Report No.: 151103034GZU-003
Issued: 2016-3-25

# TEST REPORT

| | | |
|---|---|---|
| Applicant Name & Address | : | POMCUBE Inc.<br>19363 Brockton Ln Saratoga California United States 95070 |
| Sample Description | | |
| Product | : | iCAN |
| FCC ID | : | 2AGZ2-PO1AAW1 |
| Model No. | : | PO1-AAW1 |
| Electrical Rating | : | 90-130Vac/60Hz/Max.10A |
| Date Received | : | 03 November 2015 |
| Date Test Conducted | : | 05 November 2015-22 March 2016 |
| Test standards | : | **47 CFR PART 15 Subpart C: 2014 section 15.407** |
| Test Result | : | Pass |
| Conclusion | : | The submitted samples complied with the above rules/standards. |
| Remark | : | None. |

**********End of Page**********

***Prepared and Checked By:***

Sky Zhu

***Sky Zhu***
***Project Engineer***
***Intertek Guangzhou***

***Approved By:***

Helen Ma ***Signature***

***Helen Ma***
***Team Leader***
***Intertek Guangzhou***
***25 March 2016 Date***

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## 1.0 Summary of Test

| TEST | TEST REQUIREMENT | TEST METHOD | RESULT |
|---|---|---|---|
| Antenna Requirement | FCC PART 15 C clause 15.203 | FCC PART 15 C clause 15.247 (c) and clause 15.203 | PASS |
| 26 dB Bandwidth / 99% Occupied Bandwidth | FCC PART 15 C clause 15.407(a) | FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause C&D | PASS |
| 6 dB Bandwidth | FCC PART 15 C clause 15.407(e) Only for band IV | FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause C | PASS |
| Maximum Conducted Output Power | FCC PART 15 C clause 15.407(a) | FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause E | PASS |
| Maximum Peak Power Spectral Density | FCC PART 15 C clause 15.407(a) | FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause F | PASS |
| Radiated spurious emission | FCC PART 15 C clause 15.407(b) | FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause G | PASS |
| Band Edge | FCC PART 15 C clause 15.407(b) | FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause G | PASS |
| Frequency Stability | FCC PART 15 C clause 15.407(g) | ANSI C63.10: clause 6.8 | PASS |
| Conducted Emissions at Mains Terminals | FCC PART 15 C section 15.207 | ANSI C63.10: Clause 6.2 | PASS |

**Remark:**

N/A: not applicable. Refer to the relative section for the details.
EUT: In this whole report EUT means Equipment Under Test.
Tx: In this whole report Tx (or tx) means Transmitter.
Rx: In this whole report Rx (or rx) means Receiver.
RF: In this whole report RF means Radio Frequency.
ANSI C63.10: the detail version is ANSI C63.10:2013 in the whole report.

## 2.0 General Description

### 2.1 Product Description

| | |
|---|---|
| Operating Frequency | Band I 5150 MHz to 5250 MHz and Band IV 5725 MHz to 5850MHz for 802.11an(HT20,HT40)/ac(HT20,HT40,HT80) |
| Type of Modulation: | 802.11an: OFDM (BPSK/QPSK/16QAM/64QAM)<br>802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM) |
| Transmit Data Rate: | 802.11an(HT20): MCS0: 7.2Mbps, MCS1:14.2Mbps, MCS2:21.7Mbps, MCS3:28.9Mbps, MCS4:43.3Mbps, MCS5:57.8Mbps, MCS6:65.0Mbps, MCS7:72.2Mbps<br>802.11an(HT40): MCS0:15Mbps, MCS1:30Mbps, MCS2:45Mbps, MCS3:60Mbps, MCS4:90Mbps, MCS5:120Mbps, MCS6:135Mbps, MCS7:150Mbps<br>802.11ac(HT20): MCS0: 7.2Mbps, MCS1:14.2Mbps, MCS2:21.7Mbps, MCS3:28.9Mbps, MCS4:43.3Mbps, MCS5:57.8Mbps, MCS6:65.0Mbps, MCS7:72.2Mbps, MCS8: 86.7MbPS<br>802.11ac(HT40): MCS0:15Mbps, MCS1:30Mbps, MCS2:45Mbps, MCS3:60Mbps, MCS4:90Mbps, MCS5:120Mbps,MCS6:135Mbps,MCS7:150Mbps,MCS8:180Mbps, MCS9:200Mbps<br>802.11ac(HT80): MCS0:32.5Mbps, MCS1:65Mbps, MCS2:97.5Mbps, MCS3:130Mbps, MCS4:195Mbps, MCS5:260Mbps,MCS6:292.5Mbps,MCS7:325Mbps,MCS8:390Mbps, MCS9:433.3Mbps |
| Number of Channels | Band I 5150MHz to 5250MHz<br>4 Channels for 802.11an(HT20)/ac(HT20)<br>2 Channels for 802.11an(HT40)/ac(HT40)<br>1 Channels for 802.11ac(HT80)<br>Band IV 5725MHz to 5850MHz<br>5 Channels for 802.11an(HT20)/ac(HT20)<br>2 Channels for 802.11an(HT40)/ac(HT40)<br>1 Channels for 802.11ac(HT80) |
| Channel Separation: | 20 MHz |
| Antenna Type | The wire antenna that uses a unique coupling to the intentional radiator |
| Antenna gain: | 2.1 dBi |

| | |
|---|---|
| Function: | Transmitter information with 5 GHz WIFI |
| EUT Power Supply: | AC 120V 60 Hz |
| Power cord: | 1.1 m x 3 wires unscreened AC supply cable |

EUT channels and frequencies list:

Band I 5150 MHz to 5250 MHz

For 802.11an (HT20)/ac (HT20): test frequencies are lowest channel 36: 5180 MHz, middle channel 44: 5220 MHz and highest channel 48: 5240.

For 802.11an(HT40)/ac(HT40): test frequencies are lowest channel 38: 5190 MHz and highest channel 46: 5230 MHz

For 802.11ac(HT80): test frequencies is channel 42: 5210 MHz

Band I 5725 MHz to 5850 MHz

For 802.11an (HT20)/ac (HT20): test frequencies are lowest channel 149: 5745 MHz, middle channel 157: 5785 MHz and highest channel 165: 5825 MHz

For 802.11an(HT40)/ac(HT40): test frequencies are lowest channel 151: 5755 MHz and highest channel 159: 5795 MHz

For 802.11ac(HT80): test frequencies is channel 155: 5775 MHz

For WIFI an(HT 20)/WIFI ac(HT20):

| **Band I(5150MHz-5250MHz)** | | **Band IV(5725MHz-5850MHz)** | |
|---|---|---|---|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 36 | 5180 | 149 | 5745 |
| 40 | 5200 | 153 | 5765 |
| 44 | 5220 | 157 | 5785 |
| 48 | 5240 | 161 | 5805 |
| | | 165 | 5825 |

For WIFI an(HT 40)/WIFI ac(HT40):

| **Band I(5150MHz-5250MHz)** | | **Band IV(5725MHz-5850MHz)** | |
|---|---|---|---|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 38 | 5190 | 151 | 5755 |
| 46 | 5230 | 159 | 5795 |

For WIFI ac(HT80):

| **Band I(5150MHz-5250MHz)** | | **Band IV(5725MHz-5850MHz)** | |
|---|---|---|---|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 42 | 5210 | 155 | 5775 |

## 2.2 Related Submittal(s) Grants

This is an application for certification of:
Unlicensed National Information Infrastructure Devices (WIFI transmitter portion)

Remaining portions are subject to the following procedures:
1. Receiver portion of WIFI: exempt from technical requirement of this Part.

## 2.3 Test Methodology

The EUT was performed according to the procedures in FCC Part 15 E, Section15.203, 15.207, 15.209, 15.407 and ANSI C63.4:2014, method of measurement: reference to FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.10:2013. Radiated emission measurement was performed in semi-anechoic chamber and conducted emission measurement was performed in shield room. For radiated emission measurement, preliminary scans and final tests were performed in the semi-anechoic chamber to determine the worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise.

## 2.4 Test Facility

All of the tests are performed at:
Intertek Testing Services Shenzhen Ltd. Guangzhou Branch. located at Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD Guangzhou, 510663, China. This test facility and site measurement data have been fully placed on file with the FCC, test firm registration number is 549654.

## 3.0 System Test Configuration

### 3.1 Justification

For emissions testing, the equipment under test (EUT) setup to transmit continuously to simplify the measurement methodology. During testing, AC power line was manipulated to produce worst case emissions. It was powered by AC 120V/60Hz supply.

The signal is maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters. Radiated emissions are taken at three meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. Analyzer resolution is 100 kHz or greater for frequencies below 1000 MHz. The resolution is 1 MHz or greater for frequencies above 1000 MHz. The spurious emissions more than 20 dB below the permissible value are not reported.

For an intentional radiator, the spectrum shall be investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to at least the frequency shown in the following table:

Frequency range of radiated emission measurements

| Lowest frequency generated in the device | Upper frequency range of measurement |
|---|---|
| 9 kHz to below 10 GHz | 10th harmonic of highest fundamental frequency or to 40 GHz, whichever is lower. |
| At or above 10 GHz to below 30 GHz | 5th harmonic of highest fundamental frequency or to 100 GHz, whichever is lower. |
| At or above 30 GHz | 5th harmonic of highest fundamental frequency or to 200 GHz, whichever is lower, unless otherwise specified. |

Number of fundamental frequencies to be tested in EUT transmit band

| Frequency range in which device operates | Number of frequencies | Location in frequency range of operation |
|---|---|---|
| 1 MHz or less | 1 | Middle |
| 1 MHz to 10 MHz | 2 | 1 near top and 1 near bottom |
| More than 10 MHz | 3 | 1 near top, 1 near middle and 1 near bottom |

### 3.2 EUT Exercising Software

The test was performed under “MT76xxE-AP” which was provided by manufacture. Use this software can adjust different test frequency and operation mode. Also can adjust the frequency transmit at continues mode, the duty cycle more than 98%.

### 3.3 Special Accessories

No special accessories used.

### 3.4 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

Uncertainty and Compliance – Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value.

### 3.5 Equipment Modification

Any modifications installed previous to testing by POMCUBE Inc.will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Guangzhou Branch.

### 3.6 Support Equipment List and Description

This product was tested with corresponding accessories as below:

Supplied by Intertek:

| Description | Manufacturer | Model No. | SN/Certificate NO |
|---|---|---|---|
| NoteBook | Lenovo | T430 | PB-FR45R |

## 4.0 Measurement Results

## 4.1 Antenna Requirement:

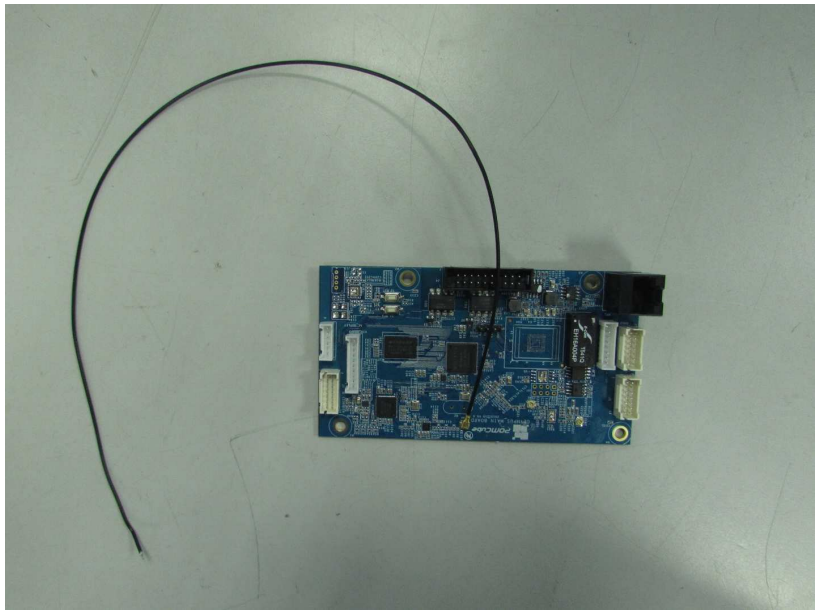
Standard requirement

15.203 requirement:

For intentional device. According to 15.203 an intentional radiator shall be designed to Ensure that no antenna other than that furnished by the responsible party shall be used with the device.

EUT Antenna

The antenna is an integral antenna and no consideration of replacement. The best case gain of the antenna is 2.1 dBi.



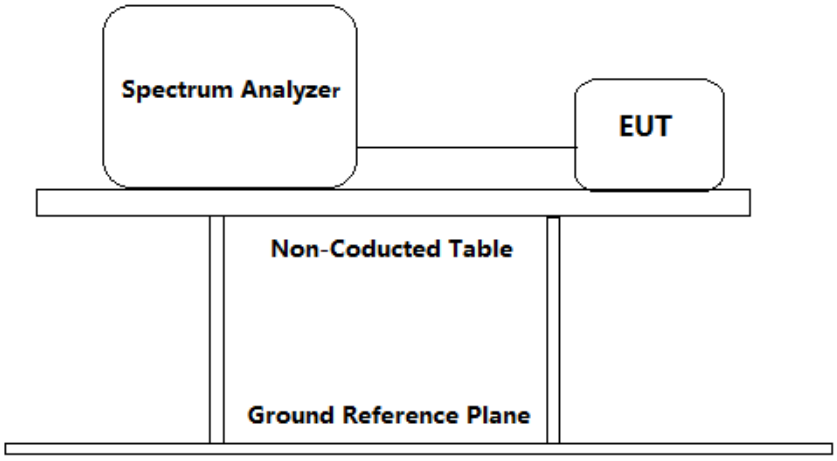
## 4.2 26 dB Bandwidth:

Test Requirement: FCC PART 15 C clause 15.407(a)

Test Method: FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause C&D

Test Status: Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.

Test Configuration:




Test Procedure:

1. Remove the antenna from the EUT and then connect a low attention attenuation RF cable (cable loss =2 dB) from the antenna port to the spectrum.
2. Set the spectrum analyzer:
   a) Set RBW = approximately 1% of the emission bandwidth
   b) Set the VBW≥ [3 × RBW]
   c) Detector = peak.
   d) Trace mode = max hold.
   e) Sweep = auto couple
   f) Allow the trace to stabilize.
   g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.
3. Repeat until all the test status is investigated.

4. Report the worst case.

**Band I (5150MHz-5250MHz)**

| Channel No. | Frequency (MHz) | Mode | Data Rate | 26dB bandwidth (MHz) |
|---|---|---|---|---|
| 36 | 5180 | 802.11an (HT20) | 72.2 Mbps | 20.6 |
| 44 | 5220 | | 72.2 Mbps | 20.1 |
| 48 | 5240 | | 72.2 Mbps | 17.5 |
| 38 | 5190 | 802.11an (HT40) | 150 Mbps | 40.5 |
| 46 | 5230 | | 150 Mbps | 40.8 |
| 36 | 5180 | 802.11ac (HT20) | 86.7 Mbps | 19.9 |
| 44 | 5220 | | 86.7 Mbps | 20.3 |
| 48 | 5240 | | 86.7 Mbps | 19.9 |
| 38 | 5190 | 802.11ac (HT40) | 200 Mbps | 40.5 |
| 46 | 5230 | | 200 Mbps | 40.8 |
| 42 | 5210 | 802.11ac (HT80) | 433.3 Mbps | 82.1 |

**Band I (5150MHz-5250MHz)**

| Channel No. | Frequency (MHz) | Mode | Data Rate | 99% bandwidth (MHz) |
|---|---|---|---|---|
| 48 | 5240 | 802.11an (HT20) | 72.2 Mbps | 17.5 |
| 46 | 5230 | 802.11an (HT40) | 150 Mbps | 36.3 |
| 48 | 5240 | 802.11ac (HT20) | 86.7 Mbps | 17.6 |
| 46 | 5230 | 802.11ac (HT40) | 200 Mbps | 36.3 |

**Band IV (5725MHz-5850MHz)**

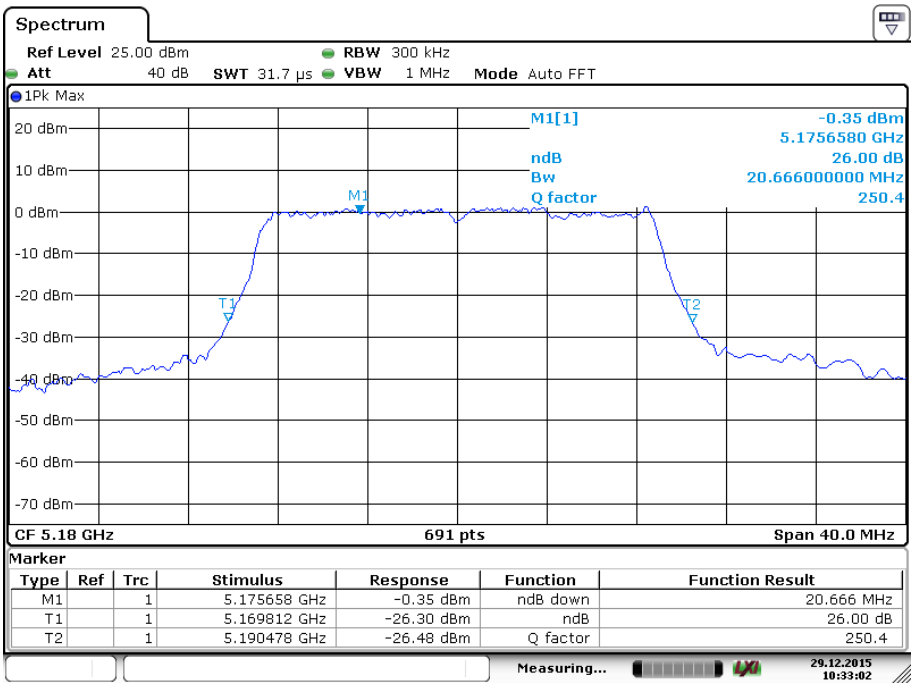
| Channel No. | Frequency (MHz) | Mode | Data Rate | 26dB bandwidth (MHz) |
|---|---|---|---|---|
| 149 | 5745 | 802.11an (HT20) | 72.2 Mbps | 19.9 |
| 157 | 5785 | | 72.2 Mbps | 20.3 |
| 165 | 5825 | | 72.2 Mbps | 20.3 |
| 151 | 5755 | 802.11an (HT40) | 150 Mbps | 40.8 |
| 159 | 5795 | | 150 Mbps | 40.9 |
| 149 | 5745 | 802.11ac (HT20) | 86.7 Mbps | 20.1 |
| 157 | 5785 | | 86.7 Mbps | 20.1 |
| 165 | 5825 | | 86.7 Mbps | 20.2 |
| 151 | 5755 | 802.11ac (HT40) | 200 Mbps | 40.7 |
| 159 | 5795 | | 200 Mbps | 40.7 |
| 155 | 5775 | 802.11ac (HT80) | 433.3 Mbps | 75.8 |

Test result: The unit does meet the FCC requirements.

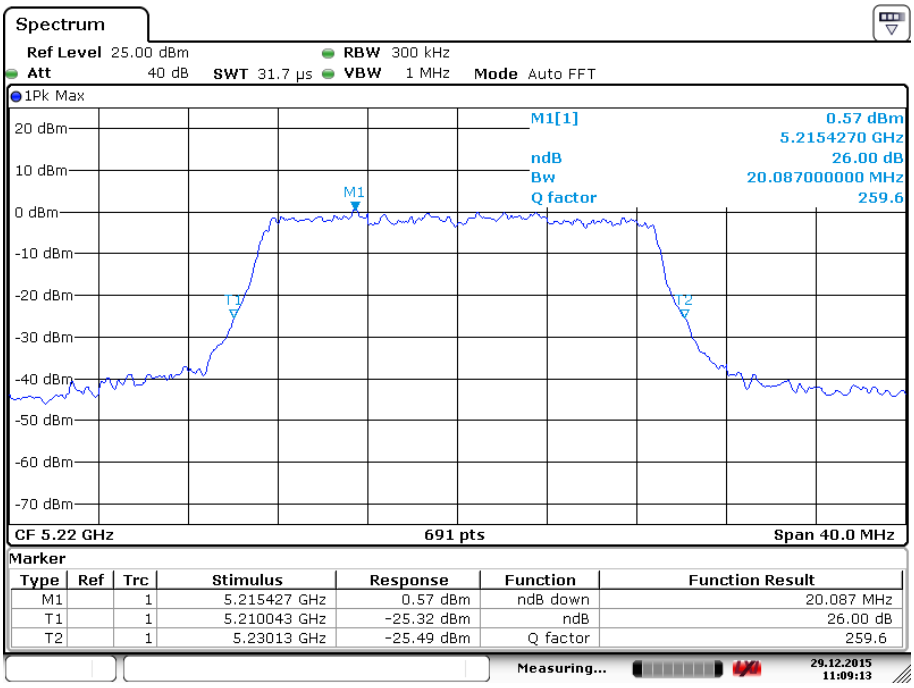
Result plot as follows:

Band I 5150 MHz to 5250 MHz

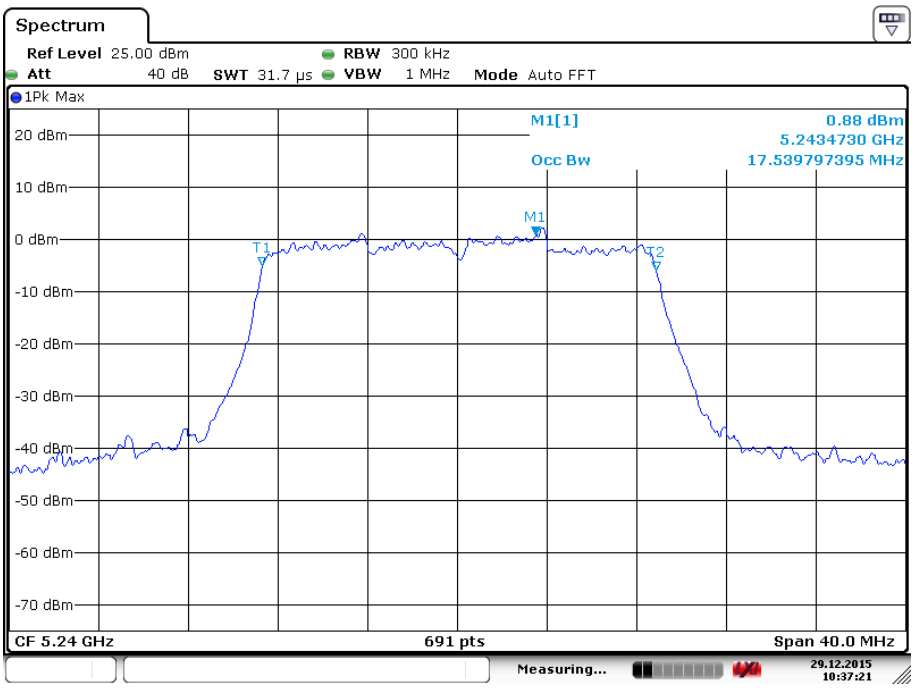
802.11an(HT 20)
Channel 36: 5180 MHz:



Channel 44: 5220 MHz:

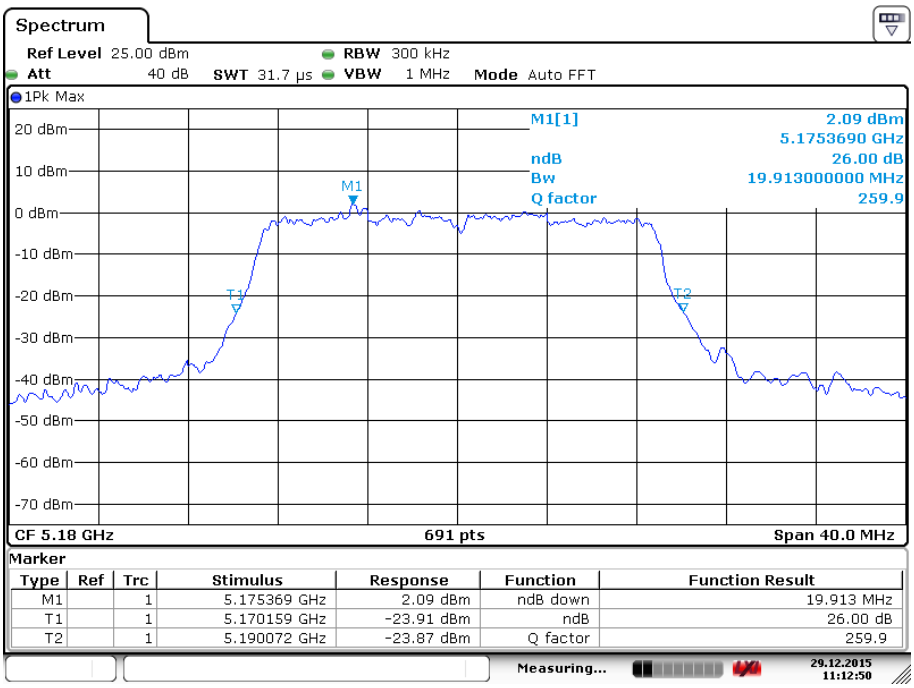



Channel 48: 5240 MHz:

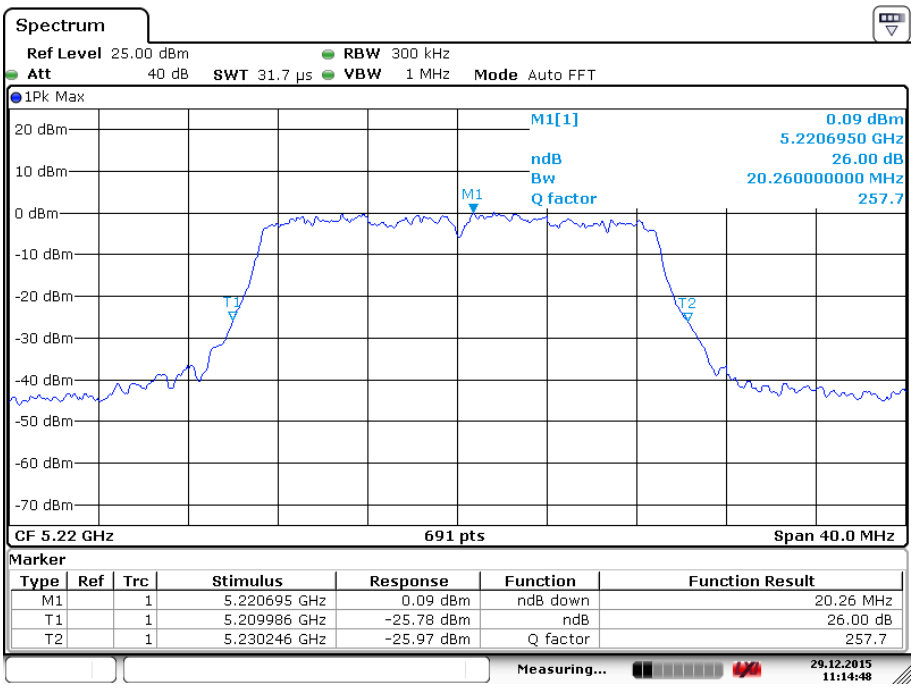


802.11ac(HT 20)

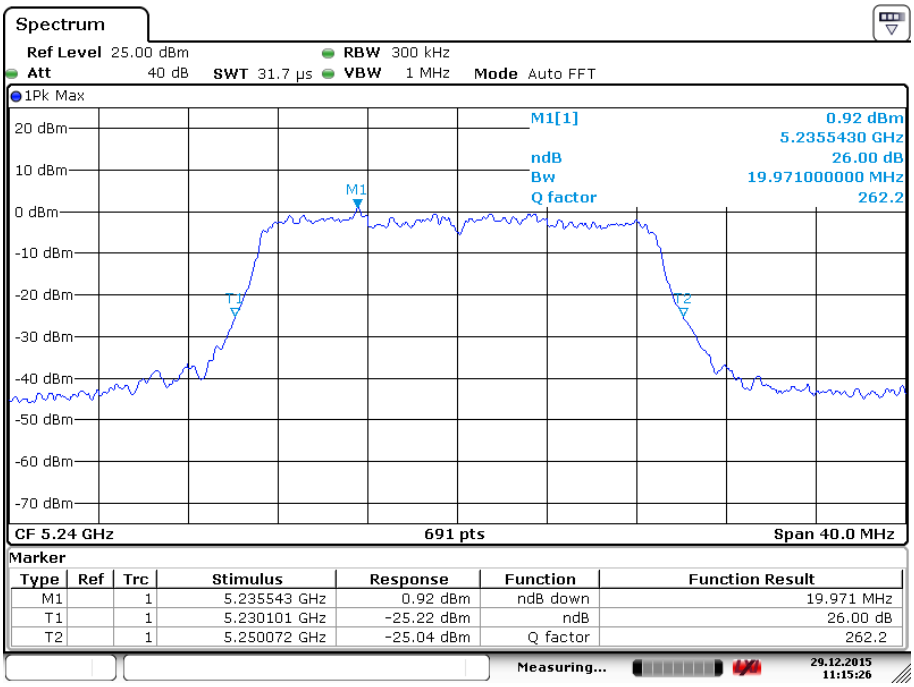
Channel 36: 5180 MHz:



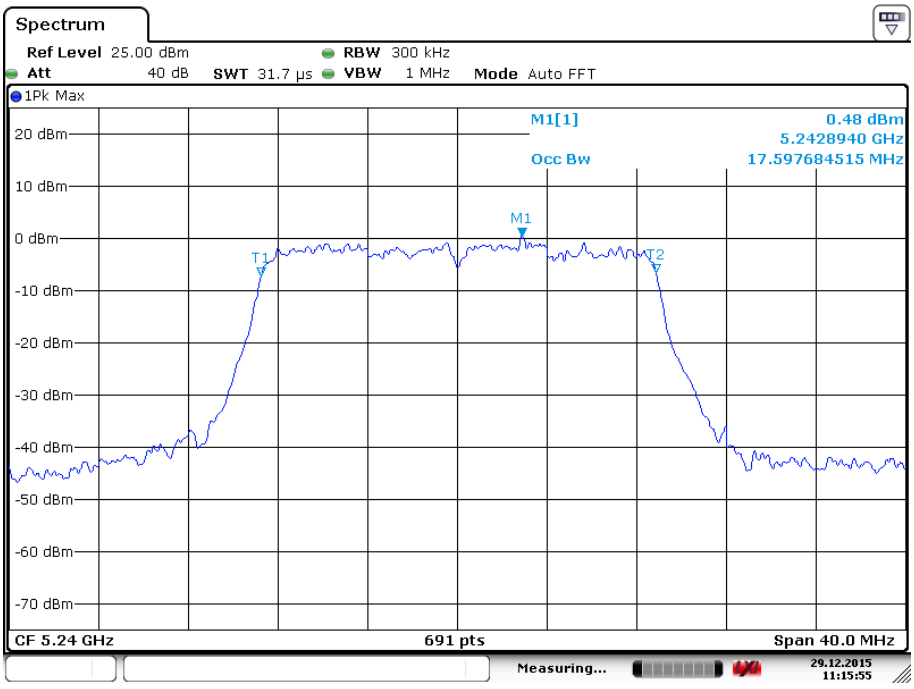

Channel 44: 5220 MHz:



Channel 48: 5240 MHz:

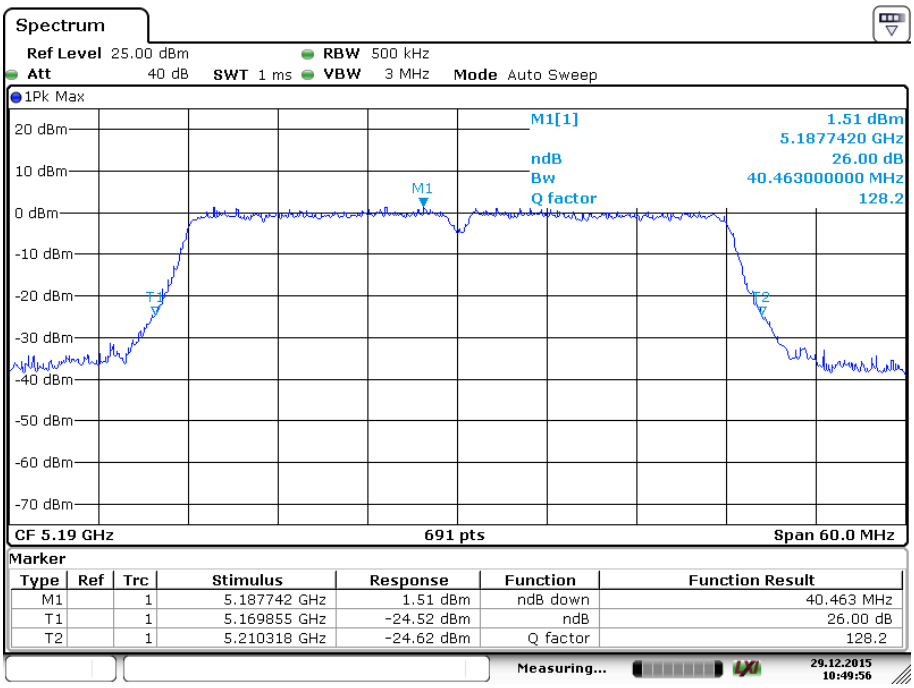



99% OBW

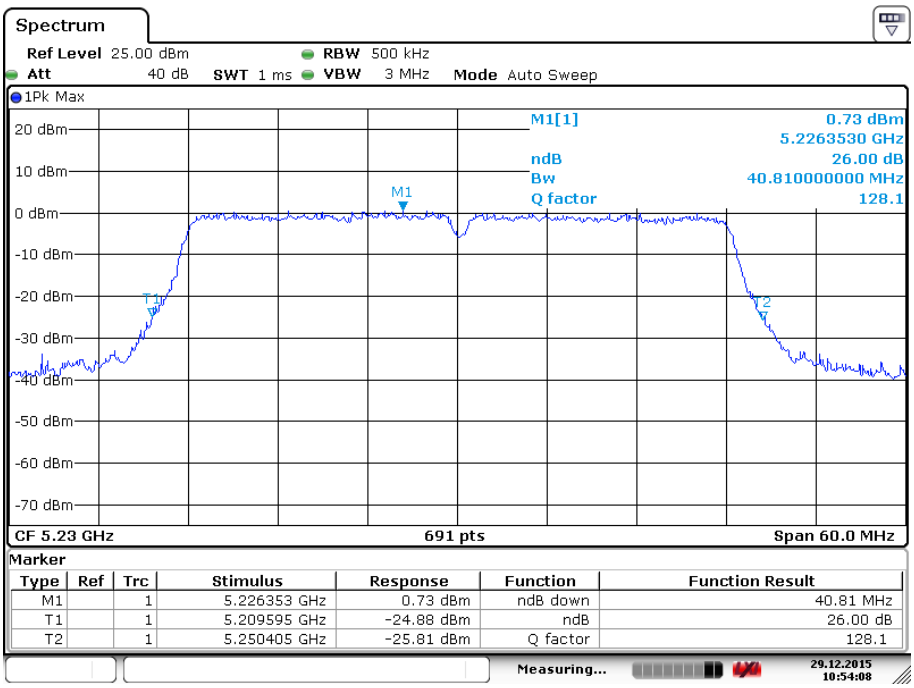


802.11an(HT 40)

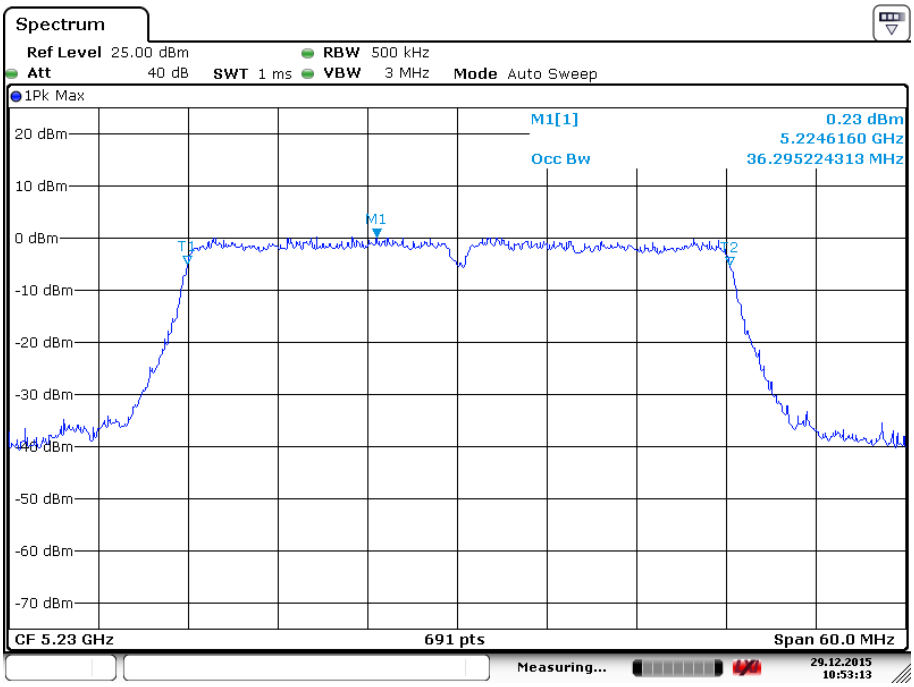
Channel 38: 5190 MHz:




Channel 46: 5230 MHz:

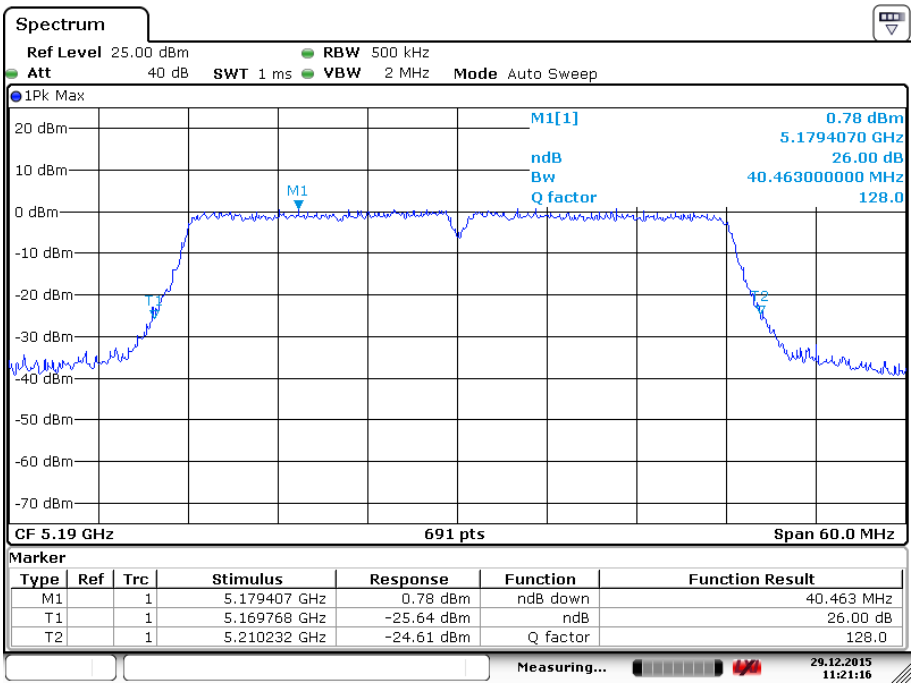


99% OBW

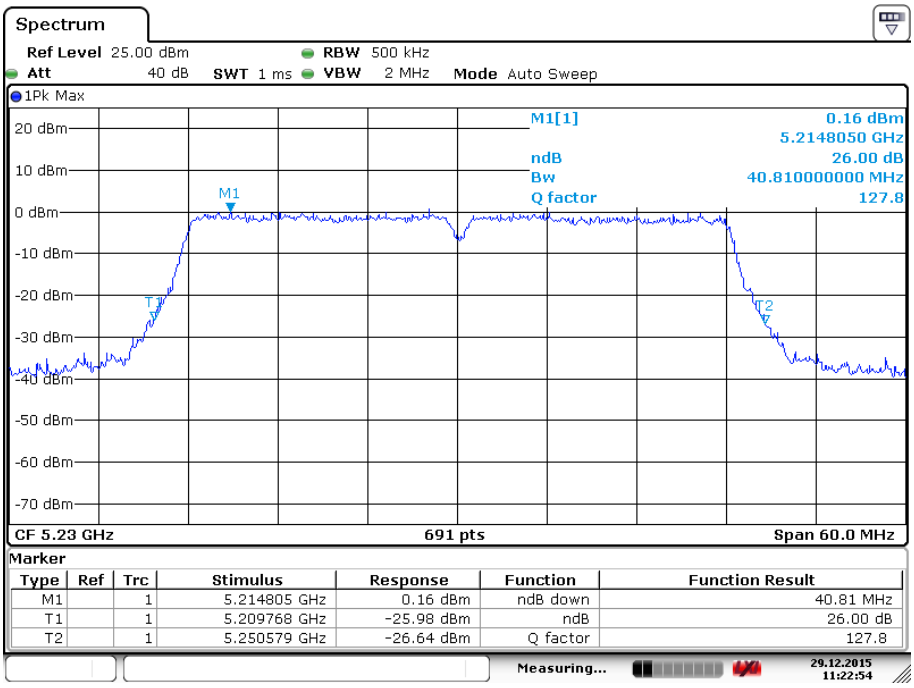



802.11ac(HT 40)

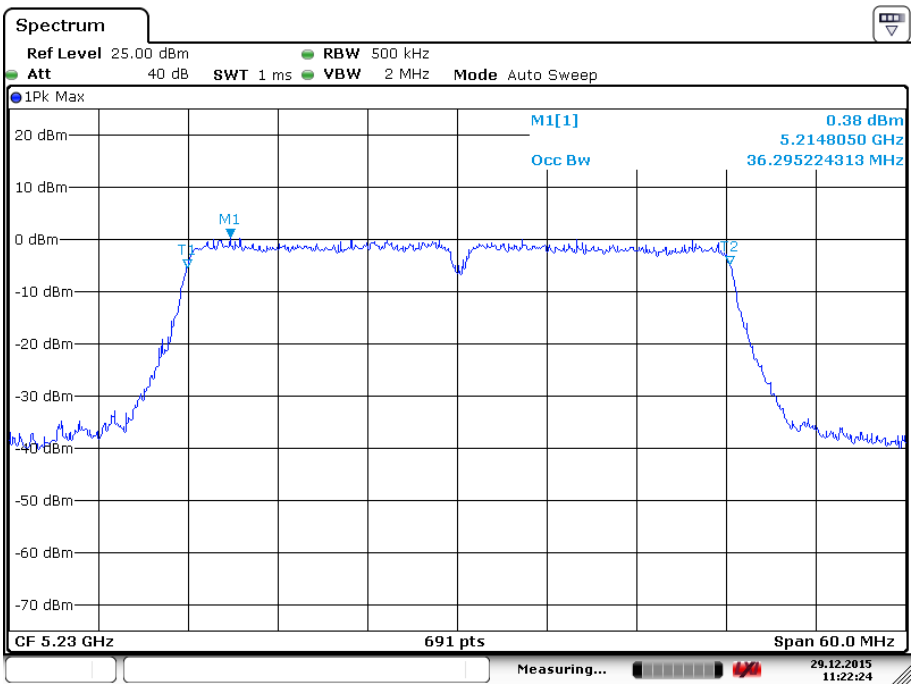
Channel 38: 5190 MHz:



Channel 46: 5230 MHz:

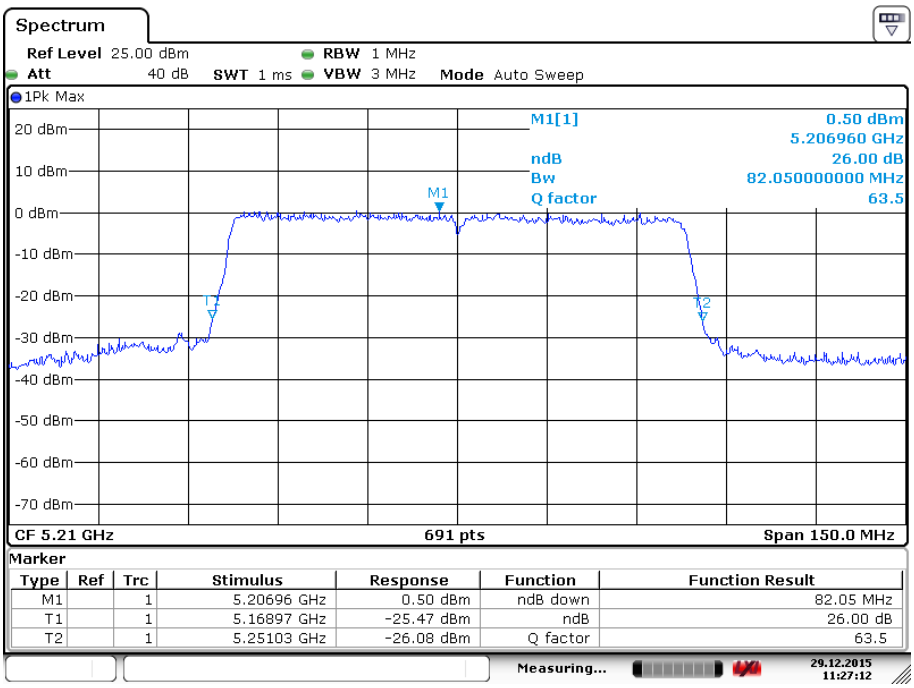



99% OBW



802.11ac(HT 80)

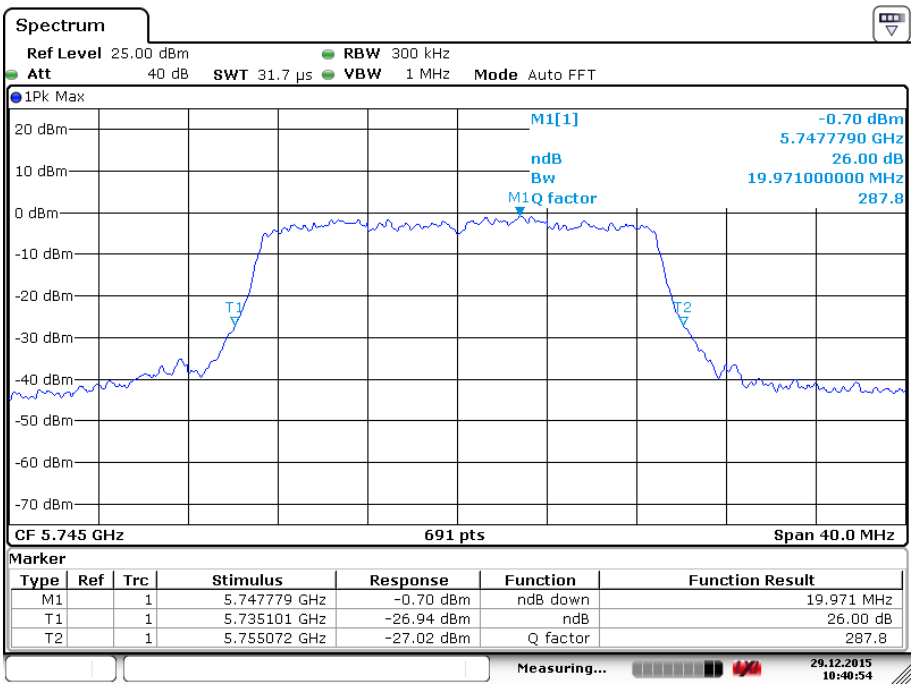
Channel 42: 5210 MHz:



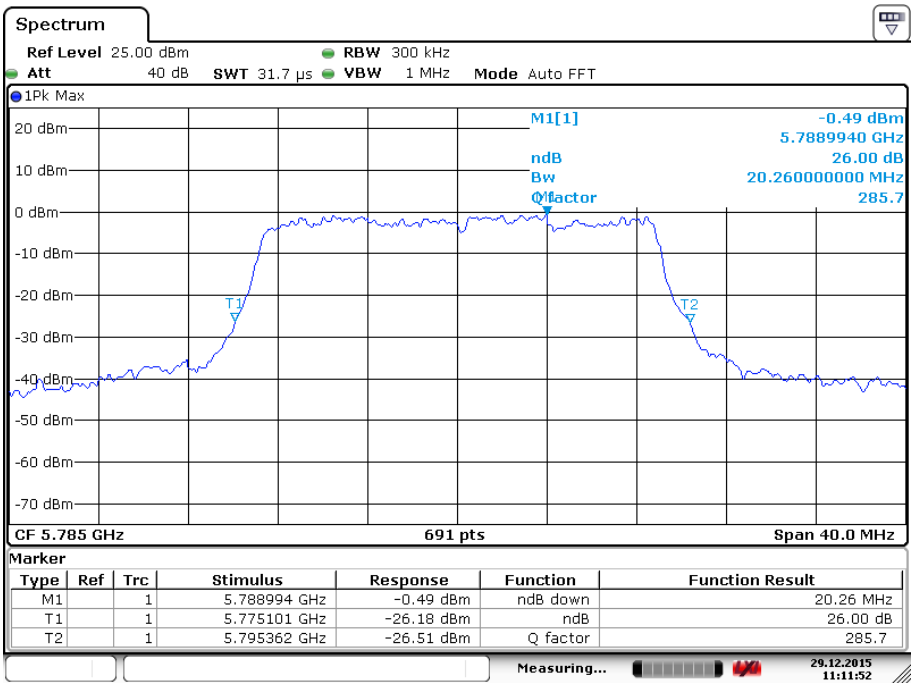
Result plot as follows:

Band IV 5725 MHz to 5850 MHz

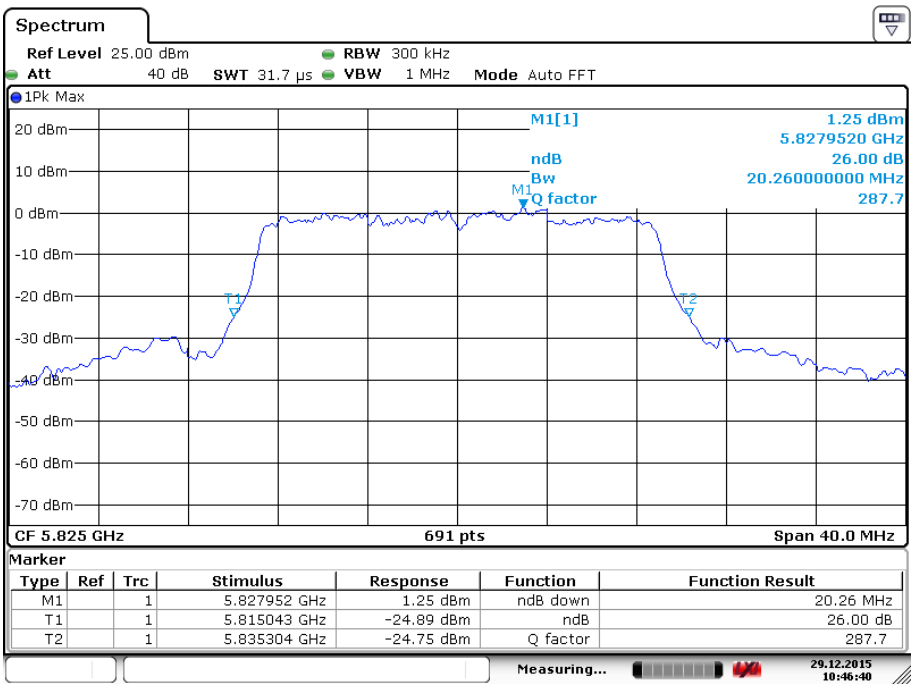
802.11an(HT 20)
Channel 149: 5745 MHz:



Channel 157: 5785 MHz:

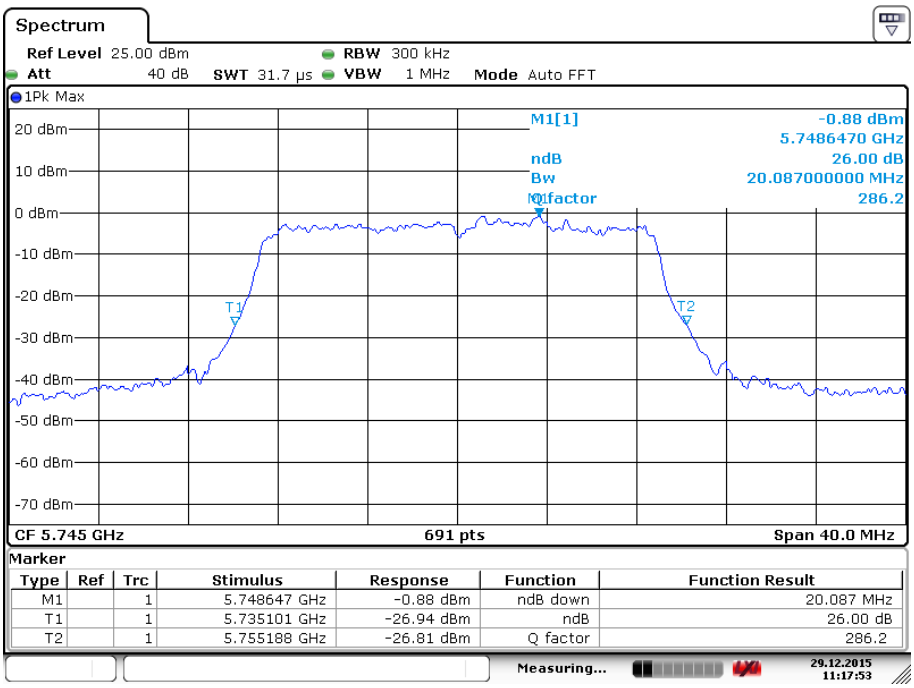



Channel 165: 5825 MHz:

