

# TEST REPORT

|                        |                                                                 |
|------------------------|-----------------------------------------------------------------|
| EUT Description        | WLAN and BT, 2x2 PCIe M.2 2230 adapter card                     |
| Brand Name             | Intel® Wireless-AC 9560                                         |
| Model Name             | 9560NGW                                                         |
| IC ID                  | 1000M-9560NG                                                    |
| Date of Test Start/End | 2017-05-29 / 2017-07-11                                         |
| Features               | 802.11 a/b/g/n/ac Wireless LAN + Bluetooth 5<br>(see section 5) |

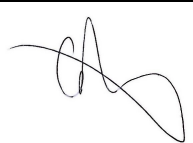
|                      |                                                                             |
|----------------------|-----------------------------------------------------------------------------|
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|                     |                                                     |
|---------------------|-----------------------------------------------------|
| Reference Standards | RSS-247 issue 2, RSS-Gen issue 4<br>(see section 1) |
|---------------------|-----------------------------------------------------|

|                            |                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------|
| Test Report identification | 170524-02.TR09                                                                                     |
| Revision Control           | Rev. 00<br>This test report revision replaces any previous test report revision<br>(see section 8) |

The test results relate only to the samples tested.  
The test report shall not be reproduced in full, without written approval of the laboratory.

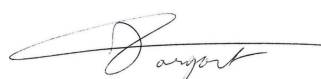
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# Table of Contents

|                                                                              |            |
|------------------------------------------------------------------------------|------------|
| <b>1. Standards, reference documents and applicable test methods .....</b>   | <b>3</b>   |
| <b>2. General conditions, competences and guarantees .....</b>               | <b>3</b>   |
| <b>3. Environmental Conditions .....</b>                                     | <b>3</b>   |
| <b>4. Test samples .....</b>                                                 | <b>4</b>   |
| <b>5. EUT Features .....</b>                                                 | <b>4</b>   |
| <b>6. Remarks and comments .....</b>                                         | <b>4</b>   |
| <b>7. Test Verdicts summary .....</b>                                        | <b>5</b>   |
| 7.1. 802.11 A/N/AC - 5150-5250 MHz .....                                     | 5          |
| 7.2. 802.11 A/N/AC – 5250-5350 MHz .....                                     | 5          |
| <b>8. Document Revision History .....</b>                                    | <b>5</b>   |
| <b>Annex A. Test &amp; System Description .....</b>                          | <b>6</b>   |
| A.1 MEASUREMENT SYSTEM .....                                                 | 6          |
| A.2 TEST EQUIPMENT LIST .....                                                | 8          |
| A.3 MEASUREMENT UNCERTAINTY EVALUATION .....                                 | 9          |
| <b>Annex B. Test Results .....</b>                                           | <b>10</b>  |
| B.1 TEST CONDITIONS .....                                                    | 10         |
| B.2 TEST RESULTS TABLES 5150 - 5250 MHz .....                                | 11         |
| B.2.1 26dB & 99% Bandwidth .....                                             | 11         |
| B.2.2 Power Limits. Maximum E.I.R.P & Maximum E.I.R.P spectral density ..... | 13         |
| B.2.3 Unwanted emission limits : Band Edge (Conducted) .....                 | 19         |
| B.2.4 Unwanted emission limits: Spurious emission (Radiated) .....           | 21         |
| B.3 TEST RESULTS SCREENSHOT 5150 - 5250 MHz .....                            | 48         |
| B.3.1 26dB Bandwidth .....                                                   | 48         |
| B.3.2 99% Bandwidth .....                                                    | 53         |
| B.3.3 Power Limits. Maximum Output power & Peak power spectral density ..... | 58         |
| B.3.4 Undesirable emission limits : Band Edge (Conducted) .....              | 69         |
| B.4 TEST RESULTS TABLES 5250 - 5350 MHz .....                                | 97         |
| B.4.1 26dB & 99% Bandwidth .....                                             | 97         |
| B.4.2 Power Limits. Maximum Output power & Peak power spectral density ..... | 99         |
| B.4.3 Unwanted emissions limits : Band Edge (Conducted) .....                | 103        |
| B.4.4 Unwanted emission limits: Spurious emission (Radiated) .....           | 105        |
| B.5 TEST RESULTS SCREENSHOT 5250 - 5350 MHz .....                            | 129        |
| B.5.1 26dB Bandwidth .....                                                   | 129        |
| B.5.2 99% Bandwidth .....                                                    | 134        |
| B.5.3 Maximum output power & Peak power spectral density .....               | 140        |
| B.5.4 Undesirable emissions limits : Band Edge (Conducted) .....             | 148        |
| <b>Annex C. Photographs .....</b>                                            | <b>161</b> |
| C.1 TEST SETUP .....                                                         | 161        |
| C.2 TEST SAMPLE .....                                                        | 163        |

### 1. Standards, reference documents and applicable test methods

1. RSS-247 Issue 2 - Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices.
2. RSS-Gen Issue 4 - General Requirements for Compliance of Radio Apparatus.
3. FCC OET KDB 789033 D02 General U-NII Test Procedures New Rules v01r04 – Guidelines for compliance testing of Unlicensed National Information Infrastructure (U-NII) Devices (Part 15, Subpart E).
4. FCC OET KDB 644545 D03 Guidance for IEEE 802.11ac v01 - GUIDANCE FOR IEEE Std 802.11ac™ DEVICES EMISSION TESTING.
5. ANSI C63.10-2013 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

### 2. General conditions, competences and guarantees

- ✓ Intel Mobile Communications France SAS Wireless RF Lab (Intel WRF Lab) is an ISO/IEC 17025:2005 testing laboratory accredited by the American Association for Laboratory Accreditation (A2LA) with the certificate number 3478.01.
- ✓ Intel Mobile Communications France SAS Wireless RF Lab (Intel WRF Lab) is a Registered Test Site listed by IC, with IC Assigned Code 1000Y.
- ✓ Intel WRF Lab only provides testing services and is committed to providing reliable, unbiased test results and interpretations.
- ✓ Intel WRF Lab is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.
- ✓ Intel WRF Lab has developed calibration and proficiency programs for its measurement equipment to ensure correlated and reliable results to its customers.
- ✓ This report is only referred to the item that has undergone the test.
- ✓ This report does not imply an approval of the product by the Certification Bodies or competent Authorities.

### 3. Environmental Conditions

- ✓ At the site where the measurements were performed the following limits were not exceeded during the tests:

|             |            |
|-------------|------------|
| Temperature | 23°C ± 3°C |
| Humidity    | 50% ± 20%  |

#### 4. Test samples

| Sample | Control #     | Description    | Model          | Serial #          | Date of receipt | Note                     |
|--------|---------------|----------------|----------------|-------------------|-----------------|--------------------------|
| #01    | 170524-02.S04 | Module         | 9560NGW        | WFM: 3413E8900F1F | 2017-05-30      | Used for conducted tests |
|        | 170524-02.S15 | Extender Board | PCB00609_01    | 6092416-442       | 2017-05-30      |                          |
|        | 170000-01.S04 | Laptop         | Latitude E5470 | DMRKMC2           | 2017-05-10      |                          |
| #02    | 170524-02.S02 | Module         | 9560NGW        | WFM 3413E88FF066  | 2017-05-30      | Used for radiated tests  |
|        | 170220-02.S03 | Extender Board | PCB00609_01    | 6092416-446       | 2017-02-20      |                          |
|        | 170000-01.S13 | Laptop         | Latitude E5470 | FT6LMC2           | 2017-05-30      |                          |
| #03    | 170524-02.S06 | Module         | 9560NGW        | WFM 3413E890192E  | 2017-05-30      | Used for radiated tests  |
|        | 170524-02.S16 | Extender Board | PCB00609_01    | 6092416-451       | 2017-06-15      |                          |
|        | 161129-02.S01 | Laptop         | Latitude 6430U | 25PVLX1           | 2016-06-12      |                          |

#### 5. EUT Features

|                        |                                                                                                                                |                              |  |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------|--|
| Brand Name             | Intel® Wireless-AC 9560                                                                                                        |                              |  |
| Model Name             | 9560NGW                                                                                                                        |                              |  |
| IC ID                  | 1000M-9560NG                                                                                                                   |                              |  |
| Software Version       | 10.1720.0-05195                                                                                                                |                              |  |
| Driver Version         | 99.0.28.6                                                                                                                      |                              |  |
| Prototype / Production | Production                                                                                                                     |                              |  |
| Supported Radios       | 802.11b/g/n                                                                                                                    | 2.4GHz (2400.0 – 2483.5 MHz) |  |
|                        | 802.11a/n/ac                                                                                                                   | 5.2GHz (5150.0 – 5350.0 MHz) |  |
|                        |                                                                                                                                | 5.6GHz (5470.0 – 5725.0 MHz) |  |
|                        |                                                                                                                                | 5.8GHz (5725.0 – 5850.0 MHz) |  |
|                        | Bluetooth 5                                                                                                                    | 2.4GHz (2400.0 – 2483.5 MHz) |  |
| Antenna Information    | Main WLAN: Slot antenna. WiFi 2.4GHz & 5GHz (DRTU CHAIN B)<br>Aux WLAN: Slot antenna. WiFi 2.4GHz & 5GHz and BT (DRTU CHAIN A) |                              |  |
| Additional Information |                                                                                                                                |                              |  |

#### 6. Remarks and comments

N/A

## 7. Test Verdicts summary

### 7.1. 802.11 a/n/ac - 5150-5250 MHz

| RSS part                                      | Test name                                               | Verdict |
|-----------------------------------------------|---------------------------------------------------------|---------|
| RSS-247 Clause 6.2.1.1                        | Power Limits. Maximum E.I.R.P.                          | P       |
| RSS-247 Clause 6.2.1.1                        | E.I.R.P power spectral density                          | P       |
| RSS-247 Clause 6.2.1.2<br>RSS-GEN, Clause 8.9 | Unwanted emissions limits: Band Edge (Conducted)        | P       |
| RSS-247 Clause 6.2.1.2<br>RSS-GEN, Clause 8.9 | Unwanted emissions limits: Spurious emission (Radiated) | P       |

### 7.2. 802.11 a/n/ac – 5250-5350 MHz

| RSS part                                      | Test name                                               | Verdict |
|-----------------------------------------------|---------------------------------------------------------|---------|
| RSS-247 Clause 6.2.2.1                        | Power Limits. Maximum output power                      | P       |
| RSS-247 Clause 6.2.2.1                        | Power spectral density                                  | P       |
| RSS-247 Clause 6.2.2.2<br>RSS-GEN, Clause 8.9 | Unwanted emissions limits: Band Edge (Conducted)        | P       |
| RSS-247 Clause 6.2.2.2<br>RSS-GEN, Clause 8.9 | Unwanted emissions limits: Spurious emission (Radiated) | P       |

P: Pass

F: Fail

NM: Not Measured

NA: Not Applicable

## 8. Document Revision History

| Revision # | Date       | Modified by | Revision Details |
|------------|------------|-------------|------------------|
| Rev. 00    | 2017-07-13 | A.Sayoud    | First Issue      |

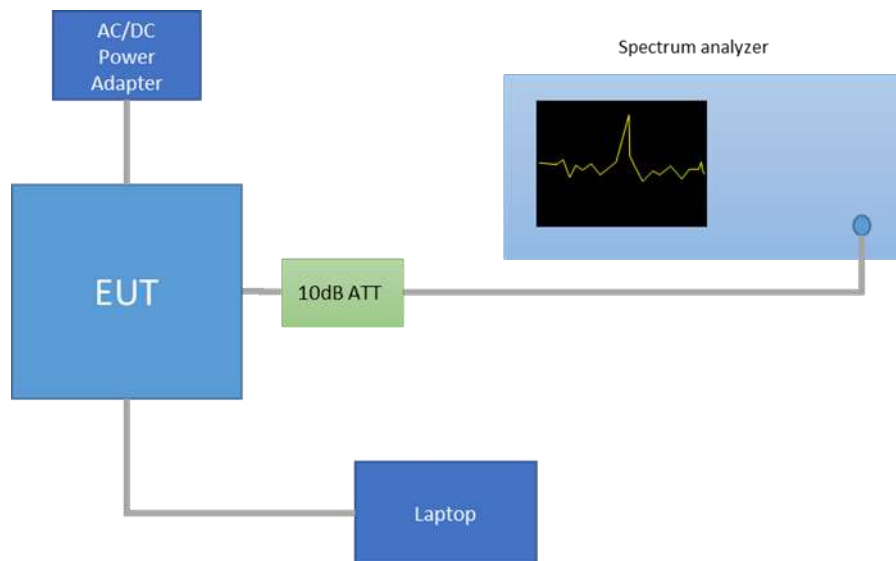
# Annex A. Test & System Description

## A.1 Measurement System

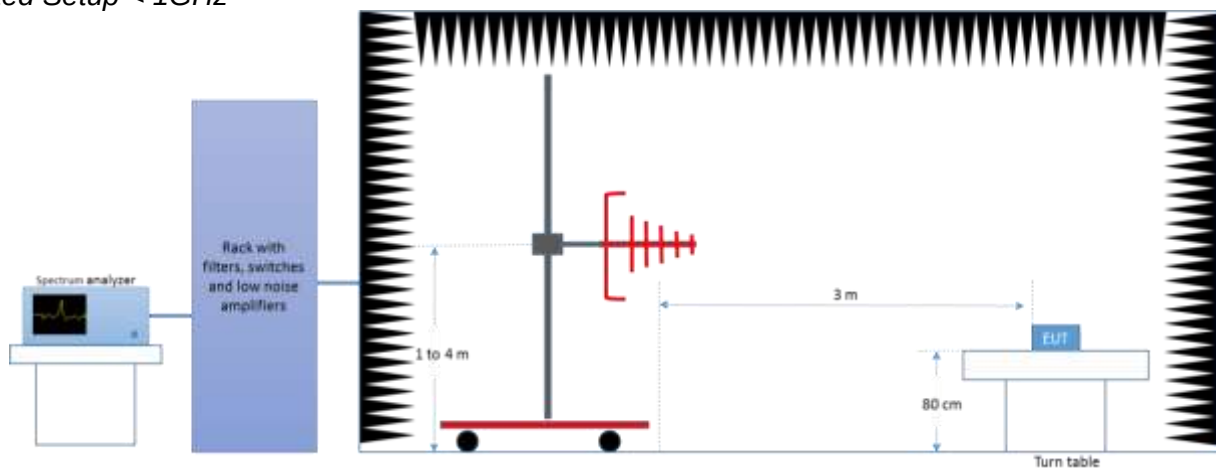
Measurements were performed using the following setups, made in accordance to the general provisions of FCC KDB 789033 D02 and ANSI C63.10 Test Procedures.

The DUT was installed in a test fixture and this test fixture is connected to a laptop computer and AC/DC power adapter. The laptop computer was used to configure the EUT to continuously transmit at a specified output power using all different modes and modulation schemes, using the Intel proprietary tool DRTU.

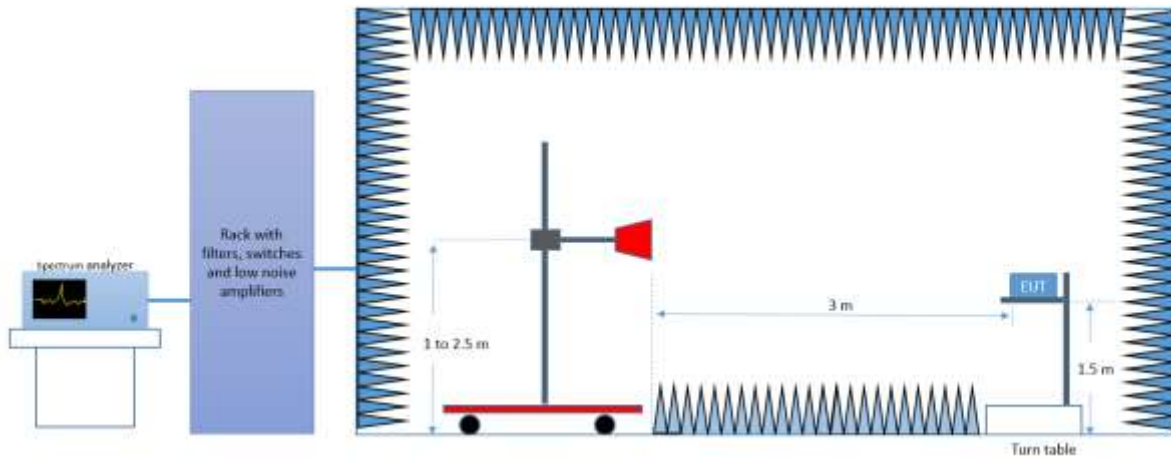
### Conducted Setup



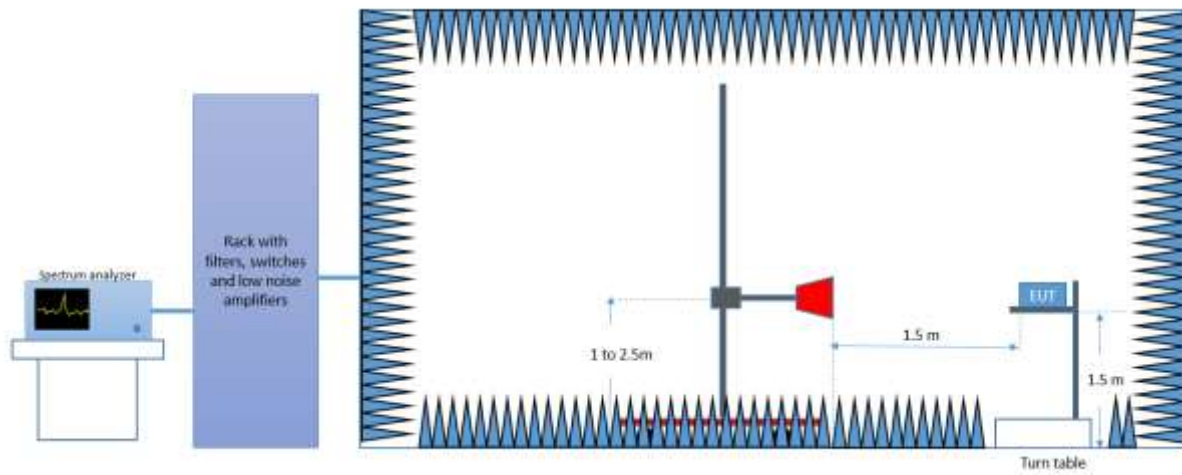
### Radiated Setup < 1GHz



### *Radiated Setup 1 GHz - 18 GHz*



### *Radiated Setup 18 GHz - 40 GHz*



## A.2 Test Equipment List

### Conducted Setup

| ID#  | Device            | Type/Model | Serial # | Manufacturer    | Cal. Date  | Cal. Due Date |
|------|-------------------|------------|----------|-----------------|------------|---------------|
| 0316 | Spectrum analyzer | FSV30      | 103309   | Rohde & Schwarz | 2017-01-30 | 2019-01-30    |

### Radiated Setup

| ID#  | Device                                           | Type/Model | Serial #   | Manufacturer    | Cal. Date  | Cal. Due Date |
|------|--------------------------------------------------|------------|------------|-----------------|------------|---------------|
| 0420 | Spectrum analyzer                                | FSV40      | 101556     | Rohde & Schwarz | 2016-04-15 | 2018-04-15    |
| 0133 | Spectrum analyzer                                | FSV40      | 101358     | Rohde & Schwarz | 2016-04-15 | 2018-04-15    |
| 0137 | Log antenna<br>30 MHz – 1 GHz                    | 3142E      | 00156946   | ETS Lindgren    | 2015-12-11 | 2017-12-11    |
| 0138 | Horn antenna<br>1 GHz – 6.4 GHz                  | 3117       | 00152266   | ETS Lindgren    | 2016-03-14 | 2018-03-14    |
| 0141 | Double Ridge Horn<br>Antenna<br>1 GHz – 18 GHz   | 3117       | 00157736   | ETS Lindgren    | 2016-04-13 | 2018-04-13    |
| 0409 | PreAmplifier                                     | 3117-PA    | 00157993   | ETS Lindgren    | N/A        | N/A           |
| 0139 | Horn Antenna<br>18 GHz - 26.5 GHz                | 114514     | 00167100   | ETS Lindgren    | 2016-03-16 | 2018-03-16    |
| 0334 | Double Ridged Horn<br>Antenna<br>18 GHz – 40 GHz | 3116C-PA   | 00196308   | ETS Lindgren    | 2015-07-15 | 2017-07-15    |
| 0140 | Horn Antenna<br>26.5 GHz - 40 GHz                | 120722     | 00169638   | ETS Lindgren    | 2016-07-26 | 2018-07-26    |
| 0135 | Semi Anechoic<br>chamber                         | FACT 3     | 5720       | ETS Lindgren    | 2016-04-28 | 2018-04-28    |
| 0337 | Full Anechoic<br>chamber                         | RFD_FA_100 | 5996       | ETS Lindgren    | 2016-04-28 | 2018-04-28    |
| 0329 | Measurement<br>Software                          | EMC32      | 100401     | Rohde & Schwarz | N/A        | N/A           |
| 0530 | Measurement<br>Software                          | EMC32      | 100623     | Rohde & Schwarz | N/A        | N/A           |
| 0296 | Power Supply                                     | 6673A      | MY41000318 | Agilent         | N/A        | N/A           |
| 0346 | Multimeter                                       | 34401A     | US36054685 | HP              | 2016-02-04 | 2018-02-04    |
| 0014 | Power Sensor                                     | NRP-Z57    | 101280     | Rohde & Schwarz | 2017-04-25 | 2019-04-25    |

### A.3 Measurement Uncertainty Evaluation

The system uncertainty evaluation is shown in the below table:

| Measurement type             | Uncertainty [ $\pm$ dB] |
|------------------------------|-------------------------|
| Conducted Power              | $\pm 1.0$               |
| Conducted Spurious Emission  | $\pm 2.9$               |
| Radiated tests <1GHz         | $\pm 3.8$               |
| Radiated tests 1GHz - 40 GHz | $\pm 4.7$               |

# Annex B. Test Results

## B.1 Test Conditions

For 802.11a mode the EUT can transmit at both CHAIN A and CHAIN B RF outputs individually, but not simultaneously.

For 802.11n20 (20 MHz channel bandwidth), 802.11n40 (40MHz channel bandwidth), 802.11ac80 (80MHz channel bandwidth) and 802.11ac160 (160MHz channel bandwidth) modes the EUT can transmit at both CHAIN A and CHAIN B RF outputs individually, and also simultaneously.

The conducted RF output power at chain A and B was adjusted according to the client's supplied Target values (see following table) using the Intel DRTU tool and measuring the power by using a spectrum analyzer with the channel integration method according to section 12.3.2.4 (Method SA-2 Alternative) of ANSI C63.10-2013.

Measured values for adjustment were within -0.25 dB/+0.25 dB from the declared Target values.

| Frequency Band 5150-5250 MHz |          |           |         |             | Conducted Power, Target Value (dBm) |              |                            |
|------------------------------|----------|-----------|---------|-------------|-------------------------------------|--------------|----------------------------|
| Mode                         | BW (MHz) | Data Rate | CH #    | Freq. (MHz) | SISO Chain A                        | SISO Chain B | MIMO at both ports A and B |
| 802.11a                      | 20       | 6Mbps     | 36      | 5180        | 16.5                                | 16.5         | -                          |
|                              |          |           | 40      | 5200        | 16.5                                | 16.5         | -                          |
|                              |          |           | 48      | 5240        | 16.5                                | 16.5         | -                          |
| 802.11n                      | 20       | HT0 HT8*  | 36      | 5180        | 16.5                                | 16.5         | 17                         |
|                              |          |           | 40      | 5200        | 16.5                                | 17           | 17                         |
|                              |          |           | 48      | 5240        | 16.5                                | 16.5         | 17                         |
|                              | 40       | HT0 HT8*  | 38F     | 5190        | 17.5                                | 17.5         | 18                         |
|                              |          |           | 46F     | 5230        | 17.5                                | 17.5         | 18                         |
| 802.11ac                     | 80       | VHT0      | 42ac80  | 5210        | 18                                  | 18           | 18                         |
| 802.11ac                     | 160      | VHT0      | 50ac160 | 5250        | 14                                  | 14           | 14.5                       |

| Frequency Band 5250-5350 MHz |          |           |        |             | Conducted Power, Target Value (dBm) |              |                            |
|------------------------------|----------|-----------|--------|-------------|-------------------------------------|--------------|----------------------------|
| Mode                         | BW (MHz) | Data Rate | CH #   | Freq. (MHz) | SISO Chain A                        | SISO Chain B | MIMO at both ports A and B |
| 802.11a                      | 20       | 6Mbps     | 52     | 5260        | 21.00                               | 21.50        | -                          |
|                              |          |           | 56     | 5280        | 21.50                               | 21.50        | -                          |
|                              |          |           | 64     | 5320        | 16.50                               | 17.00        | -                          |
| 802.11n                      | 20       | HT0 HT8*  | 52     | 5260        | 21.00                               | 21.50        | 23.00                      |
|                              |          |           | 56     | 5280        | 21.50                               | 21.50        | 23.00                      |
|                              |          |           | 64     | 5320        | 16.50                               | 16.50        | 19.00                      |
|                              | 40       | HT0 HT8*  | 54F    | 5270        | 19.00                               | 19.00        | 21.00                      |
|                              |          |           | 62F    | 5310        | 15.00                               | 15.00        | 17.50                      |
| 802.11ac                     | 80       | VHT0      | 58ac80 | 5290        | 16.00                               | 15.50        | 16.00                      |

The following data rates were selected based on preliminary testing that identified those rates as the worst cases for output power and spurious levels at the band edges:

802.11a → 6Mbps

802.11n20 and 802.11n40 (SISO) → HT0

802.11n20 and 802.11n40 (MIMO) → HT8

802.11ac80 (SISO) → VHT0

802.11ac80 (MIMO) → VHT0

802.11ac160 (SISO) → VHT0

802.11ac160 (MIMO) → VHT0

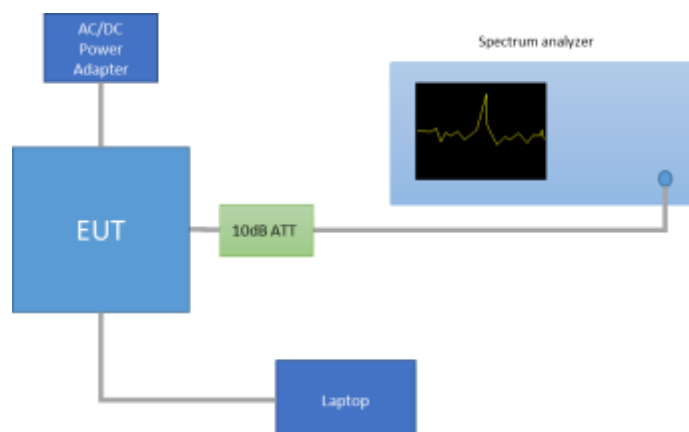
Alternative channels to the lowest and highest channels per band have been also tested for Band Edge compliance

## B.2 Test Results Tables 5150 - 5250 MHz

### B.2.1 26dB & 99% Bandwidth

#### Test procedure

The setup below was used to measure the 26dB & 99% Bandwidth. The antenna terminal of the EUT is connected to the spectrum analyzer through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.



#### Results tables

| Mode      | Rate  | Antenna      | Channel | Frequency [MHz] | 26dB BW [MHz] | 99% BW [MHz] |
|-----------|-------|--------------|---------|-----------------|---------------|--------------|
| 802.11a   | 6Mbps | SISO CHAIN A | 36      | 5180            | 24.98         | 16.84        |
|           |       |              | 40      | 5200            | 27.98         | 16.84        |
|           |       |              | 48      | 5240            | 45.50         | 16.84        |
|           |       | SISO CHAIN B | 36      | 5180            | 24.22         | 16.84        |
|           |       |              | 40      | 5200            | 27.17         | 16.84        |
|           |       |              | 48      | 5240            | 45.60         | 16.84        |
| 802.11n20 | HT0   | SISO CHAIN A | 36      | 5180            | 24.37         | 17.88        |
|           |       |              | 40      | 5200            | 29.52         | 17.92        |
|           |       |              | 48      | 5240            | 48.45         | 17.92        |
|           |       | SISO CHAIN B | 36      | 5180            | 24.42         | 17.88        |
|           |       |              | 40      | 5200            | 28.22         | 17.88        |
|           |       |              | 48      | 5240            | 47.70         | 17.88        |
| 802.11n20 | HT8   | MIMO CHAIN A | 36      | 5180            | 24.92         | 17.92        |
|           |       |              | 40      | 5200            | 24.78         | 17.92        |
|           |       |              | 48      | 5240            | 25.82         | 17.96        |
|           |       | MIMO CHAIN B | 36      | 5180            | 24.17         | 17.92        |
|           |       |              | 40      | 5200            | 25.27         | 17.92        |
|           |       |              | 48      | 5240            | 25.97         | 17.92        |

| Mode        | Rate | Antenna      | Channel | Frequency [MHz] | 26dB BW [MHz] | 99% BW [MHz] |
|-------------|------|--------------|---------|-----------------|---------------|--------------|
| 802.11n40   | HT0  | SISO CHAIN A | 38F     | 5190            | 45.14         | 36.56        |
|             |      |              | 46F     | 5230            | 43.24         | 36.56        |
|             |      | SISO CHAIN B | 38F     | 5190            | 44.41         | 36.56        |
|             |      |              | 46F     | 5230            | 43.69         | 36.56        |
|             | HT8  | MIMO CHAIN A | 38F     | 5190            | 46.03         | 36.72        |
|             |      |              | 46F     | 5230            | 44.96         | 36.56        |
|             |      | MIMO CHAIN B | 38F     | 5190            | 44.41         | 36.40        |
|             |      |              | 46F     | 5230            | 42.97         | 36.40        |
| 802.11ac80  | VHT0 | SISO CHAIN A | 42ac80  | 5210            | 84.83         | 75.12        |
|             |      | SISO CHAIN B | 42ac80  | 5210            | 83.87         | 75.12        |
|             | VHT0 | MIMO CHAIN A | 42ac80  | 5210            | 86.54         | 75.24        |
|             |      | MIMO CHAIN B | 42ac80  | 5210            | 84.44         | 75.12        |
| 802.11ac160 | VHT0 | SISO CHAIN A | 50ac160 | 5250            | 165.17        | 153.80       |
|             |      | SISO CHAIN B | 50ac160 | 5250            | 164.51        | 153.00       |
|             | VHT0 | MIMO CHAIN A | 50ac160 | 5250            | 164.17        | 153.00       |
|             |      | MIMO CHAIN B | 50ac160 | 5250            | 163.18        | 152.00       |

Max Value

## B.2.2 Power Limits. Maximum E.I.R.P & Maximum E.I.R.P spectral density

### Test limits

| RSS-247 | Limits                                                                                                                                                                                                                            |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.2.1.1 | The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$ , dBm, whichever power is less. B is the 99% emission bandwidth in megahertz.<br>The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band. |

### Test procedure

The Maximum Conducted Output Power was measured using the channel integration method according to section 12.3.2.4 (Method SA-2 Alternative) of ANSI C63.10-2013

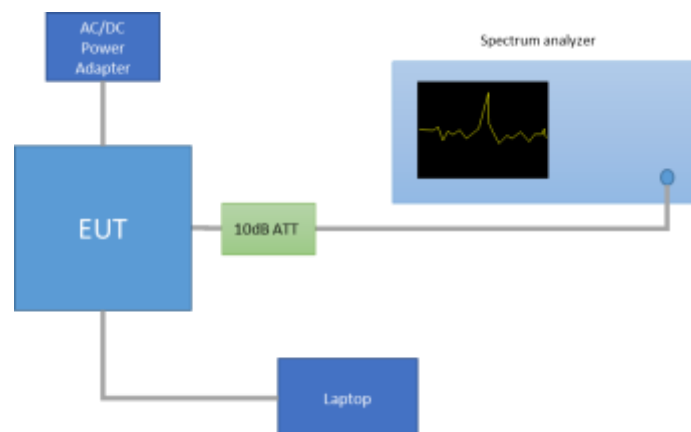
The maximum power spectral density (PSD) was measured using the method according to section 12.5 (Method SA-2 Alternative) of ANSI C63.10-2013.

In the measure-and-sum approach for MIMO mode, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically in linear power units to determine the total emission level from the device.

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power.

The setup below was used to measure the maximum conducted output power and power spectral density. The antenna terminal of the EUT is connected to the spectrum analyser through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

The declared maximum antenna gain is 5dBi.



## Results tables

### Duty cycle

| Mode        | Rate  | Antenna | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] |
|-------------|-------|---------|----------------------------|--------------------------|----------------|
| 802.11a     | 6Mbps | SISO-A  | 2.04                       | 2.07                     | 98.31%         |
|             |       | SISO-B  | 2.04                       | 2.07                     | 98.36%         |
| 802.11n20   | HT0   | SISO-A  | 1.90                       | 1.93                     | 98.24%         |
|             |       | SISO-B  | 1.90                       | 1.93                     | 98.08%         |
|             | HT8   | MIMO-A  | 0.97                       | 1.01                     | 96.06%         |
|             |       | MIMO-B  | 0.97                       | 1.01                     | 96.15%         |
| 802.11n40   | HT0   | SISO-A  | 0.93                       | 0.97                     | 96.69%         |
|             |       | SISO-B  | 0.94                       | 0.98                     | 96.52%         |
|             | HT8   | MIMO-A  | 0.49                       | 0.53                     | 92.45%         |
|             |       | MIMO-B  | 0.49                       | 0.53                     | 92.82%         |
| 802.11ac80  | VHT0  | SISO-A  | 0.46                       | 0.49                     | 93.10%         |
|             |       | SISO-B  | 0.46                       | 0.49                     | 93.09%         |
|             |       | MIMO-A  | 0.26                       | 0.29                     | 87.03%         |
|             |       | MIMO-B  | 0.26                       | 0.29                     | 87.03%         |
| 802.11ac160 | VHT0  | SISO-A  | 0.25                       | 0.28                     | 88.65%         |
|             |       | SISO-B  | 0.25                       | 0.28                     | 88.34%         |
|             |       | MIMO-A  | 0.15                       | 0.19                     | 79.89%         |
|             |       | MIMO-B  | 0.15                       | 0.19                     | 79.89%         |

### Maximum output power

| Mode      | Rate  | Channel | Freq. [MHz] | Antenna      | Average Conducted Output Power [dBm] | Maximum* Conducted Output Power [dBm] | Maximum* Conducted Output Power [mW] | Max of EIRP [dBm] |
|-----------|-------|---------|-------------|--------------|--------------------------------------|---------------------------------------|--------------------------------------|-------------------|
| 802.11a   | 6Mbps | 36      | 5180        | SISO CHAIN A | 16.36                                | 16.36                                 | 43.25                                | 21.36             |
|           |       |         |             | SISO CHAIN B | 16.46                                | 16.46                                 | 44.26                                | 21.46             |
|           |       | 40      | 5200        | SISO CHAIN A | 16.50                                | 16.50                                 | 44.67                                | 21.50             |
|           |       |         |             | SISO CHAIN B | 16.46                                | 16.46                                 | 44.26                                | 21.46             |
|           |       | 48      | 5240        | SISO CHAIN A | 16.51                                | 16.51                                 | 44.77                                | 21.51             |
|           |       |         |             | SISO CHAIN B | 16.56                                | 16.56                                 | 45.29                                | 21.56             |
| 802.11n20 | HT0   | 36      | 5180        | SISO CHAIN A | 16.62                                | 16.62                                 | 45.92                                | 21.62             |
|           |       |         |             | SISO CHAIN B | 16.74                                | 16.74                                 | 47.21                                | 21.74             |
|           |       | 40      | 5200        | SISO CHAIN A | 16.65                                | 16.65                                 | 46.24                                | 21.65             |
|           |       |         |             | SISO CHAIN B | 16.86                                | 16.86                                 | 48.53                                | 21.86             |
|           |       | 48      | 5240        | SISO CHAIN A | 16.69                                | 16.69                                 | 46.67                                | 21.69             |
|           |       |         |             | SISO CHAIN B | 16.69                                | 16.69                                 | 46.67                                | 21.69             |
|           | HT8   | 36      | 5180        | MIMO CHAIN A | 13.51                                | 13.68                                 | 23.36                                | 18.68             |
|           |       |         |             | MIMO CHAIN B | 13.70                                | 13.87                                 | 24.38                                | 18.87             |
|           |       |         |             | Combined A+B | 16.62                                | 16.79                                 | 47.74                                | 21.79             |
|           |       | 40      | 5200        | MIMO CHAIN A | 13.63                                | 13.80                                 | 24.01                                | 18.80             |
|           |       |         |             | MIMO CHAIN B | 13.65                                | 13.82                                 | 24.10                                | 18.82             |
|           |       |         |             | Combined A+B | 16.65                                | 16.82                                 | 48.12                                | 21.82             |
|           |       | 48      | 5240        | MIMO CHAIN A | 13.66                                | 13.83                                 | 24.18                                | 18.83             |
|           |       |         |             | MIMO CHAIN B | 13.70                                | 13.87                                 | 24.38                                | 18.87             |
|           |       |         |             | Combined A+B | 16.69                                | 16.86                                 | 48.56                                | 21.86             |

| Mode        | Rate | Channel | Freq. [MHz] | Antenna      | Average Conducted Output Power [dBm] | Maximum* Conducted Output Power [dBm] | Maximum* Conducted Output Power [mW] | Max of EIRP [dBm] |
|-------------|------|---------|-------------|--------------|--------------------------------------|---------------------------------------|--------------------------------------|-------------------|
| 802.11n40   | HT0  | 38F     | 5190        | SISO CHAIN A | 17.40                                | 17.54                                 | 56.83                                | 22.54             |
|             |      |         |             | SISO CHAIN B | 17.18                                | 17.33                                 | 54.12                                | 22.33             |
|             |      | 46F     | 5230        | SISO CHAIN A | 17.26                                | 17.40                                 | 55.03                                | 22.40             |
|             |      |         |             | SISO CHAIN B | 17.16                                | 17.31                                 | 53.87                                | 22.31             |
|             | HT8  | 38F     | 5190        | MIMO CHAIN A | 14.60                                | 14.94                                 | 31.19                                | 19.94             |
|             |      |         |             | MIMO CHAIN B | 14.39                                | 14.71                                 | 29.61                                | 19.71             |
|             |      |         |             | Combined A+B | 17.51                                | 17.84                                 | 60.80                                | 22.84             |
|             |      | 46F     | 5230        | MIMO CHAIN A | 14.55                                | 14.89                                 | 30.84                                | 19.89             |
|             |      |         |             | MIMO CHAIN B | 14.35                                | 14.67                                 | 29.33                                | 19.67             |
|             |      |         |             | Combined A+B | 17.46                                | 17.79                                 | 60.17                                | 22.79             |
| 802.11ac80  | VHT0 | 42ac80  | 5210        | SISO CHAIN A | 17.49                                | 17.80                                 | 60.26                                | 22.80             |
|             |      |         |             | SISO CHAIN B | 17.48                                | 17.79                                 | 60.13                                | 22.79             |
|             |      |         |             | MIMO CHAIN A | 15.18                                | 15.78                                 | 37.87                                | 20.78             |
|             |      |         |             | MIMO CHAIN B | 13.06                                | 13.66                                 | 23.24                                | 18.66             |
|             |      |         |             | Combined A+B | 17.27                                | 17.88                                 | 61.33                                | 22.88             |
| 802.11ac160 | VHT0 | 50ac160 | 5250        | SISO CHAIN A | 13.32                                | 13.84                                 | 24.23                                | 18.84             |
|             |      |         |             | SISO CHAIN B | 13.35                                | 13.89                                 | 24.48                                | 18.89             |
|             |      |         |             | MIMO CHAIN A | 10.47                                | 11.44                                 | 13.95                                | 16.44             |
|             |      |         |             | MIMO CHAIN B | 10.59                                | 11.56                                 | 14.34                                | 16.56             |
|             |      |         |             | Combined A+B | 13.54                                | 14.52                                 | 28.29                                | 19.52             |

\* Maximum values are the duty cycle compensated values calculated from the average (measured) values

Max Value

Min Value

Maximum power spectral Density (PSD)

| Mode      | Rate  | Channel | Freq.<br>[MHz] | Antenna      | Average<br>conducted PSD<br>[dBm/MHz] | Maximum*<br>conducted PSD<br>[dBm/MHz] | Maximum*<br>EIRP PSD<br>[dBm/MHz] |
|-----------|-------|---------|----------------|--------------|---------------------------------------|----------------------------------------|-----------------------------------|
| 802.11a   | 6Mbps | 36      | 5180           | SISO CHAIN A | 4.78                                  | 4.78                                   | 9.78                              |
|           |       |         |                | SISO CHAIN B | 4.88                                  | 4.88                                   | 9.88                              |
|           |       | 40      | 5200           | SISO CHAIN A | 4.90                                  | 4.90                                   | 9.90                              |
|           |       |         |                | SISO CHAIN B | 4.88                                  | 4.88                                   | 9.88                              |
|           |       | 48      | 5240           | SISO CHAIN A | 4.92                                  | 4.92                                   | 9.92                              |
|           |       |         |                | SISO CHAIN B | 4.98                                  | 4.98                                   | 9.98                              |
| 802.11n20 | HT0   | 36      | 5180           | SISO CHAIN A | 4.76                                  | 4.76                                   | 9.76                              |
|           |       |         |                | SISO CHAIN B | 4.94                                  | 4.94                                   | 9.94                              |
|           |       | 40      | 5200           | SISO CHAIN A | 4.76                                  | 4.76                                   | 9.76                              |
|           |       |         |                | SISO CHAIN B | 4.98                                  | 4.98                                   | 9.98                              |
|           |       | 48      | 5240           | SISO CHAIN A | 4.79                                  | 4.79                                   | 9.79                              |
|           |       |         |                | SISO CHAIN B | 4.84                                  | 4.84                                   | 9.84                              |
|           | HT8   | 36      | 5180           | MIMO CHAIN A | 1.64                                  | 1.81                                   | 6.81                              |
|           |       |         |                | MIMO CHAIN B | 1.83                                  | 2.00                                   | 7.00                              |
|           |       |         |                | Combined A+B | 4.75                                  | 4.92                                   | 9.92                              |
|           |       | 40      | 5200           | MIMO CHAIN A | 1.78                                  | 1.95                                   | 6.95                              |
|           |       |         |                | MIMO CHAIN B | 1.76                                  | 1.93                                   | 6.93                              |
|           |       |         |                | Combined A+B | 4.78                                  | 4.95                                   | 9.95                              |
|           |       | 48      | 5240           | MIMO CHAIN A | 1.74                                  | 1.91                                   | 6.91                              |
|           |       |         |                | MIMO CHAIN B | 1.84                                  | 2.01                                   | 7.01                              |
|           |       |         |                | Combined A+B | 4.80                                  | 4.97                                   | 9.97                              |

| Mode        | Rate | Channel | Freq.<br>[MHz] | Antenna      | Average<br>conducted PSD<br>[dBm/MHz] | Maximum*<br>conducted PSD<br>[dBm/MHz] | Maximum*<br>EIRP PSD<br>[dBm/MHz] |
|-------------|------|---------|----------------|--------------|---------------------------------------|----------------------------------------|-----------------------------------|
| 802.11n40   | HT0  | 38F     | 5190           | SISO CHAIN A | 2.37                                  | 2.52                                   | 7.52                              |
|             |      |         |                | SISO CHAIN B | 2.20                                  | 2.35                                   | 7.35                              |
|             |      | 46F     | 5230           | SISO CHAIN A | 2.20                                  | 2.35                                   | 7.35                              |
|             |      |         |                | SISO CHAIN B | 2.12                                  | 2.27                                   | 7.27                              |
|             | HT8  | 38F     | 5190           | MIMO CHAIN A | -0.44                                 | -0.10                                  | 4.90                              |
|             |      |         |                | MIMO CHAIN B | -0.58                                 | -0.26                                  | 4.74                              |
|             |      |         |                | Combined A+B | 2.50                                  | 2.83                                   | 7.83                              |
|             |      | 46F     | 5230           | MIMO CHAIN A | -0.51                                 | -0.17                                  | 4.83                              |
|             |      |         |                | MIMO CHAIN B | -0.64                                 | -0.32                                  | 4.68                              |
|             |      |         |                | Combined A+B | 2.44                                  | 2.77                                   | 7.77                              |
| 802.11ac80  | VHT0 | 42ac80  | 5210           | SISO CHAIN A | 0.05                                  | 0.36                                   | 5.36                              |
|             |      |         |                | SISO CHAIN B | 0.05                                  | 0.36                                   | 5.36                              |
|             |      |         |                | MIMO CHAIN A | -2.17                                 | -1.57                                  | 3.43                              |
|             |      |         |                | MIMO CHAIN B | -4.22                                 | -3.62                                  | 1.38                              |
|             |      |         |                | Combined A+B | -0.01                                 | 0.59                                   | 5.59                              |
| 802.11ac160 | VHT0 | 50ac160 | 5250           | SISO CHAIN A | -0.01                                 | 0.59                                   | 5.59                              |
|             |      |         |                | SISO CHAIN B | -6.70                                 | -6.18                                  | -1.18                             |
|             |      |         |                | MIMO CHAIN A | -6.85                                 | -6.31                                  | -1.31                             |
|             |      |         |                | MIMO CHAIN B | -9.44                                 | -8.47                                  | -3.47                             |
|             |      |         |                | Combined A+B | -9.23                                 | -8.26                                  | -3.26                             |

\* Maximum values are the duty cycle compensated values calculated from the measured average values

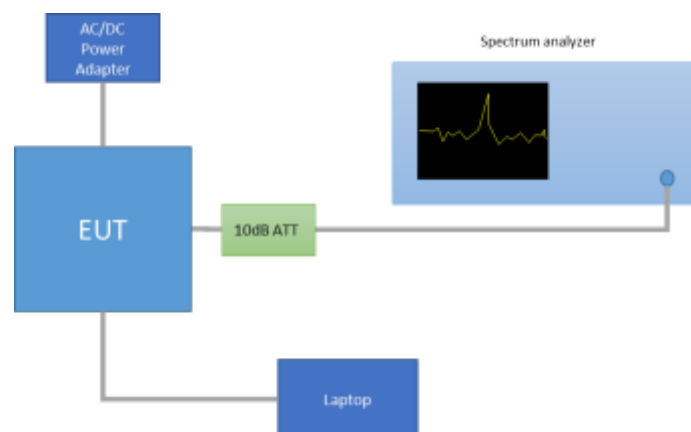
### B.2.3 Unwanted emission limits : Band Edge (Conducted)

#### Standard references

| RSS part                | Limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                       |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------|-------------------------|--------------------|-------|-----|----|---|--------|-----|------|---|---------|-----|----|---|-----------|-----|----|---|
| RSS-247, Clause 6.2.1.2 | For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250- 5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz. Otherwise, the transmission is considered as intentional and the devices shall implement dynamic frequency selection (DFS) and transmitter power control (TPC) as per the requirements for the band 5250-5350 MHz.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                       |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| RSS-GEN, Clause 8.9     | <p>Except when the requirements applicable to a given device state otherwise, emissions from license-exempt transmitters shall comply with the field strength limits shown in Table below. Additionally, the level of any transmitter emission shall not exceed the level of the transmitter's fundamental emission.</p> <table><tr><th>Freq Range (MHz)</th><th>Field Strength (μV/m)</th><th>Field Strength (dBμV/m)</th><th>Meas. Distance (m)</th></tr><tr><td>30-88</td><td>100</td><td>40</td><td>3</td></tr><tr><td>88-216</td><td>150</td><td>43.5</td><td>3</td></tr><tr><td>216-960</td><td>200</td><td>46</td><td>3</td></tr><tr><td>Above 960</td><td>500</td><td>54</td><td>3</td></tr></table> <p>Unless otherwise specified, for all frequencies greater than 1 GHz, the radiated emission limits for license-exempt radio apparatus stated in applicable RSSs (including RSS-Gen) are based on measurements using a linear average detector function having a minimum resolution bandwidth of 1 MHz. If an average limit is specified for the EUT, then the peak emission shall also be measured with instrumentation properly adjusted for such factors as pulse desensitization to ensure the peak emission is less than 20 dB above the average limit.</p> | Freq Range (MHz)        | Field Strength (μV/m) | Field Strength (dBμV/m) | Meas. Distance (m) | 30-88 | 100 | 40 | 3 | 88-216 | 150 | 43.5 | 3 | 216-960 | 200 | 46 | 3 | Above 960 | 500 | 54 | 3 |
| Freq Range (MHz)        | Field Strength (μV/m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Field Strength (dBμV/m) | Meas. Distance (m)    |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 30-88                   | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 40                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 88-216                  | 150                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 43.5                    | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 216-960                 | 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 46                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| Above 960               | 500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 54                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |

#### Test procedure

The setup below was used to measure undesirable emissions on the Band Edge domain. The antenna terminal of the EUT is connected to the spectrum analyzer through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss and the declared Antenna Gain.



Band Edge measurements in average mode on the low frequency section was done with the Video Bandwidth Method was used according to section G) 6) (KDB 789033 D02), with the following parameters:

- When the duty cycle is > 98 %, VBW = 10Hz
- When the duty cycle is < 98 %, VBW > 1/T, where T is defined in section II.B.1.a

In case of Band Edge measurements falling in restricted bands, the declared Antenna Gain is also compensated in the graph. The declared maximum antenna gain is 5dBi.

For Band Edge measurements falling in restricted bands, the following limits in dBm were applied for the average detector after the conversion from the limits detailed above in dBμV/m, according RSS-Gen Section 8.9. The limits in dBm for peak detector are 20dB above the indicated values in the table.

| §15.209(a)       |              |                                   | Converted values                     |             |
|------------------|--------------|-----------------------------------|--------------------------------------|-------------|
| Freq Range (MHz) | Distance (m) | Field strength (microvolts/meter) | Field strength (dB microvolts/meter) | Power (dBm) |
| Above 960        | 3            | 500                               | 54.0                                 | -41.2       |

**See Section B.3.4 for the screenshot results.**

## B.2.4 Unwanted emission limits: Spurious emission (Radiated)

### Standard references

| RSS part                | Limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                       |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------|-------------------------|--------------------|-------|-----|----|---|--------|-----|------|---|---------|-----|----|---|-----------|-----|----|---|
| RSS-247, Clause 6.2.1.2 | For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250- 5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz. Otherwise, the transmission is considered as intentional and the devices shall implement dynamic frequency selection (DFS) and transmitter power control (TPC) as per the requirements for the band 5250-5350 MHz.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                       |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| RSS-GEN, Clause 8.9     | <p>Except when the requirements applicable to a given device state otherwise, emissions from license-exempt transmitters shall comply with the field strength limits shown in Table below. Additionally, the level of any transmitter emission shall not exceed the level of the transmitter's fundamental emission.</p> <table><tr><th>Freq Range (MHz)</th><th>Field Strength (μV/m)</th><th>Field Strength (dBμV/m)</th><th>Meas. Distance (m)</th></tr><tr><td>30-88</td><td>100</td><td>40</td><td>3</td></tr><tr><td>88-216</td><td>150</td><td>43.5</td><td>3</td></tr><tr><td>216-960</td><td>200</td><td>46</td><td>3</td></tr><tr><td>Above 960</td><td>500</td><td>54</td><td>3</td></tr></table> <p>Unless otherwise specified, for all frequencies greater than 1 GHz, the radiated emission limits for license-exempt radio apparatus stated in applicable RSSs (including RSS-Gen) are based on measurements using a linear average detector function having a minimum resolution bandwidth of 1 MHz. If an average limit is specified for the EUT, then the peak emission shall also be measured with instrumentation properly adjusted for such factors as pulse desensitization to ensure the peak emission is less than 20 dB above the average limit.</p> | Freq Range (MHz)        | Field Strength (μV/m) | Field Strength (dBμV/m) | Meas. Distance (m) | 30-88 | 100 | 40 | 3 | 88-216 | 150 | 43.5 | 3 | 216-960 | 200 | 46 | 3 | Above 960 | 500 | 54 | 3 |
| Freq Range (MHz)        | Field Strength (μV/m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Field Strength (dBμV/m) | Meas. Distance (m)    |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 30-88                   | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 40                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 88-216                  | 150                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 43.5                    | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 216-960                 | 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 46                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| Above 960               | 500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 54                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |

### Test procedure

The setup below was used to measure the radiated spurious emissions.

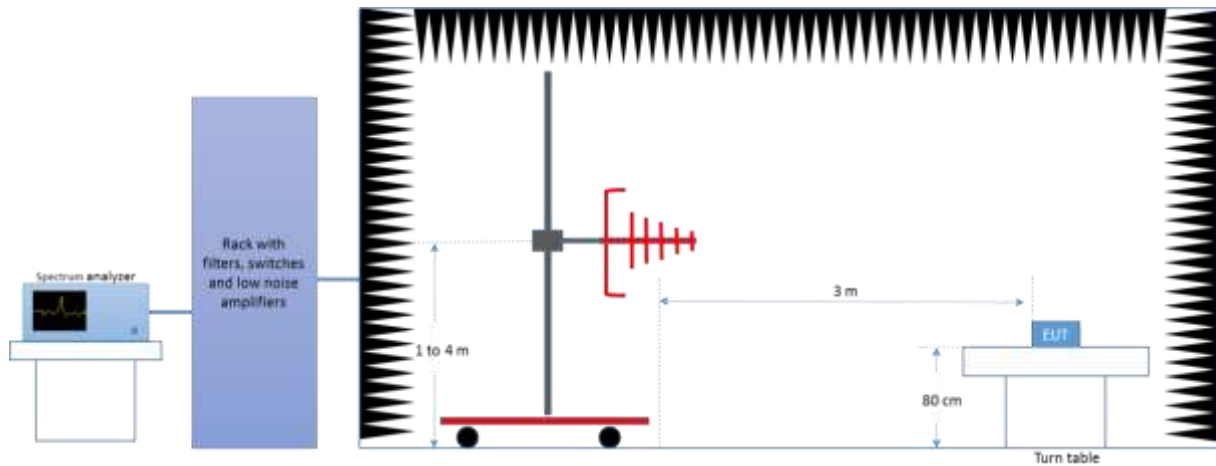
Depending of the frequency range and bands being tested, different antennas and filters were used.

The final measurement is done by varying the antenna height, the EUT azimuth over 360° and for both Vertical and Horizontal polarizations.

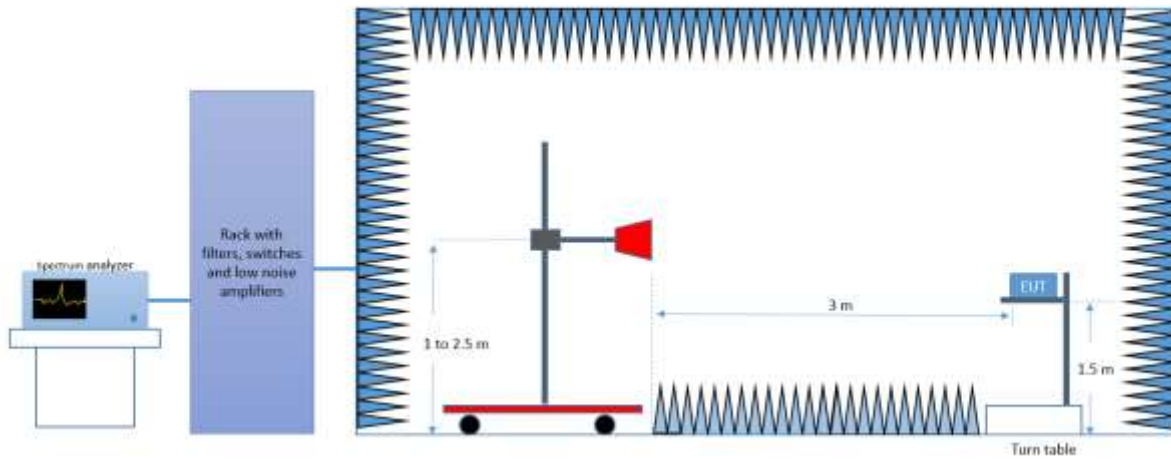
The radiated spurious emission was measured on the worst case configuration selected from the chapter B.2.2 and using the low, middle and high channel.

For technologies 802.n20, 802.n40 and 802.ac80 the worst case in terms of spurious emissions found among the low, mid and high channels when tested on chain A and B separately is used to perform the test in MIMO mode (Chain A+B).

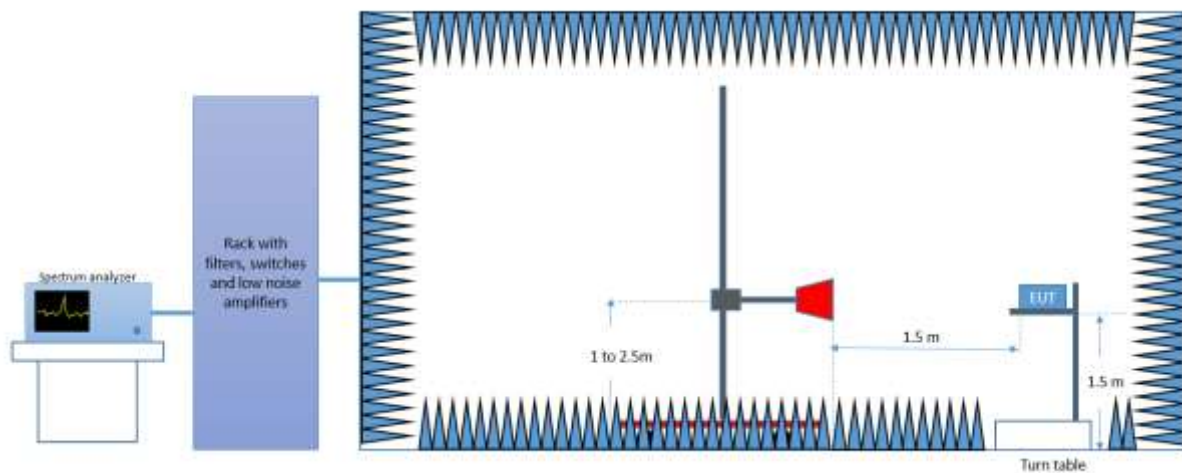
*Radiated Setup < 1GHz*



*Radiated Setup 1 GHz - 18 GHz*



*Radiated Setup 18 GHz - 40 GHz*



Sample Calculation

The field strength is deduced from the radiated measurement using the following equation:

$$E = 126.8 - 20\log(\lambda) + P - G$$

where

*E* is the field strength of the emission at the measurement distance, in dBμV/m

*P* is the power measured at the output of the test antenna, in dBm

*λ* is the wavelength of the emission under investigation  $[300/f_{MHz}]$ , in m

*G* is the gain of the test antenna, in dBi

NOTE – The measured power P includes all applicable instrument correction factors up to the connection to the test Antenna e.g. cable losses, amplifier gains.

