

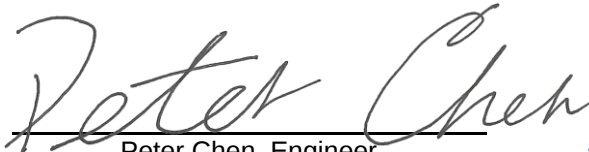
# FCC Radio Test Report

**FCC ID: EROTSW770**

**Report No.** : BTL-FCCP-4-1911T045  
**Equipment** : 7 inch Touch Screen wall mount  
**Model Name** : M201923002, TSW-770-B-S, TSW-770-W-S, TSW-770P-B-S,  
TSW-770P-W-S, TSS-770-B-S, TSS-770-W-S  
**Brand Name** : CRESTRON  
**Applicant** : Crestron Electronics, Inc.  
**Address** : 15 Volvo Drive, Rockleigh, NJ 07647  
  
**Radio Function** : RLAN 5 GHz (U-NII 1, U-NII 3)  
  
**FCC Rule Part(s)** : FCC Part15, Subpart E (15.407)  
**Measurement** : ANSI C63.10-2013  
**Procedure(s)**  
  
**Date of Receipt** : 2018/11/28  
**Date of Test** : 2018/11/28 ~ 2020/3/11  
**Issued Date** : 2020/3/24

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

**Prepared by**

  
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**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

**BTL's** reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

**Limitation**

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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**REPORT ISSUED HISTORY**

| Report Version | Description                               | Issued Date |
|----------------|-------------------------------------------|-------------|
| R00            | Original Issue.                           | 2020/1/21   |
| R01            | Revised report to address TCB's comments. | 2020/3/11   |
| R02            | Revised report to address TCB's comments. | 2020/3/13   |
| R03            | Revised report to address TCB's comments. | 2020/3/24   |

## 1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

| FCC Part 15, Subpart E (15.407) |                                        |                                        |           |          |
|---------------------------------|----------------------------------------|----------------------------------------|-----------|----------|
| Standard(s) Section             | Description                            | Test Result                            | Judgement | Remark   |
| 15.207                          | AC Power Line Conducted Emissions      | -----                                  | N/A       | NOTE(4)  |
| 15.205<br>15.209<br>15.407(b)   | Radiated Emissions                     | APPENDIX A<br>APPENDIX B<br>APPENDIX C | Pass      | -----    |
| 15.407(a)                       | Bandwidth                              | APPENDIX D                             | Pass      | -----    |
| 15.407(a)                       | Output Power                           | APPENDIX E                             | Pass      | -----    |
| 15.407(a)                       | Power Spectral Density                 | APPENDIX F                             | Pass      | -----    |
| 15.203                          | Antenna Requirement                    | -----                                  | Pass      | -----    |
| 15.407(c)                       | Automatically Discontinue Transmission | -----                                  | Pass      | NOTE (2) |

### NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.
- (3) The report format version is TP.1.1.1.
- (4) Input power is supplied by POE.

## 1.1 TEST FACILITY

The test facilities used to collect the test data in this report:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

The test sites and facilities are covered under FCC RN: 355421 and DN: TW1099.

☒ C05      ☐ CB08      ☐ CB11      ☐ CB15      ☐ CB16  
☒ SR06

No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan

The test sites and facilities are covered under FCC RN: 325517 and DN: TW1115.

☐ C03      ☒ CB18      ☐ CB19

## 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k = 2$ , providing a level of confidence of approximately **95 %**.

The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2  $U_{\text{cispri}}$  requirement.

### A. Radiated emissions below 1 GHz test :

| Test Site    | Method | Measurement Frequency Range | Ant. H / V | U,(dB) |
|--------------|--------|-----------------------------|------------|--------|
| CB18<br>(3m) | CISPR  | 30MHz ~ 200MHz              | V          | 4.20   |
|              |        | 30MHz ~ 200MHz              | H          | 3.64   |
|              |        | 200MHz ~ 1,000MHz           | V          | 4.56   |
|              |        | 200MHz ~ 1,000MHz           | H          | 3.90   |

### B. Radiated emissions above 1 GHz test :

| Test Site    | Method | Measurement Frequency Range | Ant. H / V | U,(dB) |
|--------------|--------|-----------------------------|------------|--------|
| CB18<br>(3m) | CISPR  | 1GHz ~ 6GHz                 | V          | 4.46   |
|              |        | 1GHz ~ 6GHz                 | H          | 4.40   |
|              |        | 6GHz ~ 18GHz                | V          | 3.88   |
|              |        | 6GHz ~ 18GHz                | H          | 4.00   |

| Test Site    | Method | Measurement Frequency Range | U,(dB) |
|--------------|--------|-----------------------------|--------|
| CB18<br>(1m) | CISPR  | 18 ~ 26.5 GHz               | 4.62   |
|              |        | 26.5 ~ 40 GHz               | 5.12   |

### C. Conducted test :

| Test Item              | U,(dB) |
|------------------------|--------|
| Bandwidth              | 1.13   |
| Output power           | 1.07   |
| Power Spectral Density | 1.20   |
| Conducted Band edges   | 1.13   |
| Frequency Stability    | 1.13   |

#### NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

### 1.3 TEST ENVIRONMENT CONDITIONS

| Test Item                      | Environment Condition | Tested by     |
|--------------------------------|-----------------------|---------------|
| Radiated emissions below 1 GHz | 22°C, 67%             | Hunter Chiang |
| Radiated emissions above 1 GHz | 22°C, 67%             | Hunter Chiang |
| Bandwidth                      | 25.3 °C, 45 %         | Jay Kao       |
| Output Power                   | 25.3 °C, 45 %         | Jay Kao       |
| Power Spectral Density         | 25.3 °C, 45 %         | Jay Kao       |

### 1.4 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

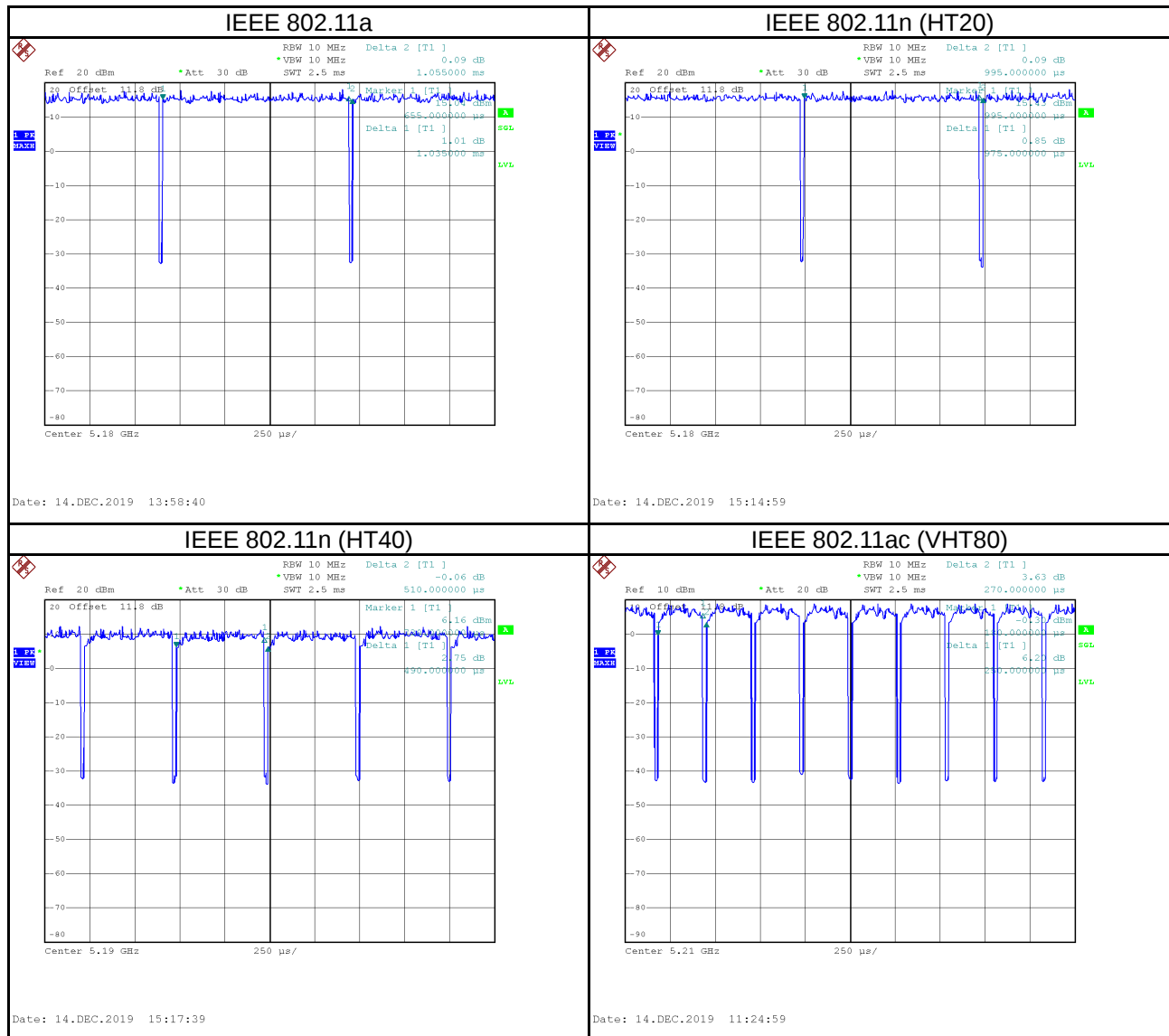
| UNII-1                |          |          |          |           |
|-----------------------|----------|----------|----------|-----------|
| Test Software         | QRCT 4   |          |          |           |
| Mode                  | 5180 MHz | 5200 MHz | 5240 MHz | Data Rate |
| IEEE 802.11a          | 13       | 14       | 14       | 6 Mbps    |
| IEEE 802.11n (HT20)   | 13       | 14       | 14       | MCS 0     |
| IEEE 802.11ac (VHT20) | 13       | 14       | 14       | MCS 0     |
| Mode                  | 5190 MHz | 5230 MHz |          | Data Rate |
| IEEE 802.11n (HT40)   | 9        | 14       |          | MCS 0     |
| IEEE 802.11ac (VHT40) | 9        | 14       |          | MCS 0     |
| Mode                  | 5210 MHz |          |          | Data Rate |
| IEEE 802.11ac (VHT80) | 9        |          |          | MCS 0     |

| UNII-3                |          |          |          |           |
|-----------------------|----------|----------|----------|-----------|
| Test Software         | QRCT 4   |          |          |           |
| Mode                  | 5745 MHz | 5785 MHz | 5825 MHz | Data Rate |
| IEEE 802.11a          | 13       | 13       | 13       | 6 Mbps    |
| IEEE 802.11n (HT20)   | 13       | 13       | 13       | MCS 0     |
| IEEE 802.11ac (VHT20) | 13       | 13       | 13       | MCS 0     |
| Mode                  | 5755 MHz | 5795 MHz |          | Data Rate |
| IEEE 802.11n (HT40)   | 13       | 13       |          | MCS 0     |
| IEEE 802.11ac (VHT40) | 13       | 13       |          | MCS 0     |
| Mode                  | 5775 MHz |          |          | Data Rate |
| IEEE 802.11ac (VHT80) | 14       |          |          | MCS 0     |

## 1.5 DUTY CYCLE

If duty cycle is  $\geq 98\%$ , duty factor is not required.

If duty cycle is  $< 98\%$ , duty factor shall be considered.



| Remark                | Delta 1 |              |                  | Delta 2              | On Time/Period | 10 log(1/Duty Cycle) |
|-----------------------|---------|--------------|------------------|----------------------|----------------|----------------------|
| Mode                  | ON (ms) | Numbers (ON) | On Time (B) (ms) | Period (ON+OFF) (ms) | Duty Cycle (%) | Duty Factor (dB)     |
| IEEE 802.11a          | 1.035   | 1            | 1.035            | 1.055                | 98.10%         | 0.08                 |
| IEEE 802.11n (HT20)   | 0.975   | 1            | 0.975            | 0.995                | 97.99%         | 0.09                 |
| IEEE 802.11n (HT40)   | 0.490   | 1            | 0.490            | 0.510                | 96.08%         | 0.17                 |
| IEEE 802.11ac (VHT80) | 0.250   | 1            | 0.250            | 0.270                | 92.59%         | 0.33                 |

**NOTE:**

For IEEE 802.11n (HT20):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1.5 kHz (Duty cycle < 98%).

For IEEE 802.11n (HT40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2.2 kHz (Duty cycle < 98%).

For IEEE 802.11ac (VHT80):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 4 kHz (Duty cycle < 98%).

## 2 GENERAL INFORMATION

### 2.1 DESCRIPTION OF EUT

|                              |                                                                                                                                                                                                                                                                           |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment                    | 7 inch Touch Screen wall mount                                                                                                                                                                                                                                            |
| Model Name                   | M201923002, TSW-770-B-S, TSW-770-W-S, TSW-770P-B-S, TSW-770P-W-S, TSS-770-B-S, TSS-770-W-S                                                                                                                                                                                |
| Brand Name                   | CRESTRON                                                                                                                                                                                                                                                                  |
| Model Difference             | M201923002 includes six series: TSW-770-B-S, TSW-770-W-S, TSW-770P-B-S, TSW-770P-W-S, TSS-770-B-S, TSS-770-W-S<br>All modes are identical to each other except below:<br>B: Black, W: White, P: Portrait, S: Smooth, TSS: Touch Screen Scheduling                         |
| Power Source                 | DC voltage supplied from POE.                                                                                                                                                                                                                                             |
| Power Rating                 | I/P: 48 VDC 350mA (802.3at type 1), 48 VDC 600mA (802.3at type 2)                                                                                                                                                                                                         |
| Products Covered             | N/A                                                                                                                                                                                                                                                                       |
| Frequency Range              | UNII-1: 5150 MHz to 5250 MHz<br>UNII-3: 5725 MHz to 5850 MHz                                                                                                                                                                                                              |
| Operation Frequency          | UNII-1: 5180 MHz to 5240 MHz<br>UNII-3: 5745 MHz to 5825 MHz                                                                                                                                                                                                              |
| Modulation Technology        | OFDM                                                                                                                                                                                                                                                                      |
| Transfer Rate                | up to 433.3 Mbps                                                                                                                                                                                                                                                          |
| Output Power Max. for UNII-1 | IEEE 802.11a: 13.84 dBm (0.0242 W)<br>IEEE 802.11n (HT20): 13.85 dBm (0.0243 W)<br>IEEE 802.11n (HT40): 13.79 dBm (0.0239 W)<br>IEEE 802.11ac (VHT20): 13.84 dBm (0.0242 W)<br>IEEE 802.11ac (VHT40): 13.77 dBm (0.0238W)<br>IEEE 802.11ac (VHT80): 9.17 dBm (0.0083W)    |
| Output Power Max. for UNII-3 | IEEE 802.11a: 19.51 dBm (0.0893 W)<br>IEEE 802.11n (HT20): 19.24 dBm (0.0839 W)<br>IEEE 802.11n (HT40): 19.32 dBm (0.0855 W)<br>IEEE 802.11ac (VHT20): 19.13 dBm (0.0818 W)<br>IEEE 802.11ac (VHT40): 19.09 dBm (0.0811 W)<br>IEEE 802.11ac (VHT80): 19.14 dBm (0.0820 W) |
| Test Model                   | M201923002                                                                                                                                                                                                                                                                |
| Sample Status                | Engineering Sample                                                                                                                                                                                                                                                        |
| EUT Modification(s)          | N/A                                                                                                                                                                                                                                                                       |

**NOTE:**

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

## (2) Channel List:

| UNII-1                                                       |                 |                                              |                 |                       |                 |
|--------------------------------------------------------------|-----------------|----------------------------------------------|-----------------|-----------------------|-----------------|
| IEEE 802.11a<br>IEEE 802.11n (HT20)<br>IEEE 802.11ac (VHT20) |                 | IEEE 802.11n (HT40)<br>IEEE 802.11ac (VHT40) |                 | IEEE 802.11ac (VHT80) |                 |
| Channel                                                      | Frequency (MHz) | Channel                                      | Frequency (MHz) | Channel               | Frequency (MHz) |
| 36                                                           | 5180            | 38                                           | 5190            | 42                    | 5210            |
| 40                                                           | 5200            | 46                                           | 5230            |                       |                 |
| 44                                                           | 5220            |                                              |                 |                       |                 |
| 48                                                           | 5240            |                                              |                 |                       |                 |

| UNII-3                                                       |                 |                                              |                 |                       |                 |
|--------------------------------------------------------------|-----------------|----------------------------------------------|-----------------|-----------------------|-----------------|
| IEEE 802.11a<br>IEEE 802.11n (HT20)<br>IEEE 802.11ac (VHT20) |                 | IEEE 802.11n (HT40)<br>IEEE 802.11ac (VHT40) |                 | IEEE 802.11ac (VHT80) |                 |
| Channel                                                      | Frequency (MHz) | Channel                                      | Frequency (MHz) | Channel               | Frequency (MHz) |
| 149                                                          | 5745            | 151                                          | 5755            | 155                   | 5775            |
| 153                                                          | 5765            | 159                                          | 5795            |                       |                 |
| 157                                                          | 5785            |                                              |                 |                       |                 |
| 161                                                          | 5805            |                                              |                 |                       |                 |
| 165                                                          | 5825            |                                              |                 |                       |                 |

## (3) Table for Filed Antenna:

| Ant. | Brand | Model Name    | Antenna Type | Connector | Gain (dBi) | Note   |
|------|-------|---------------|--------------|-----------|------------|--------|
| 1    | YAGEO | TSW WLAN MAIN | PIFA         | IPEX      | 2.23       | UNII-1 |
|      |       |               |              |           | 3.95       | UNII-3 |

## 2.2 TEST MODES

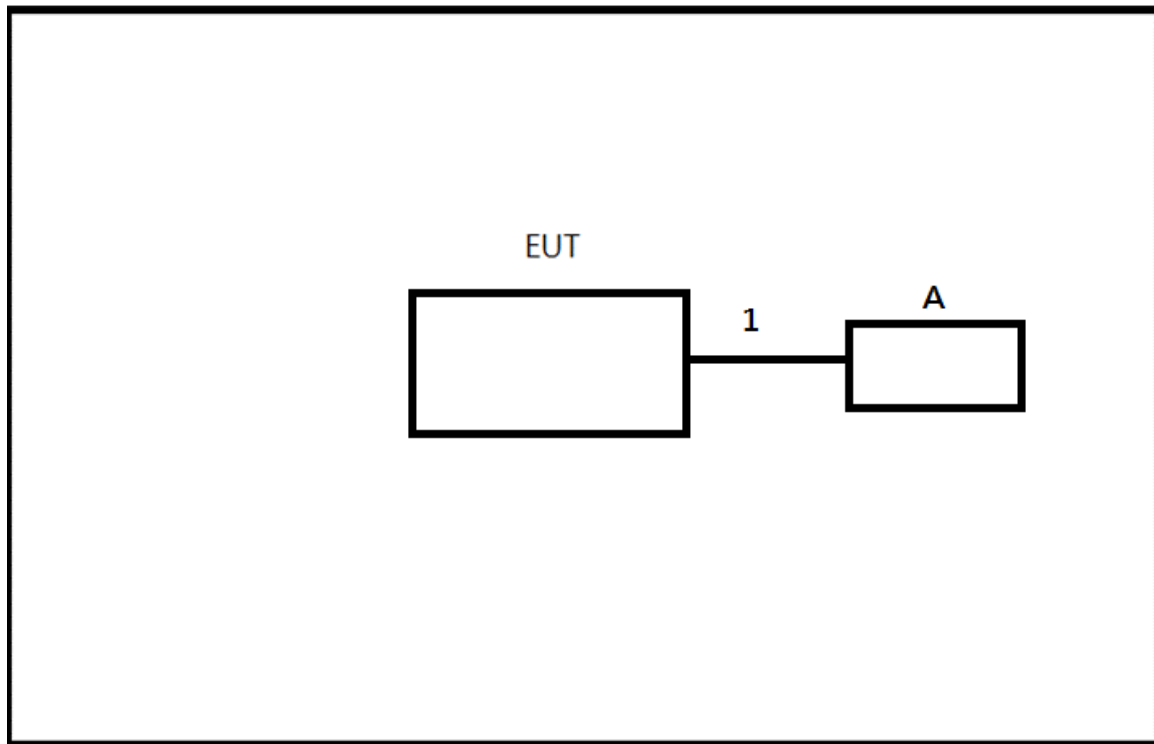
| Test Items                                  | Test mode                     | Channel          | Note     |
|---------------------------------------------|-------------------------------|------------------|----------|
| AC power line conducted emissions           | TX Mode_IEEE 802.11a          | 149              | -        |
| Transmitter Radiated Emissions (below 1GHz) | TX Mode_IEEE 802.11a          | 149              | -        |
| Transmitter Radiated Emissions (above 1GHz) | TX Mode_IEEE 802.11a          | 36/48            | Bandedge |
|                                             | TX Mode_IEEE 802.11n (HT20)   | 149/165          |          |
|                                             | TX Mode_IEEE 802.11ac (VHT40) | 38/46<br>151/159 |          |
|                                             | TX Mode_IEEE 802.11ac (VHT80) | 42<br>155        |          |
|                                             | TX Mode_IEEE 802.11a          | 36/40/48         | Harmonic |
|                                             | TX Mode_IEEE 802.11n (HT20)   | 149/157/165      |          |
|                                             | TX Mode_IEEE 802.11ac (VHT40) | 38/46<br>151/159 |          |
|                                             | TX Mode_IEEE 802.11ac (VHT80) | 42<br>155        |          |
| Bandwidth                                   | TX Mode_IEEE 802.11a          | 36/40/48         | -        |
|                                             | TX Mode_IEEE 802.11n (HT20)   | 149/157/165      |          |
|                                             | TX Mode_IEEE 802.11n (HT40)   | 38/46<br>151/159 |          |
|                                             | TX Mode_IEEE 802.11ac (VHT80) | 42<br>155        |          |
| Output Power                                | TX Mode_IEEE 802.11a          | 36/40/48         | -        |
|                                             | TX Mode_IEEE 802.11n (HT20)   | 149/157/165      |          |
|                                             | TX Mode_IEEE 802.11ac (VHT20) |                  |          |
|                                             | TX Mode_IEEE 802.11n (HT40)   | 38/46<br>151/159 |          |
|                                             | TX Mode_IEEE 802.11ac (VHT40) |                  |          |
| Power Spectral Density                      | TX Mode_IEEE 802.11a          | 36/40/48         | -        |
|                                             | TX Mode_IEEE 802.11n (HT20)   | 149/157/165      |          |
|                                             | TX Mode_IEEE 802.11n (HT40)   | 38/46<br>151/159 |          |
|                                             | TX Mode_IEEE 802.11ac (VHT80) | 42<br>155        |          |

### NOTE:

- (1) The Radiated emissions test was verified based on the worst conducted power and Bandwidth test results reported in the original report.
- (2) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Horizontal) is recorded.
- (3) All X, Y and Z axes are evaluated, but only the worst case (X axis) is recorded.

### 2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.



### 2.4 SUPPORT UNITS

| Item | Equipment          | Brand    | Model No.    | Series No. | Remarks |
|------|--------------------|----------|--------------|------------|---------|
| A    | MANAGED POE SWITCH | CRESTRON | CEN-SWPOE-16 | N/A        | -       |

| Item | Shielded | Ferrite Core | Length | Cable Type | Remarks |
|------|----------|--------------|--------|------------|---------|
| 1    | NO       | NO           | 3m     | LAN Cable  | -       |

### 3 RADIATED EMISSIONS TEST

#### 3.1 LIMIT

In case the emission fall within the restricted band specified on 15.205, then the 15.209 limit in the table below has to be followed.

#### LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

| Frequency (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                             |
| 960~1000        | 500                               | 3                             |

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

| Frequency (MHz) | EIRP Limit (dBm) | Equivalent Field Strength at 3m (dBμV/m) |
|-----------------|------------------|------------------------------------------|
| 5150-5250       | -27              | 68.3                                     |
| 5250-5350       | -27              | 68.3                                     |
| 5470-5725       | -27              | 68.3                                     |
| 5725-5850       | -27 (NOTE 2)     | 68.3                                     |
|                 | 10 (NOTE 2)      | 105.3                                    |
|                 | 15.6 (NOTE 2)    | 110.9                                    |
|                 | 27 (NOTE 2)      | 122.3                                    |

#### NOTE:

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

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

- (2) According to FCC 16-24, All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

- (3) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

| Reading Level |   | Correct Factor |   | Measurement Value |
|---------------|---|----------------|---|-------------------|
| 19.11         | + | 2.11           | = | 21.22             |

| Measurement Value |   | Limit Value |   | Margin Level |
|-------------------|---|-------------|---|--------------|
| 21.22             | - | 68.3        | = | -47.08       |

| Spectrum Parameter                         | Setting                                         |
|--------------------------------------------|-------------------------------------------------|
| Attenuation                                | Auto                                            |
| Start Frequency                            | 1000 MHz                                        |
| Stop Frequency                             | 10th carrier harmonic                           |
| RBW / VBW<br>(Emission in restricted band) | 1MHz / 3MHz for Peak,<br>1MHz / 1/T for Average |

| Spectrum Parameter     | Setting                           |
|------------------------|-----------------------------------|
| Attenuation            | Auto                              |
| Start ~ Stop Frequency | 9KHz~90KHz for PK/AVG detector    |
| Start ~ Stop Frequency | 90KHz~110KHz for QP detector      |
| Start ~ Stop Frequency | 110KHz~490KHz for PK/AVG detector |
| Start ~ Stop Frequency | 490KHz~30MHz for QP detector      |
| Start ~ Stop Frequency | 30MHz~1000MHz for QP detector     |

### 3.2 TEST PROCEDURE

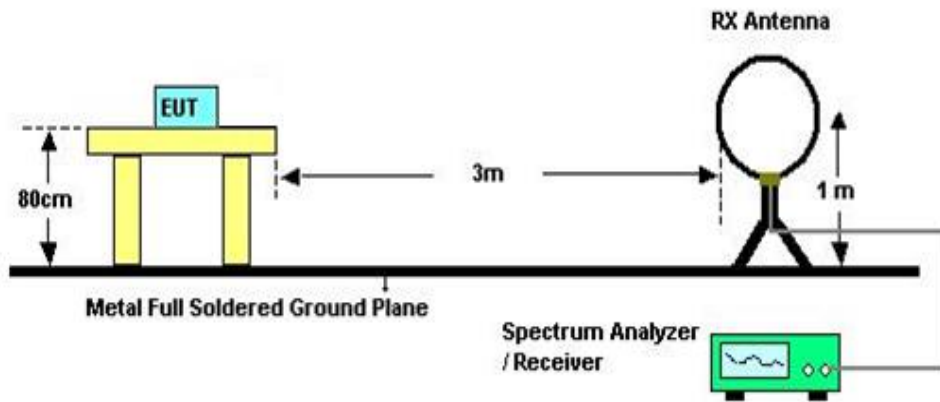
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- For the actual test configuration, please refer to the related Item – EUT TEST PHOTO.

### 3.3 DEVIATION FROM TEST STANDARD

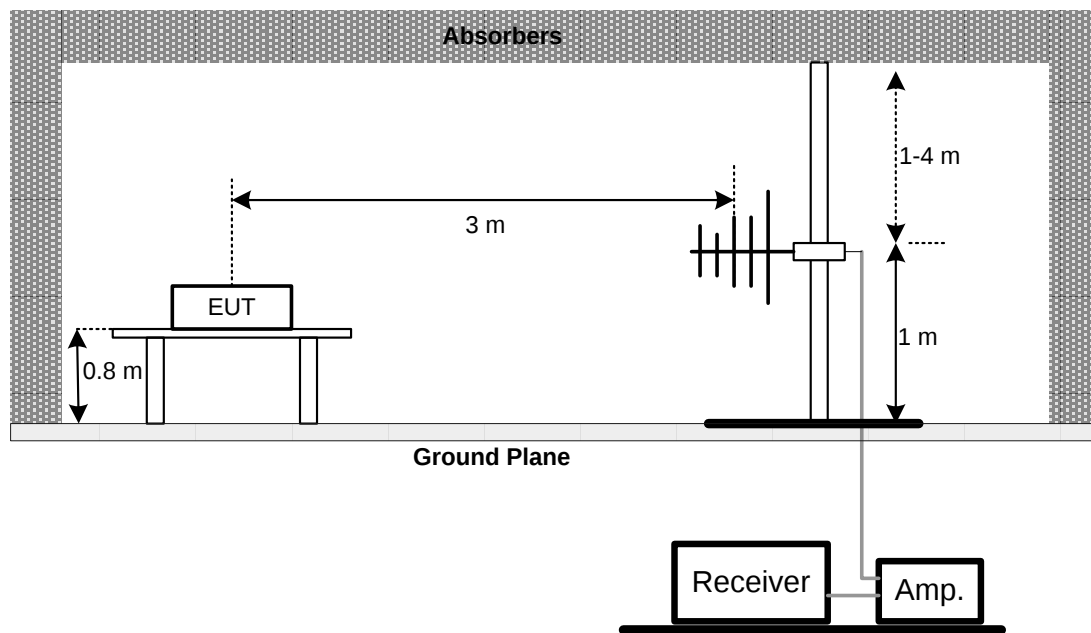
No deviation.

