

# TEST REPORT

|                        |                                                                    |
|------------------------|--------------------------------------------------------------------|
| EUT Description        | WLAN and BT, 2x2 PCIe M.2 2230 SD adapter card                     |
| Brand Name             | Intel® Wi-Fi 6E AX211                                              |
| Model Name             | AX211NGW                                                           |
| FCC ID / IC ID         | FCCID: PD9AX211NG/ IC ID: 1000M-AX211NG                            |
| Date of Test Start/End | 2020-12-01 /2021-01-20                                             |
| Features               | 802.11ax, Dual Band, 2x2 Wi-Fi + Bluetooth® 5.2<br>(see section 5) |

|                      |                                                                             |
|----------------------|-----------------------------------------------------------------------------|
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|                     |                                                                                      |
|---------------------|--------------------------------------------------------------------------------------|
| Reference Standards | FCC CFR Title 47 Part 15 E<br>RSS-247 issue 2, RSS-Gen A1 issue 5<br>(see section 1) |
|---------------------|--------------------------------------------------------------------------------------|

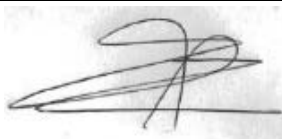
|                            |                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------|
| Test Report identification | 200611-01.TR03                                                                                     |
| 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.

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

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FCC  | <ol style="list-style-type: none"> <li>1. FCC Title 47 CFR part 15 – Subpart E – Unlicensed National Information Infrastructure Devices. 2019-10-01 Edition</li> <li>2. FCC Title 47 CFR part 15 – Subpart C – §15.209 Radiated emission limits; general requirements. 2019-10-01 Edition</li> <li>3. FCC OET KDB 789033 D02 v02r01 - General U-NII Test Procedures New Rules – Guidelines for compliance testing of Unlicensed National Information Infrastructure (U-NII) Devices (Part 15, Subpart E)</li> <li>4. ANSI C63.10-2013 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.</li> </ol>   |
| ISED | <ol style="list-style-type: none"> <li>1. RSS-Gen Issue 5 Amendment 1 - General Requirements for Compliance of Radio Apparatus.</li> <li>2. RSS-247 Issue 2 - Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and License-Exempt Local Area Network (LE-LAN) Devices.</li> <li>3. FCC OET KDB 789033 D02 v02r01 - General U-NII Test Procedures New Rules – Guidelines for compliance testing of Unlicensed National Information Infrastructure (U-NII) Devices (Part 15, Subpart E).</li> <li>4. ANSI C63.10-2013 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices</li> </ol> |

## 2. General conditions, competences and guarantees

- ✓ Tests performed under FCC standards identified in section 1 are covered by A2LA accreditation.
- ✓ Tests performed under ISED standards identified in section 1 are covered by Cofrac accreditation.
- ✓ Intel Corporation SAS Wireless RF Lab (Intel WRF Lab) is an ISO/IEC 17025:2017 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 an ISO/IEC 17025:2017 testing laboratory accredited by the French Committee for Accreditation (Cofrac) with the certificate number 1-6736.
- ✓ Intel Corporation SAS Wireless RF Lab (Intel WRF Lab) is a Registered Test Site listed by ISED, with ISED #1000Y.
- ✓ Intel WRF Lab declines any responsibility with respect to the identified information provided by the customer and that may affect the validity of results.
- ✓ 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.
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- ✓ This report does not imply an approval of the product by the Certification Bodies or competent Authorities.
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## 3. Environmental Conditions

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

|             |                |
|-------------|----------------|
| Temperature | 20.2°C ± 4.9°C |
| Humidity    | 44.6% ± 9.5%   |

#### 4. Test samples

| Sample | Control #     | Description    | Model          | Serial #          | Date of receipt | Note                                                   |
|--------|---------------|----------------|----------------|-------------------|-----------------|--------------------------------------------------------|
| #1     | 200611-01.S01 | WiFi 6E Module | AX211NGW       | WFM: D8F889597A5E | 2020-11-23      | RF Conducted                                           |
|        | 170000-01.S13 | Laptop         | Latitude E5470 | FT6LMC2           | 2017-05-30      |                                                        |
|        | 200611-01.S11 | Extender       | PCB00651_01    | -                 | 2020-11-30      |                                                        |
| #2     | 200611-01.S17 | WiFi 6E Module | AX211NGW       | WFM:D8F883596CD0  | 2020-12-01      | Used for 18GHz-40GHz Radiated Spurious Emissions tests |
|        | 200102-01.S03 | Extender       | ADEXELEC       | -                 | 2020-01-02      |                                                        |
|        | 200611-01.S06 | Adaptor        | PowerBy SNJ A4 | -                 | 2020-11-30      |                                                        |
|        | 200602-03.S06 | Absorber       | MCS0           | -                 | 2020-07-03      |                                                        |
|        | 170801-01.S10 | Laptop         | Latitude E7470 | 7KNOXF2           | 2017-09-08      |                                                        |
|        | 200611-03.S28 | Main Antenna   | SkyCross       | -                 | 2020-07-01      |                                                        |
|        | 200611-03.S29 | Aux Antenna    | SkyCross       | -                 | 2020-07-01      |                                                        |
| #3     | 200611-01.S04 | WiFi 6E Module | AX211NGW       | WFM:D8F8835981DE  | 2020-11-23      | Used for 30MHz-18GHz Radiated Spurious Emissions tests |
|        | 200611-03.S26 | Extender       | ADEXELEC       | -                 | 2020-07-01      |                                                        |
|        | 200611-01.S07 | Adaptor        | PowerBy SNJ A4 | -                 | 2020-11-30      |                                                        |
|        | 200602-03.S06 | Absorber       | MCS0           | -                 | 2020-07-03      |                                                        |
|        | 170000-01.S01 | Laptop         | Latitude E5470 | DBPLMC2           | 2017-03-28      |                                                        |
|        | 200928-03.S08 | Main Antenna   | SkyCross       | -                 | 2020-09-01      |                                                        |
|        | 200928-03.S09 | Aux Antenna    | SkyCross       | -                 | 2020-09-01      |                                                        |

## 5. EUT Features

The herein information is provided by the customer

|                        |                                                                                                                                                                                                           |                |                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------|
| Brand Name             | Intel® Wi-Fi 6E AX211                                                                                                                                                                                     |                |                 |
| Model Name             | AX211NGW                                                                                                                                                                                                  |                |                 |
| Software Version       | DRTU Version: 11195_99_2100_51G                                                                                                                                                                           |                |                 |
| Driver Version         | 99.0.58.3                                                                                                                                                                                                 |                |                 |
| Prototype / Production | Production                                                                                                                                                                                                |                |                 |
| Supported Radios       | 802.11b/g/n/ax 2.4GHz (2400.0 – 2483.5 MHz)<br>802.11a/n/ac/ax 5.2GHz (5150.0 – 5350.0 MHz)<br>5.6GHz (5470.0 – 5725.0 MHz)<br>5.8GHz (5725.0 – 5850.0 MHz)<br>Bluetooth 5.2 2.4GHz (2400.0 – 2483.5 MHz) |                |                 |
| Antenna Information    | Transmitter                                                                                                                                                                                               | Main (chain A) | Aux (chain B)   |
|                        | Manufacturer                                                                                                                                                                                              | SkyCross       | Skycross        |
|                        | Antenna type                                                                                                                                                                                              | PIFA antenna   | PIFA antenna    |
|                        | Part number                                                                                                                                                                                               | N/A            | N/A             |
|                        | Declared antenna gain (dBi)                                                                                                                                                                               | +5             | +5              |
| Document               | Filename                                                                                                                                                                                                  |                | Date of receipt |
|                        | Intel_Ref_Antenna data_HMC-M2 Ant_Spec_Universe_SkyCross Antenna                                                                                                                                          |                | 2013-01-28      |

## 6. Remarks and comments

1. No deviations were made from the test methods listed in section 1 of this report

## 7. Test Verdicts summary

The statement of conformity to applicable standards in the table below are based on the measured values, without taking into account the measurement uncertainties.

### 7.1. 802.11 a/n/ac/ax – U-NII- 3

| FCC part                 | RSS clause                                      | 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                          | Power spectral density                                      | P       |
| 15.407 (b) (3)           | RSS-247 Clause 6.2.4.2                          | Undesirable emissions limits: out of band (conducted)       | P       |
| 15.407 (b) (3)<br>15.209 | RSS-247 Clause 6.2.4.2<br>RSS-GEN A1 Clause 8.9 | Undesirable emissions limits: Spurious emissions (radiated) | P       |

P: Pass

F: Fail

NM: Not Measured

NA: Not Applicable

## 8. Document Revision History

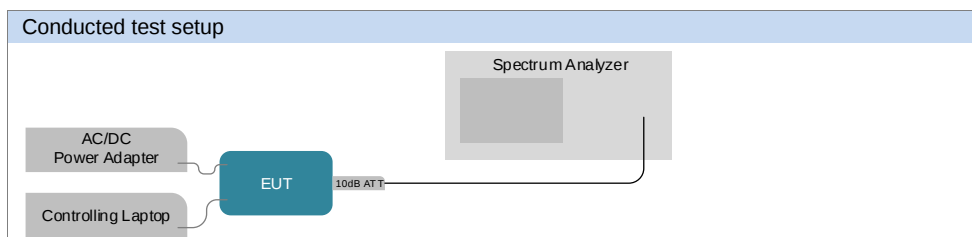
| Revision # | Modified by | Revision Details |
|------------|-------------|------------------|
| Rev. 00    | C.Requin    | First Issue      |

# Annex A. Test & System Description

## A.1 Measurement System

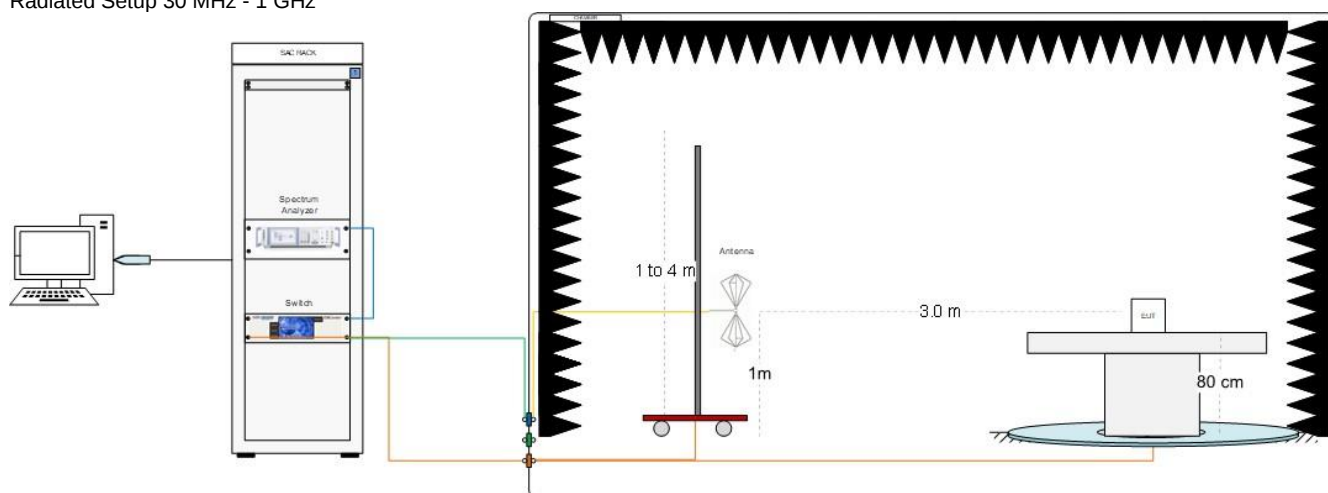
Measurements were performed using the following setups, made in accordance to the general provisions of FCC KDB 789033 D02 General UNII Test Procedures.

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.