For field strength measurements made at other than the distance at which the applicable limit is specified, the field strength of the emission at the distance specified by the limit is deduced as follows:

$$E_{SpecLimit} = E_{Meas} + 20\log(D_{Meas}/D_{SpecLimit})$$

where

*E<sub>SpecLimit</sub>* is the field strength of the emission at the distance specified by the limit, in dBμV/m

*E<sub>Meas</sub>* is the field strength of the emission at the measurement distance, in dBμV/m

*D<sub>Meas</sub>* is the measurement distance, in m

*D<sub>SpecLimit</sub>* is the distance specified by the limit, in m

# Test Results

## 30 MHz – 40 GHz, 802.11a, 6Mbps, Chain A

### Radiated Spurious – CH36

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 30.5    | ---    | 40     | 9.5    |
| 62.5      | ---     | 29.8   | 40     | 10.3   |
| 1124.9    | ---     | 37.6   | 54     | 16.5   |
| 2291.8    | 49.3    | ---    | 74     | 24.8   |
| 2464.4    | 49.1    | ---    | 74     | 24.9   |
| 2468.8    | ---     | 37.6   | 54     | 16.4   |
| 15539.5   | ---     | 47.0   | 54     | 7.1    |
| 15556.4   | 57.3    | ---    | 74     | 16.8   |
| 17984.4   | ---     | 49.9   | 54     | 4.1    |
| 17997.3   | 60.7    | ---    | 74     | 13.4   |
| 20719.8   | ---     | 39.7   | 54     | 14.4   |
| 39809.9   | 58.5    | ---    | 74     | 15.6   |
| 39830.9   | 58.3    | ---    | 74     | 15.7   |
| 39854.6   | ---     | 48.1   | 54     | 5.9    |

**Radiated Spurious – CH40**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 29.2    | ---    | 40     | 10.8   |
| 62.5      | ---     | 27.9   | 40     | 12.1   |
| 1125.2    | ---     | 37.5   | 54     | 16.5   |
| 1187.5    | ---     | 38.2   | 54     | 15.8   |
| 2343.9    | 50.3    | ---    | 74     | 23.8   |
| 2367.4    | 49.6    | ---    | 74     | 24.5   |
| 15597.9   | 57.8    | ---    | 74     | 16.3   |
| 15601.0   | ---     | 46.4   | 54     | 7.7    |
| 17981.7   | 60.9    | ---    | 74     | 13.2   |
| 17999.1   | ---     | 50.1   | 54     | 4.0    |
| 20799.8   | ---     | 39.5   | 54     | 14.5   |
| 39865.9   | 58.0    | ---    | 74     | 16.0   |
| 39876.9   | ---     | 48.1   | 54     | 6.0    |
| 39968.7   | 58.0    | ---    | 74     | 16.1   |

**Radiated Spurious – CH48**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 27.6    | ---    | 40     | 12.4   |
| 62.5      | ---     | 26.7   | 40     | 13.4   |
| 1124.9    | ---     | 37.3   | 54     | 16.7   |
| 1187.8    | ---     | 37.6   | 54     | 16.4   |
| 1592.3    | 44.8    | ---    | 74     | 29.2   |
| 2290.1    | 48.2    | ---    | 74     | 25.8   |
| 15713.9   | 55.1    | ---    | 74     | 19.0   |
| 15718.4   | ---     | 44.5   | 54     | 9.6    |
| 17995.1   | 61.1    | ---    | 74     | 13.0   |
| 17996.0   | ---     | 50.0   | 54     | 4.0    |
| 20960.0   | ---     | 39.0   | 54     | 15.1   |
| 39826.8   | 57.5    | ---    | 74     | 16.6   |
| 39837.8   | ---     | 47.2   | 54     | 6.9    |
| 39890.7   | 57.8    | ---    | 74     | 16.3   |

## 30 MHz – 40 GHz, 802.11a, 6Mbps, Chain B

### Radiated Spurious – CH36

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 28.1   | 40     | 11.9   |
| 62.5      | 29.7    | ---    | 40     | 10.4   |
| 1158.1    | 45.8    | ---    | 74     | 28.2   |
| 1187.5    | ---     | 37.3   | 54     | 16.7   |
| 2140.1    | 48.2    | ---    | 74     | 25.9   |
| 2340.7    | ---     | 37.3   | 54     | 16.8   |
| 15539.9   | 55.4    | ---    | 74     | 18.6   |
| 15540.4   | ---     | 45.0   | 54     | 9.1    |
| 17975.0   | ---     | 49.9   | 54     | 4.2    |
| 17998.7   | 61.3    | ---    | 74     | 12.7   |
| 39832.3   | ---     | 47.6   | 54     | 6.4    |
| 39891.7   | 58.1    | ---    | 74     | 15.9   |
| 39921.3   | ---     | 47.6   | 54     | 6.4    |
| 39969.8   | 58.1    | ---    | 74     | 16.0   |

## Radiated Spurious – CH40

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 28.9    | ---    | 40     | 11.2   |
| 62.5      | ---     | 26.9   | 40     | 13.2   |
| 1125.2    | ---     | 37.5   | 54     | 16.6   |
| 1187.5    | ---     | 37.6   | 54     | 16.4   |
| 2352.9    | 49.8    | ---    | 74     | 24.2   |
| 2430.3    | 48.5    | ---    | 74     | 25.5   |
| 15597.0   | 55.8    | ---    | 74     | 18.3   |
| 15601.5   | ---     | 45.5   | 54     | 8.6    |
| 17995.5   | 61.1    | ---    | 74     | 12.9   |
| 17997.8   | ---     | 50.2   | 54     | 3.9    |
| 20800.2   | ---     | 36.9   | 54     | 17.2   |
| 39779.3   | 57.5    | ---    | 74     | 16.5   |
| 39872.8   | 57.9    | ---    | 74     | 16.1   |
| 39895.2   | ---     | 47.3   | 54     | 6.7    |

**Radiated Spurious – CH48**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 33.6   | 40     | 6.5    |
| 62.5      | 35.0    | ---    | 40     | 5.1    |
| 1125.2    | 46.6    | ---    | 74     | 27.4   |
| 1125.2    | ---     | 37.7   | 54     | 16.3   |
| 1187.5    | ---     | 38.0   | 54     | 16.0   |
| 2252.6    | 49.3    | ---    | 74     | 24.8   |
| 15718.8   | ---     | 44.4   | 54     | 9.6    |
| 15722.8   | 55.1    | ---    | 74     | 19.0   |
| 17978.6   | 61.5    | ---    | 74     | 12.5   |
| 18000.0   | ---     | 50.0   | 54     | 4.0    |
| 20959.7   | ---     | 37.5   | 54     | 16.6   |
| 39812.3   | 57.5    | ---    | 74     | 16.6   |
| 39857.3   | ---     | 47.4   | 54     | 6.6    |
| 39949.5   | 57.5    | ---    | 74     | 16.5   |

## 30 MHz – 40 GHz, 802.11n20, HT0, Chain A

### Radiated Spurious – CH36

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 23.4   | 40     | 16.7   |
| 62.5      | 24.6    | ---    | 40     | 15.5   |
| 1124.9    | ---     | 37.5   | 54     | 16.6   |
| 1187.5    | ---     | 37.9   | 54     | 16.2   |
| 2148.0    | 49.8    | ---    | 74     | 24.2   |
| 3008.1    | 50.4    | ---    | 74     | 23.6   |
| 15533.7   | ---     | 46.3   | 54     | 7.8    |
| 15536.8   | 57.1    | ---    | 74     | 16.9   |
| 17966.1   | 61.9    | ---    | 74     | 12.2   |
| 17999.6   | ---     | 50.0   | 54     | 4.1    |
| 20720.1   | ---     | 38.5   | 54     | 15.6   |
| 39865.9   | 57.6    | ---    | 74     | 16.5   |
| 39939.8   | 58.6    | ---    | 74     | 15.5   |
| 39980.4   | ---     | 47.2   | 54     | 6.9    |

## Radiated Spurious – CH40

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 31.5    | ---    | 40     | 8.6    |
| 62.5      | ---     | 30.3   | 40     | 9.7    |
| 1124.9    | ---     | 37.7   | 54     | 16.3   |
| 1124.9    | 45.7    | ---    | 74     | 28.3   |
| 1187.5    | ---     | 38.1   | 54     | 16.0   |
| 2141.9    | 52.7    | ---    | 74     | 21.3   |
| 15595.7   | 57.2    | ---    | 74     | 16.8   |
| 15601.5   | ---     | 46.2   | 54     | 7.8    |
| 17968.8   | 60.6    | ---    | 74     | 13.4   |
| 17987.1   | ---     | 50.0   | 54     | 4.1    |
| 20799.8   | ---     | 40.5   | 54     | 13.6   |
| 20800.2   | 48.1    | ---    | 74     | 26.0   |
| 39853.9   | 57.8    | ---    | 74     | 16.3   |
| 39855.3   | ---     | 47.2   | 54     | 6.8    |

**Radiated Spurious – CH48**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 28.7    | ---    | 40     | 11.3   |
| 62.5      | ---     | 27.8   | 40     | 12.3   |
| 1000.0    | ---     | 37.5   | 54     | 16.6   |
| 1124.9    | ---     | 38.0   | 54     | 16.1   |
| 2255.7    | 47.7    | ---    | 74     | 26.3   |
| 5706.3    | 56.3    | ---    | 74     | 17.7   |
| 15721.5   | ---     | 44.3   | 54     | 9.8    |
| 15722.8   | 55.9    | ---    | 74     | 18.2   |
| 17983.5   | 60.6    | ---    | 74     | 13.5   |
| 17992.9   | ---     | 49.8   | 54     | 4.2    |
| 20960.0   | ---     | 40.0   | 54     | 14.1   |
| 39839.8   | 57.6    | ---    | 74     | 16.4   |
| 39856.0   | 58.3    | ---    | 74     | 15.8   |
| 39880.4   | ---     | 47.1   | 54     | 7.0    |

## 30 MHz – 40 GHz, 802.11n20, HT0, Chain B

### Radiated Spurious – CH36

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 29.4    | ---    | 40     | 10.6   |
| 62.5      | ---     | 28.4   | 40     | 11.7   |
| 1124.9    | 45.9    | ---    | 74     | 28.2   |
| 1124.9    | ---     | 37.1   | 54     | 16.9   |
| 1187.5    | ---     | 38.0   | 54     | 16.0   |
| 2143.8    | 48.3    | ---    | 74     | 25.8   |
| 15535.9   | ---     | 45.6   | 54     | 8.5    |
| 15551.5   | 55.6    | ---    | 74     | 18.4   |
| 17999.6   | ---     | 50.1   | 54     | 4.0    |
| 17999.6   | 61.3    | ---    | 74     | 12.8   |
| 39660.0   | 57.7    | ---    | 74     | 16.4   |
| 39793.8   | ---     | 47.0   | 54     | 7.0    |
| 39852.9   | 58.0    | ---    | 74     | 16.0   |
| 39865.6   | ---     | 47.2   | 54     | 6.8    |

**Radiated Spurious – CH40**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 32.2   | 40     | 7.9    |
| 62.5      | 32.9    | ---    | 40     | 7.1    |
| 1124.9    | ---     | 38.1   | 54     | 15.9   |
| 1187.5    | ---     | 37.3   | 54     | 16.8   |
| 2144.3    | 51.3    | ---    | 74     | 22.8   |
| 5632.0    | 55.8    | ---    | 74     | 18.3   |
| 15594.8   | ---     | 45.1   | 54     | 9.0    |
| 15606.8   | 55.6    | ---    | 74     | 18.5   |
| 17987.1   | ---     | 50.0   | 54     | 4.0    |
| 17996.0   | 61.7    | ---    | 74     | 12.4   |
| 20800.2   | ---     | 36.5   | 54     | 17.6   |
| 39742.5   | 57.3    | ---    | 74     | 16.8   |
| 39816.1   | 57.4    | ---    | 74     | 16.6   |
| 39867.7   | ---     | 47.2   | 54     | 6.9    |

## Radiated Spurious – CH48

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 31.9    | ---    | 40     | 8.2    |
| 62.5      | ---     | 31.3   | 40     | 8.8    |
| 1124.9    | ---     | 38.0   | 54     | 16.0   |
| 1187.5    | ---     | 37.8   | 54     | 16.2   |
| 2257.0    | 51.8    | ---    | 74     | 22.2   |
| 2294.8    | 49.5    | ---    | 74     | 24.5   |
| 15710.8   | 54.4    | ---    | 74     | 19.6   |
| 15718.8   | ---     | 44.2   | 54     | 9.9    |
| 17994.2   | 61.5    | ---    | 74     | 12.6   |
| 18000.0   | ---     | 50.1   | 54     | 4.0    |
| 20960.0   | ---     | 37.4   | 54     | 16.7   |
| 39855.6   | 57.8    | ---    | 74     | 16.2   |
| 39875.9   | ---     | 47.5   | 54     | 6.6    |
| 39883.1   | 58.0    | ---    | 74     | 16.1   |

# 30 MHz – 40 GHz, 802.11n20, HT8, Chain A+B

## Radiated Spurious – CH40

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 32.6      | ---     | 31.1   | 40     | 8.9    |
| 32.6      | 32.5    | ---    | 40     | 7.6    |
| 2435.4    | 49.8    | ---    | 74     | 24.2   |
| 2438.4    | ---     | 43.6   | 54     | 10.4   |
| 6370.8    | ---     | 46.0   | 54     | 8.1    |
| 6386.3    | 58.3    | ---    | 74     | 15.7   |
| 15594.3   | ---     | 47.6   | 54     | 6.5    |
| 15596.1   | 58.7    | ---    | 74     | 15.4   |
| 17991.1   | 61.2    | ---    | 74     | 12.8   |
| 17996.0   | ---     | 49.9   | 54     | 4.2    |
| 20799.8   | ---     | 38.5   | 54     | 15.6   |
| 39841.9   | ---     | 47.5   | 54     | 6.6    |
| 39916.5   | 58.2    | ---    | 74     | 15.9   |
| 39923.3   | 57.9    | ---    | 74     | 16.1   |

# 30 MHz – 40 GHz, 802.11n40, HT0, Chain A

## Radiated Spurious – CH38F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 46.2      | 34.2    | ---    | 40     | 5.9    |
| 46.9      | ---     | 23.8   | 40     | 16.3   |
| 1125.2    | ---     | 37.3   | 54     | 16.7   |
| 1187.5    | ---     | 38.0   | 54     | 16.0   |
| 1593.5    | 47.3    | ---    | 74     | 26.8   |
| 2280.5    | 49.3    | ---    | 74     | 24.8   |
| 15553.7   | ---     | 44.0   | 54     | 10.0   |
| 15589.9   | 54.9    | ---    | 74     | 19.2   |
| 17986.6   | ---     | 49.9   | 54     | 4.2    |
| 17992.4   | 61.0    | ---    | 74     | 13.1   |
| 20760.0   | ---     | 39.4   | 54     | 14.7   |
| 39849.1   | 57.5    | ---    | 74     | 16.6   |
| 39870.1   | 57.9    | ---    | 74     | 16.2   |
| 39874.2   | ---     | 47.3   | 54     | 6.7    |

## Radiated Spurious – CH46F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 28.9    | ---    | 40     | 11.1   |
| 62.5      | ---     | 28.2   | 40     | 11.8   |
| 1000.0    | ---     | 38.3   | 54     | 15.7   |
| 1187.5    | ---     | 36.5   | 54     | 17.5   |
| 2135.5    | 47.9    | ---    | 74     | 26.2   |
| 2345.1    | 51.8    | ---    | 74     | 22.2   |
| 15688.9   | ---     | 43.4   | 54     | 10.7   |
| 15692.9   | 54.5    | ---    | 74     | 19.5   |
| 17996.0   | ---     | 49.9   | 54     | 4.2    |
| 18000.0   | 61.5    | ---    | 74     | 12.5   |
| 20919.5   | 46.7    | ---    | 74     | 27.3   |
| 20919.8   | ---     | 39.0   | 54     | 15.1   |
| 39863.9   | ---     | 47.7   | 54     | 6.4    |
| 39926.8   | 57.7    | ---    | 74     | 16.3   |

# 30 MHz – 40 GHz, 802.11n40, HT0, Chain B

## Radiated Spurious – CH38F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.4      | 27.2    | ---    | 40     | 12.9   |
| 62.5      | ---     | 26.1   | 40     | 14.0   |
| 1000.0    | ---     | 38.1   | 54     | 16.0   |
| 1187.5    | ---     | 37.6   | 54     | 16.5   |
| 2144.1    | 53.0    | ---    | 74     | 21.1   |
| 2254.3    | 49.8    | ---    | 74     | 24.3   |
| 15564.0   | ---     | 43.9   | 54     | 10.2   |
| 15578.3   | 54.7    | ---    | 74     | 19.3   |
| 17992.9   | ---     | 49.8   | 54     | 4.3    |
| 17996.9   | 60.6    | ---    | 74     | 13.4   |
| 20760.0   | ---     | 37.6   | 54     | 16.5   |
| 39830.2   | 57.2    | ---    | 74     | 16.9   |
| 39843.3   | 57.4    | ---    | 74     | 16.7   |
| 39858.4   | ---     | 47.2   | 54     | 6.8    |

## Radiated Spurious – CH46F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 25.5    | ---    | 40     | 14.6   |
| 62.5      | ---     | 23.9   | 40     | 16.2   |
| 1000.0    | ---     | 38.7   | 54     | 15.3   |
| 1187.5    | ---     | 37.3   | 54     | 16.8   |
| 1596.2    | 46.4    | ---    | 74     | 27.7   |
| 2279.3    | 50.0    | ---    | 74     | 24.1   |
| 15702.8   | ---     | 43.2   | 54     | 10.9   |
| 15703.6   | 54.0    | ---    | 74     | 20.0   |
| 17992.4   | 61.1    | ---    | 74     | 13.0   |
| 18000.0   | ---     | 50.0   | 54     | 4.0    |
| 20919.8   | ---     | 37.6   | 54     | 16.5   |
| 39814.4   | 57.3    | ---    | 74     | 16.7   |
| 39832.9   | ---     | 47.6   | 54     | 6.5    |
| 39970.4   | 57.2    | ---    | 74     | 16.8   |

# 30 MHz – 40 GHz, 802.11n40, HT8, Chain A+B

## Radiated Spurious – CH38F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 27.0   | 40     | 13.1   |
| 62.5      | 28.0    | ---    | 40     | 12.0   |
| 1000.0    | 46.5    | ---    | 74     | 27.6   |
| 1000.0    | ---     | 39.6   | 54     | 14.5   |
| 1124.9    | 46.2    | ---    | 74     | 27.9   |
| 1187.5    | ---     | 37.3   | 54     | 16.7   |
| 15568.5   | ---     | 45.7   | 54     | 8.3    |
| 15583.2   | 56.4    | ---    | 74     | 17.6   |
| 17993.3   | ---     | 50.1   | 54     | 3.9    |
| 17999.1   | 61.3    | ---    | 74     | 12.8   |
| 20760.0   | 47.3    | ---    | 74     | 26.8   |
| 20760.0   | ---     | 40.3   | 54     | 13.8   |
| 39828.5   | ---     | 47.1   | 54     | 6.9    |
| 39903.4   | 58.1    | ---    | 74     | 15.9   |

# 30 MHz – 40 GHz, 802.11ac80, VHT0, Chain A

## Radiated Spurious – CH42ac80

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 26.2    | ---    | 40     | 13.9   |
| 62.5      | ---     | 25.1   | 40     | 14.9   |
| 1000.0    | ---     | 38.2   | 54     | 15.9   |
| 1187.5    | ---     | 37.6   | 54     | 16.5   |
| 2416.5    | 51.0    | ---    | 74     | 23.0   |
| 2626.9    | 50.7    | ---    | 74     | 23.4   |
| 15634.5   | ---     | 43.6   | 54     | 10.5   |
| 15639.0   | 53.9    | ---    | 74     | 20.2   |
| 17988.4   | ---     | 50.0   | 54     | 4.1    |
| 17993.8   | 61.2    | ---    | 74     | 12.8   |
| 20839.7   | ---     | 38.8   | 54     | 15.3   |
| 39817.8   | 57.6    | ---    | 74     | 16.5   |
| 39836.0   | 57.8    | ---    | 74     | 16.3   |
| 39883.8   | ---     | 47.5   | 54     | 6.5    |

# 30 MHz – 40 GHz, 802.11ac80, VHT0, Chain B

## Radiated Spurious – CH42ac80

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 28.5    | ---    | 40     | 11.5   |
| 62.5      | ---     | 27.4   | 40     | 12.7   |
| 1000.0    | ---     | 38.4   | 54     | 15.7   |
| 2139.4    | ---     | 38.3   | 54     | 15.8   |
| 2143.1    | 54.7    | ---    | 74     | 19.4   |
| 2577.8    | 51.3    | ---    | 74     | 22.7   |
| 15638.5   | ---     | 43.8   | 54     | 10.3   |
| 15641.2   | 54.1    | ---    | 74     | 20.0   |
| 17980.4   | 61.1    | ---    | 74     | 13.0   |
| 17991.1   | ---     | 50.1   | 54     | 4.0    |
| 24538.1   | ---     | 37.4   | 54     | 16.7   |
| 39847.4   | ---     | 47.3   | 54     | 6.8    |
| 39854.6   | 57.5    | ---    | 74     | 16.6   |
| 39977.0   | 57.3    | ---    | 74     | 16.8   |

# 30 MHz – 40 GHz, 802.11ac80, VHT0, Chain A+B

## Radiated Spurious – CH42ac80

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 28.4    | ---    | 40     | 11.4   |
| 62.5      | ---     | 27.4   | 40     | 12.7   |
| 1000.0    | ---     | 40.3   | 54     | 13.7   |
| 1000.2    | 47.3    | ---    | 74     | 26.8   |
| 1187.5    | ---     | 37.7   | 54     | 16.3   |
| 2290.6    | 48.9    | ---    | 74     | 25.1   |
| 15619.3   | 55.5    | ---    | 74     | 18.5   |
| 15632.3   | ---     | 44.6   | 54     | 9.4    |
| 17967.0   | 61.0    | ---    | 74     | 13.1   |
| 18000.0   | ---     | 50.0   | 54     | 4.0    |
| 20839.7   | 47.4    | ---    | 74     | 26.6   |
| 20839.7   | ---     | 41.1   | 54     | 12.9   |
| 39867.7   | ---     | 47.4   | 54     | 6.7    |
| 39986.3   | 57.4    | ---    | 74     | 16.6   |

# 30 MHz – 40 GHz, 802.11ac160, VHT0, Chain A

## Radiated Spurious – CH50ac160

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 27.0    | ---    | 40     | 13.1   |
| 62.5      | ---     | 25.5   | 40     | 14.5   |
| 5407.6    | ---     | 50.5   | 54     | 3.6    |
| 5418.4    | 62.5    | ---    | 74     | 11.5   |
| 5426.3    | 62.8    | ---    | 74     | 11.2   |
| 5426.8    | ---     | 50.2   | 54     | 3.8    |
| 15976.2   | 54.8    | ---    | 74     | 19.3   |
| 15983.8   | ---     | 43.2   | 54     | 10.9   |
| 17981.3   | 62.6    | ---    | 74     | 11.5   |
| 17983.9   | ---     | 50.1   | 54     | 3.9    |
| 20999.6   | 46.3    | ---    | 74     | 27.7   |
| 20999.9   | ---     | 39.4   | 54     | 14.7   |
| 39807.5   | 57.5    | ---    | 74     | 16.5   |
| 39843.9   | ---     | 47.6   | 54     | 6.5    |

# 30 MHz – 40 GHz, 802.11ac160, VHT0, Chain B

## Radiated Spurious – CH50ac160

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 28.5    | ---    | 40     | 11.5   |
| 62.5      | ---     | 27.5   | 40     | 12.5   |
| 5403.0    | ---     | 51.8   | 54     | 2.3    |
| 5406.2    | 64.4    | ---    | 74     | 9.7    |
| 5426.3    | 64.1    | ---    | 74     | 10.0   |
| 5428.5    | ---     | 51.0   | 54     | 3.0    |
| 15930.7   | ---     | 42.7   | 54     | 11.4   |
| 15930.7   | 54.5    | ---    | 74     | 19.5   |
| 17983.9   | 61.7    | ---    | 74     | 12.3   |
| 17999.6   | ---     | 50.1   | 54     | 4.0    |
| 20999.9   | ---     | 38.1   | 54     | 16.0   |
| 39818.5   | 57.8    | ---    | 74     | 16.2   |
| 39820.9   | 57.8    | ---    | 74     | 16.2   |
| 39857.0   | ---     | 47.4   | 54     | 6.7    |

# 30 MHz – 40 GHz, 802.11ac160, VHT0, Chain A+B

## Radiated Spurious – CH50ac160

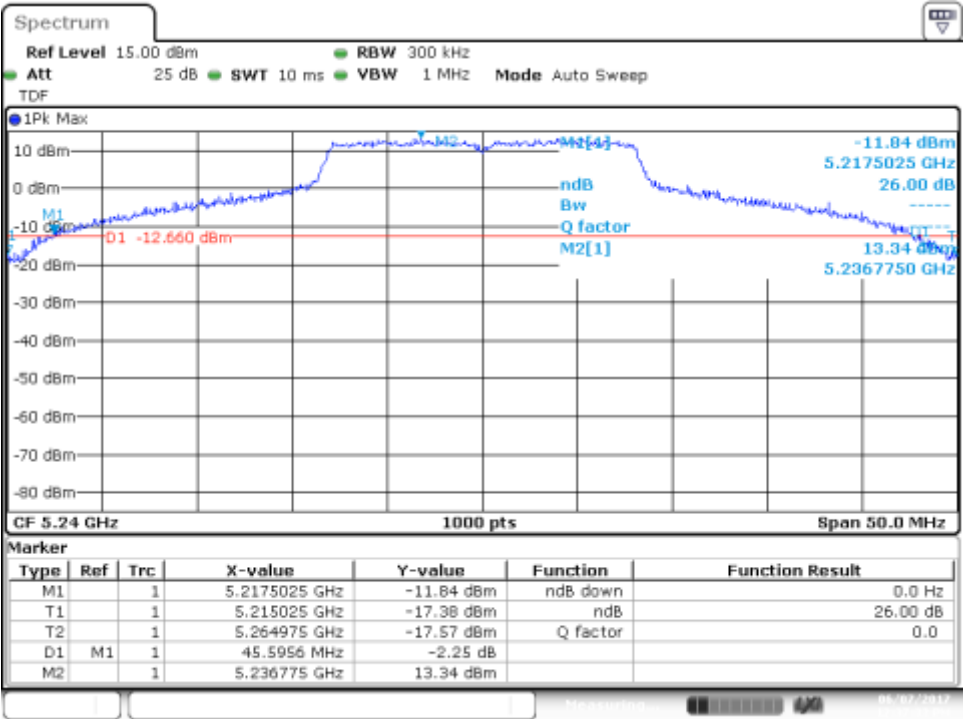
| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 26.8    | ---    | 40     | 13.2   |
| 62.5      | ---     | 26.3   | 40     | 13.8   |
| 1000.0    | ---     | 39.6   | 54     | 14.4   |
| 1187.5    | ---     | 38.2   | 54     | 15.9   |
| 2281.8    | 51.3    | ---    | 74     | 22.8   |
| 2367.2    | 49.1    | ---    | 74     | 25.0   |
| 13542.0   | ---     | 39.8   | 54     | 14.3   |
| 13585.3   | 51.0    | ---    | 74     | 23.1   |
| 17994.2   | ---     | 50.1   | 54     | 4.0    |
| 17999.6   | 61.2    | ---    | 74     | 12.9   |
| 20999.9   | ---     | 40.7   | 54     | 13.4   |
| 39534.6   | 57.5    | ---    | 74     | 16.5   |
| 39859.1   | 57.8    | ---    | 74     | 16.3   |
| 39859.4   | ---     | 47.1   | 54     | 6.9    |