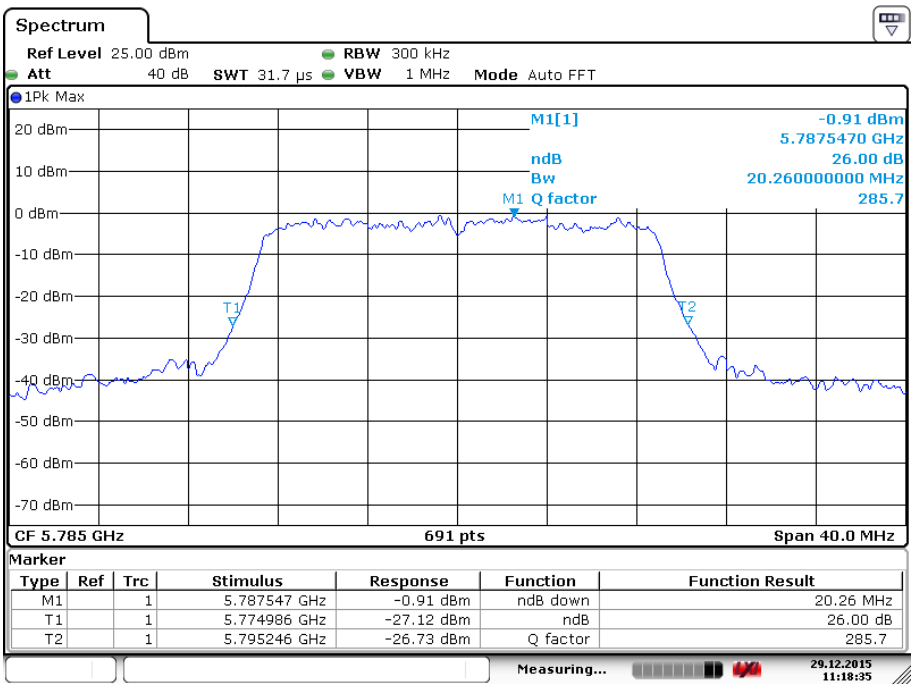


802.11ac(HT 20)

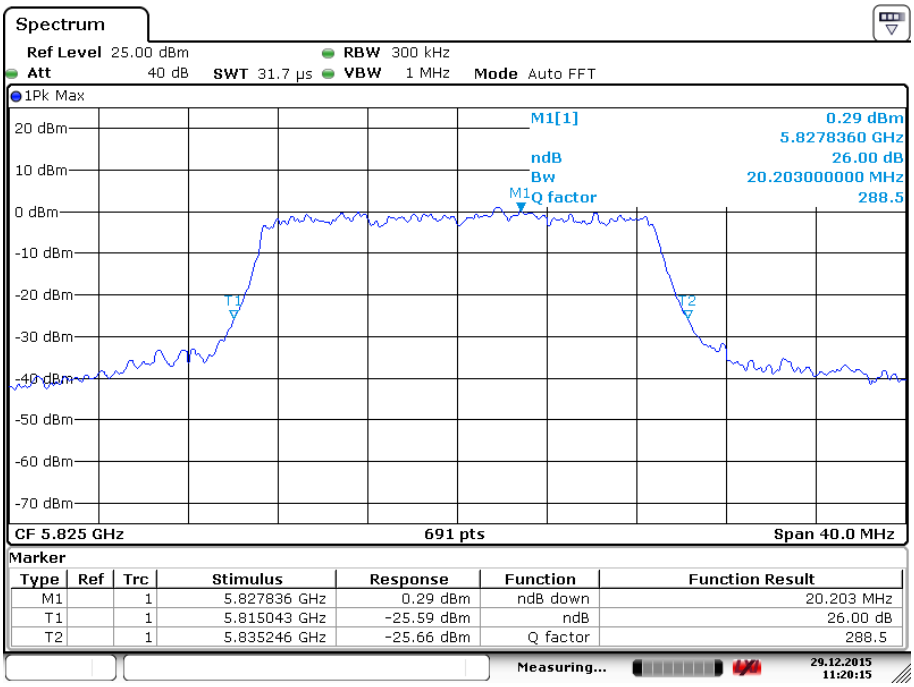
Channel 149: 5745 MHz:




Channel 157: 5785 MHz:

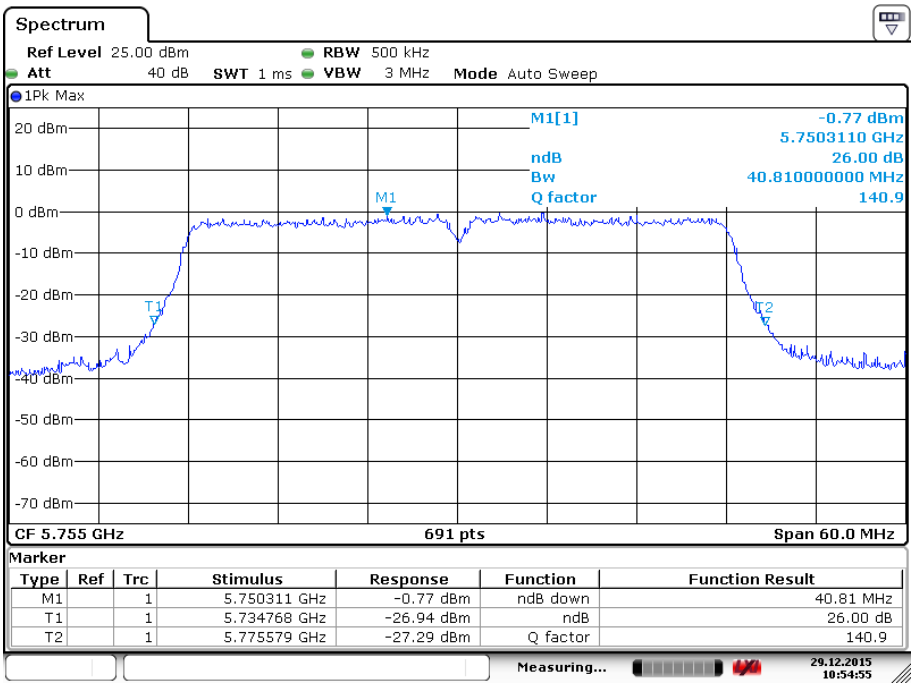


Channel 165: 5825 MHz:

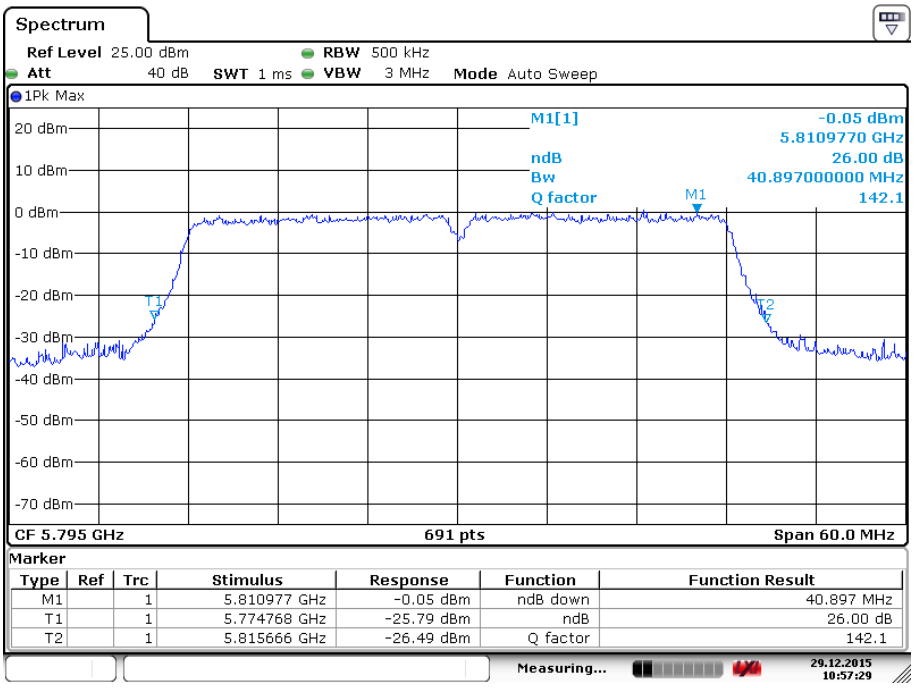



802.11an(HT 40)

Channel 151: 5755 MHz:

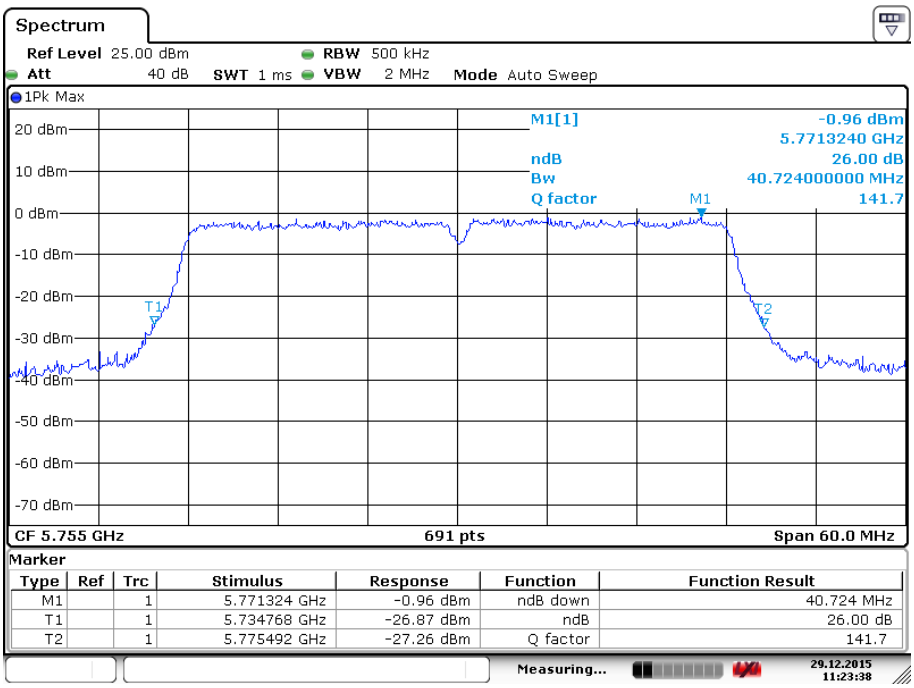


Channel 159: 5795 MHz:

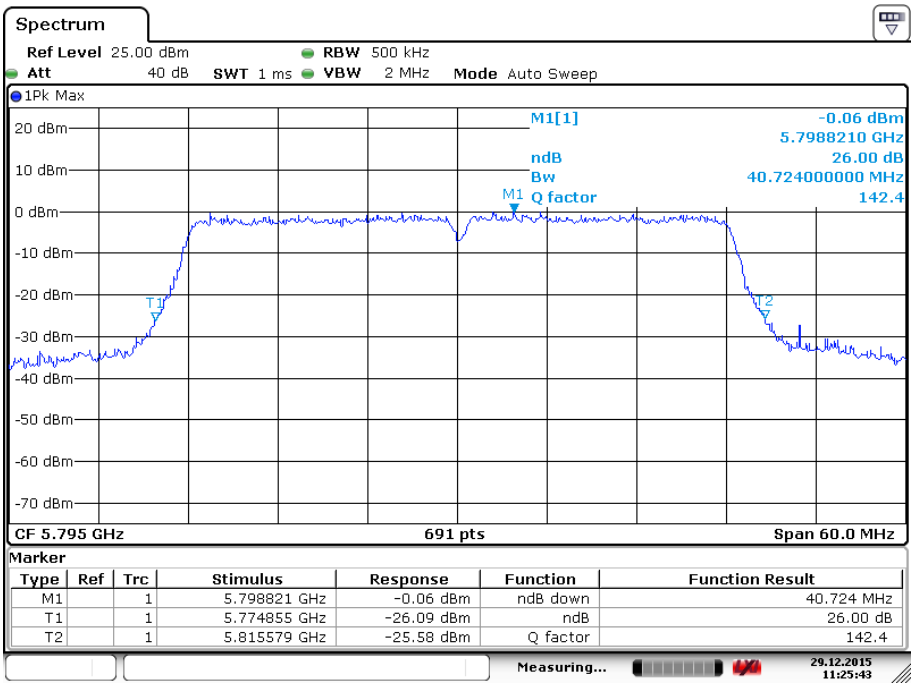



802.11ac(HT 40)

Channel 151: 5755 MHz:

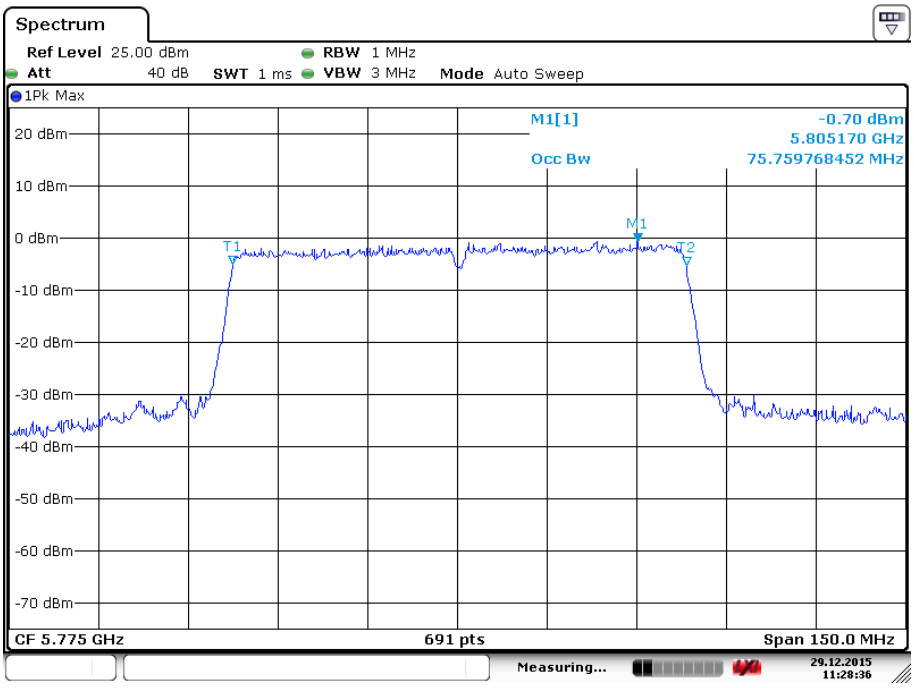


Channel 159: 5795 MHz:




802.11ac(HT 80)

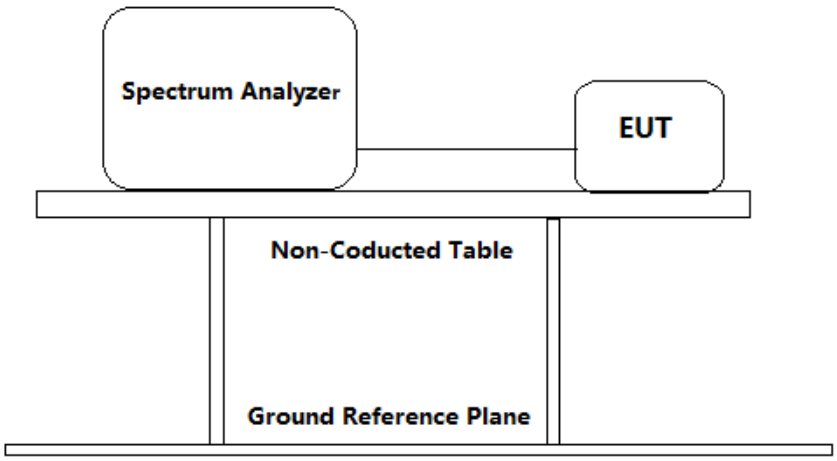
Channel 155: 5775 MHz:



## 4.2 6 dB Bandwidth:

| | |
|---|---|
| Test Requirement: | FCC PART 15 C clause 15.407(e)<br>Within the 5.725–5.85 GHz band the minimum 6 dB bandwidth of U–NII devices shall be at least 500 kHz. |
| Test Method: | FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause C |
| Test Status: | Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. |

Test Configuration:




Test Procedure:

5. Remove the antenna from the EUT and then connect a low attention attenuation RF cable (cable loss =2 dB) from the antenna port to the spectrum.
6. Set the spectrum analyzer:
   a) Set RBW = 100 kHz
   b) Set the VBW≥ [3 × RBW]
   c) Detector = peak.
   d) Trace mode = max hold.
   e) Sweep = auto couple
   f) Allow the trace to stabilize.
   g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.
   h) Span=2*BW~5*BW

7. Repeat until all the test status is investigated.
8. Report the worst case.

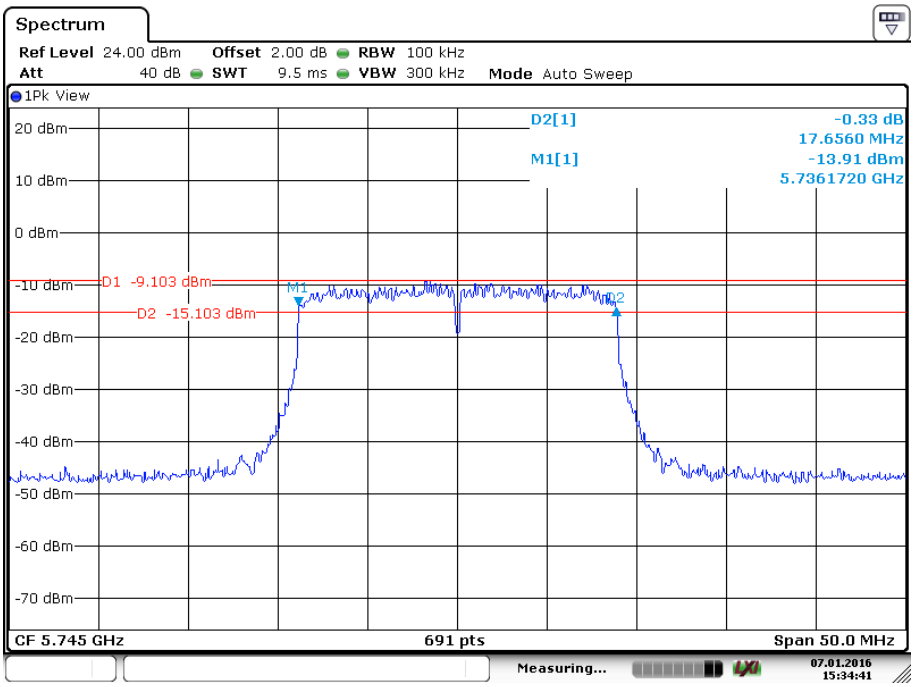
| Channel No. | Frequency (MHz) | Mode | Data Rate | 6dB bandwidth (MHz) | Limit | Result |
|---|---|---|---|---|---|---|
| 149 | 5745 | 802.11an (HT20) | 72.2 Mbps | 17.7 | 500kHz | Pass |
| 157 | 5785 | | 72.2 Mbps | 17.7 | | Pass |
| 165 | 5825 | | 72.2 Mbps | 17.7 | | Pass |
| 151 | 5755 | 802.11an (HT40) | 150 Mbps | 36.5 | | Pass |
| 159 | 5795 | | 150 Mbps | 36.6 | | Pass |
| 149 | 5745 | 802.11ac (HT20) | 86.7 Mbps | 17.7 | | Pass |
| 157 | 5785 | | 86.7 Mbps | 17.7 | | Pass |
| 165 | 5825 | | 86.7 Mbps | 17.7 | | Pass |
| 151 | 5755 | 802.11ac (HT40) | 200 Mbps | 36.6 | | Pass |
| 159 | 5795 | | 200 Mbps | 36.6 | | Pass |
| 155 | 5775 | 802.11ac (HT80) | 433.3 Mbps | 76.2 | | Pass |

Test result: The unit does meet the FCC requirements.

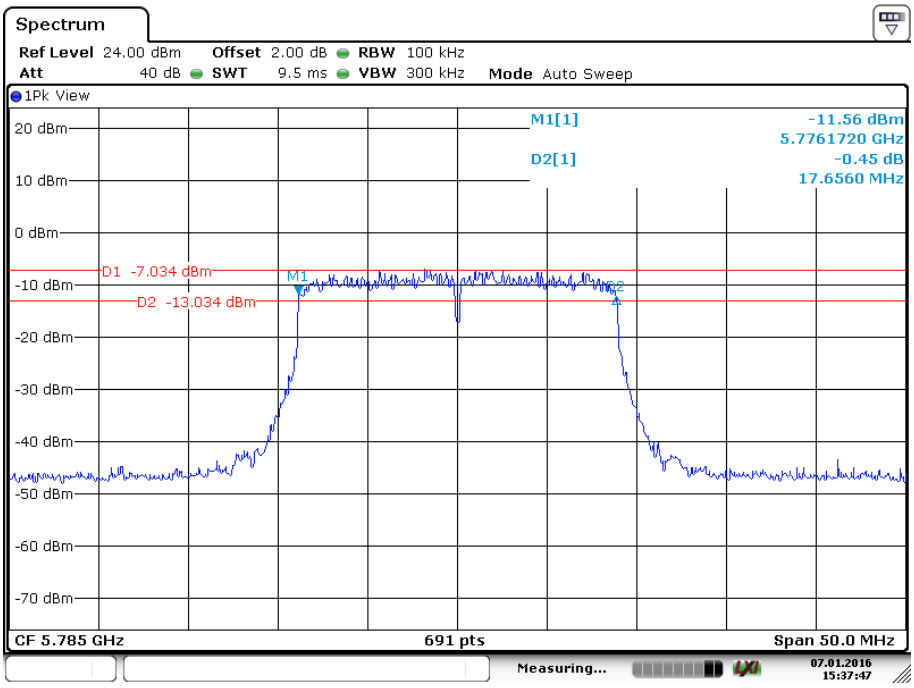
Result plot as follows:

Band IV 5725 MHz to 5850 MHz

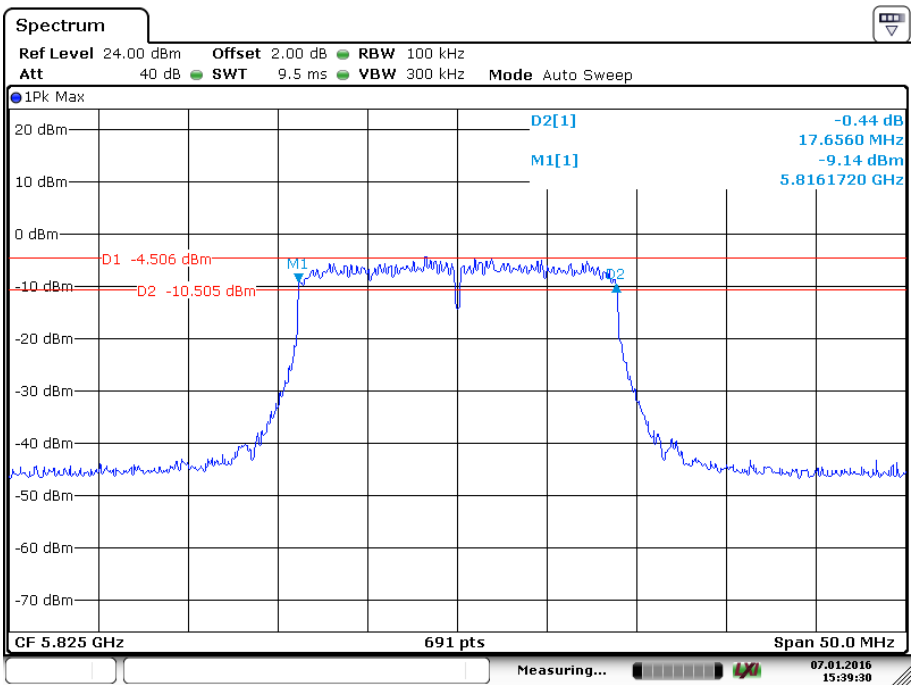
802.11an(HT 20)
Channel 149: 5745 MHz:



Channel 157: 5785 MHz:

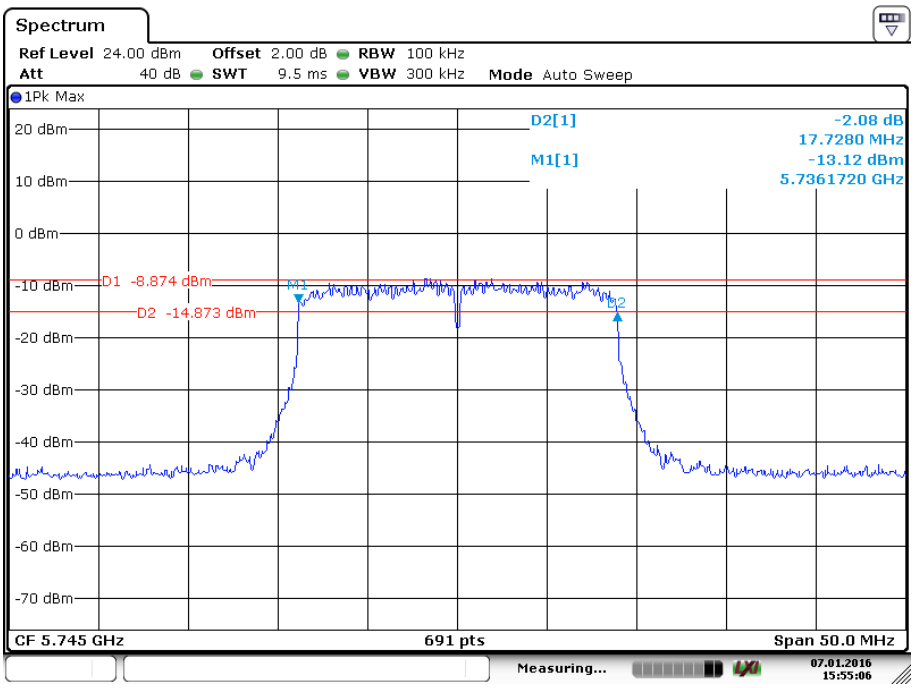



Channel 165: 5825 MHz:

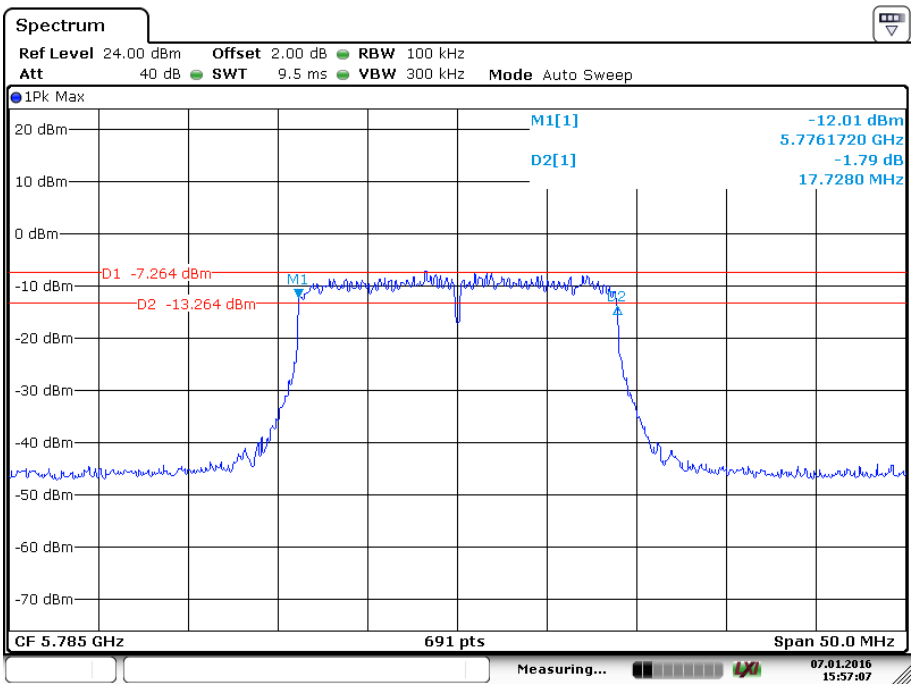


802.11ac(HT 20)

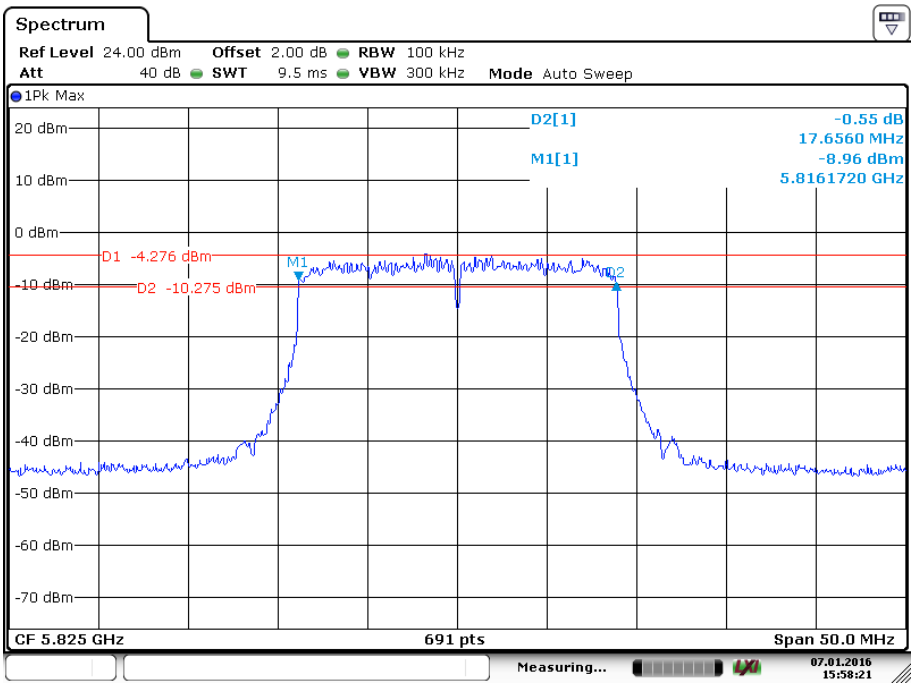
Channel 149: 5745 MHz:




Channel 157: 5785 MHz:

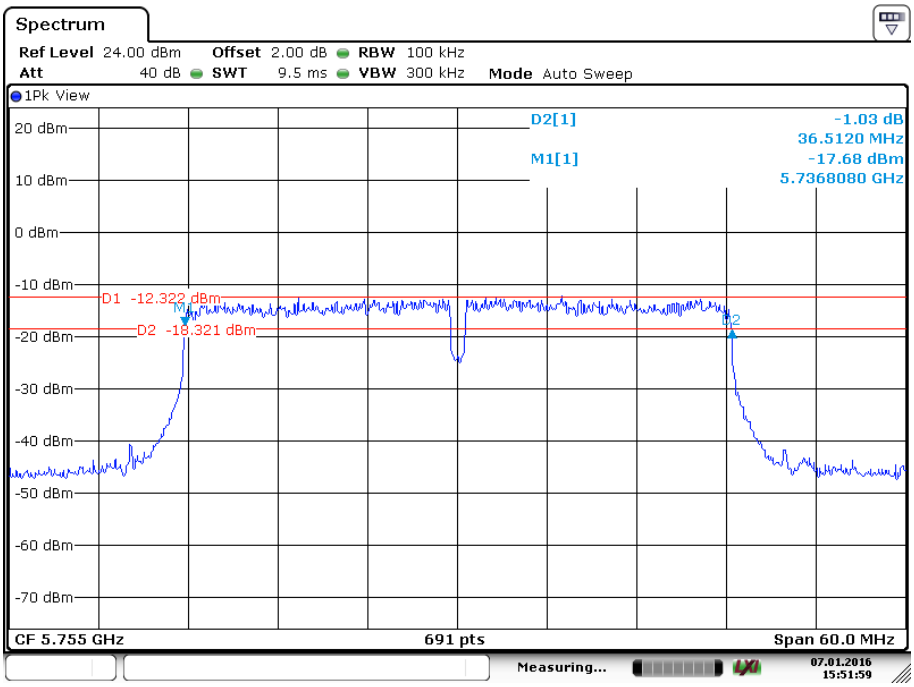


Channel 165: 5825 MHz:

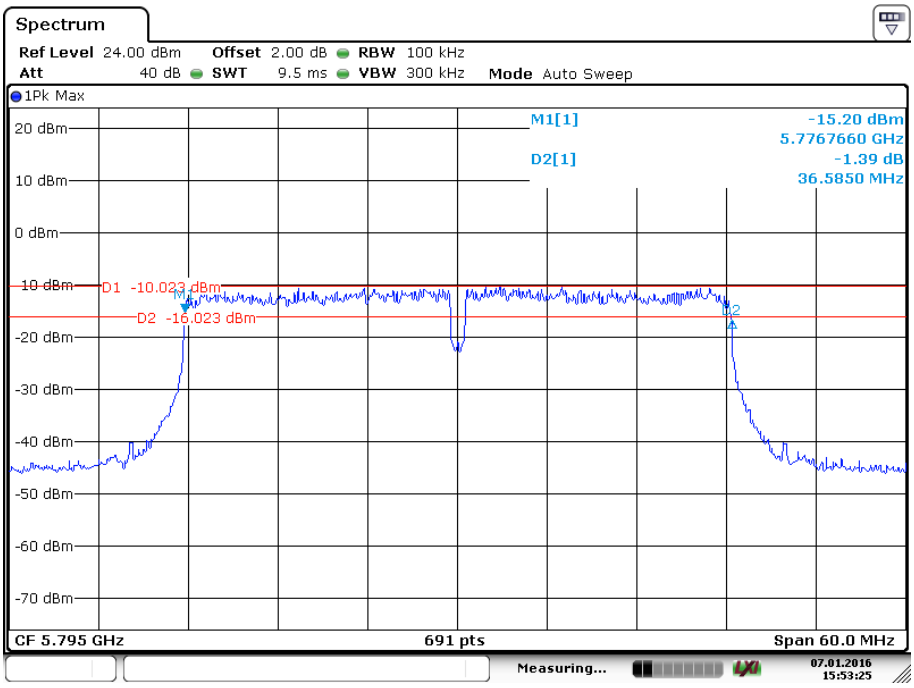



802.11an(HT 40)

Channel 151: 5755 MHz:

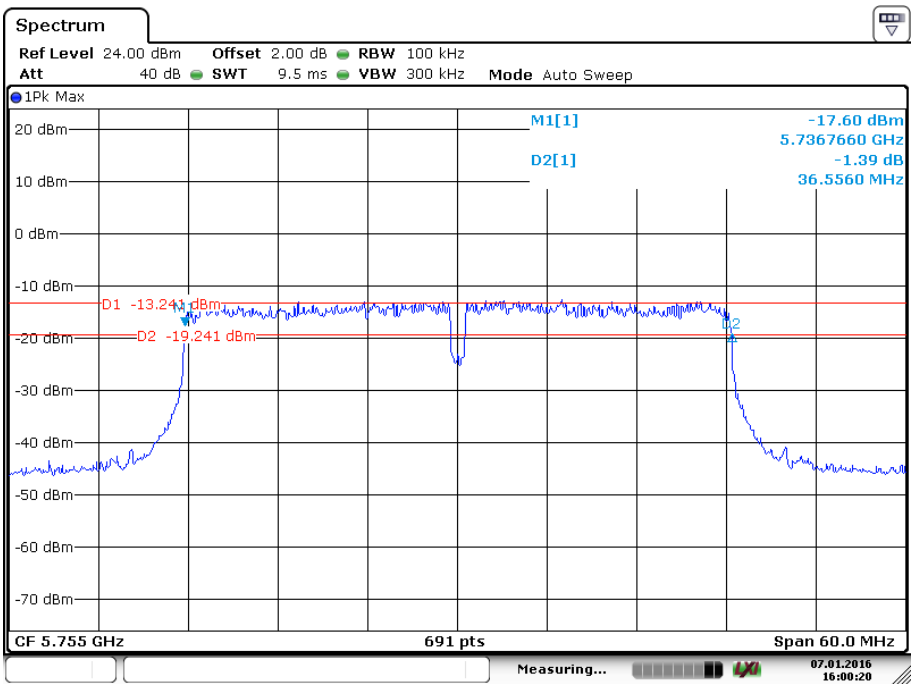


Channel 159: 5795 MHz:

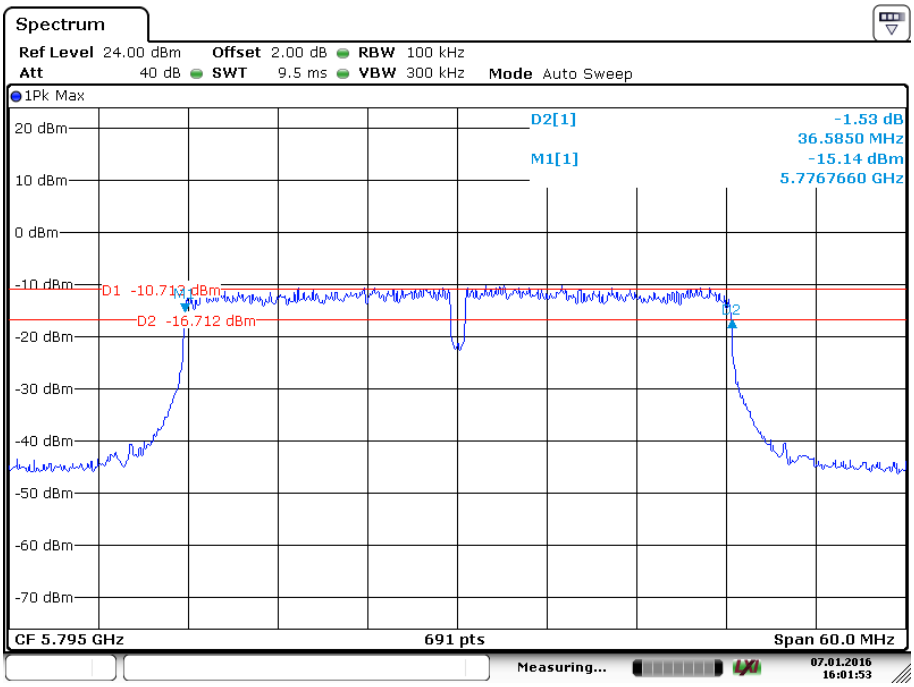



802.11ac(HT 40)

Channel 151: 5755 MHz:

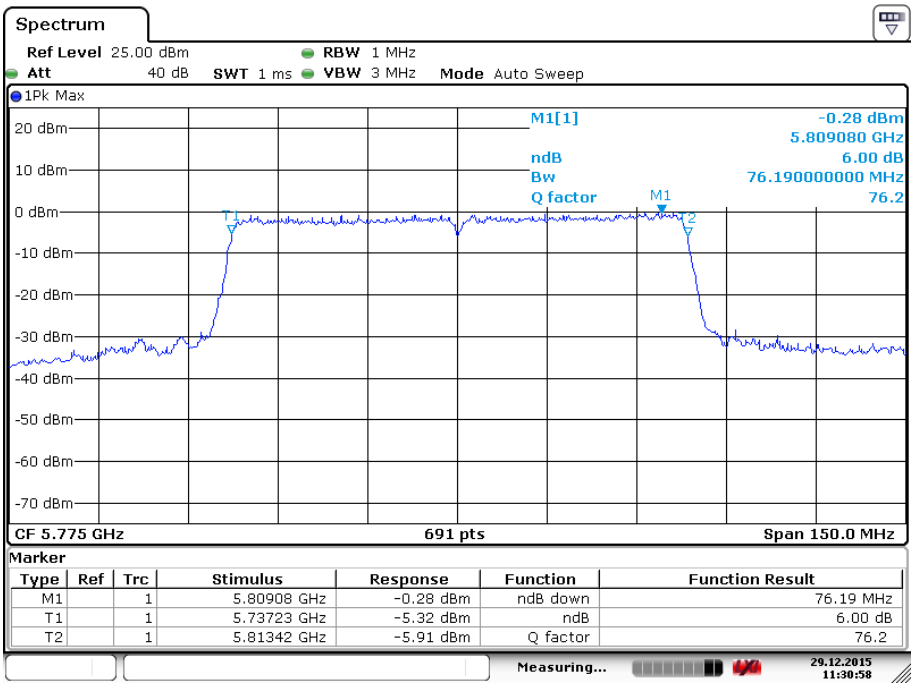


Channel 159: 5795 MHz:




802.11ac(HT 80)

Channel 155: 5775 MHz:



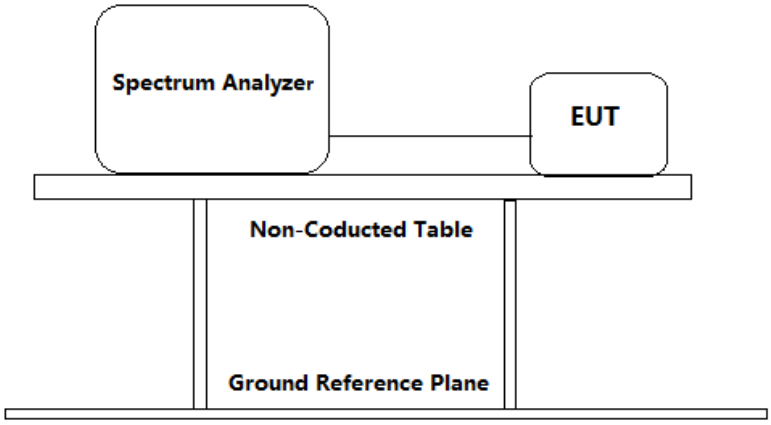
## 4.3 Maximum Conducted Output Power

Test Requirement: FCC Part 15 C clause 15.407(a)

Test Method: FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause E

Test Status: Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.

Test Configuration:



Test Procedure:

1. Remove the antenna from the EUT and then connect a low attention attenuation RF cable (cable loss =2 dB) from the antenna port to the spectrum.
2. Set the spectrum analyzer:
   a) Set the RBW = 1 MHz.
   b) Set the VBW≥[3 × RBW].
   c) Set the span≥26 dB Bandwidth
   d) Detector = RMS
   e) Sweep time = auto couple.
   f) Trace mode = max hold.
   g) Allow trace to fully stabilize.
   h) Use the instrument's band/channel power measurement function with the band limits set equal to the 26 dB Bandwidth.
3. Repeat until all the test status is investigated.
4. Report the worst case.

**Test result:**

**Band I (5150MHz-5250MHz)**

| Channel No. | Frequency (MHz) | Mode | Data Rate | Maximum Conducted output power (dBm) | Limit dBm | Result |
|---|---|---|---|---|---|---|
| 36 | 5180 | 802.11an (HT20) | 72.2 Mbps | 15.5 | 30 | Pass |
| 44 | 5220 | | 72.2 Mbps | 14.8 | | Pass |
| 48 | 5240 | | 72.2 Mbps | 16.9 | | Pass |
| 38 | 5190 | 802.11an (HT40) | 150 Mbps | 15.3 | | Pass |
| 46 | 5230 | | 150 Mbps | 14.5 | | Pass |
| 36 | 5180 | 802.11ac (HT20) | 86.7 Mbps | 14.6 | | Pass |
| 44 | 5220 | | 86.7 Mbps | 14.8 | | Pass |
| 48 | 5240 | | 86.7 Mbps | 14.6 | | Pass |
| 38 | 5190 | 802.11ac (HT40) | 200 Mbps | 15.5 | | Pass |
| 46 | 5230 | | 200 Mbps | 14.7 | | Pass |
| 42 | 5210 | 802.11ac (HT80) | 433.3 Mbps | 14.8 | | Pass |

**Band IV (5725MHz-5850MHz)**

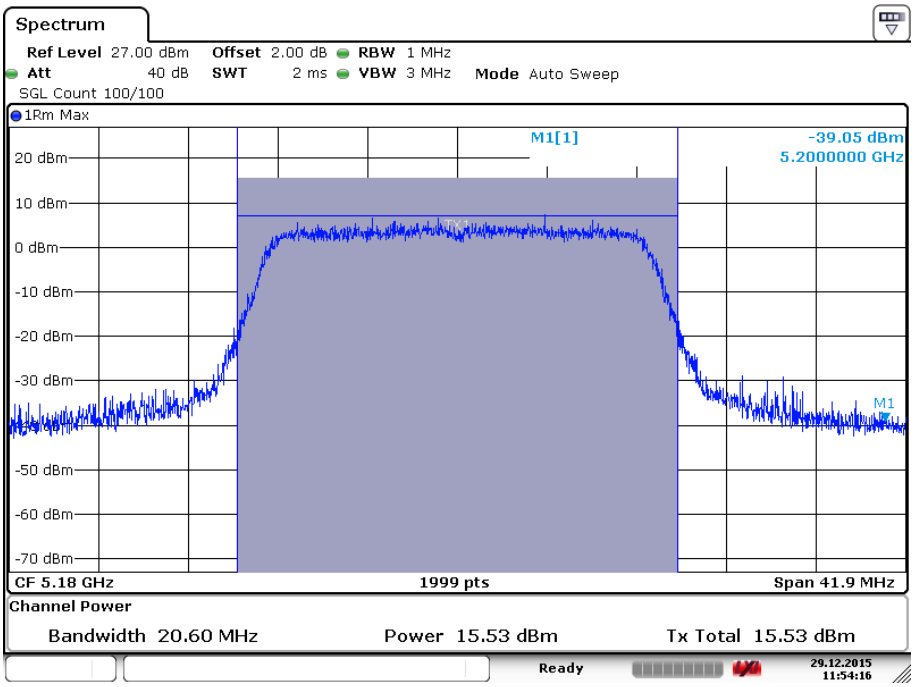
| Channel No. | Frequency (MHz) | Mode | Data Rate | Maximum Conducted output power (dBm) | Limit dBm | Result |
|---|---|---|---|---|---|---|
| 149 | 5745 | 802.11an (HT20) | 72.2 Mbps | 13.4 | 30 | Pass |
| 157 | 5785 | | 72.2 Mbps | 13.9 | | Pass |
| 165 | 5825 | | 72.2 Mbps | 14.8 | | Pass |
| 151 | 5755 | 802.11an (HT40) | 150 Mbps | 13.4 | | Pass |
| 159 | 5795 | | 150 Mbps | 13.9 | | Pass |
| 149 | 5745 | 802.11ac (HT20) | 86.7 Mbps | 13.5 | | Pass |
| 157 | 5785 | | 86.7 Mbps | 13.9 | | Pass |
| 165 | 5825 | | 86.7 Mbps | 14.8 | | Pass |
| 151 | 5755 | 802.11ac (HT40) | 200 Mbps | 13.3 | | Pass |
| 159 | 5795 | | 200 Mbps | 13.9 | | Pass |
| 155 | 5775 | 802.11ac (HT80) | 433.3 Mbps | 13.4 | | Pass |

Remark: Level = Read Level + Cable Loss (2 dB).
The unit does meet the FCC requirements.

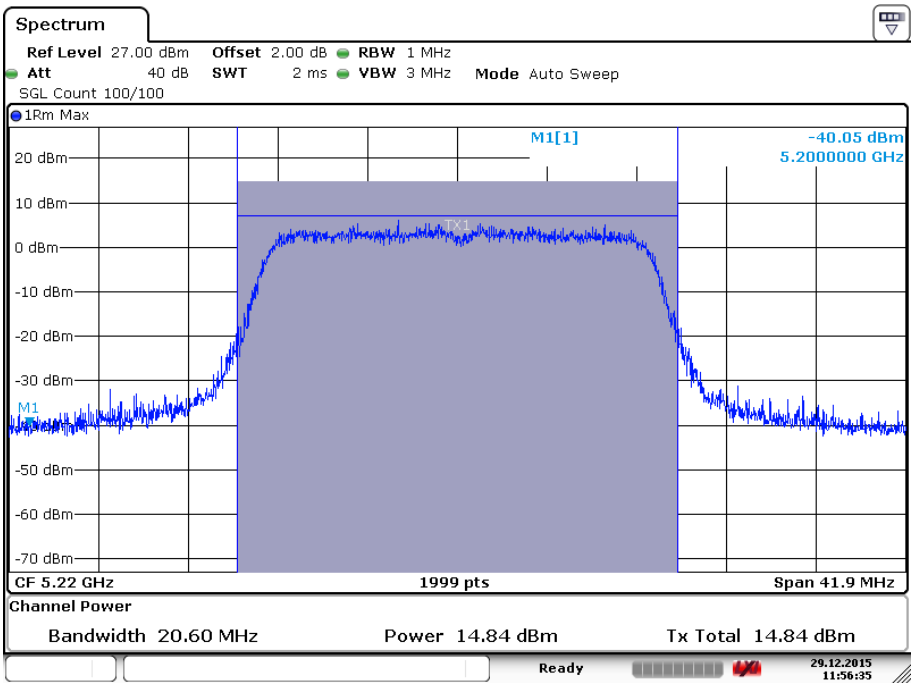
Result plot as follows:

Band I 5150 MHz to 5250 MHz

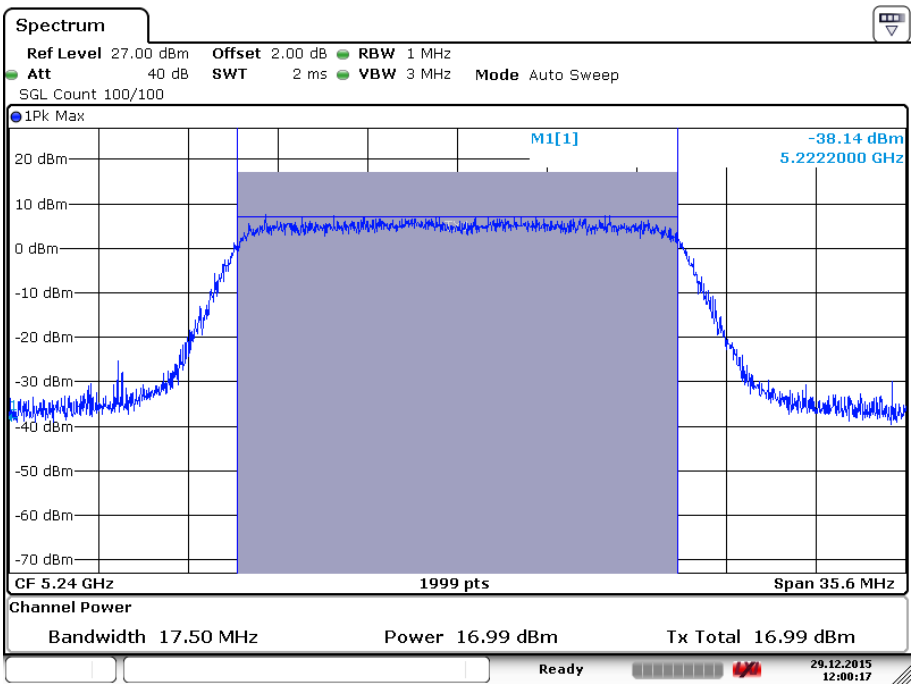
802.11an(HT 20)
Channel 36: 5180 MHz:



Channel 44: 5220 MHz:

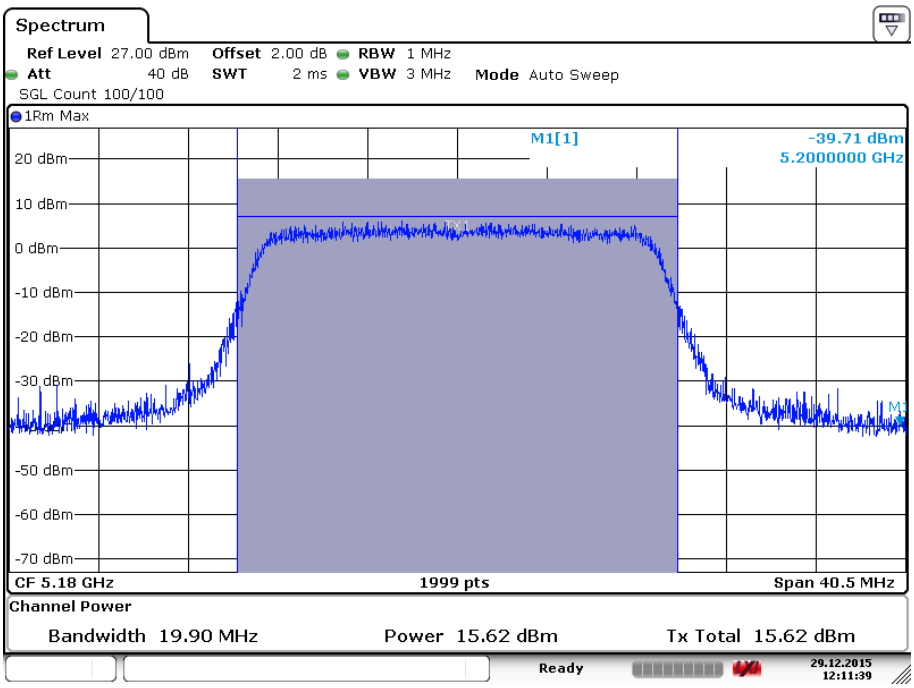



Channel 48: 5240 MHz:

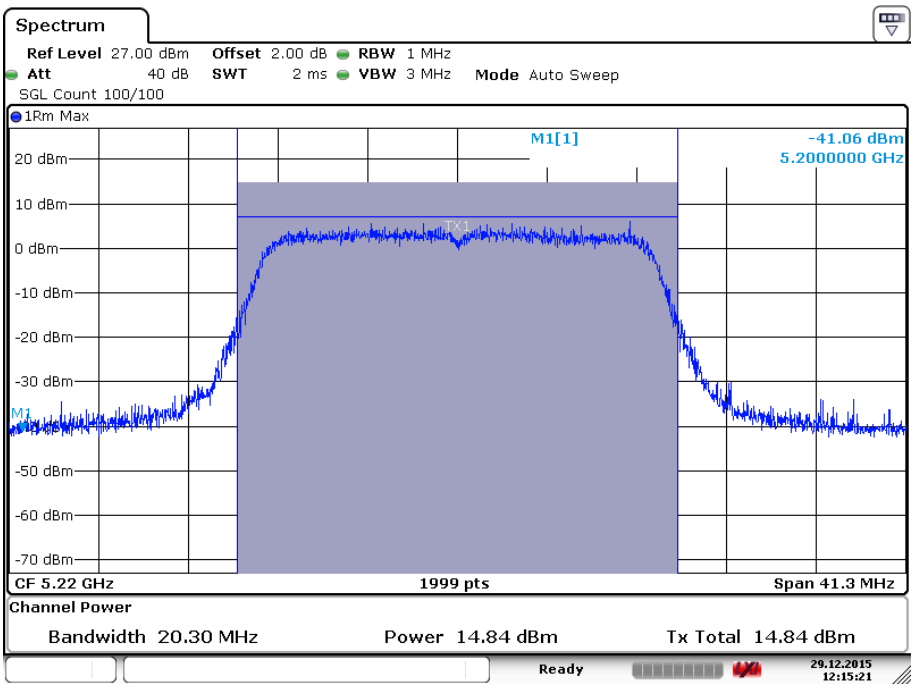


802.11ac(HT 20)