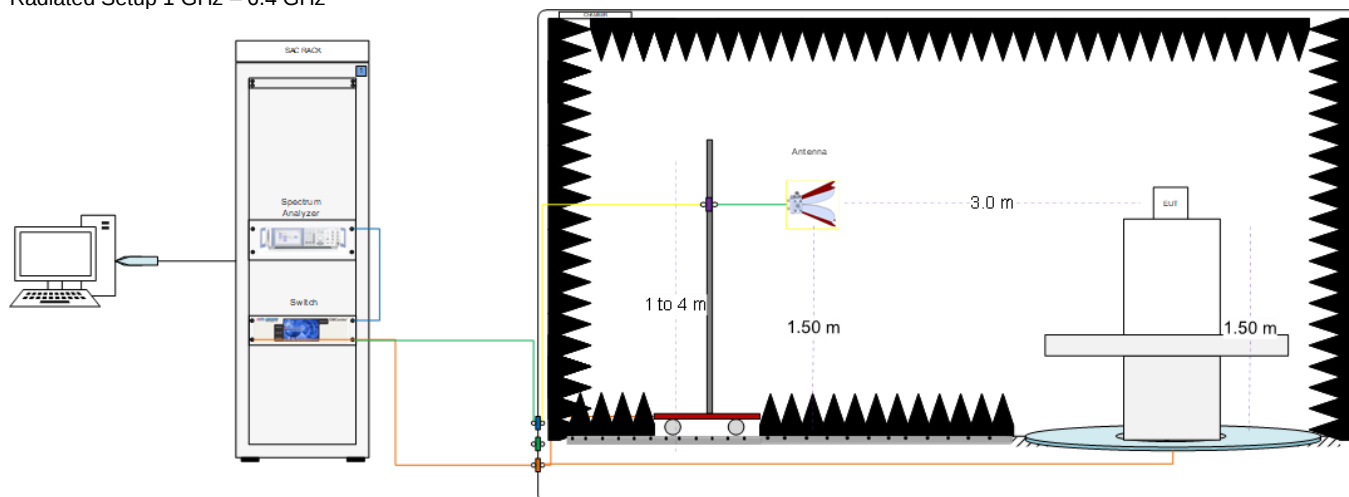


### Radiated test setup

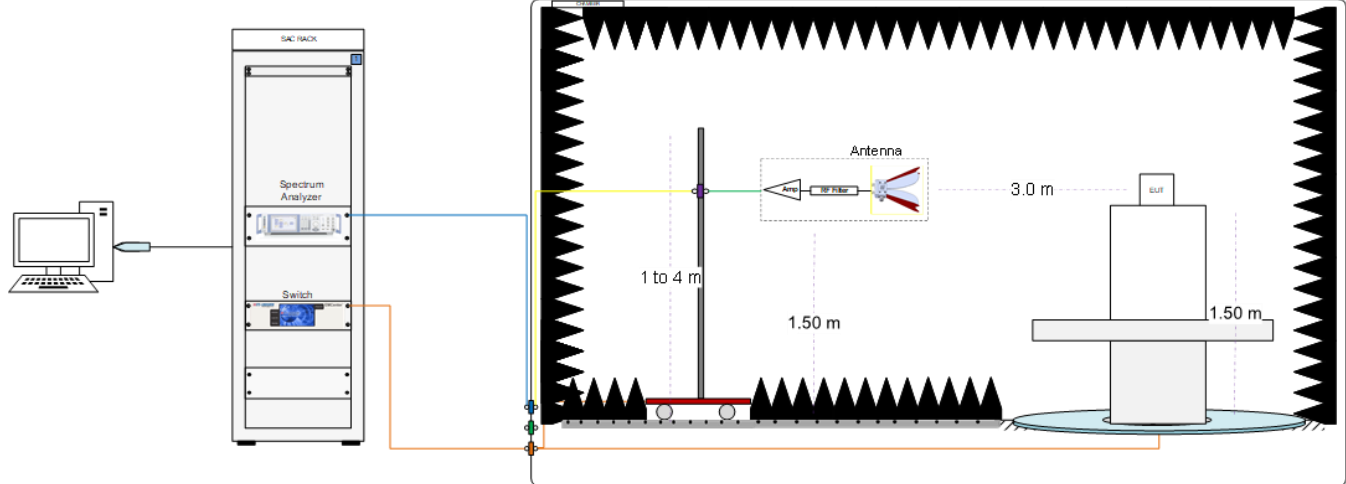
#### Radiated Setup 30 MHz - 1 GHz



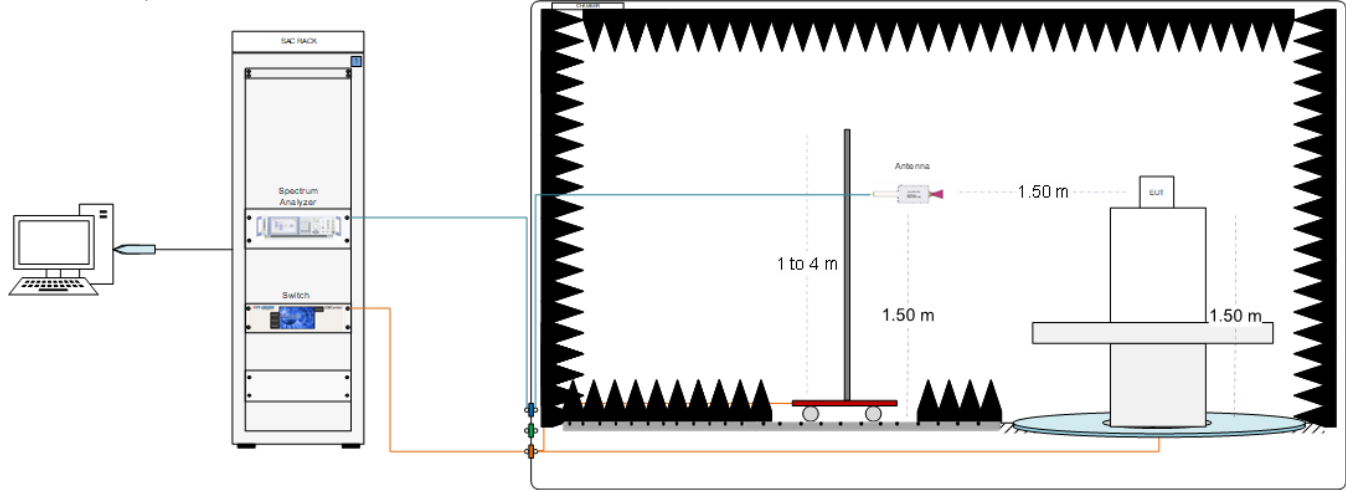
#### Radiated Setup 1 GHz – 6.4 GHz



Radiated Setup 6.4 GHz - 18 GHz



Radiated Setup 18 GHz – 40 GHz



### Sample Calculation

The spurious received voltage  $V(\text{dB}\mu\text{V})$  in the spectrum Analyzer is converted to Electric field strength using the transducer factor  $F$  corresponding to the Rx path Loss:

$$F(\text{dB/m}) = \text{Rx Antenna Factor}(\text{dB/m}) + \text{Cable losses}(\text{dB}) - \text{Amplifiers Gain}(\text{dBi})$$

$$E(\text{dB}\mu\text{V/m}) = V(\text{dB}\mu\text{V}) + F(\text{dB/m})$$

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:

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

where

$E_{\text{SpecLimit}}$  is the field strength of the emission at the distance specified by the limit, in  $\text{dB}\mu\text{V/m}$

$E_{\text{Meas}}$  is the field strength of the emission at the measurement distance, in  $\text{dB}\mu\text{V/m}$

$D_{\text{Meas}}$  is the measurement distance, in m

$D_{\text{SpecLimit}}$  is the distance specified by the limit, in m

## A.2 Test Equipment List

### Conducted setup #1

| ID#  | Device                  | Type/Model             | Serial #           | Manufacturer    | Cal. Date  | Cal. Due Date |
|------|-------------------------|------------------------|--------------------|-----------------|------------|---------------|
| 0315 | Spectrum Analyzer       | FSV30                  | 103307             | Rohde & Schwarz | 2020-04-06 | 2022-04-06    |
| 0378 | RF Cable                | Cable 40GHz<br>Utiflex | MFR64639 23720-001 | MICRO-COAX      | 2020-08-26 | 2021-02-26    |
| 1118 | 10dB Attenuator + MH4   | N/A                    | N/A                | N/A             | N/A        | N/A           |
| 0583 | Temp & Humidity Logger  | RA12E-TH1-RAS          | RA12-B9D6E         | AVITECH         | 2019-09-06 | 2021-09-06    |
| 1002 | Measurement SW v1.5.4.2 | Octopi                 | N/A                | Step AT         | N/A        | N/A           |

### Conducted setup #2

| ID#  | Device                  | Type/Model                         | Serial #   | Manufacturer    | Cal. Date  | Cal. Due Date |
|------|-------------------------|------------------------------------|------------|-----------------|------------|---------------|
| 0316 | Spectrum Analyzer       | FSV30                              | 103309     | Rohde & Schwarz | 2019-09-02 | 2021-09-02    |
| 0442 | RF cable 50cm           | Coax 2.92mm Male<br>To 2.92mm Male | N/A        | PASTERNAK       | 2020-08-26 | 2021-02-26    |
| 1044 | 10dB Attenuator + MH4   | N/A                                | N/A        | N/A             | N/A        | N/A           |
| 0583 | Temp & Humidity Logger  | RA12E-TH1-RAS                      | RA12-B9D6E | AVITECH         | 2019-09-06 | 2021-09-06    |
| 1002 | Measurement SW v1.5.4.2 | Octopi                             | N/A        | Step AT         | N/A        | N/A           |

### Radiated Setup #1

| ID#  | Device                                                                 | Type/Model                       | Serial #                  | Manufacturer    | Cal. Date  | Cal. Due Date |
|------|------------------------------------------------------------------------|----------------------------------|---------------------------|-----------------|------------|---------------|
| 0135 | Anechoic Chamber                                                       | FACT3                            | 5720                      | ETS-Lindgren    | 2020-07-06 | 2022-01-07    |
| 0136 | Turn Table                                                             | ETS                              | -                         | ETS-Lindgren    | N/A        | N/A           |
| 0147 | Switch & Positioning systems                                           | EMC Center                       | 00159757                  | ETS-Lindgren    | N/A        | N/A           |
| 0530 | Measurement SW                                                         | EMC32, v10.40.10                 | 100623                    | Rohde & Schwarz | N/A        | N/A           |
| 1033 | Boresight antenna mast                                                 | BAM 4.0-P                        | P/278/2890.01             | Maturo          | N/A        | N/A           |
| 1076 | Spectrum Analyzer                                                      | FSW43                            | 101847                    | Rohde & Schwarz | 2020-11-02 | 2022-11-02    |
| 0993 | Biconical antenna<br>30 MHz – 1 GHz                                    | UBAA9115<br>BBVU9135<br>DGA9552N | +<br>+<br>0286 + CH 9044  | Schwarzbeck     | 2019-11-22 | 2021-11-22    |
| 0325 | Horn antenna                                                           | 3117                             | 00157734                  | ETS-Lindgren    | 2019-08-12 | 2021-08-12    |
| 0141 | Horn Antenna + Amplifier +<br>HPF6.4                                   | 3117                             | 00157736                  | ETS-Lindgren    | 2020-04-02 | 2022-04-02    |
| 0334 | Double-Ridged Waveguide<br>Horn with Pre-Amplifier 18<br>GHz to 40 GHz | 3116C+PA                         | 00169308bis +<br>00196308 | ETS-Lindgren    | 2019-07-24 | 2021-07-24    |
| 0859 | Cable 2.5m - 30MHz to 18GHz                                            | 0500990992500KE                  | 19.23.395                 | Radiall         | 2020-11-27 | 2021-05-27    |
| 0206 | Cable 1.2m – 18 to 40 GHz                                              | UFA147A-0-0480-<br>200200        | MFR<br>64639223720-003    | Micro-coax      | 2020-08-25 | 2021-02-25    |
| 0263 | Cable 1m - 1GHz to 18GHz                                               | UFA147A                          | -                         | Utiflex         | 2020-08-25 | 2021-02-25    |
| 0369 | Cable 2m - 26.5GHz to 40GHz                                            | 794-9191-2000A                   | E00327                    | Atem            | 2020-08-25 | 2021-02-25    |
| 0371 | Cable 1m – 30 MHz - 18GHz                                              | UFB311A-0-0590-<br>50U50U        | MFR 64639<br>223230-001   | Micro-coax      | 2020-08-25 | 2021-02-25    |
| 1099 | Cable 7m DC-18 GHz                                                     | 0501051057000GX                  | 19.35.850                 | Radiall         | 2020-11-27 | 2021-05-27    |
| 0809 | Cable 7m - 18GHz to 40GHz                                              | R286304009                       | -                         | Radiall         | 2020-08-25 | 2021-02-25    |
| 1098 | Cable 1.5m - DC-18GHz                                                  | CBL-1.5M-SMSM+                   | 202879                    | Mini-Circuits   | 2020-11-27 | 2021-05-27    |
| 0797 | Temp & Humidity Logger                                                 | RA12E-TH1-RAS                    | RA12-D0EB1A               | Avtech          | 2019-07-04 | 2021-07-04    |