### B.3 Test Results Screenshot 5150 - 5250 MHz

#### B.3.1 26dB Bandwidth

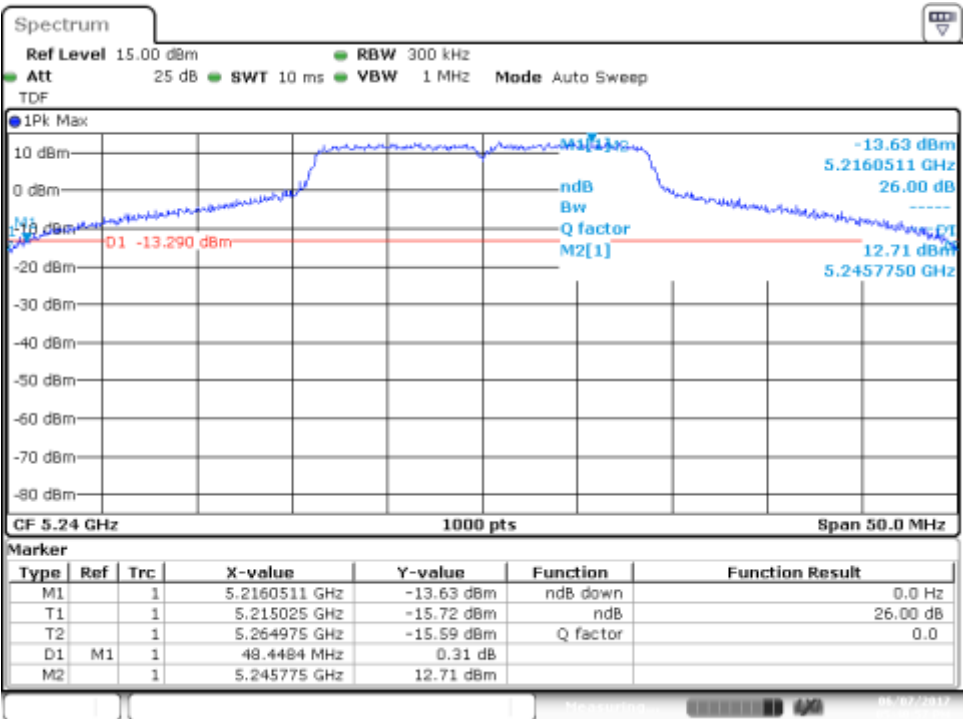
## SISO-B, 802.11a, 6Mbps

Channel 48



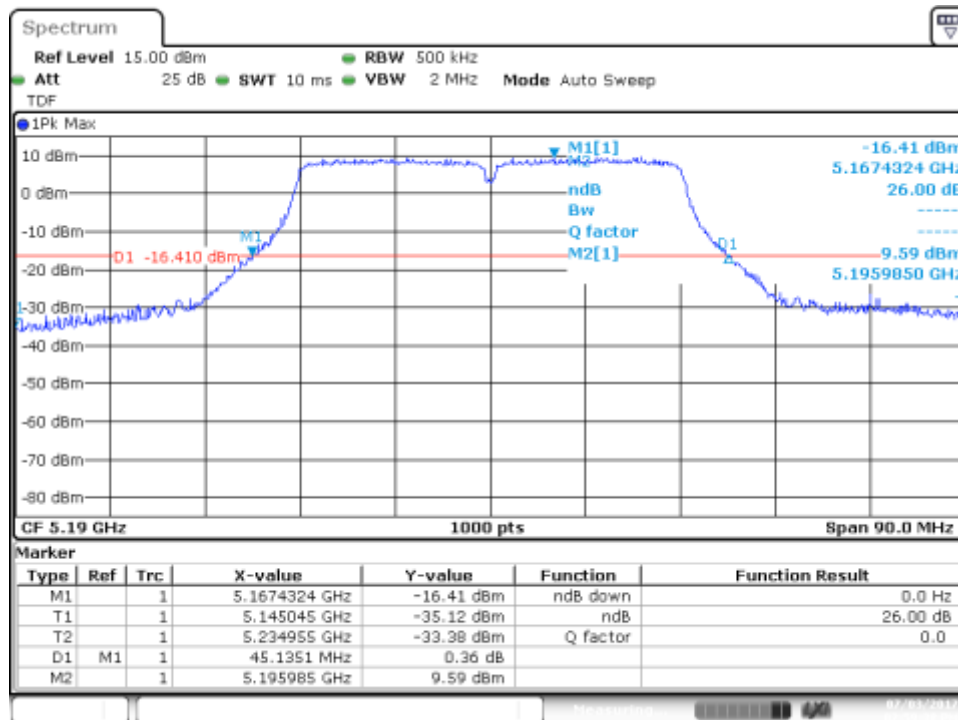
## SISO-A, 802.11n20, HT0

Channel 48



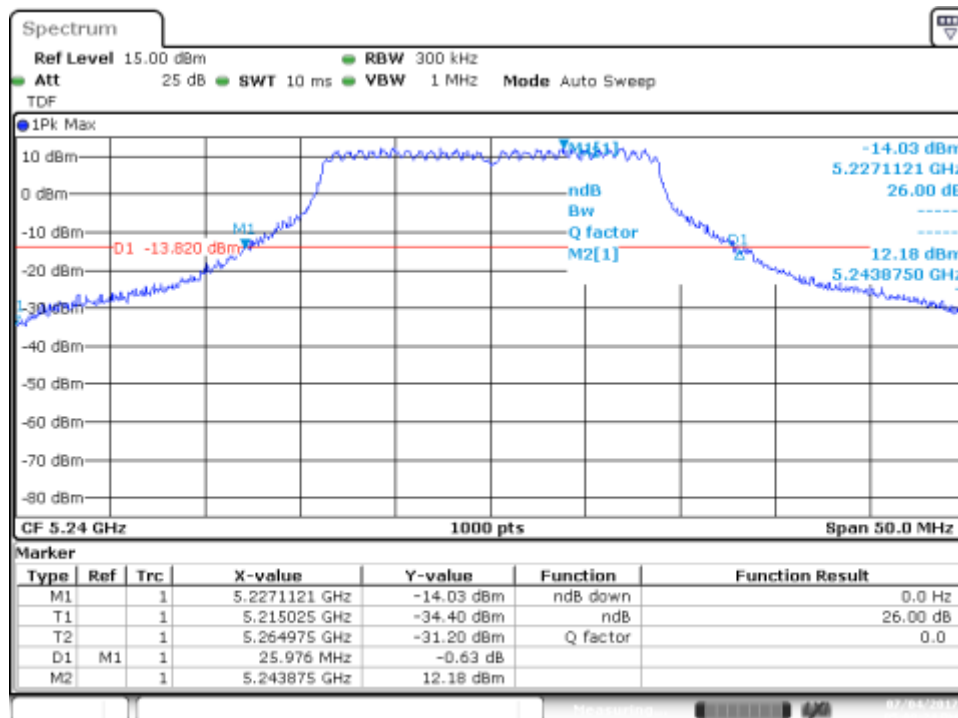
## SISO-A, 802.11n40, HT0

Channel 38F



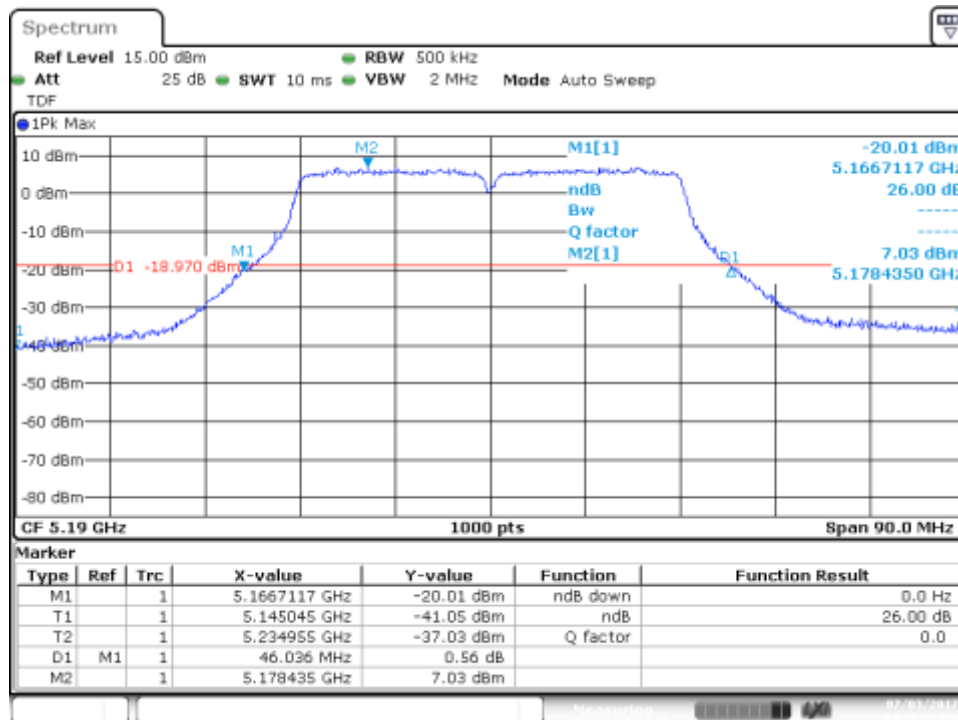
## MIMO-B, 802.11n20, HT8

Channel 48



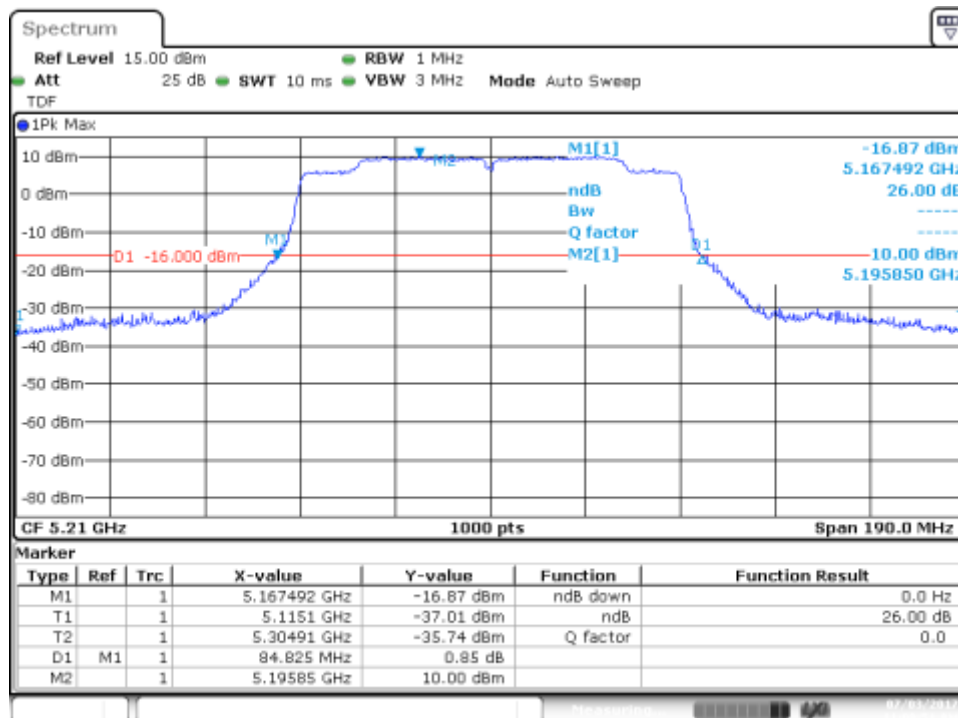
## MIMO-A, 802.11n40, HT8

Channel 38F



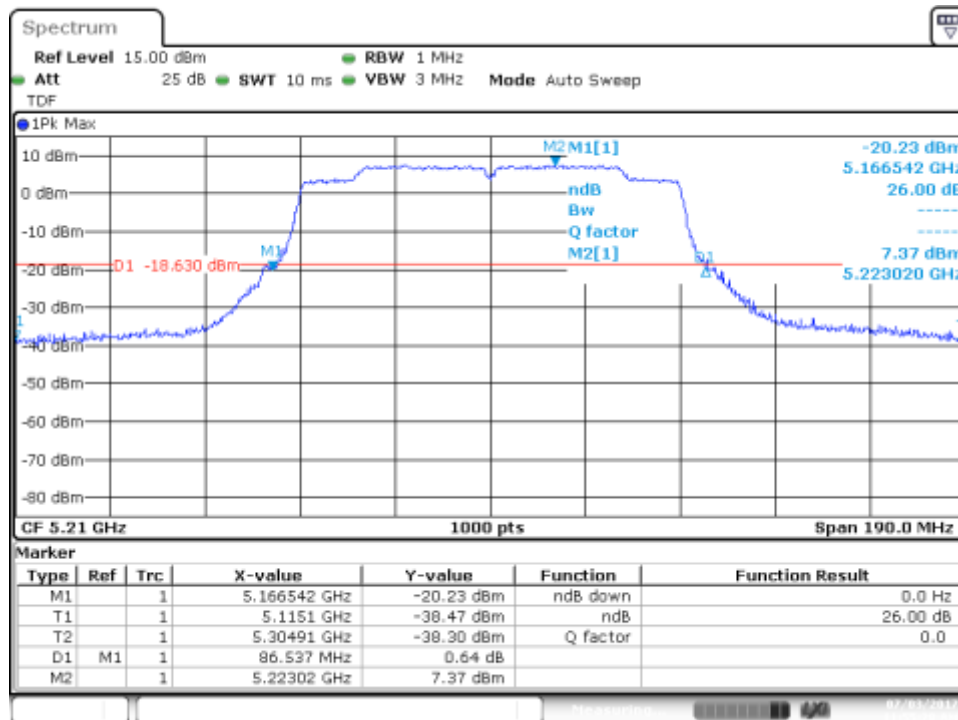
## SISO-A, 802.11ac80, VHT0

Channel 42ac80



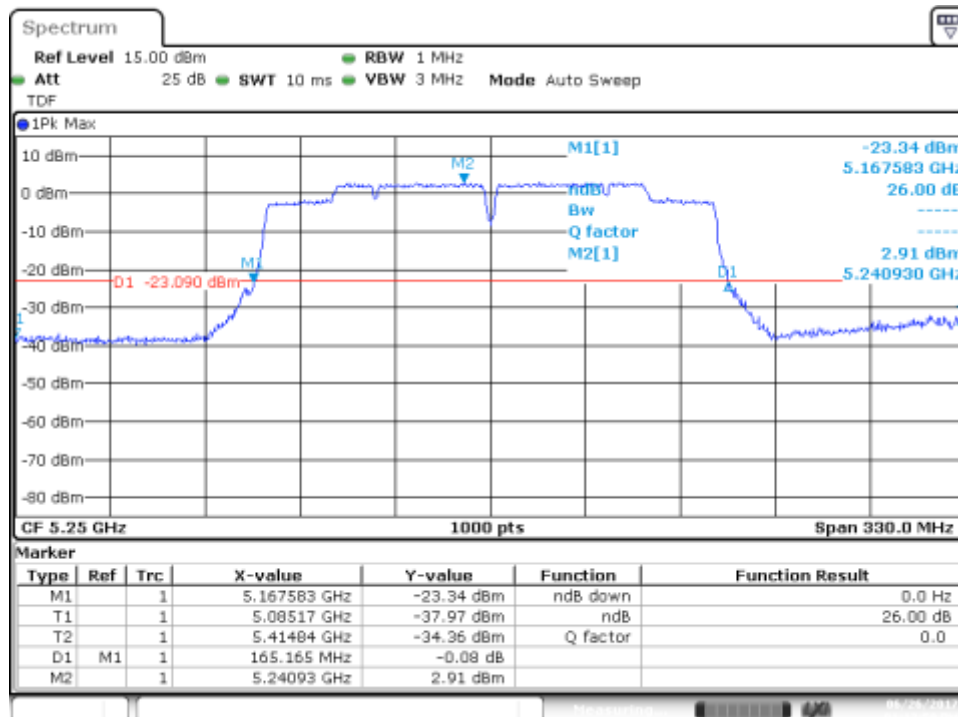
## MIMO-A, 802.11ac80, VHT0

Channel 42ac80



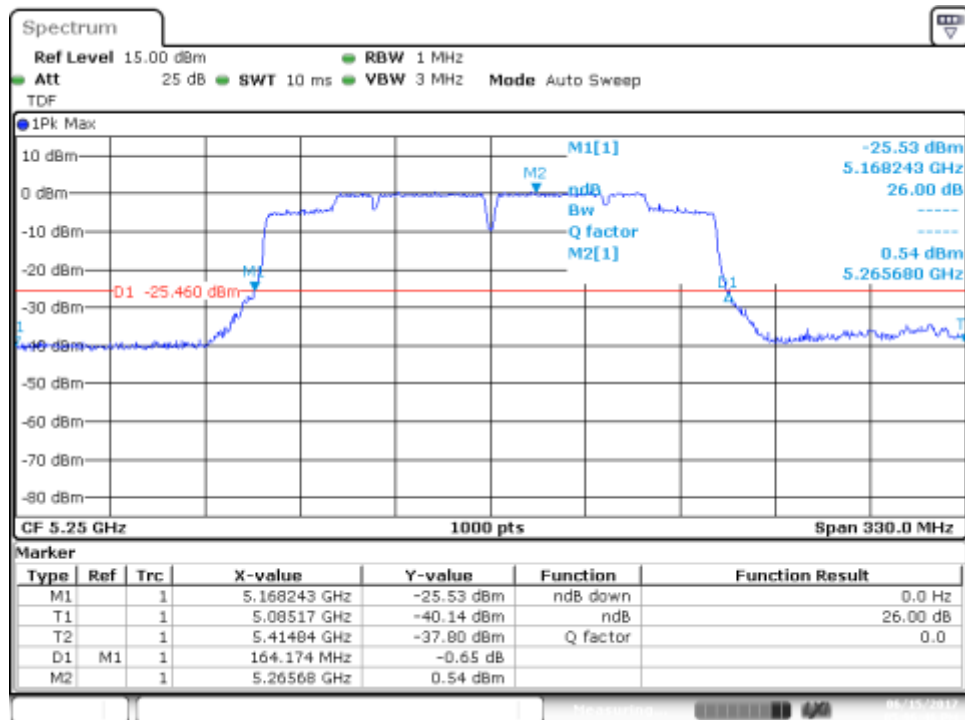
## SISO-A, 802.11ac160, VHT0

Channel 50ac160



# MIMO-A, 802.11ac160, VHT0

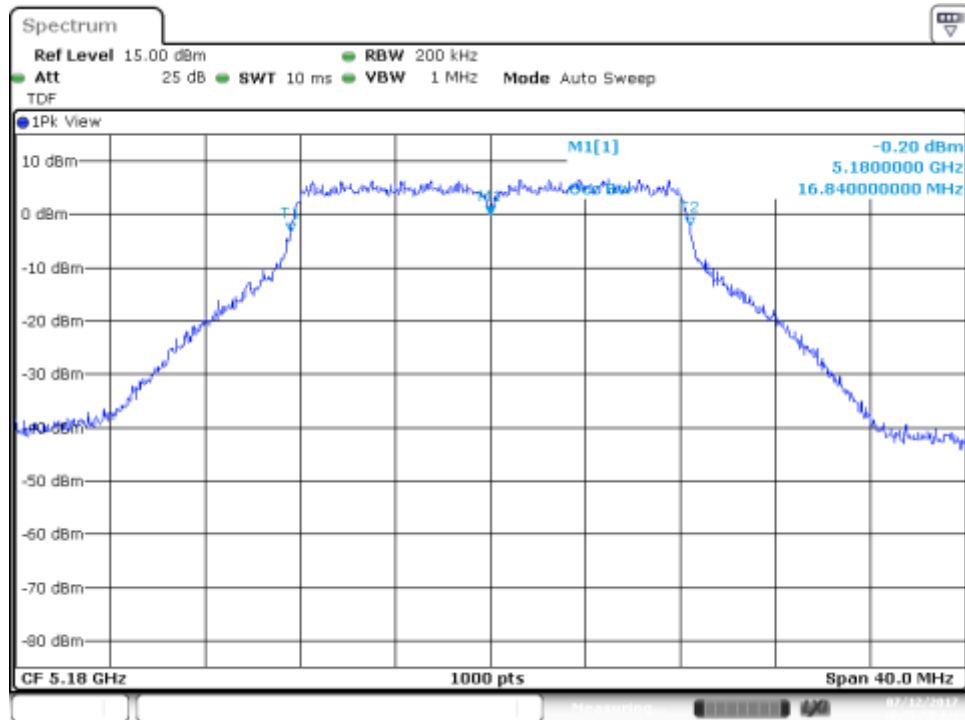
Channel 50ac160



## B.3.2 99% Bandwidth

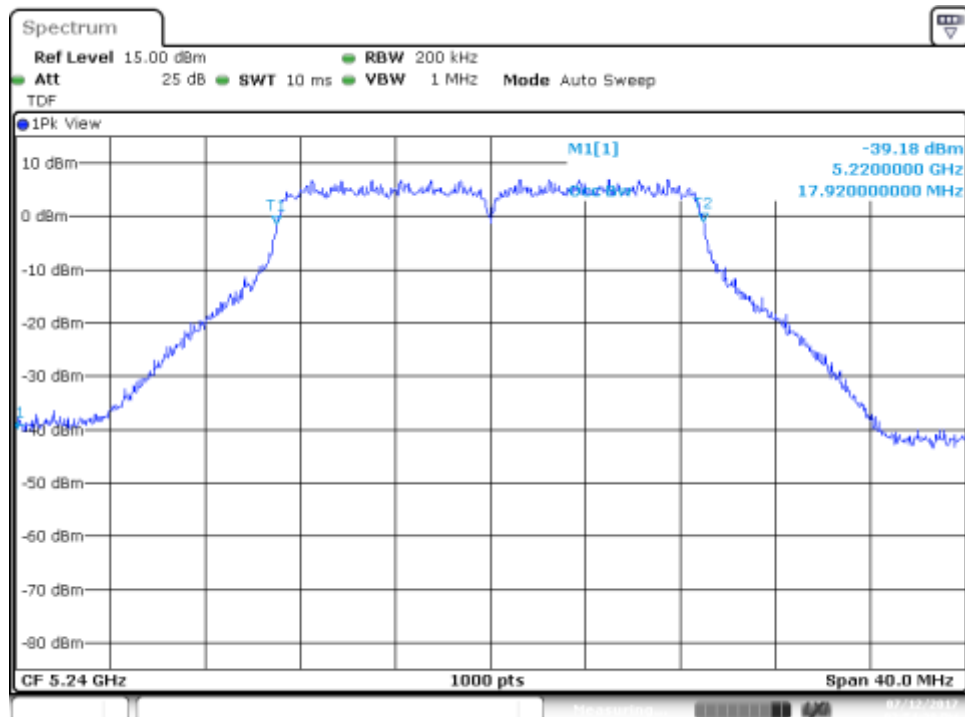
### SISO-A, 802.11a, 6Mbps

Channel 36



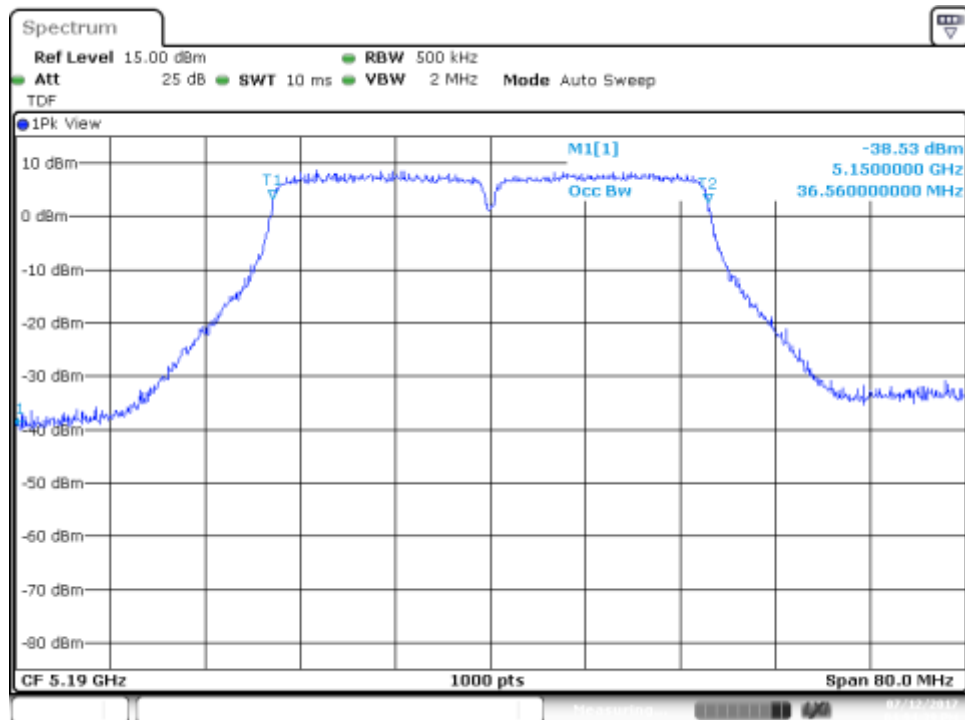
### SISO-A, 802.11n20, HT0

Channel 48



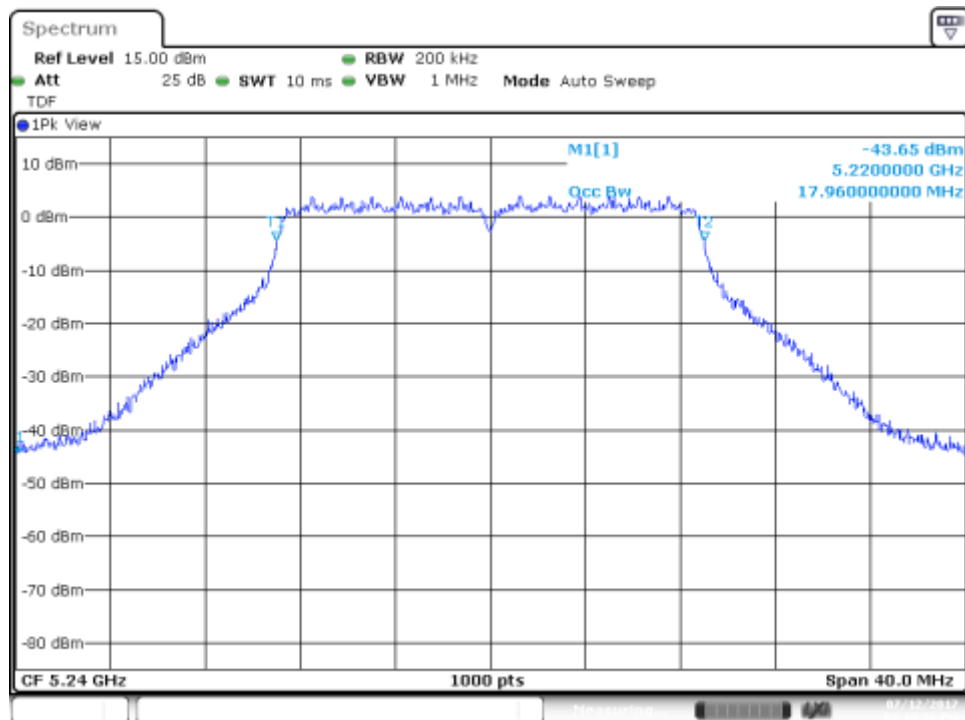
## SISO-A, 802.11n40, HT0

Channel 38F



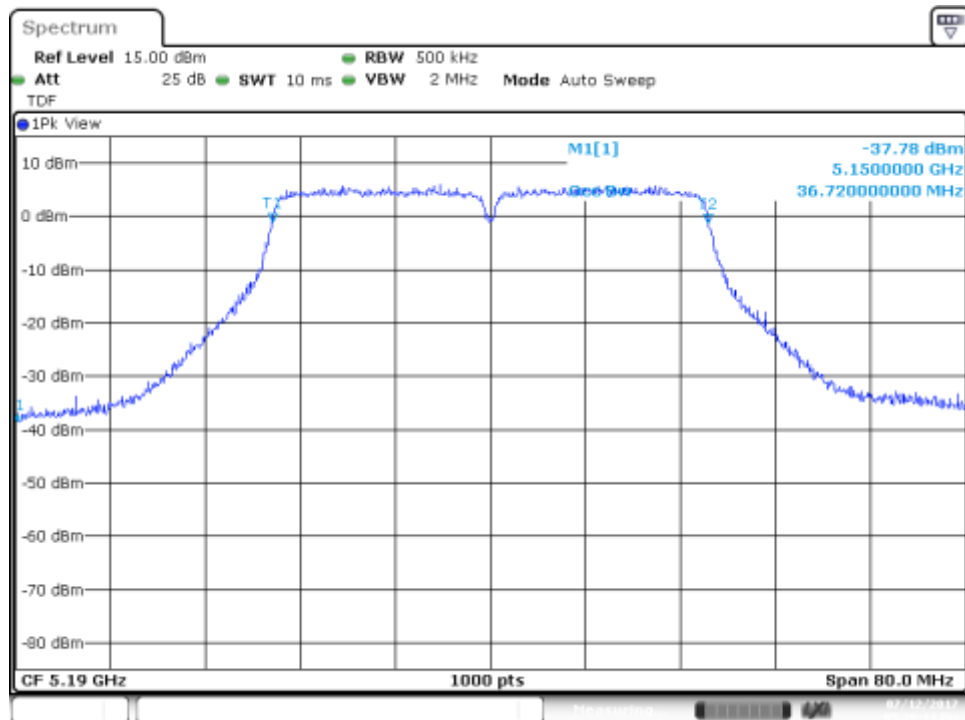
## MIMO-A, 802.11n20, HT8

Channel 40



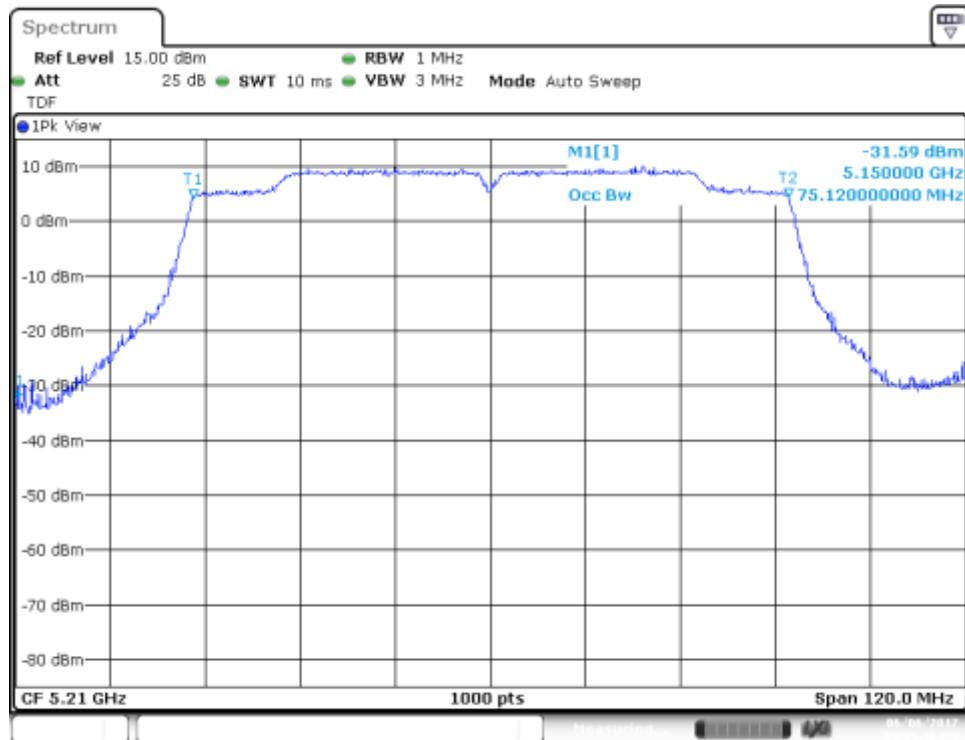
## MIMO-A, 802.11n40, HT8

Channel 38F



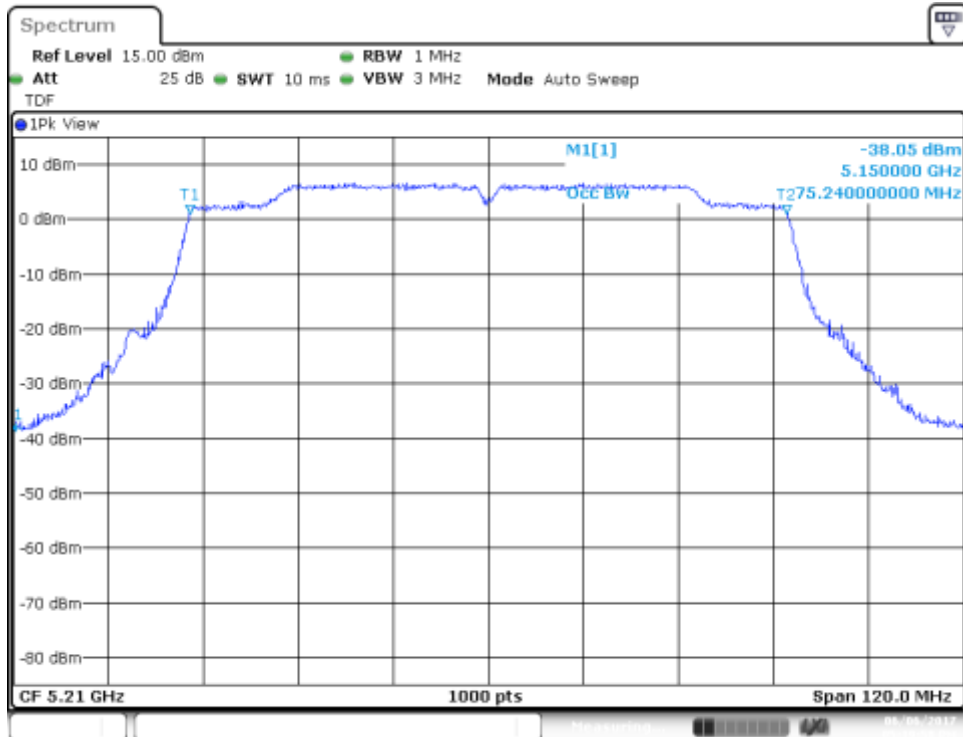
## SISO-A, 802.11ac80, VHT0

Channel 42ac80



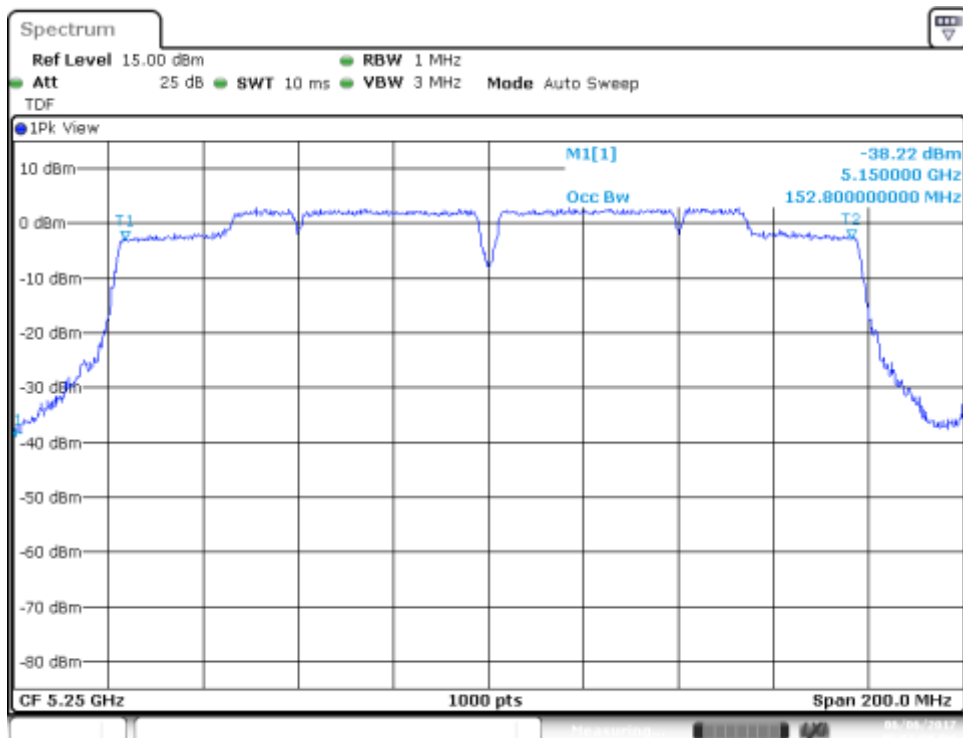
## MIMO-A, 802.11ac80, VHT0

Channel 42ac80



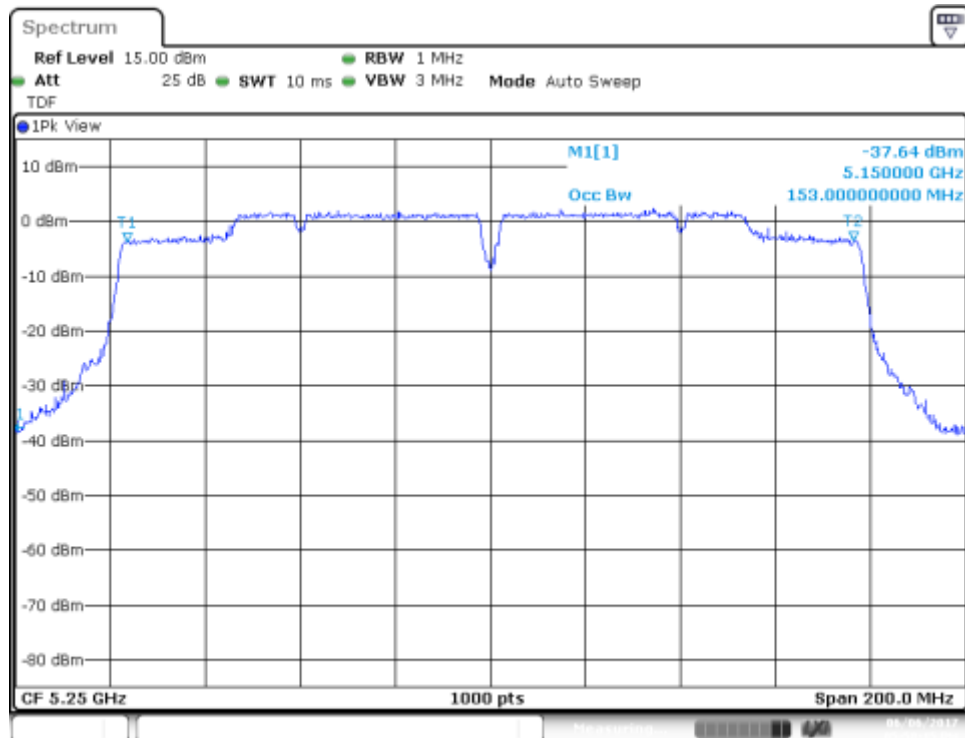
## SISO-A, 802.11ac160, VHT0

Channel 50ac160



## MIMO-A, 802.11ac160, VHT0

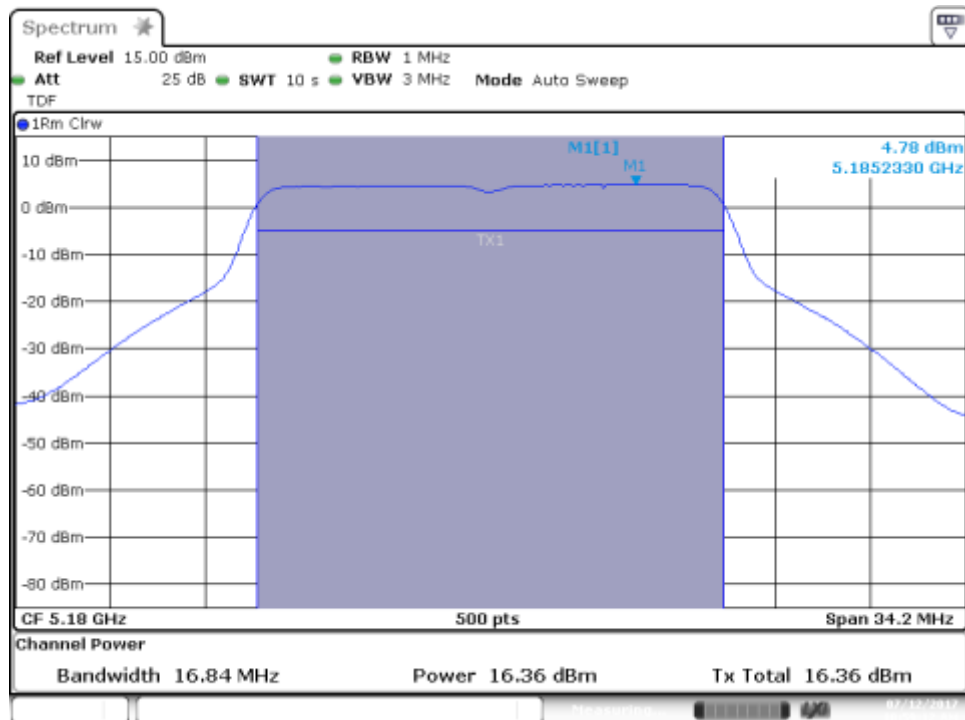
Channel 50ac160



### B.3.3 Power Limits. Maximum Output power & Peak power spectral density

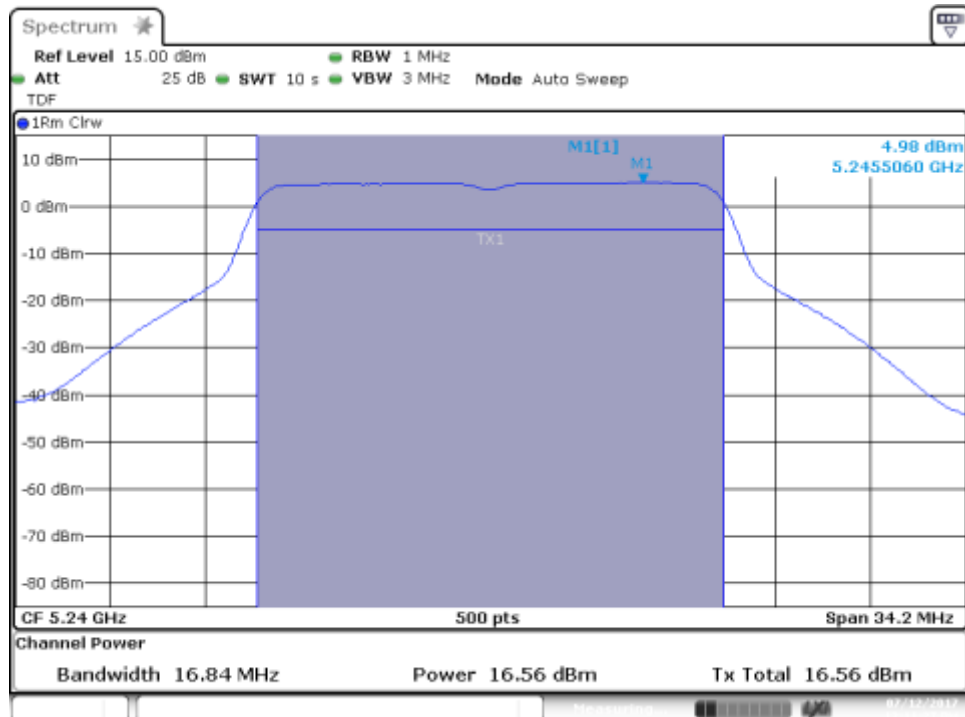
#### SISO-A, 802.11a, 6Mbps

Channel 36



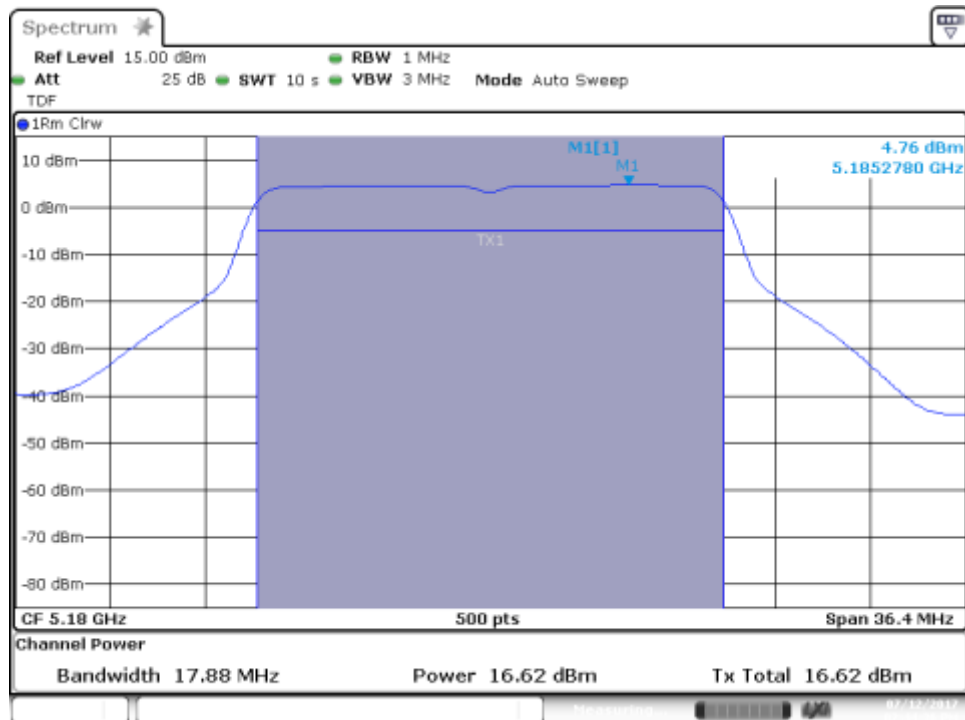
#### SISO-B, 802.11a, 6Mbps

Channel 48



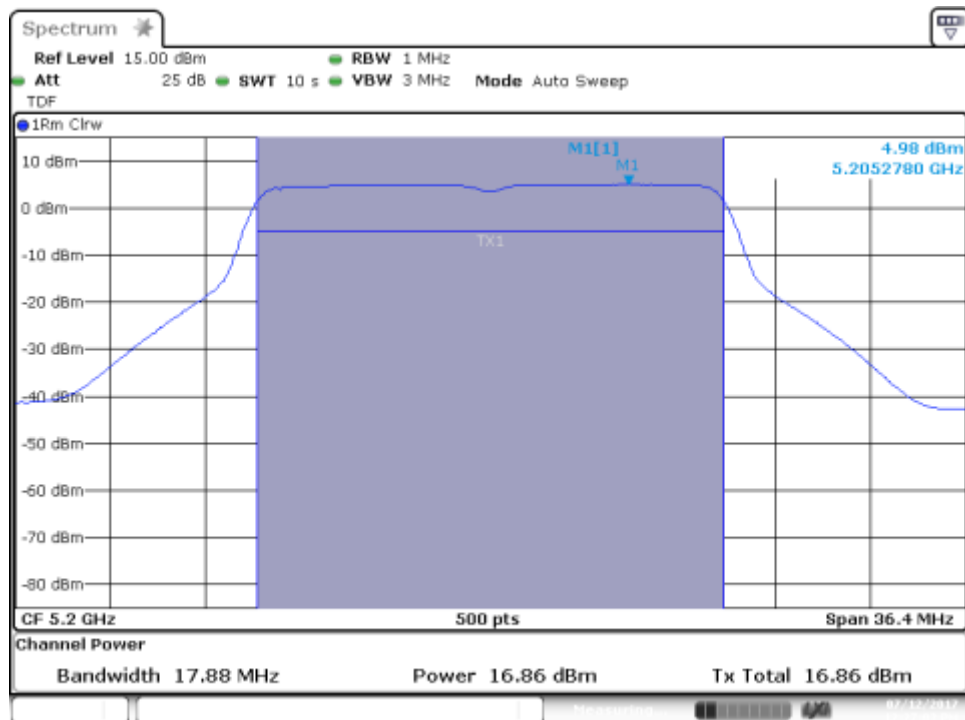
## SISO-A, 802.11n20, HT0

Channel 36



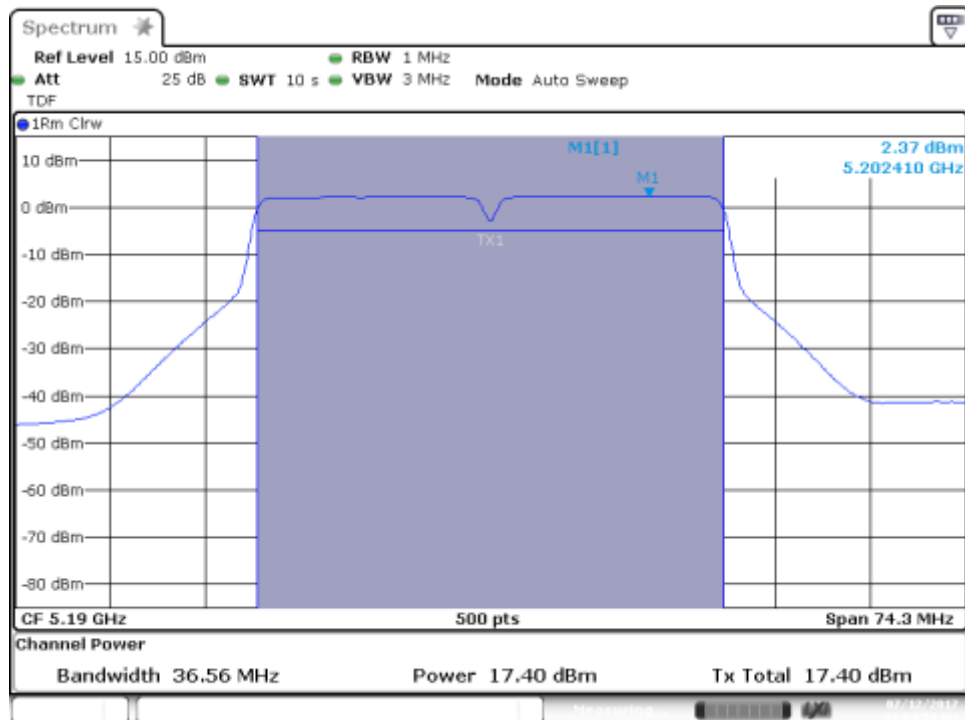
## SISO-B, 802.11n20, HT0

Channel 40



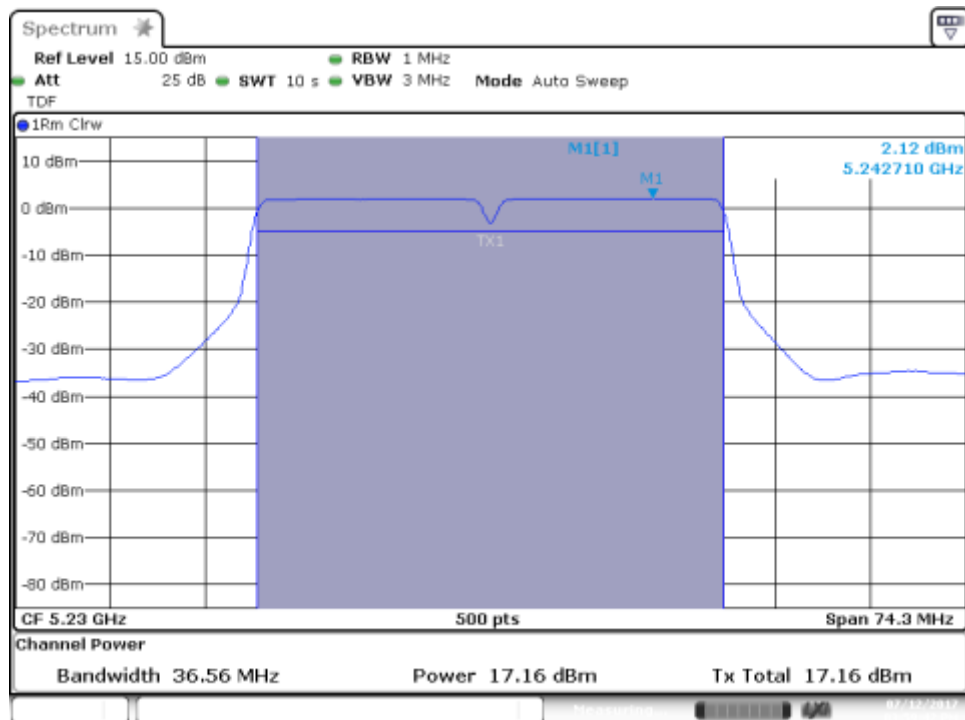
## SISO-A, 802.11n40, HT0

Channel 38F



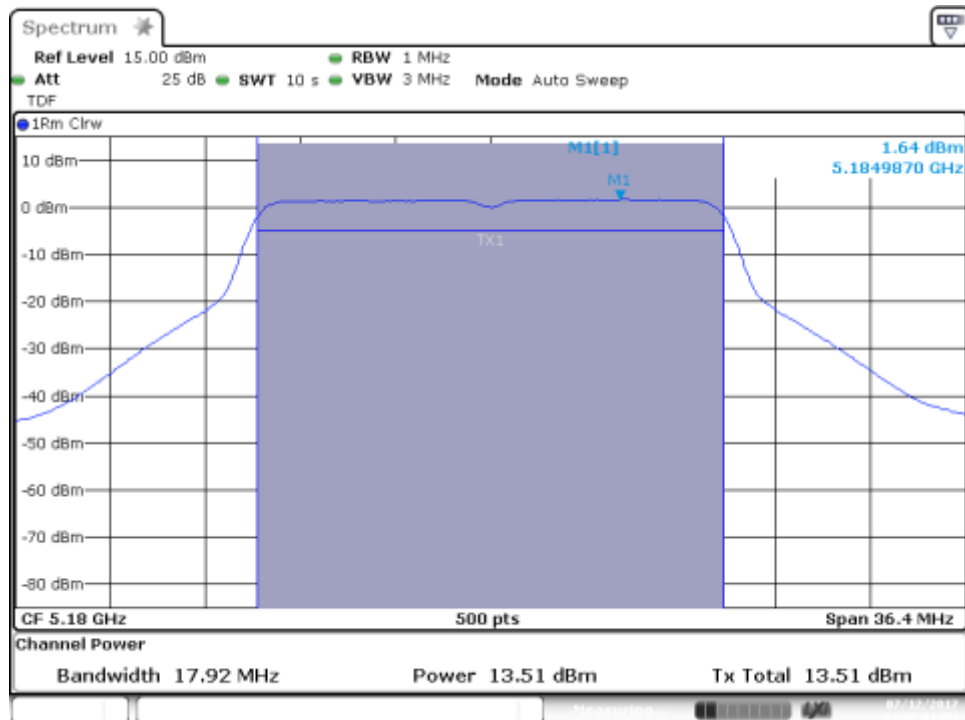
## SISO-B, 802.11n40, HT0

Channel 46F



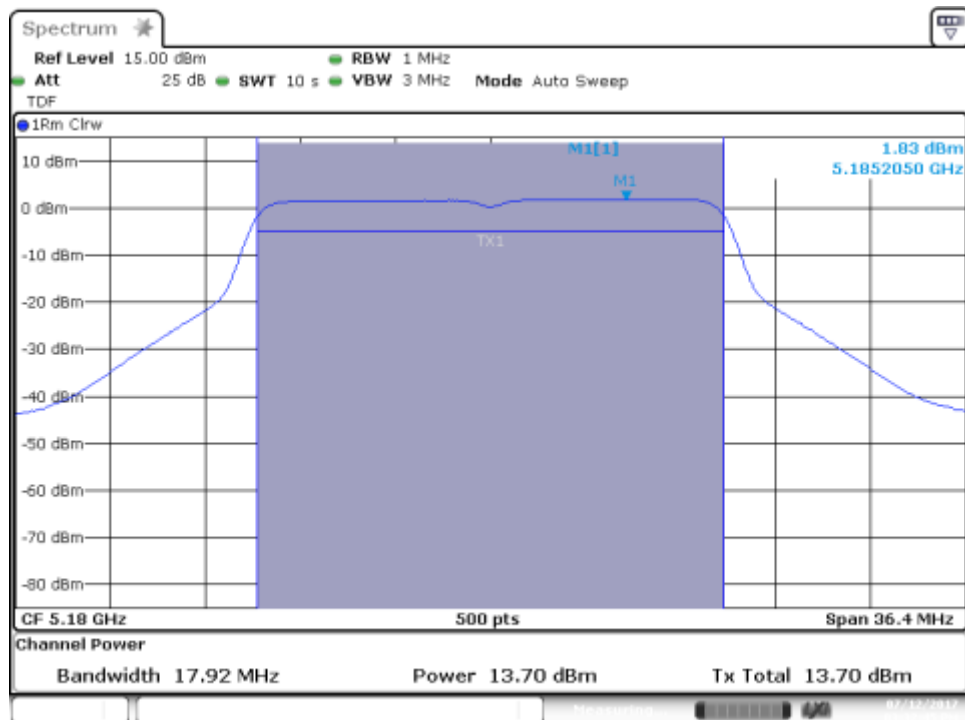
## MIMO-A, 802.11n20, HT8

Channel 36



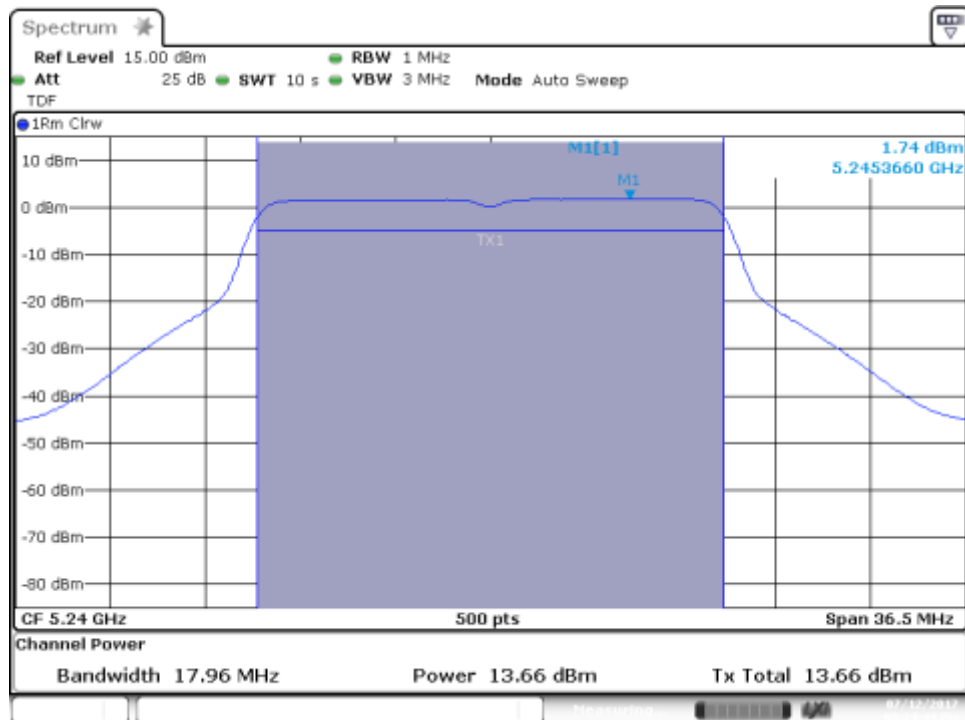
## MIMO-B, 802.11n20, HT8

Channel 36



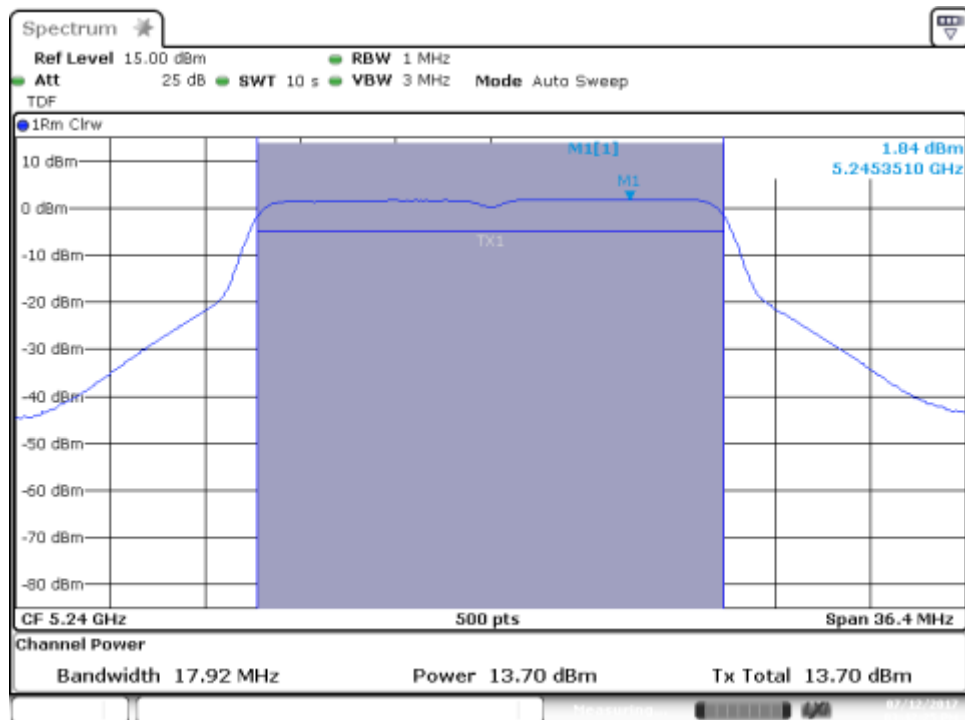
## MIMO-A, 802.11n20, HT8

Channel 48



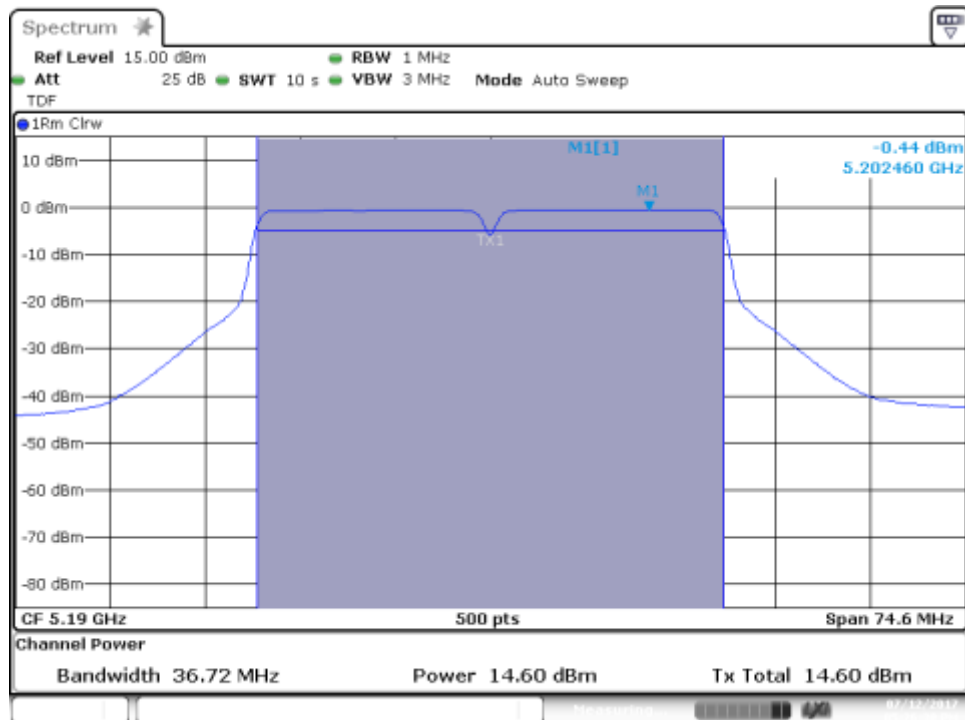
## MIMO-B, 802.11n20, HT8

Channel 48



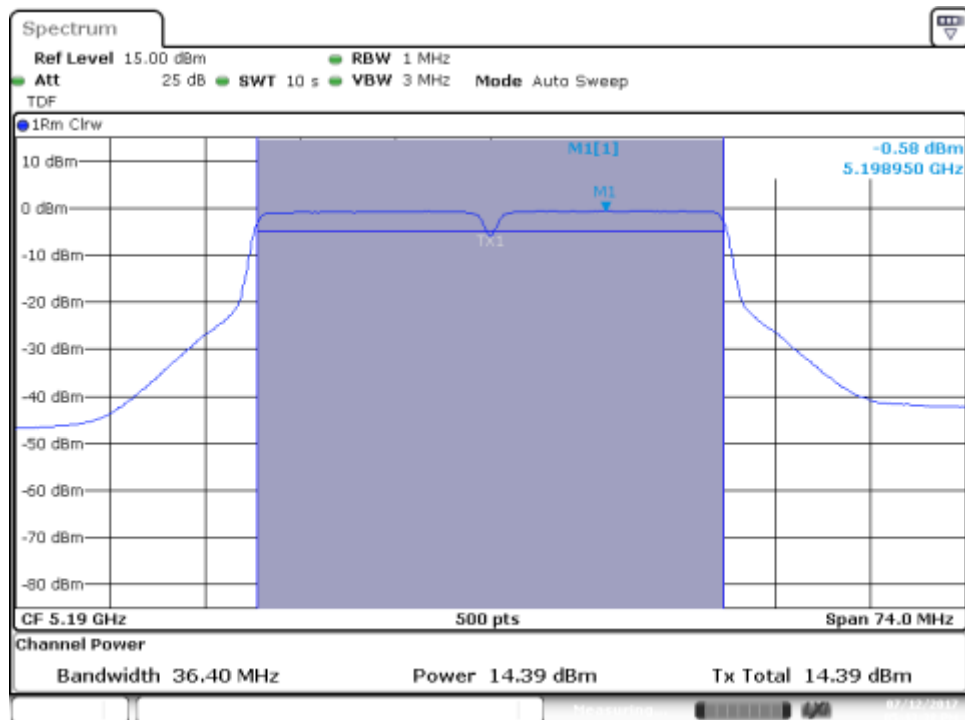
## MIMO-A, 802.11n40, HT8

Channel 38F



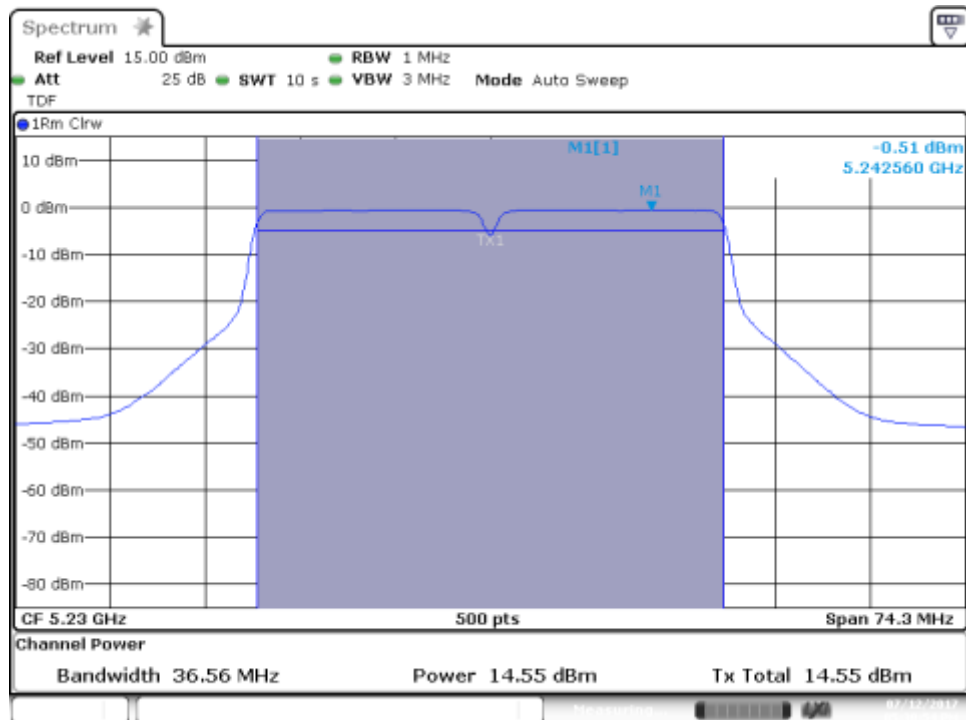
## MIMO-B, 802.11n40, HT8

Channel 38F



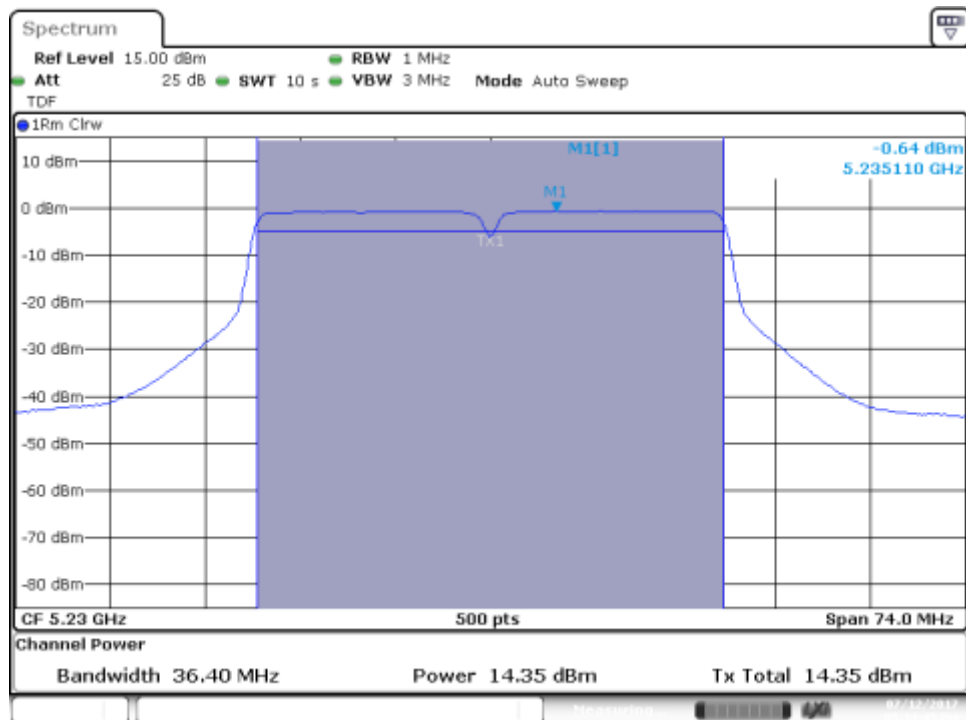
## MIMO-A, 802.11n40, HT8

Channel 46F



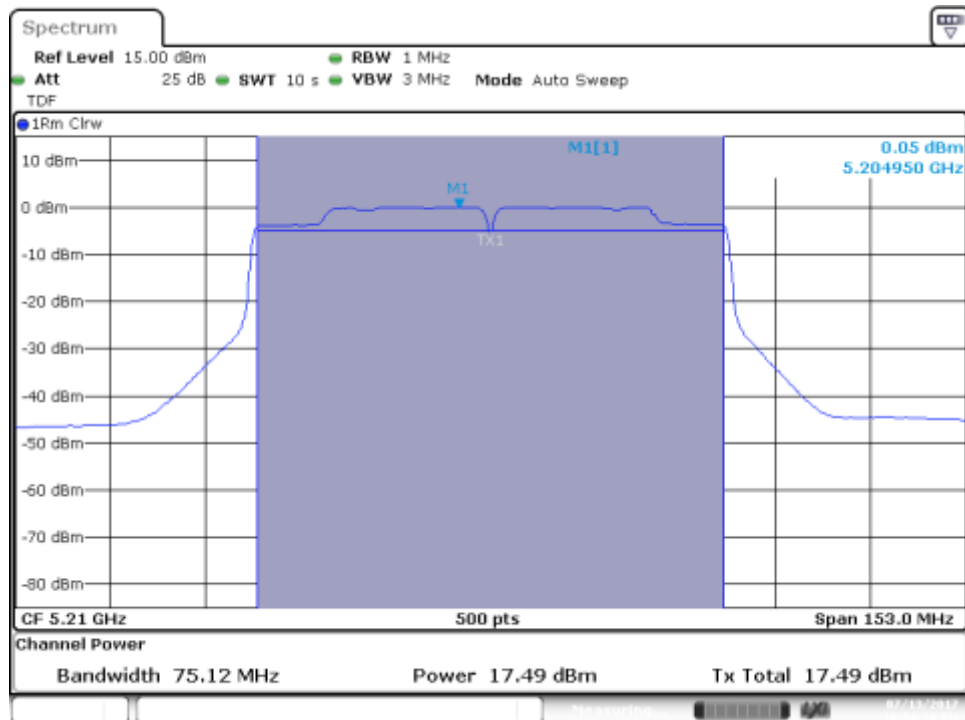
## MIMO-B, 802.11n40, HT8

Channel 46F



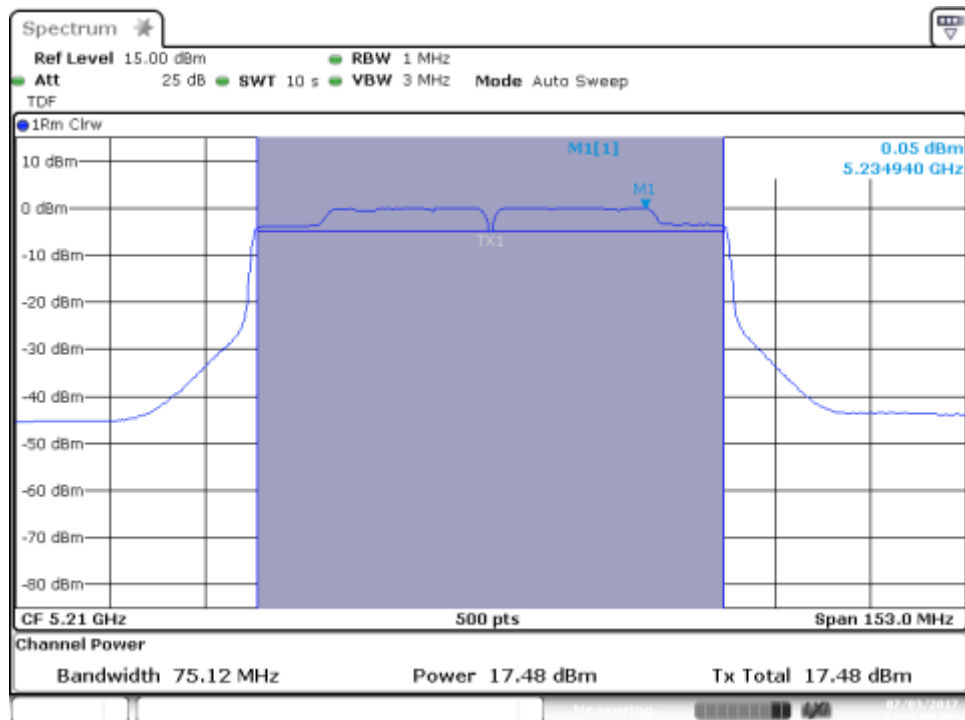
## SISO-A, 802.11ac80, VHT0

Channel 42ac80



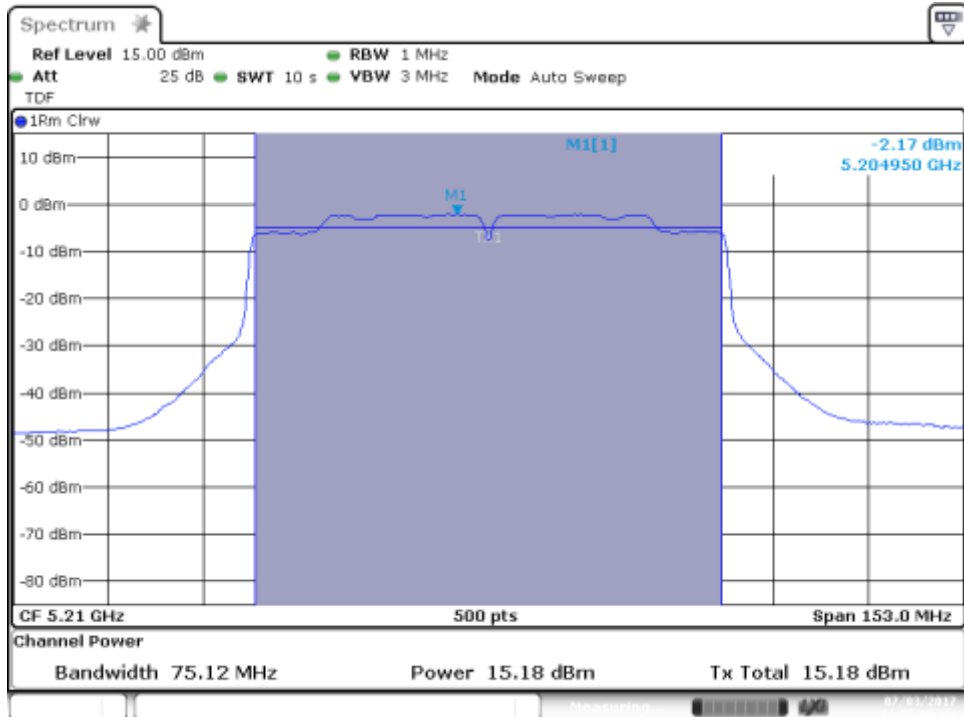
## SISO-B, 802.11ac80, VHT0

Channel 42ac80



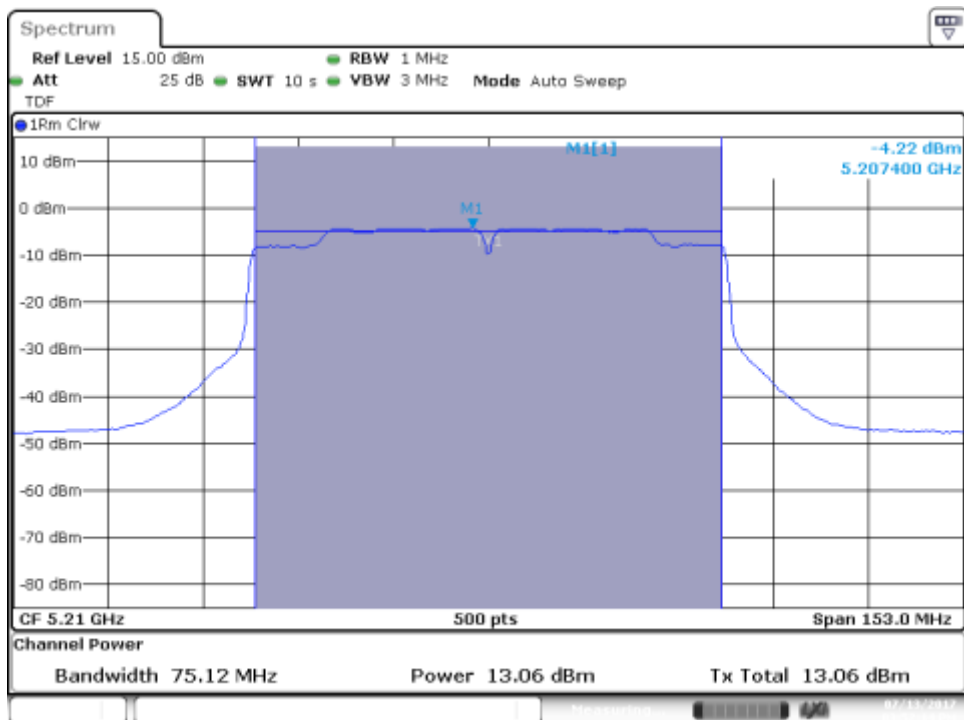
## MIMO-A, 802.11ac80, VHT0

Channel 42ac80



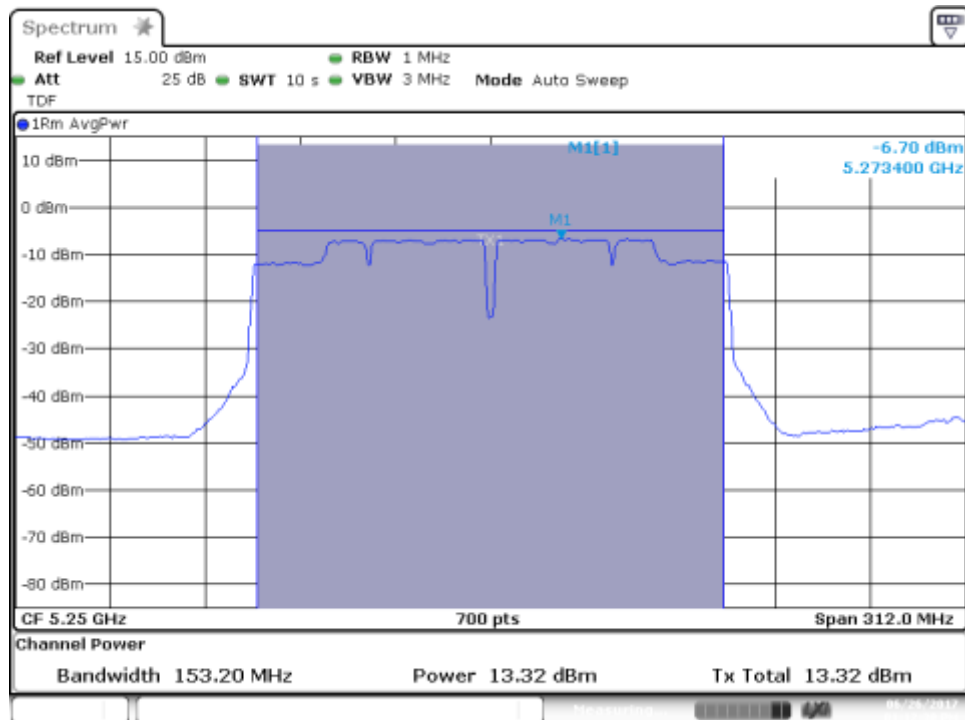
## MIMO-B, 802.11ac80, VHT0

Channel 42ac80



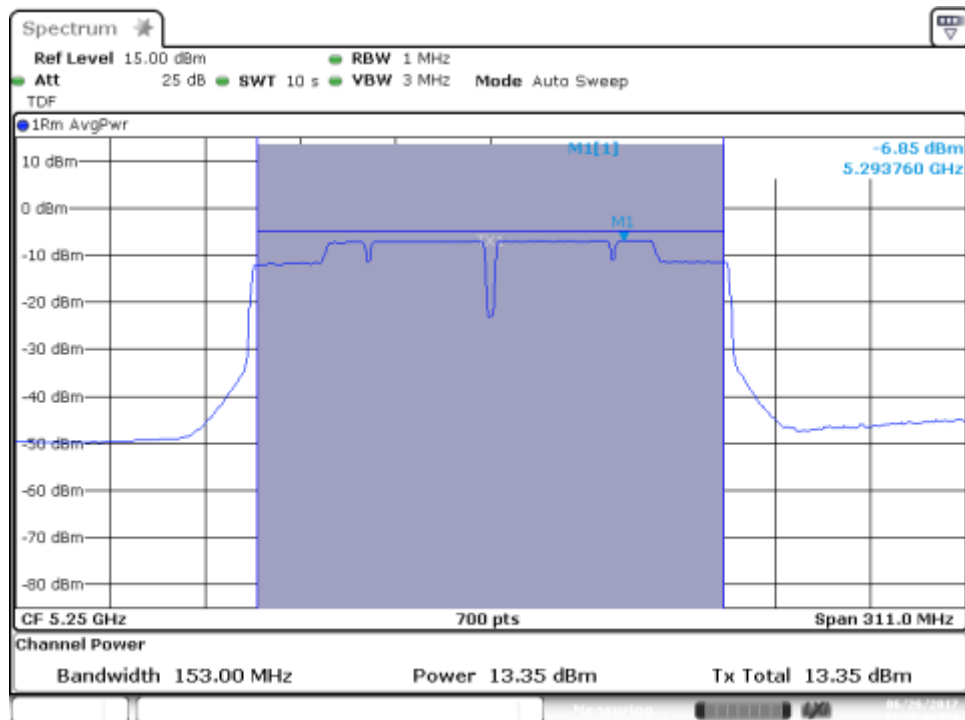
## SISO-A, 802.11ac160, VHT0

Channel 50ac160



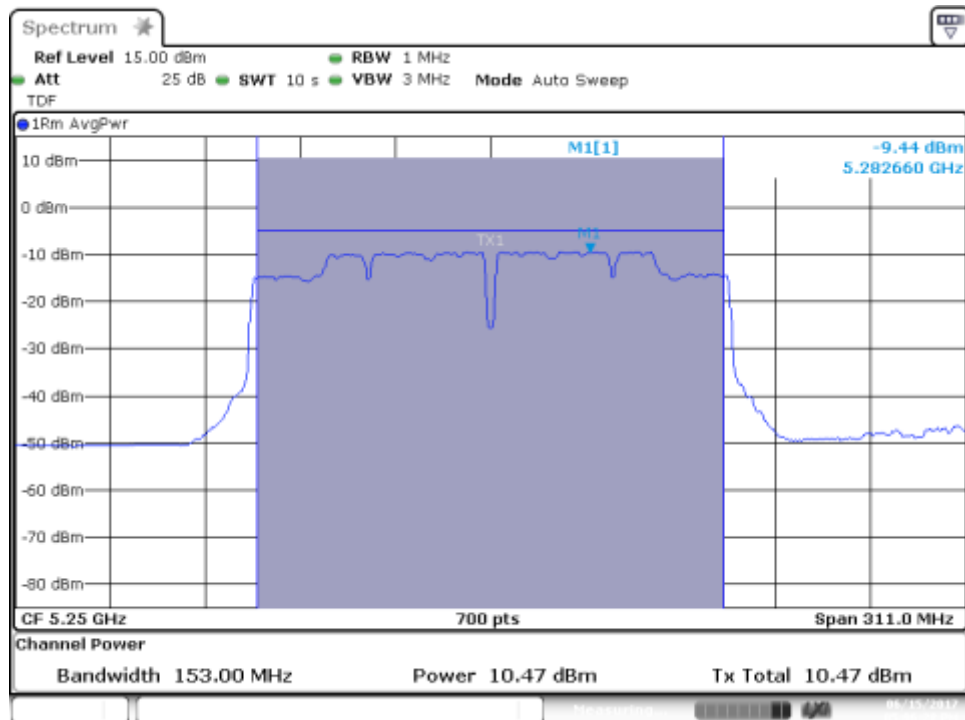
## SISO-B, 802.11ac160, VHT0

Channel 50ac160



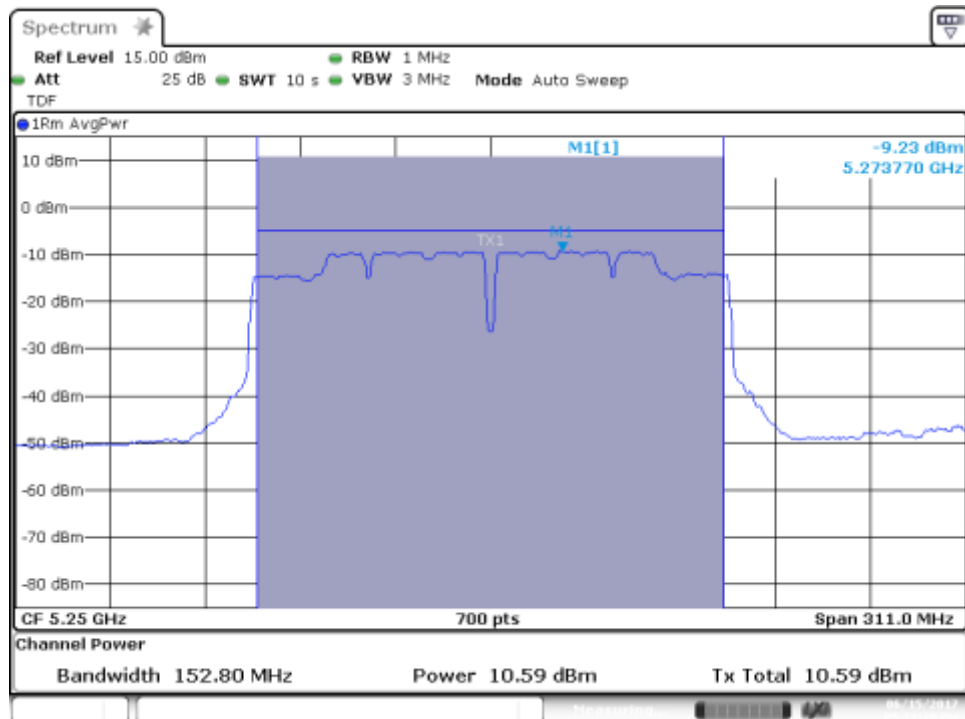
## MIMO-A, 802.11ac160, VHT0

Channel 50ac160



## MIMO-B, 802.11ac160, VHT0

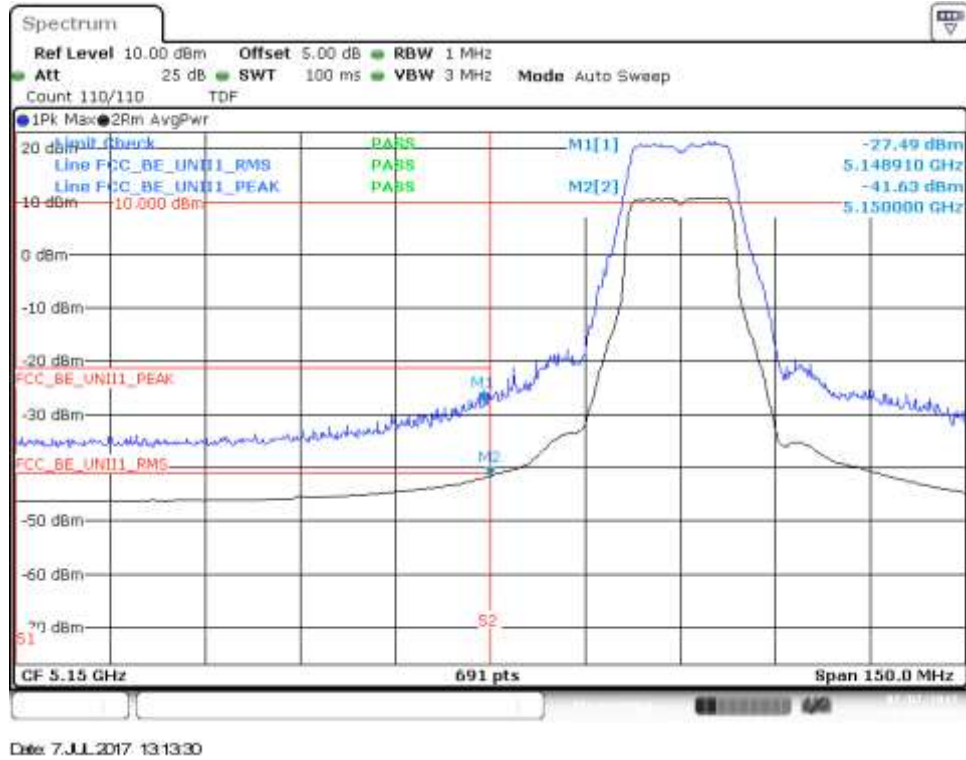
Channel 50ac160



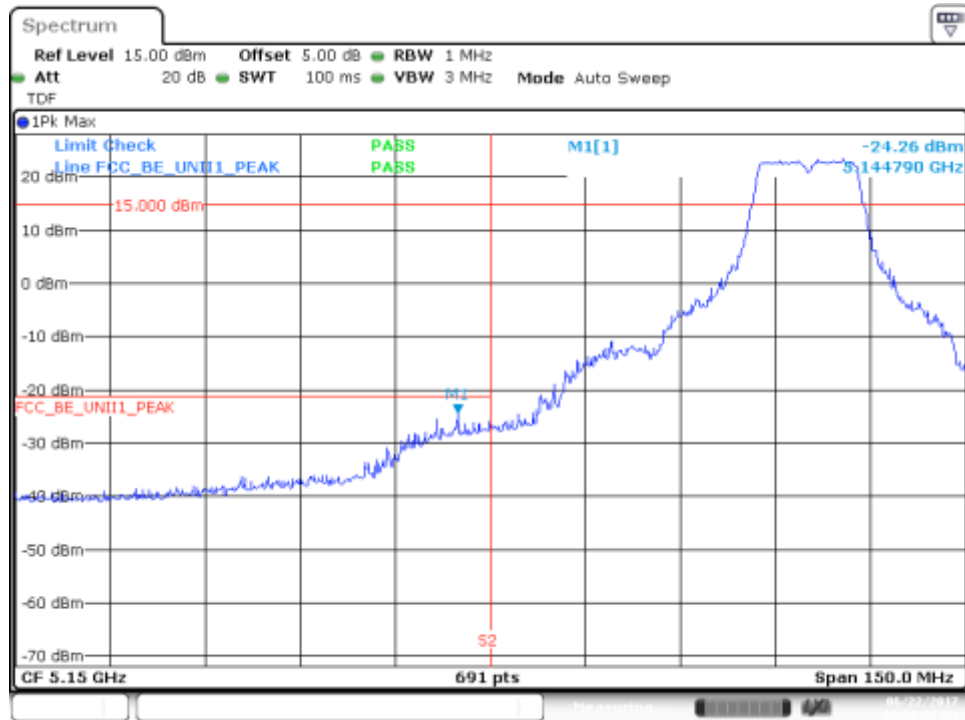
### B.3.4 Undesirable emission limits : Band Edge (Conducted)

