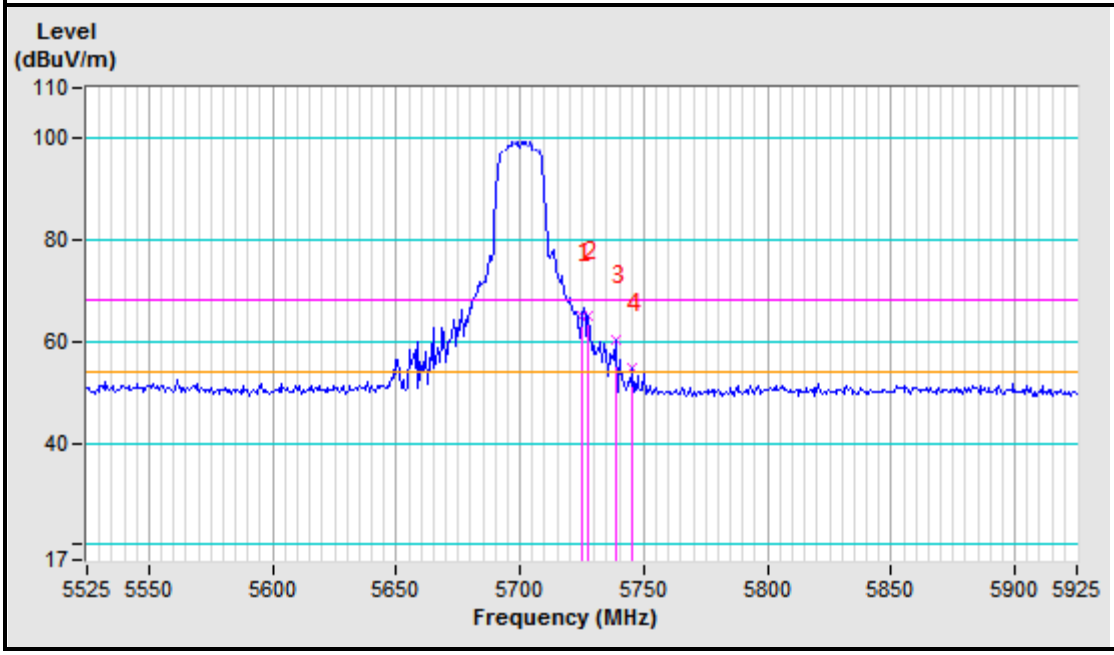
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5700MHz Horizontal**




**5700MHz Vertical**



## 802.11n (40MHz)

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

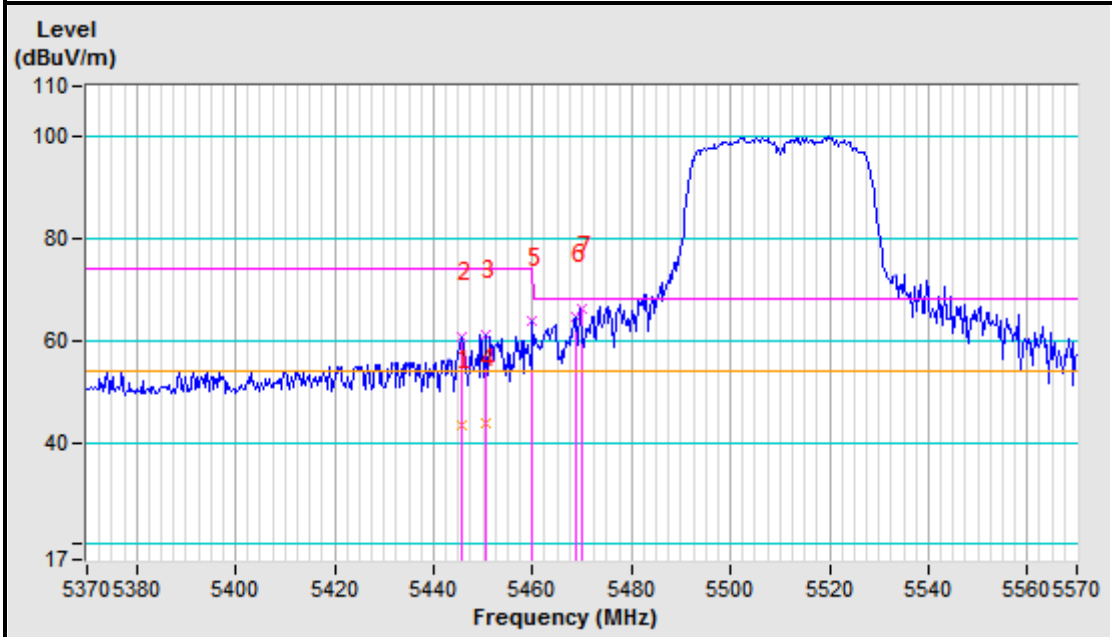
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5445.64 | 60.92 PK | 74.00 | -13.08 | 1.00 H | 185 | 52.06 | 8.86 |
| 2 | 5445.64 | 43.51 AV | 54.00 | -10.49 | 1.00 H | 185 | 34.65 | 8.86 |
| 3 | 5450.45 | 61.11 PK | 74.00 | -12.89 | 1.00 H | 185 | 52.25 | 8.86 |
| 4 | 5450.45 | 43.85 AV | 54.00 | -10.15 | 1.00 H | 185 | 34.99 | 8.86 |
| 5 | #5460.06 | 63.78 PK | 70.28 | -6.50 | 1.00 H | 185 | 54.89 | 8.89 |
| 6 | #5468.72 | 64.51 PK | 68.20 | -3.69 | 1.00 H | 185 | 55.60 | 8.91 |
| 7 | #5470.00 | 66.16 PK | 68.20 | -2.04 | 1.00 H | 185 | 57.25 | 8.91 |
| 8 | *5510.00 | 98.22 PK | | | 1.00 H | 185 | 89.23 | 8.99 |
| 9 | *5510.00 | 82.47 AV | | | 1.00 H | 185 | 73.48 | 8.99 |
| 10 | 11020.00 | 61.75 PK | 74.00 | -12.25 | 1.00 H | 0 | 42.68 | 19.07 |
| 11 | 11020.00 | 40.78 AV | 54.00 | -13.22 | 1.00 H | 0 | 21.71 | 19.07 |
| 12 | #16530.00 | 65.02 PK | 68.20 | -3.18 | 1.00 H | 0 | 39.37 | 25.65 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5455.90 | 59.13 PK | 74.00 | -14.87 | 1.00 V | 220 | 50.26 | 8.87 |
| 2 | 5455.90 | 42.27 AV | 54.00 | -11.73 | 1.00 V | 220 | 33.40 | 8.87 |
| 3 | #5465.19 | 60.87 PK | 68.20 | -7.33 | 1.00 V | 220 | 51.97 | 8.90 |
| 4 | #5469.36 | 64.04 PK | 68.20 | -4.16 | 1.00 V | 220 | 55.13 | 8.91 |
| 5 | #5470.00 | 64.04 PK | 68.20 | -4.16 | 1.00 V | 220 | 55.13 | 8.91 |
| 6 | *5510.00 | 93.07 PK | | | 1.00 V | 220 | 84.08 | 8.99 |
| 7 | *5510.00 | 77.24 AV | | | 1.00 V | 220 | 68.25 | 8.99 |
| 8 | 11020.00 | 61.20 PK | 74.00 | -12.80 | 1.00 V | 0 | 42.13 | 19.07 |
| 9 | 11020.00 | 40.30 AV | 54.00 | -13.70 | 1.00 V | 0 | 21.23 | 19.07 |
| 10 | #16530.00 | 64.70 PK | 68.20 | -3.50 | 1.00 V | 0 | 39.05 | 25.65 |

**REMARKS:**

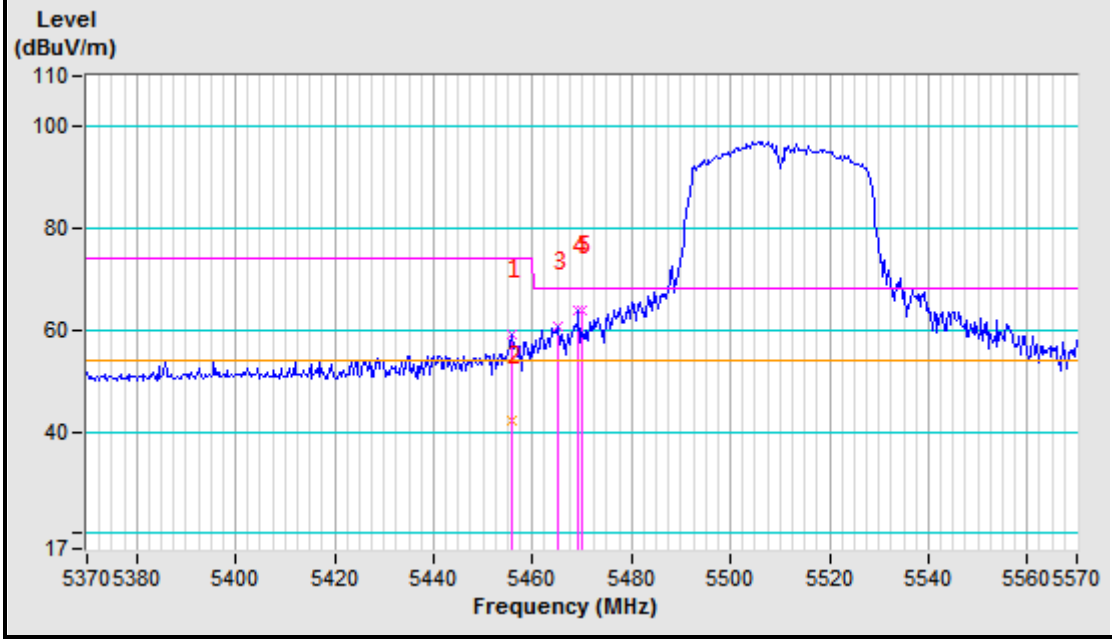
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

### 5510MHz Horizontal




### 5510MHz Vertical



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

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5470.00 | 63.42 PK | 68.20 | -4.78 | 1.00 H | 345 | 54.51 | 8.91 |
| 2 | #5500.00 | 106.32 PK | | | 1.00 H | 345 | 97.35 | 8.97 |
| 3 | #5500.00 | 90.72 AV | | | 1.00 H | 345 | 81.75 | 8.97 |
| 4 | 11100.00 | 60.48 PK | 74.00 | -13.52 | 1.00 H | 0 | 41.32 | 19.16 |
| 5 | 11100.00 | 40.33 AV | 54.00 | -13.67 | 1.00 H | 0 | 21.17 | 19.16 |
| 6 | #16650.00 | 64.00 PK | 68.20 | -4.20 | 1.00 H | 0 | 37.98 | 26.02 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5470.00 | 58.29 PK | 68.20 | -9.91 | 1.00 V | 146 | 49.38 | 8.91 |
| 2 | #5500.00 | 100.27 PK | | | 1.00 V | 146 | 91.30 | 8.97 |
| 3 | #5500.00 | 86.94 AV | | | 1.00 V | 146 | 77.97 | 8.97 |
| 4 | 11100.00 | 59.05 PK | 74.00 | -14.95 | 1.00 V | 0 | 39.89 | 19.16 |
| 5 | 11100.00 | 39.89 AV | 54.00 | -14.11 | 1.00 V | 0 | 20.73 | 19.16 |
| 6 | #16650.00 | 63.62 PK | 68.20 | -4.58 | 1.00 V | 0 | 37.60 | 26.02 |

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

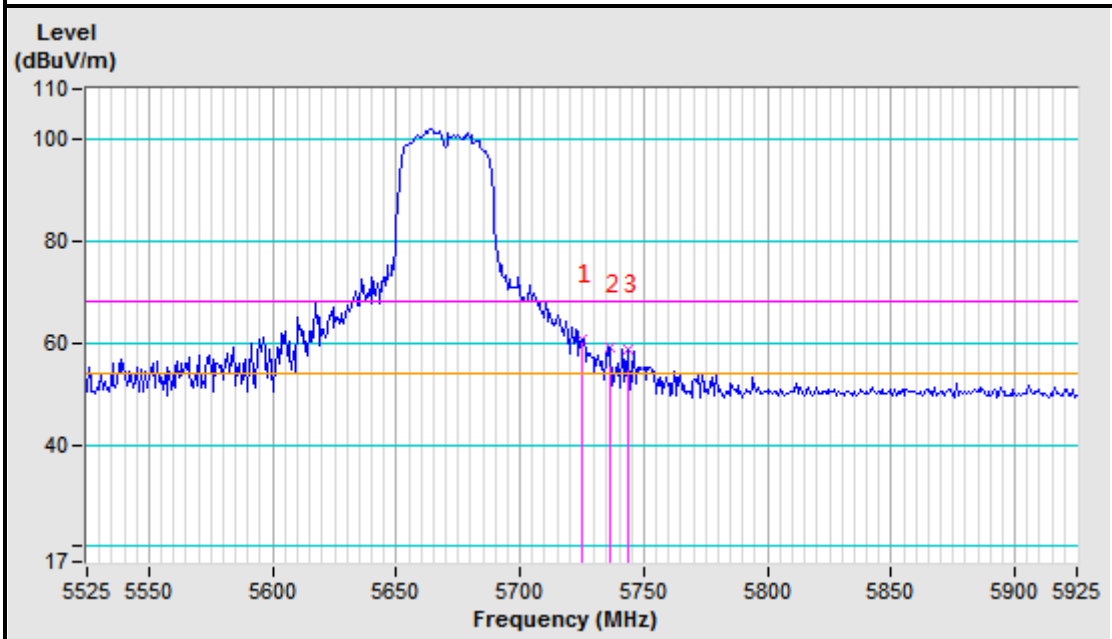
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5670.00 | 104.37 PK | | | 1.00 H | 351 | 94.96 | 9.41 |
| 2 | *5670.00 | 86.85 AV | | | 1.00 H | 351 | 77.44 | 9.41 |
| 3 | #5725.00 | 60.77 PK | 68.20 | -7.43 | 1.00 H | 351 | 51.21 | 9.56 |
| 4 | #5736.54 | 59.08 PK | 68.20 | -9.12 | 1.00 H | 351 | 49.49 | 9.59 |
| 5 | #5743.59 | 58.74 PK | 68.20 | -9.46 | 1.00 H | 351 | 49.14 | 9.60 |
| 6 | 11340.00 | 61.09 PK | 74.00 | -12.91 | 1.00 H | 0 | 41.63 | 19.46 |
| 7 | 11340.00 | 42.30 AV | 54.00 | -11.70 | 1.00 H | 0 | 22.84 | 19.46 |
| 8 | #17010.00 | 64.28 PK | 68.20 | -3.92 | 1.00 H | 0 | 37.17 | 27.11 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5670.00 | 101.83 PK | | | 1.00 V | 144 | 92.42 | 9.41 |
| 2 | *5670.00 | 83.46 AV | | | 1.00 V | 144 | 74.05 | 9.41 |
| 3 | #5725.00 | 60.19 PK | 68.20 | -8.01 | 1.00 V | 144 | 50.63 | 9.56 |
| 4 | #5732.69 | 56.55 PK | 68.20 | -11.65 | 1.00 V | 144 | 46.97 | 9.58 |
| 5 | #5741.03 | 57.23 PK | 68.20 | -10.97 | 1.00 V | 144 | 47.63 | 9.60 |
| 6 | 11340.00 | 60.05 PK | 74.00 | -13.95 | 1.00 V | 0 | 40.59 | 19.46 |
| 7 | 11340.00 | 39.79 AV | 54.00 | -14.21 | 1.00 V | 0 | 20.33 | 19.46 |
| 8 | #17010.00 | 63.80 PK | 68.20 | -4.40 | 1.00 V | 0 | 36.69 | 27.11 |

**REMARKS:**

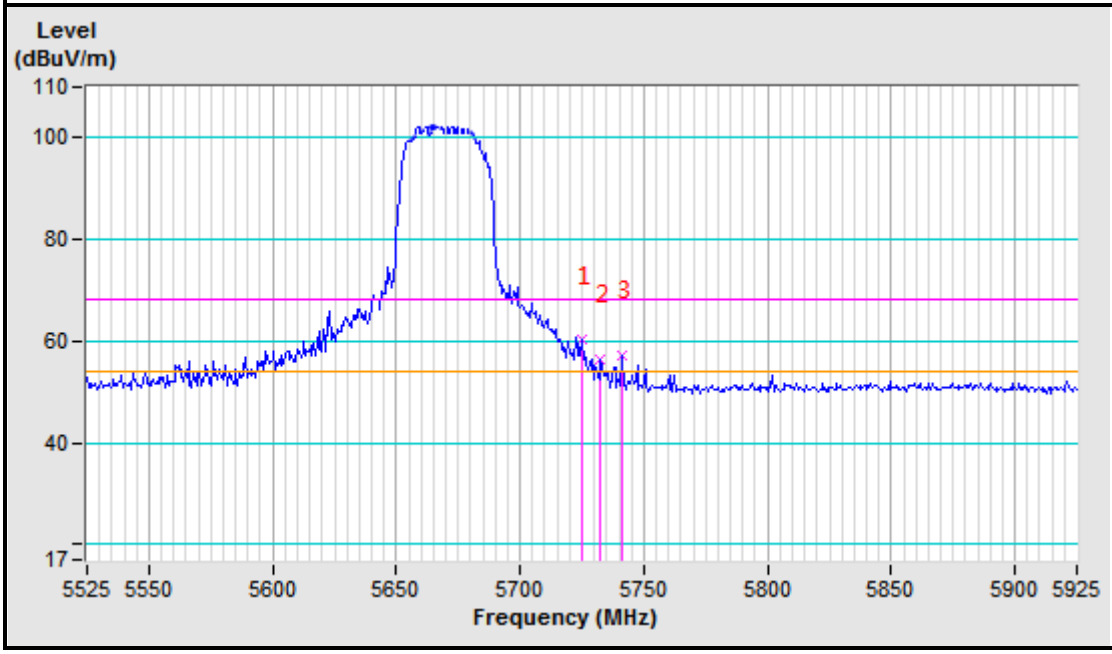
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