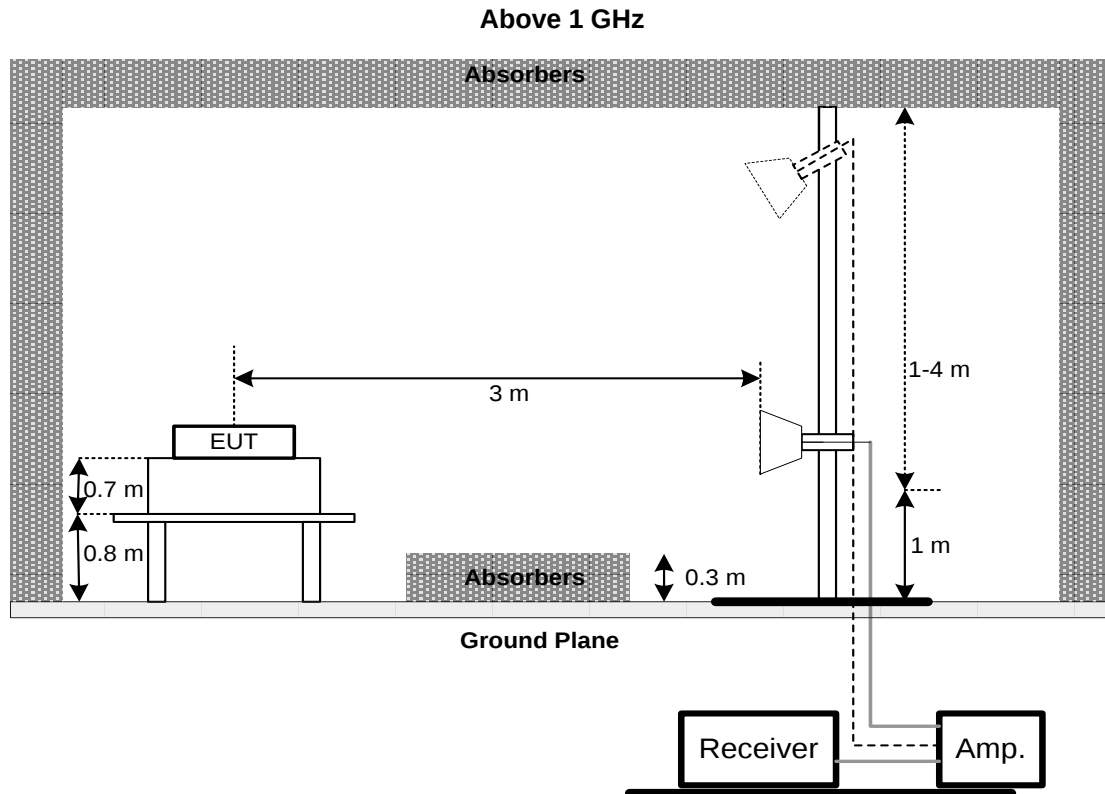
## 3.4 TEST SETUP

9 kHz to 30 MHz



30 MHz to 1 GHz





### 3.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 3.6 TEST RESULT – 9 KHZ TO 30 MHZ

Please refer to the APPENDIX A.

### 3.7 TEST RESULT – 30 MHZ TO 1 GHZ

Please refer to the APPENDIX B.

### 3.8 TEST RESULT – ABOVE 1 GHZ

Please refer to the APPENDIX C.

#### NOTE:

- (1) No limit: This is fundamental signal, the judgment is not applicable.  
For fundamental signal judgment was referred to Peak output test.

## 4 BANDWIDTH TEST

### 4.1 LIMIT

| FCC Part15, Subpart E (15.407) |                                |                       |
|--------------------------------|--------------------------------|-----------------------|
| Section                        | Test Item                      | Frequency Range (MHz) |
| 15.407(a)                      | 26 dB Bandwidth                | 5150-5250             |
|                                |                                | 5250-5350             |
|                                |                                | 5470-5725             |
|                                | Minimum 500 kHz 6 dB Bandwidth | 5725-5850             |

### 4.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting:

| Spectrum Parameter | Setting                                                         |
|--------------------|-----------------------------------------------------------------|
| Attenuation        | Auto                                                            |
| Span Frequency     | > 26 dB Bandwidth                                               |
| RBW                | 300 kHz(Bandwidth 20 MHz)<br>1 MHz(Bandwidth 40 MHz and 80 MHz) |
| VBW                | 1 MHz(Bandwidth 20 MHz)<br>3 MHz(Bandwidth 40 MHz and 80 MHz)   |
| Detector           | Peak                                                            |
| Trace              | Max Hold                                                        |
| Sweep Time         | Auto                                                            |

### 4.3 DEVIATION FROM TEST STANDARD

No deviation.

### 4.4 TEST SETUP



### 4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 4.6 TEST RESULT

Please refer to the APPENDIX D.

## 5 OUTPUT POWER TEST

### 5.1 LIMIT

| FCC Part15, Subpart E (15.407) |                      |                                                               |                       |
|--------------------------------|----------------------|---------------------------------------------------------------|-----------------------|
| Section                        | Test Item            | Limit                                                         | Frequency Range (MHz) |
| 15.407(a)                      | Maximum Output Power | Fixed:1 Watt (30 dBm)<br>Mobile and portable: 250 mW (24 dBm) | 5150-5250             |
|                                |                      | 250 mW (24 dBm)                                               | 5250-5350             |
|                                |                      |                                                               | 5470-5725             |
|                                |                      | 1 Watt (30dBm)                                                | 5725-5850             |

Note: The maximum e.i.r.p at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW(21 dBm).

### 5.2 TEST PROCEDURE

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- Spectrum Setting:

| Spectrum Parameter | Setting                                                      |
|--------------------|--------------------------------------------------------------|
| Attenuation        | Auto                                                         |
| Span Frequency     | Encompass the entire emissions bandwidth (EBW) of the signal |
| RBW                | = 1 MHz                                                      |
| VBW                | ≥ 3 MHz                                                      |
| Detector           | RMS                                                          |
| Trace              | Max Hold                                                     |
| Sweep Time         | auto                                                         |

- The maximum peak conducted output power was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

### 5.3 DEVIATION FROM TEST STANDARD

No deviation.

### 5.4 TEST SETUP



### 5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 5.6 TEST RESULT

Please refer to the APPENDIX E.

## 6 POWER SPECTRAL DENSITY

### 6.1 LIMIT

| FCC Part15, Subpart E (15.407) |                        |                                                                               |                       |
|--------------------------------|------------------------|-------------------------------------------------------------------------------|-----------------------|
| Section                        | Test Item              | Limit                                                                         | Frequency Range (MHz) |
| 15.407(a)                      | Power Spectral Density | Other than Mobile and portable: 17 dBm/MHz<br>Mobile and portable: 11 dBm/MHz | 5150-5250             |
|                                |                        | 11 dBm/MHz                                                                    | 5250-5350             |
|                                |                        |                                                                               | 5470-5725             |
|                                |                        | 30 dBm/500 kHz                                                                | 5725-5850             |

### 6.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting:

| Spectrum Parameter | Setting                                                      |
|--------------------|--------------------------------------------------------------|
| Attenuation        | Auto                                                         |
| Span Frequency     | Encompass the entire emissions bandwidth (EBW) of the signal |
| RBW                | = 1 MHz                                                      |
| VBW                | ≥ 3 MHz                                                      |
| Detector           | RMS                                                          |
| Trace              | Max Hold                                                     |
| Sweep Time         | Auto                                                         |

### 6.3 DEVIATION FROM TEST STANDARD

No deviation.

### 6.4 TEST SETUP



### 6.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 6.6 TEST RESULT

Please refer to the APPENDIX F.

## 7 LIST OF MEASURING EQUIPMENTS

| Radiated Emissions |                          |              |                   |            |                 |                  |
|--------------------|--------------------------|--------------|-------------------|------------|-----------------|------------------|
| Item               | Kind of Equipment        | Manufacturer | Type No.          | Serial No. | Calibrated Date | Calibrated Until |
| 1                  | Preamplifier             | EMCI         | EMC001340         | 980555     | 2019/4/12       | 2020/4/11        |
| 2                  | Preamplifier             | EMCI         | EMC02325B         | 980217     | 2019/4/12       | 2020/4/11        |
| 3                  | Preamplifier             | EMCI         | EMC012645B        | 980267     | 2019/4/12       | 2020/4/11        |
| 4                  | Test Cable               | EMCI         | EMC104-SM-SM-800  | 150207     | 2019/4/12       | 2020/4/11        |
| 5                  | Test Cable               | EMCI         | EMC104-SM-SM-3000 | 151205     | 2019/4/12       | 2020/4/11        |
| 6                  | Test Cable               | EMCI         | EMC-SM-SM-7000    | 180408     | 2019/4/12       | 2020/4/11        |
| 7                  | MXE EMI Receiver         | Agilent      | N9038A            | MY55420127 | 2019/3/26       | 2020/3/25        |
| 8                  | Signal Analyzer          | Agilent      | N9010A            | MY56480554 | 2019/6/6        | 2020/6/5         |
| 9                  | Loop Ant                 | EMCO         | EMCI-LPA600       | 274        | 2019/5/31       | 2020/5/30        |
| 10                 | Horn Ant                 | SCHWARZBECK  | BBHA 9120D        | 9120D-1342 | 2019/6/10       | 2020/6/9         |
| 11                 | Trilog-Broadband Antenna | Schwarzbeck  | VULB 9168         | 000992     | 2019/5/29       | 2020/5/28        |
| 12                 | 5dB Attenuator           | EMCI         | EMCI-N-6-05       | AT-N0508   | 2019/5/29       | 2020/5/28        |

| Bandwidth |                   |              |          |            |                 |                  |
|-----------|-------------------|--------------|----------|------------|-----------------|------------------|
| Item      | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1         | Spectrum Analyzer | R&S          | FSP40    | 100129     | 2019/5/23       | 2020/5/22        |

| Output Power |                   |              |          |            |                 |                  |
|--------------|-------------------|--------------|----------|------------|-----------------|------------------|
| Item         | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1            | Power Meter       | Anritsu      | ML2487A  | 6K00004714 | 2019/6/20       | 2020/6/18        |
| 2            | Power Sensor      | Anritsu      | MA2491A  | 1725282    | 2019/6/20       | 2020/6/18        |

| Power Spectral Density |                   |              |          |            |                 |                  |
|------------------------|-------------------|--------------|----------|------------|-----------------|------------------|
| Item                   | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1                      | Spectrum Analyzer | R&S          | FSP40    | 100129     | 2019/5/23       | 2020/5/22        |

Remark: "N/A" denotes no model name, no serial no. or no calibration specified.  
All calibration period of equipment list is one year.

**8 EUT TEST PHOTO**

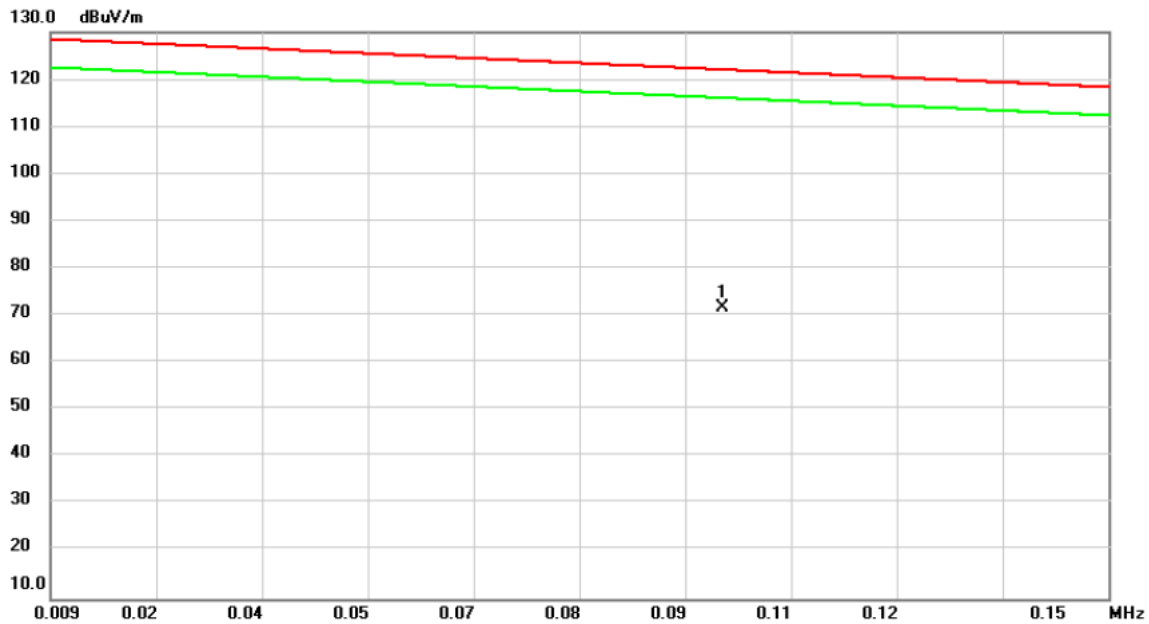
Please refer to document Appendix No.: TP-1911T045-FCCP-1 (APPENDIX-TEST PHOTOS).

**9 EUT PHOTOS**

Please refer to document Appendix No.: EP-1911T045-1 (APPENDIX-EUT PHOTOS).

## **APPENDIX A    RADIATED EMISSIONS - 9 KHZ TO 30 MHZ**

|              |                          |               |           |
|--------------|--------------------------|---------------|-----------|
| Test Mode    | UNII-3_TX a Mode 5745MHz | Tested Date   | 2019/12/9 |
| Test Voltage | DC 48V                   | Azimuth Angle | 90°       |

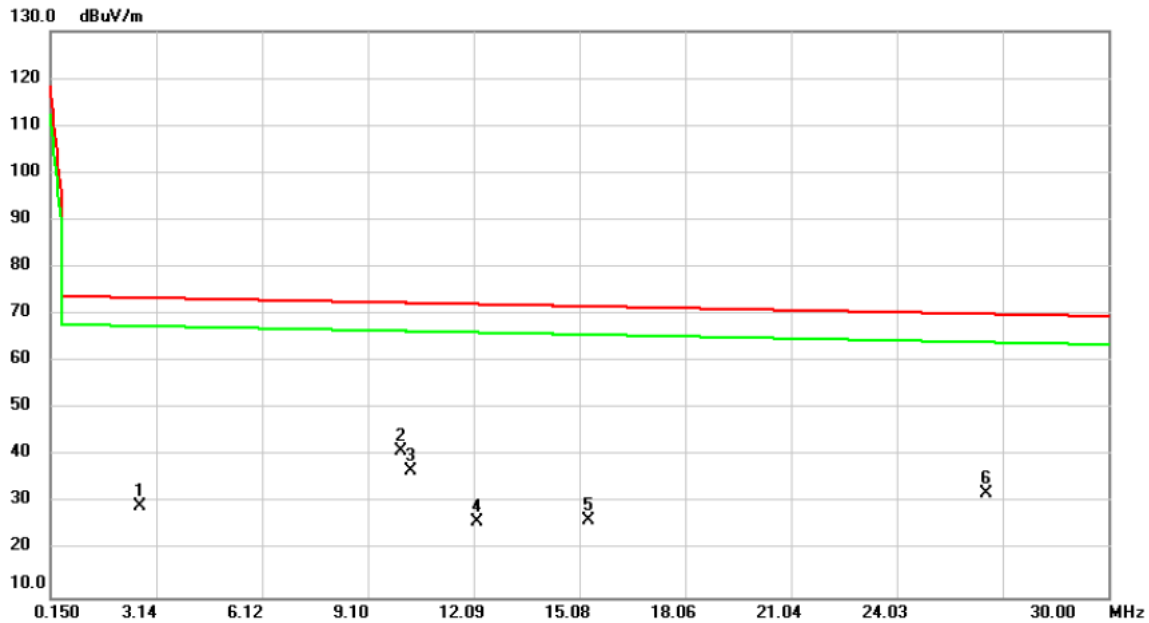


| No. | Mk. | Freq.  | Reading Level | Correct Factor | Measurement | Limit  | Margin |          |         |
|-----|-----|--------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz    | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   | *   | 0.0985 | 55.30         | 16.23          | 71.53       | 122.05 | -50.52 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |               |           |
|--------------|--------------------------|---------------|-----------|
| Test Mode    | UNII-3_TX a Mode 5745MHz | Tested Date   | 2019/12/9 |
| Test Voltage | DC 48V                   | Azimuth Angle | 90°       |



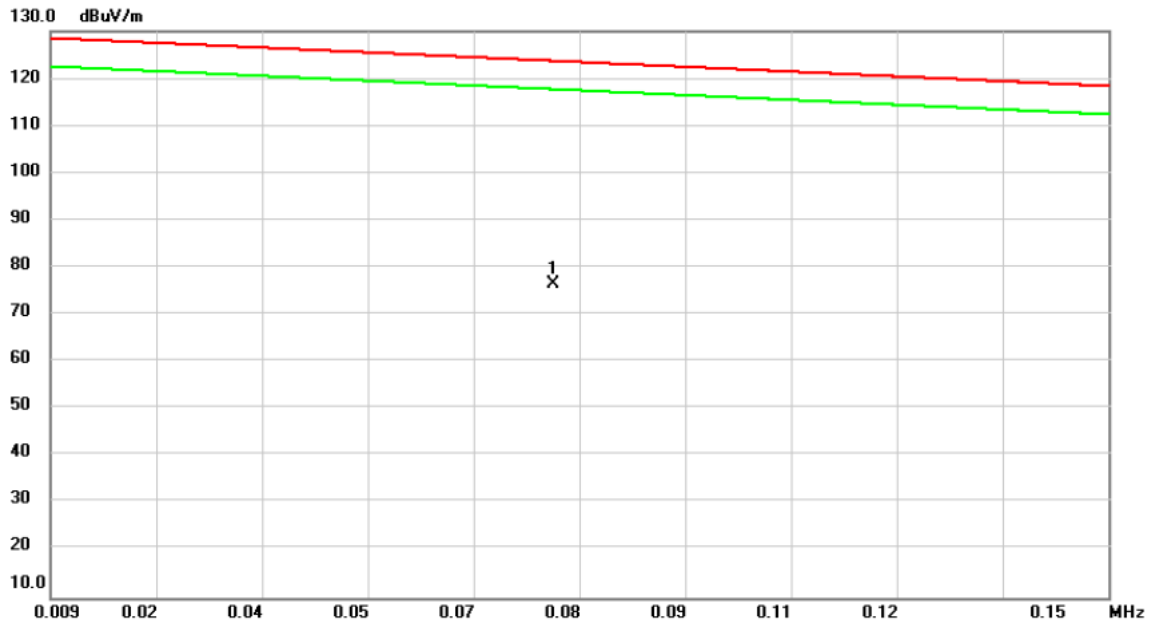
| No. Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|---------|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1       | 2.6574       | 32.79                    | -3.41                   | 29.38                      | 73.49           | -44.11       | peak     |         |
| 2 *     | 10.0304      | 45.81                    | -4.71                   | 41.10                      | 72.42           | -31.32       | peak     |         |
| 3       | 10.3288      | 41.62                    | -4.74                   | 36.88                      | 72.38           | -35.50       | peak     |         |
| 4       | 12.1796      | 30.76                    | -4.82                   | 25.94                      | 72.11           | -46.17       | peak     |         |
| 5       | 15.3138      | 31.56                    | -5.12                   | 26.44                      | 71.66           | -45.22       | peak     |         |
| 6       | 26.5374      | 40.51                    | -8.53                   | 31.98                      | 70.04           | -38.06       | peak     |         |

## REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

|              |                          |               |           |
|--------------|--------------------------|---------------|-----------|
| Test Mode    | UNII-3_TX a Mode 5745MHz | Tested Date   | 2019/12/9 |
| Test Voltage | DC 48V                   | Azimuth Angle | 0°        |

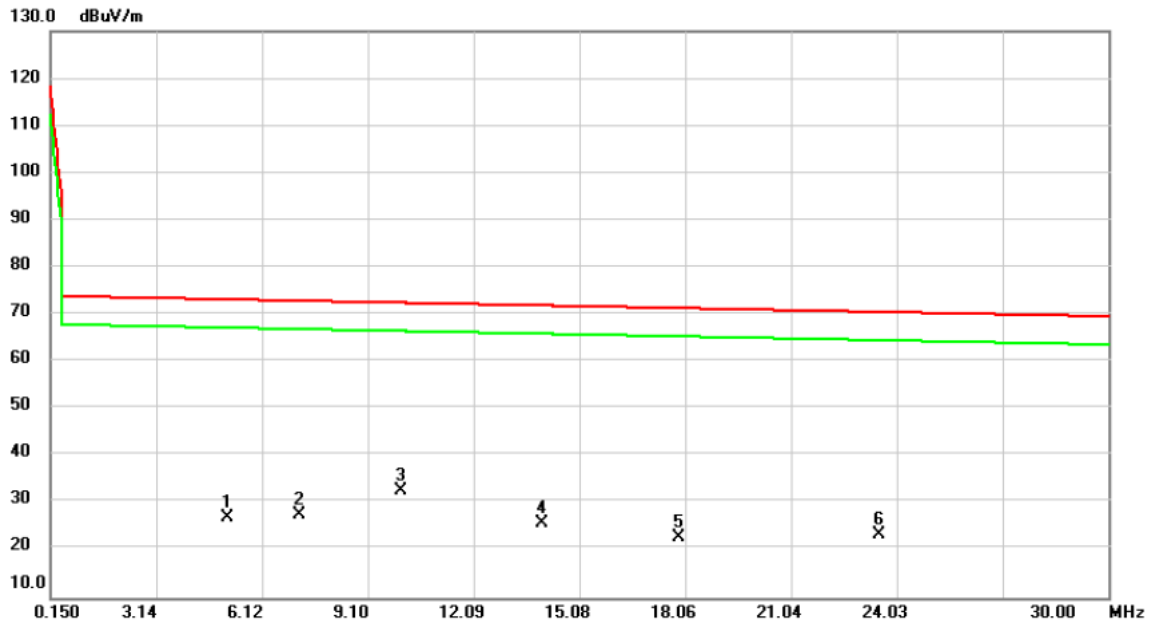


| No. | Mk. | Freq.  | Reading Level | Correct Factor | Measurement | Limit  | Margin |          |         |
|-----|-----|--------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz    | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   | *   | 0.0761 | 57.92         | 18.63          | 76.55       | 123.67 | -47.12 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |               |           |
|--------------|--------------------------|---------------|-----------|
| Test Mode    | UNII-3_TX a Mode 5745MHz | Tested Date   | 2019/12/9 |
| Test Voltage | DC 48V                   | Azimuth Angle | 0°        |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 5.1350       | 30.94                    | -3.94                   | 27.00                      | 73.13           | -46.13       | peak     |         |
| 2   |     | 7.1647       | 31.86                    | -4.16                   | 27.70                      | 72.84           | -45.14       | peak     |         |
| 3   | *   | 10.0304      | 37.34                    | -4.71                   | 32.63                      | 72.42           | -39.79       | peak     |         |
| 4   |     | 14.0004      | 30.50                    | -4.82                   | 25.68                      | 71.85           | -46.17       | peak     |         |
| 5   |     | 17.8810      | 28.89                    | -6.18                   | 22.71                      | 71.29           | -48.58       | peak     |         |
| 6   |     | 23.5224      | 31.14                    | -7.66                   | 23.48                      | 70.48           | -47.00       | peak     |         |

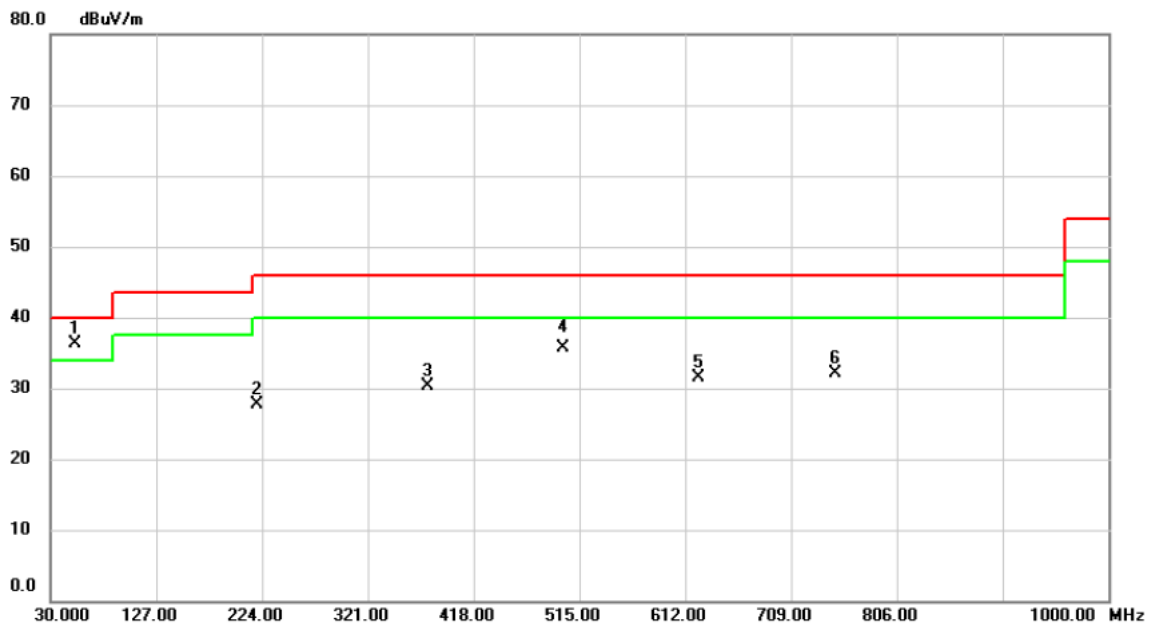
## REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

## **APPENDIX B    RADIATED EMISSIONS - 30 MHZ TO 1 GHZ**

|              |                          |              |           |
|--------------|--------------------------|--------------|-----------|
| Test Mode    | UNII-3_TX a Mode 5745MHz | Tested Date  | 2019/12/9 |
| Test Voltage | DC 48V                   | Polarization | Vertical  |

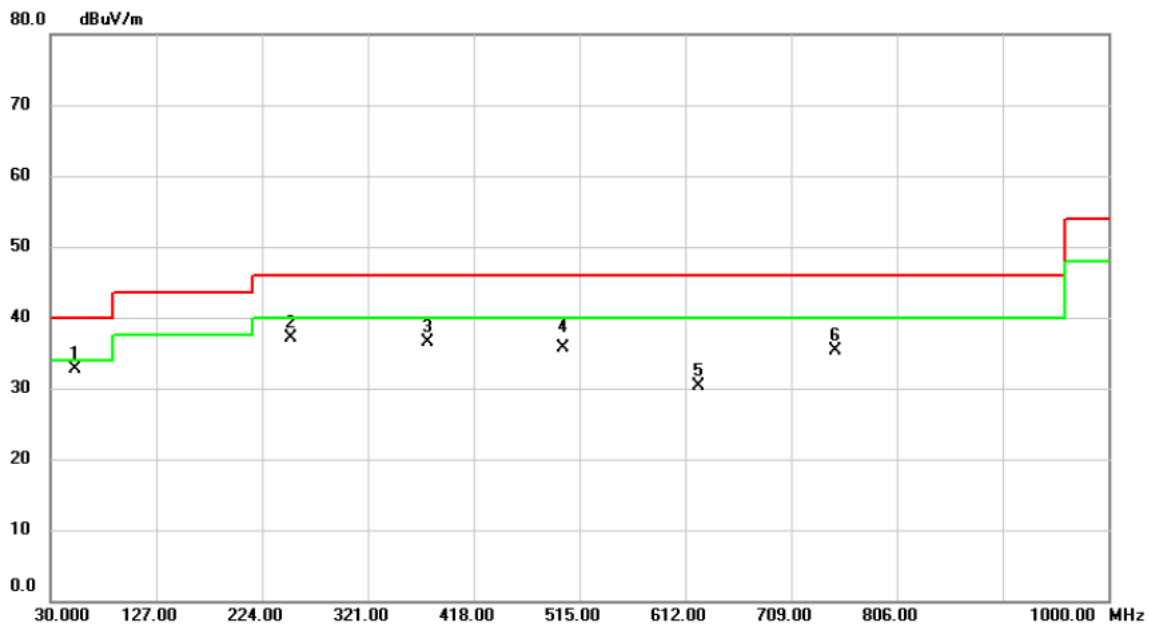


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   | *   | 52.3100      | 48.22                    | -11.86                  | 36.36                      | 40.00           | -3.64        | peak     |         |
| 2   |     | 219.1500     | 42.34                    | -14.64                  | 27.70                      | 46.00           | -18.30       | peak     |         |
| 3   |     | 375.3200     | 39.29                    | -9.05                   | 30.24                      | 46.00           | -15.76       | peak     |         |
| 4   |     | 500.4500     | 41.74                    | -6.12                   | 35.62                      | 46.00           | -10.38       | QP       |         |
| 5   |     | 624.6100     | 35.04                    | -3.54                   | 31.50                      | 46.00           | -14.50       | peak     |         |
| 6   |     | 749.7400     | 33.50                    | -1.36                   | 32.14                      | 46.00           | -13.86       | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |            |
|--------------|--------------------------|--------------|------------|
| Test Mode    | UNII-3_TX a Mode 5745MHz | Tested Date  | 2019/12/9  |
| Test Voltage | DC 48V                   | Polarization | Horizontal |



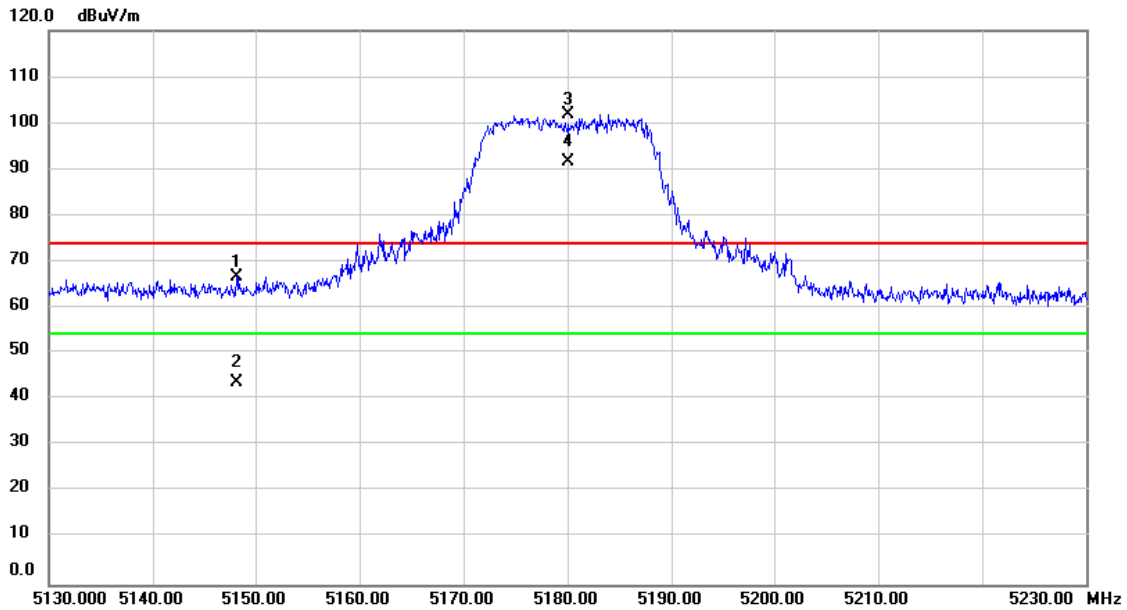
| No. Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|---------|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1 *     | 52.3100      | 44.49                    | -11.86                  | 32.63                      | 40.00           | -7.37        | peak     |         |
| 2       | 250.1900     | 49.99                    | -12.92                  | 37.07                      | 46.00           | -8.93        | peak     |         |
| 3       | 375.3200     | 45.49                    | -9.05                   | 36.44                      | 46.00           | -9.56        | peak     |         |
| 4       | 500.4500     | 41.77                    | -6.12                   | 35.65                      | 46.00           | -10.35       | QP       |         |
| 5       | 624.6100     | 33.85                    | -3.54                   | 30.31                      | 46.00           | -15.69       | peak     |         |
| 6       | 749.7400     | 36.68                    | -1.36                   | 35.32                      | 46.00           | -10.68       | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

