

# TEST REPORT

|                        |                                                                  |
|------------------------|------------------------------------------------------------------|
| EUT Description        | WLAN and BT, 2x2 PCIe M.2 1216 SD adapter card, LTE Coexistence  |
| Brand Name             | Intel® Wi-Fi 6 AX201                                             |
| Model Name             | AX201D2WL                                                        |
| FCC ID                 | PD9AX201D2L                                                      |
| ISED ID                | 1000M-AX201D2L                                                   |
| Date of Test Start/End | 2018-10-10 / 2018-10-31                                          |
| Features               | 802.11ax, Dual Band, 2x2 Wi-Fi + Bluetooth® 5<br>(see section 5) |

|                      |                                                                             |
|----------------------|-----------------------------------------------------------------------------|
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|                     |                                                                                   |
|---------------------|-----------------------------------------------------------------------------------|
| Reference Standards | FCC CFR Title 47 Part 15 E<br>RSS-247 issue 2, RSS-Gen issue 5<br>(see section 1) |
|---------------------|-----------------------------------------------------------------------------------|

|                            |                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------|
| Test Report identification | 180717-04.TR03                                                                                     |
| 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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## 1. Standards, reference documents and applicable test methods

1. FCC 47 CFR part 15 – Subpart E – Unlicensed National Information Infrastructure Devices.
2. FCC 47 CFR part 15 - Subpart C – §15.209 Radiated emission limits; general requirements.
3. FCC OET KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 – Guidelines for compliance testing of Unlicensed National Information Infrastructure (U-NII) Devices (Part 15, Subpart E)
4. ANSI C63.10-2013 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.
5. RSS-247 Issue 2 - Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices.
6. RSS-Gen Issue 5 - General Requirements for Compliance of Radio Apparatus.

## 2. General conditions, competences and guarantees

- ✓ Intel Corporation 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 Corporation SAS Wireless RF Lab (Intel WRF Lab) is an Accredited Test Firm recognized by the FCC, with Designation Number FR0011.
- ✓ Intel Corporation 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 ±2°C |
| Humidity    | 58 % ± 5 % |

## 4. Test samples

| Sample | Control #     | Description | Model          | Serial #           | Date of receipt | Note                                              |
|--------|---------------|-------------|----------------|--------------------|-----------------|---------------------------------------------------|
| #1     | 180717-04.S10 | RF MODULE   | AX201D2WL      | WFM :3413E8CA8E4C  | 2018-10-02      | Used for conducted tests                          |
|        | 180717-03.S13 | EXTENDER    | PCB00651_01    | 6510818-131        | 2018-08-21      |                                                   |
|        | 180000-01.S04 | ADAPTER     | JFP ADAPTER M2 | -                  | 2017-04-10      |                                                   |
|        | 170000-01.S01 | LAPTOP      | LATITUDE E5470 | DBLMC2             | 2017-03-28      |                                                   |
| #2     | 180717-04.S07 | RF MODULE   | AX201D2WL      | WFM : 3413E8CA8E92 | 2018-10-02      | Radiated Spurious emission from 30 MHz to 6.4 GHz |
|        | 180326-01.S03 | EXTENDER    | PCB00651_01    | 6510818-198        | 2018-03-27      |                                                   |
|        | 180000-01.S02 | ADAPTER     | JFP ADAPTER M2 | -                  | 2017-08-09      |                                                   |
|        | 170209-01.S16 | LAPTOP      | LATITUDE E7470 | C1HTPF2            | 2017-02-09      |                                                   |
| #3     | 180717-04.S08 | RF MODULE   | AX201D2WL      | WFM :3413E8CA8DFC  | 2018-10-02      | Radiated Spurious emission from 6.4 GHz to 40 GHz |
|        | 180717-03.S18 | EXTENDER    | PCB00651_01    | 6510817-133        | 2018-08-21      |                                                   |
|        | 180000-01.S05 | ADAPTER     | JFP ADAPTER M2 | -                  | 2018-08-20      |                                                   |
|        | 170801-01.S10 | LAPTOP      | LATITUDE E7470 | 7KNOXF2            | 2017-09-07      |                                                   |

## 5. EUT Features

|                        |                                                                                               |                              |  |
|------------------------|-----------------------------------------------------------------------------------------------|------------------------------|--|
| Brand Name             | Intel® Wi-Fi 6 AX201                                                                          |                              |  |
| Model Name             | AX201D2WL                                                                                     |                              |  |
| FCC ID                 | PD9AX201D2L                                                                                   |                              |  |
| ISED ID                | 1000M-AX201D2L                                                                                |                              |  |
| Software Version       | OEM DRTU_08048_11_1832_0G                                                                     |                              |  |
| Driver Version         | 99.0.39.1 (V010.19)                                                                           |                              |  |
| Prototype / Production | Production                                                                                    |                              |  |
| Supported Radios       | 802.11b/g/n/ax                                                                                | 2.4GHz (2400.0 – 2483.5 MHz) |  |
|                        | 802.11a/n/ac/ax                                                                               | 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    | CHAIN A: PIFA antenna. WiFi 2.4GHz & 5GHz and BT<br>CHAIN B: PIFA antenna. WiFi 2.4GHz & 5GHz |                              |  |
| Additional Information |                                                                                               |                              |  |

## 6. Remarks and comments

N/A

## 7. Test Verdicts summary

### 7.1. 802.11 a/n/ac/ax – U-NII- 3

| FCC part                 | RSS part                                     | Test name                                           | Verdict |
|--------------------------|----------------------------------------------|-----------------------------------------------------|---------|
| 15.407 (a) (3)           | RSS-247 Clause 6.2.4.1                       | Power Limits. Maximum output power                  | P       |
| 15.407 (a) (3)           | RSS-247 Clause 6.2.4.1                       | Peak power spectral density                         | P       |
| 15.407 (b) (3)           | RSS-247 Clause 6.2.4.2                       | Undesirable emissions limits: Band Edge (conducted) | P       |
| 15.407 (b) (3)<br>15.209 | RSS-247 Clause 6.2.4.2<br>RSS-GEN Clause 8.9 | Undesirable emissions limits (radiated)             | P       |

## 8. Document Revision History

| Revision # | Date       | Modified by                | Revision Details |
|------------|------------|----------------------------|------------------|
| Rev. 00    | 2018-11-05 | G.Gerbaud<br>F.Nsengiyumva | First Issue      |

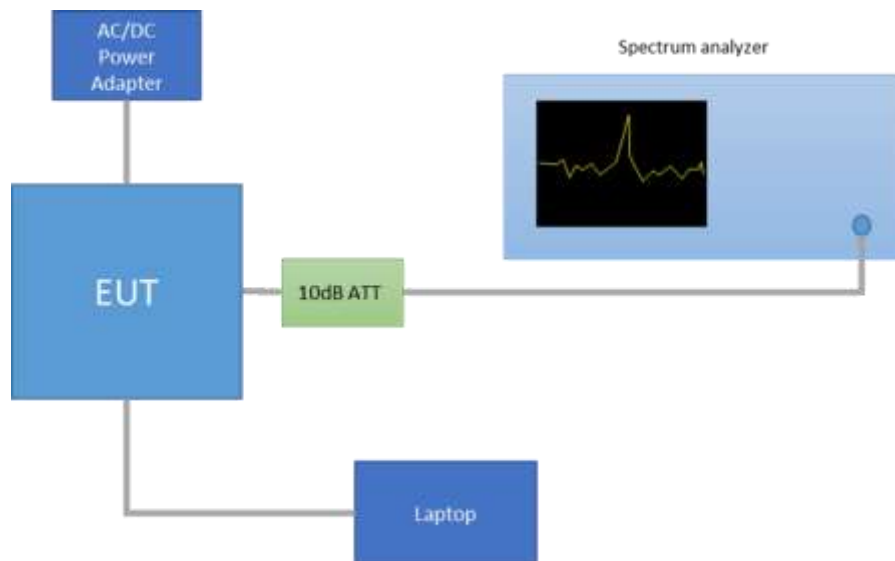
# Annex A. Test & System Description

## A.1 Measurement System

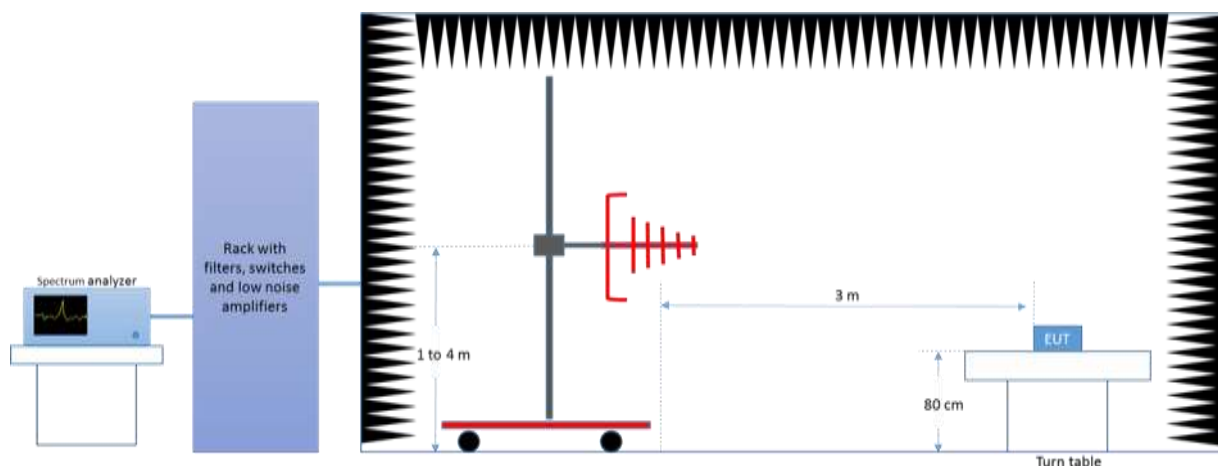
Measurements were performed using the following setups, made in accordance to the general provisions of FCC KDB 789033 D02 General UNII Test Procedures.

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.

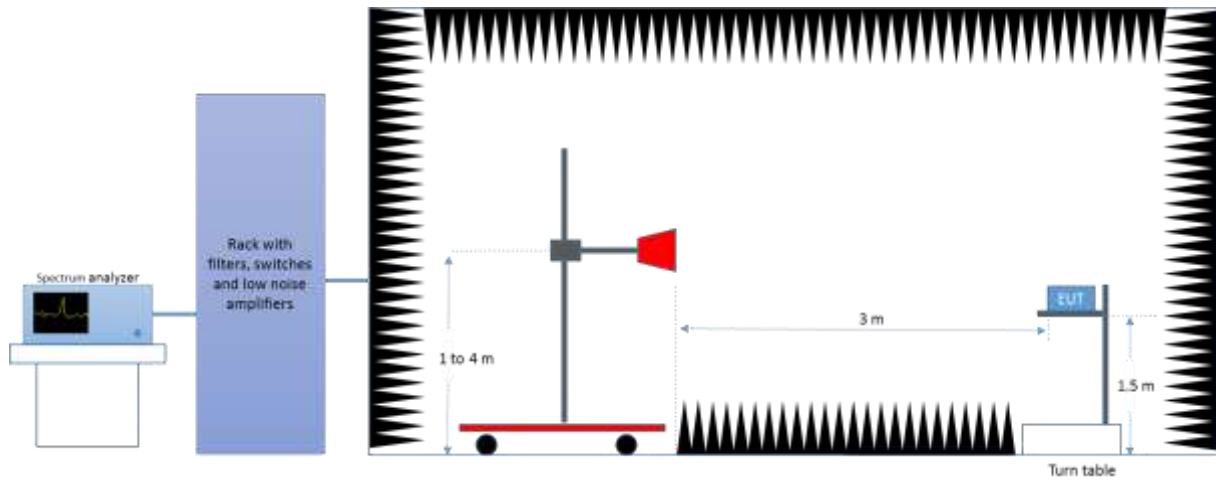
### Conducted Setup



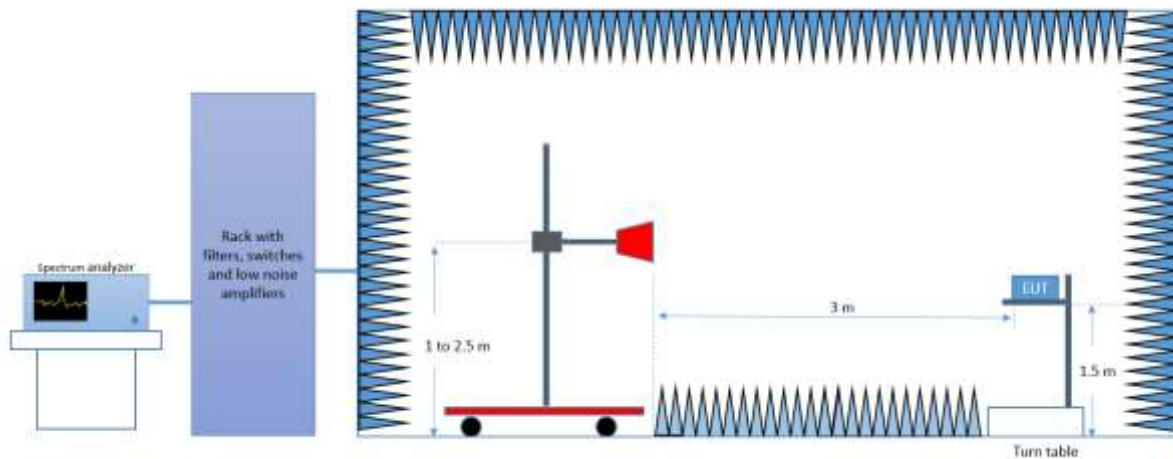
### Radiated Setup 30 MHz – 1 GHz



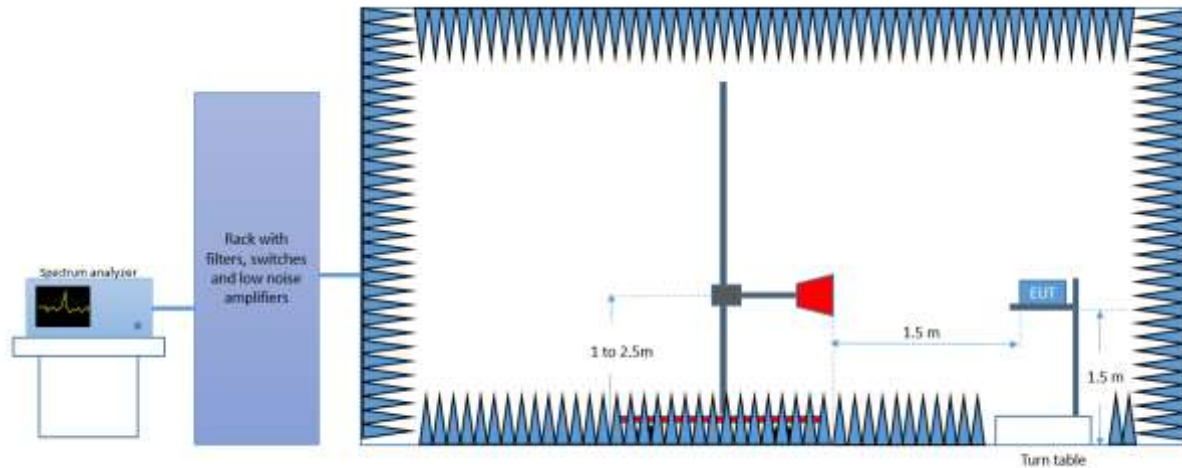
### *Radiated Setup 1 GHz – 6.4 GHz*



### *Radiated Setup 6.4 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 |
|------|-------------------|------------|----------|-----------------|------------|---------------|
| 0315 | Spectrum analyzer | FSV30      | 103307   | Rohde & Schwarz | 2018-04-10 | 2020-04-10    |

### Radiated Setup-1

| ID#  | Device                                          | Type/Model | Serial # | Manufacturer    | Cal. Date  | Cal. Due Date |
|------|-------------------------------------------------|------------|----------|-----------------|------------|---------------|
| 0420 | Spectrum analyzer                               | FSV40      | 101556   | Rohde & Schwarz | 2018-05-17 | 2020-05-17    |
| 0137 | Log antenna<br>30 MHz – 1 GHz                   | 3142E      | 00156946 | ETS Lindgren    | 2017-12-19 | 2019-12-19    |
| 0325 | Double Ridged Horn<br>Antenna<br>1 GHz – 18 GHz | 3117       | 00157734 | ETS Lindgren    | 2017-08-22 | 2019-08-22    |
| 0135 | Semi Anechoic<br>chamber                        | FACT 3     | 5720     | ETS Lindgren    | 2018-04-18 | 2020-04-18    |
| 0530 | Measurement<br>Software                         | EMC32      | 100623   | Rohde & Schwarz | N/A        | N/A           |

N/A: Not Applicable

### Radiated Setup-2

| ID#  | Device                                           | Type/Model | Serial # | Manufacturer    | Cal. Date  | Cal. Due Date |
|------|--------------------------------------------------|------------|----------|-----------------|------------|---------------|
| 0133 | Spectrum analyzer                                | FSV40      | 101358   | Rohde & Schwarz | 2018-04-11 | 2020-04-11    |
| 0141 | Double Ridged Horn<br>Antenna<br>1 GHz – 18 GHz  | 3117       | 00157736 | ETS Lindgren    | 2018-05-11 | 2020-05-11    |
| 0334 | Double Ridged Horn<br>Antenna<br>18 GHz – 40 GHz | 3116C-PA   | 00196308 | ETS Lindgren    | 2017-08-22 | 2019-08-22    |
| 0337 | Full Anechoic<br>chamber                         | RFD_FA_100 | 5996     | ETS Lindgren    | 2018-04-17 | 2020-04-17    |
| 0329 | Measurement<br>Software                          | EMC32      | 100401   | Rohde & Schwarz | N/A        | N/A           |

N/A: Not Applicable

### Radiated Setup - shared equipment

| ID#  | Device                      | Type/Model | Serial # | Manufacturer    | Cal. Date  | Cal. Due Date |
|------|-----------------------------|------------|----------|-----------------|------------|---------------|
| 0616 | Power Sensor<br>50MHz-18GHz | NRP-Z81    | 104385   | Rohde & Schwarz | 2018-04-16 | 2020-04-16    |
| 0617 | Power Sensor<br>50MHz-18GHz | NRP-Z81    | 104386   | Rohde & Schwarz | 2018-04-16 | 2020-04-16    |
| 0618 | Power Sensor<br>50MHz-18GHz | NRP-Z81    | 104382   | Rohde & Schwarz | 2018-04-16 | 2020-04-16    |



### 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 U-NII-3

## 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 & 802.11ax20 (20 MHz channel bandwidth), 802.11n40 and 802.11ax40 (40MHz channel bandwidth) 802.11ac80 & 802.11ax80 (80MHz 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 each chain 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 analyser with the channel integration method according to section II) E) 2) e) (Method SA-2 Alternative) of Guidance 789033 D02.

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

| U-NII-3  |          |             |      |             | 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       | 149  | 5745        | 21.50                               | 21.50        | -                          |
|          |          |             | 157  | 5785        | 21.50                               | 21.50        | -                          |
|          |          |             | 165  | 5825        | 21.00                               | 21.50        | -                          |
| 802.11n  | 20       | HT0<br>HT8* | 149  | 5745        | 21.00                               | 21.00        | 21.00                      |
|          |          |             | 157  | 5785        | 21.00                               | 21.00        | 21.00                      |
|          |          |             | 165  | 5825        | 21.00                               | 21.00        | 21.00                      |
|          | 40       | HT0<br>HT8* | 151F | 5755        | 21.00                               | 21.00        | 21.00                      |
|          |          |             | 159F | 5795        | 21.00                               | 21.00        | 21.00                      |
| 802.11ac | 80       | VHT0        | 155  | 5775        | 19.50                               | 19.50        | 20.00                      |
| 802.11ax | 20       | HE0         | 149  | 5745        | 21.00                               | 21.00        | 21.00                      |
|          |          |             | 157  | 5785        | 21.00                               | 21.00        | 21.00                      |
|          |          |             | 165  | 5825        | 21.00                               | 21.00        | 21.00                      |
|          | 40       |             | 151F | 5755        | 21.00                               | 21.00        | 21.00                      |
|          |          |             | 159F | 5795        | 21.00                               | 21.00        | 21.00                      |
|          | 80       |             | 155  | 5775        | 19.00                               | 19.00        | 19.50                      |

\* Note: HT8 for MIMO modes only

| Overlapped channels between UNII-2C and UNII-3 |          |           |      |             | 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 |
| 802.11n                                        | 20       | HT0 HT8*  | 144  | 5720        | 21.00                               | 21.00        | 21.50                      |
|                                                | 40       | HT0 HT8*  | 142F | 5710        | 21.00                               | 21.00        | 22.00                      |
| 802.11ac                                       | 80       | VHT0      | 138  | 5690        | 21.00                               | 21.00        | 22.00                      |
| 802.11ax                                       | 20       | HE0       | 144  | 5720        | 21.00                               | 21.00        | 21.50                      |
|                                                | 40       | HE0       | 142F | 5710        | 21.00                               | 21.00        | 21.50                      |
|                                                | 80       | HE0       | 138  | 5690        | 21.00                               | 21.00        | 21.50                      |

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

802.11ax20 and 802.11ax40 (SISO) → HE0

802.11ax20 and 802.11ax40 (MIMO) → HE0

802.11ax80 (SISO) → HE0

802.11ax80 (MIMO) → HE0

802.11he160 (SISO) → HE0

802.11he160 (MIMO) → HE0

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

## B.2 Test Results Tables

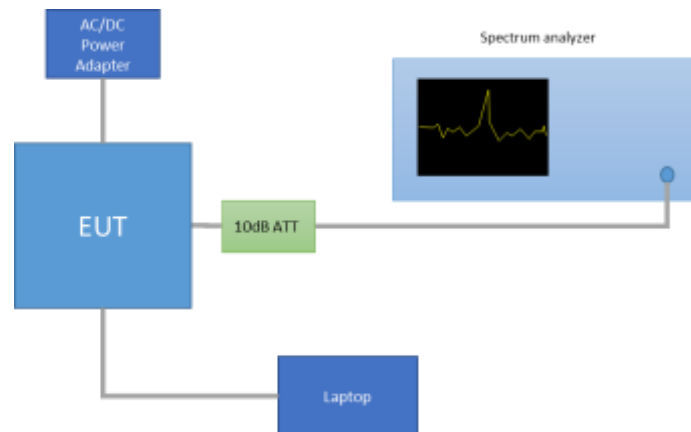
### B.2.1 6dB & 99% Bandwidth

#### Test limits

| FCC part   | RSS part                  | Limits                                                                                                   |
|------------|---------------------------|----------------------------------------------------------------------------------------------------------|
| 15.407 (e) | RSS-247<br>Clause 6.2.4.1 | For equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz. |

#### Test procedure

The setup below was used to measure the 6dB & 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.



For the overlapped channels between U-NII-2C and U-NII-3 bands, and according to FCC KDB 789033 D02 v02r01 , the boundary frequency between the bands is used as one edge for defining the portion of the 6dB bandwidth that falls within a particular U-NII band. This rule is only applicable for the 6dB bandwidth and for those channels marked as overlapped.

## Results tables

### U-NII-3 channels

| Mode       | Rate  | Antenna | Channel | Freq.<br>[MHz] | 6dB BW<br>[MHz] | 99% BW<br>[MHz] |
|------------|-------|---------|---------|----------------|-----------------|-----------------|
| 802.11a    | 6Mbps | SISO-A  | 149     | 5745           | 16.33           | 17.60           |
|            |       |         | 157     | 5785           | 16.33           | 17.84           |
|            |       |         | 165     | 5825           | 16.35           | 17.60           |
|            |       | SISO-B  | 149     | 5745           | 16.35           | 18.04           |
|            |       |         | 157     | 5785           | 16.33           | 18.16           |
|            |       |         | 165     | 5825           | 16.35           | 18.40           |
| 802.11n20  | HT0   | SISO-A  | 149     | 5745           | 17.58           | 18.40           |
|            |       |         | 157     | 5785           | 17.58           | 18.40           |
|            |       |         | 165     | 5825           | 17.57           | 18.60           |
|            |       | SISO-B  | 149     | 5745           | 17.57           | 18.64           |
|            |       |         | 157     | 5785           | 17.57           | 18.80           |
|            |       |         | 165     | 5825           | 17.59           | 19.20           |
|            | HT8   | MIMO-A  | 149     | 5745           | 17.58           | 17.96           |
|            |       |         | 157     | 5785           | 17.59           | 17.96           |
|            |       |         | 165     | 5825           | 17.58           | 18.00           |
|            |       | MIMO-B  | 149     | 5745           | 17.58           | 18.04           |
|            |       |         | 157     | 5785           | 17.59           | 18.08           |
|            |       |         | 165     | 5825           | 17.59           | 18.00           |
| 802.11n40  | HT0   | SISO-A  | 151F    | 5755           | 36.35           | 36.96           |
|            |       |         | 159F    | 5795           | 36.35           | 37.04           |
|            |       | SISO-B  | 151F    | 5755           | 36.35           | 36.96           |
|            |       |         | 159F    | 5795           | 36.35           | 37.20           |
|            | HT8   | MIMO-A  | 151F    | 5755           | 36.34           | 36.72           |
|            |       |         | 159F    | 5795           | 36.35           | 36.72           |
|            |       | MIMO-B  | 151F    | 5755           | 36.37           | 36.48           |
|            |       |         | 159F    | 5795           | 36.37           | 36.40           |
| 802.11ac80 | VHT0  | SISO-A  | 155     | 5775           | 62.72           | 75.12           |
|            |       | SISO-B  |         | 5775           | 70.19           | 75.24           |
|            |       | MIMO-A  |         | 5775           | 61.42           | 75.24           |
|            |       | MIMO-B  |         | 5775           | 71.42           | 75.12           |

Max Value

| Mode       | Rate | Antenna | Channel | Freq.<br>[MHz] | 6dB BW<br>[MHz] | 99% BW<br>[MHz] |
|------------|------|---------|---------|----------------|-----------------|-----------------|
| 802.11ax20 | HE0  | SISO-A  | 149     | 5745           | 18.90           | 19.24           |
|            |      |         | 157     | 5785           | 18.75           | 19.20           |
|            |      |         | 165     | 5825           | 18.77           | 19.32           |
|            |      | SISO-B  | 149     | 5745           | 18.91           | 19.36           |
|            |      |         | 157     | 5785           | 18.84           | 19.24           |
|            |      |         | 165     | 5825           | 18.98           | 19.32           |
|            |      | MIMO-A  | 149     | 5745           | 18.90           | 19.12           |
|            |      |         | 157     | 5785           | 18.83           | 19.08           |
|            |      |         | 165     | 5825           | 18.94           | 19.08           |
|            |      | MIMO-B  | 149     | 5745           | 18.74           | 19.08           |
|            |      |         | 157     | 5785           | 18.89           | 19.08           |
|            |      |         | 165     | 5825           | 18.82           | 19.12           |
| 802.11ax40 |      | SISO-A  | 151F    | 5755           | 37.82           | 37.92           |
|            |      |         | 159F    | 5795           | 37.92           | 38.00           |
|            |      | SISO-B  | 151F    | 5755           | 38.01           | 38.00           |
|            |      |         | 159F    | 5795           | 38.01           | 38.08           |
|            |      | MIMO-A  | 151F    | 5755           | 37.98           | 37.84           |
|            |      |         | 159F    | 5795           | 38.00           | 37.92           |
|            |      | MIMO-B  | 151F    | 5755           | 38.05           | 37.92           |
|            |      |         | 159F    | 5795           | 37.98           | 37.84           |
| 802.11ax80 |      | SISO-A  | 155     | 5775           | 62.89           | 76.80           |
|            |      | SISO-B  |         | 5775           | 67.72           | 76.68           |
|            |      | MIMO-A  |         | 5775           | 70.16           | 76.92           |
|            |      | MIMO-B  |         | 5775           | 71.39           | 76.80           |

Max Value

| Mode       | Rate | Antenna | Channel | Freq.<br>[MHz] | RU<br>Configuration | 6dB BW<br>[MHz] | 99% BW<br>[MHz] |
|------------|------|---------|---------|----------------|---------------------|-----------------|-----------------|
| 802.11ax20 | HE0  | SISO-A  | 149     | 5745           | 26/0                | 2.04            | 18.52           |
|            |      |         |         |                | 52/37               | 14.50           | 18.40           |
|            |      |         |         |                | 106/53              | 17.03           | 18.32           |
|            |      | SISO-B  |         |                | 26/0                | 2.07            | 18.60           |
|            |      |         |         |                | 52/37               | 16.97           | 18.44           |
|            |      |         |         |                | 106/53              | 17.11           | 18.40           |
|            |      | MIMO-A  |         |                | 26/0                | 2.07            | 18.60           |
|            |      |         |         |                | 52/37               | 15.77           | 18.44           |
|            |      |         |         |                | 106/53              | 17.12           | 18.28           |
|            |      | MIMO-B  |         |                | 26/0                | 2.09            | 18.52           |
|            |      |         |         |                | 52/37               | 16.92           | 18.36           |
|            |      |         |         |                | 106/53              | 17.07           | 18.20           |
| 802.11ax40 | HE0  | SISO-A  | 151F    | 5755           | 242/61              | 18.79           | 19.28           |
|            |      | SISO-B  |         |                | 242/61              | 18.64           | 19.36           |
|            |      | MIMO-A  |         |                | 242/61              | 18.66           | 19.20           |
|            |      | MIMO-B  |         |                | 242/61              | 18.66           | 19.12           |
|            |      |         |         |                |                     |                 |                 |
| 802.11ax80 | HE0  | SISO-A  | 155     | 5775           | 484/65              | 37.58           | 37.92           |
|            |      | SISO-B  |         |                | 484/65              | 37.74           | 38.04           |
|            |      | MIMO-B  |         |                | 484/65              | 37.65           | 38.04           |
|            |      | MIMO-A  |         |                | 484/65              | 37.61           | 37.80           |
|            |      |         |         |                |                     |                 |                 |

Max Value

### Overlapped channels between U-NII-2C and U-NII-3

| Mode       | Rate | Antenna | Channel | Frequency | 6dB BW [MHz] | 26dB BW UNII-3 |
|------------|------|---------|---------|-----------|--------------|----------------|
| 802.11n20  | HT0  | SISO-A  | 144     | 5720      | 3.78         | 8.98           |
|            |      | SISO-B  |         |           | 3.78         | 8.13           |
|            | HT8  | MIMO-A  |         |           | 3.79         | 7.13           |
|            |      | MIMO-B  |         |           | 3.89         | 7.13           |
| 802.11n40  | HT0  | SISO-A  | 142F    | 5710      | 3.17         | 8.63           |
|            |      | SISO-B  |         |           | 3.17         | 8.99           |
|            | HT8  | MIMO-A  |         |           | 3.18         | 7.73           |
|            |      | MIMO-B  |         |           | 3.18         | 7.10           |
| 802.11ac80 | VHT0 | SISO-A  | 138     | 5690      | 3.23         | 9.56           |
|            |      | SISO-B  |         |           | 3.22         | 8.99           |
|            |      | MIMO-A  |         |           | 3.24         | 7.66           |
|            |      | MIMO-B  |         |           | 3.23         | 7.85           |
| 802.11ax20 | HE0  | SISO-A  | 144     | 5720      | 4.50         | 8.23           |
|            |      | SISO-B  |         |           | 4.47         | 8.18           |
|            |      | MIMO-A  |         |           | 4.52         | 7.03           |
|            |      | MIMO-B  |         |           | 4.44         | 7.48           |
| 802.11ax40 |      | SISO-A  | 142F    | 5710      | 4.02         | 7.73           |
|            |      | SISO-B  |         |           | 4.02         | 8.54           |
|            |      | MIMO-A  |         |           | 4.06         | 6.92           |
|            |      | MIMO-B  |         |           | 4.08         | 7.19           |
| 802.11ax80 |      | SISO-A  | 138     | 5690      | 4.04         | 6.90           |
|            |      | SISO-B  |         |           | 4.04         | 7.28           |
|            |      | MIMO-A  |         |           | 4.05         | 6.71           |
|            |      | MIMO-B  |         |           | 4.12         | 6.90           |

### Max Value

Note: the 26dB bandwidth of the overlapped channels falling in U-NII-3 band is shown in the above table. These values were used to measure the maximum output power in the U-NII-3 band as specified in chapter B.2.2.

See Section B.3.1, B.3.2, B.3.3, and Section B.3.4 for the screenshot results.



## B.2.2 Power Limits. Maximum output power & Peak power spectral Density

### Test limits

| FCC part          | RSS part                  | Limits                                                                                                                                                                                                                 |
|-------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15.407<br>(a) (3) | RSS-247<br>Clause 6.2.4.1 | For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band |

### Test procedure

The Maximum Conducted Output Power was measured using the channel integration method according to section E) 2) e) (Method SA-2 Alternative) of KDB 789033 D02.

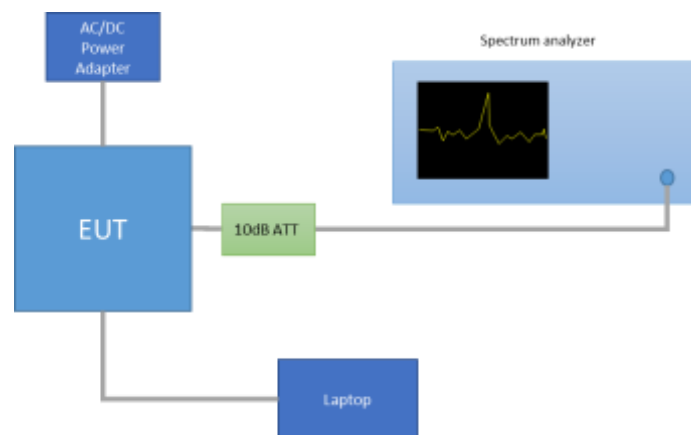
The maximum power spectral density (PSD) was measured using the method according to section F) (Method SA-2 Alternative) of KDB 789033 D02.

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.



For the overlapped channels between U-NII-2C and U-NII-3, and according to FCC KDB 789033 D02 v02r01 , the power is computed based on the portion of the emission bandwidth (26dB) contained within that band. This rule is only applicable for those channels marked as overlapped.

## Results tables

### Duty cycle

| Mode       | Rate  | Antenna | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] |
|------------|-------|---------|----------------------------|--------------------------|----------------|
| 802.11a    | 6Mbps | SISO-A  | 2.07                       | 2.13                     | 97.26%         |
|            |       | SISO-B  | 2.07                       | 2.13                     | 97.26%         |
| 802.11n20  | HT0   | SISO-A  | 3.96                       | 4.01                     | 98.74%         |
|            |       | SISO-B  | 3.96                       | 4.01                     | 98.74%         |
|            | HT8   | MIMO-A  | 3.96                       | 4.01                     | 98.69%         |
|            |       | MIMO-B  | 3.96                       | 4.01                     | 98.69%         |
| 802.11ax20 | HE0   | SISO-A  | 3.94                       | 3.99                     | 98.75%         |
|            |       | SISO-B  | 3.94                       | 3.99                     | 98.75%         |
|            |       | MIMO-A  | 3.94                       | 3.99                     | 98.69%         |
|            |       | MIMO-B  | 3.94                       | 3.99                     | 98.69%         |
| 802.11n40  | HT0   | SISO-A  | 3.96                       | 4.01                     | 98.79%         |
|            |       | SISO-B  | 3.96                       | 4.01                     | 98.79%         |
|            | HT8   | MIMO-A  | 3.97                       | 4.02                     | 98.78%         |
|            |       | MIMO-B  | 3.97                       | 4.02                     | 98.78%         |
| 802.11ax40 | HE0   | SISO-A  | 3.94                       | 3.99                     | 98.69%         |
|            |       | SISO-B  | 3.94                       | 3.99                     | 98.69%         |
|            |       | MIMO-A  | 3.96                       | 4.01                     | 98.72%         |
|            |       | MIMO-B  | 3.96                       | 4.01                     | 98.72%         |
| 802.11ac80 | VHT0  | SISO-A  | 3.95                       | 4.01                     | 98.56%         |
|            |       | SISO-B  | 3.95                       | 4.01                     | 98.56%         |
|            |       | MIMO-A  | 3.95                       | 4.00                     | 98.74%         |
|            |       | MIMO-B  | 3.95                       | 4.00                     | 98.74%         |
| 802.11ax80 | HE0   | SISO-A  | 3.93                       | 3.99                     | 98.55%         |
|            |       | SISO-B  | 3.93                       | 3.99                     | 98.55%         |
|            |       | MIMO-A  | 3.96                       | 4.01                     | 98.74%         |
|            |       | MIMO-B  | 3.96                       | 4.01                     | 98.74%         |

### Maximum output power – U-NII-3 Channels

| Mode       | Rate  | Channel | Frequency (MHz) | Antenna      | Average Cond. Output Power [dBm] | Max.* Cond. Output Power [dBm] | Max.* Cond. Output Power [mW] | Max.* EIRP [dBm] |
|------------|-------|---------|-----------------|--------------|----------------------------------|--------------------------------|-------------------------------|------------------|
| 802.11a    | 6Mbps | 149     | 5745            | SISO-A       | 21.14                            | 21.26                          | 133.68                        | 26.26            |
|            |       |         |                 | SISO-B       | 21.21                            | 21.33                          | 135.86                        | 26.33            |
|            |       | 157     | 5785            | SISO-A       | 21.21                            | 21.33                          | 135.86                        | 26.33            |
|            |       |         |                 | SISO-B       | 21.17                            | 21.29                          | 134.61                        | 26.29            |
|            |       | 165     | 5825            | SISO-A       | 21.04                            | 21.16                          | 130.64                        | 26.16            |
|            |       |         |                 | SISO-B       | 21.19                            | 21.31                          | 135.23                        | 26.31            |
| 802.11n20  | HT0   | 149     | 5745            | SISO-A       | 21.12                            | 21.12                          | 129.42                        | 26.12            |
|            |       |         |                 | SISO-B       | 21.20                            | 21.20                          | 131.83                        | 26.20            |
|            |       | 157     | 5785            | SISO-A       | 21.16                            | 21.16                          | 130.62                        | 26.16            |
|            |       |         |                 | SISO-B       | 21.16                            | 21.16                          | 130.62                        | 26.16            |
|            |       | 165     | 5825            | SISO-A       | 21.16                            | 21.16                          | 130.62                        | 26.16            |
|            |       |         |                 | SISO-B       | 21.17                            | 21.17                          | 130.92                        | 26.17            |
|            | HT8   | 149     | 5745            | MIMO-A       | 17.79                            | 17.79                          | 60.12                         | 22.79            |
|            |       |         |                 | MIMO-B       | 17.84                            | 17.84                          | 60.81                         | 22.84            |
|            |       |         |                 | Combined A+B | 20.83                            | 20.83                          | 120.93                        | 25.83            |
|            |       | 157     | 5785            | MIMO-A       | 18.08                            | 18.08                          | 64.27                         | 23.08            |
|            |       |         |                 | MIMO-B       | 18.10                            | 18.10                          | 64.57                         | 23.10            |
|            |       |         |                 | Combined A+B | 21.10                            | 21.10                          | 128.83                        | 26.10            |
|            |       | 165     | 5825            | MIMO-A       | 18.03                            | 18.03                          | 63.53                         | 23.03            |
|            |       |         |                 | MIMO-B       | 17.94                            | 17.94                          | 62.23                         | 22.94            |
|            |       |         |                 | Combined A+B | 21.00                            | 21.00                          | 125.76                        | 26.00            |
| 802.11n40  | HT0   | 151F    | 5755            | SISO-A       | 21.12                            | 21.12                          | 129.42                        | 26.12            |
|            |       |         |                 | SISO-B       | 21.06                            | 21.06                          | 127.64                        | 26.06            |
|            |       | 159F    | 5795            | SISO-A       | 21.08                            | 21.08                          | 128.23                        | 26.08            |
|            |       |         |                 | SISO-B       | 21.13                            | 21.13                          | 129.72                        | 26.13            |
|            | HT8   | 151F    | 5755            | MIMO-A       | 17.99                            | 17.99                          | 62.95                         | 22.99            |
|            |       |         |                 | MIMO-B       | 18.01                            | 18.01                          | 63.24                         | 23.01            |
|            |       |         |                 | Combined A+B | 21.01                            | 21.01                          | 126.19                        | 26.01            |
|            |       | 159F    | 5795            | MIMO-A       | 18.05                            | 18.05                          | 63.83                         | 23.05            |
|            |       |         |                 | MIMO-B       | 18.04                            | 18.04                          | 63.68                         | 23.04            |
|            |       |         |                 | Combined A+B | 21.06                            | 21.06                          | 127.51                        | 26.06            |
| 802.11ac80 | VHT0  | 155     | 5775            | SISO-A       | 19.73                            | 19.73                          | 93.97                         | 24.73            |
|            |       |         |                 | SISO-B       | 19.48                            | 19.48                          | 88.72                         | 24.48            |
|            |       |         |                 | MIMO-A       | 16.76                            | 16.76                          | 47.42                         | 21.76            |
|            |       |         |                 | MIMO-B       | 16.85                            | 16.85                          | 48.42                         | 21.85            |
|            |       |         |                 | Combined A+B | 19.82                            | 19.82                          | 95.84                         | 24.82            |

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

Max Value

Min Value

| Mode         | Rate | Channel      | Frequency (MHz) | Antenna      | Average Cond. Output Power [dBm] | Max.* Cond. Output Power [dBm] | Max.* Cond. Output Power [mW] | Max.* EIRP [dBm] |       |
|--------------|------|--------------|-----------------|--------------|----------------------------------|--------------------------------|-------------------------------|------------------|-------|
| 802.11ax20   | HE0  | 149          | 5745            | SISO-A       | 21.10                            | 21.10                          | 128.82                        | 26.10            |       |
|              |      |              |                 | SISO-B       | 21.14                            | 21.14                          | 130.02                        | 26.14            |       |
|              |      | 157          | 5785            | SISO-A       | 21.02                            | 21.02                          | 126.47                        | 26.02            |       |
|              |      |              |                 | SISO-B       | 21.12                            | 21.12                          | 129.42                        | 26.12            |       |
|              |      | 165          | 5825            | SISO-A       | 21.19                            | 21.19                          | 131.52                        | 26.19            |       |
|              |      |              |                 | SISO-B       | 21.04                            | 21.04                          | 127.06                        | 26.04            |       |
|              |      | 149          | 5745            | MIMO-A       | 17.80                            | 17.80                          | 60.26                         | 22.80            |       |
|              |      |              |                 | MIMO-B       | 17.74                            | 17.74                          | 59.43                         | 22.74            |       |
|              |      |              |                 | Combined A+B | 20.78                            | 20.78                          | 119.69                        | 25.78            |       |
|              |      | 157          | 5785            | MIMO-A       | 18.00                            | 18.00                          | 63.10                         | 23.00            |       |
|              |      |              |                 | MIMO-B       | 18.00                            | 18.00                          | 63.10                         | 23.00            |       |
|              |      |              |                 | Combined A+B | 21.01                            | 21.01                          | 126.19                        | 26.01            |       |
|              |      | 165          | 5825            | MIMO-A       | 18.01                            | 18.01                          | 63.24                         | 23.01            |       |
|              |      |              |                 | MIMO-B       | 17.97                            | 17.97                          | 62.66                         | 22.97            |       |
|              |      |              |                 | Combined A+B | 21.00                            | 21.00                          | 125.90                        | 26.00            |       |
|              |      | 802.11ax40   | 151F            | 5755         | SISO-A                           | 21.06                          | 21.06                         | 127.64           | 26.06 |
|              |      |              |                 |              | SISO-B                           | 21.09                          | 21.09                         | 128.53           | 26.09 |
|              |      |              | 159F            | 5795         | SISO-A                           | 21.00                          | 21.00                         | 125.89           | 26.00 |
|              |      |              |                 |              | SISO-B                           | 21.10                          | 21.10                         | 128.82           | 26.10 |
|              |      |              | 151F            | 5755         | MIMO-A                           | 18.01                          | 18.01                         | 63.24            | 23.01 |
|              |      |              |                 |              | MIMO-B                           | 17.92                          | 17.92                         | 61.94            | 22.92 |
|              |      |              |                 |              | Combined A+B                     | 20.98                          | 20.98                         | 125.19           | 25.98 |
|              |      |              | 159F            | 5795         | MIMO-A                           | 18.18                          | 18.18                         | 65.77            | 23.18 |
|              |      |              |                 |              | MIMO-B                           | 18.13                          | 18.13                         | 65.01            | 23.13 |
| Combined A+B |      |              |                 |              | 21.17                            | 21.17                          | 130.78                        | 26.17            |       |
| 802.11ax80   |      |              | 155             | 5775         | SISO-A                           | 19.18                          | 19.18                         | 82.79            | 24.18 |
|              |      |              |                 |              | SISO-B                           | 19.20                          | 19.20                         | 83.18            | 24.20 |
|              |      | MIMO-A       |                 |              | 16.65                            | 16.65                          | 46.24                         | 21.65            |       |
|              |      | MIMO-B       |                 |              | 16.56                            | 16.56                          | 45.29                         | 21.56            |       |
|              |      | Combined A+B |                 |              | 19.62                            | 19.62                          | 91.53                         | 24.62            |       |

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

Max Value

Min Value

| Mode       | Rate | Antenna      | Channel | Freq.<br>[MHz] | RU<br>Config. | Average<br>Conducted<br>Output<br>Power<br>[dBm] | Maximum*<br>Conducted<br>Output<br>Power<br>[dBm] | Maximum*<br>Conducted<br>Output<br>Power<br>[mW] | Max of<br>EIRP<br>[dBm] |
|------------|------|--------------|---------|----------------|---------------|--------------------------------------------------|---------------------------------------------------|--------------------------------------------------|-------------------------|
| 802.11ax20 | HE0  | SISO-A       | 149     | 5745           | 26/0          | 15.89                                            | 15.89                                             | 38.82                                            | 20.89                   |
|            |      | SISO-A       |         |                | 52/37         | 18.57                                            | 18.57                                             | 71.94                                            | 23.57                   |
|            |      | SISO-A       |         |                | 106/53        | 20.98                                            | 20.98                                             | 125.31                                           | 25.98                   |
|            |      | SISO-B       |         |                | 26/0          | 15.77                                            | 15.77                                             | 37.76                                            | 20.77                   |
|            |      | SISO-B       |         |                | 52/40         | 18.57                                            | 18.57                                             | 71.94                                            | 23.57                   |
|            |      | SISO-B       |         |                | 106/53        | 21.09                                            | 21.09                                             | 128.53                                           | 26.09                   |
|            |      | MIMO-A       |         |                | 26/0          | 12.84                                            | 12.84                                             | 19.23                                            | 17.84                   |
|            |      | MIMO-B       |         |                |               | 12.87                                            | 12.87                                             | 19.36                                            | 17.87                   |
|            |      | Combined A+B |         |                |               | 15.87                                            | 15.87                                             | 38.60                                            | 20.87                   |
|            |      | MIMO-A       |         |                | 52/37         | 15.41                                            | 15.41                                             | 34.75                                            | 20.41                   |
|            |      | MIMO-B       |         |                |               | 15.44                                            | 15.44                                             | 34.99                                            | 20.44                   |
|            |      | Combined A+B |         |                |               | 18.44                                            | 18.44                                             | 69.75                                            | 23.44                   |
|            |      | MIMO-A       |         |                | 106/53        | 18.31                                            | 18.31                                             | 67.76                                            | 23.31                   |
|            |      | MIMO-B       |         |                |               | 18.23                                            | 18.23                                             | 66.53                                            | 23.23                   |
|            |      | Combined A+B |         |                |               | 21.28                                            | 21.28                                             | 134.29                                           | 26.28                   |
| 802.11ax40 | HE0  | SISO-A       | 151F    | 5755           | 242/61        | 21.00                                            | 21.00                                             | 125.89                                           | 26.00                   |
|            |      | SISO-B       |         |                |               | 21.02                                            | 21.02                                             | 126.47                                           | 26.02                   |
|            |      | MIMO-B       |         |                |               | 18.05                                            | 18.05                                             | 63.83                                            | 23.05                   |
|            |      | MIMO-A       |         |                |               | 17.88                                            | 17.88                                             | 61.38                                            | 22.88                   |
|            |      | Combined A+B |         |                |               | 20.98                                            | 20.98                                             | 125.20                                           | 25.98                   |
| 802.11ax80 | HE0  | SISO-A       | 155     | 5775           | 484/65        | 20.68                                            | 20.68                                             | 116.95                                           | 25.68                   |
|            |      | SISO-B       |         |                |               | 20.73                                            | 20.73                                             | 118.30                                           | 25.73                   |
|            |      | MIMO-A       |         |                |               | 18.00                                            | 18.00                                             | 63.10                                            | 23.00                   |
|            |      | MIMO-B       |         |                |               | 17.87                                            | 17.87                                             | 61.24                                            | 22.87                   |
|            |      | Combined A+B |         |                |               | 20.95                                            | 20.95                                             | 124.33                                           | 25.95                   |