**Band edge Plot**

**5670MHz Horizontal**




**5670MHz Vertical**



## 802.11ac 80MHz

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

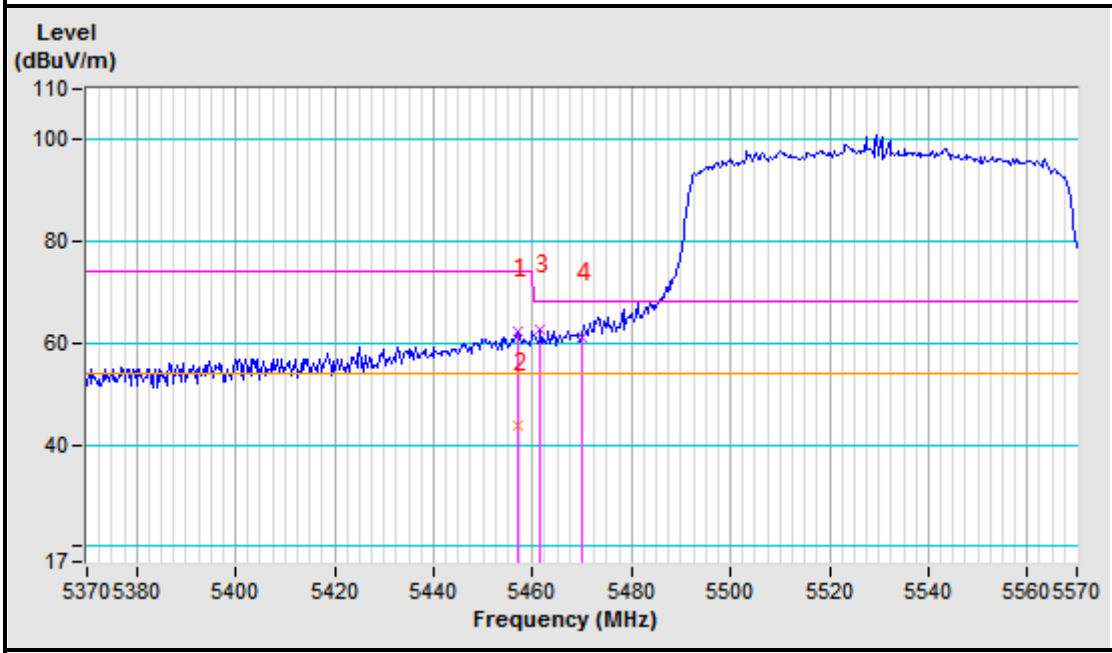
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5456.86 | 62.23 PK | 74.00 | -11.77 | 1.00 H | 331 | 53.36 | 8.87 |
| 2 | 5456.86 | 43.65 AV | 54.00 | -10.35 | 1.00 H | 331 | 34.78 | 8.87 |
| 3 | #5461.67 | 62.81 PK | 68.20 | -5.39 | 1.00 H | 331 | 53.92 | 8.89 |
| 4 | #5470.00 | 61.18 PK | 68.20 | -7.02 | 1.00 H | 331 | 52.27 | 8.91 |
| 5 | *5530.00 | 100.01 PK | | | 1.00 H | 331 | 90.96 | 9.05 |
| 6 | *5530.00 | 77.42 AV | | | 1.00 H | 331 | 68.37 | 9.05 |
| 7 | 11060.00 | 60.95 PK | 74.00 | -13.05 | 1.00 H | 0 | 41.84 | 19.11 |
| 8 | 11060.00 | 40.25 AV | 54.00 | -13.75 | 1.00 H | 0 | 21.14 | 19.11 |
| 9 | #16590.00 | 63.75 PK | 68.20 | -4.45 | 1.00 H | 0 | 37.91 | 25.84 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 5449.81 | 58.07 PK | 74.00 | -15.93 | 1.00 V | 128 | 49.21 | 8.86 |
| 2 | 5449.81 | 42.67 AV | 54.00 | -11.33 | 1.00 V | 128 | 33.81 | 8.86 |
| 3 | 5454.62 | 58.30 PK | 74.00 | -15.70 | 1.00 V | 128 | 49.43 | 8.87 |
| 4 | 5454.62 | 43.01 AV | 54.00 | -10.99 | 1.00 V | 128 | 34.14 | 8.87 |
| 5 | #5464.55 | 58.34 PK | 68.20 | -9.86 | 1.00 V | 128 | 49.44 | 8.90 |
| 6 | #5468.72 | 58.88 PK | 68.20 | -9.32 | 1.00 V | 128 | 49.97 | 8.91 |
| 7 | #5470.00 | 57.15 PK | 68.20 | -11.05 | 1.00 V | 128 | 48.24 | 8.91 |
| 8 | *5530.00 | 92.80 PK | | | 1.00 V | 128 | 83.75 | 9.05 |
| 9 | *5530.00 | 71.06 AV | | | 1.00 V | 128 | 62.01 | 9.05 |
| 10 | 11060.00 | 60.33 PK | 74.00 | -13.67 | 1.00 V | 0 | 41.22 | 19.11 |
| 11 | 11060.00 | 40.10 AV | 54.00 | -13.90 | 1.00 V | 0 | 20.99 | 19.11 |
| 12 | #16590.00 | 63.30 PK | 68.20 | -4.90 | 1.00 V | 0 | 37.46 | 25.84 |

**REMARKS:**

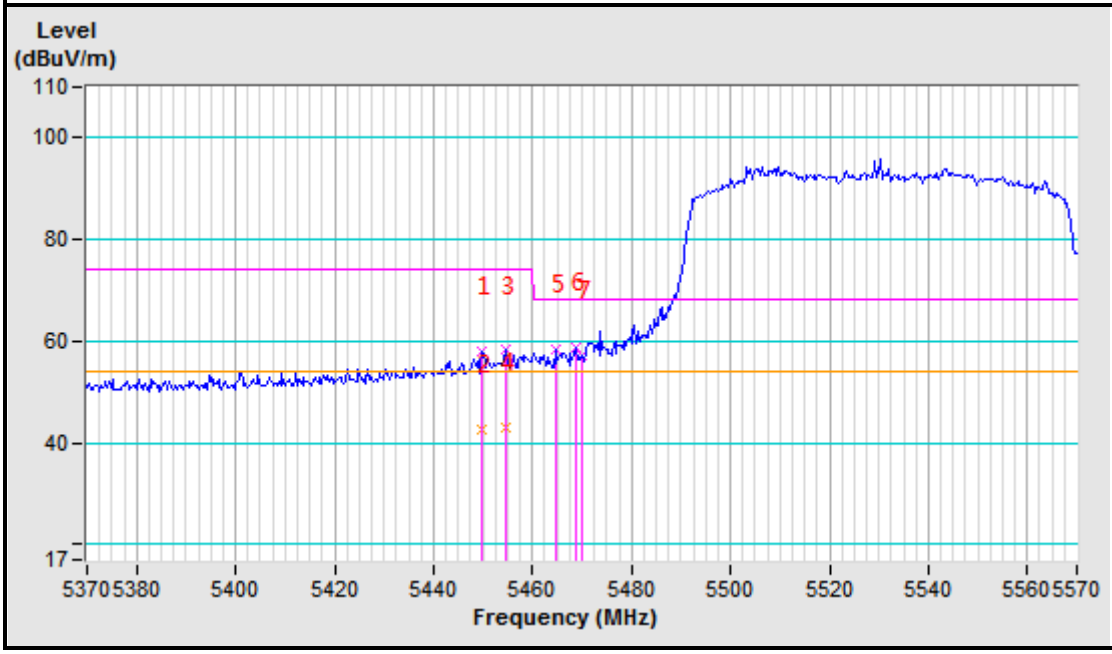
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5530MHz Horizontal**




**5530MHz Vertical**



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

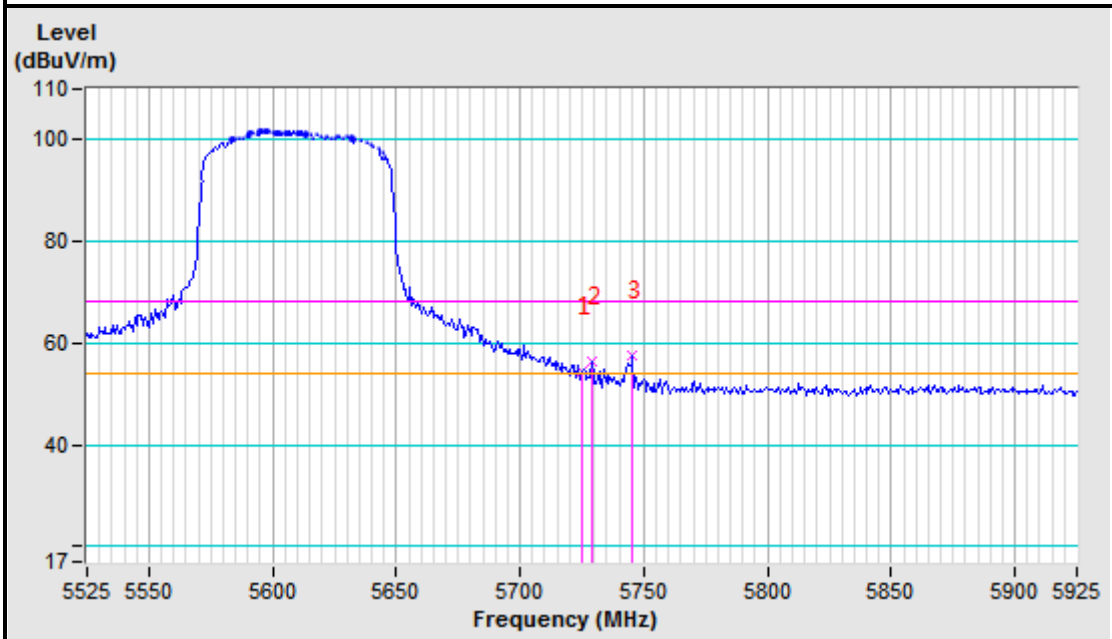
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5610.00 | 104.57 PK | | | 1.00 H | 350 | 95.31 | 9.26 |
| 2 | *5610.00 | 81.27 AV | | | 1.00 H | 350 | 72.01 | 9.26 |
| 3 | #5725.00 | 54.63 PK | 68.20 | -13.57 | 1.00 H | 350 | 45.07 | 9.56 |
| 4 | #5728.85 | 56.51 PK | 68.20 | -11.69 | 1.00 H | 350 | 46.94 | 9.57 |
| 5 | #5745.51 | 57.64 PK | 68.20 | -10.56 | 1.00 H | 350 | 48.03 | 9.61 |
| 6 | 11220.00 | 61.20 PK | 74.00 | -12.80 | 1.00 H | 0 | 41.89 | 19.31 |
| 7 | 11220.00 | 40.90 AV | 54.00 | -13.10 | 1.00 H | 0 | 21.59 | 19.31 |
| 8 | #16830.00 | 63.40 PK | 68.20 | -4.80 | 1.00 H | 0 | 36.83 | 26.57 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *5610.00 | 96.83 PK | | | 1.00 V | 126 | 87.57 | 9.26 |
| 2 | *5610.00 | 76.29 AV | | | 1.00 V | 126 | 67.03 | 9.26 |
| 3 | #5725.00 | 50.81 PK | 68.20 | -17.39 | 1.00 V | 126 | 41.25 | 9.56 |
| 4 | 11220.00 | 60.09 PK | 74.00 | -13.91 | 1.00 V | 0 | 40.78 | 19.31 |
| 5 | 11220.00 | 40.25 AV | 54.00 | -13.75 | 1.00 V | 0 | 20.94 | 19.31 |
| 6 | #16830.00 | 63.10 PK | 68.20 | -5.10 | 1.00 V | 0 | 36.53 | 26.57 |

**REMARKS:**

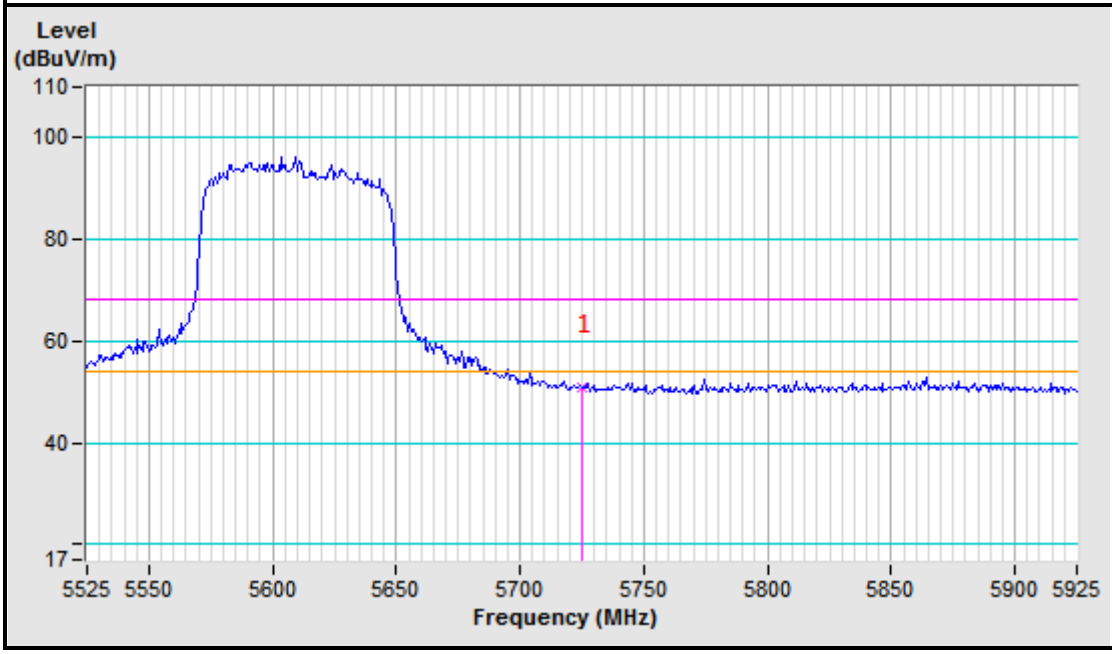
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

**Band edge Plot**

**5610MHz Horizontal**




**5610MHz Vertical**



## Band 4 (5725-5850MHz):

## ABOVE 1GHz DATA

### 802.11a

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

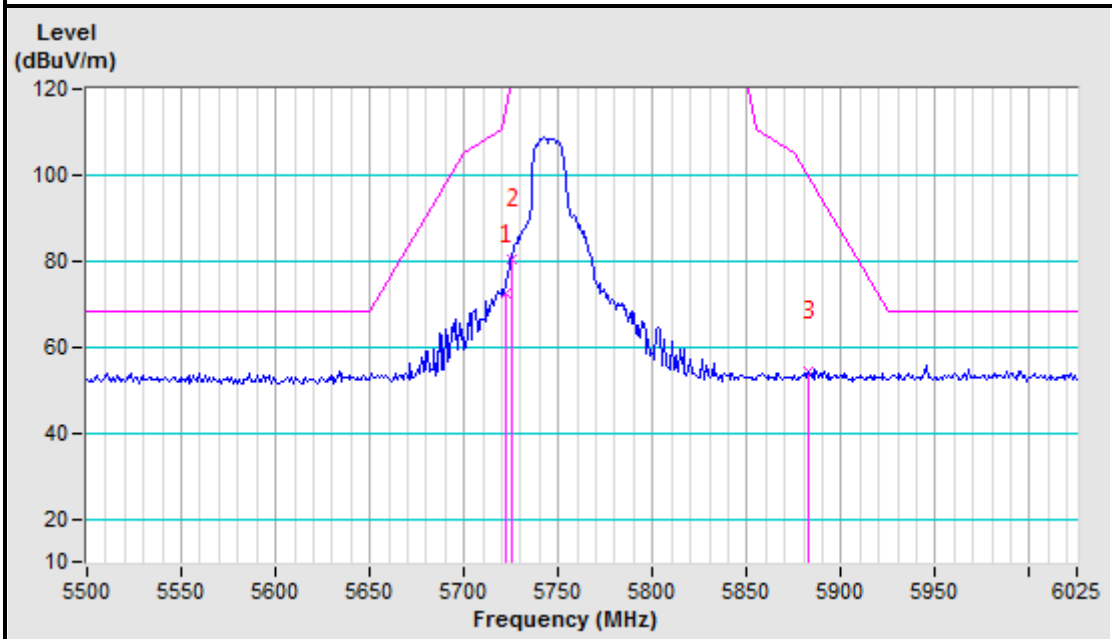
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5721.63 | 72.32 PK | 114.53 | -42.21 | 1.38 H | 0 | 62.77 | 9.55 |
| 2 | #5725.00 | 80.43 PK | 122.20 | -41.77 | 1.38 H | 0 | 70.87 | 9.56 |
| 3 | *5745.00 | 108.79 PK | | | 1.00 H | 240 | 99.18 | 9.61 |
| 4 | *5745.00 | 94.84 AV | | | 1.00 H | 240 | 85.23 | 9.61 |
| 5 | #5882.81 | 54.37 PK | 99.40 | -45.03 | 1.38 H | 0 | 44.40 | 9.97 |
| 6 | 11490.00 | 59.89 PK | 74.00 | -14.11 | 1.00 H | 0 | 40.25 | 19.64 |
| 7 | 11490.00 | 39.34 AV | 54.00 | -14.66 | 1.00 H | 0 | 19.70 | 19.64 |
| 8 | #17235.00 | 63.38 PK | 68.20 | -4.82 | 1.00 H | 0 | 36.03 | 27.35 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5720.79 | 67.59 PK | 112.61 | -45.02 | 1.00 V | 0 | 58.04 | 9.55 |
| 2 | #5725.00 | 72.29 PK | 122.20 | -49.91 | 1.00 V | 0 | 62.73 | 9.56 |
| 3 | *5745.00 | 101.02 PK | | | 1.00 V | 0 | 91.41 | 9.61 |
| 4 | *5745.00 | 88.91 AV | | | 1.00 V | 0 | 79.30 | 9.61 |
| 5 | #5865.99 | 53.81 PK | 107.72 | -53.91 | 1.00 V | 0 | 43.88 | 9.93 |
| 6 | 11490.00 | 57.11 PK | 74.00 | -16.89 | 1.00 V | 0 | 37.47 | 19.64 |
| 7 | 11490.00 | 38.04 AV | 54.00 | -15.96 | 1.00 V | 0 | 18.40 | 19.64 |
| 8 | #17235.00 | 62.34 PK | 68.20 | -5.86 | 1.00 V | 0 | 34.99 | 27.35 |

**REMARKS:**

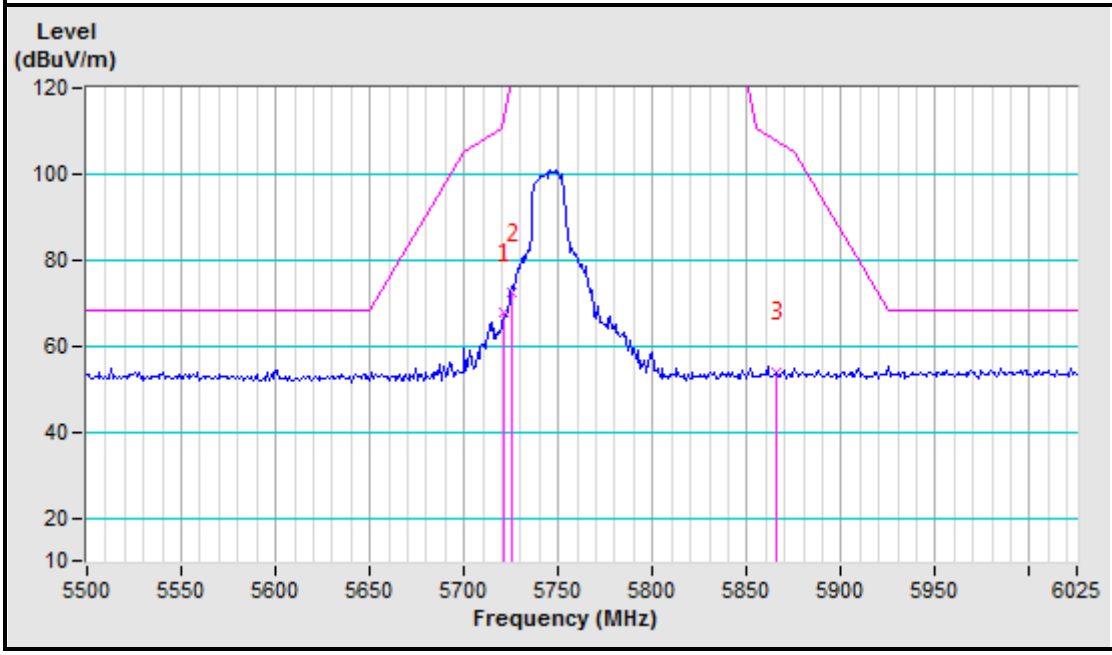
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5745MHz Horizontal**




**5745MHz Vertical**



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

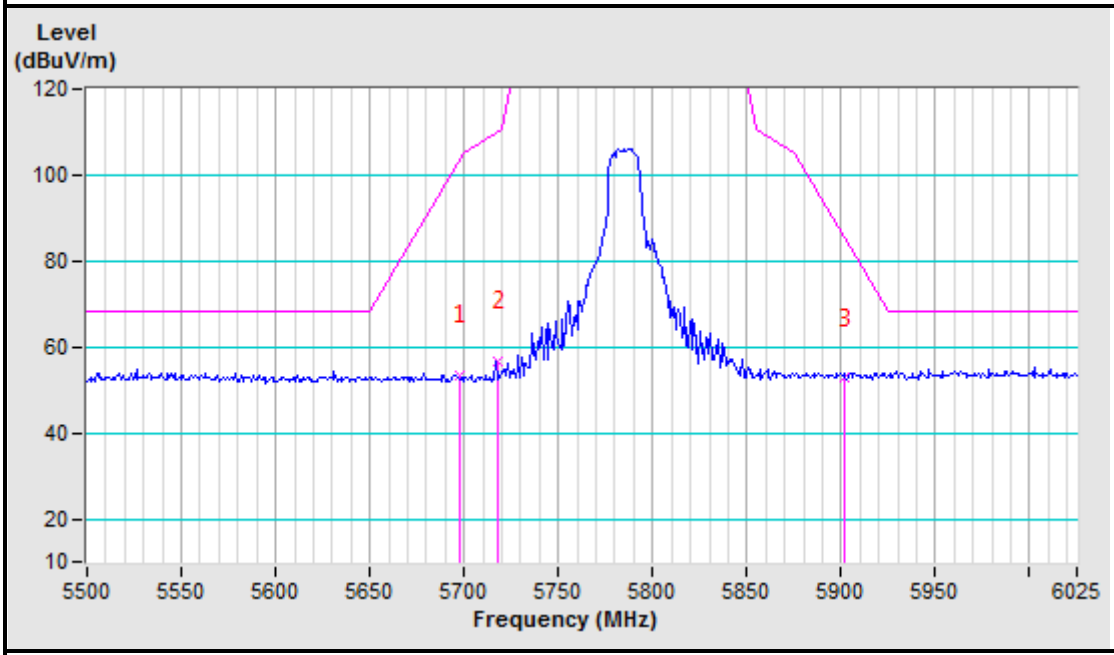
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5697.24 | 53.41 PK | 103.16 | -49.75 | 1.56 H | 0 | 43.92 | 9.49 |
| 2 | #5717.43 | 56.51 PK | 110.08 | -53.57 | 1.56 H | 0 | 46.98 | 9.53 |
| 3 | *5785.00 | 107.24 PK | | | 1.00 H | 0 | 97.53 | 9.71 |
| 4 | *5785.00 | 93.58 AV | | | 1.00 H | 0 | 83.87 | 9.71 |
| 5 | #5902.16 | 52.66 PK | 85.06 | -32.40 | 1.56 H | 0 | 42.64 | 10.02 |
| 6 | 11570.00 | 61.04 PK | 74.00 | -12.96 | 1.00 H | 0 | 41.24 | 19.80 |
| 7 | 11570.00 | 40.47 AV | 54.00 | -13.53 | 1.00 H | 0 | 20.67 | 19.80 |
| 8 | #17355.00 | 64.39 PK | 68.20 | -3.81 | 1.00 H | 0 | 36.91 | 27.48 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5689.66 | 53.81 PK | 97.58 | -43.77 | 1.00 V | 0 | 44.34 | 9.47 |
| 2 | #5713.22 | 53.39 PK | 108.90 | -55.51 | 1.00 V | 0 | 43.86 | 9.53 |
| 3 | *5785.00 | 100.37 PK | | | 1.00 V | 260 | 90.66 | 9.71 |
| 4 | *5785.00 | 86.45 AV | | | 1.00 V | 260 | 76.74 | 9.71 |
| 5 | #5894.59 | 55.65 PK | 90.67 | -35.02 | 1.00 V | 0 | 45.65 | 10.00 |
| 6 | 11570.00 | 58.06 PK | 74.00 | -15.94 | 1.00 V | 0 | 38.26 | 19.80 |
| 7 | 11570.00 | 38.30 AV | 54.00 | -15.70 | 1.00 V | 0 | 18.50 | 19.80 |
| 8 | #17355.00 | 64.09 PK | 68.20 | -4.11 | 1.00 V | 0 | 36.61 | 27.48 |