## **APPENDIX C    RADIATED EMISSIONS - ABOVE 1 GHZ**

|              |                           |              |            |
|--------------|---------------------------|--------------|------------|
| Test Mode    | UnII-1/ TX a Mode 5180MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                    | Polarization | Horizontal |



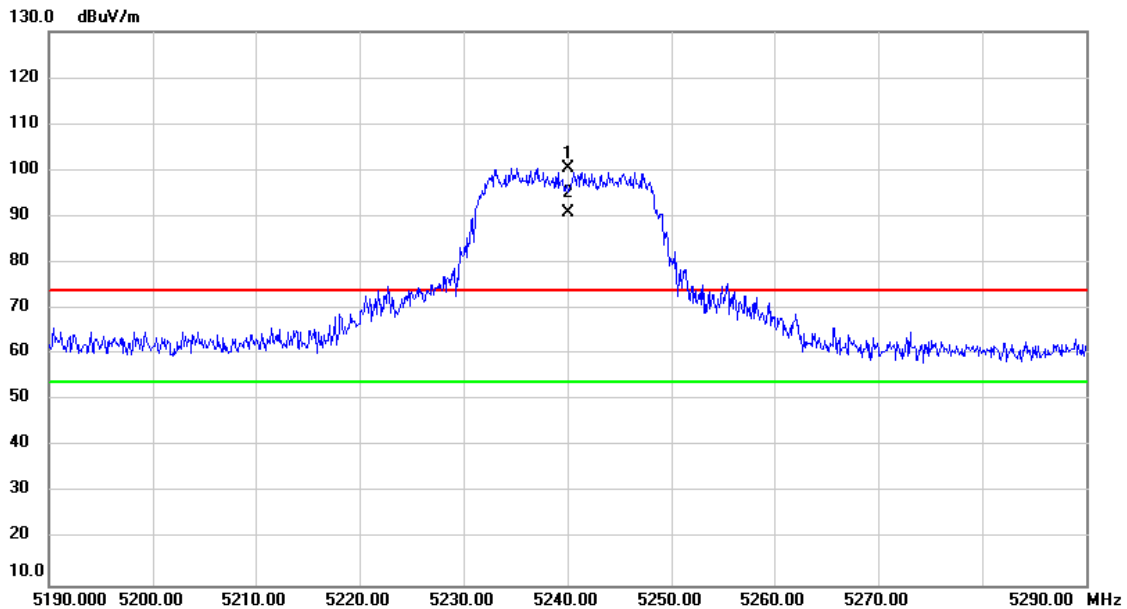
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5148.200     | 29.09                    | 37.61                   | 66.70                      | 74.00           | -7.30        | peak     |          |
| 2   |     | 5148.200     | 6.15                     | 37.61                   | 43.76                      | 54.00           | -10.24       | AVG      |          |
| 3   | X   | 5180.000     | 64.16                    | 37.65                   | 101.81                     | 74.00           | 27.81        | peak     | No Limit |
| 4   | *   | 5180.000     | 53.98                    | 37.65                   | 91.63                      | 54.00           | 37.63        | AVG      | No Limit |

## REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

|              |                           |              |            |
|--------------|---------------------------|--------------|------------|
| Test Mode    | UnII-1/ TX a Mode 5240MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                    | Polarization | Horizontal |

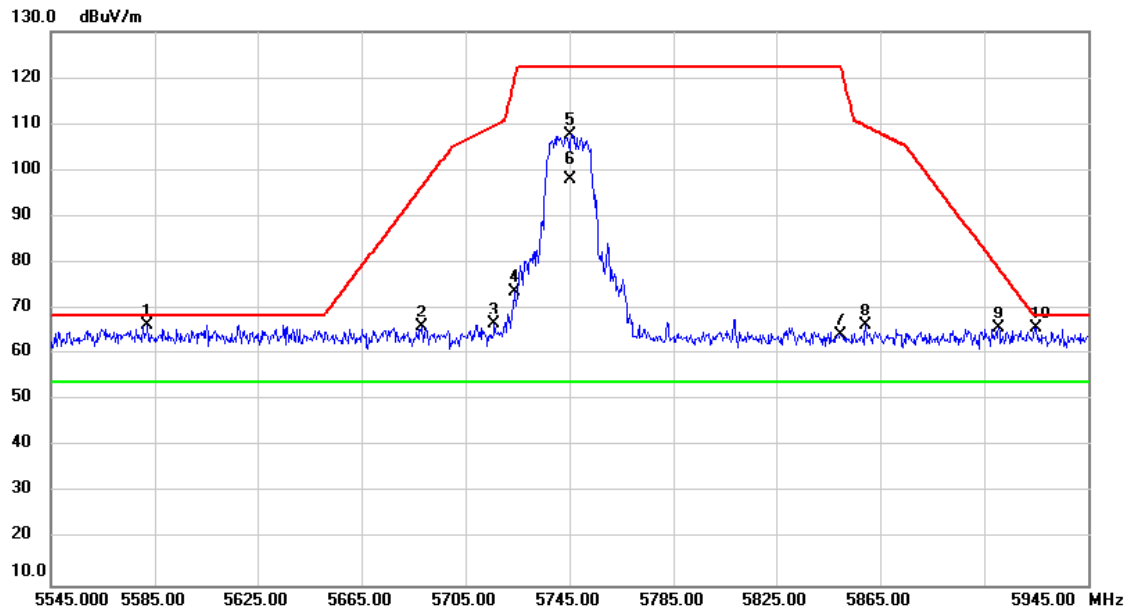


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   | X   | 5240.000     | 62.76                    | 37.71                   | 100.47                     | 74.00           | 26.47        | peak     | No Limit |
| 2   | *   | 5240.000     | 53.00                    | 37.71                   | 90.71                      | 54.00           | 36.71        | AVG      | No Limit |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                           |              |            |
|--------------|---------------------------|--------------|------------|
| Test Mode    | UnII-3/ TX a Mode 5745MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                    | Polarization | Horizontal |



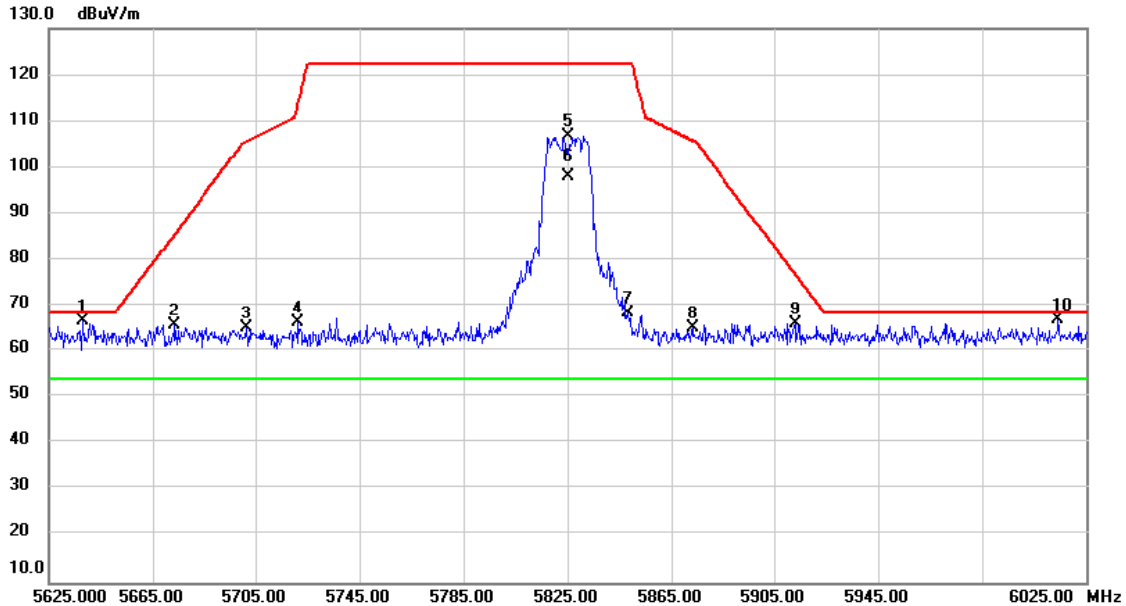
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5582.200     | 28.25                    | 38.13                   | 66.38                      | 68.20           | -1.82        | peak     |          |
| 2   |     | 5688.200     | 27.58                    | 38.27                   | 65.85                      | 96.50           | -30.65       | peak     |          |
| 3   |     | 5716.200     | 28.14                    | 38.31                   | 66.45                      | 109.74          | -43.29       | peak     |          |
| 4   |     | 5723.800     | 35.35                    | 38.32                   | 73.67                      | 119.46          | -45.79       | peak     |          |
| 5   |     | 5745.000     | 69.39                    | 38.35                   | 107.74                     | 122.20          | -14.46       | peak     | No Limit |
| 6   | *   | 5745.000     | 59.71                    | 38.35                   | 98.06                      | 54.00           | 44.06        | AVG      | No Limit |
| 7   |     | 5849.800     | 25.77                    | 38.50                   | 64.27                      | 122.20          | -57.93       | peak     |          |
| 8   |     | 5859.400     | 27.60                    | 38.51                   | 66.11                      | 109.57          | -43.46       | peak     |          |
| 9   |     | 5910.600     | 27.05                    | 38.58                   | 65.63                      | 78.82           | -13.19       | peak     |          |
| 10  |     | 5925.000     | 27.17                    | 38.61                   | 65.78                      | 68.20           | -2.42        | peak     |          |

## REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

|              |                           |              |            |
|--------------|---------------------------|--------------|------------|
| Test Mode    | UnII-3/ TX a Mode 5825MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                    | Polarization | Horizontal |



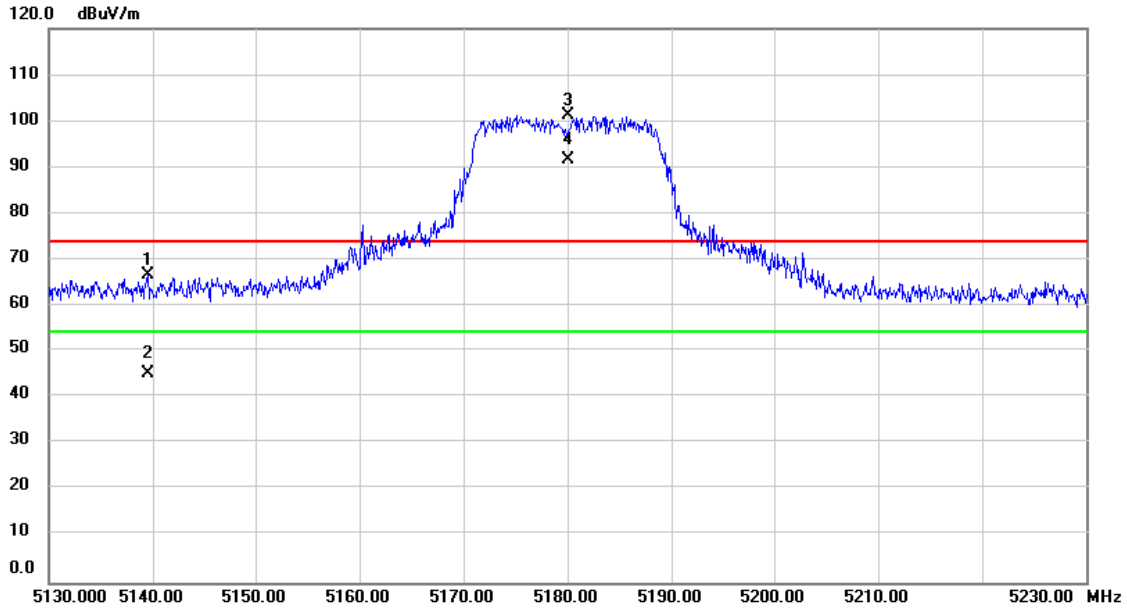
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5637.800     | 28.43                    | 38.20                   | 66.63                      | 68.20           | -1.57        | peak     |          |
| 2   |     | 5673.400     | 27.43                    | 38.25                   | 65.68                      | 85.56           | -19.88       | peak     |          |
| 3   |     | 5701.400     | 26.81                    | 38.29                   | 65.10                      | 105.59          | -40.49       | peak     |          |
| 4   |     | 5721.400     | 28.01                    | 38.32                   | 66.33                      | 113.99          | -47.66       | peak     |          |
| 5   |     | 5825.000     | 68.20                    | 38.47                   | 106.67                     | 122.20          | -15.53       | peak     | No Limit |
| 6   | *   | 5825.000     | 59.49                    | 38.47                   | 97.96                      | 54.00           | 43.96        | AVG      | No Limit |
| 7   |     | 5848.200     | 29.76                    | 38.50                   | 68.26                      | 122.20          | -53.94       | peak     |          |
| 8   |     | 5873.000     | 26.39                    | 38.53                   | 64.92                      | 105.76          | -40.84       | peak     |          |
| 9   |     | 5913.000     | 27.51                    | 38.59                   | 66.10                      | 77.05           | -10.95       | peak     |          |
| 10  |     | 6014.200     | 28.01                    | 38.77                   | 66.78                      | 68.20           | -1.42        | peak     |          |

## REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UnII-1/TX n (HT20) Mode 5180MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

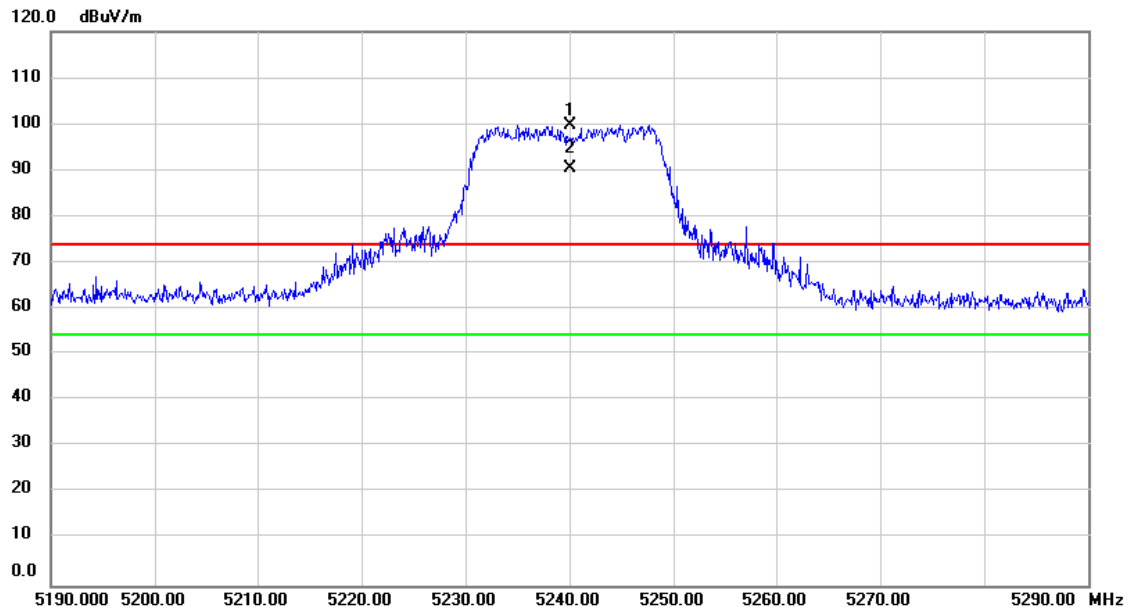


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5139.500     | 29.09                    | 37.60                   | 66.69                      | 74.00           | -7.31        | peak     |          |
| 2   |     | 5139.500     | 7.55                     | 37.60                   | 45.15                      | 54.00           | -8.85        | AVG      |          |
| 3   | X   | 5180.000     | 63.72                    | 37.65                   | 101.37                     | 74.00           | 27.37        | peak     | No Limit |
| 4   | *   | 5180.000     | 53.99                    | 37.65                   | 91.64                      | 54.00           | 37.64        | AVG      | No Limit |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UnII-1/TX n (HT20) Mode 5240MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

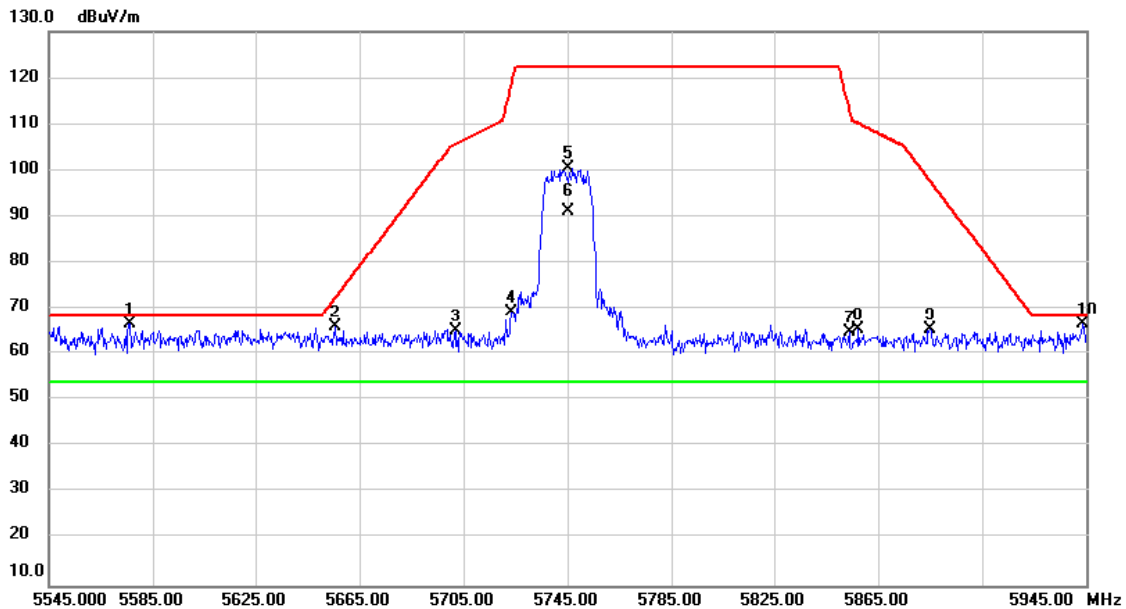


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   | X   | 5240.000     | 62.07                    | 37.71                   | 99.78                      | 74.00           | 25.78        | peak     | No Limit |
| 2   | *   | 5240.000     | 52.66                    | 37.71                   | 90.37                      | 54.00           | 36.37        | AVG      | No Limit |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UnII-3/TX n (HT20) Mode 5745MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |



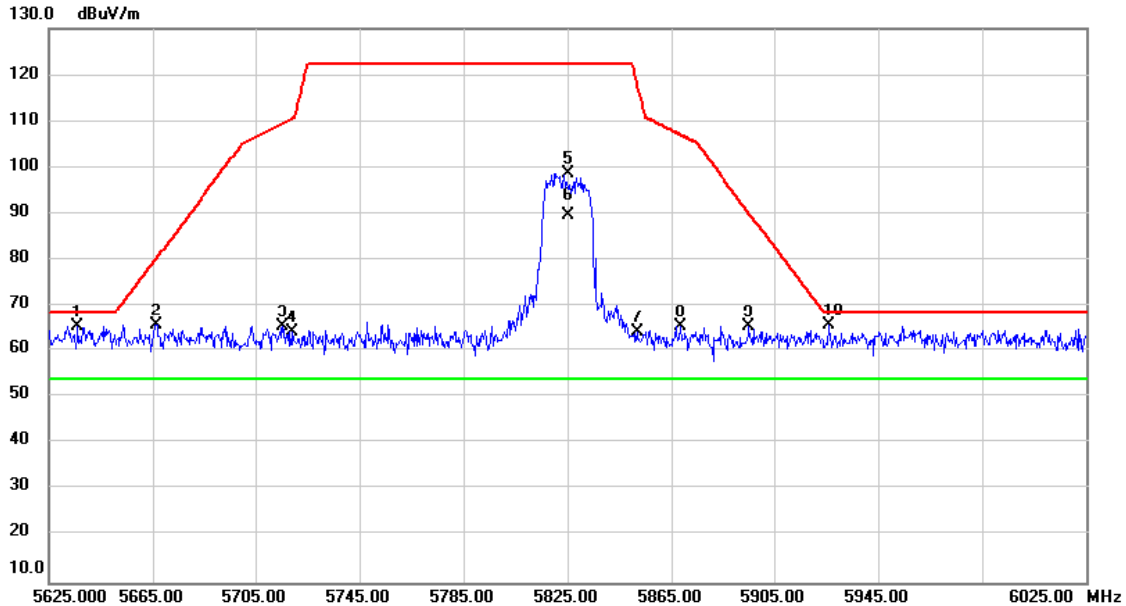
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5576.200     | 28.52                    | 38.12                   | 66.64                      | 68.20           | -1.56        | peak     |          |
| 2   |     | 5655.800     | 27.70                    | 38.23                   | 65.93                      | 72.51           | -6.58        | peak     |          |
| 3   |     | 5701.800     | 26.85                    | 38.29                   | 65.14                      | 105.70          | -40.56       | peak     |          |
| 4   |     | 5723.400     | 31.02                    | 38.32                   | 69.34                      | 118.55          | -49.21       | peak     |          |
| 5   |     | 5745.000     | 62.00                    | 38.35                   | 100.35                     | 122.20          | -21.85       | peak     | No Limit |
| 6   | *   | 5745.000     | 52.87                    | 38.35                   | 91.22                      | 54.00           | 37.22        | AVG      | No Limit |
| 7   |     | 5853.800     | 26.25                    | 38.51                   | 64.76                      | 113.54          | -48.78       | peak     |          |
| 8   |     | 5857.400     | 26.84                    | 38.51                   | 65.35                      | 110.13          | -44.78       | peak     |          |
| 9   |     | 5885.000     | 26.81                    | 38.55                   | 65.36                      | 97.77           | -32.41       | peak     |          |
| 10  |     | 5943.800     | 27.81                    | 38.63                   | 66.44                      | 68.20           | -1.76        | peak     |          |

## REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

|              |                                |              |            |
|--------------|--------------------------------|--------------|------------|
| Test Mode    | UnII-3/TX n (HT20)Mode 5825MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                         | Polarization | Horizontal |

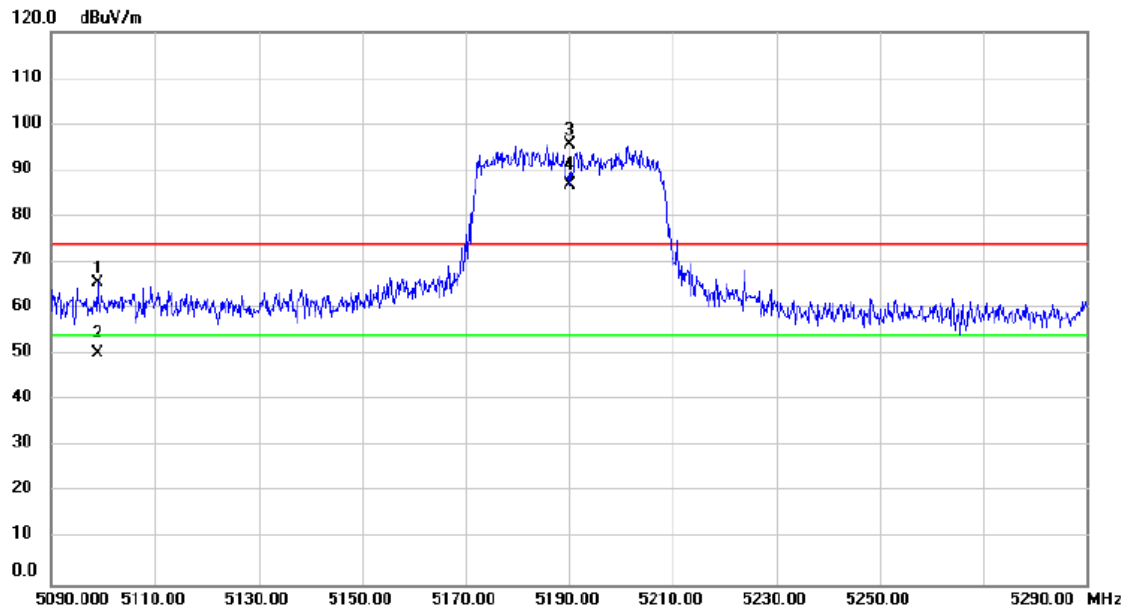


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5636.200     | 27.27                    | 38.20                   | 65.47                      | 68.20           | -2.73        | peak     |          |
| 2   |     | 5666.200     | 27.46                    | 38.24                   | 65.70                      | 80.22           | -14.52       | peak     |          |
| 3   |     | 5715.400     | 27.00                    | 38.31                   | 65.31                      | 109.51          | -44.20       | peak     |          |
| 4   |     | 5719.400     | 25.81                    | 38.32                   | 64.13                      | 110.63          | -46.50       | peak     |          |
| 5   |     | 5825.000     | 60.12                    | 38.47                   | 98.59                      | 122.20          | -23.61       | peak     | No Limit |
| 6   | *   | 5825.000     | 51.23                    | 38.47                   | 89.70                      | 54.00           | 35.70        | AVG      | No Limit |
| 7   |     | 5851.800     | 25.60                    | 38.50                   | 64.10                      | 118.09          | -53.99       | peak     |          |
| 8   |     | 5868.600     | 26.90                    | 38.53                   | 65.43                      | 106.99          | -41.56       | peak     |          |
| 9   |     | 5895.400     | 26.83                    | 38.56                   | 65.39                      | 90.07           | -24.68       | peak     |          |
| 10  |     | 5926.200     | 27.11                    | 38.61                   | 65.72                      | 68.20           | -2.48        | peak     |          |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UnII-1/TX n (HT40) Mode 5190MHz | Tested Date  | 2020/1/5   |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

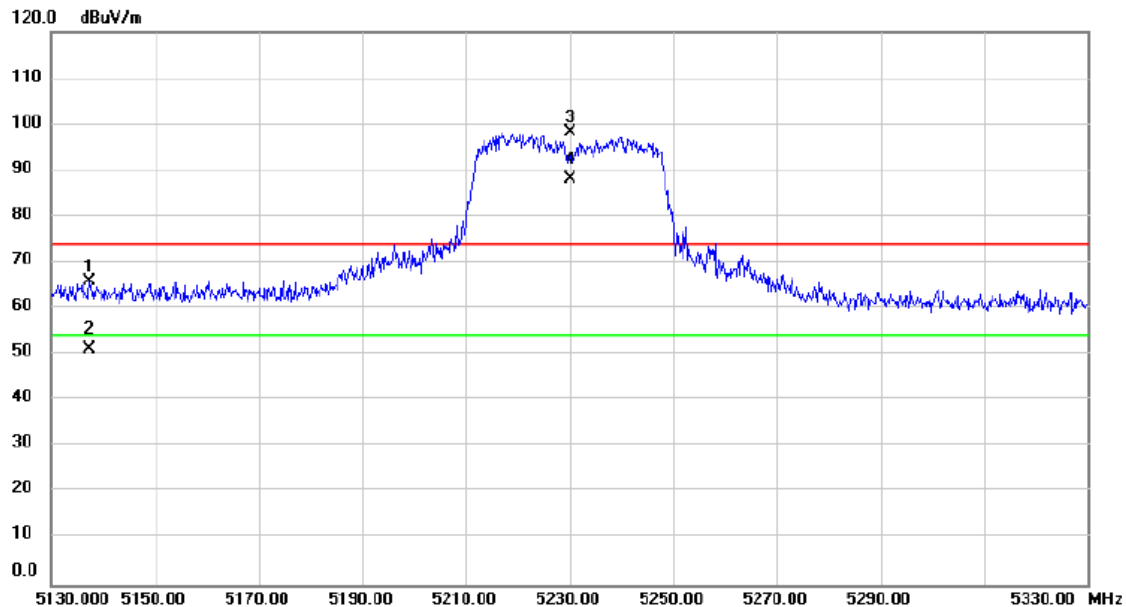


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|----------|----------|
| 1   |     | 5098.800     | 27.97                    | 37.55                   | 65.52                      | 74.00           | -8.48      | peak     |          |
| 2   |     | 5098.800     | 12.84                    | 37.55                   | 50.39                      | 54.00           | -3.61      | AVG      |          |
| 3   | X   | 5190.000     | 57.94                    | 37.65                   | 95.59                      | 74.00           | 21.59      | peak     | No Limit |
| 4   | *   | 5190.000     | 49.35                    | 37.65                   | 87.00                      | 54.00           | 33.00      | AVG      | No Limit |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UnII-1/TX n (HT40) Mode 5230MHz | Tested Date  | 2020/1/5   |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