N/A: Not Applicable

## Radiated Setup #2

| ID#  | Device                            | Type/Model       | Serial #               | Manufacturer    | Cal. Date  | Cal. Due Date |
|------|-----------------------------------|------------------|------------------------|-----------------|------------|---------------|
| 0337 | Anechoic chamber                  | RFD-FA-100       | 5996                   | ETS Lindgren    | 2020-07-06 | 2022-07-06    |
| 0238 | Switch & Positioner               | EMCenter         | 00151232               | ETS Lindgren    | N/A        | N/A           |
| 0382 | Antenna Tower                     | 2171B-3.0M       | 00150123               | ETS Lindgren    | N/A        | N/A           |
| 0383 | Turntable                         | -                | -                      | ETS Lindgren    | N/A        | N/A           |
| 0329 | Measurement SW                    | EMC32, v10.50.10 | 100401                 | Rohde & Schwarz | N/A        | N/A           |
| 0133 | Spectrum Analyzer                 | FSV40            | 101358                 | Rohde & Schwarz | 2020-02-25 | 2022-02-25    |
| 0138 | Double Ridge Horn (1- 18GHz)      | 3117             | 00152266               | ETS Lindgren    | 2020-03-08 | 2022-03-08    |
| 0141 | Horn Antenna + Amplifier + HPF6.4 | 3117             | 00157736               | ETS-Lindgren    | 2020-04-02 | 2022-04-02    |
| 0334 | Double Horn Ridged antenna        | 3116C-PA         | 00169308bis + 00196308 | ETS-Lindgren    | 2019-07-24 | 2021-07-24    |
| 0871 | RF Cable 1-18GHz, 1.5 m           | 0501050991200GX  | 19.21.710              | Radiall         | 2020-08-20 | 2021-02-20    |
| 0860 | RF Cable 1-18GHz, 1.2 m           | 2301761761200PJ  | 12.22.1104             | Radiall         | 2020-08-20 | 2021-02-20    |
| 0275 | RF Cable 1-18GHz - 6.5m           | 140-8500-11-51   | 001                    | Spectrum        | 2020-08-20 | 2021-02-20    |
| 0684 | RF Cable 1GHz-18GHz 1.5m          | -                | -                      | Spirent         | 2020-08-20 | 2021-02-20    |
| 0679 | RF Cable 18-40 GHz 6m             | R286304009       | 1747364                | Radiall         | 2020-08-20 | 2021-02-20    |
| 0028 | RF Cable 1.2m 40MHz-40GHz         | 794-9191-1200A   | DA585                  | Atem            | 2020-08-20 | 2021-02-20    |
| 0725 | RF Cable 1-9.5GHz 1.2m            | 0500990991200KE  | -                      | Radiall         | 2020-08-20 | 2021-02-20    |
| 0796 | Temp & Humidity Logger            | RA12E-TH1-RAS    | RA12-D4F316            | Avtech          | 2019-07-05 | 2021-07-05    |

## Shared Radiated Equipment

| ID#  | Device       | Type/Model | Serial # | Manufacturer    | Cal. Date  | Cal. Due Date |
|------|--------------|------------|----------|-----------------|------------|---------------|
| 0616 | Power Sensor | NRP-Z81    | 104385   | Rohde & Schwarz | 2020-04-08 | 2022-04-08    |
| 0617 | Power Sensor | NRP-Z81    | 104386   | Rohde & Schwarz | 2020-04-08 | 2022-04-08    |
| 0618 | Power Sensor | NRP-Z81    | 104382   | Rohde & Schwarz | 2020-04-08 | 2022-04-08    |

### A.3 Measurement Uncertainty Evaluation

The system uncertainty evaluation is shown in the table below with a coverage factor of  $k = 2$  to indicate a 95% level of confidence:

| Measurement type                    | Uncertainty | Unit |
|-------------------------------------|-------------|------|
| Timing                              | $\pm 0.12$  | %    |
| Power Spectral density              | $\pm 1.47$  | dB   |
| Occupied bandwidth                  | $\pm 2.07$  | %    |
| Conducted Power                     | $\pm 1.03$  | dB   |
| Conducted Spurious Emission <40 GHz | $\pm 3.45$  | dB   |
| Radiated tests <1GHz                | $\pm 5.26$  | dB   |
| Radiated tests on 1-40GHz           | $\pm 4.85$  | dB   |

# Annex B. Test Results U-NII-3

The herein test results were performed by:

| Test case measurement                    | Test Engineer              |
|------------------------------------------|----------------------------|
| 6dB and 99% Bandwidth                    | G.Roustan, C.Requin        |
| Maximum output power & Maximum PSD       | G.Roustan, C.Requin        |
| Undesirable emission limits: out of band | G.Roustan, C.Requin        |
| Radiated spurious emissions              | A.Lounes. N.Nachabe, N.Bui |

## 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 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:

| Transmission | Mode     | Bandwidth (MHz) | Worst Case Data Rate |
|--------------|----------|-----------------|----------------------|
| SISO         | 802.11a  | 20              | 6Mbps                |
|              | 802.11n  | 20              | HT0                  |
|              |          | 40              | HT0                  |
|              | 802.11ac | 80              | VHT0                 |
|              | 802.11ax | 20              | HE0                  |
|              |          | 40              | HE0                  |
|              |          | 80              | HE0                  |
| MIMO         | 802.11n  | 20/40           | HT8                  |
|              | 802.11ac | 80              | VHT0                 |
|              | 802.11ax | 20/40/80        | 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 clause                | 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 conducted setup shown in section *Test & System Description* 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, 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 [MHz] | 6dB BW [MHz] | 99% BW [MHz] |
|------------|-------|---------|---------|------------|--------------|--------------|
| 802.11a    | 6Mbps | SISO A  | 149     | 5745       | 15.08        | 16.80        |
|            |       |         | 157     | 5785       | 15.10        | 16.72        |
|            |       |         | 165     | 5825       | 15.09        | 16.84        |
|            |       | SISO B  | 149     | 5745       | 15.03        | 16.72        |
|            |       |         | 157     | 5785       | 15.12        | 16.72        |
|            |       |         | 165     | 5825       | 15.06        | 16.68        |
| 802.11n20  | HT0   | SISO A  | 149     | 5745       | 15.08        | 17.84        |
|            |       |         | 157     | 5785       | 15.45        | 17.92        |
|            |       |         | 165     | 5825       | 15.13        | 17.92        |
|            |       | SISO B  | 149     | 5745       | 15.70        | 17.80        |
|            |       |         | 157     | 5785       | 15.03        | 17.92        |
|            |       |         | 165     | 5825       | 15.09        | 17.84        |
|            | HT8   | MIMO A  | 149     | 5745       | 13.81        | 17.88        |
|            |       |         | 157     | 5785       | 15.03        | 17.84        |
|            |       |         | 165     | 5825       | 14.99        | 17.96        |
|            |       | MIMO B  | 149     | 5745       | 15.70        | 17.96        |
|            |       |         | 157     | 5785       | 15.67        | 17.80        |
|            |       |         | 165     | 5825       | 15.69        | 17.80        |
| 802.11n40  | HT0   | SISO A  | 151     | 5755       | 35.07        | 36.16        |
|            |       |         | 159     | 5795       | 35.03        | 36.32        |
|            |       | SISO B  | 151     | 5755       | 35.09        | 36.24        |
|            |       |         | 159     | 5795       | 35.05        | 36.08        |
|            | HT8   | MIMO A  | 151     | 5755       | 33.85        | 36.16        |
|            |       |         | 159     | 5795       | 35.07        | 36.24        |
|            |       | MIMO B  | 151     | 5755       | 35.00        | 36.08        |
|            |       |         | 159     | 5795       | 33.83        | 36.16        |
|            |       |         |         |            |              |              |
| 802.11ac80 | VHT0  | SISO A  | 155     | 5775       | 75.07        | 75.12        |
|            |       | SISO B  |         |            | 71.37        | 75.24        |
|            |       | MIMO A  |         |            | 73.80        | 75.12        |
|            |       | MIMO B  |         |            | 72.63        | 75.00        |

Max Value

| Mode       | Rate | Antenna | Channel | Freq [MHz] | RU config. | 6dB BW [MHz] | 99% BW [MHz] |
|------------|------|---------|---------|------------|------------|--------------|--------------|
| 802.11ax20 | HE0  | SISO A  | 149     | 5745       | Full       | 15.10        | 18.96        |
|            |      |         |         |            | 26/0       | 2.05         | 18.24        |
|            |      |         |         |            | 52/37      | 17.06        | 18.40        |
|            |      |         |         |            | 106/53     | 17.12        | 18.32        |
|            |      |         | 157     | 5785       | Full       | 15.41        | 18.92        |
|            |      |         |         |            | 165        | 5825         | Full         |
|            |      | SISO B  | 149     | 5745       | Full       | 16.89        | 18.96        |
|            |      |         |         |            | 26/0       | 14.49        | 18.56        |
|            |      |         |         |            | 52/37      | 15.75        | 18.52        |
|            |      |         |         |            | 106/53     | 17.72        | 18.04        |
|            |      |         | 157     | 5785       | Full       | 15.46        | 18.92        |
|            |      |         |         |            | 165        | 5825         | Full         |
|            |      | MIMO A  | 149     | 5745       | Full       | 15.84        | 18.96        |
|            |      |         |         |            | 26/0       | 17.01        | 18.68        |
|            |      |         |         |            | 52/37      | 17.01        | 17.88        |
|            |      |         |         |            | 106/53     | 17.09        | 18.24        |
|            |      |         | 157     | 5785       | Full       | 16.86        | 19.00        |
|            |      |         |         |            | 165        | 5825         | Full         |
|            |      | MIMO B  | 149     | 5745       | Full       | 15.05        | 19.04        |
|            |      |         |         |            | 26/0       | 13.24        | 18.44        |
|            |      |         |         |            | 52/37      | 16.93        | 18.36        |
|            |      |         |         |            | 106/53     | 17.12        | 15.96        |
|            |      |         | 157     | 5785       | Full       | 15.92        | 19.00        |
|            |      |         |         |            | 165        | 5825         | Full         |
| 802.11ax40 | HE0  | SISO A  | 151     | 5755       | Full       | 35.08        | 37.76        |
|            |      |         | 159     | 5795       | 242/61     | 16.56        | 18.88        |
|            |      | SISO B  | 151     | 5755       | Full       | 35.08        | 37.60        |
|            |      |         | 159     | 5795       | Full       | 34.18        | 37.68        |
|            |      |         | 151     | 5755       | 242/61     | 15.53        | 18.80        |
|            |      |         | 159     | 5795       | Full       | 15.27        | 37.68        |
|            |      | MIMO A  | 151     | 5755       | Full       | 35.14        | 37.60        |
|            |      |         | 159     | 5795       | 242/61     | 15.49        | 18.80        |
|            |      |         | 151     | 5755       | Full       | 35.60        | 37.76        |
|            |      |         | 159     | 5795       | Full       | 35.08        | 37.68        |
| 802.11ax80 | HE0  | SISO A  | 155     | 5775       | Full       | 72.63        | 76.92        |
|            |      |         |         |            | 484/65     | 34.73        | 37.56        |
|            |      | SISO B  |         |            | Full       | 73.83        | 76.80        |
|            |      |         |         |            | 484/65     | 35.90        | 37.44        |
|            |      | MIMO A  |         |            | Full       | 75.10        | 76.68        |
|            |      |         |         |            | 484/65     | 35.60        | 37.44        |
|            |      | MIMO B  |         |            | Full       | 75.03        | 76.68        |
|            |      |         |         |            | 484/65     | 35.13        | 37.32        |

Max Value

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

| Mode       | Channel | Frequency (MHz) | Antenna | Chain | 6dB BW [MHz] | 26dB BW UNII-3 [MHz] |
|------------|---------|-----------------|---------|-------|--------------|----------------------|
| 802.11n20  | 144     | 5720            | SISO    | A     | 3.34         | 6.58                 |
|            |         |                 |         | B     | 3.46         | 6.63                 |
|            |         |                 | MIMO    | A     | 3.37         | 6.63                 |
|            |         |                 |         | B     | 3.37         | 6.53                 |
| 802.11n40  | 142     | 5710            | SISO    | A     | 3.20         | 7.10                 |
|            |         |                 |         | B     | 3.18         | 7.55                 |
|            |         |                 | MIMO    | A     | 3.27         | 6.29                 |
|            |         |                 |         | B     | 3.17         | 5.48                 |
| 802.11ac80 | 138     | 5690            | SISO    | A     | 3.27         | 7.28                 |
|            |         |                 |         | B     | 3.27         | 8.99                 |
|            |         |                 | MIMO    | A     | 3.22         | 7.85                 |
|            |         |                 |         | B     | 3.18         | 7.47                 |
| 802.11ax20 | 144     | 5720            | SISO    | A     | 3.35         | 6.33                 |
|            |         |                 |         | B     | 4.51         | 6.03                 |
|            |         |                 | MIMO    | A     | 4.07         | 6.08                 |
|            |         |                 |         | B     | 3.29         | 6.33                 |
| 802.11ax40 | 142     | 5710            | SISO    | A     | 4.13         | 5.65                 |
|            |         |                 |         | B     | 4.04         | 6.29                 |
|            |         |                 | MIMO    | A     | 4.06         | 5.93                 |
|            |         |                 |         | B     | 3.15         | 6.29                 |
| 802.11ax80 | 138     | 5690            | SISO    | A     | 4.05         | 6.52                 |
|            |         |                 |         | B     | 4.06         | 7.09                 |
|            |         |                 | MIMO    | A     | 4.11         | 6.14                 |
|            |         |                 |         | B     | 4.01         | 6.33                 |

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 annex C.1.1 and C.1.2 for screenshot results**

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

### Test limits

| FCC part          | RSS clause                | 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 FCC KDB 789033 D02

The maximum power spectral density (PSD) was measured using the method according to section F) (Method SA-2 Alternative) of FCC 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 conducted setup shown in section *Test & System Description* was used to measure the maximum conducted output power and power spectral density. The antenna terminal of the EUT is connected to the spectrum analyser through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

For the overlapped channels between U-NII-2C and U-NII-3, and according to FCC KDB 789033 D02, 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.