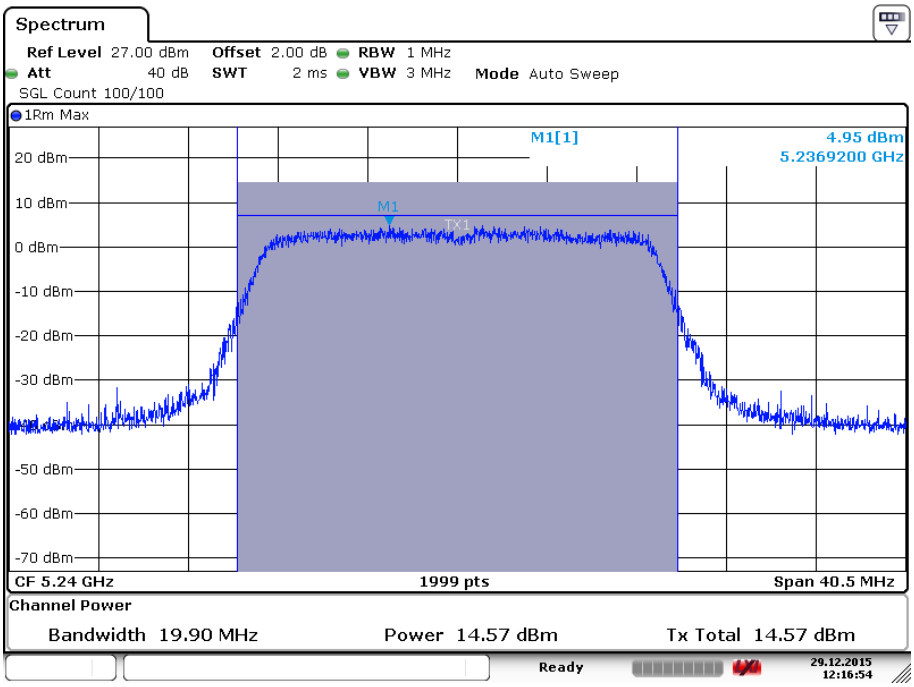
Channel 36: 5180 MHz:




Channel 44: 5220 MHz:

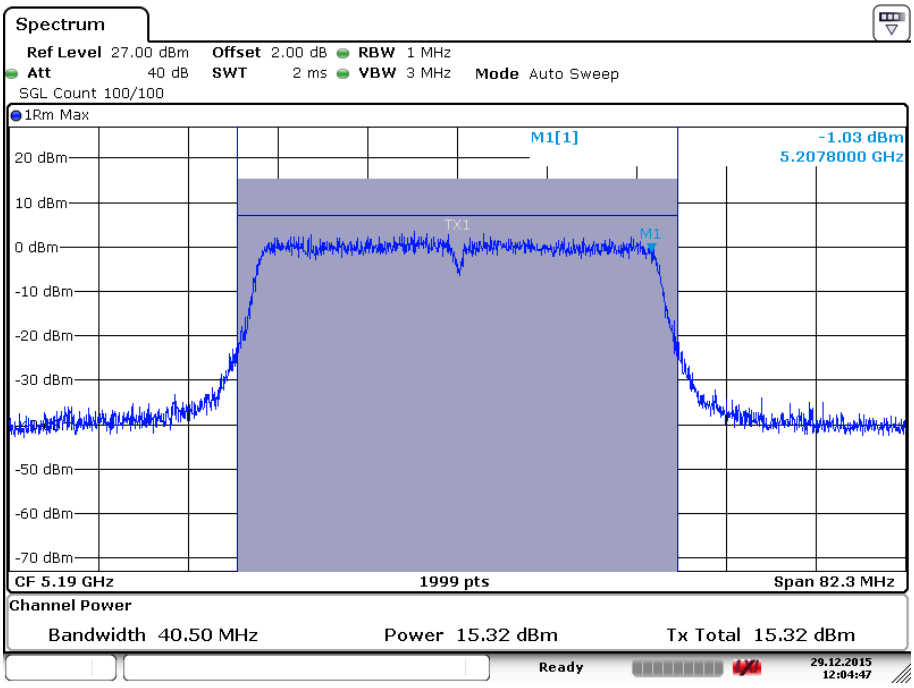


Channel 48: 5240 MHz:

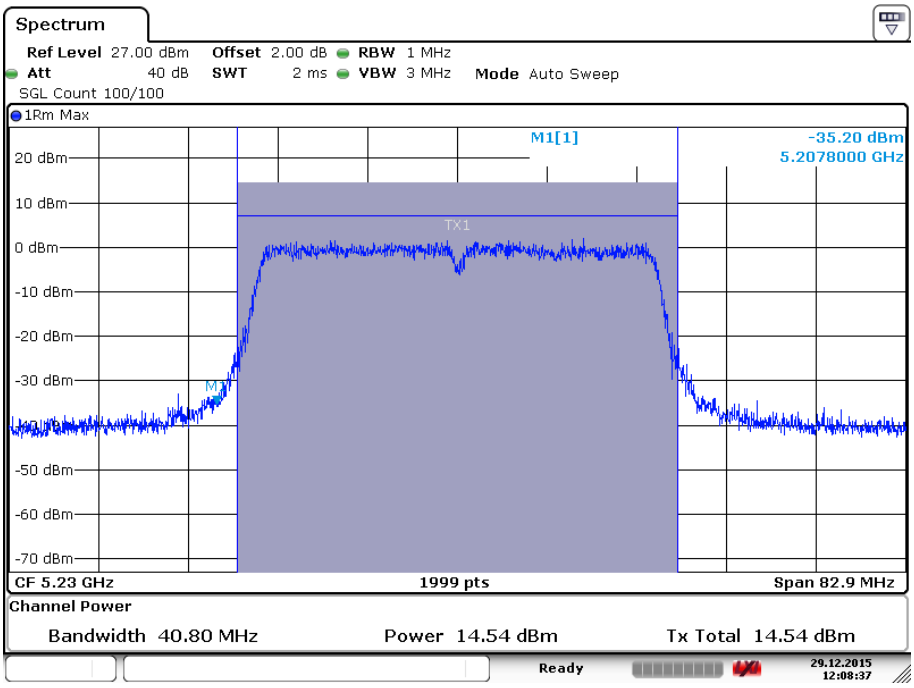



802.11an(HT 40)

Channel 38: 5190 MHz:

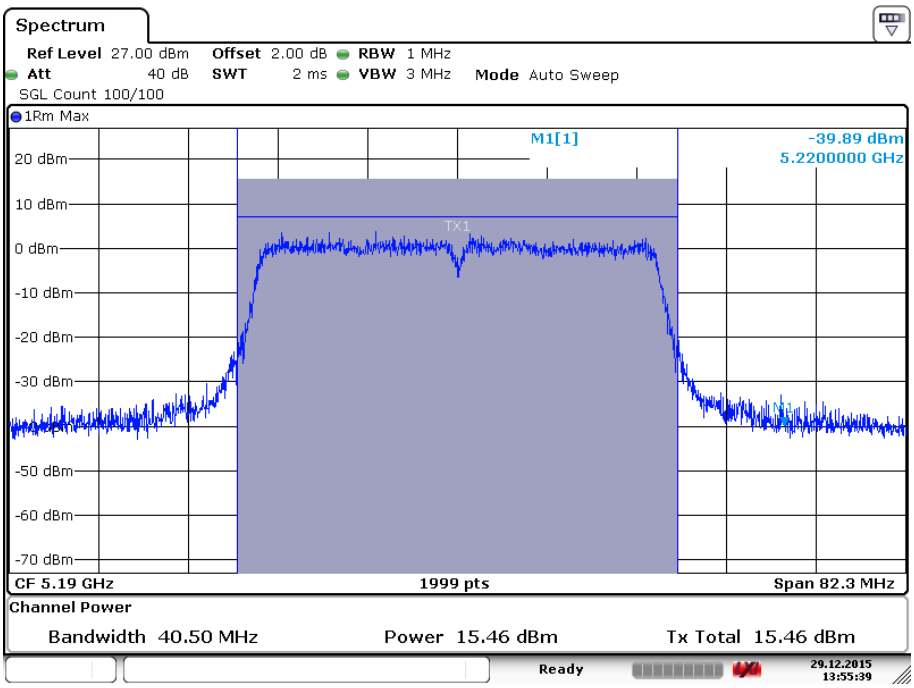


Channel 46: 5230 MHz:

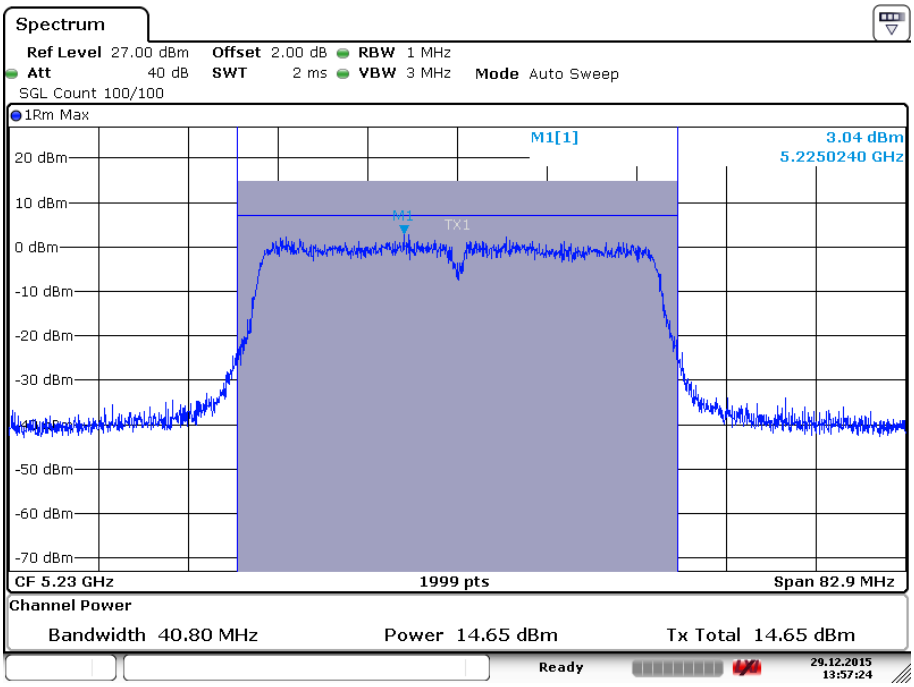



802.11ac(HT 40)

Channel 38: 5190 MHz:

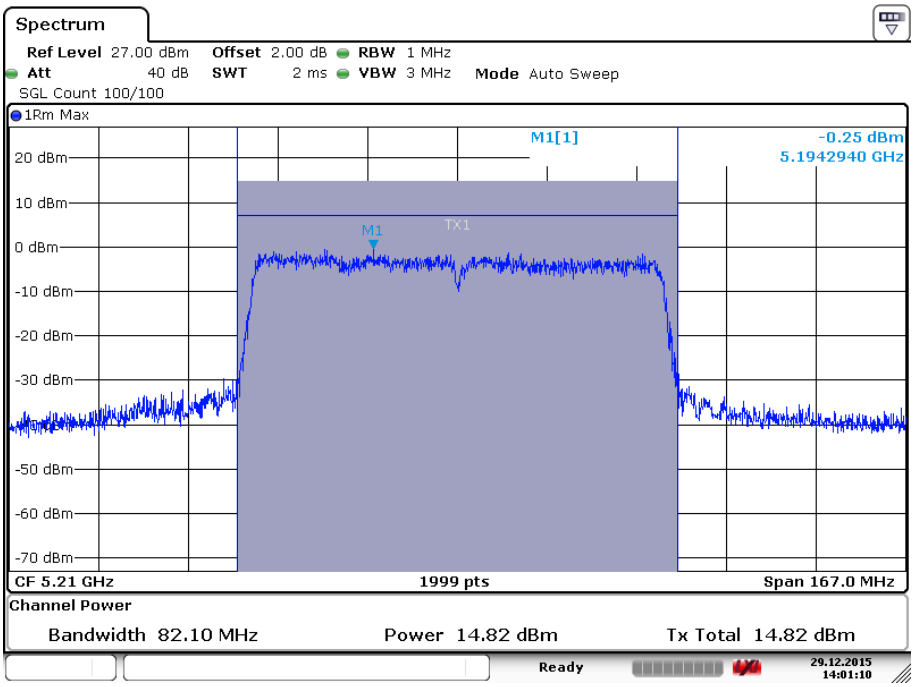


Channel 46: 5230 MHz:




802.11ac(HT 80)

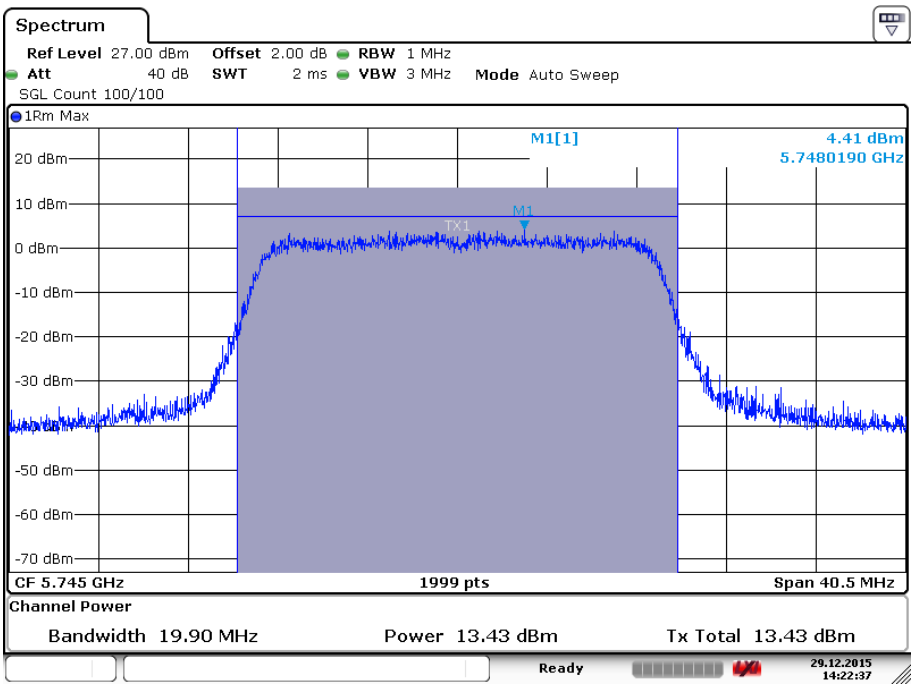
Channel 42: 5210 MHz:



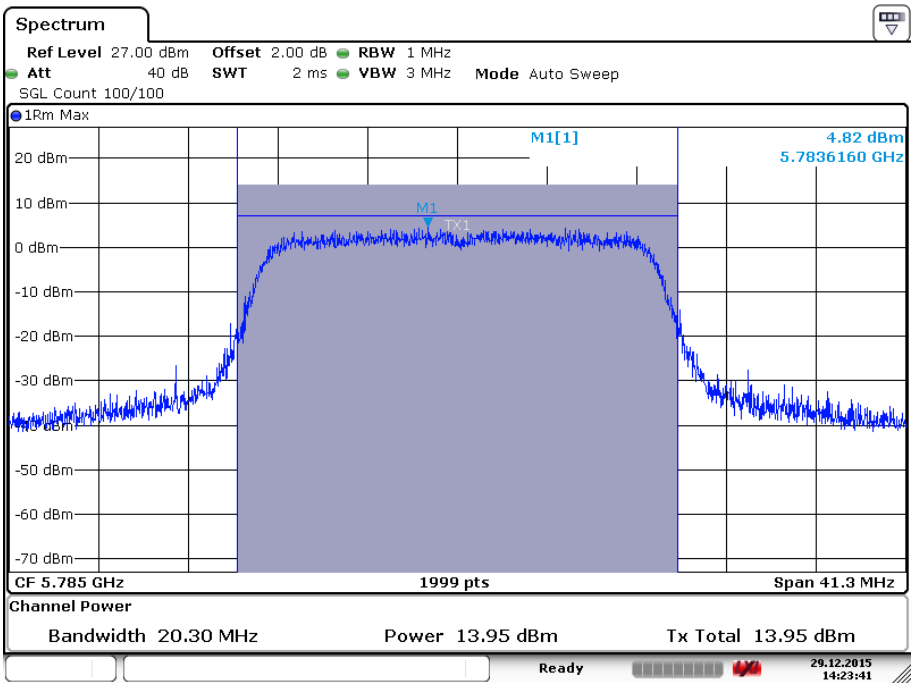
Result plot as follows:

Band IV 5725 MHz to 5850 MHz

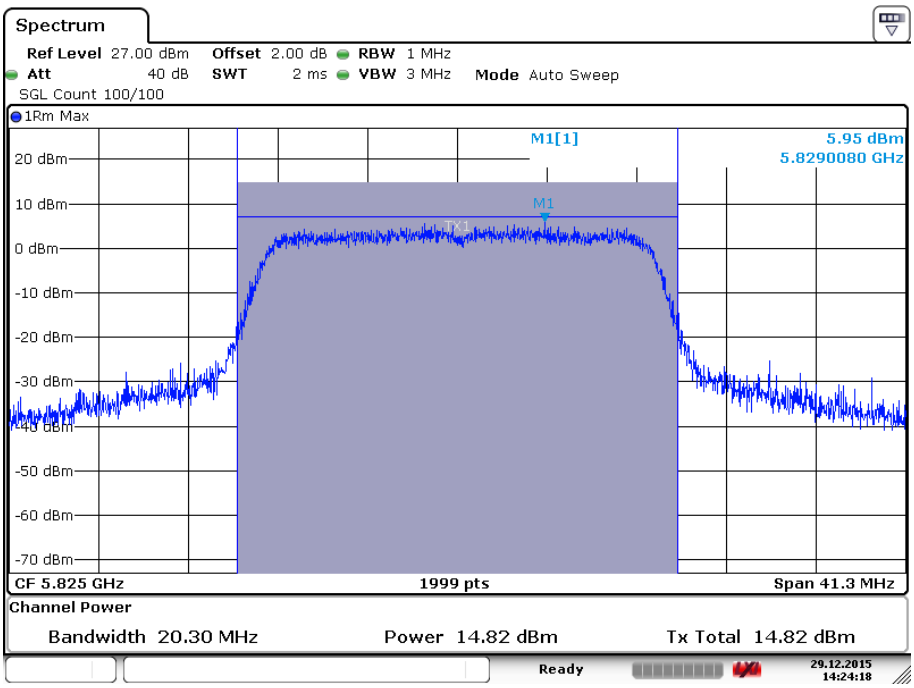
802.11an(HT 20)
Channel 149: 5745 MHz:



Channel 157: 5785 MHz:

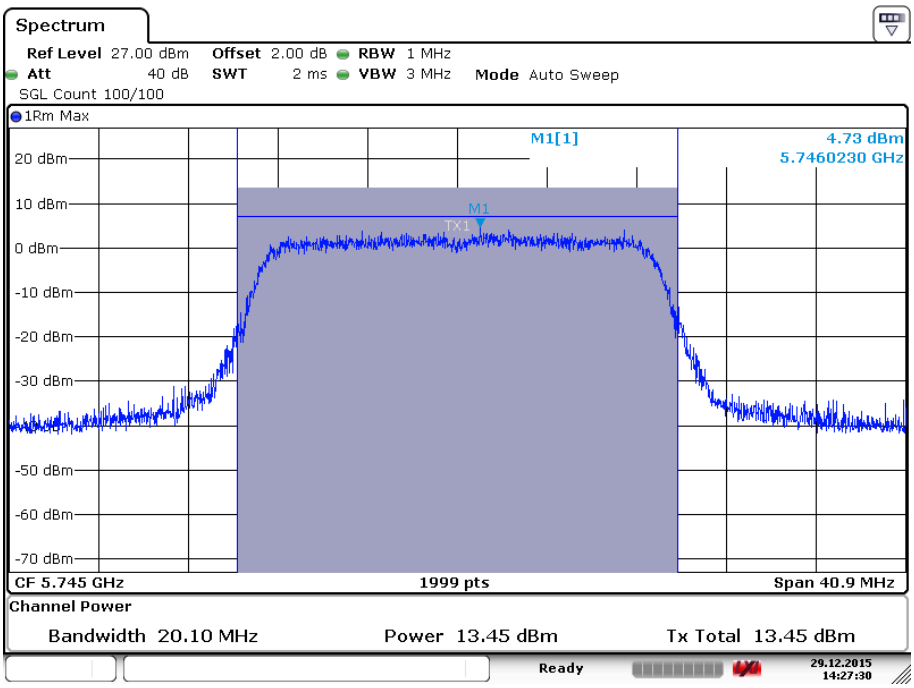



Channel 165: 5825 MHz:

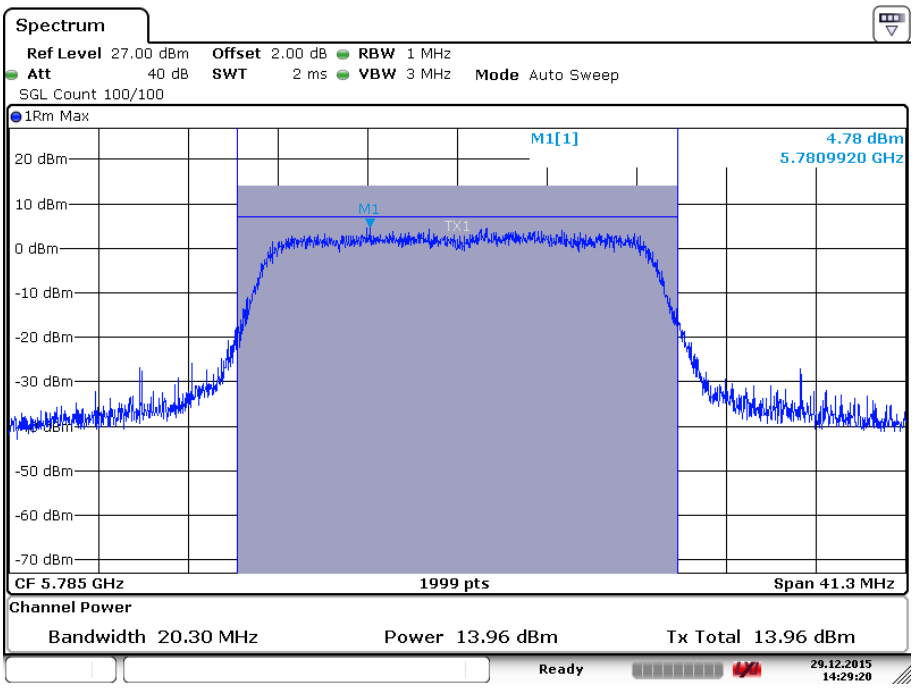


802.11ac(HT 20)

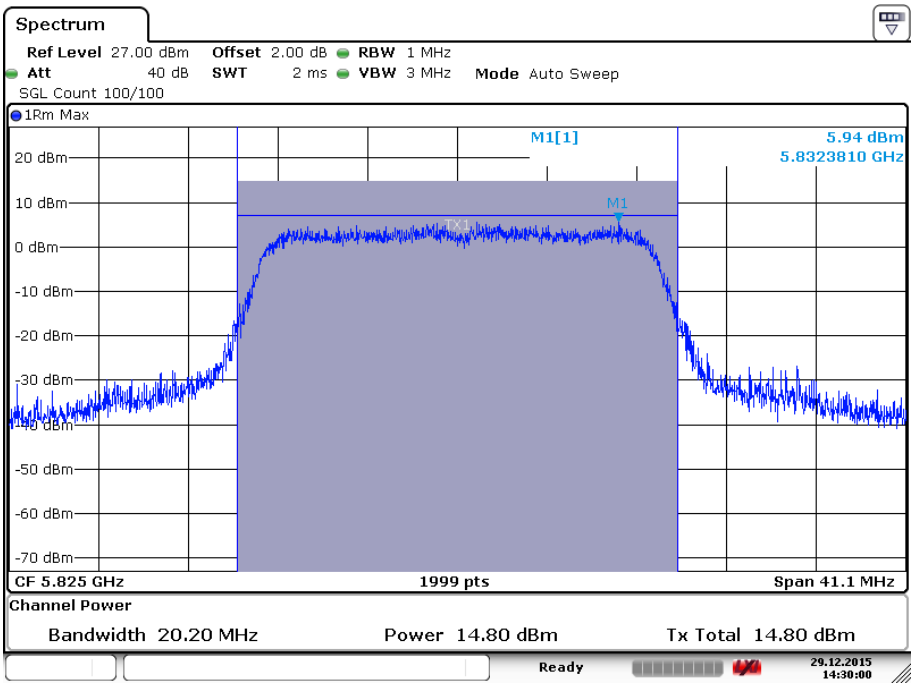
Channel 149: 5745 MHz:




Channel 157: 5785 MHz:

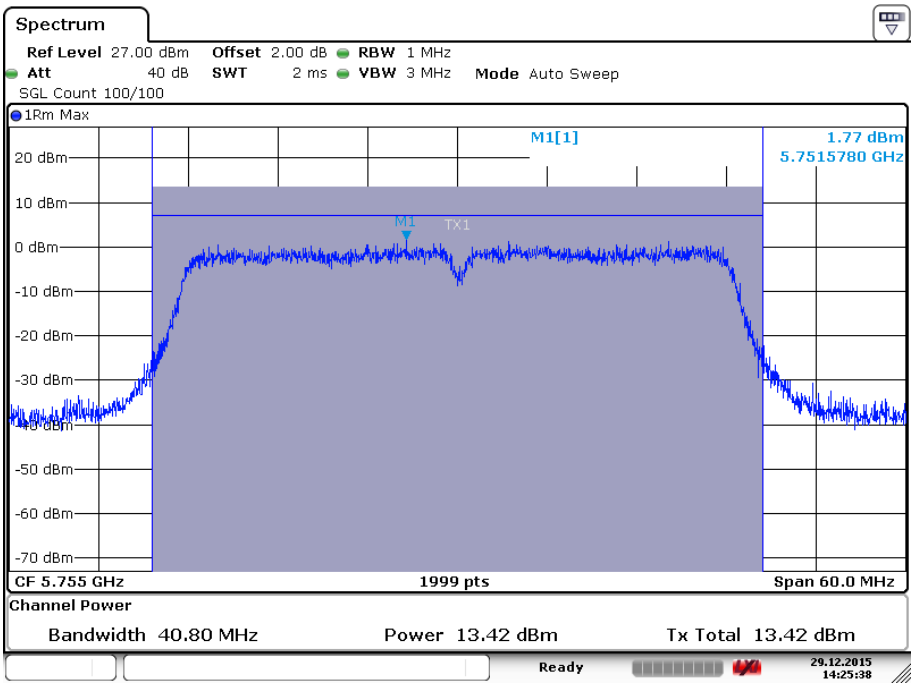


Channel 165: 5825 MHz:

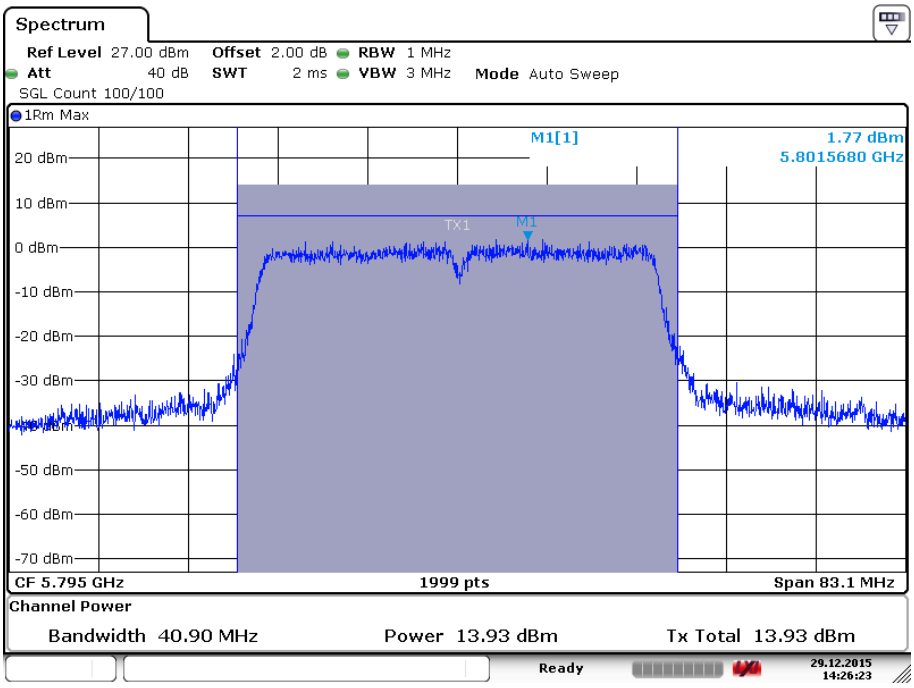



802.11an(HT 40)

Channel 151: 5755 MHz:

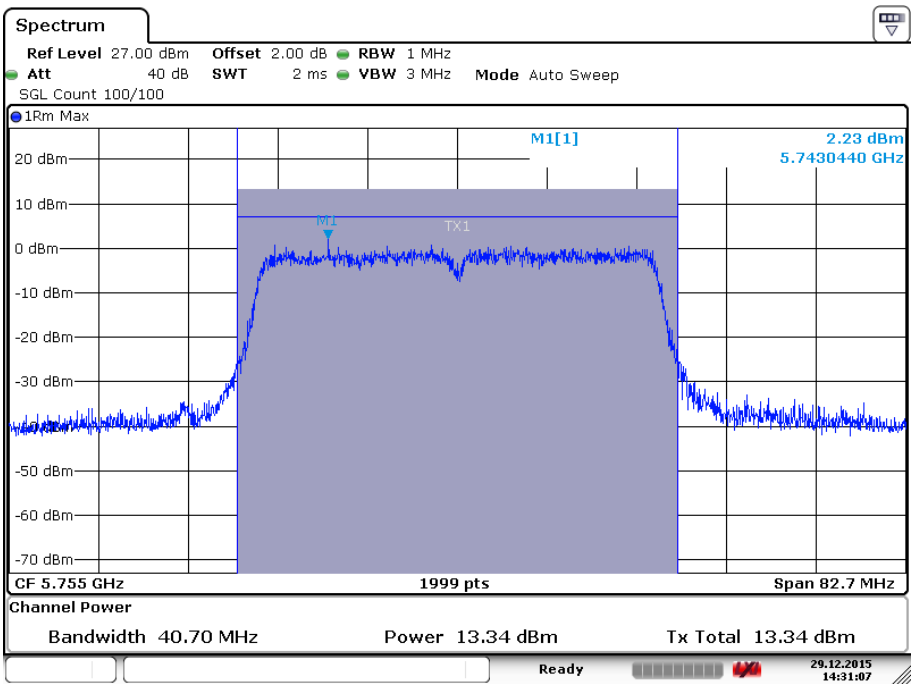


Channel 159: 5795 MHz:

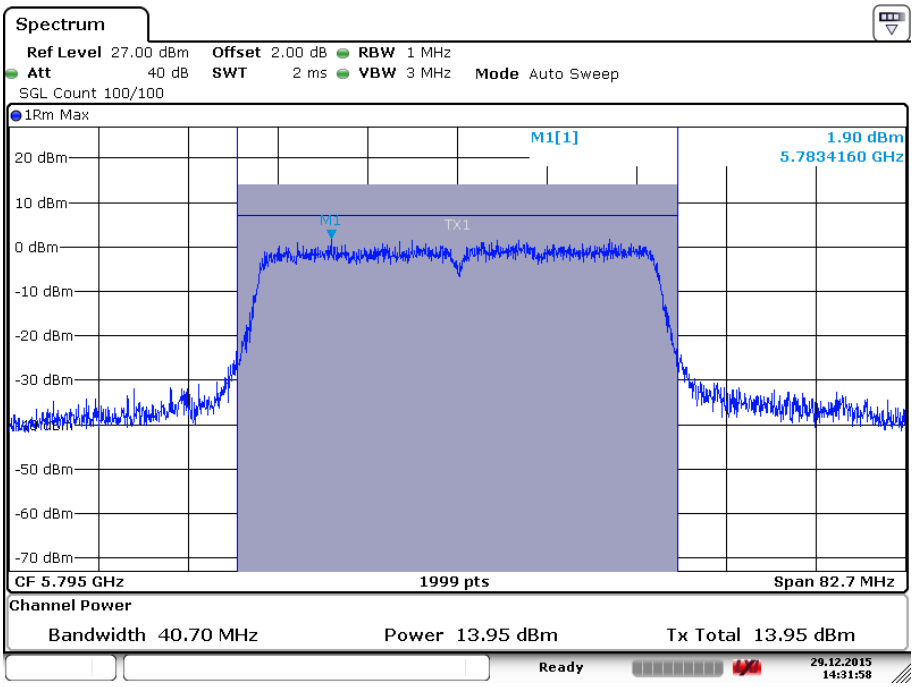



802.11ac(HT 40)

Channel 151: 5755 MHz:

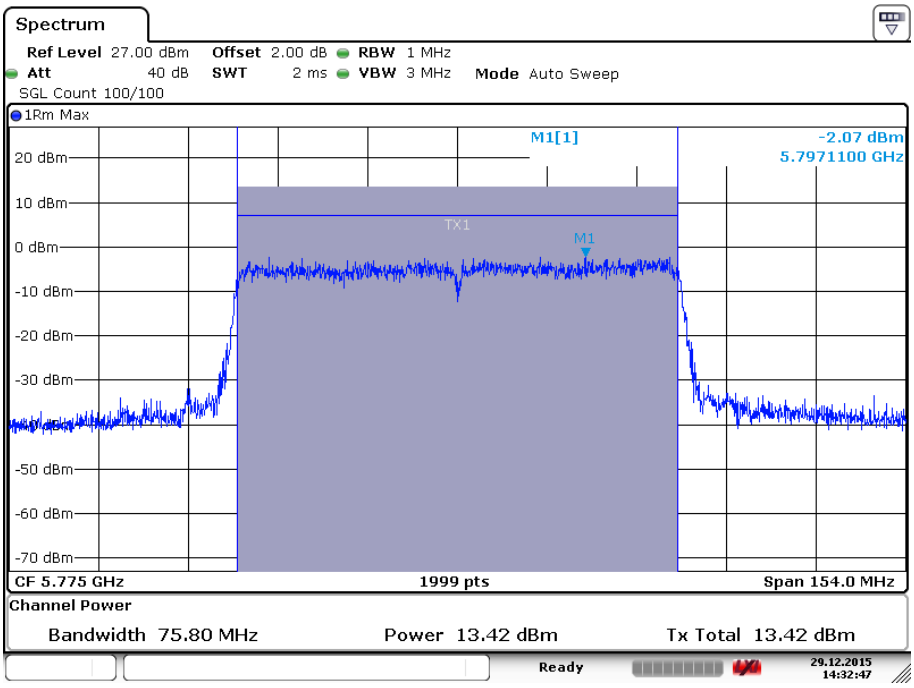


Channel 159: 5795 MHz:




802.11ac(HT 80)

Channel 155: 5775 MHz:



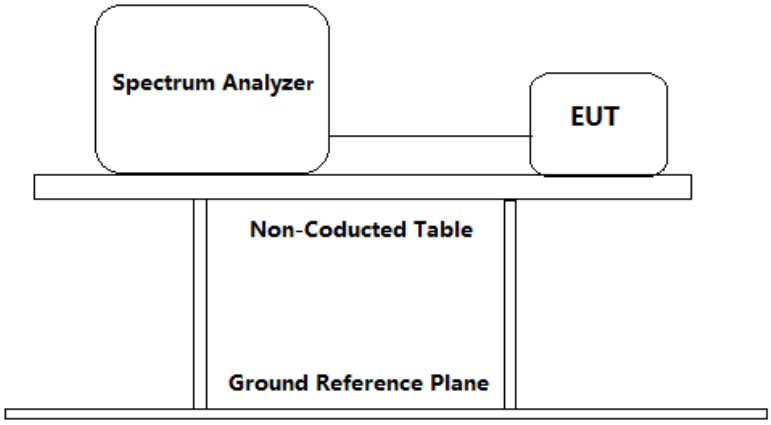
## 4.4 Maximum Peak Power Spectral Density

Test Requirement: FCC Part 15 C clause 15.407(a)

Test Method: FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause F

Test Status: Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.

Test Configuration:



Test Procedure:

1. Remove the antenna from the EUT and then connect a low attention attenuation RF cable (cable loss =2 dB) from the antenna port to the spectrum analyzer or power meter.
2. Set the spectrum analyzer:

   For Band I (5150MHz-5250MHz)
   a) Set the RBW = 1MHz.
   b) Set the VBW≥ (3 × RBW).
   c) Set the span≥ 26 dB Bandwidth
   d) Detector = peak
   e) Sweep time = auto couple.
   f) Trace mode = max hold.
   g) Allow trace to fully stabilize.
   i) Use the peak marker function to determine the maximum amplitude level within the RBW.

   For Band IV (5725MHz-5850MHz)
   a) Set the RBW = 500kHz.
   b) Set the VBW≥ (3 × RBW).
   c) Set the span≥ 26 dB Bandwidth.
   d) Detector = peak
   e) Sweep time = auto couple.
   f) Trace mode = max hold.
   g) Allow trace to fully stabilize.
   i) Use the peak marker function to determine the maximum amplitude level within the RBW.Measure the Power Spectral Density of the test frequency with special test status.
3. Measure the Power Spectral Density of the test frequency with special test status.
4. Repeat until all the test status is investigated.
5. Report the worst case.

**Band I (5150MHz-5250MHz)**

| Channel No. | Frequency (MHz) | Mode | Data Rate | Maximum Power Spectral Density (dBm/MHz) | Limit | Result |
|---|---|---|---|---|---|---|
| 36 | 5180 | 802.11an (HT20) | 72.2 Mbps | 9.8 | 17dBm/ MHz | Pass |
| 44 | 5220 | | 72.2 Mbps | 8.8 | | Pass |
| 48 | 5240 | | 72.2 Mbps | 7.7 | | Pass |
| 38 | 5190 | 802.11an (HT40) | 150 Mbps | 6.0 | | Pass |
| 46 | 5230 | | 150 Mbps | 5.5 | | Pass |
| 36 | 5180 | 802.11ac (HT20) | 86.7 Mbps | 9.3 | | Pass |
| 44 | 5220 | | 86.7 Mbps | 8.8 | | Pass |
| 48 | 5240 | | 86.7 Mbps | 7.8 | | Pass |
| 38 | 5190 | 802.11ac (HT40) | 200 Mbps | 6.0 | | Pass |
| 46 | 5230 | | 200 Mbps | 5.8 | | Pass |
| 42 | 5210 | 802.11ac (HT80) | 433.3 Mbps | 2.8 | | Pass |

Test result: Level = Read Level + Cable Loss(2dB).
The unit does meet the FCC requirements.

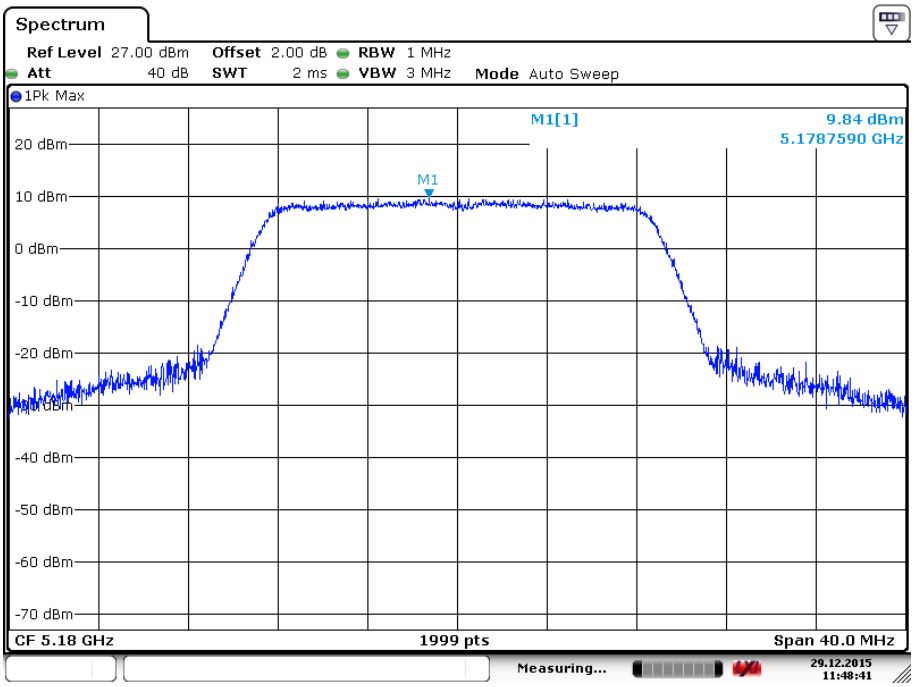
**Band IV (5725MHz-5850MHz)**

| Channel No. | Frequency (MHz) | Mode | Data Rate | Maximum Power Spectral Density (dBm/500kHz) | Limit | Result |
|---|---|---|---|---|---|---|
| 149 | 5745 | 802.11an (HT20) | 72.2 Mbps | 4.0 | 30dBm/ 500kHz | Pass |
| 157 | 5785 | | 72.2 Mbps | 5.2 | | Pass |
| 165 | 5825 | | 72.2 Mbps | 5.4 | | Pass |
| 151 | 5755 | 802.11an (HT40) | 150 Mbps | 1.6 | | Pass |
| 159 | 5795 | | 150 Mbps | 2.5 | | Pass |
| 149 | 5745 | 802.11ac (HT20) | 86.7 Mbps | 4.8 | | Pass |
| 157 | 5785 | | 86.7 Mbps | 4.7 | | Pass |
| 165 | 5825 | | 86.7 Mbps | 5.3 | | Pass |
| 151 | 5755 | 802.11ac (HT40) | 200 Mbps | 1.1 | | Pass |
| 159 | 5795 | | 200 Mbps | 2.1 | | Pass |
| 155 | 5775 | 802.11ac (HT80) | 433.3 Mbps | -1.9 | | Pass |

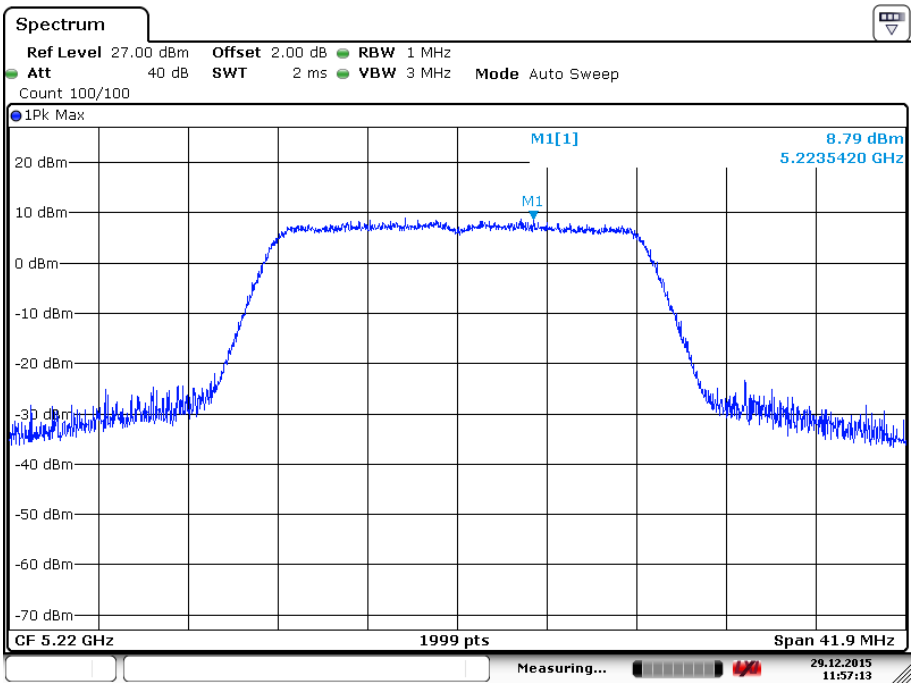
Result plot as follows:

Band I 5150 MHz to 5250 MHz

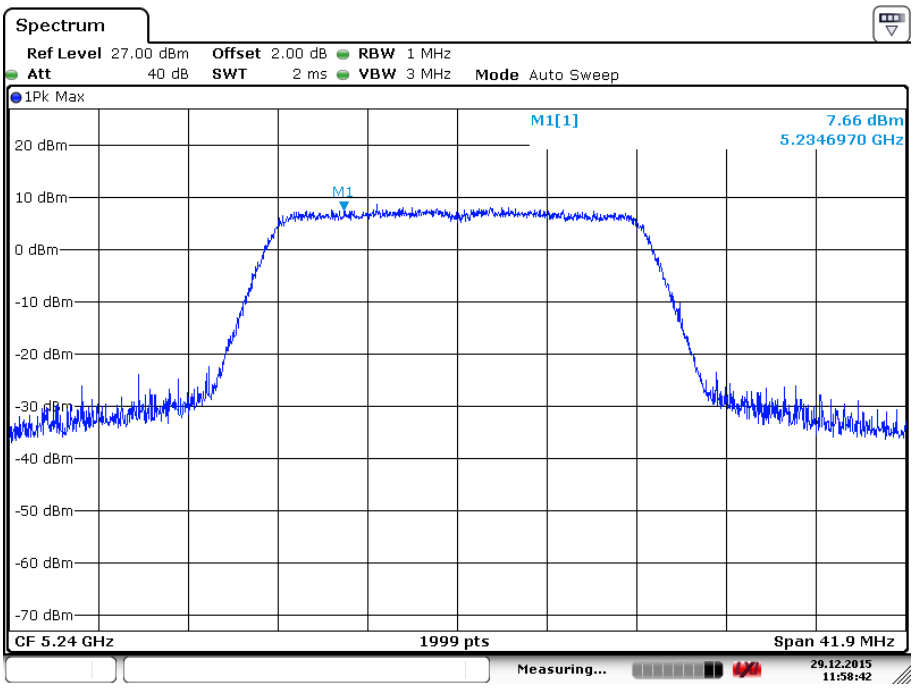
802.11an(HT 20)
Channel 36: 5180 MHz:



Channel 44: 5220 MHz:

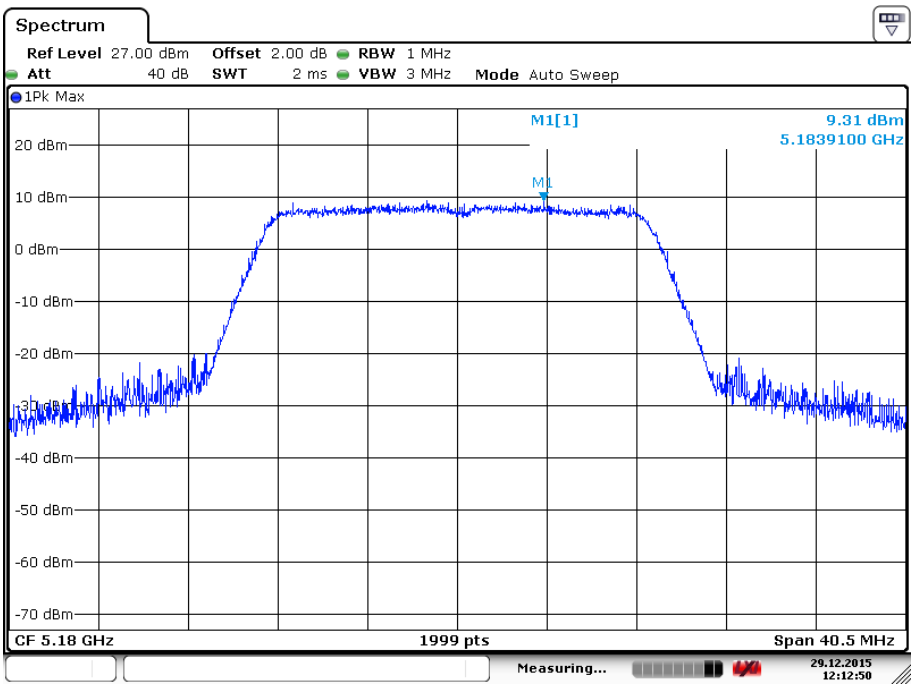



Channel 48: 5240 MHz:

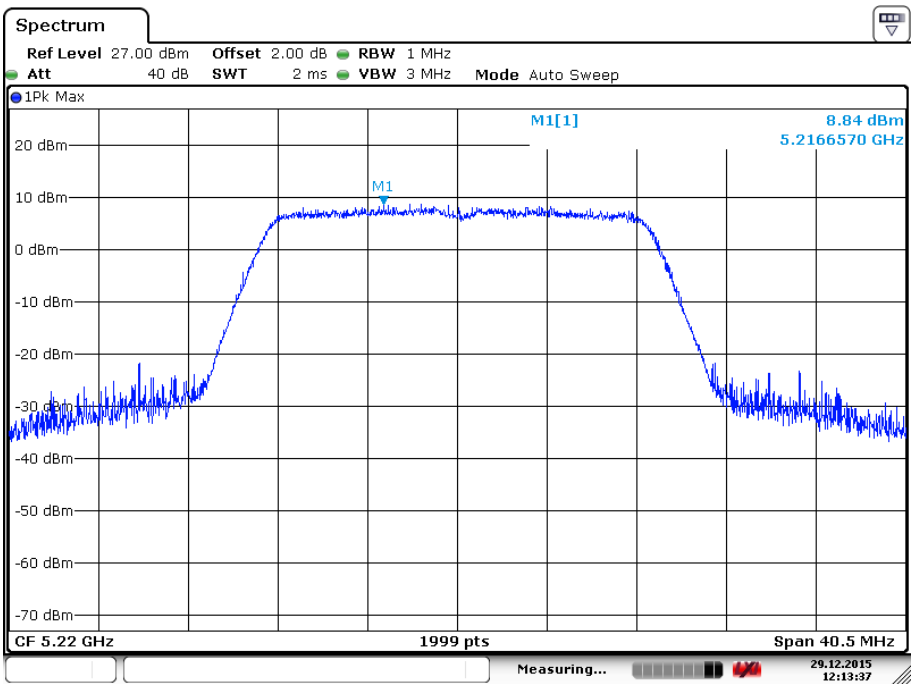


802.11ac(HT 20)

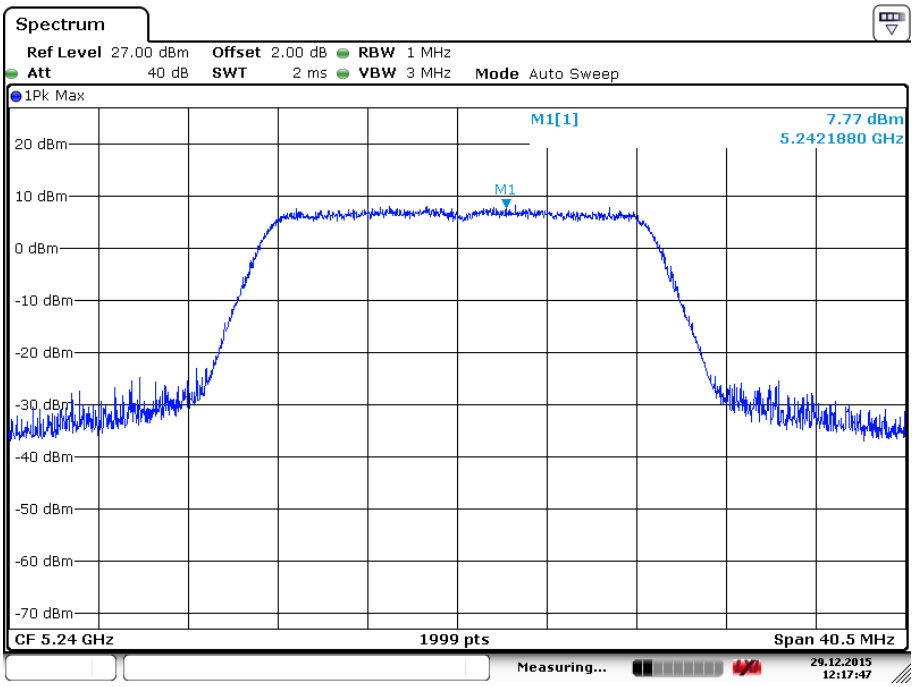
Channel 36: 5180 MHz:




Channel 44: 5220 MHz:

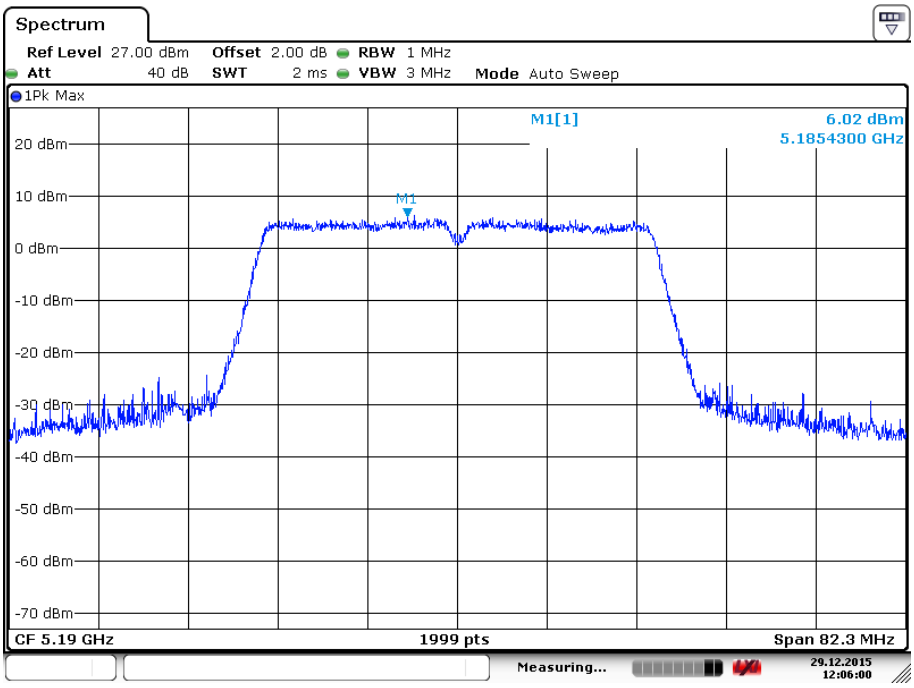


Channel 48: 5240 MHz:

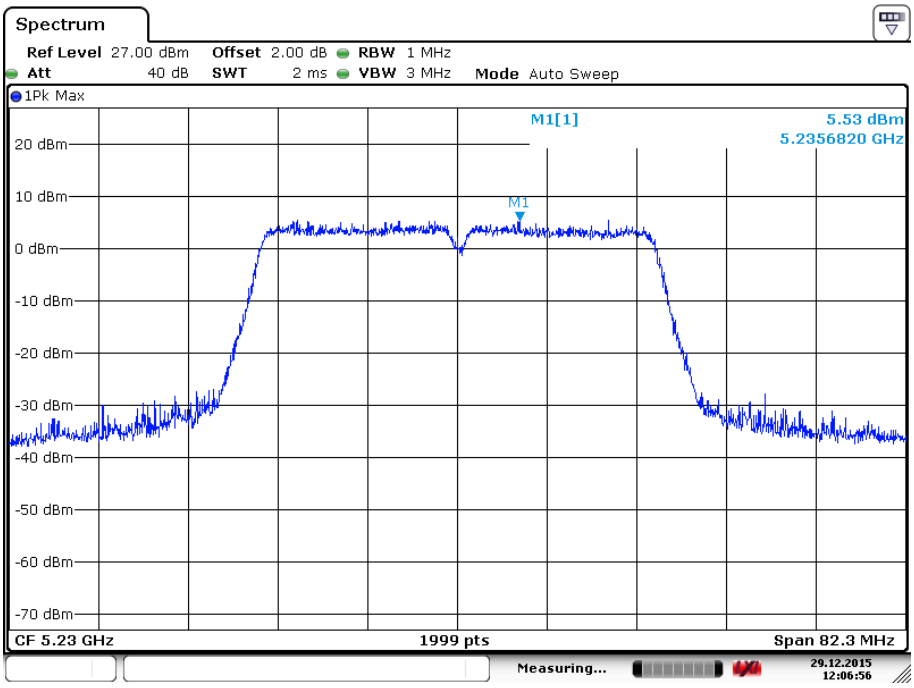



802.11an(HT 40)

Channel 38: 5190 MHz:

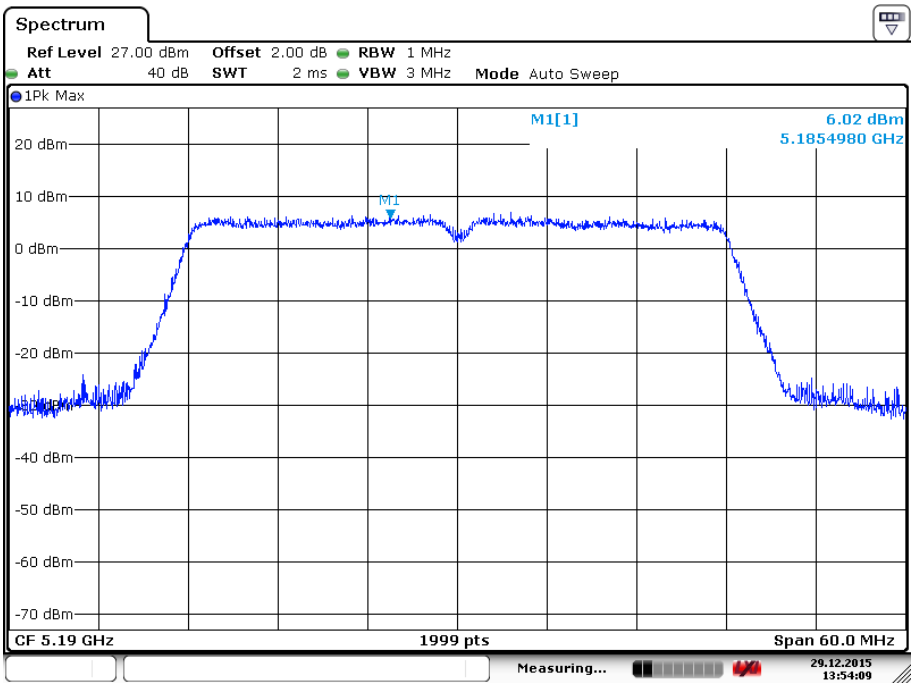


Channel 46: 5230 MHz:

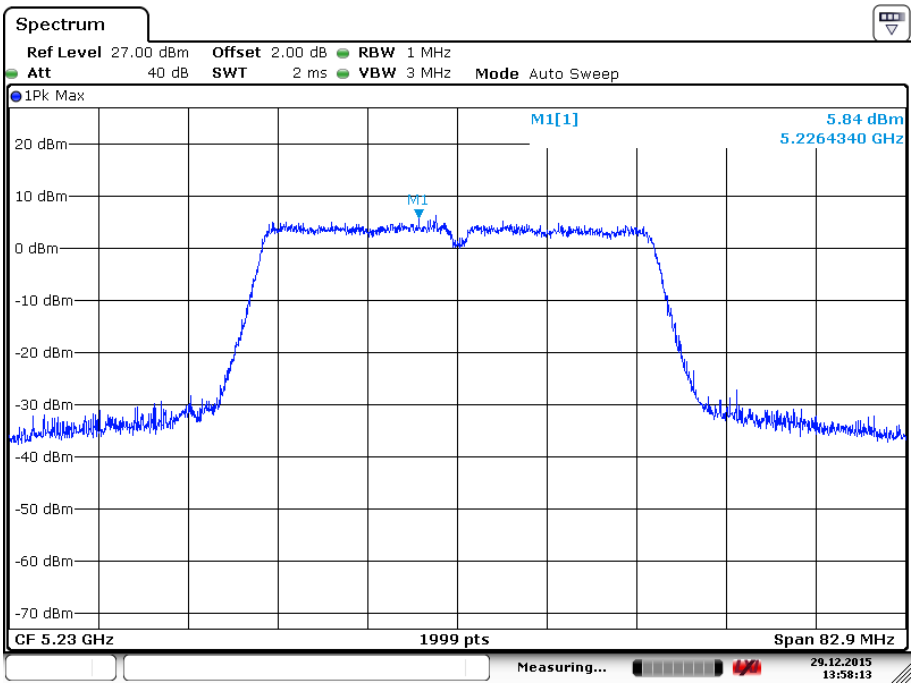



802.11ac(HT 40)

Channel 38: 5190 MHz:

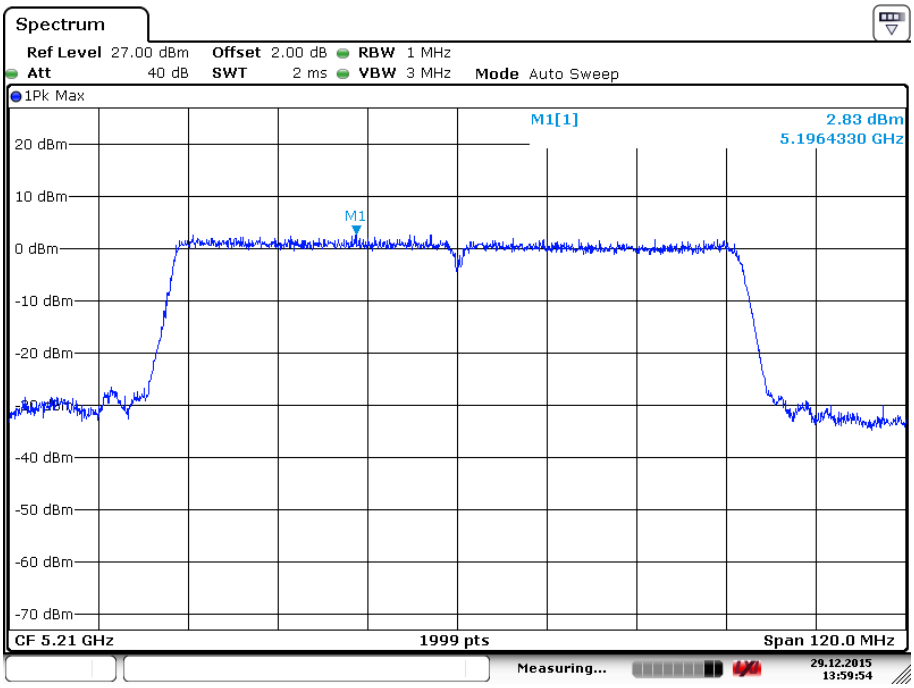


Channel 46: 5230 MHz:




802.11ac(HT 80)

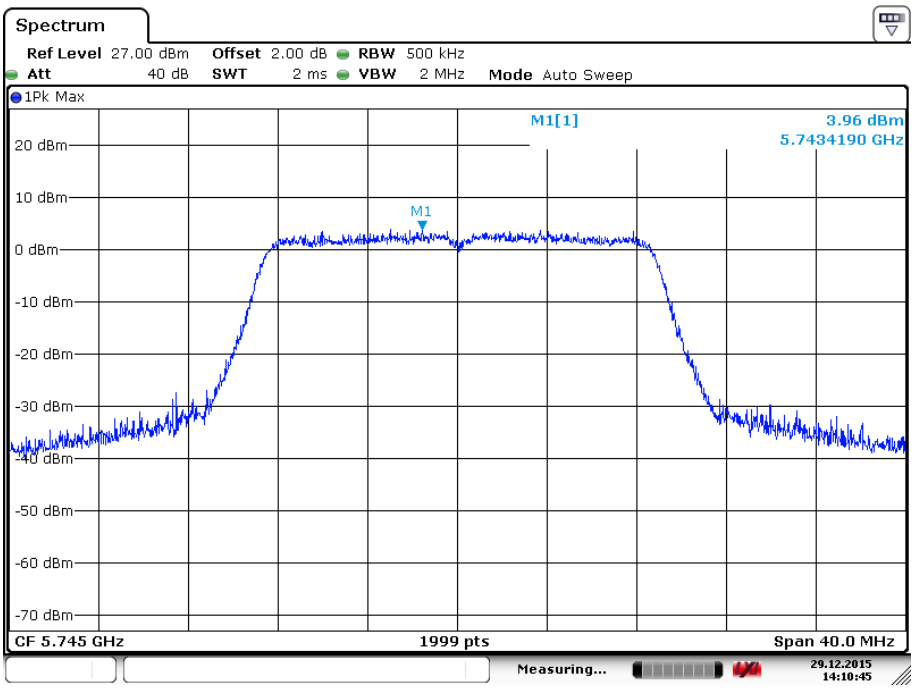
Channel 42: 5210 MHz:



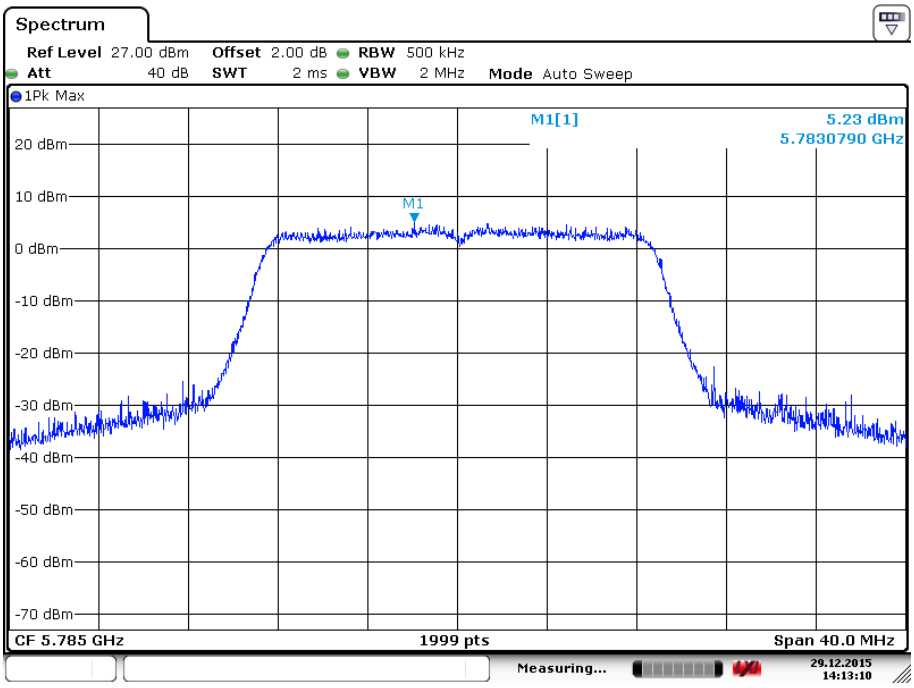
Result plot as follows:

Band IV 5725 MHz to 5850 MHz

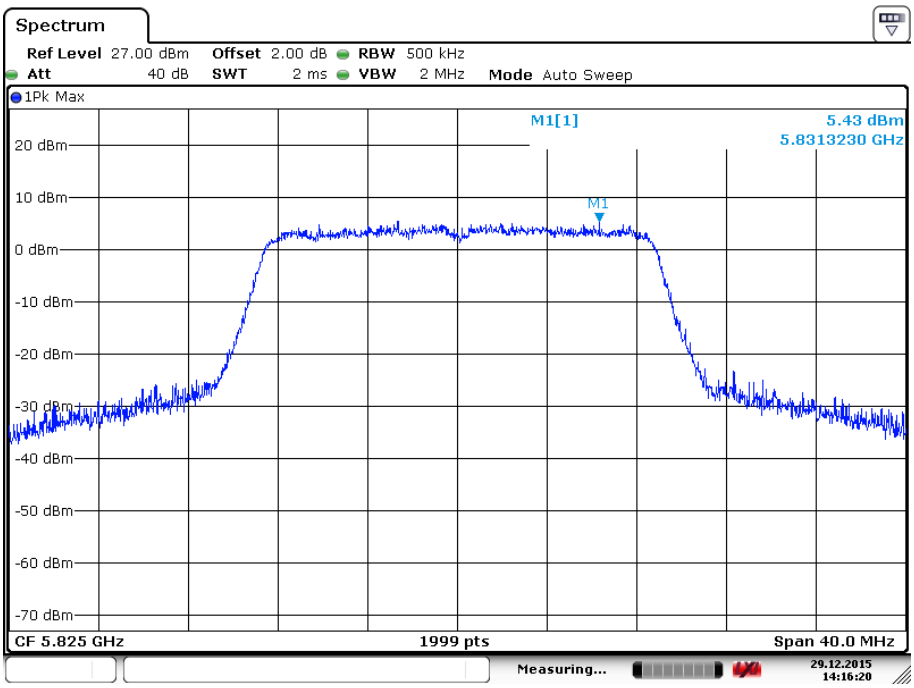
802.11an(HT 20)
Channel 149: 5745 MHz:



Channel 157: 5785 MHz:

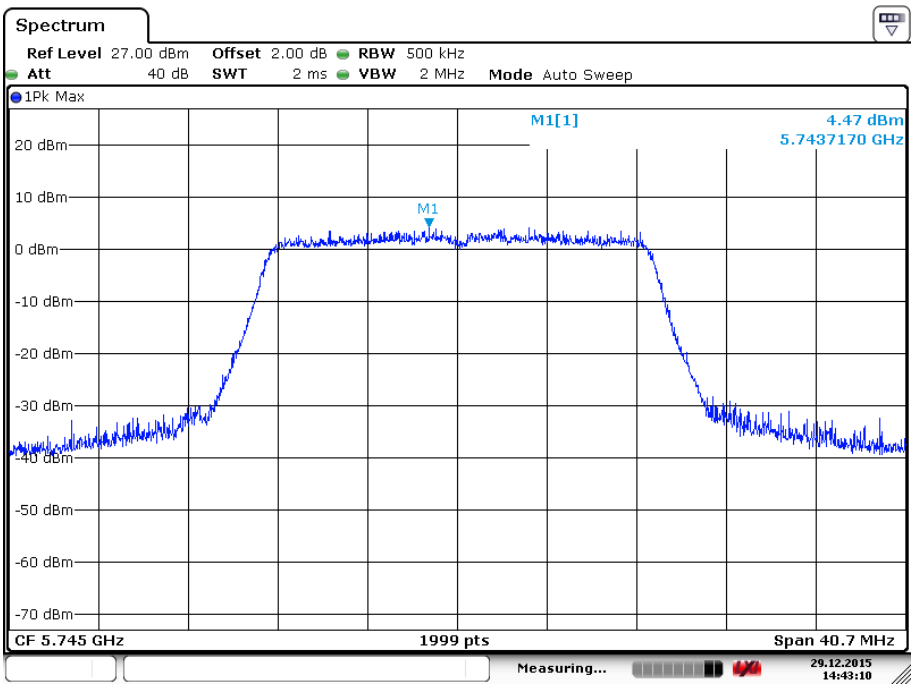



Channel 165: 5825 MHz:

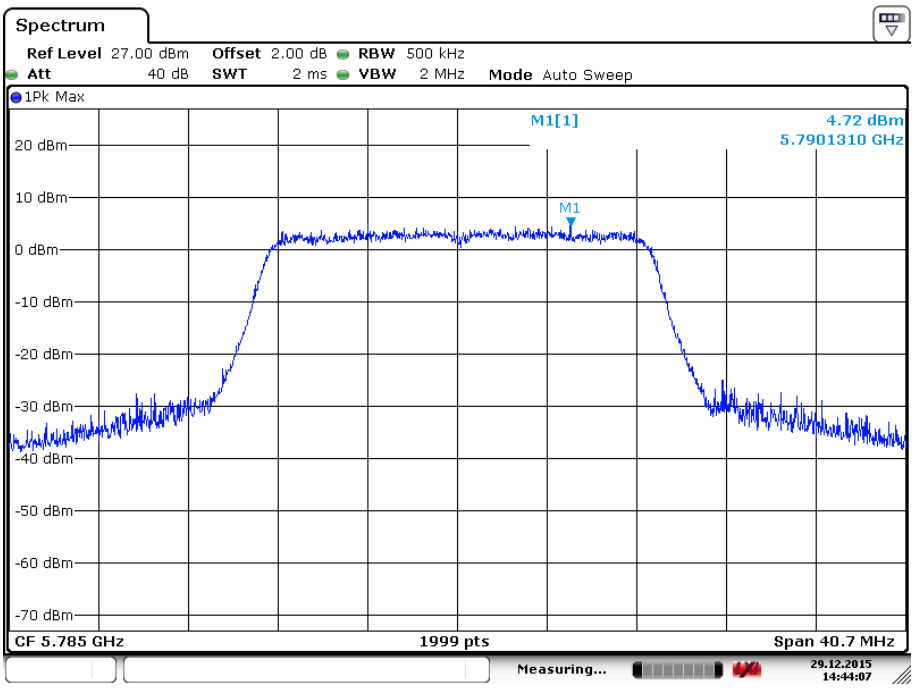


802.11ac(HT 20)

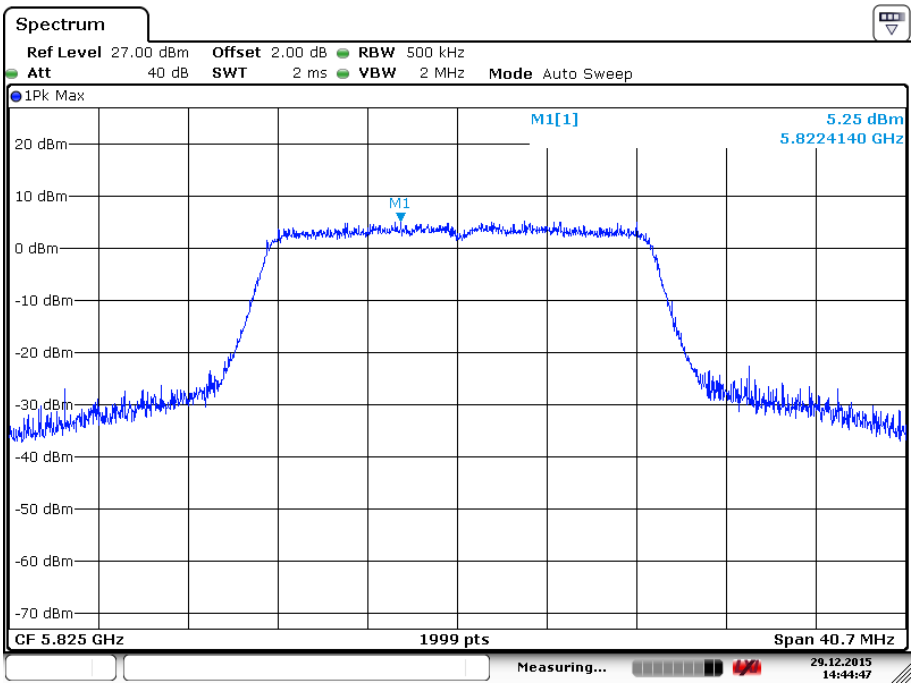
Channel 149: 5745 MHz:




Channel 157: 5785 MHz:

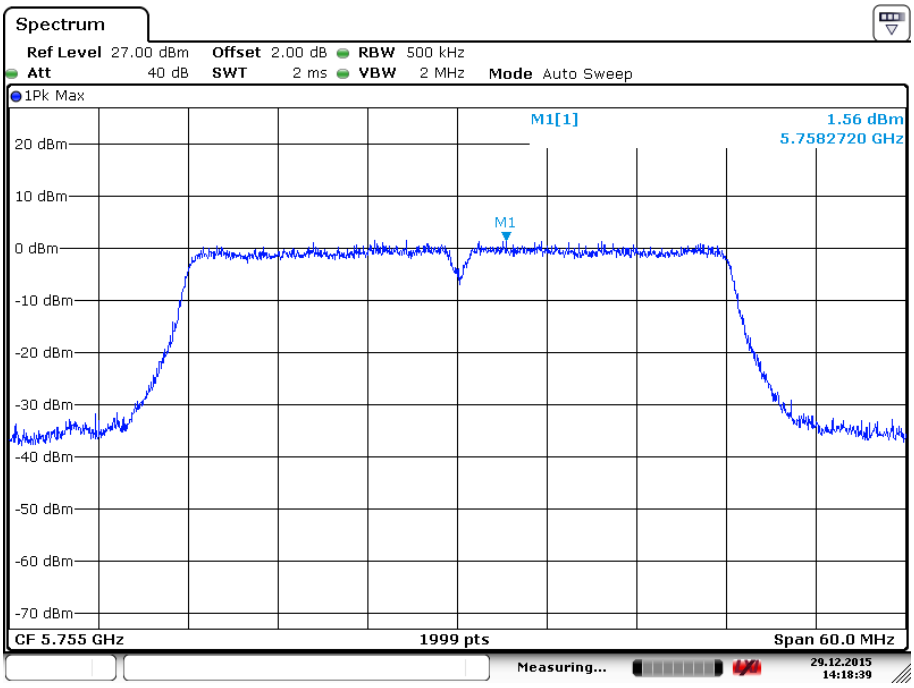


Channel 165: 5825 MHz:

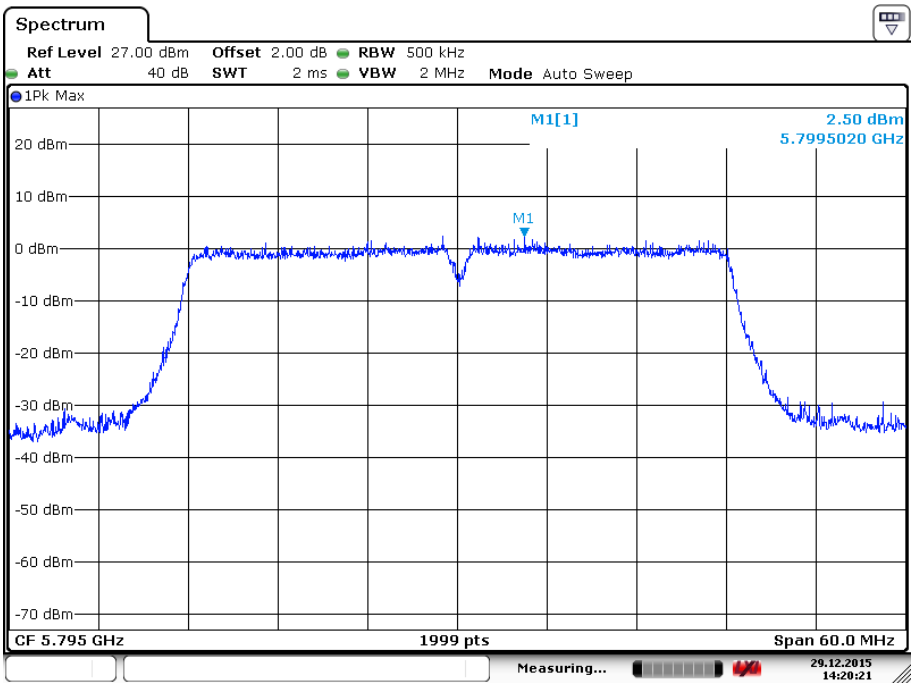



802.11an(HT 40)

Channel 151: 5755 MHz:

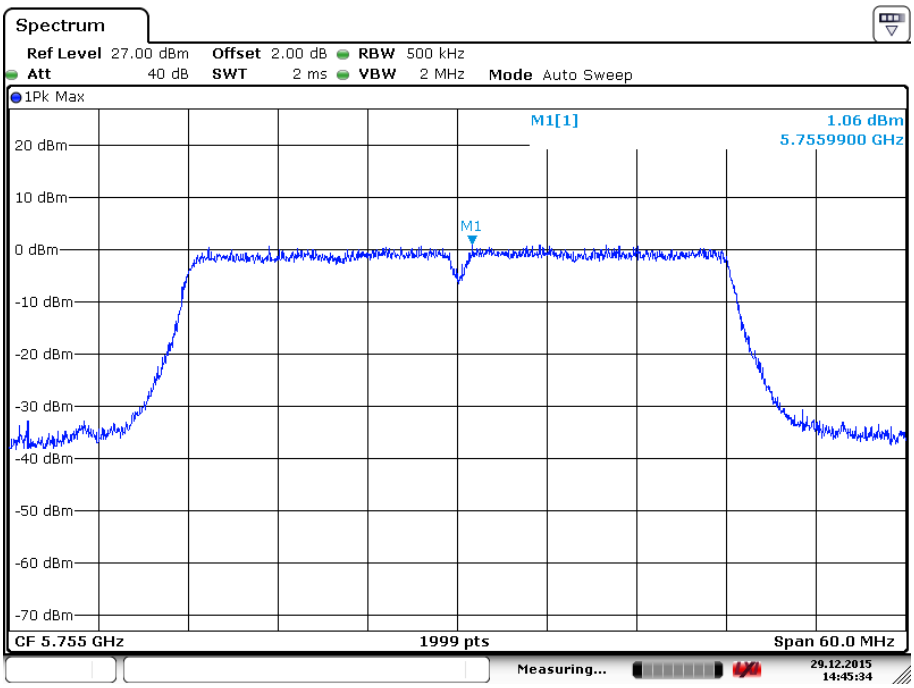


Channel 159: 5795 MHz:

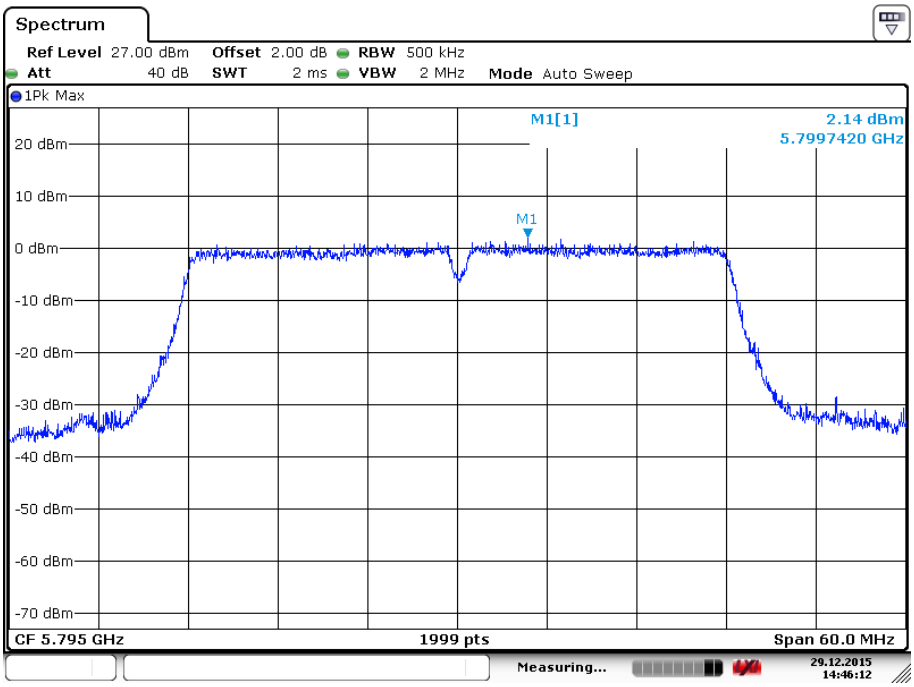



802.11ac(HT 40)

Channel 151: 5755 MHz:

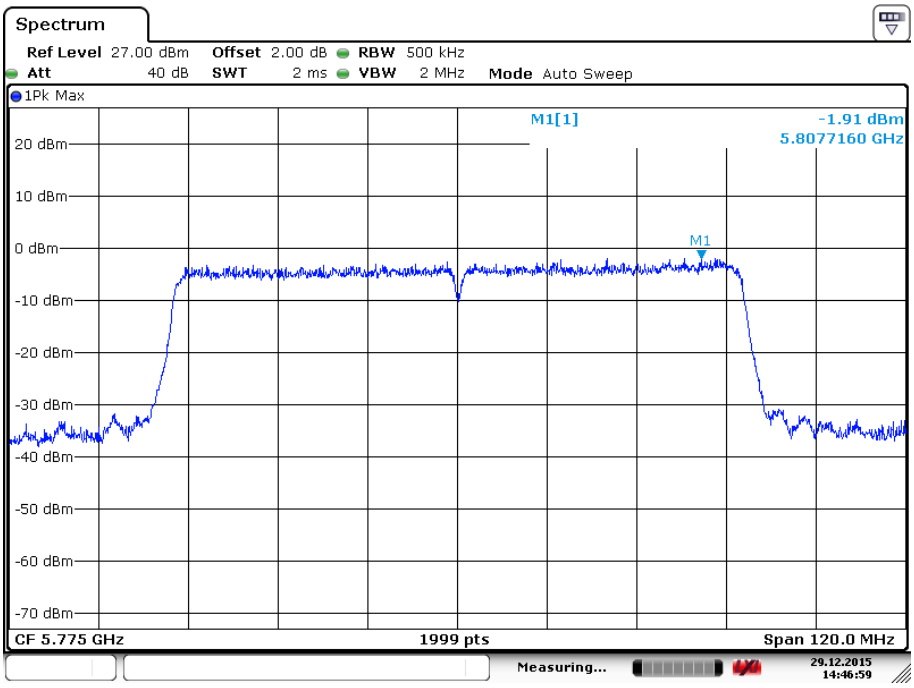


Channel 159: 5795 MHz:




802.11ac(HT 80)

Channel 155: 5775 MHz:



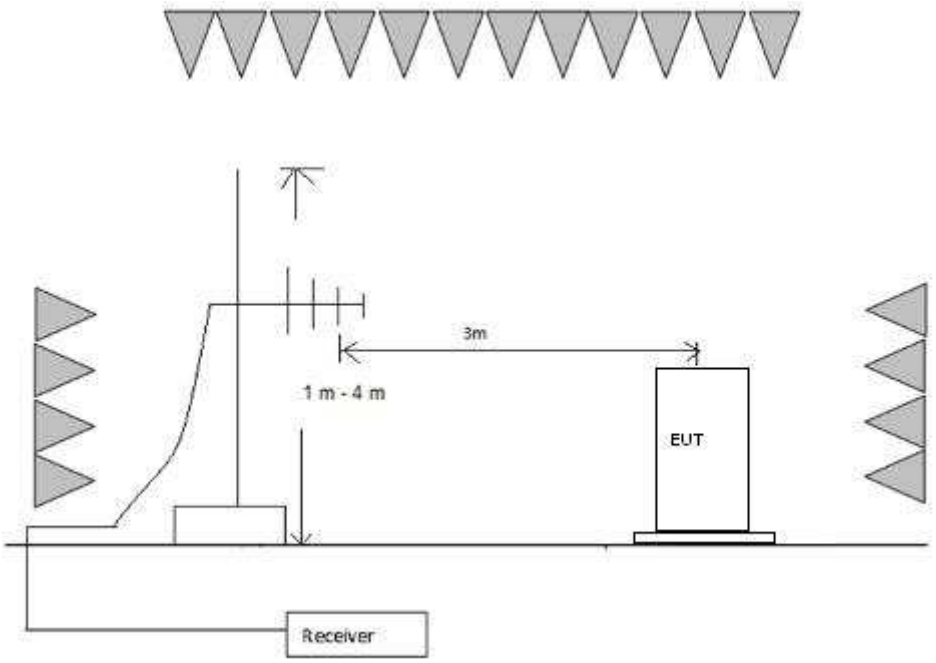
## 4.7 Radiated Spurious Emissions

| | |
|---|---|
| Test Requirement: | FCC Part 15 C clause 15.407(b)<br>In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)). |
| Test Method: | FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause G |
| Test Status: | Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. |
| Test site: | Measurement Distance: 3m (Semi-Anechoic Chamber) |
| Limit: | 40.0 dBμV/m between 30MHz & 88MHz;<br>43.5 dBμV/m between 88MHz & 216MHz;<br>46.0 dBμV/m between 216MHz & 960MHz;<br>54.0 dBμV/m above 960MHz. |
| Detector: | For Peak and Quasi-Peak value:<br>RBW =<br>1 MHz for f ≥ 1 GHz,<br>200 Hz for 9 kHz to 150 kHz<br>9 kHz for 150 kHz to 30 MHz<br>120 kHz for 30 MHz to 1GHz<br>VBW ≥ RBW<br>Sweep = auto<br>Detector function = peak for f ≥ 1 GHz, QP for f < 1 GHz<br>Trace = max hold<br><br>For AV value:<br>RBW = 1 MHz for f ≥ 1 GHz, 100 kHz for f < 1 GHz<br>VBW=10 Hz<br>Sweep = auto<br>Trace = max hold |

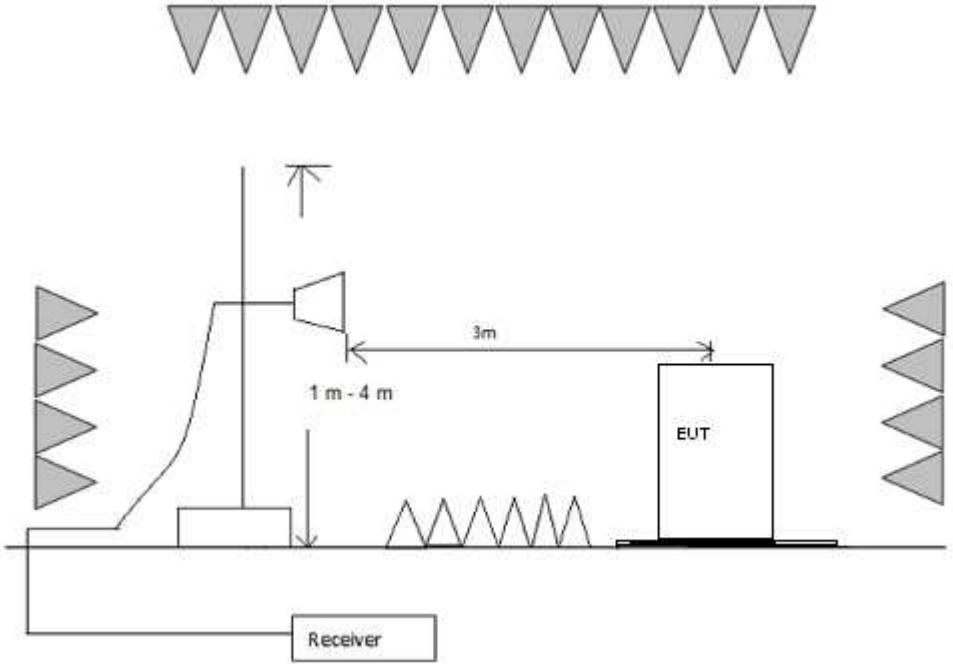
Section 15.205 Restricted bands of operation.
(a) Except as shown in paragraph (d) of this section. Only spurious emissions are permitted in any of the frequency bands listed below:

| MHz | MHz | MHz | GHz |
|---|---|---|---|
| 0.090 - 0.110 | 16.42 - 16.423 | 399.9 - 410 | 4.5 - 5.15 |
| [1]0.495 - 0.505 | 16.69475 - 16.69525 | 608 - 614 | 5.35 - 5.46 |
| 2.1735 - 2.1905 | 16.80425 - 16.80475 | 960 - 1240 | 7.25 - 7.75 |
| 4.125 - 4.128 | 25.5 - 25.67 | 1300 - 1427 | 8.025 - 8.5 |
| 4.17725 - 4.17775 | 37.5 - 38.25 | 1435 - 1626.5 | 9.0 - 9.2 |
| 4.20725 - 4.20775 | 73 - 74.6 | 1645.5 - 1646.5 | 9.3 - 9.5 |
| 6.215 - 6.218 | 74.8 - 75.2 | 1660 - 1710 | 10.6 - 12.7 |
| 6.26775 - 6.26825 | 108 - 121.94 | 1718.8 - 1722.2 | 13.25 - 13.4 |
| 6.31175 - 6.31225 | 123 - 138 | 2200 - 2300 | 14.47 - 14.5 |
| 8.291 - 8.294 | 149.9 - 150.05 | 2310 - 2390 | 15.35 - 16.2 |
| 8.362 - 8.366 | 156.52475 - 156.52525 | 2483.5 - 2500 | 17.7 - 21.4 |
| 8.37625 - 8.38675 | 156.7 - 156.9 | 2655 - 2900 | 22.01 - 23.12 |
| 8.41425 - 8.41475 | 162.0125 - 167.17 | 3260 - 3267 | 23.6 - 24.0 |
| 12.29 - 12.293 | 167.72 - 173.2 | 3332 - 3339 | 31.2 - 31.8 |
| 12.51975 - 12.52025 | 240 - 285 | 3345.8 - 3358 | 36.43 - 36.5 |
| 12.57675 - 12.57725 | 322 - 335.4 | 3600 - 4400 | |
| 13.36 - 13.41 | | | |

Test Configuration:
1) 30 MHz to 1 GHz emissions:



2) 1 GHz to 40 GHz emissions:




**Test Procedure:**

Test site with RF absorbing material covering the ground plane that met the site validation criterion called out in CISPR 16-1-4:2007 was used to perform radiated emission test above 1 GHz.

The receiver was scanned from 9 kHz to 25 GHz. When an emission was found, the table was rotated to produce the maximum signal strength. An initial pre-scan was performed for in peak detection mode using the receiver. The EUT was measured for both the Horizontal and Vertical polarities and performed a pre-test three orthogonal planes. For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. The worst case emissions were reported.

9 kHz~30 MHz Field Strength of Unwanted Emissions for Quasi-Peak Measurement
The measurements with active loop antenna were greater than 20dB below the limit, so the test data were not recorded in the test report.

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any), Average Factor (optional) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CF - AG

→ FS = RA + Correct Factor

where FS = Field Strength in dBμV/m
RA = Receiver Amplitude (including preamplifier) in dBμV
CF = Cable Attenuation Factor in dB
AF = Antenna Factor in dB
AG = Amplifier Gain in dB
Correct Factor = AF + CF – AG

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows:

FS = RA + Correct Factor

30 MHz~1 GHz Spurious Emissions .Quasi-Peak Measurement.

Pretest on the lowest channel, middle channel and highest channel for each mode of the brand I and brand IV.

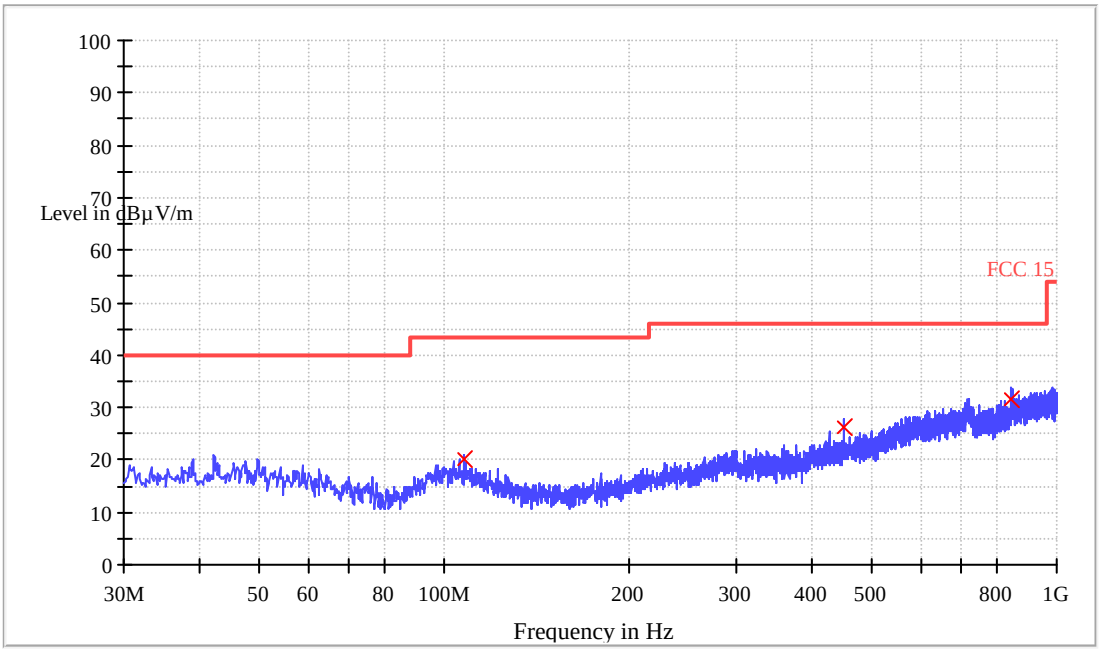
Result follows:

Band I 5150 MHz to 5250 MHz

802.11an(HT 20)

Channel 36: 5180 MHz:

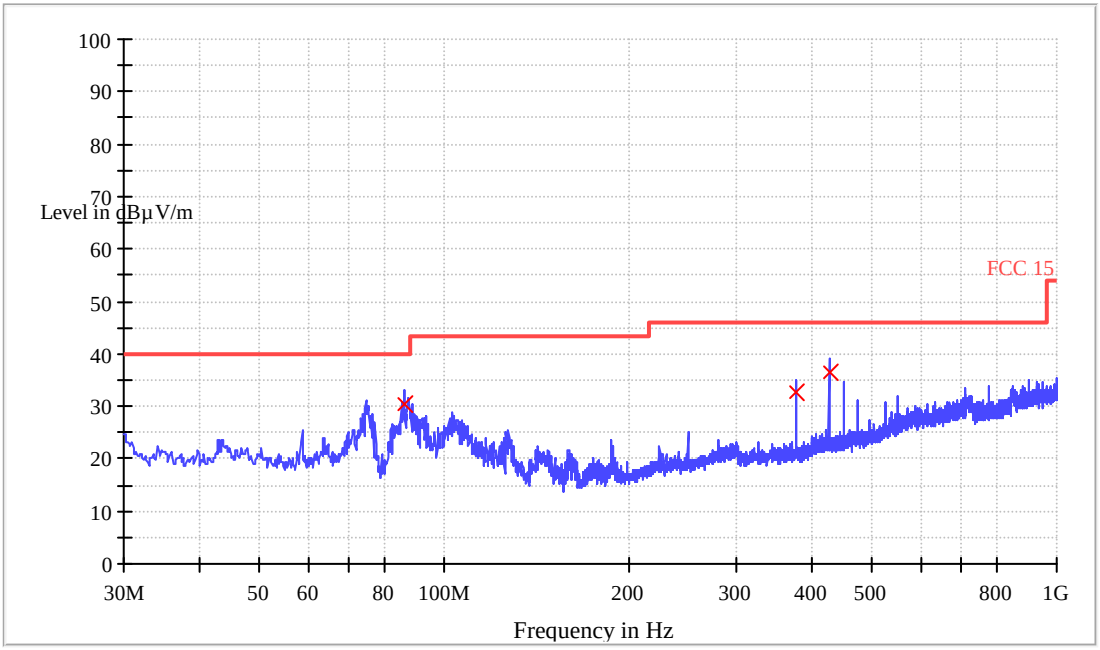
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 107.600000 | 20.0 | 120.000 | H | 12.4 | 23.5 | 43.5 |
| 450.040000 | 26.1 | 120.000 | H | 18.0 | 19.9 | 46.0 |
| 845.080000 | 31.5 | 120.000 | H | 24.2 | 14.5 | 46.0 |

Vertical

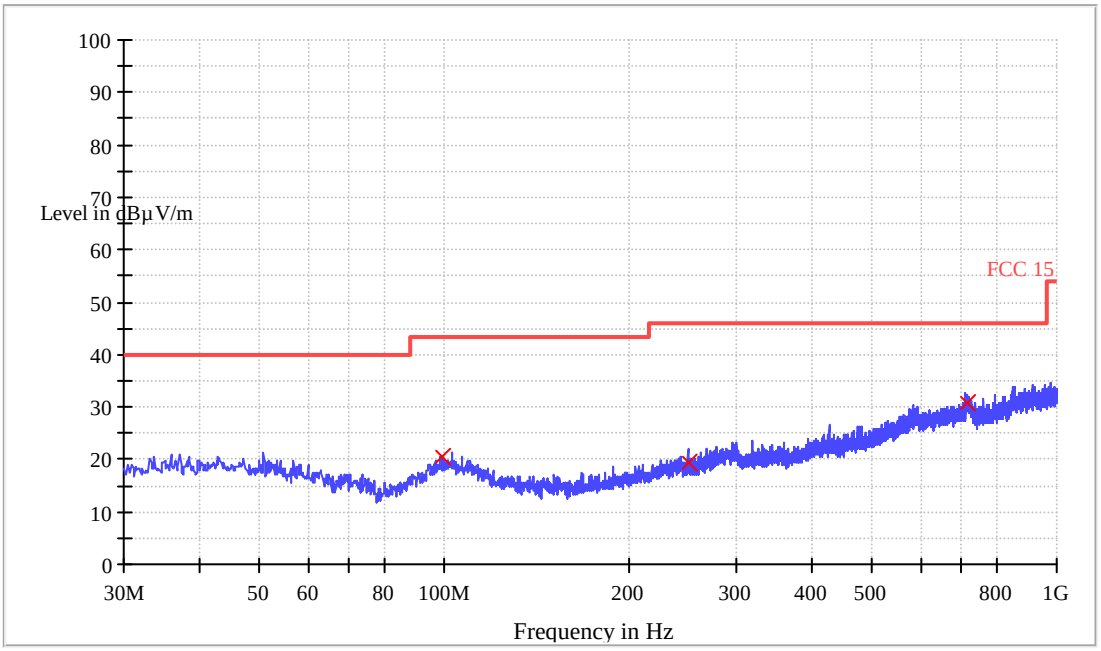



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 86.000000 | 30.4 | 120.000 | V | 8.9 | 9.6 | 40.0 |
| 374.920000 | 32.6 | 120.000 | V | 16.1 | 13.5 | 46.0 |
| 424.920000 | 36.7 | 120.000 | V | 17.6 | 9.3 | 46.0 |

Channel 44: 5220 MHz:

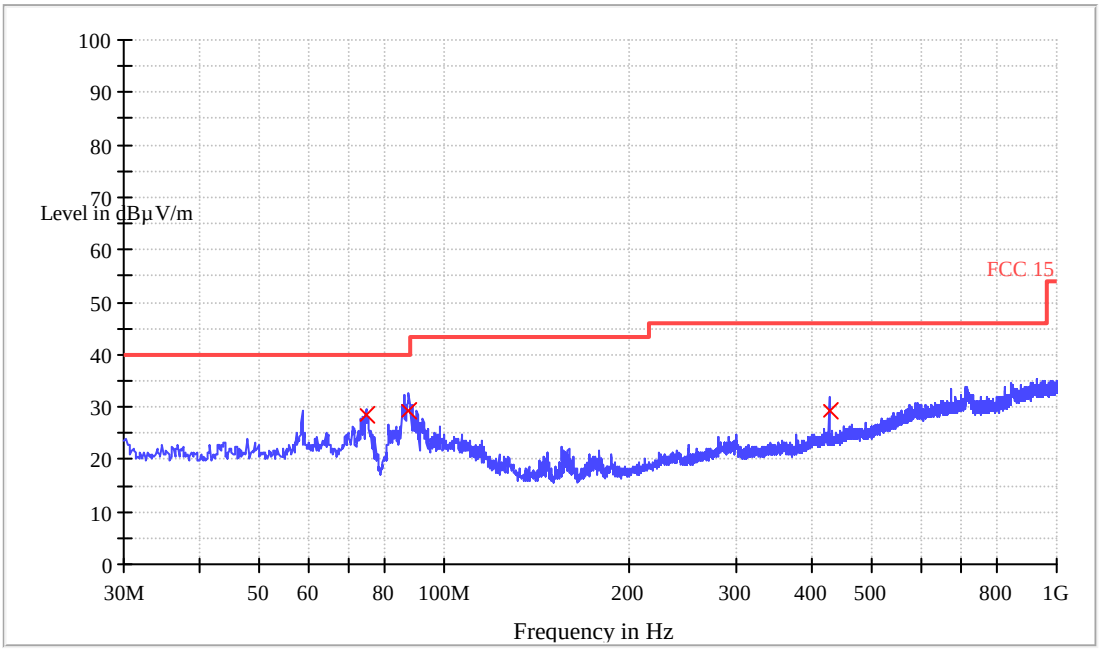
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 98.920000 | 20.4 | 120.000 | H | 12.7 | 23.1 | 43.5 |
| 249.880000 | 19.3 | 120.000 | H | 12.7 | 26.7 | 46.0 |
| 712.680000 | 30.8 | 120.000 | H | 22.3 | 15.2 | 46.0 |
| 712.680000 | 30.9 | 120.000 | H | 22.3 | 15.1 | 46.0 |

Vertical

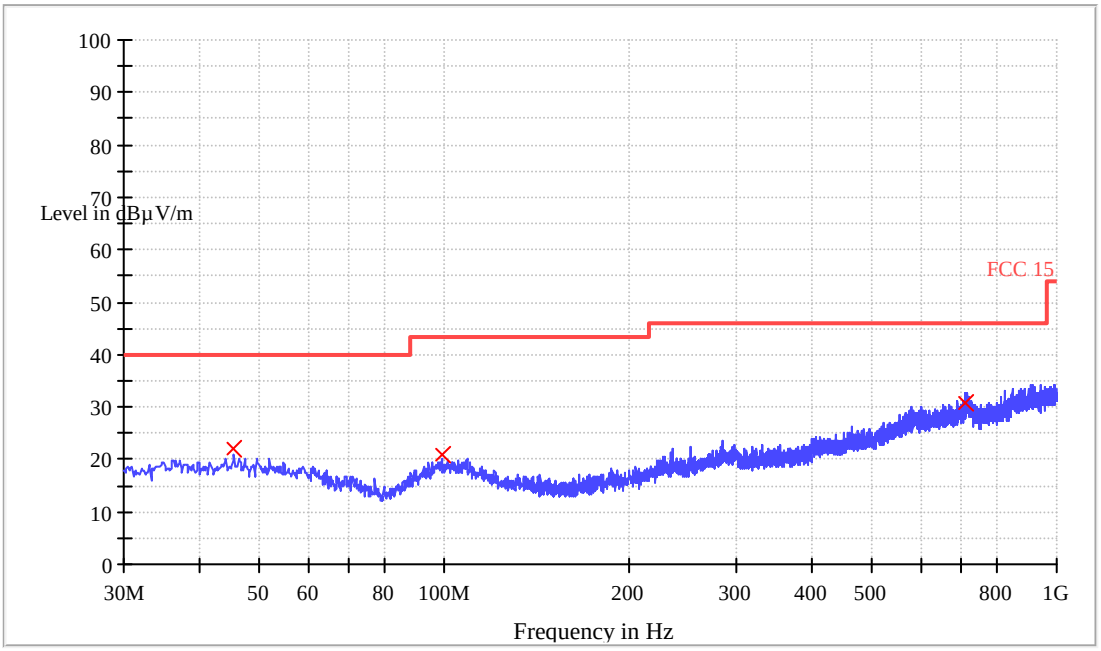



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 74.520000 | 28.5 | 120.000 | V | 7.9 | 11.5 | 40.0 |
| 87.600000 | 29.5 | 120.000 | V | 9.4 | 10.5 | 40.0 |
| 424.920000 | 29.4 | 120.000 | V | 17.6 | 16.6 | 46.0 |

Channel 48: 5240 MHz:

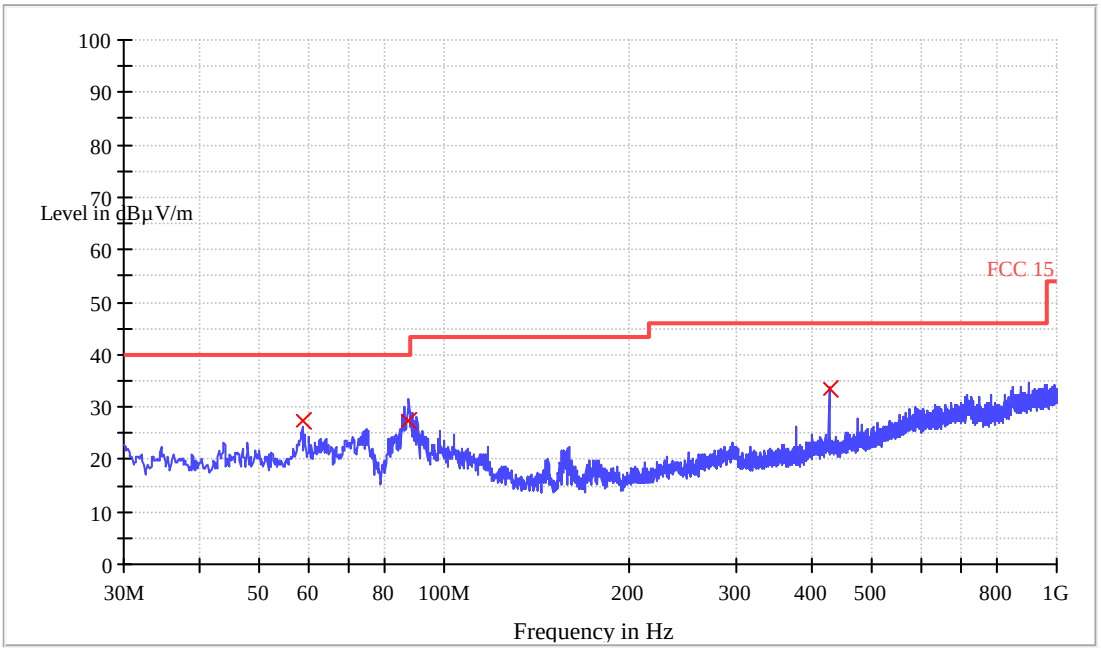
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 45.280000 | 22.1 | 120.000 | H | 13.9 | 17.9 | 40.0 |
| 98.920000 | 21.1 | 120.000 | H | 13.9 | 22.4 | 43.5 |
| 709.440000 | 30.6 | 120.000 | H | 22.3 | 15.4 | 46.0 |