**REMARKS:**

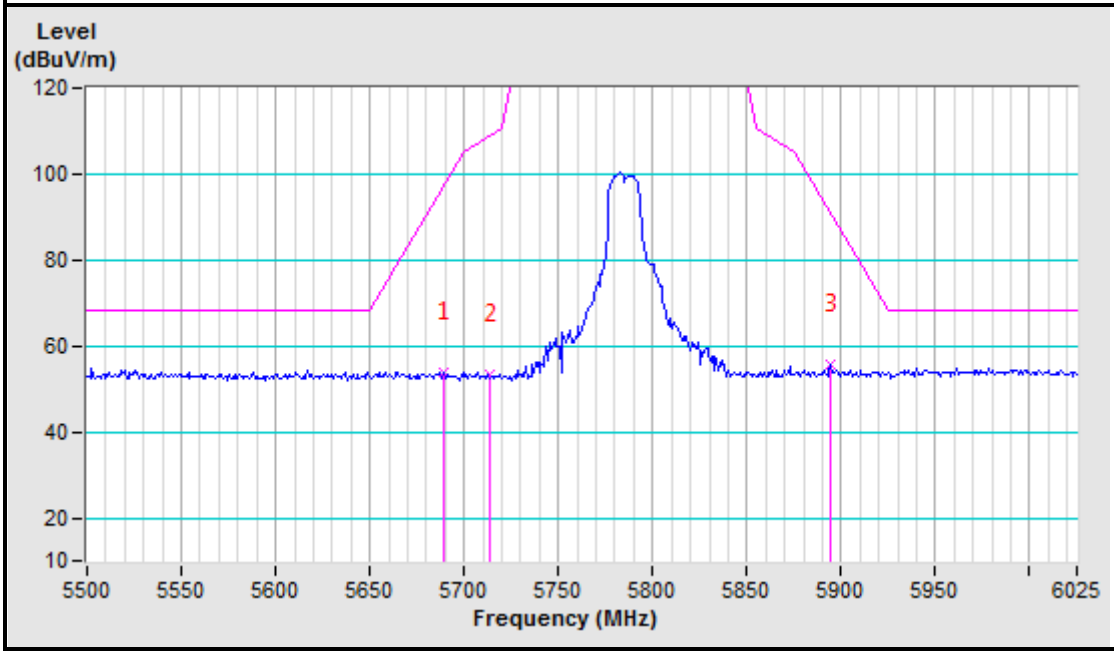
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5785MHz Horizontal**




**5785MHz Vertical**



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

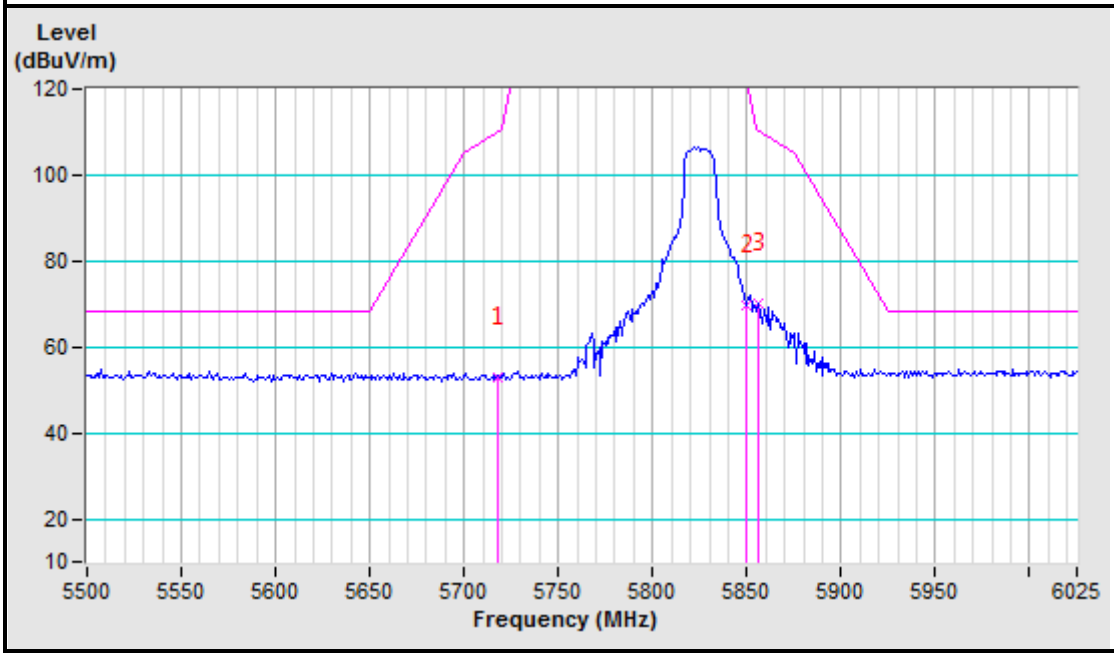
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5717.43 | 53.08 PK | 110.08 | -57.00 | 1.19 H | 0 | 43.55 | 9.53 |
| 2 | *5825.00 | 106.41 PK | | | 1.00 H | 25 | 96.59 | 9.82 |
| 3 | *5825.00 | 92.14 AV | | | 1.00 H | 25 | 82.32 | 9.82 |
| 4 | #5850.00 | 69.80 PK | 122.20 | -52.40 | 1.19 H | 0 | 59.92 | 9.88 |
| 5 | #5855.89 | 70.32 PK | 110.55 | -40.23 | 1.19 H | 0 | 60.42 | 9.90 |
| 6 | 11650.00 | 59.39 PK | 74.00 | -14.61 | 1.00 H | 0 | 39.41 | 19.98 |
| 7 | 11650.00 | 39.65 AV | 54.00 | -14.35 | 1.00 H | 0 | 19.67 | 19.98 |
| 8 | #17475.00 | 63.71 PK | 68.20 | -4.49 | 1.00 H | 0 | 36.09 | 27.62 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5682.09 | 53.11 PK | 91.99 | -38.88 | 1.00 V | 0 | 43.66 | 9.45 |
| 2 | *5825.00 | 99.76 PK | | | 1.00 V | 360 | 89.94 | 9.82 |
| 3 | *5825.00 | 84.50 AV | | | 1.00 V | 360 | 74.68 | 9.82 |
| 4 | #5850.00 | 65.94 PK | 122.20 | -56.26 | 1.00 V | 0 | 56.06 | 9.88 |
| 5 | #5855.05 | 65.17 PK | 110.79 | -45.62 | 1.00 V | 0 | 55.27 | 9.90 |
| 6 | 11650.00 | 58.72 PK | 74.00 | -15.28 | 1.00 V | 0 | 38.74 | 19.98 |
| 7 | 11650.00 | 38.50 AV | 54.00 | -15.50 | 1.00 V | 0 | 18.52 | 19.98 |
| 8 | #17475.00 | 62.77 PK | 68.20 | -5.43 | 1.00 V | 0 | 35.15 | 27.62 |

**REMARKS:**

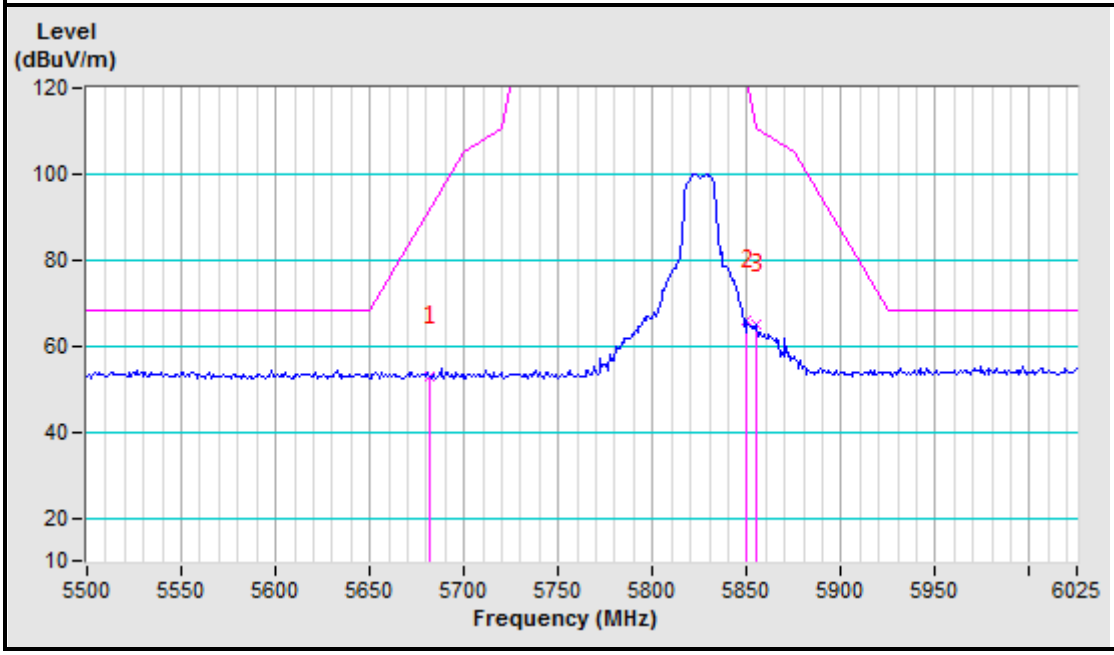
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5825MHz Horizontal**




**5825MHz Vertical**



## 802.11n (20MHz)

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

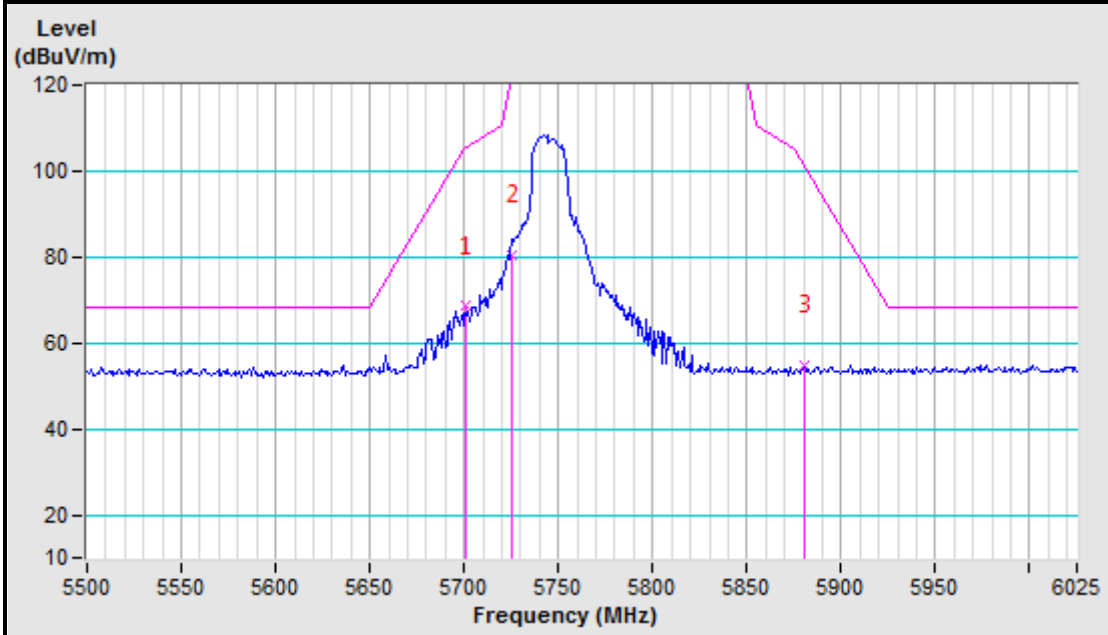
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5700.60 | 68.59 PK | 105.37 | -36.78 | 1.35 H | 0 | 59.09 | 9.50 |
| 2 | #5725.00 | 80.52 PK | 122.20 | -41.68 | 1.35 H | 0 | 70.96 | 9.56 |
| 3 | *5745.00 | 108.32 PK | | | 1.00 H | 110 | 98.71 | 9.61 |
| 4 | *5745.00 | 95.11 AV | | | 1.00 H | 110 | 85.50 | 9.61 |
| 5 | #5880.29 | 54.94 PK | 101.27 | -46.33 | 1.35 H | 0 | 44.97 | 9.97 |
| 6 | 11490.00 | 60.22 PK | 74.00 | -13.78 | 1.00 H | 0 | 40.58 | 19.64 |
| 7 | 11490.00 | 40.57 AV | 54.00 | -13.43 | 1.00 H | 0 | 20.93 | 19.64 |
| 8 | #17325.00 | 64.03 PK | 68.20 | -4.17 | 1.00 H | 0 | 36.58 | 27.45 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5714.06 | 66.76 PK | 109.14 | -42.38 | 1.08 V | 0 | 57.23 | 9.53 |
| 2 | #5725.00 | 77.07 PK | 122.20 | -45.13 | 1.08 V | 0 | 67.51 | 9.56 |
| 3 | *5745.00 | 100.47 PK | | | 1.00 V | 30 | 90.86 | 9.61 |
| 4 | *5745.00 | 87.93 AV | | | 1.00 V | 30 | 78.32 | 9.61 |
| 5 | #5891.23 | 53.37 PK | 93.16 | -39.79 | 1.08 V | 0 | 43.38 | 9.99 |
| 6 | 11490.00 | 59.81 PK | 74.00 | -14.19 | 1.00 V | 0 | 40.17 | 19.64 |
| 7 | 11490.00 | 38.79 AV | 54.00 | -15.21 | 1.00 V | 0 | 19.15 | 19.64 |
| 8 | #17325.00 | 62.52 PK | 68.20 | -5.68 | 1.00 V | 0 | 35.07 | 27.45 |

**REMARKS:**

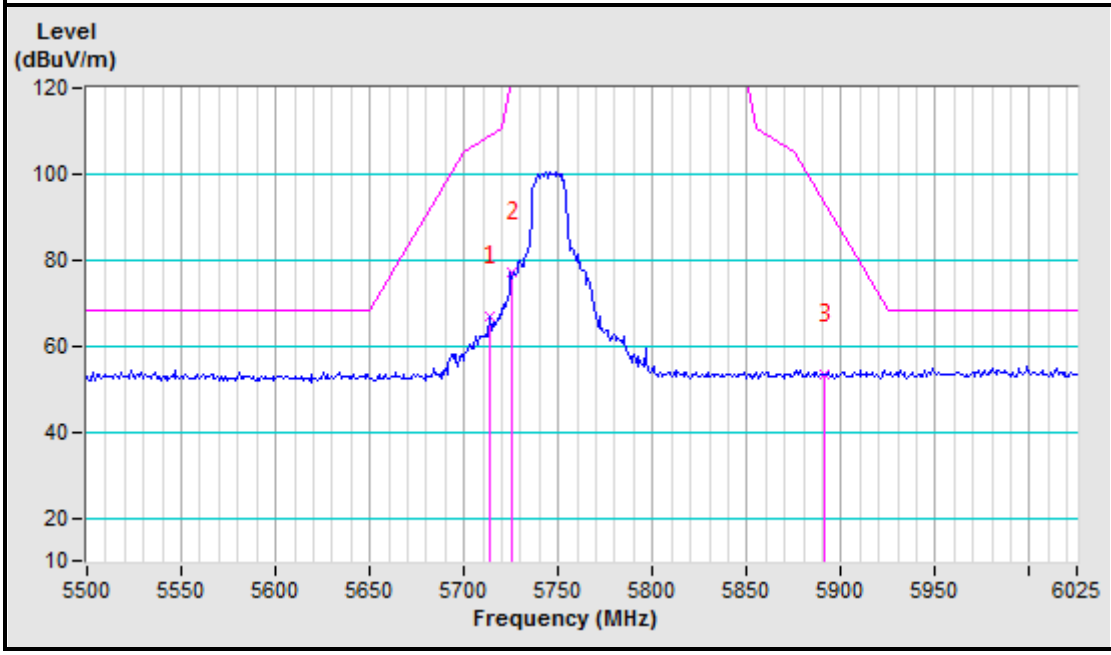
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5745MHz Horizontal**




**5745MHz Vertical**



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

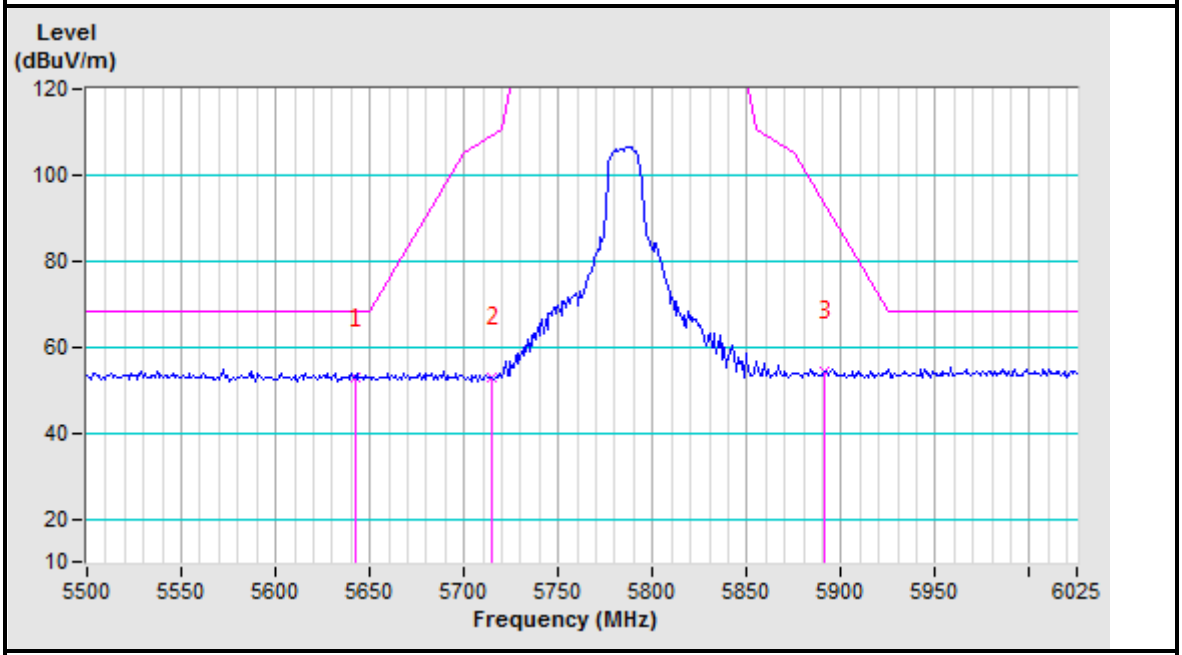
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5642.55 | 52.73 PK | 68.20 | -15.47 | 1.35 H | 0 | 43.39 | 9.34 |
| 2 | #5714.90 | 52.96 PK | 109.37 | -56.41 | 1.35 H | 0 | 43.42 | 9.54 |
| 3 | *5785.00 | 106.39 PK | | | 1.00 H | 28 | 96.68 | 9.71 |
| 4 | *5785.00 | 94.28 AV | | | 1.00 H | 28 | 84.57 | 9.71 |
| 5 | #5891.23 | 54.43 PK | 93.16 | -38.73 | 1.35 H | 0 | 44.44 | 9.99 |
| 6 | 11570.00 | 61.72 PK | 74.00 | -12.28 | 1.00 H | 0 | 41.92 | 19.80 |
| 7 | 11570.00 | 40.80 AV | 54.00 | -13.20 | 1.00 H | 0 | 21.00 | 19.80 |
| **8** | **#17355.00** | **64.69 PK** | **68.20** | **-3.51** | **1.00 H** | **0** | **37.21** | **27.48** |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M** | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5682.93 | 53.25 PK | 92.61 | -39.36 | 1.00 V | 0 | 43.80 | 9.45 |
| 2 | #5705.65 | 52.40 PK | 106.78 | -54.38 | 1.00 V | 0 | 42.89 | 9.51 |
| 3 | *5785.00 | 99.98 PK | | | 1.00 V | 275 | 90.27 | 9.71 |
| 4 | *5785.00 | 86.19 AV | | | 1.00 V | 275 | 76.48 | 9.71 |
| 5 | #5864.30 | 53.46 PK | 108.19 | -54.73 | 1.00 V | 0 | 43.54 | 9.92 |
| 6 | 11570.00 | 59.18 PK | 74.00 | -14.82 | 1.00 V | 0 | 39.38 | 19.80 |
| 7 | 11570.00 | 38.11 AV | 54.00 | -15.89 | 1.00 V | 0 | 18.31 | 19.80 |
| 8 | #17355.00 | 62.39 PK | 68.20 | -5.81 | 1.00 V | 0 | 34.91 | 27.48 |