**See annex C.1.3 for screenshot results**

## Results tables

### Duty cycle

| Mode        | Rate  | Antenna | Duty Cycle [%] |
|-------------|-------|---------|----------------|
| 802.11a     | 6Mbps | SISO A  | 97.90          |
|             |       | SISO B  | 97.90          |
| 802.11n20   | HT0   | SISO A  | 98.90          |
|             |       | SISO B  | 98.90          |
|             | HT8   | MIMO A  | 98.90          |
|             |       | MIMO B  | 98.90          |
| 802.11ax20  | HE0   | SISO A  | 98.90          |
|             |       | SISO B  | 98.90          |
|             |       | MIMO A  | 98.90          |
|             |       | MIMO B  | 98.90          |
| 802.11n40   | HT0   | SISO A  | 98.90          |
|             |       | SISO B  | 98.90          |
|             | HT8   | MIMO A  | 98.90          |
|             |       | MIMO B  | 98.90          |
| 802.11ax40  | HE0   | SISO A  | 98.90          |
|             |       | SISO B  | 98.90          |
|             |       | MIMO A  | 98.90          |
|             |       | MIMO B  | 98.90          |
| 802.11ac80  | VHT0  | SISO A  | 98.90          |
|             |       | SISO B  | 98.90          |
|             |       | MIMO A  | 98.90          |
|             |       | MIMO B  | 98.90          |
| 802.11ax80  | HE0   | SISO A  | 98.90          |
|             |       | SISO B  | 98.90          |
|             |       | MIMO A  | 99.40          |
|             |       | MIMO B  | 99.40          |
| 802.11ac160 | VTH0  | SISO A  | 98.90          |
|             |       | SISO B  | 98.90          |
|             |       | MIMO A  | 98.90          |
|             |       | MIMO B  | 98.90          |
| 802.11ax160 | HE0   | SISO A  | 98.90          |
|             |       | SISO B  | 98.90          |
|             |       | MIMO A  | 98.90          |
|             |       | MIMO B  | 98.90          |

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

| Mode       | Rate  | Channel | Freq [MHz] | Antenna      | Average Conducted Output Power [dBm] | Avg Max* Conducted Output Power [dBm] | Avg Max* EIRP [dBm] | Avg Max* Conducted Power [mW] |
|------------|-------|---------|------------|--------------|--------------------------------------|---------------------------------------|---------------------|-------------------------------|
| 802.11a    | 6Mbps | 149     | 5745       | SISO A       | 20.98                                | 21.07                                 | 26.07               | 128.00                        |
|            |       |         |            | SISO B       | 21.01                                | 21.10                                 | 26.10               | 128.89                        |
|            |       | 157     | 5785       | SISO A       | 20.81                                | 20.90                                 | 25.90               | 123.09                        |
|            |       |         |            | SISO B       | 21.01                                | 21.10                                 | 26.10               | 128.89                        |
|            |       | 165     | 5825       | SISO A       | 21.00                                | 21.09                                 | 26.09               | 128.59                        |
|            |       |         |            | SISO B       | 20.90                                | 20.99                                 | 25.99               | 125.67                        |
| 802.11n20  | HT0   | 149     | 5745       | SISO A       | 20.96                                | 20.96                                 | 25.96               | 124.74                        |
|            |       |         |            | SISO B       | 20.93                                | 20.93                                 | 25.93               | 123.88                        |
|            |       | 157     | 5785       | SISO A       | 20.93                                | 20.93                                 | 25.93               | 123.88                        |
|            |       |         |            | SISO B       | 20.99                                | 20.99                                 | 25.99               | 125.60                        |
|            |       | 165     | 5825       | SISO A       | 20.93                                | 20.93                                 | 25.93               | 123.88                        |
|            |       |         |            | SISO B       | 21.03                                | 21.03                                 | 26.03               | 126.77                        |
|            | HT8   | 149     | 5745       | MIMO A       | 20.88                                | 20.88                                 | 25.88               | 122.46                        |
|            |       |         |            | MIMO B       | 20.84                                | 20.84                                 | 25.84               | 121.34                        |
|            |       |         |            | Combined A+B | 23.87                                | 23.87                                 | 28.87               | 243.80                        |
|            |       | 157     | 5785       | MIMO A       | 20.97                                | 20.97                                 | 25.97               | 125.03                        |
|            |       |         |            | MIMO B       | 20.84                                | 20.84                                 | 25.84               | 121.34                        |
|            |       |         |            | Combined A+B | 23.92                                | 23.92                                 | 28.92               | 246.36                        |
|            |       | 165     | 5825       | MIMO A       | 20.97                                | 20.97                                 | 25.97               | 125.03                        |
|            |       |         |            | MIMO B       | 20.93                                | 20.93                                 | 25.93               | 123.88                        |
|            |       |         |            | Combined A+B | 23.96                                | 23.96                                 | 28.96               | 248.91                        |
| 802.11n40  | HT0   | 151     | 5755       | SISO A       | 21.16                                | 21.16                                 | 26.16               | 130.62                        |
|            |       |         |            | SISO B       | 20.92                                | 20.92                                 | 25.92               | 123.59                        |
|            |       | 159     | 5795       | SISO A       | 21.19                                | 21.19                                 | 26.19               | 131.52                        |
|            |       |         |            | SISO B       | 20.94                                | 20.94                                 | 25.94               | 124.17                        |
|            | HT8   | 151     | 5755       | MIMO A       | 20.61                                | 20.61                                 | 25.61               | 115.08                        |
|            |       |         |            | MIMO B       | 20.28                                | 20.28                                 | 25.28               | 106.66                        |
|            |       |         |            | Combined A+B | 23.46                                | 23.46                                 | 28.46               | 221.74                        |
|            |       | 159     | 5795       | MIMO A       | 20.94                                | 20.94                                 | 25.94               | 124.17                        |
|            |       |         |            | MIMO B       | 20.94                                | 20.94                                 | 25.94               | 124.17                        |
|            |       |         |            | Combined A+B | 23.95                                | 23.95                                 | 28.95               | 248.33                        |
| 802.11ac80 | VHT0  | 155     | 5775       | SISO A       | 20.07                                | 20.07                                 | 25.07               | 101.62                        |
|            |       |         |            | SISO B       | 19.85                                | 19.85                                 | 24.85               | 96.61                         |
|            |       |         |            | MIMO A       | 18.48                                | 18.48                                 | 23.48               | 70.47                         |
|            |       |         |            | MIMO B       | 18.15                                | 18.15                                 | 23.15               | 65.31                         |
|            |       |         |            | Combined A+B | 21.33                                | 21.33                                 | 26.33               | 135.78                        |

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

Max Value

Min Value

| Mode       | Rate | Channel | Freq [MHz] | Antenna      | RU config. | Average Conducted Ouput Power [dBm] | Avg Max* Conducted Ouput Power [dBm] | Avg Max*. EIRP [dBm] | Avg Max* Conducted Power [mW] |
|------------|------|---------|------------|--------------|------------|-------------------------------------|--------------------------------------|----------------------|-------------------------------|
| 802.11ax20 | HE0  | 149     | 5745       | SISO A       | Full       | 21.03                               | 21.03                                | 26.03                | 126.77                        |
|            |      |         |            |              | 26/0       | 20.79                               | 20.79                                | 25.79                | 119.95                        |
|            |      |         |            |              | 52/37      | 20.83                               | 20.83                                | 25.83                | 121.06                        |
|            |      |         |            |              | 106/53     | 21.01                               | 21.01                                | 26.01                | 126.18                        |
|            |      |         |            | SISO B       | Full       | 20.81                               | 20.81                                | 25.81                | 120.50                        |
|            |      |         |            |              | 26/0       | 20.86                               | 20.86                                | 25.86                | 121.90                        |
|            |      |         |            |              | 52/37      | 20.90                               | 20.90                                | 25.90                | 123.03                        |
|            |      |         |            |              | 106/53     | 20.93                               | 20.93                                | 25.93                | 123.88                        |
|            |      |         |            | MIMO A       | Full       | 21.02                               | 21.02                                | 26.02                | 126.47                        |
|            |      |         |            |              | 26/0       | 17.94                               | 17.94                                | 22.94                | 62.23                         |
|            |      |         |            |              | 52/37      | 14.09                               | 14.09                                | 19.09                | 25.64                         |
|            |      |         |            |              | 106/53     | 17.95                               | 17.95                                | 22.95                | 62.37                         |
|            |      |         |            | MIMO B       | Full       | 20.98                               | 20.98                                | 25.98                | 125.31                        |
|            |      |         |            |              | 26/0       | 18.02                               | 18.02                                | 23.02                | 63.39                         |
|            |      |         |            |              | 52/37      | 13.89                               | 13.89                                | 18.89                | 24.49                         |
|            |      |         |            |              | 106/53     | 17.86                               | 17.86                                | 22.86                | 61.09                         |
|            |      |         |            | Combined A+B | Full       | 24.01                               | 24.01                                | 29.01                | 251.79                        |
|            |      |         |            |              | 26/0       | 20.99                               | 20.99                                | 25.99                | 125.62                        |
|            |      |         |            |              | 52/37      | 17.00                               | 17.00                                | 22.00                | 50.14                         |
|            |      |         |            |              | 106/53     | 20.92                               | 20.92                                | 25.92                | 123.47                        |
|            |      | 157     | 5785       | SISO A       | Full       | 21.09                               | 21.09                                | 26.09                | 128.53                        |
|            |      |         |            | SISO B       | Full       | 20.83                               | 20.83                                | 25.83                | 121.06                        |
|            |      |         |            | MIMO A       | Full       | 20.80                               | 20.80                                | 25.80                | 120.23                        |
|            |      |         |            | MIMO B       | Full       | 20.99                               | 20.99                                | 25.99                | 125.60                        |
|            |      |         |            | Combined A+B | Full       | 23.91                               | 23.91                                | 28.91                | 245.83                        |
|            |      | 165     | 5825       | SISO A       | Full       | 20.84                               | 20.84                                | 25.84                | 121.34                        |
|            |      |         |            | SISO B       | Full       | 20.94                               | 20.94                                | 25.94                | 124.17                        |
|            |      |         |            | MIMO A       | Full       | 21.03                               | 21.03                                | 26.03                | 126.77                        |
|            |      |         |            | MIMO B       | Full       | 21.05                               | 21.05                                | 26.05                | 127.35                        |
|            |      |         |            | Combined A+B | Full       | 24.05                               | 24.05                                | 29.05                | 254.12                        |
| 802.11ax40 | HE0  | 151     | 5755       | SISO A       | Full       | 20.84                               | 20.84                                | 25.84                | 121.34                        |
|            |      |         |            |              | 242/61     | 20.86                               | 20.86                                | 25.86                | 121.90                        |
|            |      |         |            | SISO B       | Full       | 20.67                               | 20.67                                | 25.67                | 116.68                        |
|            |      |         |            |              | 242/61     | 20.88                               | 20.88                                | 25.88                | 122.46                        |
|            |      |         |            | MIMO A       | Full       | 20.07                               | 20.07                                | 25.07                | 101.62                        |
|            |      |         |            |              | 242/61     | 21.09                               | 21.09                                | 26.09                | 128.53                        |
|            |      |         |            | MIMO B       | Full       | 20.27                               | 20.27                                | 25.27                | 106.41                        |
|            |      |         |            |              | 242/61     | 21.09                               | 21.09                                | 26.09                | 128.53                        |
|            |      |         |            | Combined A+B | Full       | 23.18                               | 23.18                                | 28.18                | 208.04                        |
|            |      |         |            |              | 242/61     | 24.10                               | 24.10                                | 29.10                | 257.06                        |
|            |      | 159     | 5795       | SISO A       | Full       | 20.92                               | 20.92                                | 25.92                | 123.59                        |
|            |      |         |            | SISO B       | Full       | 20.98                               | 20.98                                | 25.98                | 125.31                        |
|            |      |         |            | MIMO A       | Full       | 20.91                               | 20.91                                | 25.91                | 123.31                        |
|            |      |         |            | MIMO B       | Full       | 21.11                               | 21.11                                | 26.11                | 129.12                        |
|            |      |         |            | Combined A+B | Full       | 24.02                               | 24.02                                | 29.02                | 252.43                        |
| 802.11ax80 | HE0  | 155     | 5775       | SISO A       | Full       | 19.85                               | 19.85                                | 24.85                | 96.61                         |
|            |      |         |            |              | 484/65     | 20.39                               | 20.39                                | 25.39                | 109.40                        |
|            |      |         |            | SISO B       | Full       | 19.82                               | 19.82                                | 24.82                | 95.94                         |
|            |      |         |            |              | 484/65     | 20.11                               | 20.11                                | 25.11                | 102.57                        |
|            |      |         |            | MIMO A       | Full       | 18.25                               | 18.25                                | 23.25                | 66.83                         |
|            |      |         |            |              | 484/65     | 20.43                               | 20.43                                | 25.43                | 110.41                        |
|            |      |         |            | MIMO B       | Full       | 18.24                               | 18.24                                | 23.24                | 66.68                         |
|            |      |         |            |              | 484/65     | 20.06                               | 20.06                                | 25.06                | 101.39                        |
|            |      |         |            | Combined A+B | Full       | 21.26                               | 21.26                                | 26.26                | 133.52                        |
|            |      |         |            |              | 484/65     | 23.26                               | 23.26                                | 28.26                | 211.80                        |