Vertical



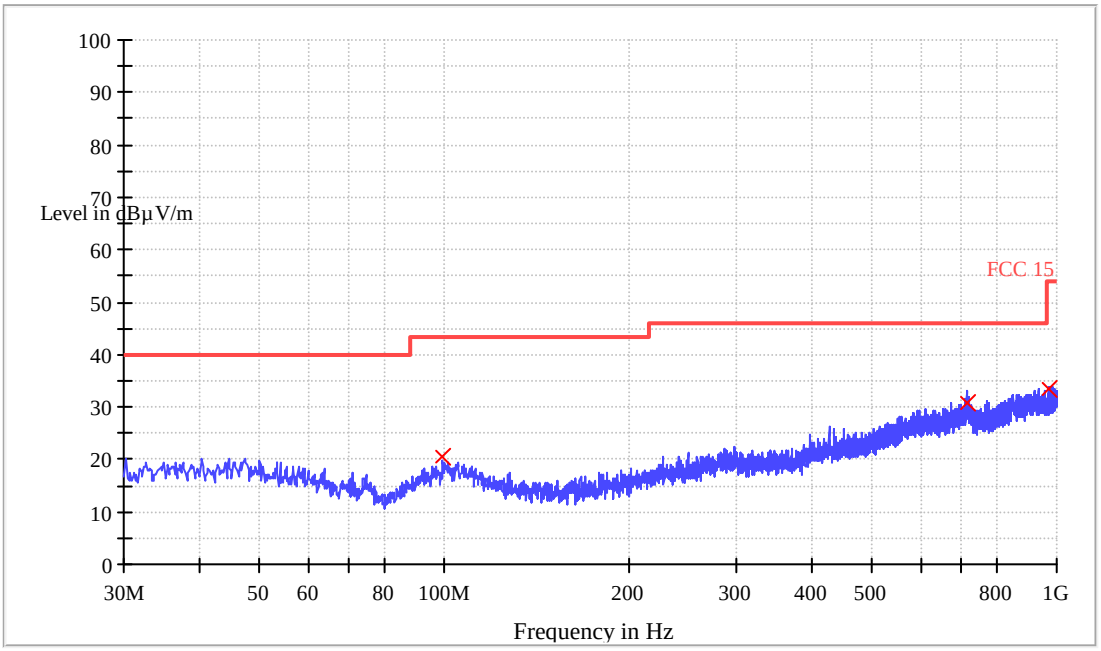

## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 58.640000 | 27.6 | 120.000 | V | 11.9 | 12.4 | 40.0 |
| 87.480000 | 27.6 | 120.000 | V | 9.3 | 12.4 | 40.0 |
| 424.920000 | 33.6 | 120.000 | V | 17.6 | 12.4 | 46.0 |

802.11ac(HT 20)

Channel 36: 5180 MHz:

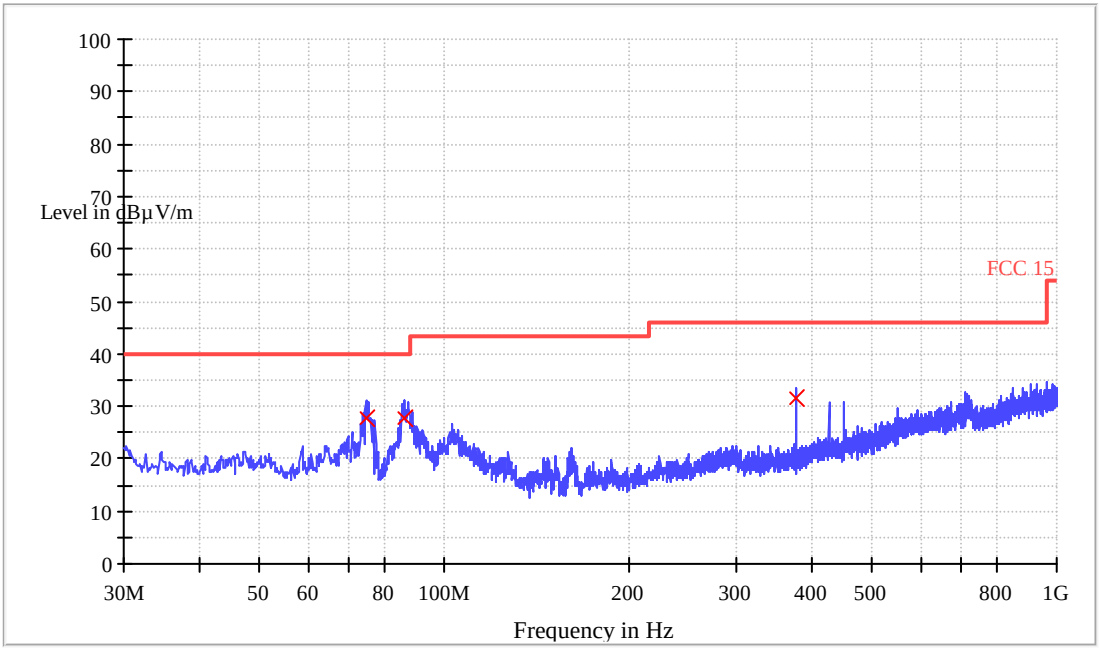
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 99.360000 | 20.5 | 120.000 | H | 12.8 | 23.0 | 43.5 |
| 711.800000 | 30.7 | 120.000 | H | 22.3 | 15.3 | 46.0 |
| 971.640000 | 33.3 | 120.000 | H | 26.0 | 20.7 | 54.0 |

Vertical

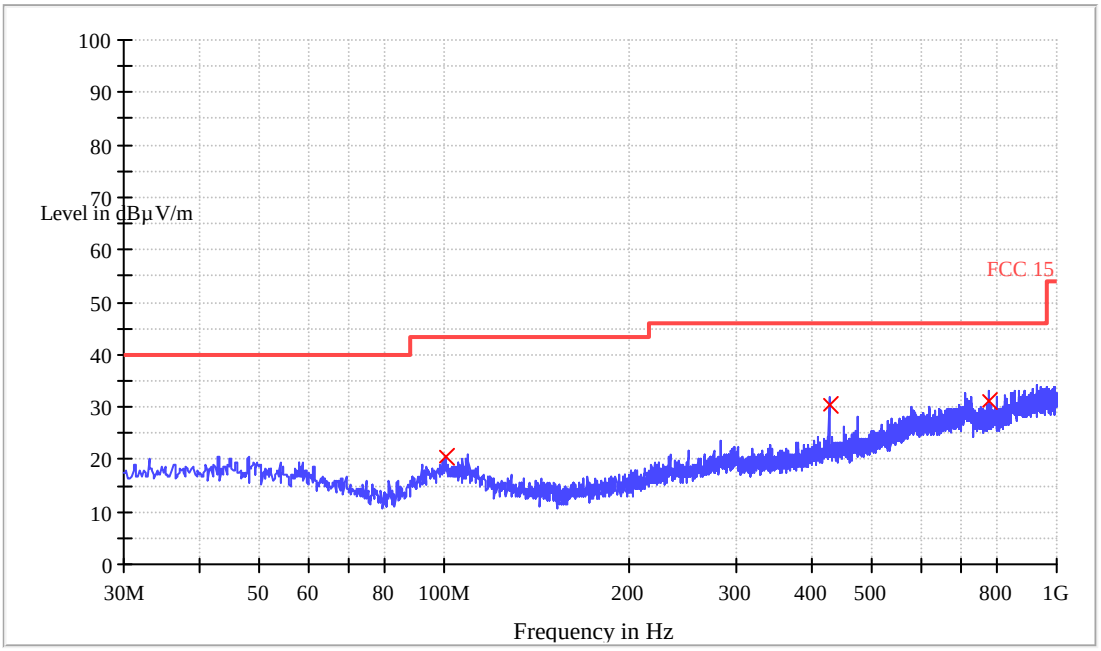



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 74.520000 | 27.7 | 120.000 | V | 7.9 | 12.3 | 40.0 |
| 86.000000 | 27.7 | 120.000 | V | 8.9 | 12.3 | 40.0 |
| 374.920000 | 31.4 | 120.000 | V | 16.1 | 14.6 | 46.0 |

Channel 44: 5220 MHz:

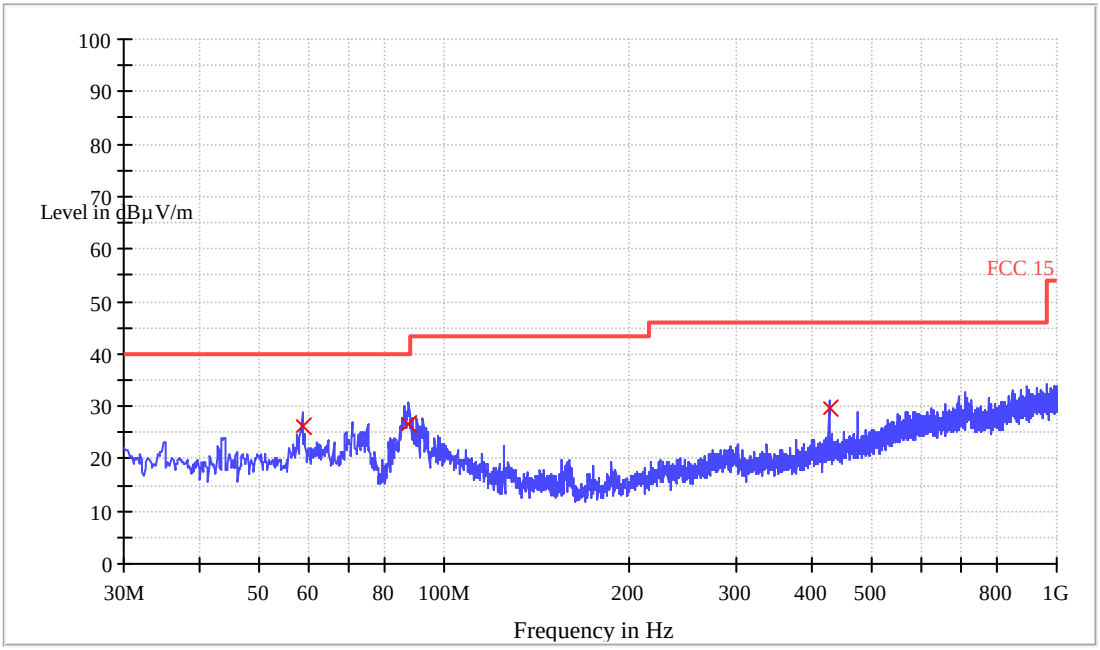
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 100.560000 | 20.6 | 120.000 | H | 12.9 | 22.9 | 43.5 |
| 425.040000 | 30.3 | 120.000 | H | 17.6 | 15.7 | 46.0 |
| 775.000000 | 31.3 | 120.000 | H | 23.0 | 14.7 | 46.0 |

Vertical

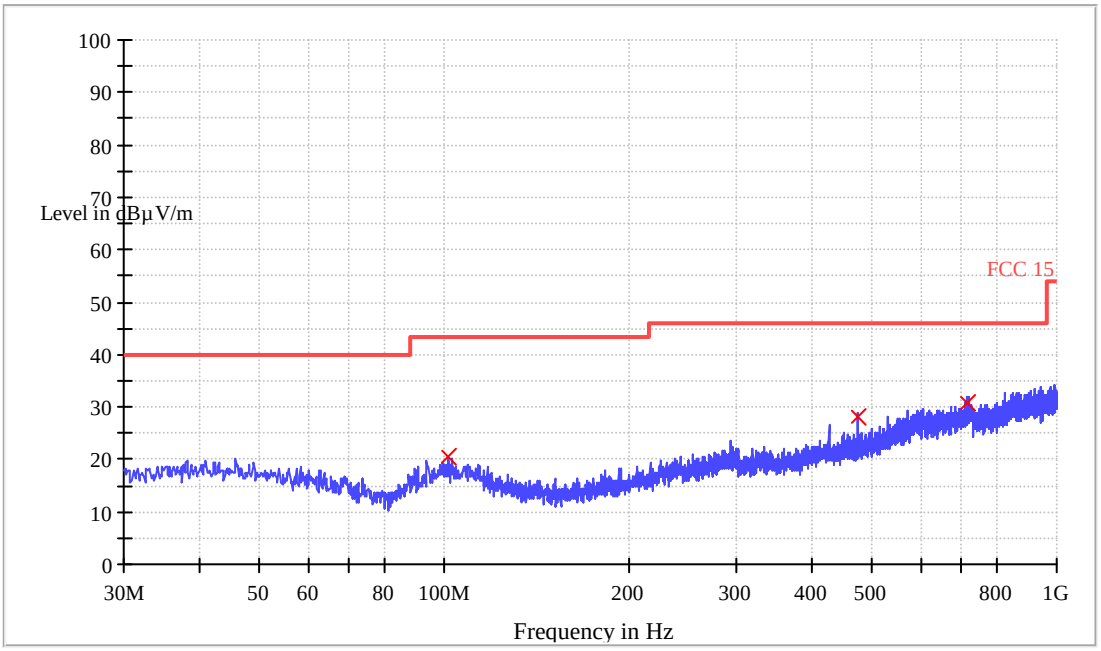



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 58.640000 | 26.1 | 120.000 | V | 11.9 | 13.9 | 40.0 |
| 87.600000 | 26.5 | 120.000 | V | 9.4 | 13.5 | 40.0 |
| 424.920000 | 29.6 | 120.000 | V | 17.6 | 16.4 | 46.0 |

Channel 48: 5240 MHz:

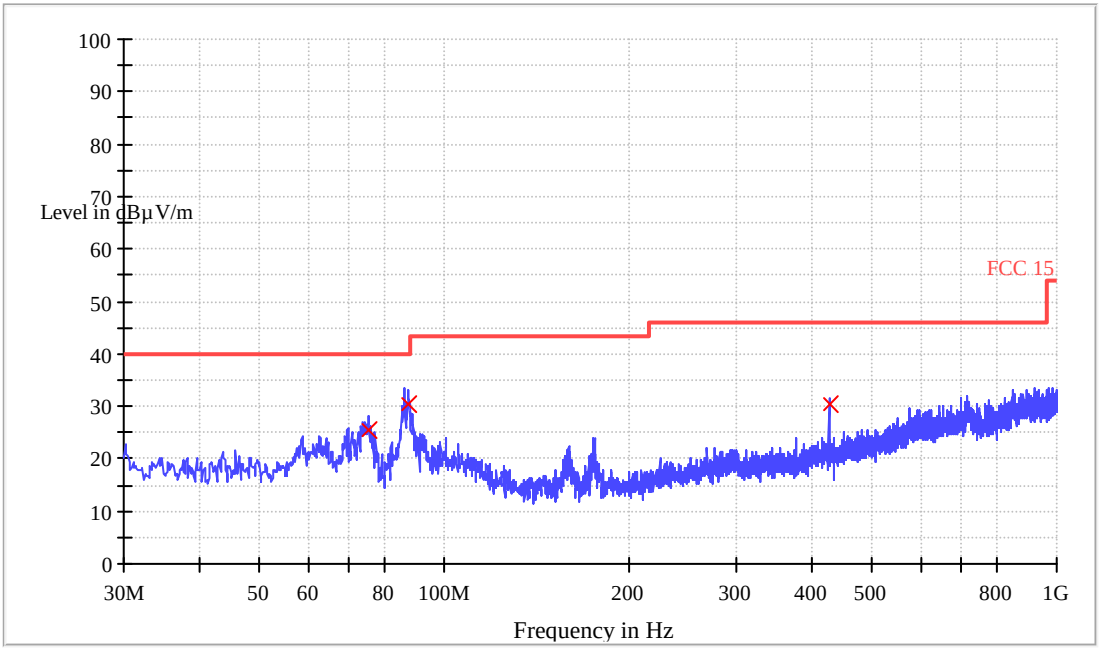
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 101.720000 | 20.5 | 120.000 | H | 12.8 | 23.0 | 43.5 |
| 475.040000 | 28.1 | 120.000 | H | 18.6 | 17.9 | 46.0 |
| 715.920000 | 30.8 | 120.000 | H | 22.3 | 15.2 | 46.0 |

Vertical



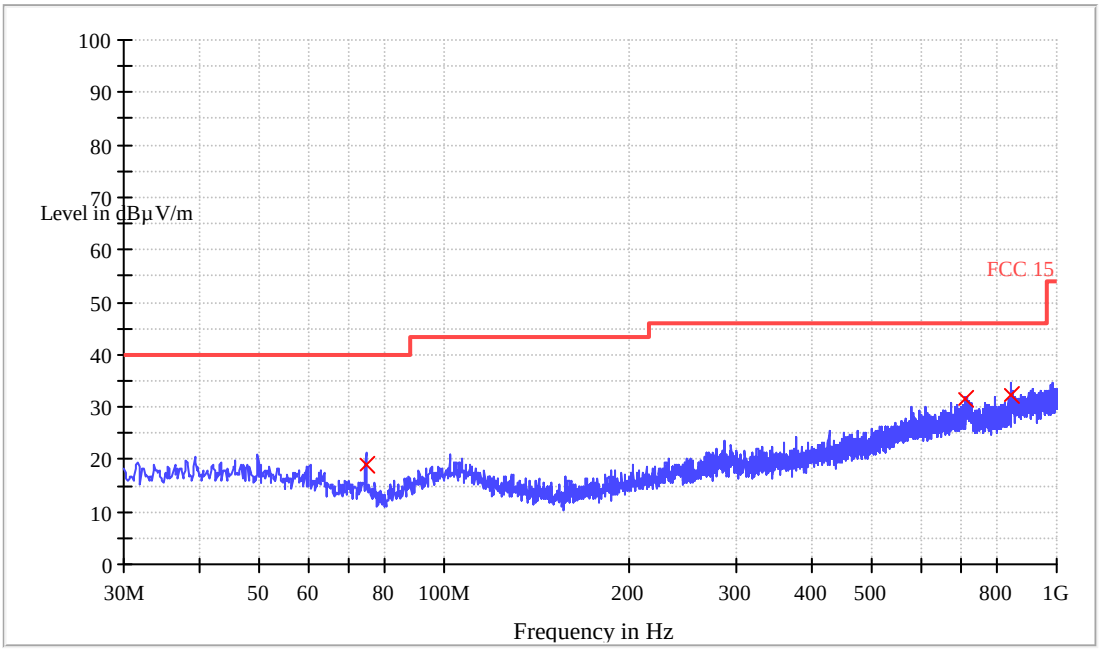

## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 75.120000 | 25.3 | 120.000 | V | 7.9 | 14.7 | 40.0 |
| 87.480000 | 30.5 | 120.000 | V | 9.3 | 9.5 | 40.0 |
| 424.920000 | 30.5 | 120.000 | V | 17.6 | 15.5 | 46.0 |

802.11an(HT 40)

Channel 38: 5190 MHz:

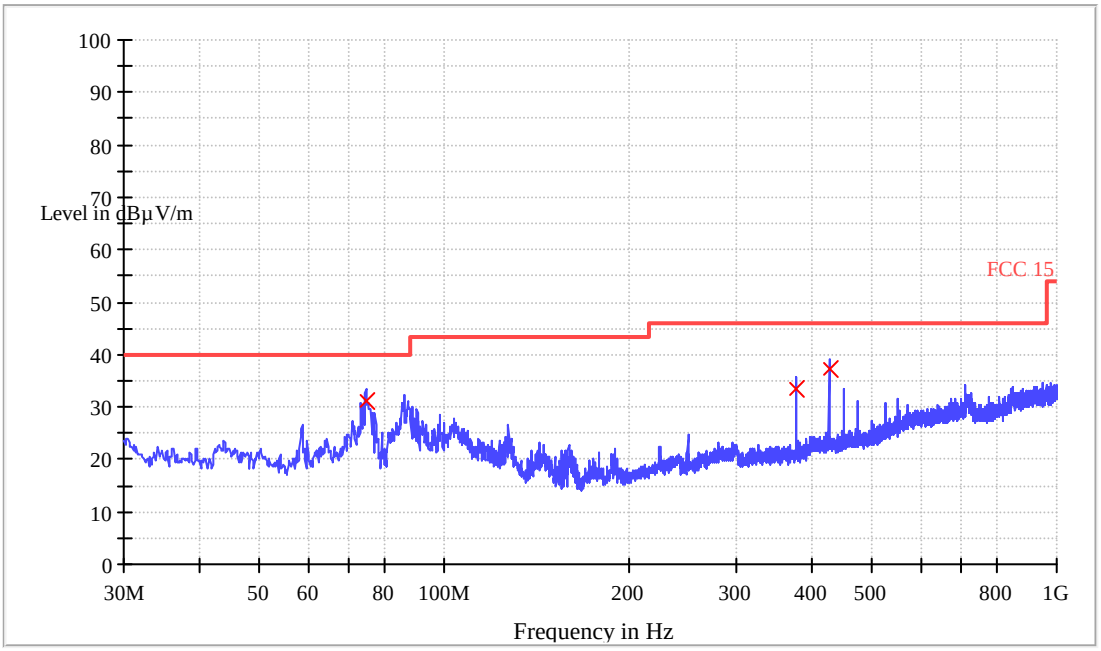
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 74.520000 | 19.0 | 120.000 | H | 7.9 | 21.0 | 40.0 |
| 710.760000 | 31.4 | 120.000 | H | 22.3 | 14.6 | 46.0 |
| 844.800000 | 32.4 | 120.000 | H | 24.2 | 13.6 | 46.0 |

Vertical

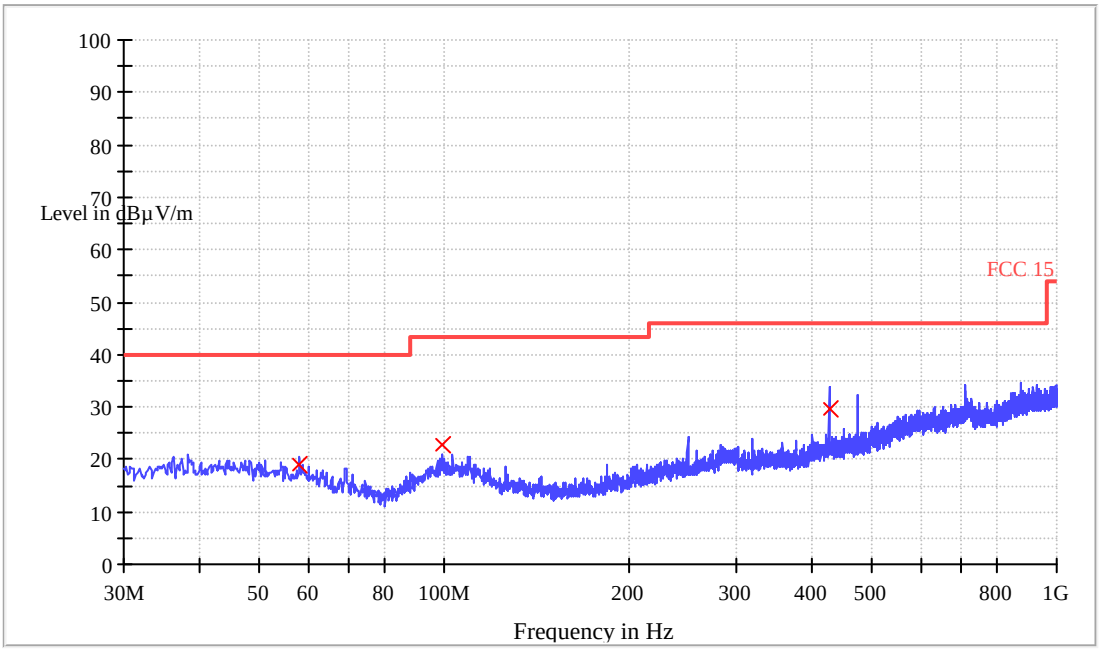



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 74.520000 | 31.4 | 120.000 | V | 7.9 | 8.6 | 40.0 |
| 374.920000 | 33.5 | 120.000 | V | 16.1 | 12.5 | 46.0 |
| 425.040000 | 37.1 | 120.000 | V | 17.6 | 8.9 | 46.0 |

Channel 46: 5230 MHz:

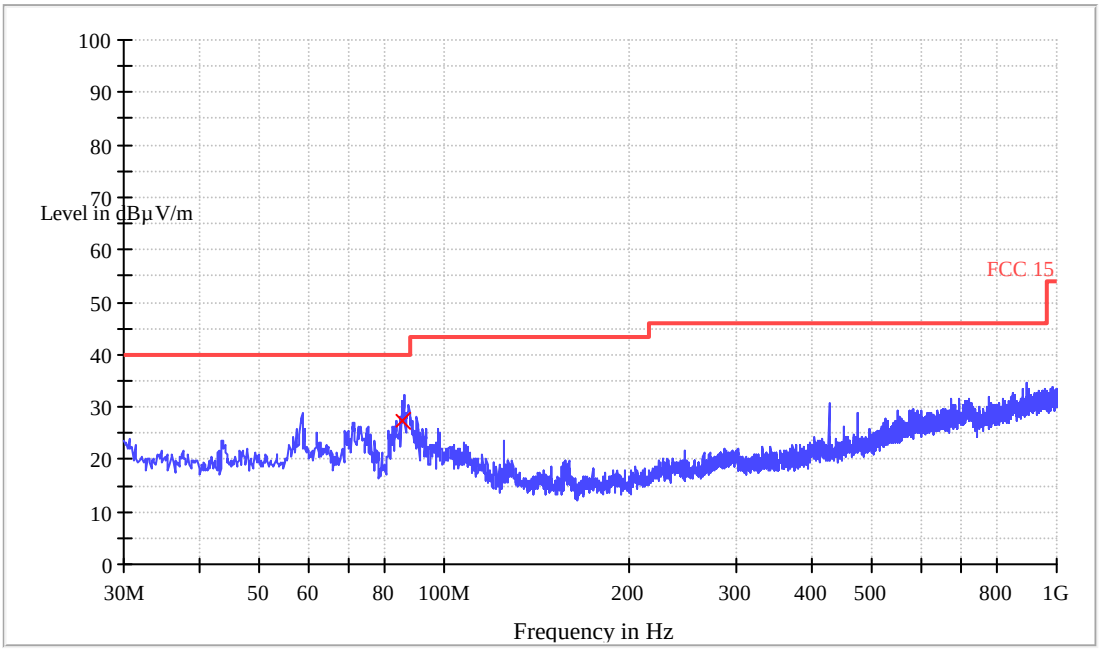
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 58.080000 | 19.0 | 120.000 | H | 11.9 | 21.0 | 40.0 |
| 99.360000 | 22.8 | 120.000 | H | 12.8 | 20.7 | 43.5 |
| 424.920000 | 29.8 | 120.000 | H | 17.6 | 16.2 | 46.0 |

Vertical



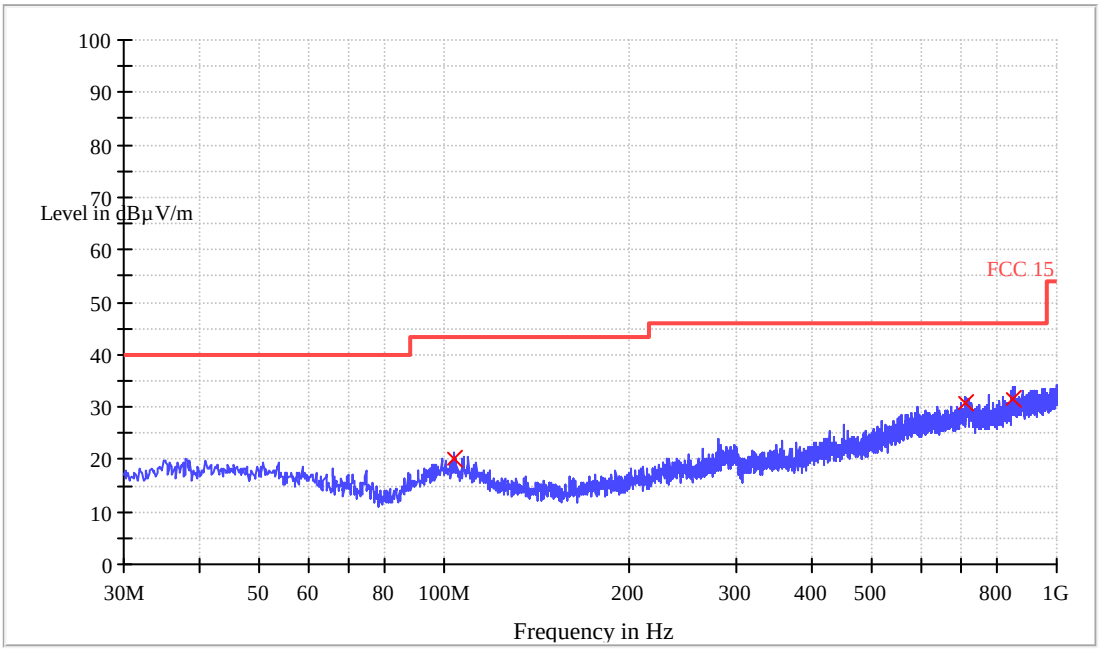

## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 58.640000 | 23.4 | 120.000 | V | 11.9 | 16.6 | 40.0 |
| 85.400000 | 27.6 | 120.000 | V | 8.7 | 12.4 | 40.0 |

802.11ac(HT 40)

Channel 38: 5190 MHz:

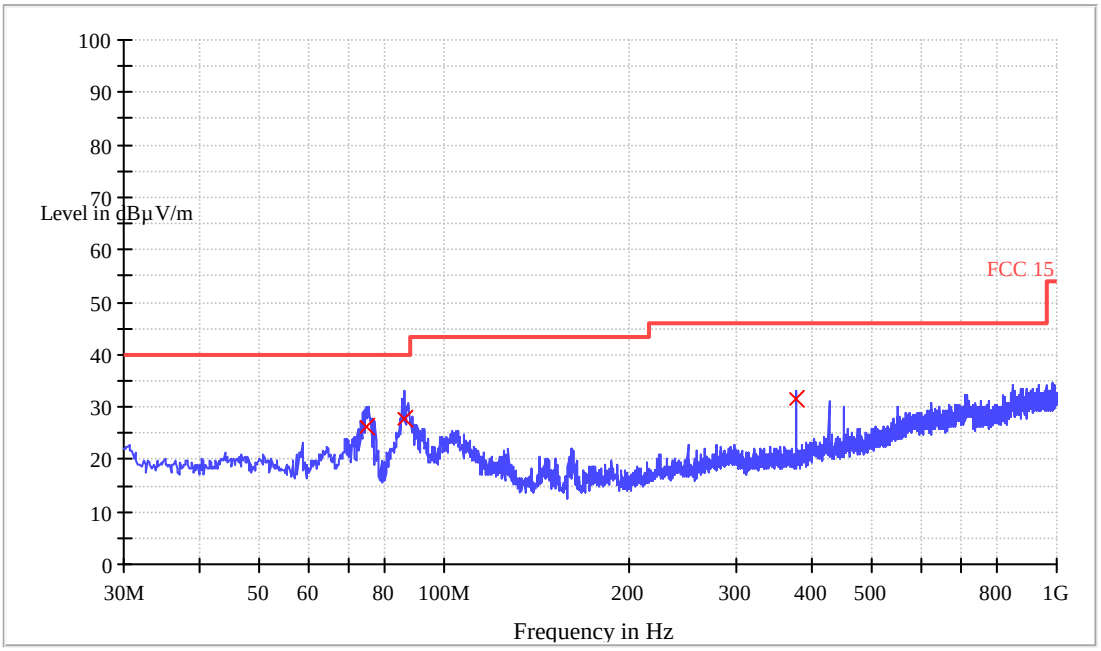
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 103.640000 | 20.3 | 120.000 | H | 12.6 | 23.2 | 43.5 |
| 711.480000 | 30.8 | 120.000 | H | 22.3 | 15.2 | 46.0 |
| 845.520000 | 31.6 | 120.000 | H | 24.2 | 14.4 | 46.0 |

Vertical

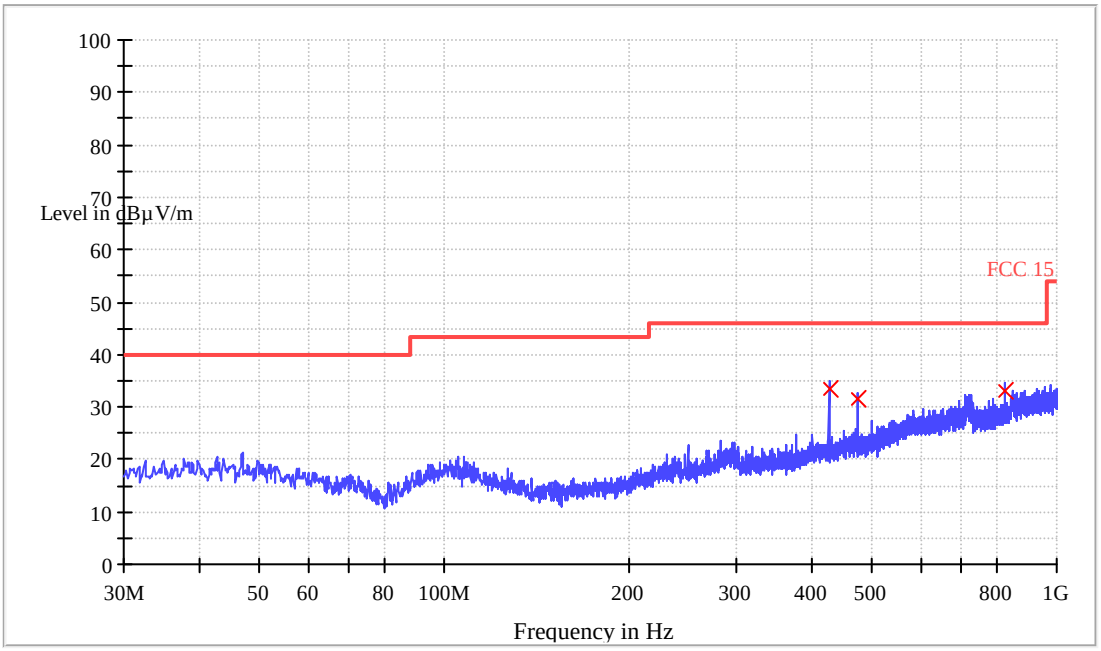



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 74.520000 | 26.4 | 120.000 | V | 7.9 | 13.6 | 40.0 |
| 86.000000 | 27.7 | 120.000 | V | 8.9 | 12.3 | 40.0 |
| 374.920000 | 31.6 | 120.000 | V | 16.1 | 14.4 | 46.0 |

Channel 46: 5230 MHz:

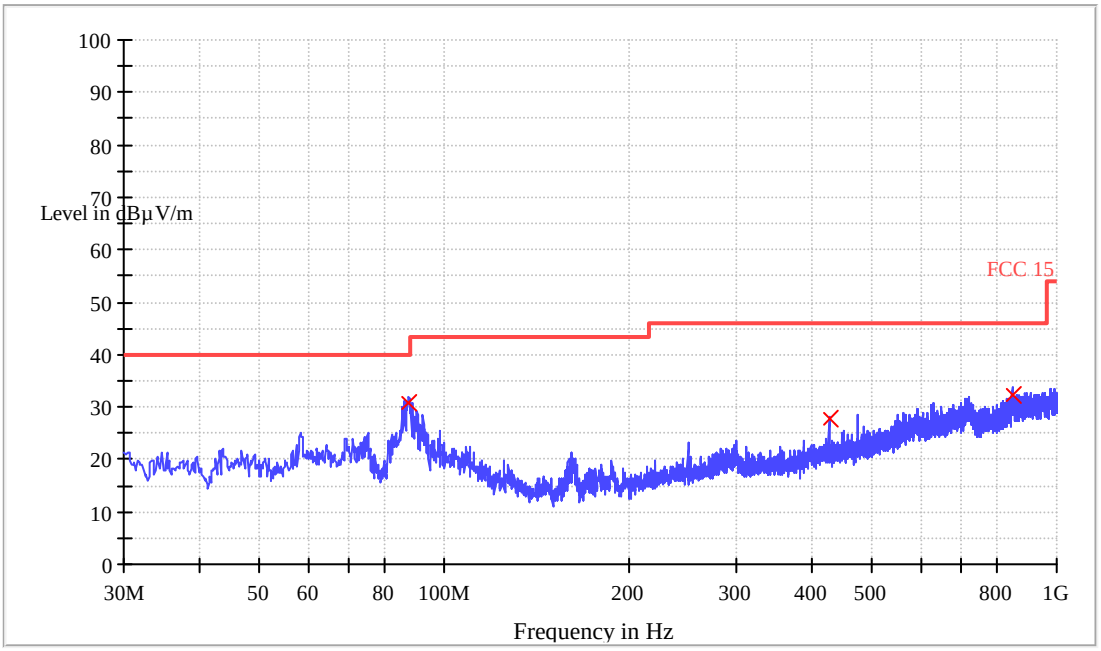
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 424.920000 | 33.4 | 120.000 | H | 17.6 | 12.6 | 46.0 |
| 475.040000 | 31.5 | 120.000 | H | 18.6 | 14.5 | 46.0 |
| 825.120000 | 33.1 | 120.000 | H | 23.8 | 13.0 | 46.0 |

Vertical



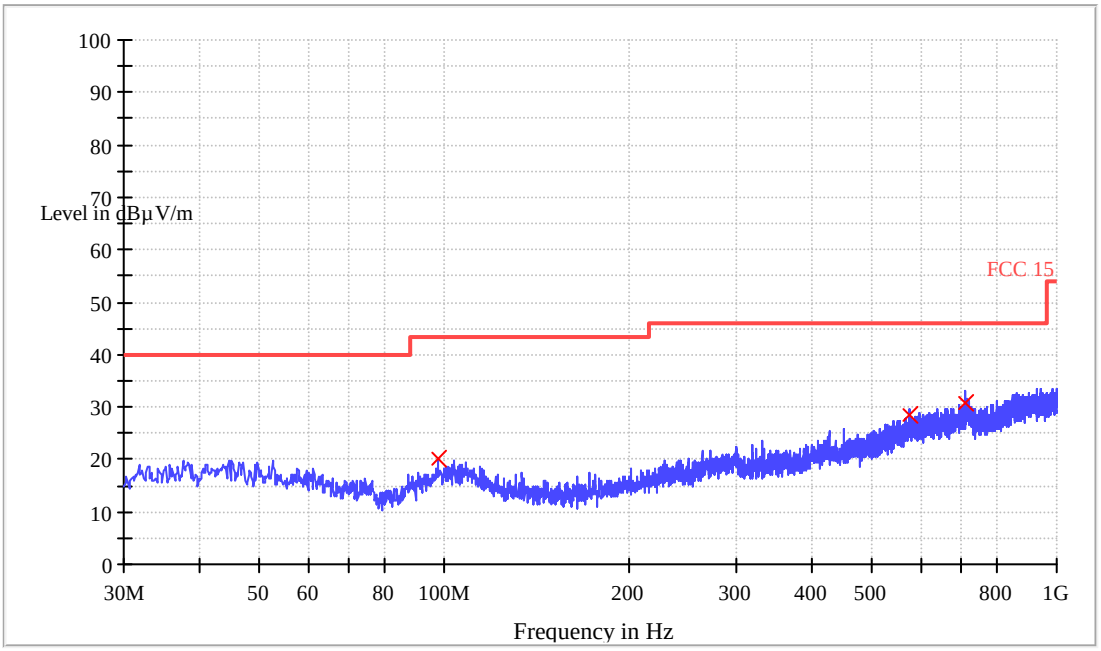

## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 87.600000 | 30.8 | 120.000 | V | 9.4 | 9.2 | 40.0 |
| 424.920000 | 27.8 | 120.000 | V | 17.6 | 18.2 | 46.0 |
| 845.240000 | 32.5 | 120.000 | V | 24.2 | 13.5 | 46.0 |

802.11ac(HT 80)

Channel 42: 5210 MHz:

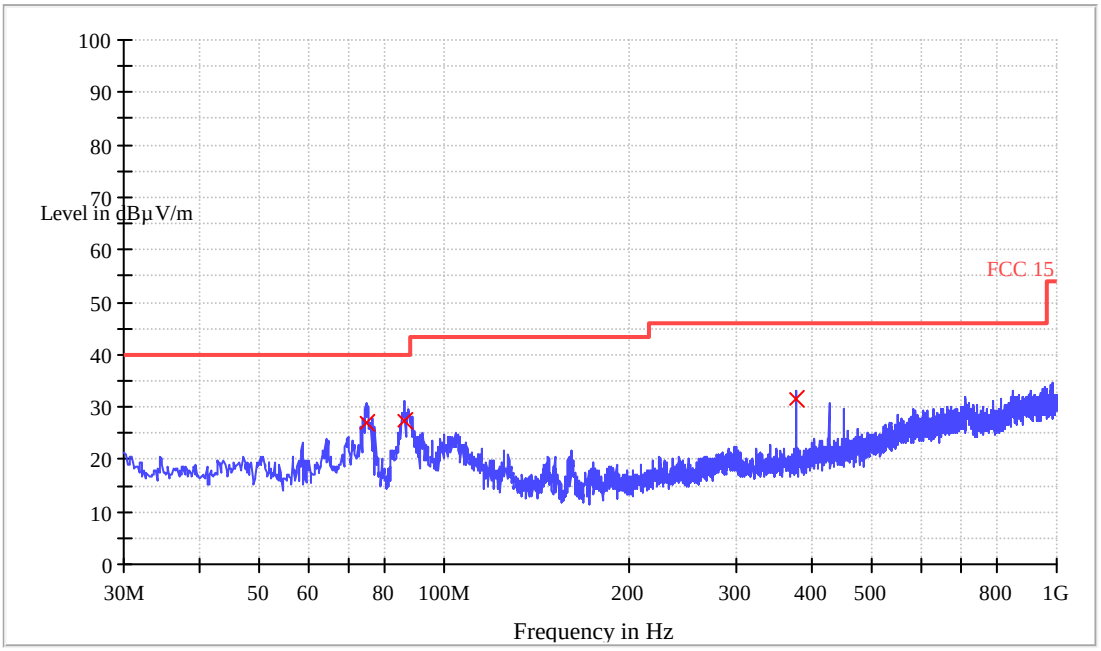
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 97.760000 | 20.1 | 120.000 | H | 12.5 | 23.4 | 43.5 |
| 575.120000 | 28.5 | 120.000 | H | 20.9 | 17.5 | 46.0 |
| 710.920000 | 30.7 | 120.000 | H | 22.3 | 15.3 | 46.0 |

Vertical




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 74.520000 | 27.2 | 120.000 | V | 7.9 | 12.8 | 40.0 |
| 86.000000 | 27.5 | 120.000 | V | 8.9 | 12.5 | 40.0 |
| 374.920000 | 31.5 | 120.000 | V | 16.1 | 14.5 | 46.0 |

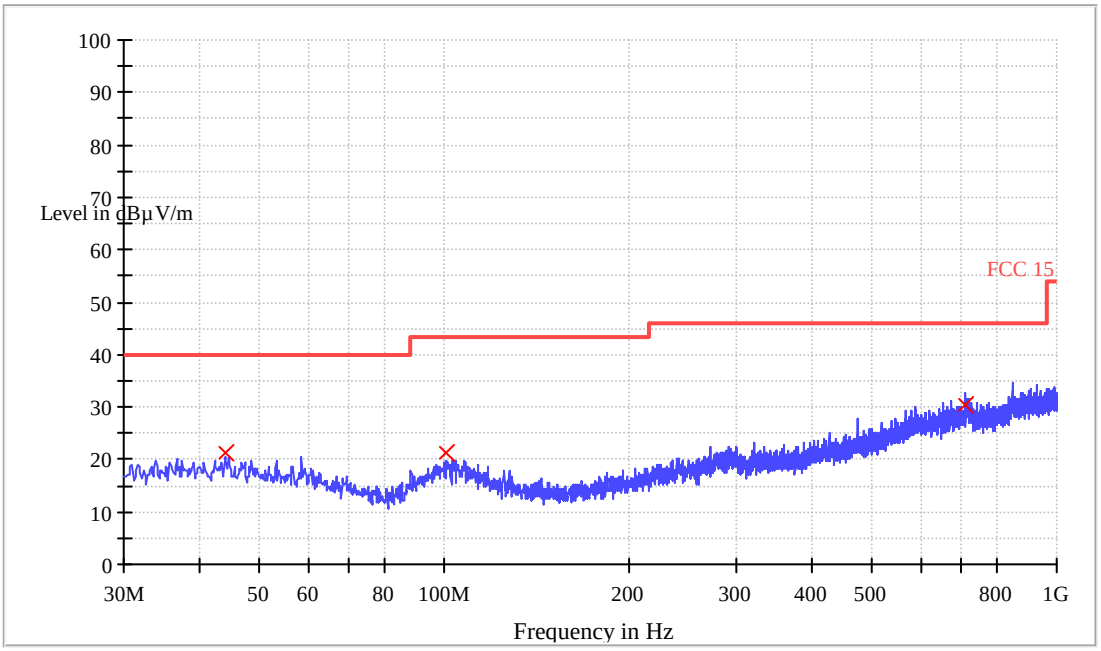
Result as follows:

Band IV 5725 MHz to 5850 MHz

802.11an(HT 20)

Channel 149: 5745 MHz:

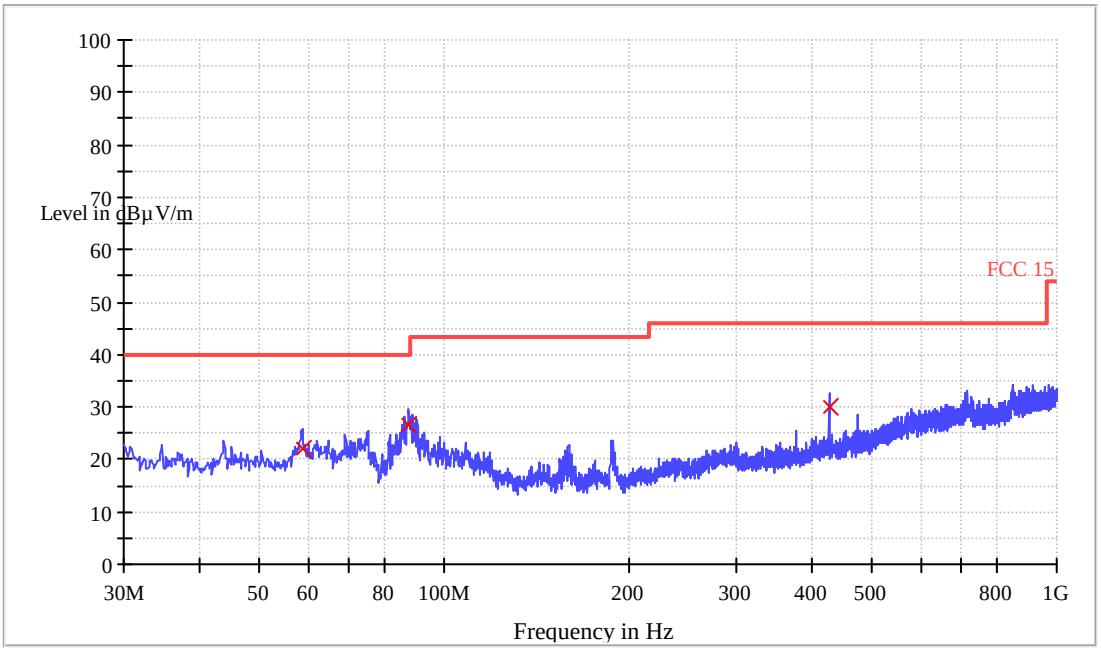
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 43.960000 | 21.4 | 120.000 | H | 13.8 | 18.6 | 40.0 |
| 101.000000 | 21.3 | 120.000 | H | 12.8 | 22.2 | 43.5 |
| 709.720000 | 30.6 | 120.000 | H | 22.3 | 15.4 | 46.0 |

Vertical

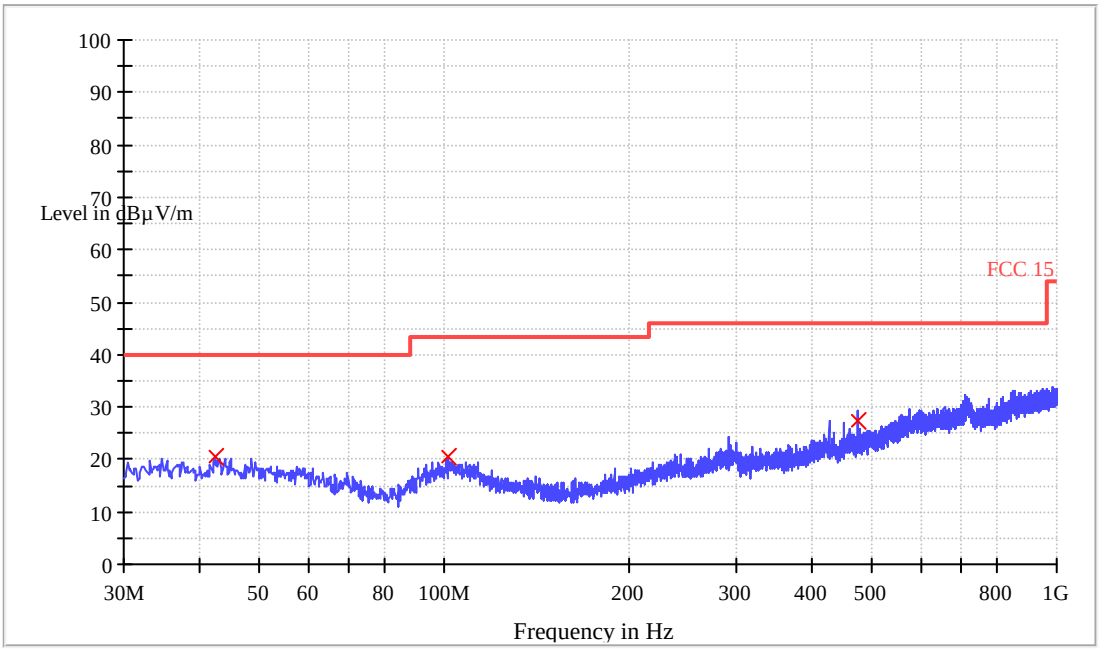



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 58.640000 | 27.6 | 120.000 | V | 11.9 | 12.4 | 40.0 |
| 87.480000 | 27.6 | 120.000 | V | 9.3 | 12.4 | 40.0 |
| 424.920000 | 33.6 | 120.000 | V | 17.6 | 12.4 | 46.0 |

Channel 157: 5785 MHz:

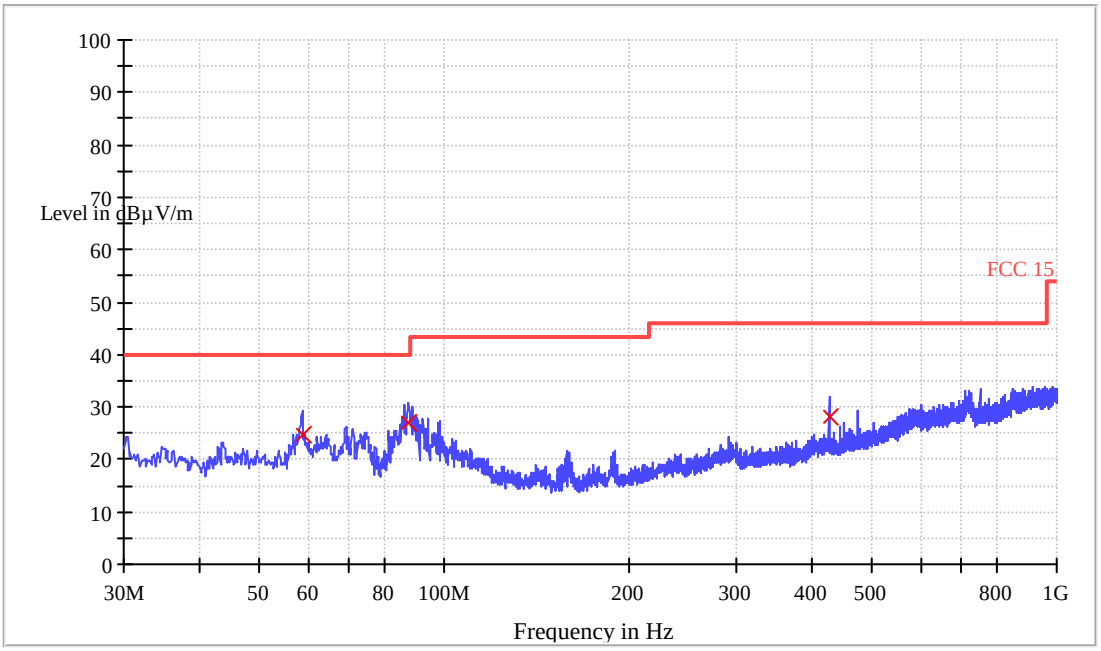
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 42.200000 | 20.4 | 120.000 | H | 13.6 | 19.6 | 40.0 |
| 101.720000 | 20.5 | 120.000 | H | 12.8 | 23.0 | 43.5 |
| 475.040000 | 27.2 | 120.000 | H | 18.6 | 18.8 | 46.0 |