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

Max Value

Min Value

### Maximum output power – Overlapped channels between U-NII-2C and U-NII-3

| Mode       | Rate | Channel | Freq. | Antenna      | Average<br>Cond. Output<br>Power<br>UNII-3 [dBm] | Max.* Cond.<br>Output Power<br>UNII-3 [dBm] | Max.* Cond.<br>Output Power<br>UNII-3 [mW] | Max.*<br>EIRP<br>UNII-3<br>[dBm] |
|------------|------|---------|-------|--------------|--------------------------------------------------|---------------------------------------------|--------------------------------------------|----------------------------------|
| 802.11n20  | HT0  | 144     | 5720  | SISO-A       | 14.37                                            | 14.42                                       | 27.70                                      | 19.42                            |
|            |      |         |       | SISO-B       | 14.25                                            | 14.30                                       | 26.95                                      | 19.30                            |
|            | HT8  |         |       | MIMO-A       | 11.88                                            | 11.94                                       | 15.62                                      | 16.94                            |
|            |      |         |       | MIMO-B       | 12.06                                            | 12.12                                       | 16.28                                      | 17.12                            |
|            |      |         |       | Combined A+B | 14.98                                            | 15.04                                       | 31.91                                      | 20.04                            |
| 802.11n40  | HT0  | 142F    | 5710  | SISO-A       | 10.54                                            | 10.59                                       | 11.46                                      | 15.59                            |
|            |      |         |       | SISO-B       | 10.47                                            | 10.52                                       | 11.28                                      | 15.52                            |
|            | HT8  |         |       | MIMO-A       | 8.28                                             | 8.33                                        | 6.81                                       | 13.33                            |
|            |      |         |       | MIMO-B       | 8.64                                             | 8.69                                        | 7.40                                       | 13.69                            |
|            |      |         |       | Combined A+B | 11.47                                            | 11.53                                       | 14.21                                      | 16.53                            |
| 802.11ac80 | VHT0 | 138     | 5690  | SISO-A       | 4.38                                             | 4.44                                        | 2.78                                       | 9.44                             |
|            |      |         |       | SISO-B       | 4.29                                             | 4.35                                        | 2.72                                       | 9.35                             |
|            |      |         |       | MIMO-A       | 2.39                                             | 2.45                                        | 1.76                                       | 7.45                             |
|            |      |         |       | MIMO-B       | 2.66                                             | 2.72                                        | 1.87                                       | 7.72                             |
|            |      |         |       | Combined A+B | 5.54                                             | 5.59                                        | 3.62                                       | 10.59                            |
| 802.11ax20 | HE0  | 144     | 5720  | SISO-A       | 14.66                                            | 14.71                                       | 29.61                                      | 19.71                            |
|            |      |         |       | SISO-B       | 14.70                                            | 14.76                                       | 29.90                                      | 19.76                            |
|            |      |         |       | MIMO-A       | 12.03                                            | 12.09                                       | 16.17                                      | 17.09                            |
|            |      |         |       | MIMO-B       | 12.34                                            | 12.39                                       | 17.35                                      | 17.39                            |
|            |      |         |       | Combined A+B | 15.20                                            | 15.25                                       | 33.52                                      | 20.25                            |
| 802.11ax40 |      | 142F    | 5710  | SISO-A       | 11.07                                            | 11.13                                       | 12.96                                      | 16.13                            |
|            |      |         |       | SISO-B       | 11.08                                            | 11.14                                       | 12.99                                      | 16.14                            |
|            |      |         |       | MIMO-A       | 8.55                                             | 8.61                                        | 7.25                                       | 13.61                            |
|            |      |         |       | MIMO-B       | 9.01                                             | 9.07                                        | 8.08                                       | 14.07                            |
|            |      |         |       | Combined A+B | 11.80                                            | 11.86                                       | 15.33                                      | 16.86                            |
| 802.11ax80 |      | 138     | 5690  | SISO-A       | 5.31                                             | 5.37                                        | 3.45                                       | 10.37                            |
|            |      |         |       | SISO-B       | 5.40                                             | 5.46                                        | 3.51                                       | 10.46                            |
|            |      |         |       | MIMO-A       | 2.88                                             | 2.94                                        | 1.97                                       | 7.94                             |
|            |      |         |       | MIMO-B       | 3.27                                             | 3.35                                        | 2.16                                       | 8.35                             |
|            |      |         |       | Combined A+B | 6.09                                             | 6.16                                        | 4.13                                       | 11.16                            |

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

Max Value

Min Value

### Maximum Power Spectral Density (PSD) – U-NII-3 channels

| Mode       | Rate  | Channel | Freq. [MHz] | Antenna      | Average conducted PSD [dBm/500kHz] | Max.* conducted PSD [dBm/500kHz] |
|------------|-------|---------|-------------|--------------|------------------------------------|----------------------------------|
| 802.11a    | 6Mbps | 149     | 5745        | SISO-A       | 6.42                               | 6.54                             |
|            |       |         |             | SISO-B       | 6.41                               | 6.53                             |
|            |       | 157     | 5785        | SISO-A       | 6.45                               | 6.57                             |
|            |       |         |             | SISO-B       | 6.39                               | 6.51                             |
|            |       | 165     | 5825        | SISO-A       | 6.25                               | 6.37                             |
|            |       |         |             | SISO-B       | 6.41                               | 6.53                             |
| 802.11n20  | HT0   | 149     | 5745        | SISO-A       | 6.04                               | 6.04                             |
|            |       |         |             | SISO-B       | 6.10                               | 6.10                             |
|            |       | 157     | 5785        | SISO-A       | 6.10                               | 6.10                             |
|            |       |         |             | SISO-B       | 6.08                               | 6.08                             |
|            |       | 165     | 5825        | SISO-A       | 6.09                               | 6.09                             |
|            |       |         |             | SISO-B       | 6.04                               | 6.04                             |
|            | HT8   | 149     | 5745        | MIMO-A       | 2.71                               | 2.71                             |
|            |       |         |             | MIMO-B       | 2.77                               | 2.77                             |
|            |       |         |             | Combined A+B | 5.75                               | 5.75                             |
|            |       | 157     | 5785        | MIMO-A       | 3.06                               | 3.06                             |
|            |       |         |             | MIMO-B       | 3.08                               | 3.08                             |
|            |       |         |             | Combined A+B | 6.08                               | 6.08                             |
|            |       | 165     | 5825        | MIMO-A       | 2.96                               | 2.96                             |
|            |       |         |             | MIMO-B       | 2.95                               | 2.95                             |
|            |       |         |             | Combined A+B | 5.97                               | 5.97                             |
| 802.11n40  | HT0   | 151F    | 5755        | SISO-A       | 2.99                               | 2.99                             |
|            |       |         |             | SISO-B       | 2.90                               | 2.90                             |
|            |       | 159F    | 5795        | SISO-A       | 2.93                               | 2.93                             |
|            |       |         |             | SISO-B       | 2.99                               | 2.99                             |
|            | HT8   | 151F    | 5755        | MIMO-A       | -0.09                              | -0.09                            |
|            |       |         |             | MIMO-B       | -0.10                              | -0.13                            |
|            |       |         |             | Combined A+B | 2.92                               | 2.92                             |
|            |       | 159F    | 5795        | MIMO-A       | -0.13                              | -0.10                            |
|            |       |         |             | MIMO-B       | -0.04                              | -0.04                            |
| 802.11ac80 | VHT0  | 155     | 5775        | Combined A+B | 2.93                               | 2.93                             |
|            |       |         |             | SISO-A       | -0.81                              | -0.81                            |
|            |       |         |             | SISO-B       | -1.09                              | -1.09                            |
|            |       |         |             | MIMO-A       | -3.79                              | -3.79                            |
|            |       |         |             | MIMO-B       | -3.63                              | -3.63                            |
|            |       |         |             | Combined A+B | -0.68                              | -0.68                            |

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

Max Value

| Mode       | Rate | Channel | Freq. [MHz] | Antenna      | Average conducted PSD [dBm/500kHz] | Max.* conducted PSD [dBm/500kHz] |
|------------|------|---------|-------------|--------------|------------------------------------|----------------------------------|
| 802.11ax20 | HE0  | 149     | 5745        | SISO-A       | 5.78                               | 5.78                             |
|            |      |         |             | SISO-B       | 5.80                               | 5.80                             |
|            |      | 157     | 5785        | SISO-A       | 5.68                               | 5.68                             |
|            |      |         |             | SISO-B       | 5.77                               | 5.77                             |
|            |      | 165     | 5825        | SISO-A       | 5.88                               | 5.88                             |
|            |      |         |             | SISO-B       | 5.68                               | 5.68                             |
|            |      | 149     | 5745        | MIMO-A       | 2.55                               | 2.55                             |
|            |      |         |             | MIMO-B       | 2.46                               | 2.46                             |
|            |      |         |             | Combined A+B | 5.52                               | 5.52                             |
|            |      | 157     | 5785        | MIMO-A       | 2.66                               | 2.66                             |
|            |      |         |             | MIMO-B       | 2.75                               | 2.75                             |
|            |      |         |             | Combined A+B | 5.72                               | 5.72                             |
|            |      | 165     | 5825        | MIMO-A       | 2.67                               | 2.67                             |
|            |      |         |             | MIMO-B       | 2.59                               | 2.59                             |
|            |      |         |             | Combined A+B | 5.64                               | 5.64                             |
| 802.11ax40 | HE0  | 151F    | 5755        | SISO-A       | 2.71                               | 2.71                             |
|            |      |         |             | SISO-B       | 2.74                               | 2.74                             |
|            |      | 159F    | 5795        | SISO-A       | 2.65                               | 2.65                             |
|            |      |         |             | SISO-B       | 2.75                               | 2.75                             |
|            |      | 151F    | 5755        | MIMO-A       | -0.37                              | -0.37                            |
|            |      |         |             | MIMO-B       | -0.37                              | -0.37                            |
|            |      |         |             | Combined A+B | 2.64                               | 2.64                             |
|            |      | 159F    | 5795        | MIMO-A       | -0.21                              | -0.21                            |
|            |      |         |             | MIMO-B       | -0.11                              | -0.11                            |
|            |      |         |             | Combined A+B | 2.85                               | 2.85                             |
| 802.11ax80 | HE0  | 155     | 5775        | SISO-A       | -1.40                              | -1.40                            |
|            |      |         |             | SISO-B       | -1.45                              | -1.45                            |
|            |      |         |             | MIMO-A       | -4.02                              | -4.02                            |
|            |      |         |             | MIMO-B       | -4.09                              | -4.09                            |
|            |      |         |             | Combined A+B | -1.04                              | -1.04                            |

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

Max Value



| Mode       | Rate | Antenna      | Channel | Frequency<br>[MHz] | RU<br>Configuration | Average<br>conducted<br>PSD<br>[dBm/MHz] | Maximum*<br>conducted<br>PSD<br>[dBm/MHz] |
|------------|------|--------------|---------|--------------------|---------------------|------------------------------------------|-------------------------------------------|
| 802.11ax20 | HE0  | SISO-A       | 149     | 5745               | 26/0                | 10.00                                    | 10.00                                     |
|            |      | SISO-A       |         |                    | 52/37               | 9.78                                     | 9.78                                      |
|            |      | SISO-A       |         |                    | 106/53              | 9.10                                     | 9.10                                      |
|            |      | SISO-B       |         |                    | 26/0                | 9.97                                     | 9.97                                      |
|            |      | SISO-B       |         |                    | 52/37               | 9.72                                     | 9.72                                      |
|            |      | SISO-B       |         |                    | 106/53              | 9.15                                     | 9.15                                      |
|            |      | MIMO-A       |         |                    | 26/0                | 7.14                                     | 7.14                                      |
|            |      | MIMO-B       |         |                    |                     | 7.13                                     | 7.13                                      |
|            |      | Combined A+B |         |                    |                     | 10.15                                    | 10.15                                     |
|            |      | MIMO-A       |         |                    | 53/37               | 6.59                                     | 6.59                                      |
|            |      | MIMO-B       |         |                    |                     | 6.69                                     | 6.69                                      |
|            |      | Combined A+B |         |                    |                     | 9.65                                     | 9.65                                      |
|            |      | MIMO-A       |         |                    | 106/53              | 6.45                                     | 6.45                                      |
|            |      | MIMO-B       |         |                    |                     | 6.39                                     | 6.39                                      |
|            |      | Combined A+B |         |                    |                     | 9.43                                     | 9.43                                      |
| 802.11ax40 | HE0  | SISO-A       | 151F    | 5755               | 242/61              | 5.61                                     | 5.61                                      |
|            |      | SISO-B       |         |                    |                     | 5.64                                     | 5.64                                      |
|            |      | MIMO-B       |         |                    |                     | 2.59                                     | 2.59                                      |
|            |      | MIMO-A       |         |                    |                     | 2.49                                     | 2.49                                      |
|            |      | Combined A+B |         |                    |                     | 5.55                                     | 5.55                                      |
| 802.11ax80 | HE0  | SISO-A       | 155     | 5530               | 484/65              | 2.32                                     | 2.32                                      |
|            |      | SISO-B       |         |                    |                     | 2.37                                     | 2.37                                      |
|            |      | MIMO-B       |         |                    |                     | -0.24                                    | -0.24                                     |
|            |      | MIMO-A       |         |                    |                     | -0.35                                    | -0.35                                     |
|            |      | Combined A+B |         |                    |                     | 2.72                                     | 2.72                                      |

Max Value

### Maximum Power Spectral Density (PSD) – Overlapped channels between U-NII-2C and U-NII-3

| Mode       | Rate | Channel | Freq.<br>[MHz] | Antenna      | Average<br>conducted<br>PSD UNII-2C<br>[dBm/MHz] | Maximum*<br>conducted PSD<br>UNII-2C<br>[dBm/MHz] |
|------------|------|---------|----------------|--------------|--------------------------------------------------|---------------------------------------------------|
| 802.11n20  | HT0  | 144     | 5720           | SISO-A       | 5.86                                             | 5.91                                              |
|            |      |         |                | SISO-B       | 5.67                                             | 5.72                                              |
|            | HT8  |         |                | MIMO-A       | 3.25                                             | 3.31                                              |
|            |      |         |                | MIMO-B       | 3.28                                             | 3.34                                              |
|            |      |         |                | Combined A+B | 6.28                                             | 6.33                                              |
| 802.11n40  | HT0  | 142F    | 5710           | SISO-A       | 2.70                                             | 2.75                                              |
|            |      |         |                | SISO-B       | 2.71                                             | 2.76                                              |
|            | HT8  |         |                | MIMO-A       | 0.44                                             | 0.49                                              |
|            |      |         |                | MIMO-B       | 0.34                                             | 0.39                                              |
|            |      |         |                | Combined A+B | 3.40                                             | 3.45                                              |
| 802.11ac80 | VHT0 | 138     | 5690           | SISO-A       | -3.49                                            | -3.43                                             |
|            |      |         |                | SISO-B       | -3.57                                            | -3.51                                             |
|            |      |         |                | MIMO-A       | -5.62                                            | -5.56                                             |
|            |      |         |                | MIMO-B       | -5.47                                            | -5.41                                             |
|            |      |         |                | Combined A+B | -2.53                                            | -2.48                                             |
| 802.11ax20 | HE0  | 144     | 5720           | SISO-A       | 5.45                                             | 5.50                                              |
|            |      |         |                | SISO-B       | 5.55                                             | 5.61                                              |
|            |      |         |                | MIMO-A       | 2.89                                             | 2.95                                              |
|            |      |         |                | MIMO-B       | 2.95                                             | 3.00                                              |
|            |      |         |                | Combined A+B | 5.93                                             | 5.99                                              |
| 802.11ax40 | HE0  | 142F    | 5710           | SISO-A       | 2.42                                             | 2.48                                              |
|            |      |         |                | SISO-B       | 2.52                                             | 2.58                                              |
|            |      |         |                | MIMO-A       | -0.15                                            | -0.09                                             |
|            |      |         |                | MIMO-B       | 0.04                                             | 0.10                                              |
|            |      |         |                | Combined A+B | 2.96                                             | 3.02                                              |
| 802.11ax80 | HE0  | 138     | 5690           | SISO-A       | -3.42                                            | -3.36                                             |
|            |      |         |                | SISO-B       | -3.56                                            | -3.50                                             |
|            |      |         |                | MIMO-A       | -5.89                                            | -5.83                                             |
|            |      |         |                | MIMO-B       | -5.81                                            | -5.73                                             |
|            |      |         |                | Combined A+B | -2.84                                            | -2.77                                             |

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

#### Max Value

See Section B.3.5, B.3.6, B.3.7, and Section B.3.8 for the screenshot results

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

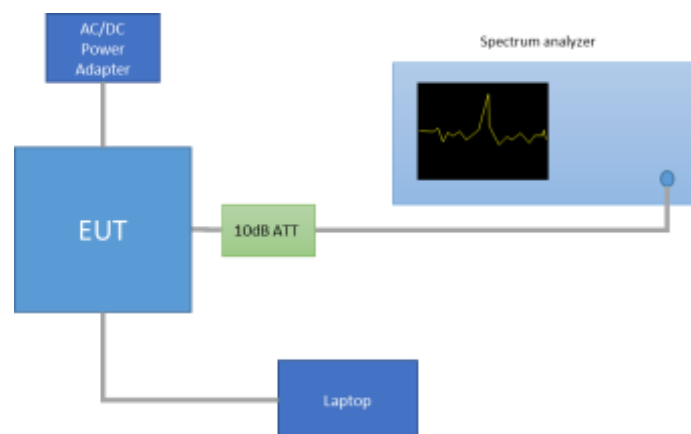
#### Test limits

| FCC part          | RSS part                  | Limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15.407 (b)<br>(4) | RSS-247 Clause<br>6.2.4.2 | For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. |

#### 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.

The declared maximum antenna gain is 5dBi.



See Section B.3.9 for the screenshot results.

## B.2.4 Radiated spurious emission

### Standard references

| FCC part         | RSS part               | Limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                    |                       |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
|------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------|-------------------------|--------------------|-------|-----|----|---|--------|-----|------|---|---------|-----|----|---|-----------|-----|----|---|
| 15.407 (b) (4)   | RSS-247 Clause 6.2.4.2 | For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                    |                       |                         |                    |       |     |    |   |        |     |      |   |         |     |    |   |           |     |    |   |
| 15.209           | RSS-GEN, Clause 8.9    | <p>Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a):</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>The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.</p> <p>For average radiated emission measurements above 1000 MHz, there is also a limit specified when measuring with peak detector function, corresponding to 20 dB above the indicated values in the table.</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.

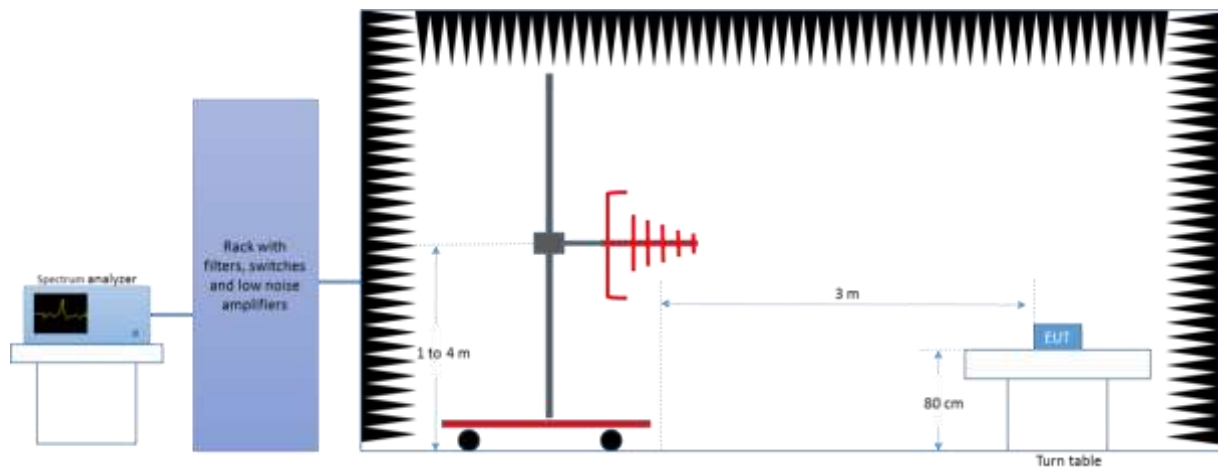
The final measurement is done by varying the antenna height, the EUT azimuth over 360° and for both Vertical and Horizontal polarizations.

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.

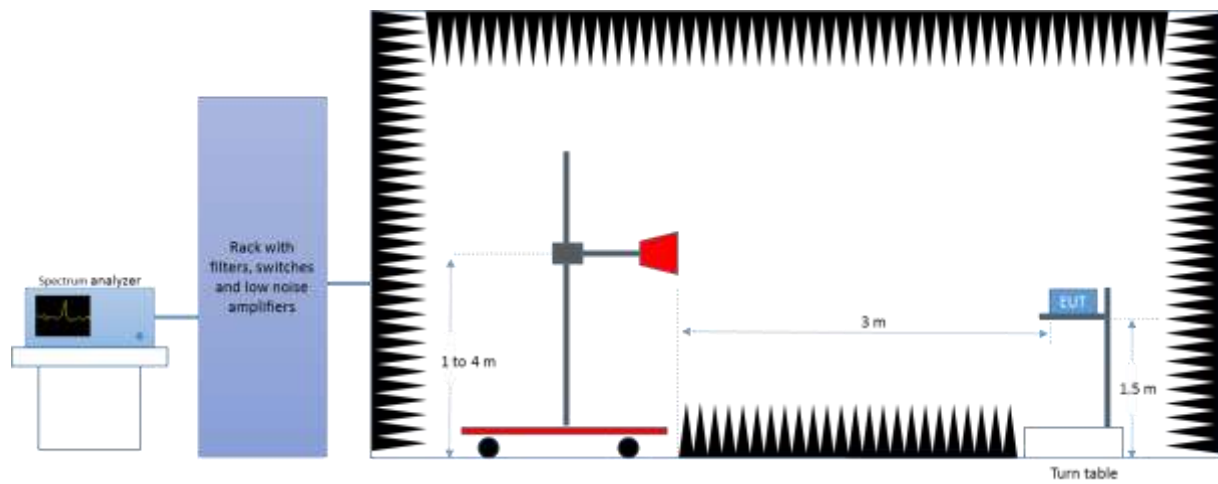
For technologies 802.11ax20, 802.11ax40, 802.11ax80 and 802.11ax160, the worst case spurious emission result among the low, mid and high channels tested separately on Chain A and B is used to perform the test on MIMO mode (Chain A+B).

For 802.11n20, 802.11n40, 802.11ac80 and 802.11ac160 the worst channel found among all 802.11ax modes mentioned above is chosen to perform the test in Chain A, B ,and MIMO (Chain A+B).

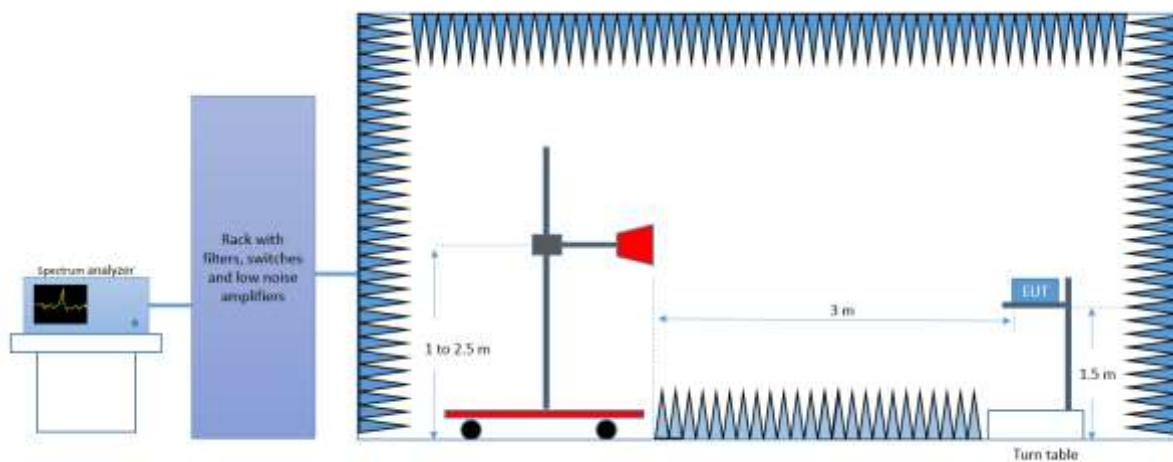
*Radiated Setup 30 MHz- 1 GHz*



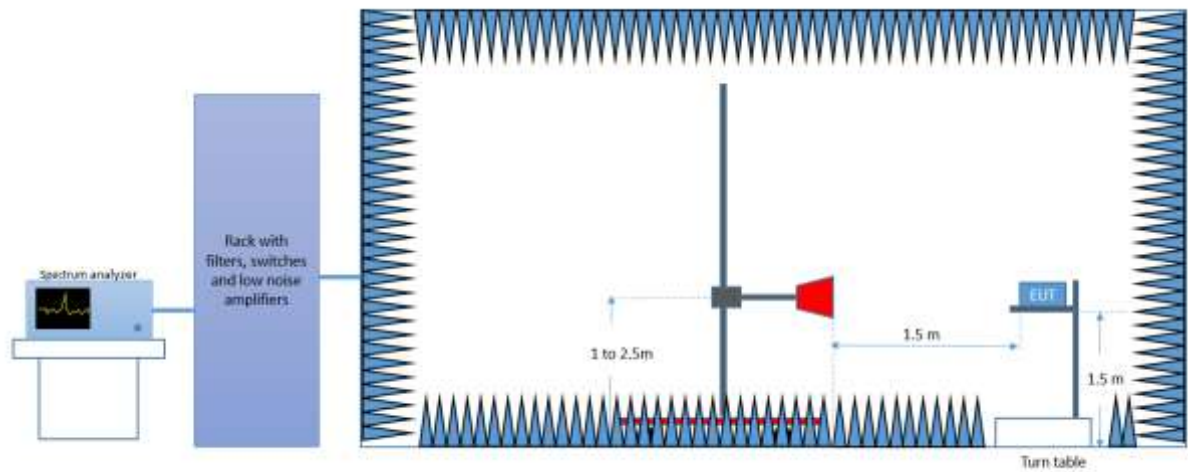
*Radiated Setup 1 GHz- 6.4 GHz*



*Radiated Setup 6.4 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 – CH149

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 264.0     | 34.9    | ---    | 46.0   | 11.1   |
| 1246.0    | ---     | 32.5   | 54.0   | 21.6   |
| 1246.0    | 52.7    | ---    | 74.0   | 21.3   |
| 11490.0   | 54.8    | ---    | 74.0   | 19.2   |
| 11491.0   | ---     | 50.4   | 54.0   | 3.6    |
| 39458.3   | ---     | 42.9   | 54.0   | 11.1   |
| 39671.8   | 53.9    | ---    | 74.0   | 20.1   |

### Radiated Spurious – CH157

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 264.0     | 35.1    | ---    | 46.0   | 11.0   |
| 1240.5    | ---     | 31.6   | 54.0   | 22.4   |
| 1240.5    | 55.3    | ---    | 74.0   | 18.7   |
| 11567.3   | ---     | 40.9   | 54.0   | 13.1   |
| 11573.1   | 52.5    | ---    | 74.0   | 21.5   |
| 23130.5   | 49.8    | ---    | 74.0   | 24.2   |
| 23138.8   | ---     | 40.1   | 54.0   | 13.9   |
| 39473.5   | ---     | 43.0   | 54.0   | 11.0   |
| 39701.7   | 53.5    | ---    | 74.0   | 20.5   |



### Radiated Spurious – CH165

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 264.0     | 35.8    | ---    | 46.0   | 10.2   |
| 2409.0    | 46.7    | ---    | 74.0   | 27.3   |
| 2409.5    | ---     | 38.1   | 54.0   | 15.9   |
| 11648.5   | ---     | 39.2   | 54.0   | 14.8   |
| 11652.4   | 50.1    | ---    | 74.0   | 23.9   |
| 17471.2   | ---     | 42.6   | 54.0   | 11.4   |
| 17472.7   | 53.0    | ---    | 74.0   | 21.0   |
| 23298.7   | ---     | 42.9   | 54.0   | 11.1   |
| 23313.6   | 49.5    | ---    | 74.0   | 24.5   |

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

### Radiated Spurious – CH149

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 264.0     | 35.0    | ---    | 46.0   | 11.0   |
| 1747.5    | ---     | 40.5   | 54.0   | 13.5   |
| 1748.0    | 47.8    | ---    | 74.0   | 26.2   |
| 11493.9   | ---     | 37.6   | 54.0   | 16.4   |
| 11493.9   | 47.7    | ---    | 74.0   | 26.3   |
| 39461.3   | ---     | 43.1   | 54.0   | 10.9   |
| 39486.6   | 53.3    | ---    | 74.0   | 20.7   |

### Radiated Spurious – CH157

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 245.4     | 34.4    | ---    | 46.0   | 11.6   |
| 1244.5    | ---     | 32.8   | 54.0   | 21.2   |
| 1245.5    | 54.8    | ---    | 74.0   | 19.2   |
| 16733.2   | 52.1    | ---    | 74.0   | 21.9   |
| 16733.2   | ---     | 40.6   | 54.0   | 13.4   |
| 39475.2   | ---     | 42.8   | 54.0   | 11.2   |
| 39485.3   | 54.2    | ---    | 74.0   | 19.8   |

### Radiated Spurious – CH165

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 624.0     | 34.2    | ---    | 46.0   | 11.8   |
| 1241.5    | 54.1    | ---    | 74.0   | 19.9   |
| 1243.5    | ---     | 32.9   | 54.0   | 21.1   |
| 2394.5    | 47.8    | ---    | 74.0   | 26.2   |
| 2409.0    | ---     | 37.7   | 54.0   | 16.3   |
| 17467.9   | 52.1    | ---    | 74.0   | 21.9   |
| 17470.8   | ---     | 41.4   | 54.0   | 12.6   |
| 23300.0   | ---     | 39.1   | 54.0   | 14.9   |
| 23280.6   | 52.9    | ---    | 74.0   | 21.1   |

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

#### Radiated Spurious – CH157

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 624.0     | 34.6    | ---    | 46.0   | 11.4   |
| 2393.0    | 47.5    | ---    | 74.0   | 26.5   |
| 2409.0    | ---     | 37.0   | 54.0   | 17.0   |
| 11570.7   | 51.0    | ---    | 74.0   | 23.0   |
| 11570.7   | ---     | 40.9   | 54.0   | 13.1   |
| 17356.7   | 49.8    | ---    | 74.0   | 24.2   |
| 17358.6   | ---     | 39.0   | 54.0   | 15.0   |
| 23146.0   | ---     | 39.7   | 54.0   | 14.3   |
| 23147.8   | 49.7    | ---    | 74.0   | 24.3   |

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

#### Radiated Spurious – CH157

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 624.0     | 34.6    | ---    | 46.0   | 11.4   |
| 2409.0    | 48.2    | ---    | 74.0   | 25.8   |
| 2413.0    | ---     | 38.2   | 54.0   | 15.8   |
| 16744.3   | 52.3    | ---    | 74.0   | 21.7   |
| 16753.5   | ---     | 40.6   | 54.0   | 13.4   |
| 23140.1   | ---     | 37.8   | 54.0   | 16.2   |
| 39708.5   | 53.6    | ---    | 74.0   | 20.4   |

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

## Radiated Spurious – CH157

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 624.0     | 34.1    | ---    | 46.0   | 11.9   |
| 2398.5    | 48.3    | ---    | 74.0   | 25.7   |
| 2409.5    | ---     | 37.7   | 54.0   | 16.3   |
| 16753.5   | 51.9    | ---    | 74.0   | 22.1   |
| 16754.0   | ---     | 40.5   | 54.0   | 13.5   |
| 23140.1   | ---     | 37.1   | 54.0   | 16.9   |
| 39467.6   | 53.3    | ---    | 74.0   | 20.7   |

### 30 MHz – 40 GHz, 802.11ax20, HE0, Chain A

#### Radiated Spurious – CH149

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 624.0     | 35.2    | ---    | 46.0   | 10.8   |
| 2409.0    | ---     | 37.4   | 54.0   | 16.6   |
| 2489.0    | 51.3    | ---    | 74.0   | 22.7   |
| 11473.1   | ---     | 51.2   | 54.0   | 2.8    |
| 11474.0   | 53.0    | ---    | 74.0   | 21.0   |
| 17209.8   | ---     | 43.0   | 54.0   | 11.0   |
| 17210.2   | 50.8    | ---    | 74.0   | 23.2   |
| 22945.1   | 47.9    | ---    | 74.0   | 26.1   |
| 22945.1   | ---     | 39.3   | 54.0   | 14.7   |

#### Radiated Spurious – CH157

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 264.0     | 30.1    | ---    | 46.0   | 15.9   |
| 2405.0    | 48.0    | ---    | 74.0   | 26.1   |
| 2410.0    | ---     | 39.2   | 54.0   | 14.8   |
| 11552.82  | ---     | 51.20  | 54.00  | 2.80   |
| 11553.30  | 53.36   | ---    | 74.00  | 20.64  |
| 17330.10  | 51.02   | ---    | 74.00  | 22.98  |
| 17330.10  | ---     | 41.63  | 54.00  | 12.37  |
| 23105.6   | ---     | 44.1   | 54.0   | 9.9    |
| 23107.4   | 53.3    | ---    | 74.0   | 20.7   |

### Radiated Spurious – CH165

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 408.0     | 34.0    | ---    | 46.0   | 12.0   |
| 1245.0    | ---     | 33.5   | 54.0   | 20.5   |
| 1245.0    | 55.2    | ---    | 74.0   | 18.8   |
| 2410.0    | 48.2    | ---    | 74.0   | 25.8   |
| 2411.0    | ---     | 37.9   | 54.0   | 16.1   |
| 11633.5   | ---     | 47.7   | 54.0   | 6.3    |
| 11633.5   | 56.3    | ---    | 74.0   | 17.7   |
| 17449.0   | 57.4    | ---    | 74.0   | 16.6   |
| 17450.0   | ---     | 50.3   | 54.0   | 3.7    |
| 23266.3   | ---     | 44.6   | 54.0   | 9.4    |
| 23266.5   | 54.8    | ---    | 74.0   | 19.2   |
| 29083.1   | ---     | 44.1   | 54.0   | 9.9    |
| 29084.0   | 50.5    | ---    | 74.0   | 23.5   |

### 30 MHz – 40 GHz, 802.11ax20, HE0, Chain B

### Radiated Spurious – CH149

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 624.0     | 35.1    | ---    | 46.0   | 10.9   |
| 1237.5    | ---     | 30.8   | 54.0   | 23.2   |
| 1241.0    | 54.0    | ---    | 74.0   | 20.0   |
| 11472.6   | ---     | 46.6   | 54.0   | 7.4    |
| 11472.6   | 51.2    | ---    | 74.0   | 22.8   |
| 17209.8   | ---     | 42.8   | 54.0   | 11.2   |
| 17211.2   | 53.0    | ---    | 74.0   | 21.0   |
| 22979.9   | ---     | 37.9   | 54.0   | 16.1   |
| 39573.5   | 53.4    | ---    | 74.0   | 20.6   |

### Radiated Spurious – CH157

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 624.0     | 35.8    | ---    | 46.0   | 10.2   |
| 2392.5    | 47.3    | ---    | 74.0   | 26.7   |
| 2408.5    | ---     | 37.7   | 54.0   | 16.3   |
| 11553.3   | 49.6    | ---    | 74.0   | 24.4   |
| 11553.3   | ---     | 40.1   | 54.0   | 13.9   |
| 17329.6   | ---     | 41.3   | 54.0   | 12.7   |
| 17330.6   | 53.1    | ---    | 74.0   | 20.9   |
| 23140.1   | ---     | 43.9   | 54.0   | 10.1   |
| 39477.7   | 59.7    | ---    | 74.0   | 14.3   |
| 23107.4   | ---     | 37.9   | 54.0   | 16.1   |
| 23140.1   | 53.7    | ---    | 74.0   | 20.3   |

### Radiated Spurious – CH165

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 408.0     | 34.1    | ---    | 46.0   | 11.9   |
| 6326.0    | 56.3    | ---    | 74.0   | 17.8   |
| 6328.0    | ---     | 43.8   | 54.0   | 10.2   |
| 11632.6   | ---     | 39.1   | 54.0   | 14.9   |
| 11634.0   | 49.1    | ---    | 74.0   | 24.9   |
| 17450.0   | ---     | 46.6   | 54.0   | 7.4    |
| 17450.0   | 54.7    | ---    | 74.0   | 19.3   |
| 23265.2   | ---     | 38.1   | 54.0   | 15.9   |
| 23266.8   | 47.9    | ---    | 74.0   | 26.1   |
| 23300.0   | ---     | 39.1   | 54.0   | 14.9   |
| 29082.7   | ---     | 39.6   | 54.0   | 14.4   |
| 29084.4   | 49.1    | ---    | 74.0   | 24.9   |

### 30 MHz – 40 GHz, 802.11ax20, HE0, Chain A+B

#### Radiated Spurious – CH157

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 576.0     | 34.9    | ---    | 46.0   | 11.1   |
| 1241.0    | ---     | 32.1   | 54.0   | 21.9   |
| 1246.5    | 55.0    | ---    | 74.0   | 19.0   |
| 11552.8   | ---     | 42.3   | 54.0   | 11.7   |
| 11553.3   | 51.4    | ---    | 74.0   | 22.6   |
| 23105.6   | ---     | 36.8   | 54.0   | 17.2   |
| 23107.2   | 46.9    | ---    | 74.0   | 27.1   |
| 23140.1   | 45.3    | ---    | 74.0   | 28.7   |
| 23140.1   | ---     | 37.2   | 54.0   | 16.8   |
| 39446.1   | 52.4    | ---    | 74.0   | 21.6   |
| 39465.1   | ---     | 42.6   | 54.0   | 11.4   |

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

#### Radiated Spurious – CH151F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 62.5      | 29.5    | ---    | 40.0   | 10.5   |
| 1241.0    | 54.2    | ---    | 74.0   | 19.9   |
| 1245.0    | ---     | 31.4   | 54.0   | 22.6   |
| 11473.6   | 54.2    | ---    | 74.0   | 19.8   |
| 11473.6   | ---     | 51.0   | 54.0   | 3.0    |
| 17210.2   | 50.5    | ---    | 74.0   | 23.5   |
| 17210.7   | ---     | 41.7   | 54.0   | 12.3   |



### Radiated Spurious – CH159F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 408.0     | 34.2    | ---    | 46.0   | 11.8   |
| 1243.5    | ---     | 32.3   | 54.0   | 21.7   |
| 1243.5    | 52.6    | ---    | 74.0   | 21.4   |
| 11575.5   | ---     | 38.3   | 54.0   | 15.7   |
| 11579.4   | 48.7    | ---    | 74.0   | 25.3   |
| 16699.8   | 51.9    | ---    | 74.0   | 22.1   |
| 16750.1   | ---     | 40.7   | 54.0   | 13.3   |
| 23179.7   | ---     | 38.6   | 54.0   | 15.4   |
| 23199.1   | 49.1    | ---    | 74.0   | 24.9   |

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

### Radiated Spurious – CH151F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 62.4      | 29.7    | ---    | 40.0   | 10.3   |
| 1244.0    | ---     | 32.7   | 54.0   | 21.3   |
| 1244.0    | 53.8    | ---    | 74.0   | 20.2   |
| 10677.5   | ---     | 37.8   | 54.0   | 16.2   |
| 10699.7   | 48.9    | ---    | 74.0   | 25.1   |
| 16389.5   | 52.4    | ---    | 74.0   | 21.6   |
| 16753.0   | ---     | 40.9   | 54.0   | 13.1   |
| 23019.8   | ---     | 39.6   | 54.0   | 14.4   |
| 39462.1   | 54.0    | ---    | 74.0   | 20.0   |

### Radiated Spurious – CH159F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 528.0     | 34.8    | ---    | 46.0   | 11.2   |
| 1242.0    | ---     | 32.0   | 54.0   | 22.0   |
| 1242.0    | 53.2    | ---    | 74.0   | 20.8   |
| 16346.0   | 52.4    | ---    | 74.0   | 21.6   |
| 16750.1   | ---     | 40.8   | 54.0   | 13.2   |
| 23180.2   | ---     | 38.1   | 54.0   | 15.9   |
| 39443.1   | 53.4    | ---    | 74.0   | 20.6   |

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

### Radiated Spurious – CH151F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 62.5      | 29.4    | ---    | 40.0   | 10.6   |
| 1244.0    | 53.8    | ---    | 74.0   | 20.2   |
| 1244.0    | ---     | 32.5   | 54.0   | 21.5   |
| 11509.3   | 50.7    | ---    | 74.0   | 23.3   |
| 11514.6   | ---     | 39.3   | 54.0   | 14.7   |
| 16743.3   | ---     | 40.7   | 54.0   | 13.3   |
| 17858.9   | 52.5    | ---    | 74.0   | 21.5   |
| 23019.8   | ---     | 37.5   | 54.0   | 16.5   |
| 39478.1   | 54.0    | ---    | 74.0   | 20.0   |

### Radiated Spurious – CH159F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 528.0     | 34.6    | ---    | 46.0   | 11.4   |
| 1243.0    | ---     | 31.7   | 54.0   | 22.3   |
| 1243.0    | 53.4    | ---    | 74.0   | 20.6   |
| 11609.9   | ---     | 37.5   | 54.0   | 16.5   |
| 11621.0   | 48.3    | ---    | 74.0   | 25.7   |
| 16753.5   | ---     | 40.7   | 54.0   | 13.3   |
| 16769.0   | 52.8    | ---    | 74.0   | 21.2   |
| 34002.2   | 49.2    | ---    | 74.0   | 24.8   |
| 34002.6   | ---     | 40.4   | 54.0   | 13.6   |
| 39465.5   | ---     | 42.6   | 54.0   | 11.4   |
| 39478.1   | 53.6    | ---    | 74.0   | 20.4   |

### 30 MHz – 40 GHz, 802.11ax40, HE0, Chain A

### Radiated Spurious – CH151F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 408.0     | 34.3    | ---    | 46.0   | 11.7   |
| 5809.0    | ---     | 47.7   | 54.0   | 6.3    |
| 5809.5    | 63.6    | ---    | 74.0   | 10.4   |
| 11474.0   | ---     | 52.0   | 54.0   | 2.0    |
| 11475.0   | 54.8    | ---    | 74.0   | 19.2   |
| 22235.1   | 47.2    | ---    | 74.0   | 26.8   |
| 22237.3   | ---     | 37.0   | 54.0   | 17.0   |
| 39485.3   | ---     | 42.8   | 54.0   | 11.2   |
| 39689.5   | 53.3    | ---    | 74.0   | 20.7   |

### Radiated Spurious – CH159F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 528.0     | 34.2    | ---    | 46.0   | 11.8   |
| 1246.0    | ---     | 32.2   | 54.0   | 21.8   |
| 1246.0    | 53.6    | ---    | 74.0   | 20.4   |
| 11553.3   | ---     | 50.4   | 54.0   | 3.6    |
| 11555.2   | 55.5    | ---    | 74.0   | 18.5   |
| 17331.1   | ---     | 45.6   | 54.0   | 8.4    |
| 17331.1   | 53.3    | ---    | 74.0   | 20.7   |
| 23108.0   | ---     | 41.7   | 54.0   | 12.3   |
| 23110.1   | 52.8    | ---    | 74.0   | 21.2   |
| 39457.0   | ---     | 42.9   | 54.0   | 11.1   |
| 39551.1   | 53.4    | ---    | 74.0   | 20.6   |

### 30 MHz – 40 GHz, 802.11ax40, HE0, Chain B

### Radiated Spurious – CH151F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 408.0     | 34.5    | ---    | 46.0   | 11.5   |
| 5807.5    | 63.5    | ---    | 74.0   | 10.5   |
| 5809.5    | ---     | 52.7   | 54.0   | 1.3    |
| 11473.6   | 50.8    | ---    | 74.0   | 23.2   |
| 11474.0   | ---     | 46.2   | 54.0   | 7.8    |
| 17210.7   | 53.9    | ---    | 74.0   | 20.1   |
| 17211.2   | ---     | 46.2   | 54.0   | 7.8    |
| 39463.4   | ---     | 42.9   | 54.0   | 11.1   |
| 39483.2   | 53.3    | ---    | 74.0   | 20.7   |

### Radiated Spurious – CH159F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 624.0     | 33.9    | ---    | 46.0   | 12.1   |
| 1242.5    | ---     | 32.4   | 54.0   | 21.6   |
| 1242.5    | 53.1    | ---    | 74.0   | 20.9   |
| 11553.3   | ---     | 40.4   | 54.0   | 13.6   |
| 11554.3   | 50.2    | ---    | 74.0   | 23.8   |
| 16751.1   | ---     | 40.9   | 54.0   | 13.1   |
| 17847.3   | 52.1    | ---    | 74.0   | 21.9   |
| 23081.7   | 47.6    | ---    | 74.0   | 26.4   |
| 23180.0   | ---     | 38.0   | 54.0   | 16.0   |
| 39461.7   | 53.4    | ---    | 74.0   | 20.6   |
| 39747.3   | ---     | 42.8   | 54.0   | 11.2   |

### 30 MHz – 40 GHz, 802.11ax40, HE0, Chain A+B

### Radiated Spurious – CH151F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 62.5      | 28.8    | ---    | 40.0   | 11.2   |
| 1245.0    | ---     | 32.0   | 54.0   | 22.0   |
| 1245.0    | 54.0    | ---    | 74.0   | 20.0   |
| 11474.0   | ---     | 50.4   | 54.0   | 3.6    |
| 11474.5   | 54.3    | ---    | 74.0   | 19.7   |
| 17210.2   | ---     | 40.4   | 54.0   | 13.6   |
| 17210.7   | 50.5    | ---    | 74.0   | 23.5   |
| 24317.9   | ---     | 38.1   | 54.0   | 15.9   |
| 24332.5   | 49.0    | ---    | 74.0   | 25.0   |
| 39454.9   | 53.5    | ---    | 74.0   | 20.5   |
| 39466.3   | ---     | 43.3   | 54.0   | 10.8   |

### Radiated Spurious – CH159F

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBµV/m  | dBµV/m | dBµV/m | dB     |
| 640.0     | 34.4    | ---    | 46.0   | 11.6   |
| 1242.5    | ---     | 32.0   | 54.0   | 22.0   |
| 1242.5    | 53.5    | ---    | 74.0   | 20.5   |
| 11553.8   | ---     | 42.6   | 54.0   | 11.4   |
| 11554.8   | 52.8    | ---    | 74.0   | 21.2   |
| 25905.8   | 50.1    | ---    | 74.0   | 23.9   |
| 25952.0   | ---     | 38.2   | 54.0   | 15.8   |
| 39446.5   | ---     | 42.8   | 54.0   | 11.2   |
| 39562.1   | 53.5    | ---    | 74.0   | 20.5   |

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

## Radiated Spurious – CH155

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 576.0     | 34.1    | ---    | 46.0   | 11.9   |
| 1244.5    | ---     | 32.0   | 54.0   | 22.0   |
| 1245.5    | 52.8    | ---    | 74.0   | 21.2   |
| 11551.9   | 49.8    | ---    | 74.0   | 24.2   |
| 11551.9   | ---     | 38.9   | 54.0   | 15.1   |
| 16754.0   | ---     | 40.7   | 54.0   | 13.3   |
| 16824.1   | 52.6    | ---    | 74.0   | 21.4   |
| 23100.0   | ---     | 38.0   | 54.0   | 16.0   |
| 23101.9   | 48.1    | ---    | 74.0   | 25.9   |
| 39446.1   | 53.3    | ---    | 74.0   | 20.7   |
| 39467.6   | ---     | 43.0   | 54.0   | 11.0   |

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

#### Radiated Spurious – CH155

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 576.0     | 33.1    | ---    | 46.0   | 12.9   |
| 1244.0    | ---     | 32.5   | 54.0   | 21.5   |
| 1244.0    | 52.9    | ---    | 74.0   | 21.1   |
| 16746.7   | ---     | 40.6   | 54.0   | 13.4   |
| 16750.1   | 52.1    | ---    | 74.0   | 21.9   |
| 22824.3   | ---     | 37.3   | 54.0   | 16.7   |
| 22829.3   | 47.3    | ---    | 74.0   | 26.7   |
| 39479.4   | ---     | 42.7   | 54.0   | 11.3   |
| 39701.7   | 53.5    | ---    | 74.0   | 20.5   |

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

#### Radiated Spurious – CH155

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 640.0     | 35.8    | ---    | 46.0   | 10.2   |
| 1246.0    | ---     | 32.4   | 54.0   | 21.6   |
| 1246.0    | 54.0    | ---    | 74.0   | 20.0   |
| 16706.1   | ---     | 40.5   | 54.0   | 13.5   |
| 16755.9   | 52.1    | ---    | 74.0   | 21.9   |
| 22200.9   | ---     | 36.5   | 54.0   | 17.5   |
| 22220.8   | 47.5    | ---    | 74.0   | 26.5   |
| 39480.7   | ---     | 42.9   | 54.0   | 11.1   |
| 39484.0   | 53.7    | ---    | 74.0   | 20.3   |
| 39701.7   | ---     | 36.5   | 54.0   | 17.5   |



### 30 MHz – 40 GHz, 802.11ax80, HE0, Chain A

#### Radiated Spurious – CH155

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 624.0     | 34.7    | ---    | 46.0   | 11.3   |
| 5888.5    | 60.5    | ---    | 74.0   | 13.5   |
| 5889.5    | ---     | 49.9   | 54.0   | 4.1    |
| 11473.6   | 54.2    | ---    | 74.0   | 19.8   |
| 11473.6   | ---     | 51.0   | 54.0   | 3.0    |
| 23114.1   | ---     | 37.6   | 54.0   | 16.4   |
| 23114.9   | 48.0    | ---    | 74.0   | 26.0   |
| 39472.7   | ---     | 42.9   | 54.0   | 11.1   |
| 39726.2   | 53.6    | ---    | 74.0   | 20.4   |

### 30 MHz – 40 GHz, 802.11ax80, HE0, Chain B

#### Radiated Spurious – CH155

| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 624.0     | 33.6    | ---    | 46.0   | 12.4   |
| 1245.0    | ---     | 32.7   | 54.0   | 21.4   |
| 1245.0    | 53.4    | ---    | 74.0   | 20.6   |
| 11474.0   | ---     | 43.7   | 54.0   | 10.3   |
| 11475.0   | 51.7    | ---    | 74.0   | 22.3   |
| 17210.2   | ---     | 43.0   | 54.0   | 11.0   |
| 17210.7   | 53.0    | ---    | 74.0   | 21.0   |
| 21500.7   | 47.6    | ---    | 74.0   | 26.4   |
| 21506.5   | ---     | 37.3   | 54.0   | 16.7   |
| 39473.5   | ---     | 42.7   | 54.0   | 11.3   |
| 39478.1   | 53.4    | ---    | 74.0   | 20.6   |

# 30 MHz – 40 GHz, 802.11ax80, HE0, Chain A+B

## Radiated Spurious – CH155

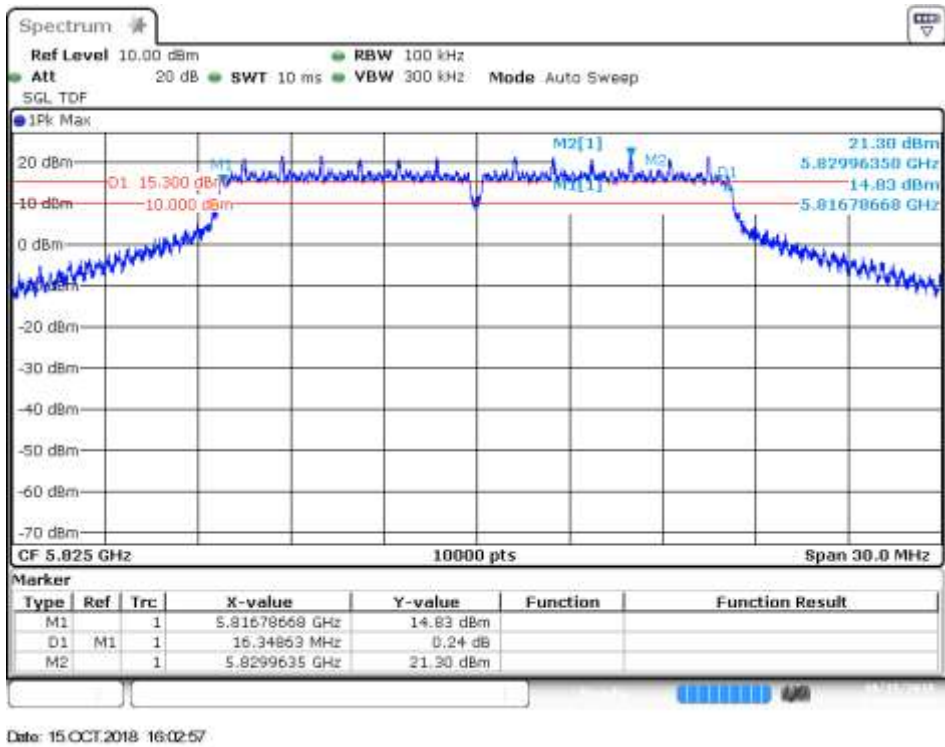
| Frequency | MaxPeak | Avg    | Limit  | Margin |
|-----------|---------|--------|--------|--------|
| MHz       | dBμV/m  | dBμV/m | dBμV/m | dB     |
| 640.0     | 35.5    | ---    | 46.0   | 10.6   |
| 1241.5    | 53.5    | ---    | 74.0   | 20.5   |
| 1243.0    | ---     | 31.4   | 54.0   | 22.7   |
| 11473.6   | 54.2    | ---    | 74.0   | 19.8   |
| 11473.6   | ---     | 45.4   | 54.0   | 8.6    |
| 23847.7   | 48.3    | ---    | 74.0   | 25.7   |
| 23881.5   | ---     | 37.3   | 54.0   | 16.7   |
| 39448.2   | 53.7    | ---    | 74.0   | 20.3   |
| 39465.1   | ---     | 42.9   | 54.0   | 11.1   |