\* 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       | Channel | Freq (MHz) | Antenna  | Chain | Average Cond. Output Power UNII-3 [dBm] | Max.* Cond. Output Power UNII-3 [dBm] | Max.* EIRP UNII-3 [dBm] | Max.* Cond. Output Power UNII-3 [mW] |
|------------|---------|------------|----------|-------|-----------------------------------------|---------------------------------------|-------------------------|--------------------------------------|
| 802.11n20  | 144     | 5720       | SISO     | A     | 12.61                                   | 12.61                                 | 17.61                   | 18.24                                |
|            |         |            |          | B     | 12.69                                   | 12.69                                 | 17.69                   | 18.58                                |
|            |         |            | MIMO     | A     | 10.01                                   | 10.01                                 | 15.01                   | 10.02                                |
|            |         |            |          | B     | 9.71                                    | 9.71                                  | 14.71                   | 9.35                                 |
|            |         |            | Combined | A+B   | 12.87                                   | 12.87                                 | 17.87                   | 19.38                                |
| 802.11n40  | 142     | 5710       | SISO     | A     | 8.52                                    | 8.52                                  | 13.52                   | 7.11                                 |
|            |         |            |          | B     | 8.60                                    | 8.60                                  | 13.60                   | 7.24                                 |
|            |         |            | MIMO     | A     | 5.24                                    | 5.24                                  | 10.24                   | 3.34                                 |
|            |         |            |          | B     | 5.18                                    | 5.18                                  | 10.18                   | 3.30                                 |
|            |         |            | Combined | A+B   | 8.22                                    | 8.22                                  | 13.22                   | 6.64                                 |
| 802.11ac80 | 138     | 5690       | SISO     | A     | 4.35                                    | 4.35                                  | 9.35                    | 2.72                                 |
|            |         |            |          | B     | 4.39                                    | 4.39                                  | 9.39                    | 2.75                                 |
|            |         |            | MIMO     | A     | 1.33                                    | 1.33                                  | 6.33                    | 1.36                                 |
|            |         |            |          | B     | 1.74                                    | 1.74                                  | 6.74                    | 1.49                                 |
|            |         |            | Combined | A+B   | 4.55                                    | 4.55                                  | 9.55                    | 2.85                                 |
| 802.11ax20 | 144     | 5720       | SISO     | A     | 13.09                                   | 13.09                                 | 18.09                   | 20.37                                |
|            |         |            |          | B     | 13.77                                   | 13.77                                 | 18.77                   | 23.82                                |
|            |         |            | MIMO     | A     | 10.13                                   | 10.13                                 | 15.13                   | 10.30                                |
|            |         |            |          | B     | 10.17                                   | 10.17                                 | 15.17                   | 10.40                                |
|            |         |            | Combined | A+B   | 13.16                                   | 13.16                                 | 18.16                   | 20.70                                |
| 802.11ax40 | 142     | 5710       | SISO     | A     | 8.88                                    | 8.88                                  | 13.88                   | 7.73                                 |
|            |         |            |          | B     | 8.39                                    | 8.39                                  | 13.39                   | 6.90                                 |
|            |         |            | MIMO     | A     | 5.72                                    | 5.72                                  | 10.72                   | 3.73                                 |
|            |         |            |          | B     | 5.66                                    | 5.66                                  | 10.66                   | 3.68                                 |
|            |         |            | Combined | A+B   | 8.70                                    | 8.70                                  | 13.70                   | 7.41                                 |
| 802.11ax80 | 138     | 5690       | SISO     | A     | 5.18                                    | 5.18                                  | 10.18                   | 3.30                                 |
|            |         |            |          | B     | 5.18                                    | 5.18                                  | 10.18                   | 3.30                                 |
|            |         |            | MIMO     | A     | 1.99                                    | 1.99                                  | 6.99                    | 1.58                                 |
|            |         |            |          | B     | 2.00                                    | 2.00                                  | 7.00                    | 1.58                                 |
|            |         |            | Combined | A+B   | 5.01                                    | 5.01                                  | 10.01                   | 3.17                                 |

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

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       | 7.12                               | 7.21                             |
|            |       |         |            | SISO B       | 7.28                               | 7.37                             |
|            |       | 157     | 5785       | SISO A       | 7.04                               | 7.13                             |
|            |       |         |            | SISO B       | 7.28                               | 7.37                             |
|            |       | 165     | 5825       | SISO A       | 7.17                               | 7.26                             |
|            |       |         |            | SISO B       | 7.10                               | 7.19                             |
| 802.11n20  | HT0   | 149     | 5745       | SISO A       | 6.88                               | 6.88                             |
|            |       |         |            | SISO B       | 6.92                               | 6.92                             |
|            |       | 157     | 5785       | SISO A       | 6.88                               | 6.88                             |
|            |       |         |            | SISO B       | 7.03                               | 7.03                             |
|            |       | 165     | 5825       | SISO A       | 6.89                               | 6.89                             |
|            |       |         |            | SISO B       | 7.00                               | 7.00                             |
|            | HT8   | 149     | 5745       | MIMO A       | 6.83                               | 6.83                             |
|            |       |         |            | MIMO B       | 6.81                               | 6.81                             |
|            |       |         |            | Combined A+B | 9.83                               | 9.83                             |
|            |       |         |            | MIMO A       | 6.92                               | 6.92                             |
|            |       | 157     | 5785       | MIMO B       | 6.86                               | 6.86                             |
|            |       |         |            | Combined A+B | 9.90                               | 9.90                             |
|            |       | 165     | 5825       | MIMO A       | 6.90                               | 6.90                             |
|            |       |         |            | MIMO B       | 6.91                               | 6.91                             |
|            |       |         |            | Combined A+B | 9.92                               | 9.92                             |
| 802.11n40  | HT0   | 151     | 5755       | SISO A       | 3.66                               | 3.66                             |
|            |       |         |            | SISO B       | 3.47                               | 3.47                             |
|            |       | 159     | 5795       | SISO A       | 3.72                               | 3.72                             |
|            |       |         |            | SISO B       | 3.50                               | 3.50                             |
|            | HT8   | 151     | 5755       | MIMO A       | 3.01                               | 3.01                             |
|            |       |         |            | MIMO B       | 2.85                               | 2.85                             |
|            |       |         |            | Combined A+B | 5.94                               | 5.94                             |
|            |       | 159     | 5795       | MIMO A       | 3.47                               | 3.47                             |
|            |       |         |            | MIMO B       | 3.54                               | 3.54                             |
|            |       |         |            | Combined A+B | 6.52                               | 6.52                             |
| 802.11ac80 | VHT0  | 155     | 5775       | SISO A       | -0.38                              | -0.38                            |
|            |       |         |            | SISO B       | -0.72                              | -0.72                            |
|            |       |         |            | MIMO A       | -2.04                              | -2.04                            |
|            |       |         |            | MIMO B       | -2.39                              | -2.39                            |
|            |       |         |            | Combined A+B | 0.80                               | 0.80                             |

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

| Mode       | Rate | Channel | Freq [MHz] | Antenna      | RU config. | Average conducted PSD [dBm/500kHz] | Max.* conducted PSD [dBm/500kHz] |
|------------|------|---------|------------|--------------|------------|------------------------------------|----------------------------------|
| 802.11ax20 | HE0  | 149     | 5745       | SISO A       | Full       | 6.88                               | 6.88                             |
|            |      |         |            |              | 26/0       | 15.18                              | 15.18                            |
|            |      |         |            |              | 52/37      | 12.07                              | 12.07                            |
|            |      |         |            |              | 106/53     | 9.13                               | 9.13                             |
|            |      |         |            | SISO B       | Full       | 6.60                               | 6.60                             |
|            |      |         |            |              | 26/0       | 15.11                              | 15.11                            |
|            |      |         |            |              | 52/37      | 12.11                              | 12.11                            |
|            |      |         |            |              | 106/53     | 9.10                               | 9.10                             |
|            |      |         |            | MIMO A       | Full       | 6.80                               | 6.80                             |
|            |      |         |            |              | 26/0       | 12.15                              | 12.15                            |
|            |      |         |            |              | 52/37      | 5.30                               | 5.30                             |
|            |      |         |            |              | 106/53     | 6.09                               | 6.09                             |
|            |      |         |            | MIMO B       | Full       | 6.80                               | 6.80                             |
|            |      |         |            |              | 26/0       | 12.27                              | 12.27                            |
|            |      |         |            |              | 52/37      | 5.15                               | 5.15                             |
|            |      |         |            |              | 106/53     | 6.00                               | 6.00                             |
|            |      |         |            | Combined A+B | Full       | 9.81                               | 9.81                             |
|            |      |         |            |              | 26/0       | 15.22                              | 15.22                            |
|            |      |         |            |              | 52/37      | 8.24                               | 8.24                             |
|            |      |         |            |              | 106/53     | 9.06                               | 9.06                             |
|            |      | 157     | 5785       | SISO A       | Full       | 6.88                               | 6.88                             |
|            |      |         |            | SISO B       | Full       | 6.68                               | 6.68                             |
|            |      |         |            | MIMO A       | Full       | 6.61                               | 6.61                             |
|            |      |         |            | MIMO B       | Full       | 6.79                               | 6.79                             |
|            |      |         |            | Combined A+B | Full       | 9.71                               | 9.71                             |
|            |      | 165     | 5825       | SISO A       | Full       | 6.62                               | 6.62                             |
|            |      |         |            | SISO B       | Full       | 6.77                               | 6.77                             |
|            |      |         |            | MIMO A       | Full       | 6.82                               | 6.82                             |
|            |      |         |            | MIMO B       | Full       | 6.85                               | 6.85                             |
|            |      |         |            | Combined A+B | Full       | 9.85                               | 9.85                             |
| 802.11ax40 | HE0  | 151     | 5755       | SISO A       | Full       | 3.24                               | 3.24                             |
|            |      |         |            |              | 242/61     | 6.58                               | 6.58                             |
|            |      |         |            | SISO B       | Full       | 3.03                               | 3.03                             |
|            |      |         |            |              | 242/61     | 6.66                               | 6.66                             |
|            |      |         |            | MIMO A       | Full       | 2.70                               | 2.70                             |
|            |      |         |            |              | 242/61     | 6.79                               | 6.79                             |
|            |      |         |            | MIMO B       | Full       | 2.65                               | 2.65                             |
|            |      |         |            |              | 242/61     | 6.79                               | 6.79                             |
|            |      |         |            | Combined A+B | Full       | 5.69                               | 5.69                             |
|            |      |         |            |              | 242/61     | 9.80                               | 9.80                             |
|            |      | 159     | 5795       | SISO A       | Full       | 3.26                               | 3.26                             |
|            |      |         |            | SISO B       | Full       | 3.37                               | 3.37                             |
|            |      |         |            | MIMO A       | Full       | 3.30                               | 3.30                             |
|            |      |         |            | MIMO B       | Full       | 3.54                               | 3.54                             |
|            |      |         |            | Combined A+B | Full       | 6.43                               | 6.43                             |
| 802.11ax80 | HE0  | 155a    | 5775       | SISO A       | Full       | -0.79                              | -0.79                            |
|            |      |         |            |              | 484/65     | 2.87                               | 2.87                             |
|            |      |         |            | SISO B       | Full       | -0.81                              | -0.81                            |
|            |      |         |            |              | 484/65     | 2.58                               | 2.58                             |
|            |      |         |            | MIMO A       | Full       | -2.31                              | -2.31                            |
|            |      |         |            |              | 484/65     | 2.89                               | 2.89                             |
|            |      |         |            | MIMO B       | Full       | -2.33                              | -2.33                            |
|            |      |         |            |              | 484/65     | 2.52                               | 2.52                             |
|            |      |         |            | Combined A+B | Full       | 0.69                               | 0.69                             |
|            |      |         |            |              | 484/65     | 5.72                               | 5.72                             |