## 802.11a, 6Mbps – Chain A

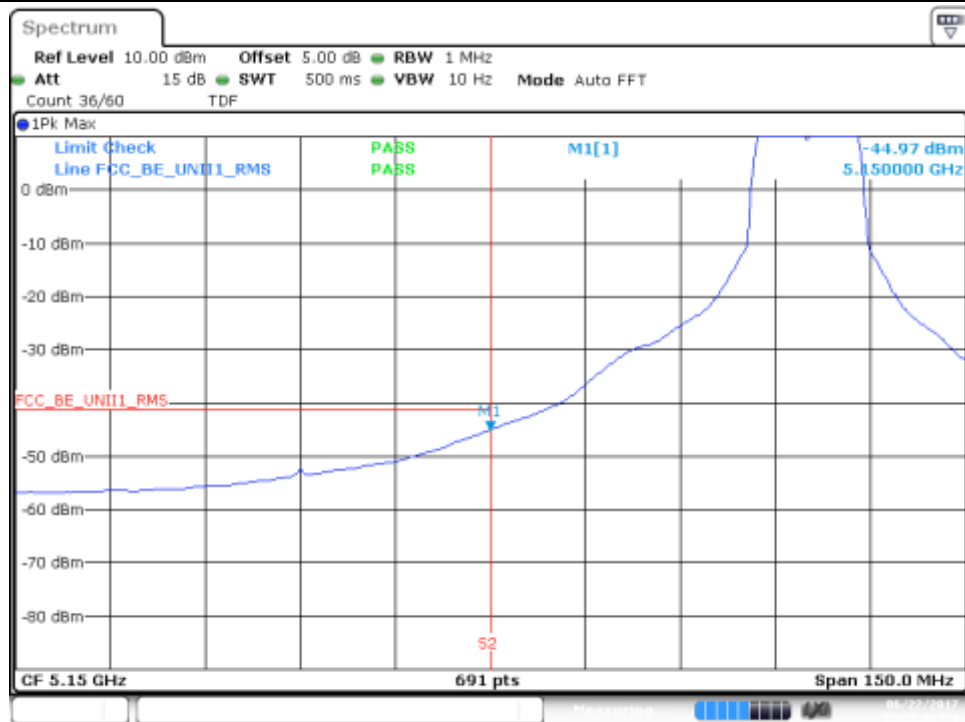
### BE Low Freq Section – CH36



## BE Low Freq Section, Peak – CH40

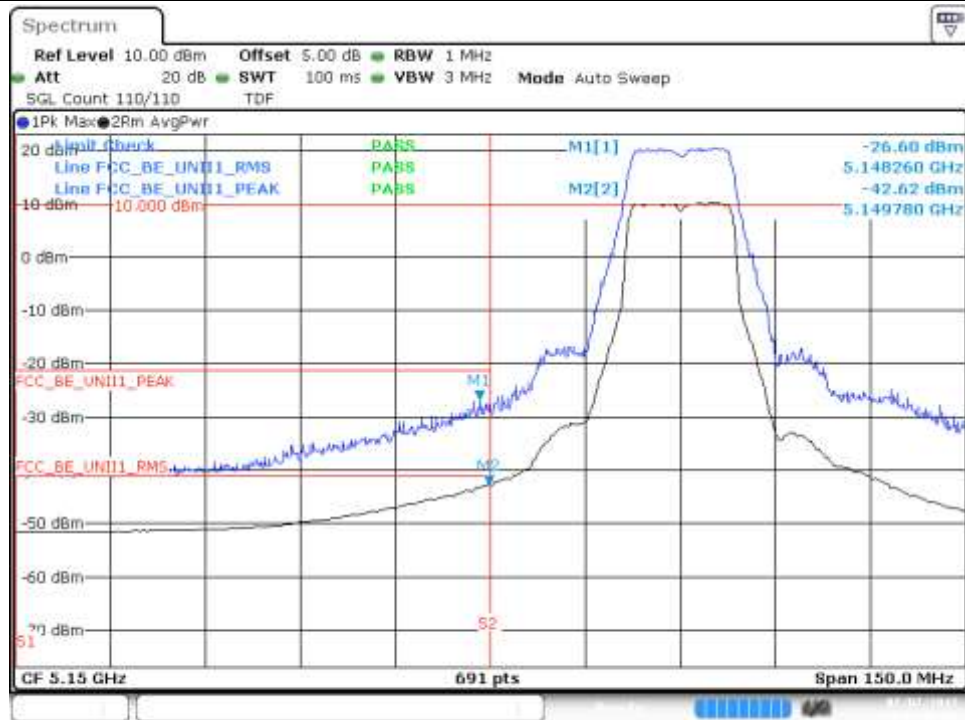


## BE Low Freq Section, RMS – CH40



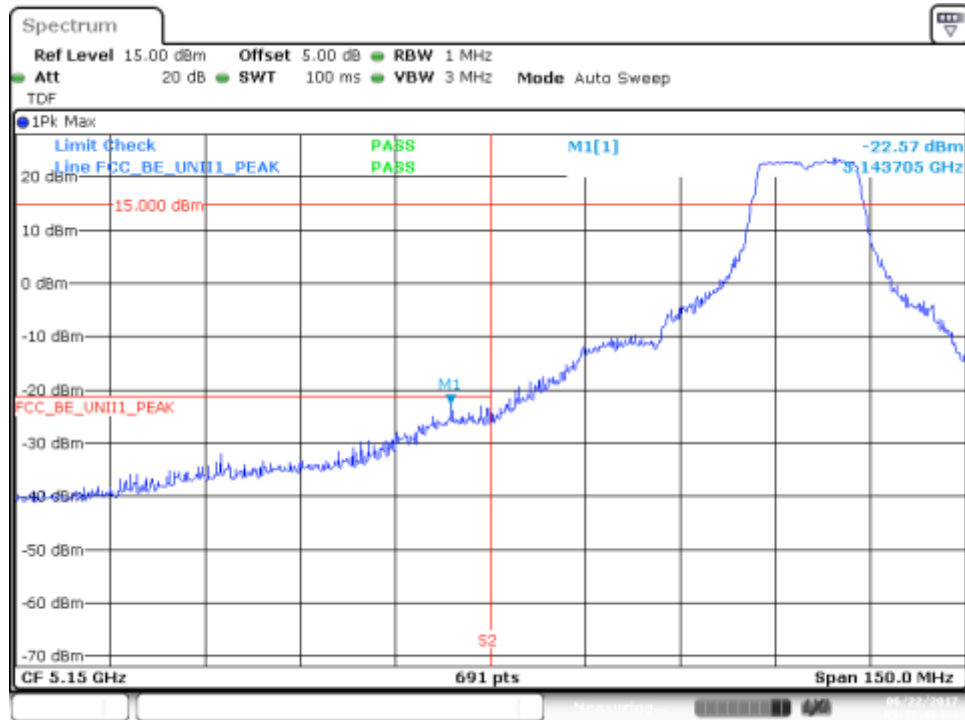
## 802.11a, 6Mbps – Chain B

### BE Low Freq Section , Peak, RMS – CH36



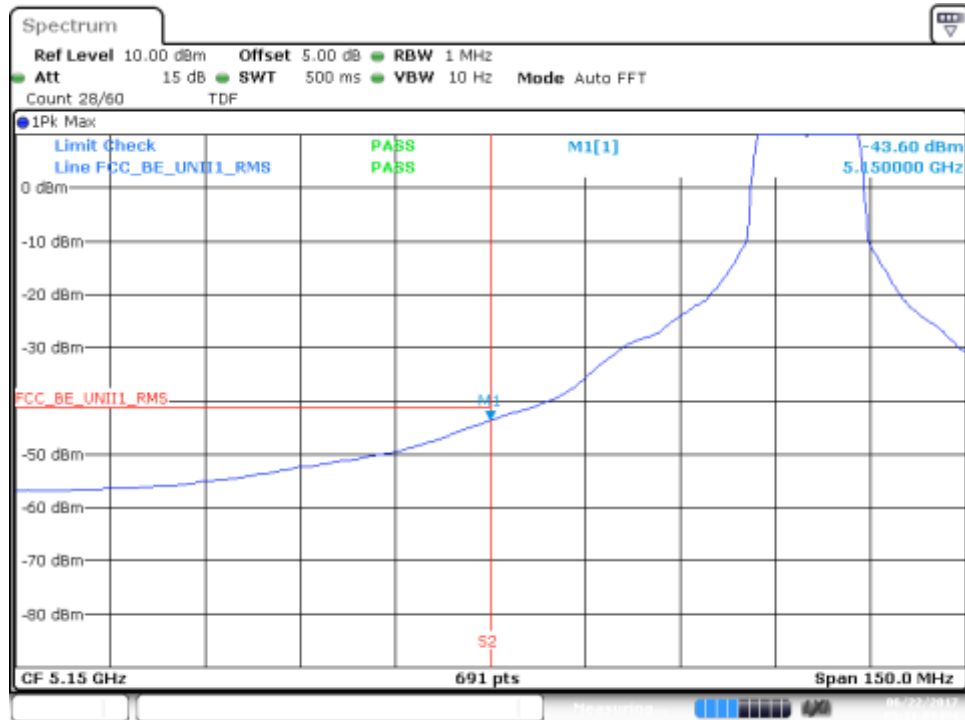
Date: 7.JUL.2017 13:17:40

## BE Low Freq Section, Peak – CH40



Date: 22 JUN 2017 17:31:40

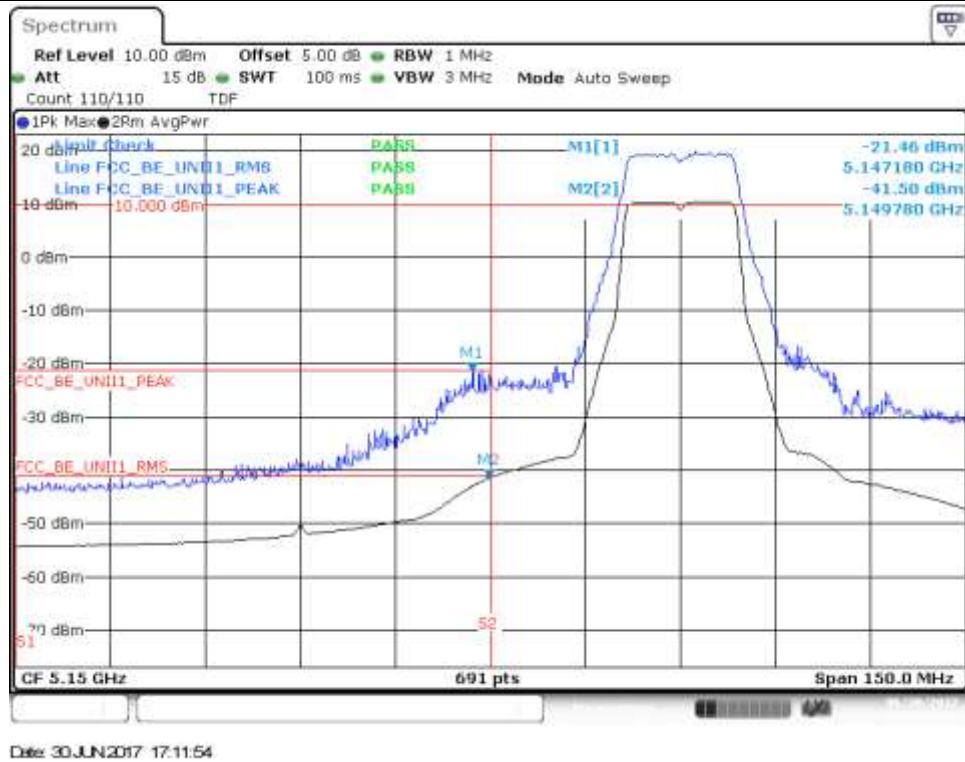
## BE Low Freq Section, RMS – CH40



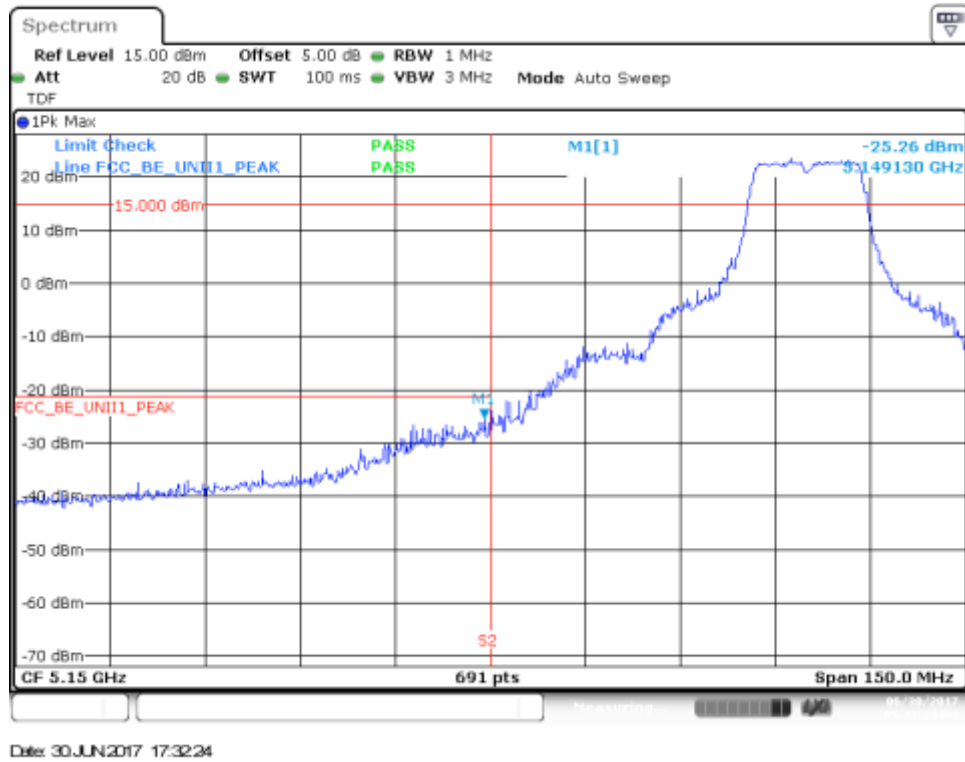
Date: 22 JUN 2017 17:31:09

## 802.11n20, HT0 (SISO) – Chain A

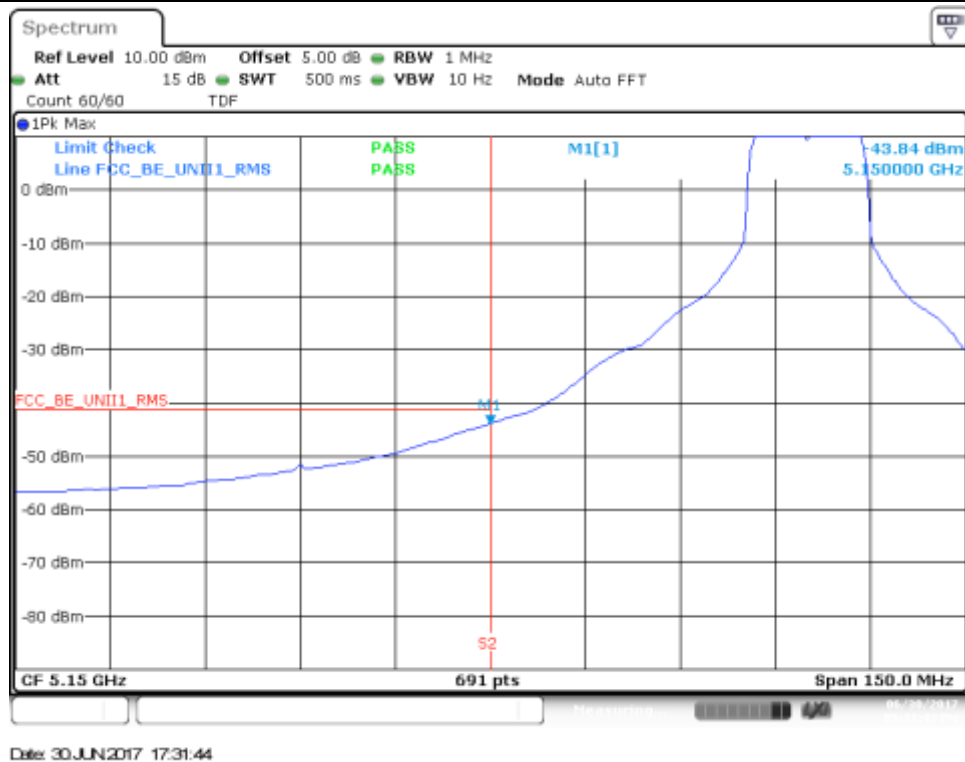
### BE Low Freq Section, Peak, RMS – CH36