### B.3 Test Results Screenshot

#### B.3.1 6dB Bandwidth

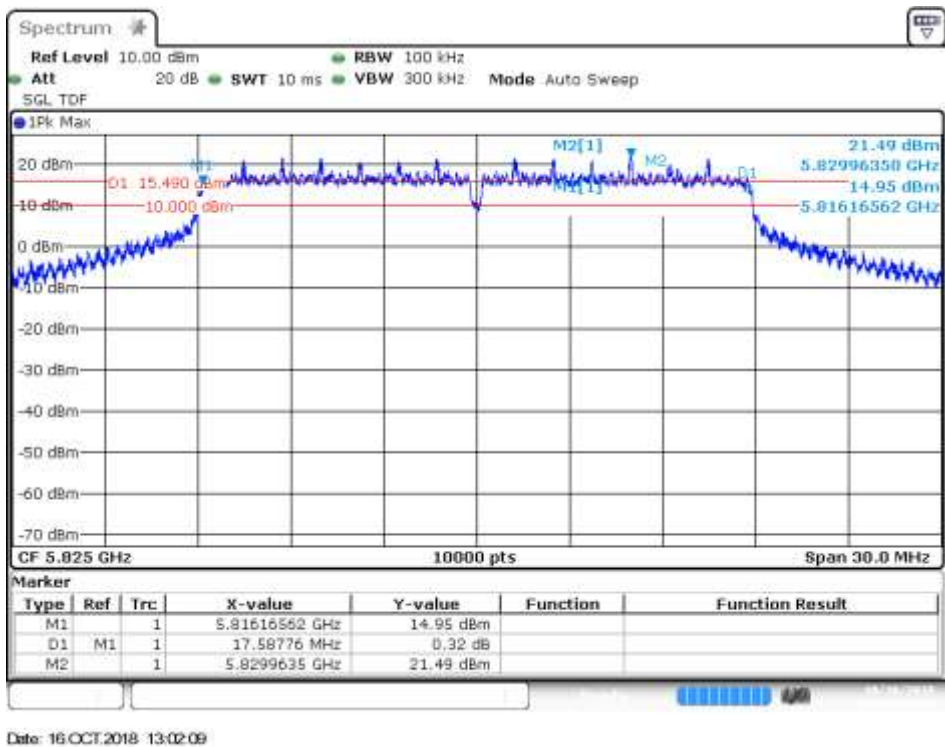
## SISO-A, 802.11a, 6Mbps

Channel 165



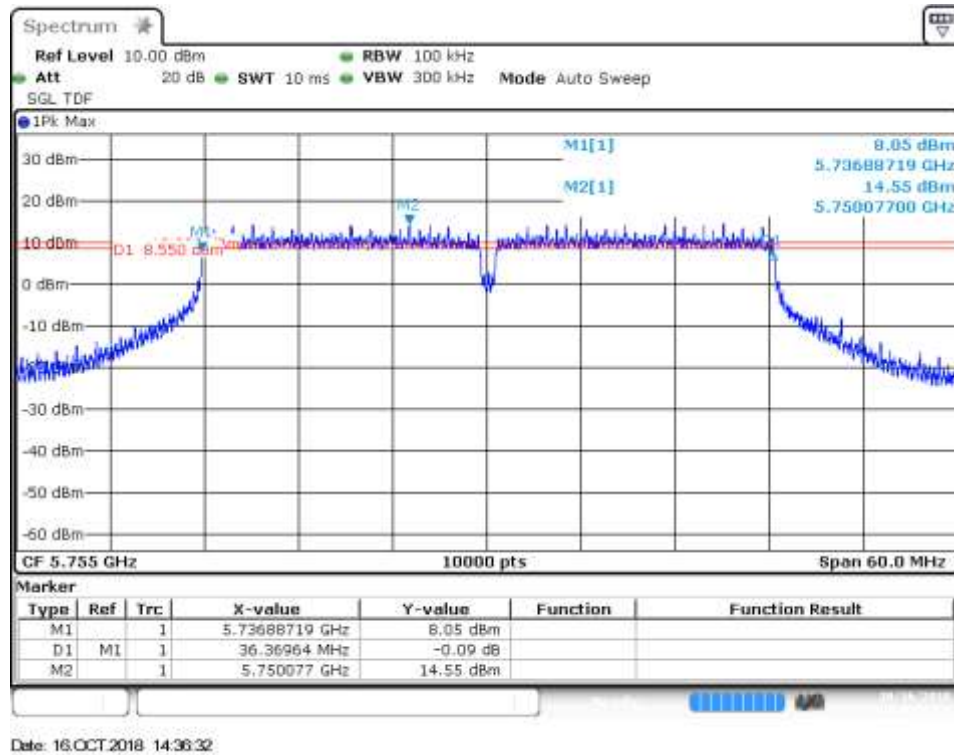
## SISO-B, 802.11n20, HT0

Channel 165



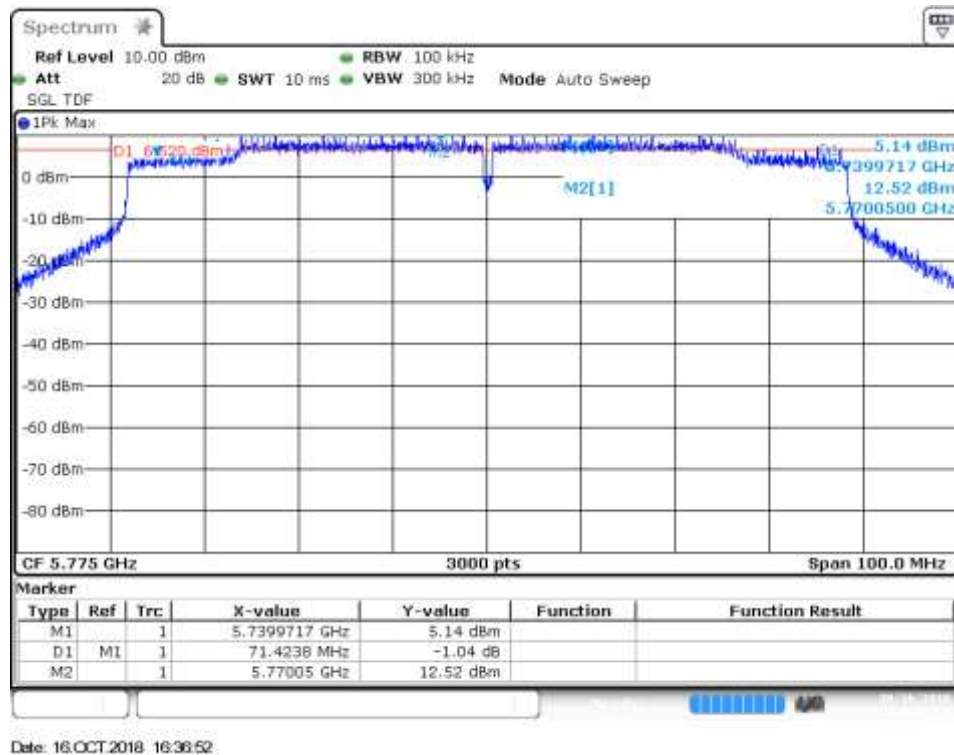
## MIMO-B, 802.11n40, HT8

Channel 151F



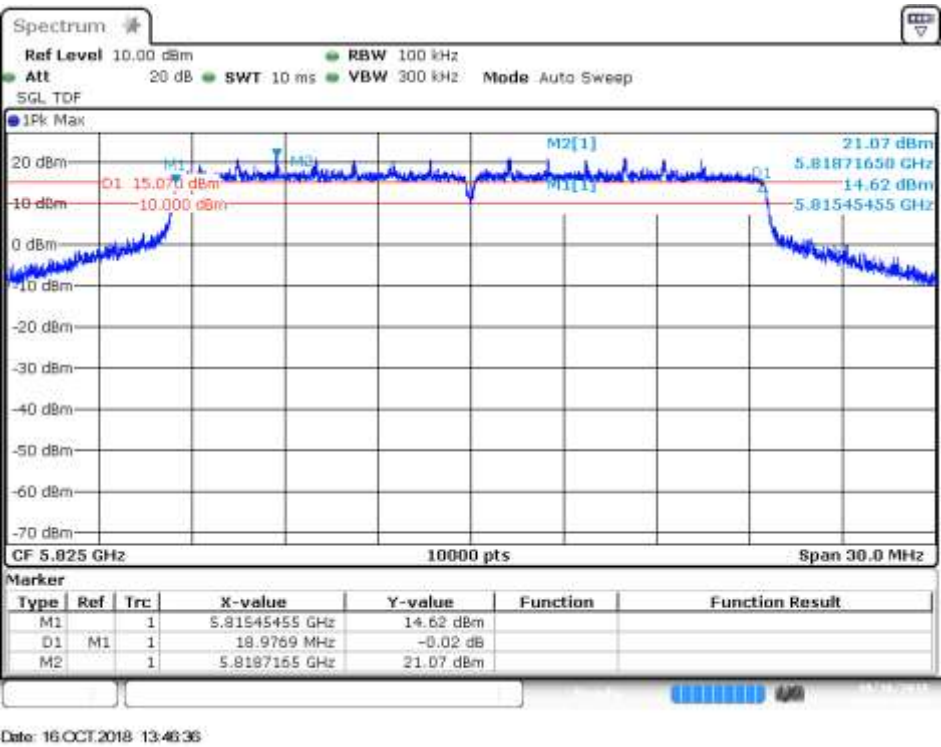
## MIMO-B, 802.11ac80, VHT0

Channel 155



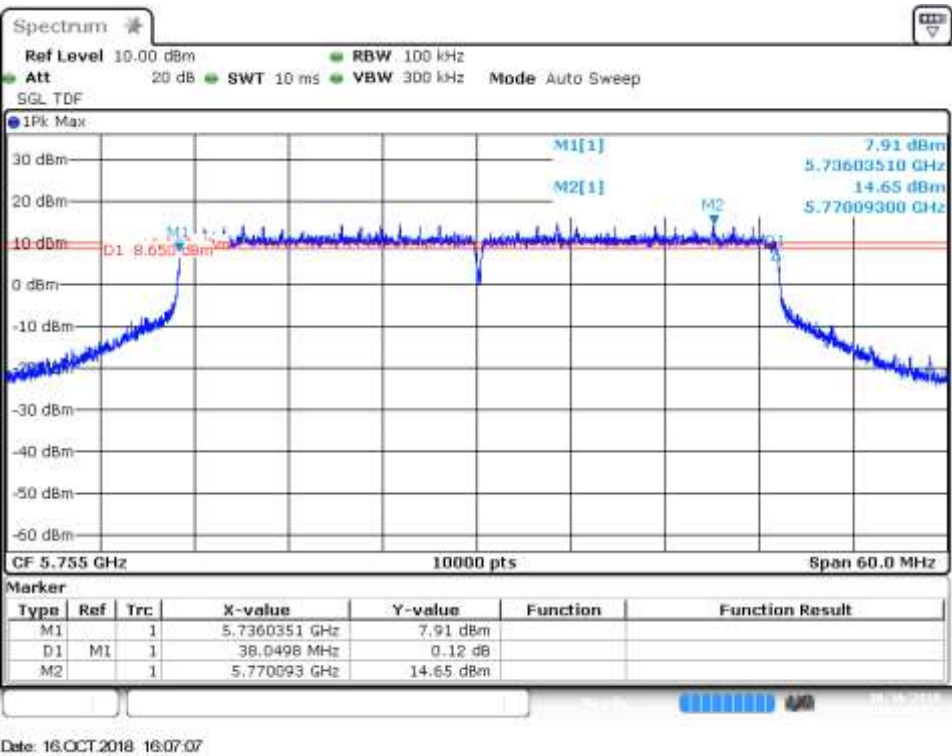
# SISO-B, 802.11ax20, HE0

Channel 165



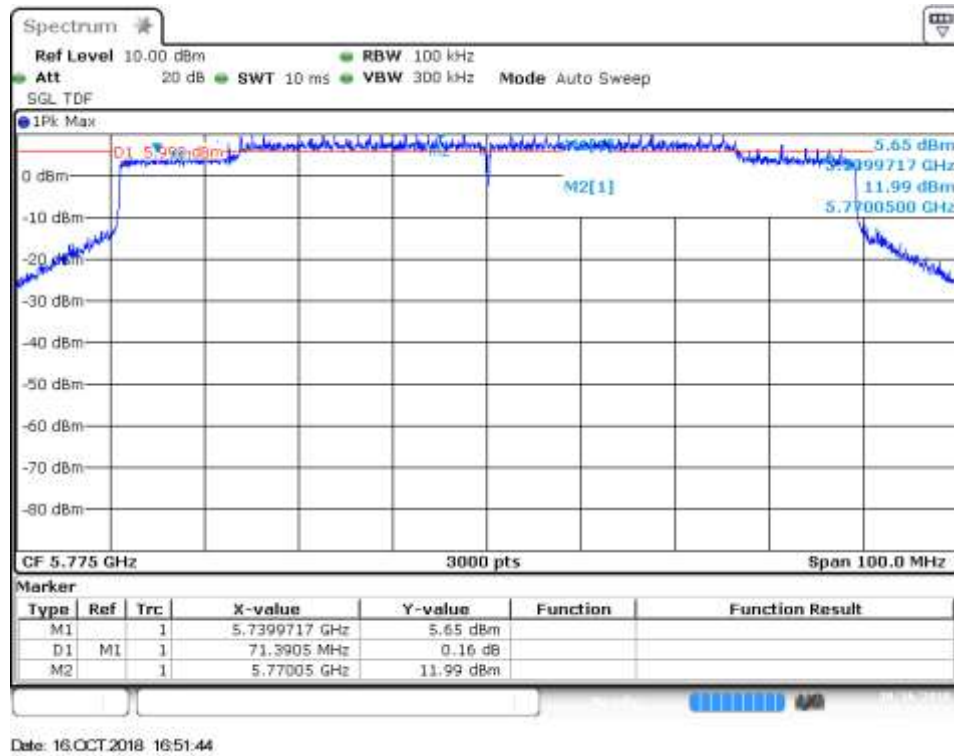
# MIMO-B, 802.11ax40, HE0

Channel 151F



## MIMO-B, 802.11ax80, HE0

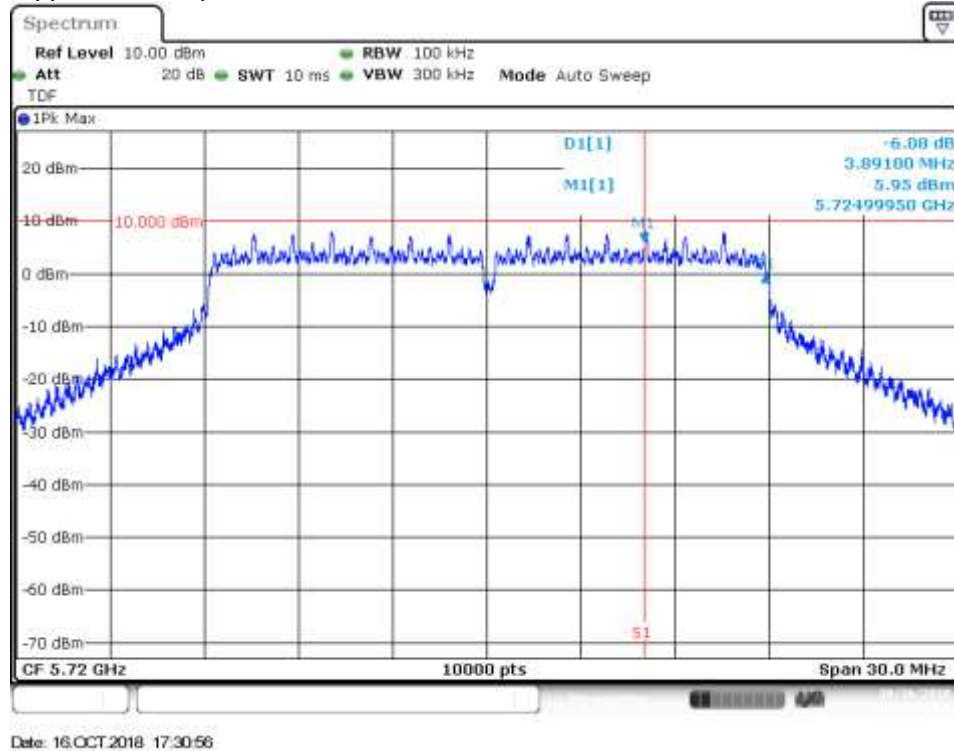
Channel 155



### B.3.2 6dB Bandwidth (Overlapped Channel)

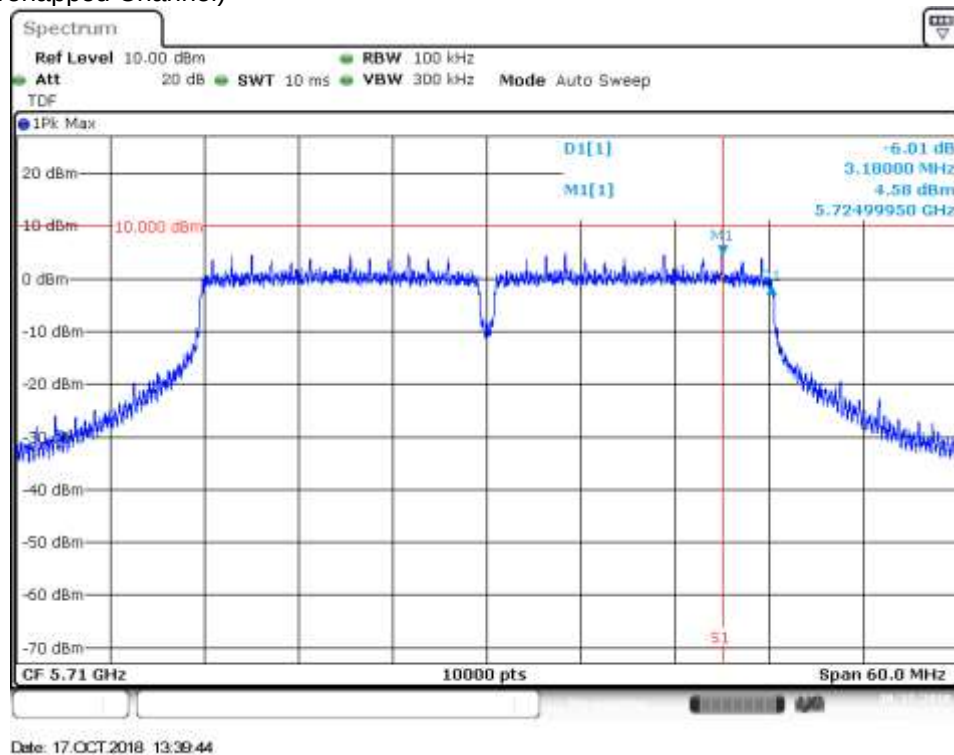
## MIMO-B, 802.11n20, HT8

Channel 144 (Overlapped Channel)



## MIMO-A, 802.11n40, HT8

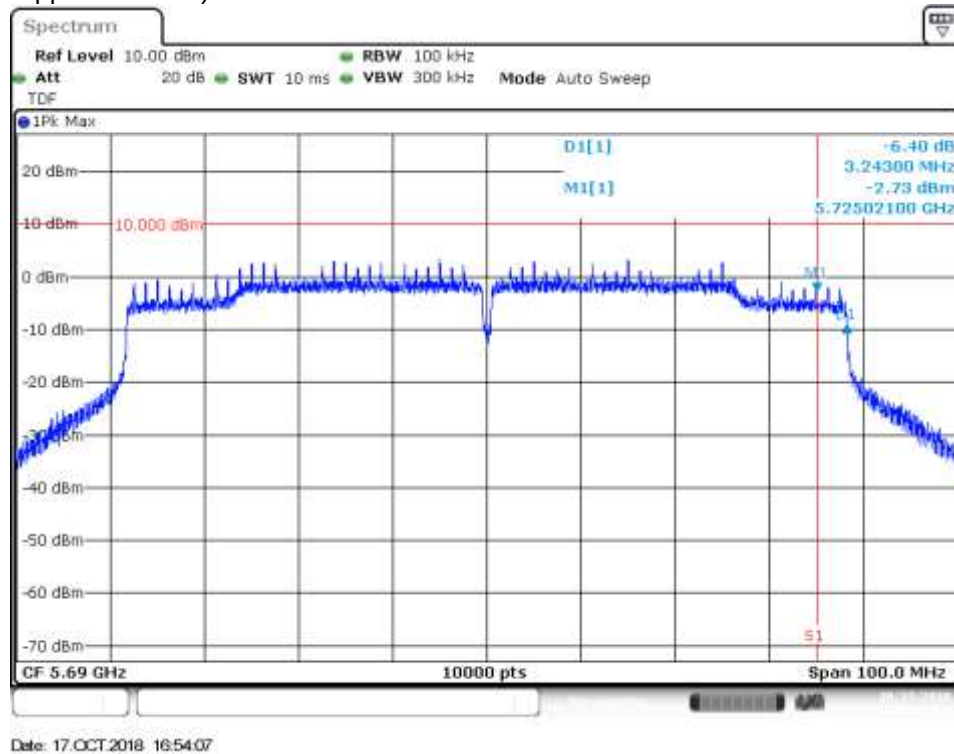
Channel 142F (Overlapped Channel)





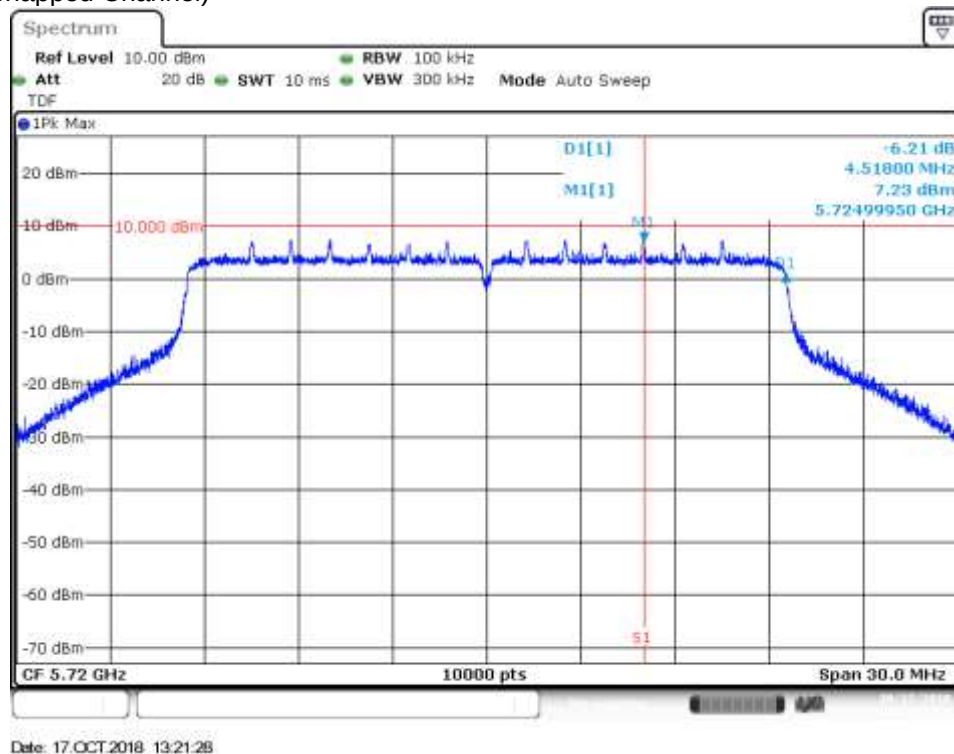
## MIMO-A, 802.11ac80, VHT0

### Channel 138 (Overlapped Channel)



## MIMO-A, 802.11ax20, HE0

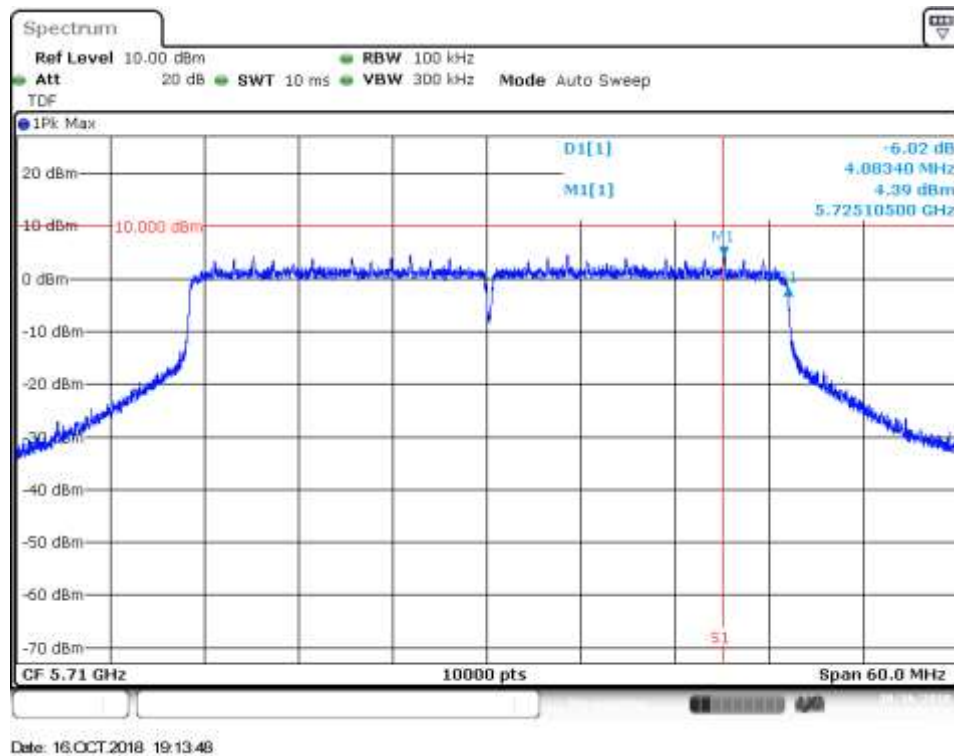
### Channel 144 (Overlapped Channel)





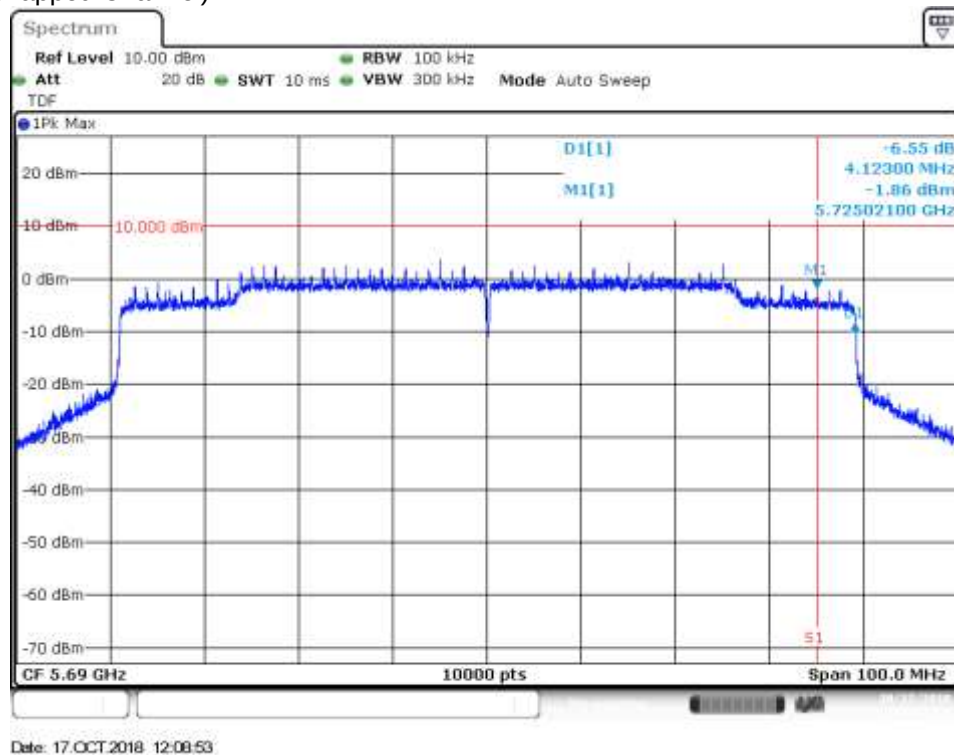
## MIMO-B, 802.11ax40, HE0

Channel 142F (Overlapped Channel)



## MIMO-B, 802.11ax80, HE0

Channel 138 (Overlapped Channel)



Channel 165

Channel 165

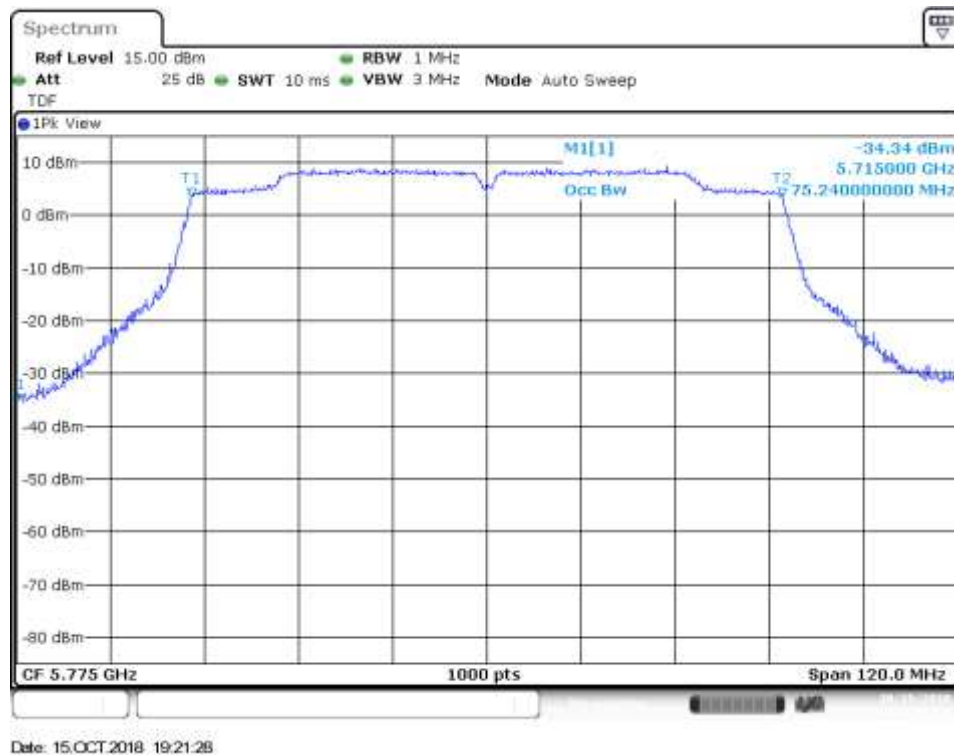
## SISO-B, 802.11n40, HT0

Channel 159F



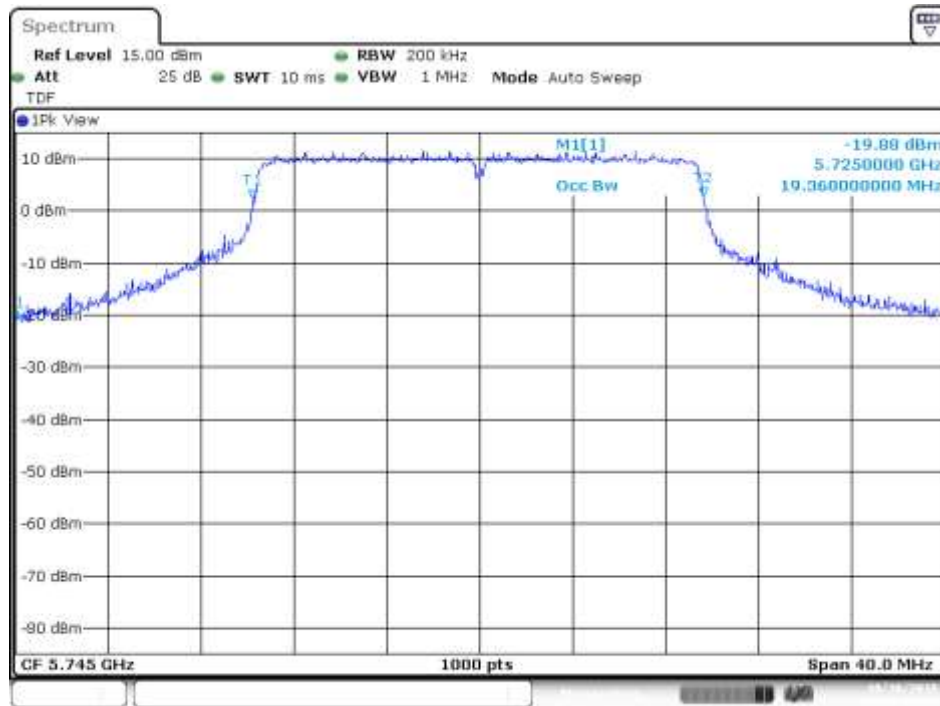
## MIMO-A, 802.11ac80, VHT0

Channel 155



## SISO-B, 802.11ax20, HE0

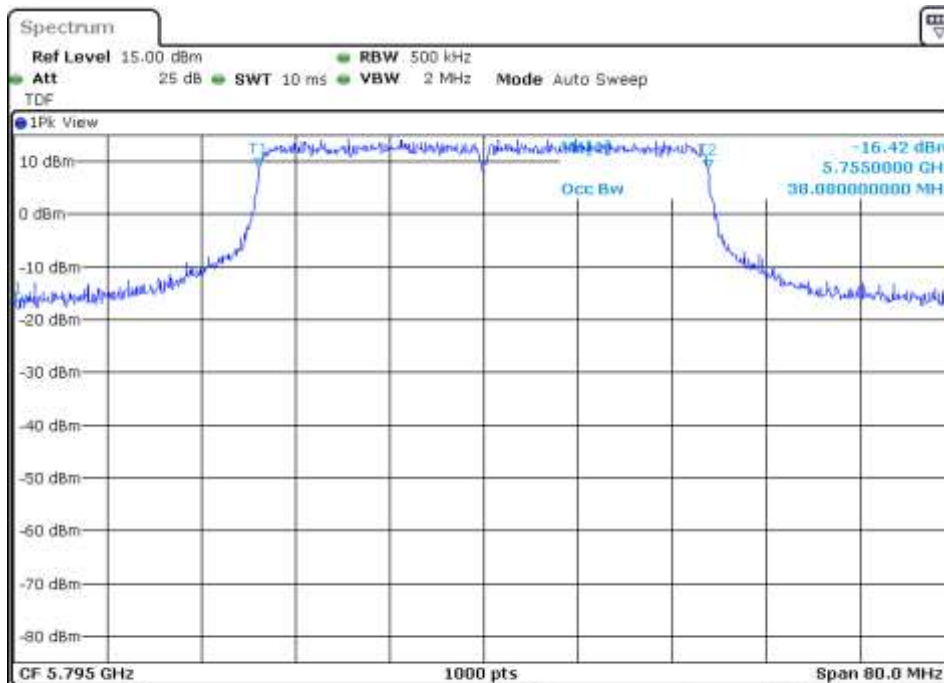
Channel 149



Date: 16.OCT.2018 13:38:09

## SISO-B, 802.11ax40, HE0

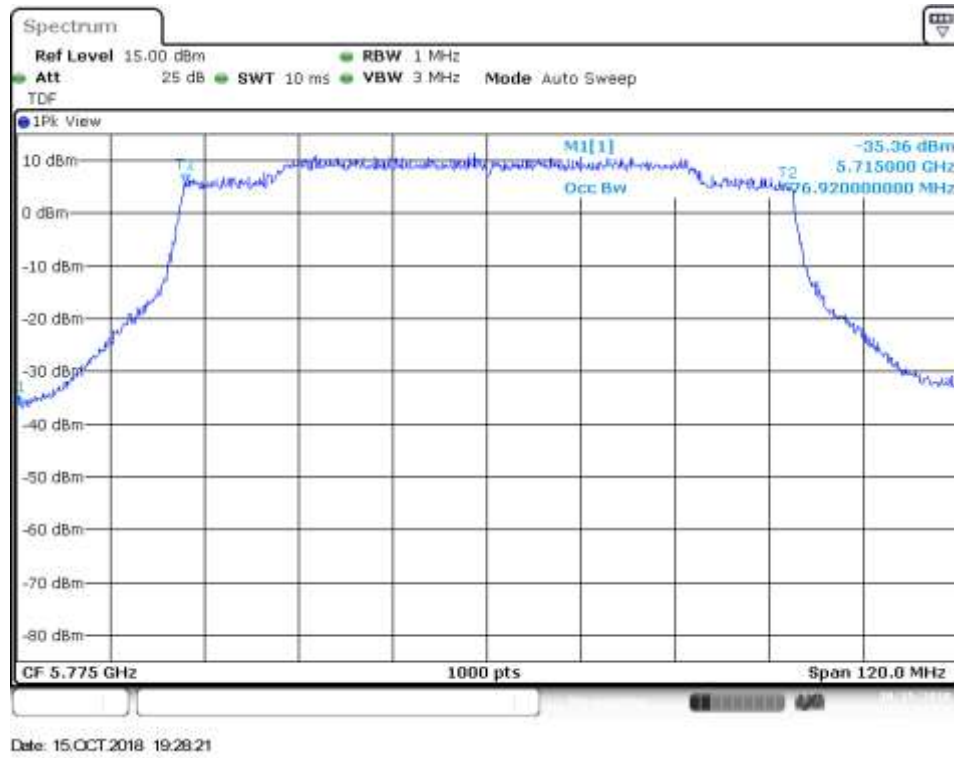
Channel 159F



Date: 16.OCT.2018 16:00:12

## MIMO-A, 802.11ax80, HE0

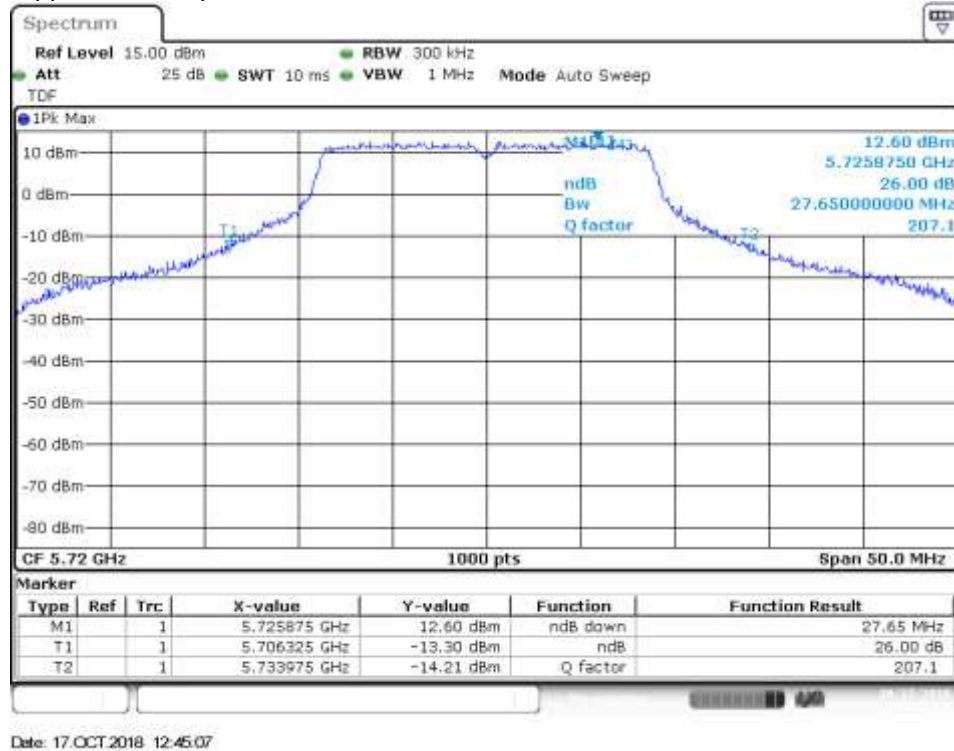
Channel 155



### B.3.4 26dB Bandwidth (Overlapped Channel)

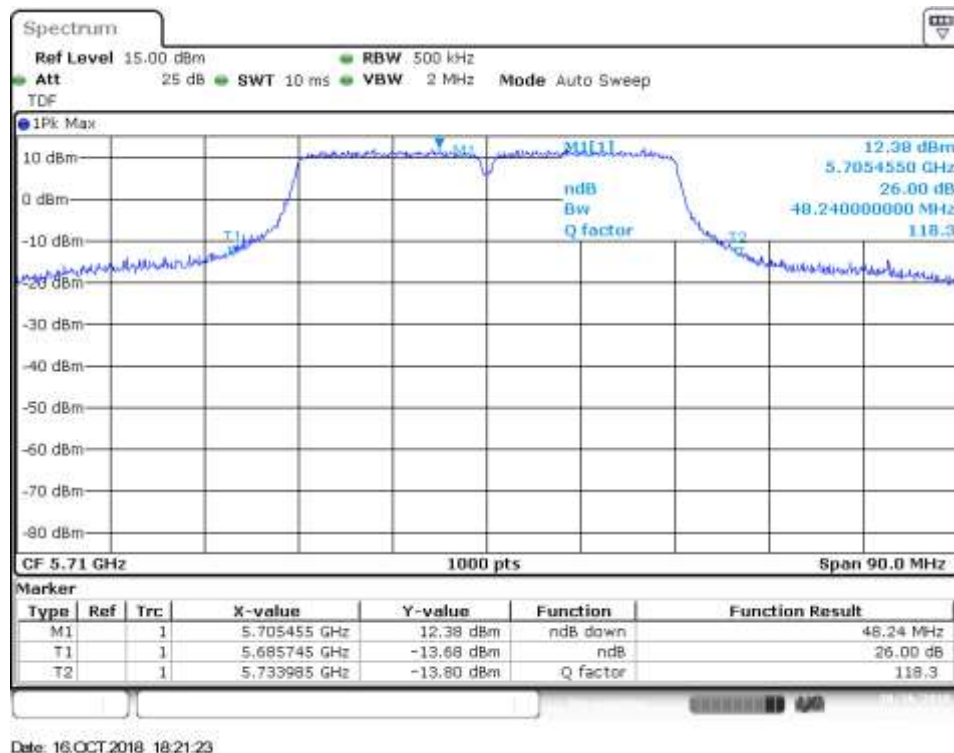
## SISO-A, 802.11n20, HT0

Channel 144 (Overlapped Channel)



## SISO-B, 802.11n40, HT0

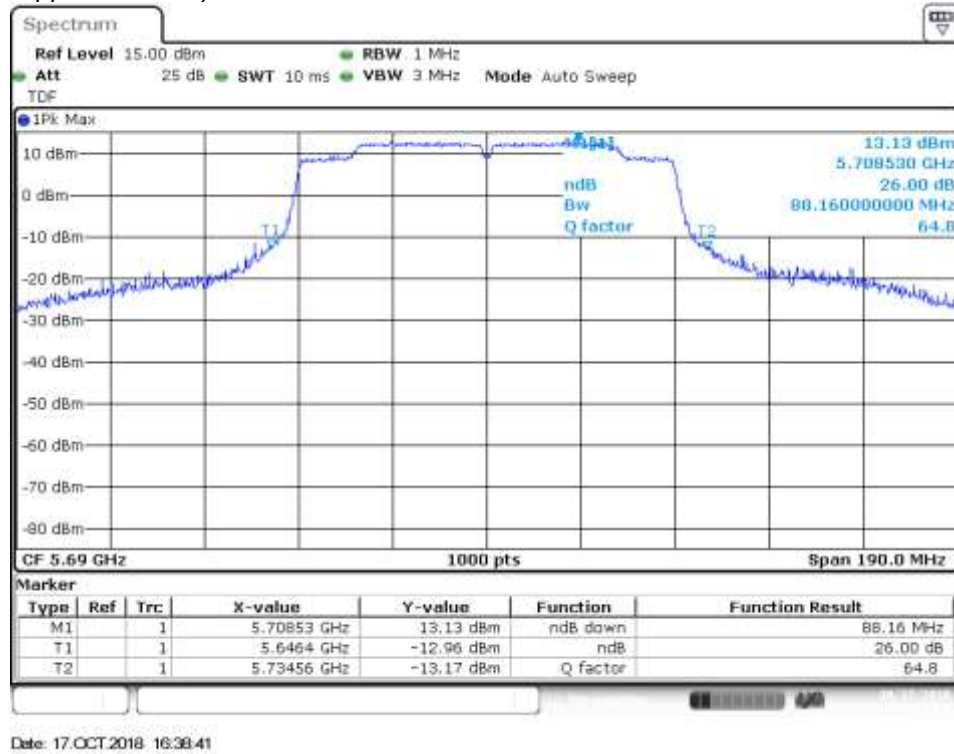
Channel 142F (Overlapped Channel)





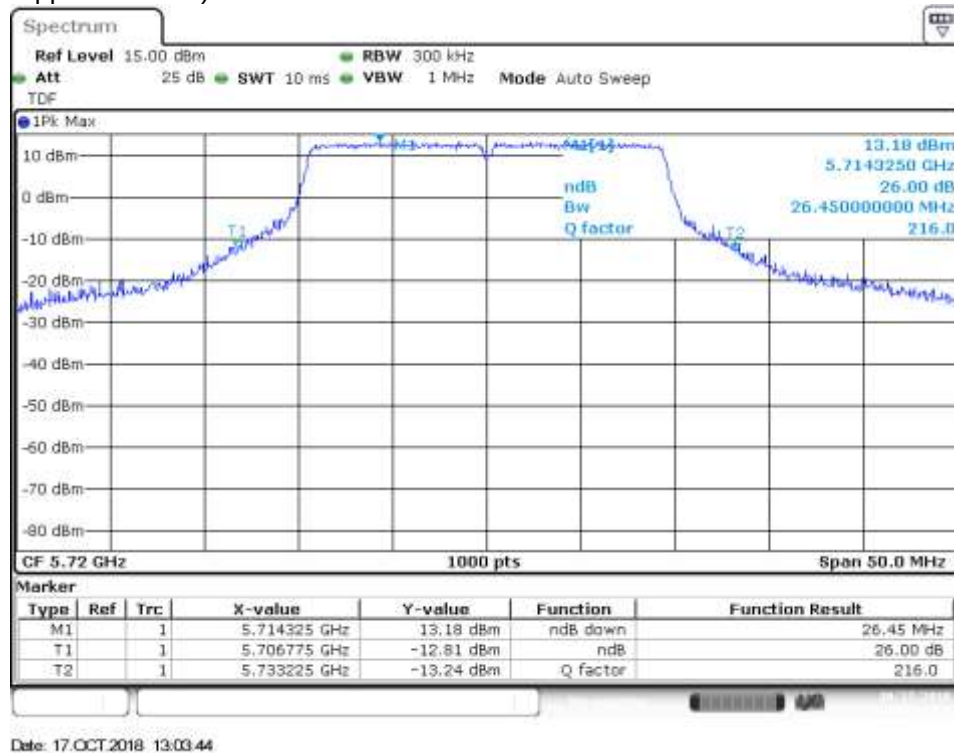
## SISO-A, 802.11ac80, VHT0

Channel 138 (Overlapped Channel)



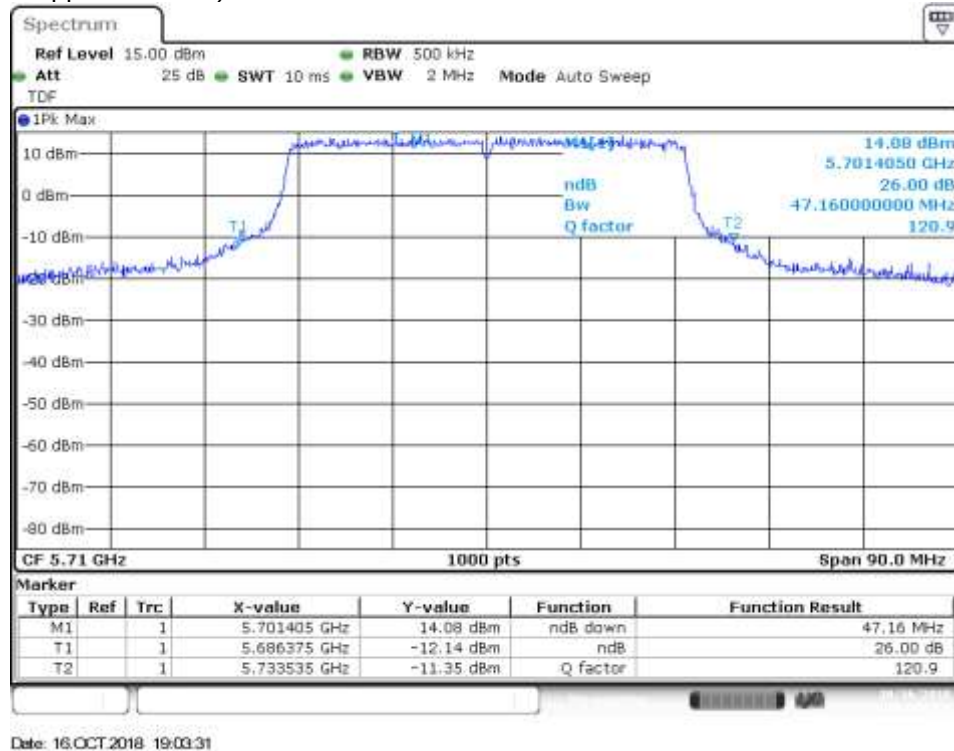
## SISO-A, 802.11ax20, HE0

Channel 144 (Overlapped Channel)