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

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

| Mode       | Channel | Freq (MHz) | Antenna  | Chain | Average conducted PSD UNII-3 [dBm/MHz] | Maximum* conducted PSD UNII-3 [dBm/MHz] |
|------------|---------|------------|----------|-------|----------------------------------------|-----------------------------------------|
| 802.11n20  | 144     | 5720       | SISO     | A     | 5.61                                   | 5.61                                    |
|            |         |            |          | B     | 5.59                                   | 5.59                                    |
|            |         |            | MIMO     | A     | 2.80                                   | 2.80                                    |
|            |         |            |          | B     | 2.71                                   | 2.71                                    |
|            |         |            | Combined | A+B   | 5.77                                   | 5.77                                    |
| 802.11n40  | 142     | 5710       | SISO     | A     | 0.46                                   | 0.46                                    |
|            |         |            |          | B     | 0.57                                   | 0.57                                    |
|            |         |            | MIMO     | A     | 0.46                                   | 0.46                                    |
|            |         |            |          | B     | -2.54                                  | -2.54                                   |
|            |         |            | Combined | A+B   | -2.56                                  | -2.56                                   |
| 802.11ac80 | 138     | 5690       | SISO     | A     | -3.46                                  | -3.46                                   |
|            |         |            |          | B     | -3.46                                  | -3.46                                   |
|            |         |            | MIMO     | A     | -6.46                                  | -6.46                                   |
|            |         |            |          | B     | -6.51                                  | -6.51                                   |
|            |         |            | Combined | A+B   | -3.47                                  | -3.47                                   |
| 802.11ax20 | 144     | 5720       | SISO     | A     | 5.51                                   | 5.51                                    |
|            |         |            |          | B     | 5.52                                   | 5.52                                    |
|            |         |            | MIMO     | A     | 2.59                                   | 2.59                                    |
|            |         |            |          | B     | 2.63                                   | 2.63                                    |
|            |         |            | Combined | A+B   | 5.62                                   | 5.62                                    |
| 802.11ax40 | 142     | 5710       | SISO     | A     | 0.21                                   | 0.21                                    |
|            |         |            |          | B     | 0.25                                   | 0.25                                    |
|            |         |            | MIMO     | A     | 0.12                                   | 0.12                                    |
|            |         |            |          | B     | -2.90                                  | -2.90                                   |
|            |         |            | Combined | A+B   | -2.88                                  | -2.88                                   |
| 802.11ax80 | 138     | 5690       | SISO     | A     | -3.49                                  | -3.49                                   |
|            |         |            |          | B     | -3.62                                  | -3.62                                   |
|            |         |            | MIMO     | A     | -6.63                                  | -6.63                                   |
|            |         |            |          | B     | -6.69                                  | -6.69                                   |
|            |         |            | Combined | A+B   | -3.65                                  | -3.65                                   |

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

**B.2.3 Undesirable emission limits : out of band (Conducted)**Test limits

| FCC part          | RSS clause                | 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 conducted setup shown in section *Test & System Description* 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.

**See Section C.1.4 for the screenshot results.**

## B.2.4 Radiated spurious emission

### Standard references

| FCC part         | RSS clause             | 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 A1, 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 radiated setups shown in section *Test & System Description* were used to measure the radiated spurious emissions.

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

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

The radiated spurious emission was measured on the worst case configuration selected from the chapter B.1 and using the low, middle and high channels.

For 802.11ax20, 802.11ax40 and 802.11ax80 modes, 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 and 802.11ac80 modes 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).

Test Results**Radiated spurious - 30 MHz – 1 GHz****Radiated Spurious – All modes**

| Frequency | Quasi-peak | Limit  | Margin | Polarization |
|-----------|------------|--------|--------|--------------|
| MHz       | dBμV/m     | dBμV/m | dB     | ---          |
| 74.9      | 31.1       | 40.0   | 8.9    | V            |
| 127.7     | 36.5       | 43.5   | 7.0    | V            |
| 328.7     | 39.3       | 46.0   | 6.7    | H            |
| 611.5     | 39.0       | 46.0   | 7.0    | V            |

Note 1: The spurious signals detected do not depend on either the operating channel or the modulation mode.

802.11a**1GHz – 40 GHz, 802.11a, 6Mbps, Chain A****Radiated Spurious – CH149**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 4300.0    | 53.4    | ---     | 74.0   | 20.6   | V     |
| 4300.3    | ---     | 42.2    | 54.0   | 11.8   | V     |
| 17229.1   | 57.3    | ---     | 68.2   | 10.9   | H     |
| 22973.4   | ---     | 39.3    | 54.0   | 14.7   | V     |
| 22982.4   | 49.6    | ---     | 74.0   | 24.4   | V     |

**Radiated Spurious – CH157**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2940.5    | 59.6    | ---     | 68.2   | 8.6    | V     |
| 17349.4   | 59.3    | ---     | 68.2   | 8.9    | H     |
| 39469.2   | 56.4    | ---     | 74.0   | 17.6   | H     |
| 39686.6   | ---     | 45.9    | 54.0   | 8.1    | V     |

**Radiated Spurious – CH165**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBµV/m  | dBµV/m  | dBµV/m | dB     | ---   |
| 2982.5    | 60.2    | ---     | 68.2   | 8.0    | H     |
| 17475.6   | 64.7    | ---     | 68.2   | 3.5    | H     |
| 39623.9   | 56.5    | ---     | 74.0   | 17.5   | V     |
| 39632.6   | ---     | 46.0    | 54.0   | 8.0    | V     |

**1GHz – 40 GHz, 802.11a, 6Mbps, Chain B****Radiated Spurious – CH149**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBµV/m  | dBµV/m  | dBµV/m | dB     | ---   |
| 2982.5    | 60.0    | ---     | 68.2   | 8.2    | H     |
| 17241.7   | 60.4    | ---     | 68.2   | 7.8    | V     |
| 39630.2   | 56.4    | ---     | 74.0   | 17.6   | H     |
| 39651.4   | ---     | 45.9    | 54.0   | 8.1    | V     |

**Radiated Spurious – CH157**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBµV/m  | dBµV/m  | dBµV/m | dB     | ---   |
| 2957.5    | 59.4    | ---     | 68.2   | 8.8    | H     |
| 17348.5   | 64.8    | ---     | 68.2   | 3.4    | H     |
| 39458.1   | 56.9    | ---     | 74.0   | 17.1   | H     |
| 39653.8   | ---     | 46.0    | 54.0   | 8.0    | V     |

**Radiated Spurious – CH165**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBµV/m  | dBµV/m  | dBµV/m | dB     | ---   |
| 2922.0    | 59.5    | ---     | 68.2   | 8.7    | H     |
| 17475.1   | 63.9    | ---     | 68.2   | 4.3    | H     |
| 39551.6   | 56.8    | ---     | 74.0   | 17.2   | H     |
| 39614.3   | ---     | 45.9    | 54.0   | 8.1    | V     |

802.11n**1GHz – 40 GHz, 802.11n20, HT0, Chain A****Radiated Spurious – CH157**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2963.5    | 60.2    | ---     | 68.2   | 8.0    | H     |
| 17364.4   | 60.5    | ---     | 68.2   | 7.7    | H     |
| 39507.2   | 56.5    | ---     | 74.0   | 17.5   | V     |
| 39655.8   | ---     | 45.7    | 54.0   | 8.3    | H     |

**1GHz – 40 GHz, 802.11n20, HT0, Chain B****Radiated Spurious – CH157**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2988.5    | 59.3    | ---     | 68.2   | 8.9    | H     |
| 17353.3   | 63.2    | ---     | 68.2   | 5.0    | V     |
| 39629.7   | ---     | 46.5    | 54.0   | 7.5    | H     |
| 39650.0   | 56.7    | ---     | 74.0   | 17.3   | H     |

**1GHz – 40 GHz, 802.11n20, HT8, Chain A+B****Radiated Spurious – CH157**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2998.0    | 59.5    | ---     | 68.2   | 8.7    | V     |
| 17352.8   | 64.3    | ---     | 68.2   | 3.9    | H     |
| 39658.6   | ---     | 45.8    | 54.0   | 8.2    | V     |
| 39675.0   | 56.7    | ---     | 74.0   | 17.3   | V     |

**1GHz – 40 GHz, 802.11n40, HT0, Chain A****Radiated Spurious – CH159**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2941.0    | 59.7    | ---     | 68.2   | 8.5    | V     |
| 17388.1   | 58.6    | ---     | 68.2   | 9.6    | H     |
| 39627.8   | ---     | 46.0    | 54.0   | 8.0    | V     |
| 39664.9   | 56.3    | ---     | 74.0   | 17.7   | H     |

**1GHz – 40 GHz, 802.11n40, HT0, Chain B****Radiated Spurious – CH159**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2985.0    | 59.9    | ---     | 68.2   | 8.3    | V     |
| 17394.9   | 62.3    | ---     | 68.2   | 5.9    | H     |
| 39659.6   | ---     | 45.9    | 54.0   | 8.1    | H     |
| 39716.0   | 56.5    | ---     | 74.0   | 17.4   | H     |

**1GHz – 40 GHz, 802.11n40, HT8, Chain A+B****Radiated Spurious – CH159**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2955.0    | 59.9    | ---     | 68.2   | 8.3    | V     |
| 17381.3   | 61.4    | ---     | 68.2   | 6.8    | V     |
| 39602.7   | ---     | 45.7    | 54.0   | 8.3    | V     |
| 39655.3   | 56.4    | ---     | 74.0   | 17.6   | H     |

[802.11ac](#)**1GHz – 40 GHz, 802.11ac80, VHT0, Chain A****Radiated Spurious – CH155**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2996.5    | 59.8    | ---     | 68.2   | 8.4    | V     |
| 17352.3   | 56.8    | ---     | 68.2   | 11.4   | V     |
| 39655.3   | ---     | 46.0    | 54.0   | 8.0    | H     |
| 39696.2   | 57.2    | ---     | 74.0   | 16.8   | H     |

**1GHz – 40 GHz, 802.11ac80, VHT0, Chain B****Radiated Spurious – CH155**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2977.0    | 59.6    | ---     | 68.2   | 8.6    | V     |
| 17343.6   | 58.8    | ---     | 68.2   | 9.4    | V     |
| 39578.6   | 56.6    | ---     | 74.0   | 17.4   | V     |
| 39629.7   | ---     | 45.7    | 54.0   | 8.3    | V     |

**1GHz – 40 GHz, 802.11ac80, VHT0, Chain A+B****Radiated Spurious – CH155**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2954.0    | 59.7    | ---     | 68.2   | 8.5    | H     |
| 17347.0   | 59.9    | ---     | 68.2   | 8.3    | V     |
| 39656.7   | 56.7    | ---     | 74.0   | 17.3   | V     |
| 39665.9   | ---     | 46.0    | 54.0   | 8.0    | H     |

[802.11ax](#)**1GHz – 40 GHz, 802.11ax20, HE0, Chain A****Radiated Spurious – CH149**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2966.5    | 59.5    | ---     | 68.2   | 8.7    | V     |
| 17212.2   | 63.9    | ---     | 68.2   | 4.3    | H     |
| 22946.5   | 54.1    | ---     | 74.0   | 19.9   | V     |
| 22946.5   | ---     | 45.7    | 54.0   | 8.3    | V     |
| 22962.1   | ---     | 37.0    | 54.0   | 16.9   | V     |
| 22962.1   | 46.7    | ---     | 74.0   | 27.3   | V     |
| 34421.1   | 54.0    | ---     | 68.2   | 14.2   | V     |