## BE Low Freq Section, Peak – CH40

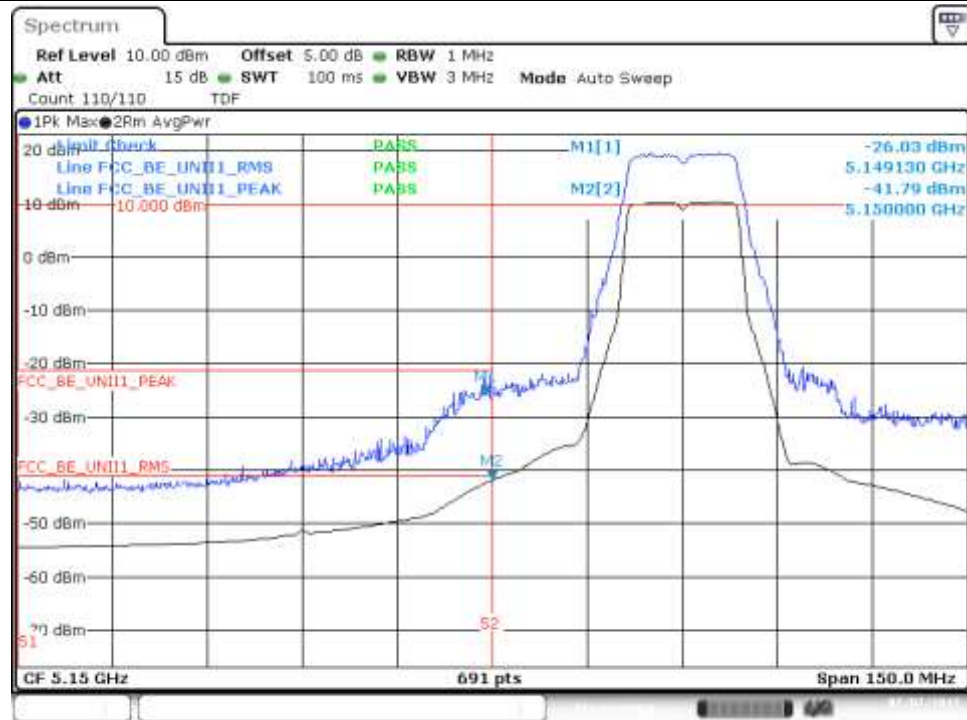


## BE Low Freq Section, RMS – CH40



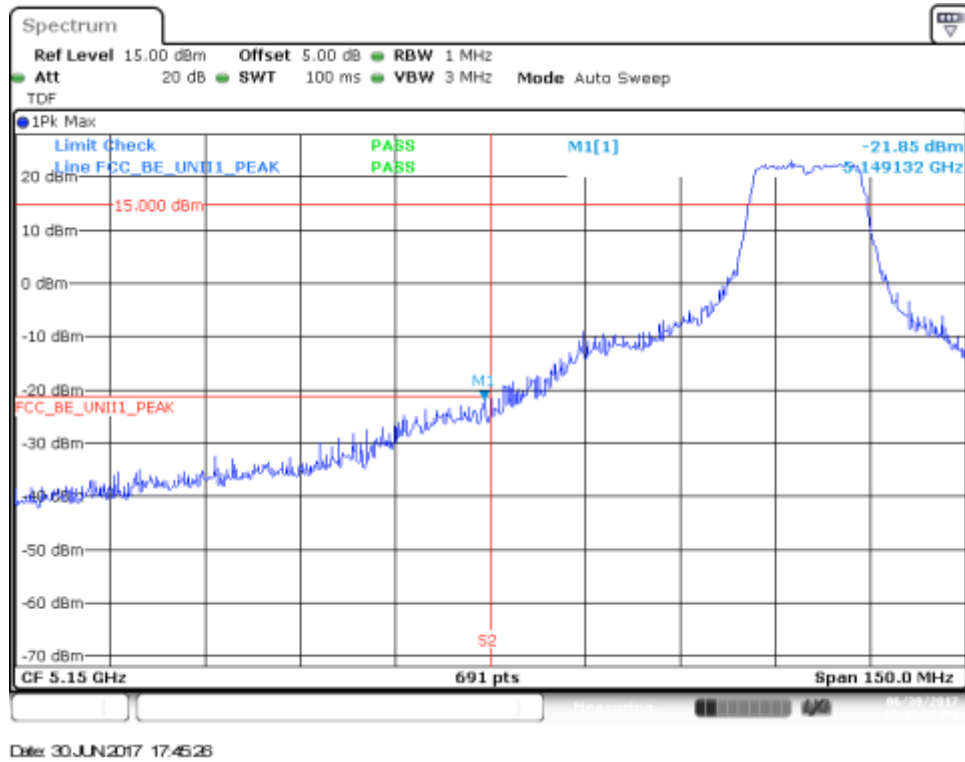
## 802.11n20, HT0 (SISO) – Chain B

### BE Low Freq Section, Peak, RMS – CH36

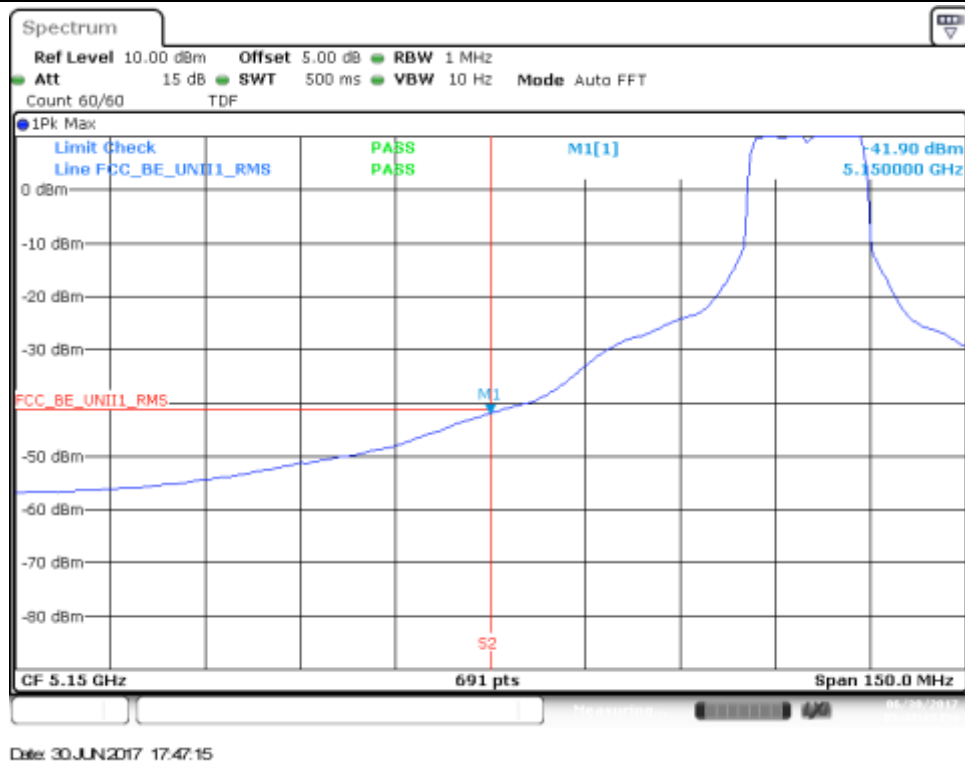


Date: 7.JUL.2017 13:21:56

## BE Low Freq Section, Peak – CH40

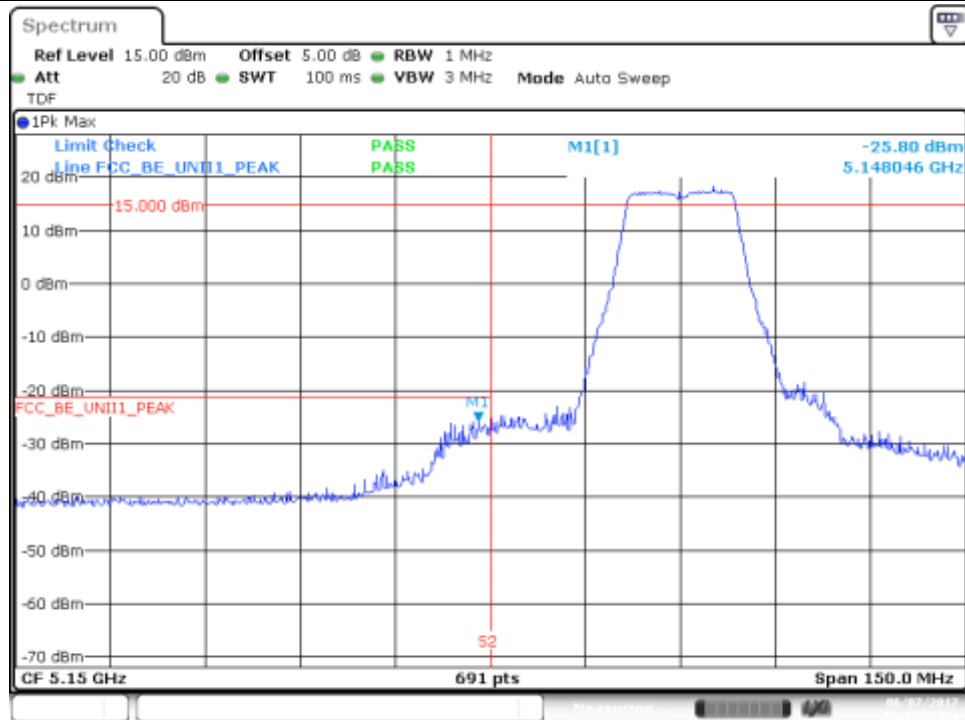


## BE Low Freq Section, RMS – CH40

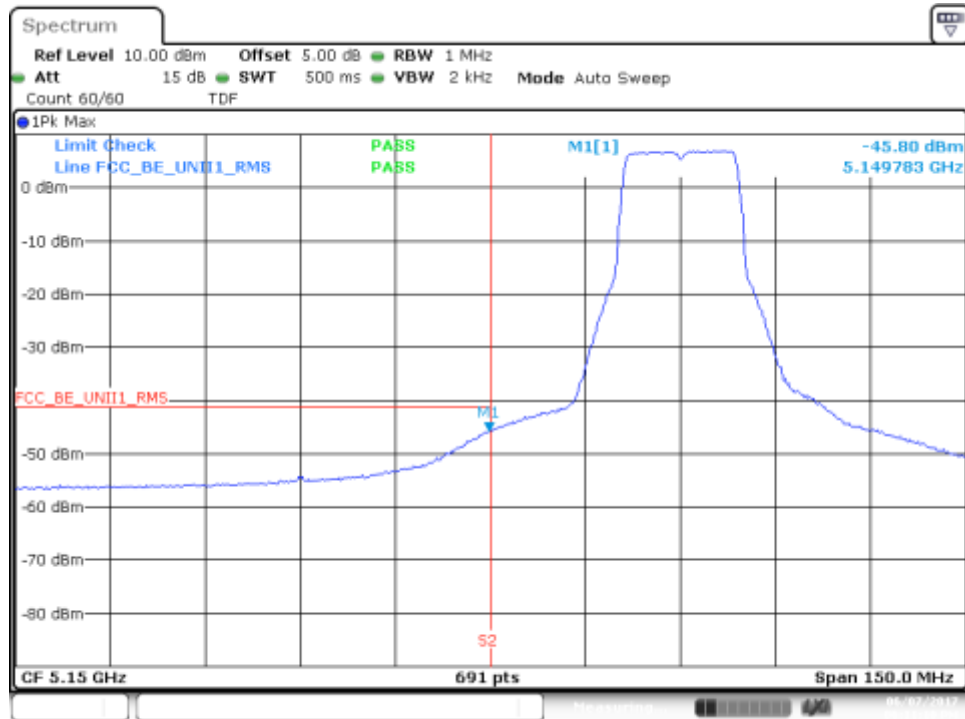


## 802.11n20, HT8 (MIMO) – Chain A

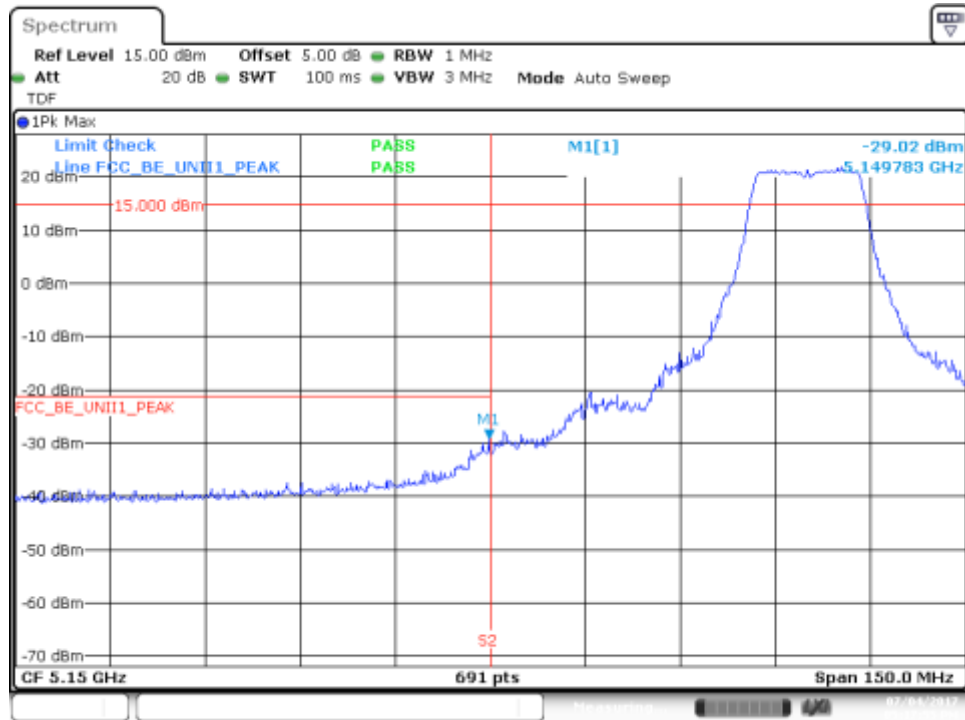
### BE Low Freq Section, Peak – CH36



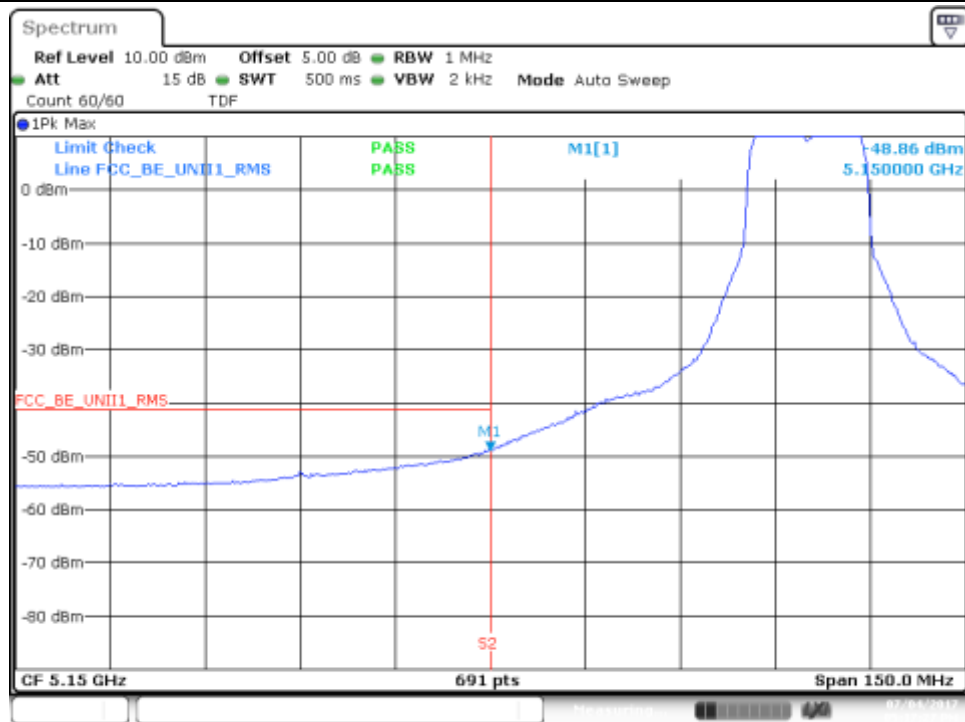
### BE Low Freq Section, RMS – CH36



## BE Low Freq Section, Peak – CH40

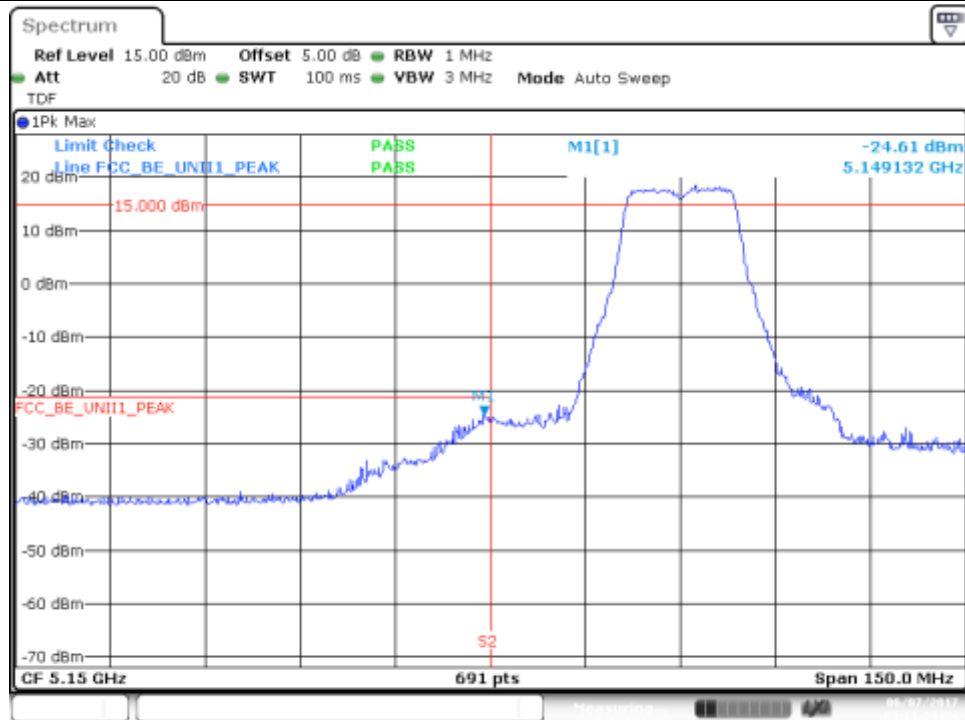


## BE Low Freq Section, RMS – CH40

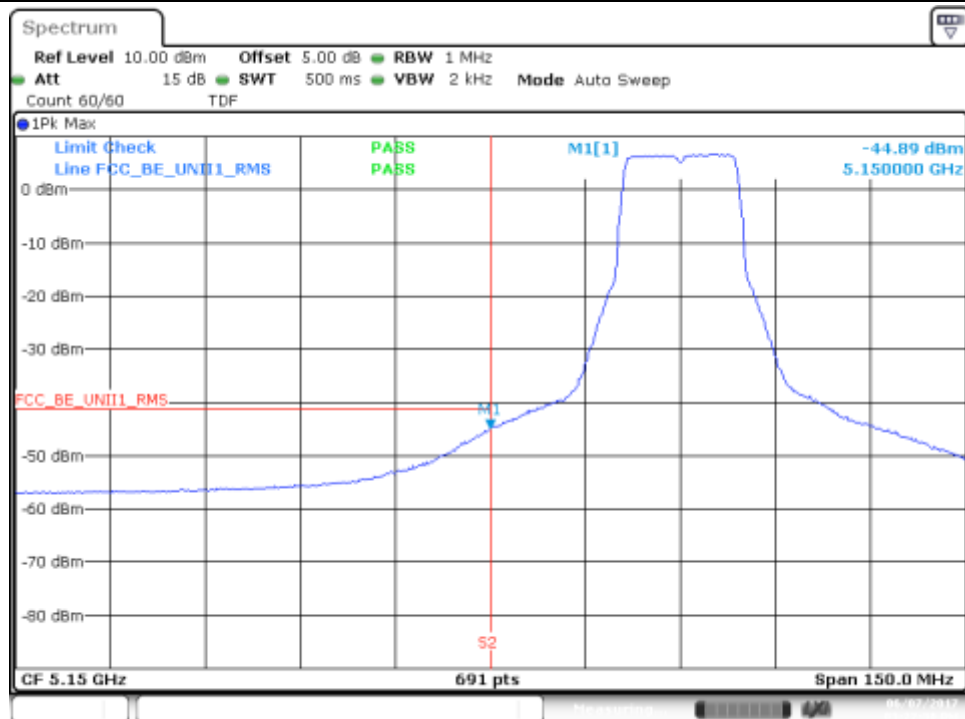


## 802.11n20, HT8 (MIMO) – Chain B

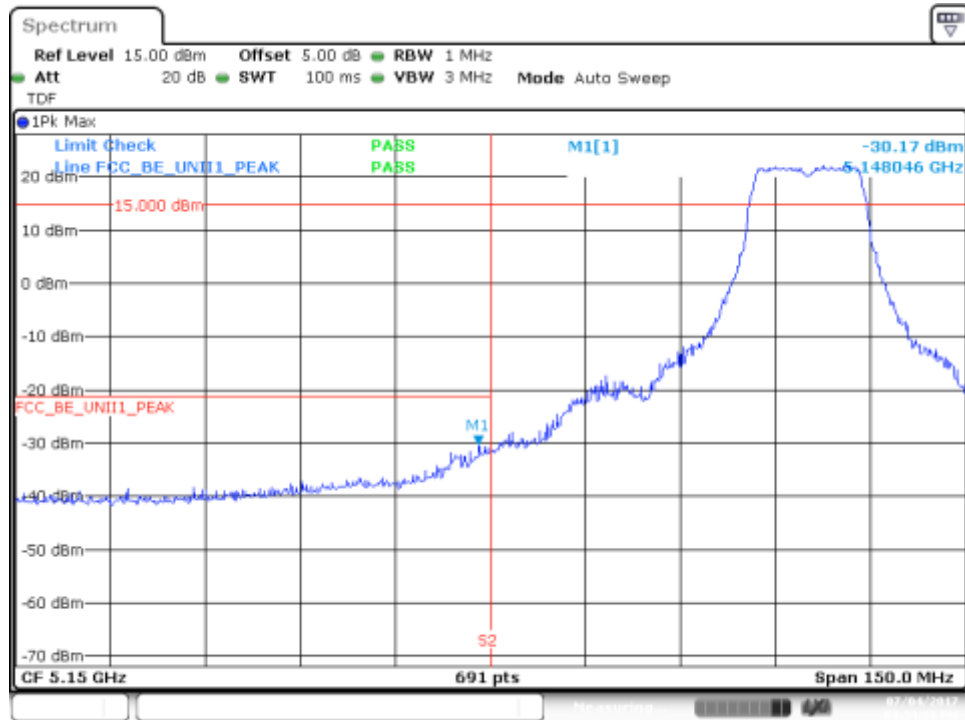
### BE Low Freq Section, Peak – CH36



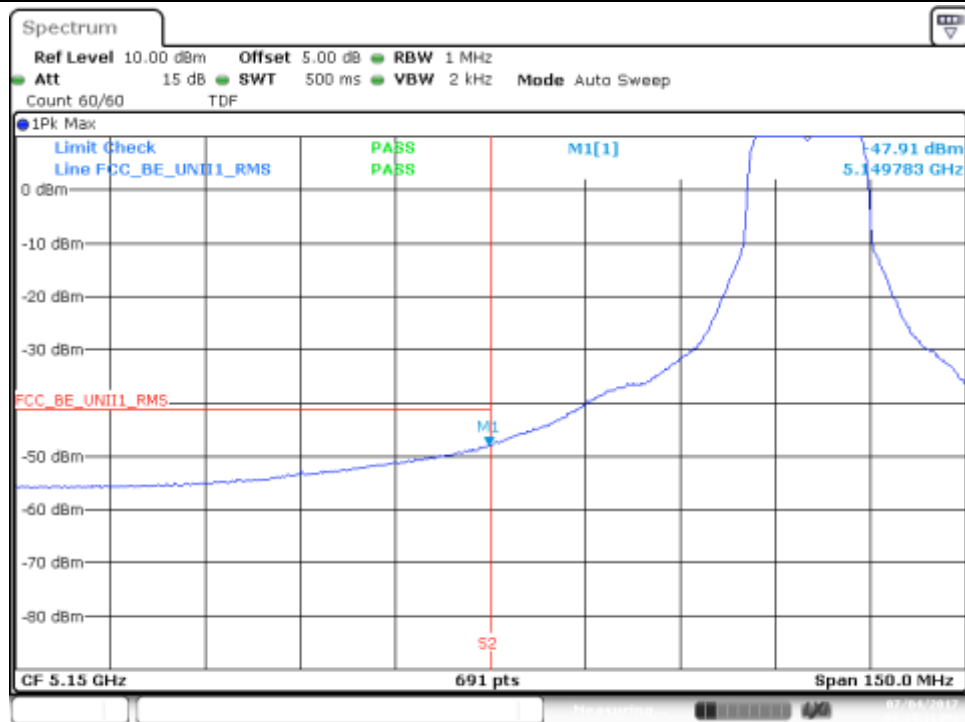
### BE Low Freq Section, RMS – CH36



## BE Low Freq Section, Peak – CH40

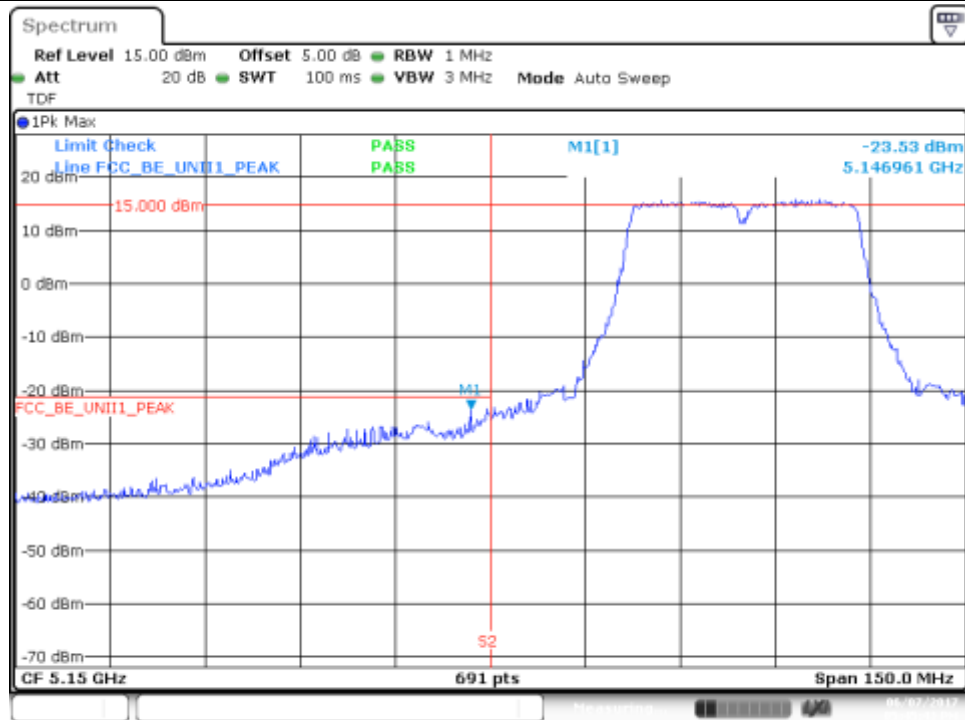


## BE Low Freq Section, RMS – CH40

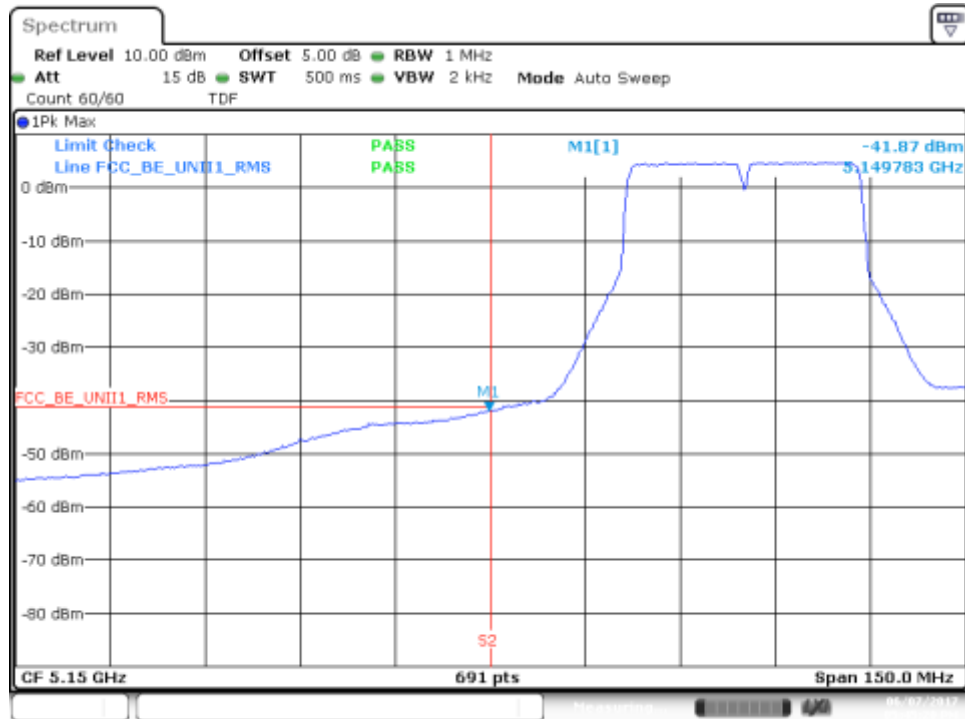


## 802.11n40, HT0 (SISO) – Chain A

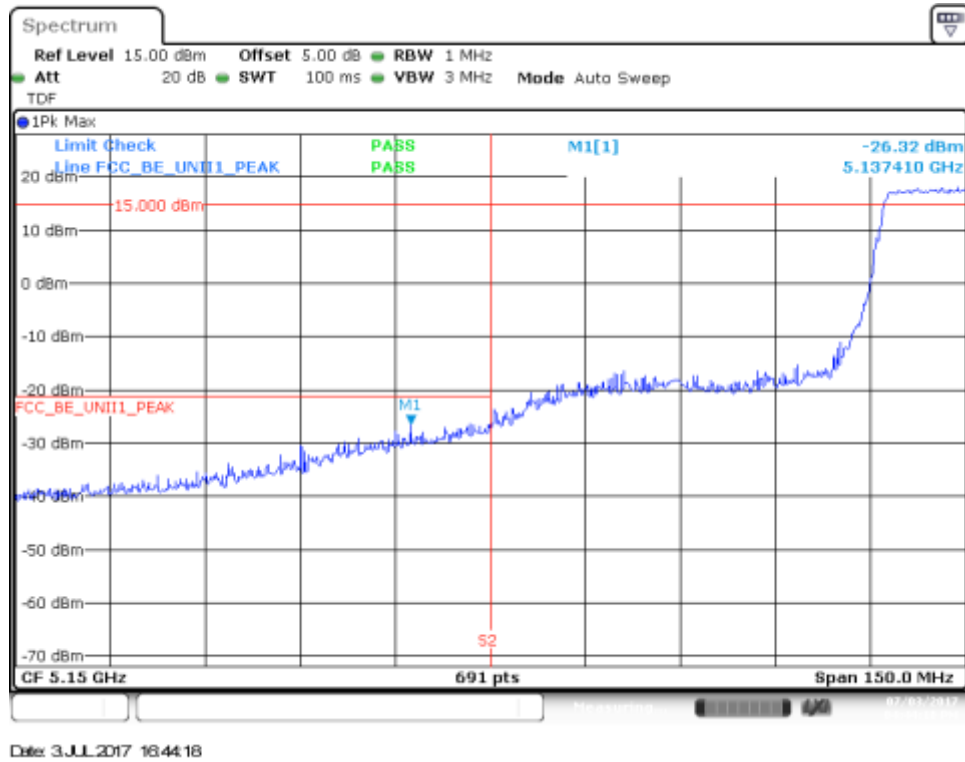
### BE Low Freq Section, Peak – CH38F



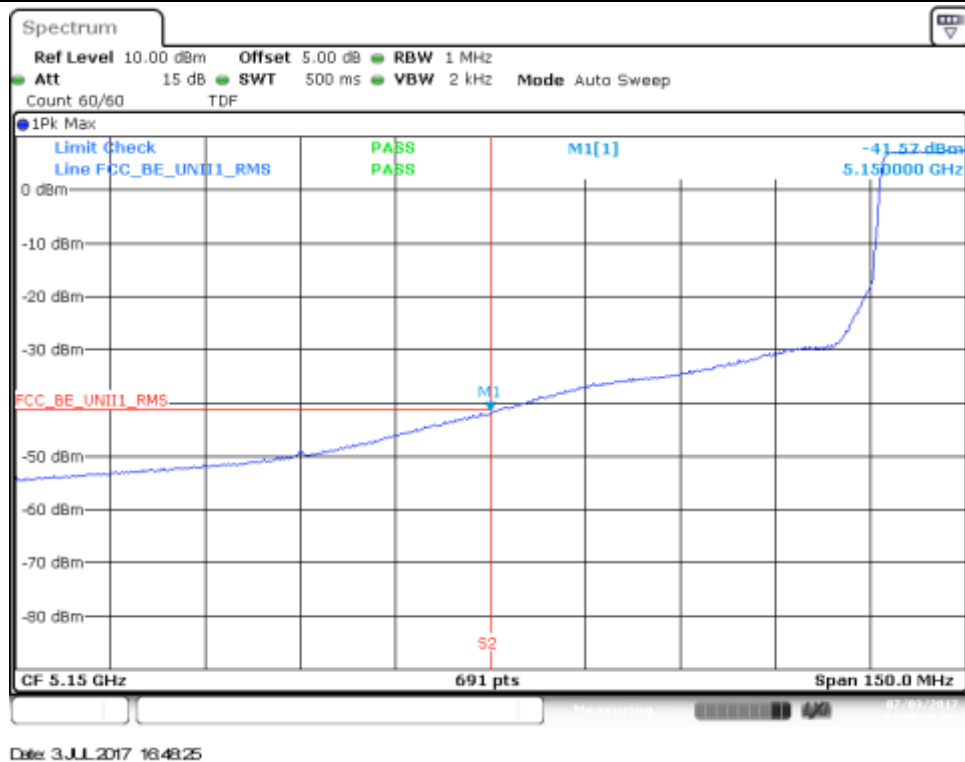
### BE Low Freq Section, RMS – CH38F



## BE Low Freq Section, Peak – CH46F

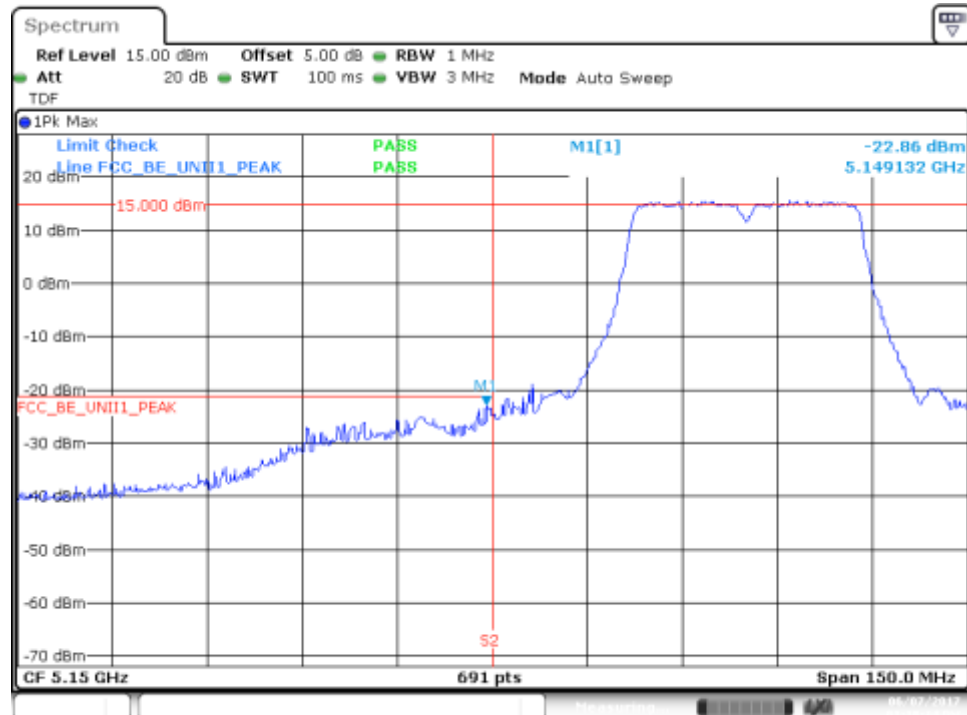


## BE Low Freq Section, RMS – CH46F



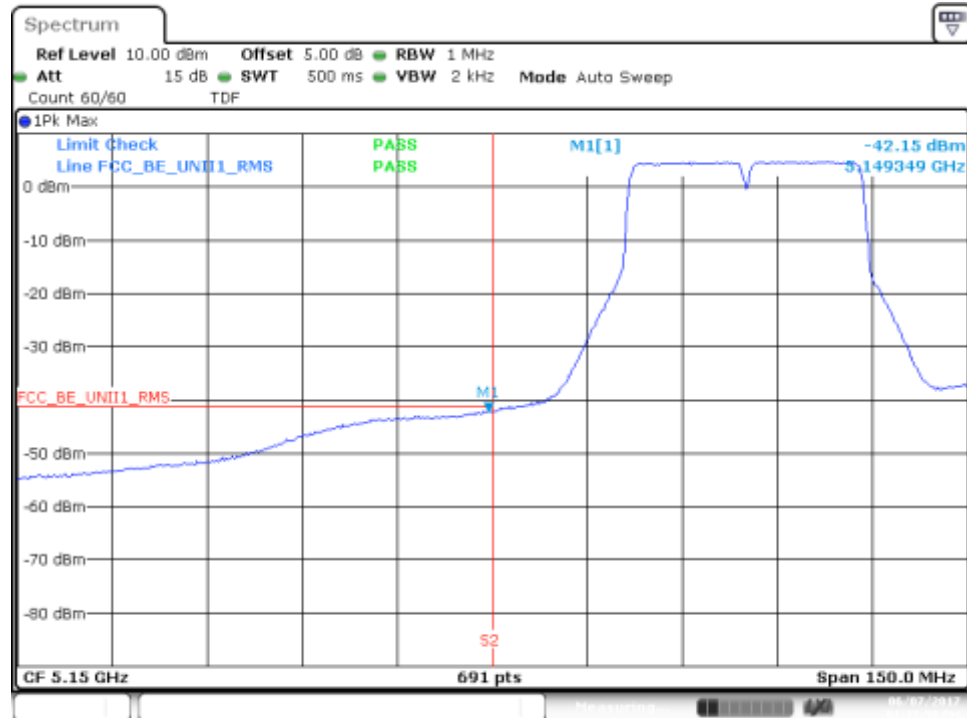
## 802.11n40, HT0 (SISO) – Chain B

### BE Low Freq Section, Peak – CH38F



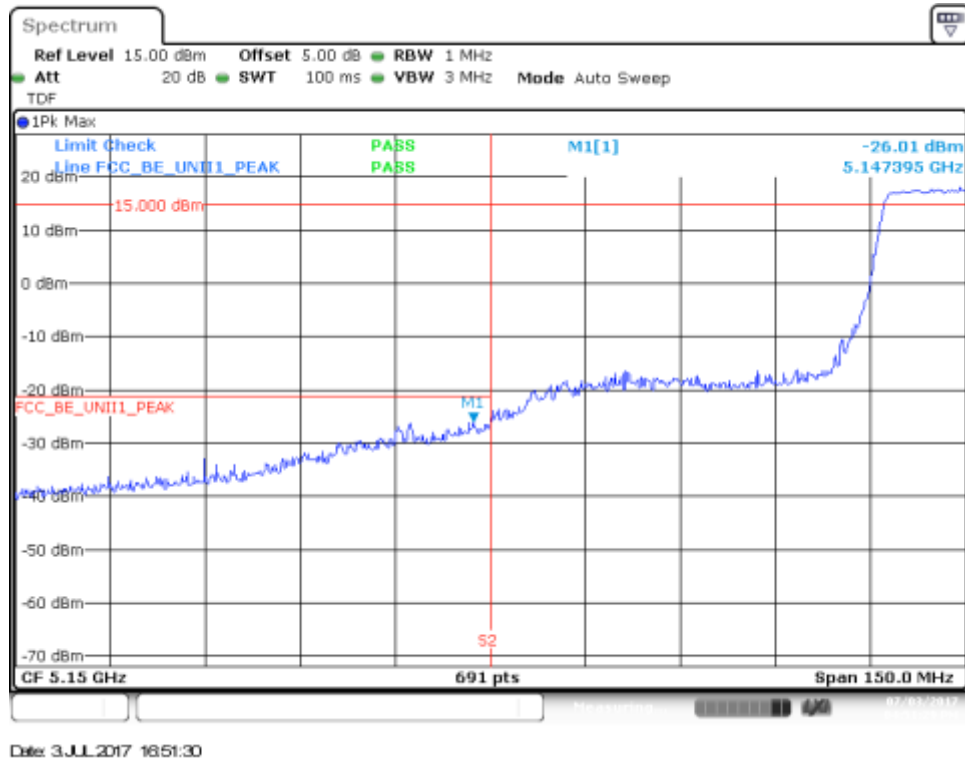
Date: 7.JUN.2017 13:18:14

### BE Low Freq Section, RMS – CH38F

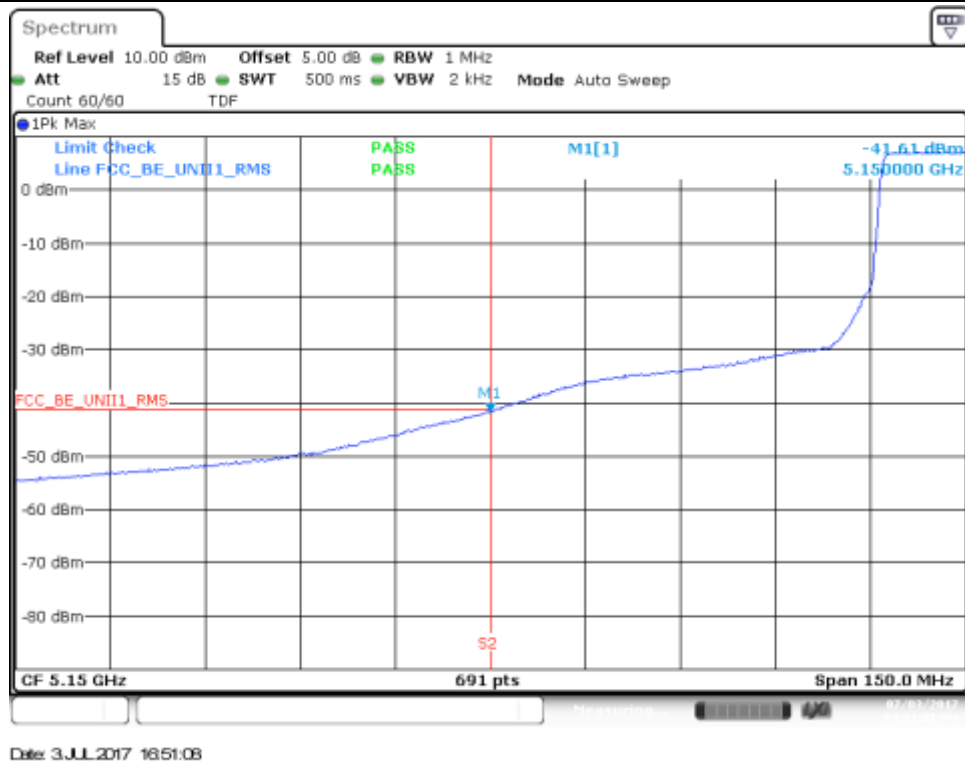


Date: 7.JUN.2017 13:17:50

## BE Low Freq Section, Peak – CH46F

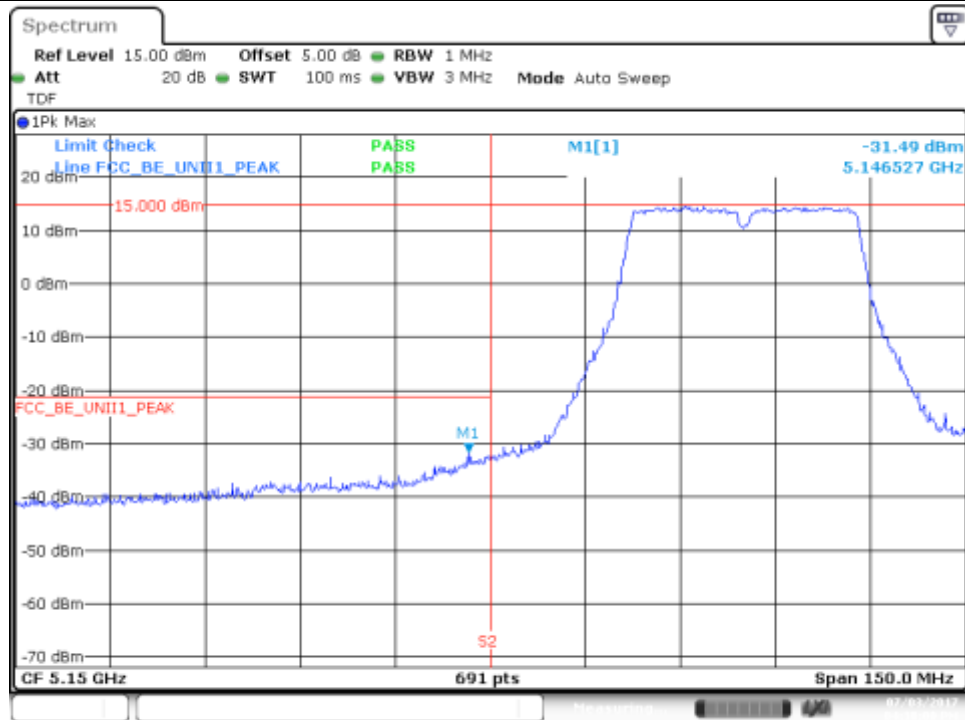


## BE Low Freq Section, RMS – CH46F

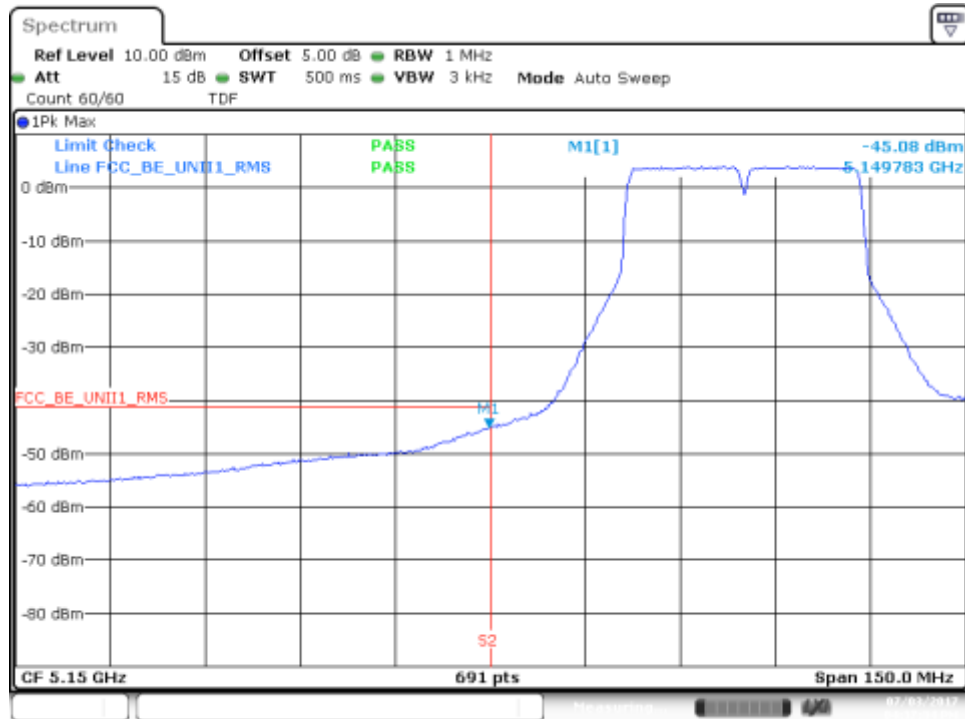


## 802.11n40, HT8 (MIMO) – Chain A

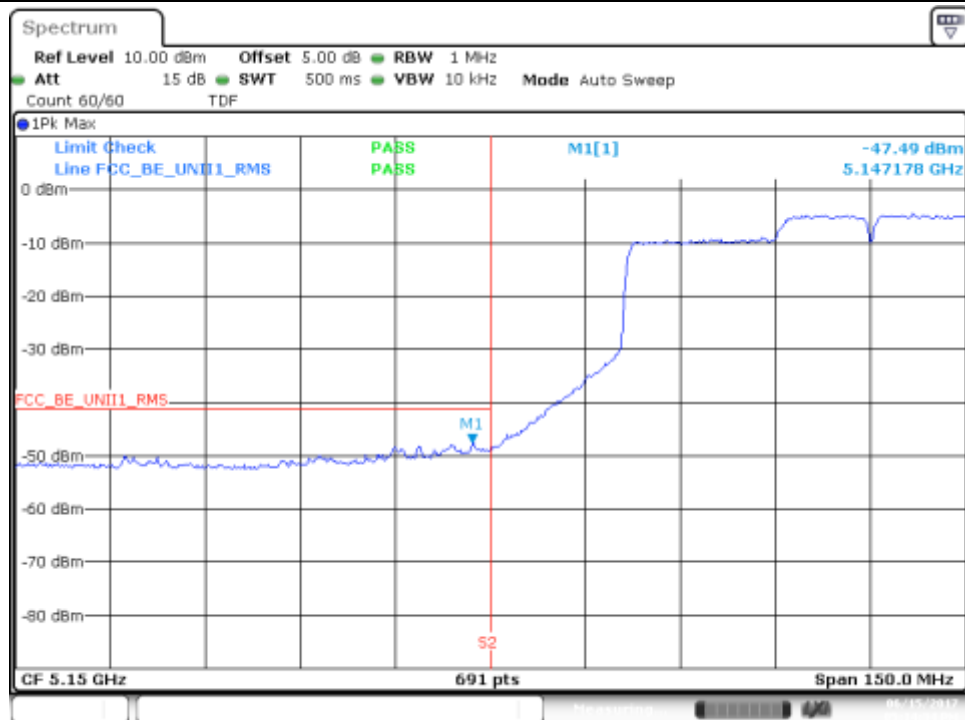
### BE Low Freq Section, Peak – CH38F



### BE Low Freq Section, RMS – CH38F

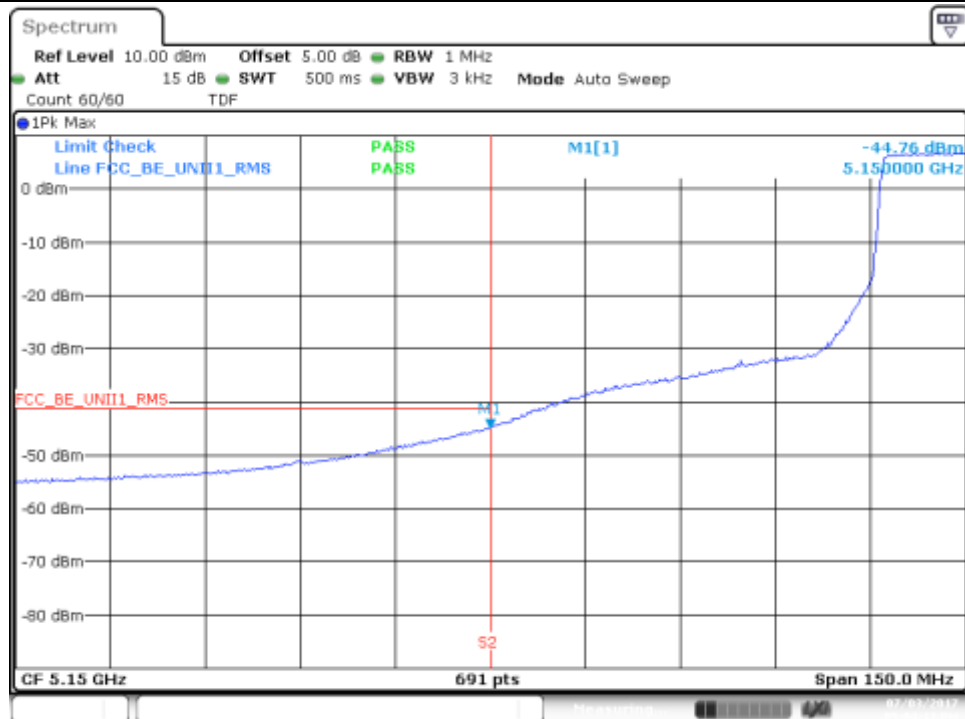


## BE Low Freq Section, Peak – CH46F



Date: 15 JUN 2017 17:14:34

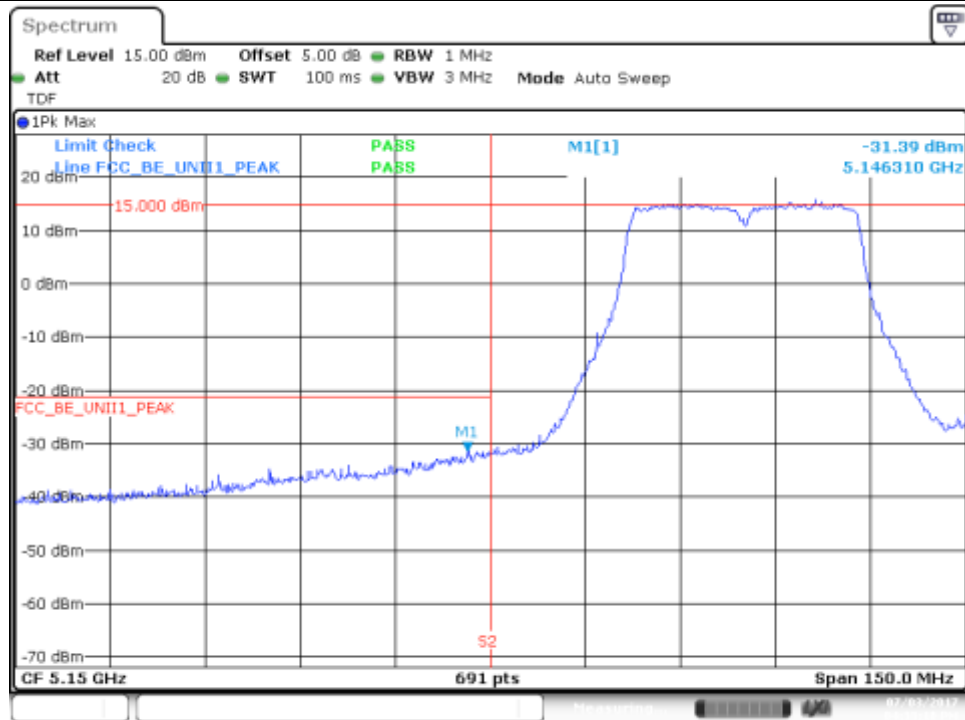
## BE Low Freq Section, RMS – CH46F



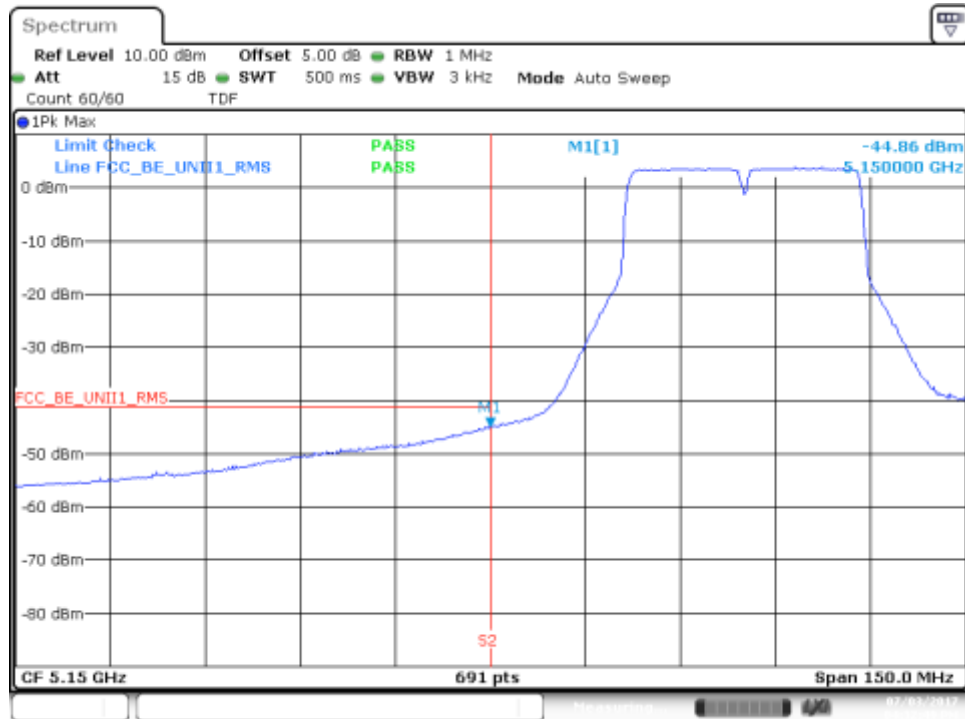
Date: 3 JUL 2017 17:04:12

## 802.11n40, HT8 (MIMO) – Chain B

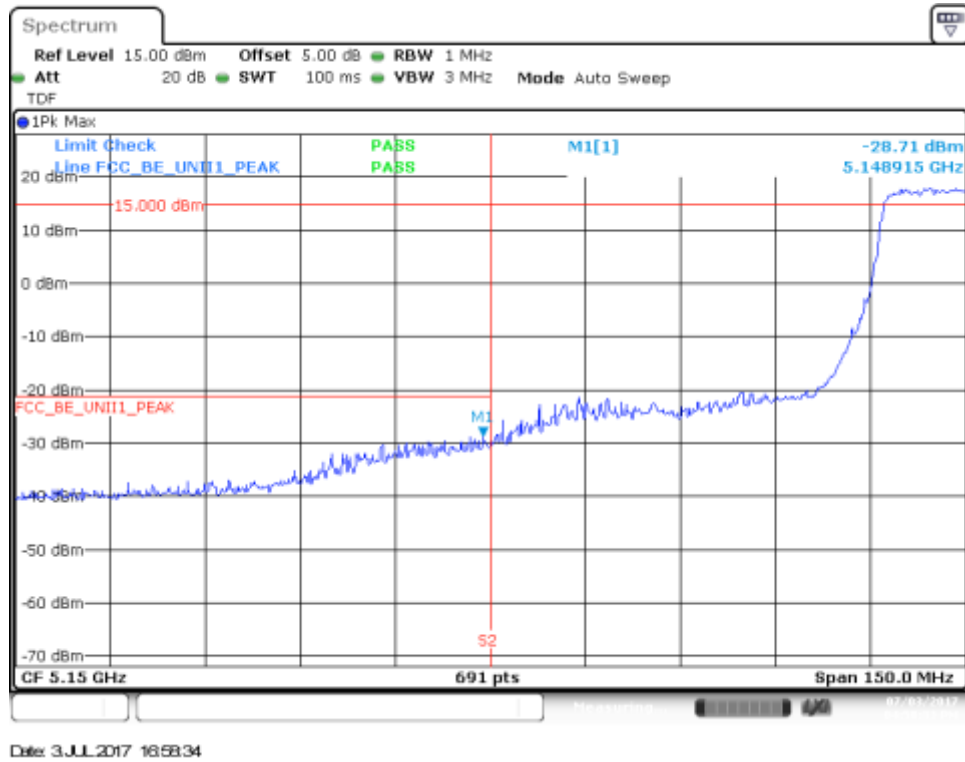
### BE Low Freq Section, Peak – CH38F



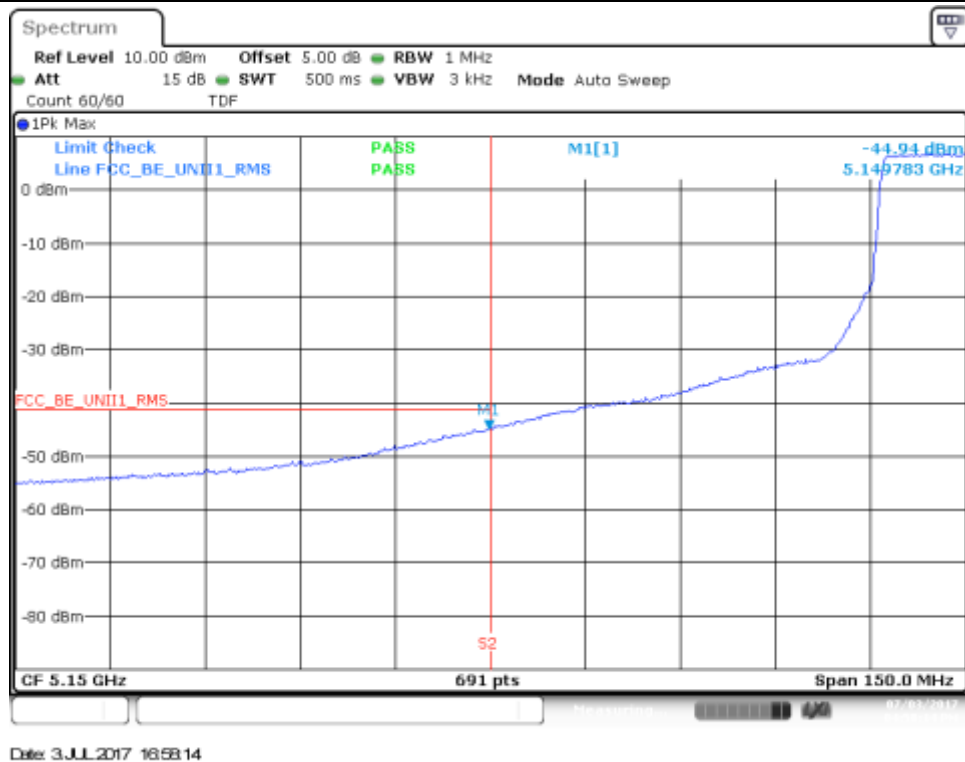
### BE Low Freq Section, RMS – CH38F



## BE Low Freq Section, Peak – CH46F

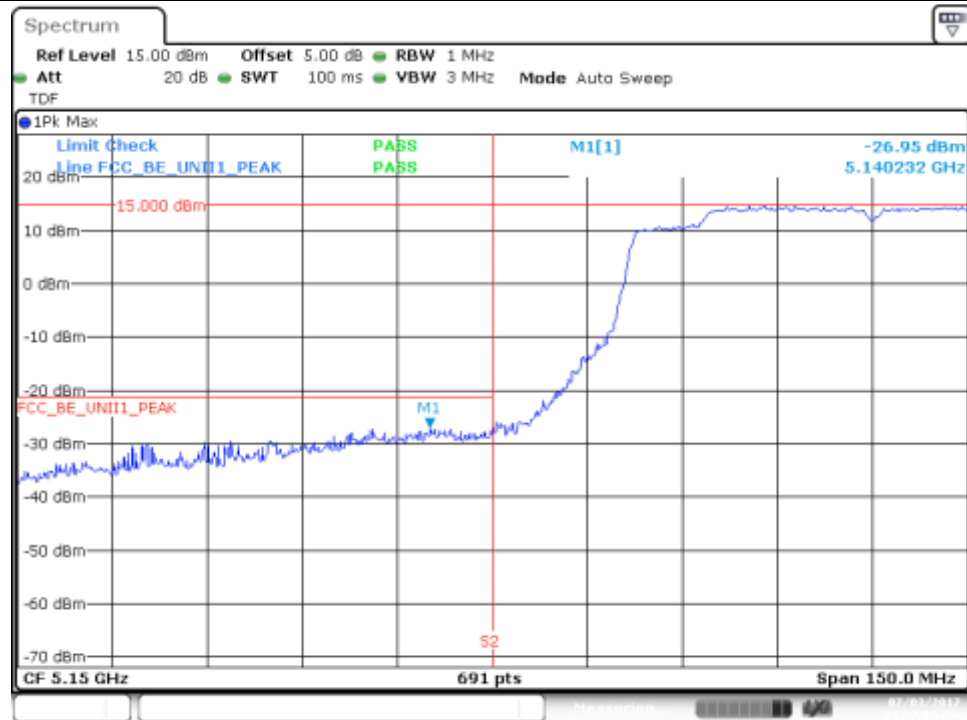


## BE Low Freq Section, RMS – CH46F

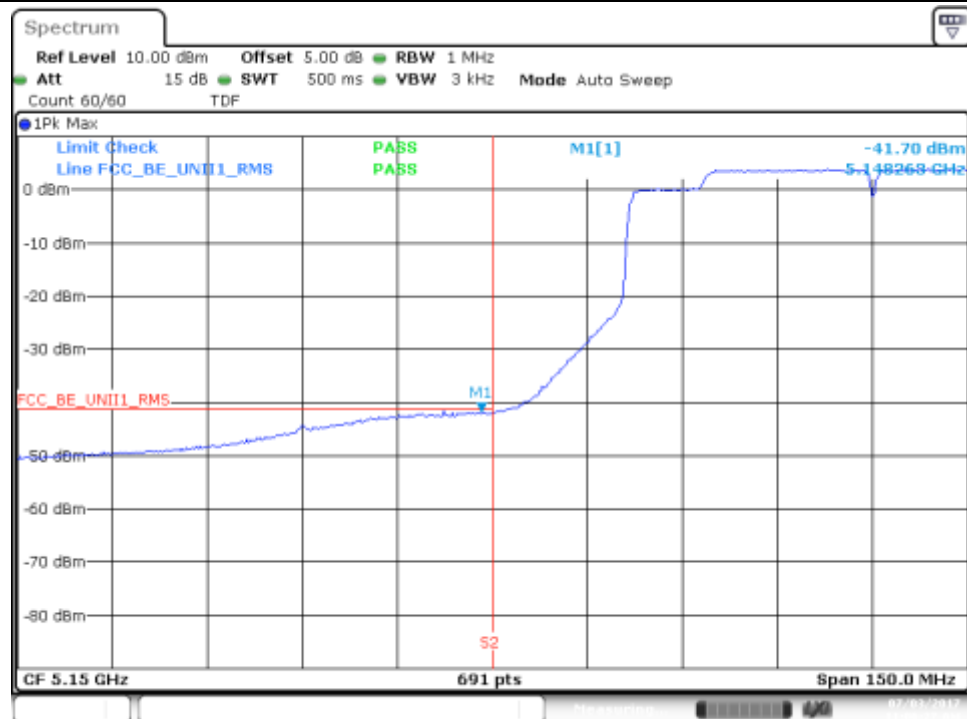


## 802.11ac80, VHT0 (SISO) – Chain A

### BE Low Freq Section, Peak – CH42ac80

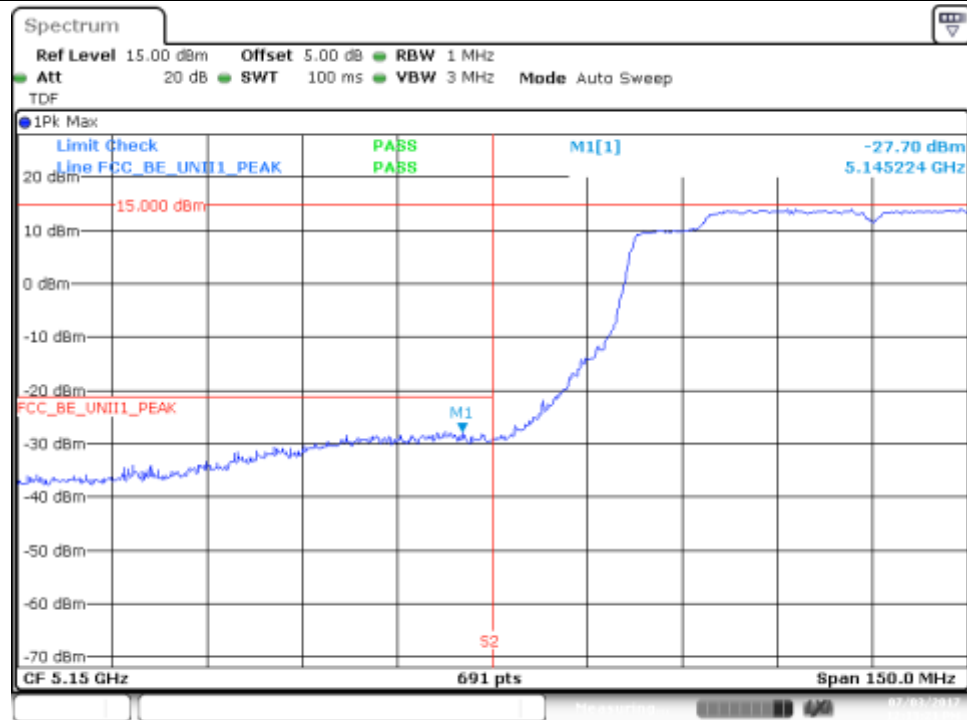


### BE Low Freq Section, RMS – CH42ac80

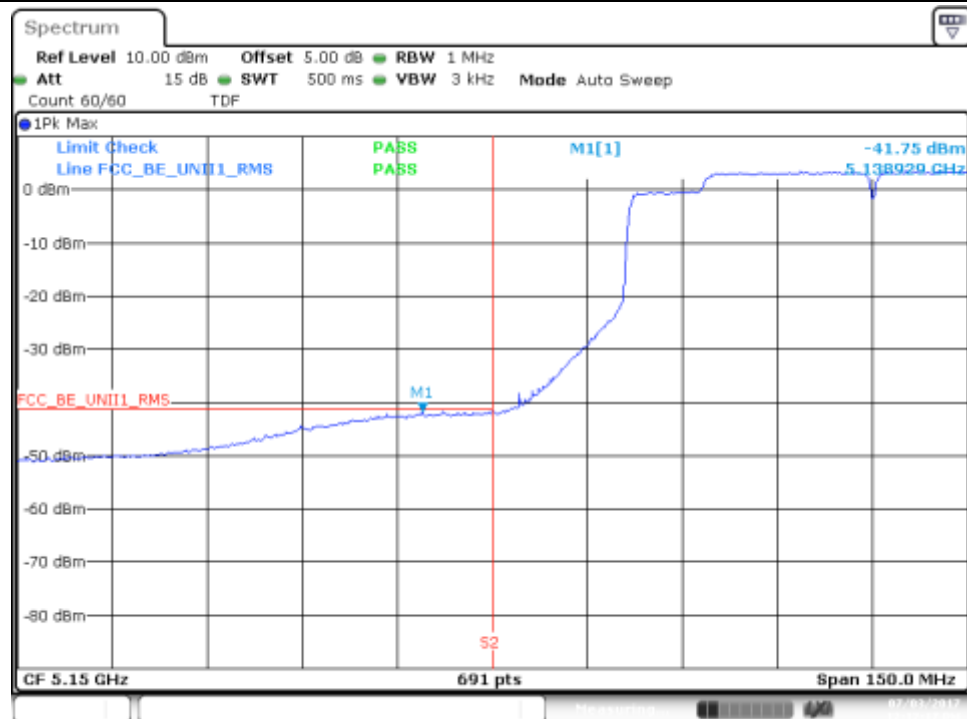


## 802.11ac80, VHT0 (SISO) – Chain B

### BE Low Freq Section, Peak – CH42ac80

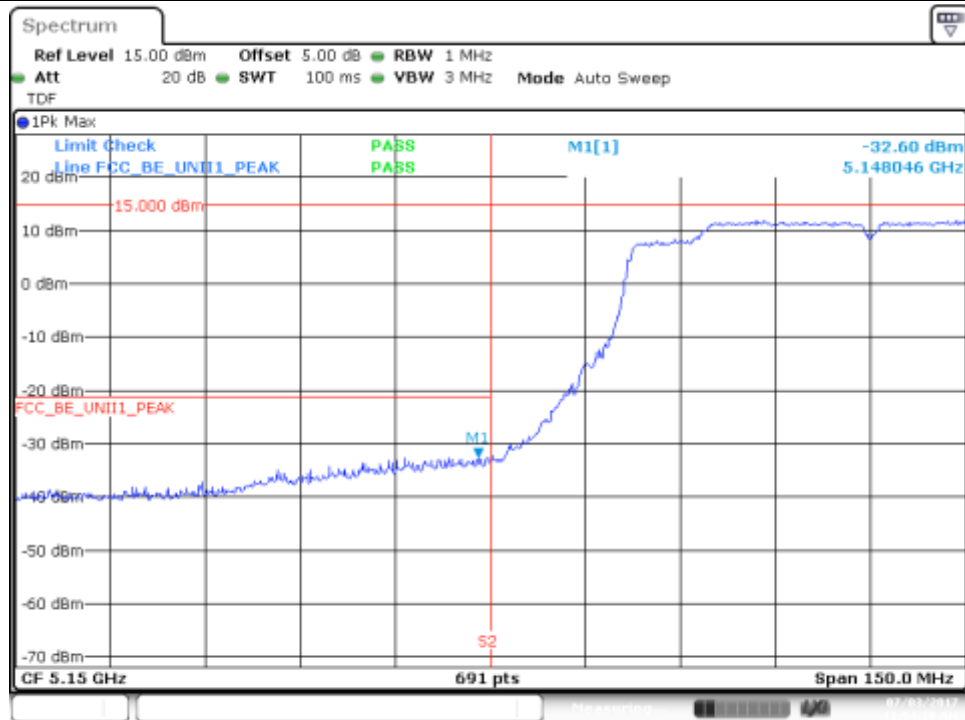


### BE Low Freq Section, RMS – CH42ac80

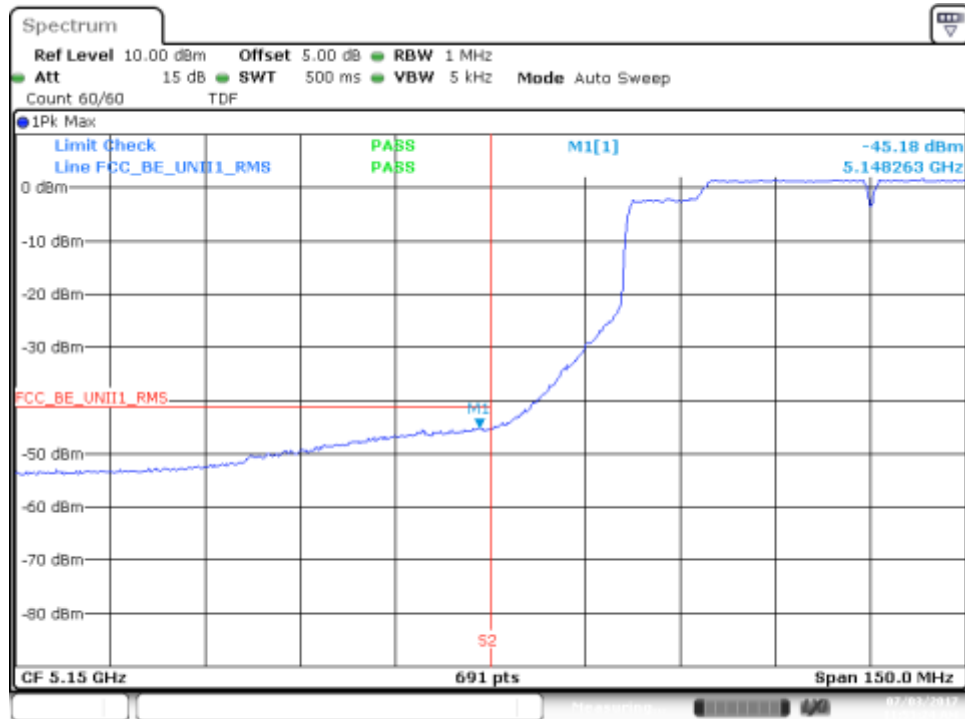


## 802.11ac80, VHT0 (MIMO) – Chain A

### BE Low Freq Section, Peak – CH42ac80

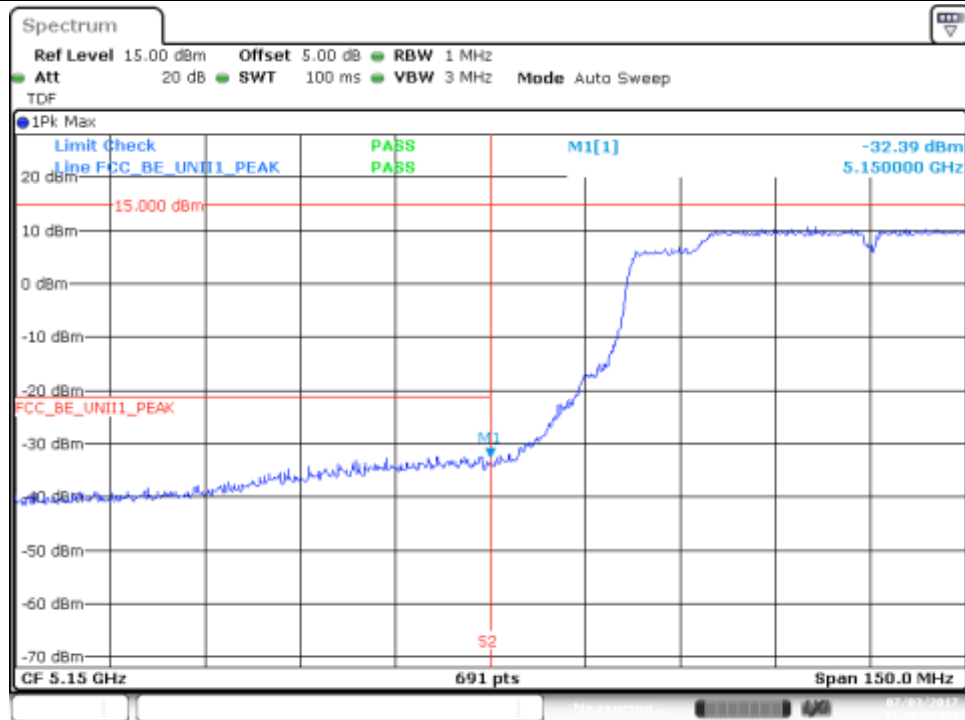


### BE Low Freq Section, RMS – CH42ac80



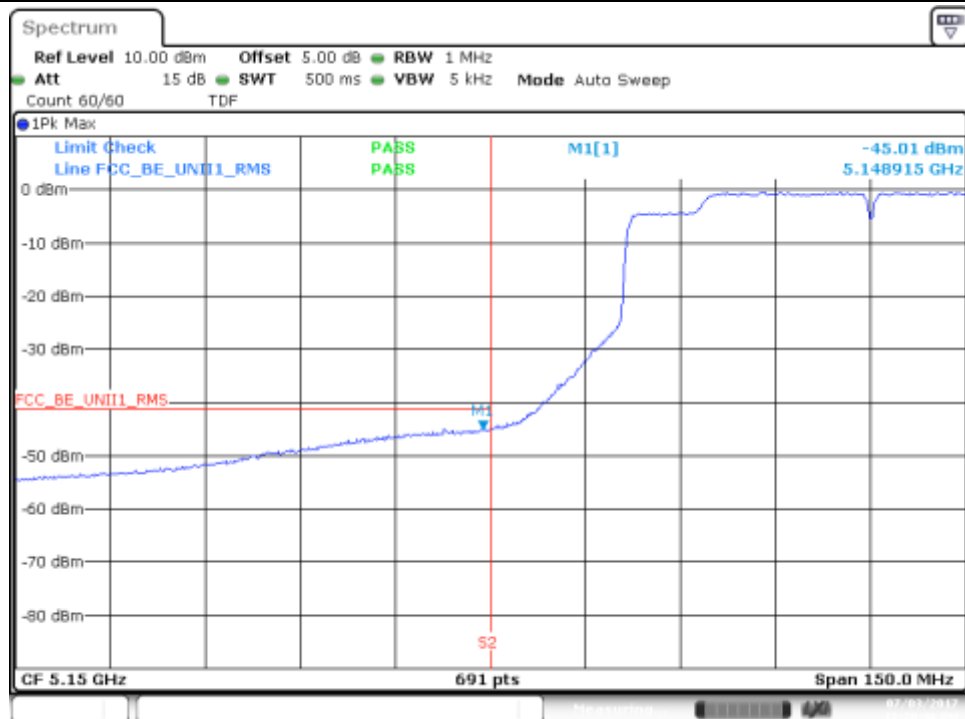
## 802.11ac80, VHT0 (MIMO) – Chain B

### BE Low Freq Section, Peak – CH42ac80



Date: 3.JUL.2017 12:21:36

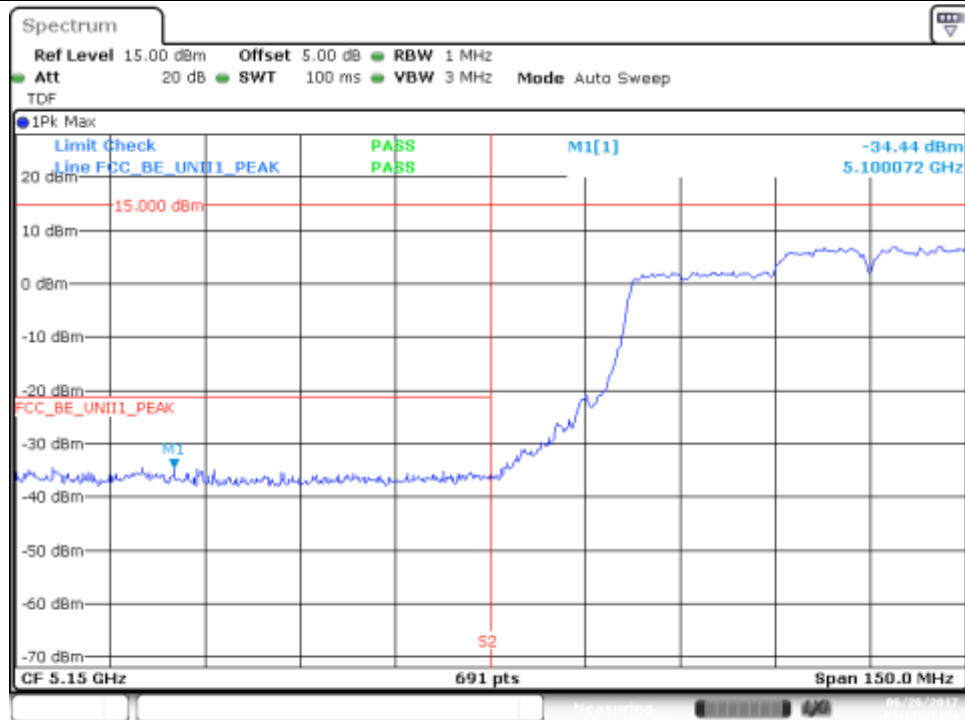
### BE Low Freq Section, RMS – CH42ac80



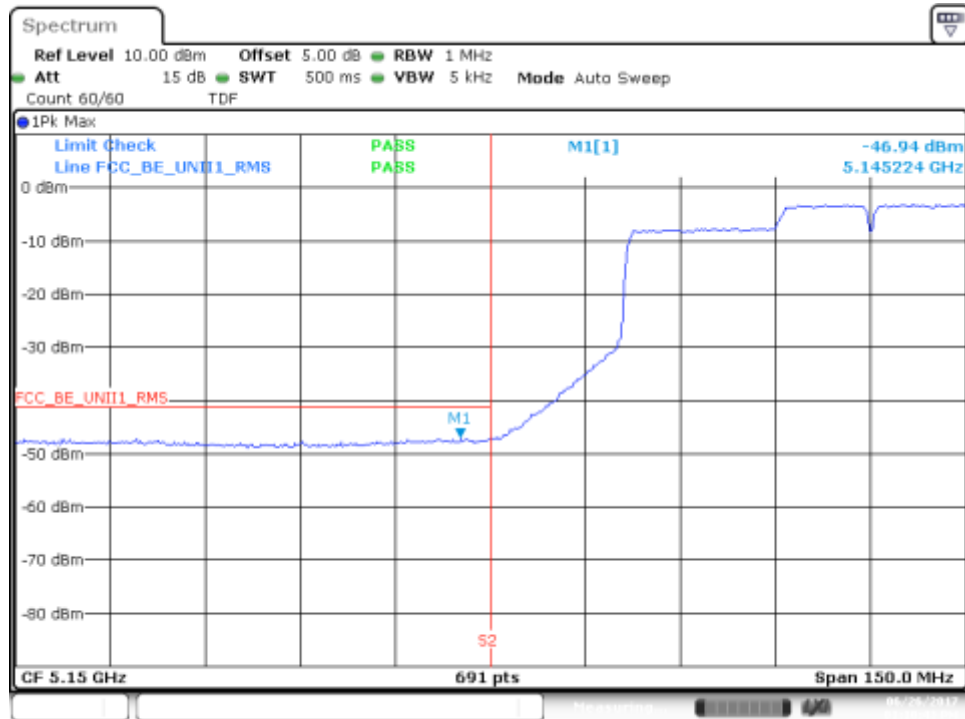
Date: 3.JUL.2017 12:20:46

## 802.11ac160, VHT0 (SISO) – Chain A

### BE Low Freq Section, Peak – CH50ac160

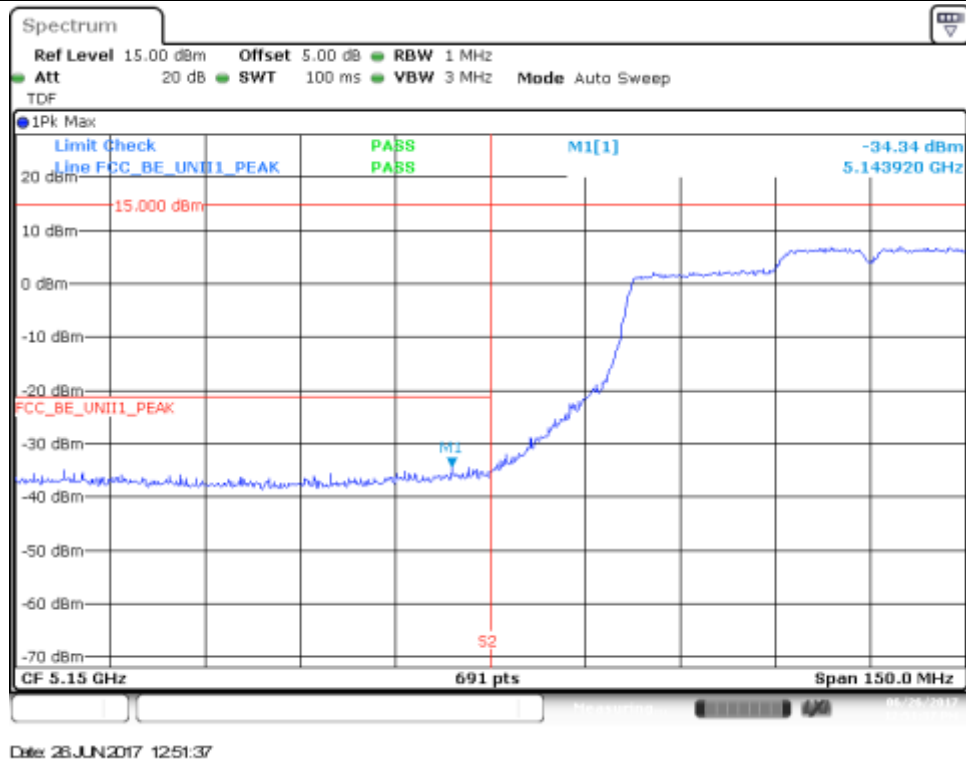


### BE Low Freq Section, RMS – CH50ac160

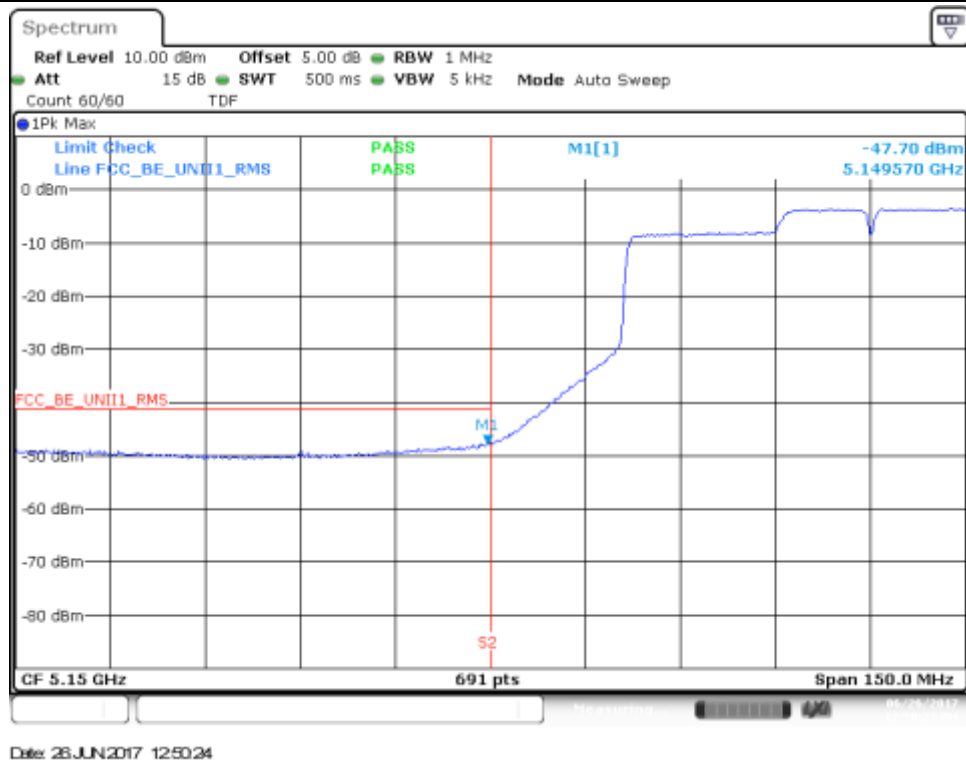


## 802.11ac160, VHT0 (SISO) – Chain B

### BE Low Freq Section, Peak – CH50ac160

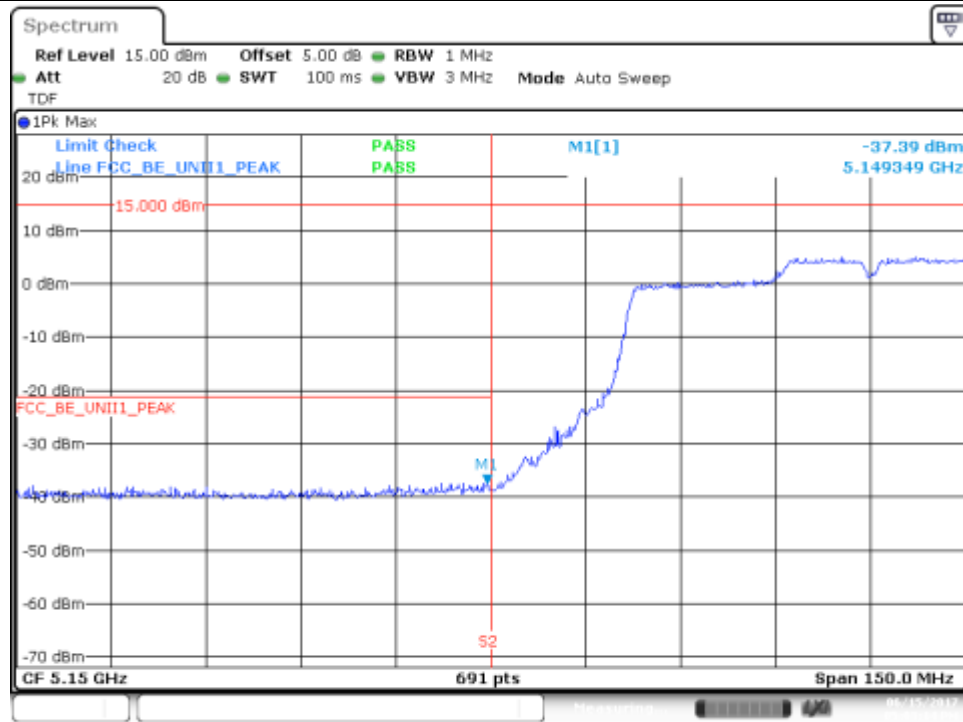


### BE Low Freq Section, RMS – CH50ac160

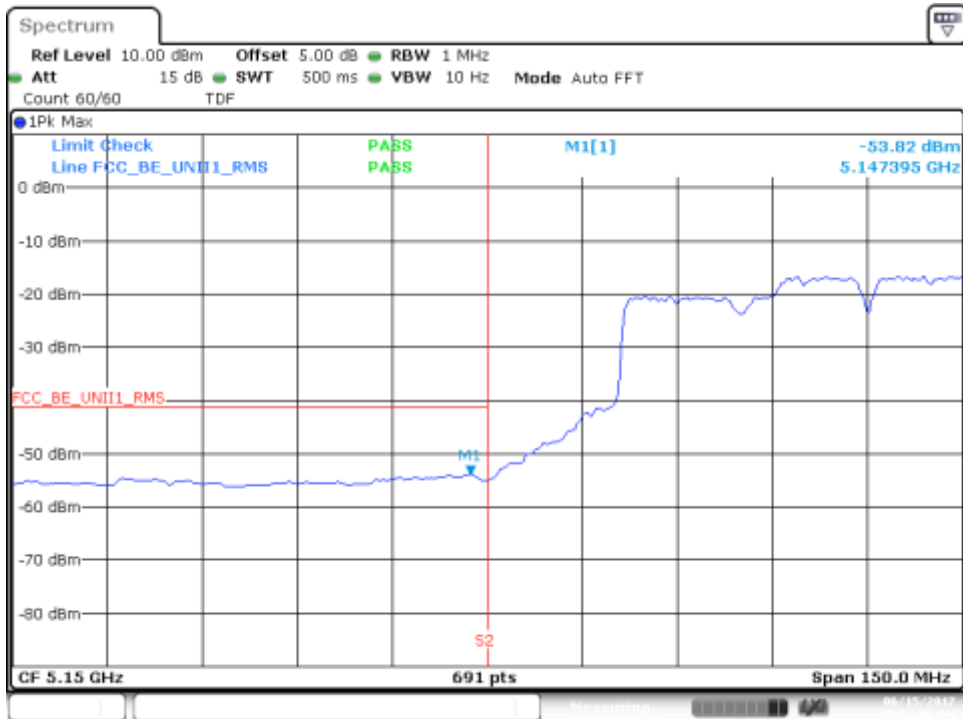


## 802.11ac160, VHT0 (MIMO) – Chain A

### BE Low Freq Section, Peak – CH50ac160

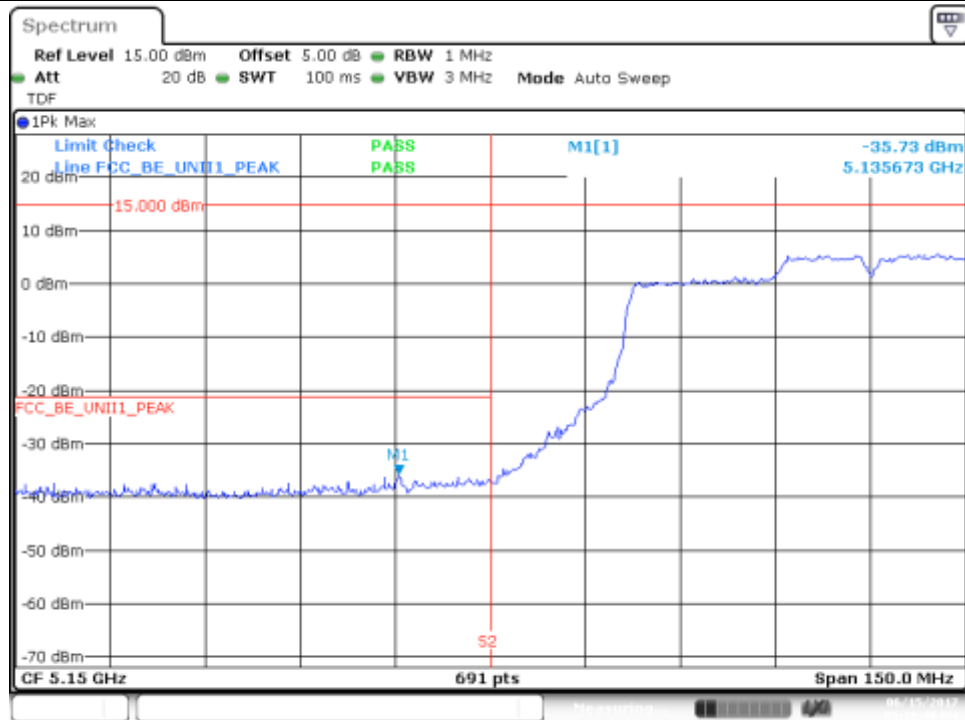


### BE Low Freq Section, RMS – CH50ac160



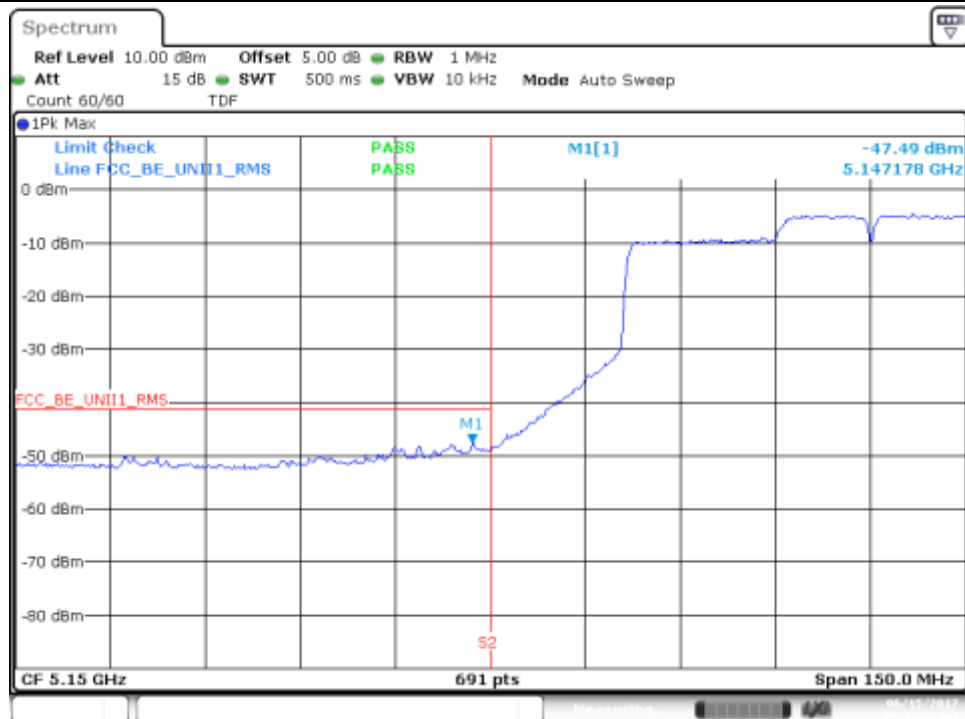
## 802.11ac160, VHT0 (MIMO) – Chain B

### BE Low Freq Section, Peak – CH50ac160



Date: 15 JUN 2017 17:18:48

### BE Low Freq Section, RMS – CH50ac160



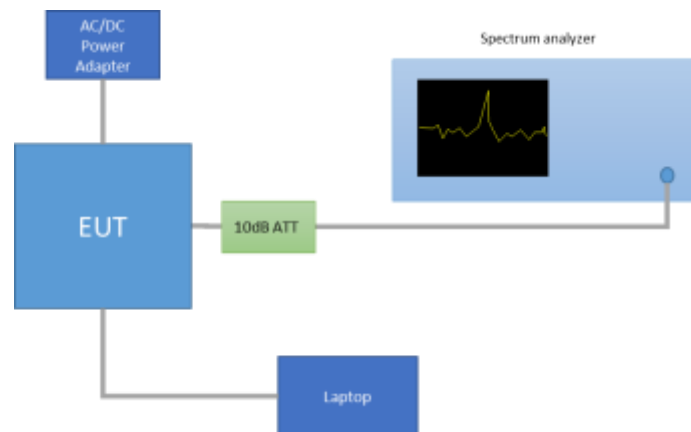
Date: 15 JUN 2017 17:14:34

## B.4 Test Results Tables 5250 - 5350 MHz

### B.4.1 26dB & 99% Bandwidth

#### Test procedure

The setup below was used to measure the 26dB & 99% Bandwidth. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.



# Results tables

| Mode       | Rate  | Antenna      | Channel | Frequency [MHz] | 26dB BW [MHz] | 99% BW [MHz] |
|------------|-------|--------------|---------|-----------------|---------------|--------------|
| 802.11a    | 6Mbps | SISO CHAIN A | 52      | 5260            | 45.65         | 28.64        |
|            |       |              | 56      | 5280            | 27.42         | 17.40        |
|            |       |              | 64      | 5320            | 23.87         | 16.84        |
|            |       | SISO CHAIN B | 52      | 5260            | 29.22         | 17.76        |
|            |       |              | 56      | 5280            | 29.22         | 17.76        |
|            |       |              | 64      | 5320            | 23.97         | 16.84        |
| 802.11n20  | HT0   | SISO CHAIN A | 52      | 5260            | 49.00         | 29.04        |
|            |       |              | 56      | 5280            | 28.22         | 18.20        |
|            |       |              | 64      | 5320            | 24.87         | 17.92        |
|            |       | SISO CHAIN B | 52      | 5260            | 48.95         | 29.64        |
|            |       |              | 56      | 5280            | 29.28         | 18.32        |
|            |       |              | 64      | 5320            | 24.62         | 17.92        |
|            | HT8   | MIMO CHAIN A | 52      | 5260            | 25.47         | 17.96        |
|            |       |              | 56      | 5280            | 25.72         | 17.96        |
|            |       |              | 64      | 5320            | 24.62         | 17.92        |
|            |       | MIMO CHAIN B | 52      | 5260            | 25.87         | 18.04        |
|            |       |              | 56      | 5280            | 25.67         | 18.00        |
|            |       |              | 64      | 5320            | 24.72         | 17.92        |
| 802.11n40  | HT0   | SISO CHAIN A | 54F     | 5270            | 42.97         | 36.56        |
|            |       |              | 62F     | 5310            | 43.60         | 36.56        |
|            |       | SISO CHAIN B | 54F     | 5270            | 42.24         | 36.56        |
|            |       |              | 62F     | 5310            | 43.78         | 36.56        |
|            | HT8   | MIMO CHAIN A | 54F     | 5270            | 44.86         | 36.56        |
|            |       |              | 62F     | 5310            | 44.50         | 36.56        |
|            |       | MIMO CHAIN B | 54F     | 5270            | 43.15         | 36.40        |
|            |       |              | 62F     | 5310            | 42.88         | 36.40        |
| 802.11ac80 | VHT0  | SISO CHAIN A | 58ac80  | 5290            | 85.21         | 75.24        |
|            |       | SISO CHAIN B | 58ac80  | 5290            | 85.40         | 75.24        |
|            |       | MIMO CHAIN A | 58ac80  | 5290            | 87.30         | 75.24        |
|            |       | MIMO CHAIN B | 58ac80  | 5290            | 87.49         | 75.12        |

Max Value

## B.4.2 Power Limits. Maximum Output power & Peak power spectral density

### Test limits

| RSS-247 | Limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.2.2.1 | <p>The maximum conducted output power shall not exceed 250 mW or <math>11 + 10 \log_{10} B</math>, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.</p> <p>The maximum e.i.r.p. shall not exceed 1.0 W or <math>17 + 10 \log_{10} B</math>, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.</p> |

### Test procedure

The Maximum Conducted Output Power was measured using the channel integration method according to section 12.3.2.4 (Method SA-2 Alternative) of ANSI C63.10-2013

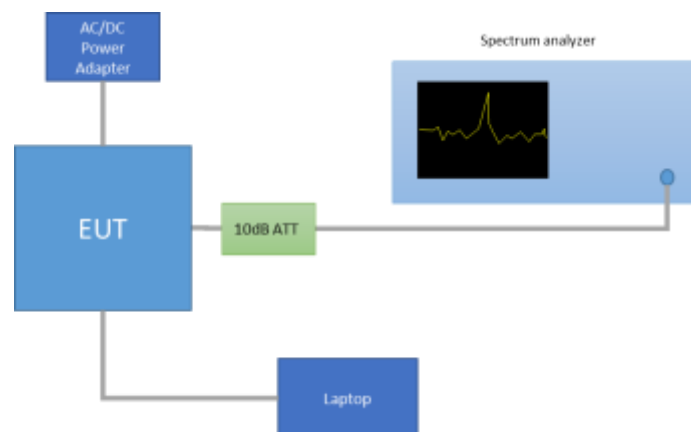
The maximum power spectral density (PSD) was measured using the method according to section 12.5 (Method SA-2 Alternative) of ANSI C63.10-2013.

In the measure-and-sum approach for MIMO mode, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically in linear power units to determine the total emission level from the device.

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power.

The setup below was used to measure the maximum conducted output power and power spectral density. The antenna terminal of the EUT is connected to the spectrum analyzer through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

The declared maximum antenna gain is 5dBi.



## Results tables

### Duty cycle

| Mode        | Rate  | Antenna | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] |
|-------------|-------|---------|----------------------------|--------------------------|----------------|
| 802.11a     | 6Mbps | SISO-A  | 2.04                       | 2.07                     | 98.31%         |
|             |       | SISO-B  | 2.04                       | 2.07                     | 98.36%         |
| 802.11n20   | HT0   | SISO-A  | 1.90                       | 1.93                     | 98.24%         |
|             |       | SISO-B  | 1.90                       | 1.93                     | 98.08%         |
|             | HT8   | MIMO-A  | 0.97                       | 1.01                     | 96.06%         |
|             |       | MIMO-B  | 0.97                       | 1.01                     | 96.15%         |
| 802.11n40   | HT0   | SISO-A  | 0.93                       | 0.97                     | 96.69%         |
|             |       | SISO-B  | 0.94                       | 0.98                     | 96.52%         |
|             | HT8   | MIMO-A  | 0.49                       | 0.53                     | 92.45%         |
|             |       | MIMO-B  | 0.49                       | 0.53                     | 92.82%         |
| 802.11ac80  | VHT0  | SISO-A  | 0.46                       | 0.49                     | 93.10%         |
|             |       | SISO-B  | 0.46                       | 0.49                     | 93.09%         |
|             |       | MIMO-A  | 0.26                       | 0.29                     | 87.03%         |
|             |       | MIMO-B  | 0.26                       | 0.29                     | 87.03%         |
| 802.11ac160 | VHT0  | SISO-A  | 0.25                       | 0.28                     | 88.65%         |
|             |       | SISO-B  | 0.25                       | 0.28                     | 88.34%         |
|             |       | MIMO-A  | 0.15                       | 0.19                     | 79.89%         |
|             |       | MIMO-B  | 0.15                       | 0.19                     | 79.89%         |

### Maximum output power

| Mode       | Rate  | Channel | Freq. [MHz] | Antenna      | Average Conducted Output Power [dBm] | Maximum* Conducted Output Power [dBm] | Maximum* Conducted Output Power [mW] | Maximum* EIRP [dBm] |
|------------|-------|---------|-------------|--------------|--------------------------------------|---------------------------------------|--------------------------------------|---------------------|
| 802.11a    | 6Mbps | 52      | 5260        | SISO CHAIN A | 21.02                                | 21.02                                 | 126.47                               | 26.02               |
|            |       |         |             | SISO CHAIN B | 21.43                                | 21.43                                 | 139.00                               | 26.43               |
|            |       | 56      | 5280        | SISO CHAIN A | 21.48                                | 21.48                                 | 140.60                               | 26.48               |
|            |       |         |             | SISO CHAIN B | 21.57                                | 21.57                                 | 143.55                               | 26.57               |
|            |       | 64      | 5320        | SISO CHAIN A | 16.32                                | 16.32                                 | 42.85                                | 21.32               |
|            |       |         |             | SISO CHAIN B | 16.86                                | 16.86                                 | 48.53                                | 21.86               |
| 802.11n20  | HT0   | 52      | 5260        | SISO CHAIN A | 20.93                                | 20.93                                 | 123.88                               | 25.93               |
|            |       |         |             | SISO CHAIN B | 21.38                                | 21.38                                 | 137.40                               | 26.38               |
|            |       | 56      | 5280        | SISO CHAIN A | 21.41                                | 21.41                                 | 138.36                               | 26.41               |
|            |       |         |             | SISO CHAIN B | 21.53                                | 21.53                                 | 142.23                               | 26.53               |
|            |       | 64      | 5320        | SISO CHAIN A | 16.30                                | 16.30                                 | 42.66                                | 21.30               |
|            |       |         |             | SISO CHAIN B | 16.72                                | 16.72                                 | 46.99                                | 21.72               |
|            | HT8   | 52      | 5260        | MIMO CHAIN A | 19.62                                | 19.79                                 | 95.38                                | 24.79               |
|            |       |         |             | MIMO CHAIN B | 19.81                                | 19.98                                 | 99.55                                | 24.98               |
|            |       |         |             | Combined A+B | 22.73                                | 22.90                                 | 194.94                               | 27.90               |
|            |       | 56      | 5280        | MIMO CHAIN A | 19.58                                | 19.75                                 | 94.51                                | 24.75               |
|            |       |         |             | MIMO CHAIN B | 19.64                                | 19.81                                 | 95.73                                | 24.81               |
|            |       |         |             | Combined A+B | 22.62                                | 22.79                                 | 190.24                               | 27.79               |
|            |       | 64      | 5320        | MIMO CHAIN A | 15.71                                | 15.88                                 | 38.77                                | 20.88               |
|            |       |         |             | MIMO CHAIN B | 16.08                                | 16.25                                 | 42.17                                | 21.25               |
|            |       |         |             | Combined A+B | 18.91                                | 19.08                                 | 80.94                                | 24.08               |
| 802.11n40  | HT0   | 54F     | 5270        | SISO CHAIN A | 18.88                                | 19.03                                 | 79.92                                | 24.03               |
|            |       |         |             | SISO CHAIN B | 18.68                                | 18.83                                 | 76.45                                | 23.83               |
|            |       | 62F     | 5310        | SISO CHAIN A | 14.67                                | 14.82                                 | 30.31                                | 19.82               |
|            |       |         |             | SISO CHAIN B | 14.68                                | 14.83                                 | 30.44                                | 19.83               |
|            | HT8   | 54F     | 5270        | MIMO CHAIN A | 17.61                                | 17.95                                 | 62.38                                | 22.95               |
|            |       |         |             | MIMO CHAIN B | 17.43                                | 17.75                                 | 59.62                                | 22.75               |
|            |       |         |             | Combined A+B | 20.53                                | 20.86                                 | 122.00                               | 25.86               |
|            |       | 62F     | 5310        | MIMO CHAIN A | 14.30                                | 14.64                                 | 29.11                                | 19.64               |
|            |       |         |             | MIMO CHAIN B | 14.27                                | 14.59                                 | 28.80                                | 19.59               |
|            |       |         |             | Combined A+B | 17.30                                | 17.63                                 | 57.91                                | 22.63               |
| 802.11ac80 | VHT0  | 58ac80  | 5290        | SISO CHAIN A | 15.60                                | 15.91                                 | 39.00                                | 20.91               |
|            |       |         |             | SISO CHAIN B | 15.22                                | 15.53                                 | 35.74                                | 20.53               |
|            |       |         |             | MIMO CHAIN A | 12.54                                | 13.14                                 | 20.62                                | 18.14               |
|            |       |         |             | MIMO CHAIN B | 12.17                                | 12.77                                 | 18.94                                | 17.77               |
|            |       |         |             | Combined A+B | 15.37                                | 15.97                                 | 39.56                                | 20.97               |

\* Maximum values are the duty cycle compensated values calculated from the average (measured) values

Max Value

Min Value

### Maximum Power Spectral Density (PSD)

| Mode       | Rate  | Channel | Freq. [MHz] | Antenna      | Average conducted PSD [dBm/MHz] | Maximum* conducted PSD [dBm/MHz] |
|------------|-------|---------|-------------|--------------|---------------------------------|----------------------------------|
| 802.11a    | 6Mbps | 52      | 5260        | SISO CHAIN A | 9.25                            | 9.25                             |
|            |       |         |             | SISO CHAIN B | 9.66                            | 9.66                             |
|            |       | 56      | 5300        | SISO CHAIN A | 9.80                            | 9.80                             |
|            |       |         |             | SISO CHAIN B | 9.88                            | 9.88                             |
|            |       | 64      | 5320        | SISO CHAIN A | 4.71                            | 4.71                             |
|            |       |         |             | SISO CHAIN B | 5.29                            | 5.29                             |
| 802.11n20  | HT0   | 52      | 5260        | SISO CHAIN A | 8.86                            | 8.86                             |
|            |       |         |             | SISO CHAIN B | 9.30                            | 9.30                             |
|            |       | 56      | 5300        | SISO CHAIN A | 9.48                            | 9.48                             |
|            |       |         |             | SISO CHAIN B | 9.58                            | 9.58                             |
|            |       | 64      | 5320        | SISO CHAIN A | 4.51                            | 4.51                             |
|            |       |         |             | SISO CHAIN B | 4.82                            | 4.82                             |
|            | HT8   | 52      | 5260        | MIMO CHAIN A | 7.67                            | 7.84                             |
|            |       |         |             | MIMO CHAIN B | 7.89                            | 8.06                             |
|            |       |         |             | Combined A+B | 10.79                           | 10.96                            |
|            |       | 56      | 5300        | MIMO CHAIN A | 7.65                            | 7.82                             |
|            |       |         |             | MIMO CHAIN B | 7.72                            | 7.89                             |
|            |       |         |             | Combined A+B | 10.70                           | 10.87                            |
|            |       | 64      | 5320        | MIMO CHAIN A | 3.80                            | 3.97                             |
|            |       |         |             | MIMO CHAIN B | 4.23                            | 4.40                             |
|            |       |         |             | Combined A+B | 7.03                            | 7.20                             |
| 802.11n40  | HT0   | 54F     | 5270        | SISO CHAIN A | 3.83                            | 3.98                             |
|            |       |         |             | SISO CHAIN B | 3.64                            | 3.79                             |
|            |       | 62F     | 5310        | SISO CHAIN A | -0.41                           | -0.26                            |
|            |       |         |             | SISO CHAIN B | -0.36                           | -0.21                            |
|            | HT8   | 54F     | 5270        | MIMO CHAIN A | 2.56                            | 2.90                             |
|            |       |         |             | MIMO CHAIN B | 2.47                            | 2.79                             |
|            |       |         |             | Combined A+B | 5.53                            | 5.86                             |
|            |       | 62F     | 5310        | MIMO CHAIN A | -0.73                           | -0.39                            |
|            |       |         |             | MIMO CHAIN B | -0.67                           | -0.35                            |
|            |       |         |             | Combined A+B | 2.31                            | 2.64                             |
| 802.11ac80 | VHT0  | 58ac80  | 5290        | SISO CHAIN A | -1.80                           | -1.49                            |
|            |       |         |             | SISO CHAIN B | -2.17                           | -1.86                            |
|            |       |         |             | MIMO CHAIN A | -4.73                           | -4.13                            |
|            |       |         |             | MIMO CHAIN B | -5.11                           | -4.51                            |
|            |       |         |             | Combined A+B | -1.91                           | -1.30                            |

\* Maximum values are the duty cycle compensated values calculated from the measured average values

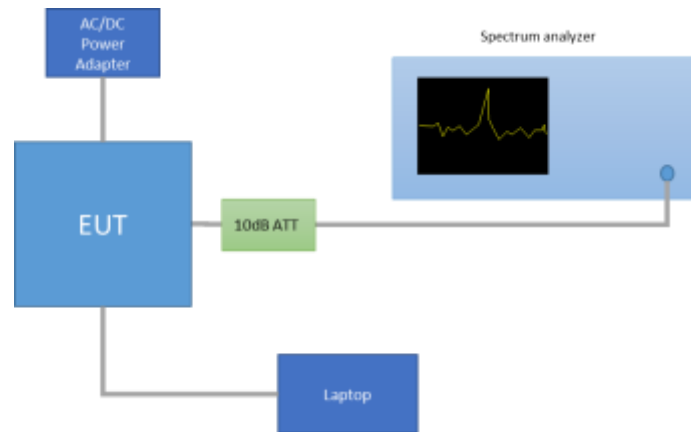
### B.4.3 Unwanted emissions limits : Band Edge (Conducted)

#### Test limits

| RSS part                   | Limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                       |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------|-------------------------|--------------------|-------|-----|----|---|--------|-----|------|---|---------|-----|----|---|-----------|-----|----|---|