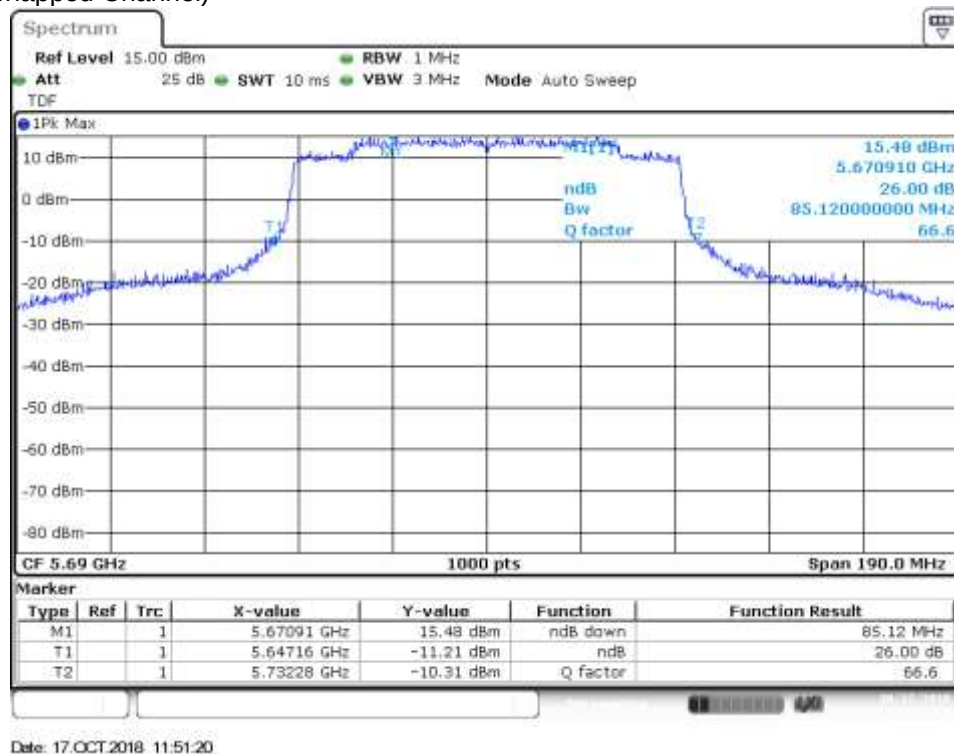
## SISO-B, 802.11ax40, HE0

Channel 142F (Overlapped Channel)



## SISO-B, 802.11ax80, HE0

Channel 138 (Overlapped Channel)

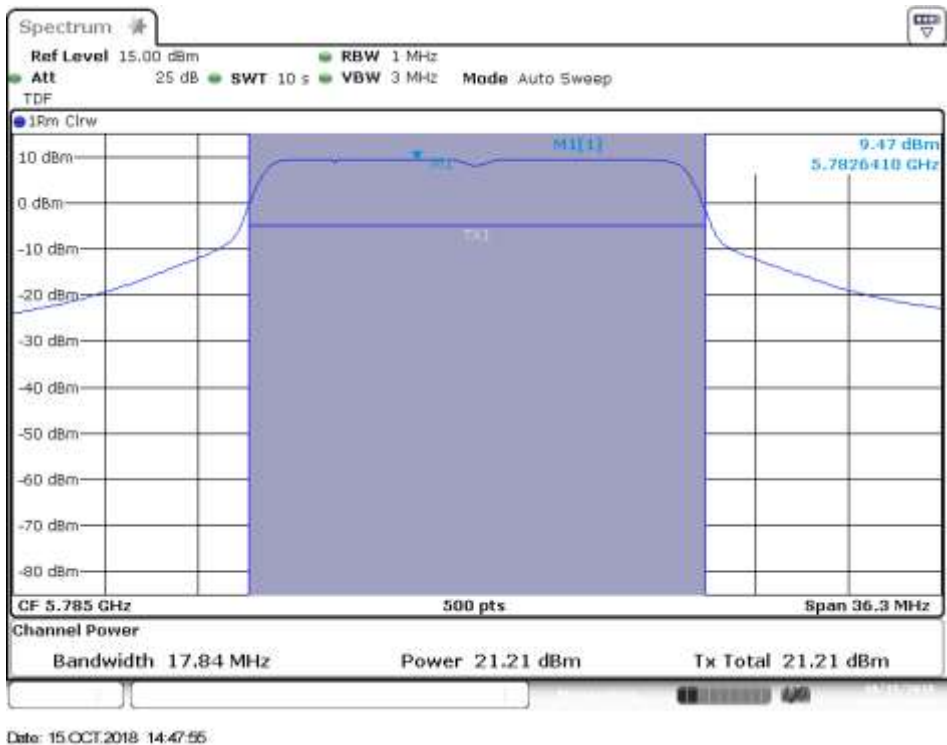




**B.3.5 Maximum output power**

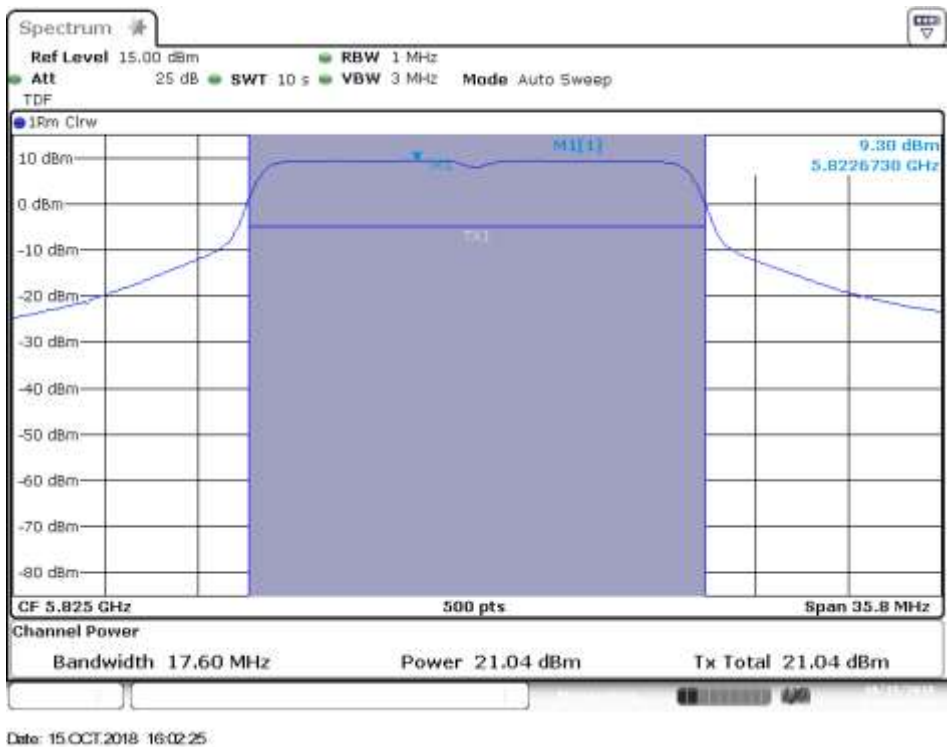
**SISO-A, 802.11a, 6Mbps**

Channel 157



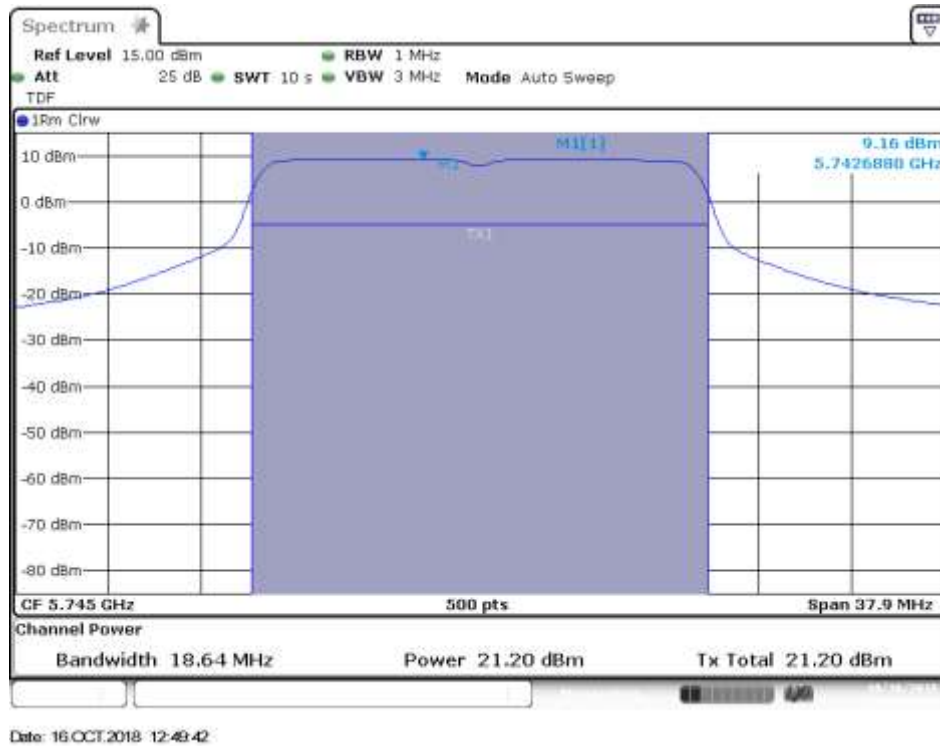
**SISO-A, 802.11a, 6Mbps**

Channel 165



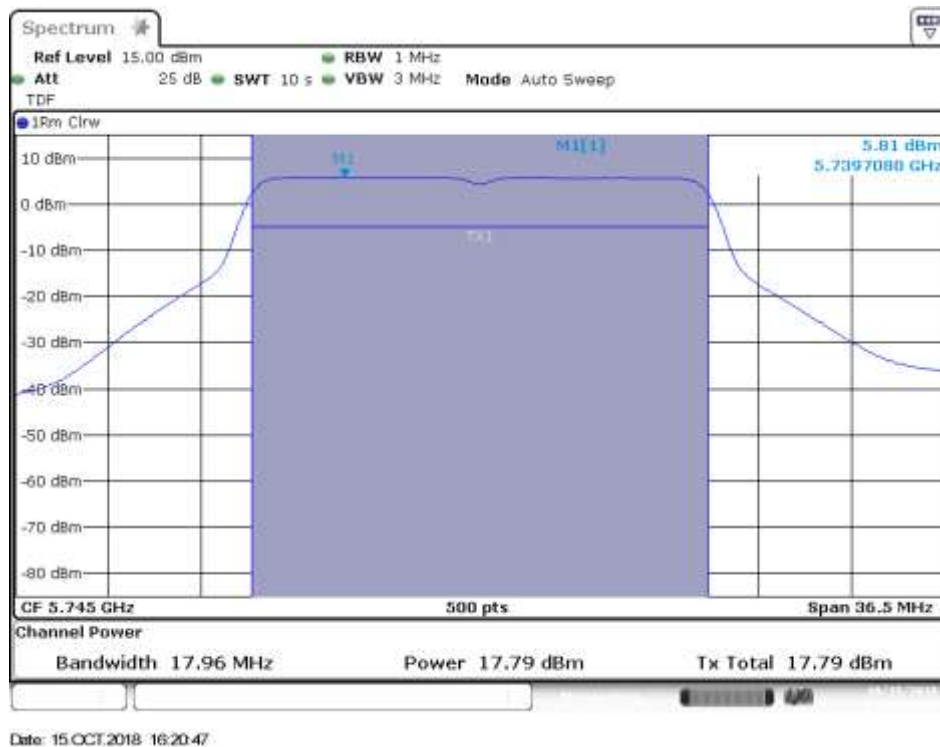
## SISO-B, 802.11n20, HT0

Channel 149



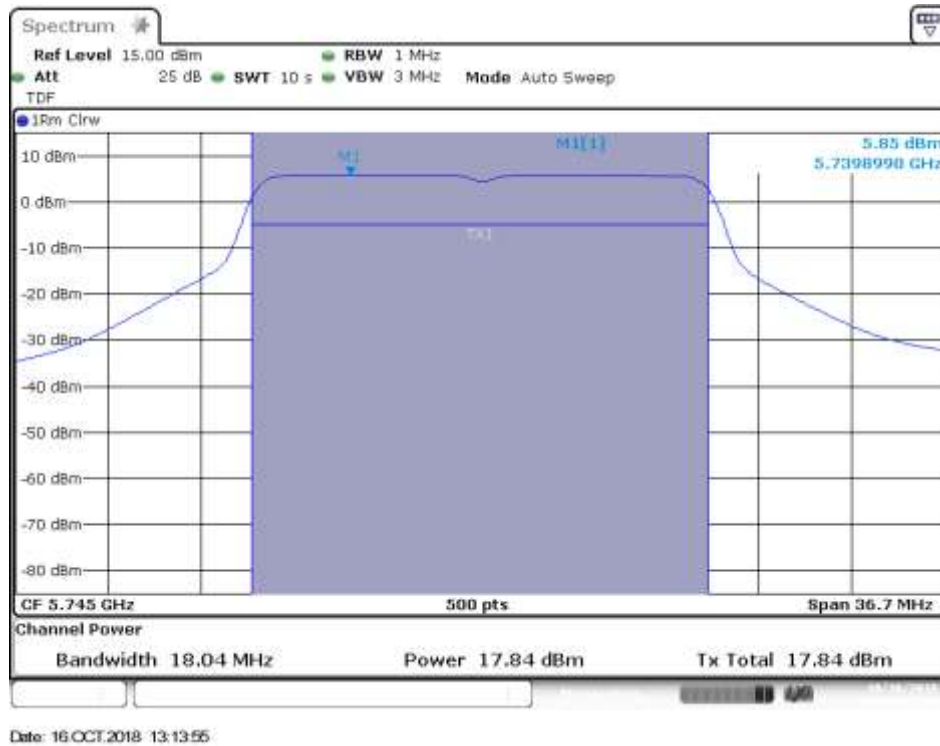
## MIMO-A, 802.11n20, HT8

Channel 149



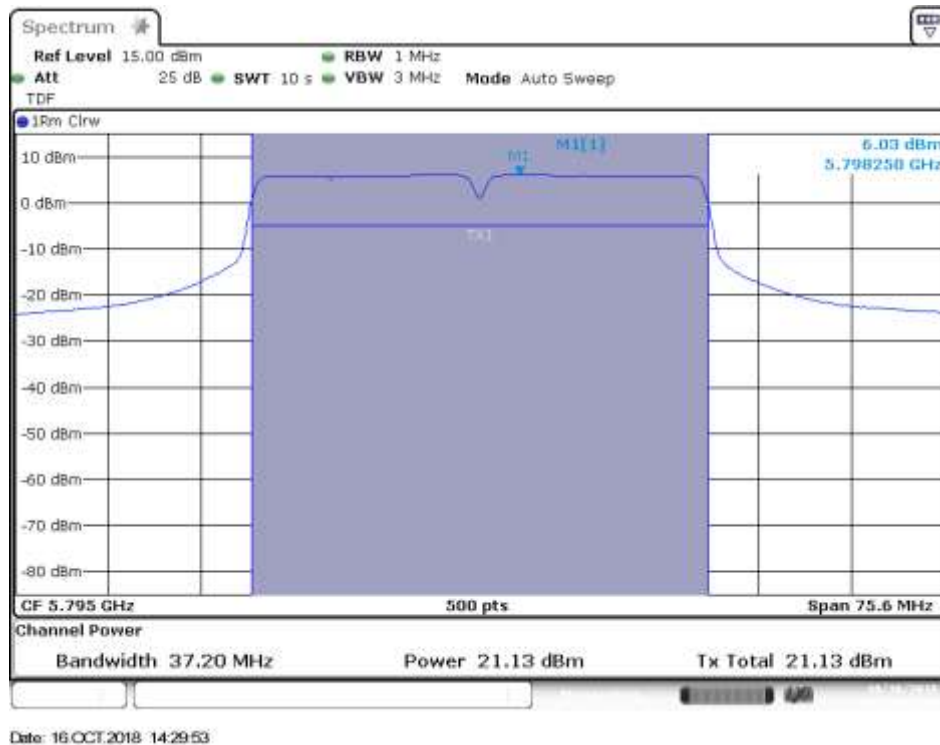
## MIMO-B, 802.11n20, HT8

Channel 149



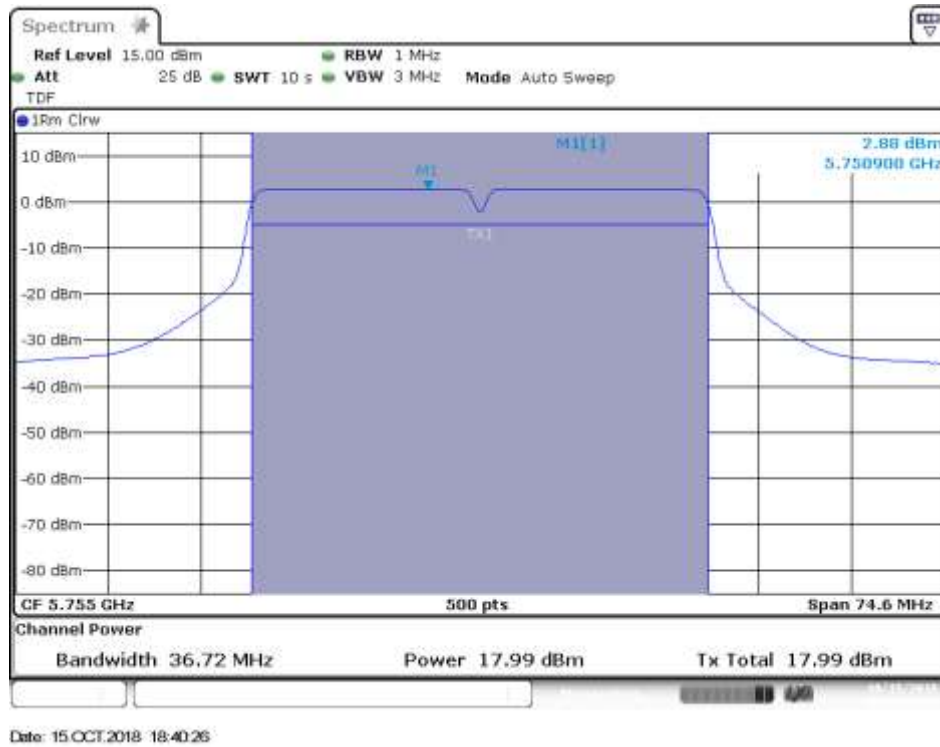
## SISO-B, 802.11n40, HT0

Channel 159F



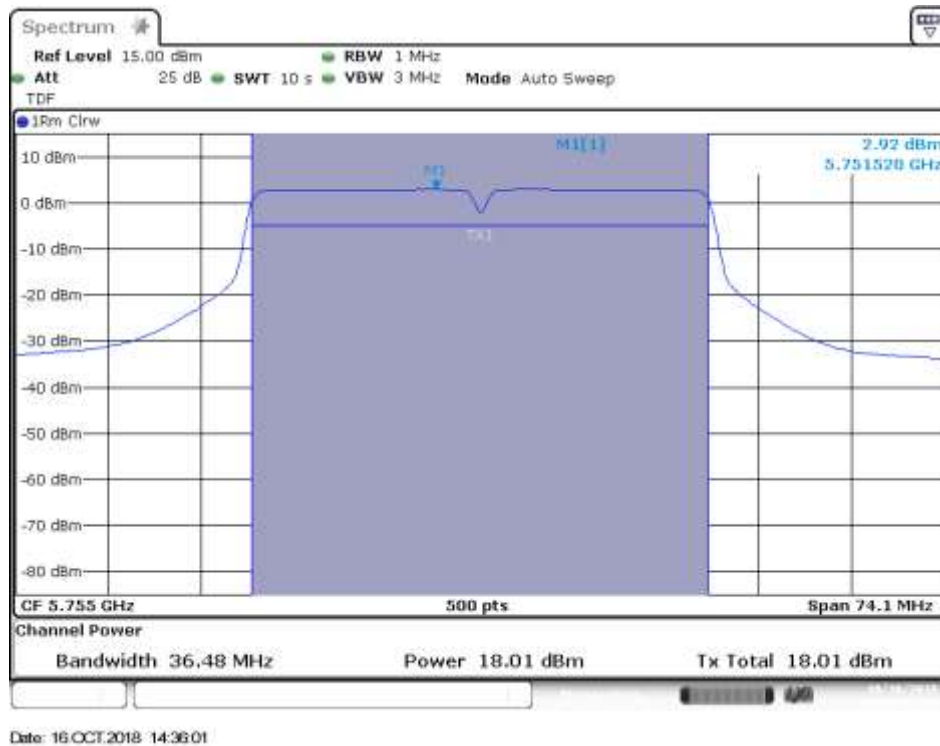
## MIMO-A, 802.11n40, HT8

Channel 151F



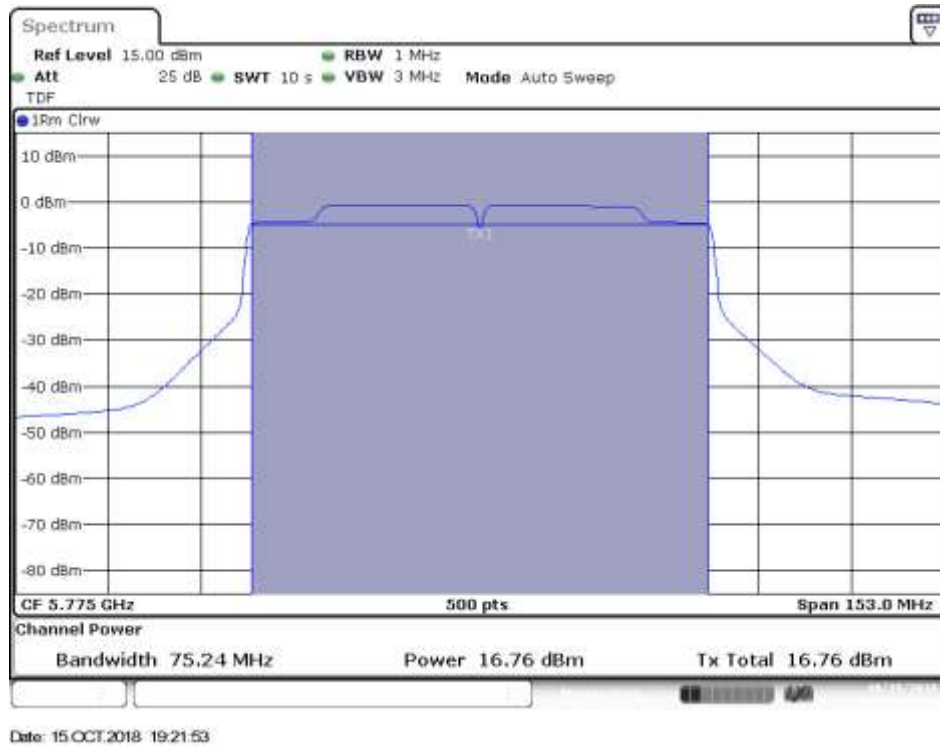
## MIMO-B, 802.11n40, HT8

Channel 151F



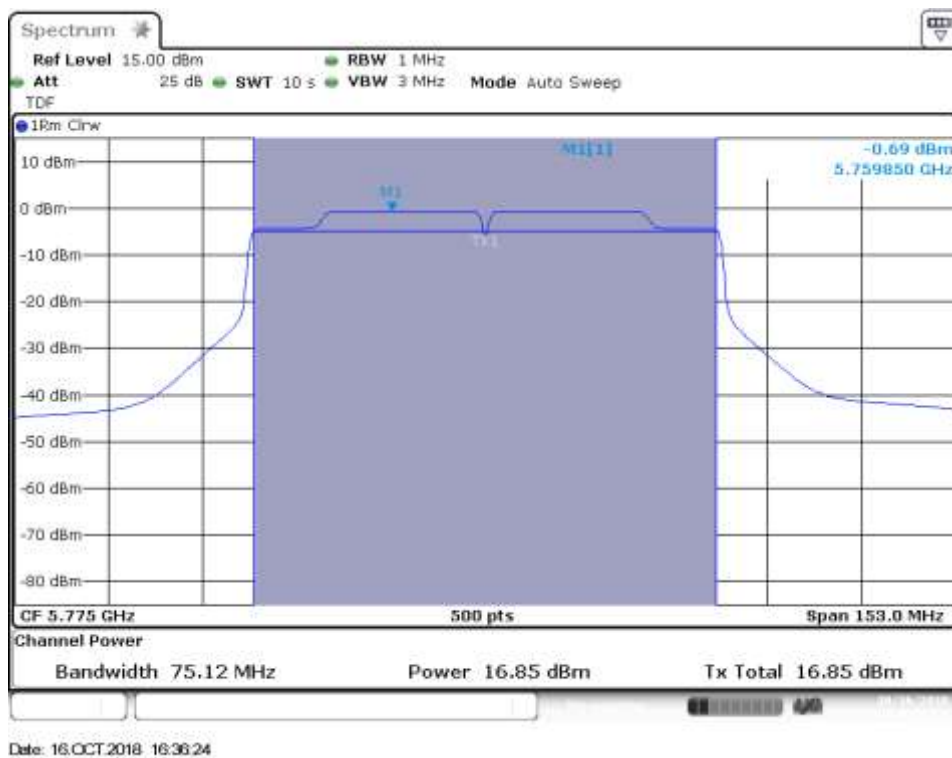
## MIMO-A, 802.11ac80, VHT0

Channel 155



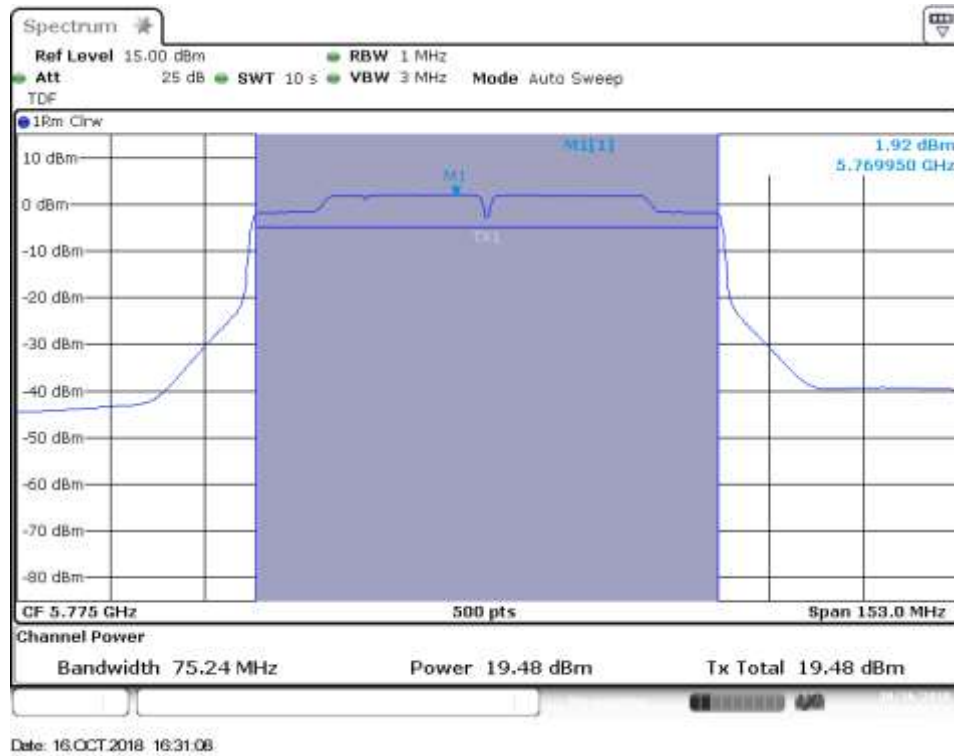
## MIMO-B, 802.11ac80, VHT0

Channel 155



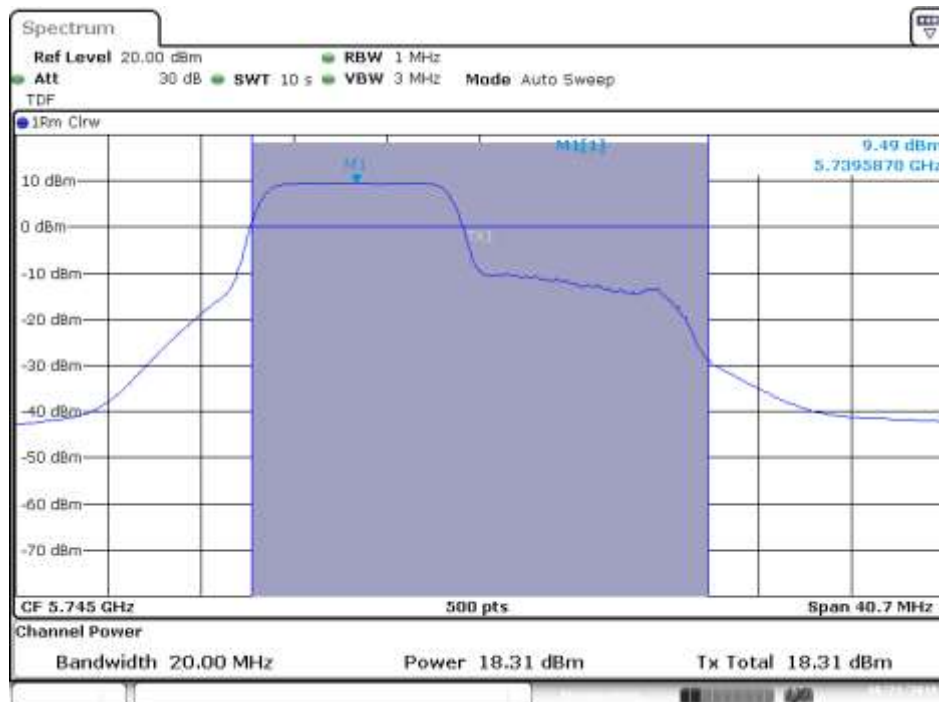
## SISO-B, 802.11ac80, VHT0

Channel 155



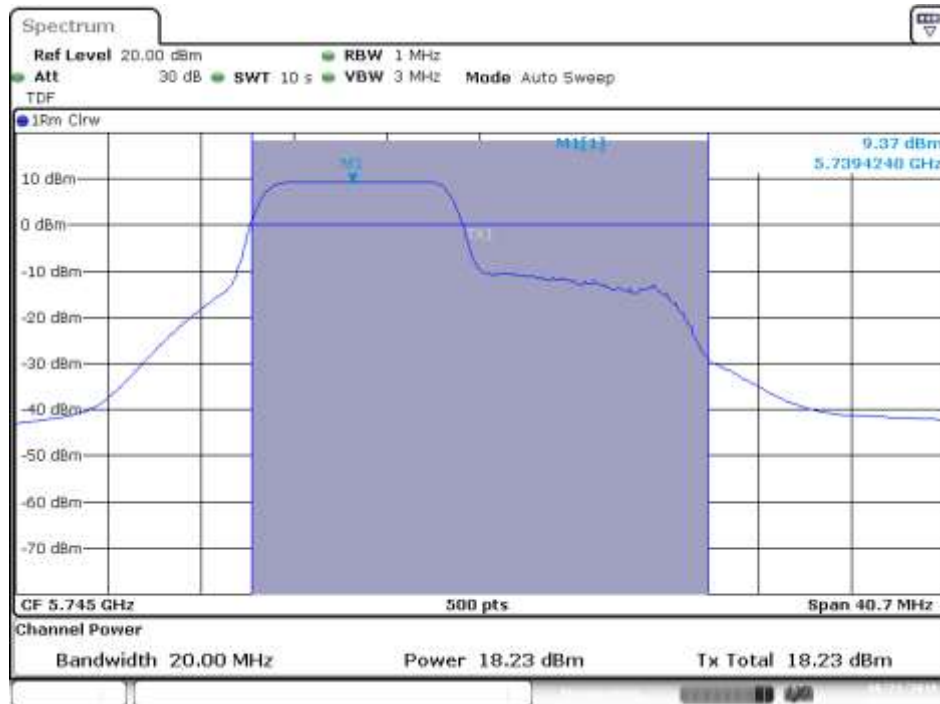
## MIMO-A, 802.11ax20, HE0, RU 106/53

Channel 149



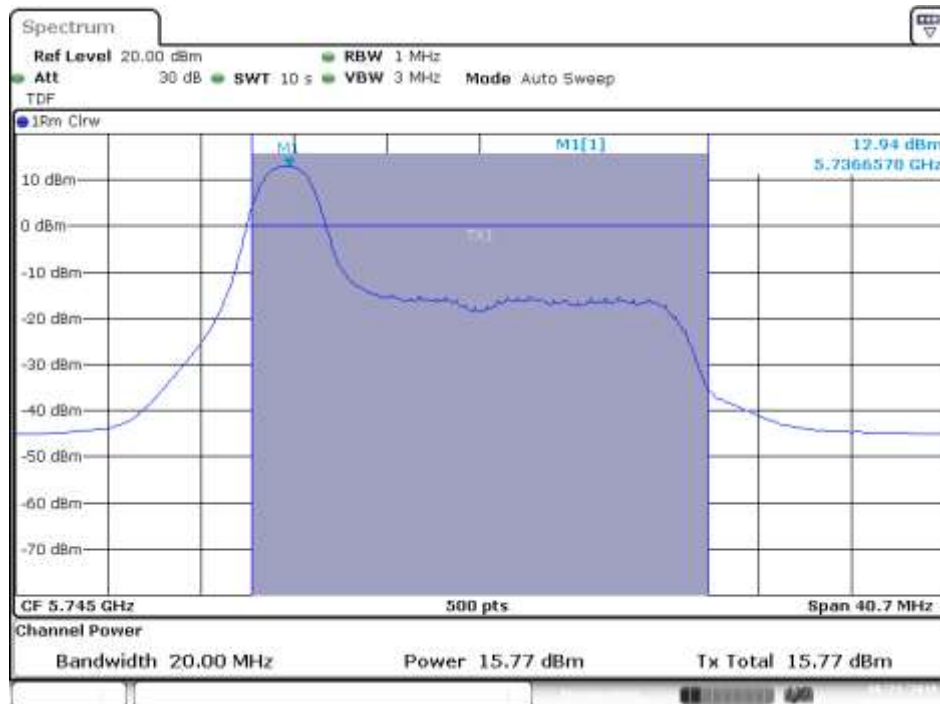
## MIMO-B, 802.11ax20, HE0, RU 106/53

Channel 149



## SISO-B, 802.11ax20, HE0, RU 26/0

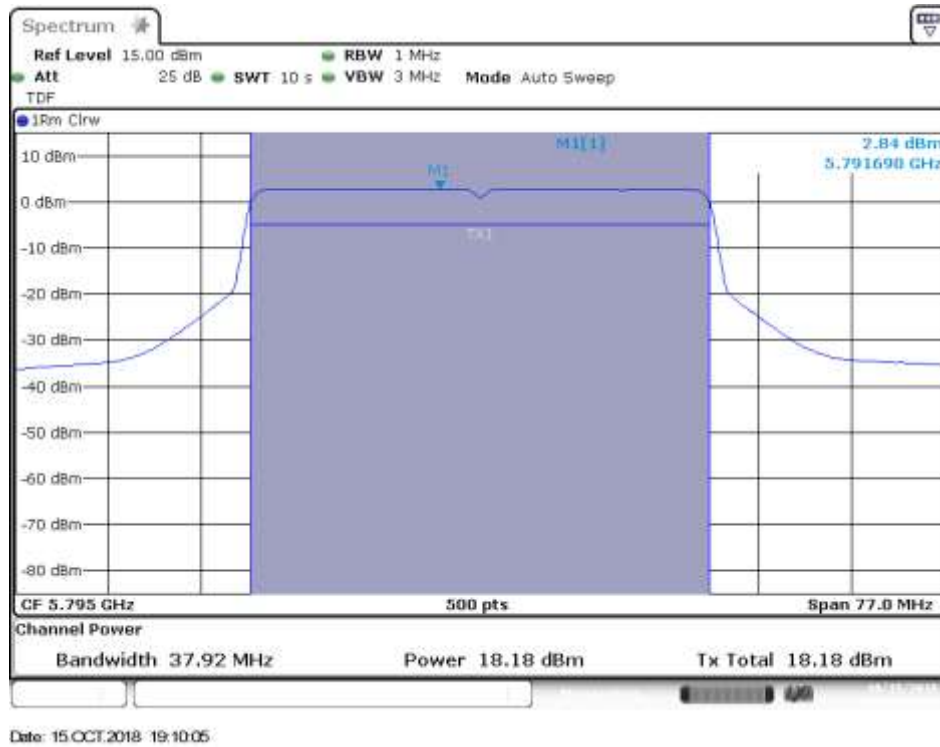
Channel 149





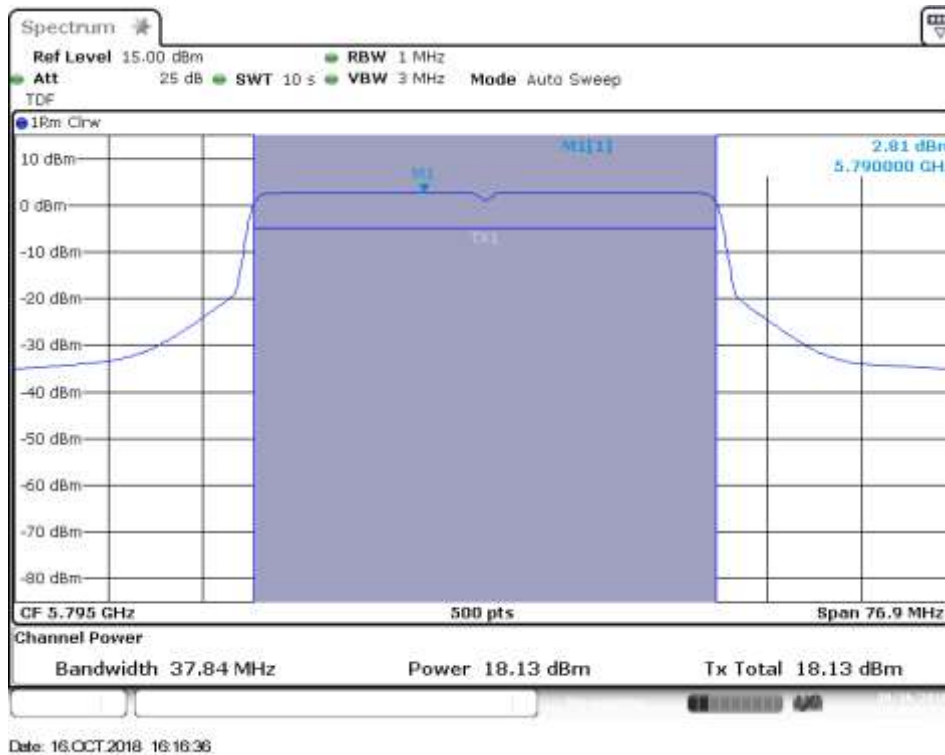
## MIMO-A, 802.11ax40, HE0

Channel 159F



## MIMO-B, 802.11ax40, HE0

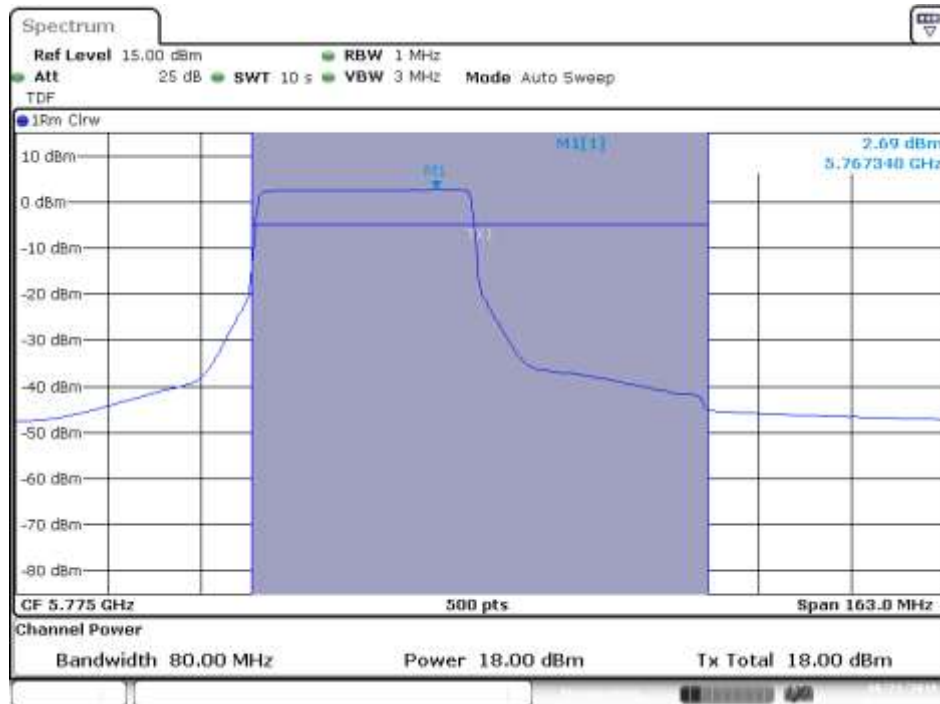
Channel 159F





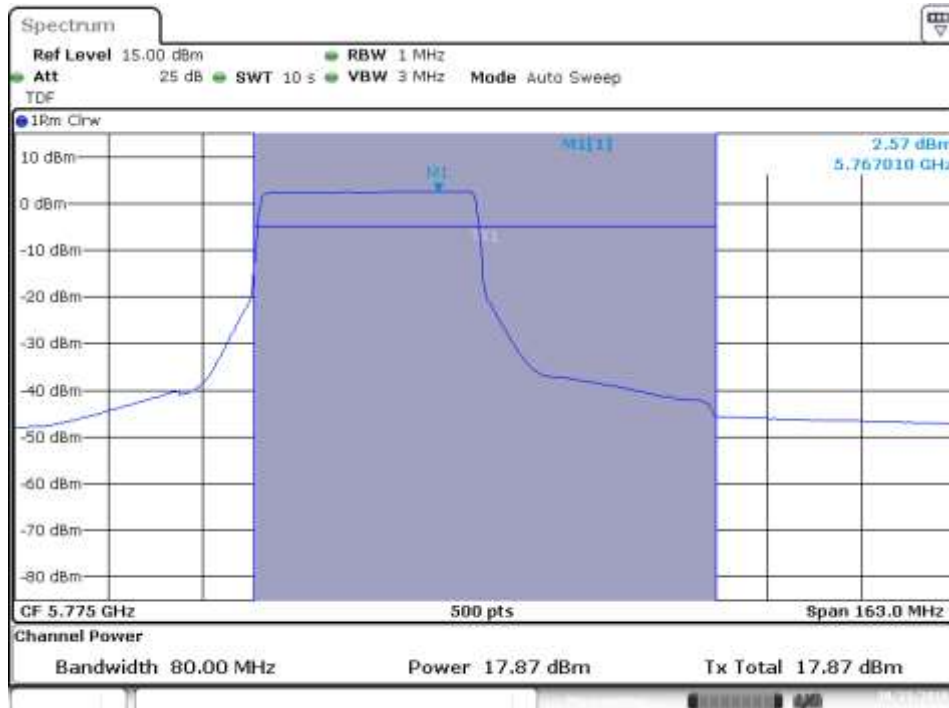
## MIMO-A, 802.11ax80, HE0, RU 484/65

Channel 155



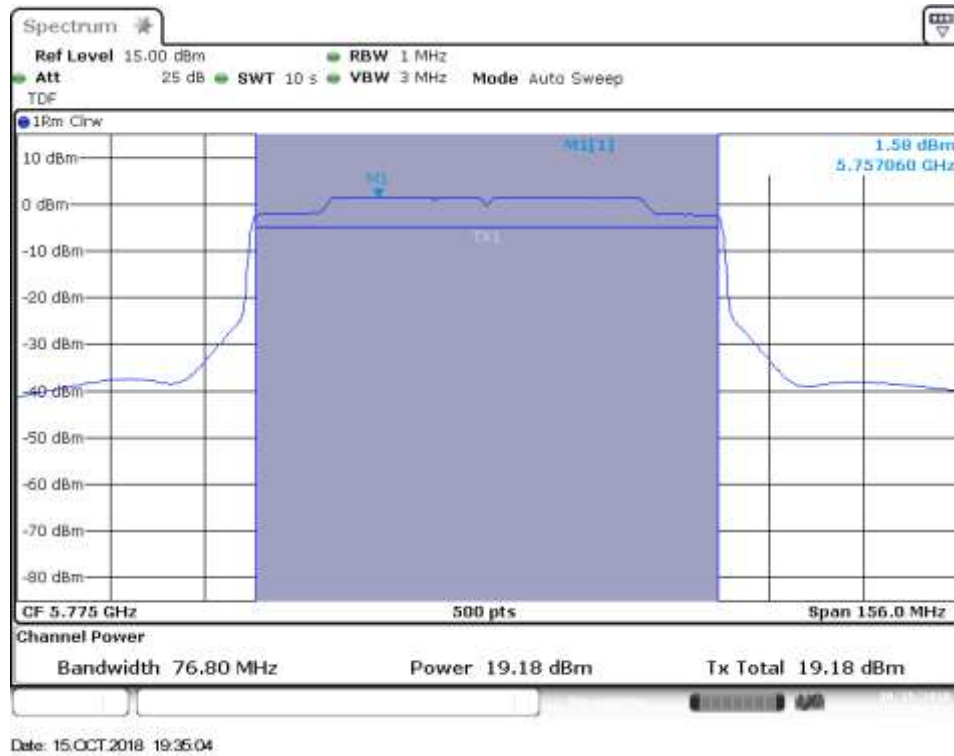
## MIMO-B, 802.11ax80, HE0, RU 484/65

Channel 155



## SISO-A, 802.11ax80, HE0

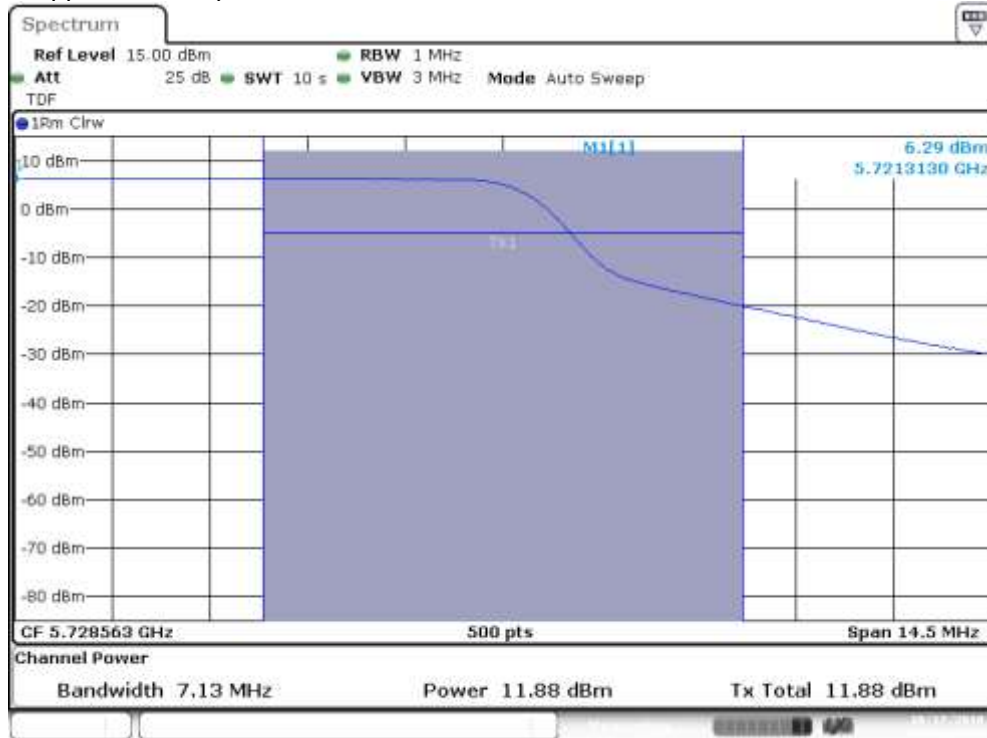
Channel 155



### B.3.6 Maximum output power (Overlapped Channel)

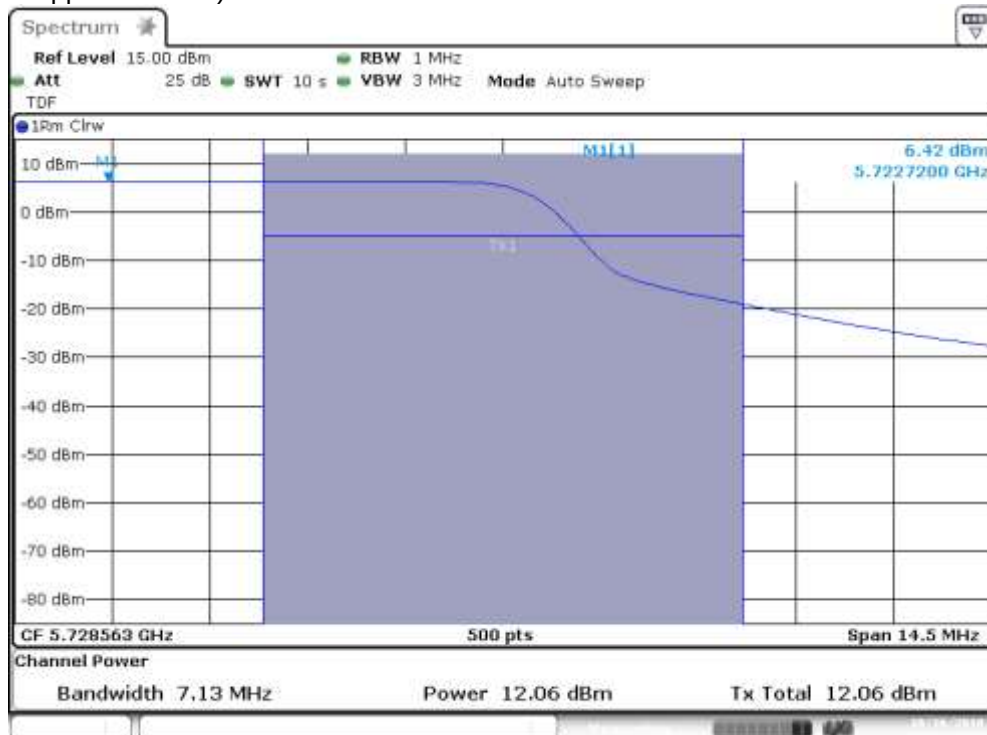
#### MIMO-A, 802.11n20, HT8

Channel 144 (Overlapped Channel)