**REMARKS:**

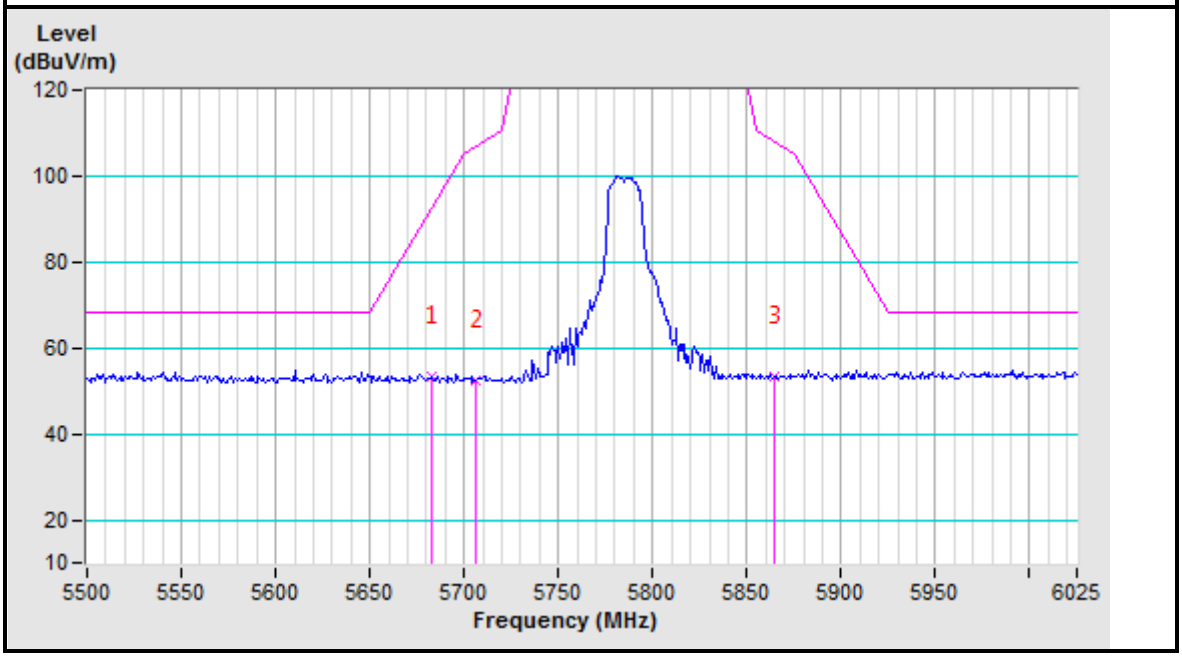
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5785MHz Horizontal**




**5785MHz Vertical**



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

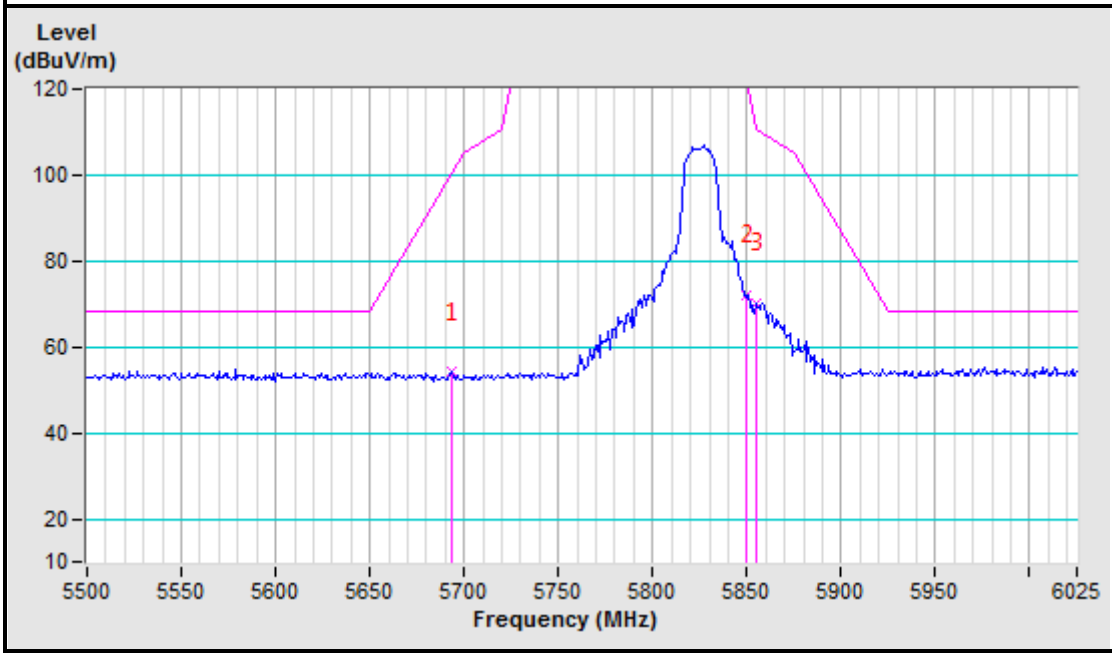
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5693.87 | 54.06 PK | 100.68 | -46.62 | 1.88 H | 0 | 44.58 | 9.48 |
| 2 | *5825.00 | 106.87 PK | | | 1.00 H | 223 | 97.05 | 9.82 |
| 3 | *5825.00 | 94.39 AV | | | 1.00 H | 223 | 84.57 | 9.82 |
| 4 | #5850.00 | 72.09 PK | 122.20 | -50.11 | 1.88 H | 0 | 62.21 | 9.88 |
| 5 | #5855.05 | 70.31 PK | 110.79 | -40.48 | 1.88 H | 0 | 60.41 | 9.90 |
| 6 | 11650.00 | 61.20 PK | 74.00 | -12.80 | 1.00 H | 0 | 41.22 | 19.98 |
| 7 | 11650.00 | 41.50 AV | 54.00 | -12.50 | 1.00 H | 0 | 21.52 | 19.98 |
| 8 | #17475.00 | 64.34 PK | 68.20 | -3.86 | 1.00 H | 0 | 36.72 | 27.62 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5709.01 | 52.58 PK | 107.73 | -55.15 | 1.00 V | 0 | 43.06 | 9.52 |
| 2 | *5825.00 | 99.31 PK | | | 1.00 V | 144 | 89.49 | 9.82 |
| 3 | *5825.00 | 85.97 AV | | | 1.00 V | 144 | 76.15 | 9.82 |
| 4 | #5850.00 | 62.10 PK | 122.20 | -60.10 | 1.00 V | 0 | 52.22 | 9.88 |
| 5 | #5852.52 | 65.53 PK | 116.44 | -50.91 | 1.00 V | 0 | 55.64 | 9.89 |
| 6 | 11650.00 | 60.03 PK | 74.00 | -13.97 | 1.00 V | 0 | 40.05 | 19.98 |
| 7 | 11650.00 | 39.20 AV | 54.00 | -14.80 | 1.00 V | 0 | 19.22 | 19.98 |
| 8 | #17475.00 | 62.95 PK | 68.20 | -5.25 | 1.00 V | 0 | 35.33 | 27.62 |

**REMARKS:**

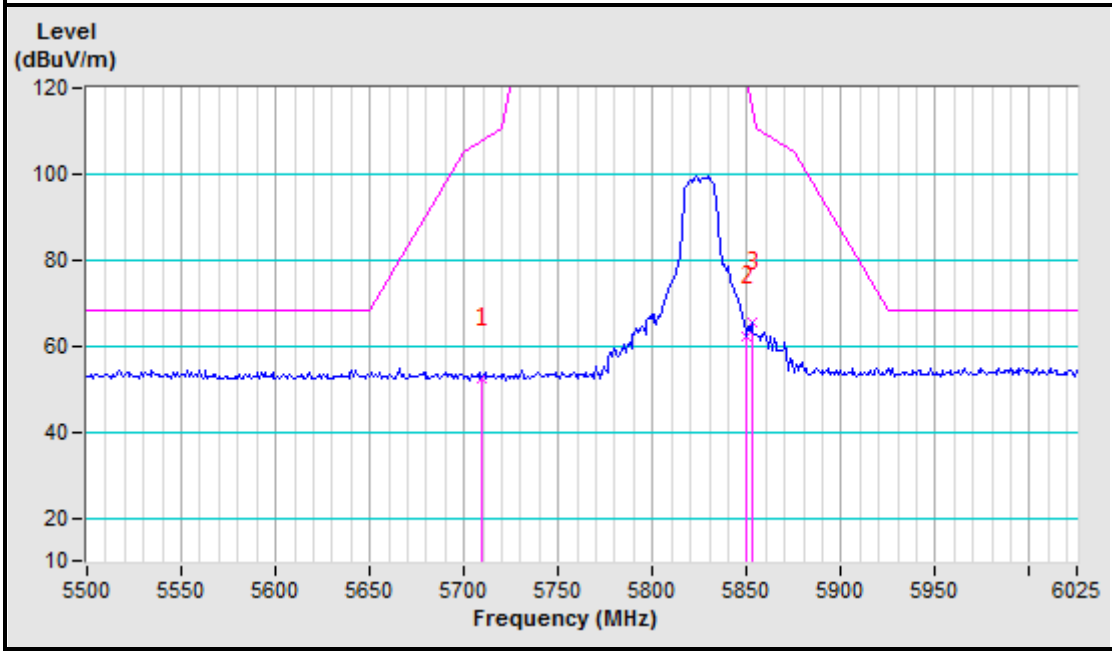
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5825MHz Horizontal**




**5825MHz Vertical**



## 802.11n (40MHz)

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

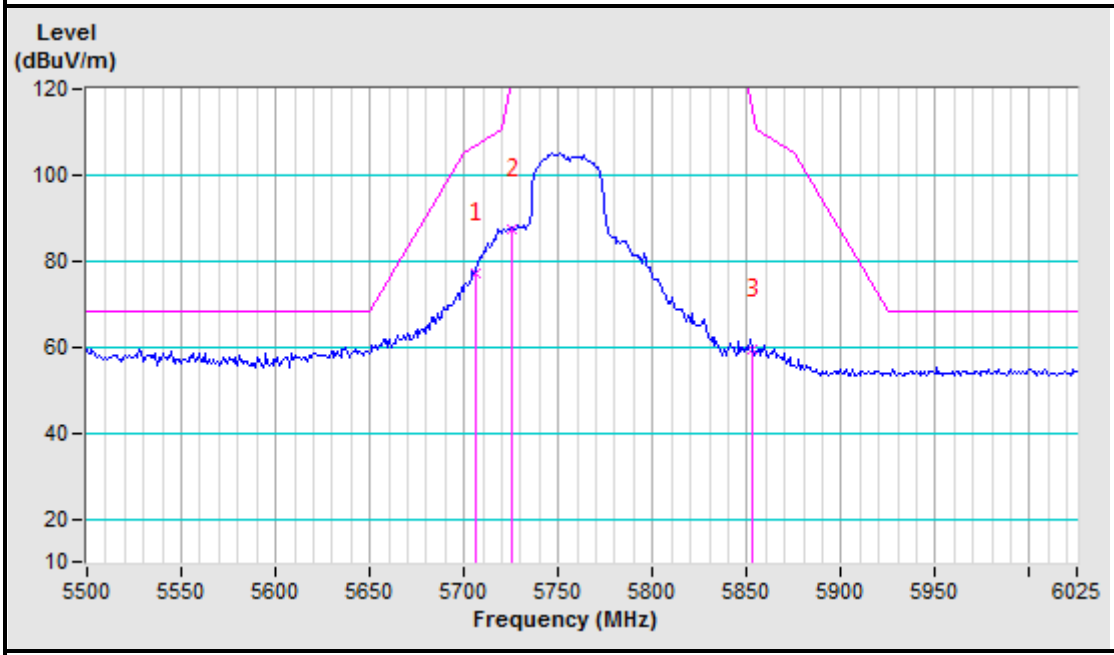
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5705.65 | 77.25 PK | 106.78 | -29.53 | 1.26 H | 0 | 67.74 | 9.51 |
| 2 | #5725.00 | 87.54 PK | 122.20 | -34.66 | 1.26 H | 0 | 77.98 | 9.56 |
| 3 | *5755.00 | 105.08 PK | | | 1.00 H | 0 | 95.44 | 9.64 |
| 4 | *5755.00 | 87.45 AV | | | 1.00 H | 0 | 77.81 | 9.64 |
| 5 | #5853.37 | 59.47 PK | 114.53 | -55.06 | 1.26 H | 0 | 49.58 | 9.89 |
| 6 | #15100.00 | 60.59 PK | 68.20 | -7.61 | 1.00 H | 0 | 36.46 | 24.13 |
| 7 | #15100.00 | 40.58 AV | 54.00 | -13.42 | 1.00 H | 0 | 16.45 | 24.13 |
| 8 | #17265.00 | 64.36 PK | 68.20 | -3.84 | 1.00 H | 0 | 36.98 | 27.38 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5708.17 | 70.24 PK | 107.49 | -37.25 | 1.00 V | 0 | 60.73 | 9.51 |
| 2 | #5725.00 | 80.49 PK | 122.20 | -41.71 | 1.00 V | 0 | 70.93 | 9.56 |
| 3 | *5755.00 | 98.13 PK | | | 1.00 V | 190 | 88.49 | 9.64 |
| 4 | *5755.00 | 81.25 AV | | | 1.00 V | 190 | 71.61 | 9.64 |
| 5 | #5856.73 | 55.48 PK | 110.31 | -54.83 | 1.00 V | 0 | 45.57 | 9.91 |
| 6 | 11510.00 | 59.36 PK | 74.00 | -14.64 | 1.00 V | 0 | 39.69 | 19.67 |
| 7 | 11510.00 | 38.70 AV | 54.00 | -15.30 | 1.00 V | 0 | 19.03 | 19.67 |
| 8 | #17265.00 | 63.64 PK | 68.20 | -4.56 | 1.00 V | 0 | 36.26 | 27.38 |

**REMARKS:**

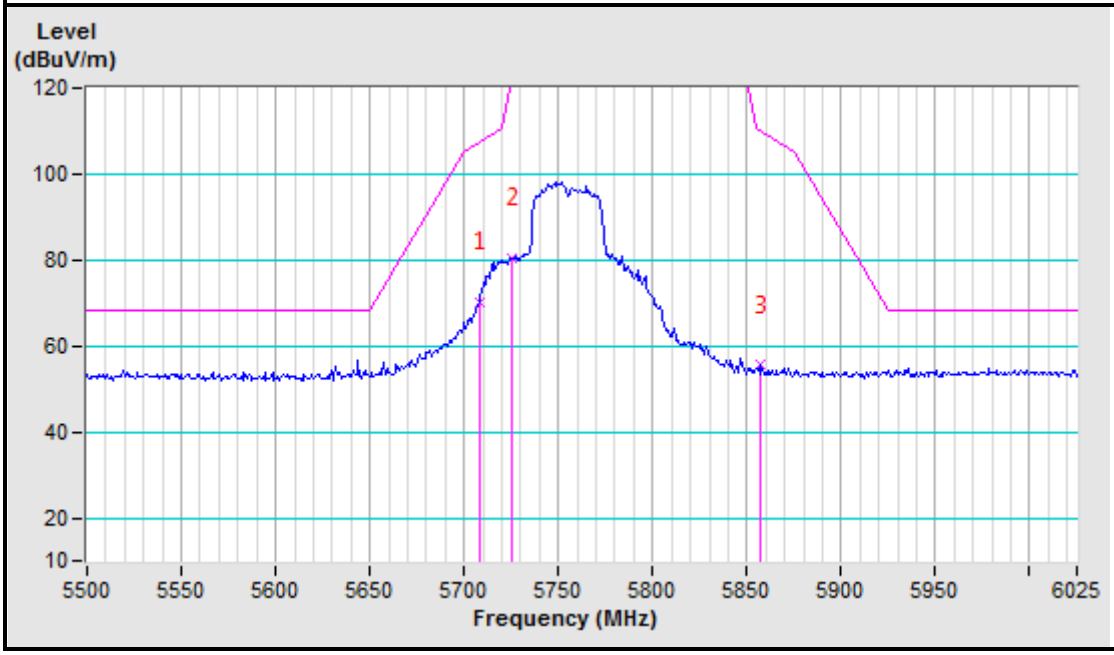
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