Vertical

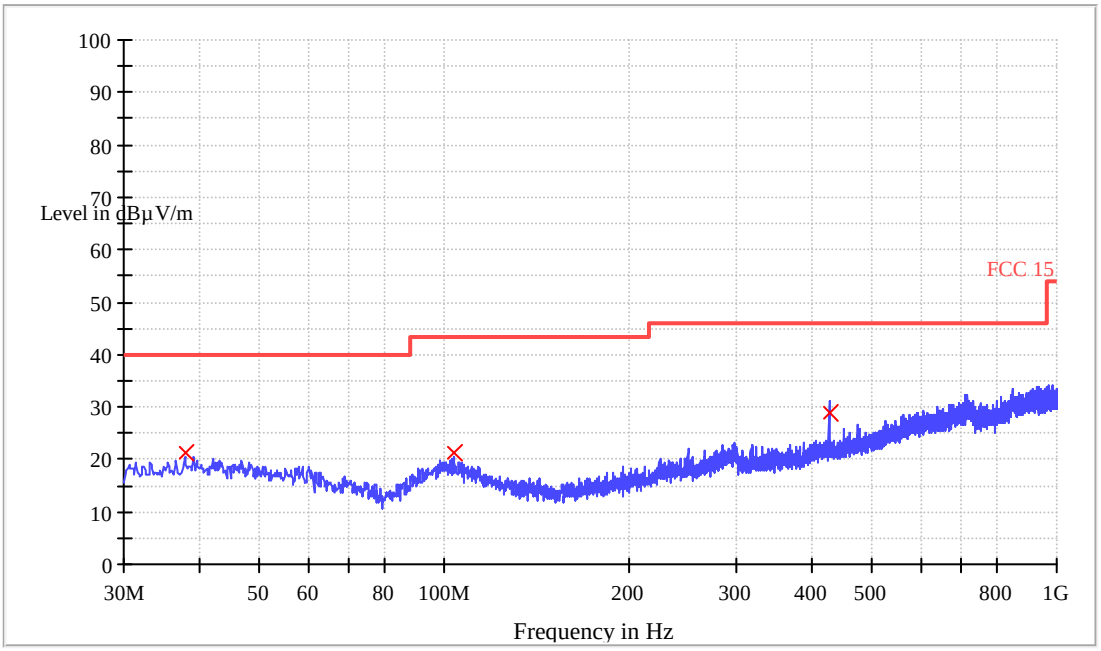



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 42.200000 | 20.4 | 120.000 | H | 13.6 | 19.6 | 40.0 |
| 101.720000 | 20.5 | 120.000 | H | 12.8 | 23.0 | 43.5 |
| 475.040000 | 27.2 | 120.000 | H | 18.6 | 18.8 | 46.0 |

Channel 165: 5825 MHz:

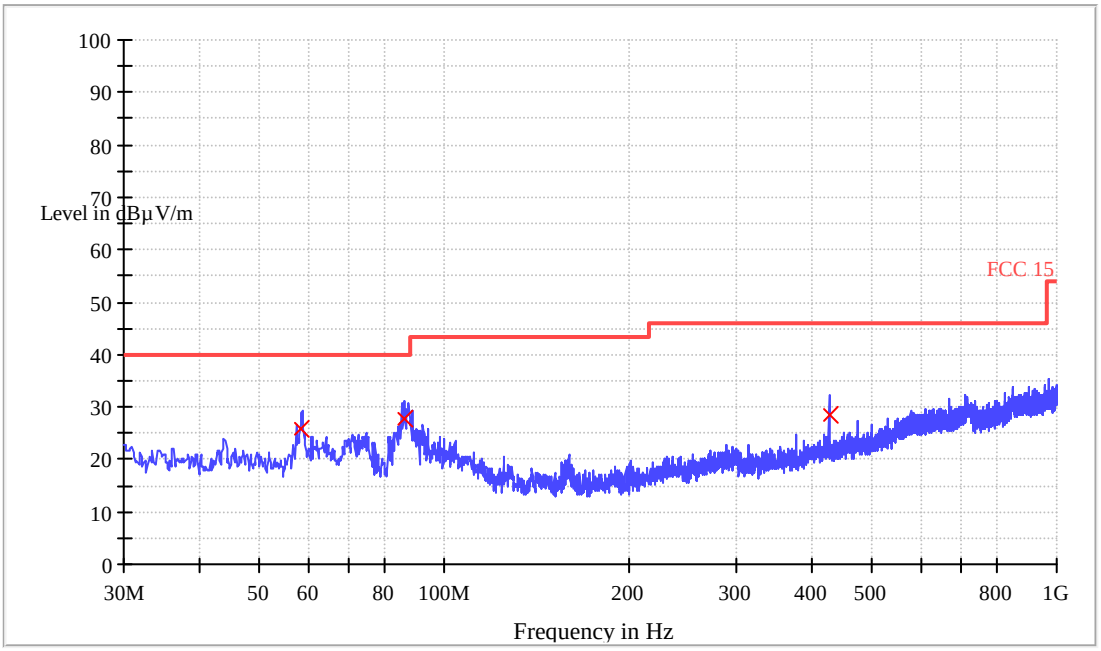
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 37.800000 | 21.2 | 120.000 | H | 13.4 | 18.8 | 40.0 |
| 104.080000 | 21.2 | 120.000 | H | 12.6 | 22.3 | 43.5 |
| 424.920000 | 28.9 | 120.000 | H | 17.6 | 17.1 | 46.0 |

Vertical



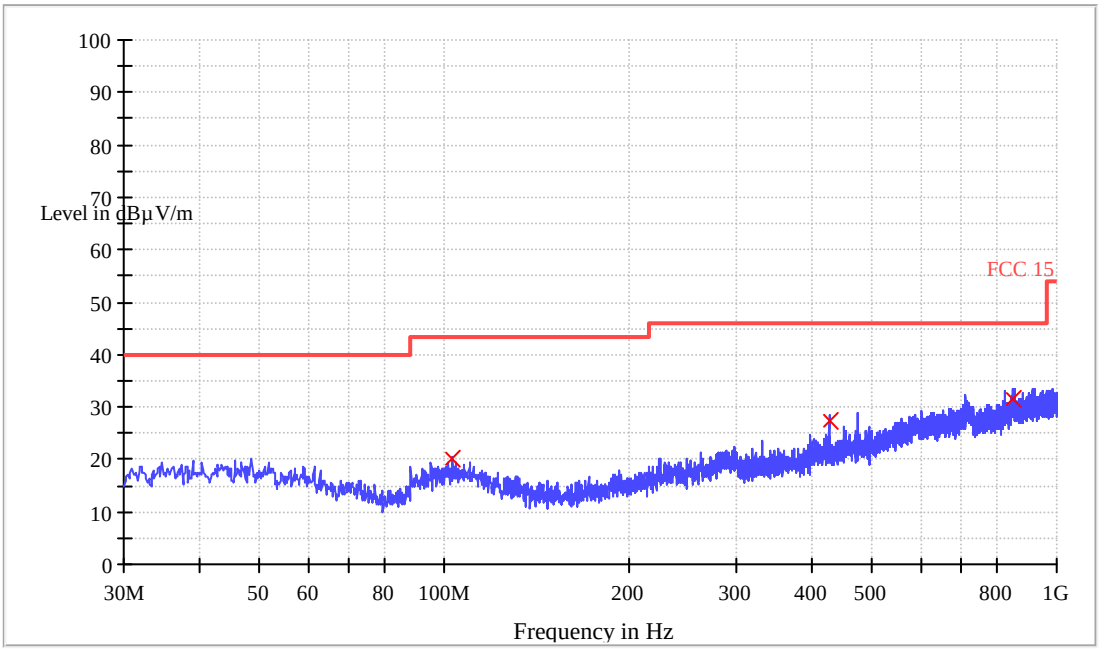

## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 58.520000 | 25.9 | 120.000 | V | 11.9 | 14.2 | 40.0 |
| 86.000000 | 27.7 | 120.000 | V | 8.9 | 12.3 | 40.0 |
| 424.920000 | 28.6 | 120.000 | V | 17.6 | 17.4 | 46.0 |

802.11ac(HT 20)

Channel 149: 5745 MHz:

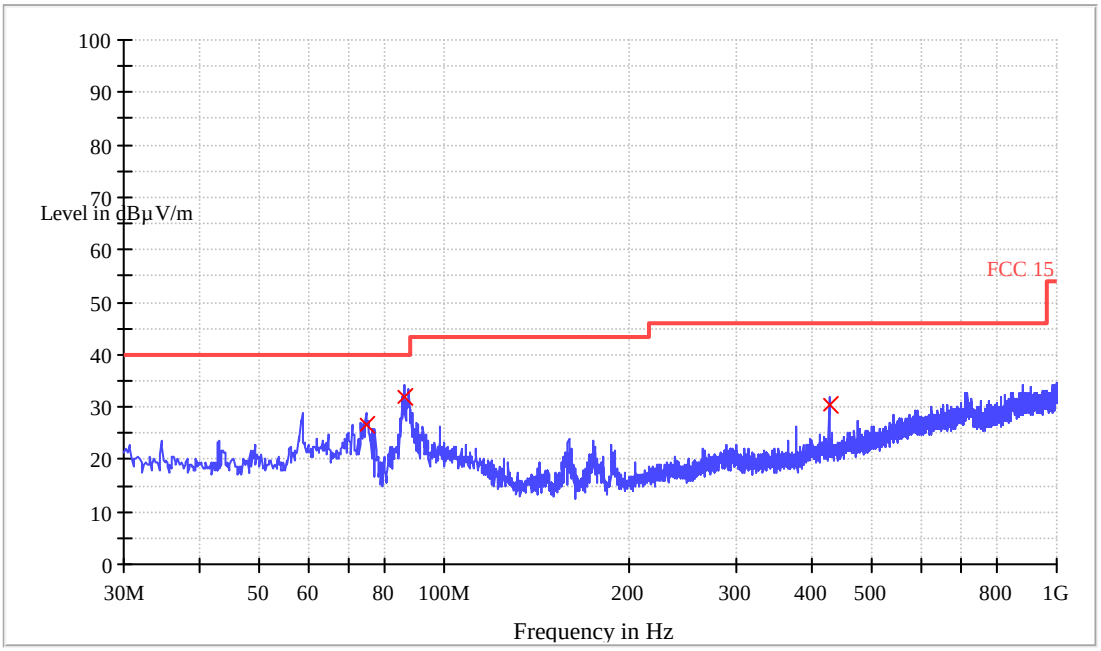
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 103.320000 | 20.3 | 120.000 | H | 12.7 | 23.2 | 43.5 |
| 424.920000 | 27.3 | 120.000 | H | 17.6 | 18.7 | 46.0 |
| 849.200000 | 31.6 | 120.000 | H | 24.3 | 14.4 | 46.0 |

Vertical

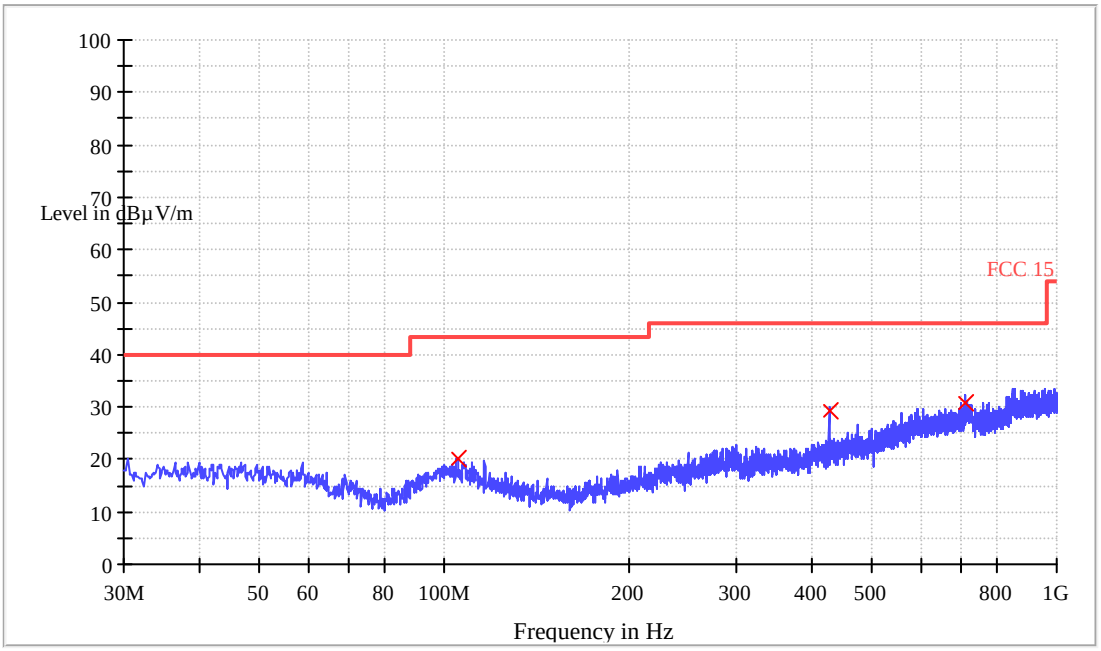



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 74.520000 | 26.8 | 120.000 | V | 7.9 | 13.2 | 40.0 |
| 86.000000 | 32.1 | 120.000 | V | 8.9 | 7.9 | 40.0 |
| 425.040000 | 30.5 | 120.000 | V | 17.6 | 15.5 | 46.0 |

Channel 157: 5785 MHz:

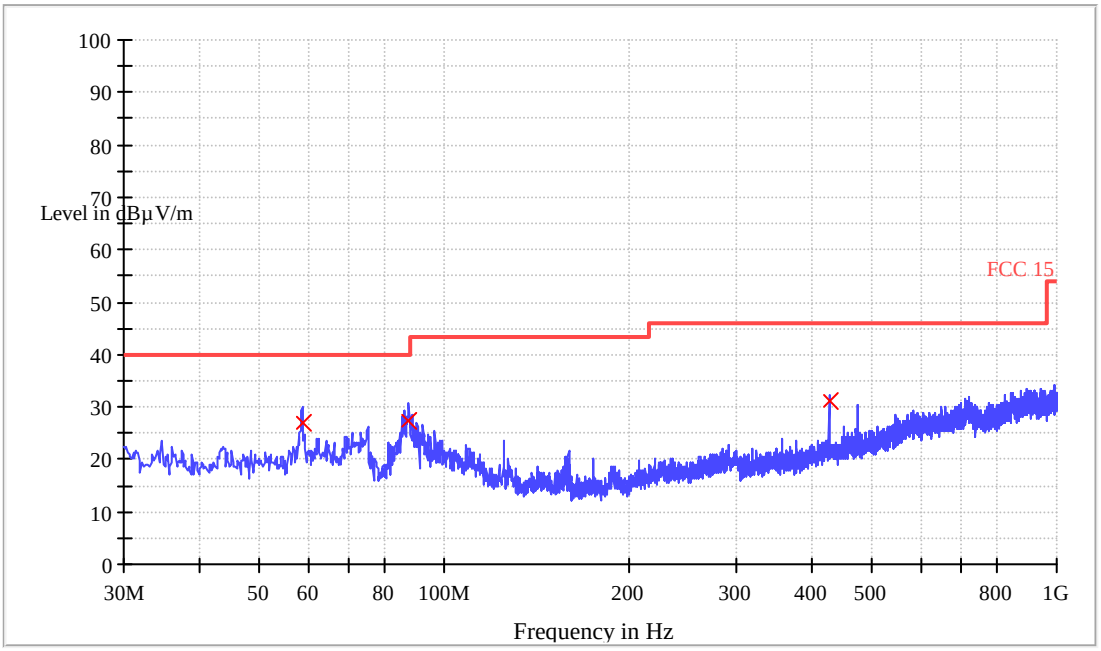
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 104.960000 | 20.2 | 120.000 | H | 12.5 | 23.3 | 43.5 |
| 424.920000 | 29.4 | 120.000 | H | 17.6 | 16.6 | 46.0 |
| 709.880000 | 30.7 | 120.000 | H | 22.3 | 15.3 | 46.0 |

Vertical

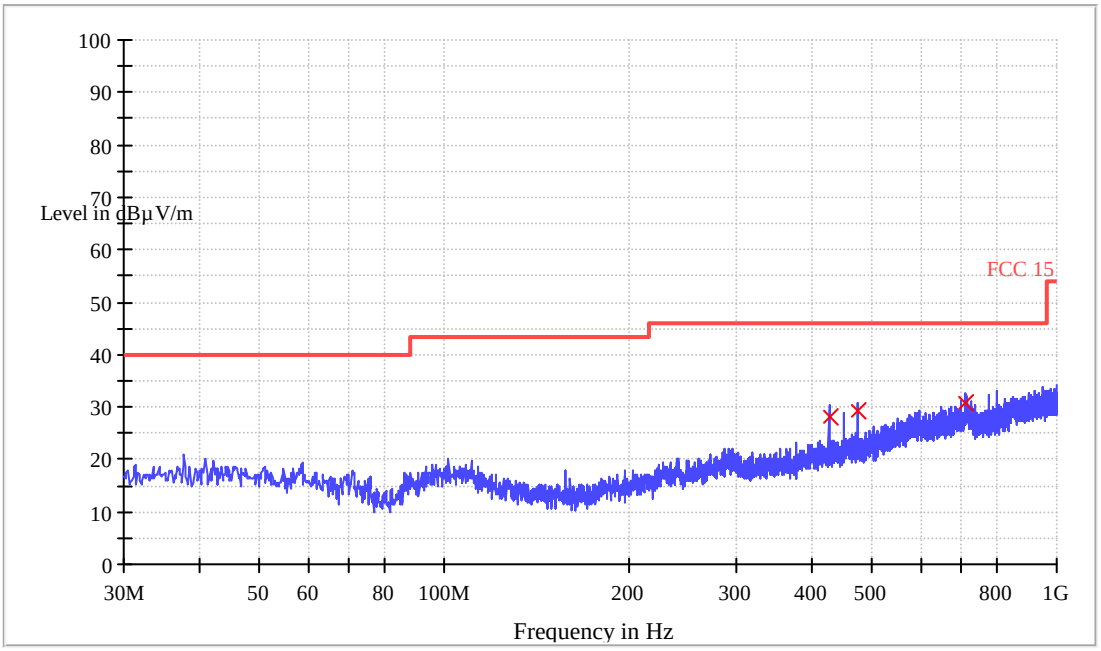



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 58.640000 | 26.9 | 120.000 | V | 11.9 | 13.1 | 40.0 |
| 87.600000 | 27.4 | 120.000 | V | 9.4 | 12.6 | 40.0 |
| 424.920000 | 31.3 | 120.000 | V | 17.6 | 14.7 | 46.0 |

Channel 165: 5825 MHz:

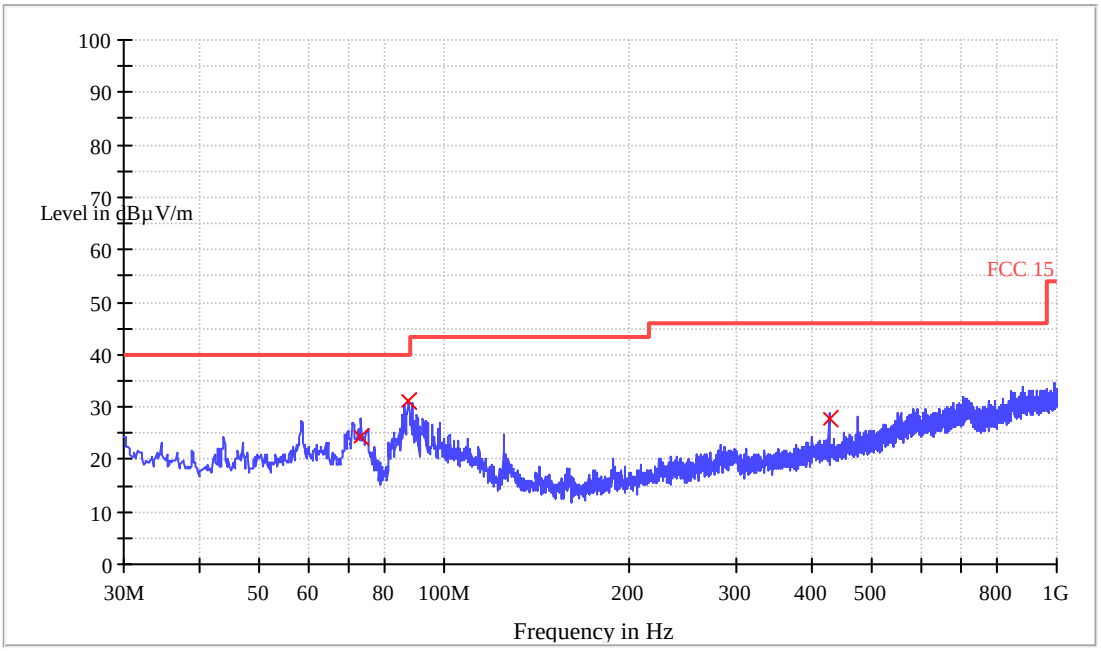
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 424.920000 | 28.1 | 120.000 | H | 17.6 | 17.9 | 46.0 |
| 475.040000 | 29.2 | 120.000 | H | 18.6 | 16.8 | 46.0 |
| 711.480000 | 30.8 | 120.000 | H | 22.3 | 15.2 | 46.0 |

Vertical



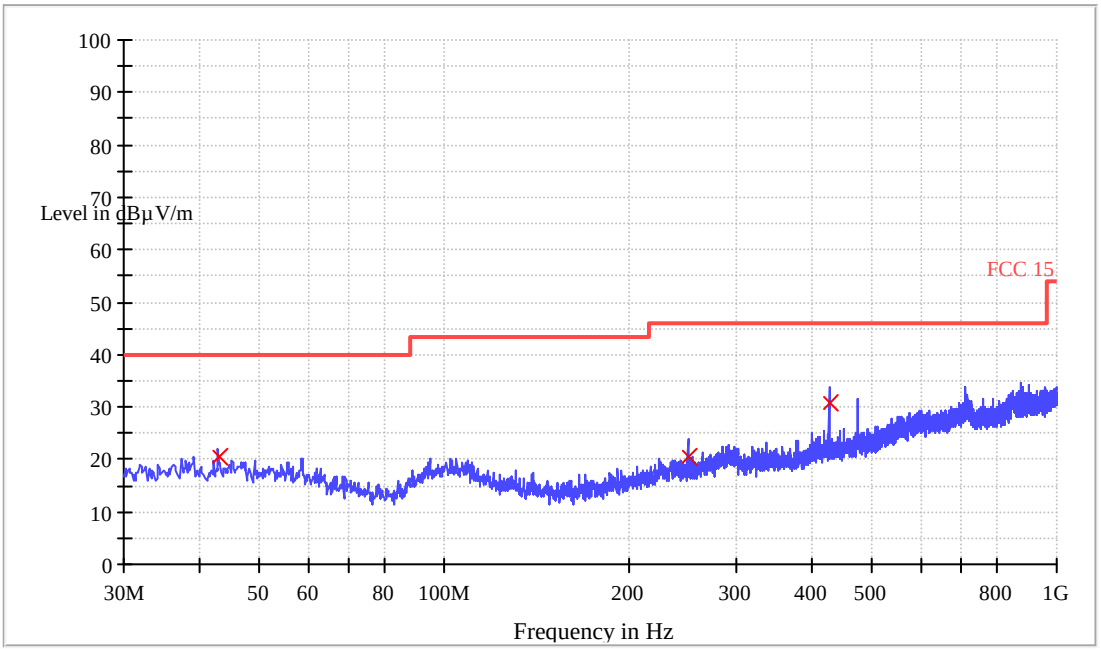

## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 73.080000 | 24.5 | 120.000 | V | 8.2 | 15.5 | 40.0 |
| 87.480000 | 31.3 | 120.000 | V | 9.3 | 8.7 | 40.0 |
| 424.920000 | 27.6 | 120.000 | V | 17.6 | 18.4 | 46.0 |

802.11an(HT 40)

Channel 151: 5755 MHz:

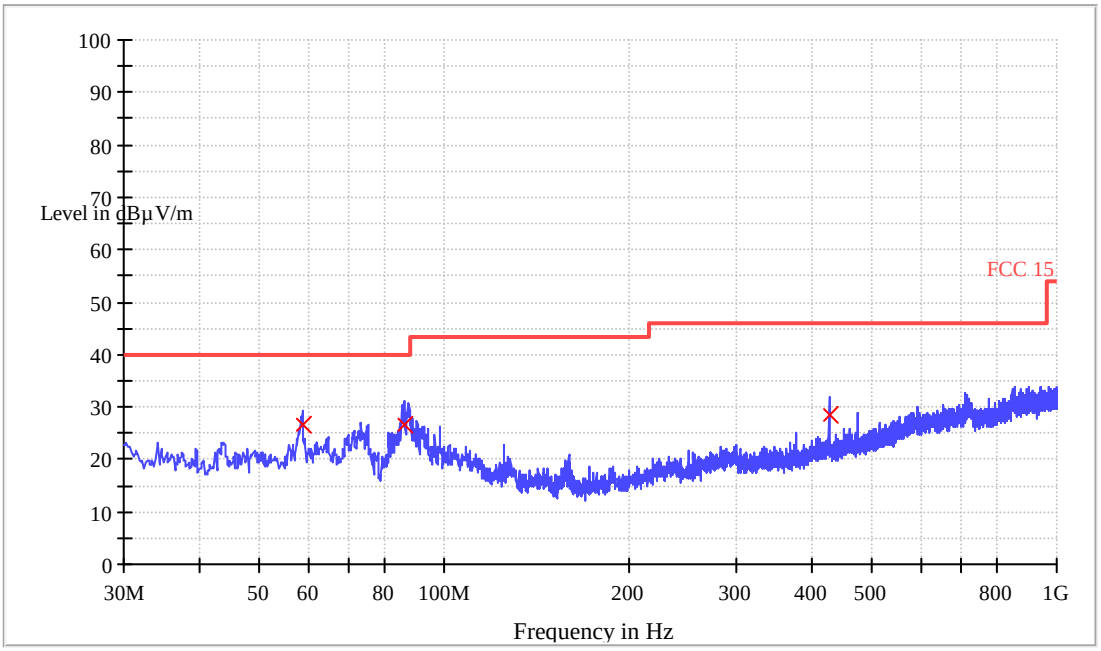
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 42.800000 | 20.5 | 120.000 | H | 13.7 | 19.6 | 40.0 |
| 249.880000 | 20.4 | 120.000 | H | 12.7 | 25.6 | 46.0 |
| 425.040000 | 31.0 | 120.000 | H | 17.6 | 15.0 | 46.0 |
| 425.040000 | 31.0 | 120.000 | H | 17.6 | 15.0 | 46.0 |

Vertical

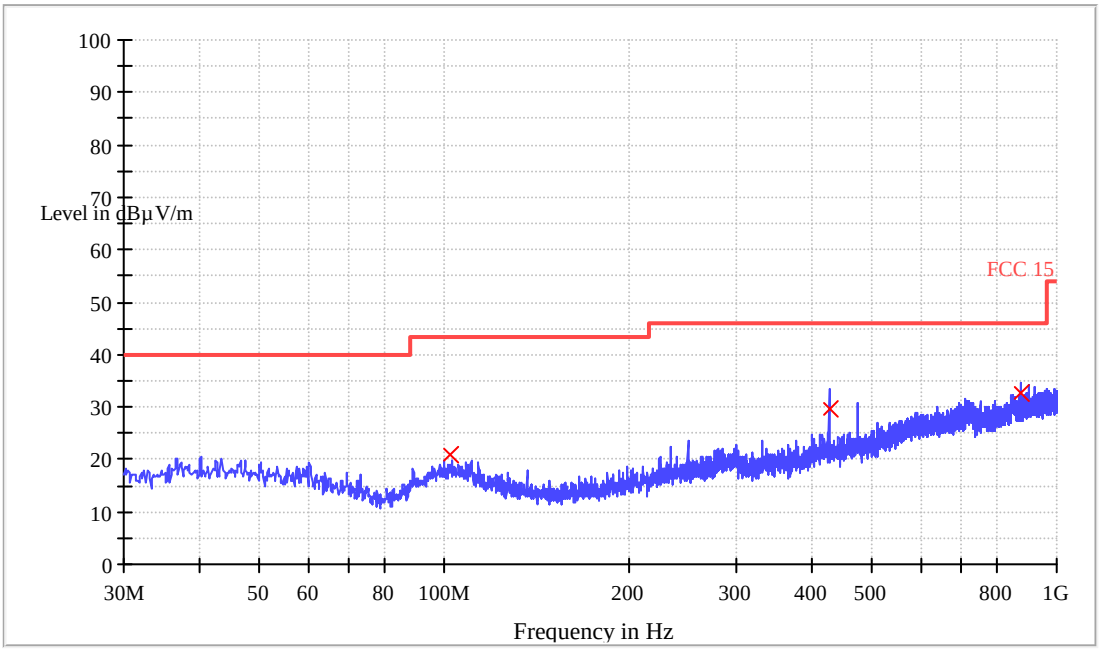



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 58.640000 | 26.7 | 120.000 | V | 11.9 | 13.3 | 40.0 |
| 86.000000 | 26.8 | 120.000 | V | 8.9 | 13.2 | 40.0 |
| 425.040000 | 28.7 | 120.000 | V | 17.6 | 17.3 | 46.0 |
| 425.040000 | 28.7 | 120.000 | V | 17.6 | 17.3 | 46.0 |

Channel 159: 5795 MHz:

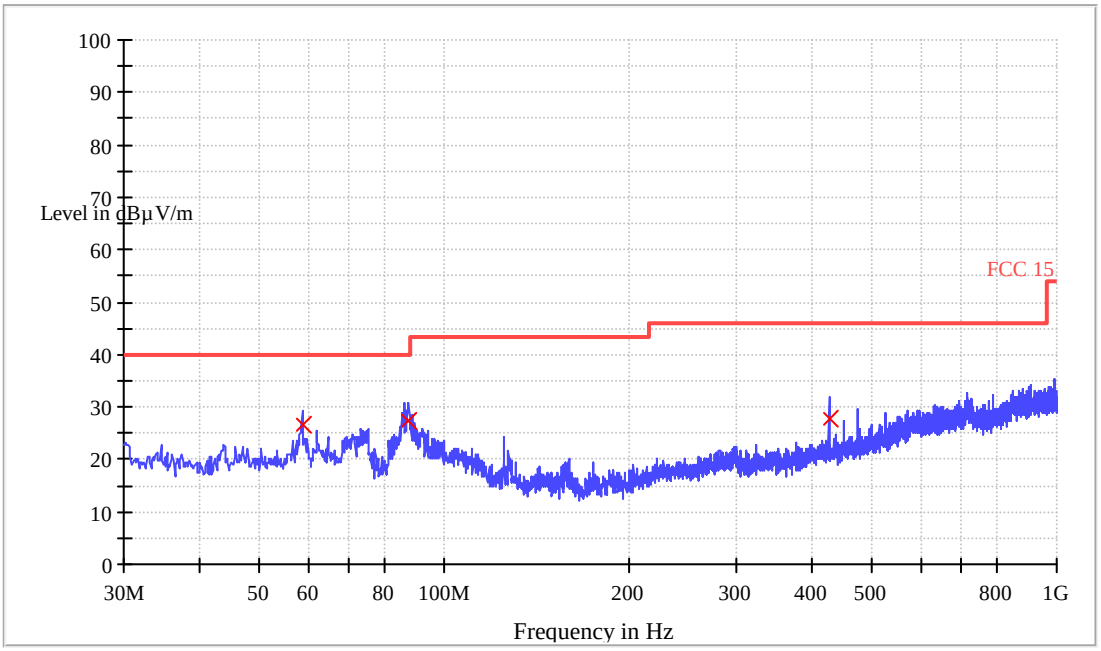
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 42.800000 | 20.5 | 120.000 | H | 13.7 | 19.6 | 40.0 |
| 249.880000 | 20.4 | 120.000 | H | 12.7 | 25.6 | 46.0 |
| 425.040000 | 31.0 | 120.000 | H | 17.6 | 15.0 | 46.0 |
| 425.040000 | 31.0 | 120.000 | H | 17.6 | 15.0 | 46.0 |

Vertical



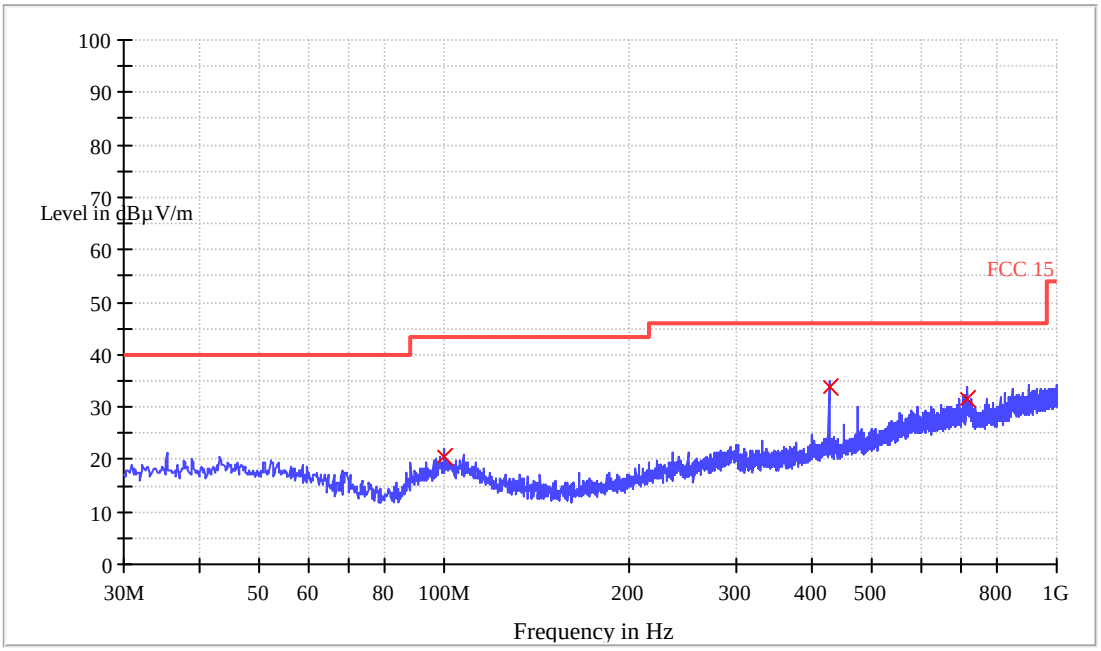

## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 58.640000 | 26.5 | 120.000 | V | 11.9 | 13.6 | 40.0 |
| 87.320000 | 27.4 | 120.000 | V | 9.3 | 12.6 | 40.0 |
| 424.920000 | 27.6 | 120.000 | V | 17.6 | 18.4 | 46.0 |

802.11ac(HT 40)

Channel 151: 5755 MHz:

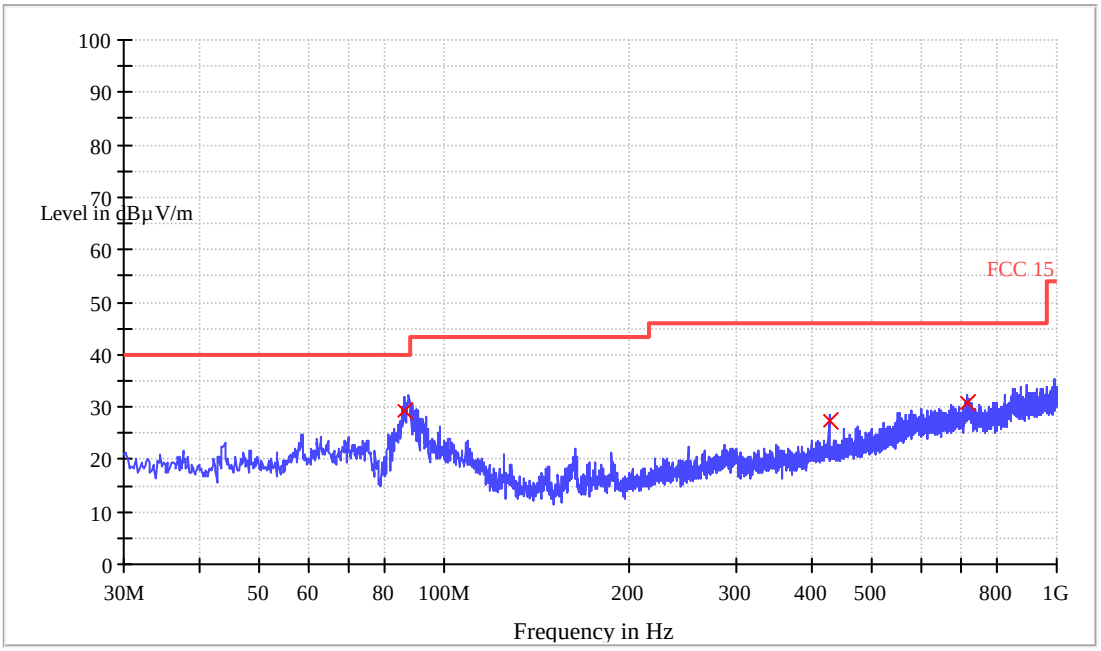
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 100.120000 | 20.6 | 120.000 | H | 12.9 | 22.9 | 43.5 |
| 425.040000 | 33.9 | 120.000 | H | 17.6 | 12.1 | 46.0 |
| 711.800000 | 31.7 | 120.000 | H | 22.3 | 14.3 | 46.0 |

Vertical

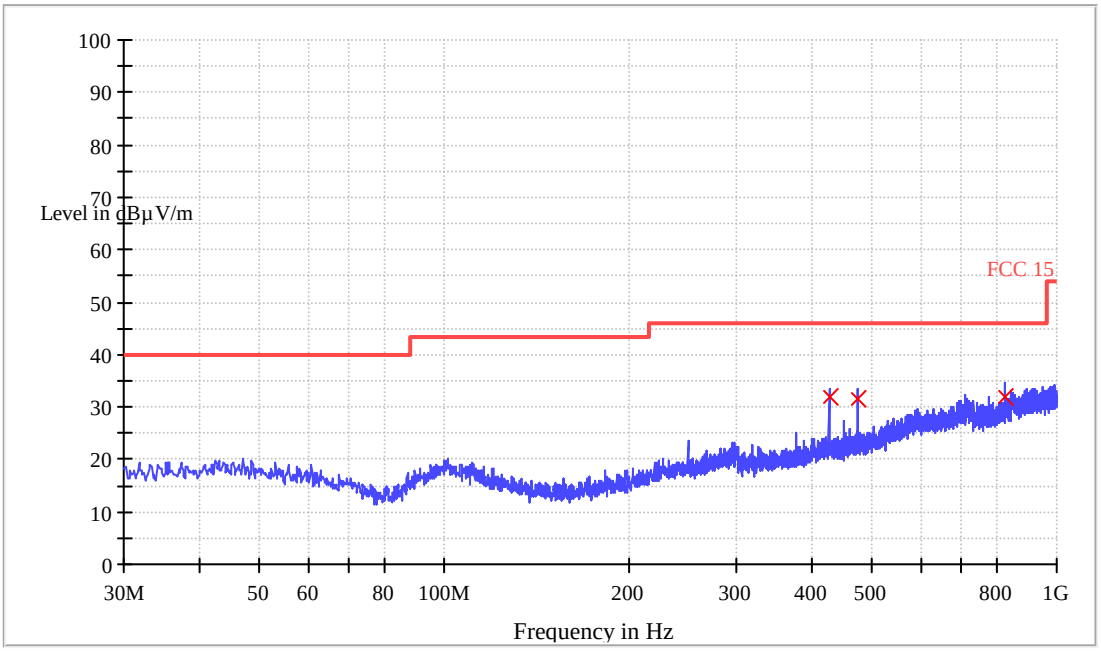



## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 86.000000 | 29.4 | 120.000 | V | 8.9 | 10.6 | 40.0 |
| 425.040000 | 27.3 | 120.000 | V | 8.9 | 18.7 | 46.0 |
| 713.560000 | 30.7 | 120.000 | V | 22.3 | 15.3 | 46.0 |

Channel 159: 5795 MHz:

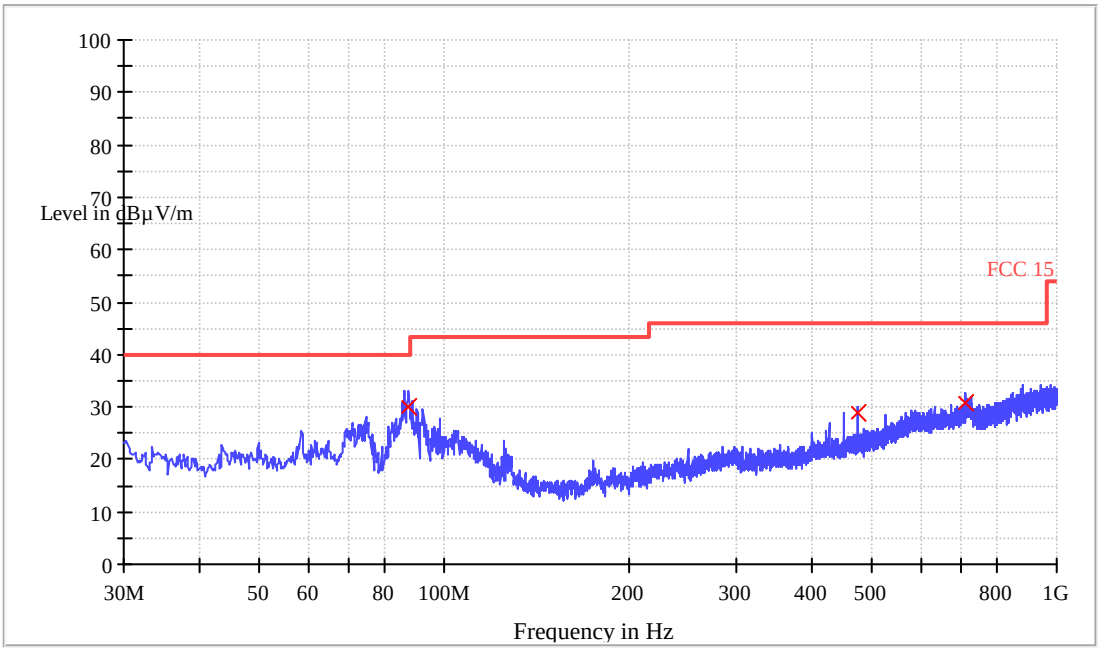
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 425.040000 | 31.8 | 120.000 | H | 17.6 | 14.2 | 46.0 |
| 475.040000 | 31.7 | 120.000 | H | 18.6 | 14.3 | 46.0 |
| 825.120000 | 32.1 | 120.000 | H | 23.8 | 14.0 | 46.0 |

Vertical



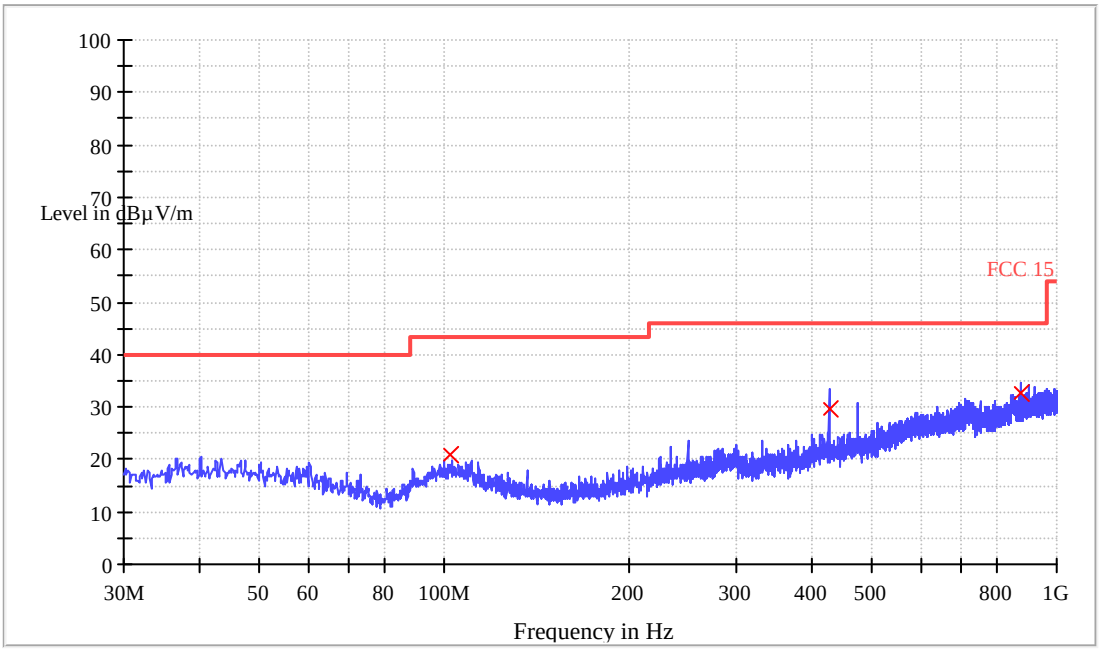

## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 87.600000 | 30.2 | 120.000 | V | 9.4 | 9.8 | 40.0 |
| 475.040000 | 28.9 | 120.000 | V | 18.6 | 17.1 | 46.0 |
| 710.320000 | 30.6 | 120.000 | V | 22.3 | 15.4 | 46.0 |

802.11ac(HT 80)

Channel 155: 5775 MHz:

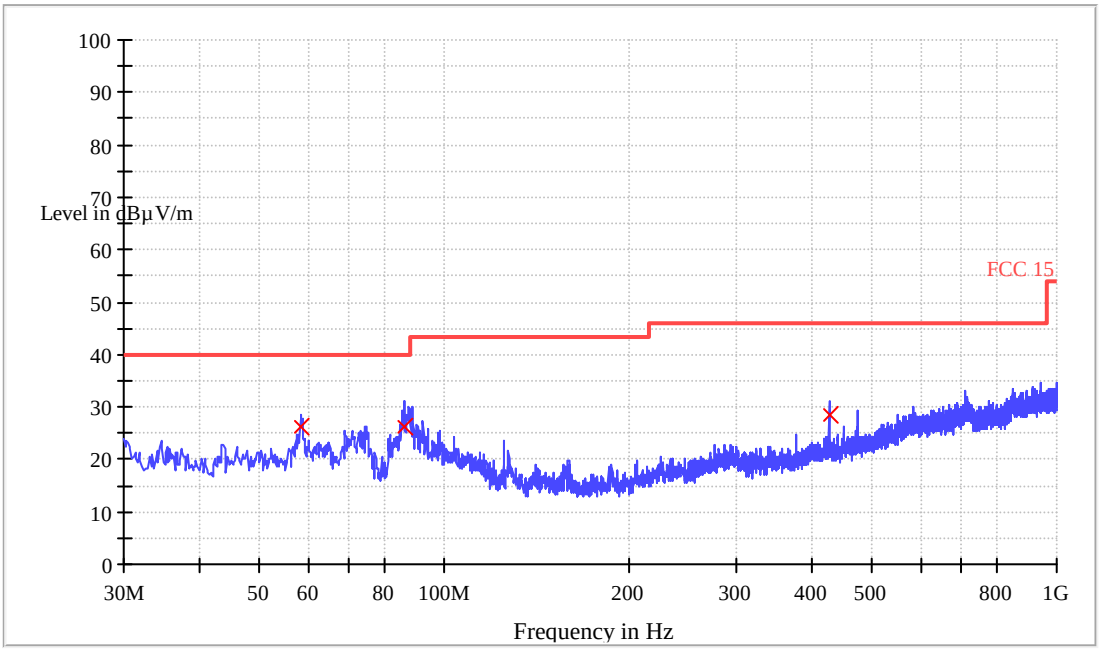
Horizontal




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 42.800000 | 20.5 | 120.000 | H | 13.7 | 19.6 | 40.0 |
| 249.880000 | 20.4 | 120.000 | H | 12.7 | 25.6 | 46.0 |
| 425.040000 | 31.0 | 120.000 | H | 17.6 | 15.0 | 46.0 |
| 425.040000 | 31.0 | 120.000 | H | 17.6 | 15.0 | 46.0 |

Vertical




## QP

| Frequency (MHz) | Quasi Peak (dBµV/m) | Bandwidth (kHz) | Pol | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|---|---|---|---|---|---|---|
| 42.800000 | 20.5 | 120.000 | H | 13.7 | 19.6 | 40.0 |
| 249.880000 | 20.4 | 120.000 | H | 12.7 | 25.6 | 46.0 |
| 425.040000 | 31.0 | 120.000 | H | 17.6 | 15.0 | 46.0 |
| 425.040000 | 31.0 | 120.000 | H | 17.6 | 15.0 | 46.0 |

**1~40 GHz Radiated Emissions.**

Result follows:

Band I 5150 MHz to 5250 MHz

802.11an(HT 20)
Channel 36: 5180 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4766.00 | 35.3 | / | -8.8 | 74.0 | / | 54.0 | -18.7 |
| H | 10358.40 | 46.0 | / | -4.6 | 74.0 | / | 54.0 | -8.0 |
| H | 14647.20 | 35.4 | / | -2.2 | 74.0 | / | 54.0 | -18.6 |
| V | 4823.60 | 45.4 | / | -8.8 | 74.0 | / | 54.0 | -8.6 |
| V | 10359.60 | 49.3 | / | -4.6 | 74.0 | / | 54.0 | -4.7 |
| V | 15595.60 | 35.8 | / | -8.8 | 74.0 | / | 54.0 | -18.2 |

Channel 44: 5220 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4775.60 | 37.4 | / | -8.8 | 74.0 | / | 54.0 | -16.6 |
| H | 10439.20 | 44.1 | / | -4.6 | 74.0 | / | 54.0 | -9.9 |
| H | 15590.80 | 36.8 | / | -1.2 | 74.0 | / | 54.0 | -17.2 |
| V | 4604.00 | 34.7 | / | -8.8 | 74.0 | / | 54.0 | -19.3 |
| V | 10432.40 | 46.5 | / | -4.6 | 74.0 | / | 54.0 | -7.5 |
| V | 12681.60 | 34.7 | / | -8.8 | 74.0 | / | 54.0 | -19.3 |

Channel 48: 5240 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 2412.00 | 51.3 | / | -12.8 | 74.0 | / | 54.0 | -2.7 |
| H | 7237.60 | 36.5 | / | -6.1 | 74.0 | / | 54.0 | -17.5 |
| H | 10470.00 | 42.2 | / | -4.6 | 74.0 | / | 54.0 | -11.8 |
| V | 4823.60 | 45.6 | / | -8.8 | 74.0 | / | 54.0 | -8.4 |
| V | 7765.60 | 37.4 | / | -6.0 | 74.0 | / | 54.0 | -16.6 |
| V | 10479.20 | 43.4 | / | -4.6 | 74.0 | / | 54.0 | -10.6 |

802.11ac(HT 20)

Channel 36: 5180 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 1712.80 | 36.8 | / | -15.3 | 74.0 | / | 54.0 | -17.2 |
| H | 4802.80 | 38.2 | / | -6.1 | 74.0 | / | 54.0 | -15.8 |
| H | 10361.20 | 46.8 | / | -4.6 | 74.0 | / | 54.0 | -7.2 |
| V | 4404.40 | 34.2 | / | -8.8 | 74.0 | / | 54.0 | -19.8 |
| V | 7237.60 | 39.9 | / | -6.1 | 74.0 | / | 54.0 | -14.1 |
| V | 10359.20 | 47.5 | / | -8.8 | 74.0 | / | 54.0 | -6.5 |

Channel 44: 5220 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4823.60 | 39.0 | / | -8.8 | 74.0 | / | 54.0 | -15.0 |
| H | 7736.80 | 35.6 | / | -6.1 | 74.0 | / | 54.0 | -18.4 |
| H | 10436.40 | 47.6 | / | -4.6 | 74.0 | / | 54.0 | -6.4 |
| V | 4500.00 | 34.9 | / | -8.8 | 74.0 | / | 54.0 | -19.1 |
| V | 7714.00 | 36.8 | / | -6.1 | 74.0 | / | 54.0 | -17.2 |
| V | 10441.20 | 44.6 | / | -4.6 | 74.0 | / | 54.0 | -9.4 |

Channel 48: 5240 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 2415.60 | 52.2 | / | -12.8 | 74.0 | / | 54.0 | -1.8 |
| H | 5240.80 | 36.9 | / | -8.5 | 74.0 | / | 54.0 | -17.1 |
| H | 10476.40 | 45.8 | / | -4.6 | 74.0 | / | 54.0 | -8.2 |
| V | 2412.40 | 51.1 | / | -12.8 | 74.0 | / | 54.0 | -2.9 |
| V | 7720.40 | 36.8 | / | -6.1 | 74.0 | / | 54.0 | -17.2 |
| V | 10472.80 | 40.4 | / | -4.6 | 74.0 | / | 54.0 | -13.6 |

802.11an(HT 40)

Channel 38: 5190 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 2410.00 | 45.4 | / | -12.8 | 74.0 | / | 54.0 | -8.6 |
| H | 7768.00 | 35.7 | / | -6.0 | 74.0 | / | 54.0 | -18.3 |
| H | 10382.00 | 48.2 | / | -4.6 | 74.0 | / | 54.0 | -5.8 |
| V | 2406.40 | 38.9 | / | -12.8 | 74.0 | / | 54.0 | -15.1 |
| V | 7809.20 | 36.4 | / | -6.1 | 74.0 | / | 54.0 | -17.6 |
| V | 10386.00 | 48.8 | / | -4.6 | 74.0 | / | 54.0 | -5.2 |

Channel 46: 5230 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4717.20 | 35.2 | / | -8.8 | 74.0 | / | 54.0 | -18.8 |
| H | 7634.80 | 36.6 | / | -6.0 | 74.0 | / | 54.0 | -17.4 |
| H | 10456.80 | 44.5 | / | -4.6 | 74.0 | / | 54.0 | -9.5 |
| V | 2415.60 | 50.8 | / | -12.8 | 74.0 | / | 54.0 | -3.2 |
| V | 7237.60 | 42.2 | / | -6.1 | 74.0 | / | 54.0 | -11.8 |
| V | 10453.20 | 42.9 | / | -4.6 | 74.0 | / | 54.0 | -11.1 |

802.11ac(HT 40)

Channel 38: 5190 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4764.40 | 36.9 | / | -8.8 | 74.0 | / | 54.0 | -17.1 |
| H | 7700.00 | 37.0 | / | -6.0 | 74.0 | / | 54.0 | -17.0 |
| H | 10380.80 | 51.7 | / | -4.6 | 74.0 | / | 54.0 | -2.3 |
| V | 2414.80 | 51.1 | / | -12.8 | 74.0 | / | 54.0 | -2.9 |
| V | 7746.80 | 35.7 | / | -6.1 | 74.0 | / | 54.0 | -18.3 |
| V | 10380.80 | 42.8 | / | -4.6 | 74.0 | / | 54.0 | -11.2 |