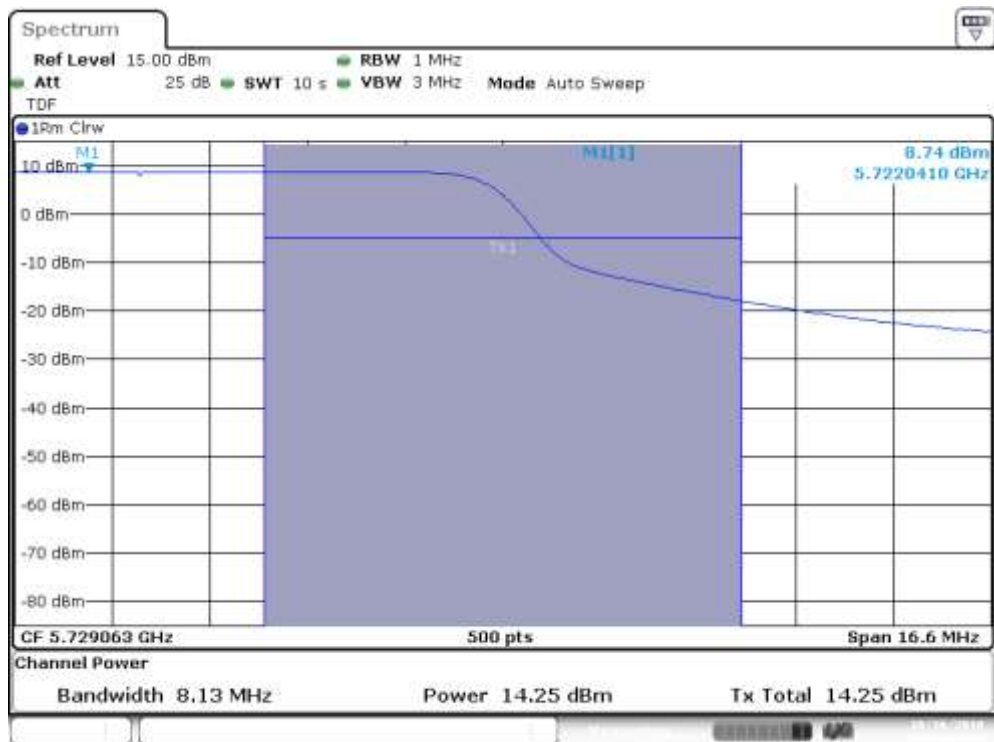
#### MIMO-B, 802.11n20, HT8

Channel 144 (Overlapped Channel)



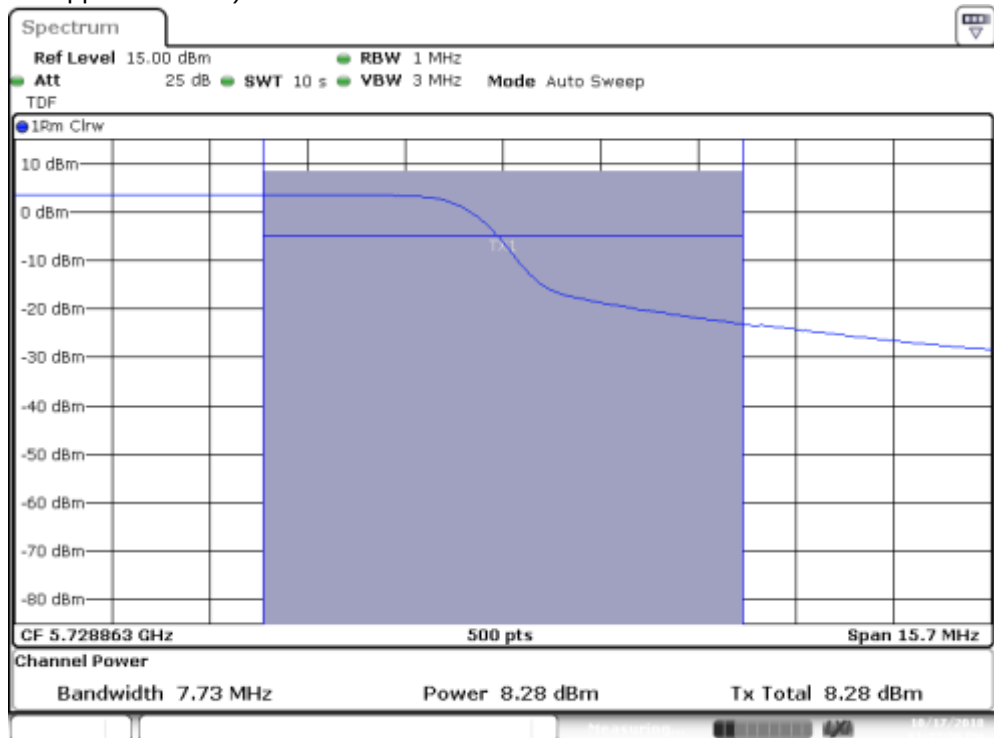
## SISO-B, 802.11n20, HT0

Channel 144 (Overlapped Channel)



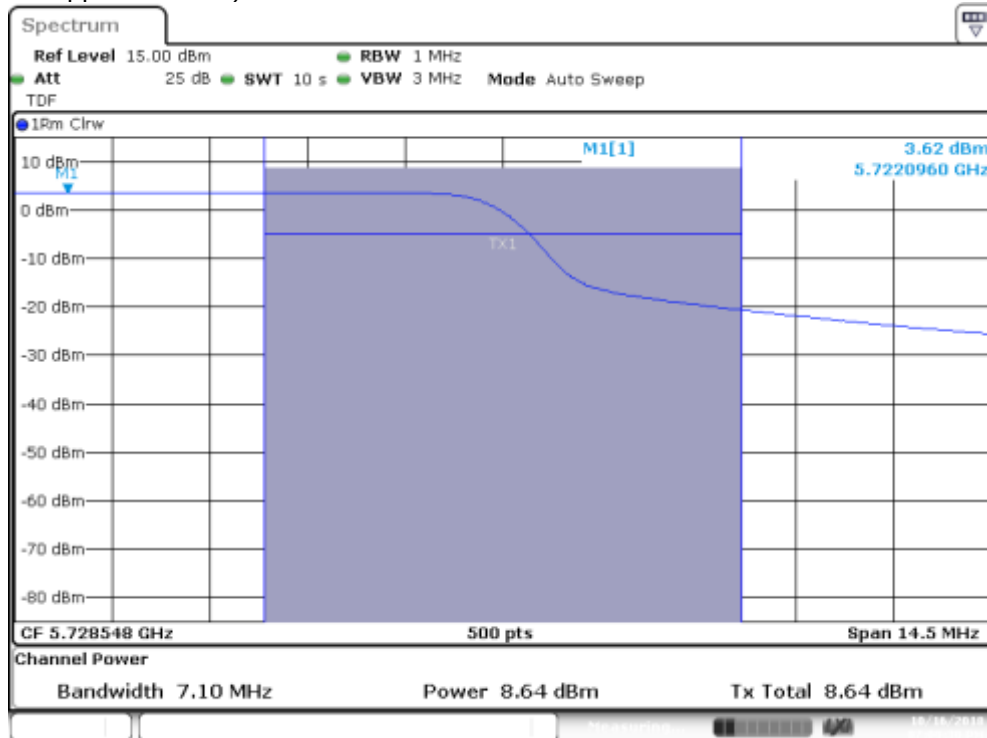
## MIMO-A, 802.11n40, HT8

Channel 142F (Overlapped Channel)



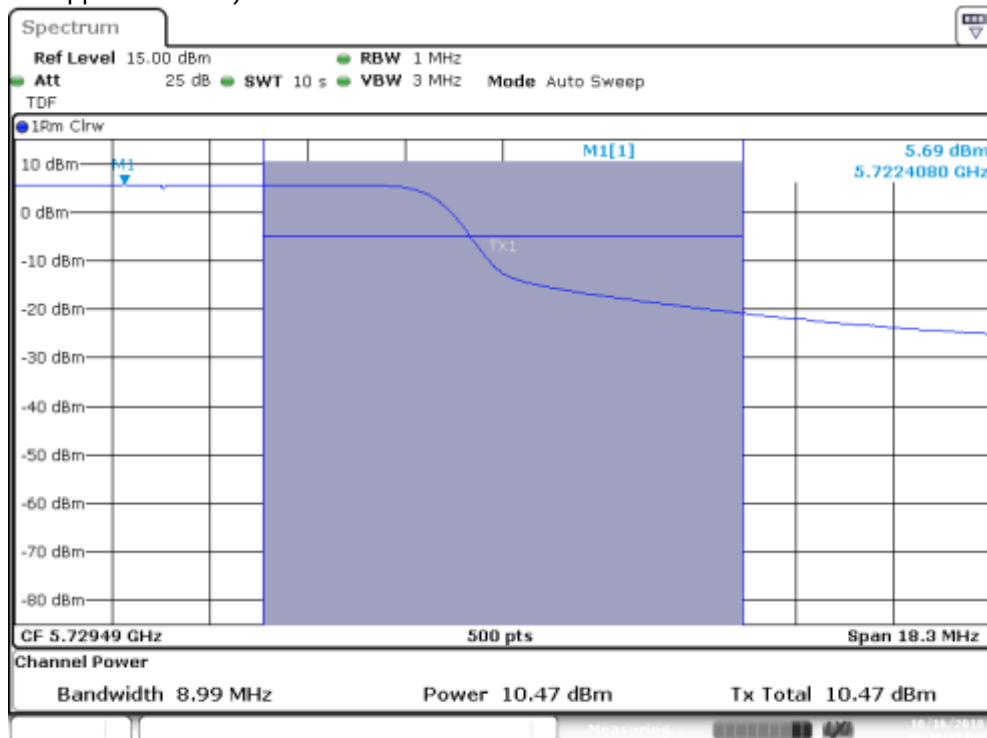
## MIMO-B, 802.11n40, HT8

Channel 142F (Overlapped Channel)



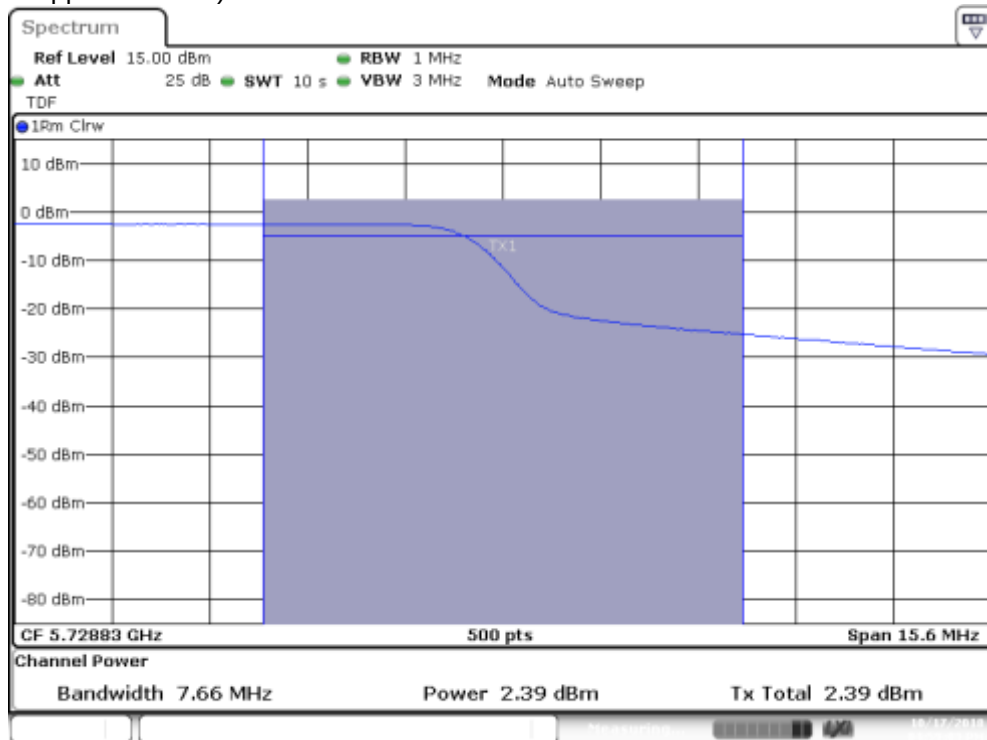
## SISO-B, 802.11n40, HT0

Channel 142F (Overlapped Channel)



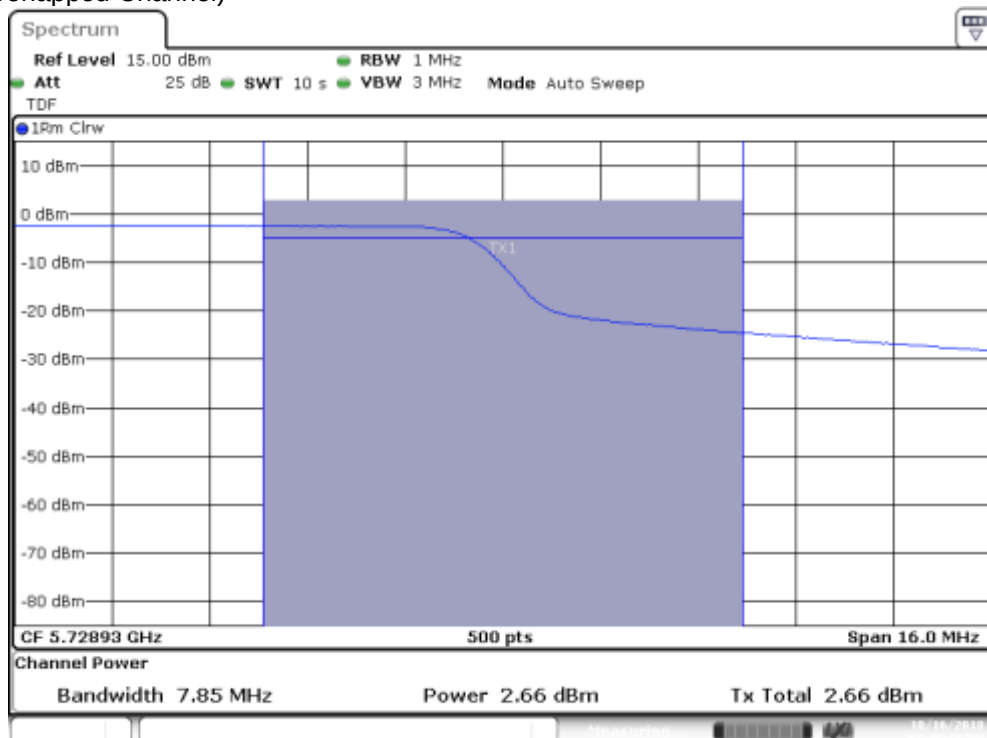
## MIMO-A, 802.11ac80, VHT0

Channel 138 (Overlapped Channel)



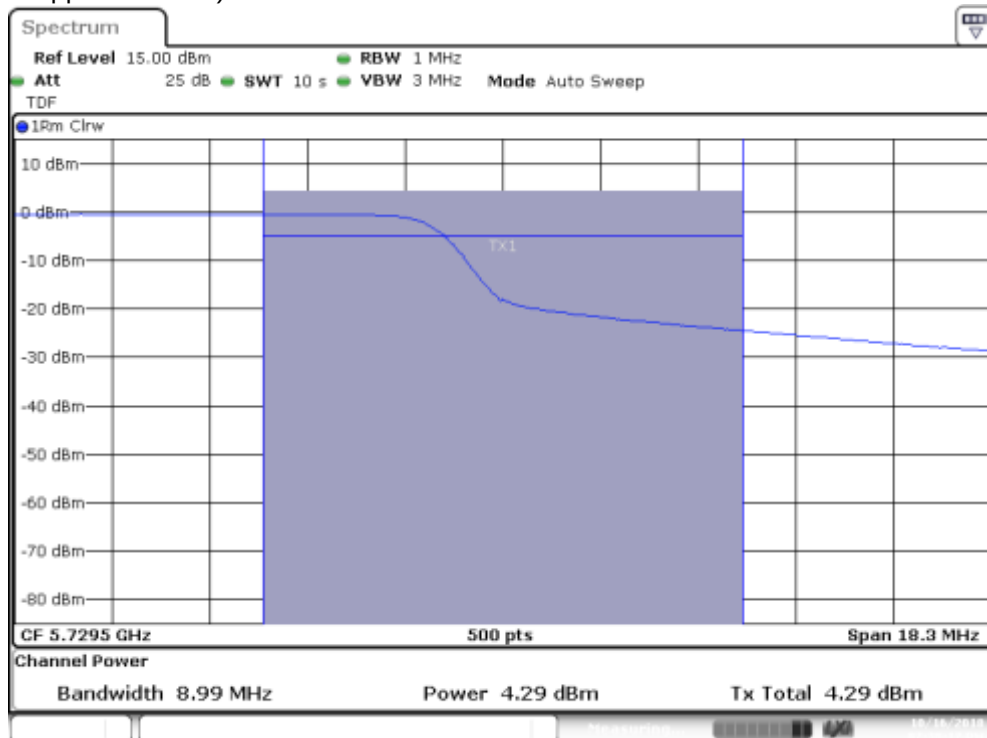
## MIMO-B, 802.11ac80, VHT0

Channel 138 (Overlapped Channel)



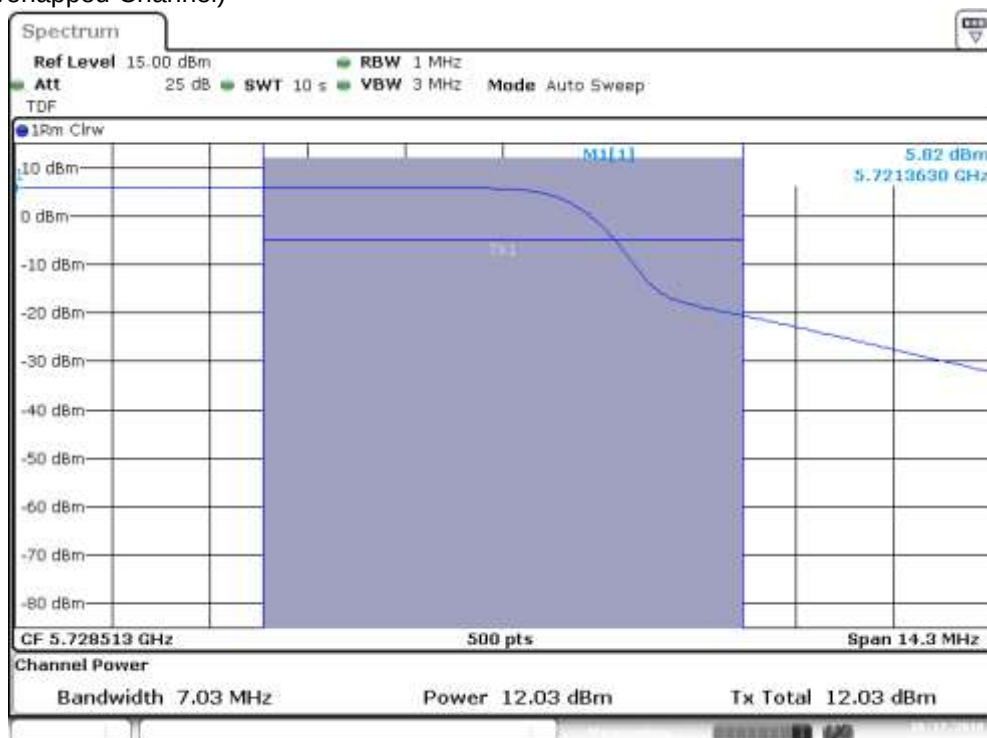
## SISO-B, 802.11ac80, VHT0

Channel 138 (Overlapped Channel)



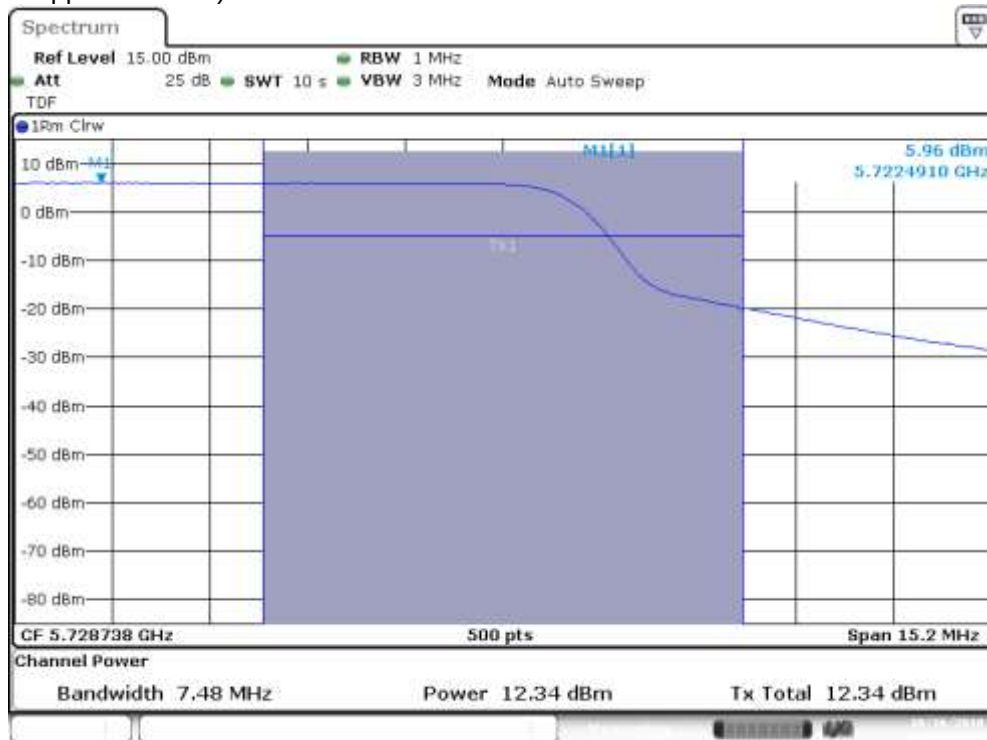
## MIMO-A, 802.11ax20, HE0

Channel 144 (Overlapped Channel)



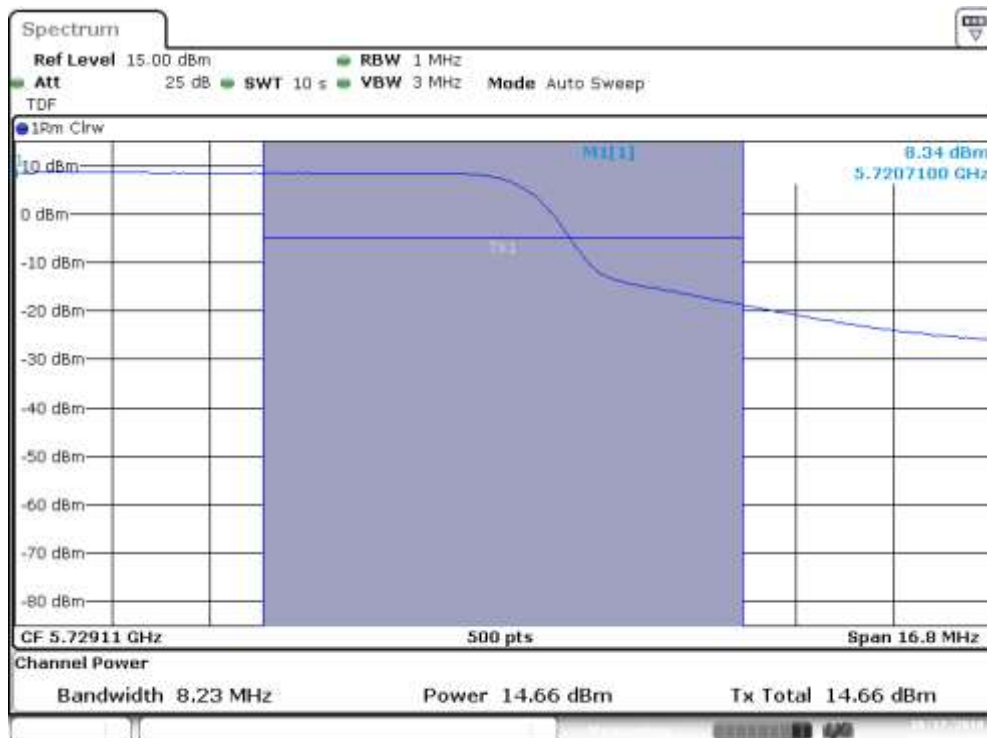
## MIMO-B, 802.11ax20, HE0

### Channel 144 (Overlapped Channel)



# SISO-A, 802.11ax20, HE0

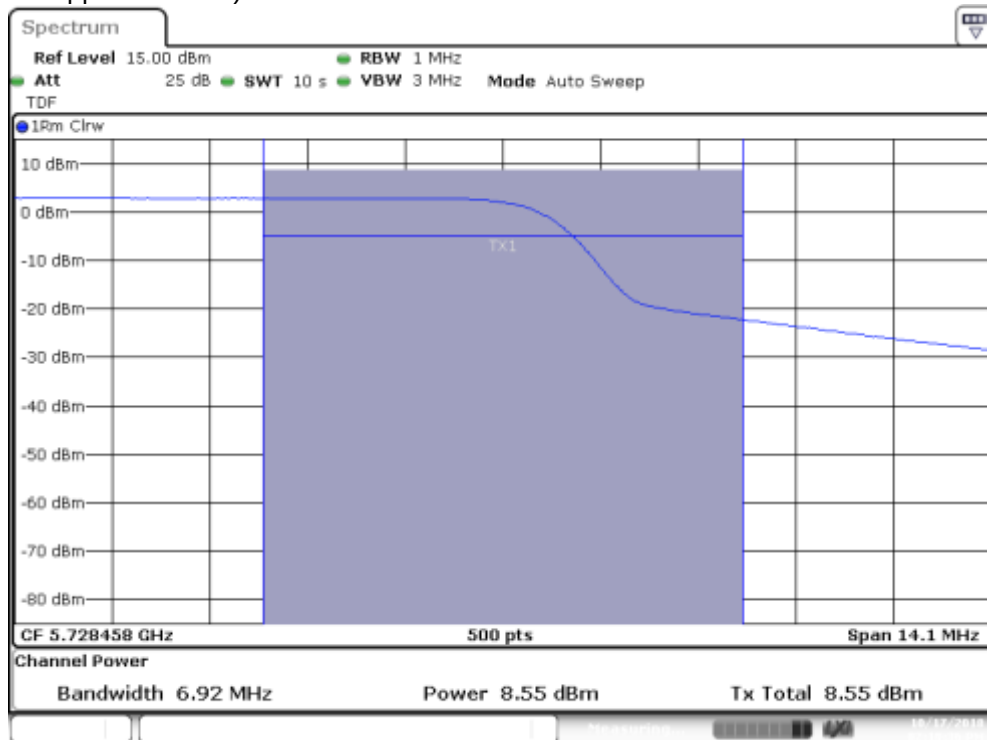
Channel 144 (Overlapped Channel)





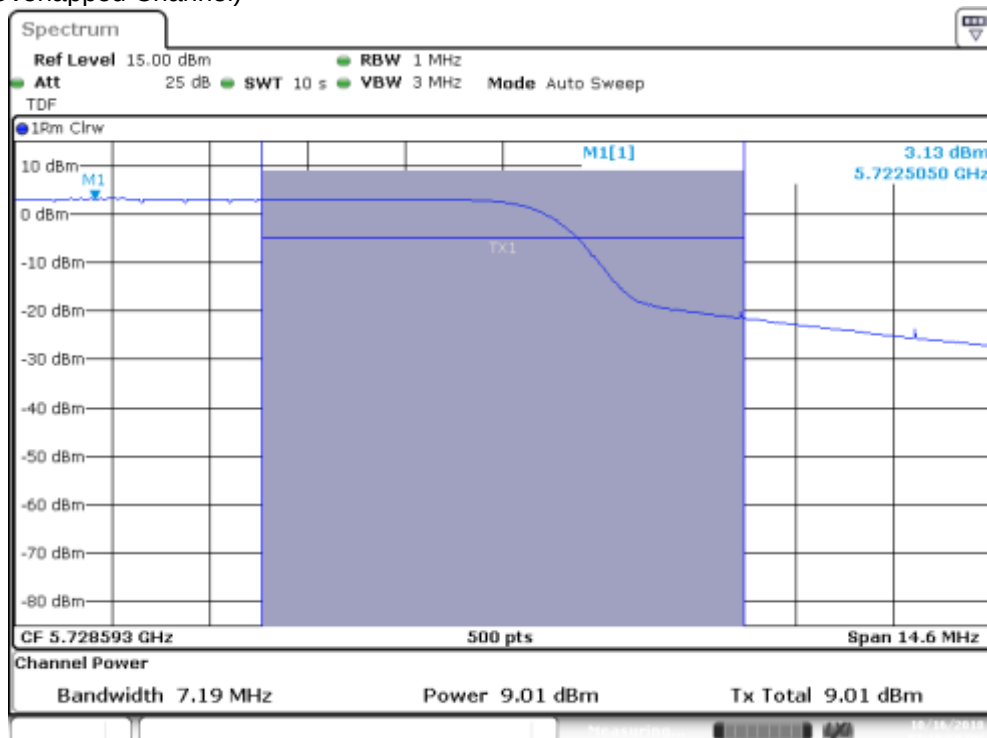
## MIMO-A, 802.11ax40, HE0

Channel 142F (Overlapped Channel)



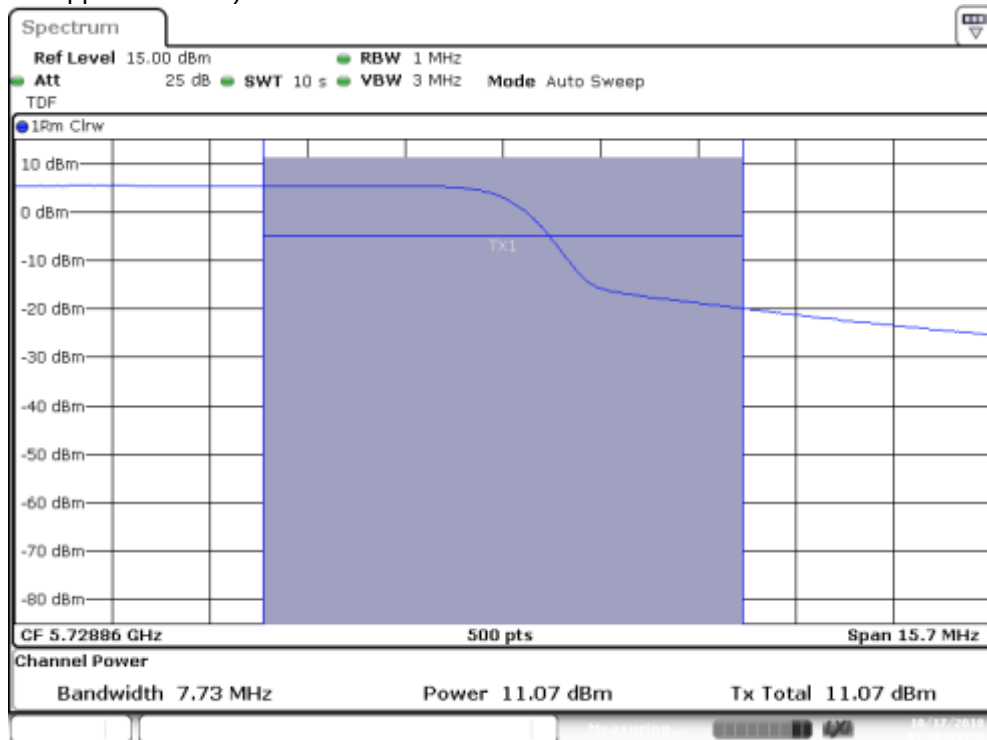
## MIMO-B, 802.11ax40, HE0

Channel 142F (Overlapped Channel)



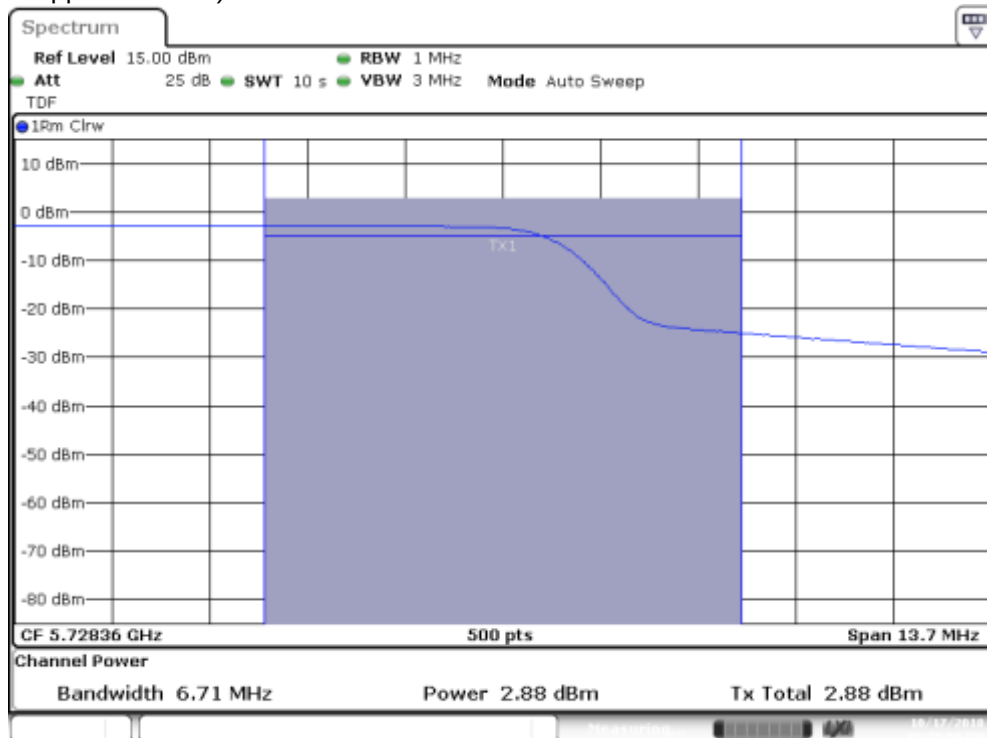
## SISO-A, 802.11ax40, HE0

Channel 142F (Overlapped Channel)



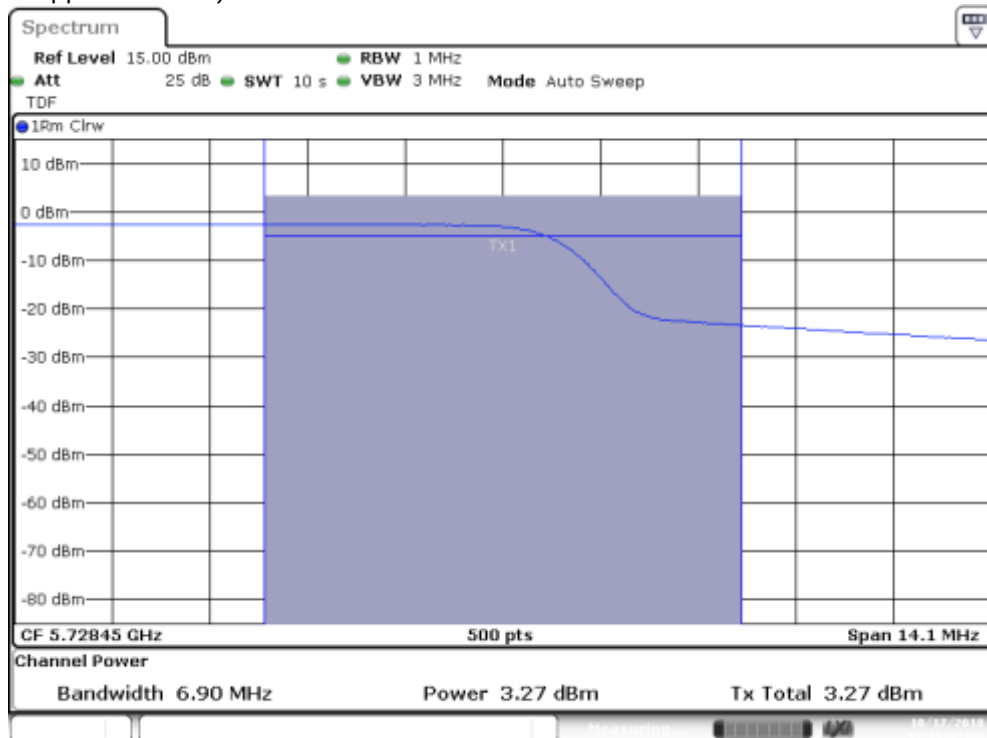
## MIMO-A, 802.11ax80, HE0

Channel 138 (Overlapped Channel)



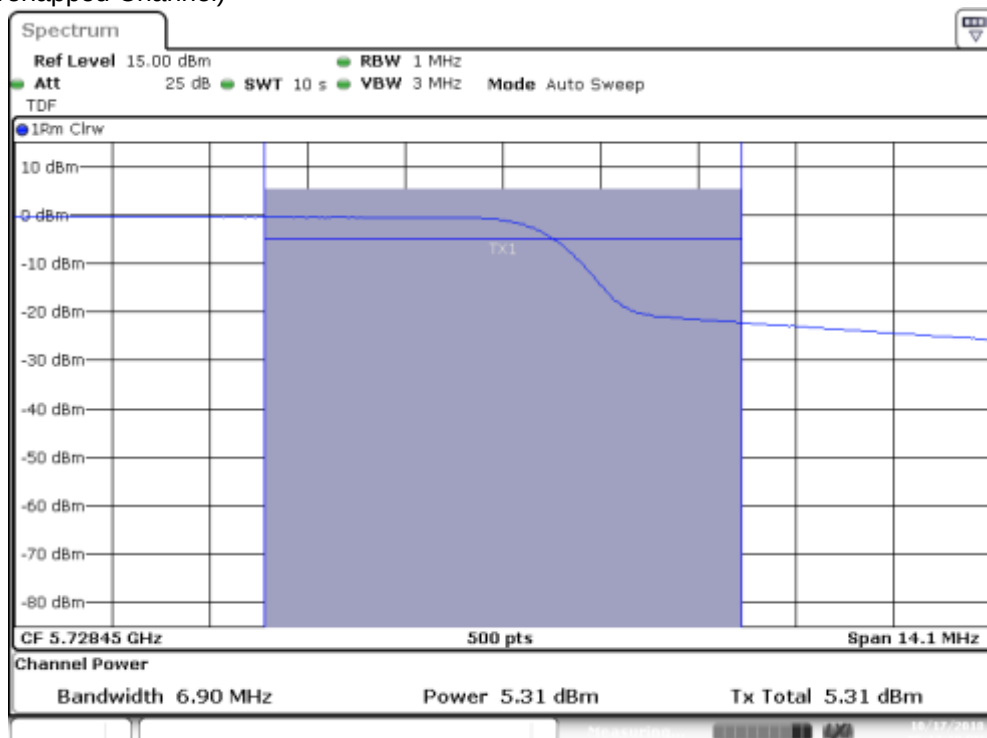
## MIMO-B, 802.11ax80, HE0

Channel 138 (Overlapped Channel)



## SISO-A, 802.11ax80, HE0

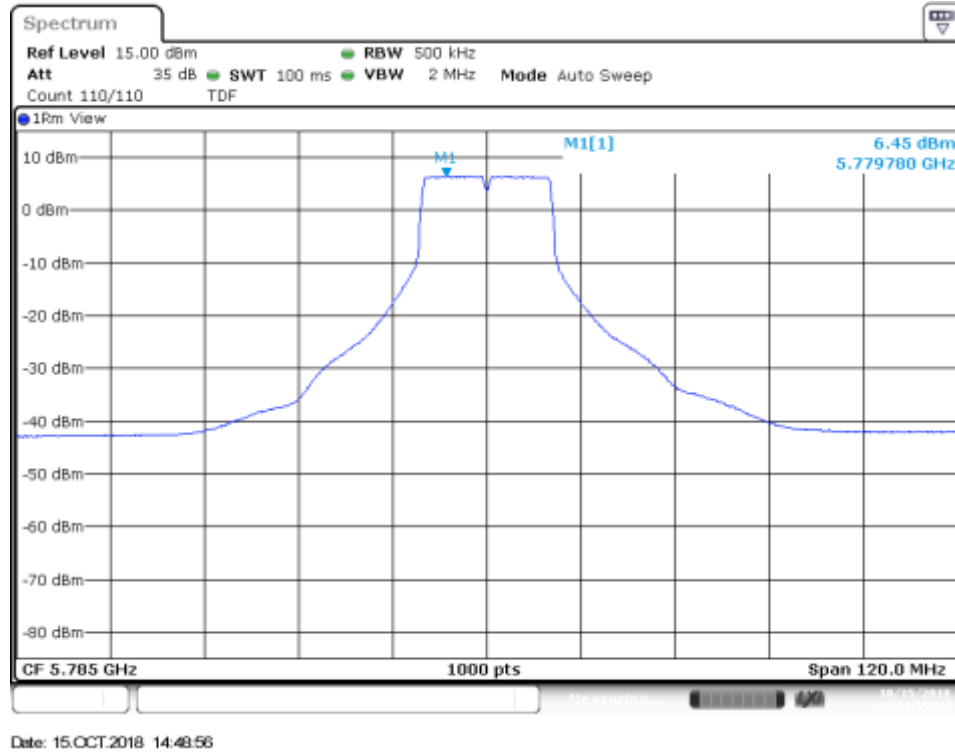
Channel 138 (Overlapped Channel)