| RSS-247,<br>Clause 6.2.2.2 | <p>i) For devices with both operating frequencies and channel bandwidths contained within the band 5250-5350 MHz, the device shall comply with the following:</p> <p>a. All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. if the equipment is intended for outdoor use; or</p> <p>b. All emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. and any emissions within the band 5150-5250 MHz shall meet the power spectral density limits of Section 6.2.1. The device shall be labelled “for indoor use only.”</p> <p>ii) For devices with operating frequencies in the band 5250-5350 MHz but having a channel bandwidth that overlaps the band 5150-5250 MHz, the devices’ unwanted emission shall not exceed -27 dBm/MHz e.i.r.p. outside the band 5150-5350 MHz and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device shall be labelled “for indoor use only.”</p>                                                                                                                                                                                                                                                                              |                         |                       |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| RSS-GEN,<br>Clause 8.9     | <p>Except when the requirements applicable to a given device state otherwise, emissions from license-exempt transmitters shall comply with the field strength limits shown in Table below. Additionally, the level of any transmitter emission shall not exceed the level of the transmitter’s fundamental emission.</p> <table><tr><th>Freq Range (MHz)</th><th>Field Strength (µV/m)</th><th>Field Strength (dBµV/m)</th><th>Meas. Distance (m)</th></tr><tr><td>30-88</td><td>100</td><td>40</td><td>3</td></tr><tr><td>88-216</td><td>150</td><td>43.5</td><td>3</td></tr><tr><td>216-960</td><td>200</td><td>46</td><td>3</td></tr><tr><td>Above 960</td><td>500</td><td>54</td><td>3</td></tr></table> <p>Unless otherwise specified, for all frequencies greater than 1 GHz, the radiated emission limits for license-exempt radio apparatus stated in applicable RSSs (including RSS-Gen) are based on measurements using a linear average detector function having a minimum resolution bandwidth of 1 MHz. If an average limit is specified for the EUT, then the peak emission shall also be measured with instrumentation properly adjusted for such factors as pulse desensitization to ensure the peak emission is less than 20 dB above the average limit.</p> | Freq Range (MHz)        | Field Strength (µV/m) | Field Strength (dBµV/m) | Meas. Distance (m) | 30-88 | 100 | 40 | 3 | 88-216 | 150 | 43.5 | 3 | 216-960 | 200 | 46 | 3 | Above 960 | 500 | 54 | 3 |
| Freq Range (MHz)           | Field Strength (µV/m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Field Strength (dBµV/m) | Meas. Distance (m)    |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 30-88                      | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 40                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 88-216                     | 150                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 43.5                    | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 216-960                    | 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 46                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| Above 960                  | 500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 54                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |

### Test procedure

The setup below was used to measure undesirable emissions on the Band Edge domain. The antenna terminal of the EUT is connected to the spectrum analyzer through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss and the declared Antenna Gain.



Band Edge measurements in average mode on the high frequency section was done with the primary and the Video Bandwidth Method according to section G) 6) (KDB 789033 D02), with the following parameters:

- When the duty cycle is  $> 98\%$ ,  $VBW = 10\text{Hz}$
- When the duty cycle is  $< 98\%$ ,  $VBW > 1/T$ , where  $T$  is defined in section II.B.1.a

In case of Band Edge measurements falling in restricted bands, the declared Antenna Gain is also compensated in the graph. The declared maximum antenna gain is 5dBi.

The following limits in dBm were applied for the average detector after the conversion from the limits detailed above in  $\text{dB}\mu\text{V/m}$ , according to RSS-GEN, Clause 8.9. The limits in dBm for peak detector are 20dB above the indicated values in the table.

| §15.209(a)       |              |                                   | Converted values                     |             |
|------------------|--------------|-----------------------------------|--------------------------------------|-------------|
| Freq Range (MHz) | Distance (m) | Field strength (microvolts/meter) | Field strength (dB microvolts/meter) | Power (dBm) |
| 960-25000        | 3            | 500                               | 53.98                                | -41.2       |

**See Section Error! Reference source not found. for the screenshot results.**

## B.4.4 Unwanted emission limits: Spurious emission (Radiated)

### Standard references

| RSS part                      | Limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                       |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------|-------------------------|--------------------|-------|-----|----|---|--------|-----|------|---|---------|-----|----|---|-----------|-----|----|---|
| RSS-247,<br>Clause<br>6.2.2.2 | <p>i) For devices with both operating frequencies and channel bandwidths contained within the band 5250-5350 MHz, the device shall comply with the following:</p> <p>a. All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. if the equipment is intended for outdoor use; or</p> <p>b. All emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. and any emissions within the band 5150-5250 MHz shall meet the power spectral density limits of Section 6.2.1. The device shall be labelled “for indoor use only.”</p> <p>ii) For devices with operating frequencies in the band 5250-5350 MHz but having a channel bandwidth that overlaps the band 5150-5250 MHz, the devices’ unwanted emission shall not exceed -27 dBm/MHz e.i.r.p. outside the band 5150-5350 MHz and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device shall be labelled “for indoor use only.”</p>                                                                                                                                                                                                                                                                              |                         |                       |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| RSS-GEN,<br>Clause 8.9        | <p>Except when the requirements applicable to a given device state otherwise, emissions from license-exempt transmitters shall comply with the field strength limits shown in Table below. Additionally, the level of any transmitter emission shall not exceed the level of the transmitter’s fundamental emission.</p> <table><tr><th>Freq Range (MHz)</th><th>Field Strength (μV/m)</th><th>Field Strength (dBμV/m)</th><th>Meas. Distance (m)</th></tr><tr><td>30-88</td><td>100</td><td>40</td><td>3</td></tr><tr><td>88-216</td><td>150</td><td>43.5</td><td>3</td></tr><tr><td>216-960</td><td>200</td><td>46</td><td>3</td></tr><tr><td>Above 960</td><td>500</td><td>54</td><td>3</td></tr></table> <p>Unless otherwise specified, for all frequencies greater than 1 GHz, the radiated emission limits for license-exempt radio apparatus stated in applicable RSSs (including RSS-Gen) are based on measurements using a linear average detector function having a minimum resolution bandwidth of 1 MHz. If an average limit is specified for the EUT, then the peak emission shall also be measured with instrumentation properly adjusted for such factors as pulse desensitization to ensure the peak emission is less than 20 dB above the average limit.</p> | Freq Range (MHz)        | Field Strength (μV/m) | Field Strength (dBμV/m) | Meas. Distance (m) | 30-88 | 100 | 40 | 3 | 88-216 | 150 | 43.5 | 3 | 216-960 | 200 | 46 | 3 | Above 960 | 500 | 54 | 3 |
| Freq Range (MHz)              | Field Strength (μV/m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Field Strength (dBμV/m) | Meas. Distance (m)    |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 30-88                         | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 40                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 88-216                        | 150                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 43.5                    | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 216-960                       | 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 46                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| Above 960                     | 500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 54                      | 3                     |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |

### Test procedure

The below setups were used to measure the radiated spurious emissions.

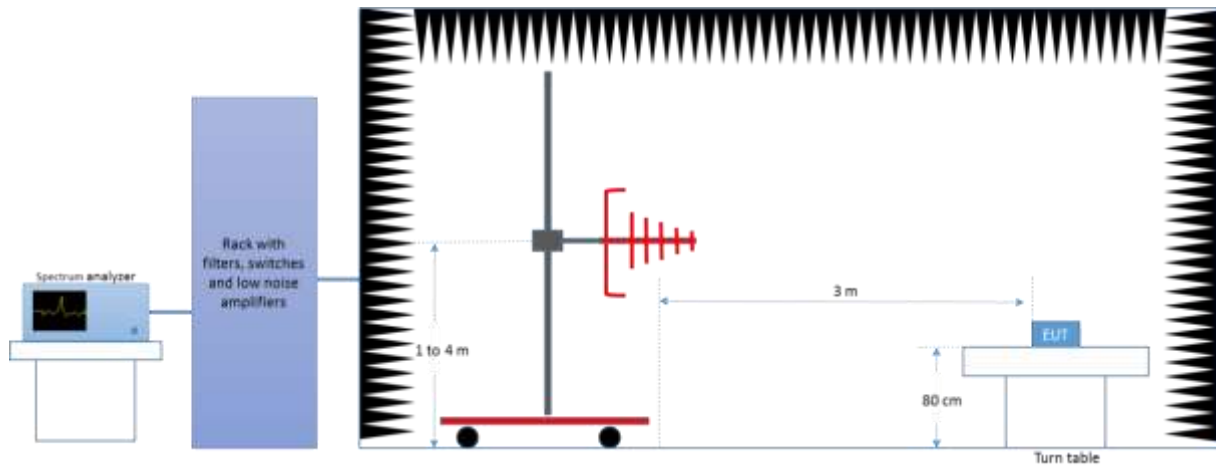
Depending of the frequency range and bands being tested, different antennas and filters were used.

The final measurement is done by varying the antenna height, the EUT azimuth over 360° and for both Vertical and Horizontal polarizations.

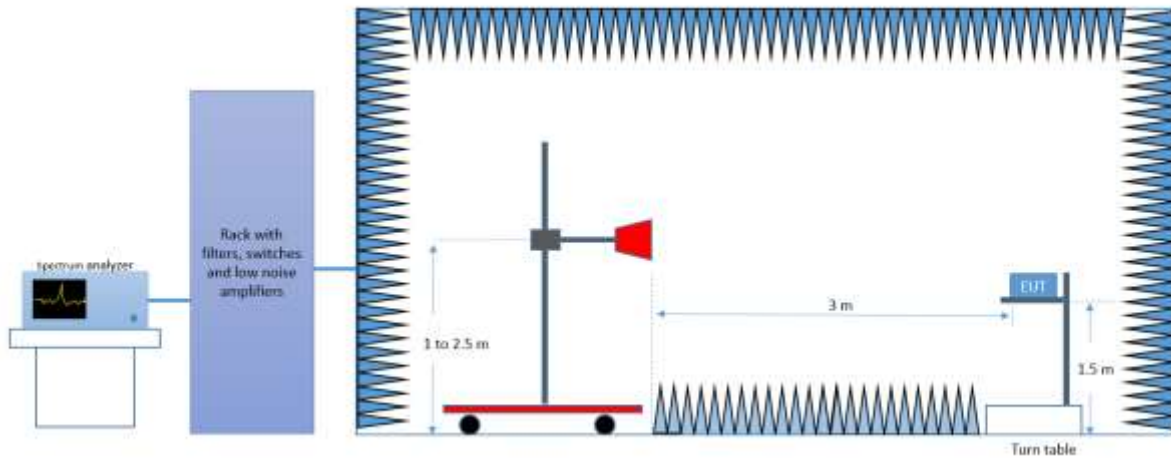
The radiated spurious emissions were measured on the worst case configuration selected from the chapter B.4.2 and using the lowest, middle and highest channels.

For technologies 802.n20, 802.n40 and 802.ac80 the worst case in terms of spurious emissions found among the low, mid and high channels when tested on chain A and B separately is used to perform the test in MIMO mode (Chain A+B).

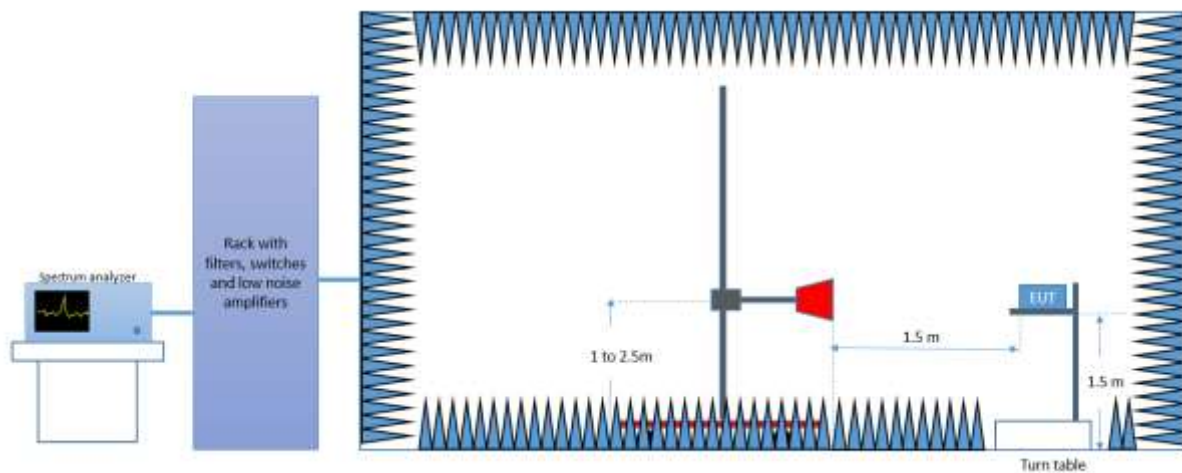
*Radiated Setup < 1GHz*



*Radiated Setup 1 GHz - 18 GHz*



*Radiated Setup 18 GHz - 40 GHz*



Sample Calculation

The field strength is deduced from the radiated measurement using the following equation:

$$E = 126.8 - 20\log(\lambda) + P - G$$

where

*E* is the field strength of the emission at the measurement distance, in dBμV/m

*P* is the power measured at the output of the test antenna, in dBm

*λ* is the wavelength of the emission under investigation  $[300/f_{MHz}]$ , in m

*G* is the gain of the test antenna, in dBi

NOTE – The measured power P includes all applicable instrument correction factors up to the connection to the test Antenna e.g. cable losses, amplifier gains.

For field strength measurements made at other than the distance at which the applicable limit is specified, the field strength of the emission at the distance specified by the limit is deduced as follows:

$$E_{SpecLimit} = E_{Meas} + 20\log(D_{Meas}/D_{SpecLimit})$$

where

*E<sub>SpecLimit</sub>* is the field strength of the emission at the distance specified by the limit, in dBμV/m

*E<sub>Meas</sub>* is the field strength of the emission at the measurement distance, in dBμV/m

*D<sub>Meas</sub>* is the measurement distance, in m

*D<sub>SpecLimit</sub>* is the distance specified by the limit, in m

# Test Results

## 30 MHz – 40 GHz, 802.11a, 6Mbps, Chain A

### Radiated Spurious – CH52

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 34.8    | ---    | 40     | 5.3    |
| 62.5      | ---     | 34.2   | 40     | 5.9    |
| 1000.0    | ---     | 39.0   | 54     | 15.1   |
| 1187.5    | ---     | 37.7   | 54     | 16.4   |
| 2144.1    | 49.1    | ---    | 74     | 25.0   |
| 2279.1    | 48.8    | ---    | 74     | 25.2   |
| 15779.9   | ---     | 44.9   | 54     | 9.2    |
| 15784.8   | 54.7    | ---    | 74     | 19.4   |
| 17994.6   | 61.2    | ---    | 74     | 12.9   |
| 17997.8   | ---     | 49.8   | 54     | 4.3    |
| 39816.4   | 57.4    | ---    | 74     | 16.6   |
| 39879.0   | ---     | 47.3   | 54     | 6.8    |
| 39948.1   | 58.1    | ---    | 74     | 15.9   |
| 39989.0   | ---     | 47.4   | 54     | 6.7    |

**Radiated Spurious – CH56**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 33.7   | 40     | 6.4    |
| 62.5      | 33.1    | ---    | 40     | 7.0    |
| 1000.0    | ---     | 38.3   | 54     | 15.7   |
| 1125.2    | ---     | 37.8   | 54     | 16.2   |
| 2168.9    | 49.0    | ---    | 74     | 25.0   |
| 2253.5    | 48.6    | ---    | 74     | 25.5   |
| 15837.5   | 56.3    | ---    | 74     | 17.7   |
| 15837.9   | ---     | 45.1   | 54     | 9.0    |
| 17992.0   | 61.2    | ---    | 74     | 12.8   |
| 18000.0   | ---     | 50.0   | 54     | 4.1    |
| 39860.1   | ---     | 47.4   | 54     | 6.7    |
| 39895.5   | ---     | 47.1   | 54     | 7.0    |
| 39906.8   | 57.4    | ---    | 74     | 16.6   |
| 39996.6   | 58.0    | ---    | 74     | 16.1   |

**Radiated Spurious – CH64**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 34.4   | 40     | 5.7    |
| 62.5      | 35.0    | ---    | 40     | 5.0    |
| 2149.2    | ---     | 41.3   | 54     | 12.8   |
| 2158.3    | 52.8    | ---    | 74     | 21.2   |
| 2159.3    | ---     | 41.3   | 54     | 12.8   |
| 2418.0    | 50.1    | ---    | 74     | 23.9   |
| 15960.6   | 57.3    | ---    | 74     | 16.7   |
| 15963.8   | ---     | 46.2   | 54     | 7.8    |
| 17979.0   | 61.5    | ---    | 74     | 12.5   |
| 17999.1   | ---     | 49.9   | 54     | 4.2    |
| 39818.5   | ---     | 47.5   | 54     | 6.5    |
| 39843.9   | 58.6    | ---    | 74     | 15.5   |
| 39858.0   | 57.4    | ---    | 74     | 16.7   |
| 39875.9   | ---     | 47.3   | 54     | 6.8    |

## 30 MHz – 40 GHz, 802.11a, 6Mbps, Chain B

### Radiated Spurious – CH52

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 33.9   | 40     | 6.2    |
| 62.5      | 34.6    | ---    | 40     | 5.5    |
| 1000.0    | ---     | 37.6   | 54     | 16.5   |
| 1124.9    | 46.4    | ---    | 74     | 27.7   |
| 1187.5    | ---     | 37.5   | 54     | 16.5   |
| 2253.8    | 50.9    | ---    | 74     | 23.1   |
| 15775.0   | ---     | 43.8   | 54     | 10.3   |
| 15777.3   | 54.5    | ---    | 74     | 19.6   |
| 17984.8   | 61.1    | ---    | 74     | 12.9   |
| 17998.7   | ---     | 49.8   | 54     | 4.2    |
| 39792.4   | 57.6    | ---    | 74     | 16.4   |
| 39825.4   | ---     | 47.3   | 54     | 6.7    |
| 39825.7   | 57.4    | ---    | 74     | 16.7   |
| 39870.1   | ---     | 47.3   | 54     | 6.8    |

**Radiated Spurious – CH56**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | 36.2    | ---    | 40     | 3.9    |
| 62.5      | ---     | 34.5   | 40     | 5.6    |
| 1000.0    | 46.3    | ---    | 54     | 7.8    |
| 1000.0    | ---     | 39.5   | 54     | 14.6   |
| 1187.5    | ---     | 37.6   | 54     | 16.5   |
| 2142.6    | 51.8    | ---    | 74     | 22.3   |
| 15842.4   | ---     | 46.1   | 54     | 7.9    |
| 15857.1   | 56.0    | ---    | 74     | 18.1   |
| 17979.5   | 61.2    | ---    | 74     | 12.9   |
| 17999.6   | ---     | 50.1   | 54     | 4.0    |
| 39818.5   | ---     | 47.5   | 54     | 6.5    |
| 39843.9   | 58.6    | ---    | 74     | 15.5   |
| 39858.0   | 57.4    | ---    | 74     | 16.7   |
| 39875.9   | ---     | 47.3   | 54     | 6.8    |

## Radiated Spurious – CH64

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 35.2   | 40     | 4.9    |
| 62.5      | 36.6    | ---    | 40     | 3.5    |
| 1000.2    | ---     | 38.3   | 54     | 15.7   |
| 1187.5    | ---     | 37.4   | 54     | 16.7   |
| 2146.3    | 50.7    | ---    | 74     | 23.4   |
| 2343.9    | 49.1    | ---    | 74     | 25.0   |
| 10639.8   | ---     | 41.7   | 54     | 12.3   |
| 10639.8   | 52.2    | ---    | 74     | 21.9   |
| 15963.3   | ---     | 46.8   | 54     | 7.3    |
| 15965.5   | 57.2    | ---    | 74     | 16.9   |
| 22527.0   | 48.1    | ---    | 74     | 26.0   |
| 26730.3   | ---     | 37.9   | 54     | 16.2   |
| 39861.2   | ---     | 47.0   | 54     | 7.0    |
| 39913.9   | 58.0    | ---    | 74     | 16.1   |

## 30 MHz – 40 GHz, 802.11n20, HT0, Chain A

### Radiated Spurious – CH52

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.4      | 37.2    | ---    | 40     | 2.9    |
| 62.5      | ---     | 36.1   | 40     | 4.0    |
| 1124.9    | ---     | 37.4   | 54     | 16.7   |
| 1124.9    | 45.5    | ---    | 74     | 28.6   |
| 6345.0    | ---     | 45.4   | 54     | 8.7    |
| 6346.7    | 57.5    | ---    | 74     | 16.6   |
| 15779.0   | 55.8    | ---    | 74     | 18.2   |
| 15779.5   | ---     | 44.9   | 54     | 9.1    |
| 17989.7   | ---     | 50.0   | 54     | 4.0    |
| 17998.2   | 61.9    | ---    | 74     | 12.2   |
| 21039.8   | ---     | 40.2   | 54     | 13.8   |
| 39830.0   | 57.5    | ---    | 74     | 16.5   |
| 39857.0   | ---     | 47.5   | 54     | 6.6    |
| 39859.1   | ---     | 47.2   | 54     | 6.9    |

**Radiated Spurious – CH56**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 36.1   | 40     | 4.0    |
| 62.5      | 37.3    | ---    | 40     | 2.8    |
| 1124.7    | 45.1    | ---    | 74     | 29.0   |
| 1124.9    | ---     | 36.9   | 54     | 17.2   |
| 6229.7    | ---     | 45.6   | 54     | 8.5    |
| 6232.6    | 58.1    | ---    | 74     | 16.0   |
| 15839.7   | 56.6    | ---    | 74     | 17.5   |
| 15841.1   | ---     | 45.3   | 54     | 8.7    |
| 17992.4   | 61.0    | ---    | 74     | 13.1   |
| 17994.6   | ---     | 49.8   | 54     | 4.3    |
| 26716.0   | 48.2    | ---    | 74     | 25.8   |
| 39853.2   | ---     | 47.2   | 54     | 6.9    |
| 39919.8   | 57.7    | ---    | 74     | 16.3   |
| 39992.8   | 57.5    | ---    | 74     | 16.6   |

**Radiated Spurious – CH64**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 32.5      | ---     | 32.2   | 40     | 7.9    |
| 32.5      | 34.3    | ---    | 40     | 5.8    |
| 1124.9    | ---     | 37.0   | 54     | 17.1   |
| 1124.9    | 45.2    | ---    | 74     | 28.8   |
| 6232.1    | ---     | 45.9   | 54     | 8.1    |
| 6234.1    | 57.8    | ---    | 74     | 16.2   |
| 15960.2   | ---     | 46.2   | 54     | 7.9    |
| 15963.3   | 57.3    | ---    | 74     | 16.7   |
| 17997.3   | 61.3    | ---    | 74     | 12.7   |
| 17997.3   | ---     | 50.0   | 54     | 4.1    |
| 21280.2   | ---     | 39.2   | 54     | 14.9   |
| 25667.5   | 48.4    | ---    | 74     | 25.7   |
| 39865.4   | ---     | 47.3   | 54     | 6.8    |
| 39966.7   | 57.8    | ---    | 74     | 16.3   |

# 30 MHz – 40 GHz, 802.11n20, HT0, Chain B

## Radiated Spurious – CH52

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.4      | 32.3    | ---    | 40     | 7.8    |
| 62.5      | ---     | 31.5   | 40     | 8.6    |
| 1124.7    | 45.0    | ---    | 74     | 29.1   |
| 1124.9    | ---     | 36.8   | 54     | 17.3   |
| 6319.2    | ---     | 45.5   | 54     | 8.6    |
| 6321.0    | 57.2    | ---    | 74     | 16.9   |
| 15779.9   | ---     | 44.1   | 54     | 10.0   |
| 15788.4   | 54.3    | ---    | 74     | 19.7   |
| 17985.7   | 61.1    | ---    | 74     | 13.0   |
| 17986.6   | ---     | 50.1   | 54     | 4.0    |
| 39823.2   | ---     | 47.0   | 54     | 7.1    |
| 39866.7   | ---     | 47.4   | 54     | 6.7    |
| 39925.8   | 57.7    | ---    | 74     | 16.4   |
| 39988.2   | 58.2    | ---    | 74     | 15.8   |

**Radiated Spurious – CH56**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 30.5   | 40     | 9.6    |
| 62.5      | 32.8    | ---    | 40     | 7.3    |
| 1183.1    | 46.7    | ---    | 74     | 27.4   |
| 1187.5    | ---     | 37.6   | 54     | 16.4   |
| 6132.9    | 57.9    | ---    | 74     | 16.2   |
| 6214.9    | ---     | 45.9   | 54     | 8.1    |
| 15835.3   | ---     | 44.8   | 54     | 9.3    |
| 15851.8   | 55.7    | ---    | 74     | 18.3   |
| 17983.9   | 61.1    | ---    | 74     | 12.9   |
| 17996.4   | ---     | 50.0   | 54     | 4.1    |
| 26675.5   | 48.4    | ---    | 74     | 25.7   |
| 26718.1   | ---     | 37.9   | 54     | 16.2   |
| 39845.2   | ---     | 47.2   | 54     | 6.8    |
| 39884.0   | 57.9    | ---    | 74     | 16.2   |

**Radiated Spurious – CH64**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 32.5      | ---     | 31.1   | 40     | 9.0    |
| 32.5      | 34.7    | ---    | 40     | 5.4    |
| 1124.9    | ---     | 36.3   | 54     | 17.7   |
| 1125.2    | 45.9    | ---    | 74     | 28.2   |
| 6252.2    | ---     | 46.0   | 54     | 8.1    |
| 6252.5    | 57.5    | ---    | 74     | 16.5   |
| 10632.7   | 50.9    | ---    | 74     | 23.2   |
| 10641.1   | ---     | 41.7   | 54     | 12.4   |
| 15966.4   | ---     | 46.0   | 54     | 8.1    |
| 15966.4   | 56.5    | ---    | 74     | 17.5   |
| 17984.4   | 61.5    | ---    | 74     | 12.5   |
| 17996.4   | ---     | 50.1   | 54     | 4.0    |
| 25299.9   | 48.5    | ---    | 74     | 25.5   |
| 26796.6   | ---     | 37.8   | 54     | 16.3   |
| 39889.5   | ---     | 47.3   | 54     | 6.7    |
| 39964.1   | 58.2    | ---    | 74     | 15.9   |

# 30 MHz – 40 GHz, 802.11n20, HT8, Chain A+B

## Radiated Spurious – CH52

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 36.3   | 40     | 3.7    |
| 62.5      | 36.9    | ---    | 40     | 3.2    |
| 1000.2    | 47.5    | ---    | 74     | 26.6   |
| 1000.2    | ---     | 39.8   | 54     | 14.3   |
| 1187.5    | ---     | 38.5   | 54     | 15.5   |
| 2417.0    | 51.0    | ---    | 74     | 23.1   |
| 15782.6   | ---     | 46.7   | 54     | 7.3    |
| 15789.8   | 58.5    | ---    | 74     | 15.5   |
| 17983.0   | 61.2    | ---    | 74     | 12.8   |
| 17996.9   | ---     | 50.1   | 54     | 4.0    |
| 24605.6   | 48.3    | ---    | 74     | 25.8   |
| 39857.4   | ---     | 47.2   | 54     | 6.9    |
| 39878.9   | ---     | 47.2   | 54     | 6.8    |
| 39997.5   | 57.5    | ---    | 74     | 16.6   |

# 30 MHz – 40 GHz, 802.11n40, HT0, Chain A

## Radiated Spurious – CH54F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 33.8   | 40     | 6.2    |
| 62.5      | 35.0    | ---    | 40     | 5.1    |
| 1123.0    | 46.4    | ---    | 74     | 27.6   |
| 1124.7    | ---     | 36.1   | 54     | 18.0   |
| 6224.7    | 57.9    | ---    | 74     | 16.2   |
| 6256.7    | ---     | 46.1   | 54     | 8.0    |
| 15941.0   | 55.6    | ---    | 74     | 18.4   |
| 15943.2   | ---     | 42.9   | 54     | 11.1   |
| 17977.7   | 61.5    | ---    | 74     | 12.5   |
| 17992.9   | ---     | 50.0   | 54     | 4.1    |
| 21079.9   | ---     | 39.1   | 54     | 14.9   |
| 26659.5   | 48.4    | ---    | 74     | 25.6   |
| 39841.4   | 58.1    | ---    | 74     | 16.0   |
| 39860.4   | ---     | 47.1   | 54     | 7.0    |

## Radiated Spurious – CH62F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 35.4   | 40     | 4.7    |
| 62.5      | 36.7    | ---    | 40     | 3.4    |
| 1125.2    | ---     | 36.8   | 54     | 17.2   |
| 1149.2    | 46.0    | ---    | 74     | 28.0   |
| 6371.8    | 58.5    | ---    | 74     | 15.6   |
| 6378.9    | ---     | 45.7   | 54     | 8.3    |
| 15948.6   | ---     | 43.8   | 54     | 10.3   |
| 15951.3   | 54.9    | ---    | 74     | 19.1   |
| 17999.1   | ---     | 50.3   | 54     | 3.8    |
| 17999.1   | 61.2    | ---    | 74     | 12.8   |
| 21239.8   | ---     | 39.9   | 54     | 14.1   |
| 26715.2   | 48.6    | ---    | 74     | 25.5   |
| 39864.2   | ---     | 47.2   | 54     | 6.8    |
| 39882.3   | 58.4    | ---    | 74     | 15.7   |

# 30 MHz – 40 GHz, 802.11n40, HT0, Chain B

## Radiated Spurious – CH54F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 32.5      | ---     | 31.0   | 40     | 9.1    |
| 32.5      | 33.8    | ---    | 40     | 6.2    |
| 1124.9    | ---     | 36.4   | 54     | 17.7   |
| 1125.2    | 45.1    | ---    | 74     | 29.0   |
| 6224.3    | ---     | 45.7   | 54     | 8.3    |
| 6226.2    | 57.6    | ---    | 74     | 16.5   |
| 15804.9   | 53.8    | ---    | 74     | 20.2   |
| 15806.3   | ---     | 43.9   | 54     | 10.2   |
| 17991.1   | ---     | 50.0   | 54     | 4.0    |
| 17991.1   | 60.9    | ---    | 74     | 13.1   |
| 24338.3   | 48.0    | ---    | 74     | 26.0   |
| 26824.8   | ---     | 37.9   | 54     | 16.2   |
| 39873.0   | ---     | 47.1   | 54     | 6.9    |
| 39947.3   | 58.1    | ---    | 74     | 16.0   |

**Radiated Spurious – CH62F**

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 62.5      | ---     | 31.3   | 40     | 8.8    |
| 62.5      | 32.6    | ---    | 40     | 7.5    |
| 1124.7    | 45.5    | ---    | 74     | 28.5   |
| 1125.2    | ---     | 36.9   | 54     | 17.2   |
| 6215.4    | ---     | 45.7   | 54     | 8.4    |
| 6233.1    | 57.8    | ---    | 74     | 16.3   |
| 15946.4   | ---     | 43.7   | 54     | 10.3   |
| 15949.0   | 55.2    | ---    | 74     | 18.9   |
| 17995.1   | 60.9    | ---    | 74     | 13.2   |
| 17997.8   | ---     | 50.2   | 54     | 3.9    |
| 21239.8   | ---     | 38.2   | 54     | 15.9   |
| 24614.1   | 49.0    | ---    | 74     | 25.0   |
| 39837.2   | ---     | 47.4   | 54     | 6.7    |
| 39872.2   | 57.2    | ---    | 74     | 16.9   |