**Band edge Plot**

**5755MHz Horizontal**




**5755MHz Vertical**



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

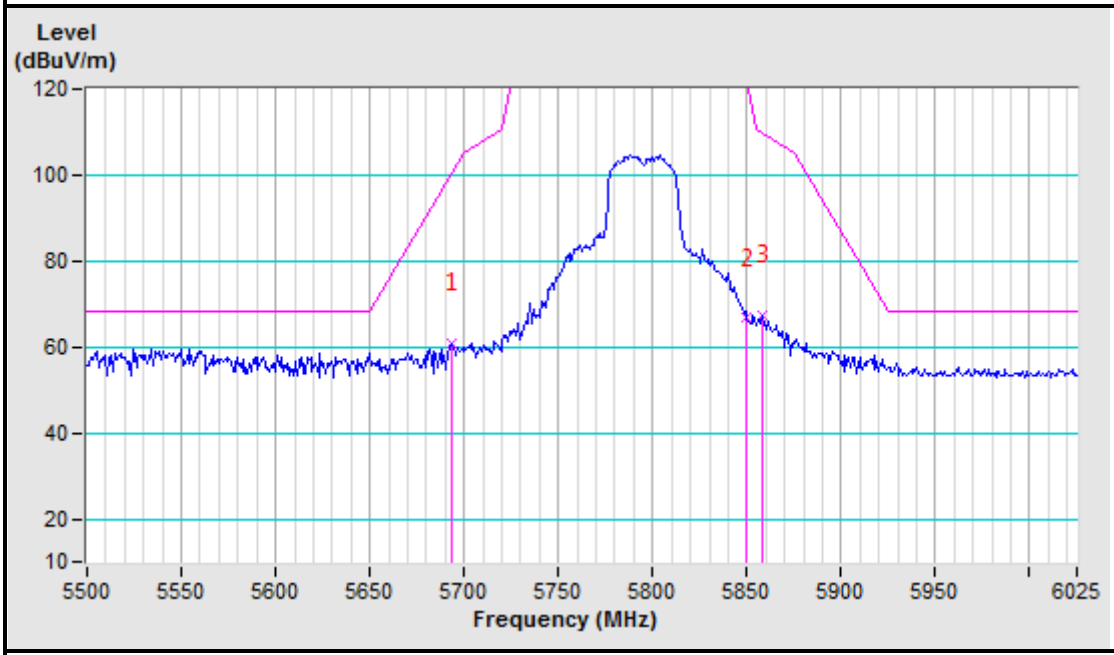
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5693.87 | 60.72 PK | 100.68 | -39.96 | 1.35 H | 0 | 51.24 | 9.48 |
| 2 | *5795.00 | 104.68 PK | | | 1.00 H | 360 | 94.93 | 9.75 |
| 3 | *5795.00 | 86.63 AV | | | 1.00 H | 360 | 76.88 | 9.75 |
| 4 | #5850.00 | 66.70 PK | 122.20 | -55.50 | 1.35 H | 0 | 56.82 | 9.88 |
| 5 | #5858.41 | 67.54 PK | 109.84 | -42.30 | 1.35 H | 0 | 57.63 | 9.91 |
| 6 | 11590.00 | 60.50 PK | 74.00 | -13.50 | 1.00 H | 0 | 40.66 | 19.84 |
| 7 | 11590.00 | 39.70 AV | 54.00 | -14.30 | 1.00 H | 0 | 19.86 | 19.84 |
| 8 | #17385.00 | 63.48 PK | 68.20 | -4.72 | 1.00 H | 0 | 35.96 | 27.52 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5714.90 | 56.45 PK | 109.37 | -52.92 | 1.00 V | 0 | 46.91 | 9.54 |
| 2 | *5795.00 | 98.47 PK | | | 1.00 V | 255 | 88.72 | 9.75 |
| 3 | *5795.00 | 81.74 AV | | | 1.00 V | 255 | 71.99 | 9.75 |
| 4 | #5850.00 | 60.09 PK | 122.20 | -62.11 | 1.00 V | 0 | 50.21 | 9.88 |
| 5 | #5860.94 | 60.25 PK | 109.14 | -48.89 | 1.00 V | 0 | 50.33 | 9.92 |
| 6 | 11590.00 | 60.01 PK | 74.00 | -13.99 | 1.00 V | 0 | 40.17 | 19.84 |
| 7 | 11590.00 | 39.60 AV | 54.00 | -14.40 | 1.00 V | 0 | 19.76 | 19.84 |
| 8 | #17385.00 | 63.70 PK | 68.20 | -4.50 | 1.00 V | 0 | 36.18 | 27.52 |

**REMARKS:**

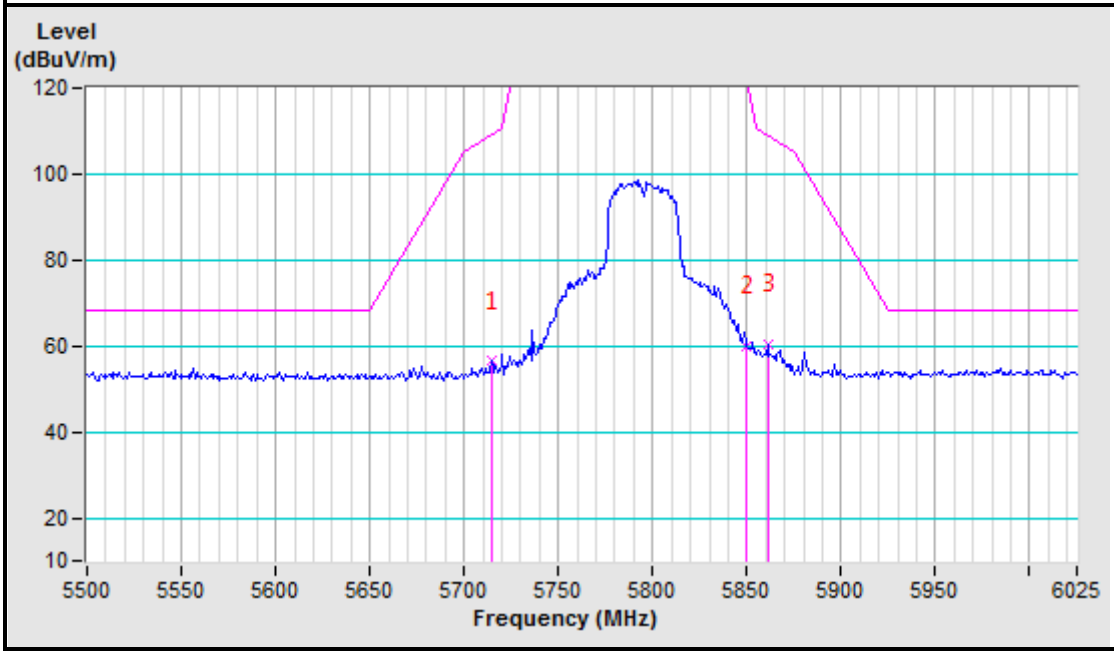
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5795MHz Horizontal**




**5795MHz Vertical**



## 802.11ac 80MHz

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

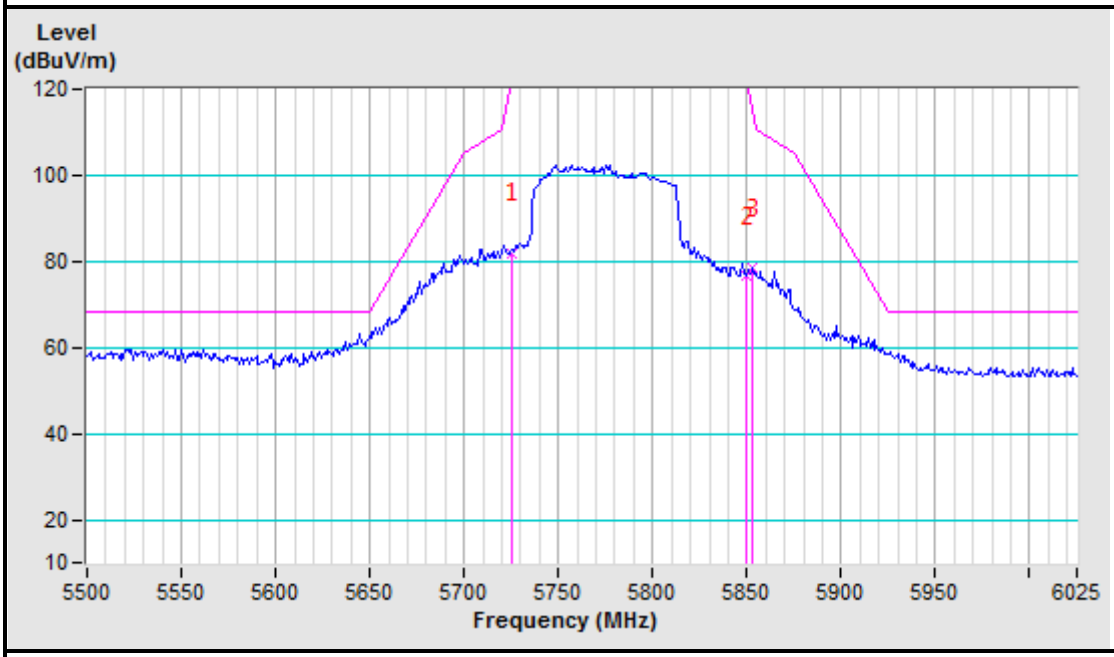
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5725.00 | 81.76 PK | 122.20 | -40.44 | 1.24 H | 0 | 72.20 | 9.56 |
| 2 | *5775.00 | 102.03 PK | | | 1.00 H | 225 | 92.34 | 9.69 |
| 3 | *5775.00 | 80.40 AV | | | 1.00 H | 225 | 70.71 | 9.69 |
| 4 | #5850.00 | 76.53 PK | 122.20 | -45.67 | 1.24 H | 0 | 66.65 | 9.88 |
| 5 | #5853.37 | 78.33 PK | 114.53 | -36.20 | 1.24 H | 0 | 68.44 | 9.89 |
| 6 | 11550.00 | 60.85 PK | 74.00 | -13.15 | 1.00 H | 0 | 41.09 | 19.76 |
| 7 | 11550.00 | 40.50 AV | 54.00 | -13.50 | 1.00 H | 0 | 20.74 | 19.76 |
| 8 | #17325.00 | 64.06 PK | 68.20 | -4.14 | 1.00 H | 0 | 36.61 | 27.45 |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #5721.63 | 77.41 PK | 114.53 | -37.12 | 1.03 V | 0 | 67.86 | 9.55 |
| 2 | #5725.00 | 76.72 PK | 122.20 | -45.48 | 1.03 V | 0 | 67.16 | 9.56 |
| 3 | *5775.00 | 95.94 PK | | | 1.00 V | 0 | 86.25 | 9.69 |
| 4 | *5775.00 | 73.96 AV | | | 1.00 V | 0 | 64.27 | 9.69 |
| 5 | #5850.00 | 70.14 PK | 122.20 | -52.06 | 1.03 V | 0 | 60.26 | 9.88 |
| 6 | 11550.00 | 60.05 PK | 74.00 | -13.95 | 1.00 V | 0 | 40.29 | 19.76 |
| 7 | 11550.00 | 39.60 AV | 54.00 | -14.40 | 1.00 V | 0 | 19.84 | 19.76 |
| 8 | #17325.00 | 63.40 PK | 68.20 | -4.80 | 1.00 V | 0 | 35.95 | 27.45 |

**REMARKS:**

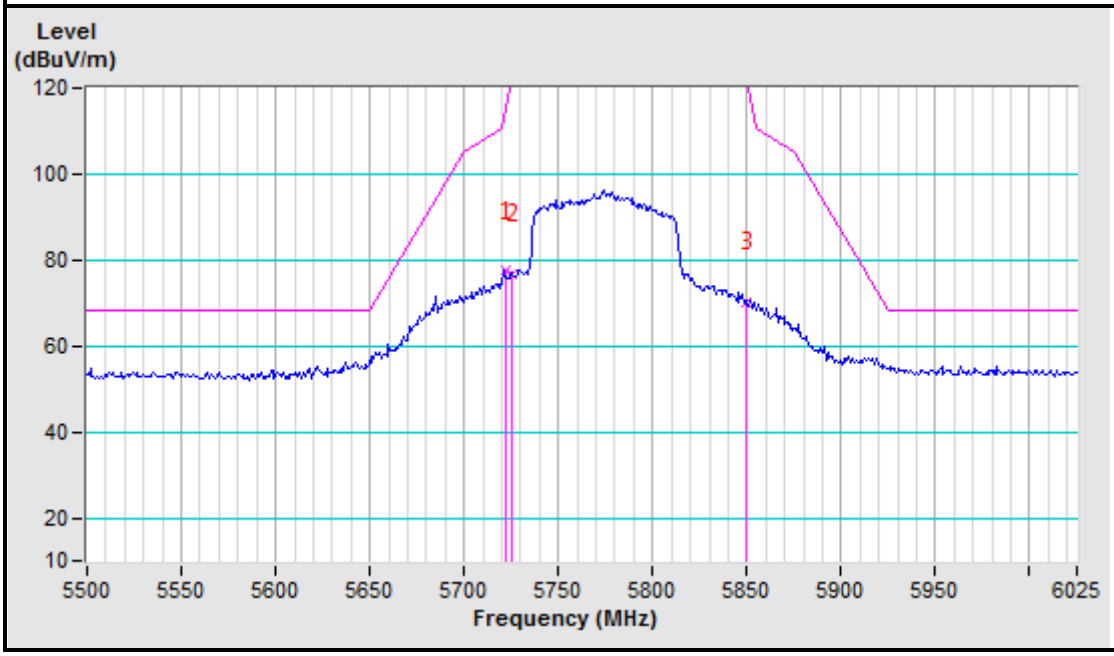
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## Band edge Plot

**5775MHz Horizontal**




**5775MHz Vertical**



## 3.2 CONDUCTED EMISSION MEASUREMENT

### 3.2.1 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 |

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

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

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.

### 3.2.2 TEST INSTRUMENTS

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|---|---|---|---|---|---|
| EMI Test Receiver | Rohde&Schwarz | ESR7 | 101494 | Mar. 18,20 | Mar. 17,21 |
| Artificial Mains Network | Rohde&Schwarz | ENV216 | 101173 | Mar. 18,20 | Mar. 17,21 |
| Artificial Mains Network | Rohde&Schwarz | ESH3-Z5 | 100317 | Mar. 18,20 | Mar. 17,21 |
| Voltage probe | SCHWARZBECK | TK 9421 | TK 9421-176 | Sep. 24,19 | Sep. 23,20 |
| Test software | ADT | ADT_Cond_V7.3.7 | N/A | N/A | N/A |

**NOTE:**

1. The test was performed in shielded room 553.
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. Test date: Apr. 02, 2020

### 3.2.3 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.

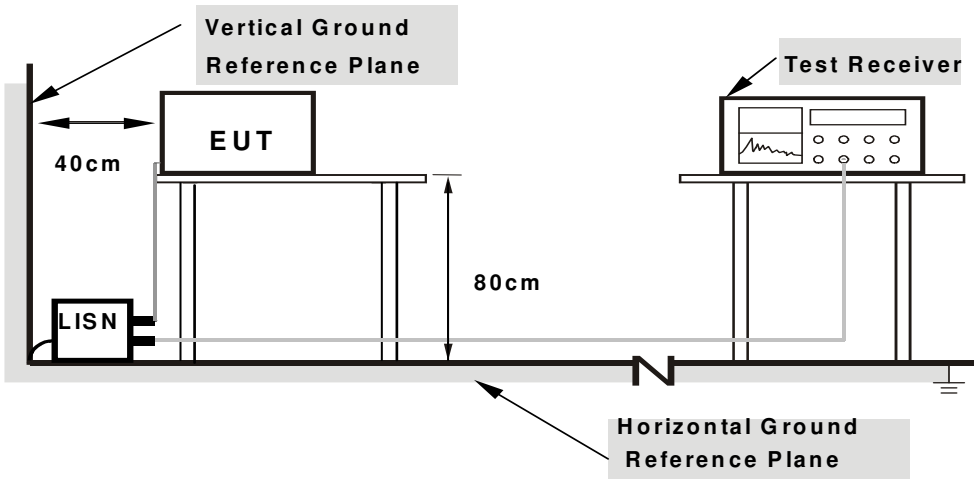
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

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

### 3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

### 3.2.5 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).

### 3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.7

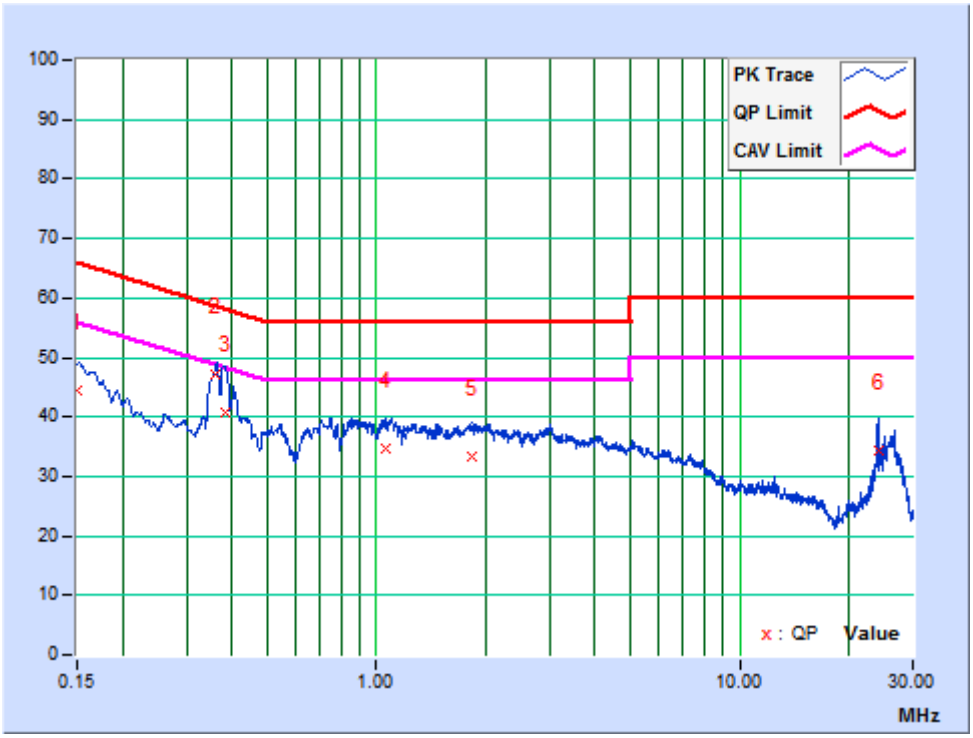
## 3.2.7 TEST RESULTS

### CONDUCTED WORST-CASE DATA: 802.11a CH36

| PHASE | Line | 6dB BANDWIDTH | 9kHz |
|---|---|---|---|

| No | Freq. | Corr. Factor | Reading Value | | Emission Level | | Limit | | Margin | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | [dB (uV)] | | [dB (uV)] | | [dB (uV)] | | (dB) | |
| | [MHz] | (dB) | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.15000 | 10.21 | 34.14 | 20.71 | 44.35 | 30.92 | 66.00 | 56.00 | -21.65 | -25.08 |
| **2** | **0.36101** | **10.22** | **36.87** | **30.23** | **47.09** | **40.45** | **58.71** | **48.71** | **-11.62** | **-8.26** |
| 3 | 0.38260 | 10.22 | 30.39 | 28.63 | 40.61 | 38.85 | 58.22 | 48.22 | -17.61 | -9.37 |
| 4 | 1.05675 | 10.24 | 24.50 | 5.93 | 34.74 | 16.17 | 56.00 | 46.00 | -21.26 | -29.83 |
| 5 | 1.84425 | 10.22 | 23.08 | 12.38 | 33.30 | 22.60 | 56.00 | 46.00 | -22.70 | -23.40 |
| 6 | 24.03825 | 10.33 | 24.18 | 10.31 | 34.51 | 20.64 | 60.00 | 50.00 | -25.49 | -29.36 |

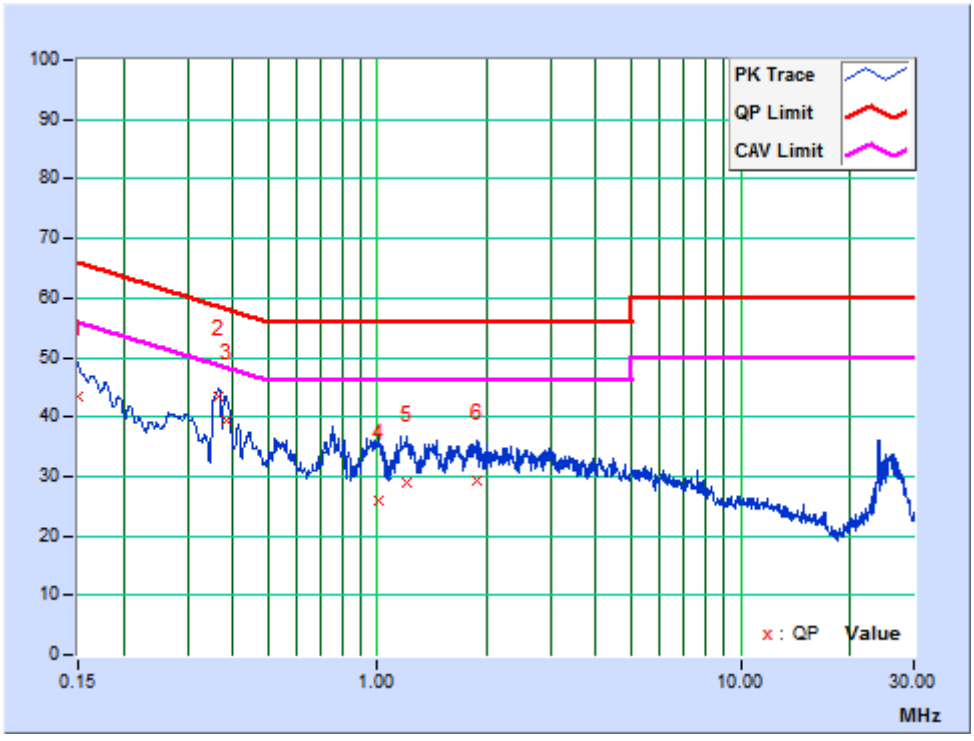
**REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor +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



| PHASE | Neutral | 6dB BANDWIDTH | 9kHz |
|---|---|---|---|

| No | Freq. | Corr. Factor | Reading Value | | Emission Level | | Limit | | Margin | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | [dB (uV)] | | [dB (uV)] | | [dB (uV)] | | (dB) | |
| | [MHz] | (dB) | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.15000 | 10.01 | 33.44 | 19.57 | 43.45 | 29.58 | 66.00 | 56.00 | -22.55 | -26.42 |
| 2 | 0.36485 | 10.02 | 33.40 | 28.58 | 43.42 | 38.60 | 58.62 | 48.62 | -15.20 | -10.02 |
| 3 | 0.38175 | 10.02 | 29.36 | 10.22 | 39.38 | 20.24 | 58.24 | 48.24 | -18.86 | -28.00 |
| 4 | 1.00950 | 10.03 | 15.91 | 7.66 | 25.94 | 17.69 | 56.00 | 46.00 | -30.06 | -28.31 |
| 5 | 1.20340 | 10.03 | 19.03 | 8.32 | 29.06 | 18.35 | 56.00 | 46.00 | -26.94 | -27.65 |
| 6 | 1.87575 | 10.01 | 19.17 | 11.35 | 29.18 | 21.36 | 56.00 | 46.00 | -26.82 | -24.64 |