### B.3.7 Peak power spectral Density

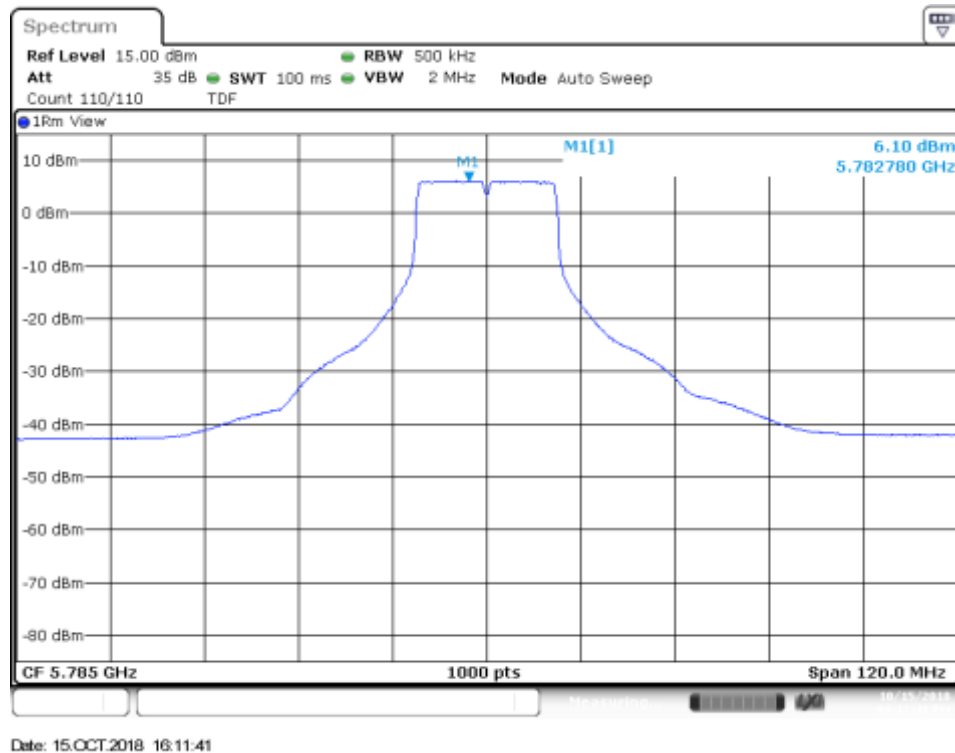
## SISO-A, 802.11a, 6Mbps

Channel 157



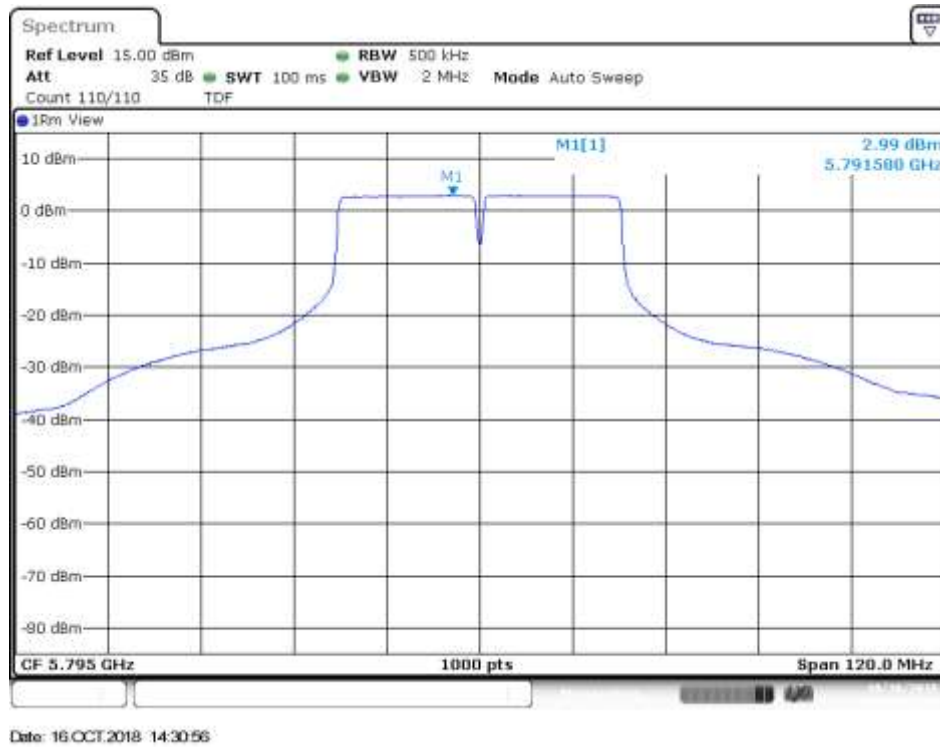
## SISO-A, 802.11n20, HT0

Channel 157



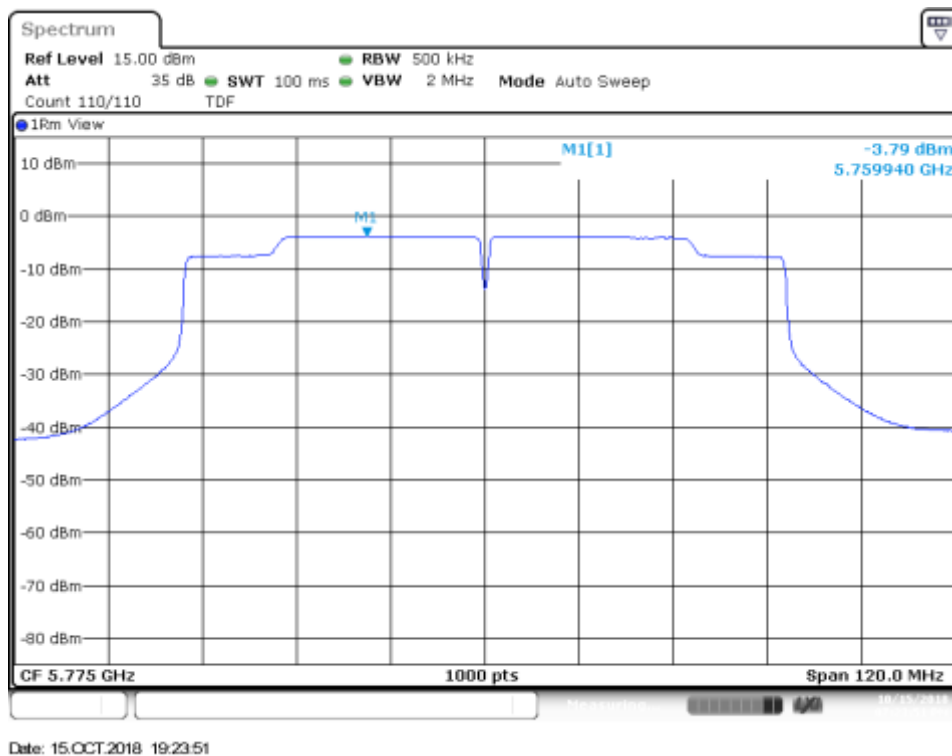
## SISO-B, 802.11n40, HT0

Channel 159F



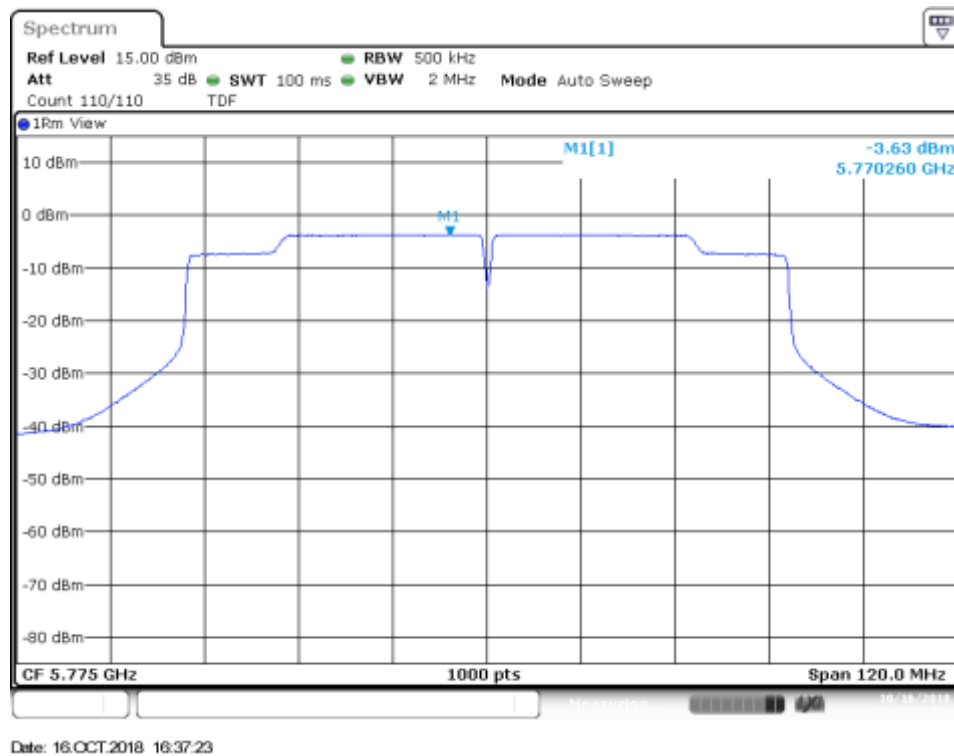
## MIMO-A, 802.11 ac80, VHT0

Channel 155



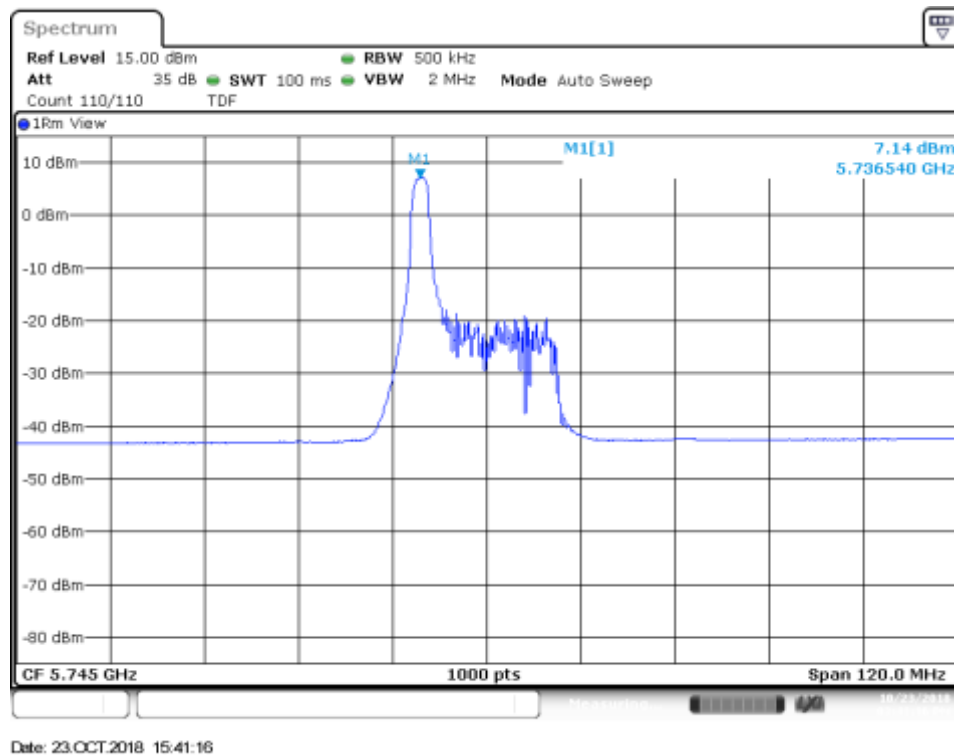
## MIMO-B, 802.11 ac80, VHT0

Channel 155



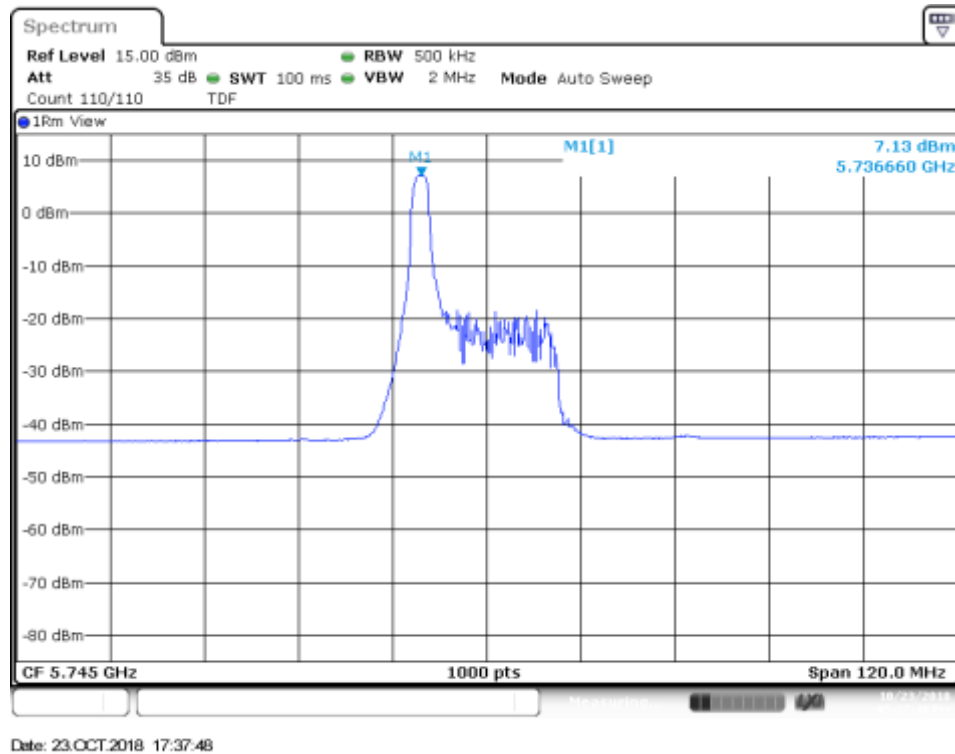
## MIMO-A, 802.11ax20, HE0, RU 26/0

Channel 149



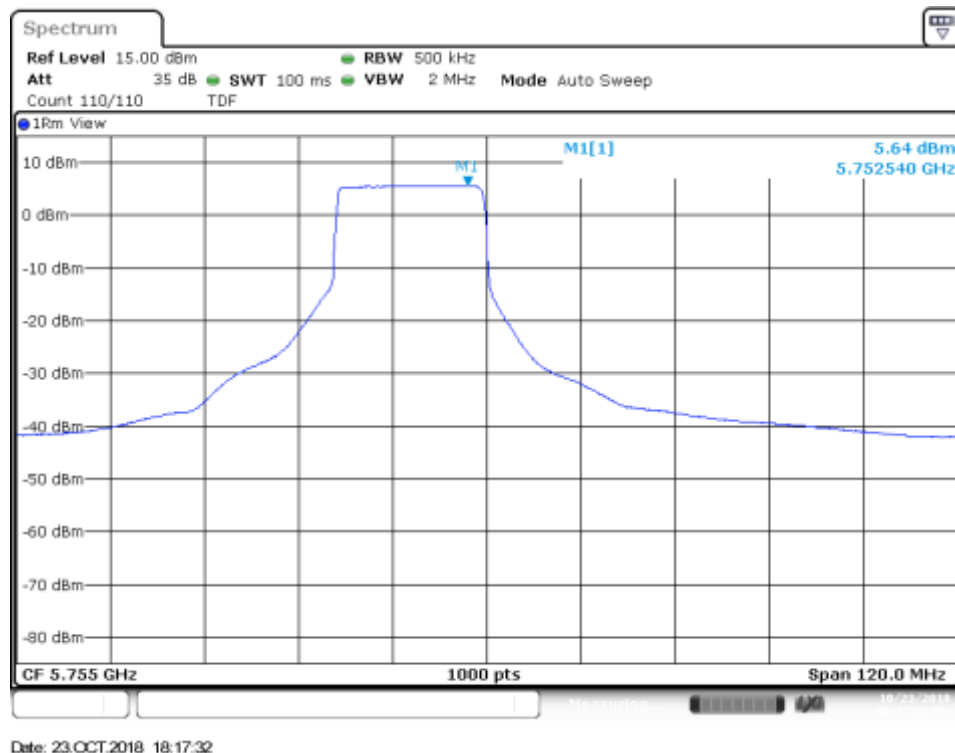
## MIMO-B, 802.11ax20, HE0, RU 26/0

Channel 149



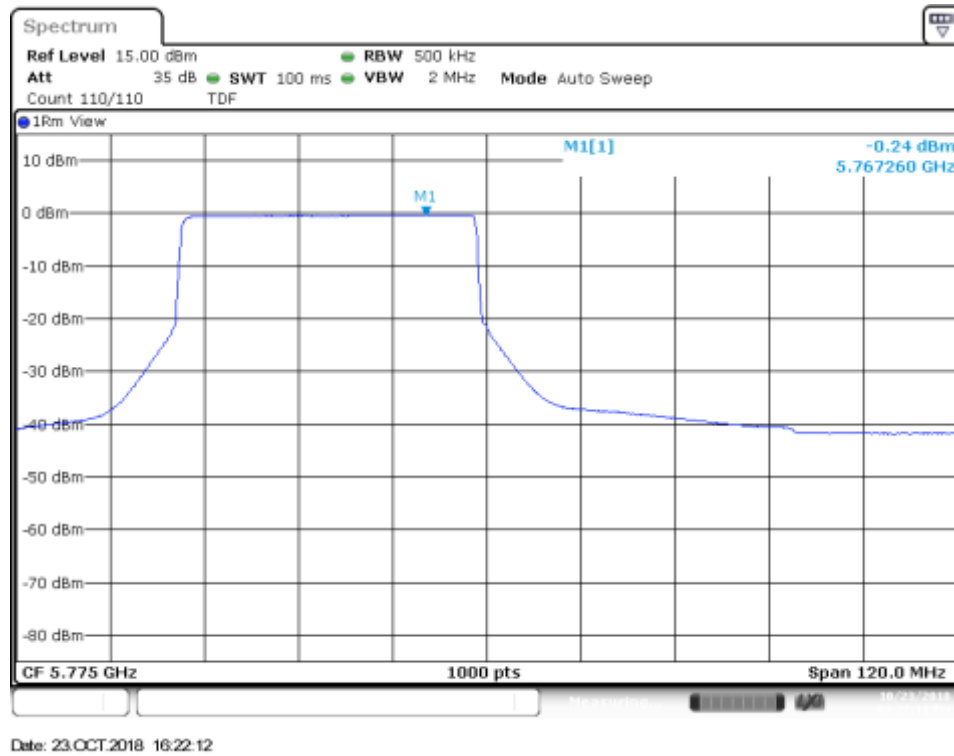
## SISO-B, 802.11ax40, HE0, RU 242/61

Channel 151F



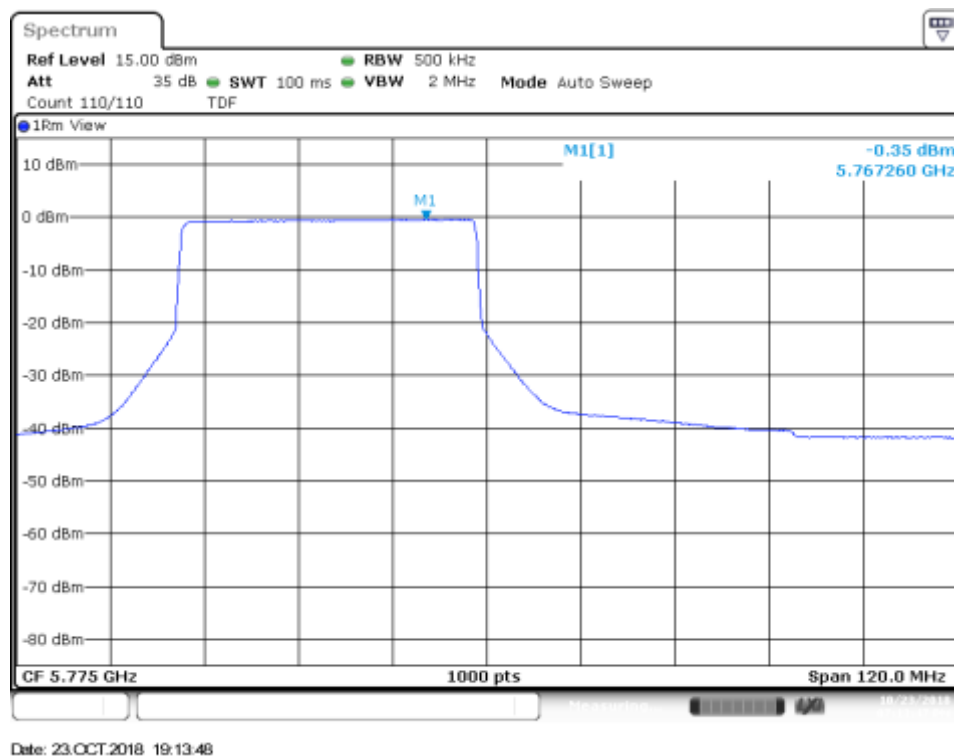
## MIMO-A, 802.11ax80, HE0, RU 484/65

Channel 155



## MIMO-B, 802.11ax80, HE0

Channel 155

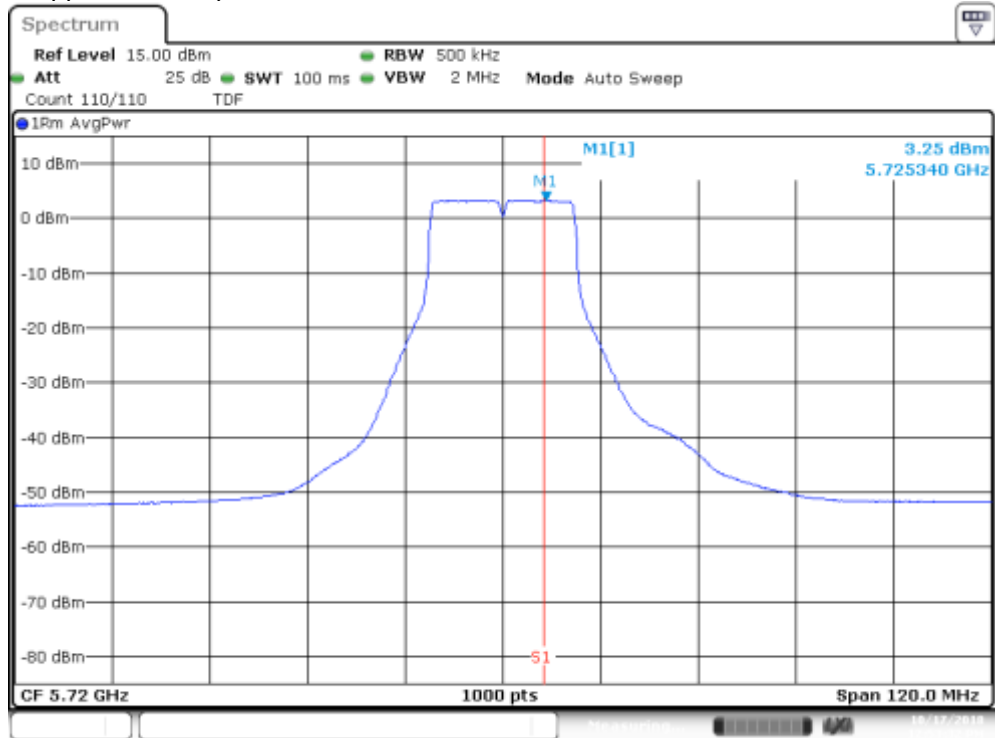




### B.3.8 Peak power spectral Density (Overlapped Channel)

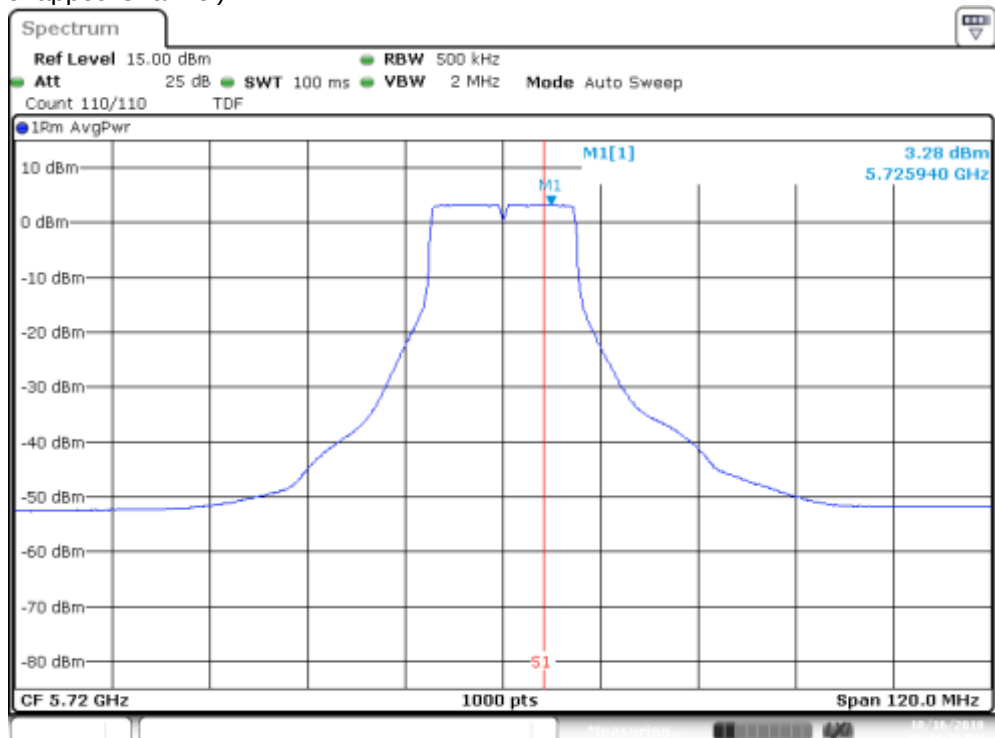
#### MIMO-A, 802.11n20, HT8

Channel 144 (Overlapped Channel)



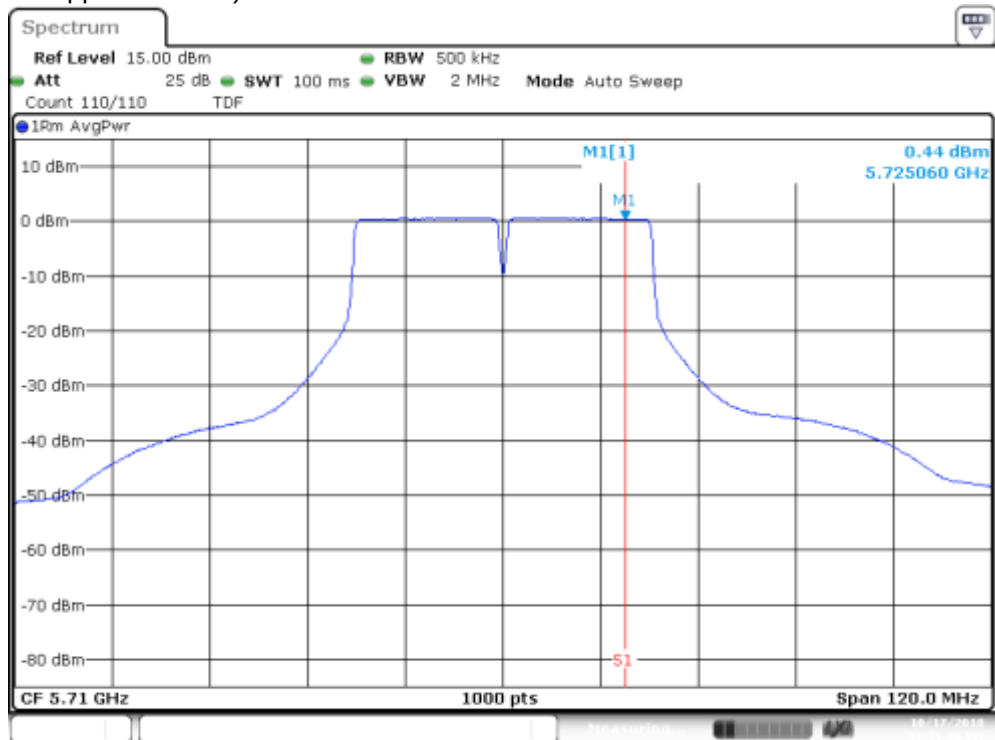
#### MIMO-B, 802.11n20, HT8

Channel 144 (Overlapped Channel)



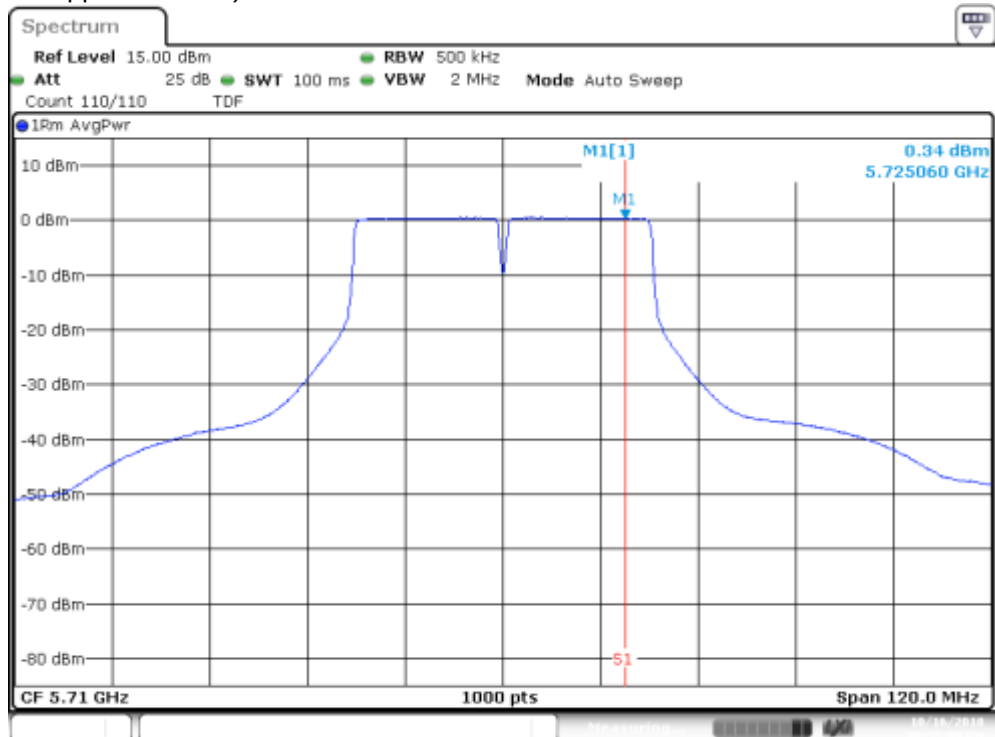
## MIMO-A, 802.11n40, HT8

Channel 142F (Overlapped Channel)



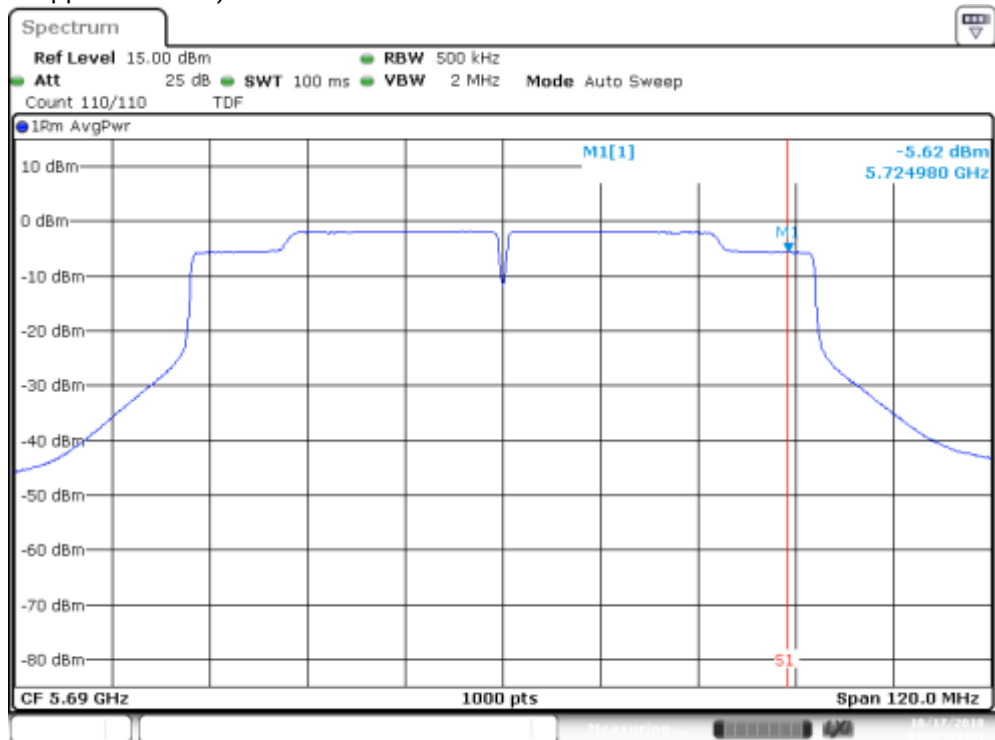
## MIMO-B, 802.11n40, HT8

Channel 142F (Overlapped Channel)



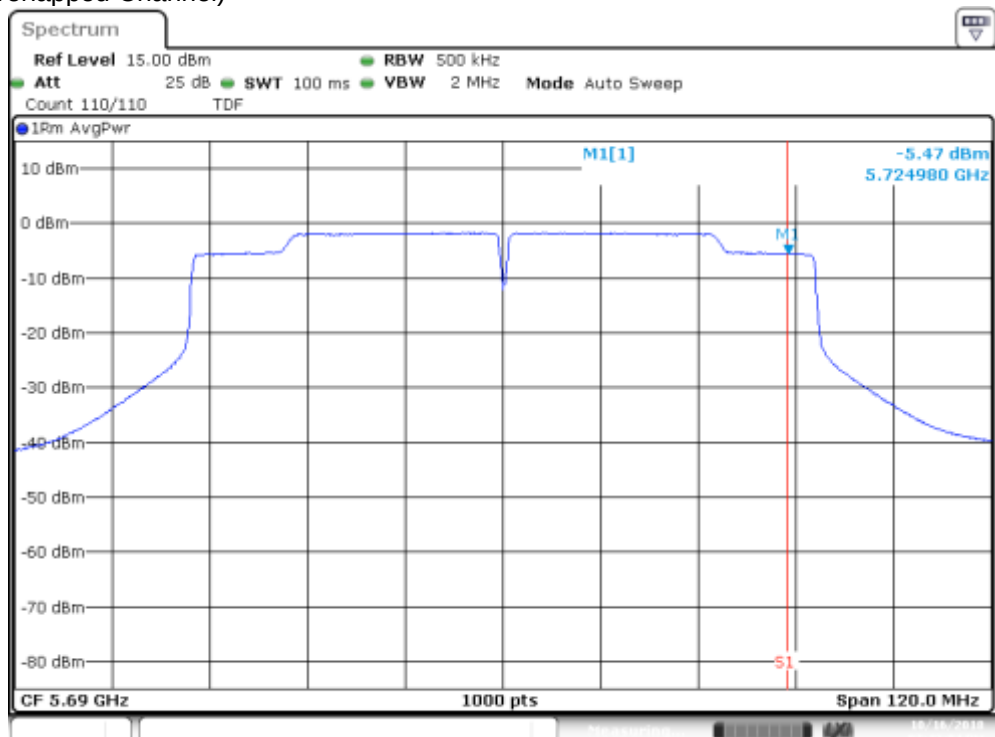
## MIMO-A, 802.11ac80, VHT0

Channel 138 (Overlapped Channel)



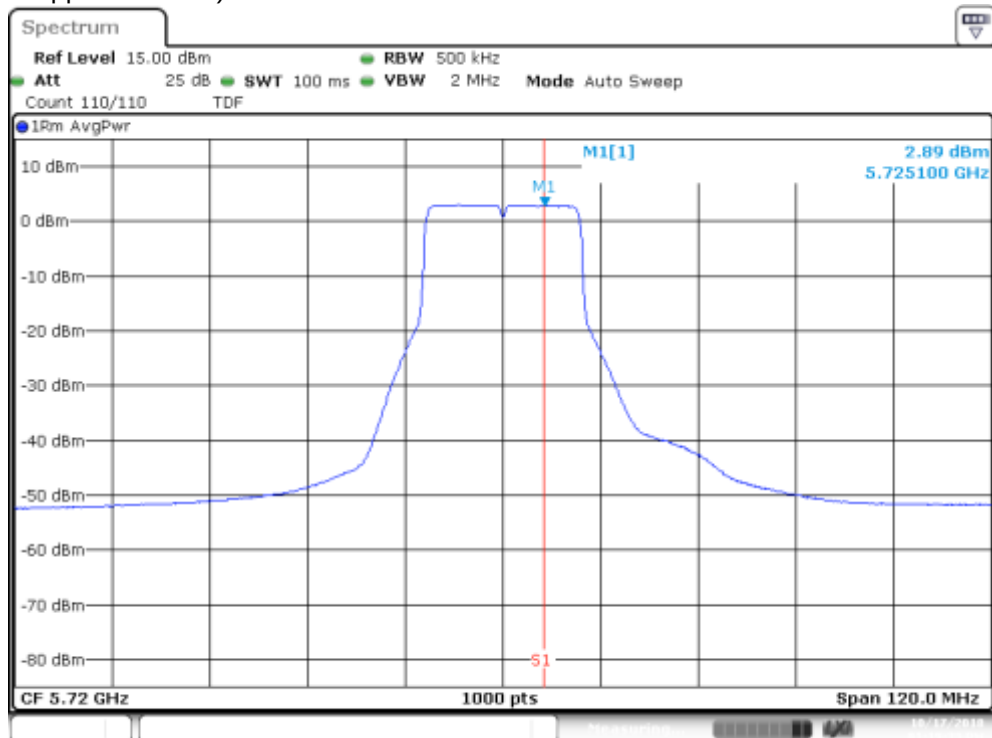
## MIMO-B, 802.11ac80, VHT0

Channel 138 (Overlapped Channel)



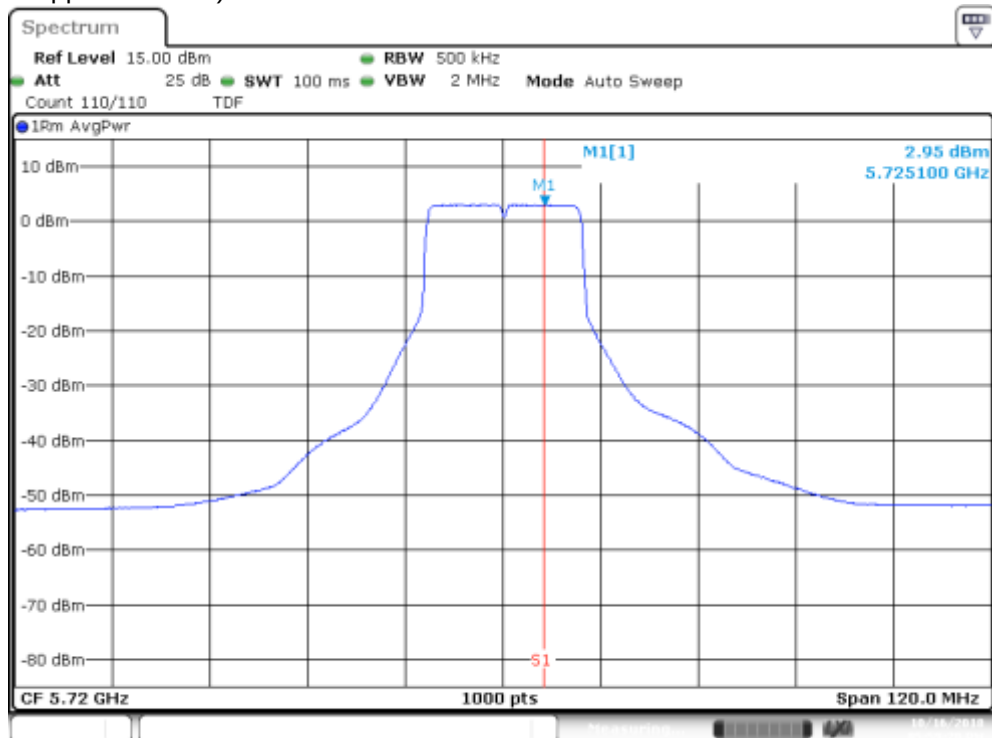
## MIMO-A, 802.11ax20, HE0

Channel 144 (Overlapped Channel)



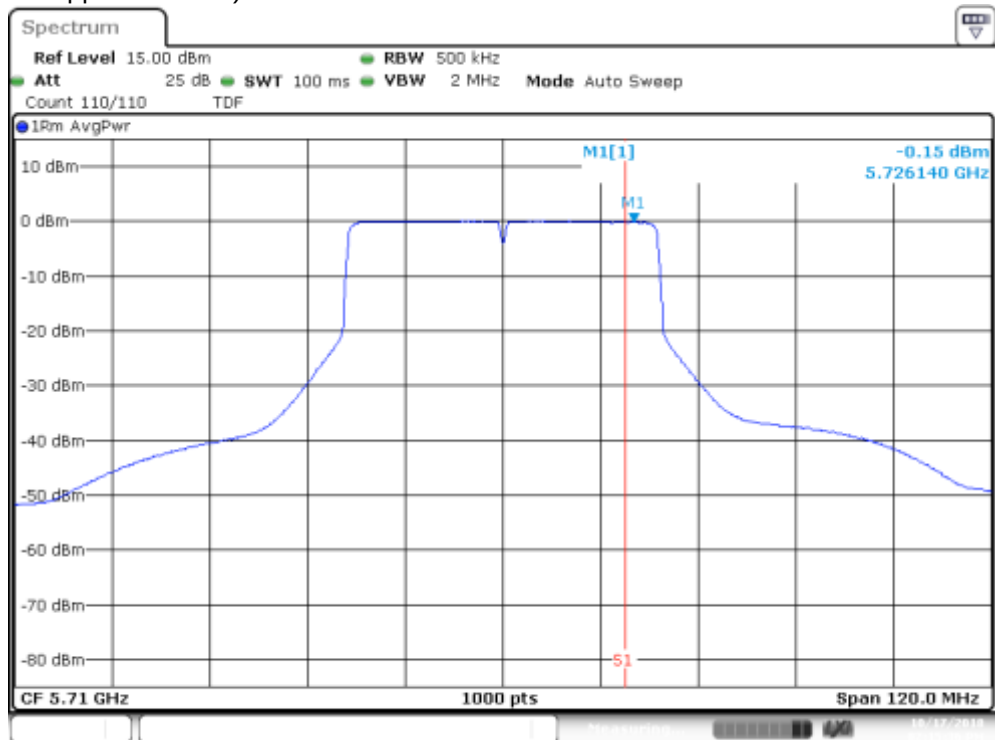
## MIMO-B, 802.11ax20, HE0

Channel 144 (Overlapped Channel)



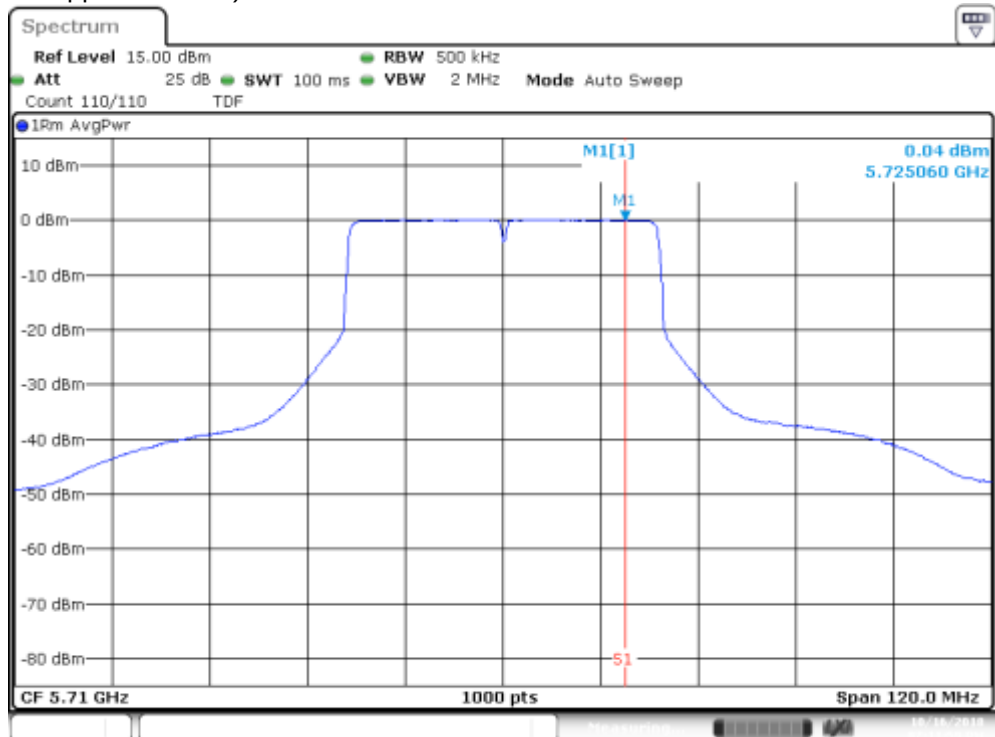
## MIMO-A, 802.11ax40, HE0

Channel 142F (Overlapped Channel)



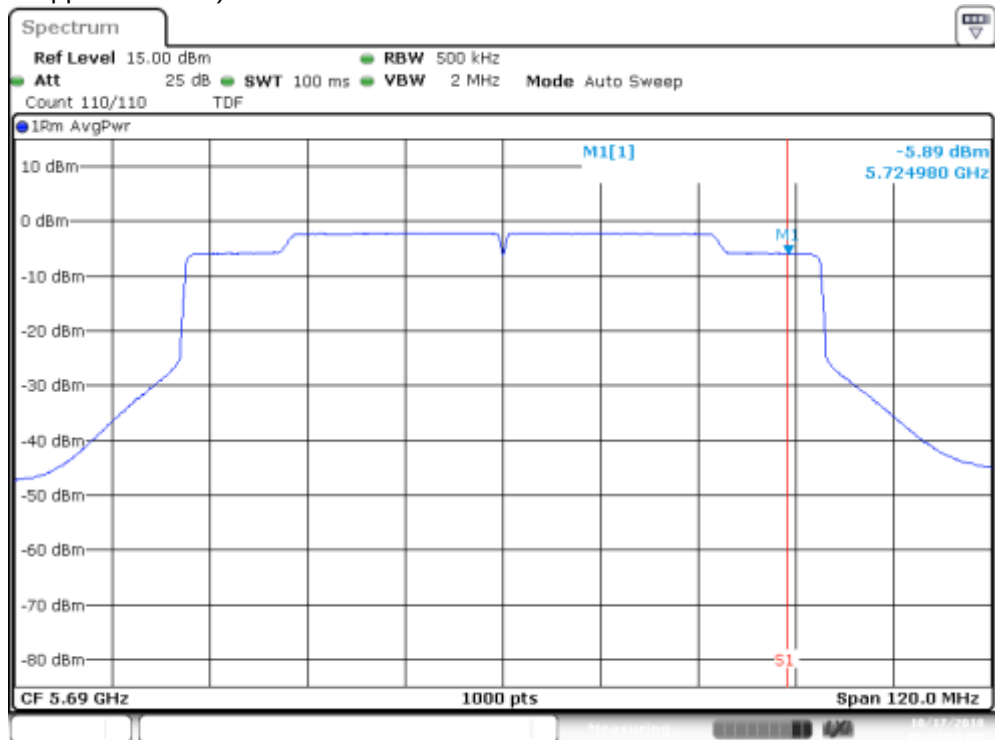
## MIMO-B, 802.11ax40, HE0

Channel 142F (Overlapped Channel)



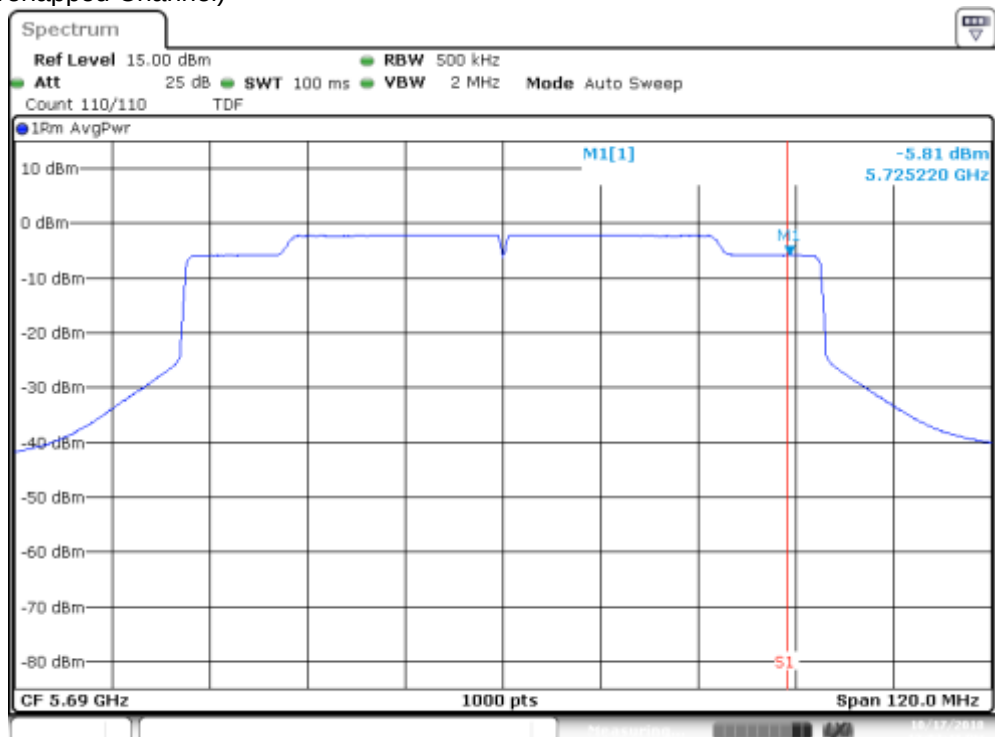
## MIMO-A, 802.11ax80, HE0

Channel 138 (Overlapped Channel)



## MIMO-B, 802.11ax80, HE0

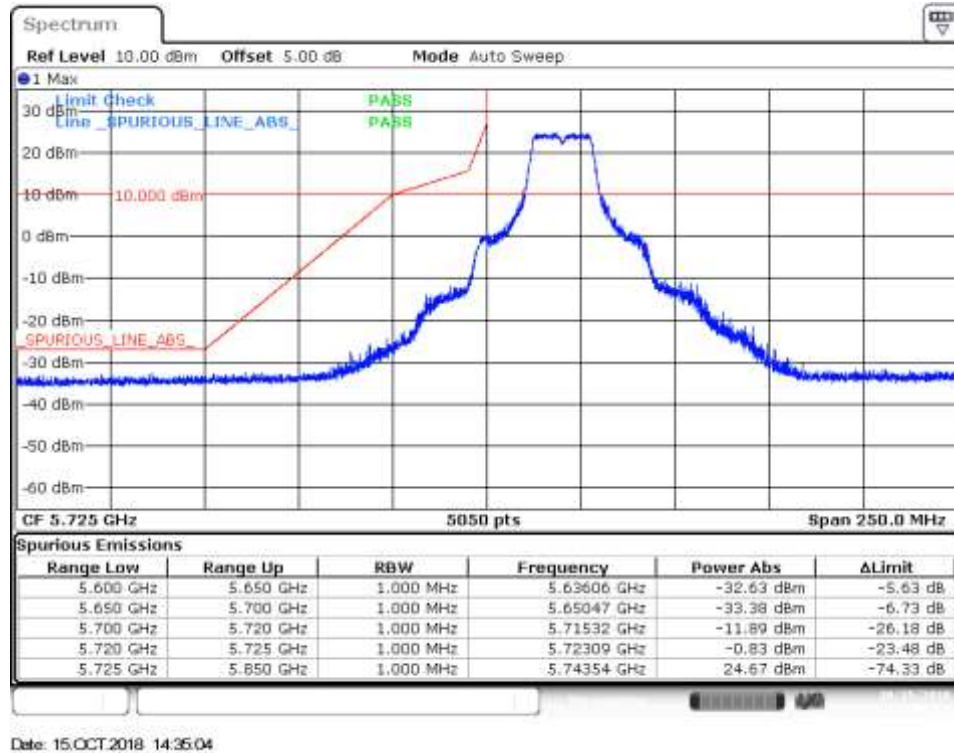
Channel 138 (Overlapped Channel)



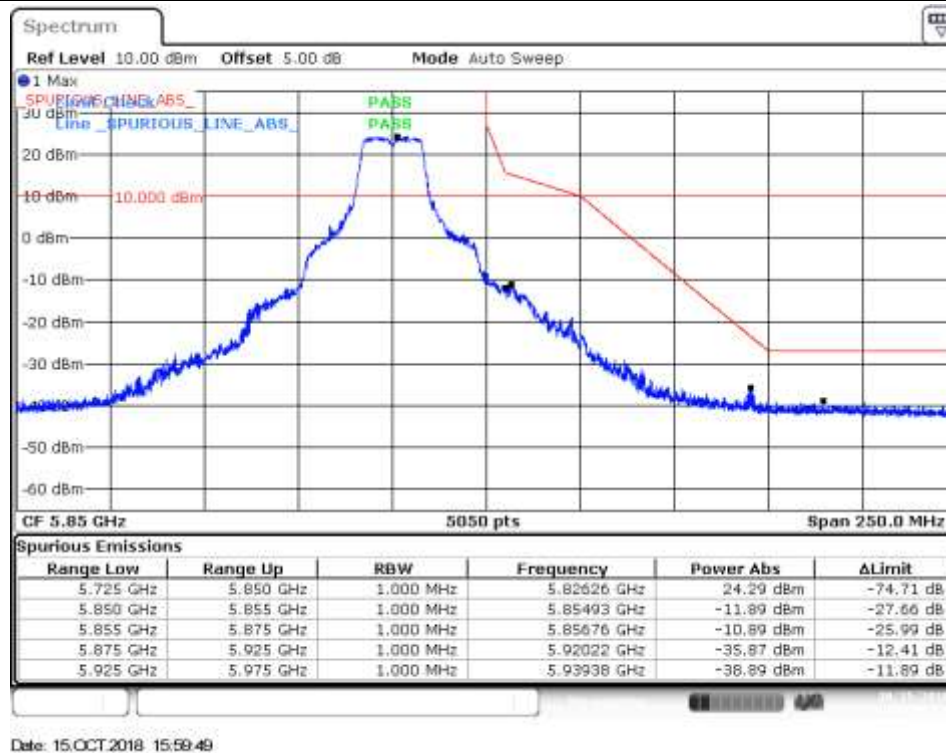
### B.3.9 Undesirable emission limits : Band Edge (Conducted)