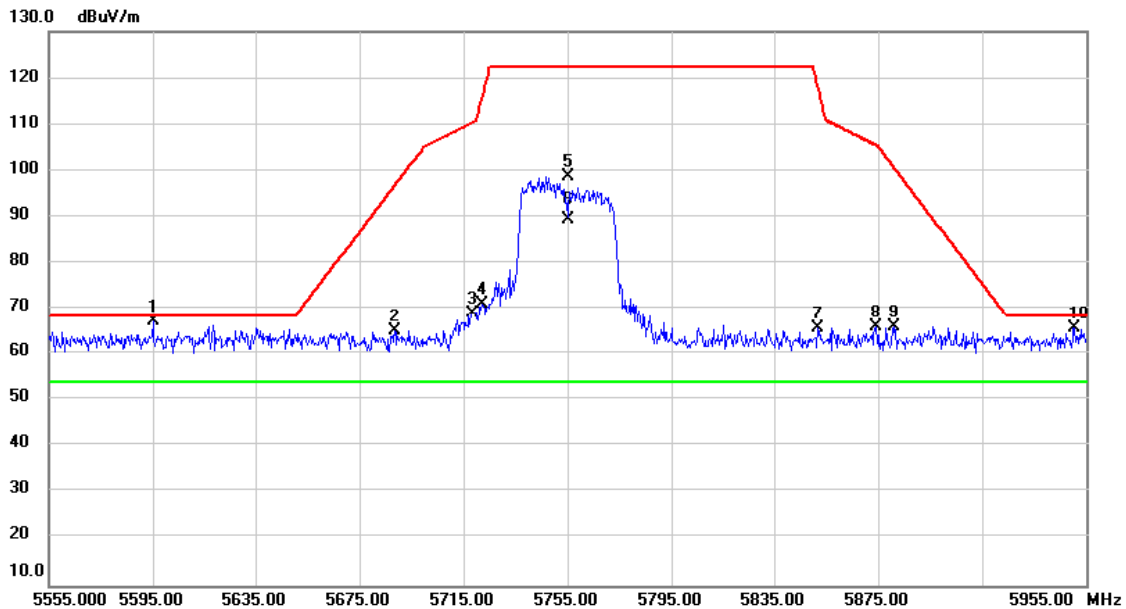


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5137.400     | 28.12                    | 37.59                   | 65.71                      | 74.00           | -8.29        | peak     |          |
| 2   |     | 5137.400     | 13.42                    | 37.59                   | 51.01                      | 54.00           | -2.99        | AVG      |          |
| 3   | X   | 5230.000     | 60.56                    | 37.70                   | 98.26                      | 74.00           | 24.26        | peak     | No Limit |
| 4   | *   | 5230.000     | 50.48                    | 37.70                   | 88.18                      | 54.00           | 34.18        | AVG      | No Limit |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UnII-3/TX n (HT40) Mode 5755MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |



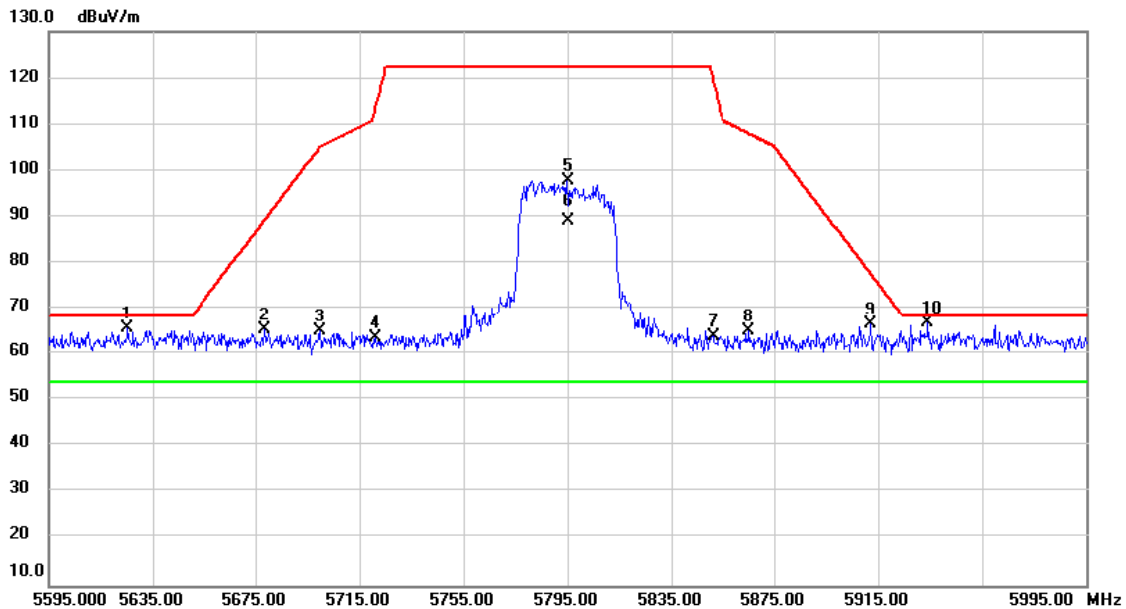
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5595.000     | 28.97                    | 38.14                   | 67.11                      | 68.20           | -1.09        | peak     |          |
| 2   |     | 5688.600     | 26.89                    | 38.27                   | 65.16                      | 96.79           | -31.63       | peak     |          |
| 3   |     | 5718.600     | 30.76                    | 38.32                   | 69.08                      | 110.41          | -41.33       | peak     |          |
| 4   |     | 5722.200     | 32.74                    | 38.32                   | 71.06                      | 115.82          | -44.76       | peak     |          |
| 5   |     | 5755.000     | 60.27                    | 38.37                   | 98.64                      | 122.20          | -23.56       | peak     | No Limit |
| 6   | *   | 5755.000     | 51.10                    | 38.37                   | 89.47                      | 54.00           | 35.47        | AVG      | No Limit |
| 7   |     | 5851.800     | 27.11                    | 38.50                   | 65.61                      | 118.09          | -52.48       | peak     |          |
| 8   |     | 5874.200     | 27.52                    | 38.53                   | 66.05                      | 105.42          | -39.37       | peak     |          |
| 9   |     | 5881.400     | 27.52                    | 38.54                   | 66.06                      | 100.45          | -34.39       | peak     |          |
| 10  |     | 5950.600     | 27.03                    | 38.64                   | 65.67                      | 68.20           | -2.53        | peak     |          |

## REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UnII-3/TX n (HT40) Mode 5795MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

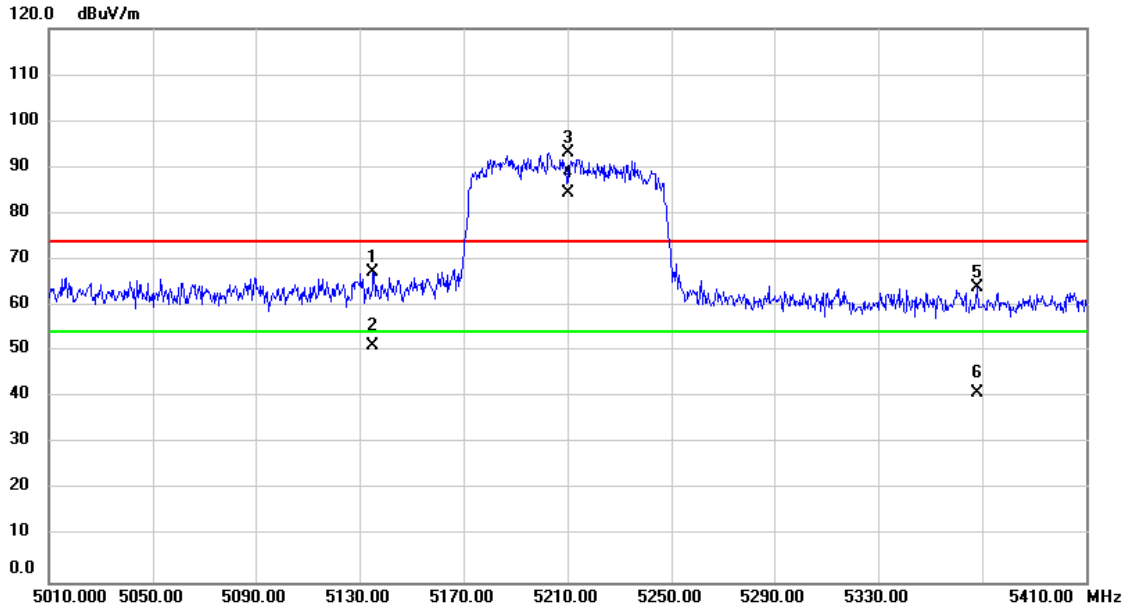


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5625.400     | 27.56                    | 38.19                   | 65.75                      | 68.20           | -2.45        | peak     |          |
| 2   |     | 5678.600     | 27.08                    | 38.26                   | 65.34                      | 89.40           | -24.06       | peak     |          |
| 3   |     | 5699.800     | 26.71                    | 38.29                   | 65.00                      | 105.05          | -40.05       | peak     |          |
| 4   |     | 5721.000     | 25.32                    | 38.32                   | 63.64                      | 113.08          | -49.44       | peak     |          |
| 5   |     | 5795.000     | 59.44                    | 38.42                   | 97.86                      | 122.20          | -24.34       | peak     | No Limit |
| 6   | *   | 5795.000     | 50.76                    | 38.42                   | 89.18                      | 54.00           | 35.18        | AVG      | No Limit |
| 7   |     | 5851.000     | 25.40                    | 38.50                   | 63.90                      | 119.92          | -56.02       | peak     |          |
| 8   |     | 5865.400     | 26.41                    | 38.52                   | 64.93                      | 107.89          | -42.96       | peak     |          |
| 9   |     | 5912.200     | 27.86                    | 38.59                   | 66.45                      | 77.64           | -11.19       | peak     |          |
| 10  |     | 5934.200     | 28.12                    | 38.62                   | 66.74                      | 68.20           | -1.46        | peak     |          |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                   |              |            |
|--------------|-----------------------------------|--------------|------------|
| Test Mode    | UnII-1/TX ac (VHT80) Mode 5210MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                            | Polarization | Horizontal |



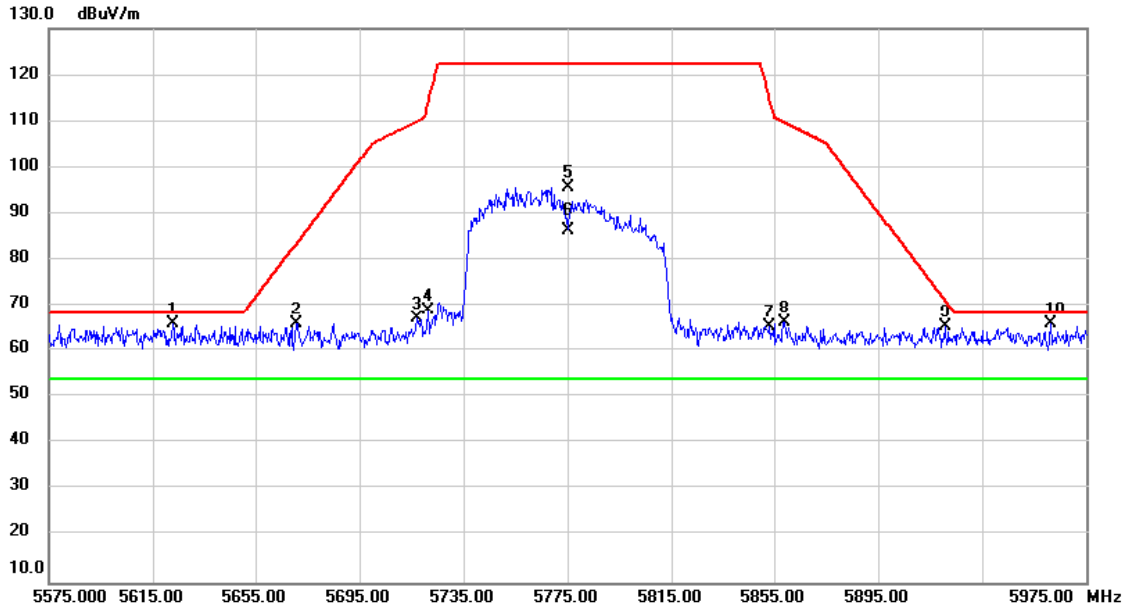
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5135.200     | 29.83                    | 37.59                   | 67.42                      | 74.00           | -6.58        | peak     |          |
| 2   |     | 5135.200     | 13.51                    | 37.59                   | 51.10                      | 54.00           | -2.90        | AVG      |          |
| 3   | X   | 5210.000     | 55.39                    | 37.68                   | 93.07                      | 74.00           | 19.07        | peak     | No Limit |
| 4   | *   | 5210.000     | 46.74                    | 37.68                   | 84.42                      | 54.00           | 30.42        | AVG      | No Limit |
| 5   |     | 5368.000     | 26.25                    | 37.86                   | 64.11                      | 74.00           | -9.89        | peak     |          |
| 6   |     | 5368.000     | 3.18                     | 37.86                   | 41.04                      | 54.00           | -12.96       | AVG      |          |

## REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

|              |                                   |              |            |
|--------------|-----------------------------------|--------------|------------|
| Test Mode    | UnII-3/TX ac (VHT80) Mode 5775MHz | Tested Date  | 2019/12/5  |
| Test Voltage | DC 48V                            | Polarization | Horizontal |



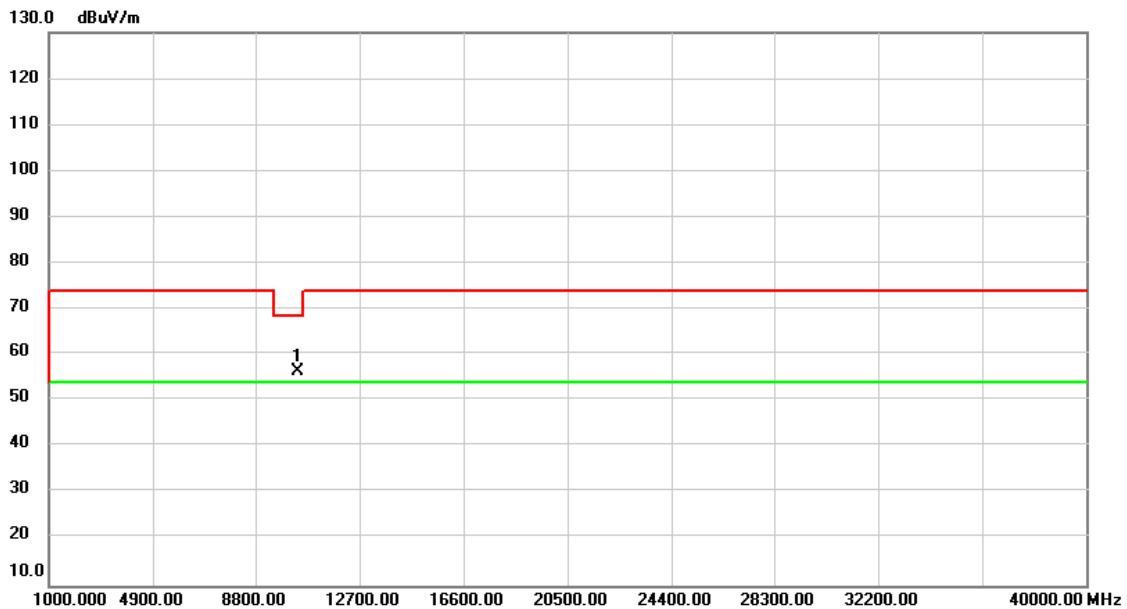
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment  |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1   |     | 5622.600     | 27.63                    | 38.18                   | 65.81                      | 68.20           | -2.39        | peak     |          |
| 2   |     | 5670.600     | 27.82                    | 38.25                   | 66.07                      | 83.48           | -17.41       | peak     |          |
| 3   |     | 5717.000     | 28.77                    | 38.31                   | 67.08                      | 109.96          | -42.88       | peak     |          |
| 4   |     | 5721.400     | 30.66                    | 38.32                   | 68.98                      | 113.99          | -45.01       | peak     |          |
| 5   |     | 5775.000     | 57.32                    | 38.39                   | 95.71                      | 122.20          | -26.49       | peak     | No Limit |
| 6   | *   | 5775.000     | 47.81                    | 38.39                   | 86.20                      | 54.00           | 32.20        | AVG      | No Limit |
| 7   |     | 5853.400     | 26.92                    | 38.50                   | 65.42                      | 114.45          | -49.03       | peak     |          |
| 8   |     | 5859.000     | 27.84                    | 38.51                   | 66.35                      | 109.68          | -43.33       | peak     |          |
| 9   |     | 5920.600     | 26.71                    | 38.60                   | 65.31                      | 71.44           | -6.13        | peak     |          |
| 10  |     | 5961.400     | 27.22                    | 38.66                   | 65.88                      | 68.20           | -2.32        | peak     |          |

## REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |           |
|--------------|--------------------------|--------------|-----------|
| Test Mode    | UNII-1_TX a Mode 5180MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                   | Polarization | Vertical  |

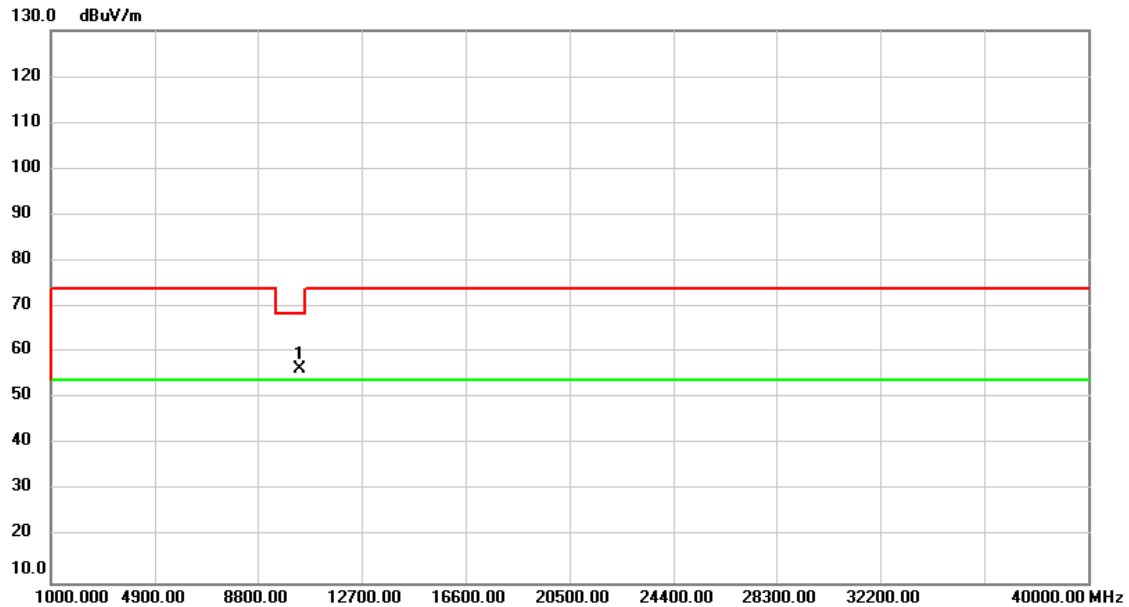


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Margin | Detector | Comment |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     |          |         |
| 1   | *   | 10360.00 | 53.55         | 2.83           | 56.38       | 68.20  | -11.82 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |            |
|--------------|--------------------------|--------------|------------|
| Test Mode    | UNII-1_TX a Mode 5180MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                   | Polarization | Horizontal |

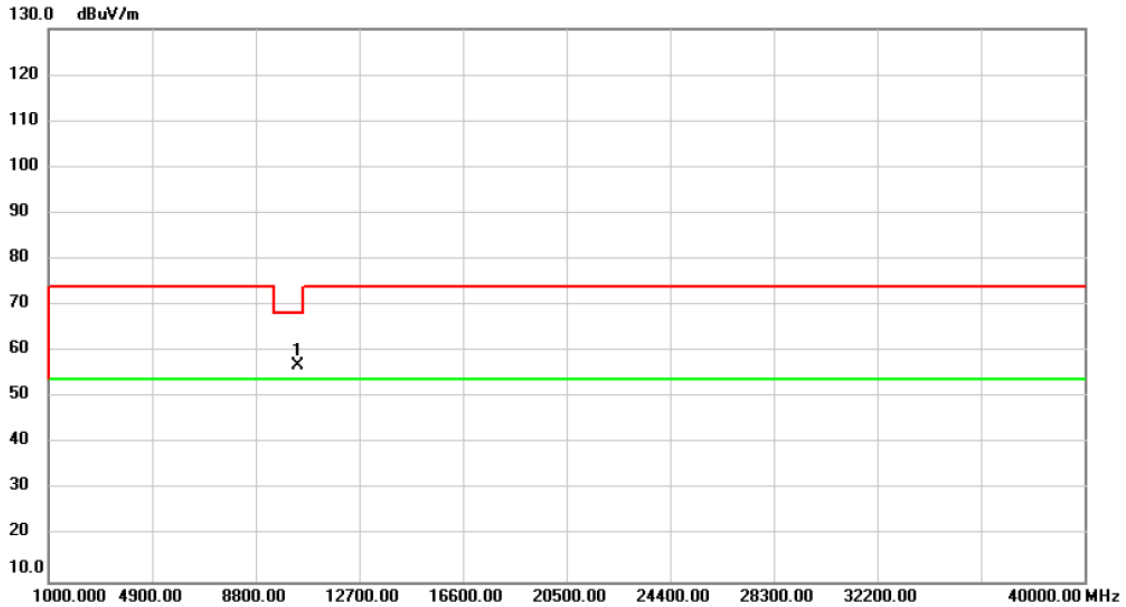


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   | *   | 10360.00     | 53.61                    | 2.83                    | 56.44                      | 68.20           | -11.76       | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |          |
|--------------|--------------------------|--------------|----------|
| Test Mode    | UNII-1_TX a Mode 5200MHz | Tested Date  | 2020/1/5 |
| Test Voltage | DC 48V                   | Polarization | Vertical |

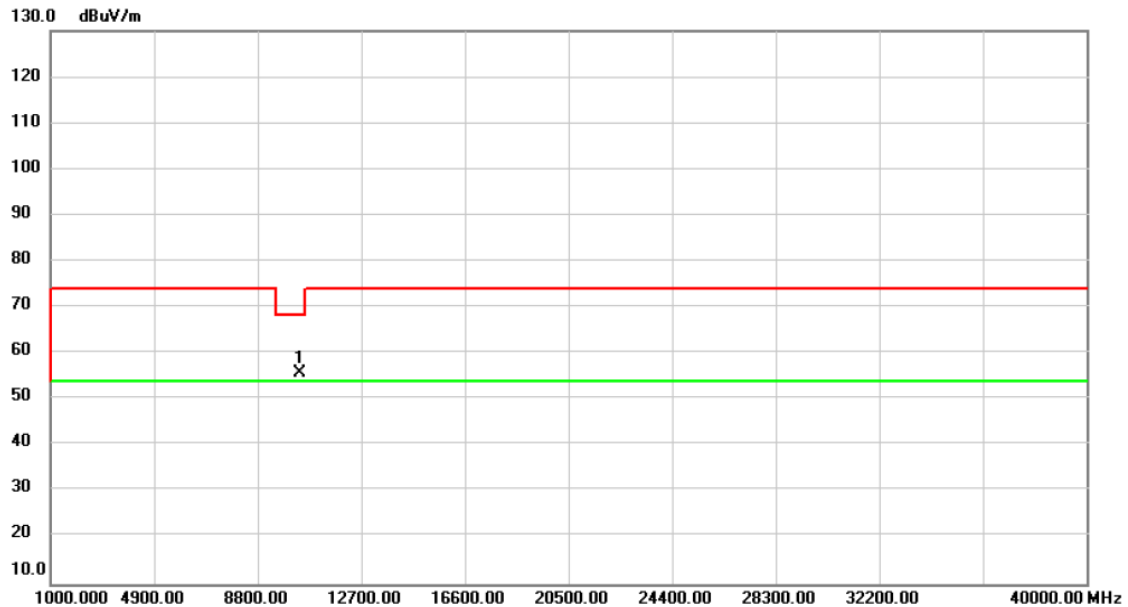


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   | *   | 10400.00 | 54.10         | 2.89           | 56.99       | 68.20  | -11.21 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |            |
|--------------|--------------------------|--------------|------------|
| Test Mode    | UNII-1_TX a Mode 5200MHz | Tested Date  | 2020/1/5   |
| Test Voltage | DC 48V                   | Polarization | Horizontal |

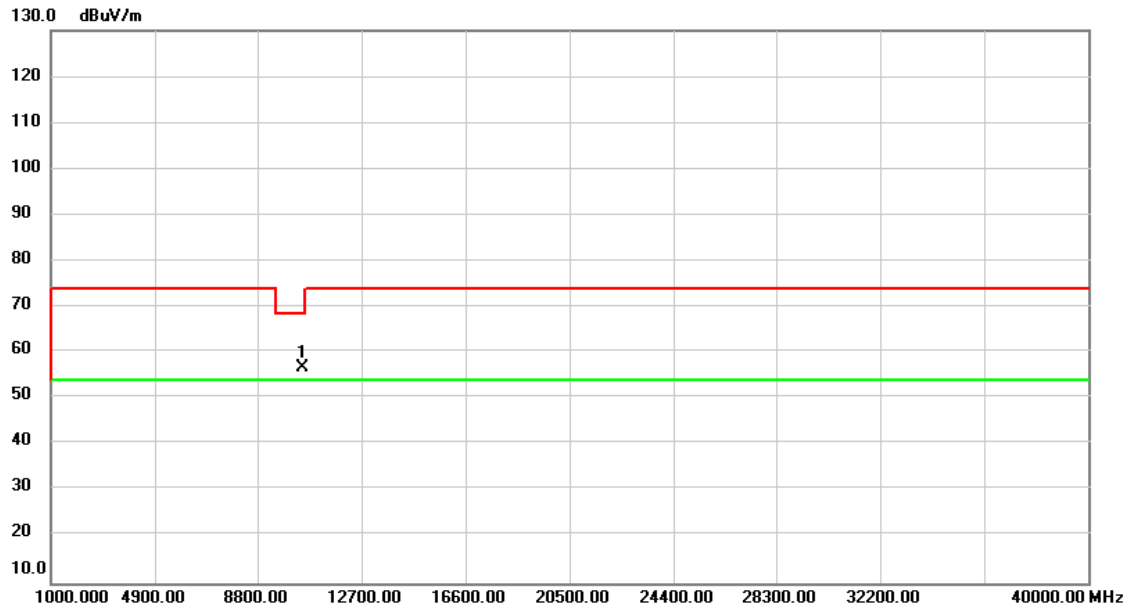


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   | *   | 10400.00 | 52.89         | 2.89           | 55.78       | 68.20  | -12.42 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |           |
|--------------|--------------------------|--------------|-----------|
| Test Mode    | UNII-1_TX a Mode 5240MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                   | Polarization | Vertical  |

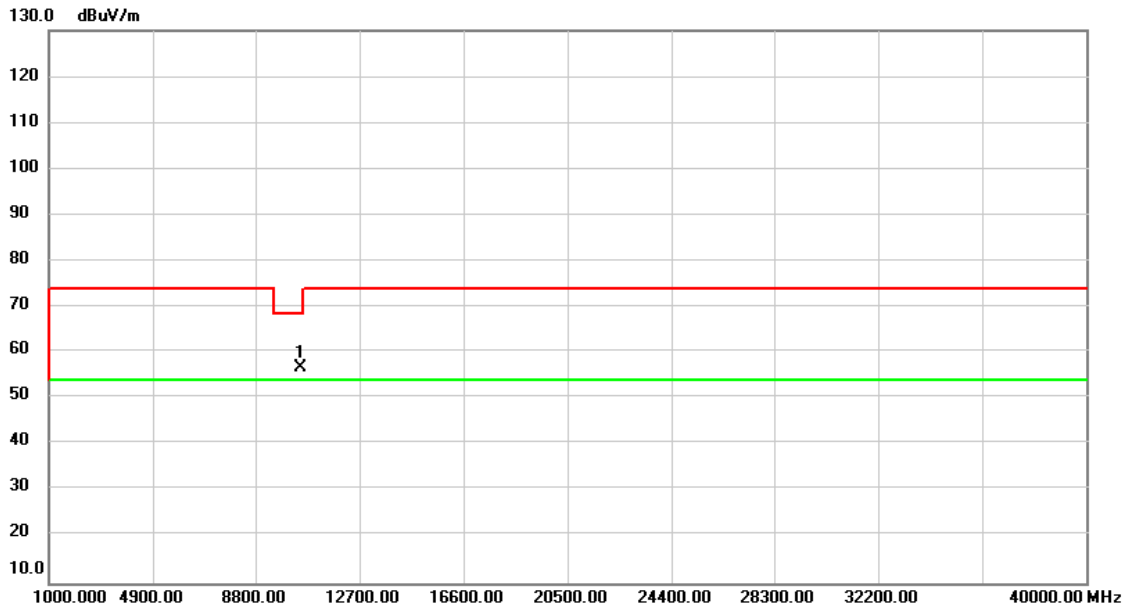


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   | *   | 10480.00     | 53.62                    | 3.00                    | 56.62                      | 68.20           | -11.58       | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |            |
|--------------|--------------------------|--------------|------------|
| Test Mode    | UNII-1_TX a Mode 5240MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                   | Polarization | Horizontal |



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Margin | Detector | Comment |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     |          |         |
| 1   | *   | 10480.00 | 53.57         | 3.00           | 56.57       | 68.20  | -11.63 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |           |
|--------------|--------------------------|--------------|-----------|
| Test Mode    | UNII-3_TX a Mode 5745MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                   | Polarization | Vertical  |

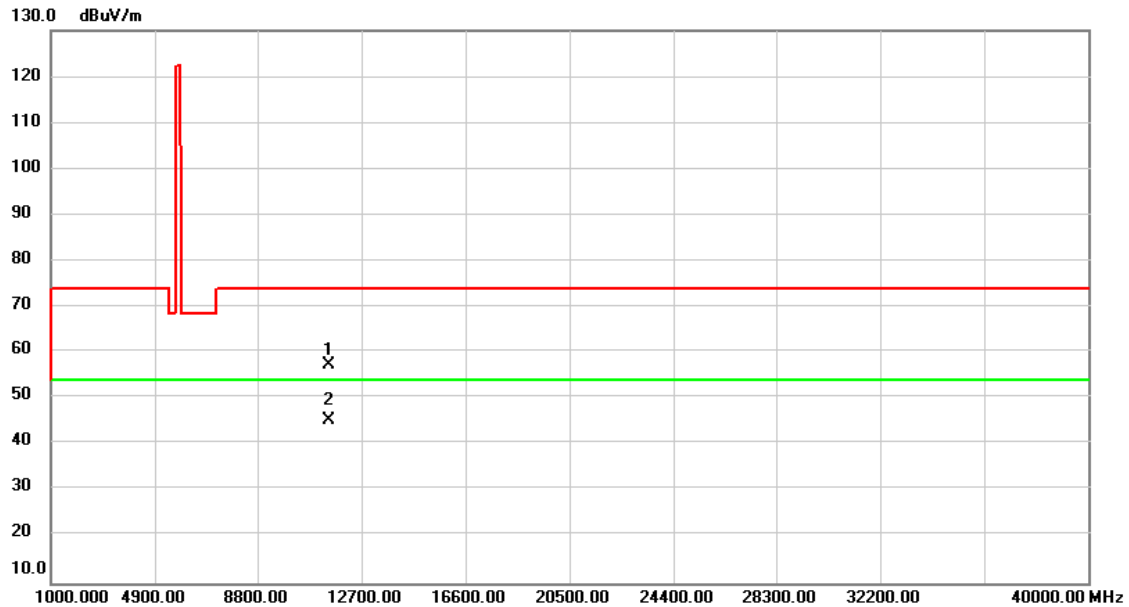


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11490.00     | 54.97                    | 3.89                    | 58.86                      | 74.00           | -15.14       | peak     |         |
| 2   | *   | 11490.00     | 41.33                    | 3.89                    | 45.22                      | 54.00           | -8.78        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |            |
|--------------|--------------------------|--------------|------------|
| Test Mode    | UNII-3_TX a Mode 5745MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                   | Polarization | Horizontal |