Channel 46: 5230 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4823.60 | 37.0 | / | -8.8 | 74.0 | / | 54.0 | -17.0 |
| H | 7696.80 | 36.1 | / | -6.0 | 74.0 | / | 54.0 | -17.9 |
| H | 10300.40 | 35.4 | / | -4.6 | 74.0 | / | 54.0 | -18.6 |
| V | 4759.20 | 34.0 | / | -8.8 | 74.0 | / | 54.0 | -20.0 |
| V | 7612.80 | 35.7 | / | -6.1 | 74.0 | / | 54.0 | -18.3 |
| V | 12652.40 | 36.1 | / | -4.5 | 74.0 | / | 54.0 | -17.9 |

802.11ac(HT 80)

Channel 42: 5210 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 3115.60 | 34.3 | / | -10.9 | 74.0 | / | 54.0 | -19.7 |
| H | 4773.60 | 37.0 | / | -8.8 | 74.0 | / | 54.0 | -17.0 |
| H | 10403.20 | 45.0 | / | -4.6 | 74.0 | / | 54.0 | -9.0 |
| V | 3472.80 | 34.3 | / | -10.1 | 74.0 | / | 54.0 | -19.7 |
| V | 7628.00 | 36.2 | / | -6.1 | 74.0 | / | 54.0 | -17.8 |
| V | 10405.20 | 44.0 | / | -4.5 | 74.0 | / | 54.0 | -10.0 |

Result as follows:

Band IV 5725 MHz to 5850 MHz

802.11an(HT 20)
Channel 149: 5745 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4739.60 | 34.7 | / | -8.8 | 74.0 | / | 54.0 | -19.3 |
| H | 9948.00 | 35.9 | / | -4.8 | 74.0 | / | 54.0 | -18.1 |
| H | 14603.00 | 34.6 | / | -4.6 | 74.0 | / | 54.0 | -19.4 |
| V | 3830.00 | 34.8 | / | -9.7 | 74.0 | / | 54.0 | -19.2 |
| V | 7238.00 | 37.0 | / | -6.1 | 74.0 | / | 54.0 | -17.0 |
| V | 10393.60 | 35.6 | / | -4.5 | 74.0 | / | 54.0 | -18.4 |

Channel 157: 5785 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4823.60 | 40.5 | / | -8.8 | 74.0 | / | 54.0 | -13.5 |
| H | 7784.40 | 36.5 | / | -6.0 | 74.0 | / | 54.0 | -17.5 |
| H | 10228.40 | 35.8 | / | -4.7 | 74.0 | / | 54.0 | -18.2 |
| V | 3856.00 | 36.0 | / | -9.7 | 74.0 | / | 54.0 | -18.0 |
| V | 7238.00 | 41.3 | / | -6.1 | 74.0 | / | 54.0 | -12.7 |
| V | 12656.00 | 34.9 | / | -4.5 | 74.0 | / | 54.0 | -19.1 |

Channel 165: 5825 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4547.20 | 34.6 | / | -8.7 | 74.0 | / | 54.0 | -19.4 |
| H | 7764.00 | 36.7 | / | -6.0 | 74.0 | / | 54.0 | -17.3 |
| H | 11651.20 | 36.3 | / | -4.8 | 74.0 | / | 54.0 | -17.7 |
| V | 2416.40 | 42.6 | / | -12.8 | 74.0 | / | 54.0 | -11.4 |
| V | 7236.40 | 36.0 | / | -6.1 | 74.0 | / | 54.0 | -18.0 |
| V | 10263.60 | 34.3 | / | -4.7 | 74.0 | / | 54.0 | -19.7 |

802.11ac(HT 20)

Channel 149: 5745 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 3471.60 | 34.6 | / | -8.7 | 74.0 | / | 54.0 | -19.4 |
| H | 7237.60 | 37.6 | / | -6.1 | 74.0 | / | 54.0 | -16.4 |
| H | 9351.60 | 35.9 | / | -5.6 | 74.0 | / | 54.0 | -18.1 |
| V | 2412.40 | 50.4 | / | -12.8 | 74.0 | / | 54.0 | -3.6 |
| V | 3830.00 | 36.2 | / | -9.7 | 74.0 | / | 54.0 | -17.8 |
| V | 4824.00 | 41.5 | / | -8.8 | 74.0 | / | 54.0 | -12.5 |

Channel 157: 5785 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 3856.40 | 36.8 | / | -9.7 | 74.0 | / | 54.0 | -17.2 |
| H | 7784.00 | 36.6 | / | -6.0 | 74.0 | / | 54.0 | -17.4 |
| H | 9938.40 | 36.4 | / | -4.8 | 74.0 | / | 54.0 | -17.6 |
| V | 3857.20 | 37.0 | / | -9.7 | 74.0 | / | 54.0 | -17.0 |
| V | 7238.40 | 41.1 | / | -6.1 | 74.0 | / | 54.0 | -12.9 |
| V | 10398.80 | 36.2 | / | -8.8 | 74.0 | / | 54.0 | -17.8 |

Channel 165: 5825 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4718.40 | 34.5 | / | -8.8 | 74.0 | / | 54.0 | -19.5 |
| H | 10297.60 | 35.9 | / | -4.7 | 74.0 | / | 54.0 | -18.1 |
| H | 11661.20 | 38.1 | / | -4.8 | 74.0 | / | 54.0 | -15.9 |
| V | 3883.60 | 37.4 | / | -9.7 | 74.0 | / | 54.0 | -16.6 |
| V | 7742.00 | 36.1 | / | -6.0 | 74.0 | / | 54.0 | -17.9 |
| V | 11649.60 | 36.7 | / | -8.8 | 74.0 | / | 54.0 | -17.3 |

802.11an(HT 40)

Channel 151: 5755 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 4823.60 | 43.9 | / | -8.8 | 74.0 | / | 54.0 | -10.1 |
| H | 7713.60 | 36.3 | / | -6.0 | 74.0 | / | 54.0 | -17.7 |
| H | 9629.60 | 36.9 | / | -4.9 | 74.0 | / | 54.0 | -17.1 |
| V | 2410.80 | 51.4 | / | -12.8 | 74.0 | / | 54.0 | -2.6 |
| V | 3836.00 | 36.0 | / | -9.7 | 74.0 | / | 54.0 | -18.0 |
| V | 7765.60 | 36.6 | / | -6.0 | 74.0 | / | 54.0 | -17.4 |

Channel 159: 5795 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 3863.60 | 36.1 | / | -9.7 | 74.0 | / | 54.0 | -17.9 |
| H | 7764.40 | 36.4 | / | -6.0 | 74.0 | / | 54.0 | -17.6 |
| H | 10263.60 | 36.5 | / | -4.7 | 74.0 | / | 54.0 | -17.5 |
| V | 3862.80 | 36.7 | / | -9.7 | 74.0 | / | 54.0 | -17.3 |
| V | 4824.40 | 36.0 | / | -8.8 | 74.0 | / | 54.0 | -18.0 |
| V | 10264.00 | 34.9 | / | -6.0 | 74.0 | / | 54.0 | -19.1 |

802.11ac(HT 40)

Channel 151: 5755 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 3836.40 | 34.9 | / | -9.7 | 74.0 | / | 54.0 | -19.1 |
| H | 7723.60 | 36.7 | / | -6.0 | 74.0 | / | 54.0 | -17.3 |
| H | 10435.60 | 36.4 | / | -4.6 | 74.0 | / | 54.0 | -17.6 |
| V | 3836.40 | 36.3 | / | -9.7 | 74.0 | / | 54.0 | -17.7 |
| V | 4823.60 | 45.6 | / | -8.8 | 74.0 | / | 54.0 | -8.4 |
| V | 9924.80 | 35.4 | / | -6.0 | 74.0 | / | 54.0 | -18.6 |

Channel 159: 5795 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 2310.00 | 32.8 | / | -13.1 | 74.0 | / | 54.0 | -21.2 |
| H | 7637.60 | 36.8 | / | -6.0 | 74.0 | / | 54.0 | -17.2 |
| H | 10430.40 | 36.1 | / | -4.6 | 74.0 | / | 54.0 | -17.9 |
| V | 3863.60 | 37.9 | / | -9.7 | 74.0 | / | 54.0 | -16.1 |
| V | 4823.60 | 45.8 | / | -8.8 | 74.0 | / | 54.0 | -8.2 |
| V | 7240.00 | 39.0 | / | -6.1 | 74.0 | / | 54.0 | -15.0 |

802.11ac(HT 80)

Channel 155: 5775 MHz:

| Polarization | Frequency (MHz) | PK Net at 3m (dBμV/m) | AV Net at 3m (dBμV/m | Correction Factor (dB) | PK Limit at 3m (dBμV/m) | PK Margin (dB) | AV Limit at 3m (dBμV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 3849.60 | 35.3 | / | -9.7 | 74.0 | / | 54.0 | -18.7 |
| H | 7628.00 | 36.3 | / | -6.0 | 74.0 | / | 54.0 | -17.7 |
| H | 10277.20 | 36.8 | / | -4.7 | 74.0 | / | 54.0 | -17.2 |
| V | 4824.00 | 38.7 | / | -8.8 | 74.0 | / | 54.0 | -15.3 |
| V | 7238.80 | 40.6 | / | -6.1 | 74.0 | / | 54.0 | -13.4 |
| V | 10253.20 | 36.0 | / | -4.7 | 74.0 | / | 54.0 | -18.0 |

Remark: When Peak emission level was below AV limit, the AV emission level did not be record.

The field strength is calculated by adding the Antenna Factor. Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Loss –Preamplifier Factor.

As shown in Section, for frequencies above 1000 MHz. the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

No any other emissions level which are attenuated less than 20dB below the limit.

## 4.8 Band Edges Requirement

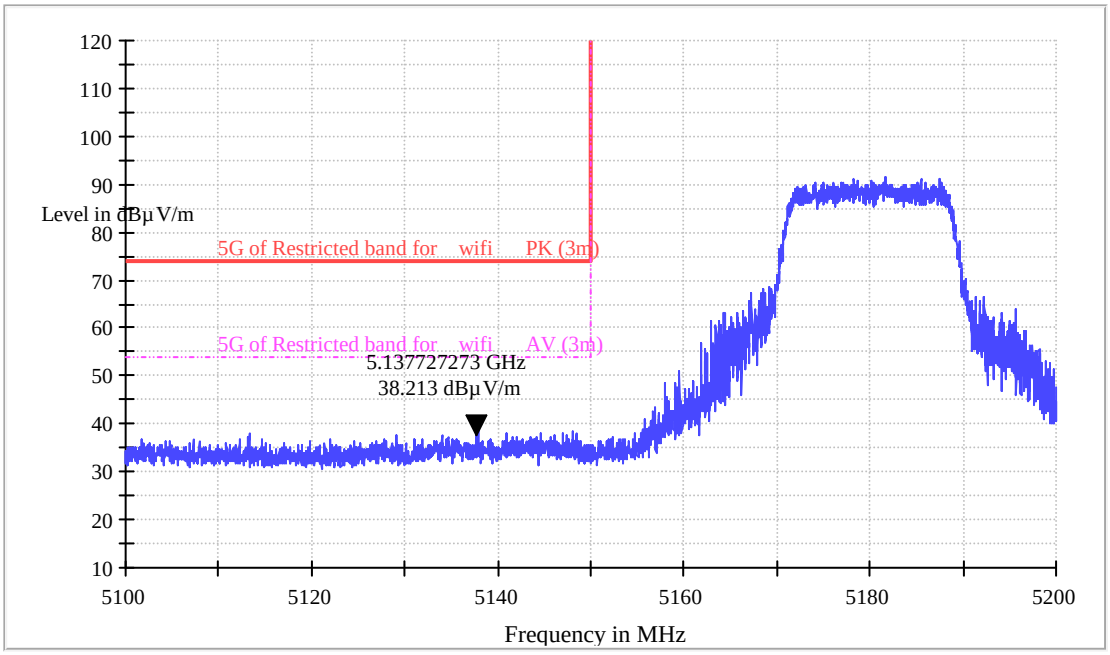
| | |
|---|---|
| Test Requirement: | FCC Part 15 C clause 15.407(b)<br>(1)For transmitters operating in the 5.15–5.25GHz band: All emission outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p of -27dBm/MHz<br>(2)For transmitters operating in the 5.725–5.85GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz |
| Frequency Band: | Brand I: 5150MHz to 5250MHz<br>Brand IV: 5725MHz to 5850MHz |
| Test Method: | FCC KDB 789033 D02 General UNII Test Procedures New Rules v01,Clause G<br>As specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit. |
| Test Status: | Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. |
| Test Configuration: | Refer to the Radiated Spurious Emission test. |
| Test Procedure: | Refer to the Radiated Spurious Emission test. |

**Test result as follows:**

Band I 5150 MHz to 5250 MHz

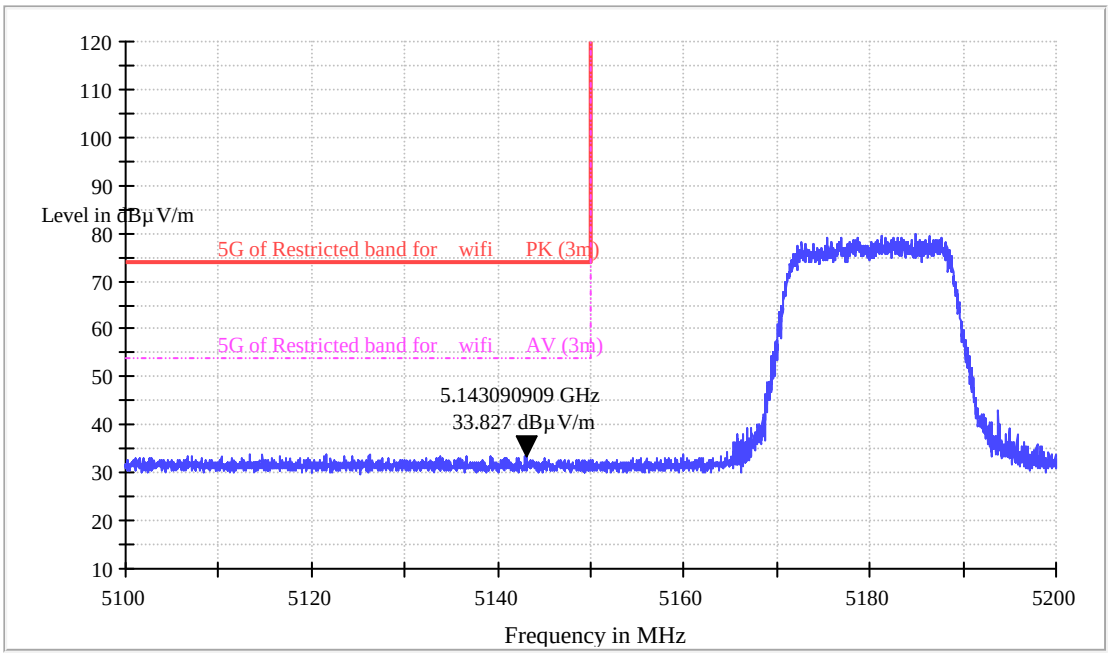
802.11an(HT 20)
Channel 36: 5180 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5137.72 | 38.2 | / | -8.7 | 74.0 | / | 54.0 | -15.8 |

Vertical

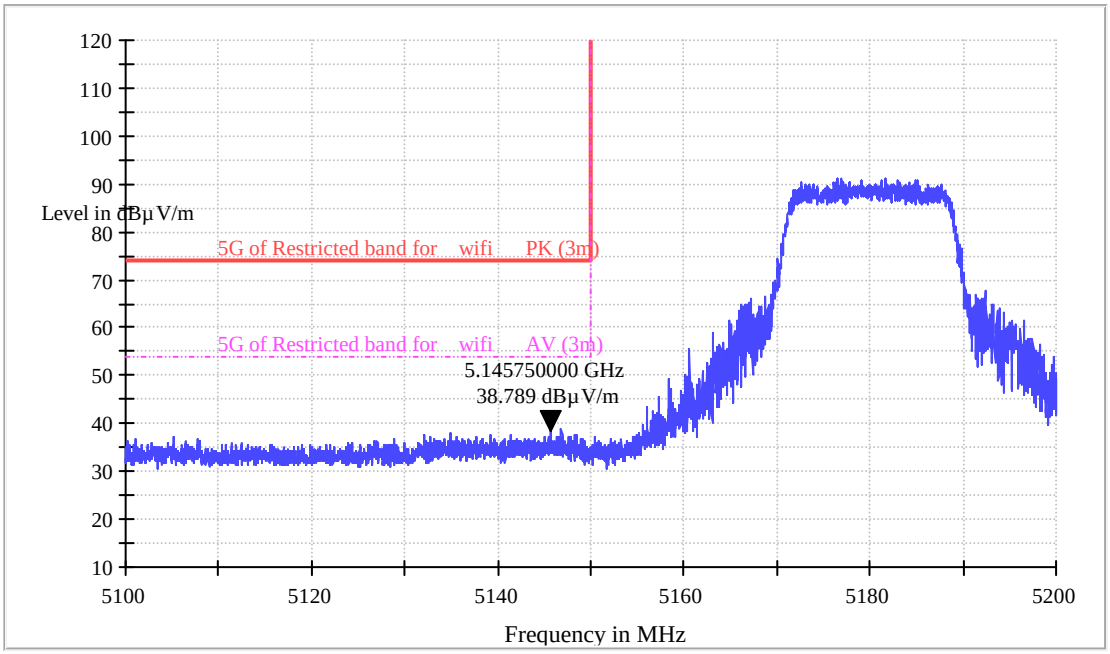



| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5143.09 | 33.8 | / | -8.7 | 74.0 | / | 54.0 | -20.2 |

802.11ac(HT 20)

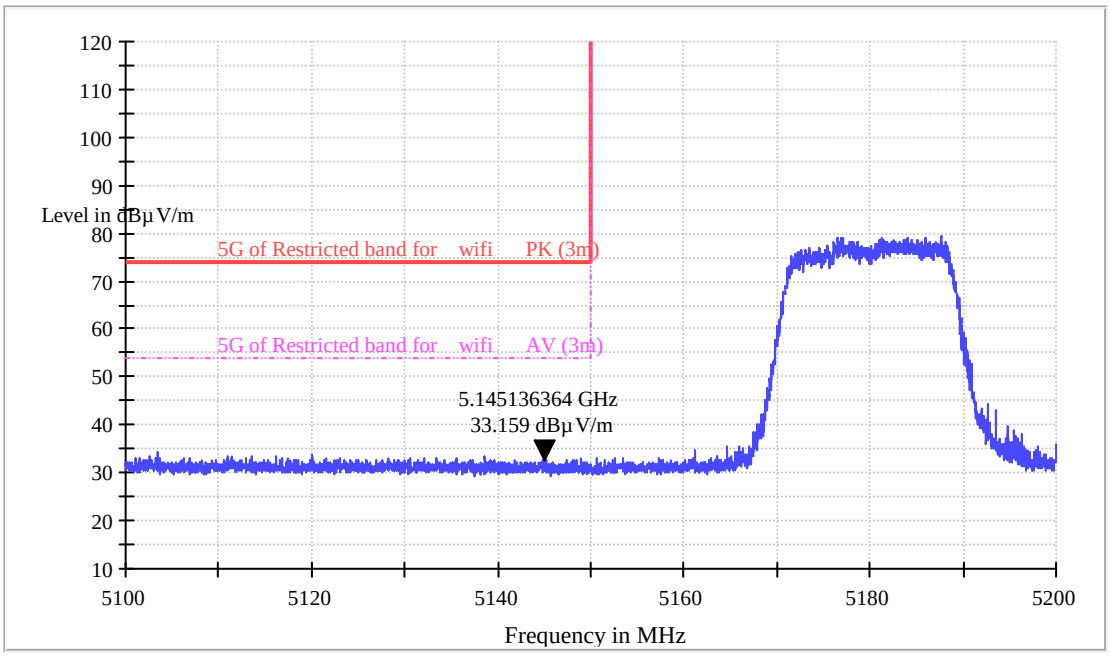
Channel 36: 5180 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5145.75 | 38.8 | / | -8.7 | 74.0 | / | 54.0 | -15.2 |

Vertical

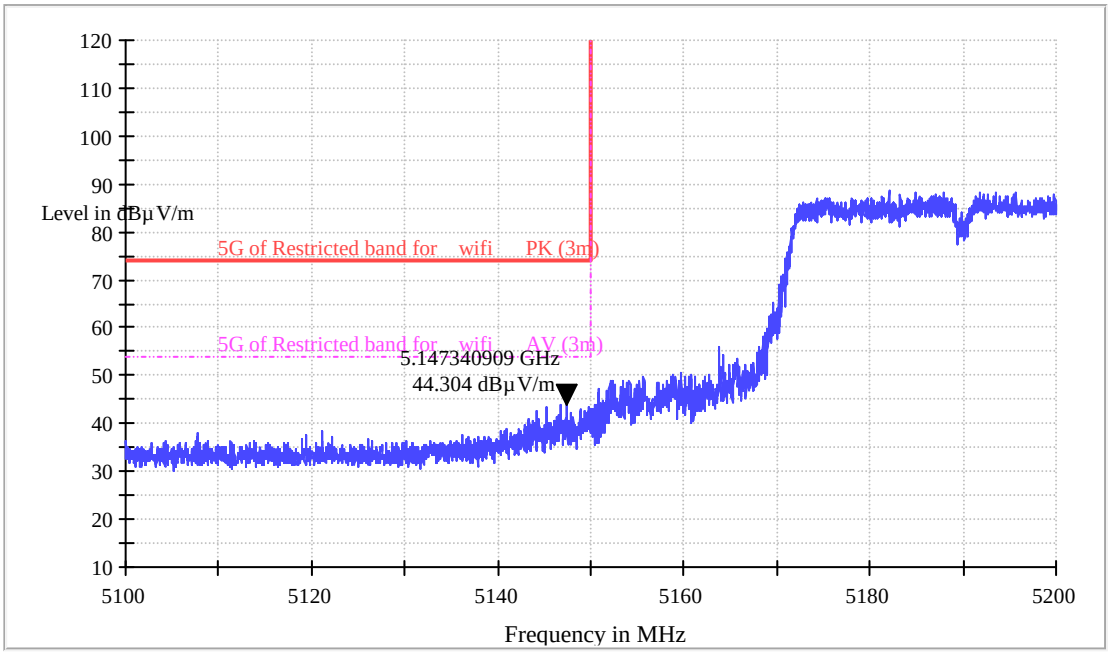



| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5145.10 | 33.2 | / | -8.7 | 74.0 | / | 54.0 | -20.8 |

802.11an(HT 40)

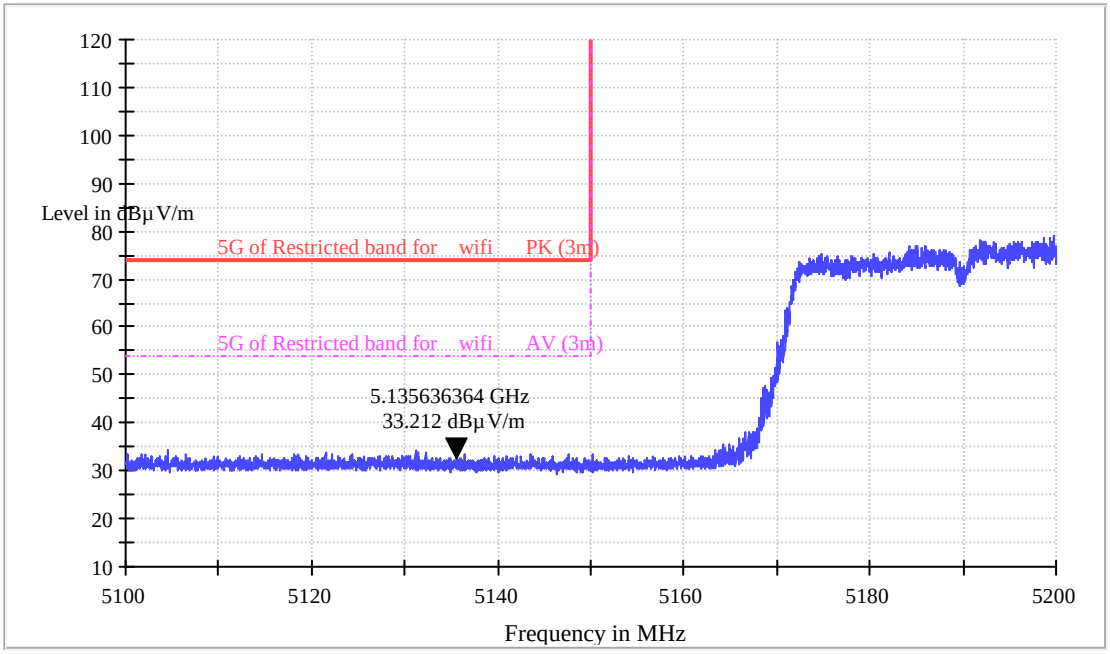
Channel 38: 5190 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5147.34 | 44.3 | / | -8.7 | 74.0 | / | 54.0 | -9.7 |

Vertical

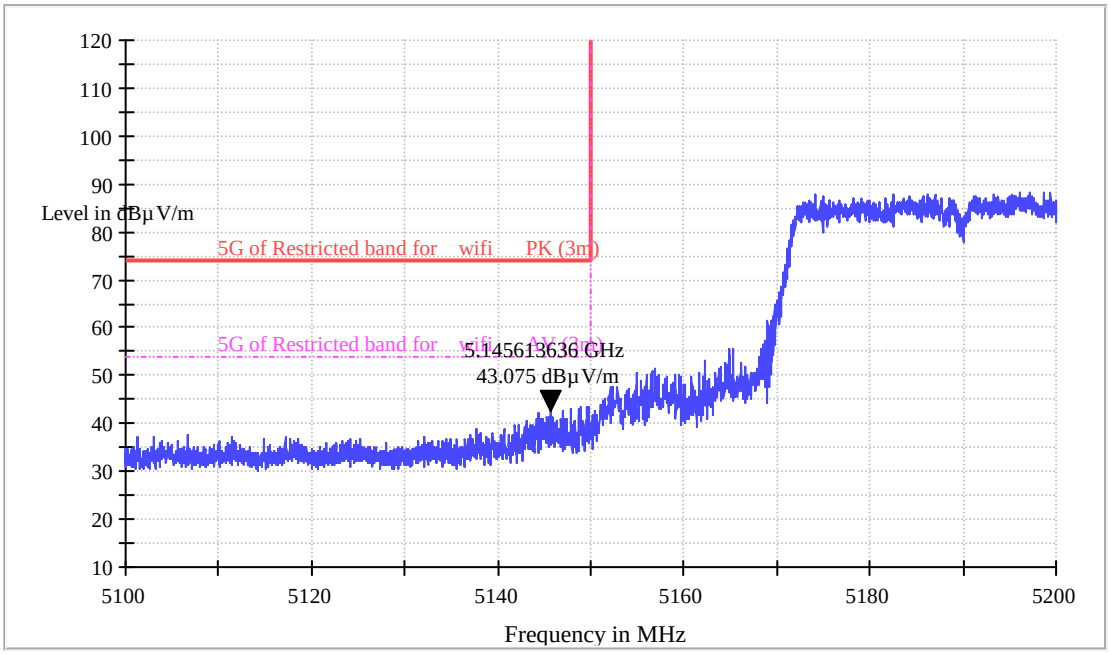



| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5135.64 | 33.2 | / | -8.7 | 74.0 | / | 54.0 | -20.8 |

802.11ac(HT 40)

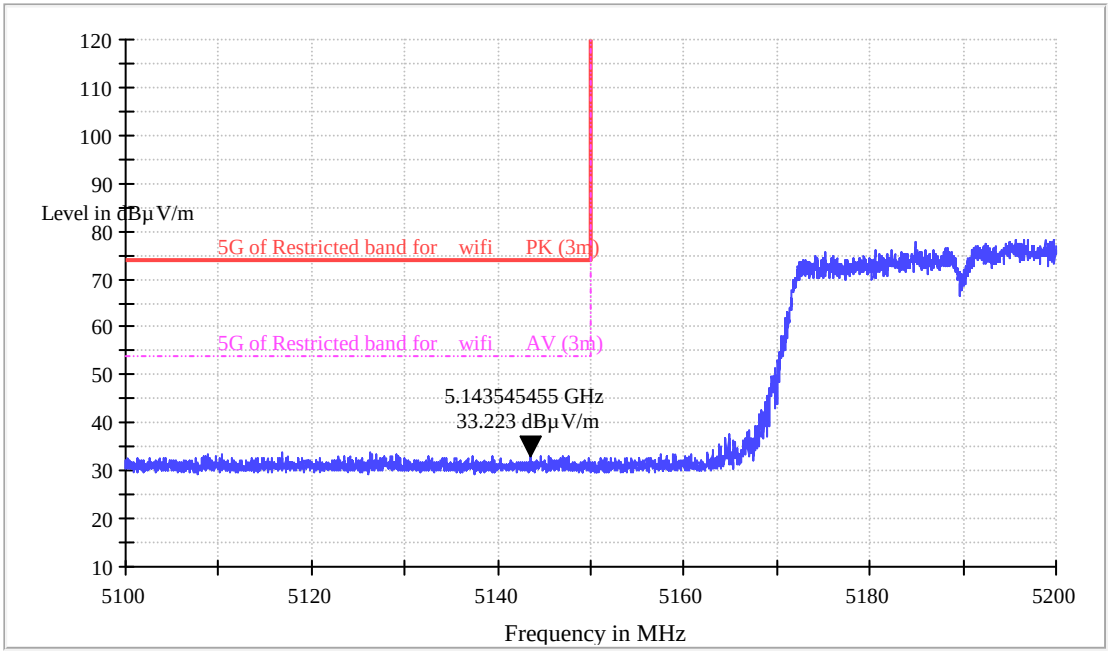
Channel 38: 5190 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5145.67 | 43.1 | / | -8.7 | 74.0 | / | 54.0 | -10.9 |

Vertical

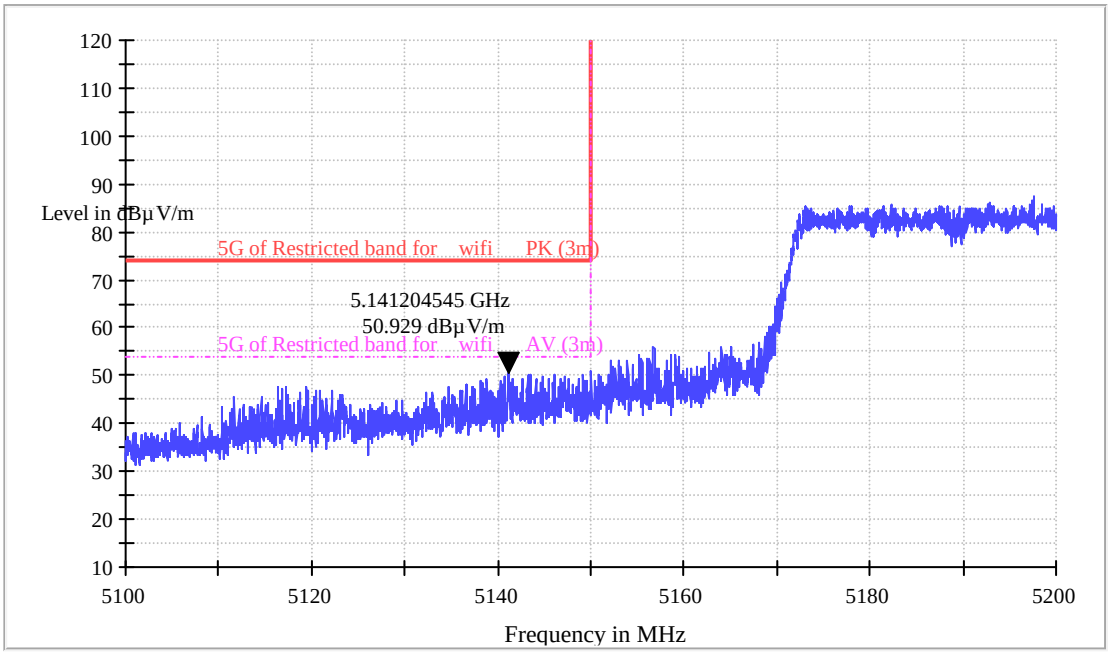



| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5143.54 | 33.2 | / | -8.7 | 74.0 | / | 54.0 | -20.8 |

802.11ac(HT 80)

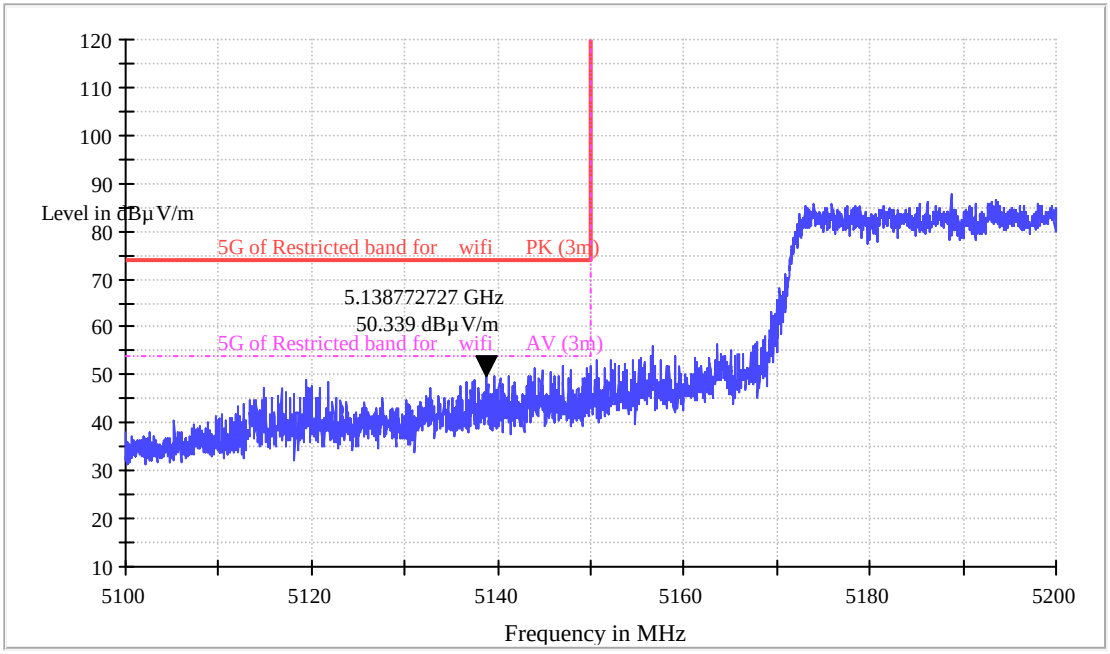
Channel 42: 5210 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5141.20 | 50.9 | / | -8.7 | 74.0 | / | 54.0 | -3.1 |

Vertical



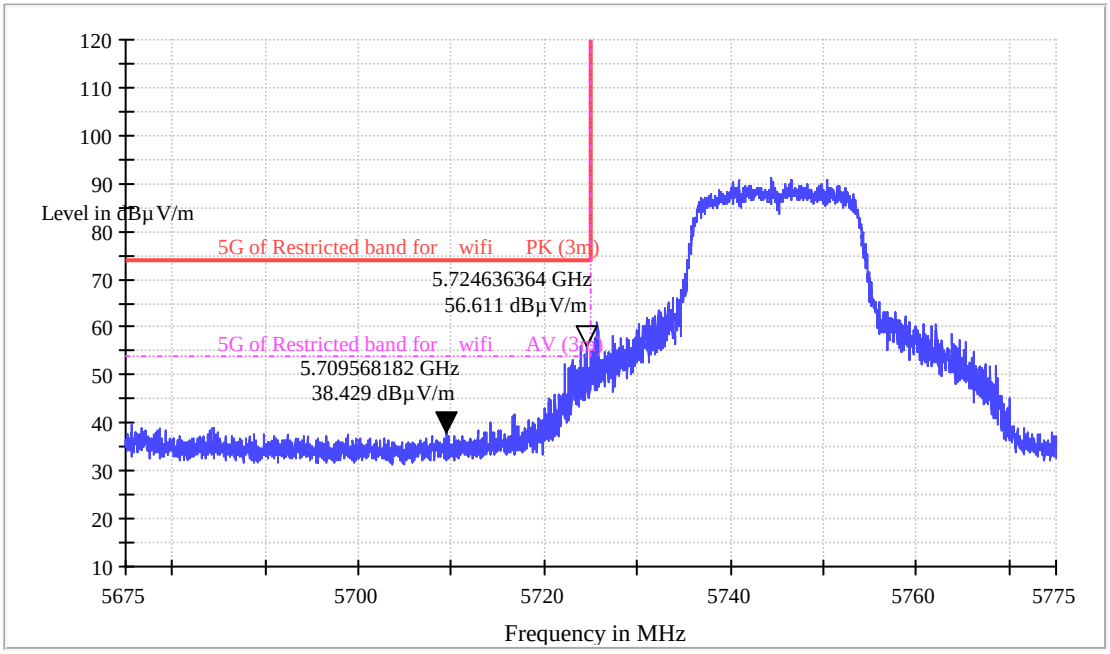

| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5138.77 | 50.3 | / | -8.7 | 74.0 | / | 54.0 | -3.7 |

Result as follows:

Band IV 5725 MHz to 5850 MHz

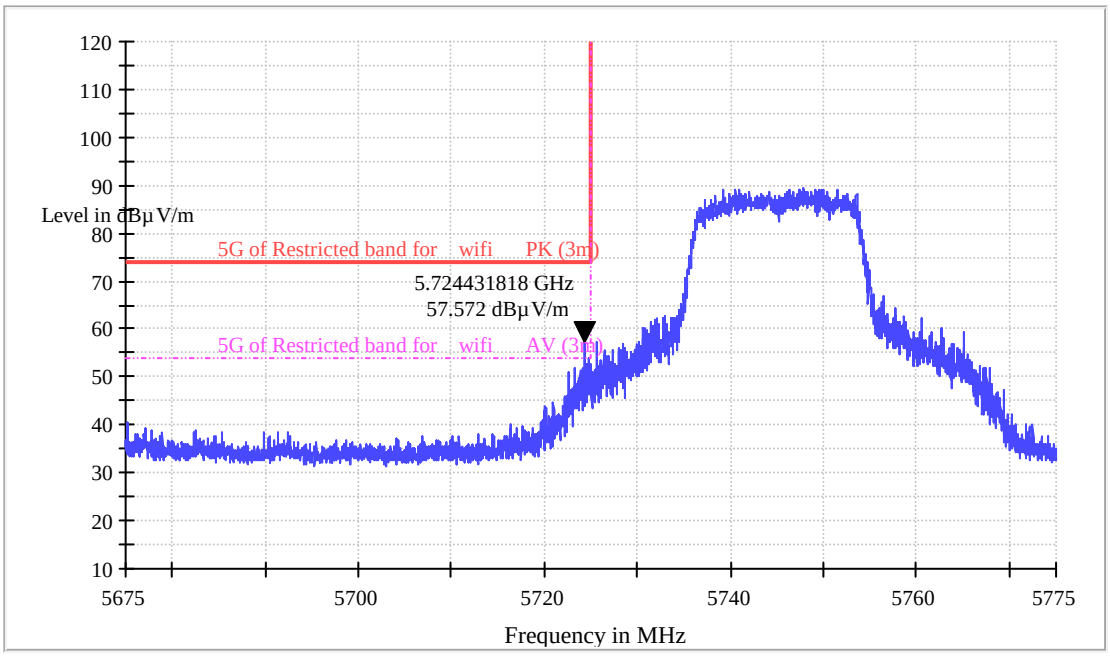
802.11an(HT 20)
Channel 149: 5745 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5709.56 | 38.4 | / | -7.7 | 74.0 | / | 54.0 | -15.6 |
| H | 5724.63 | 56.6 | 48.2 | -8.7 | 74.0 | -17.4 | 54.0 | -5.8 |

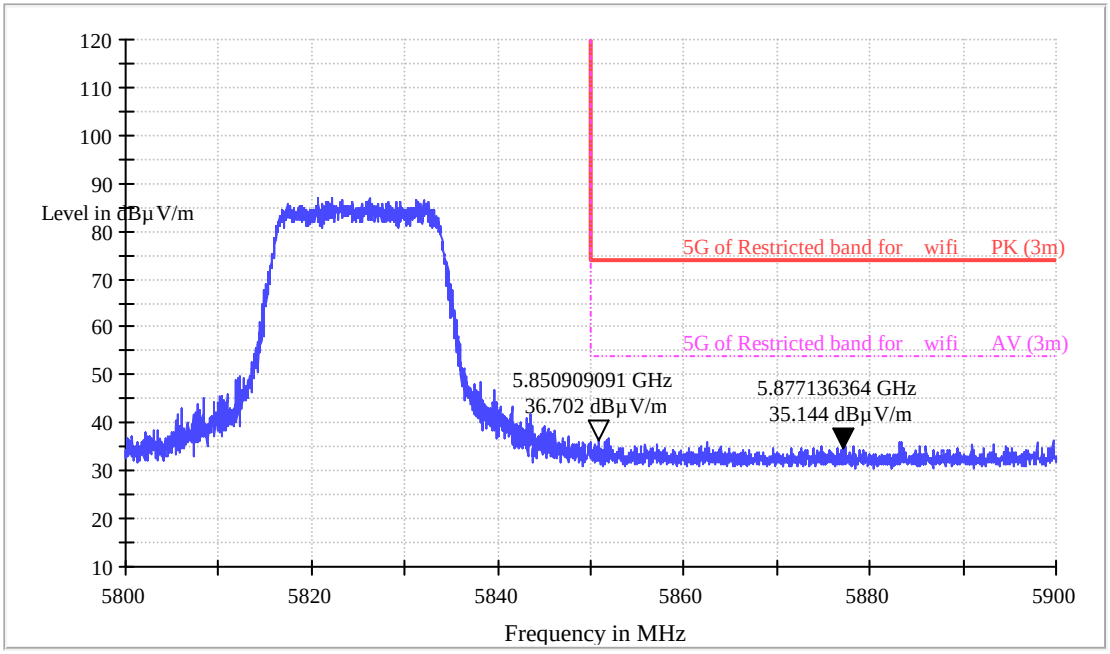
Vertical




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5724.43 | 57.6 | 46.9 | -7.7 | 74.0 | -16.4 | 54.0 | -7.1 |

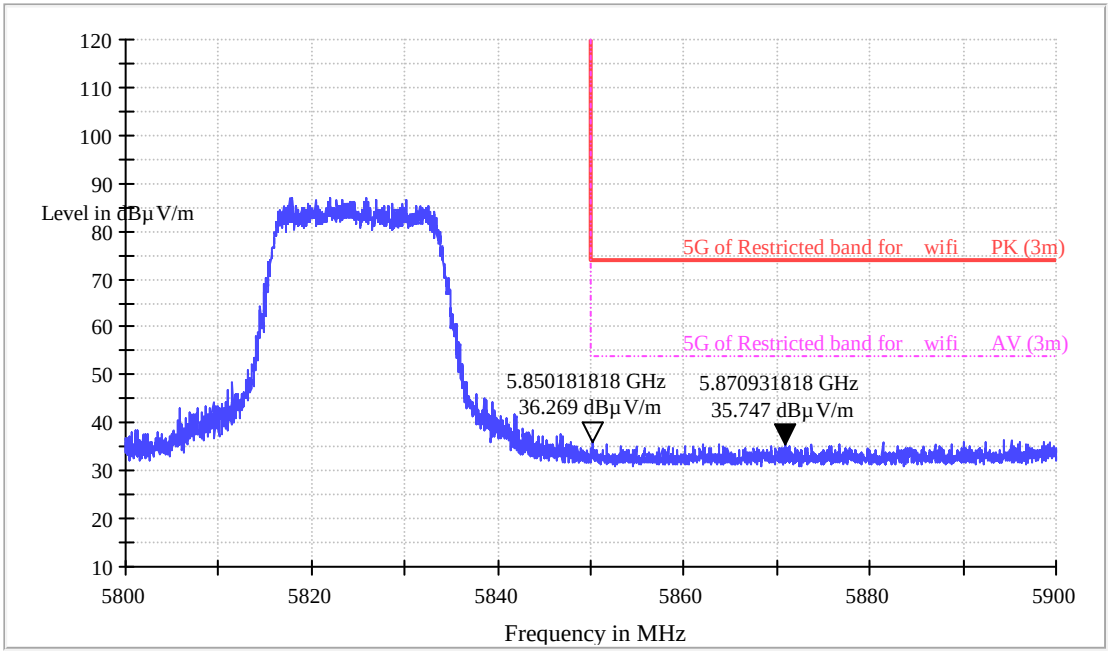
Channel 165: 5825 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5850.09 | 36.7 | / | -7.6 | 74.0 | / | 54.0 | -17.3 |
| H | 5877.13 | 35.1 | / | -7.6 | 74.0 | / | 54.0 | -18.9 |

Vertical

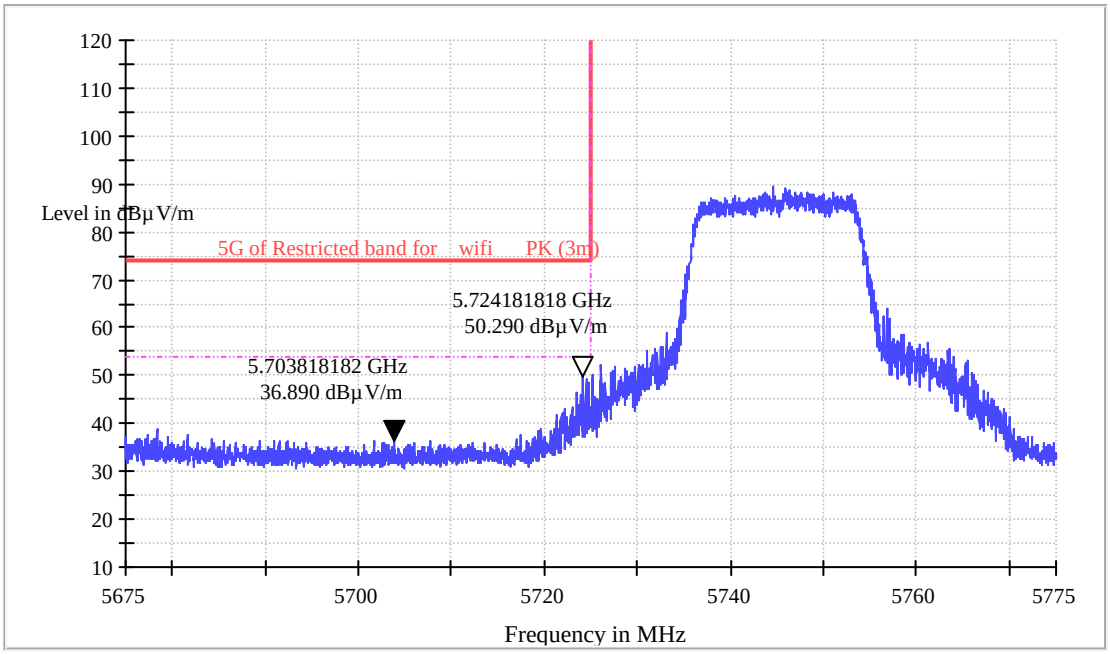



| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5850.18 | 36.3 | / | -7.6 | 74.0 | / | 54.0 | -17.7 |
| V | 5870.90 | 35.7 | / | -7.6 | 74.0 | / | 54.0 | -18.3 |

802.11ac(HT 20)

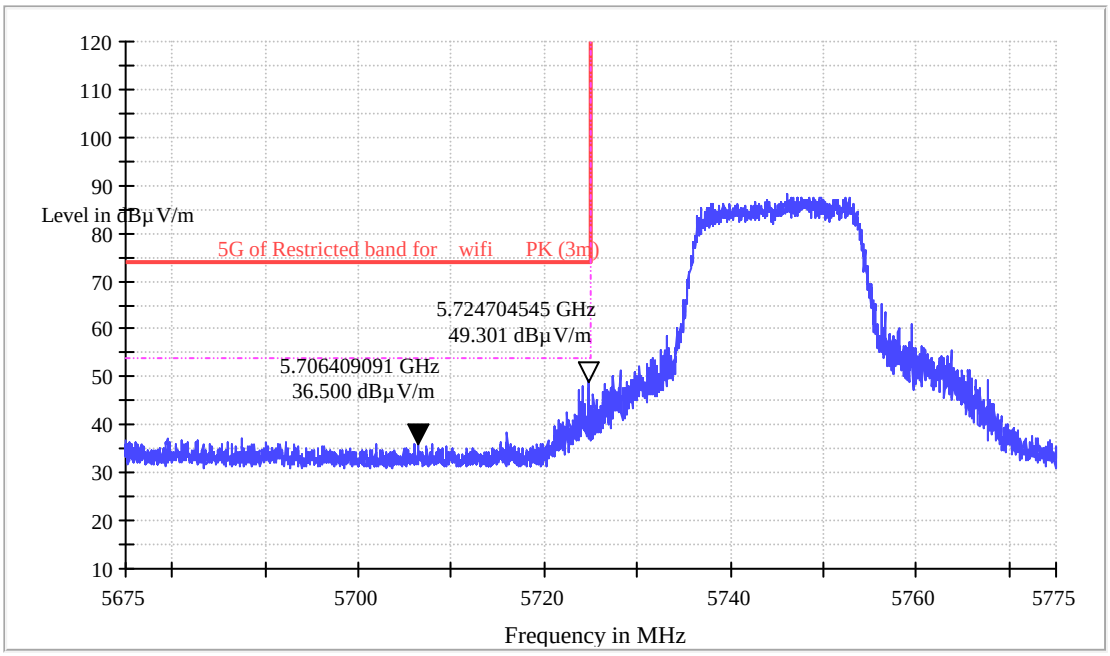
Channel 149: 5745 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5703.81 | 36.9 | / | -7.7 | 74.0 | / | 54.0 | -17.1 |
| H | 5724.18 | 50.3 | / | -8.7 | 74.0 | / | 54.0 | -3.7 |

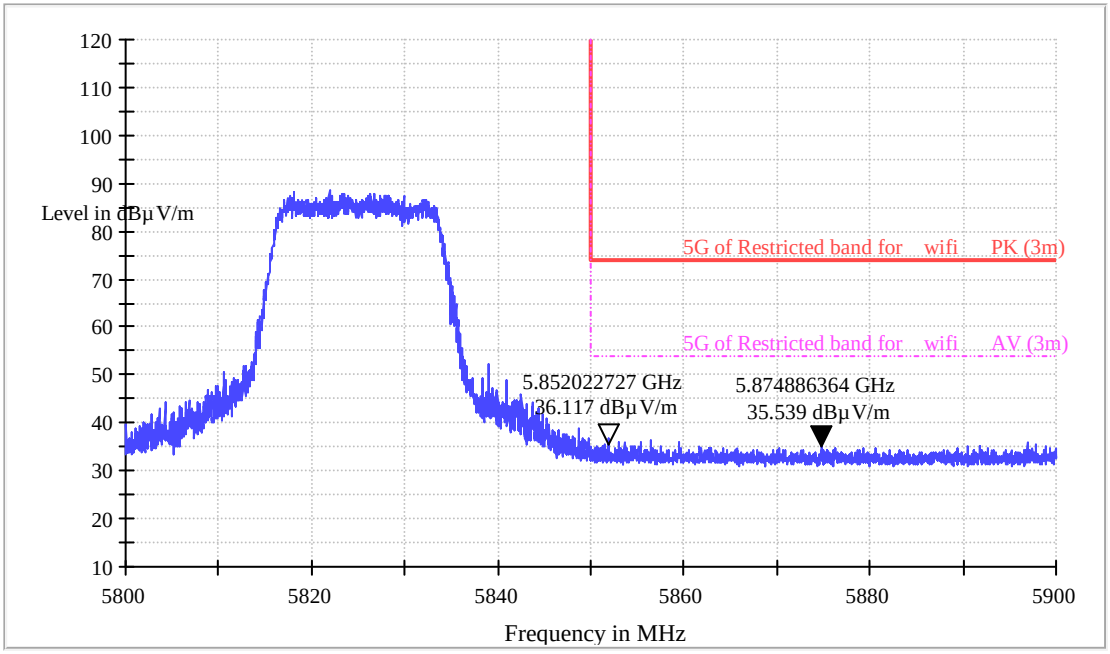
Vertical




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5706.40 | 36.5 | / | -7.7 | 74.0 | / | 54.0 | -17.5 |
| V | 5724.70 | 49.3 | / | -8.7 | 74.0 | / | 54.0 | -4.7 |

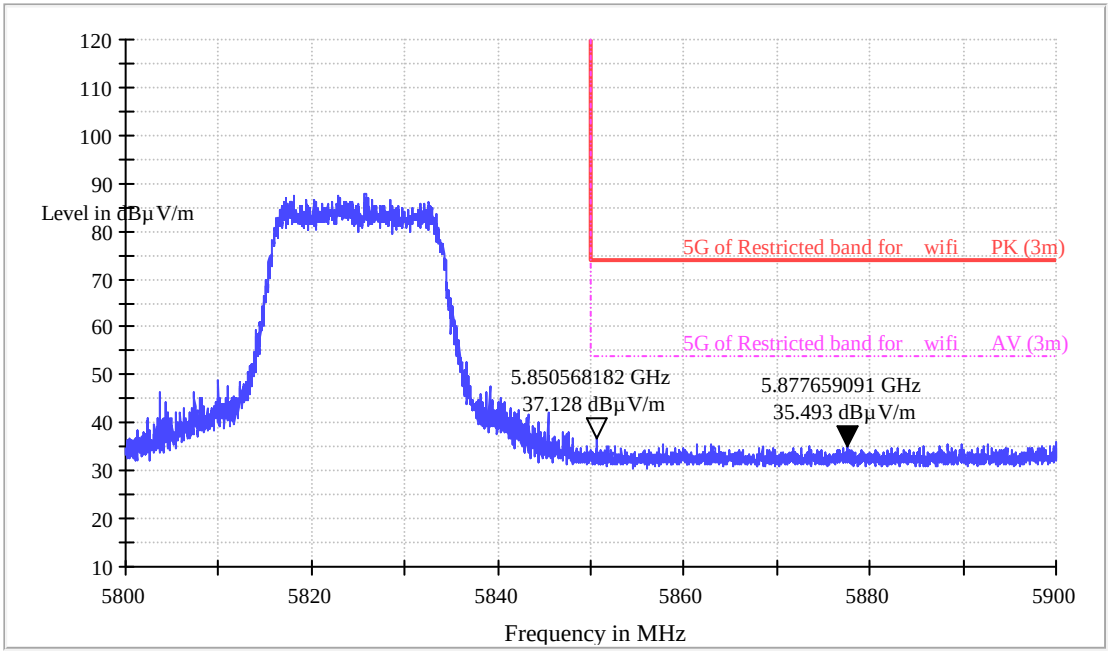
Channel 165: 5825 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5850.02 | 36.1 | / | -7.6 | 74.0 | / | 54.0 | -17.9 |
| H | 5874.88 | 35.6 | / | -7.6 | 74.0 | / | 54.0 | -18.4 |