#### 802.11a, 6Mbps – Chain A

##### BE Low Freq Section, Peak – CH149

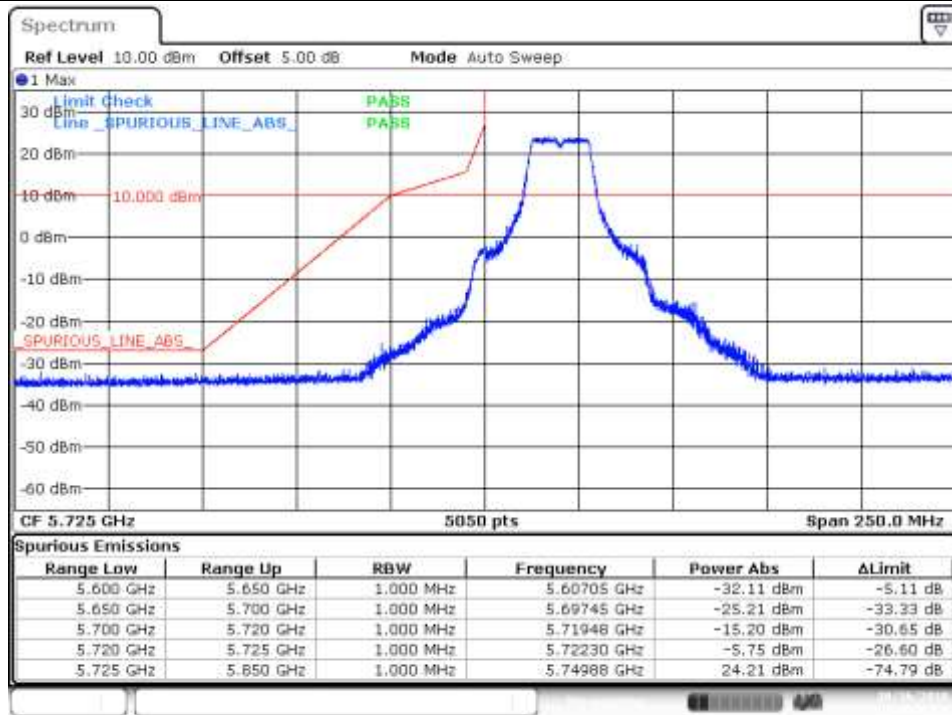


##### BE High Freq Section, Peak – CH165



## 802.11a, 6Mbps – Chain B

### BE Low Freq Section, Peak – CH149



Date: 16.OCT.2018 12:22:40

### BE High Freq Section, Peak – CH165

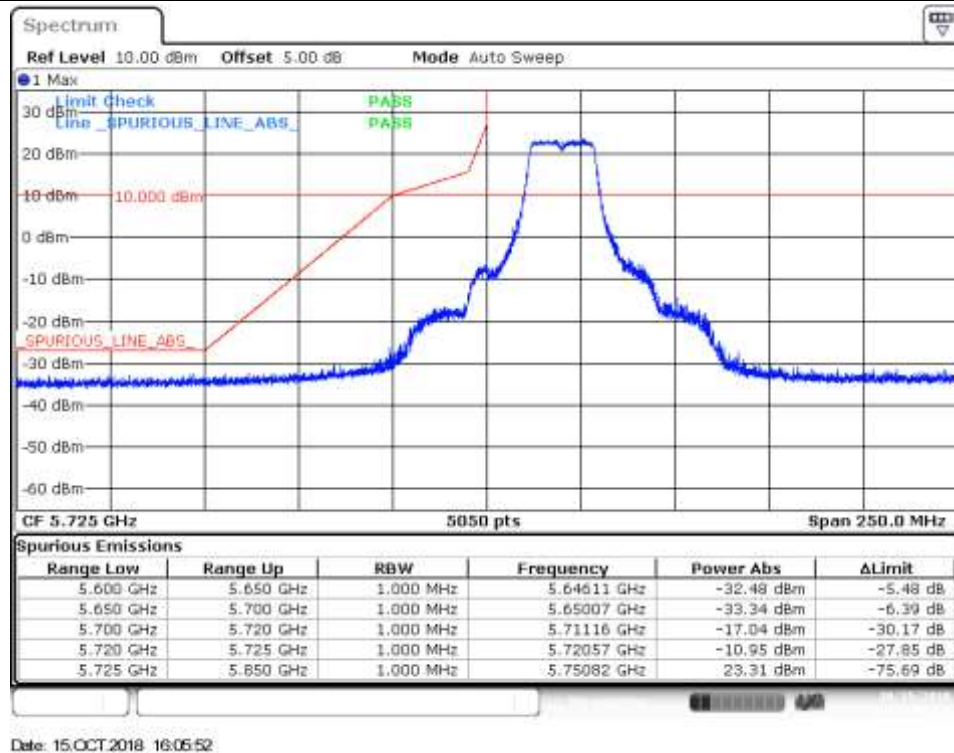


Date: 16.OCT.2018 12:38:56

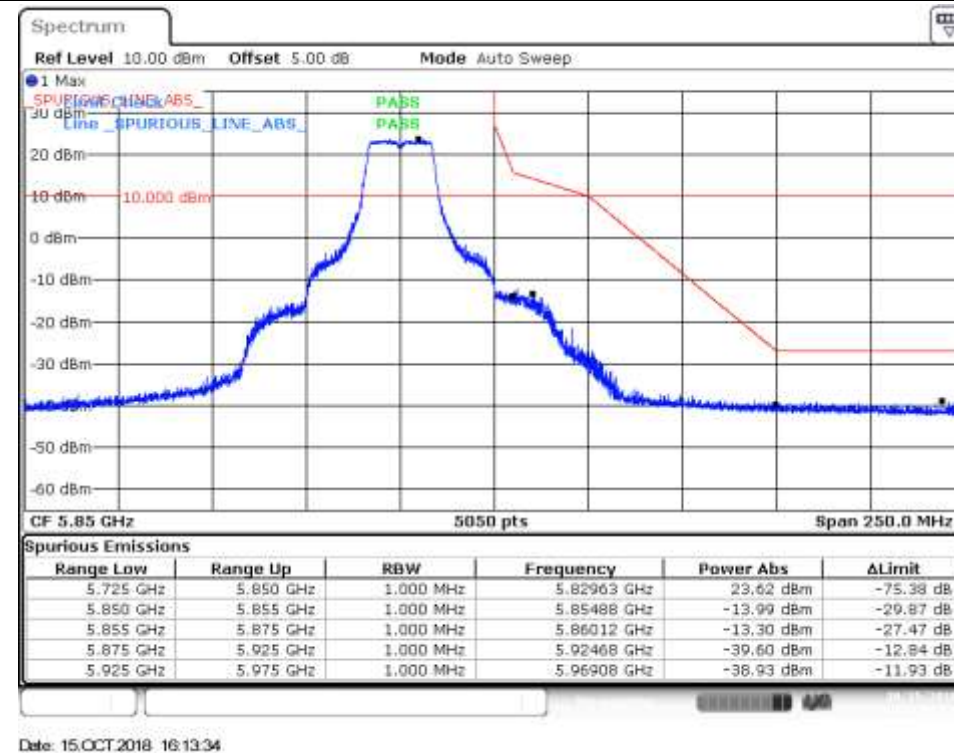


## 802.11n20, HT0 – SISO - Chain A

### BE Low Freq Section, Peak – CH149

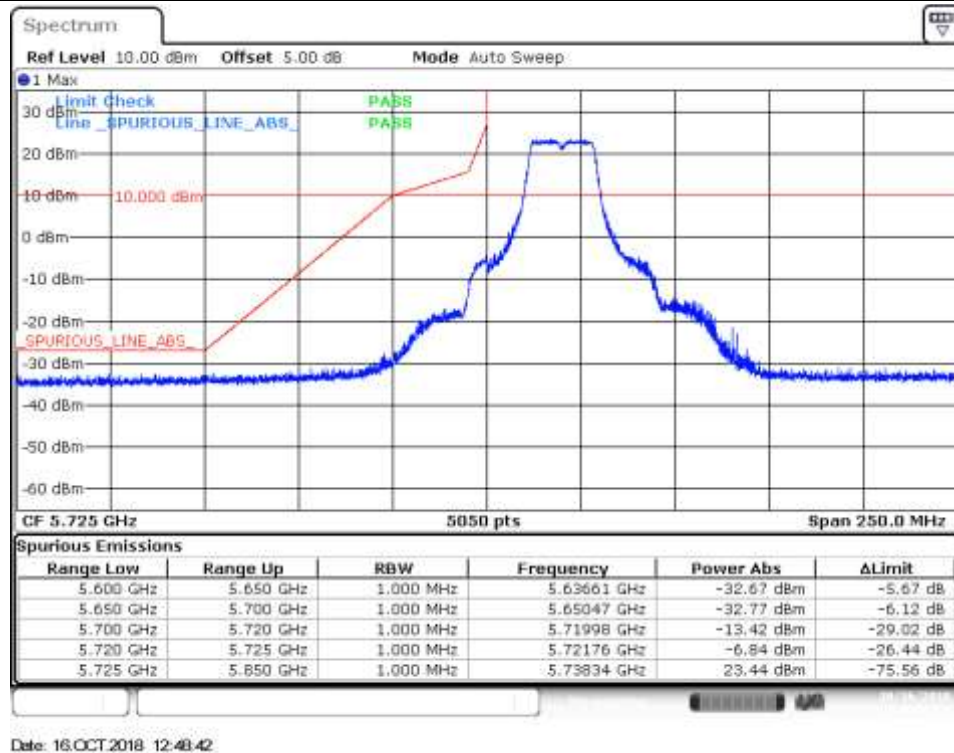


### BE High Freq Section, Peak – CH165

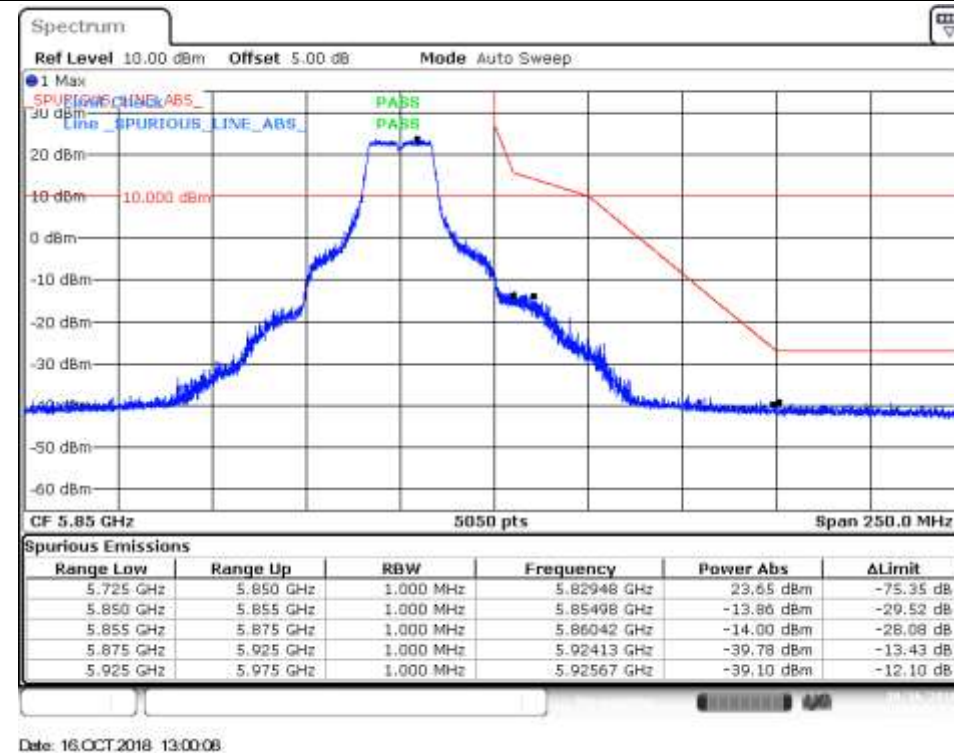


## 802.11n20, HT0 – SISO - Chain B

### BE Low Freq Section, Peak – CH149

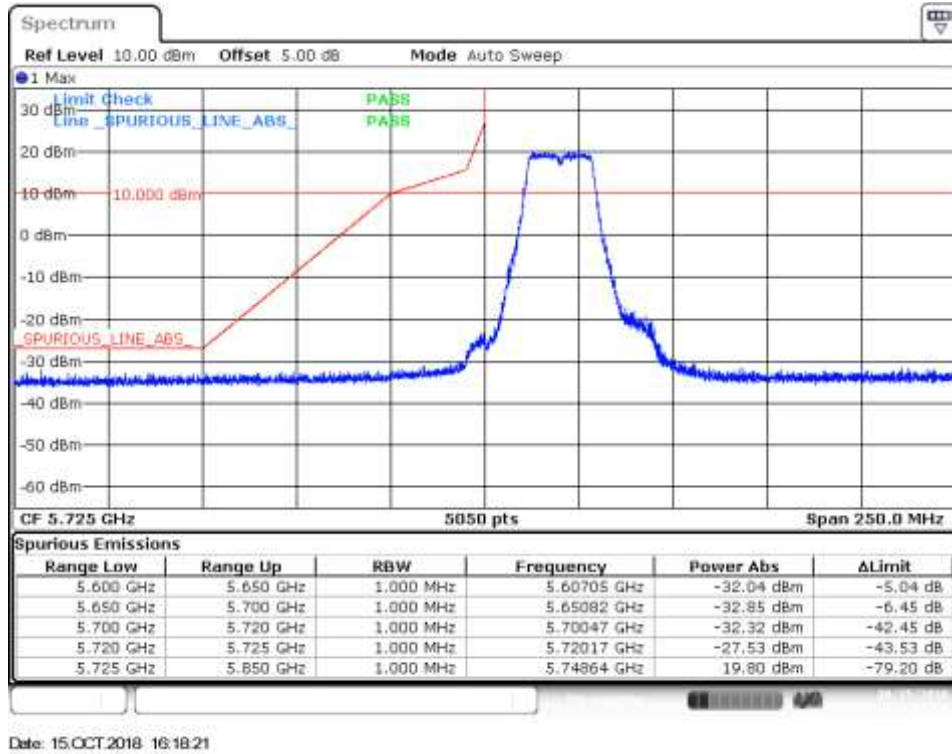


### BE High Freq Section, Peak – CH165

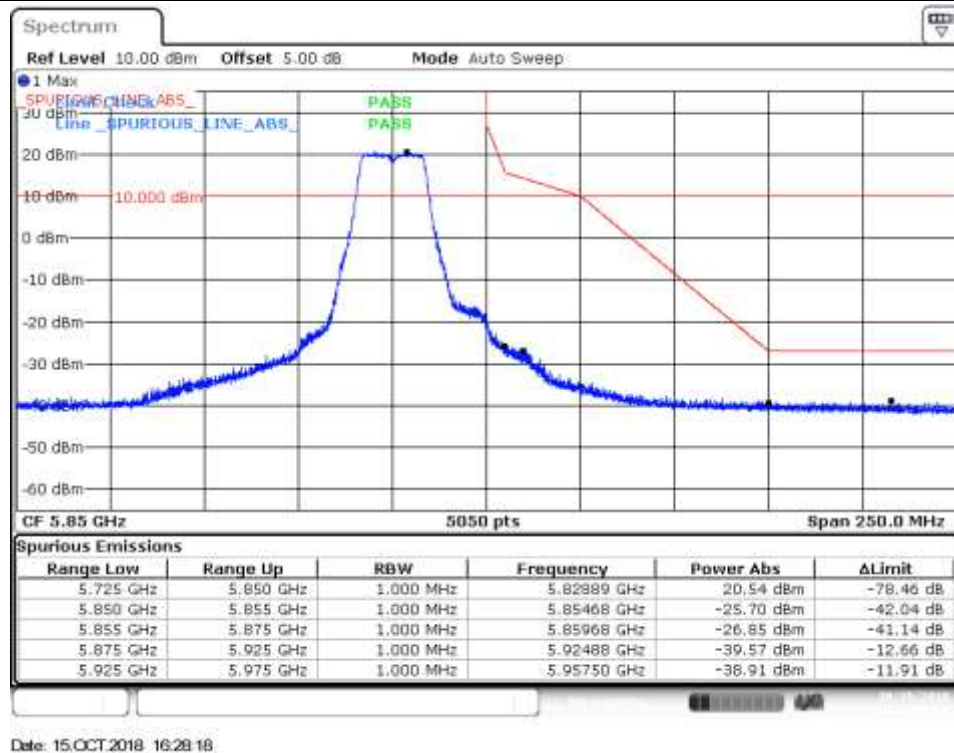


## 802.11n20, HT8 – MIMO - Chain A

### BE Low Freq Section, Peak – CH149

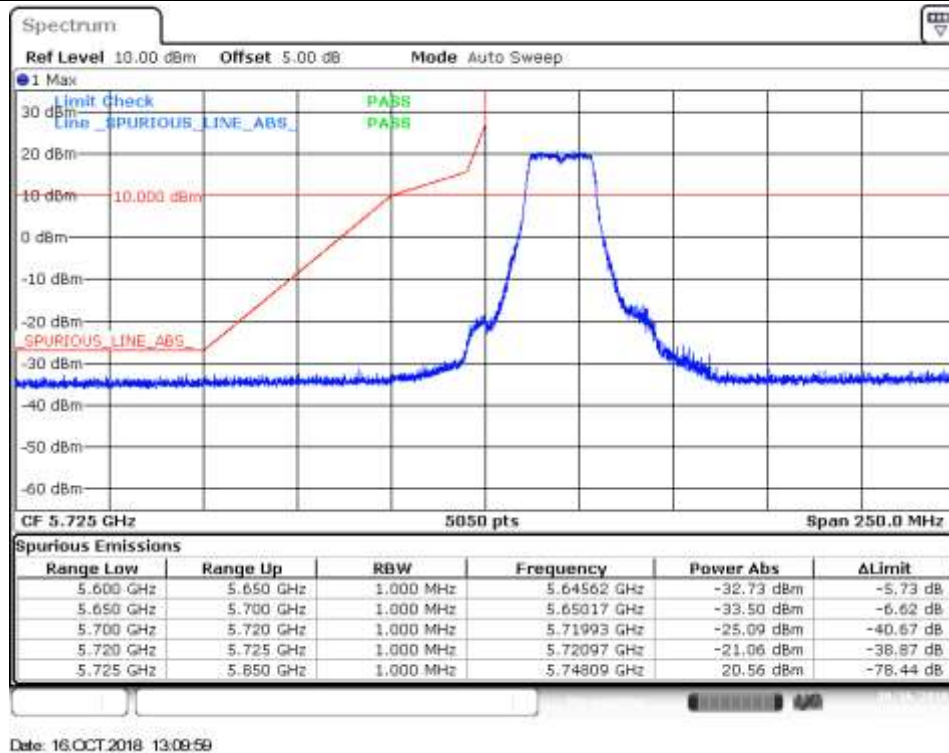


### BE High Freq Section, Peak – CH165

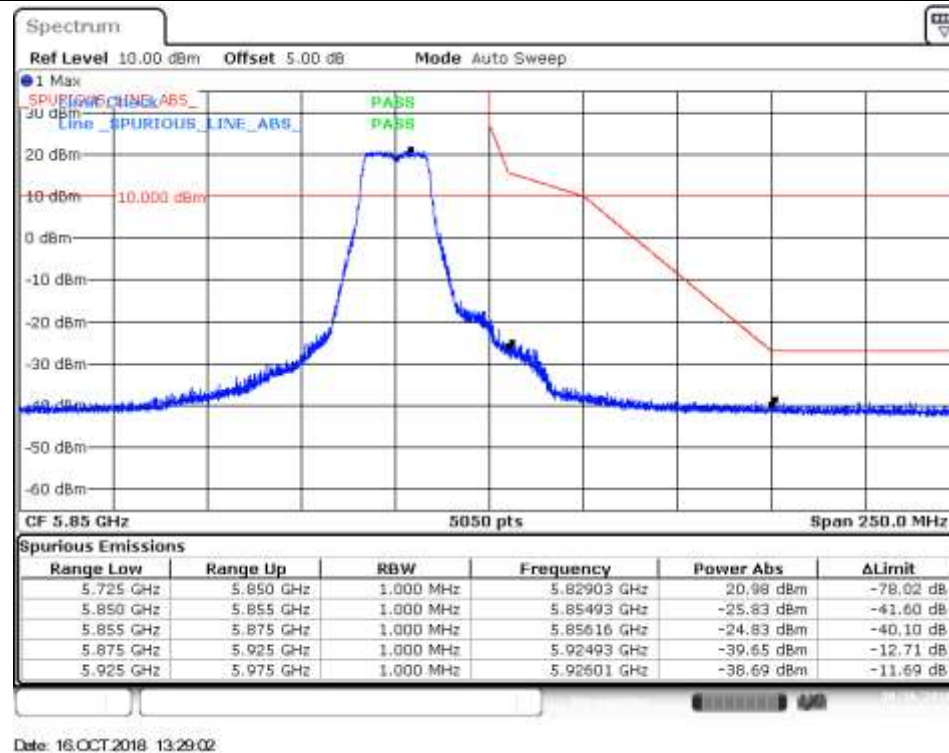


## 802.11n20, HT8 – MIMO - Chain B

### BE Low Freq Section, Peak – CH149



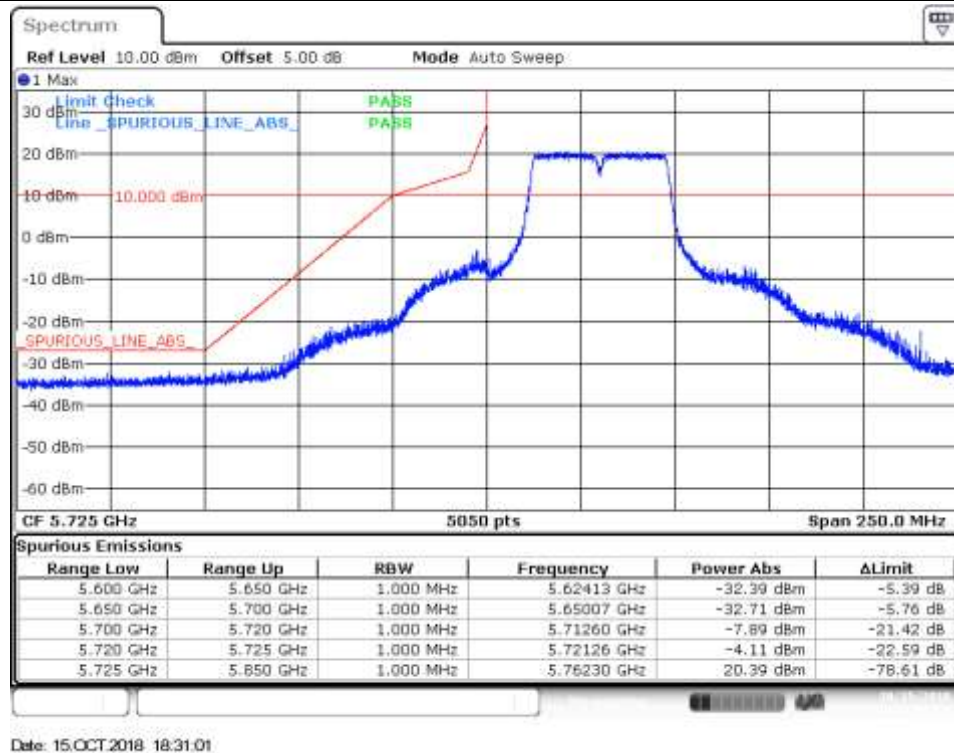
### BE High Freq Section, Peak – CH165



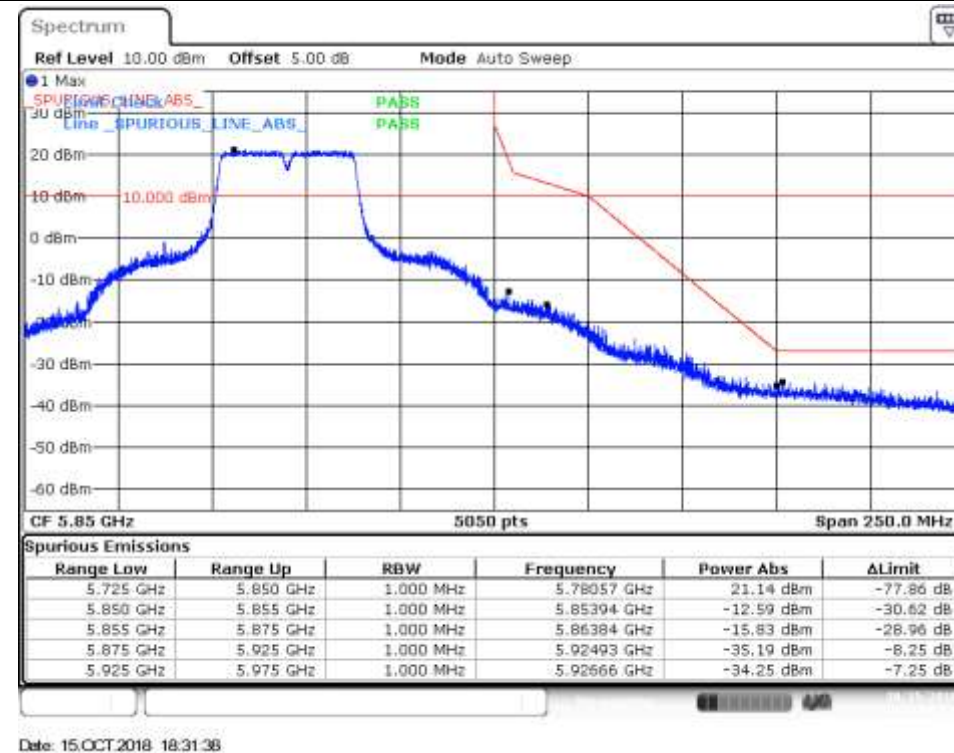


## 802.11n40, HT0 – SISO - Chain A

### BE Low Freq Section, Peak – CH151F

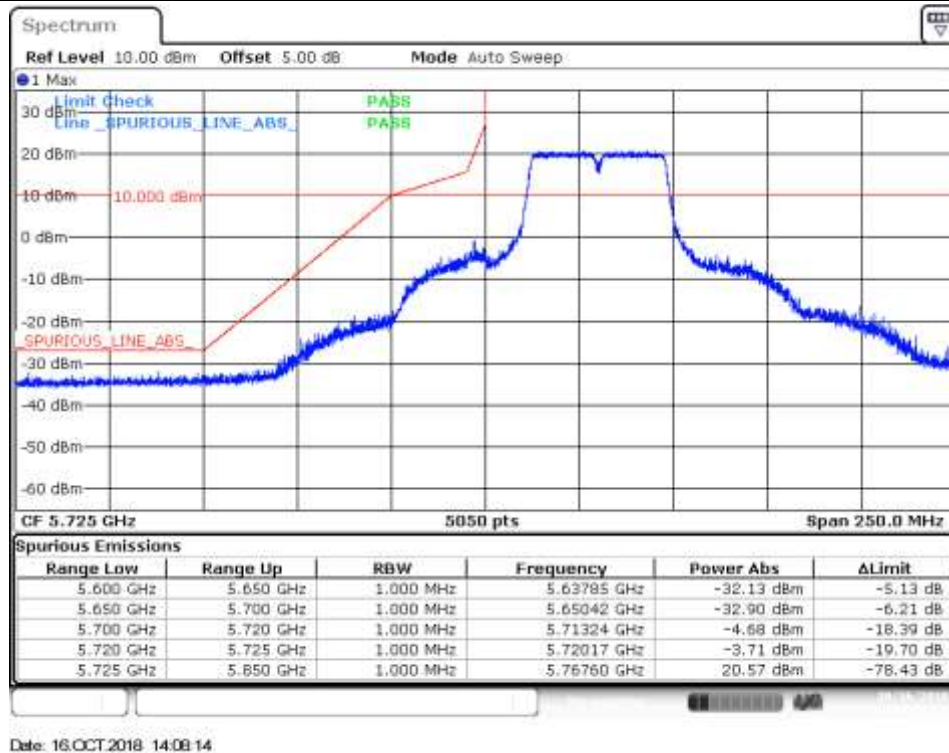


### BE High Freq Section, Peak – CH159F

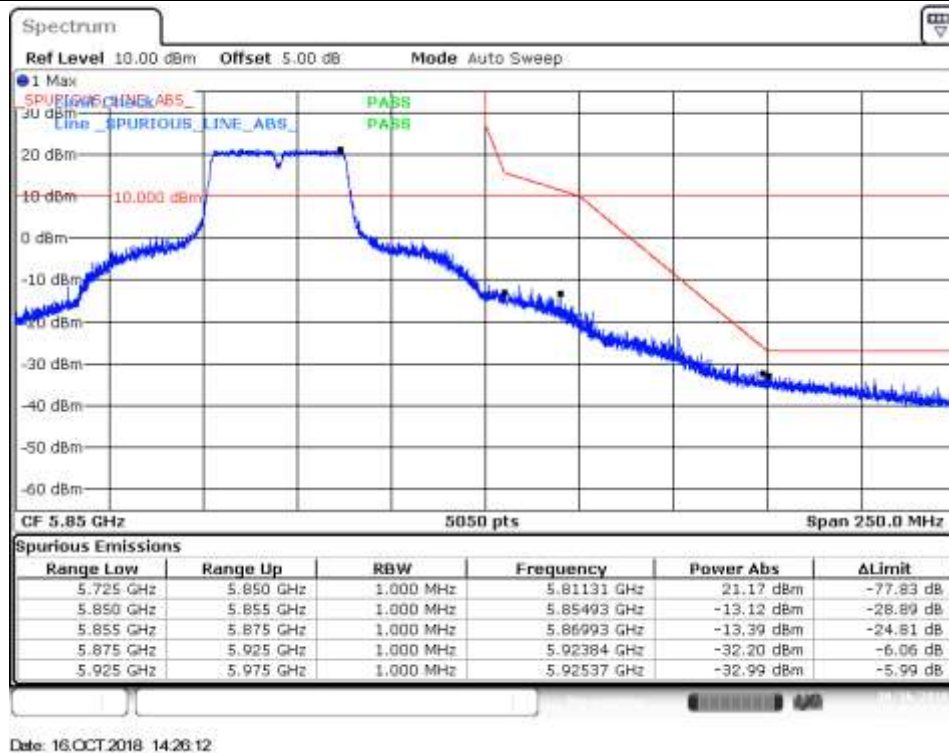


## 802.11n40, HT0 – SISO - Chain B

### BE Low Freq Section, Peak – CH151F

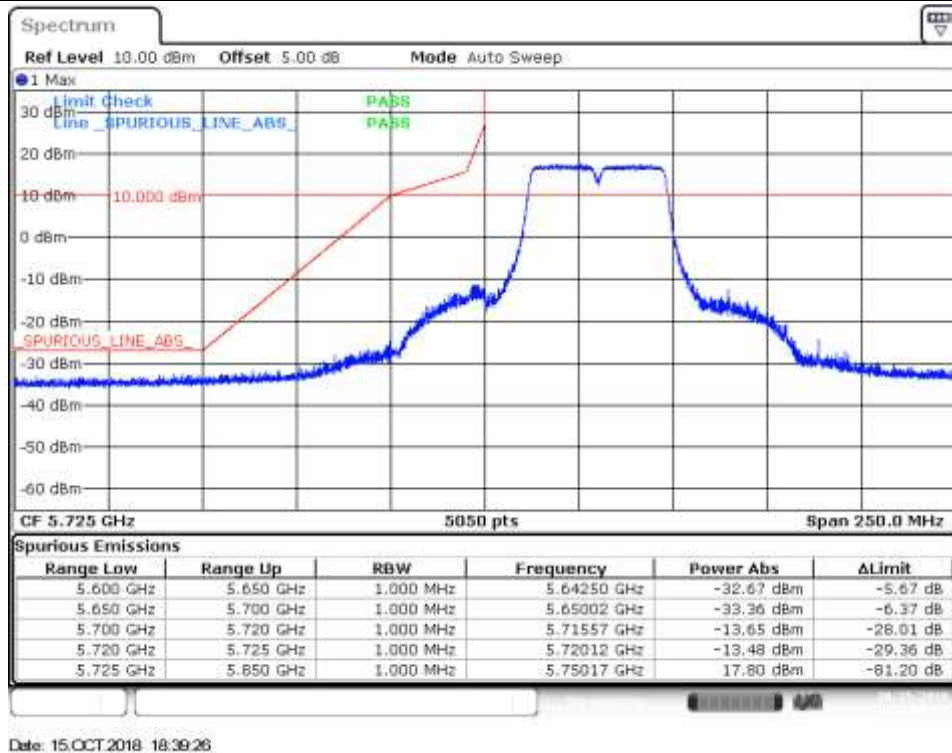


### BE High Freq Section, Peak – CH159F

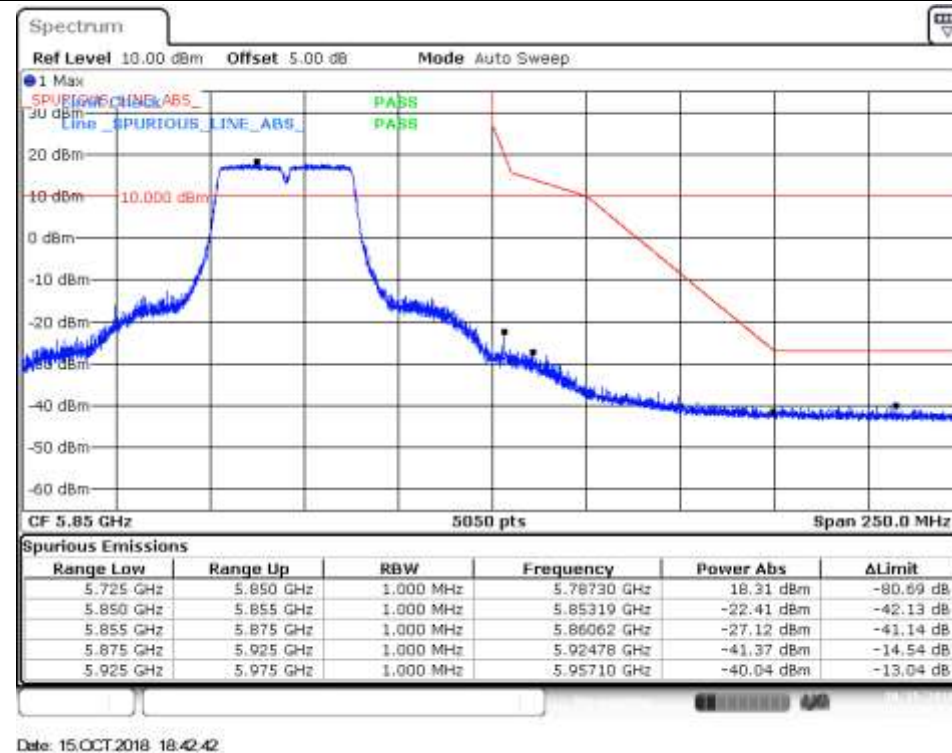


## 802.11n40, HT8 – MIMO - Chain A

### BE Low Freq Section, Peak – CH151F

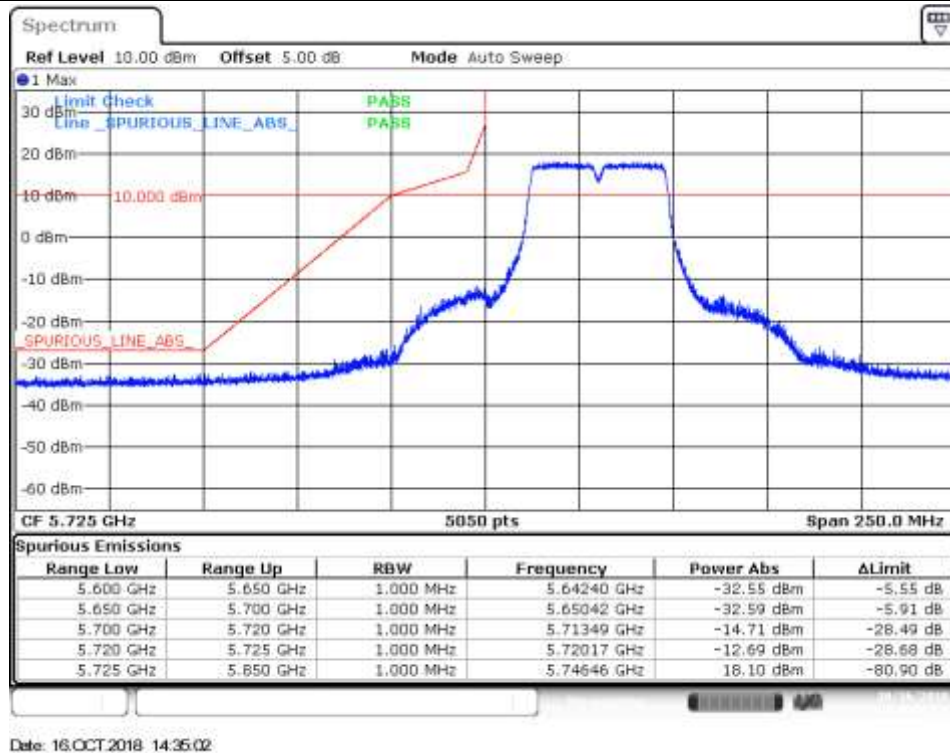


### BE High Freq Section, Peak – CH159F

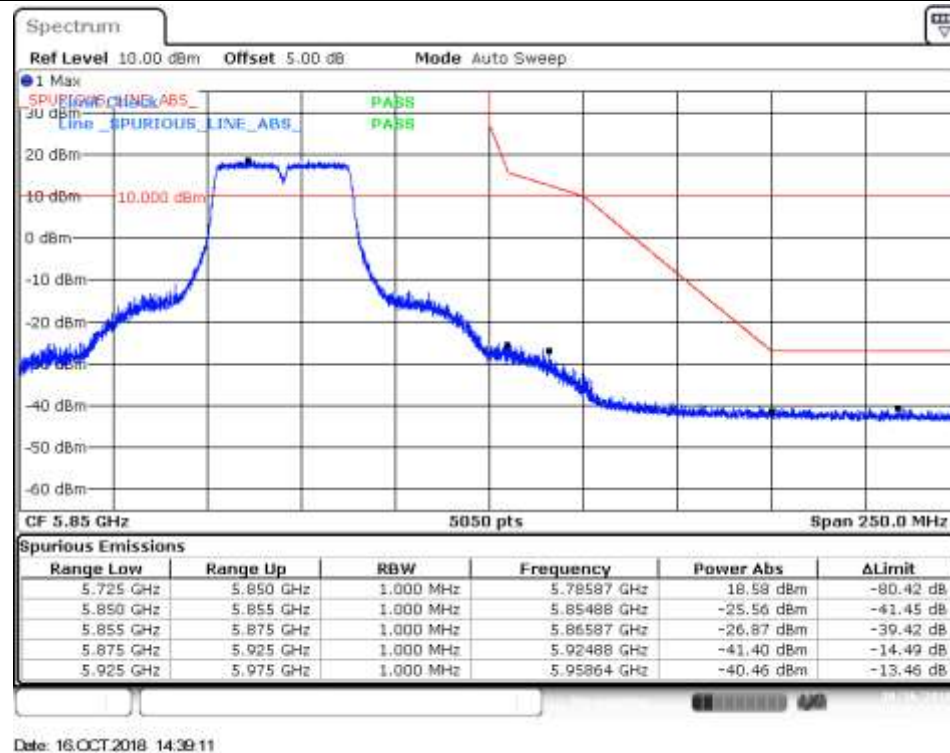


## 802.11n40, HT8 – MIMO - Chain B

### BE Low Freq Section, Peak – CH151F



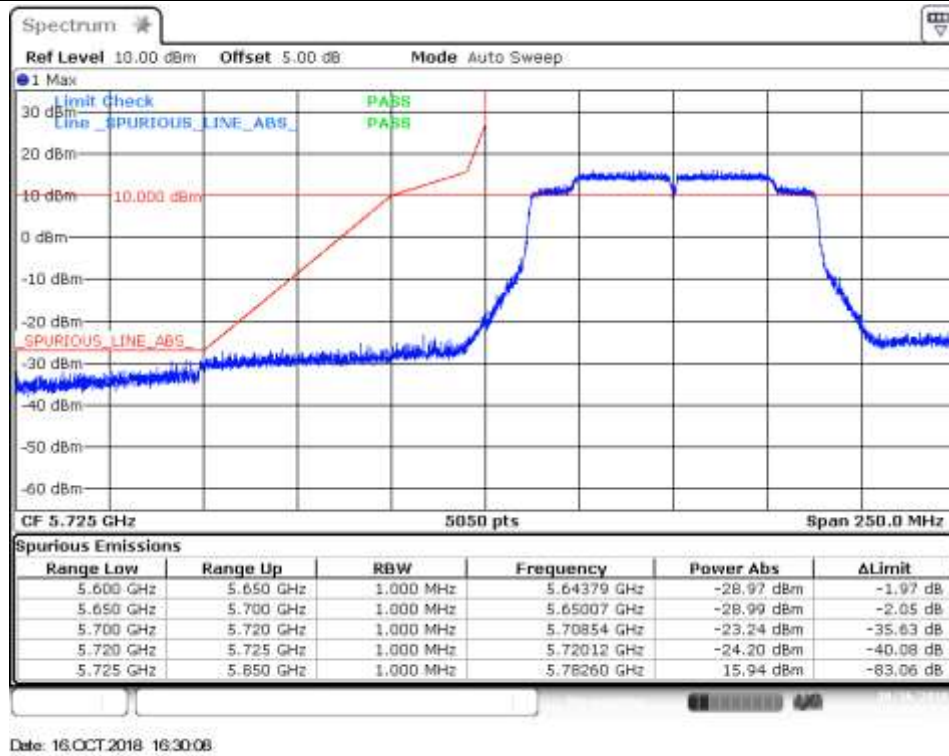
### BE High Freq Section, Peak – CH159F



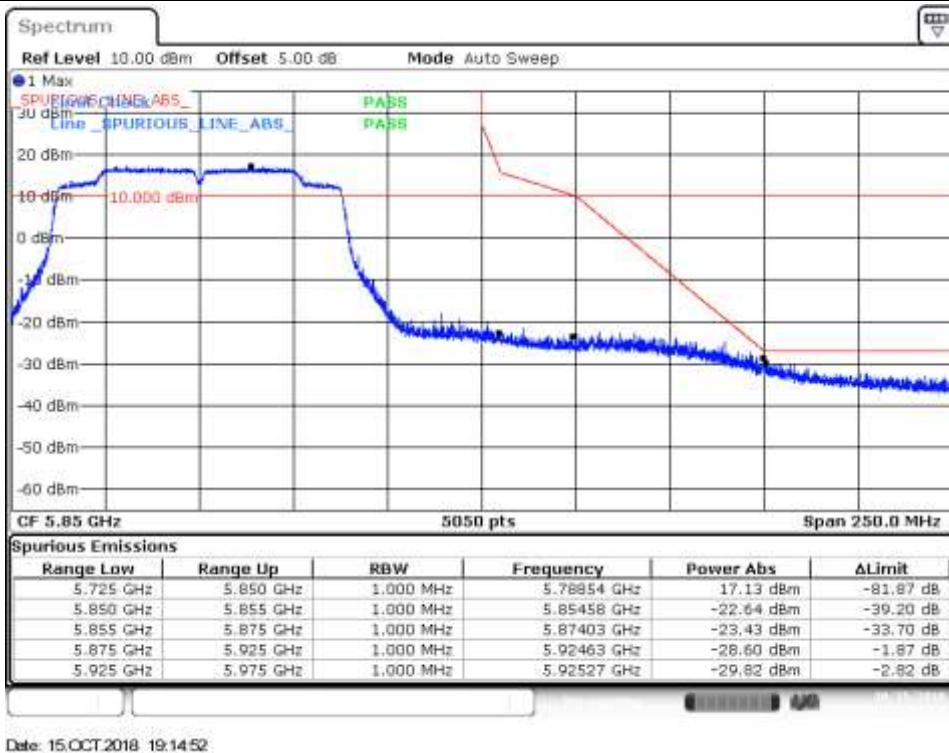


## 802.11ac80, VHT0 – SISO - Chain A

### BE Low Freq Section, Peak – CH155

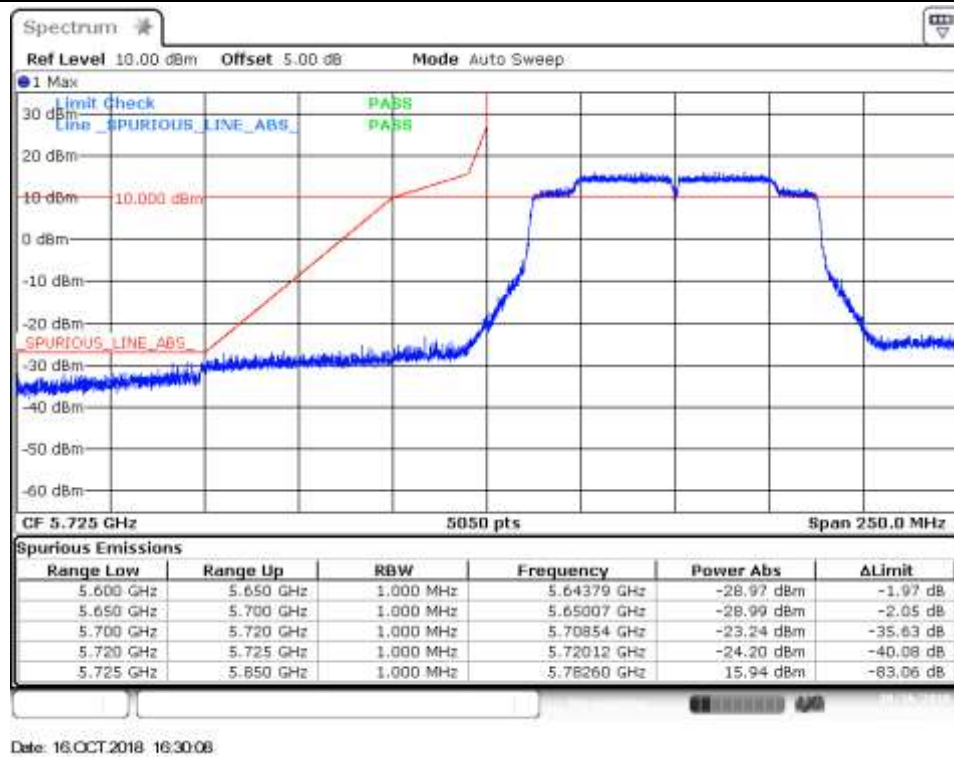


### BE High Freq Section, Peak – CH155

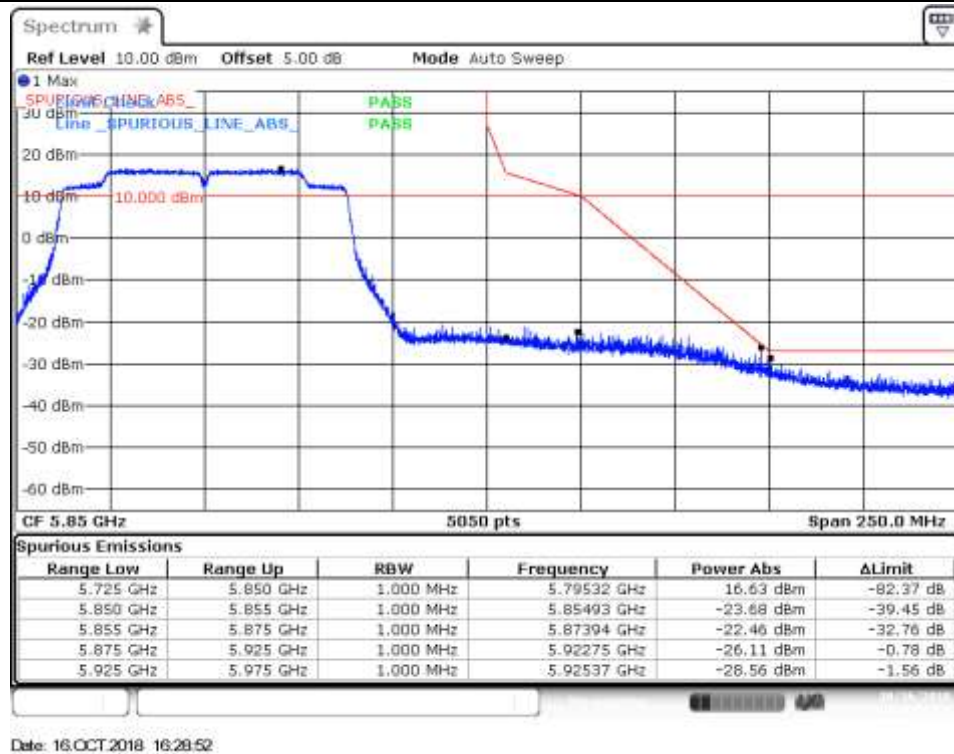


## 802.11ac80, VHT0 – SISO - Chain B

### BE Low Freq Section, Peak – CH155

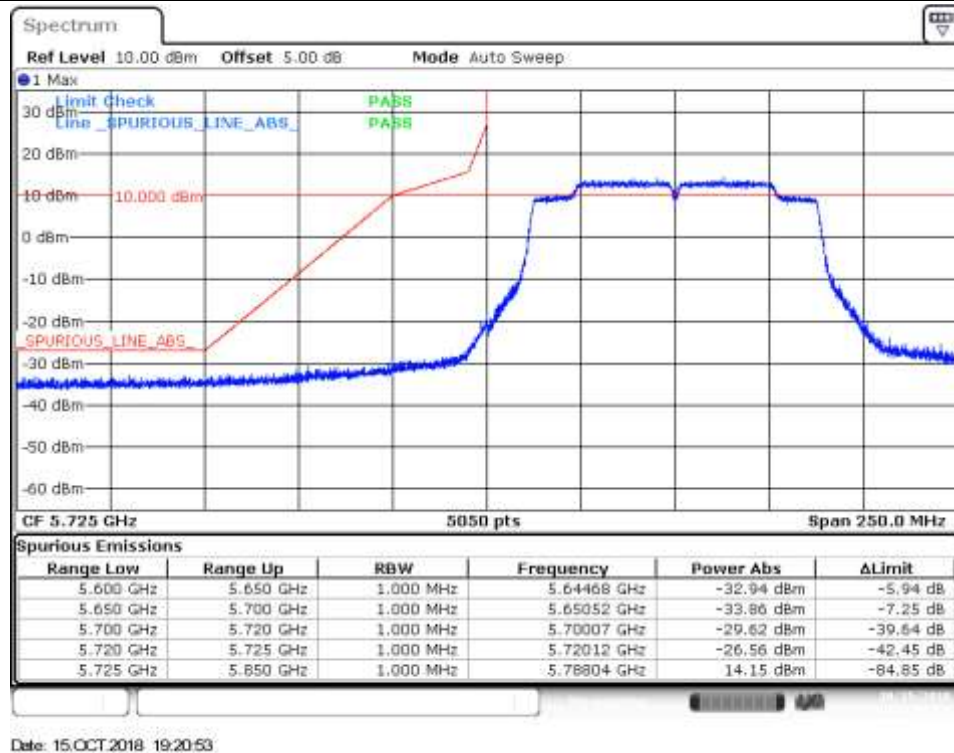


### BE High Freq Section, Peak – CH155

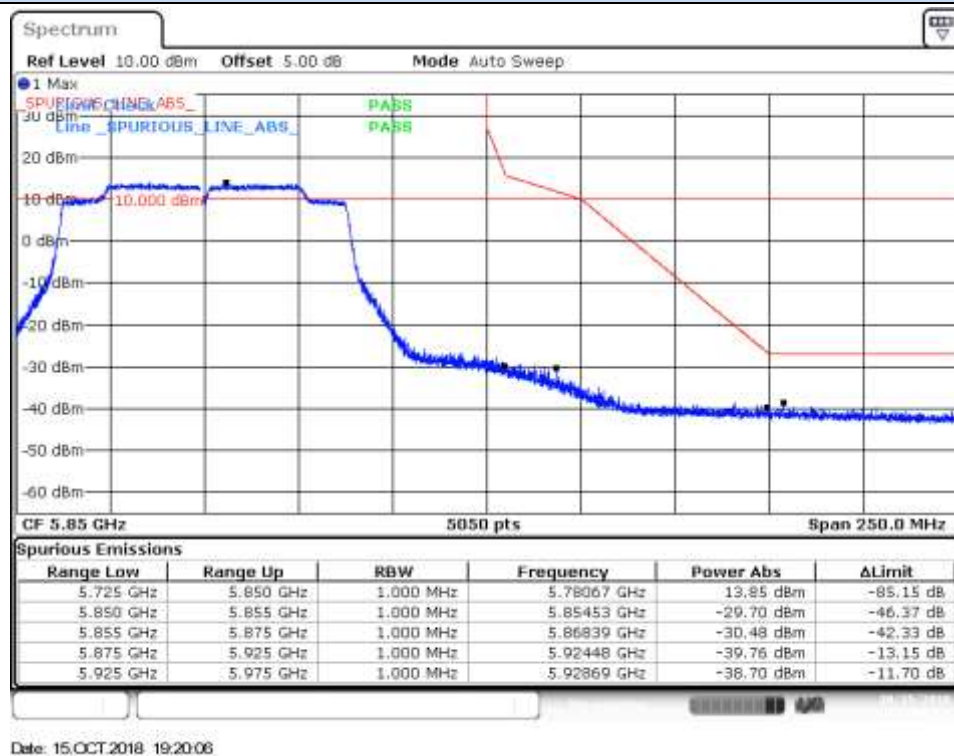


## 802.11ac80, VHT0 – MIMO - Chain A

### BE Low Freq Section, Peak – CH155



### BE High Freq Section, Peak – CH155

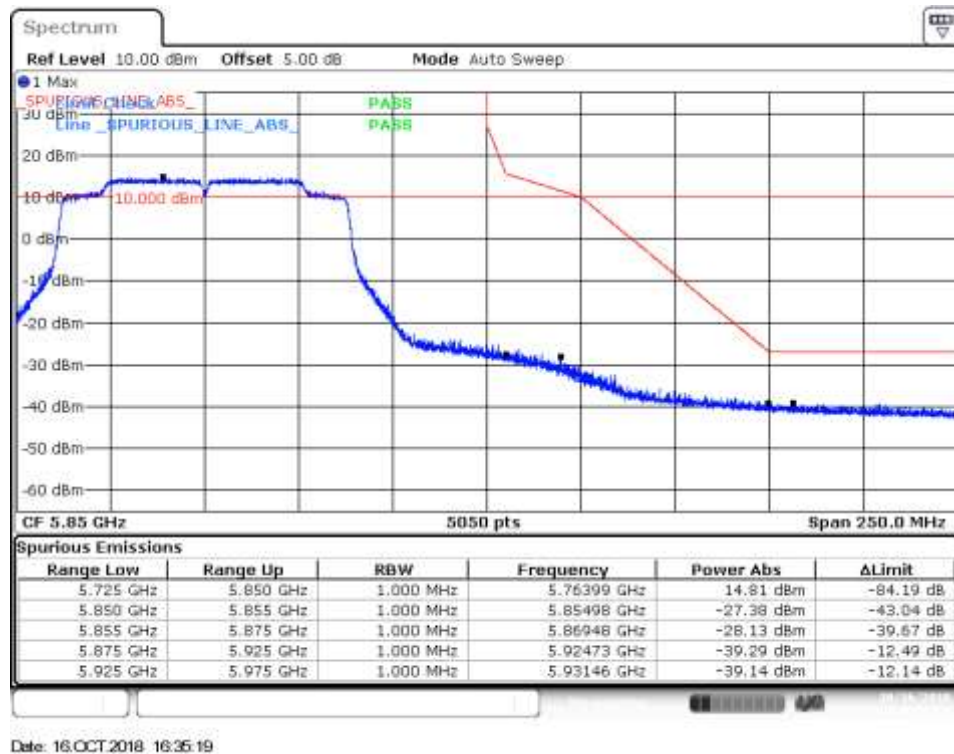