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



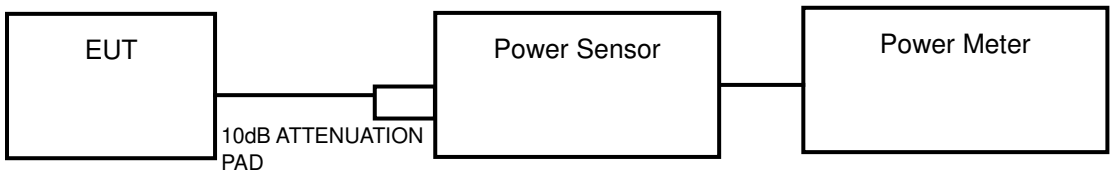
## 3.3 TRANSMIT POWER MEASUREMENT

### 3.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

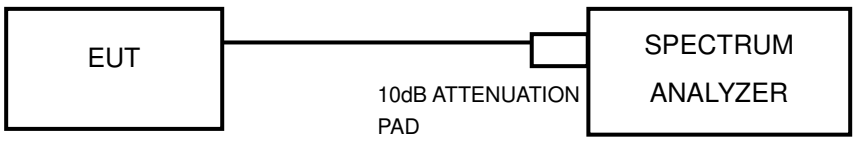
| Operation Band | EUT Category | | LIMIT |
|---|---|---|---|
| U-NII-1 | | Outdoor Access Point | 1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon) |
| | | Fixed point-to-point Access Point | 1 Watt (30 dBm) |
| | | Indoor Access Point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

**NOTE:** 1. Where B is the 26dB emission bandwidth in MHz.

### 3.3.2 TEST SETUP




**FOR 6/26dB BANDWIDTH**



### 3.3.3 TEST INSTRUMENTS

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|---|---|---|---|---|---|
| Power Sensor | Keysight | U2021XA | MY55060016 | May 22,19 | May 21,20 |
| Power Sensor | Keysight | U2021XA | MY55060018 | May 22,19 | May 21,20 |
| Power Meter | Anritsu | ML2495A | 1139001 | Mar. 18,20 | Mar. 17,21 |
| Power Sensor | Anritsu | MA2411B | 1531155 | Mar. 18,20 | Mar. 17,21 |
| Digital Multimeter | FLUKE | 15B | A1220010DG | Oct. 17, 19 | Oct.16, 20 |
| Humid & Temp Programmable Tester | Haida | HD-225T | 110807201 | Oct.31,19 | Oct. 30,20 |
| Oscilloscope | Agilent | DSO9254A | MY51260160 | Sep. 18,19 | Sep. 17,20 |
| Signal and Spectrum Analyzer | Rohde&Schwarz | FSV40 | 101094 | Mar. 18,20 | Mar. 17,21 |
| Signal Generator | Agilent | N5183A | MY50140980 | Sep. 19,19 | Sep. 18,20 |
| MXG-B RF Vector Signal Generator | Keysight | N5182B | MY56200288 | Sep. 12,19 | Sep. 11,20 |
| BLUETOOTH TESTER | Rohde&Schwarz | CBT32 | 100811 | May 20,19 | May 19,20 |
| Attenuator | MINI | BW-S10W2+ | S130129FGE2 | N/A | N/A |
| DC Source | Keysight | E3642A | MY56146098 | N/A | N/A |

**NOTES:**

1. The test was performed in RF Oven 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. Test date: Mar. 19, 2020~ Apr. 22, 2020

### 3.3.4 TEST PROCEDURE

**FOR AVERAGE POWER MEASUREMENT**

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

**FOR 26dB BANDWIDTH**

1) Set RBW = approximately 1% of the emission bandwidth.
2) Set the VBW > RBW.
3) Detector = RMS.
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.

### 3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.3.6 EUT OPERATING CONDITIONS

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

## 3.3.7 TEST RESULTS

**OUTPUT POWER:**

**802.11a**

| CHANNEL NUMBER | FREQ. (MHz) | AVG. CONDUCTED POWER (dBm) | AVG. CONDUCTED POWER (mW) | LIMIT (dBm) | PASS /FAIL |
|---|---|---|---|---|---|
| **36** | 5180 | 13.54 | 22.594 | 24.00 | PASS |
| **40** | 5200 | 13.85 | 24.266 | 24.00 | PASS |
| **48** | 5240 | 13.94 | 24.774 | 24.00 | PASS |
| **52** | 5260 | 13.09 | 20.37 | 24.00 | PASS |
| **60** | 5300 | 13.59 | 22.856 | 24.00 | PASS |
| **64** | 5320 | 12.65 | 18.408 | 24.00 | PASS |
| **100** | 5500 | 13.59 | 22.856 | 24.00 | PASS |
| **116** | 5580 | 13.42 | 21.979 | 24.00 | PASS |
| **140** | 5700 | 14.77 | 29.992 | 24.00 | PASS |
| **149** | 5745 | 12.35 | 17.179 | 30.00 | PASS |
| **157** | 5785 | 12.86 | 19.32 | 30.00 | PASS |
| **165** | 5825 | 12.92 | 19.588 | 30.00 | PASS |

**Note:**

**For 5260 ~ 5320MHz, 5500 ~ 5700MHz**

1. **11dBm + 10log (21.66) = 24.36 dBm > 24dBm**
2. **11dBm + 10log (21.42) = 24.31 dBm > 24dBm**
3. **11dBm + 10log (22.06) = 24.44 dBm > 24dBm**
4. **11dBm + 10log (27.50) = 25.39 dBm > 24dBm**
5. **11dBm + 10log (20.41) = 24.10 dBm > 24dBm**
6. **11dBm + 10log (25.94) = 25.14 dBm > 24dBm**

802.11n (20MHz)

| CHANNEL NUMBER | FREQ. (MHz) | AVG. CONDUCTED POWER (dBm) | AVG. CONDUCTED POWER (mW) | LIMIT (dBm) | PASS /FAIL |
|---|---|---|---|---|---|
| **36** | 5180 | 13.28 | 21.281 | 24.00 | PASS |
| **40** | 5200 | 13.54 | 22.594 | 24.00 | PASS |
| **48** | 5240 | 13.57 | 22.751 | 24.00 | PASS |
| **52** | 5260 | 13.63 | 23.067 | 24.00 | PASS |
| **60** | 5300 | 13.36 | 21.677 | 24.00 | PASS |
| **64** | 5320 | 13.90 | 24.547 | 24.00 | PASS |
| **100** | 5500 | 14.04 | 25.351 | 24.00 | PASS |
| **116** | 5580 | 13.19 | 20.845 | 24.00 | PASS |
| **140** | 5700 | 14.55 | 28.51 | 24.00 | PASS |
| **149** | 5745 | 13.83 | 24.155 | 30.00 | PASS |
| **157** | 5785 | 13.16 | 20.701 | 30.00 | PASS |
| **165** | 5825 | 13.54 | 22.594 | 30.00 | PASS |

**Note:**

**For 5260 ~ 5320MHz, 5500 ~ 5700MHz**

**11dBm + 10log (21.61) = 24.35 dBm > 24dBm**

**11dBm + 10log (21.23) = 24.27 dBm > 24dBm**

**11dBm + 10log (23.05) = 24.63 dBm > 24dBm**

**11dBm + 10log (24.68) = 24.93 dBm > 24dBm**

**11dBm + 10log (21.05) = 24.23 dBm > 24dBm**

**11dBm + 10log (25.99) = 25.15 dBm > 24dBm**

802.11n (40MHz)

| CHANNEL NUMBER | FREQ. (MHz) | AVG. CONDUCTED POWER (dBm) | AVG. CONDUCTED POWER (mW) | LIMIT (dBm) | PASS /FAIL |
|---|---|---|---|---|---|
| **38** | 5190 | 13.32 | 21.478 | 24.00 | PASS |
| **46** | 5230 | 13.58 | 22.803 | 24.00 | PASS |
| **54** | 5270 | 13.13 | 20.559 | 24.00 | PASS |
| **62** | 5310 | 13.07 | 20.277 | 24.00 | PASS |
| **102** | 5510 | 13.16 | 20.701 | 24.00 | PASS |
| **110** | 5550 | 14.10 | 25.704 | 24.00 | PASS |
| **134** | 5670 | 13.72 | 23.55 | 24.00 | PASS |
| **151** | 5755 | 13.84 | 24.21 | 30.00 | PASS |
| **159** | 5795 | 13.75 | 23.714 | 30.00 | PASS |

**Note:**

**For 5260 ~ 5320MHz, 5500 ~ 5700MHz**

**11dBm + 10log (45.70) = 27.60 dBm > 24dBm**

**11dBm + 10log (66.67) = 29.24 dBm > 24dBm**

**11dBm + 10log (55.46) = 28.44 dBm > 24dBm**

**11dBm + 10log (50.34) = 28.02 dBm > 24dBm**

**11dBm + 10log (56.02) = 28.48 dBm > 24dBm**

802.11ac (80MHz)

| CHANNEL NUMBER | FREQ. (MHz) | AVG. CONDUCTED POWER (dBm) | AVG. CONDUCTED POWER (mW) | LIMIT (dBm) | PASS /FAIL |
|---|---|---|---|---|---|
| **42** | 5210 | 12.69 | 18.578 | 24.00 | PASS |
| **58** | 5290 | 13.53 | 22.542 | 24.00 | PASS |
| **106** | 5530 | 12.94 | 19.679 | 24.00 | PASS |
| **122** | 5610 | 13.18 | 20.797 | 24.00 | PASS |
| **155** | 5775 | 13.77 | 23.823 | 30.00 | PASS |

**Note:**

**For 5260 ~ 5320MHz, 5500 ~ 5700MHz**

**11dBm + 10log (92.70) = 30.67 dBm > 24dBm**

**11dBm + 10log (83.34) = 30.21 dBm > 24dBm**

**11dBm + 10log (82.69) = 30.17 dBm > 24dBm**

## 26dB BANDWIDTH:

### 802.11a

| Channel Number | Freq. (MHz) | 26dB DOWN BANDWIDTH (MHz) | PASS /FAIL |
|---|---|---|---|
| **36** | 5180 | 23.09 | PASS |
| **40** | 5200 | 22.53 | PASS |
| **48** | 5240 | 22.25 | PASS |
| **52** | 5260 | 21.66 | PASS |
| **60** | 5300 | 21.42 | PASS |
| **64** | 5320 | 22.06 | PASS |
| **100** | 5500 | 27.50 | PASS |
| **116** | 5580 | 20.41 | PASS |
| **140** | 5700 | 25.94 | PASS |

### 802.11n (20MHz)

| Channel Number | Freq. (MHz) | 26dB DOWN BANDWIDTH (MHz) | PASS /FAIL |
|---|---|---|---|
| **36** | 5180 | 22.42 | PASS |
| **40** | 5200 | 21.89 | PASS |
| **48** | 5240 | 21.50 | PASS |
| **52** | 5260 | 21.61 | PASS |
| **60** | 5300 | 21.23 | PASS |
| **64** | 5320 | 23.05 | PASS |
| **100** | 5500 | 24.68 | PASS |
| **116** | 5580 | 21.05 | PASS |
| **140** | 5700 | 25.99 | PASS |

### 802.11n (40MHz)

| Channel Number | Freq. (MHz) | 26dB DOWN BANDWIDTH (MHz) | PASS /FAIL |
|---|---|---|---|
| **38** | 5190 | 46.59 | PASS |
| **46** | 5230 | 45.26 | PASS |
| **54** | 5270 | 45.70 | PASS |
| **62** | 5310 | 66.67 | PASS |
| **102** | 5510 | 55.46 | PASS |
| **110** | 5550 | 50.34 | PASS |
| **134** | 5670 | 56.02 | PASS |

### 802.11ac (80MHz)

| Channel Number | Freq. (MHz) | 26dB DOWN BANDWIDTH (MHz) | PASS /FAIL |
|---|---|---|---|
| **42** | 5210 | 88.72 | PASS |
| **58** | 5290 | 92.70 | PASS |
| **106** | 5530 | 83.34 | PASS |
| **122** | 5610 | 82.69 | PASS |

## 6dB BANDWIDTH For 5725-5850MHz

### 802.11a

| Channel Number | Freq. (MHz) | 6dB DOWN BANDWIDTH (MHz) | PASS /FAIL |
|---|---|---|---|
| **149** | **5745** | 15.14 | PASS |
| **157** | **5785** | 15.20 | PASS |
| **165** | **5825** | 15.22 | PASS |

### 802.11n (20M)

| Channel Number | Freq. (MHz) | 6dB DOWN BANDWIDTH (MHz) | PASS /FAIL |
|---|---|---|---|
| **149** | **5745** | 15.19 | PASS |
| **157** | **5785** | 15.21 | PASS |
| **165** | **5825** | 15.20 | PASS |

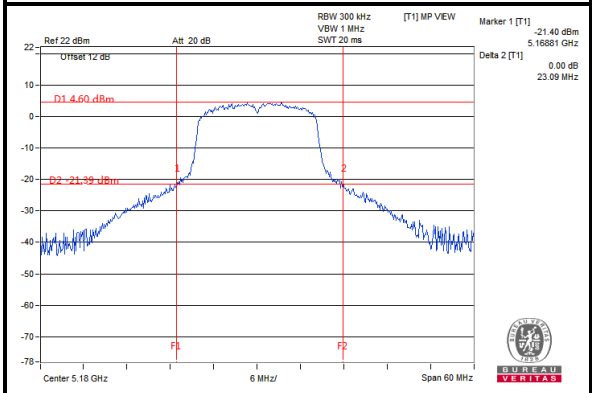
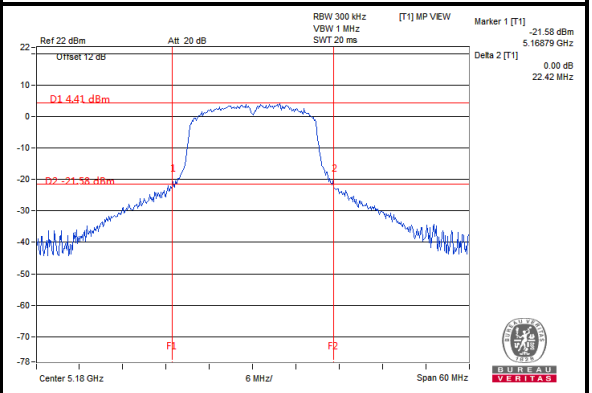
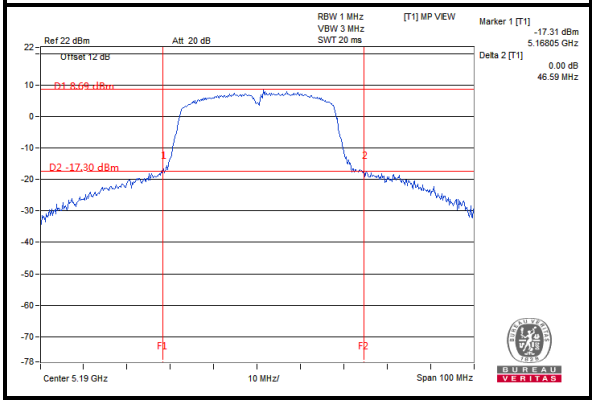
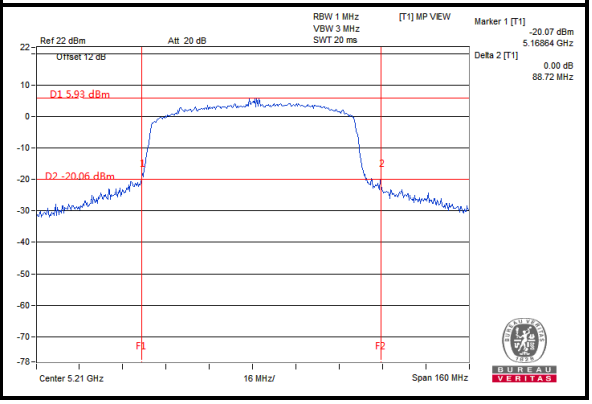
### 802.11n (40M)

| Channel Number | Freq. (MHz) | 6dB DOWN BANDWIDTH (MHz) | PASS /FAIL |
|---|---|---|---|
| **151** | **5755** | 35.25 | PASS |
| **159** | **5795** | 35.25 | PASS |

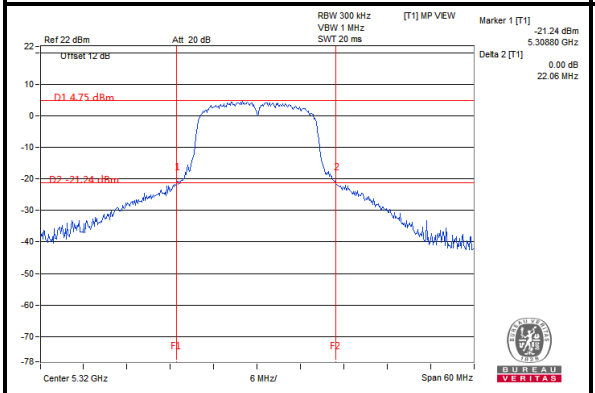
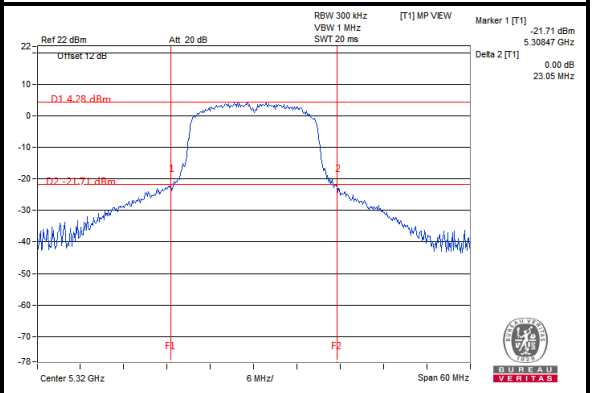
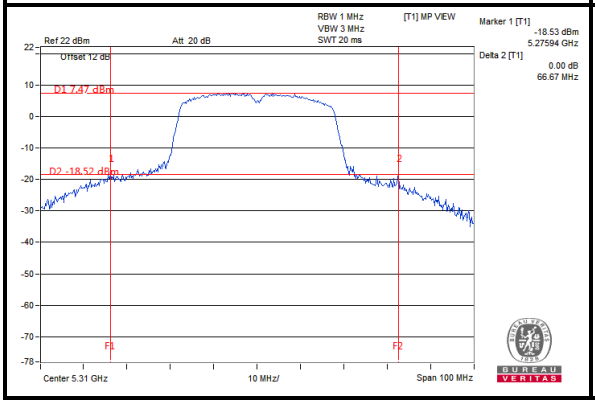
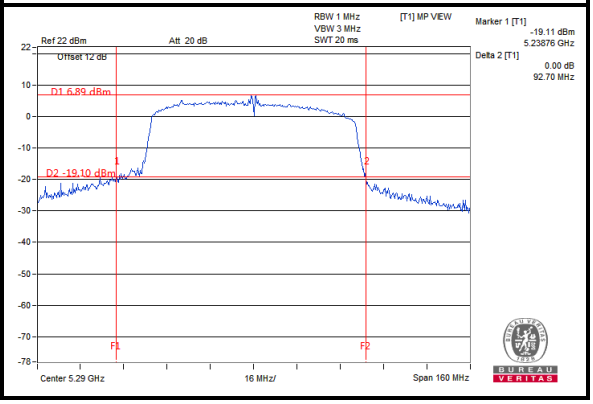
### 802.11ac (80MHz)

| Channel Number | Freq. (MHz) | 6dB DOWN BANDWIDTH (MHz) | PASS /FAIL |
|---|---|---|---|
| **155** | **5775** | 75.29 | PASS |