Vertical

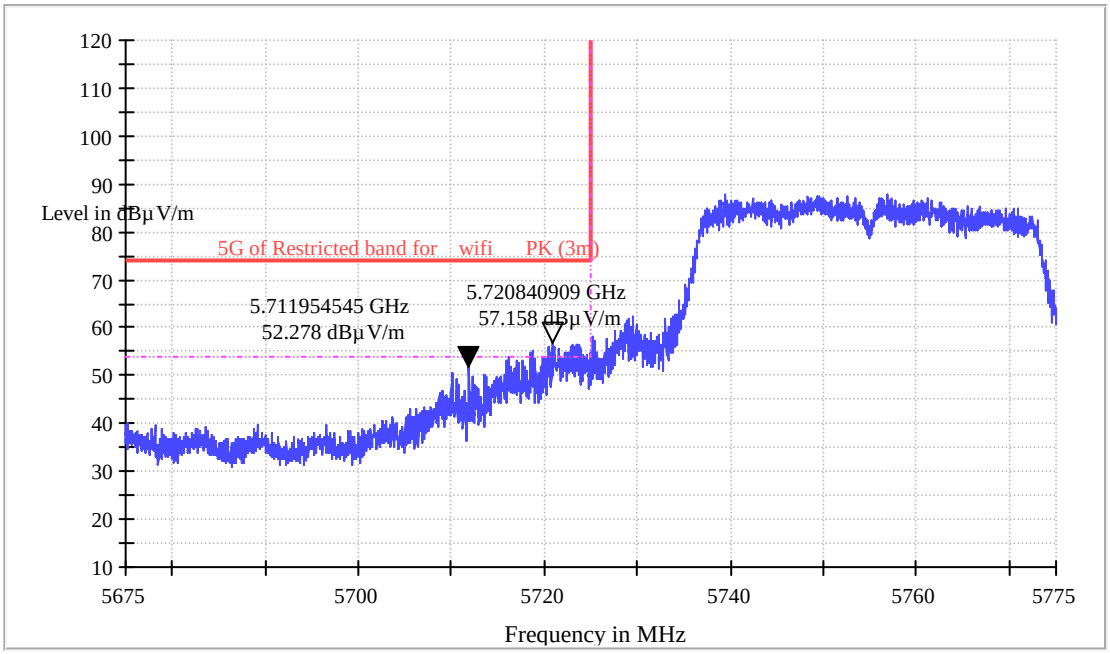



| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5850.68 | 37.1 | / | -7.6 | 74.0 | / | 54.0 | -16.9 |
| V | 5877.66 | 35.4 | / | -7.6 | 74.0 | / | 54.0 | -18.6 |

802.11an(HT 40)

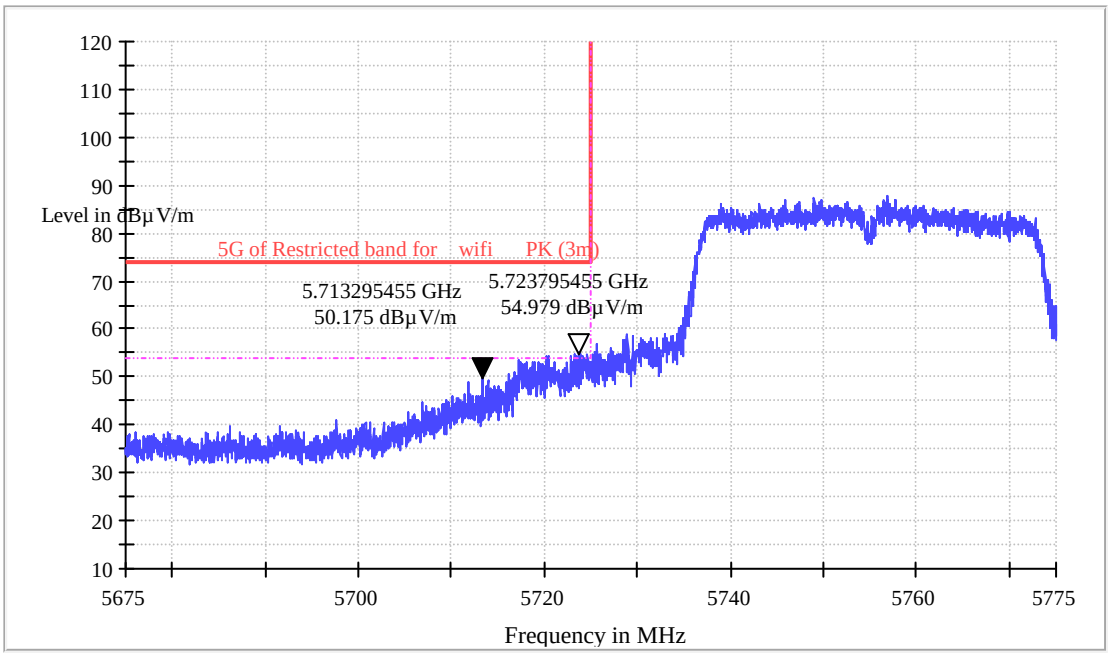
Channel 151: 5755 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m) | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5711.95 | 52.3 | / | -7.7 | 74.0 | / | 54.0 | -1.7 |
| H | 5720.84 | 57.2 | 48.9 | -7.7 | 74.0 | -16.8 | 54.0 | -5.1 |

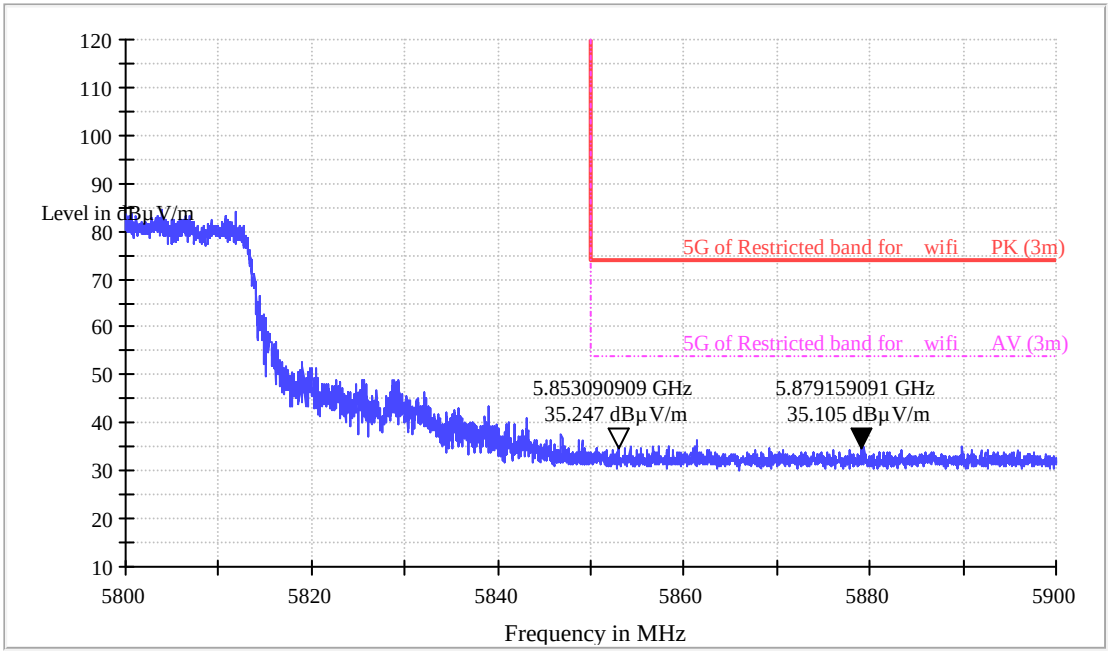
Vertical




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5713.29 | 50.2 | / | -7.7 | 74.0 | / | 54.0 | -3.8 |
| V | 5723.79 | 54.9 | 45.2 | -7.7 | 74.0 | -19.1 | 54.0 | -8.8 |

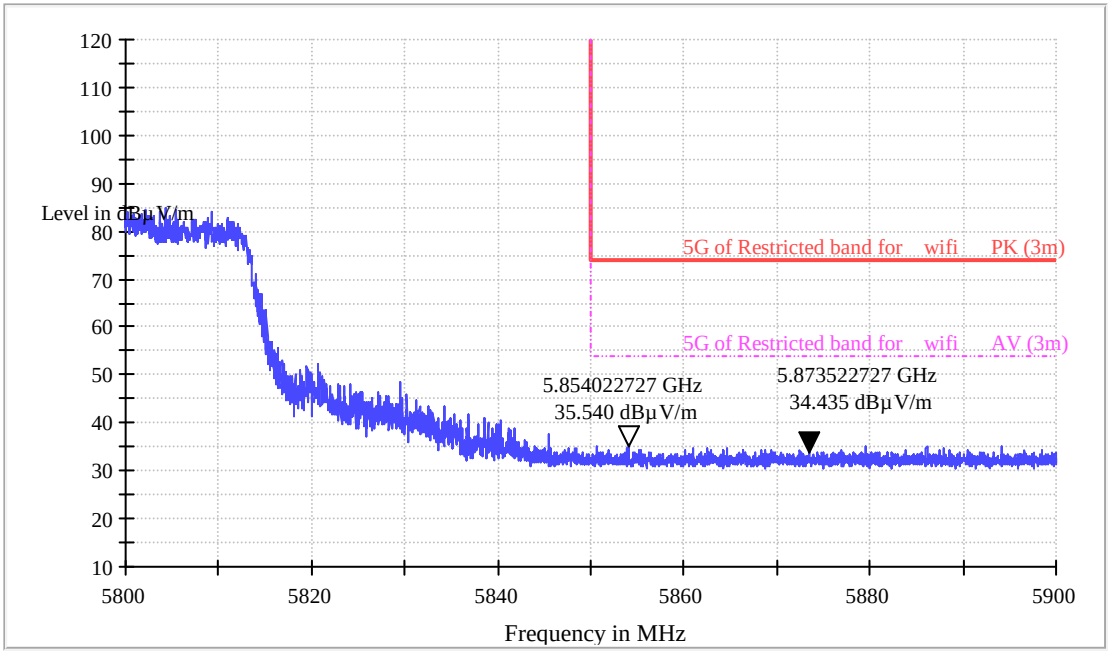
Channel 159: 5795 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5850.09 | 35.2 | / | -7.6 | 74.0 | / | 54.0 | -18.8 |
| H | 5879.15 | 35.1 | / | -7.6 | 74.0 | / | 54.0 | -18.9 |

Vertical

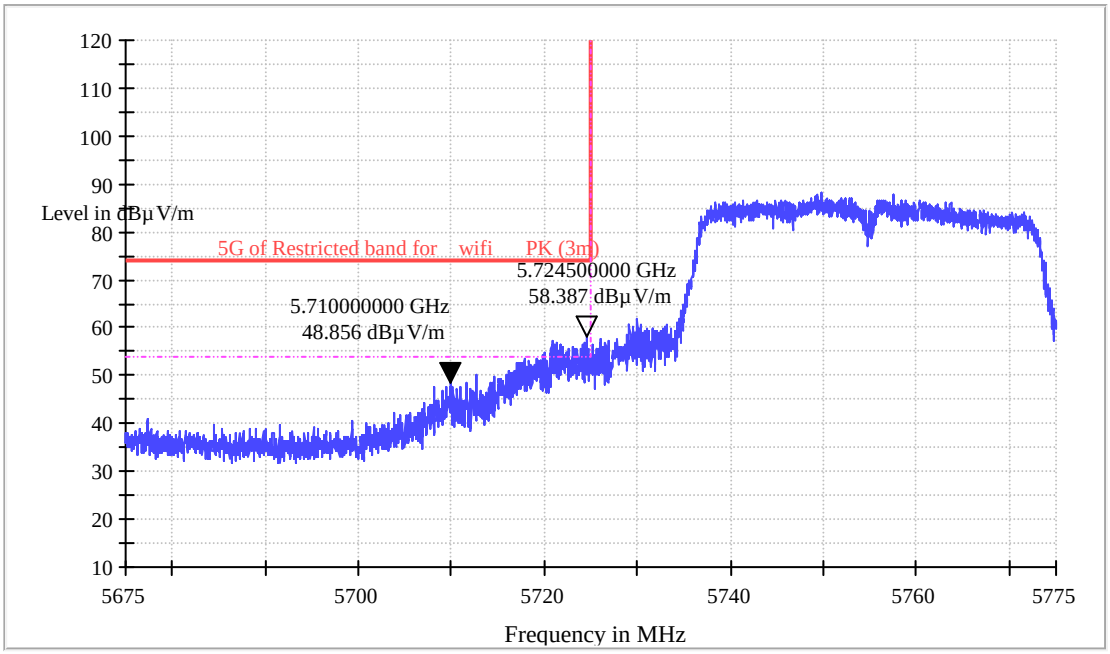



| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5854.02 | 35.5 | / | -7.6 | 74.0 | / | 54.0 | -18.5 |
| V | 5873.52 | 34.4 | / | -7.6 | 74.0 | / | 54.0 | -19.6 |

802.11ac(HT 40)

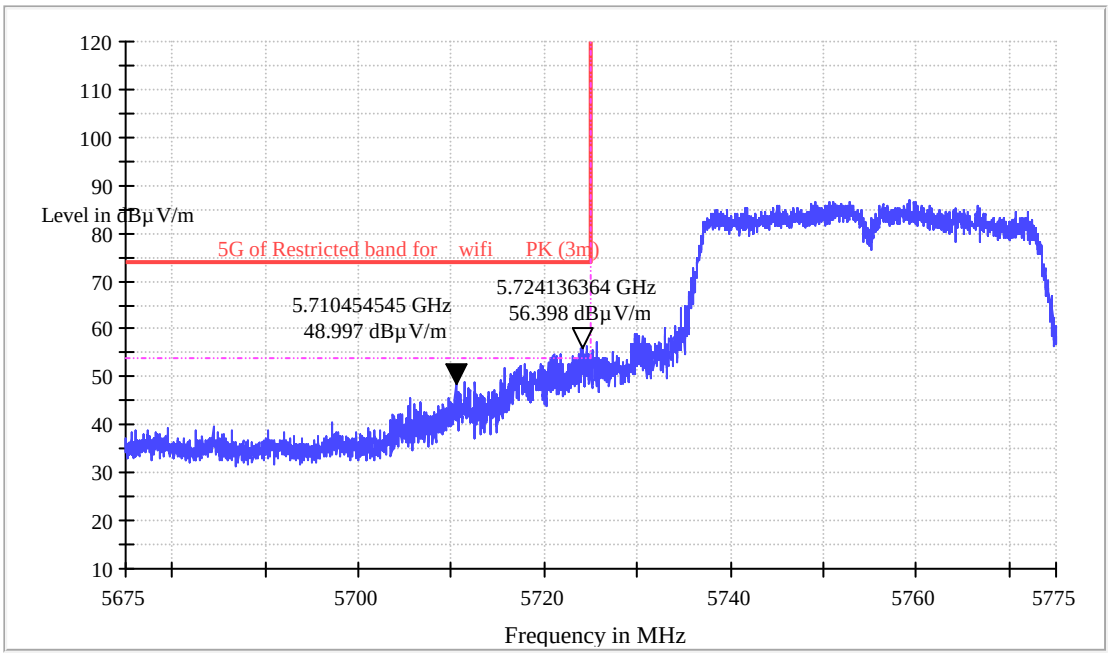
Channel 151: 5755 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5710.00 | 48.9 | / | -7.7 | 74.0 | / | 54.0 | -5.1 |
| H | 5724.50 | 58.4 | 49.6 | -7.7 | 74.0 | -15.6 | 54.0 | -4.4 |

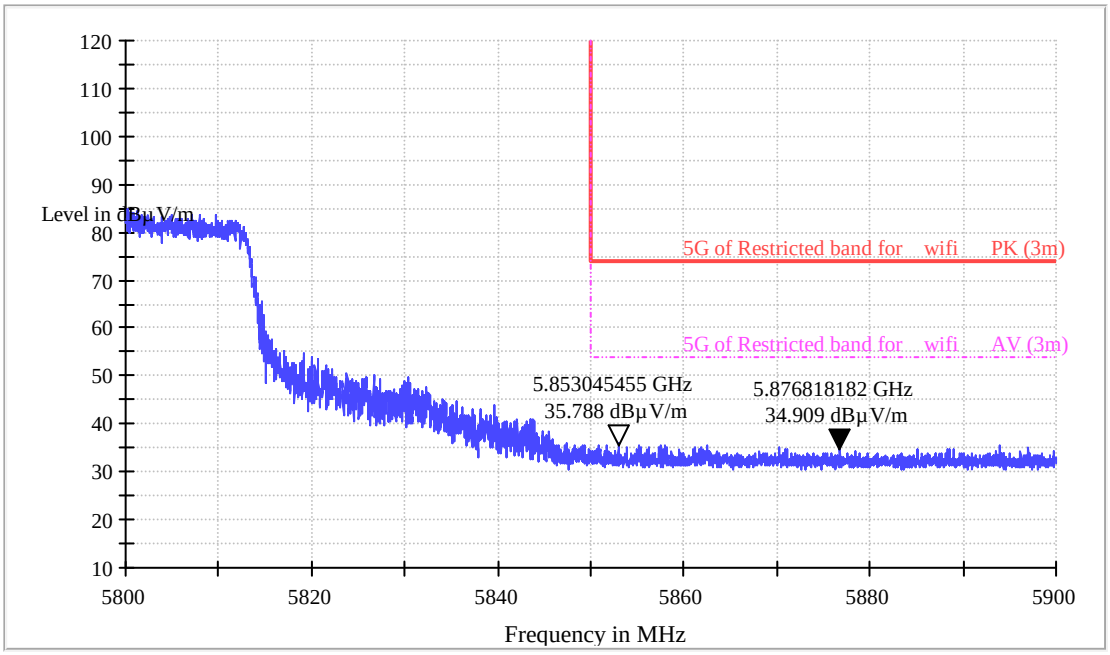
Vertical




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5710.45 | 48.9 | / | -7.7 | 74.0 | / | 54.0 | -5.1 |
| V | 5724.13 | 56.4 | 45.9 | -7.7 | 74.0 | -17.6 | 54.0 | -8.1 |

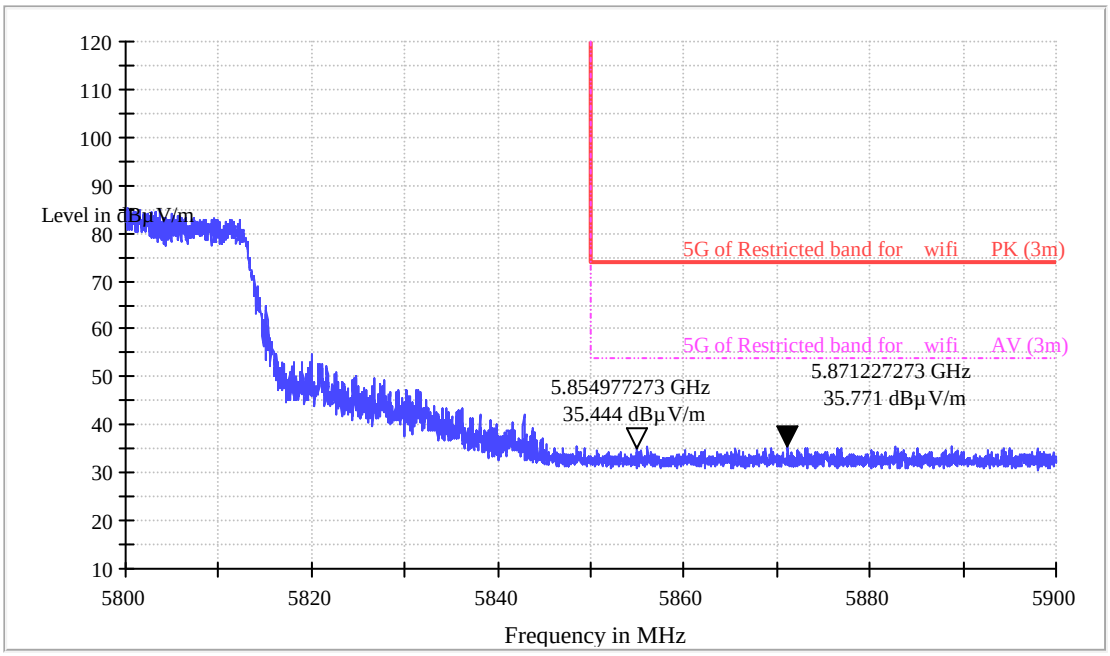
Channel 159: 5795 MHz:

Horizontal




| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5853.04 | 35.8 | / | -7.6 | 74.0 | / | 54.0 | -18.2 |
| H | 5876.18 | 34.9 | / | -7.6 | 74.0 | / | 54.0 | -19.1 |

Vertical

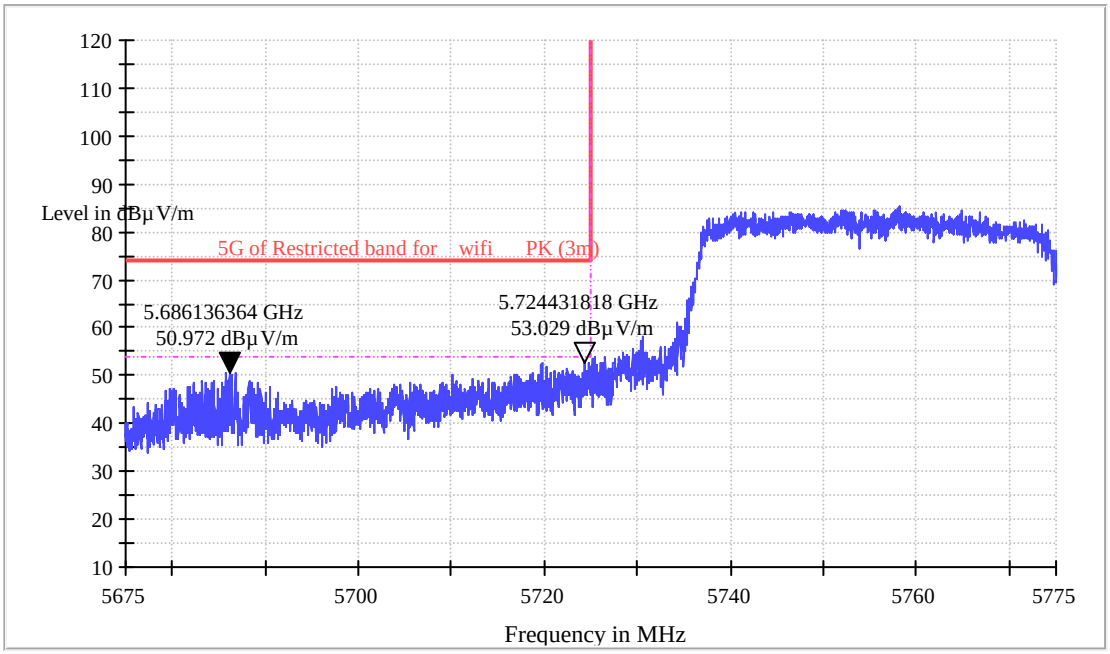


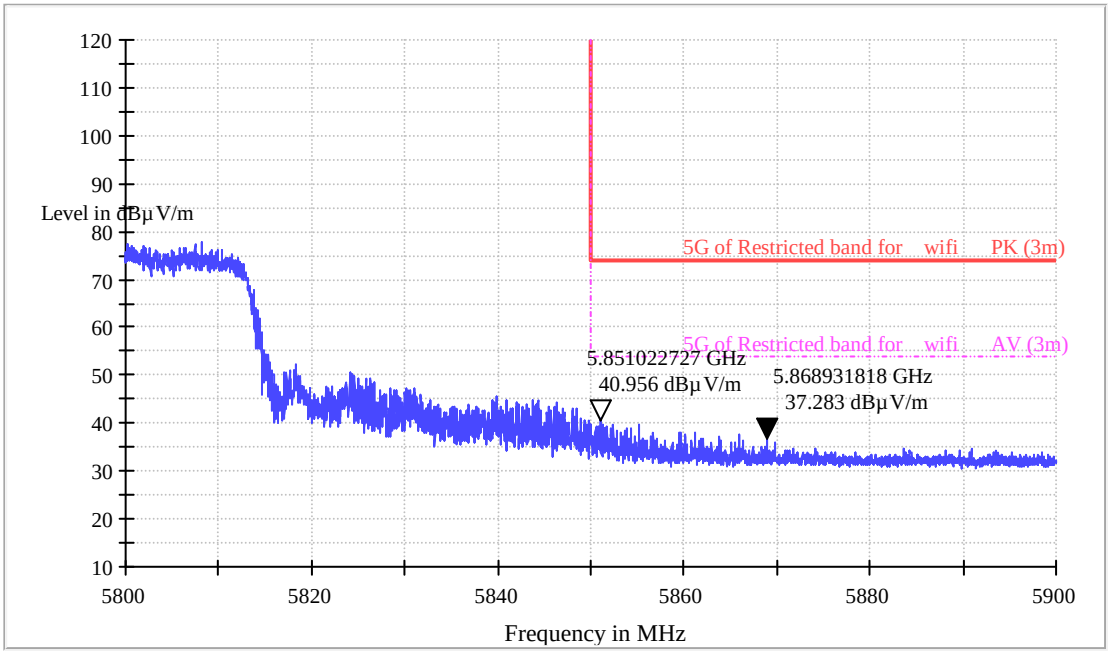

| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5854.97 | 35.4 | / | -7.6 | 74.0 | / | 54.0 | -18.6 |
| V | 5871.22 | 35.8 | / | -7.6 | 74.0 | / | 54.0 | -18.2 |

802.11ac(HT 80)

Channel 155: 5775 MHz:

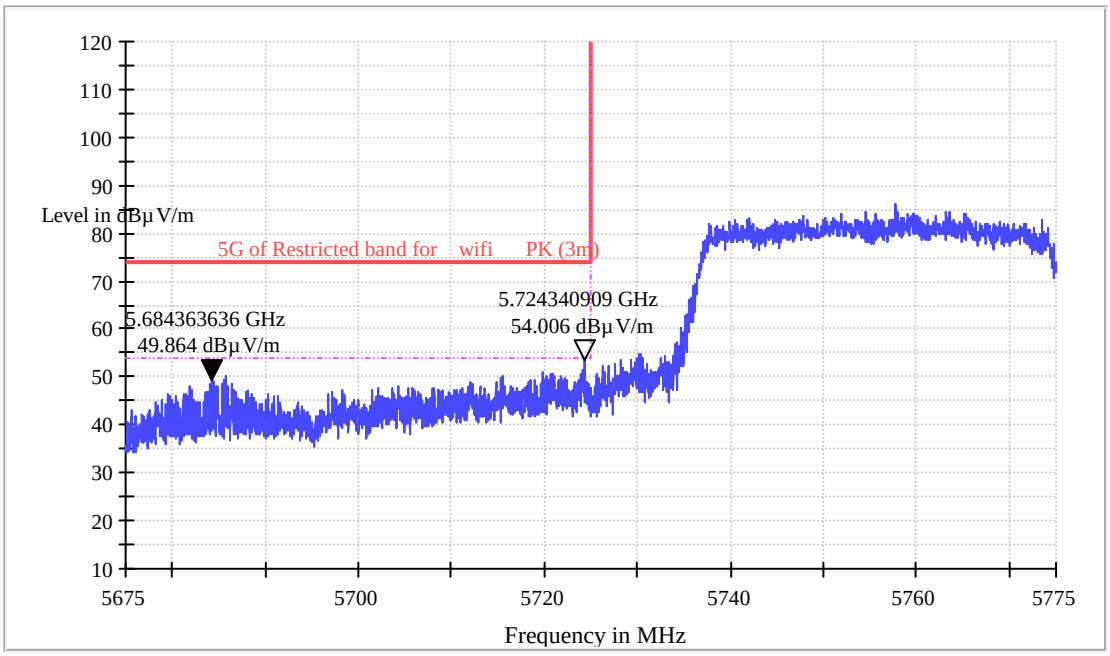
Horizontal

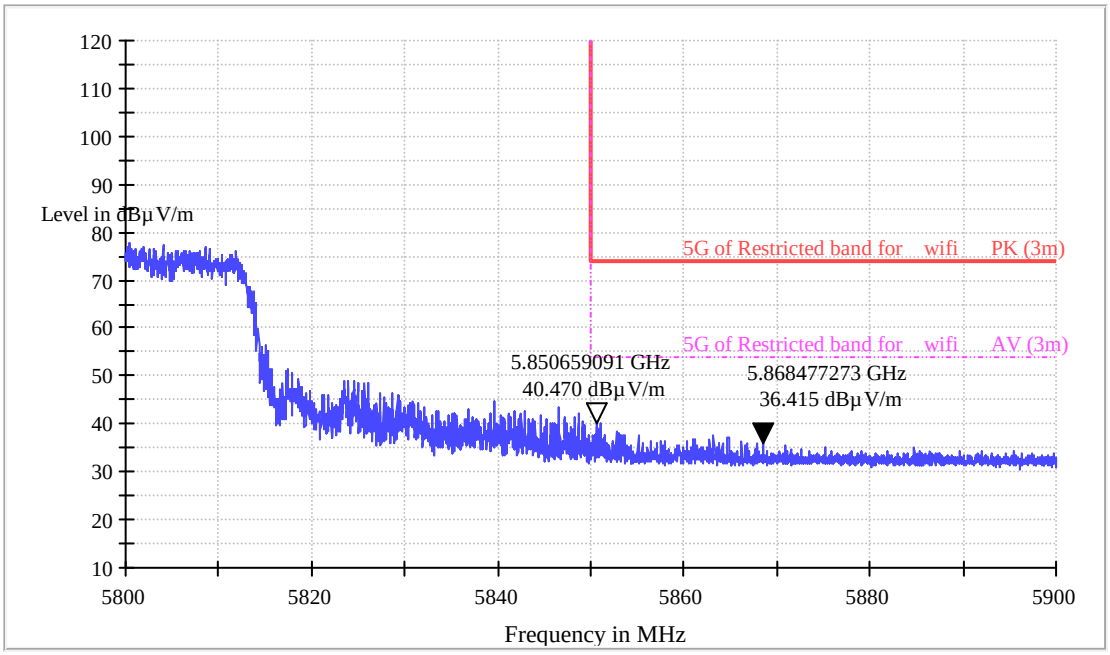


| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| H | 5686.14 | 50.9 | / | -7.7 | 74.0 | / | 54.0 | -3.1 |
| H | 5724.43 | 53.0 | / | -7.7 | 74.0 | / | 54.0 | -1.0 |
| H | 5851.02 | 40.9 | / | -7.6 | 74.0 | / | 54.0 | -13.1 |
| H | 5868.93 | 37.2 | / | -7.7 | 74.0 | / | 54.0 | -16.8 |

Vertical

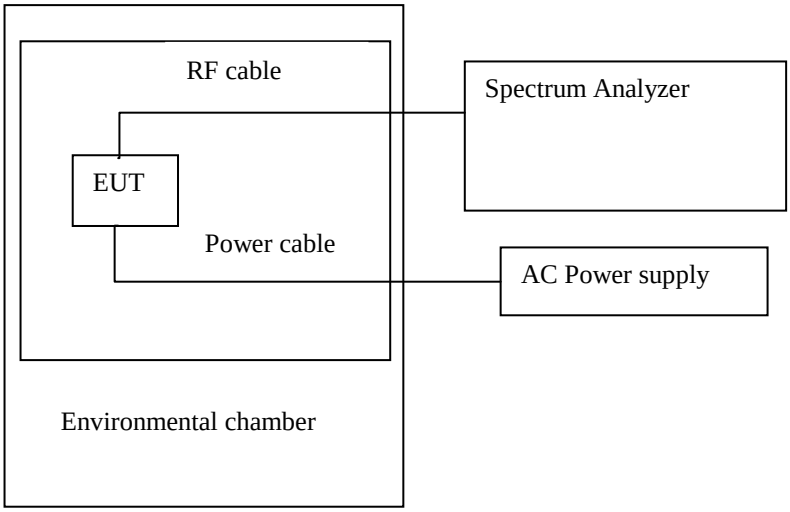

120
110
100
90
Level in dBµV/m
80
70
60
50
40
30
20
10
5675
5700
5720
5740
5760
5775
Frequency in MHz
5G of Restricted band for wifi PK (3m)
5.724340909 GHz
54.006 dBµV/m
5.684363636 GHz
49.864 dBµV/m


120
110
100
90
Level in dBµV/m
80
70
60
50
40
30
20
10
5800
5820
5840
5860
5880
5900
Frequency in MHz
5G of Restricted band for wifi PK (3m)
5G of Restricted band for wifi AV (3m)
5.850659091 GHz
40.470 dBµV/m
5.868477273 GHz
36.415 dBµV/m

| Polarization | Frequency (MHz) | PK Net at 3m (dBµV/m) | AV Net at 3m (dBµV/m | Correction Factor (dB) | PK Limit at 3m (dBµV/m) | PK Margin (dB) | AV Limit at 3m (dBµV/m) | AV Margin (dB) |
|---|---|---|---|---|---|---|---|---|
| V | 5684.36 | 49.8 | / | -7.7 | 74.0 | / | 54.0 | -4.2 |
| V | 5724.34 | 54.0 | 44.1 | -7.7 | 74.0 | -20.0 | 54.0 | -9.9 |
| V | 5851.02 | 40.9 | / | -7.6 | 74.0 | / | 54.0 | -13.1 |
| V | 5868.93 | 37.2 | / | -7.7 | 74.0 | / | 54.0 | -16.8 |

## 4.9 Frequency Stability Test

Test setup & procedure




Frequency stability with respect to ambient temperature test procedure:

1. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage 120/60Hz.
2. Turn the EUT on and couple its output to a spectrum analyser.
3. Turn the EUT off and set the chamber to the highest temperature specified.
4. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency 20dB bandwidth.
5. Lower the chamber temperature by not more than 10℃, and allow the temperature inside the chamber to stabilize Repeat step 4

Frequency stability when varying supply voltage test procedure:

1. The EUT was place at ambient room temperature (+15℃ to +25℃)
2. Turn the EUT on and couple its output to a spectrum analyser.
3. The supply voltage was then adjusted on the EUT from 85% to 115%
4. Measure the operating frequency 20dB bandwidth.

**5. Test result as follows:**

**Test mode:** 802.11an

| Test mode: | | 802.11 an | Frequency (MHz) | 5180 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5170.72 | 5189.26 | 5150-5350 |
| | 30 | 5170.88 | 5189.47 | |
| | 20 | 5170.88 | 5189.47 | |
| | 10 | 5170.76 | 5189.28 | |
| | 5 | 5170.64 | 5189.35 | |
| 138 | 20 | 5170.76 | 5189.37 | |
| 120 | | 5170.75 | 5189.67 | |
| 102 | | 5170.69 | 5189.25 | |

| Test mode: | | 802.11 an | Frequency (MHz) | 5190 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5169.76 | 5210.68 | 5150-5350 |
| | 30 | 5170.03 | 5209.77 | |
| | 20 | 5169.68 | 5210.78 | |
| | 10 | 5170.71 | 5209.72 | |
| | 5 | 5169.74 | 5210.54 | |
| 138 | 20 | 5170.39 | 5209.68 | |
| 120 | | 5169.29 | 5210.71 | |
| 102 | | 5170.25 | 5209.79 | |

| Test mode: | | 802.11 an | Frequency (MHz) | 5745 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5735.89 | 5755.01 | 5725-5850 |
| | 30 | 5735.42 | 5735.66 | |
| | 20 | 5735.77 | 5755.21 | |
| | 10 | 5735.76 | 5755.48 | |
| | 5 | 5735.78 | 5755.37 | |
| 138 | 20 | 5735.64 | 5735.46 | |
| 120 | | 5735.59 | 5755.57 | |
| 102 | | 5735.76 | 5755.41 | |

| Test mode: | | 802.11 an | Frequency (MHz) | 5825 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5816.03 | 5835.21 | 5725-5850 |
| | 30 | 5816.21 | 5835.48 | |
| | 20 | 5816.19 | 5835.68 | |
| | 10 | 5816.65 | 5835.47 | |
| | 5 | 5816.29 | 5835.59 | |
| 138 | 20 | 5816.20 | 5835.62 | |
| 120 | | 5816.18 | 5835.49 | |
| 102 | | 5816.39 | 5835.85 | |

| Test mode: | | 802.11 an | Frequency (MHz) | 5755 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5734.79 | 5775.81 | 5725-5850 |
| | 30 | 5734.61 | 5775.62 | |
| | 20 | 5734.82 | 5775.76 | |
| | 10 | 5734.78 | 5775.69 | |
| | 5 | 5734.73 | 5775.39 | |
| 138 | 20 | 5734.65 | 5775.59 | |
| 120 | | 5734.81 | 5775.48 | |
| 102 | | 5734.79 | 5775.31 | |

| Test mode: | | 802.11 an | Frequency (MHz) | 5795 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5774.87 | 5815.47 | 5725-5850 |
| | 30 | 5774.80 | 5815.26 | |
| | 20 | 5774.83 | 5815.67 | |
| | 10 | 5774.89 | 5815.58 | |
| | 5 | 5774.97 | 5815.59 | |
| 138 | 20 | 5774.66 | 5815.57 | |
| 120 | | 5774.76 | 5815.49 | |
| 102 | | 5774.83 | 5815.53 | |

**Test mode:** 802.11ac

| Test mode: | | 802.11 ac | Frequency (MHz) | 5180 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5170.18 | 5190.01 | 5150-5350 |
| | 30 | 5170.37 | 5190.24 | |
| | 20 | 5170.25 | 5190.39 | |
| | 10 | 5170.34 | 5190.26 | |
| | 5 | 5170.24 | 5190.32 | |
| 138 | 20 | 5170.47 | 5190.45 | |
| 120 | | 5170.34 | 5190.36 | |
| 102 | | 5170.47 | 5190.29 | |

| Test mode: | | 802.11 ac | Frequency (MHz) | 5190 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5169.88 | 5209.33 | 5150-5350 |
| | 30 | 5169.02 | 5209.87 | |
| | 20 | 5169.69 | 5209.46 | |
| | 10 | 5169.23 | 5209.71 | |
| | 5 | 5169.76 | 5209.45 | |
| 138 | 20 | 5169.43 | 5209.72 | |
| 120 | | 5169.38 | 5209.28 | |
| 102 | | 5169.76 | 5209.67 | |

| Test mode: | | 802.11 ac | Frequency (MHz) | 5210 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5168.73 | 5251.78 | 5150-5350 |
| | 30 | 5168.91 | 5251.68 | |
| | 20 | 5168.48 | 5251.53 | |
| | 10 | 5168.65 | 5251.57 | |
| | 5 | 5251.48 | 5251.67 | |
| 138 | 20 | 5251.44 | 5251.24 | |
| 120 | | 5251.57 | 5251.37 | |
| 102 | | 5251.68 | 5251.59 | |

| Test mode: | | 802.11 ac | Frequency (MHz) | 5745 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5735.69 | 5755.01 | 5725-5850 |
| | 30 | 5735.28 | 5745.90 | |
| | 20 | 5735.67 | 5755.79 | |
| | 10 | 5735.83 | 5745.94 | |
| | 5 | 5735.39 | 5755.23 | |
| 138 | 20 | 5735.65 | 5745.48 | |
| 120 | | 5735.62 | 5755.75 | |
| 102 | | 5735.98 | 5745.93 | |

| Test mode: | | 802.11 ac | Frequency (MHz) | 5825 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5815.03 | 5835.24 | 5725-5850 |
| | 30 | 5815.18 | 5835.27 | |
| | 20 | 5815.56 | 5835.56 | |
| | 10 | 5815.37 | 5835.25 | |
| | 5 | 5815.23 | 5835.86 | |
| 138 | 20 | 5815.87 | 5835.48 | |
| 120 | | 5815.83 | 5835.26 | |
| 102 | | 5815.29 | 5835.29 | |

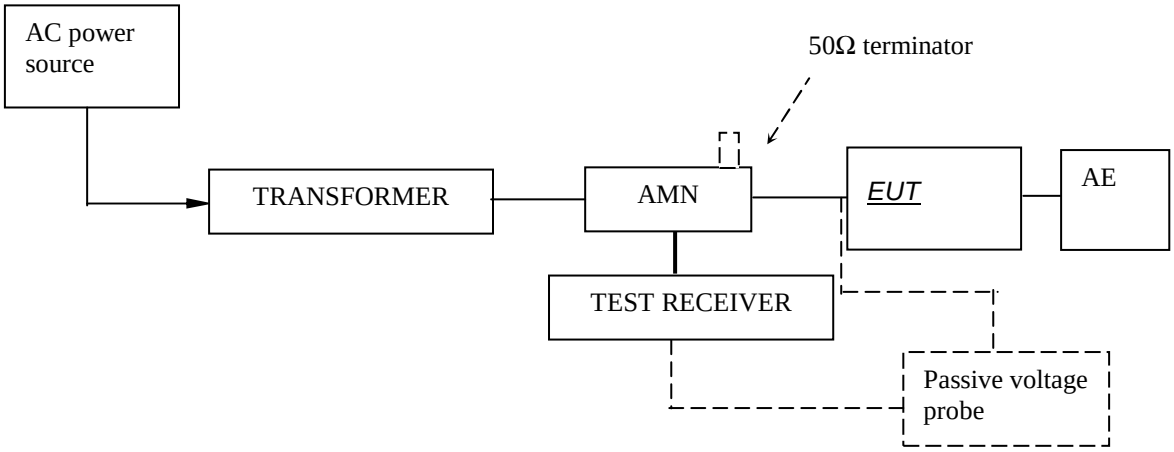
| Test mode: | | 802.11 ac | Frequency (MHz) | 5755 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5734.66 | 5775.31 | 5725-5850 |
| | 30 | 5734.58 | 5775.86 | |
| | 20 | 5734.76 | 5775.39 | |
| | 10 | 5734.39 | 5775.29 | |
| | 5 | 5734.35 | 5775.47 | |
| 138 | 20 | 5734.39 | 5775.53 | |
| 120 | | 5734.29 | 5775.98 | |
| 102 | | 5734.47 | 5775.28 | |

| Test mode: | | 802.11 ac | Frequency (MHz) | 5795 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5774.28 | 5815.95 | 5725-5850 |
| | 30 | 5774.88 | 5815.57 | |
| | 20 | 5774.86 | 5815.44 | |
| | 10 | 5774.82 | 5815.68 | |
| | 5 | 5774.49 | 5815.74 | |
| 138 | 20 | 5774.39 | 5815.99 | |
| 120 | | 5774.75 | 5815.34 | |
| 102 | | 5774.93 | 5815.75 | |

| Test mode: | | 802.11 ac | Frequency (MHz) | 5775 |
|---|---|---|---|---|
| Voltage (VAC) | Test Temperature ℃ | 20dB Bandwidth FL(MHz) | 20dB Bandwidth FH(MHz) | Limit MHz |
| 120V | 40 | 5733.90 | 5813.17 | 5725-5850 |
| | 30 | 5732.52 | 5813.75 | |
| | 20 | 5733.78 | 5813.76 | |
| | 10 | 5732.69 | 5813.38 | |
| | 5 | 5733.72 | 5813.83 | |
| 138 | 20 | 5732.99 | 5813.66 | |
| 120 | | 5733.78 | 5813.78 | |
| 102 | | 5732.86 | 5813.91 | |

## 5.0 Conducted Emission Test

Test Configuration:




Test Setup and Procedure

Test was performed according to ANSI C63.10 Clause 6.2. The EUT was set to achieve the maximum emission level. The mains terminal disturbance voltage was measured with the EUT in a shielded room. The EUT was connected to AC power source through an Artificial Mains Network which provides a 50Ω linear impedance Artificial hand is used if appropriate (for handheld apparatus). The load/control terminal disturbance voltage was measured with passive voltage probe if appropriate.

The table-top EUT was placed on a 0.8m high non-metallic table above earthed ground plane (Ground Reference Plane).And for floor standing EUT, was placed on a 0.1m high non-metallic supported on GRP. The EUT keeps a distance of at least 0.8m from any other of the metallic surface. The Artificial Mains Network is situated at a distance of 0.8m from the EUT.

During the test, mains lead of EUT excess 0.8m was folded back and forth parallel to the lead so as to form a horizontal bundle with a length between 0.3m and 0.4m.

The bandwidth of test receiver was set at 9 kHz. The frequency range from 150 kHz to 30MHz was checked.

Test Data

At main terminal: Pass

Tested Wire: Live Operation Mode: transmitting mode at 5190MHz

EDIT PEAK LIST (Final Measurement Results)

Trace1: FCC15QP
Trace2: FCC15AV
Trace3: ---

| TRACE | | FREQUENCY | LEVEL dBµV | | DELTA LIMIT dB |
|---|---|---|---|---|---|
| 2 | Average | 7.49 MHz | 45.55 | L1 | -4.44 |
| 1 | Quasi Peak | 7.586 MHz | 49.86 | L1 | -10.13 |
| 1 | Quasi Peak | 182 kHz | 54.23 | L1 | -10.16 |
| 2 | Average | 4.866 MHz | 33.82 | L1 | -12.18 |
| 2 | Average | 786 kHz | 32.62 | L1 | -13.37 |
| 2 | Average | 202 kHz | 39.30 | L1 | -14.22 |
| 2 | Average | 1.098 MHz | 30.67 | L1 | -15.32 |
| 1 | Quasi Peak | 4.866 MHz | 39.38 | L1 | -16.61 |
| 2 | Average | 29.102 MHz | 30.68 | L1 | -19.31 |
| 1 | Quasi Peak | 958 kHz | 35.25 | L1 | -20.74 |
| 1 | Quasi Peak | 782 kHz | 34.80 | L1 | -21.19 |
| 1 | Quasi Peak | 29.138 MHz | 35.93 | L1 | -24.06 |

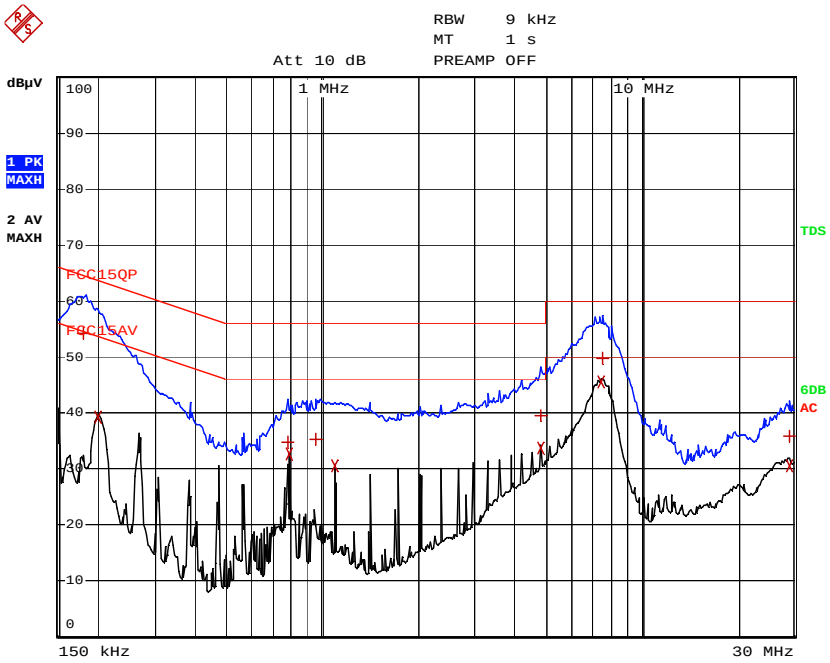
Tested Wire: Neutral Operation Mode: transmitting mode at 5190MHz

EDIT PEAK LIST (Final Measurement Results)

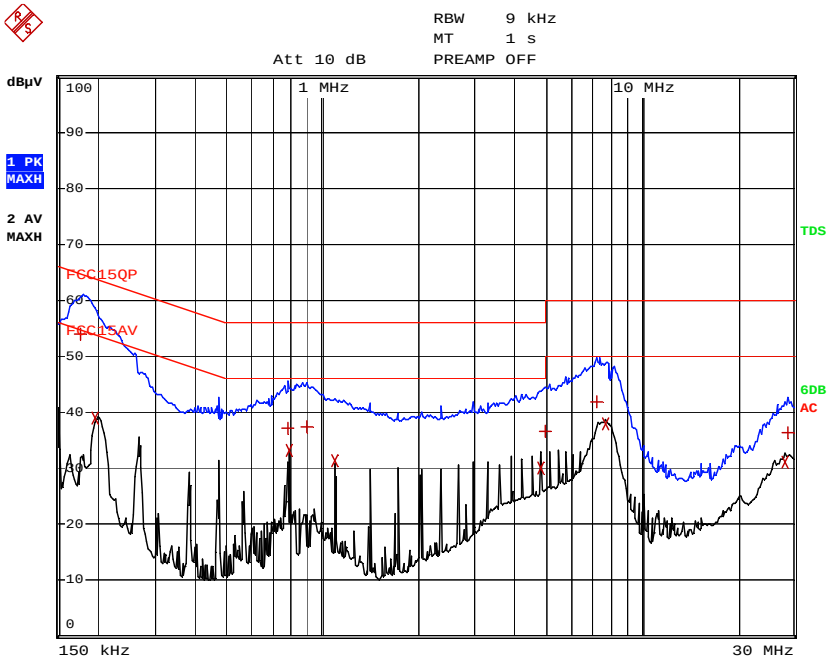
Trace1: FCC15QP
Trace2: FCC15AV
Trace3: ---

| TRACE | | FREQUENCY | LEVEL dBµV | | DELTA LIMIT dB |
|---|---|---|---|---|---|
| 1 | Quasi Peak | 178 kHz | 53.82 | L1 | -10.75 |
| 2 | Average | 7.714 MHz | 37.84 | L1 | -12.15 |
| 2 | Average | 786 kHz | 33.08 | L1 | -12.91 |
| 2 | Average | 198 kHz | 39.10 | L1 | -14.58 |
| 2 | Average | 1.098 MHz | 31.26 | L1 | -14.73 |
| 2 | Average | 4.862 MHz | 29.96 | L1 | -16.03 |
| 1 | Quasi Peak | 7.282 MHz | 41.96 | L1 | -18.03 |
| 1 | Quasi Peak | 898 kHz | 37.49 | L1 | -18.50 |
| 1 | Quasi Peak | 782 kHz | 37.20 | L1 | -18.80 |
| 2 | Average | 28.198 MHz | 31.12 | L1 | -18.87 |
| 1 | Quasi Peak | 4.994 MHz | 36.61 | L1 | -19.38 |
| 1 | Quasi Peak | 28.73 MHz | 36.30 | L1 | -23.69 |

Emission Curve
Tested Wire: Live




Tested Wire: Neutral



## 5.0 Test Equipment List

**Radiated Emission**

| Equipment No. | Equipment | Model | Manufacturer | Cal. Due date (YYYY-MM-DD) | Calibration Interval |
|---|---|---|---|---|---|
| EM030-01 | 3m Semi-Anechoic Chamber | 9×6×6 $m^3$ | ETS·LINDGREN | 2015-04-02 | 1Y |
| EM030-02 | Control room for 3m Semi-Anechoic Chamber | 4×4×3 $m^3$ | ETS·LINDGREN | | |
| EM031-02 | EMI Test Receiver (9 kHz~7 GHz) | R&S ESR7 | R&S | 2015-06-03 | 1Y |
| EM031-03 | Signal and Spectrum Analyzer (10 Hz~40 GHz) | R&S FSV40 | R&S | 2015-06-03 | 1Y |
| EM011-04 | Loop antenna (9 kHz-30 MHz) | HFH2-Z2 | R&S | 2015-05-25 | 1Y |
| EM061-03 | TRILOG Super Broadband test Antenna (30 MHz-1.5 GHz） | VULB 9161 | SCHWARZBECK | 2015-05-25 | 1Y |
| EM033-02 | Bouble-Ridged Waveguide Horn Antenna (800 MHz-18 GHz) | R&S HF907 | R&S | 2015-05-25 | 1Y |
| EM033-03 | High Frequency Antenna & preamplifier (18 GHz~26.5 GHz) | R&S SCU-26 | R&S | 2015-05-25 | 1Y |
| EM033-04 | High Frequency Antenna & preamplifier (26 GHz-40 GHz) | R&S SCU-40 | R&S | 2015-05-25 | 1Y |
| EM031-02-01 | Coaxial cable(9 kHz-1 GHz) | / | R&S | 2015-06-03 | 1Y |
| EM033-02-02 | Coaxial cable(1 GHz-18 GHz) | / | R&S | 2015-06-09 | |
| EM033-04-02 | Coaxial cable（18~40）GHz | / | R&S | 2015-06-09 | |
| EM022-03 | 2.45 GHz Filter | BRM 50702 | Micro-Tronics | 2015-05-06 | 1Y |

**Conducted emission at the mains terminals test**

| Equipment No. | Equipment | Model | Manufacturer | Cal.Due date (YYYY-MM-DD) | Calibration Interval |
|---|---|---|---|---|---|
| EM080-05 | EMI receiver | ESCI | R&S | 2015-08-04 | 1Y |
| EM006-05 | LISN | ENV216 | R&S | 2015-09-12 | 1Y |
| EM006-06 | LISN | ENV216 | R&S | 2015-09-12 | 1Y |
| EM006-06-01 | Coaxial cable | / | R&S | 2015-04-12 | 1Y |
| EM004-04 | EMC shield Room | 8m×3m×3m | Zhongyu | 2015-08-04 | 1Y |