# 30 MHz – 40 GHz, 802.11n40, HT8, Chain A+B

## Radiated Spurious – CH62F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 32.6      | ---     | 30.4   | 40     | 9.7    |
| 32.6      | 32.7    | ---    | 40     | 7.4    |
| 1956.8    | 50.7    | ---    | 74     | 23.4   |
| 1957.8    | ---     | 44.1   | 54     | 9.9    |
| 6304.3    | ---     | 45.7   | 54     | 8.4    |
| 6369.8    | 57.4    | ---    | 74     | 16.7   |
| 10626.9   | ---     | 40.0   | 54     | 14.1   |
| 10628.6   | 50.9    | ---    | 74     | 23.1   |
| 17978.1   | 60.9    | ---    | 74     | 13.1   |
| 17997.3   | ---     | 49.9   | 54     | 4.1    |
| 21239.8   | ---     | 41.0   | 54     | 13.0   |
| 24593.3   | 48.5    | ---    | 74     | 25.5   |
| 39853.6   | ---     | 47.4   | 54     | 6.7    |
| 39893.7   | 57.7    | ---    | 74     | 16.4   |

## 30 MHz – 40 GHz, 802.11ac80, VHT0, Chain A

### Radiated Spurious – CH58ac80

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 32.5      | ---     | 31.2   | 40     | 8.8    |
| 32.5      | 34.3    | ---    | 40     | 5.8    |
| 1178.7    | 45.4    | ---    | 74     | 28.6   |
| 1187.5    | ---     | 37.0   | 54     | 17.1   |
| 6260.1    | 58.2    | ---    | 74     | 15.9   |
| 6277.3    | ---     | 46.0   | 54     | 8.1    |
| 15934.3   | 54.5    | ---    | 74     | 19.5   |
| 15935.6   | ---     | 42.9   | 54     | 11.2   |
| 17967.9   | 61.0    | ---    | 74     | 13.1   |
| 17993.3   | ---     | 49.9   | 54     | 4.2    |
| 21159.9   | ---     | 39.6   | 54     | 14.4   |
| 26821.9   | 49.0    | ---    | 74     | 25.1   |
| 39819.9   | 58.2    | ---    | 74     | 15.8   |
| 39871.3   | ---     | 47.2   | 54     | 6.9    |

# 30 MHz – 40 GHz, 802.11ac80, VHT0, Chain B

## Radiated Spurious – CH58ac80

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 32.5      | ---     | 28.0   | 40     | 12.1   |
| 32.5      | 33.4    | ---    | 40     | 6.7    |
| 1124.9    | ---     | 36.5   | 54     | 17.5   |
| 1125.2    | 45.3    | ---    | 74     | 28.8   |
| 6366.9    | 58.1    | ---    | 74     | 16.0   |
| 6370.1    | ---     | 45.6   | 54     | 8.4    |
| 15959.3   | 54.6    | ---    | 74     | 19.5   |
| 15960.2   | ---     | 42.7   | 54     | 11.3   |
| 17999.1   | ---     | 50.0   | 54     | 4.1    |
| 17999.6   | 62.1    | ---    | 74     | 12.0   |
| 24355.6   | 48.3    | ---    | 74     | 25.7   |
| 26826.5   | ---     | 37.9   | 54     | 16.1   |
| 39827.9   | 57.6    | ---    | 74     | 16.4   |
| 39846.4   | ---     | 47.2   | 54     | 6.9    |

# 30 MHz – 40 GHz, 802.11ac80, VHT0, Chain A+B

## Radiated Spurious – CH58ac80

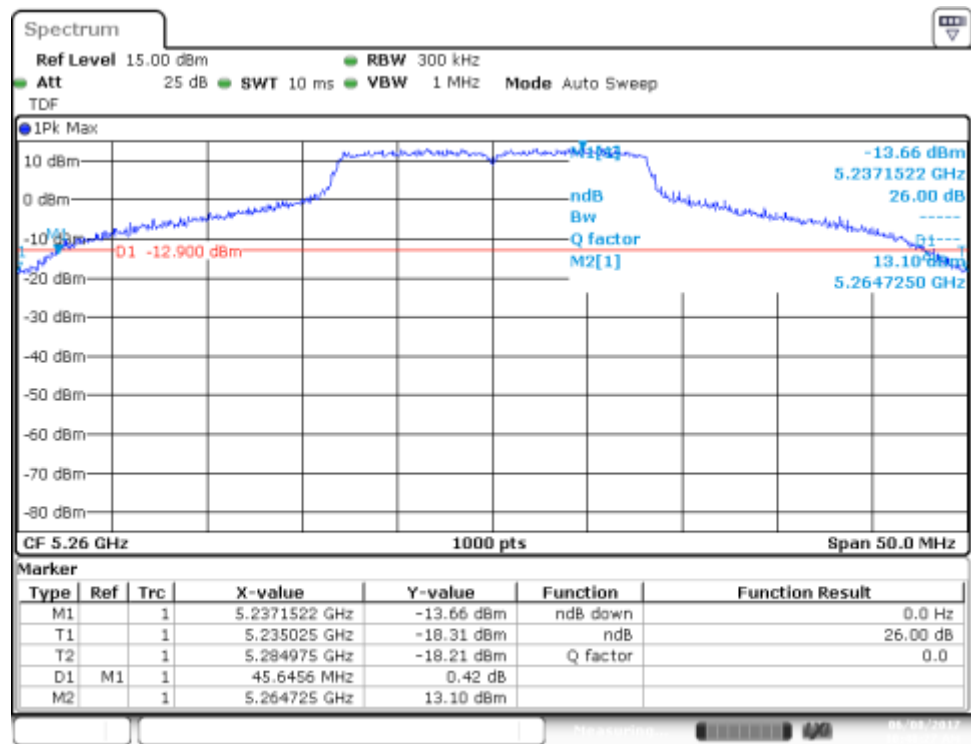
| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBuV/m  | dBuV/m | dBuV/m | dB     |
| 32.5      | ---     | 28.6   | 40     | 11.5   |
| 32.5      | 34.0    | ---    | 40     | 6.1    |
| 1172.1    | 45.8    | ---    | 74     | 28.2   |
| 1187.5    | ---     | 36.5   | 54     | 17.5   |
| 6290.0    | ---     | 45.8   | 54     | 8.3    |
| 6358.0    | 57.7    | ---    | 74     | 16.4   |
| 12406.1   | ---     | 39.4   | 54     | 14.7   |
| 12407.5   | 51.0    | ---    | 74     | 23.0   |
| 17997.8   | 61.4    | ---    | 74     | 12.6   |
| 17999.1   | ---     | 49.9   | 54     | 4.2    |
| 21160.1   | ---     | 40.1   | 54     | 14.0   |
| 26773.8   | 49.4    | ---    | 74     | 24.6   |
| 39867.5   | ---     | 47.3   | 54     | 6.7    |
| 39920.3   | 57.0    | ---    | 74     | 17.1   |