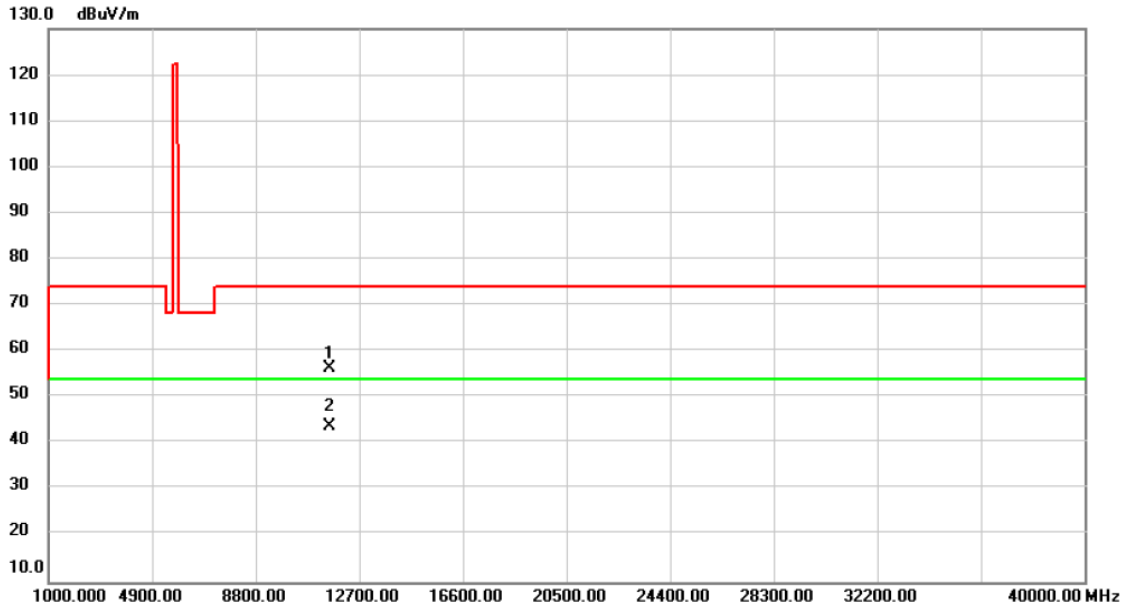


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11490.00     | 53.51                    | 3.89                    | 57.40                      | 74.00           | -16.60       | peak     |         |
| 2   | *   | 11490.00     | 41.30                    | 3.89                    | 45.19                      | 54.00           | -8.81        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |          |
|--------------|--------------------------|--------------|----------|
| Test Mode    | UNII-3_TX a Mode 5785MHz | Tested Date  | 2020/1/5 |
| Test Voltage | DC 48V                   | Polarization | Vertical |

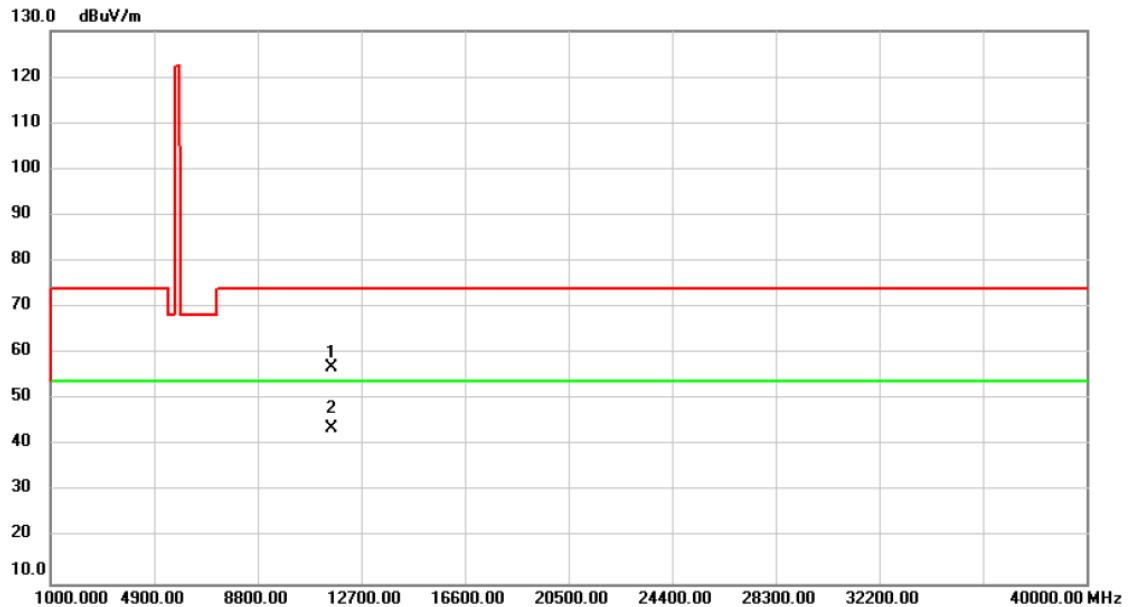


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   |     | 11570.00 | 52.69         | 3.57           | 56.26       | 74.00  | -17.74 | peak     |         |
| 2   | *   | 11570.00 | 40.06         | 3.57           | 43.63       | 54.00  | -10.37 | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |            |
|--------------|--------------------------|--------------|------------|
| Test Mode    | UNII-3_TX a Mode 5785MHz | Tested Date  | 2020/1/5   |
| Test Voltage | DC 48V                   | Polarization | Horizontal |

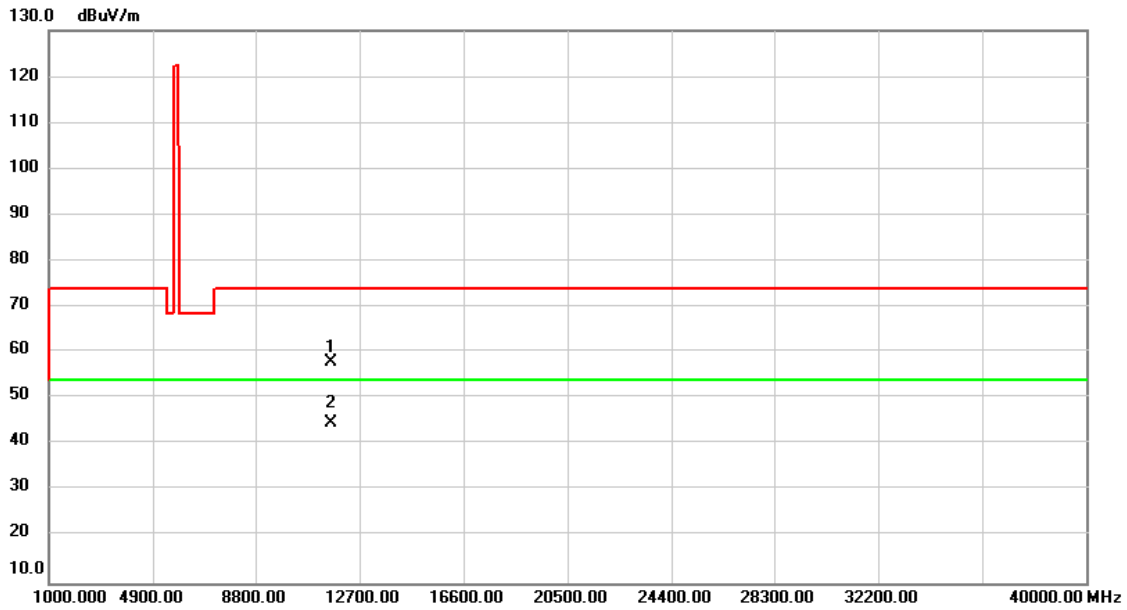


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|----------|---------|
| 1   |     | 11570.00     | 53.29                    | 3.57                    | 56.86                      | 74.00           | -17.14     | peak     |         |
| 2   | *   | 11570.00     | 40.12                    | 3.57                    | 43.69                      | 54.00           | -10.31     | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |           |
|--------------|--------------------------|--------------|-----------|
| Test Mode    | UNII-3_TX a Mode 5825MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                   | Polarization | Vertical  |

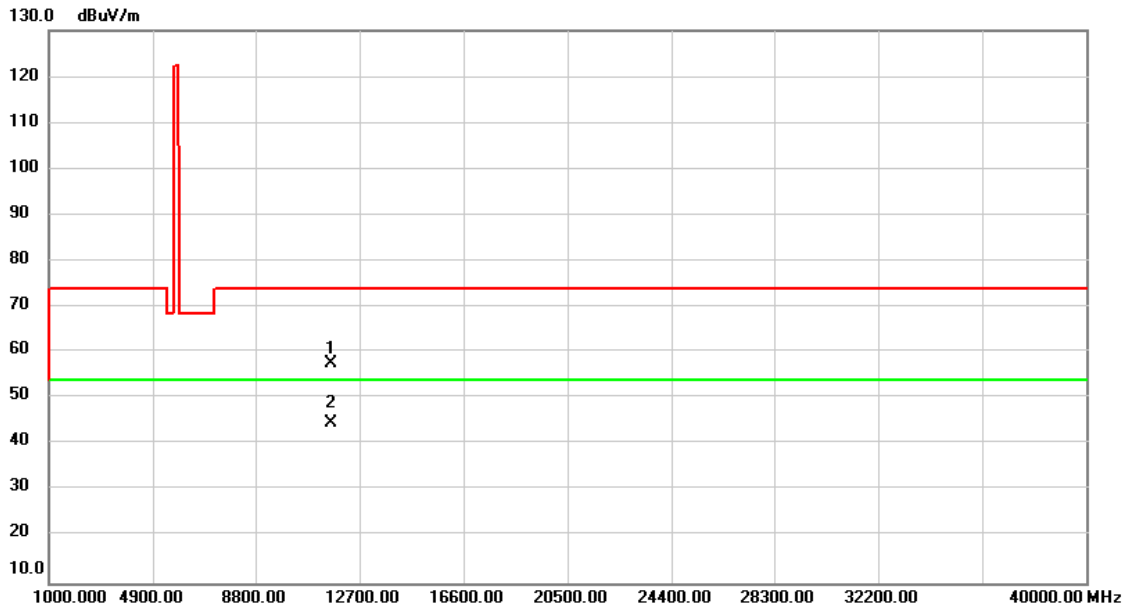


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11650.00     | 54.68                    | 3.18                    | 57.86                      | 74.00           | -16.14       | peak     |         |
| 2   | *   | 11650.00     | 41.44                    | 3.18                    | 44.62                      | 54.00           | -9.38        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                          |              |            |
|--------------|--------------------------|--------------|------------|
| Test Mode    | UNII-3_TX a Mode 5825MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                   | Polarization | Horizontal |

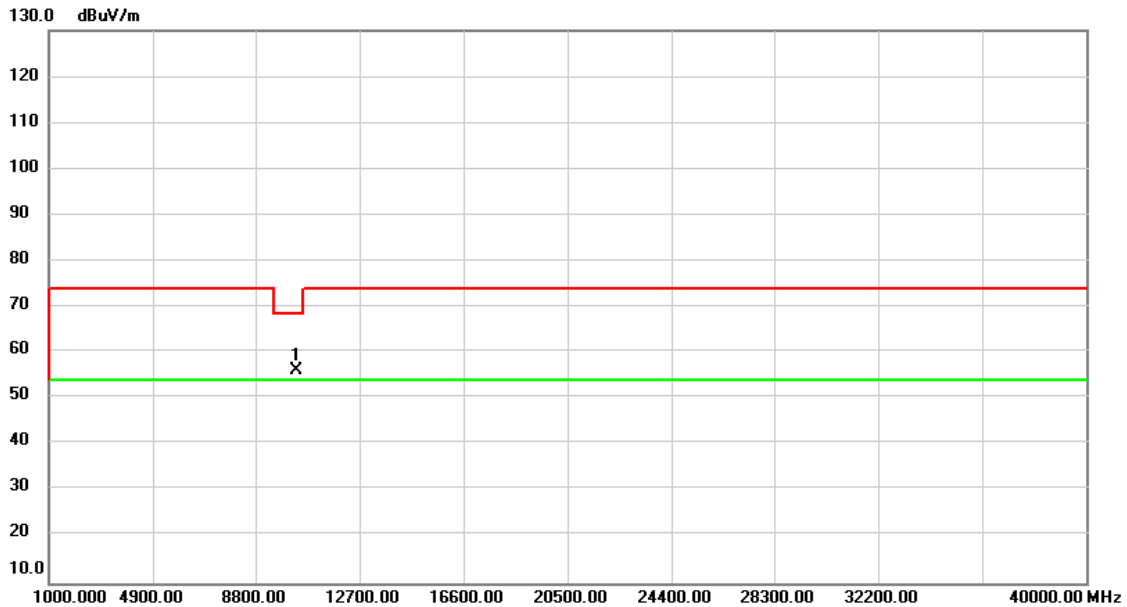


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11650.00     | 54.48                    | 3.18                    | 57.66                      | 74.00           | -16.34       | peak     |         |
| 2   | *   | 11650.00     | 41.44                    | 3.18                    | 44.62                      | 54.00           | -9.38        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |           |
|--------------|---------------------------------|--------------|-----------|
| Test Mode    | UNII-1_TX n (HT20) Mode 5180MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                          | Polarization | Vertical  |

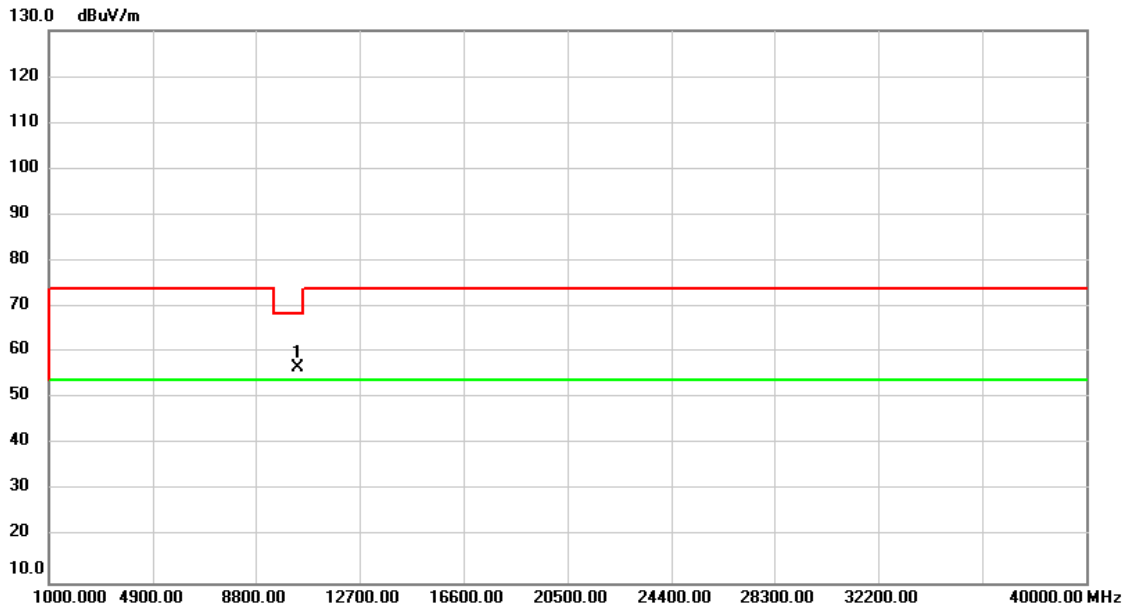


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   | *   | 10358.97     | 53.25                    | 2.82                    | 56.07                      | 68.20           | -12.13       | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UNII-1_TX n (HT20) Mode 5180MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

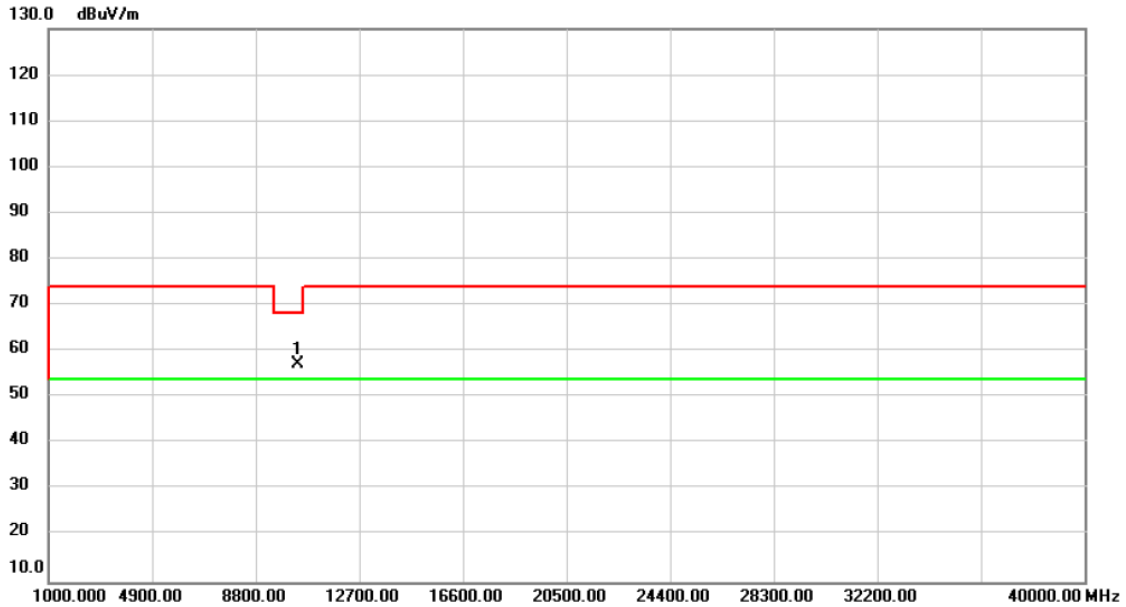


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   | *   | 10360.00     | 53.76                    | 2.83                    | 56.59                      | 68.20           | -11.61       | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |          |
|--------------|---------------------------------|--------------|----------|
| Test Mode    | UNII-1_TX n (HT20) Mode 5200MHz | Tested Date  | 2020/1/5 |
| Test Voltage | DC 48V                          | Polarization | Vertical |

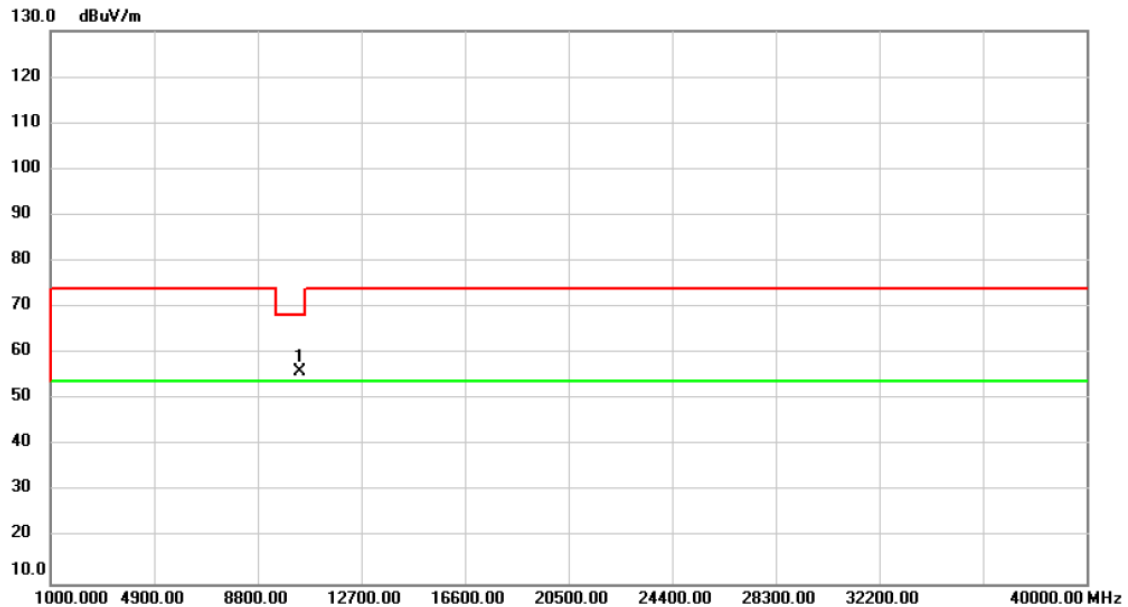


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   | *   | 10400.00 | 54.43         | 2.89           | 57.32       | 68.20  | -10.88 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UNII-1_TX n (HT20) Mode 5200MHz | Tested Date  | 2020/1/5   |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

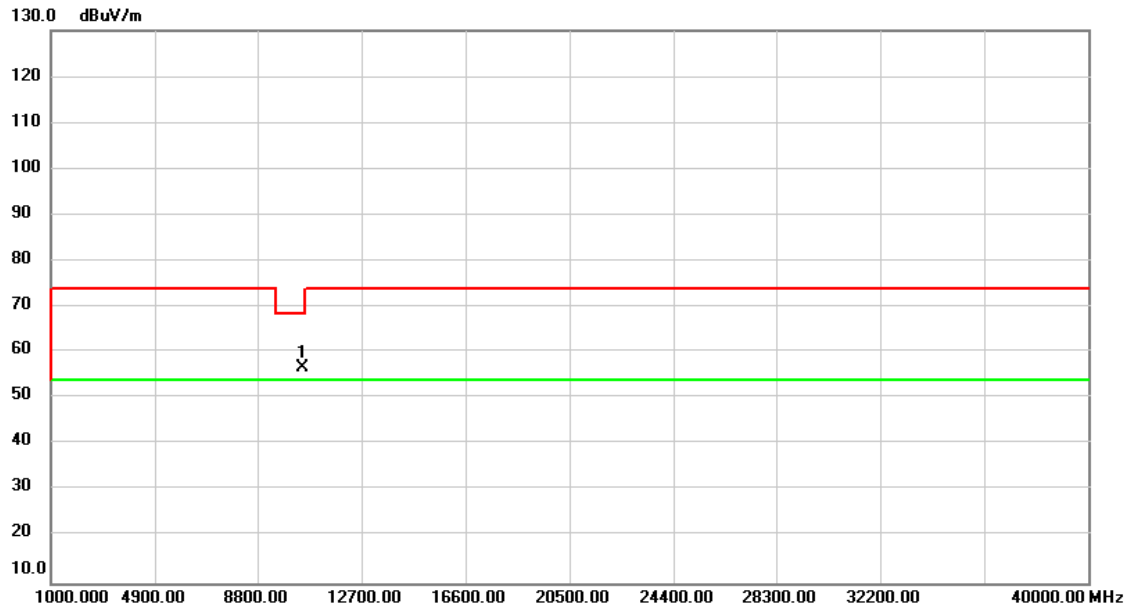


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   | *   | 10400.00 | 53.22         | 2.89           | 56.11       | 68.20  | -12.09 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |           |
|--------------|---------------------------------|--------------|-----------|
| Test Mode    | UNII-1_TX n (HT20) Mode 5240MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                          | Polarization | Vertical  |

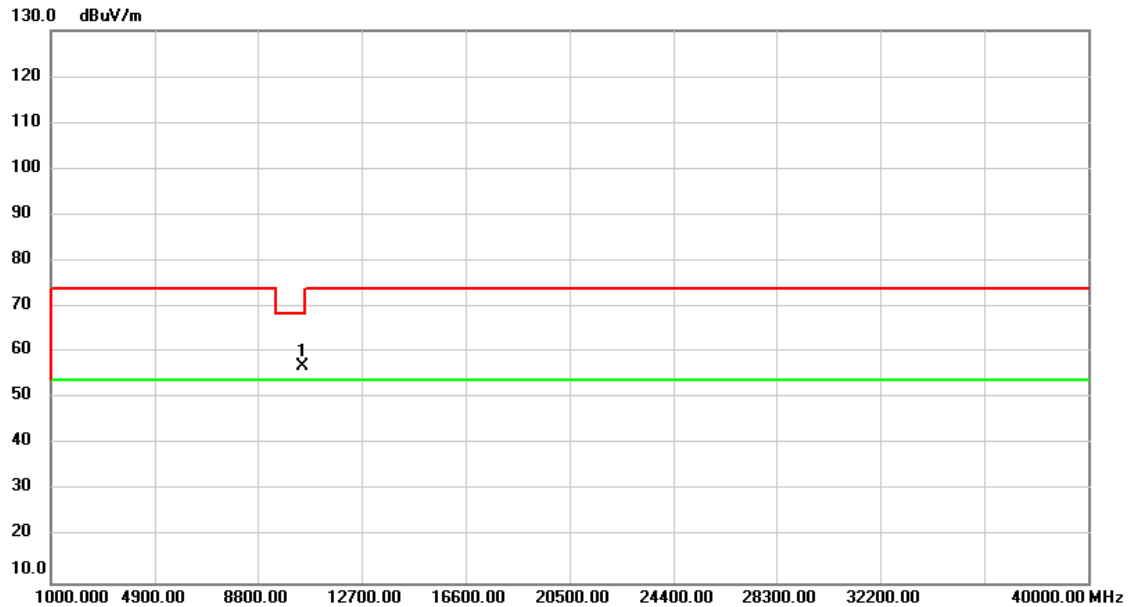


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Margin | Detector | Comment |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     |          |         |
| 1   | *   | 10480.00 | 53.56         | 3.00           | 56.56       | 68.20  | -11.64 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UNII-1_TX n (HT20) Mode 5240MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

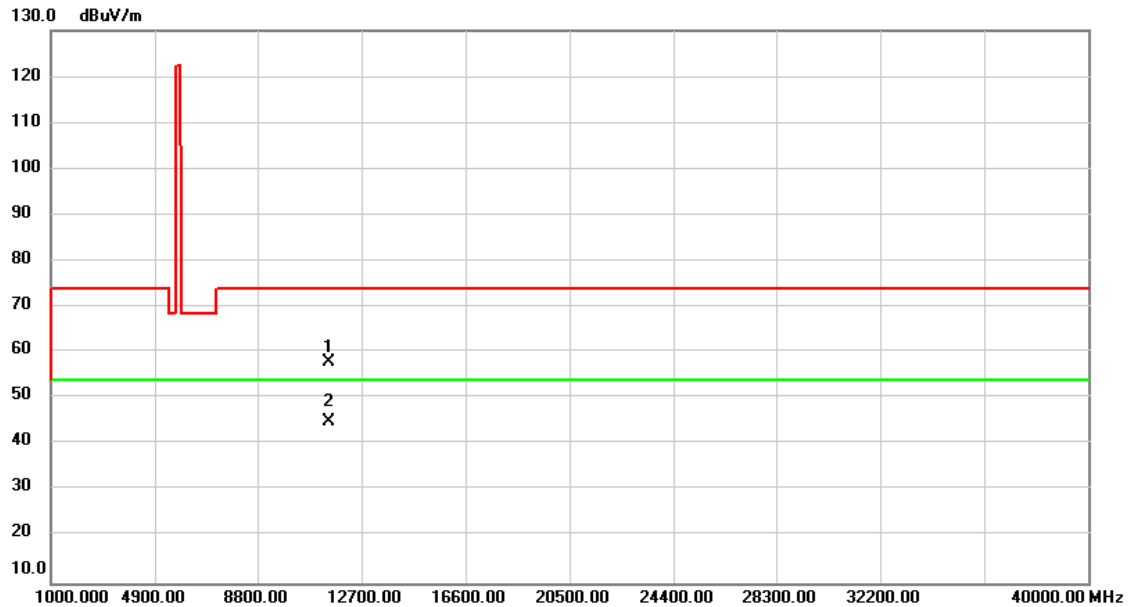


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   | *   | 10480.00     | 53.92                    | 3.00                    | 56.92                      | 68.20           | -11.28       | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |           |
|--------------|---------------------------------|--------------|-----------|
| Test Mode    | UNII-3_TX n (HT20) Mode 5745MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                          | Polarization | Vertical  |

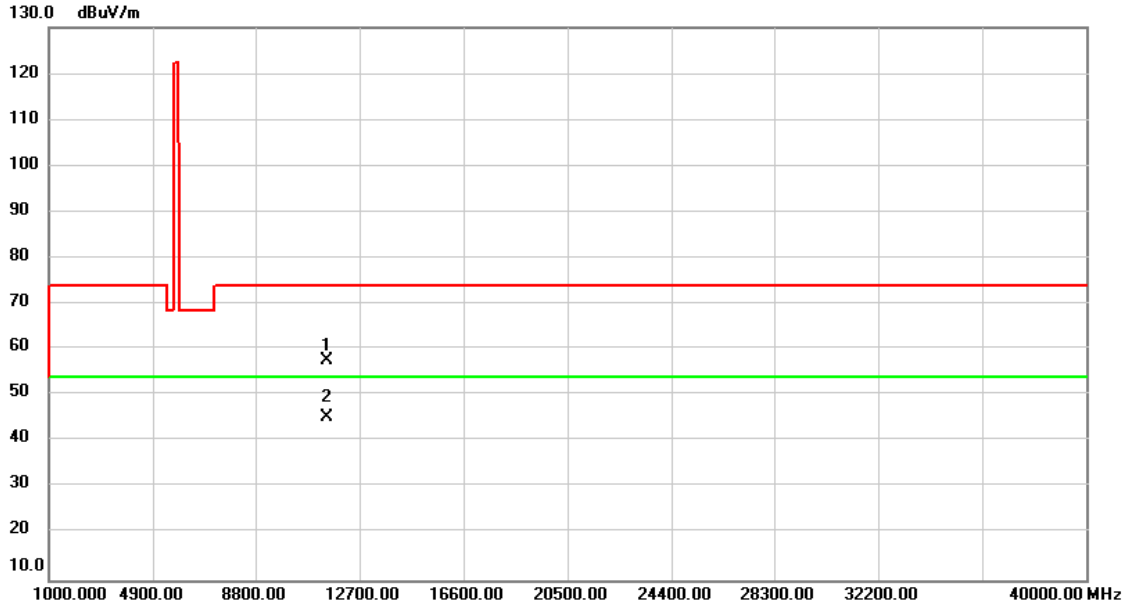


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11490.00     | 53.94                    | 3.89                    | 57.83                      | 74.00           | -16.17       | peak     |         |
| 2   | *   | 11490.00     | 41.19                    | 3.89                    | 45.08                      | 54.00           | -8.92        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UNII-3_TX n (HT20) Mode 5745MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