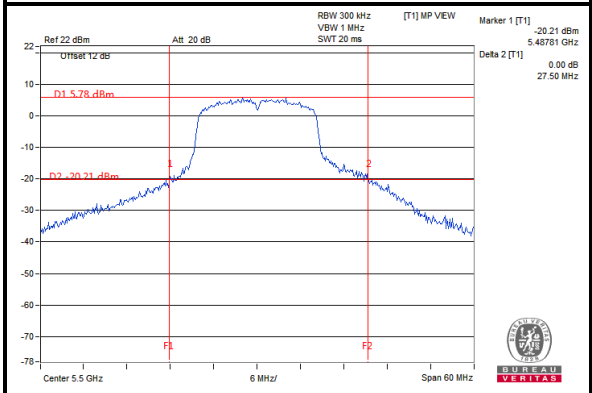
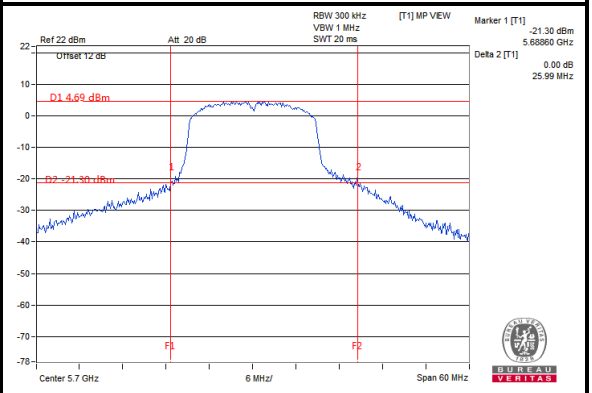
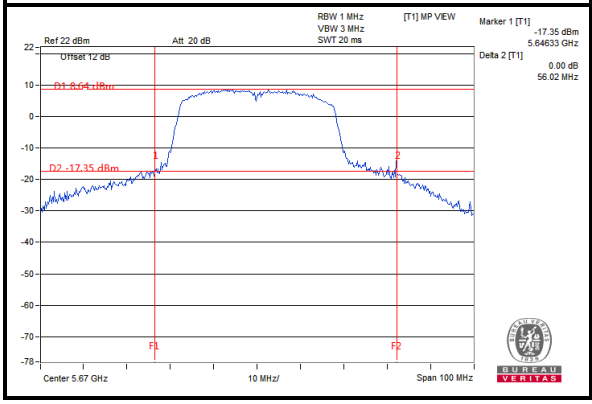
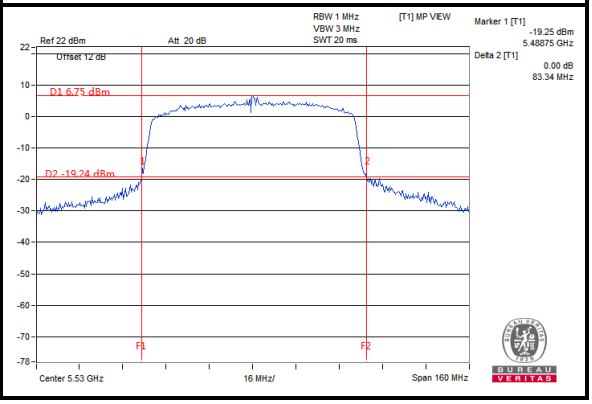
## 26dB bandwidth Test Plot
## For 5150-5250MHz

| SPECTRUM PLOT OF WORST VALUE | |
|---|---|
| 802.11a 5180MHz | 802.11n20 5180MHz |
|  |  |
| 802.11n40 5190MHz | 802.11ac80 5210MHz |
|  |  |

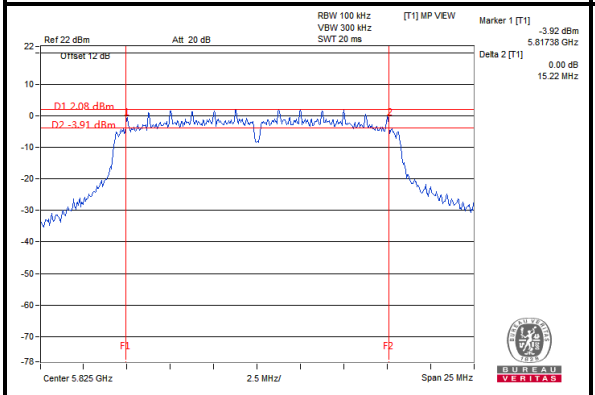
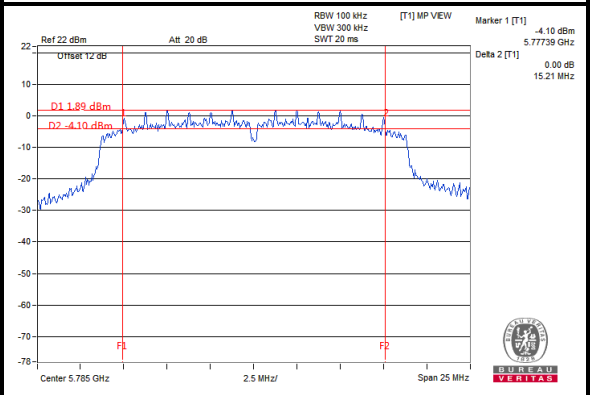
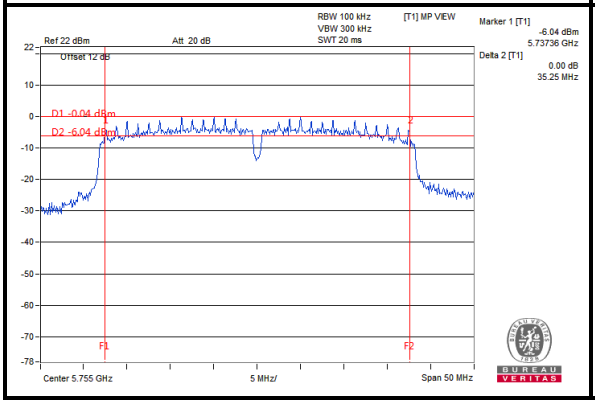
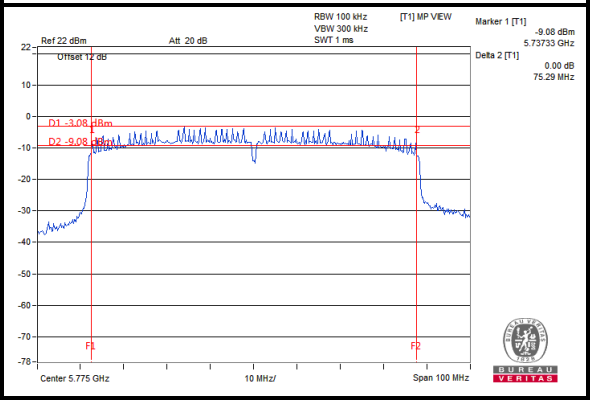
## For 5250-5350MHz

| SPECTRUM PLOT OF WORST VALUE | |
|---|---|
| **802.11a 5320MHz** | **802.11n20 5320MHz** |
|  |  |
| **802.11n40 5310MHz** | **802.11ac80 5290MHz** |
|  |  |

## For 5470-5725MHz

| SPECTRUM PLOT OF WORST VALUE | |
|---|---|
| **802.11a 5500MHz** | **802.11n20 5700MHz** |
|  |  |
| **802.11n40 5670MHz** | **802.11ac80 5530MHz** |
|  |  |

## 6dB BANDWIDTH For 5725-5850MHz

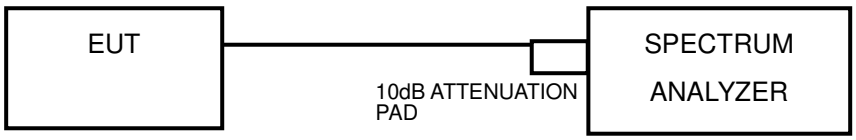
| SPECTRUM PLOT OF WORST VALUE | |
|---|---|
| 802.11a 5825MHz | 802.11n20 5785MHz |
|  |  |
| 802.11n40 5755MHz | 802.11ac80 5775MHz |
|  |  |

## 3.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

### 3.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

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

### 3.4.2 TEST SETUP




### 3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

### 3.4.4 TEST PROCEDURES

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

Using method SA-2

1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 1MHz, 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) Record the max value and add 10 log (1/duty cycle)

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

Using method SA-2

1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 300 kHz, Set VBW =1 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) Record the max value and add 10 log (1/duty cycle)

### 3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.4.6 EUT OPERATING CONDITIONS

Same as 3.3.6

## 3.4.7 TEST RESULTS

**For U-NII-1, U-NII-2A & U-NII-2C，For U-NII-3:**

**802.11a**

| Channel | Frequency (MHz) | PSD W/O Duty Factor (dBm/MHz) | Duty Factor (dB) | PSD with Duty Factor (dBm/MHz) | MAX. Limit (dBm) | PASS / FAIL |
|---|---|---|---|---|---|---|
| **36** | 5180 | -0.27 | 0.348 | 0.078 | 11.00 | PASS |
| **40** | 5200 | 0.04 | 0.348 | 0.388 | 11.00 | PASS |
| **48** | 5240 | 0.71 | 0.348 | 1.058 | 11.00 | PASS |
| **52** | 5260 | 0.70 | 0.348 | 1.048 | 11.00 | PASS |
| **60** | 5300 | -0.08 | 0.348 | 0.268 | 11.00 | PASS |
| **64** | 5320 | -0.13 | 0.348 | 0.218 | 11.00 | PASS |
| **100** | 5500 | 0.73 | 0.348 | 1.078 | 11.00 | PASS |
| **116** | 5580 | 1.70 | 0.348 | 2.048 | 11.00 | PASS |
| **140** | 5700 | 0.19 | 0.348 | 0.538 | 11.00 | PASS |

Note: Refer to section 2.3 for duty cycle spectrum plot.

| Chan. | Freq. (MHz) | PSD (dBm/300kHz) | PSD (dBm/500kHz) | Duty Factor (dB) | Total PSD (dBm/500kHz) | Limit (dBm/500kHz) | PASS / FAIL |
|---|---|---|---|---|---|---|---|
| **149** | 5745 | -8.60 | -6.38 | 0.348 | -6.032 | 30.00 | PASS |
| **157** | 5785 | -9.33 | -7.11 | 0.348 | -6.762 | 30.00 | PASS |
| **165** | 5825 | -8.77 | -6.55 | 0.348 | -6.202 | 30.00 | PASS |

Note: Refer to section 2.3 for duty cycle spectrum plot.

### 802.11n (20MHz)

| Channel | Frequency (MHz) | PSD W/O Duty Factor (dBm/MHz) | Duty Factor (dB) | PSD with Duty Factor (dBm/MHz) | MAX. Limit (dBm) | PASS / FAIL |
|---|---|---|---|---|---|---|
| **36** | 5180 | -0.57 | 0.920 | 0.35 | 11.00 | PASS |
| **40** | 5200 | -0.25 | 0.920 | 0.67 | 11.00 | PASS |
| **48** | 5240 | 0.39 | 0.920 | 1.31 | 11.00 | PASS |
| **52** | 5260 | 0.31 | 0.920 | 1.23 | 11.00 | PASS |
| **60** | 5300 | -0.54 | 0.920 | 0.38 | 11.00 | PASS |
| **64** | 5320 | -0.48 | 0.920 | 0.44 | 11.00 | PASS |
| **100** | 5500 | 0.46 | 0.920 | 1.38 | 11.00 | PASS |
| **116** | 5580 | 1.25 | 0.920 | 2.17 | 11.00 | PASS |
| **140** | 5700 | 0.02 | 0.920 | 0.94 | 11.00 | PASS |

Note: Refer to section 2.3 for duty cycle spectrum plot.

| Chan. | Freq. (MHz) | PSD (dBm/300kHz) | PSD (dBm/500kHz) | Duty Factor (dB) | Total PSD (dBm/500kHz) | Limit (dBm/500kHz) | PASS / FAIL |
|---|---|---|---|---|---|---|---|
| **149** | 5745 | -7.94 | -5.72 | 0.920 | -4.8 | 30.00 | PASS |
| **157** | 5785 | -9.40 | -7.18 | 0.920 | -6.26 | 30.00 | PASS |
| **165** | 5825 | -9.03 | -6.81 | 0.920 | -5.89 | 30.00 | PASS |

Note: Refer to section 2.3 for duty cycle spectrum plot.

802.11n (40MHz)

| Channel | Frequency (MHz) | PSD W/O Duty Factor (dBm/MHz) | Duty Factor (dB) | PSD with Duty Factor (dBm/MHz) | MAX. Limit (dBm) | PASS / FAIL |
|---|---|---|---|---|---|---|
| **38** | 5190 | -3.41 | 0.731 | -2.679 | 11.00 | PASS |
| **46** | 5230 | -3.16 | 0.731 | -2.429 | 11.00 | PASS |
| **54** | 5270 | -3.35 | 0.731 | -2.619 | 11.00 | PASS |
| **62** | 5310 | -3.46 | 0.731 | -2.729 | 11.00 | PASS |
| **102** | 5510 | -2.27 | 0.731 | -1.539 | 11.00 | PASS |
| **118** | 5590 | -2.20 | 0.731 | -1.469 | 11.00 | PASS |
| **134** | 5670 | -2.57 | 0.731 | -1.839 | 11.00 | PASS |

Note: Refer to section 2.3 for duty cycle spectrum plot.

| Chan. | Freq. (MHz) | PSD (dBm/300kHz) | PSD (dBm/500kHz) | Duty Factor (dB) | Total PSD (dBm/500kHz) | Limit (dBm/500kHz) | PASS / FAIL |
|---|---|---|---|---|---|---|---|
| **151** | 5755 | -11.94 | -9.72 | 0.731 | -8.989 | 30.00 | PASS |
| **159** | 5795 | -12.53 | -10.31 | 0.731 | -9.579 | 30.00 | PASS |

Note: Refer to section 2.3 for duty cycle spectrum plot.

### 802.11ac (80MHz)

| Channel | Frequency (MHz) | PSD W/O Duty Factor (dBm/MHz) | Duty Factor (dB) | PSD with Duty Factor (dBm/MHz) | MAX. Limit (dBm) | PASS / FAIL |
|---|---|---|---|---|---|---|
| **42** | 5210 | -7.24 | 1.186 | -6.054 | 11.00 | PASS |
| **58** | 5290 | -6.66 | 1.186 | -5.474 | 11.00 | PASS |
| **106** | 5530 | -6.89 | 1.186 | -5.704 | 11.00 | PASS |
| **122** | 5610 | -6.53 | 1.186 | -5.344 | 11.00 | PASS |

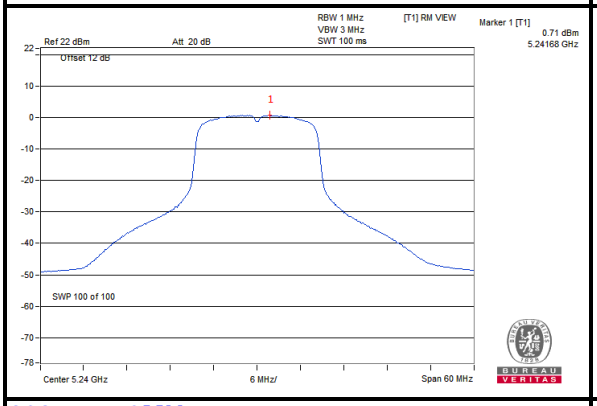
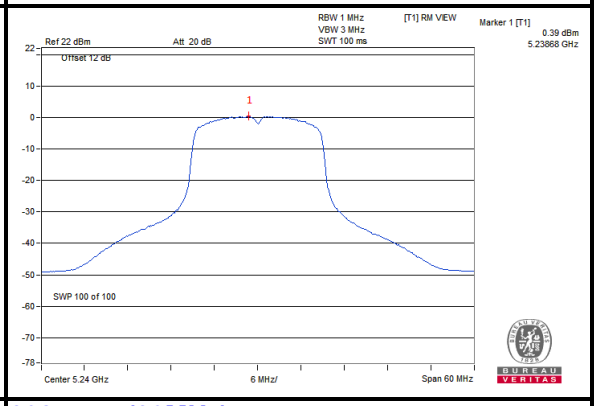
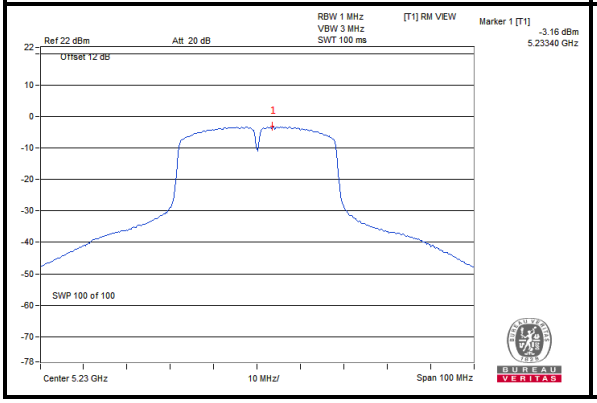
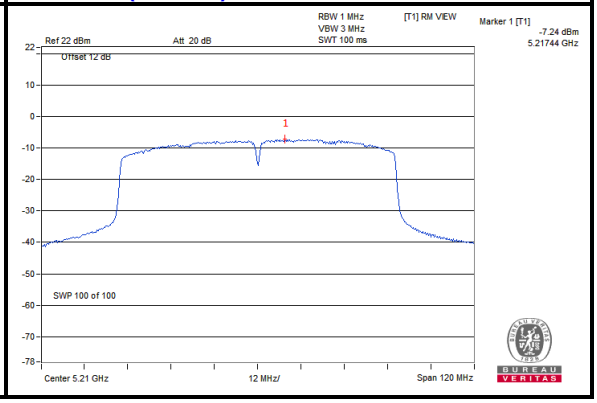
Note: Refer to section 2.3 for duty cycle spectrum plot.

| Chan. | Freq. (MHz) | PSD (dBm/300kHz) | PSD (dBm/500kHz) | Duty Factor (dB) | Total PSD (dBm/500kHz) | Limit (dBm/500kHz) | PASS / FAIL |
|---|---|---|---|---|---|---|---|
| **155** | 5775 | -16.43 | -14.21 | 1.186 | -13.024 | 30.00 | PASS |

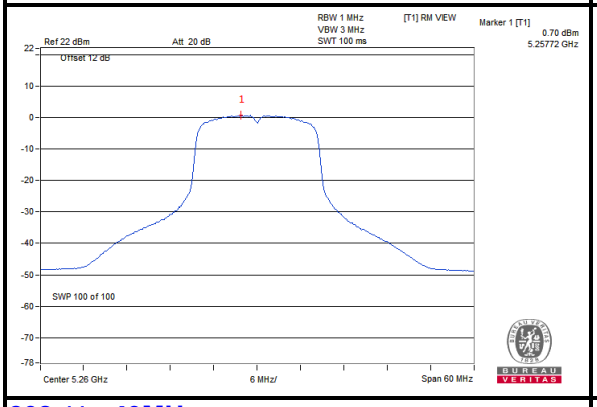
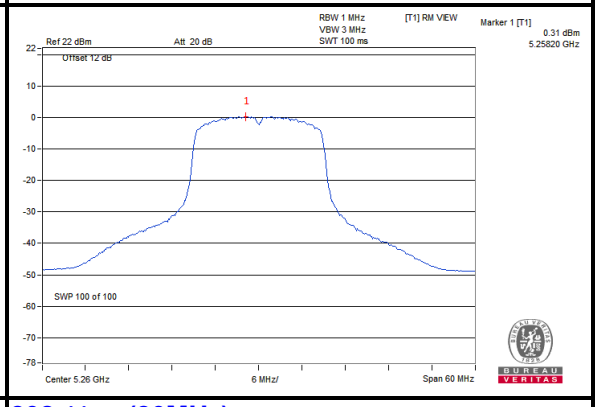
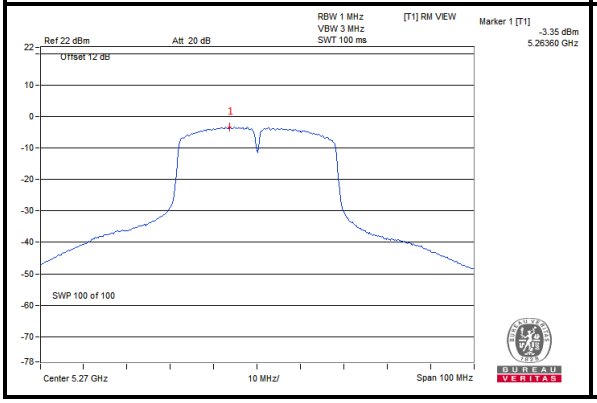
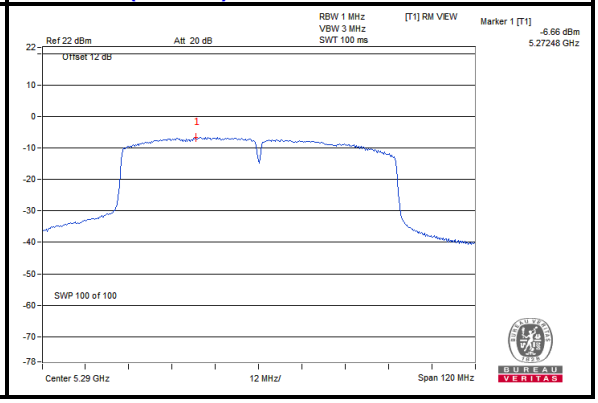
Note: Refer to section 2.3 for duty cycle spectrum plot.