## 802.11ac80, VHT0 – MIMO - Chain B

### BE Low Freq Section, Peak – CH155



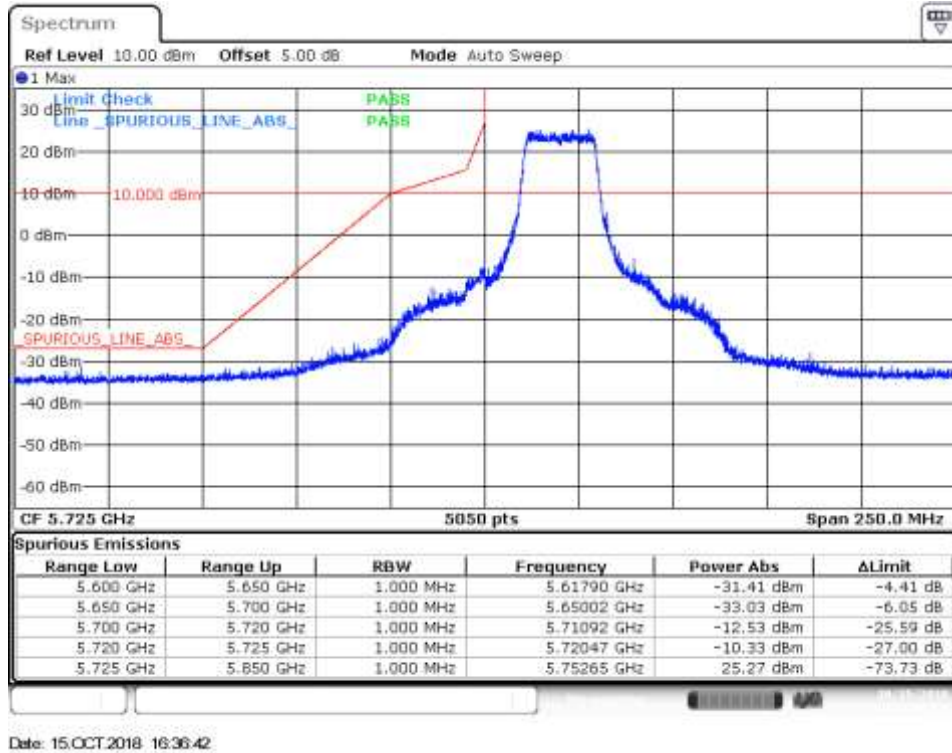
### BE High Freq Section, Peak – CH155



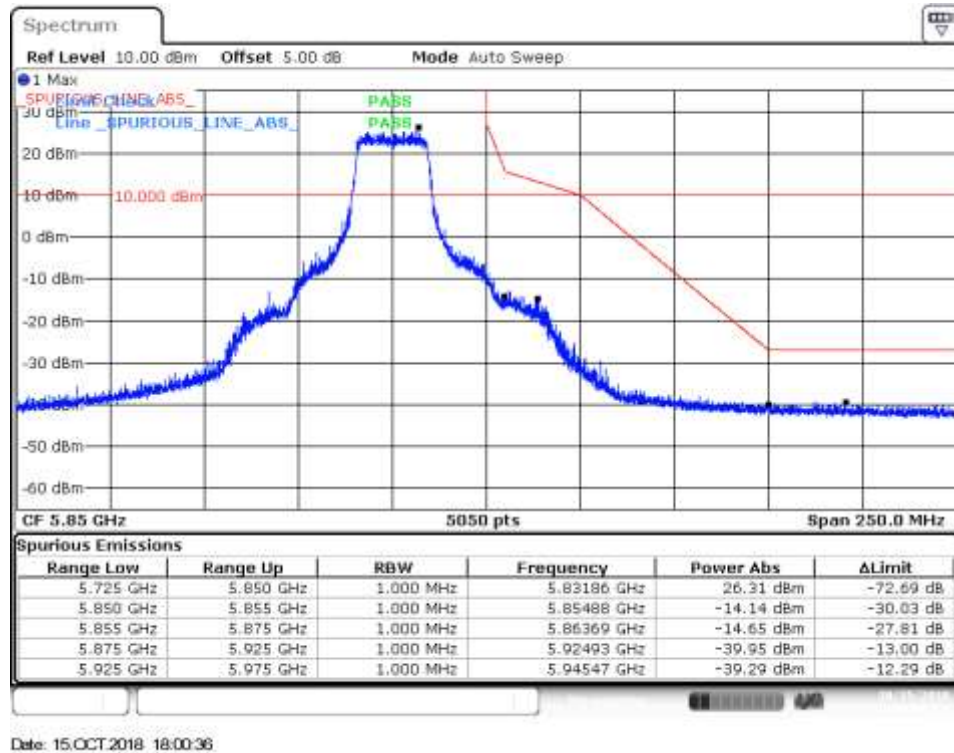


## 802.11ax20, HE0 – SISO - Chain A

### BE Low Freq Section, Peak – CH149

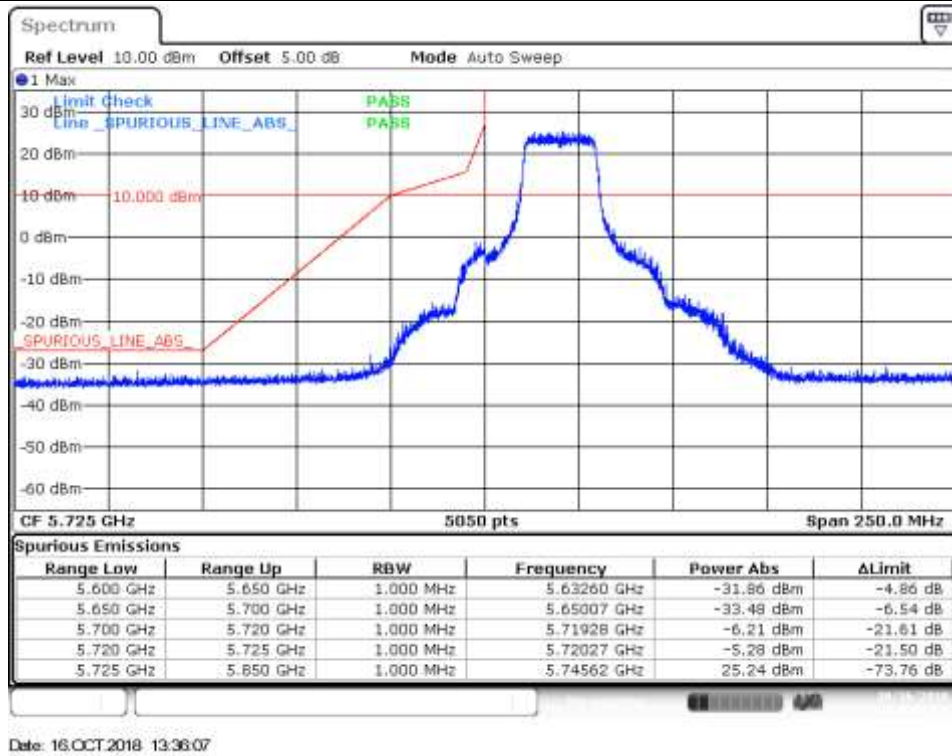


### BE High Freq Section, Peak – CH165

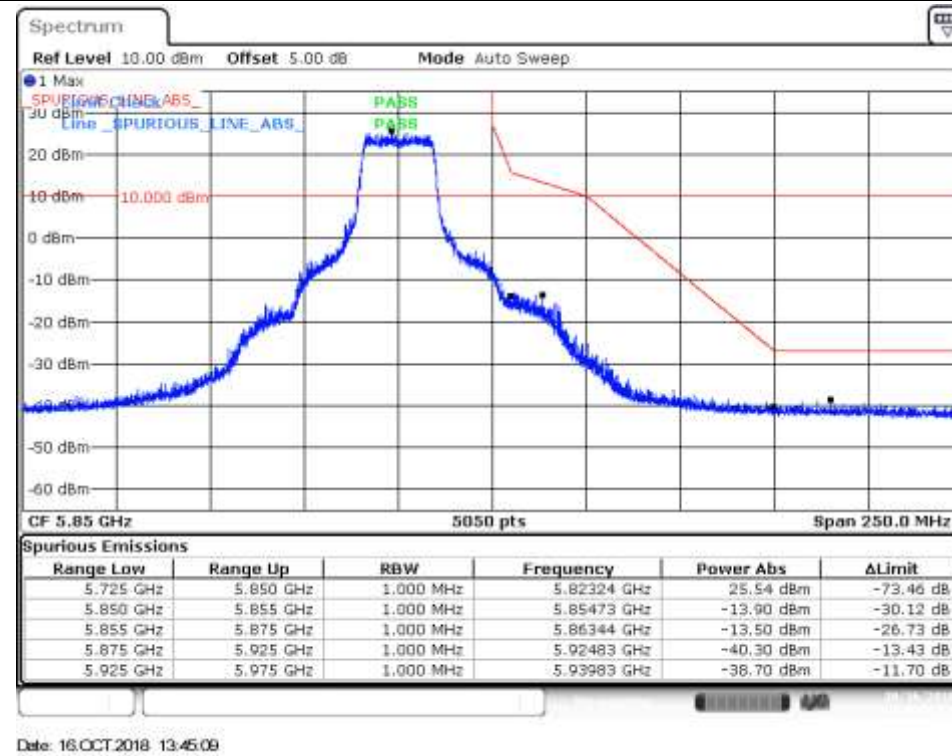


## 802.11ax20, HE0 – SISO - Chain B

### BE Low Freq Section, Peak – CH149

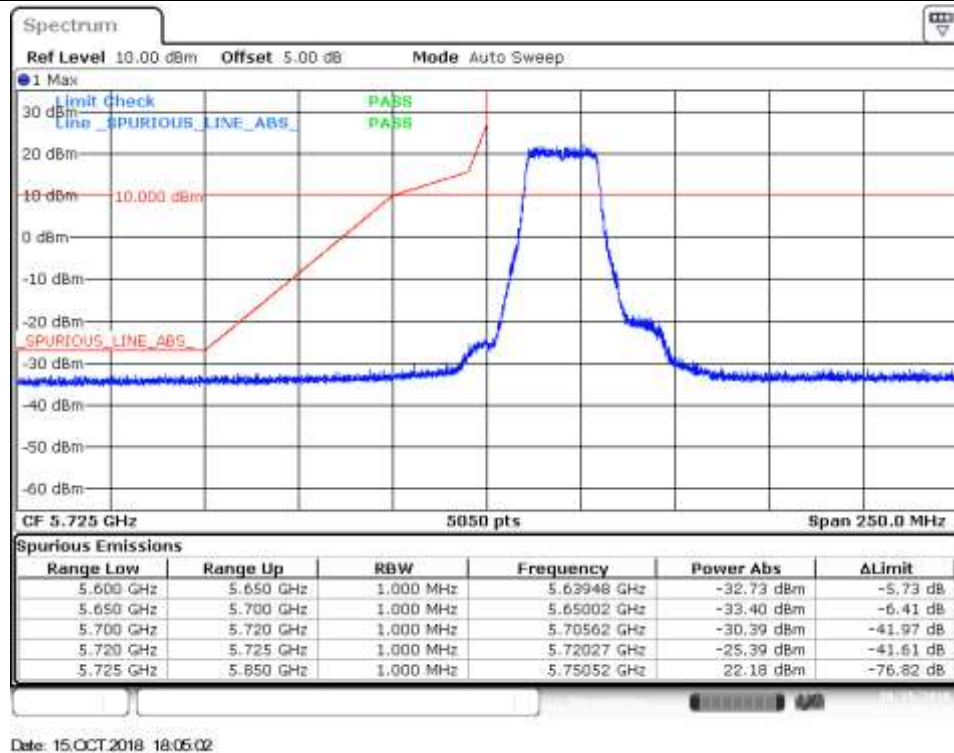


### BE High Freq Section, Peak – CH165

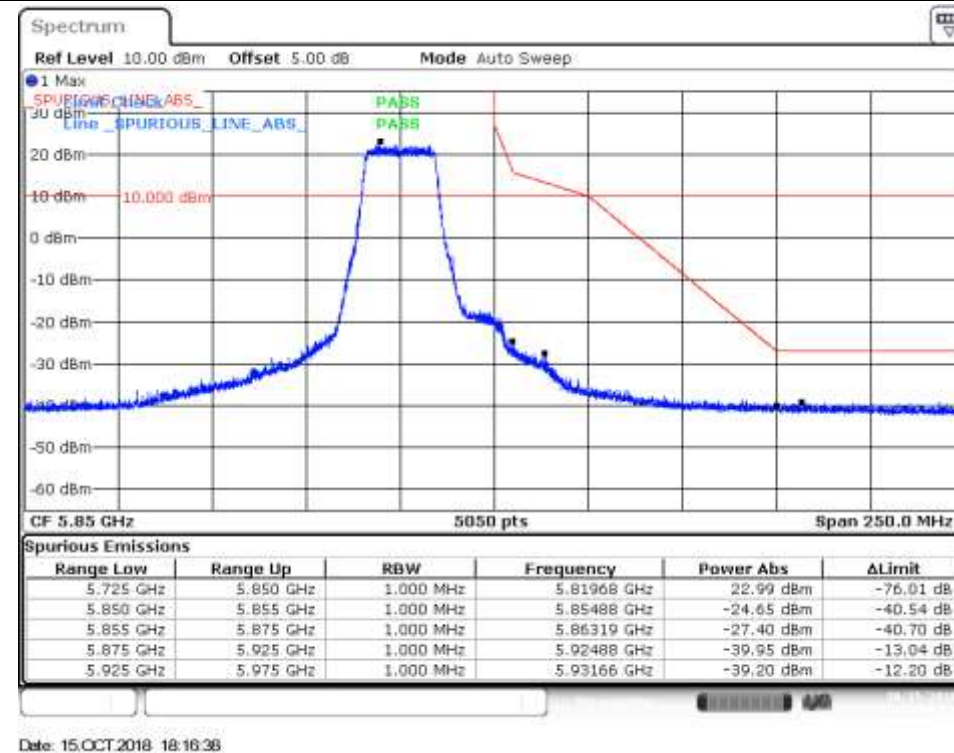


## 802.11ax20, HE0 – MIMO - Chain A

### BE Low Freq Section, Peak – CH149

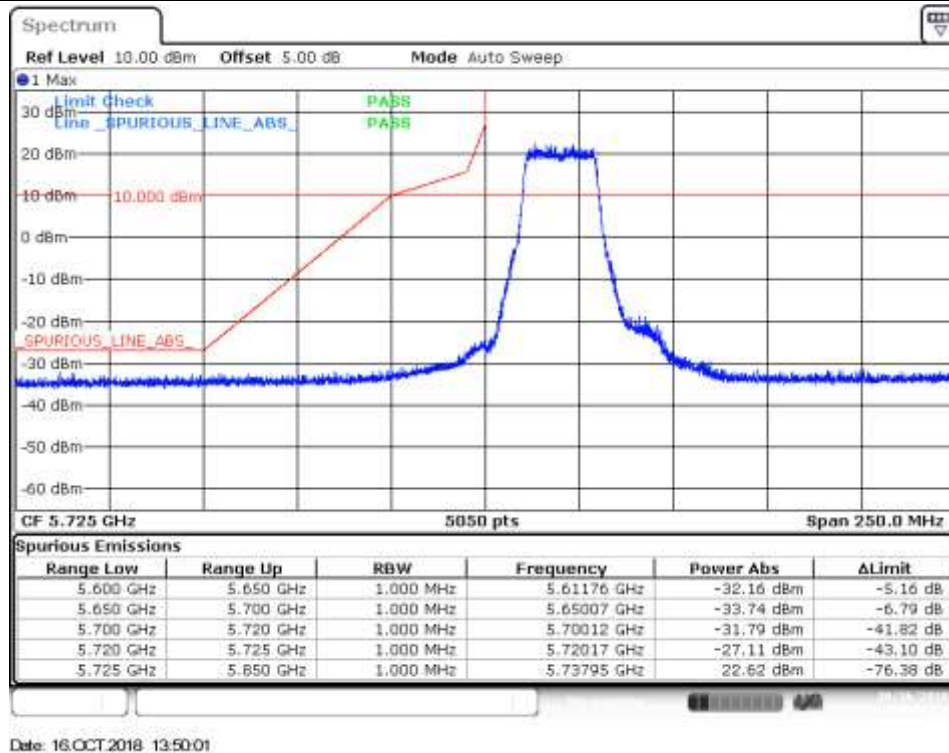


### BE High Freq Section, Peak – CH165

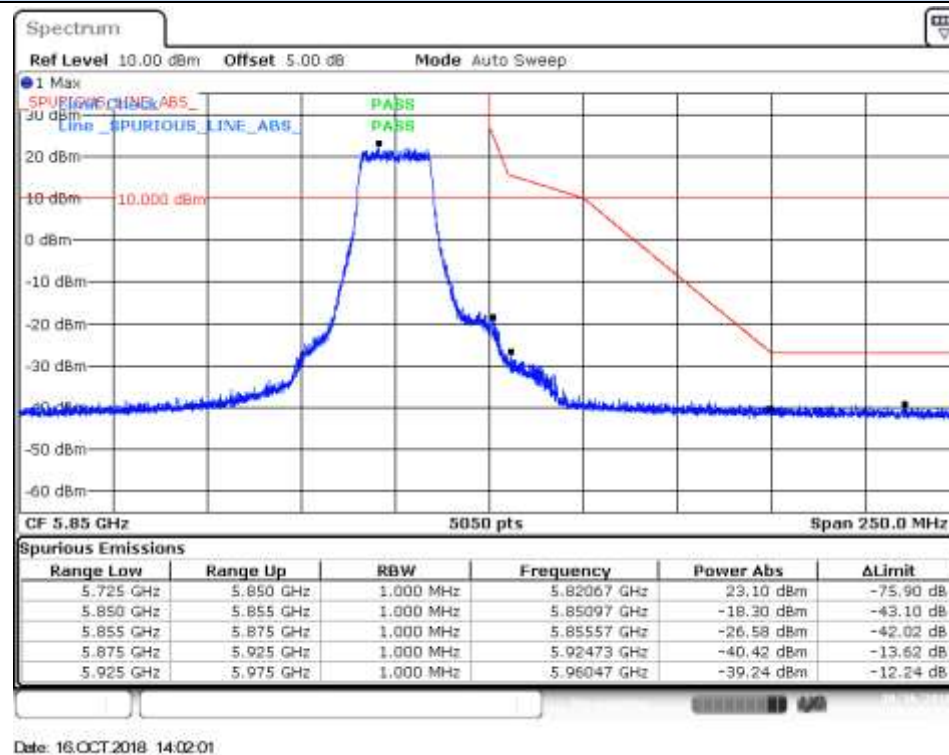


## 802.11ax20, HE0 – MIMO - Chain B

### BE Low Freq Section, Peak – CH149



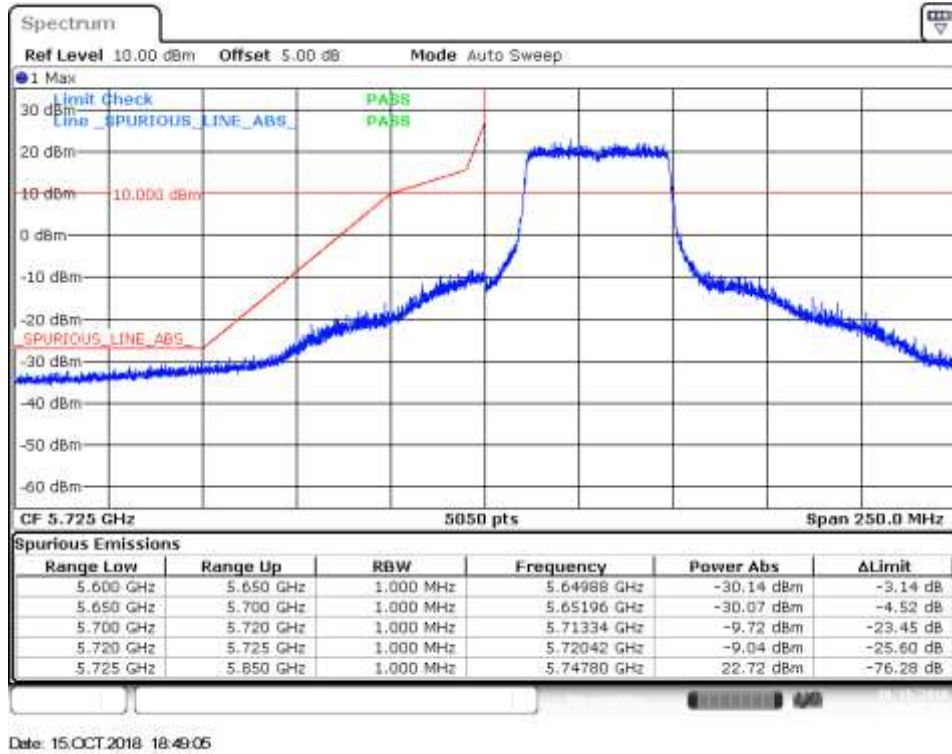
### BE High Freq Section, Peak – CH165



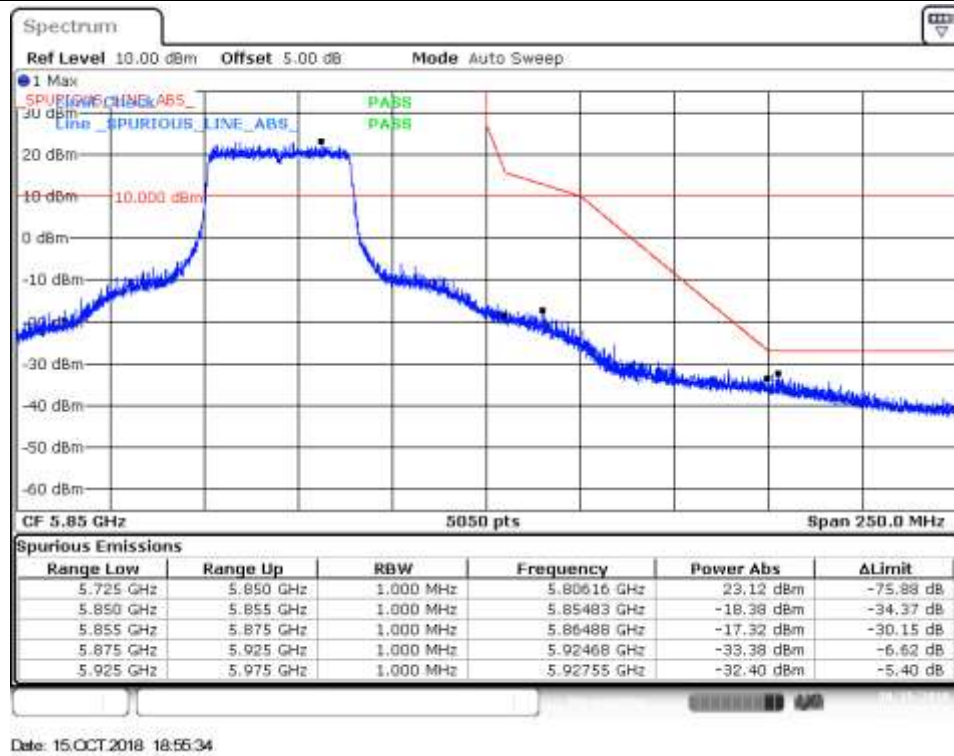


## 802.11ax40, HE0 – SISO - Chain A

### BE Low Freq Section, Peak – CH151F

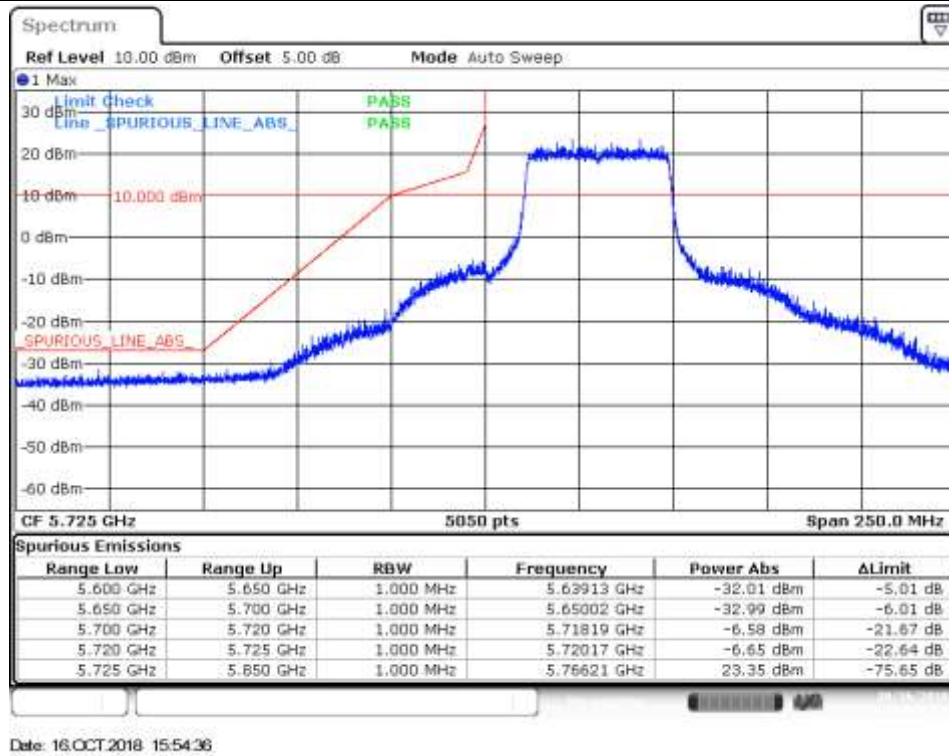


### BE High Freq Section, Peak – CH159F

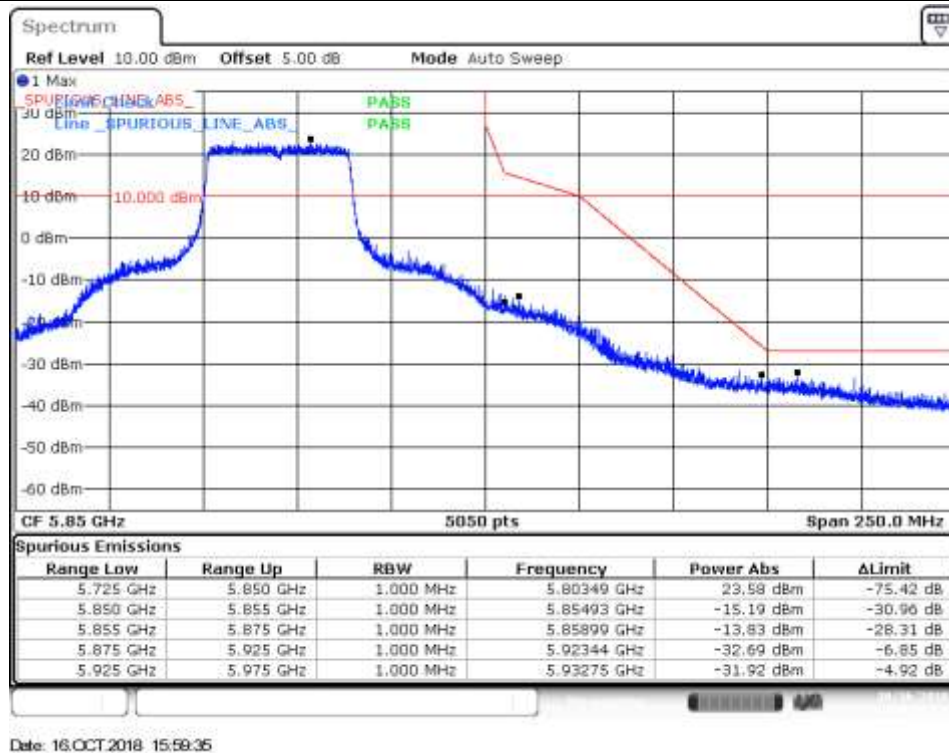


## 802.11ax40, HE0 – SISO - Chain B

### BE Low Freq Section, Peak – CH151F

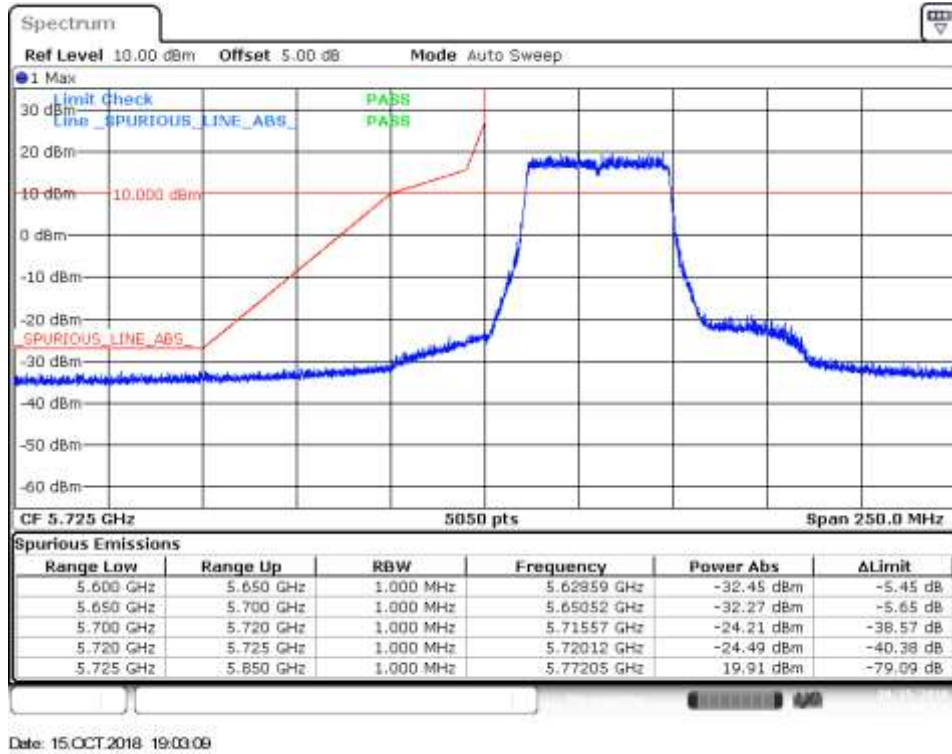


### BE High Freq Section, Peak – CH159F

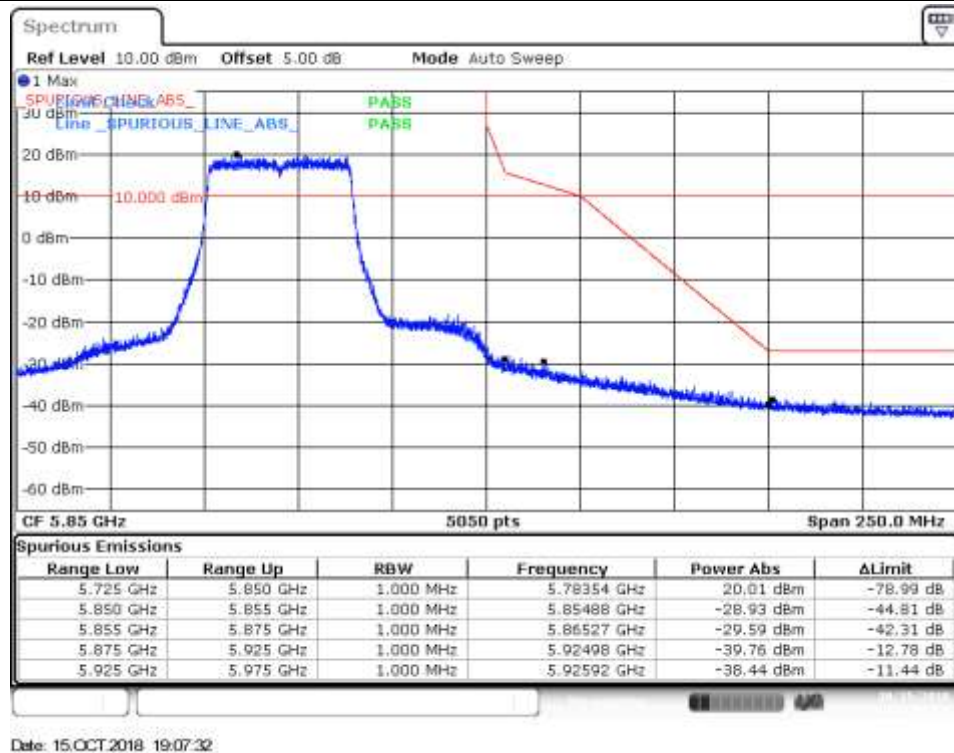


## 802.11ax40, HE0 – MIMO - Chain A

### BE Low Freq Section, Peak – CH151F

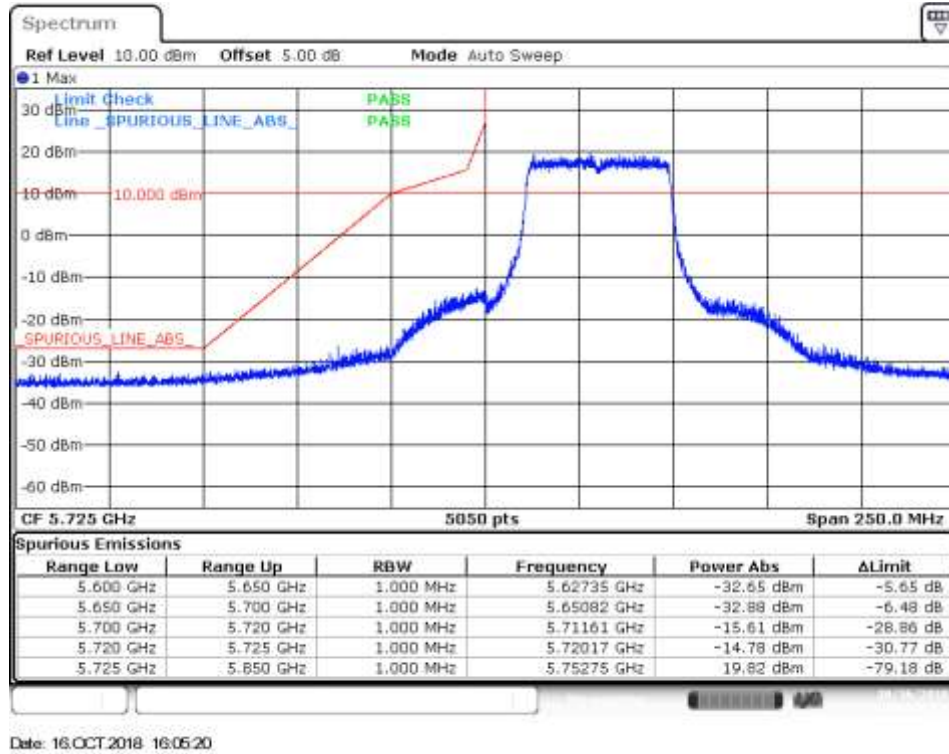


### BE High Freq Section, Peak – CH159F

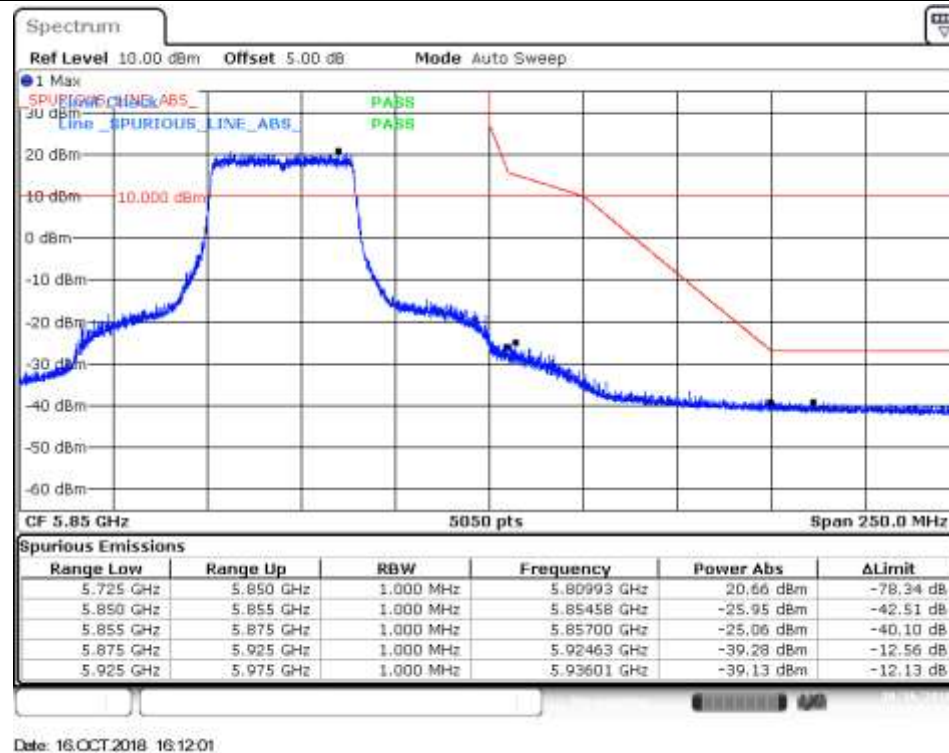


## 802.11ax40, HE0 – MIMO - Chain B

### BE Low Freq Section, Peak – CH151F



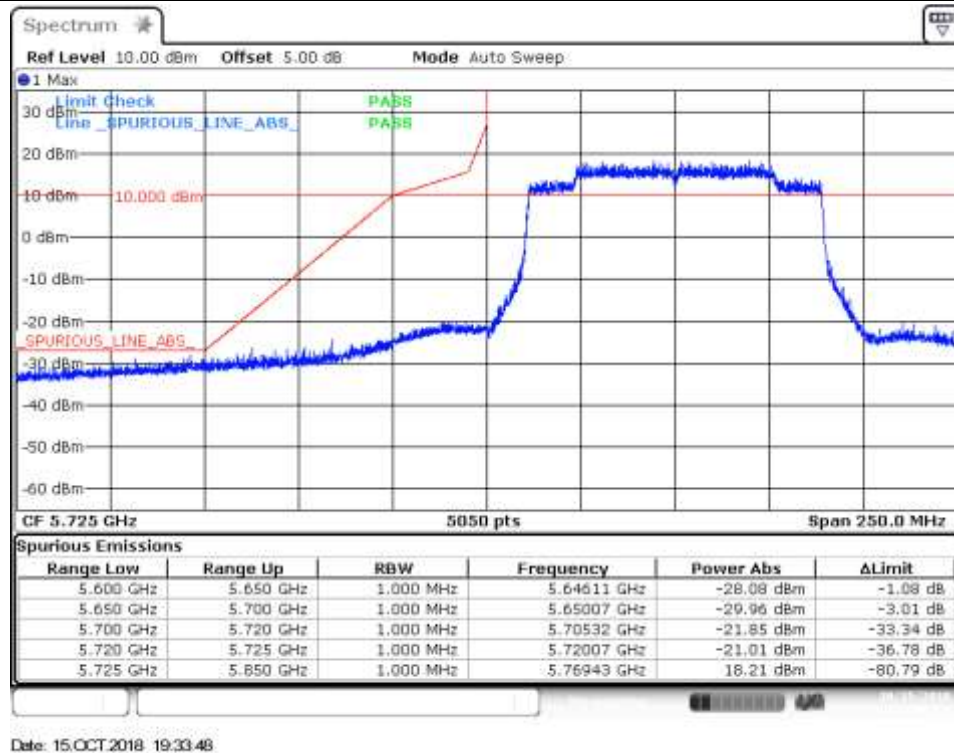
### BE High Freq Section, Peak – CH159F



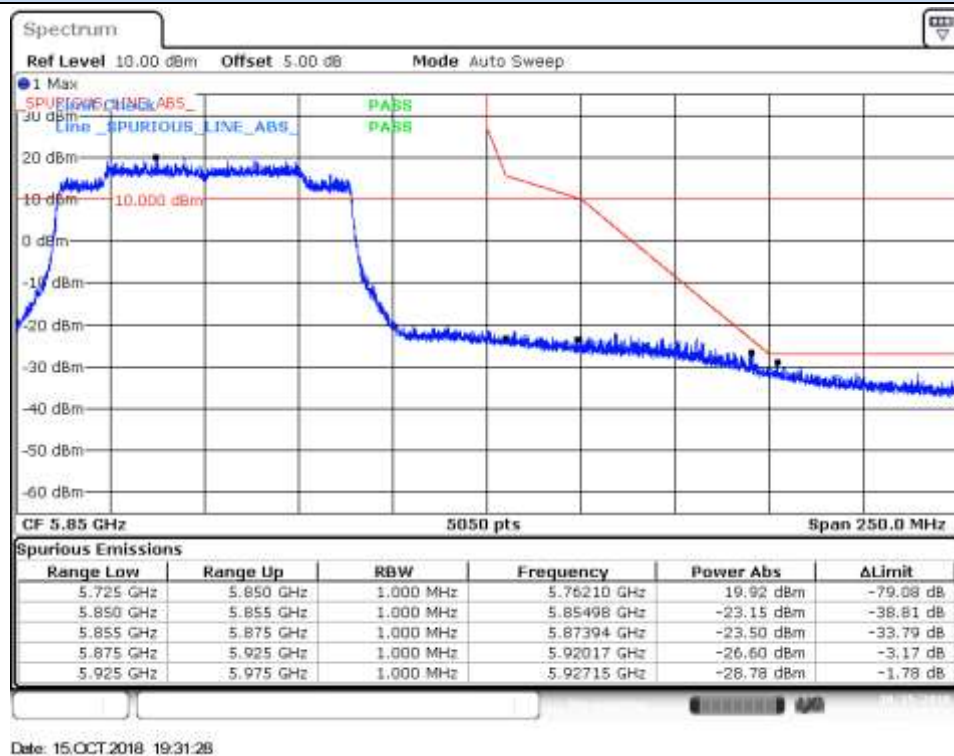


## 802.11ax80, HE0 – SISO - Chain A

### BE Low Freq Section, Peak – CH155

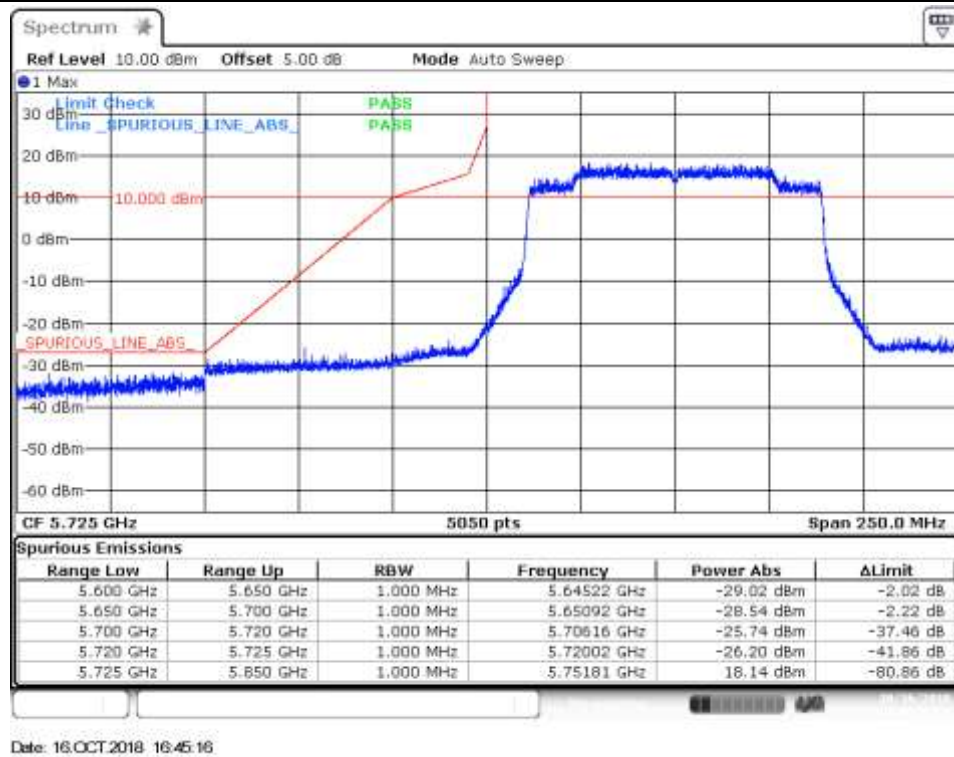


### BE High Freq Section, Peak – CH155

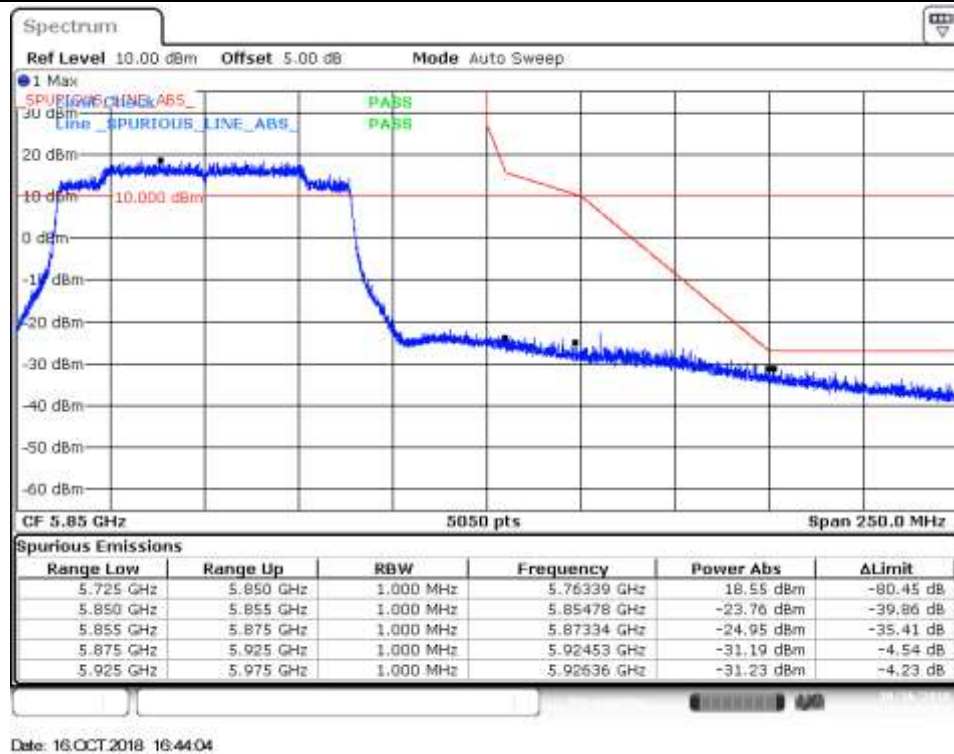


## 802.11ax80, HE0 – SISO - Chain B

### BE Low Freq Section, Peak – CH155

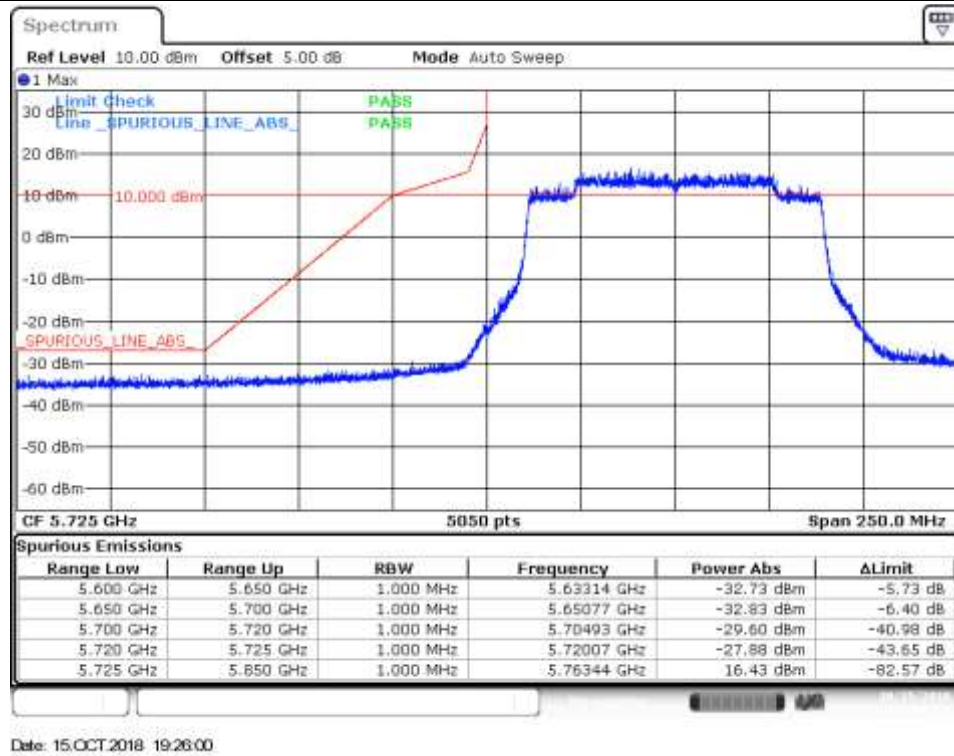


### BE High Freq Section, Peak – CH155



## 802.11ax80, HE0 – MIMO - Chain A

### BE Low Freq Section, Peak – CH155

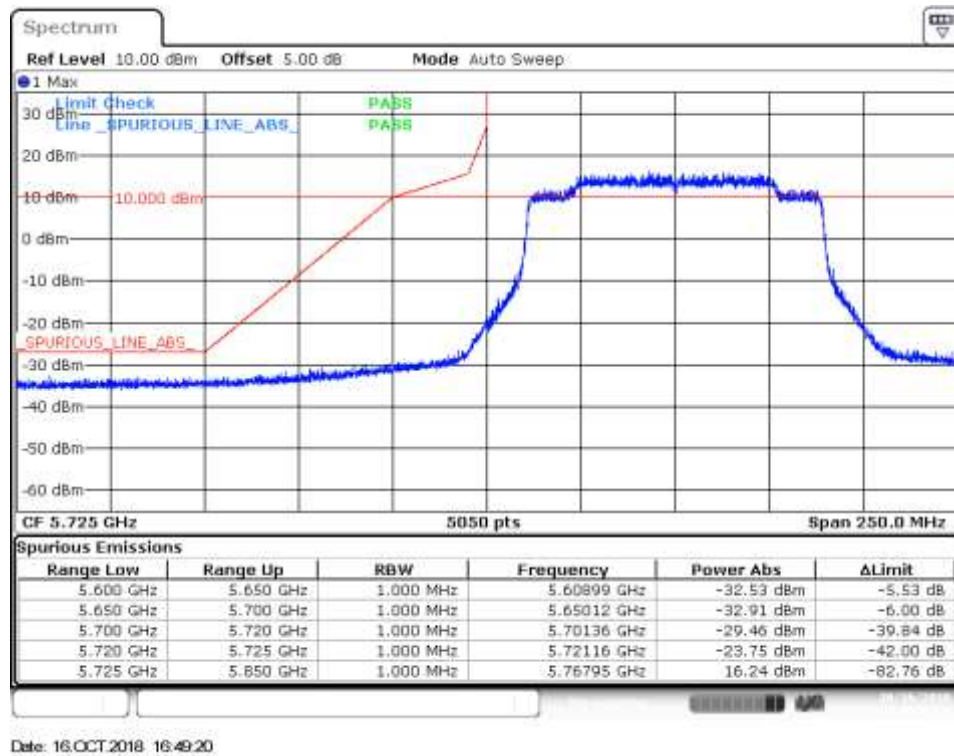


### BE High Freq Section, Peak – CH155



## 802.11ax80, HE0 – MIMO - Chain B

### BE Low Freq Section, Peak – CH155



### BE High Freq Section, Peak – CH155