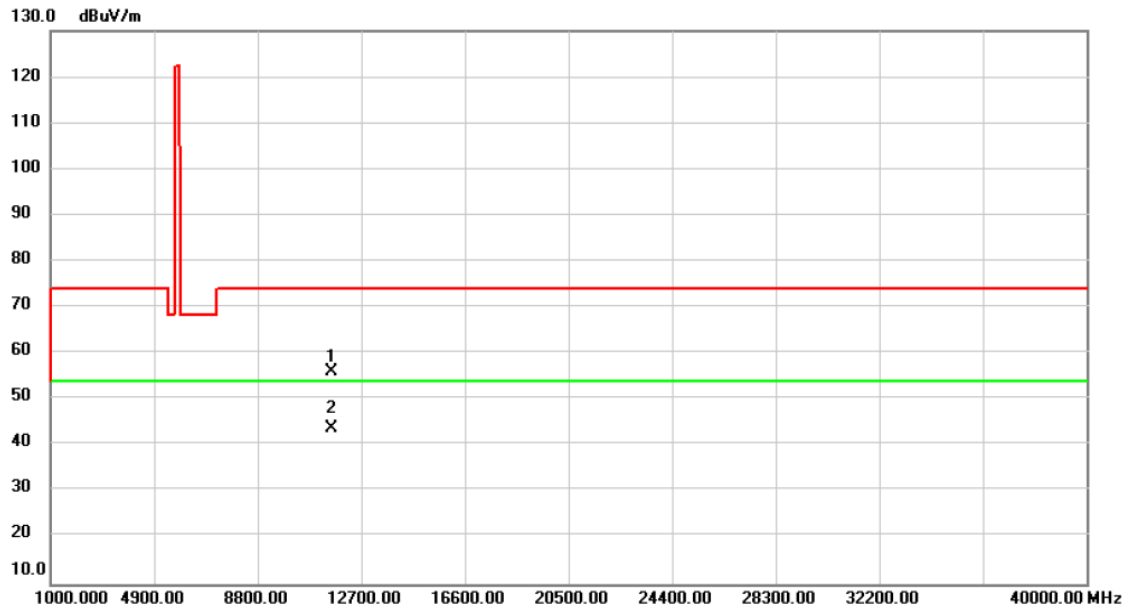


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11490.00     | 53.76                    | 3.89                    | 57.65                      | 74.00           | -16.35       | peak     |         |
| 2   | *   | 11490.00     | 41.47                    | 3.89                    | 45.36                      | 54.00           | -8.64        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |          |
|--------------|---------------------------------|--------------|----------|
| Test Mode    | UNII-3_TX n (HT20) Mode 5785MHz | Tested Date  | 2020/1/5 |
| Test Voltage | DC 48V                          | Polarization | Vertical |

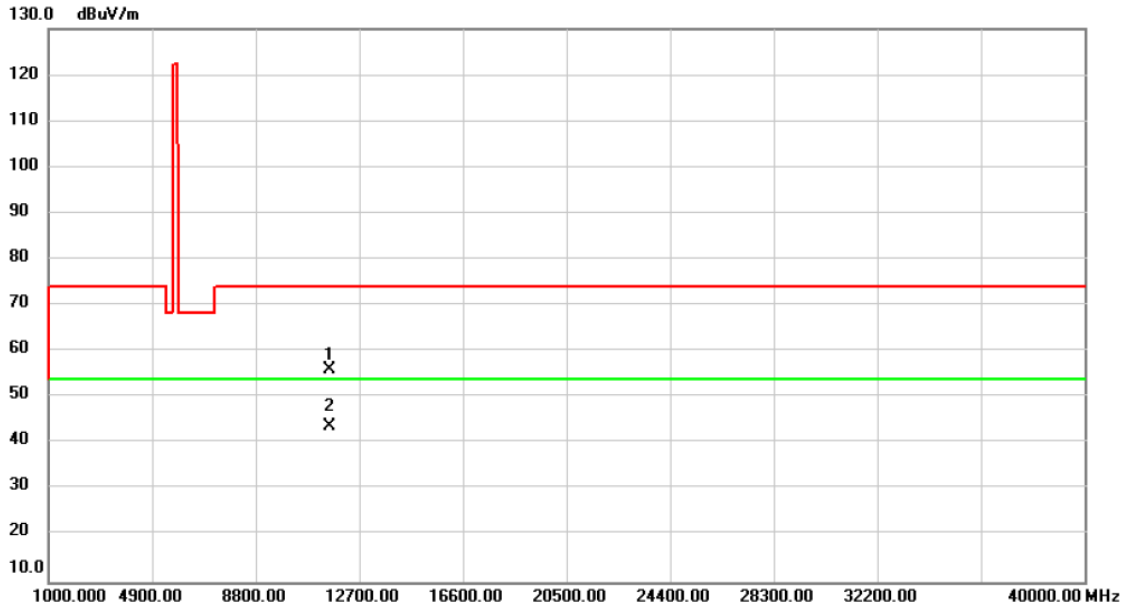


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|----------|---------|
| 1   |     | 11570.00     | 52.52                    | 3.57                    | 56.09                      | 74.00           | -17.91     | peak     |         |
| 2   | *   | 11570.00     | 40.13                    | 3.57                    | 43.70                      | 54.00           | -10.30     | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UNII-3_TX n (HT20) Mode 5785MHz | Tested Date  | 2020/1/5   |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

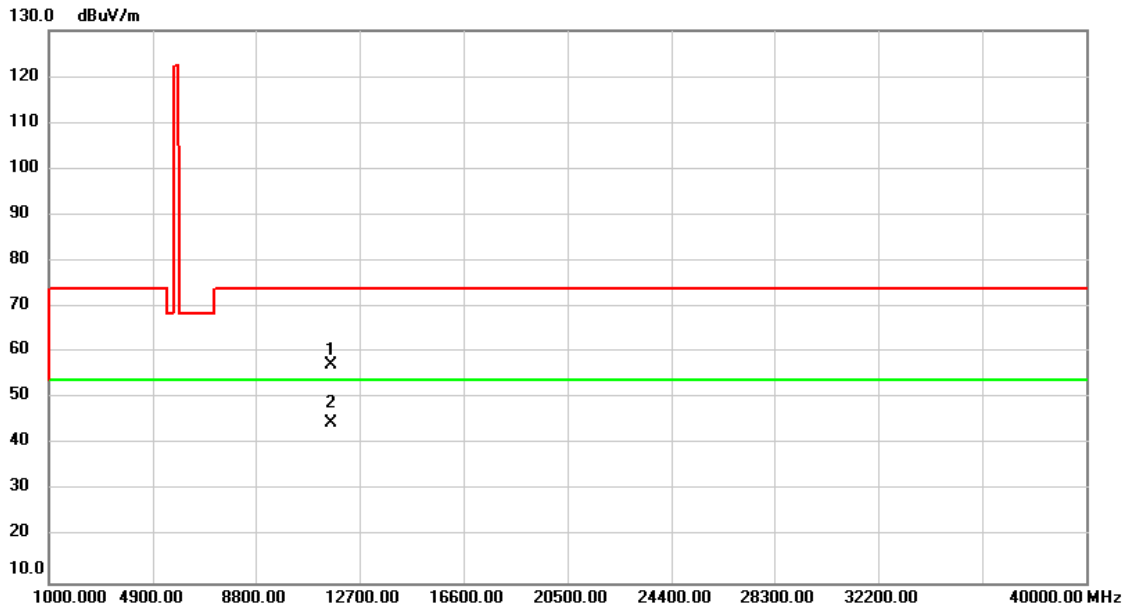


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|----------|---------|
| 1   |     | 11570.00     | 52.45                    | 3.57                    | 56.02                      | 74.00           | -17.98     | peak     |         |
| 2   | *   | 11570.00     | 40.07                    | 3.57                    | 43.64                      | 54.00           | -10.36     | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |           |
|--------------|---------------------------------|--------------|-----------|
| Test Mode    | UNII-3_TX n (HT20) Mode 5825MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                          | Polarization | Vertical  |

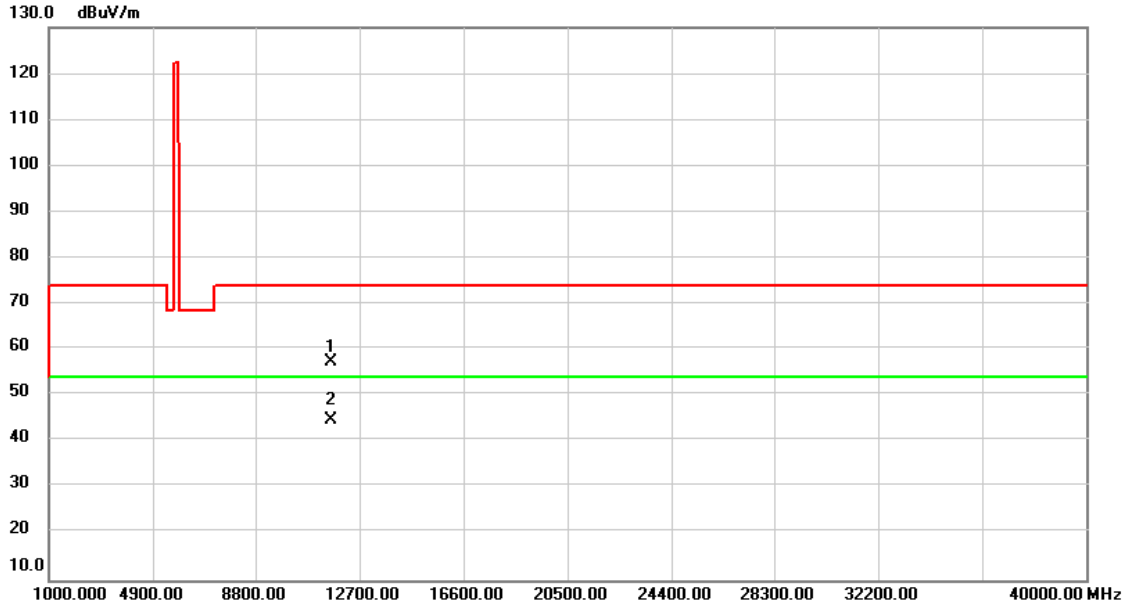


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11650.00     | 54.08                    | 3.18                    | 57.26                      | 74.00           | -16.74       | peak     |         |
| 2   | *   | 11650.00     | 41.53                    | 3.18                    | 44.71                      | 54.00           | -9.29        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UNII-3_TX n (HT20) Mode 5825MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

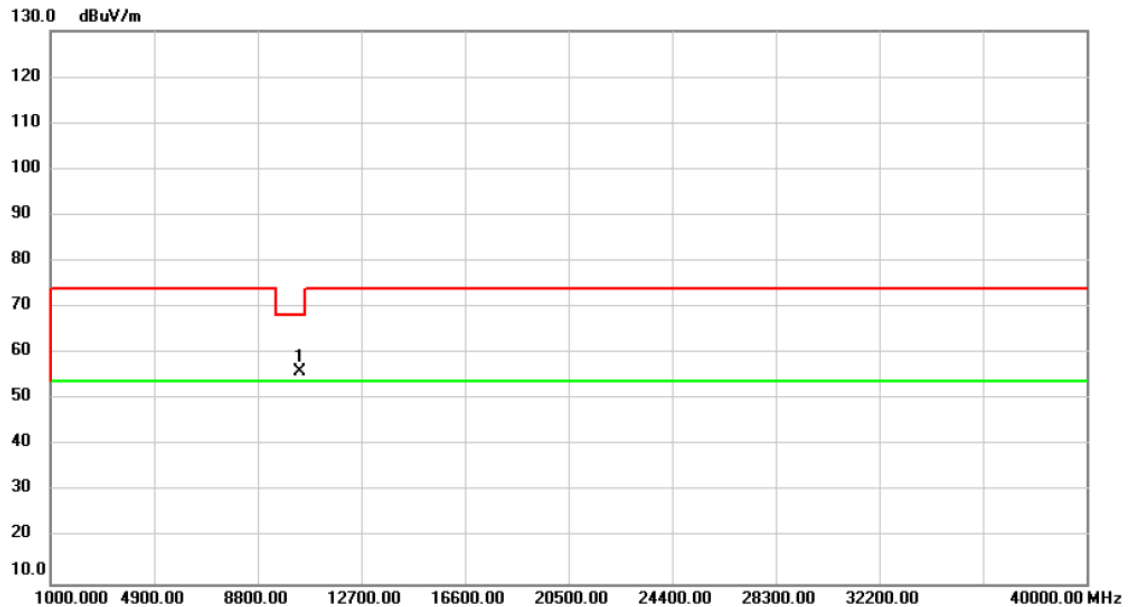


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11650.00     | 54.10                    | 3.18                    | 57.28                      | 74.00           | -16.72       | peak     |         |
| 2   | *   | 11650.00     | 41.34                    | 3.18                    | 44.52                      | 54.00           | -9.48        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |          |
|--------------|---------------------------------|--------------|----------|
| Test Mode    | UNII-1_TX n (HT40) Mode 5190MHz | Tested Date  | 2020/1/5 |
| Test Voltage | DC 48V                          | Polarization | Vertical |

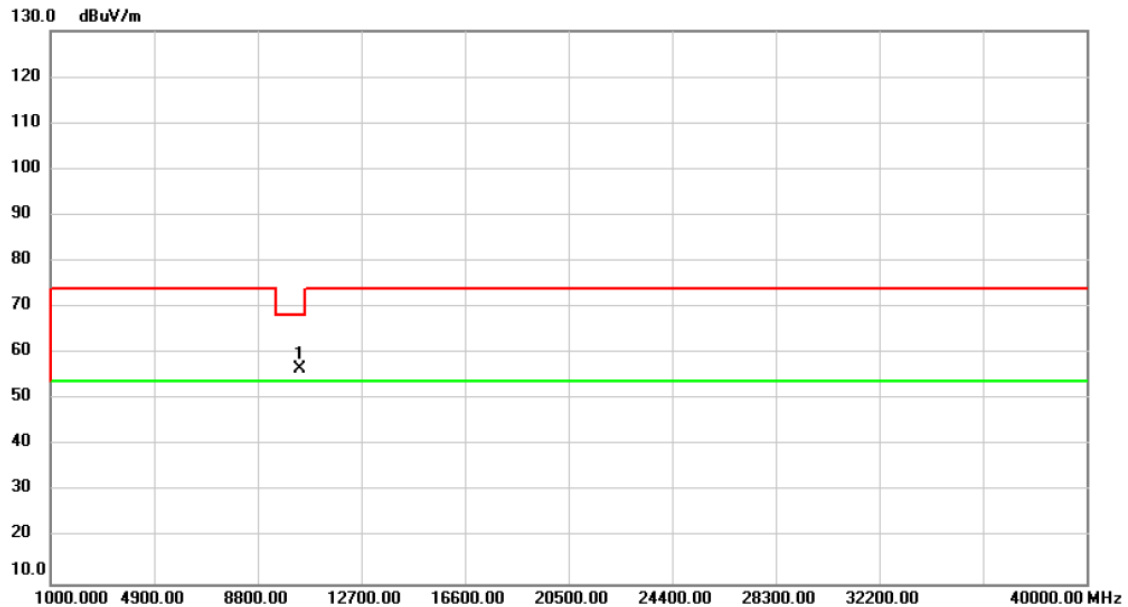


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   | *   | 10380.00 | 53.19         | 2.85           | 56.04       | 68.20  | -12.16 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UNII-1_TX n (HT40) Mode 5190MHz | Tested Date  | 2020/1/5   |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

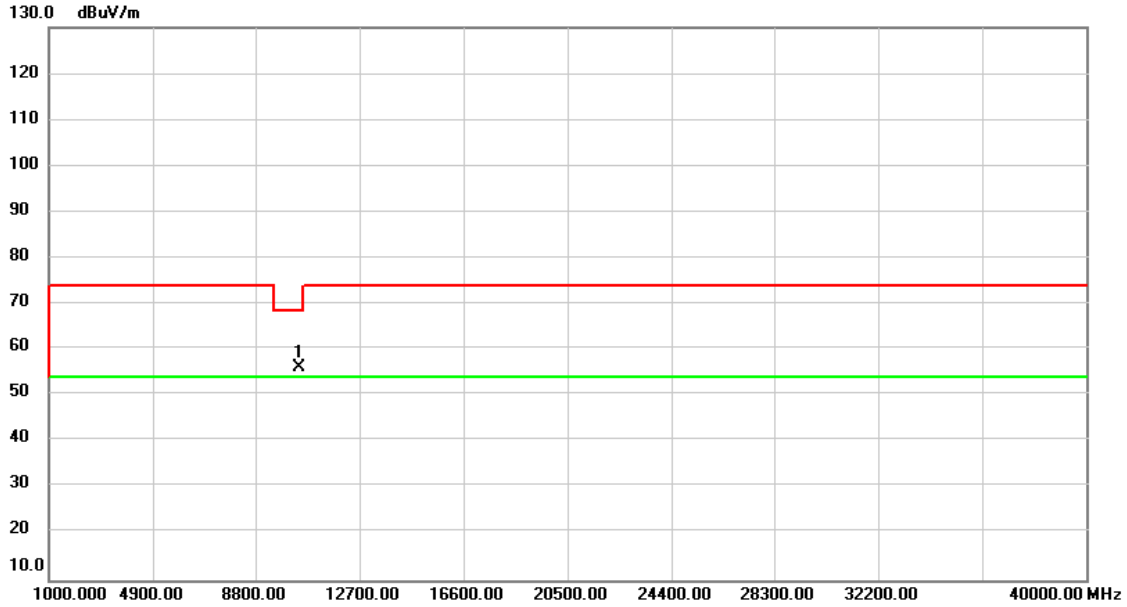


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   |          |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector | Comment |
| 1   | *   | 10380.00 | 53.66         | 2.85           | 56.51       | 68.20  | -11.69 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |           |
|--------------|---------------------------------|--------------|-----------|
| Test Mode    | UNII-1_TX n (HT40) Mode 5230MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                          | Polarization | Vertical  |

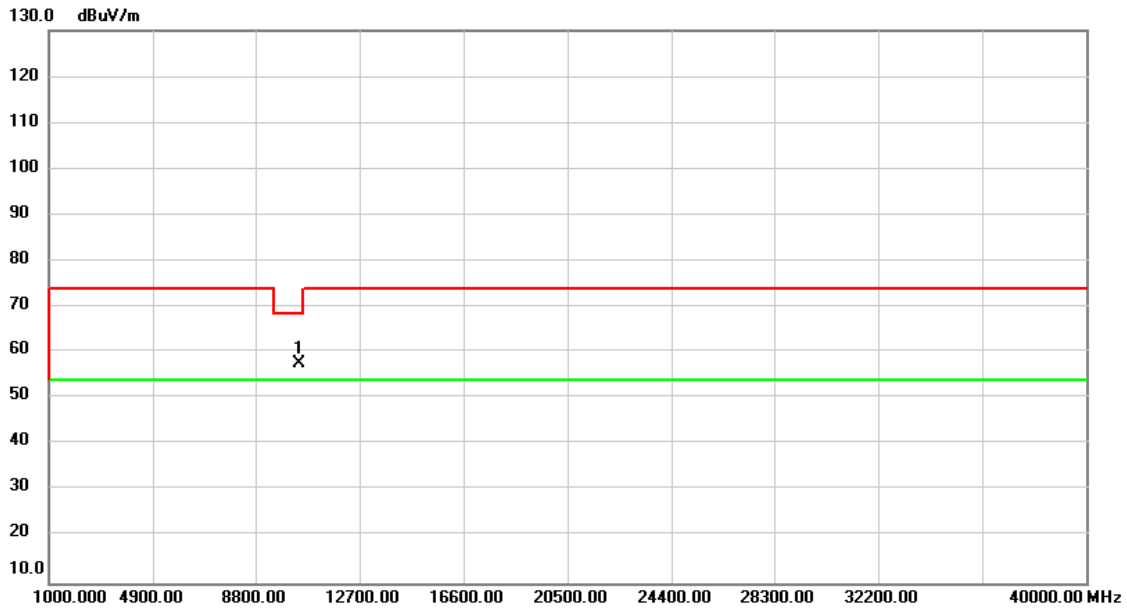


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measure-ment | Limit  | Margin | Detector | Comment |
|-----|-----|----------|---------------|----------------|--------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m       | dBuV/m | dB     |          |         |
| 1   | *   | 10460.00 | 53.04         | 2.98           | 56.02        | 68.20  | -12.18 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UNII-1_TX n (HT40) Mode 5230MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

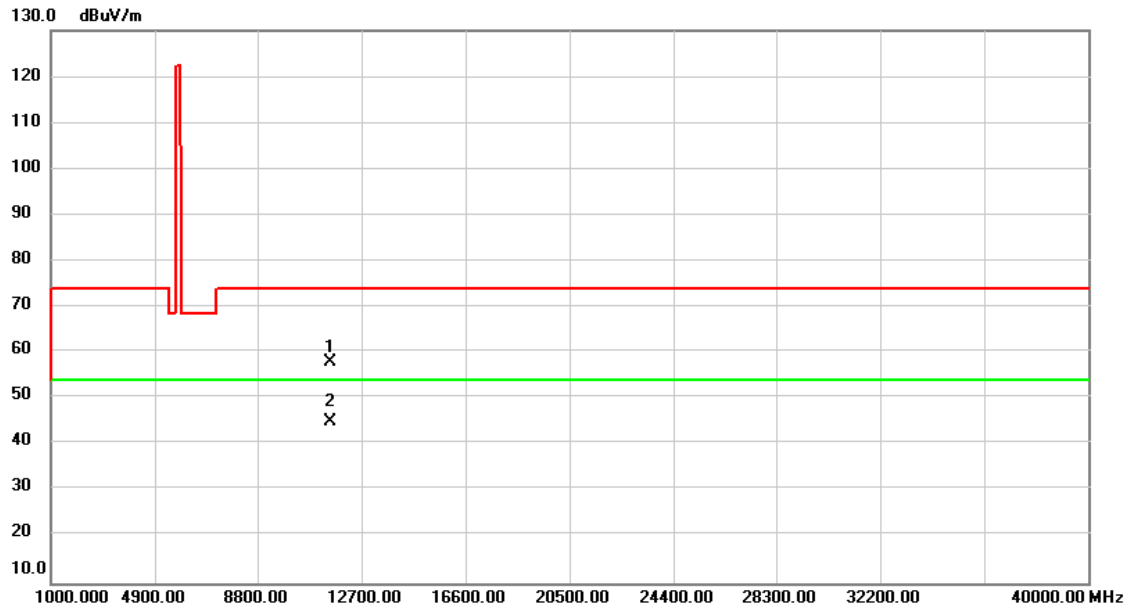


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Margin | Detector | Comment |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     |          |         |
| 1   | *   | 10460.00 | 54.68         | 2.98           | 57.66       | 68.20  | -10.54 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |           |
|--------------|---------------------------------|--------------|-----------|
| Test Mode    | UNII-3_TX n (HT40) Mode 5755MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                          | Polarization | Vertical  |

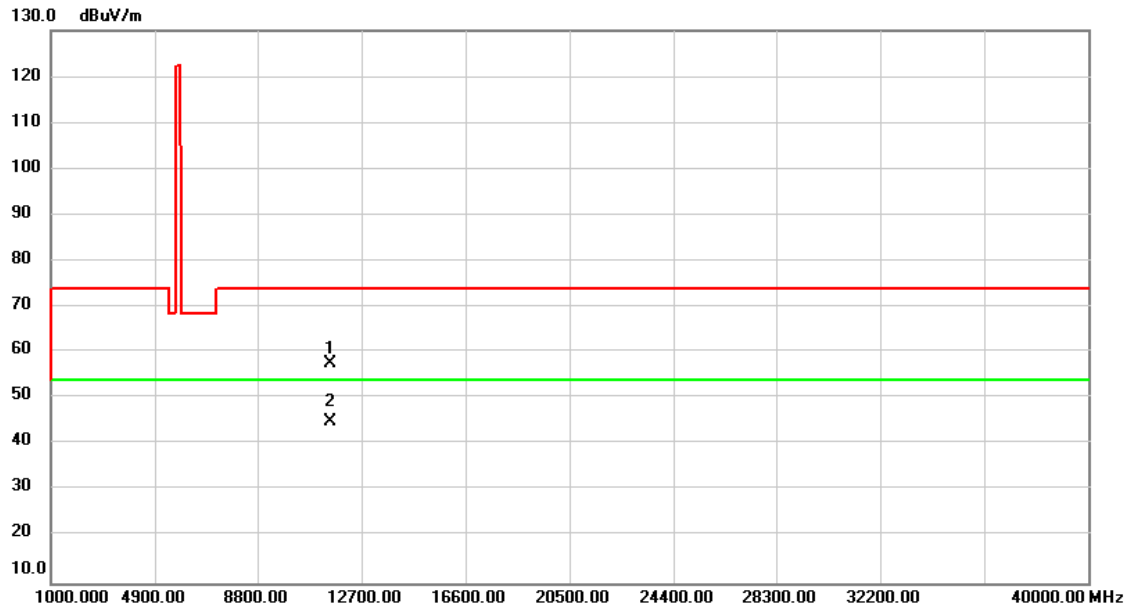


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11510.00     | 54.05                    | 3.86                    | 57.91                      | 74.00           | -16.09       | peak     |         |
| 2   | *   | 11510.00     | 41.16                    | 3.86                    | 45.02                      | 54.00           | -8.98        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UNII-3_TX n (HT40) Mode 5755MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

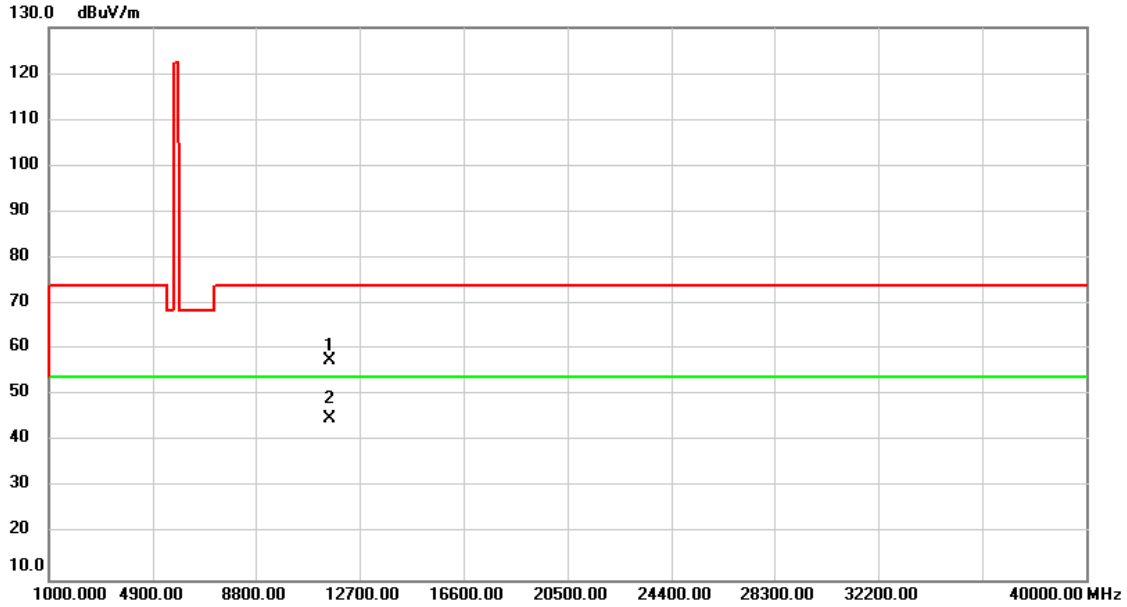


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11510.00     | 53.58                    | 3.86                    | 57.44                      | 74.00           | -16.56       | peak     |         |
| 2   | *   | 11510.00     | 41.19                    | 3.86                    | 45.05                      | 54.00           | -8.95        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |           |
|--------------|---------------------------------|--------------|-----------|
| Test Mode    | UNII-3_TX n (HT40) Mode 5795MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                          | Polarization | Vertical  |