## PSD Test Plot

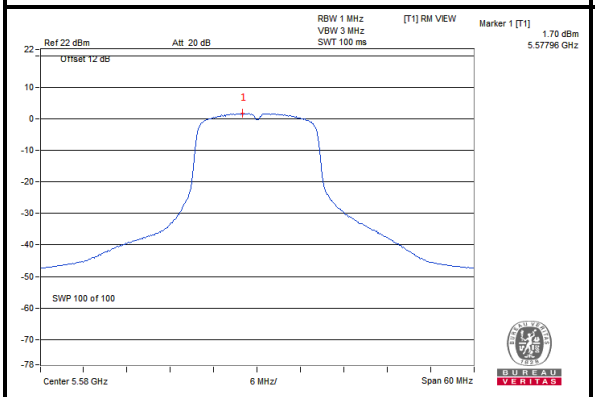
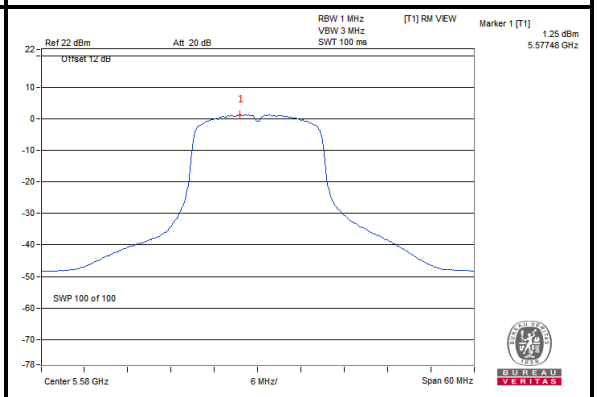
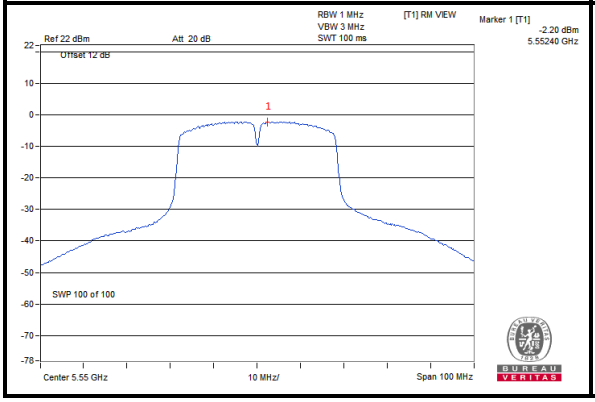
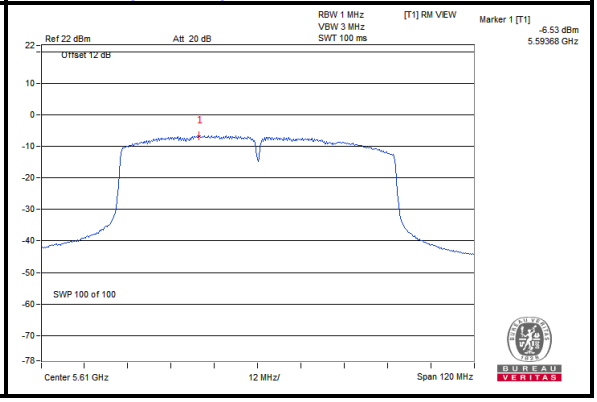
BAND 1
5150-5250MHz

| SPECTRUM PLOT OF WORST VALUE | |
|---|---|
| **802.11a** | **802.11n 20MHz** |
|  |  |
| **802.11n 40MHz** | **802.11ac (80MHz)** |
|  |  |

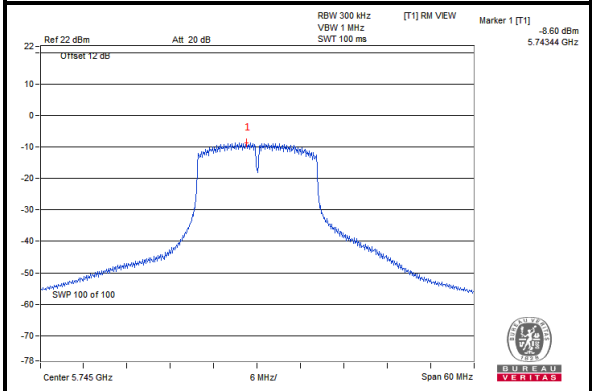
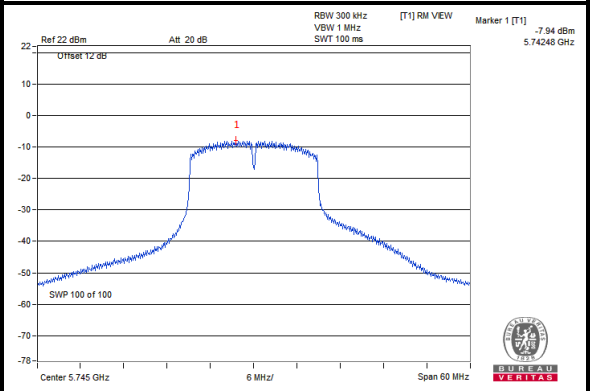
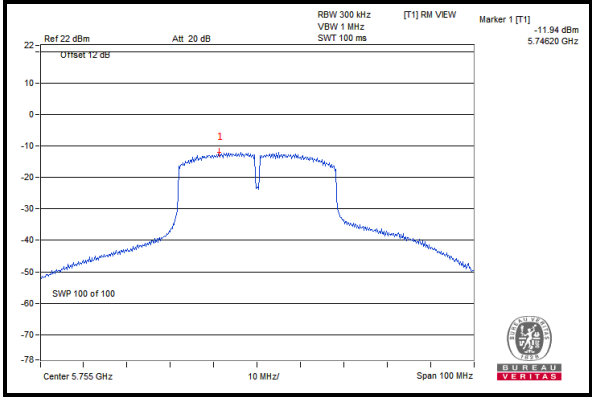
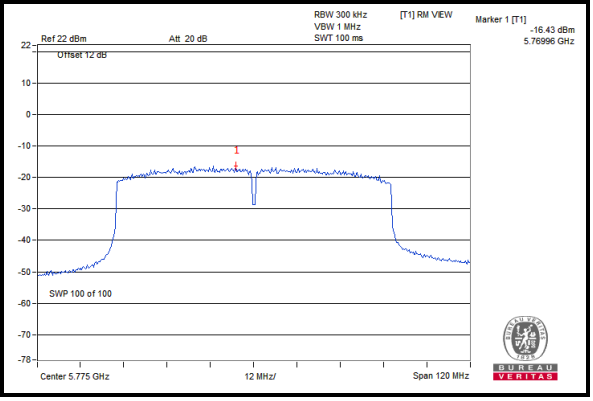
BAND 2
5250-5350MHz

| SPECTRUM PLOT OF WORST VALUE | |
|---|---|
| **802.11a** | **802.11n 20MHz** |
|  |  |
| **802.11n 40MHz** | **802.11ac (80MHz)** |
|  |  |

BAND 3
5470-5725MHz

| SPECTRUM PLOT OF WORST VALUE | |
|---|---|
| **802.11a** | **802.11n 20MHz** |
|  |  |
| **802.11n 40MHz** | **802.11ac (80MHz)** |
|  |  |

BAND4
5725-5850MHz

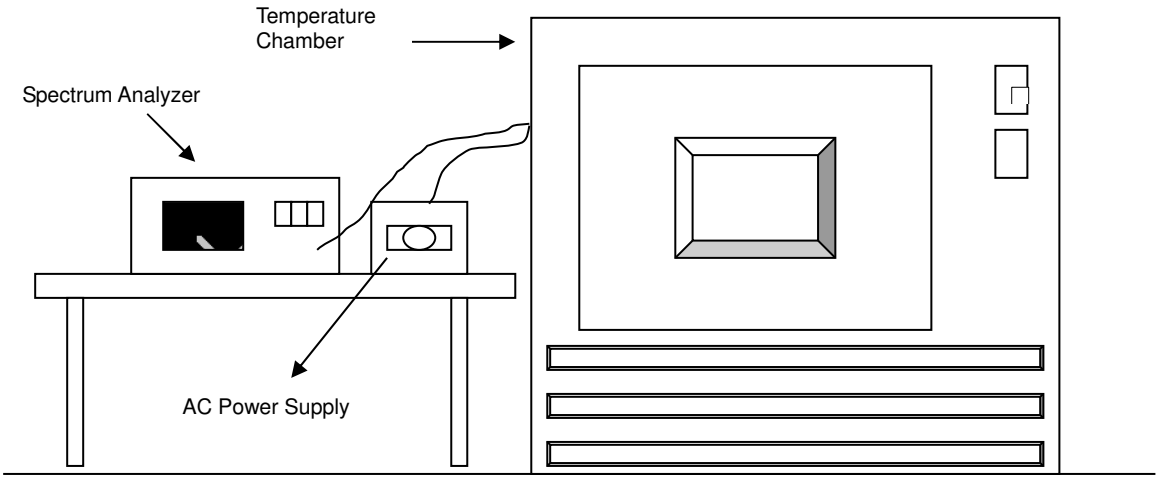
| SPECTRUM PLOT OF WORST VALUE | |
|---|---|
| **802.11a** | **802.11n 20MHz** |
|  |  |
| **802.11n 40MHz** | **802.11ac (80MHz)** |
|  |  |

## 3.5 FREQUENCY STABILITY

### 3.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

### 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 PROCEDURE

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.

b. Turn the EUT on and couple its output to a spectrum analyzer.

c. Turn the EUT off and set the chamber to the highest temperature specified.

d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.

e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.

f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

### 3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.5.6 EUT OPERATING CONDITION

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

## 3.5.7 TEST RESULTS

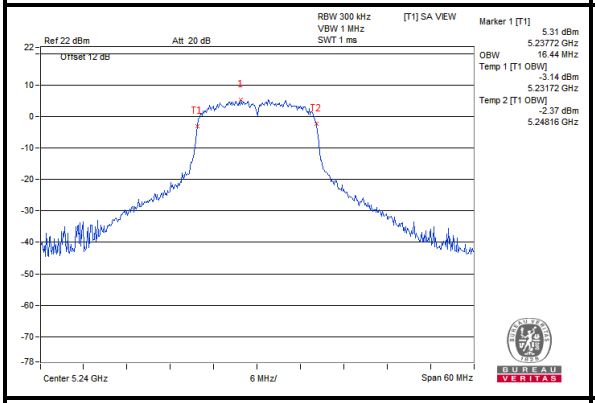
| FREQUEMCY STABILITY VERSUS TEMP. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OPERATING FREQUENCY: 5180MHz | | | | | | | | | |
| TEMP. (℃) | POWER SUPPLY (Vac) | 0 MINUTE | | 2 MINUTE | | 5 MINUTE | | 10 MINUTE | |
| | | Measured Frequency (MHz) | Frequency Drift | Measured Frequency (MHz) | Frequency Drift | Measured Frequency (MHz) | Frequency Drift | Measured Frequency (MHz) | Frequency Drift |
| 50 | 120 | 5179.9838 | -0.00031 | 5179.9843 | -0.00030 | 5179.9858 | -0.00027 | 5179.9876 | -0.00024 |
| 40 | 120 | 5179.9932 | -0.00013 | 5179.9913 | -0.00017 | 5179.9917 | -0.00016 | 5179.9917 | -0.00016 |
| 30 | 120 | 5180.015 | 0.00029 | 5180.0144 | 0.00028 | 5180.0143 | 0.00028 | 5180.0172 | 0.00033 |
| 20 | 120 | 5179.9792 | -0.00040 | 5179.9776 | -0.00043 | 5179.9819 | -0.00035 | 5179.9796 | -0.00039 |
| 10 | 120 | 5180.0084 | 0.00016 | 5180.0052 | 0.00010 | 5180.0098 | 0.00019 | 5180.0054 | 0.00010 |
| 0 | 120 | 5179.9963 | -0.00007 | 5179.9942 | -0.00011 | 5179.9966 | -0.00007 | 5179.9924 | -0.00015 |
| -10 | 120 | 5179.9855 | -0.00028 | 5179.9875 | -0.00024 | 5179.9862 | -0.00027 | 5179.989 | -0.00021 |
| -20 | 120 | 5179.9943 | -0.00011 | 5179.9917 | -0.00016 | 5179.9953 | -0.00009 | 5179.9959 | -0.00008 |
| -30 | 120 | 5179.977 | -0.00044 | 5179.9769 | -0.00045 | 5179.9771 | -0.00044 | 5179.9762 | -0.00046 |

| FREQUEMCY STABILITY VERSUS TEMP. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OPERATING FREQUENCY: 5180MHz | | | | | | | | | |
| TEMP. (℃) | POWER SUPPLY (Vac) | 0 MINUTE | | 2 MINUTE | | 5 MINUTE | | 10 MINUTE | |
| | | Measured Frequency (MHz) | Frequency Drift | Measured Frequency (MHz) | Frequency Drift | Measured Frequency (MHz) | Frequency Drift | Measured Frequency (MHz) | Frequency Drift |
| 20 | 138 | 5179.9792 | -0.00040 | 5179.9786 | -0.00041 | 5179.9821 | -0.00035 | 5179.9797 | -0.00039 |
| | 120 | 5179.9792 | -0.00040 | 5179.9776 | -0.00043 | 5179.9819 | -0.00035 | 5179.9796 | -0.00039 |
| | 102 | 5179.9802 | -0.00038 | 5179.9779 | -0.00043 | 5179.9814 | -0.00036 | 5179.9786 | -0.00041 |

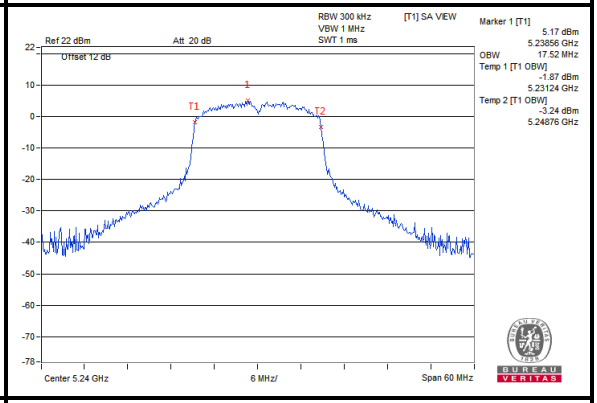
Band 1
5150-5250MHz
99% Occupied Bandwidth Without over DFS Band

**SPECTRUM PLOT OF WORST VALUE**

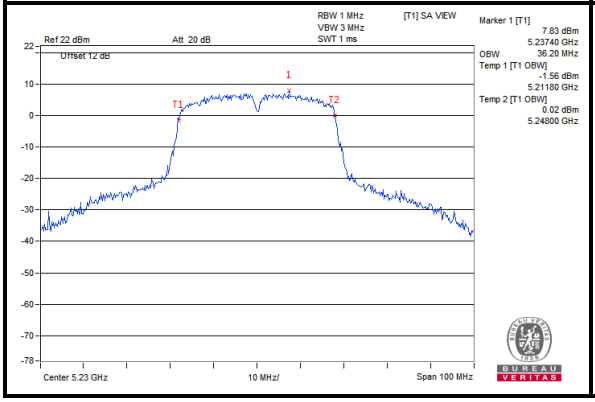
**802.11a 5240MHz**



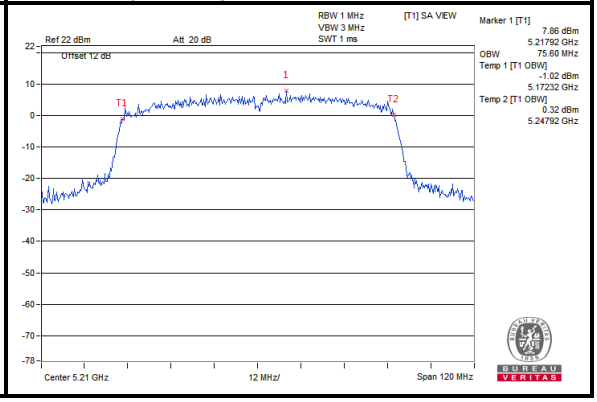

**802.11n 20MHz 5240MHz**




**802.11n 40MHz 5230MHz**



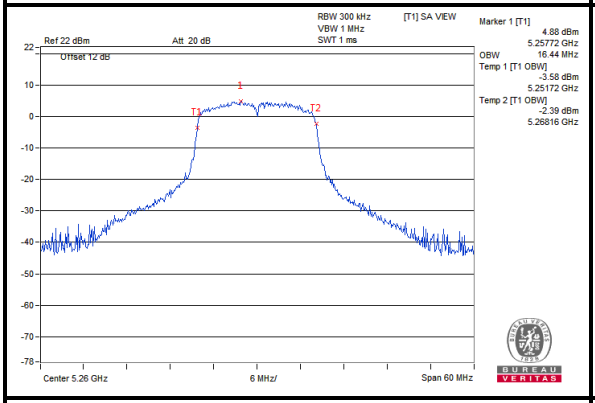

**802.11ac (80MHz)**



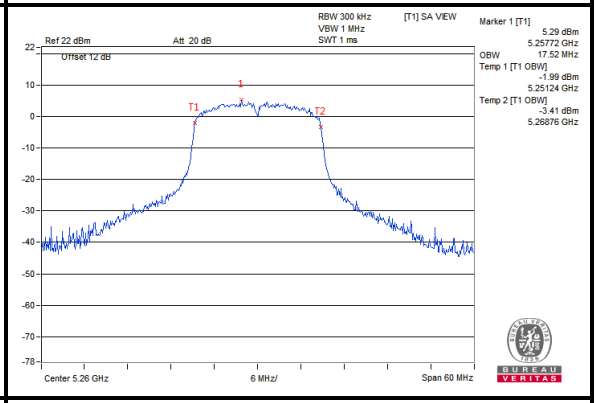
Band 2
5250-5350MHz
99% Occupied Bandwidth Without over Band 1

**SPECTRUM PLOT OF WORST VALUE**

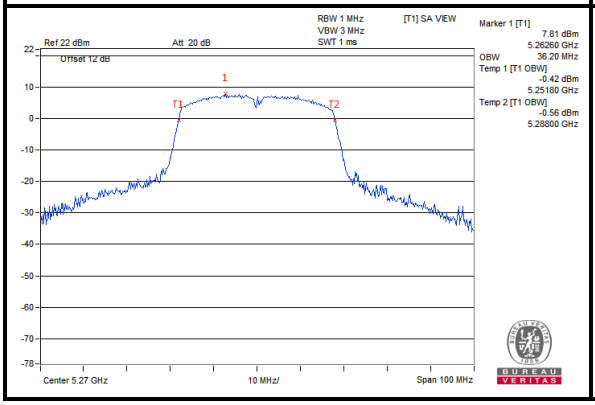
**802.11a 5260MHz**



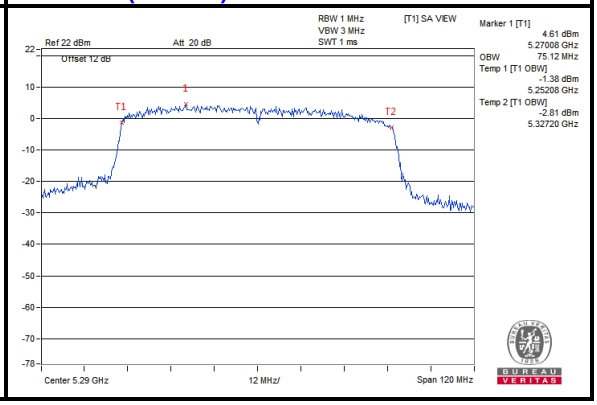

**802.11n 20MHz 5260MHz**




**802.11n 40MHz 5270MHz**




**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---**