**Radiated Spurious – CH157**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2937.5    | 59.7    | ---     | 68.2   | 8.5    | V     |
| 17330.1   | 63.7    | ---     | 68.2   | 4.5    | H     |
| 17355.7   | 57.7    | ---     | 68.2   | 10.5   | H     |
| 17371.2   | 56.7    | ---     | 68.2   | 11.5   | H     |
| 23106.1   | ---     | 42.2    | 54.0   | 11.8   | V     |
| 23107.1   | 51.2    | ---     | 74.0   | 22.8   | V     |
| 34657.4   | 52.6    | ---     | 68.2   | 15.6   | V     |

**Radiated Spurious – CH165**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 3051.2    | 51.0    | ---     | 68.2   | 17.2   | H     |
| 17451.4   | 66.0    | ---     | 68.2   | 2.2    | V     |
| 23266.7   | 46.6    | ---     | 68.2   | 21.6   | V     |

## 1GHz – 40 GHz, 802.11ax20, HE0, Chain B

### Radiated Spurious – CH149

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2951.5    | 59.7    | ---     | 68.2   | 8.5    | V     |
| 17210.7   | 64.3    | ---     | 68.2   | 3.9    | H     |
| 22945.6   | 47.9    | ---     | 74.0   | 26.1   | H     |
| 22946.1   | ---     | 38.3    | 54.0   | 15.7   | V     |

### Radiated Spurious – CH157

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2959.0    | 59.1    | ---     | 68.2   | 9.1    | H     |
| 17330.6   | 65.7    | ---     | 68.2   | 2.5    | V     |
| 17355.2   | 57.5    | ---     | 68.2   | 10.7   | V     |
| 23106.6   | 46.6    | ---     | 74.0   | 27.4   | H     |
| 23107.1   | ---     | 36.8    | 54.0   | 17.2   | V     |

### Radiated Spurious – CH165

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2956.0    | 60.1    | ---     | 68.2   | 8.1    | V     |
| 10911.9   | 47.6    | ---     | 74.0   | 26.4   | V     |
| 10911.9   | ---     | 38.0    | 54.0   | 16.0   | H     |
| 17451.4   | 63.2    | ---     | 68.2   | 5.0    | V     |
| 17479.0   | 54.7    | ---     | 68.2   | 13.5   | H     |
| 39573.3   | 56.7    | ---     | 74.0   | 17.3   | V     |
| 39649.0   | ---     | 46.0    | 54.0   | 8.0    | H     |

### 1GHz – 40 GHz, 802.11ax20, HE0, Chain A+B

#### Radiated Spurious – CH157

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2927.5    | 59.5    | ---     | 68.2   | 8.7    | H     |
| 7230.9    | 46.3    | ---     | 68.2   | 21.9   | H     |
| 17329.1   | 66.2    | ---     | 68.2   | 1.9    | V     |
| 17355.2   | 56.2    | ---     | 68.2   | 12.0   | V     |
| 23107.1   | ---     | 42.1    | 54.0   | 11.9   | V     |
| 23108.5   | 51.4    | ---     | 74.0   | 22.6   | V     |
| 34658.3   | 52.7    | ---     | 68.2   | 15.5   | V     |

### 1GHz – 40 GHz, 802.11ax40, HE0, Chain A

#### Radiated Spurious – CH151

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2975.0    | 60.3    | ---     | 68.2   | 7.9    | V     |
| 17210.2   | 62.9    | ---     | 68.2   | 5.3    | V     |
| 22948.4   | ---     | 44.6    | 54.0   | 9.4    | V     |
| 22949.4   | 54.0    | ---     | 74.0   | 20.0   | V     |

#### Radiated Spurious – CH159

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 3078.2    | 51.4    | ---     | 68.2   | 16.8   | H     |
| 17332.5   | 64.4    | ---     | 68.2   | 3.8    | V     |
| 17358.1   | 58.7    | ---     | 68.2   | 9.5    | V     |
| 23108.5   | ---     | 41.5    | 54.0   | 12.5   | V     |
| 23109.4   | 51.3    | ---     | 74.0   | 22.7   | V     |
| 34661.7   | 52.2    | ---     | 68.2   | 16.0   | V     |

**1GHz – 40 GHz, 802.11ax40, HE0, Chain B****Radiated Spurious – CH151**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2947.0    | 59.8    | ---     | 68.2   | 8.4    | V     |
| 17212.2   | 62.4    | ---     | 68.2   | 5.8    | V     |
| 22947.9   | ---     | 37.9    | 54.0   | 16.1   | V     |
| 22947.9   | 49.1    | ---     | 74.0   | 24.9   | V     |

**Radiated Spurious – CH159**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 3086.0    | 50.1    | ---     | 68.2   | 18.1   | H     |
| 17332.5   | 65.5    | ---     | 68.2   | 2.6    | V     |
| 17354.8   | 57.9    | ---     | 68.2   | 10.3   | V     |
| 23105.2   | 47.7    | ---     | 74.0   | 26.3   | V     |
| 23108.0   | ---     | 37.4    | 54.0   | 16.6   | V     |

**1GHz – 40 GHz, 802.11ax40, HE0, Chain A+B****Radiated Spurious – CH159**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2979.5    | 59.9    | ---     | 68.2   | 8.3    | H     |
| 17333.0   | 64.0    | ---     | 68.2   | 4.2    | H     |
| 17356.2   | 55.7    | ---     | 68.2   | 12.5   | V     |
| 23107.6   | 51.5    | ---     | 74.0   | 22.5   | V     |
| 23108.0   | ---     | 41.4    | 54.0   | 12.6   | V     |
| 34664.1   | 51.8    | ---     | 68.2   | 16.4   | V     |

**1GHz – 40 GHz, 802.11ax80, HE0, Chain A****Radiated Spurious – CH155**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2950.5    | 59.6    | ---     | 68.2   | 8.6    | V     |
| 17212.7   | 62.9    | ---     | 68.2   | 5.3    | V     |
| 22947.9   | ---     | 45.7    | 54.0   | 8.3    | V     |
| 22949.8   | 53.5    | ---     | 74.0   | 20.5   | V     |
| 34424.0   | 52.6    | ---     | 68.2   | 15.6   | V     |

**1GHz – 40 GHz, 802.11ax80, HE0, Chain B****Radiated Spurious – CH155**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 3065.8    | 49.7    | ---     | 68.2   | 18.5   | H     |
| 17210.2   | 62.8    | ---     | 68.2   | 5.4    | V     |
| 22947.5   | ---     | 38.0    | 54.0   | 16.0   | V     |
| 22952.7   | 47.9    | ---     | 74.0   | 26.1   | V     |

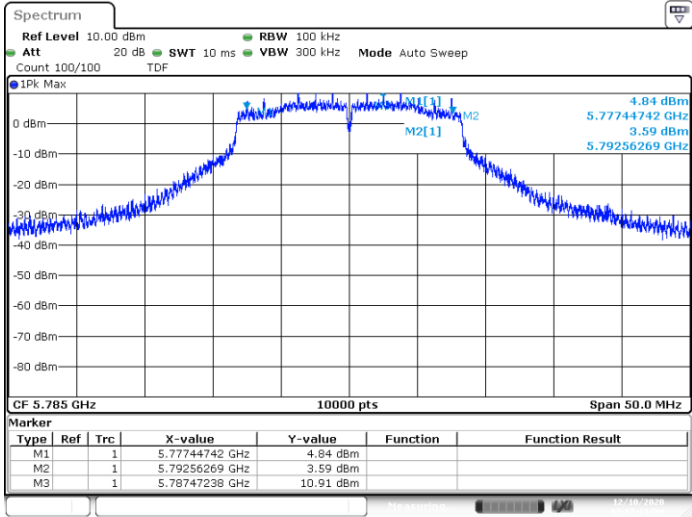
**1GHz – 40 GHz, 802.11ax80, HE0, Chain A+B****Radiated Spurious – CH155**

| Frequency | MaxPeak | Average | Limit  | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz       | dBμV/m  | dBμV/m  | dBμV/m | dB     | ---   |
| 2948.5    | 60.2    | ---     | 68.2   | 8.0    | V     |
| 7180.1    | 47.7    | ---     | 68.2   | 20.5   | H     |
| 7218.8    | 46.1    | ---     | 68.2   | 22.1   | V     |
| 17210.2   | 63.3    | ---     | 68.2   | 4.9    | H     |
| 17237.8   | 55.0    | ---     | 68.2   | 13.2   | V     |
| 22947.9   | ---     | 45.9    | 54.0   | 8.1    | V     |
| 22949.4   | 54.7    | ---     | 74.0   | 19.3   | V     |
| 34421.1   | 52.9    | ---     | 68.2   | 15.3   | V     |