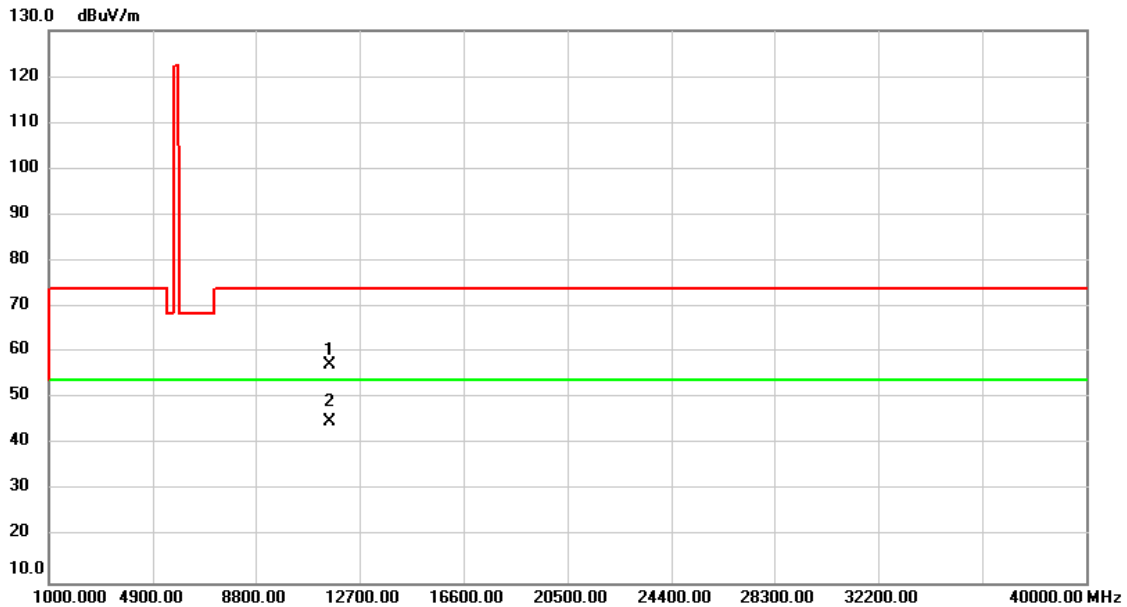


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11590.00     | 54.19                    | 3.47                    | 57.66                      | 74.00           | -16.34       | peak     |         |
| 2   | *   | 11590.00     | 41.49                    | 3.47                    | 44.96                      | 54.00           | -9.04        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                 |              |            |
|--------------|---------------------------------|--------------|------------|
| Test Mode    | UNII-3_TX n (HT40) Mode 5795MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                          | Polarization | Horizontal |

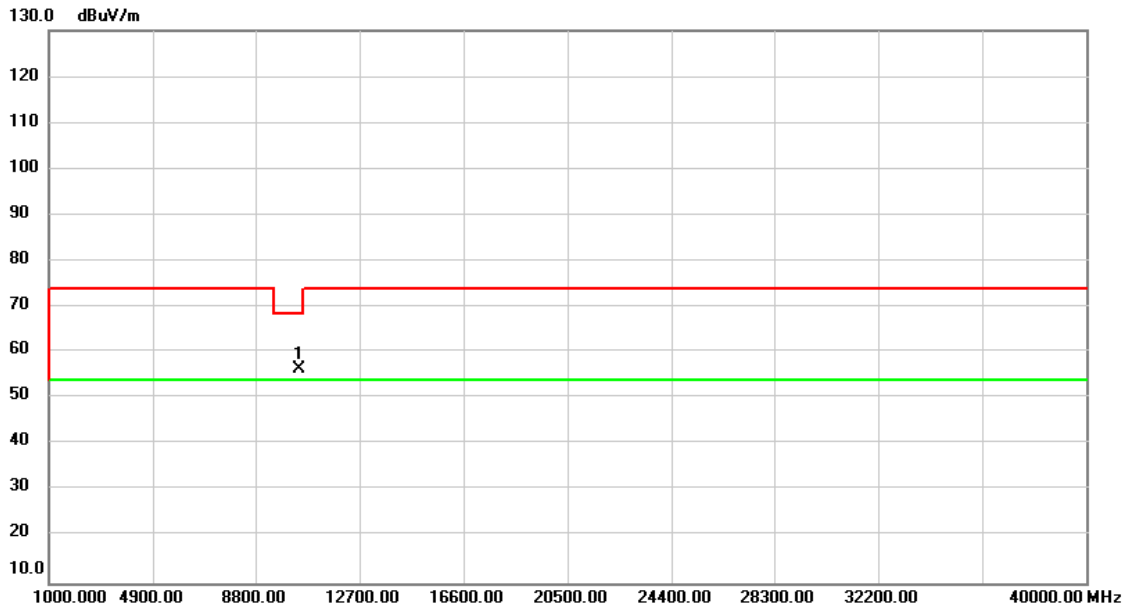


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11590.00     | 53.71                    | 3.47                    | 57.18                      | 74.00           | -16.82       | peak     |         |
| 2   | *   | 11590.00     | 41.58                    | 3.47                    | 45.05                      | 54.00           | -8.95        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                   |              |           |
|--------------|-----------------------------------|--------------|-----------|
| Test Mode    | UNII-1_TX ac (VHT80) Mode 5210MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                            | Polarization | Vertical  |

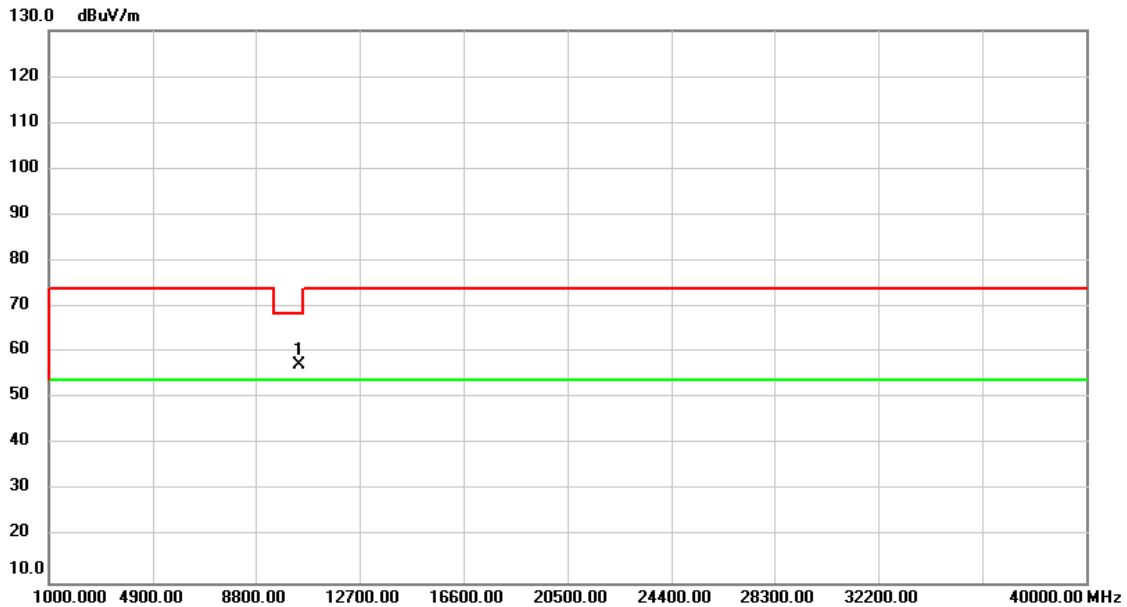


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   | *   | 10420.00     | 53.55                    | 2.91                    | 56.46                      | 68.20           | -11.74       | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                   |              |            |
|--------------|-----------------------------------|--------------|------------|
| Test Mode    | UNII-1_TX ac (VHT80) Mode 5210MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                            | Polarization | Horizontal |

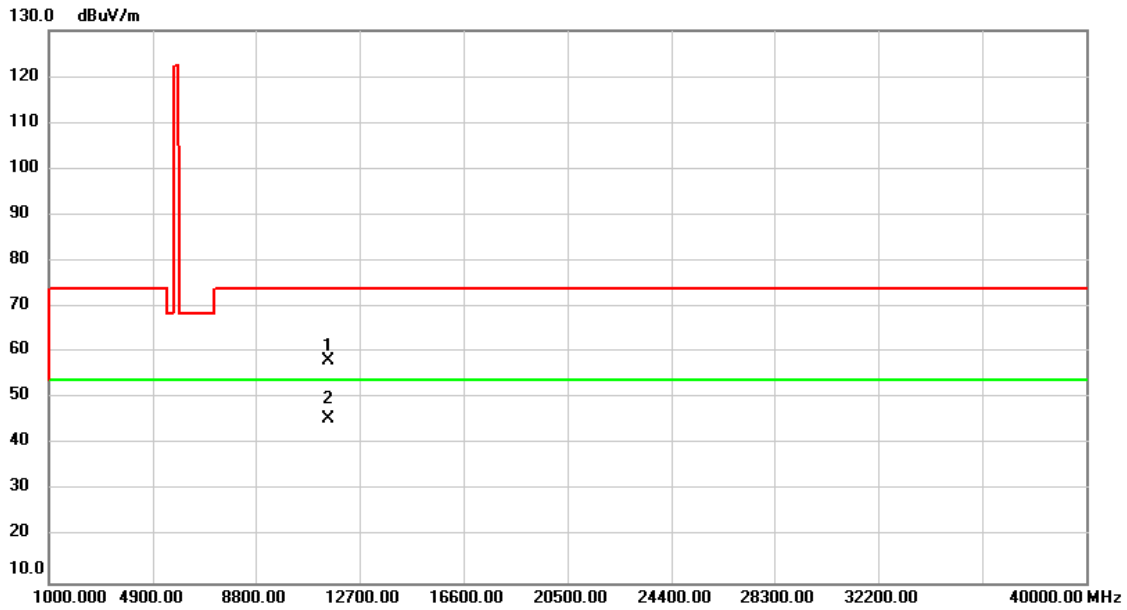


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Margin | Detector | Comment |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     |          |         |
| 1   | *   | 10420.00 | 54.22         | 2.91           | 57.13       | 68.20  | -11.07 | peak     |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                   |              |           |
|--------------|-----------------------------------|--------------|-----------|
| Test Mode    | UNII-3_TX ac (VHT80) Mode 5775MHz | Tested Date  | 2019/12/6 |
| Test Voltage | DC 48V                            | Polarization | Vertical  |

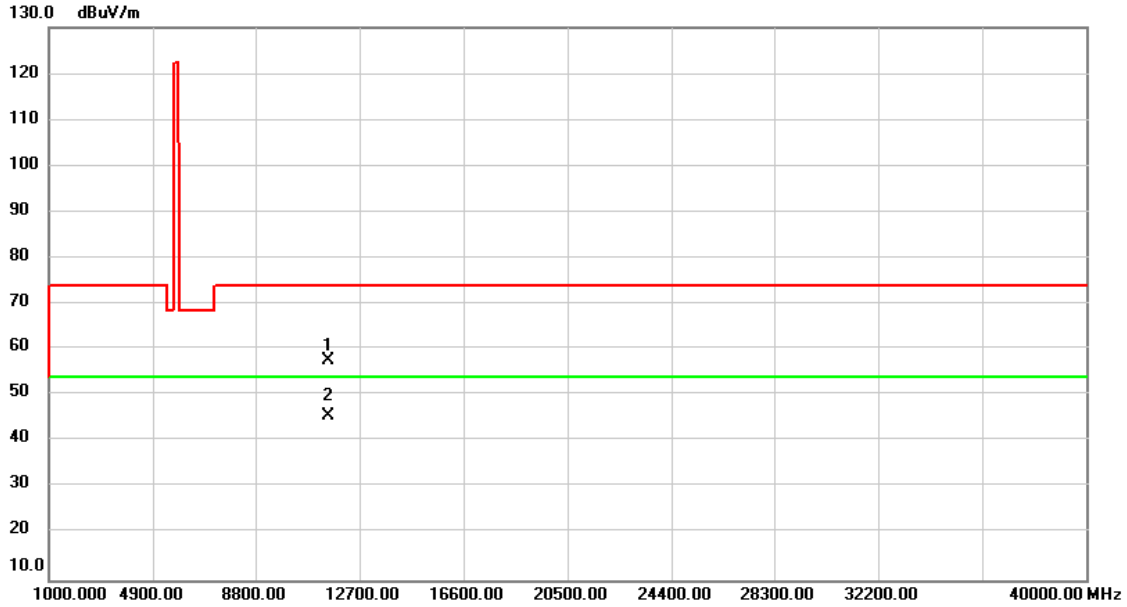


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11550.00     | 54.37                    | 3.67                    | 58.04                      | 74.00           | -15.96       | peak     |         |
| 2   | *   | 11550.00     | 41.78                    | 3.67                    | 45.45                      | 54.00           | -8.55        | AVG      |         |

## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

|              |                                   |              |            |
|--------------|-----------------------------------|--------------|------------|
| Test Mode    | UNII-3_TX ac (VHT80) Mode 5775MHz | Tested Date  | 2019/12/6  |
| Test Voltage | DC 48V                            | Polarization | Horizontal |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 11550.00     | 53.92                    | 3.67                    | 57.59                      | 74.00           | -16.41       | peak     |         |
| 2   | *   | 11550.00     | 41.88                    | 3.67                    | 45.55                      | 54.00           | -8.45        | AVG      |         |

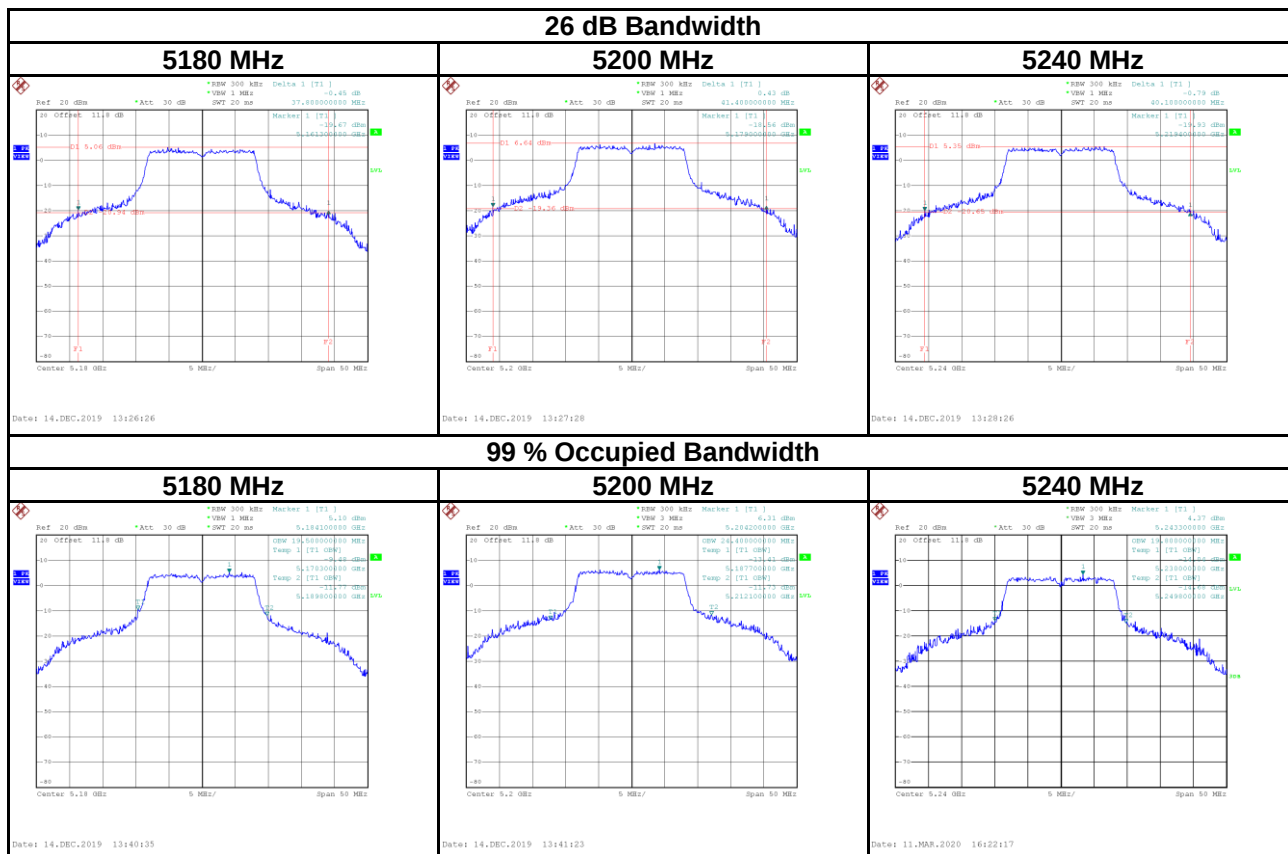
## REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

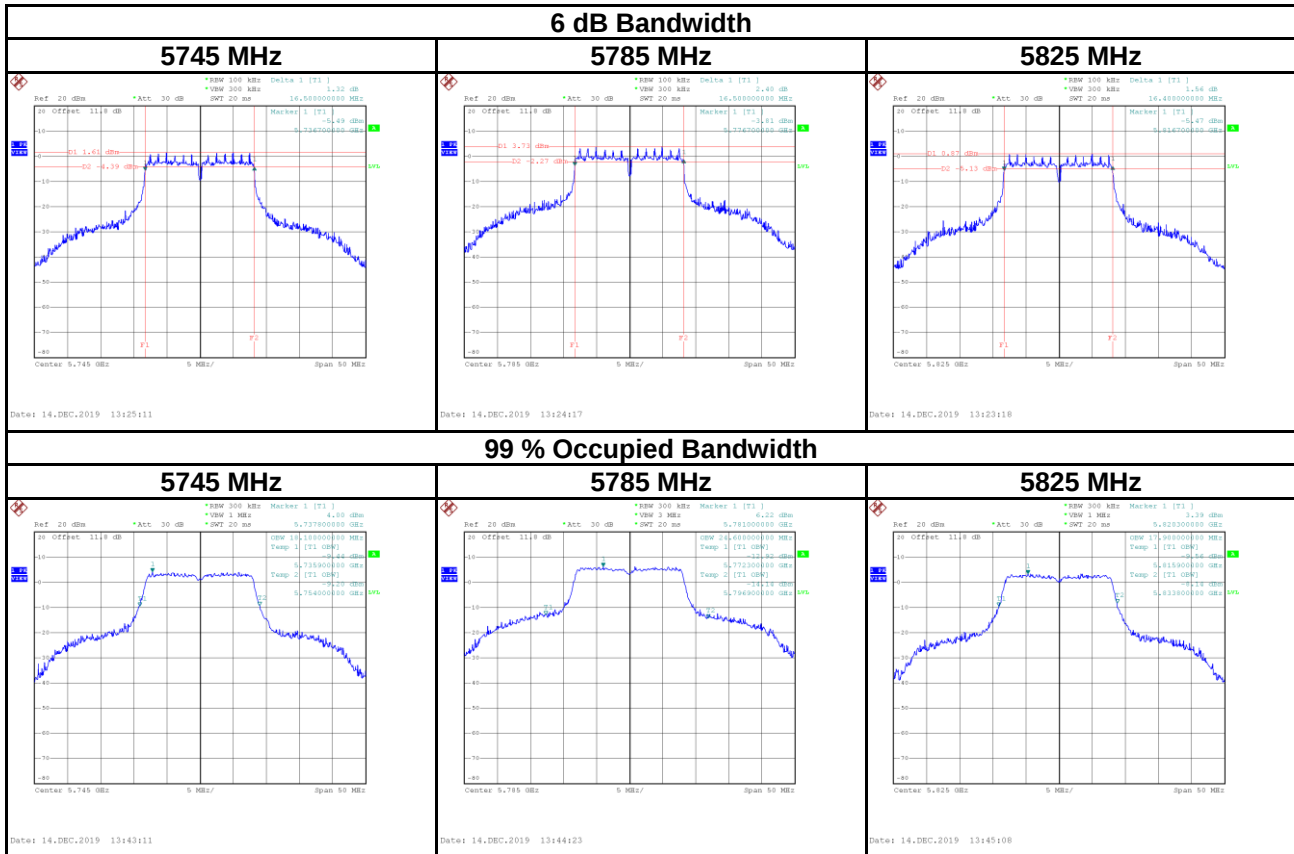
## APPENDIX D BANDWIDTH

|              |              |
|--------------|--------------|
| Test Mode    | IEEE 802.11a |
| Test Voltage | DC 48V       |

| Frequency (MHz) | 26dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) |
|-----------------|----------------------|------------------------------|
| 5180            | 37.80                | 19.50                        |
| 5200            | 41.40                | 24.40                        |
| 5240            | 40.10                | 19.80                        |

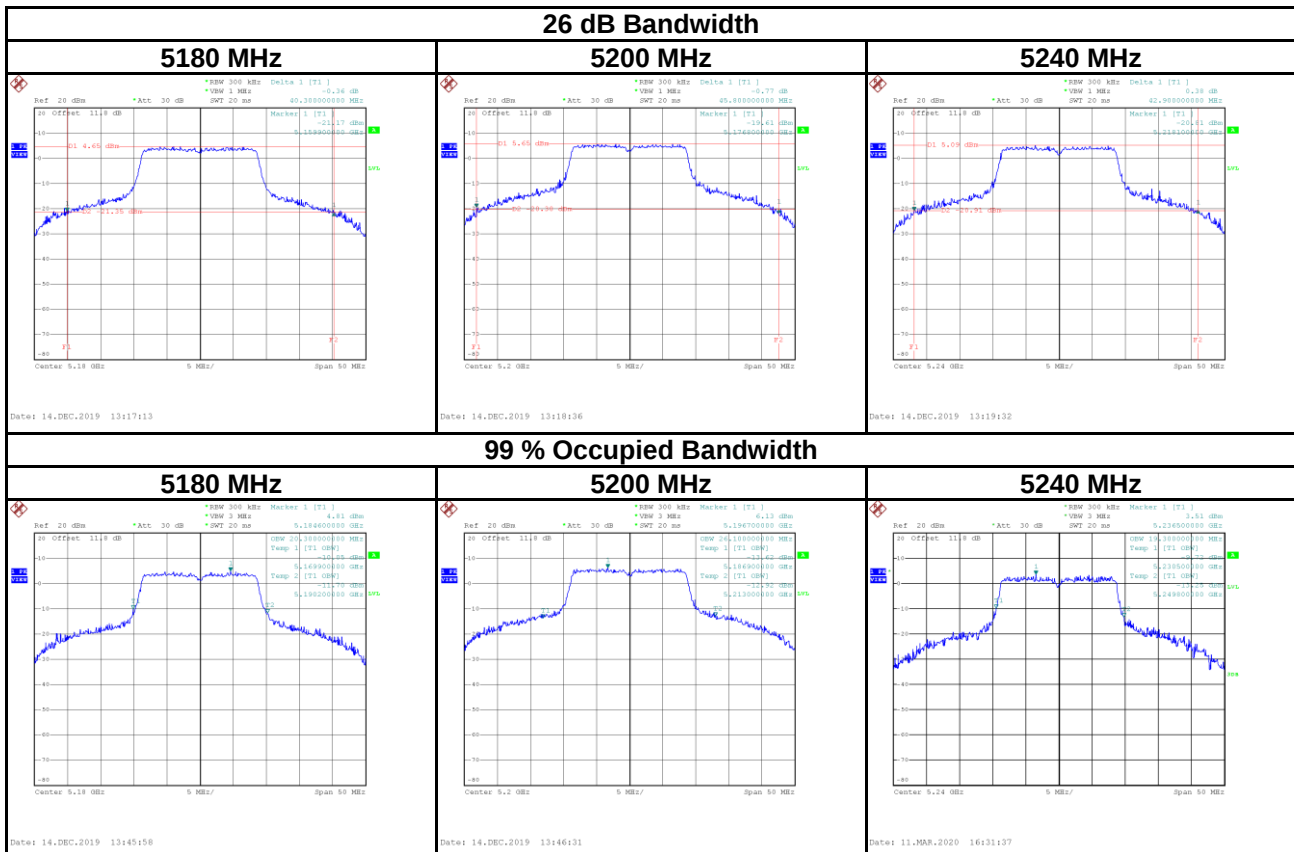


| Frequency (MHz) | 6dB Bandwidth (MHz) | 99 % Occupied Bandwidth (MHz) | 6 dB Bandwidth Limit (kHz) | Result   |
|-----------------|---------------------|-------------------------------|----------------------------|----------|
| 5745            | 16.50               | 18.10                         | 500                        | Complies |
| 5785            | 16.50               | 24.60                         | 500                        | Complies |
| 5825            | 16.40               | 17.90                         | 500                        | Complies |



|              |                     |
|--------------|---------------------|
| Test Mode    | IEEE 802.11n (HT20) |
| Test Voltage | DC 48V              |

| Frequency (MHz) | 26dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) |
|-----------------|----------------------|------------------------------|
| 5180            | 40.30                | 20.30                        |
| 5200            | 45.80                | 26.10                        |
| 5240            | 42.90                | 19.30                        |



| Frequency (MHz) | 6dB Bandwidth (MHz) | 99 % Occupied Bandwidth (MHz) | 6 dB Bandwidth Limit (kHz) | Result   |
|-----------------|---------------------|-------------------------------|----------------------------|----------|
| 5745            | 17.60               | 18.80                         | 500                        | Complies |
| 5785            | 17.60               | 25.10                         | 500                        | Complies |
| 5825            | 17.50               | 18.90                         | 500                        | Complies |

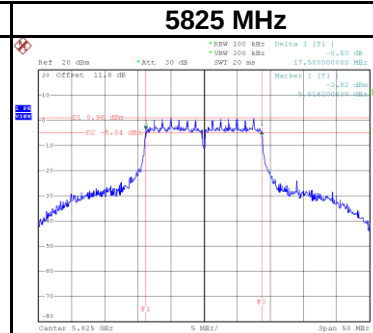
### 6 dB Bandwidth



Date: 14.DEC.2019 13:20:38

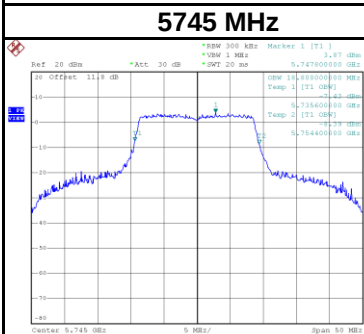


Date: 14.DEC.2019 13:21:36

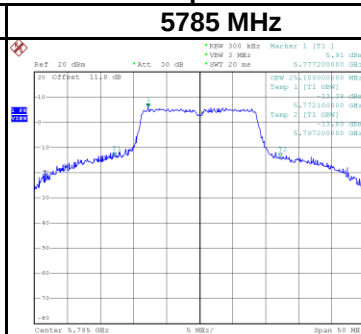


Date: 14.DEC.2019 13:22:32

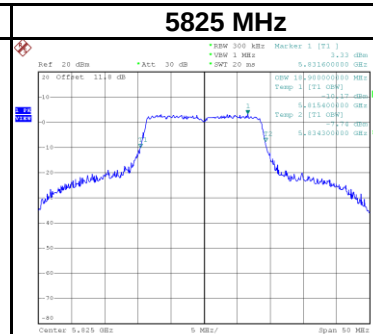
### 99 % Occupied Bandwidth



Date: 14.DEC.2019 13:47:53



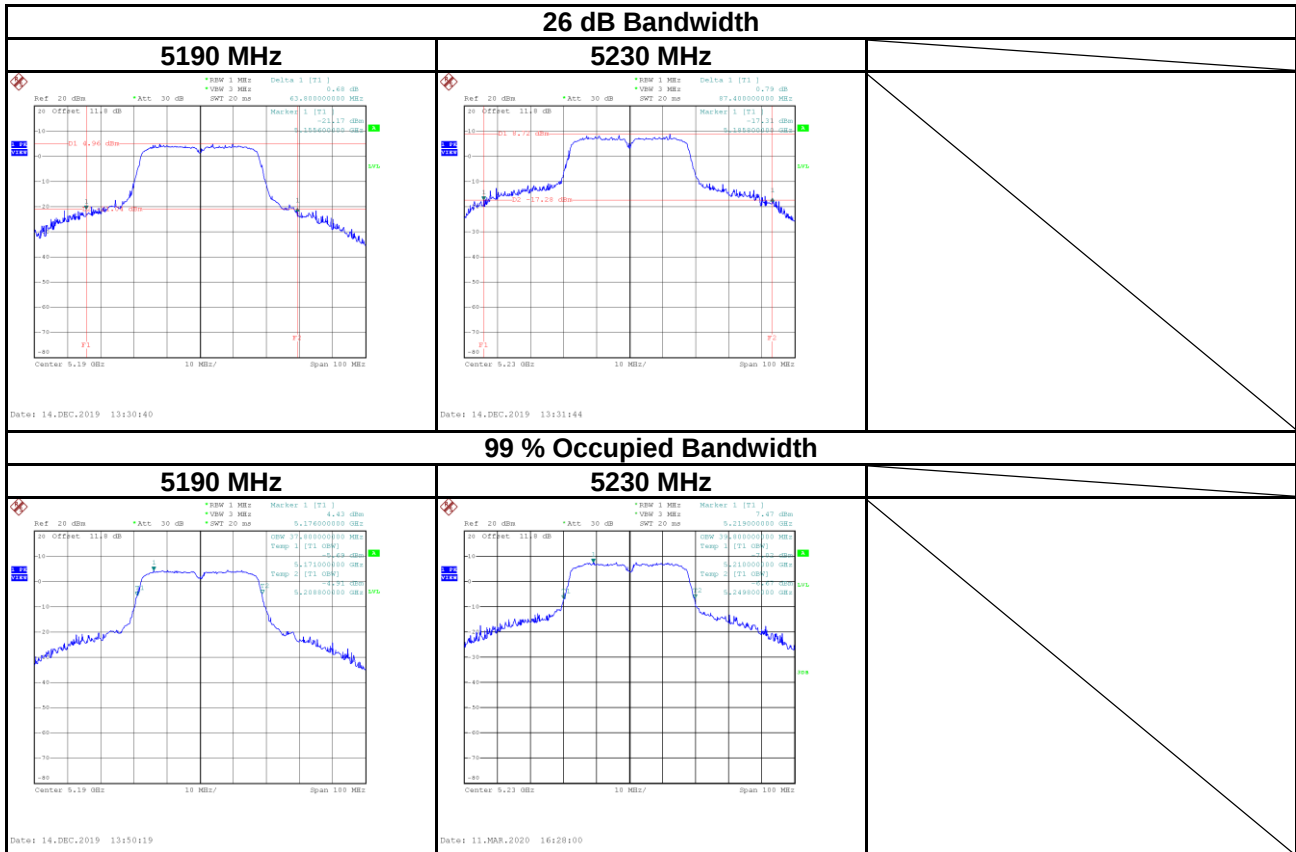
Date: 14.DEC.2019 13:48:27



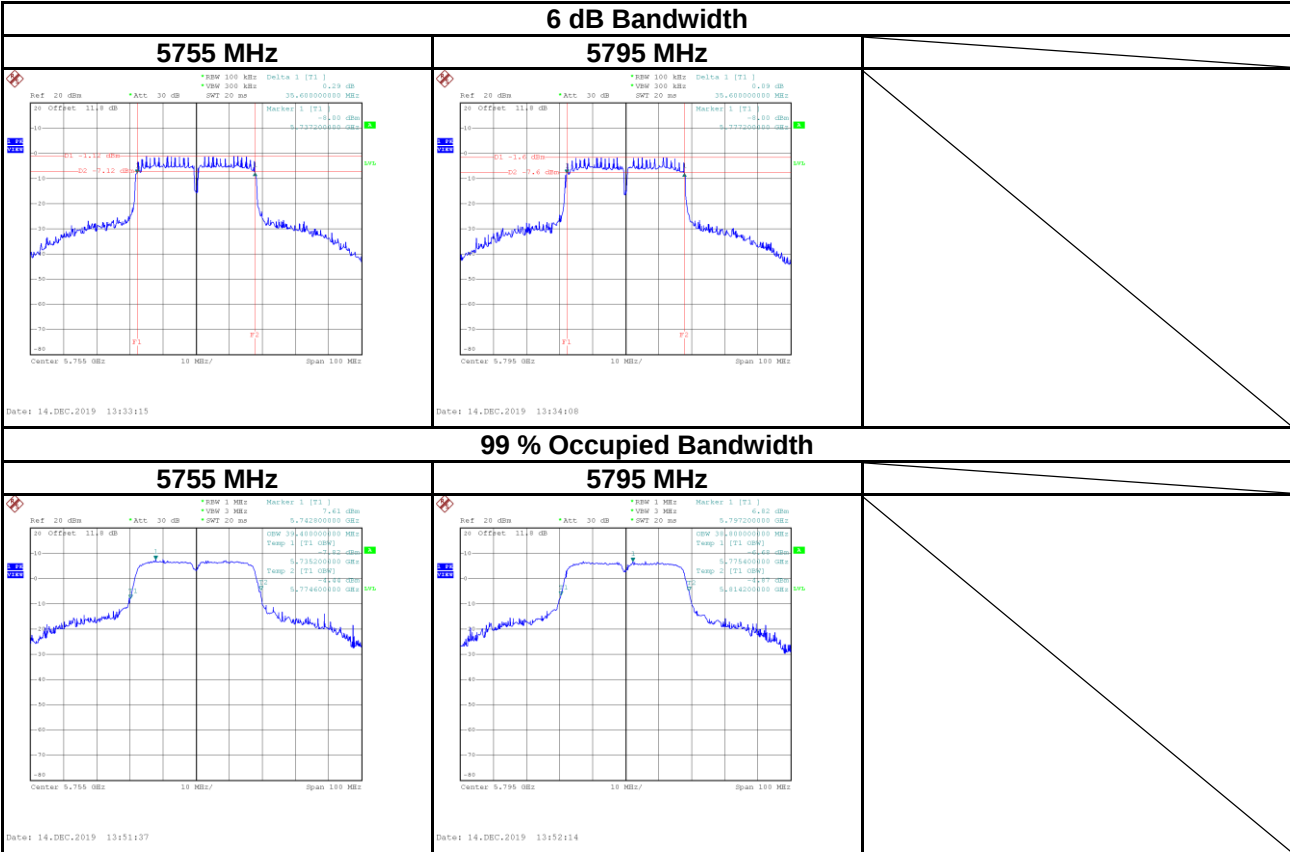
Date: 14.DEC.2019 13:49:06

|              |                     |
|--------------|---------------------|
| Test Mode    | IEEE 802.11n (HT40) |
| Test Voltage | DC 48V              |

| Frequency (MHz) | 26dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) |
|-----------------|----------------------|------------------------------|
| 5190            | 63.80                | 37.80                        |
| 5230            | 87.40                | 39.80                        |