## B.5 Test Results Screenshot 5250 - 5350 MHz

### B.5.1 26dB Bandwidth

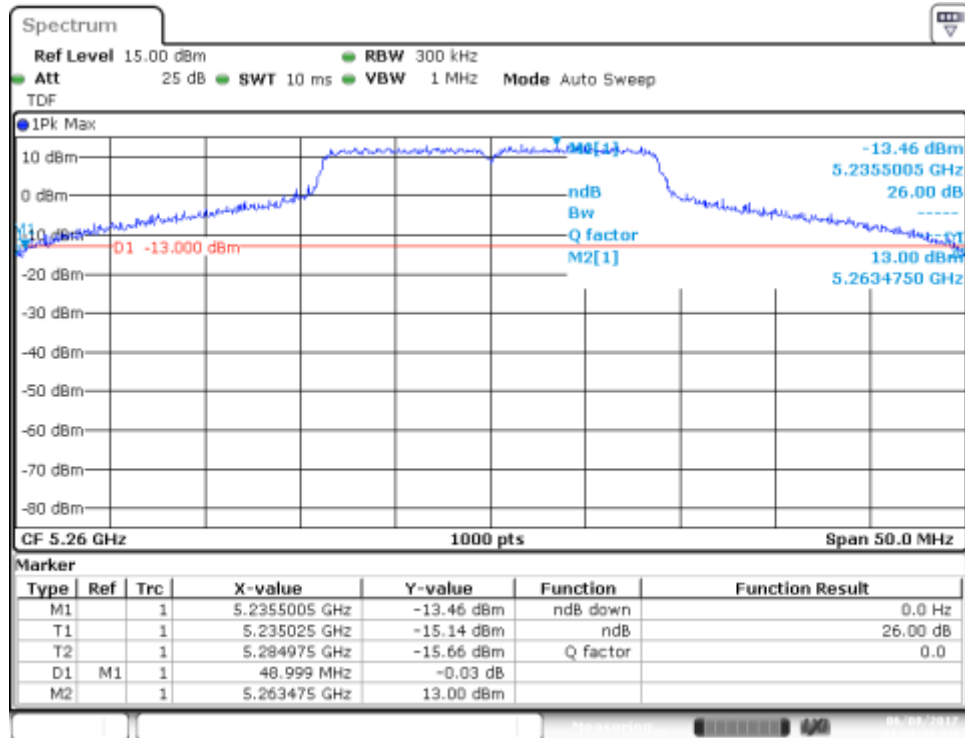
# SISO-A, 802.11a, 6Mbps

Channel 52



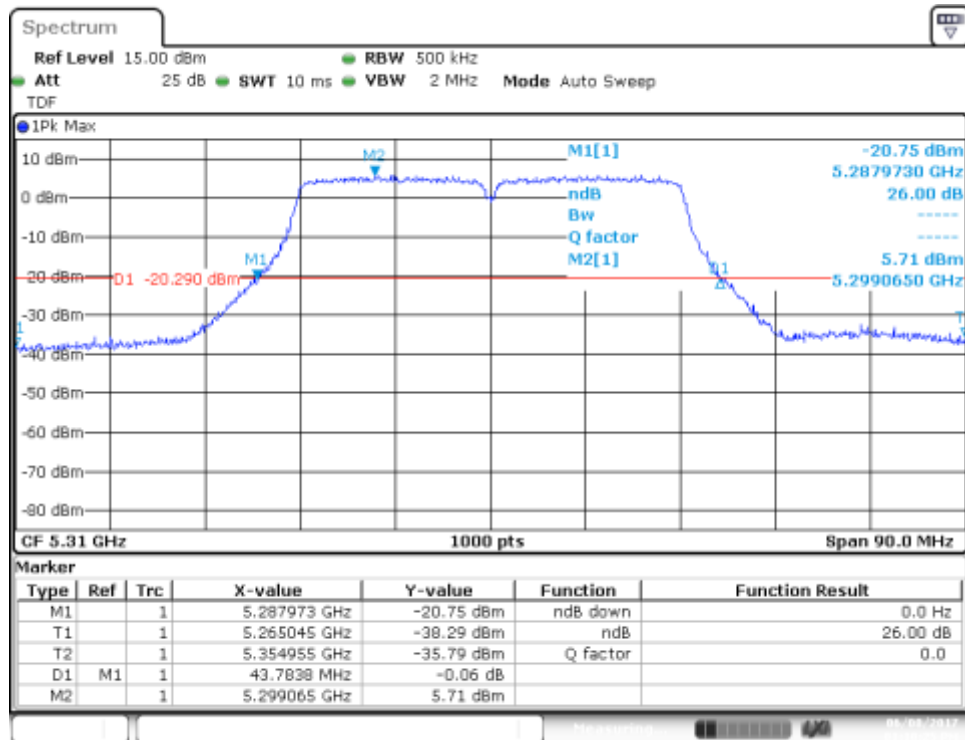
## SISO-A, 802.11n20, HT0

Channel 52



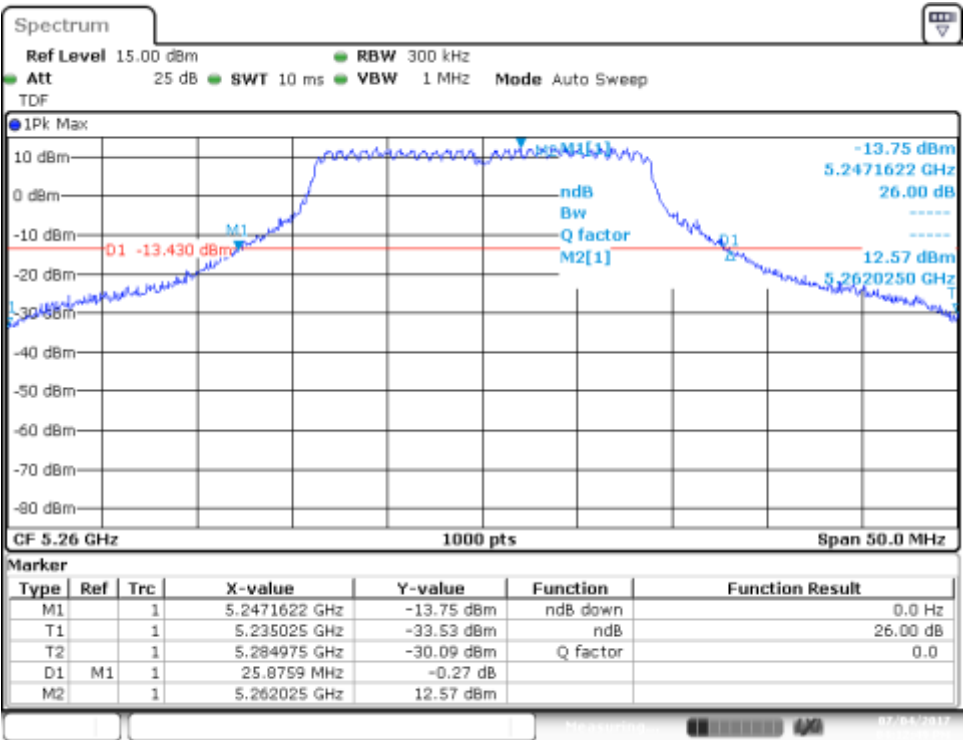
## SISO-B, 802.11n40, HT0

Channel 62F



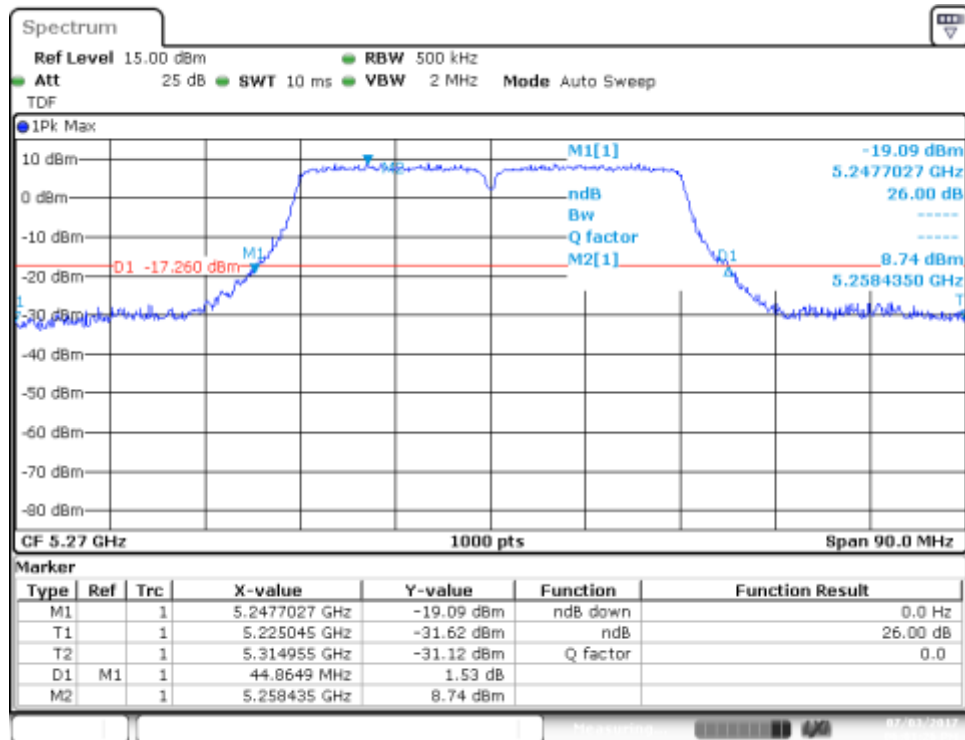
# MIMO-B, 802.11n20, HT8

Channel 52



## MIMO-A, 802.11n40, HT8

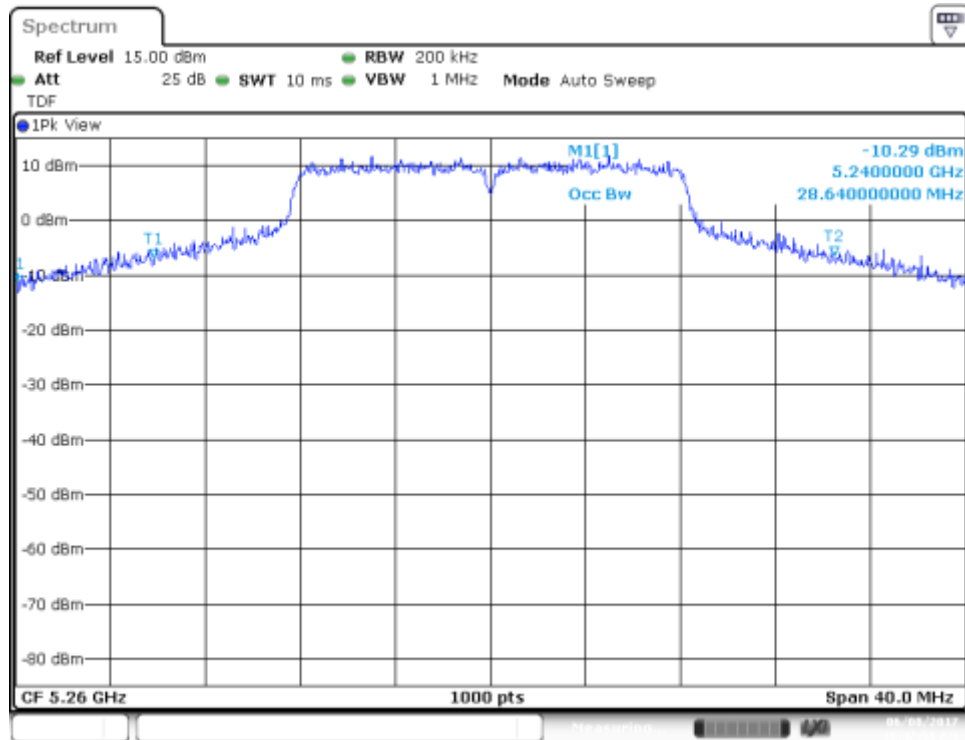
Channel 54F

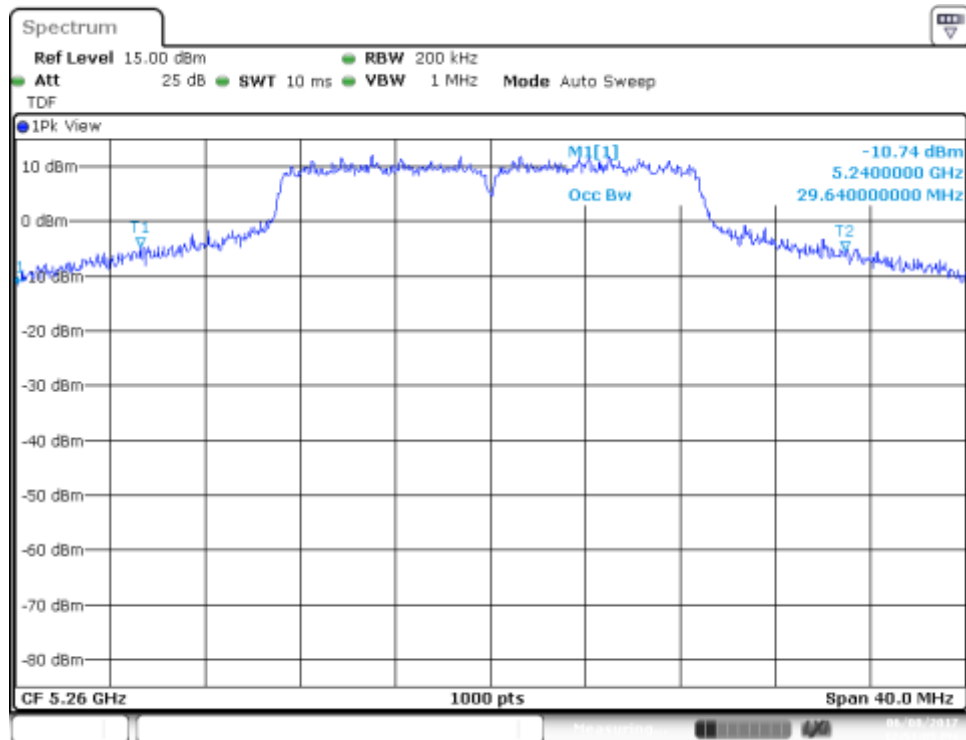


## B.5.2 99% Bandwidth

### SISO-A, 802.11a, 6Mbps

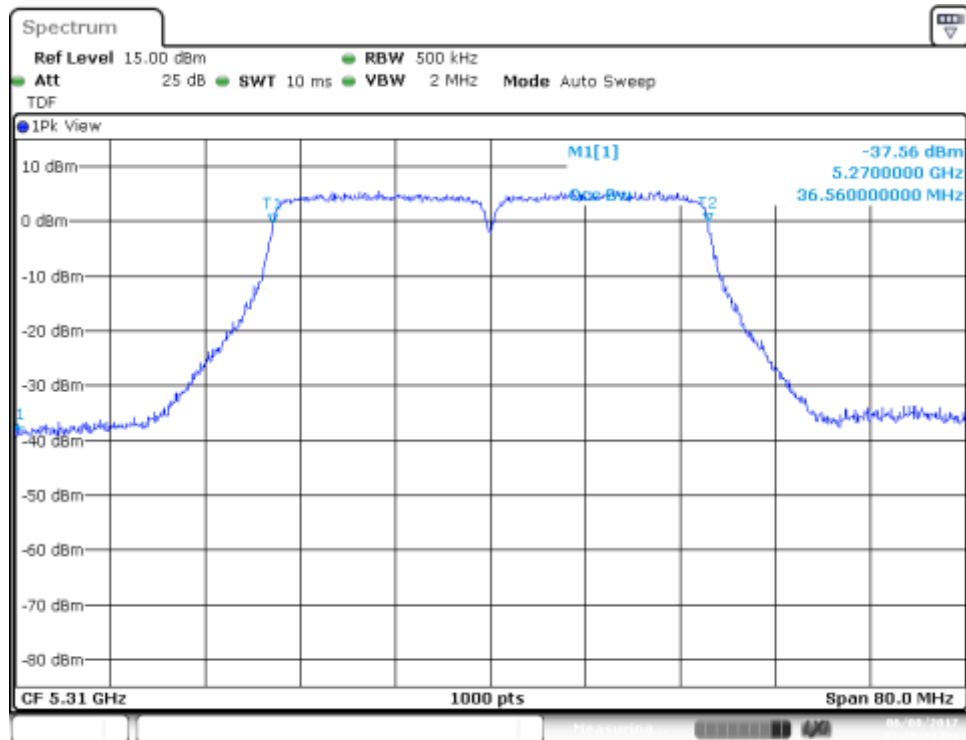
Channel 52





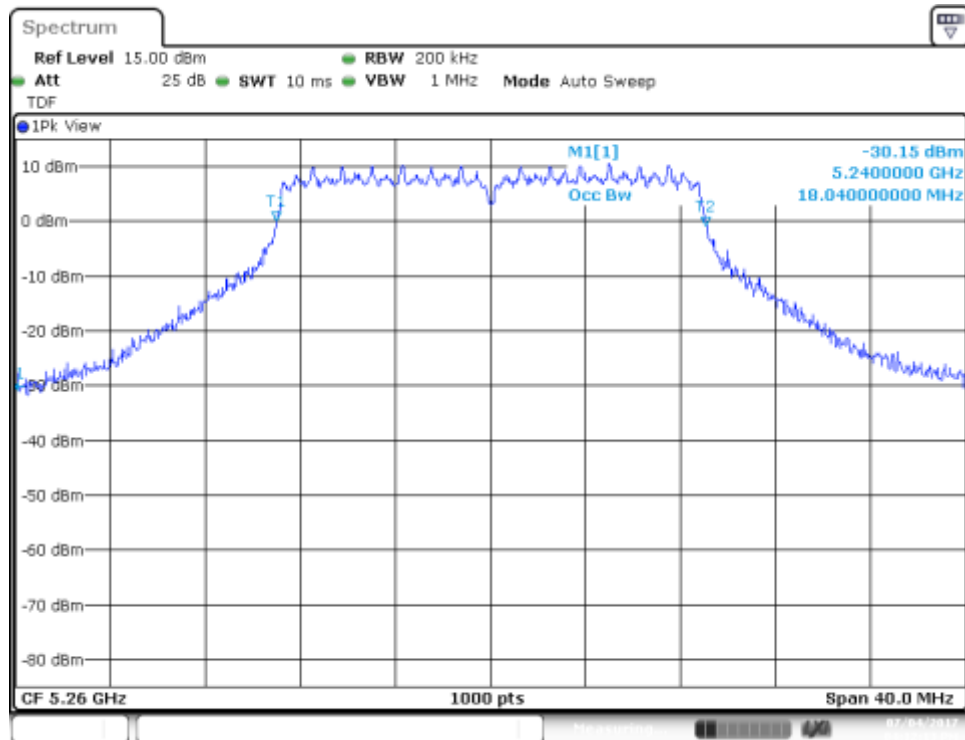
## SISO-B, 802.11n40, HT0

Channel 62F



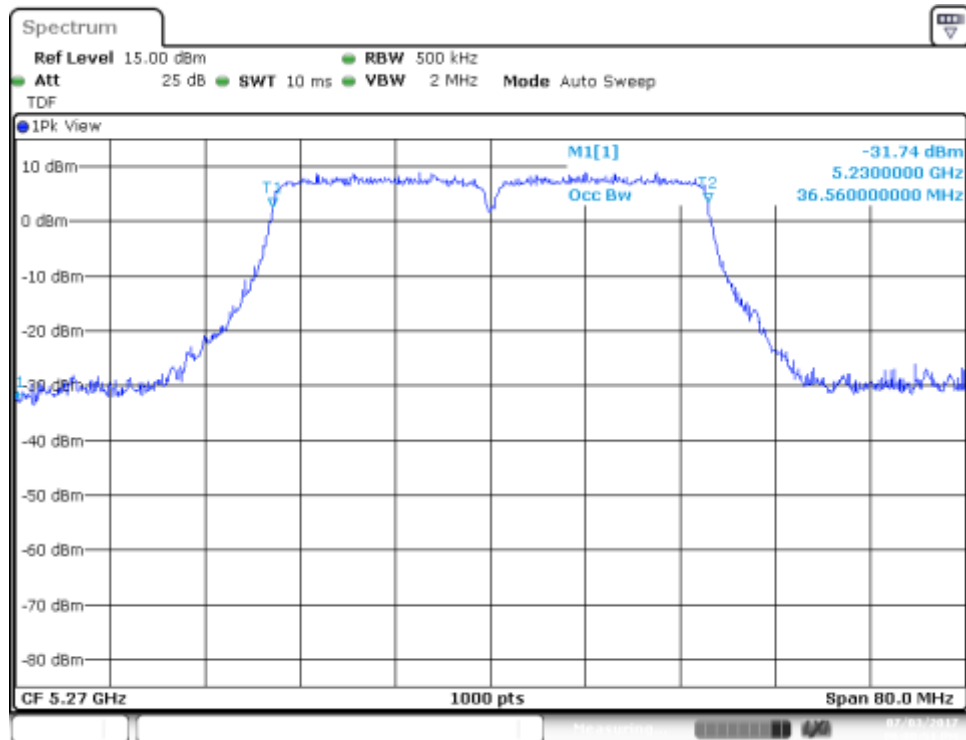
## MIMO-B, 802.11n20, HT8

Channel 52



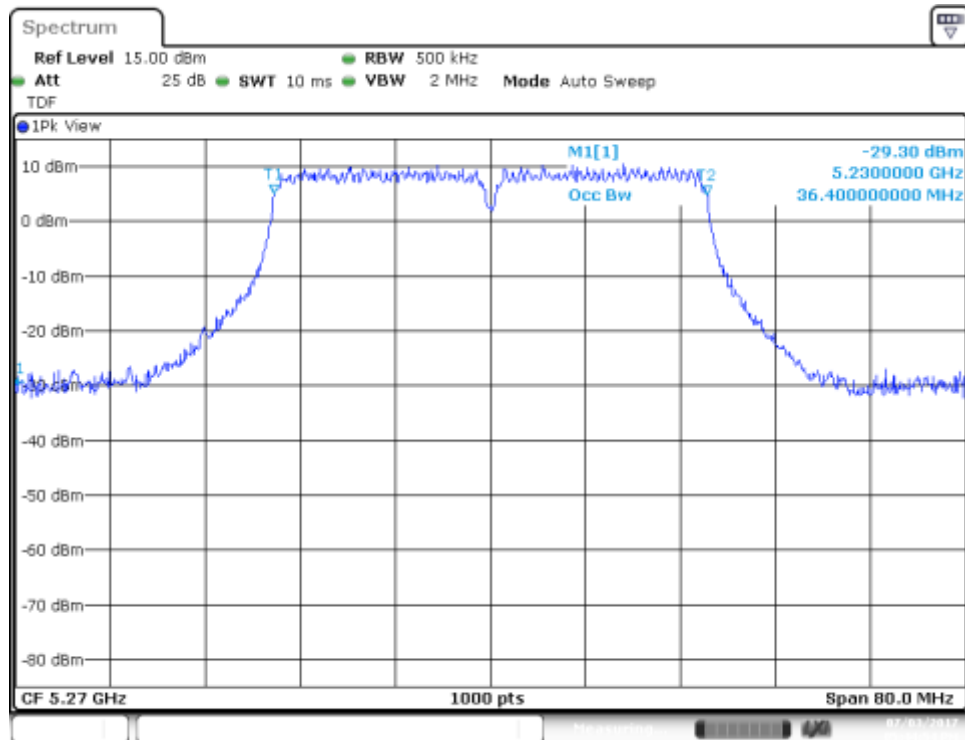
## MIMO-A, 802.11n40, HT8

Channel 54F



## MIMO-B, 802.11n40, HT8

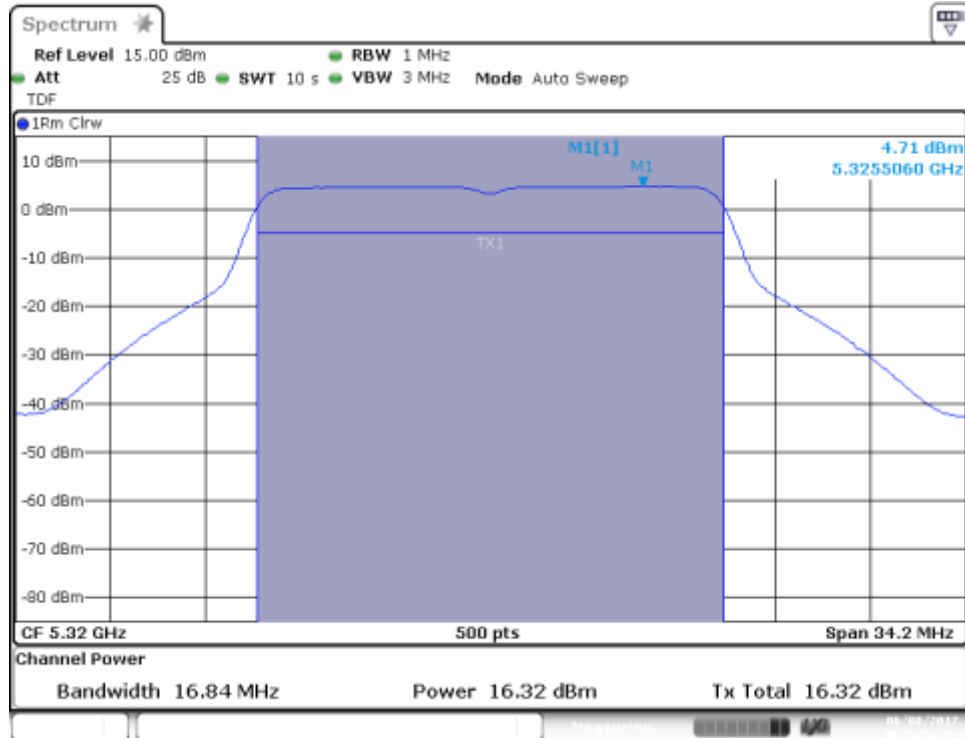
Channel 54F



### B.5.3 Maximum output power & Peak power spectral density

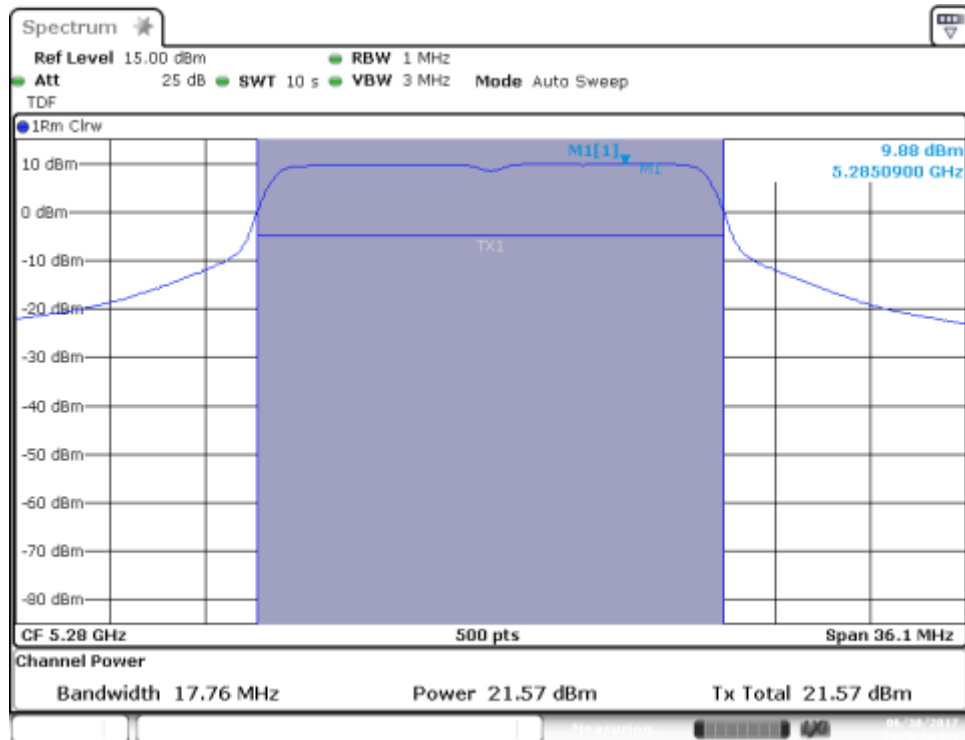
## SISO-A, 802.11a, 6Mbps

Channel 64



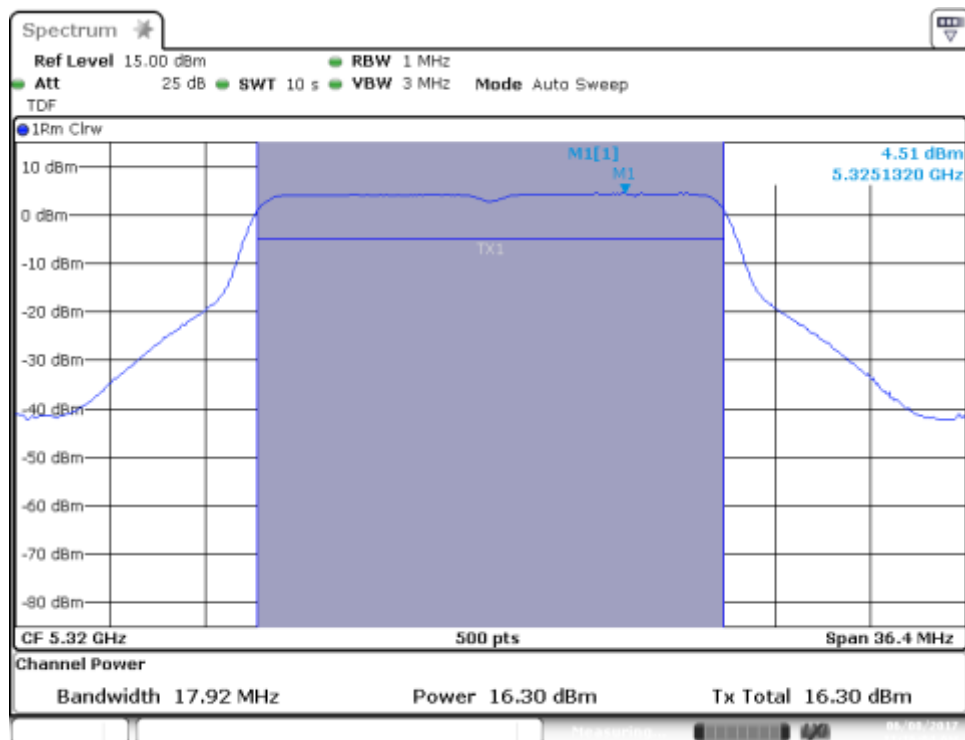
## SISO-B, 802.11a, 6Mbps

Channel 56



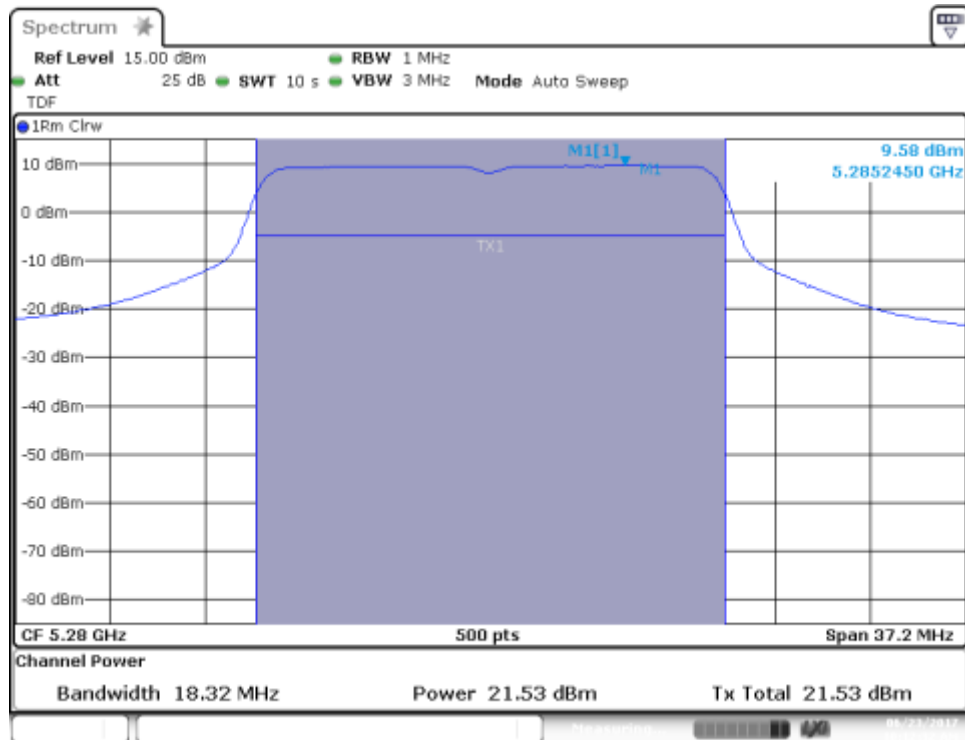
## SISO-A, 802.11n20, HT0

Channel 64



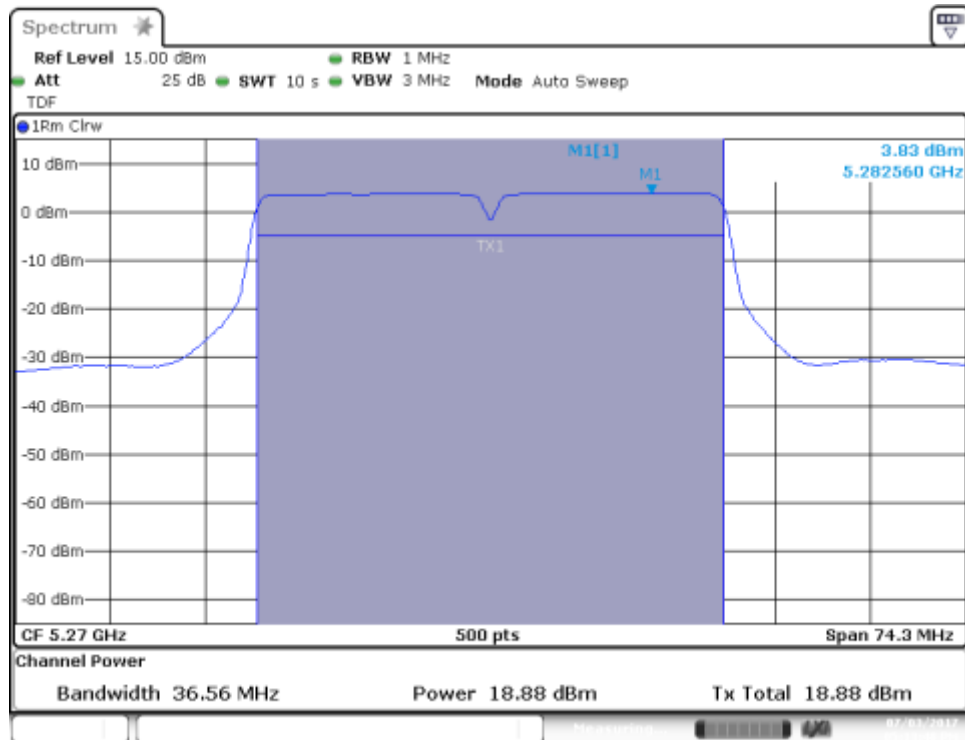
## SISO-B, 802.11n20, HT0

Channel 56

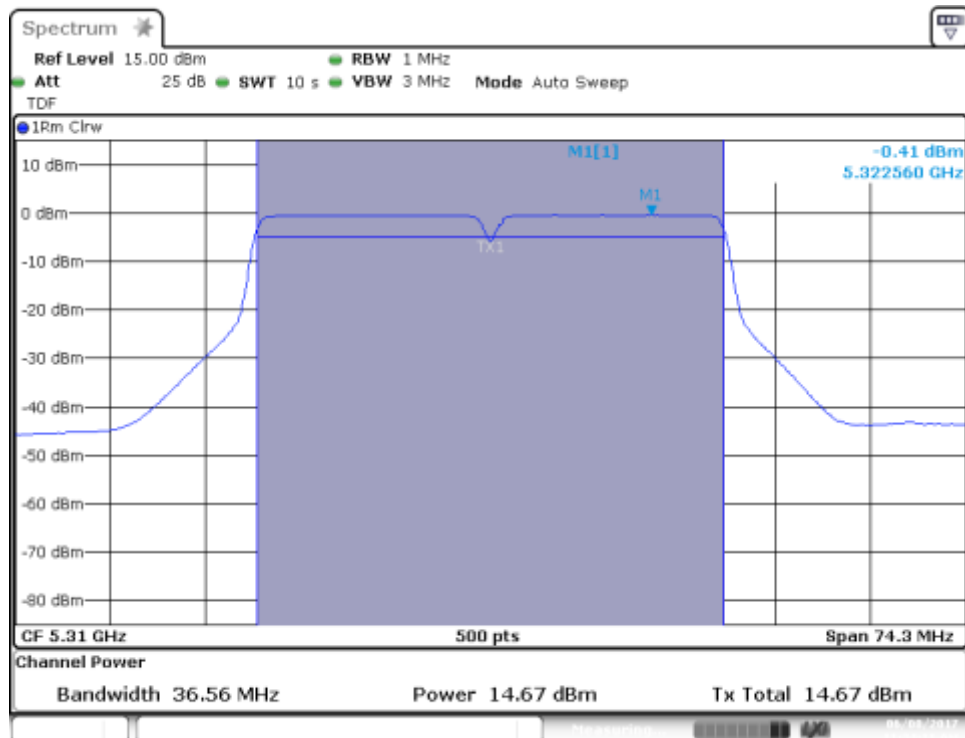


# SISO-A, 802.11n40, HT0

Channel 54F

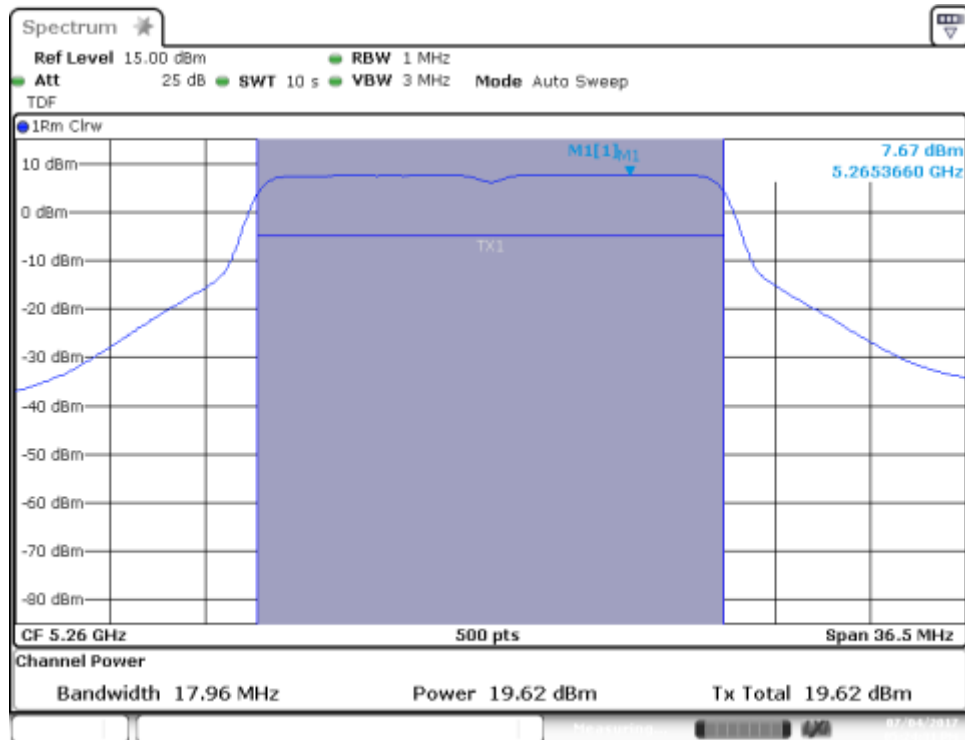


Channel 62F

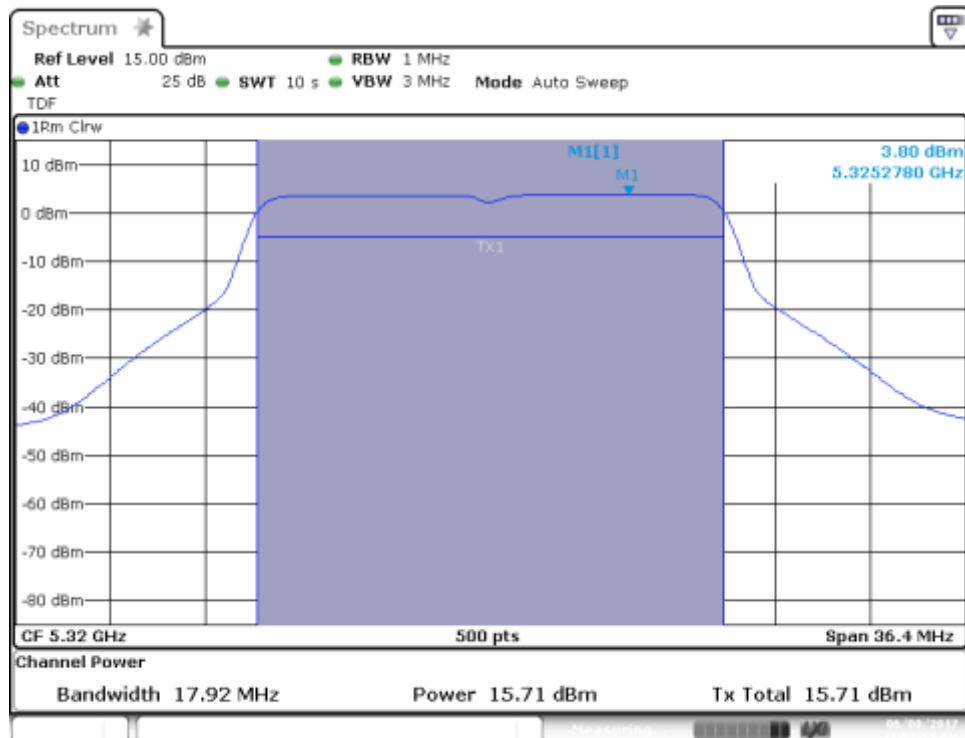


## MIMO-A, 802.11n20, HT8

Channel 52

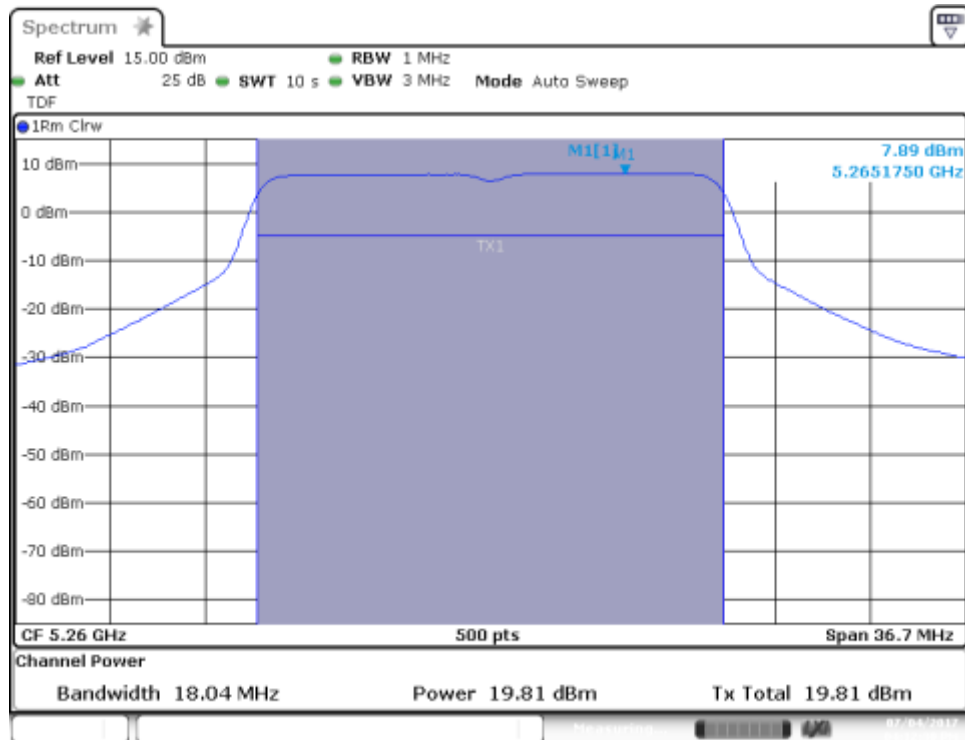


Channel 64



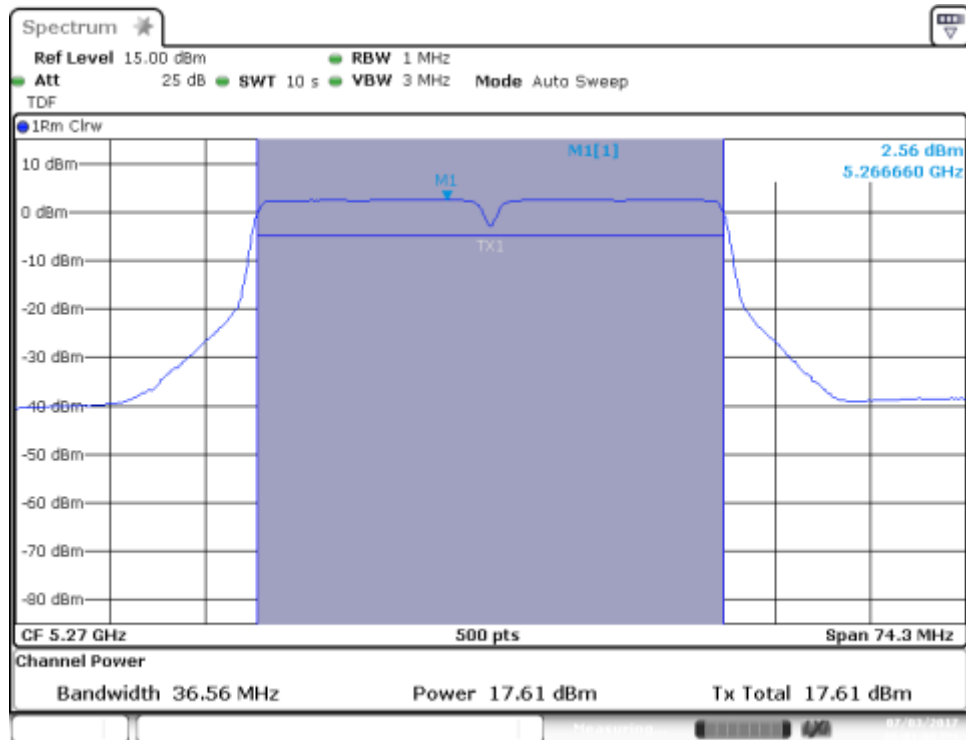
## MIMO-B, 802.11n20, HT8

Channel 52



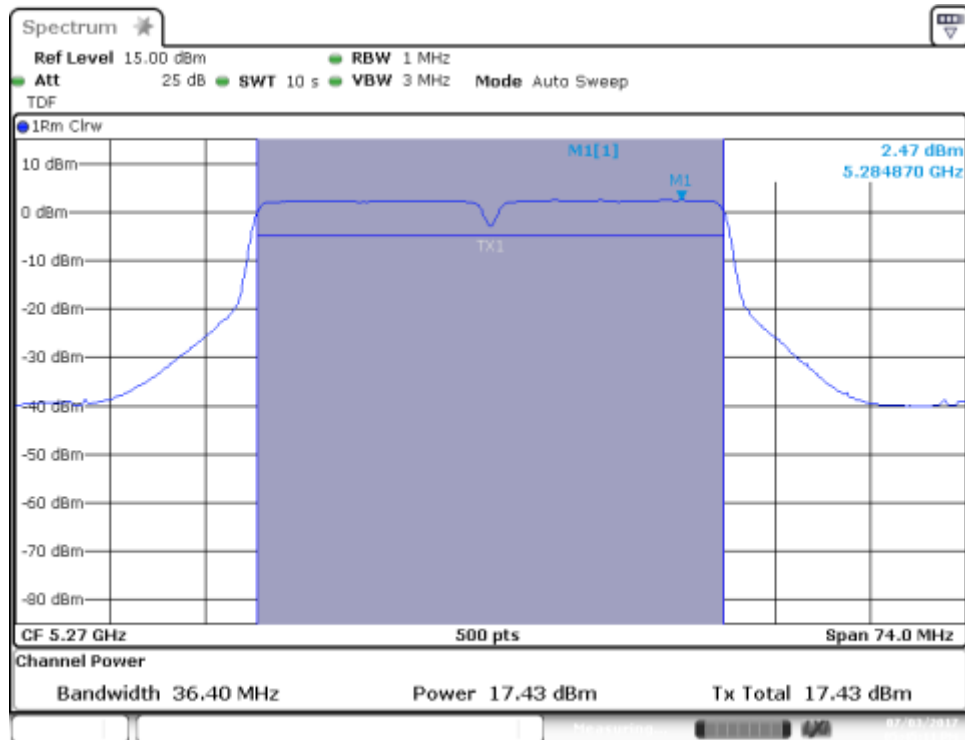
## MIMO-A, 802.11n40, HT8

Channel 54F

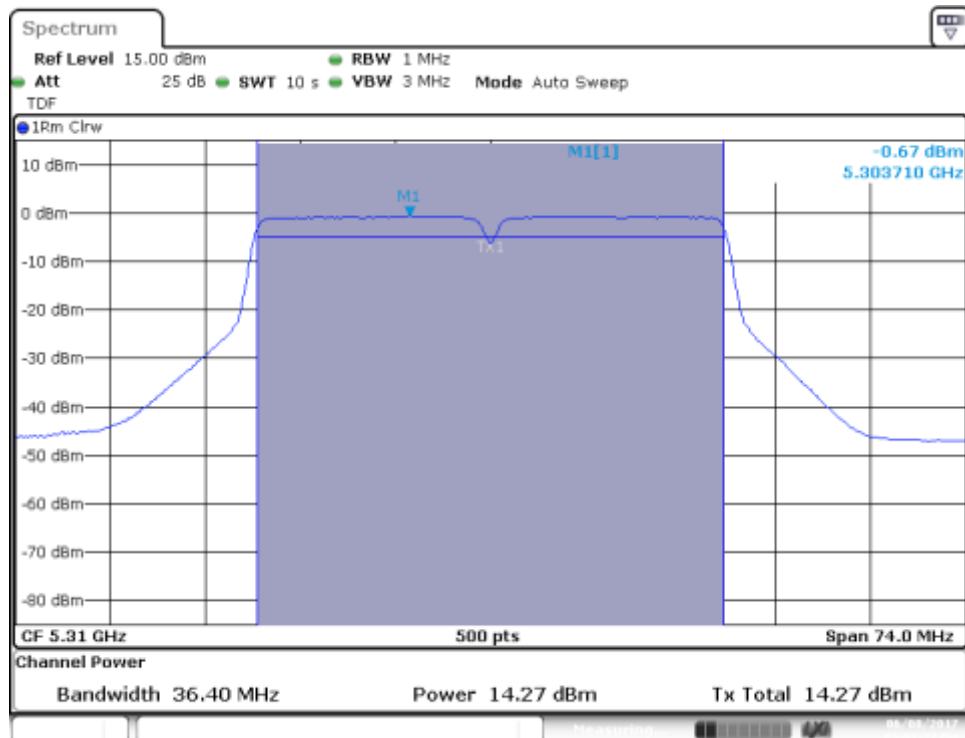


## MIMO-B, 802.11n40, HT8

Channel 54F



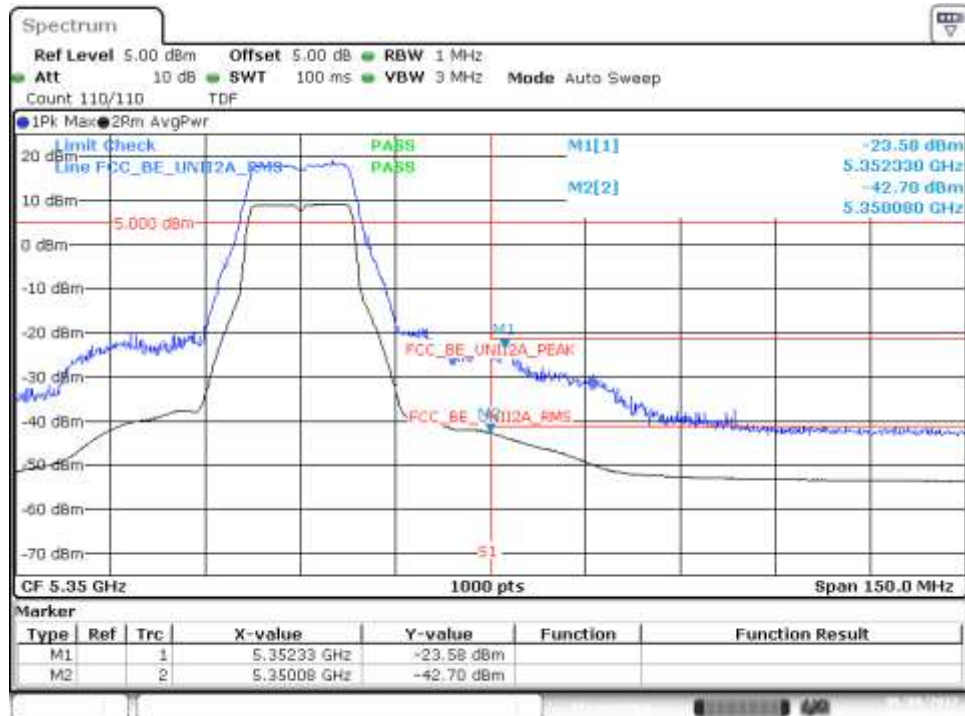
Channel 62F



## B.5.4 Undesirable emissions limits : Band Edge (Conducted)

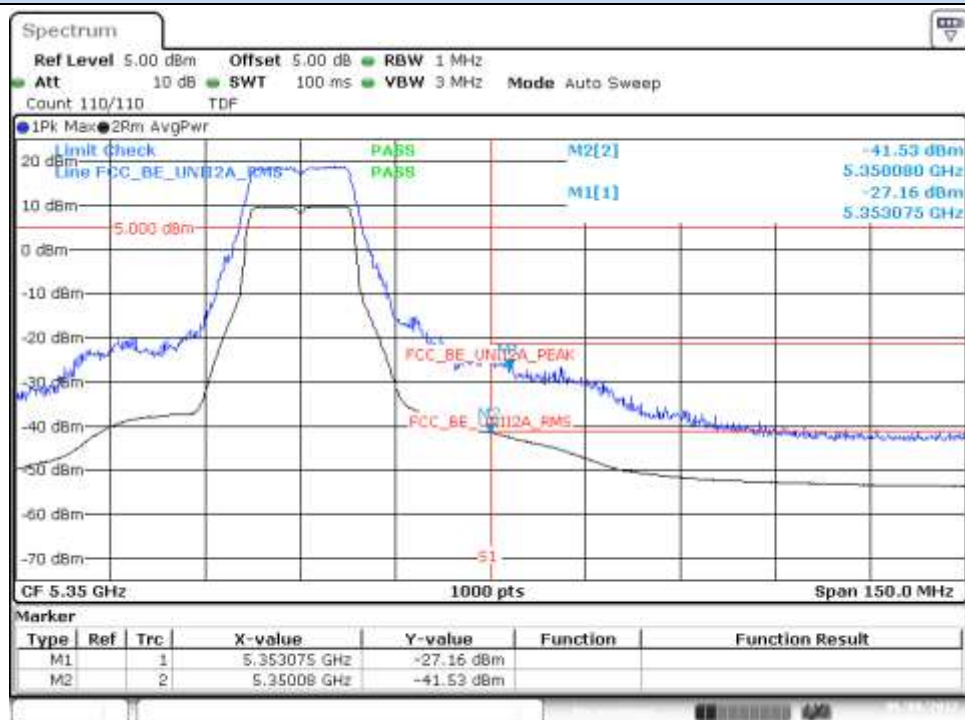
### 802.11a, 6Mbps – Chain A

#### BE High Freq Section, Peak, RMS – CH64



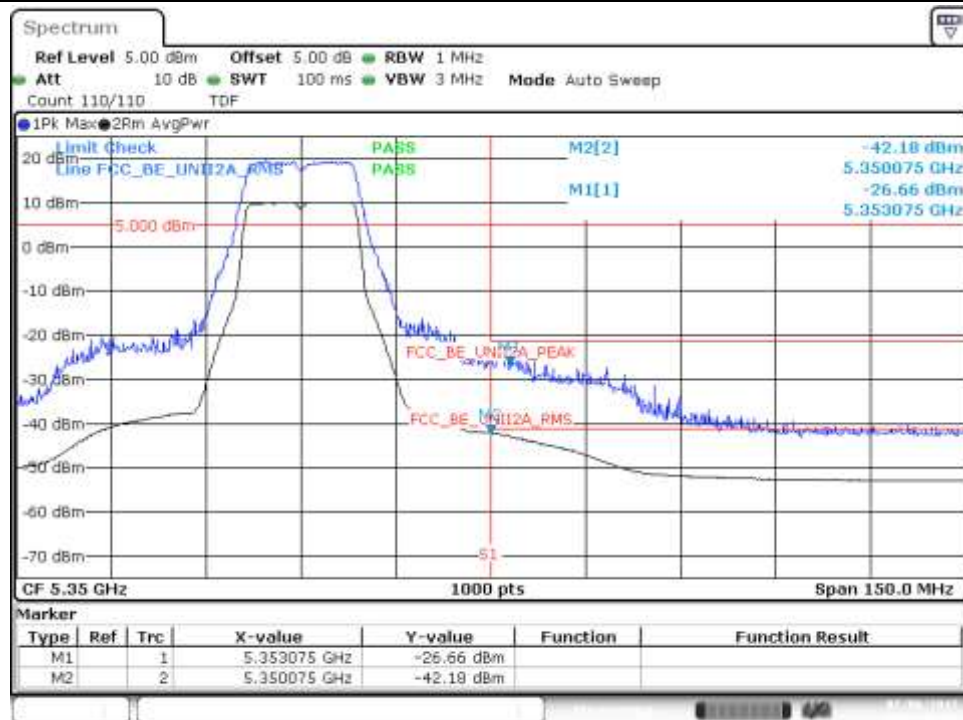
### 802.11a, 6Mbps – Chain B

#### BE High Freq Section, Peak, RMS – CH64



## 802.11n20, HT0 (SISO) - Chain A

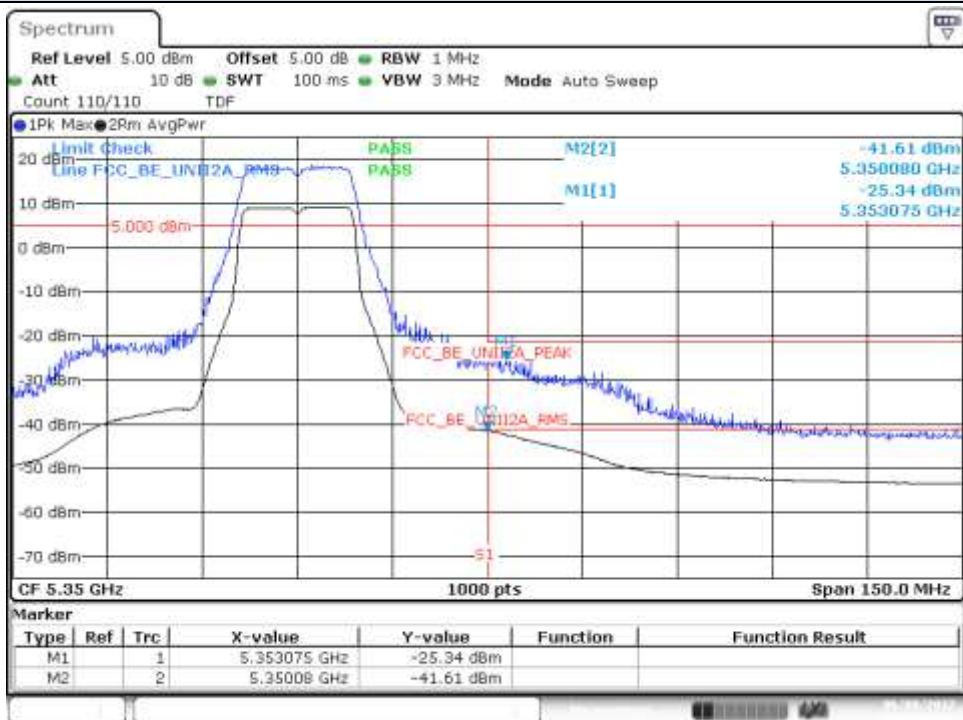
### BE High Freq Section, Peak, RMS – CH64



Date: 6.JUL.2017 15:22:18

## 802.11n20, HT0 (SISO) - Chain B

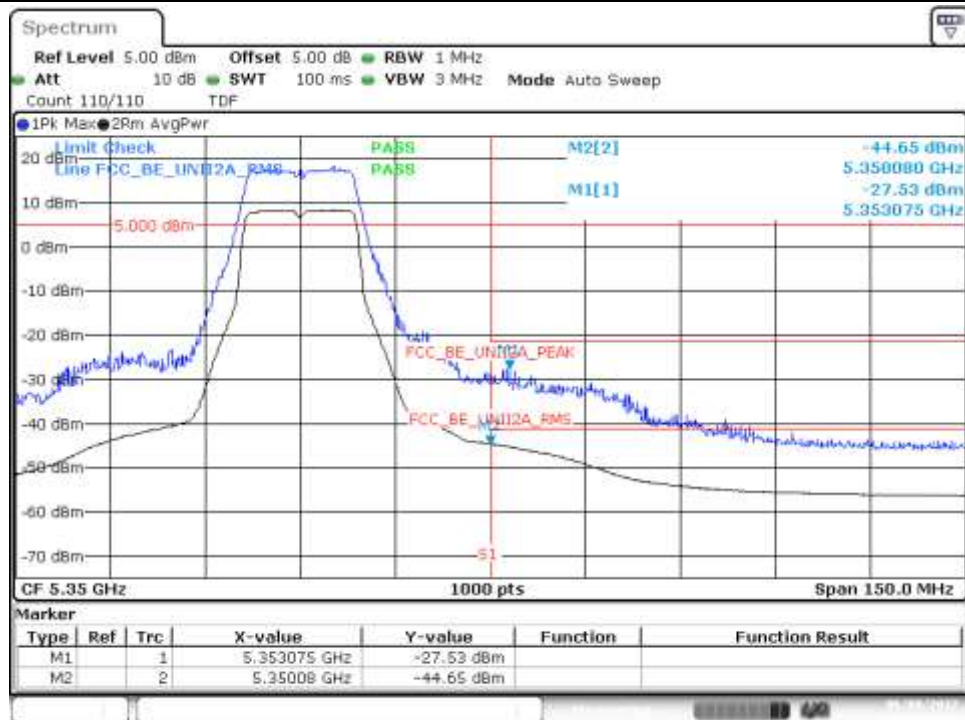
### BE High Freq Section, Peak, RMS – CH64



Date: 8.JUN.2017 12:55:03

## 802.11n20, HT8 (MIMO)– Chain A

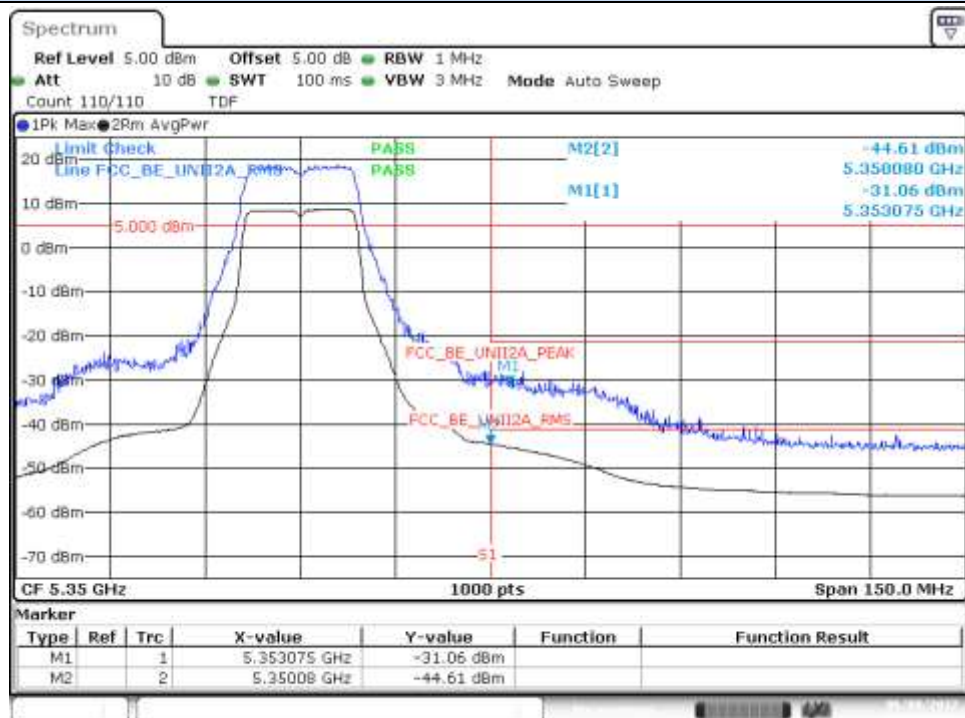
### BE High Freq Section, Peak, RMS – CH64



Date: 8 JUN 2017 11:58:50

## 802.11n20, HT8 (MIMO)– Chain B

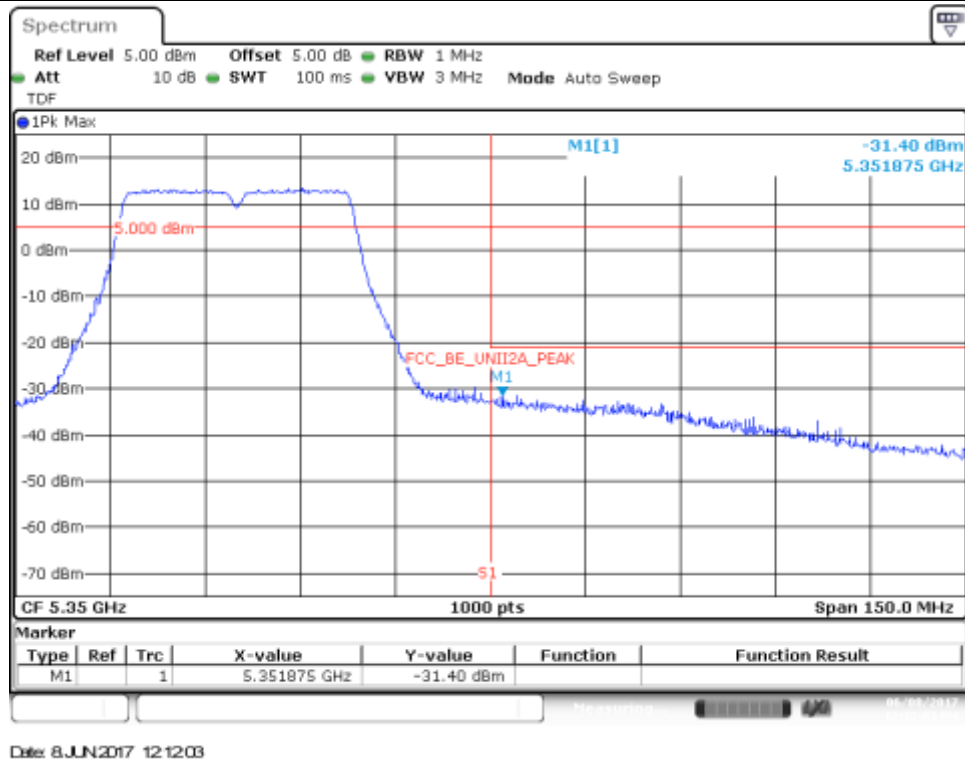
### BE High Freq Section, Peak, RMS – CH64



Date: 8 JUN 2017 13:36:41

## 802.11n40, HT0 (SISO) - Chain A

### BE High Freq Section, Peak – CH62F

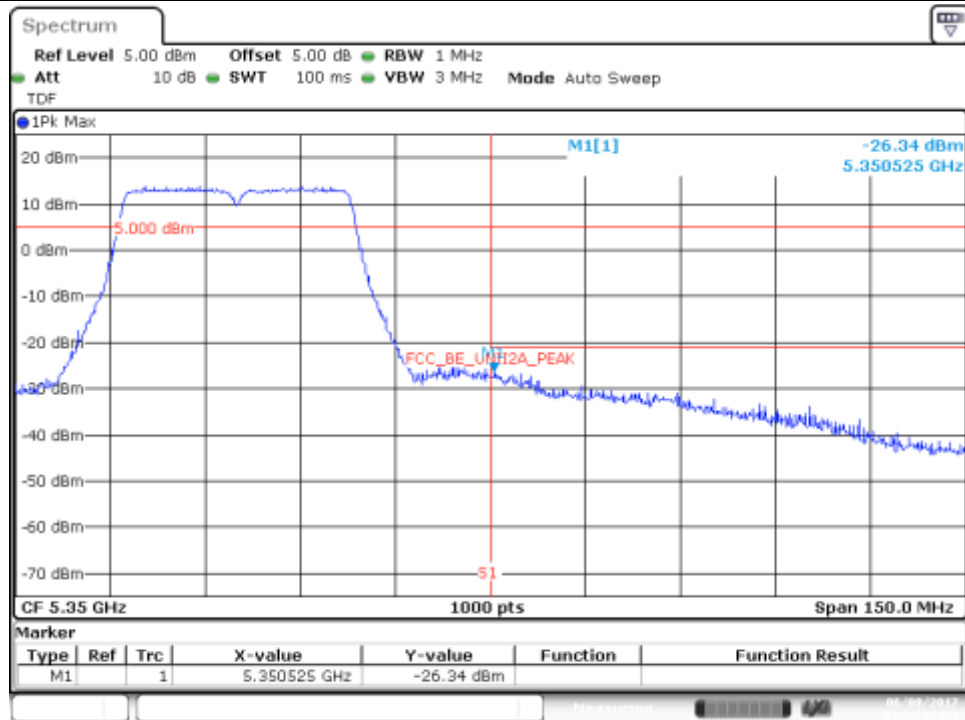


### BE High Freq Section, RMS – CH62F

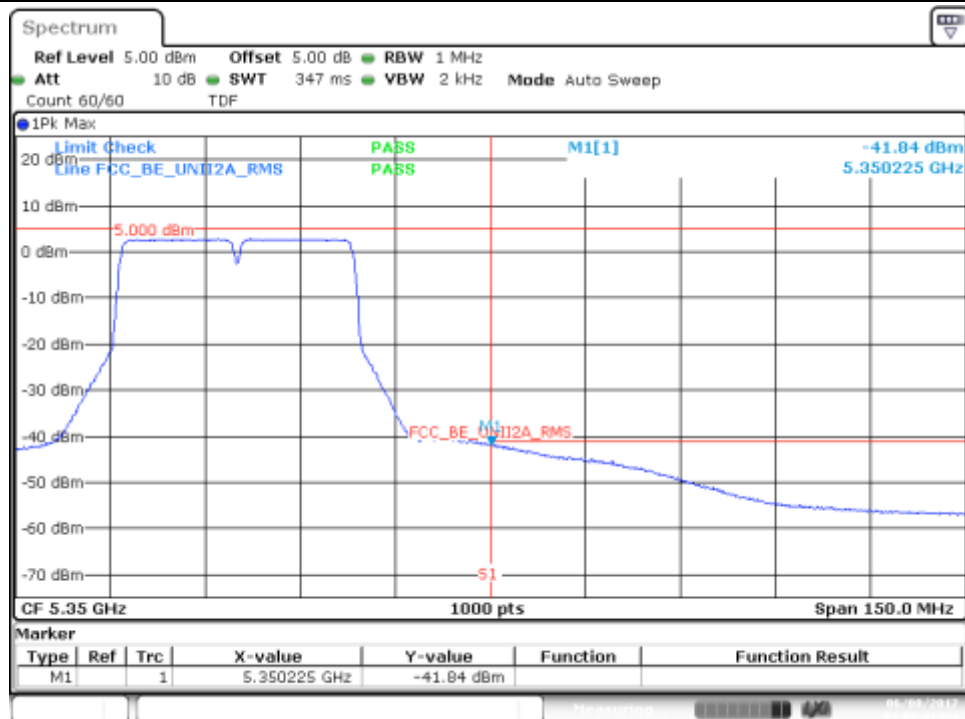


## 802.11n40, HT0 (SISO) - Chain B

### BE High Freq Section, Peak – CH62F

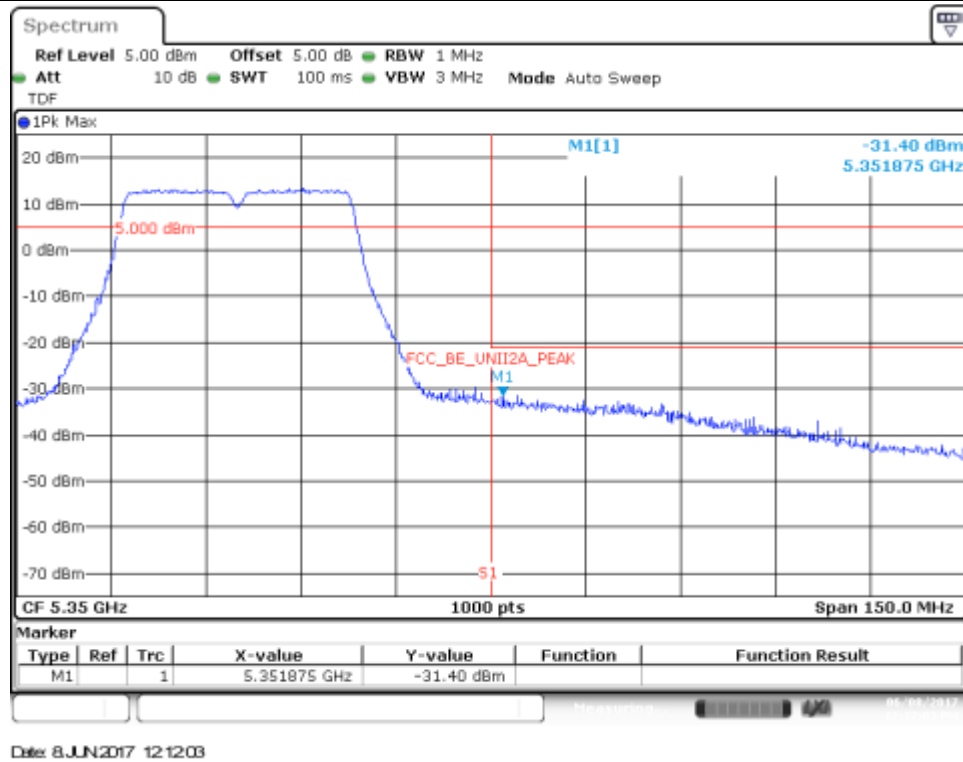


### BE High Freq Section, RMS – CH62F

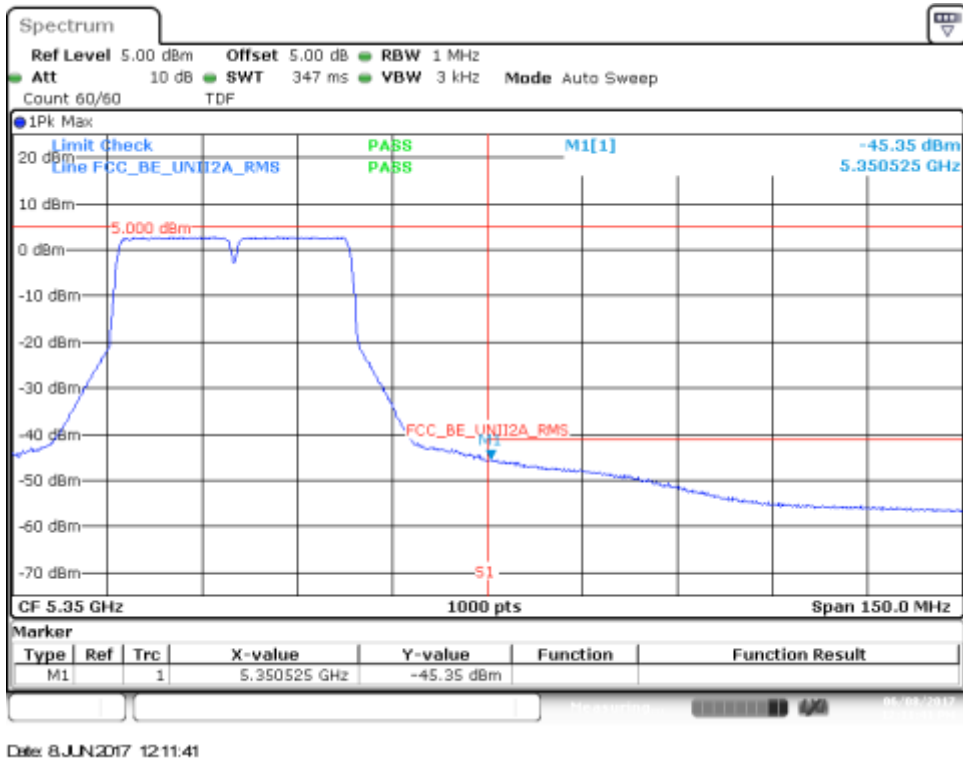


## 802.11n40, HT8 (MIMO) – Chain A

### BE High Freq Section, Peak– CH62F

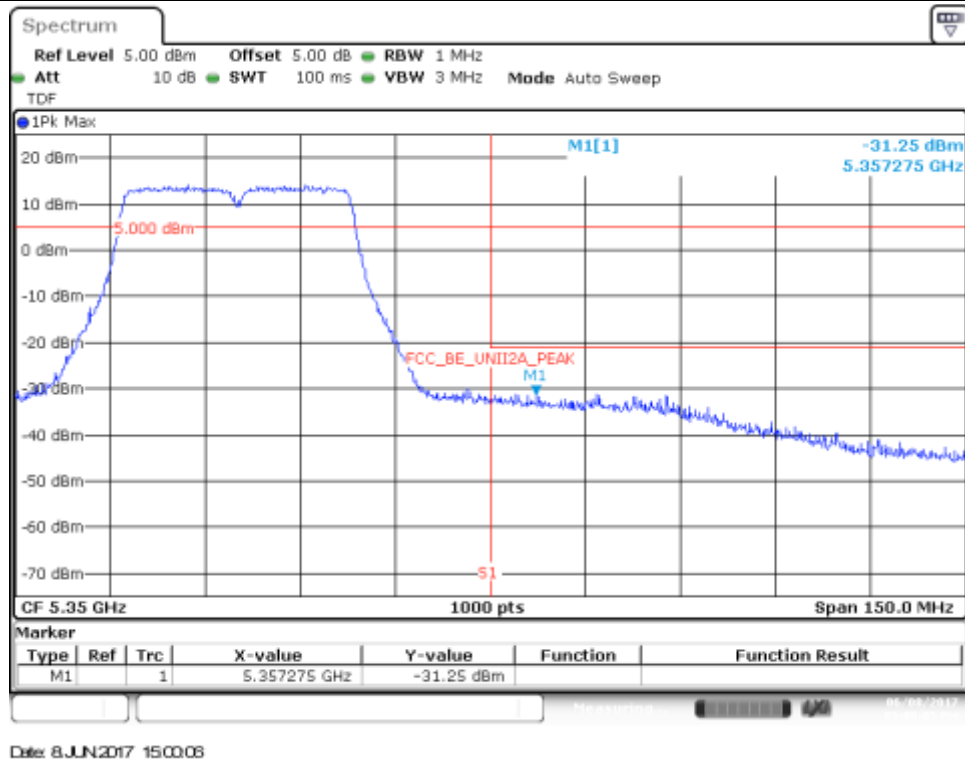


### BE High Freq Section, RMS – CH62F

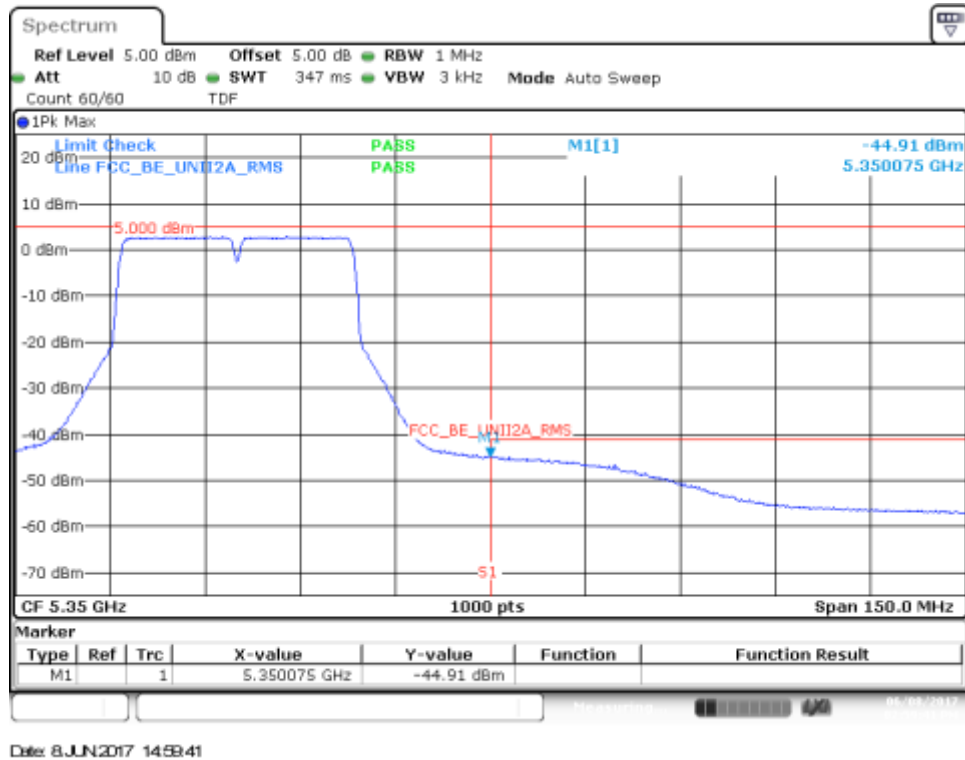


## 802.11n40, HT8 (MIMO) – Chain B

### BE High Freq Section, Peak – CH62F

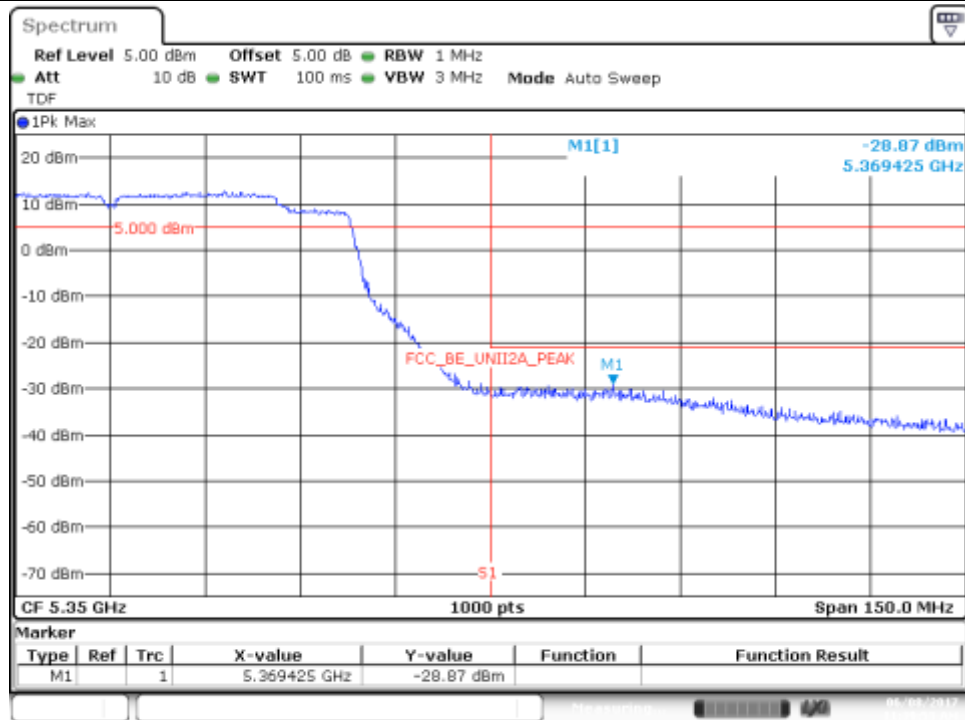


### BE High Freq Section, RMS – CH62F

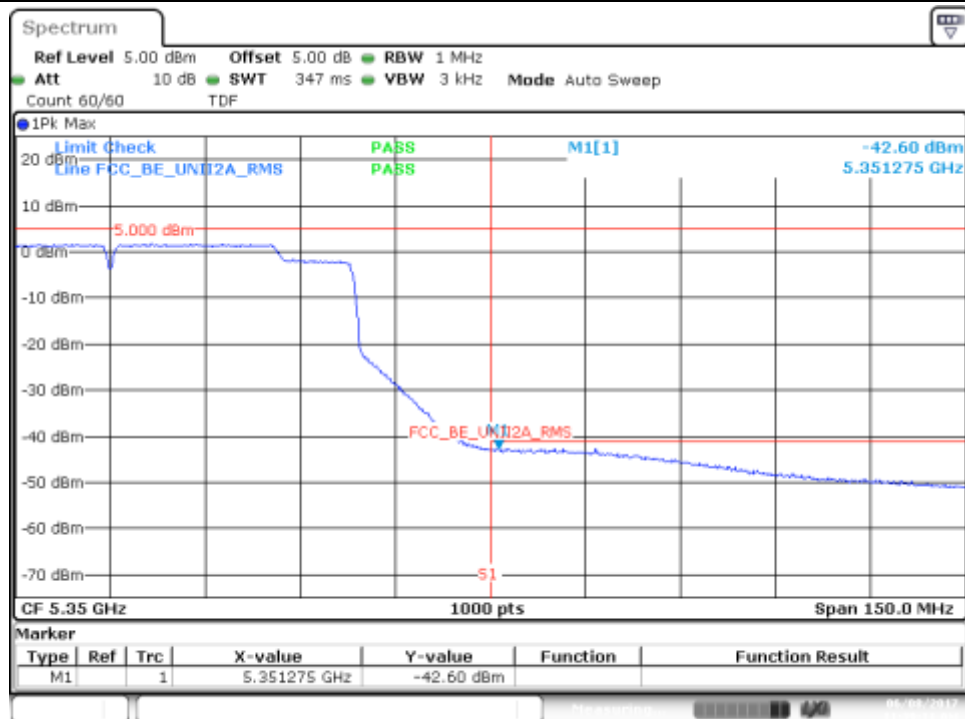


## 802.11ac80, VHT0 (SISO) - Chain A

### BE High Freq Section, Peak – CH58ac80

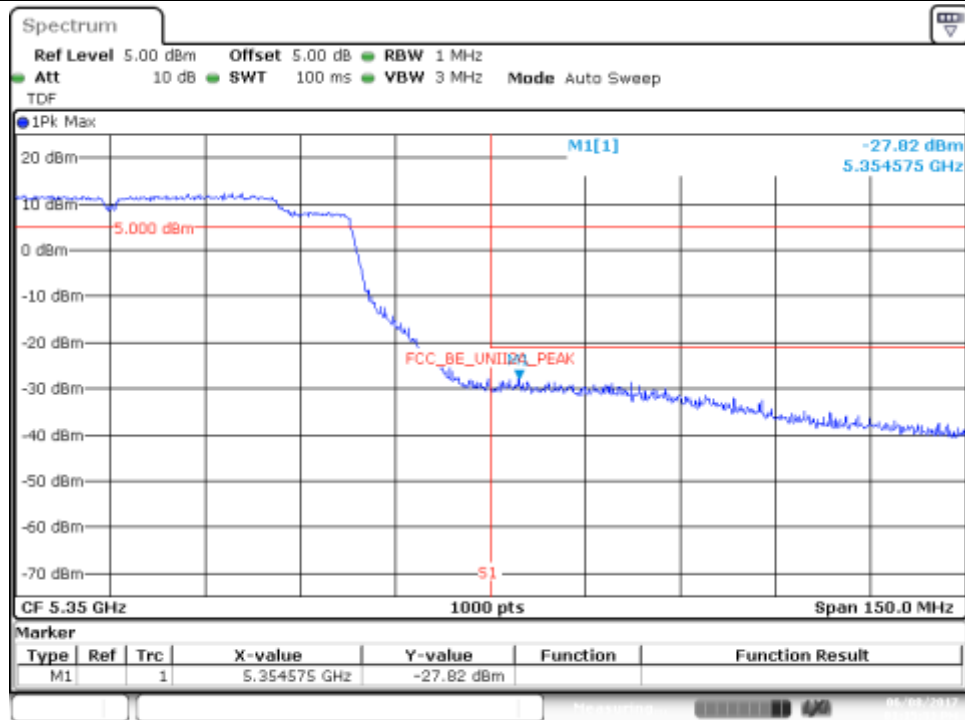


### BE High Freq Section, RMS – CH58ac80



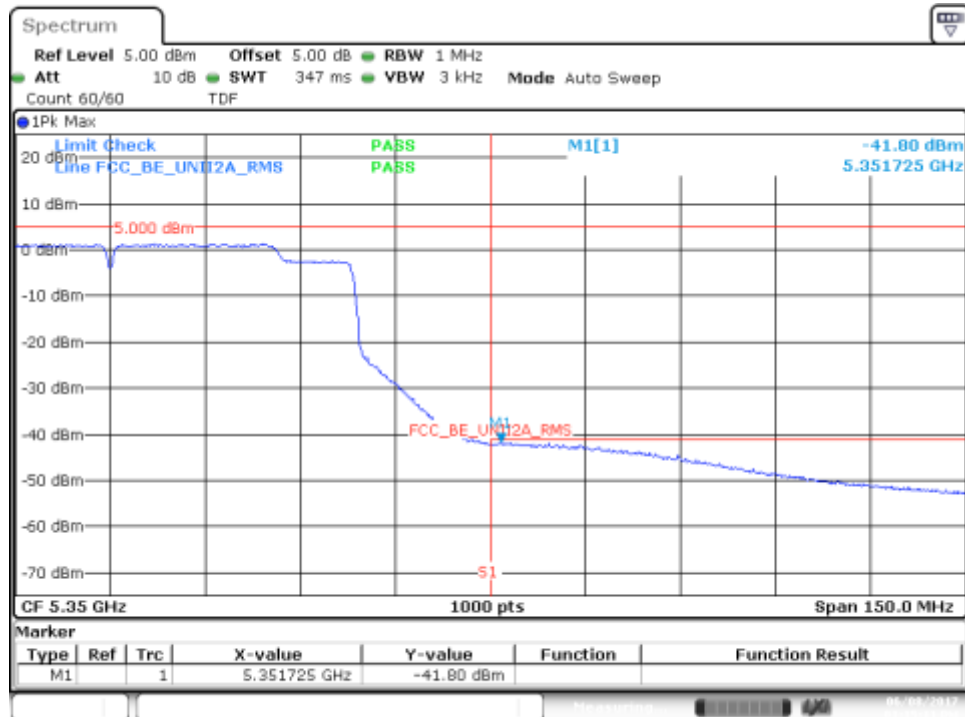
## 802.11ac80, VHT0 (SISO) - Chain B

### BE High Freq Section, Peak – CH58ac80



Date: 8 JUN 2017 13:15:33

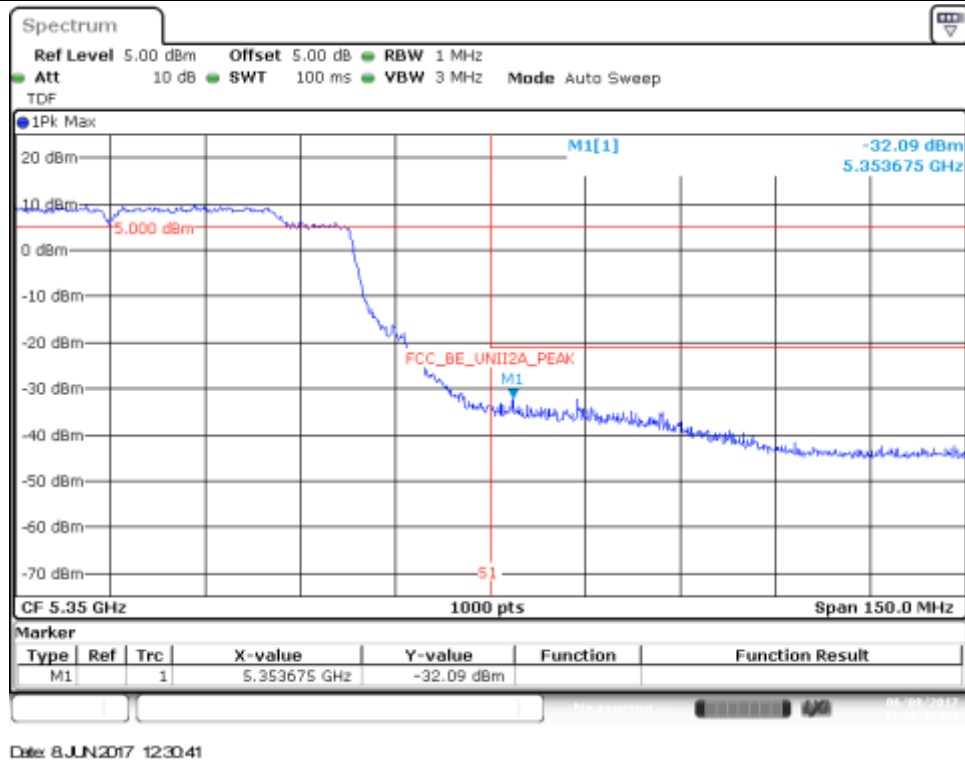
### BE High Freq Section, RMS – CH58ac80



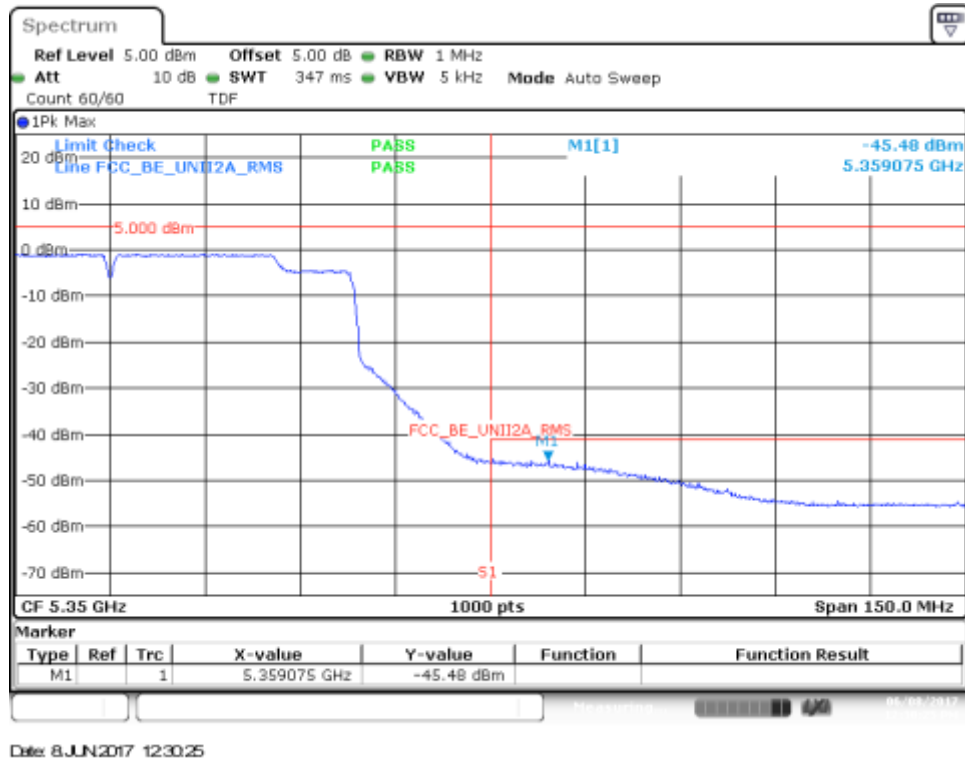
Date: 8 JUN 2017 13:15:12

## 802.11ac80, VHT0 (MIMO)– Chain A

### BE High Freq Section, Peak – CH58ac80

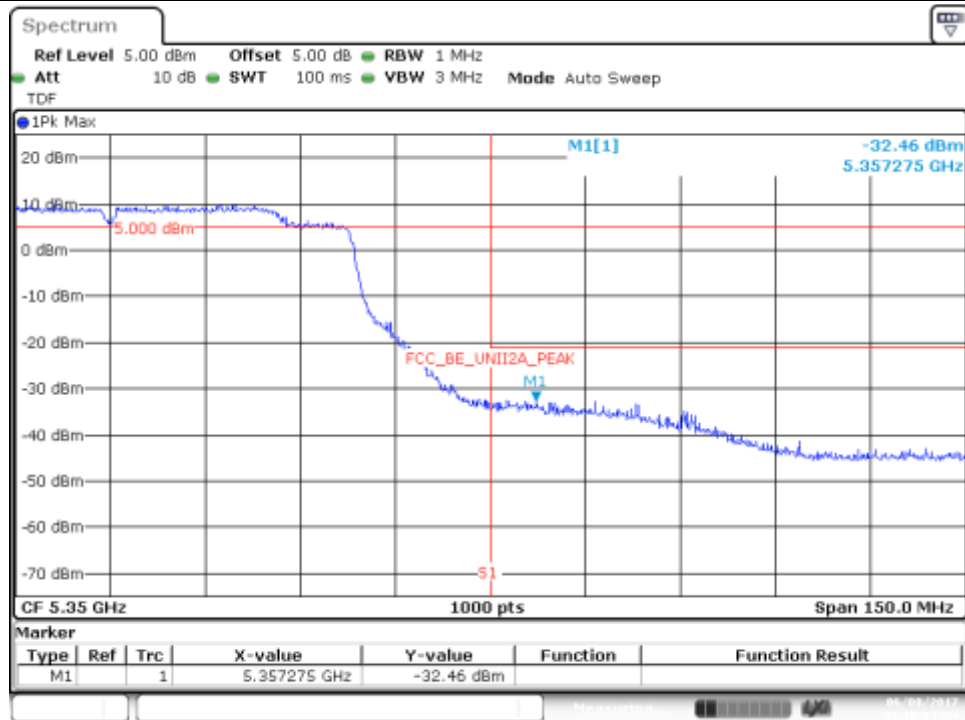


### BE High Freq Section, RMS – CH58ac80



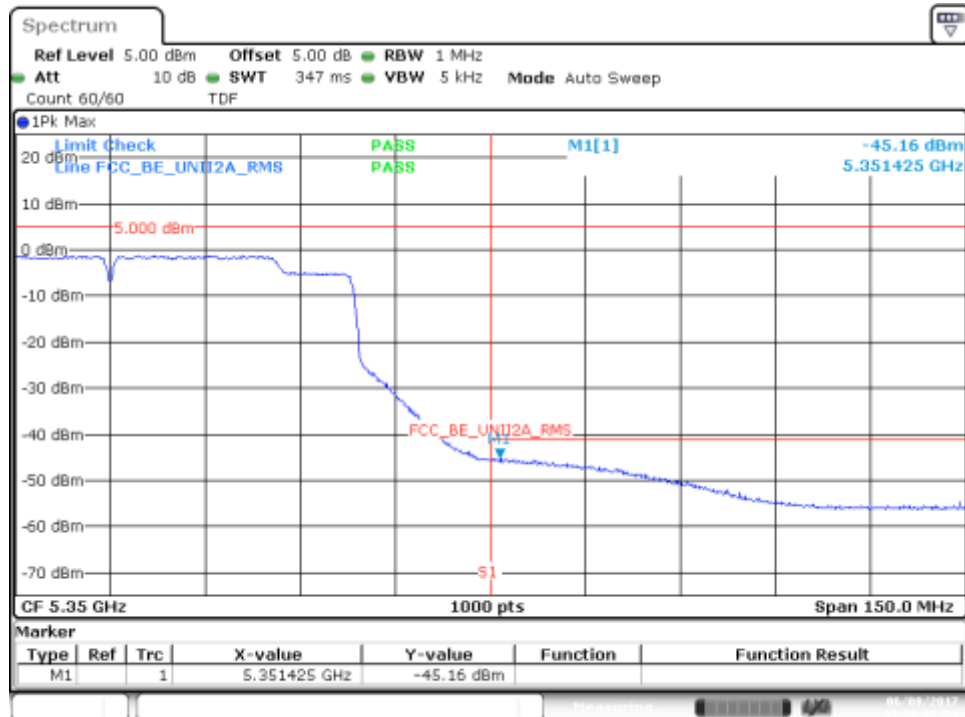
## 802.11ac80, VHT0 (MIMO)– Chain B

### BE High Freq Section, Peak – CH58ac80



Date: 8.JUN.2017 15:10:05

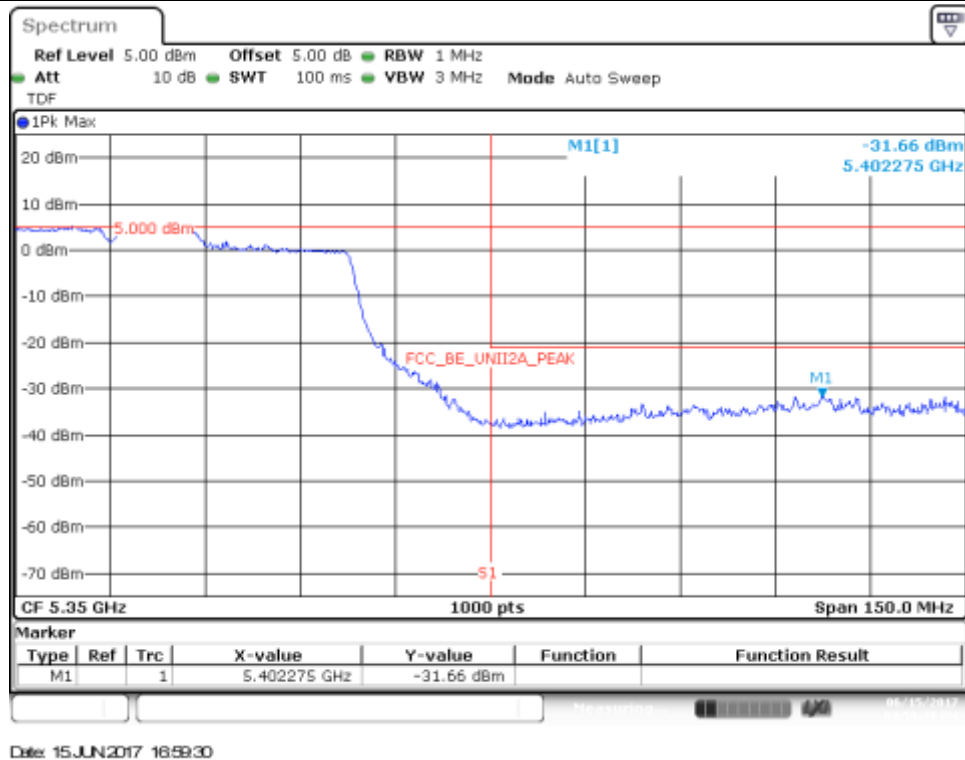
### BE High Freq Section, Peak – CH58ac80



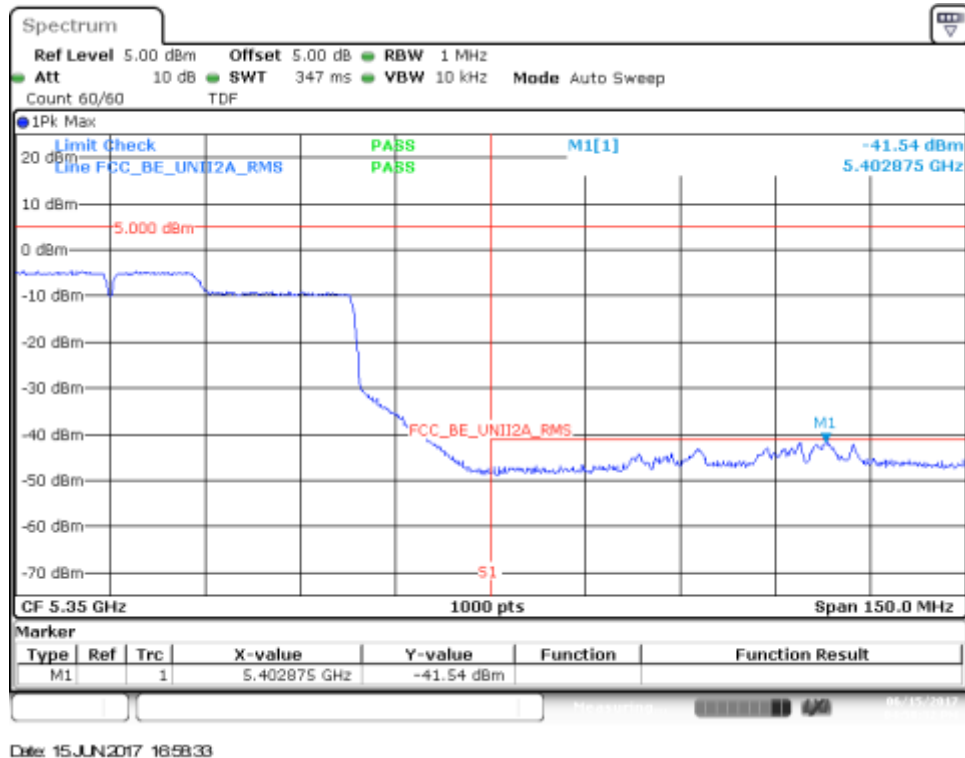
Date: 8.JUN.2017 15:08:40

## 802.11ac160, VHT0 (MIMO)– Chain A

### BE High Freq Section, Peak – CH50ac160

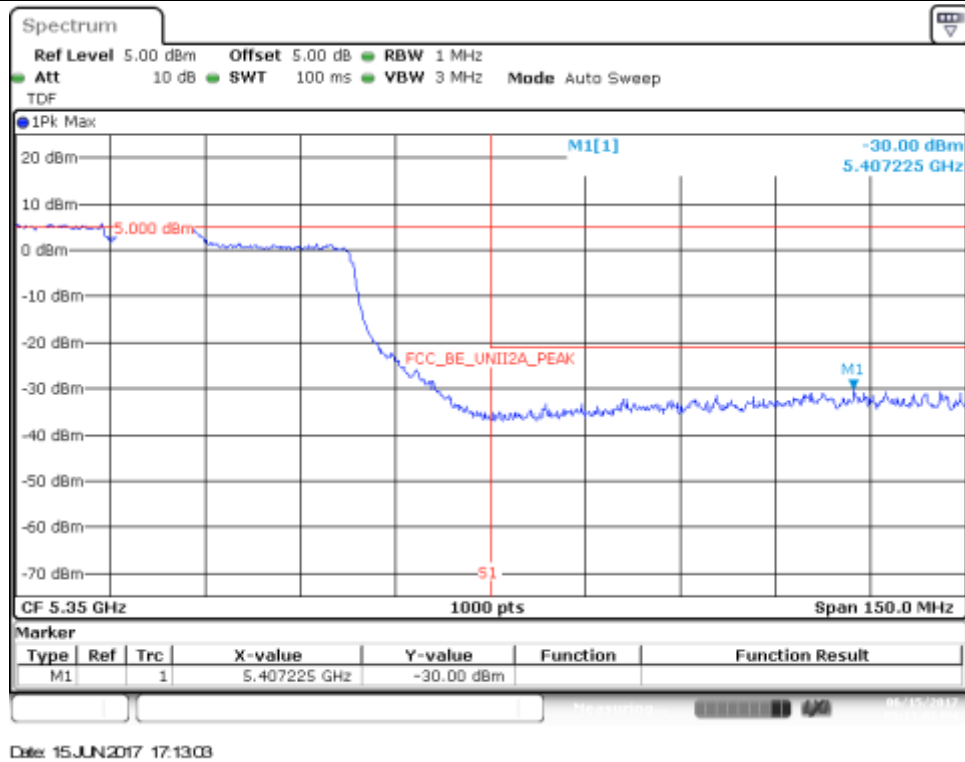


### BE High Freq Section, Peak – CH50ac160



## 802.11ac160, VHT0 (MIMO)– Chain B

### BE High Freq Section, Peak – CH50ac160



### BE High Freq Section, Peak – CH50ac160