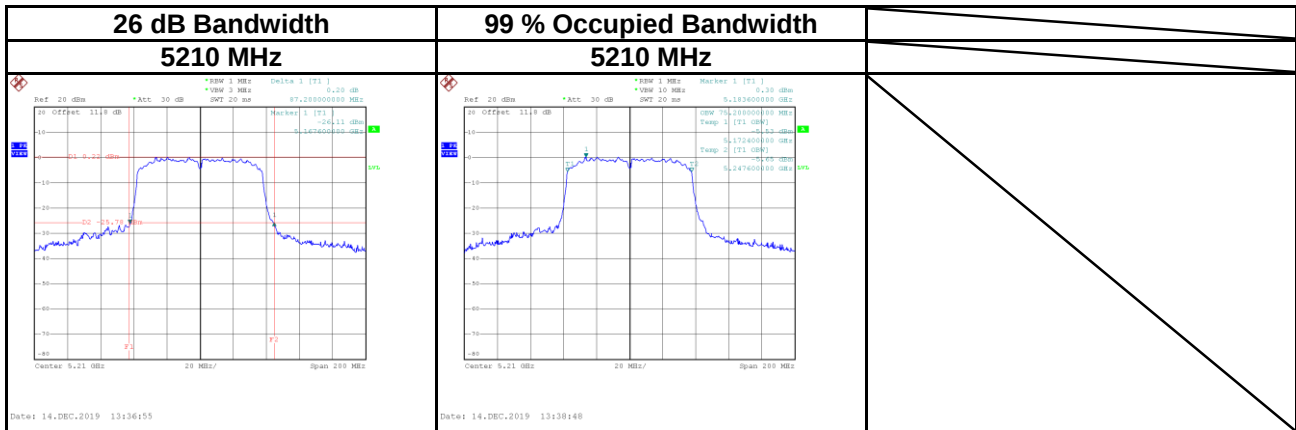


| Frequency (MHz) | 6dB Bandwidth (MHz) | 99 % Occupied Bandwidth (MHz) | 6 dB Bandwidth Limit (kHz) | Result   |
|-----------------|---------------------|-------------------------------|----------------------------|----------|
| 5755            | 35.60               | 39.40                         | 500                        | Complies |
| 5795            | 35.60               | 38.80                         | 500                        | Complies |

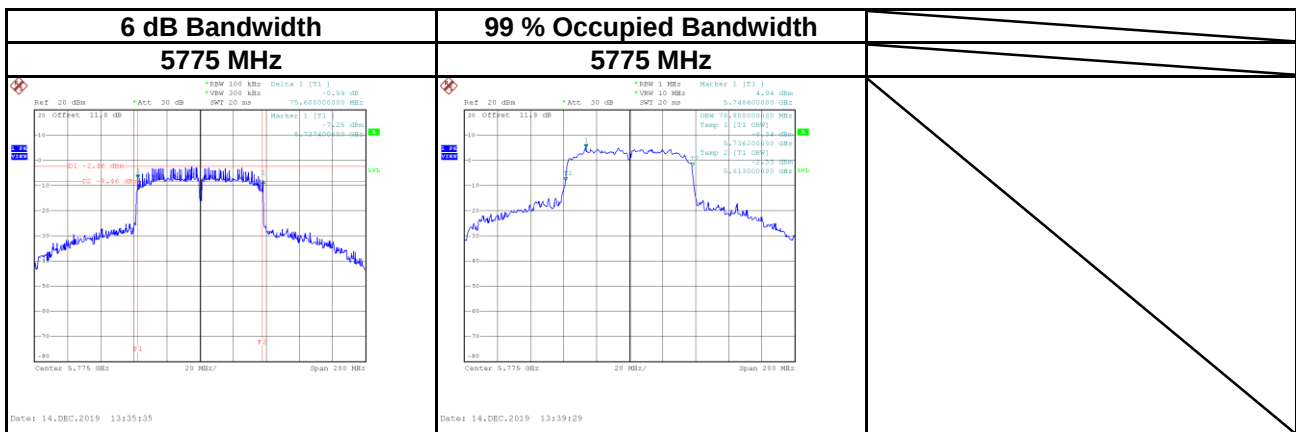


|              |                       |
|--------------|-----------------------|
| Test Mode    | IEEE 802.11ac (VHT80) |
| Test Voltage | DC 48V                |

| Frequency (MHz) | 26dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) |
|-----------------|----------------------|------------------------------|
| 5210            | 87.20                | 75.20                        |



| Frequency (MHz) | 6dB Bandwidth (MHz) | 99 % Occupied Bandwidth (MHz) | 6 dB Bandwidth Limit (kHz) | Result   |
|-----------------|---------------------|-------------------------------|----------------------------|----------|
| 5775            | 75.60               | 76.80                         | 500                        | Complies |



## **APPENDIX E    CONDUCTED OUTPUT POWER**

|              |              |             |            |
|--------------|--------------|-------------|------------|
| Test Mode    | IEEE 802.11a | Tested Date | 2019/12/13 |
| Test Voltage | DC 48V       |             |            |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5180            | 12.84                 | 0.0192              | 24.00            | 0.250          | Complies |
| 5200            | 13.54                 | 0.0226              | 24.00            | 0.250          | Complies |
| 5240            | 13.84                 | 0.0242              | 24.00            | 0.250          | Complies |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5745            | 19.51                 | 0.0893              | 30.00            | 1.0000         | Complies |
| 5785            | 19.32                 | 0.0855              | 30.00            | 1.0000         | Complies |
| 5825            | 19.02                 | 0.0798              | 30.00            | 1.0000         | Complies |

|              |                     |             |            |
|--------------|---------------------|-------------|------------|
| Test Mode    | IEEE 802.11n (HT20) | Tested Date | 2019/12/13 |
| Test Voltage | DC 48V              |             |            |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5180            | 12.97                 | 0.0198              | 24.00            | 0.250          | Complies |
| 5200            | 13.57                 | 0.0228              | 24.00            | 0.250          | Complies |
| 5240            | 13.85                 | 0.0243              | 24.00            | 0.250          | Complies |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5745            | 19.11                 | 0.0815              | 30.00            | 1.0000         | Complies |
| 5785            | 19.24                 | 0.0839              | 30.00            | 1.0000         | Complies |
| 5825            | 19.18                 | 0.0828              | 30.00            | 1.0000         | Complies |

|              |                     |             |            |
|--------------|---------------------|-------------|------------|
| Test Mode    | IEEE 802.11n (HT40) | Tested Date | 2019/12/13 |
| Test Voltage | DC 48V              |             |            |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5190            | 8.99                  | 0.0079              | 24.00            | 0.250          | Complies |
| 5230            | 13.79                 | 0.0239              | 24.00            | 0.250          | Complies |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5755            | 19.25                 | 0.0841              | 30.00            | 1.0000         | Complies |
| 5795            | 19.32                 | 0.0855              | 30.00            | 1.0000         | Complies |

|              |                       |             |            |
|--------------|-----------------------|-------------|------------|
| Test Mode    | IEEE 802.11ac (VHT20) | Tested Date | 2019/12/13 |
| Test Voltage | DC 48V                |             |            |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5180            | 12.94                 | 0.0197              | 24.00            | 0.250          | Complies |
| 5200            | 13.52                 | 0.0225              | 24.00            | 0.250          | Complies |
| 5240            | 13.84                 | 0.0242              | 24.00            | 0.250          | Complies |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5745            | 19.08                 | 0.0809              | 30.00            | 1.0000         | Complies |
| 5785            | 19.13                 | 0.0818              | 30.00            | 1.0000         | Complies |
| 5825            | 19.06                 | 0.0805              | 30.00            | 1.0000         | Complies |

|              |                       |             |            |
|--------------|-----------------------|-------------|------------|
| Test Mode    | IEEE 802.11ac (VHT40) | Tested Date | 2019/12/13 |
| Test Voltage | DC 48V                |             |            |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5190            | 8.78                  | 0.0076              | 24.00            | 0.250          | Complies |
| 5230            | 13.77                 | 0.0238              | 24.00            | 0.250          | Complies |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5755            | 19.09                 | 0.0811              | 30.00            | 1.0000         | Complies |
| 5795            | 19.03                 | 0.0800              | 30.00            | 1.0000         | Complies |

|              |                       |             |            |
|--------------|-----------------------|-------------|------------|
| Test Mode    | IEEE 802.11ac (VHT80) | Tested Date | 2019/12/13 |
| Test Voltage | DC 48V                |             |            |

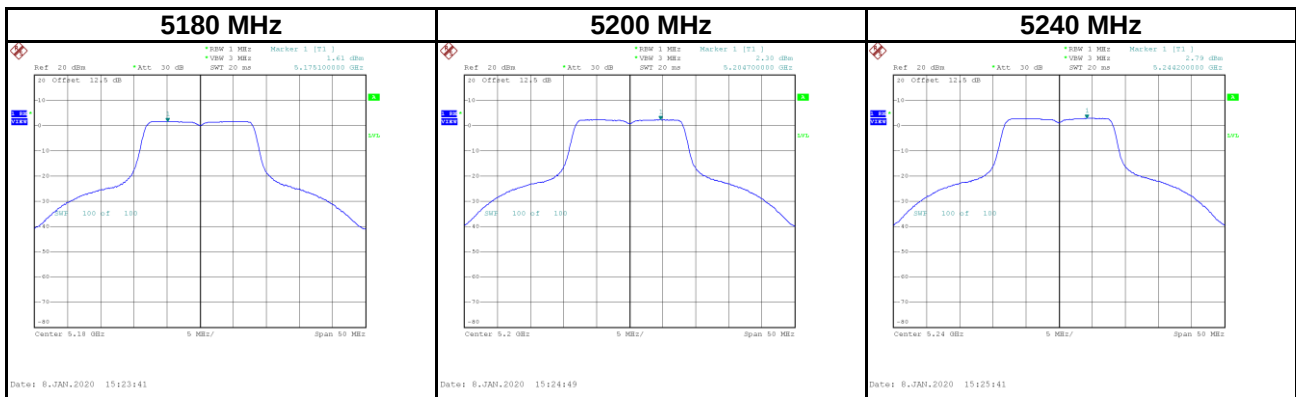
| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5210            | 9.17                  | 0.0083              | 24.00            | 0.250          | Complies |

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result   |
|-----------------|-----------------------|---------------------|------------------|----------------|----------|
| 5775            | 19.14                 | 0.0820              | 30.00            | 1.0000         | Complies |

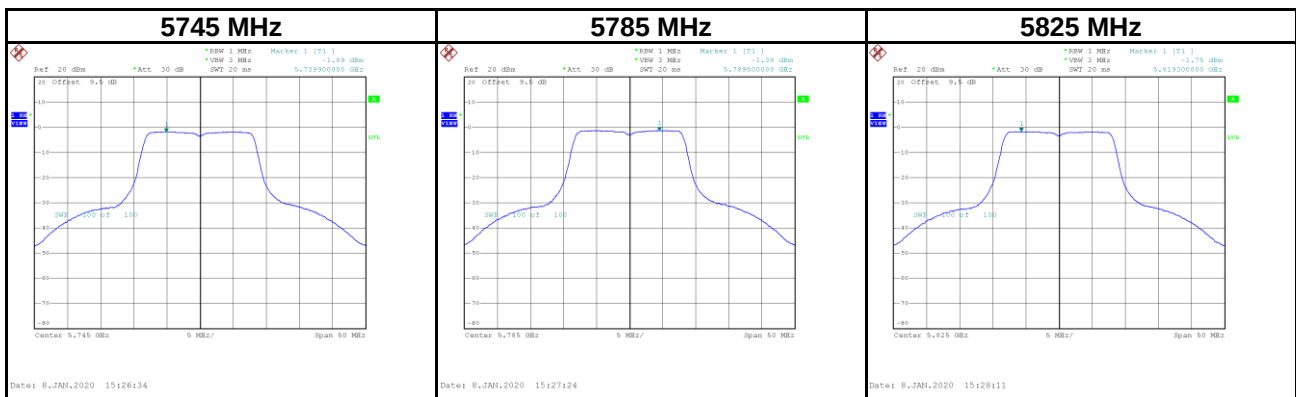
## **APPENDIX F    POWER SPECTRAL DENSITY**

|              |              |
|--------------|--------------|
| Test Mode    | IEEE 802.11a |
| Test Voltage | DC 48V       |

| Frequency (MHz) | Power Density (dBm/MHz) | Duty Factor (dB) | Power Density+ Duty Factor (dBm/MHz) | Limit (dBm/MHz) | Result   |
|-----------------|-------------------------|------------------|--------------------------------------|-----------------|----------|
| 5180            | 1.61                    | 0.08             | 1.69                                 | 11.00           | Complies |
| 5200            | 2.30                    | 0.08             | 2.38                                 | 11.00           | Complies |
| 5240            | 2.79                    | 0.08             | 2.87                                 | 11.00           | Complies |

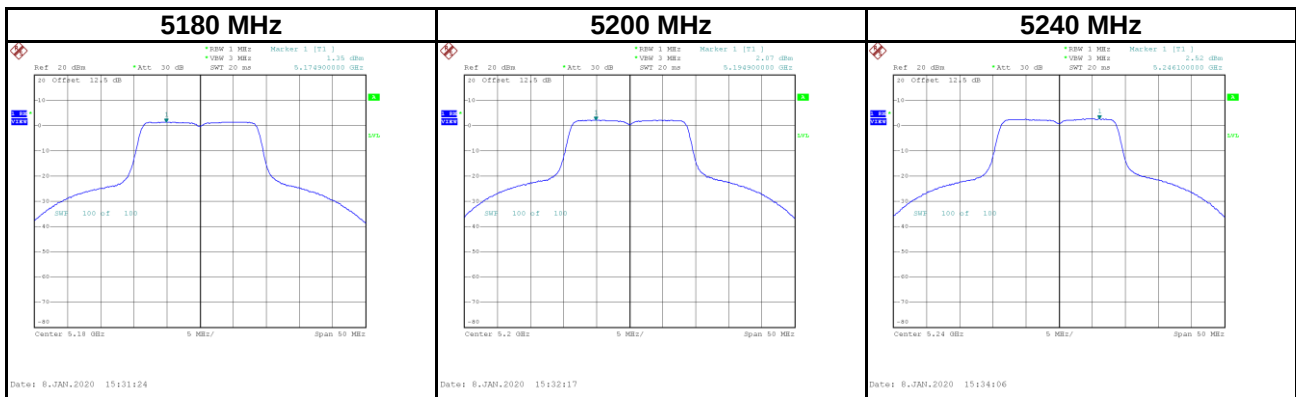


| Frequency (MHz) | Power Density (dBm/1MHz) | Power Density (dBm/500KHz) | Duty Factor (dB) | Power Density+ Duty Factor (dBm/500 kHz) | Limit (dBm/500 kHz) | Result   |
|-----------------|--------------------------|----------------------------|------------------|------------------------------------------|---------------------|----------|
| 5745            | -1.89                    | -4.90                      | 0.08             | -4.82                                    | 30.00               | Complies |
| 5785            | -1.38                    | -4.39                      | 0.08             | -4.31                                    | 30.00               | Complies |
| 5825            | -1.75                    | -4.76                      | 0.08             | -4.68                                    | 30.00               | Complies |

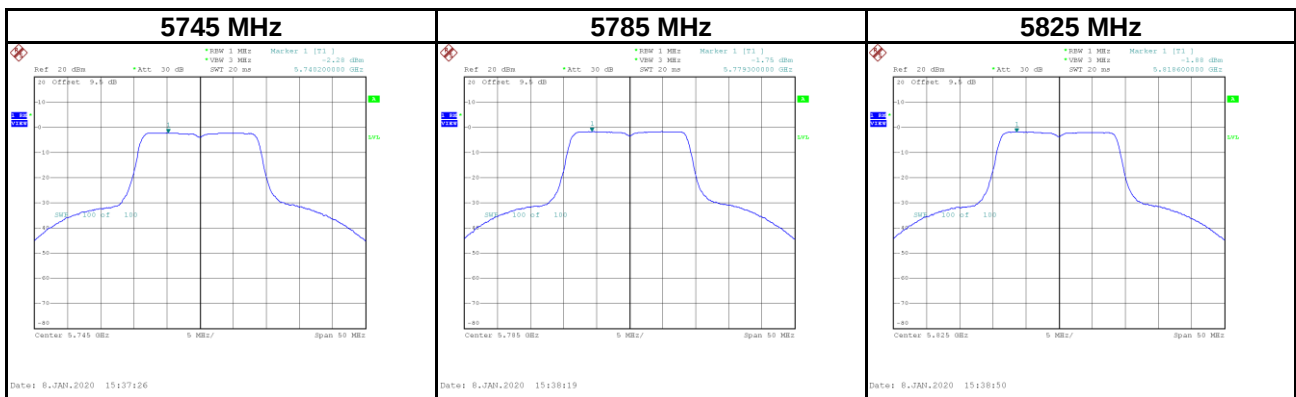


|              |                     |
|--------------|---------------------|
| Test Mode    | IEEE 802.11n (HT20) |
| Test Voltage | DC 48V              |

| Frequency (MHz) | Power Density (dBm/500 kHz) | Duty Factor (dB) | Power Density+ Duty Factor (dBm/500 kHz) | Limit (dBm/500 kHz) | Result   |
|-----------------|-----------------------------|------------------|------------------------------------------|---------------------|----------|
| 5180            | 1.35                        | 0.09             | 1.44                                     | 11.00               | Complies |
| 5200            | 2.07                        | 0.09             | 2.16                                     | 11.00               | Complies |
| 5240            | 2.52                        | 0.09             | 2.61                                     | 11.00               | Complies |

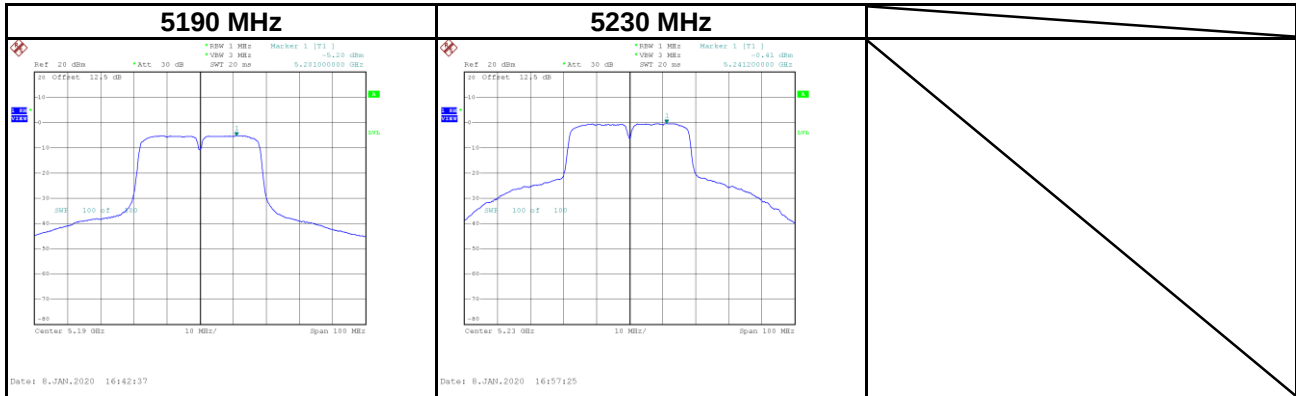


| Frequency (MHz) | Power Density (dBm/1MHz) | Power Density (dBm/500KHz) | Duty Factor (dB) | Power Density+ Duty Factor (dBm/500 kHz) | Limit (dBm/500 kHz) | Result   |
|-----------------|--------------------------|----------------------------|------------------|------------------------------------------|---------------------|----------|
| 5745            | -2.28                    | -5.29                      | 0.09             | -5.20                                    | 30.00               | Complies |
| 5785            | -1.75                    | -4.76                      | 0.09             | -4.67                                    | 30.00               | Complies |
| 5825            | -1.88                    | -4.89                      | 0.09             | -4.80                                    | 30.00               | Complies |

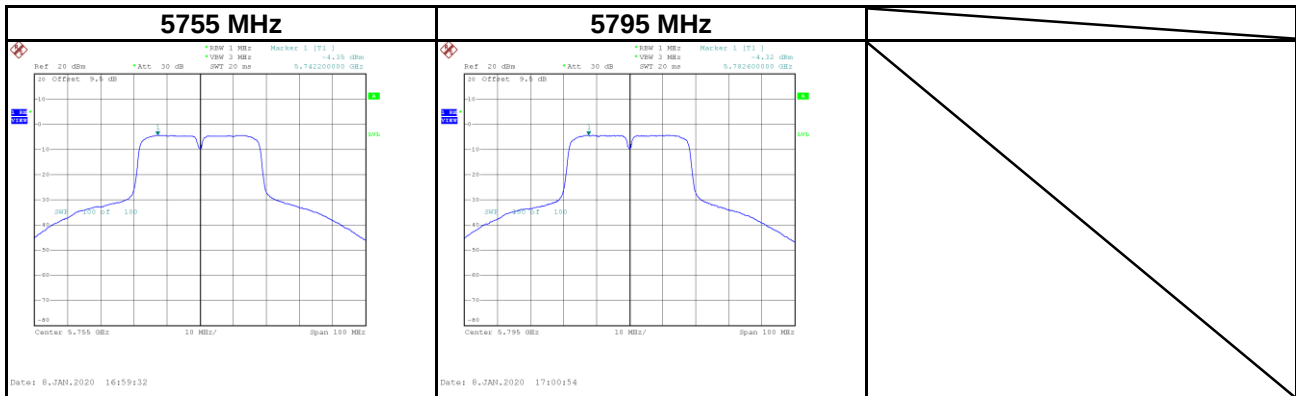


|              |                     |
|--------------|---------------------|
| Test Mode    | IEEE 802.11n (HT40) |
| Test Voltage | DC 48V              |

| Frequency (MHz) | Power Density (dBm/MHz) | Duty Factor (dB) | Power Density+ Duty Factor (dBm/MHz) | Limit (dBm/MHz) | Result   |
|-----------------|-------------------------|------------------|--------------------------------------|-----------------|----------|
| 5190            | -5.20                   | 0.17             | -5.03                                | 11.00           | Complies |
| 5230            | -0.41                   | 0.17             | -0.24                                | 11.00           | Complies |

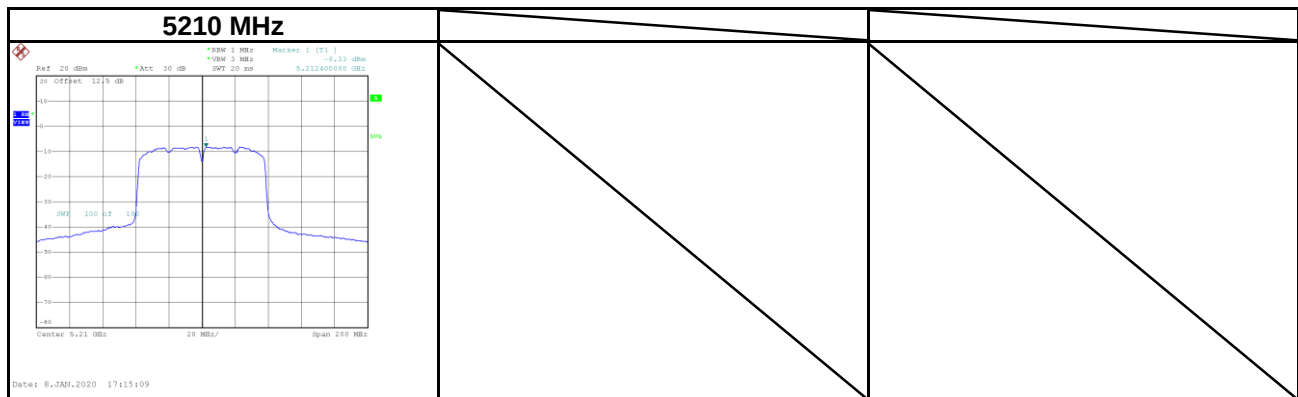


| Frequency (MHz) | Power Density (dBm/1MHz) | Power Density (dBm/500KHz) | Duty Factor (dB) | Power Density+ Duty Factor (dBm/500 kHz) | Limit (dBm/500 kHz) | Result   |
|-----------------|--------------------------|----------------------------|------------------|------------------------------------------|---------------------|----------|
| 5755            | -4.35                    | -7.36                      | 0.17             | -7.19                                    | 30.00               | Complies |
| 5795            | -4.32                    | -7.33                      | 0.17             | -7.16                                    | 30.00               | Complies |

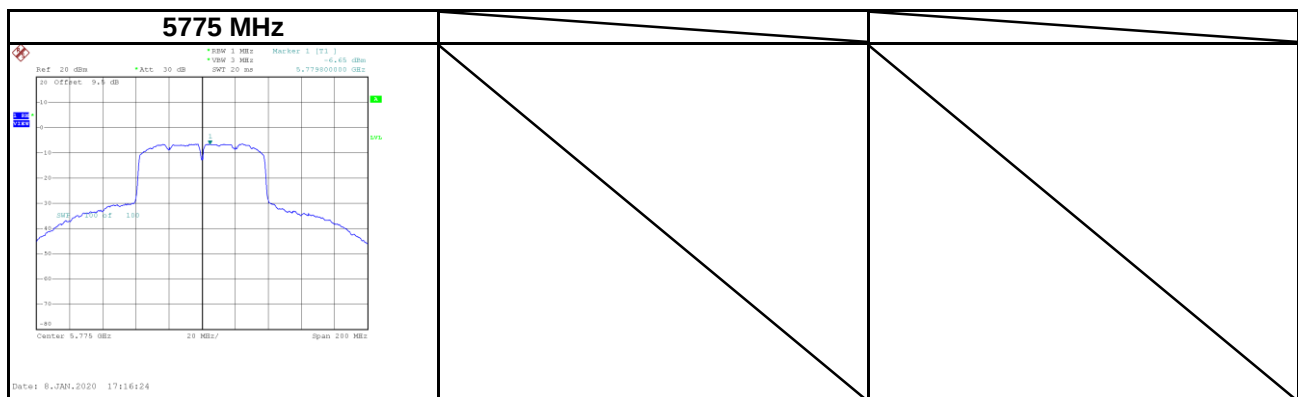


|              |                       |
|--------------|-----------------------|
| Test Mode    | IEEE 802.11ac (VHT80) |
| Test Voltage | DC 48V                |

| Frequency (MHz) | Power Density (dBm/MHz) | Duty Factor (dB) | Power Density+ Duty Factor (dBm/MHz) | Limit (dBm/MHz) | Result   |
|-----------------|-------------------------|------------------|--------------------------------------|-----------------|----------|
| 5210            | -8.33                   | 0.33             | -8.00                                | 11.00           | Complies |



| Frequency (MHz) | Power Density (dBm/1MHz) | Power Density (dBm/500KHz) | Duty Factor (dB) | Power Density+ Duty Factor (dBm/500 kHz) | Limit (dBm/500 kHz) | Result   |
|-----------------|--------------------------|----------------------------|------------------|------------------------------------------|---------------------|----------|
| 5775            | -6.65                    | -9.66                      | 0.33             | -9.33                                    | 30.00               | Complies |



End of Test Report