# Annex C. System Plots

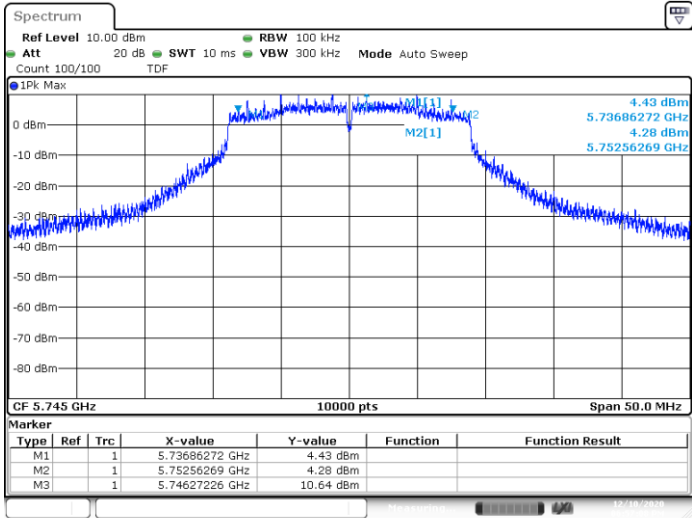
## C.1.1 6dB Bandwidth

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



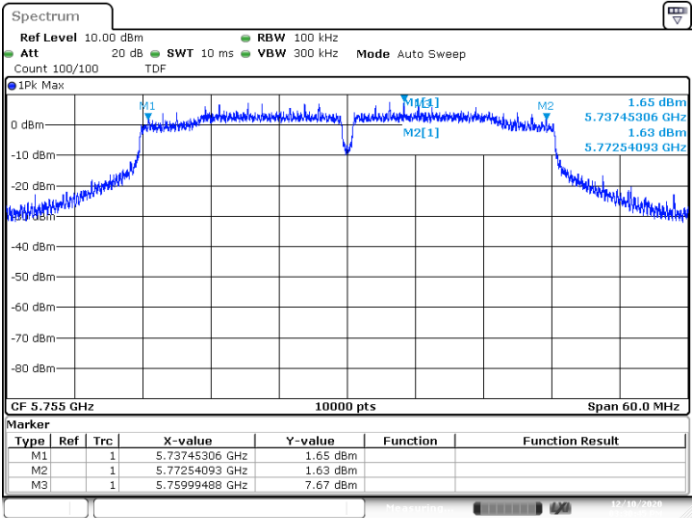
Channel 157

### MIMO-B, 802.11n20, HT8



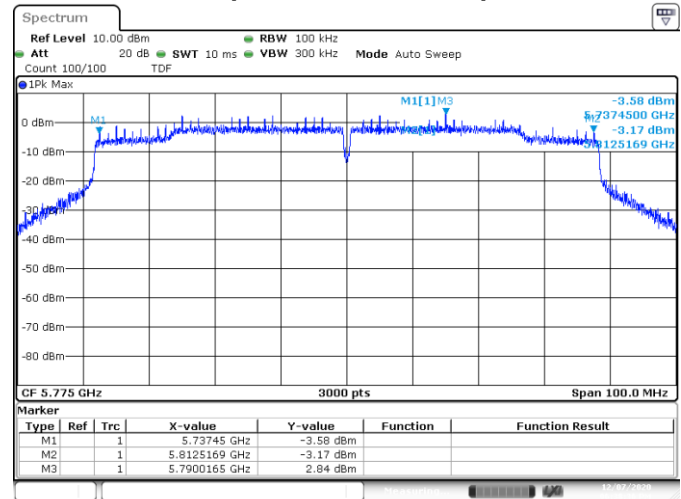
Channel 149

SISO-B, 802.11n40, HT0



Channel 151

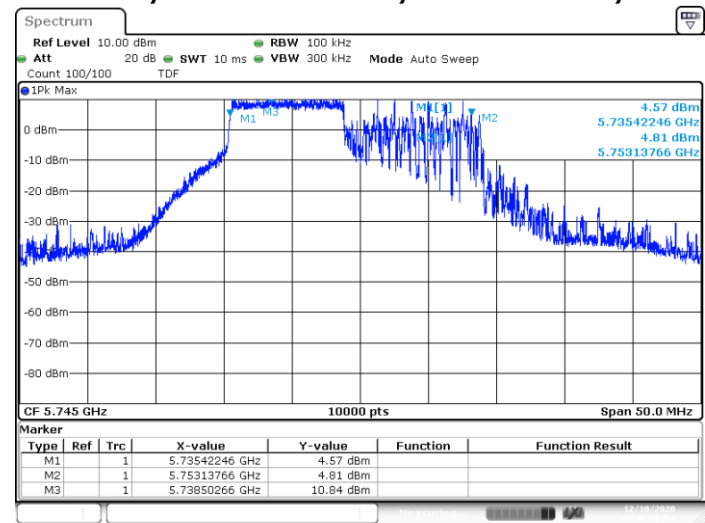
SISO-A, 802.11ac80, VHT0



Date: 7 DEC 2020 18:38:36

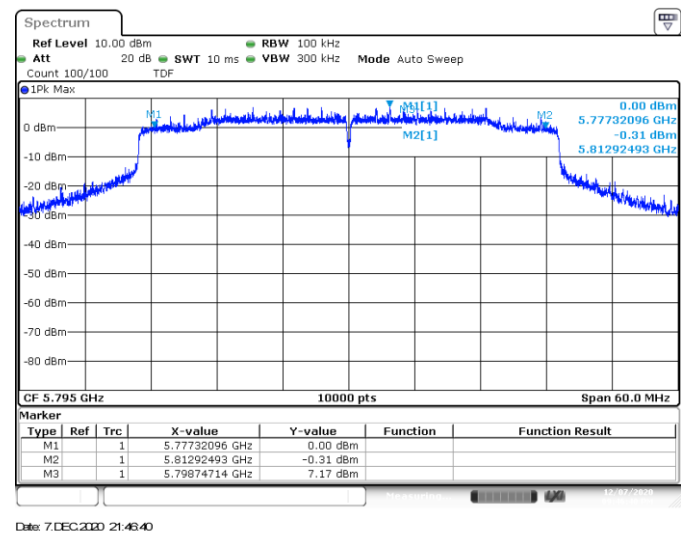
Channel 155

SISO-B, 802.11ax20, RU106/53, HE0



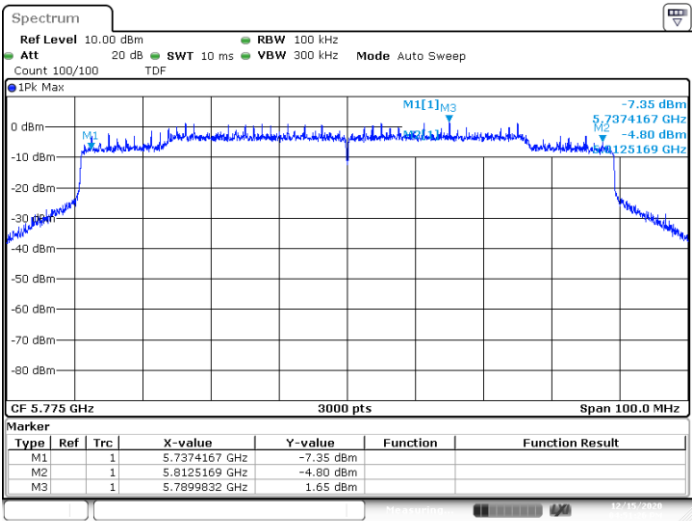
Channel 149

MIMO-A, 802.11ax40, HE0



Channel 159

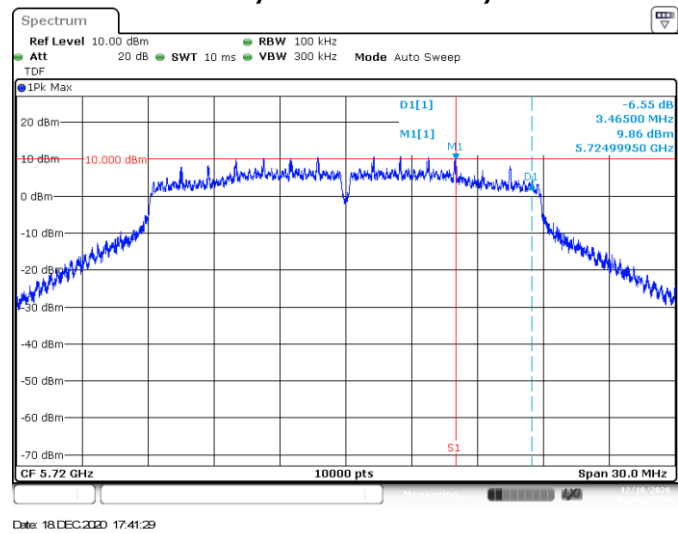
MIMO-A, 802.11ax80, HE0



Channel 155

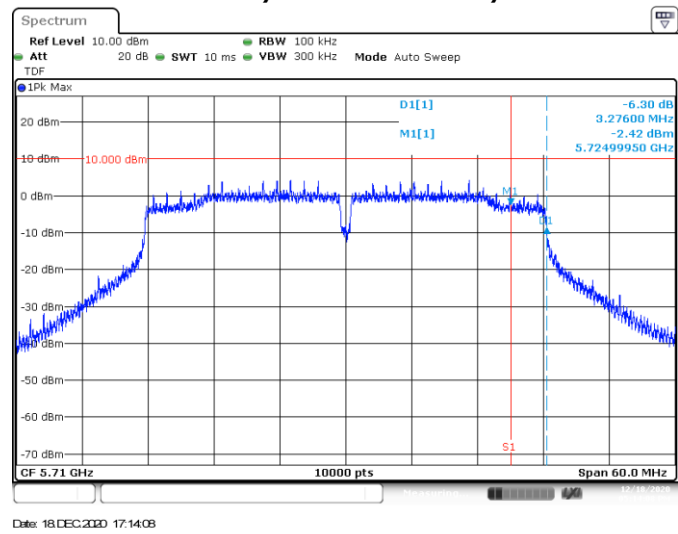
C.1.2 6dB Bandwidth (Overlapped Channel)

SISO-B, 802.11n20, HT0



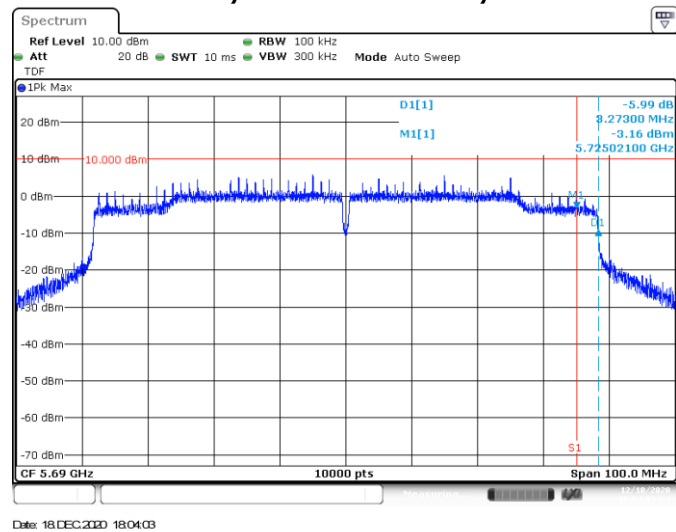
Channel 144 (Overlapped Channel)

MIMO-A, 802.11n40, HT8



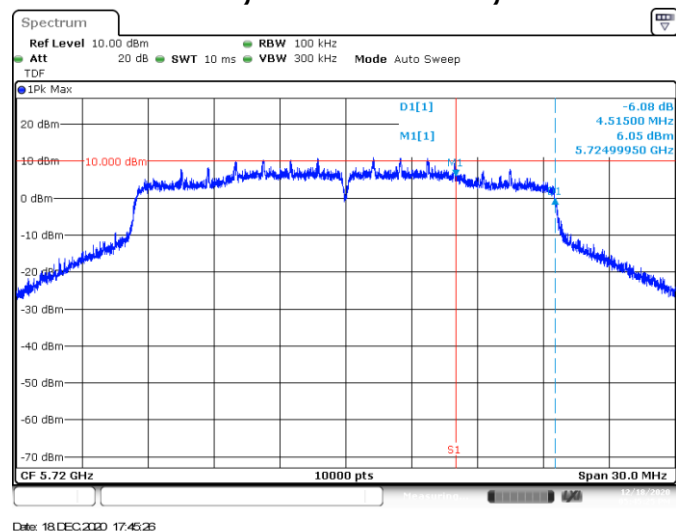
Channel 142 (Overlapped Channel)

SISO-B, 802.11ac80, VHT0



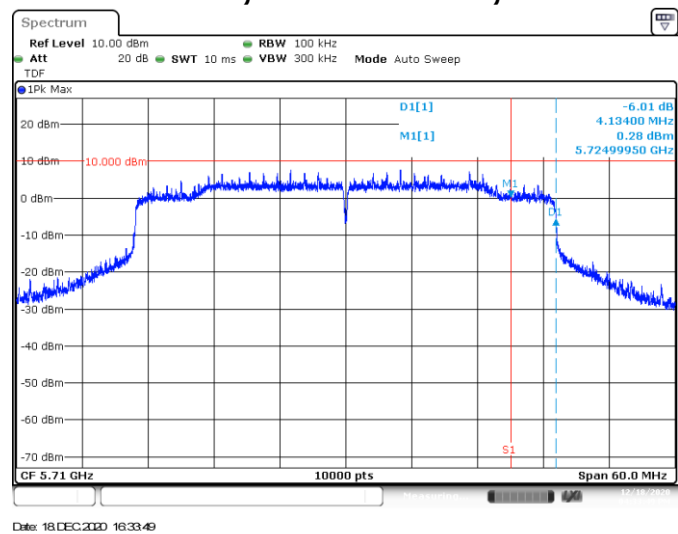
Channel 138 (Overlapped Channel)

SISO-B, 802.11ax20, HE0



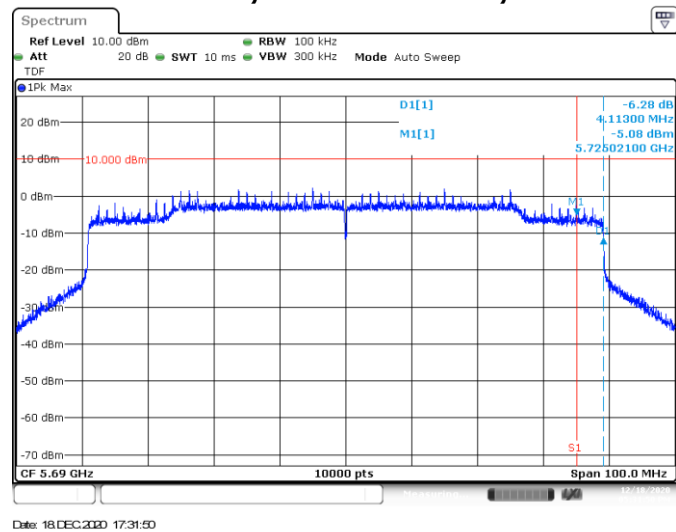
Channel 144 (Overlapped Channel)

SISO-A, 802.11ax40, HE0



Channel 142 (Overlapped Channel)

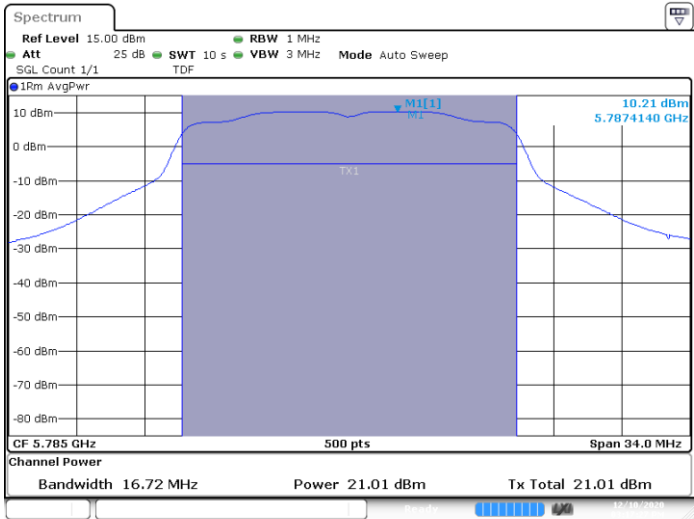
MIMO-A, 802.11ax80, HE0



Channel 138 (Overlapped Channel)

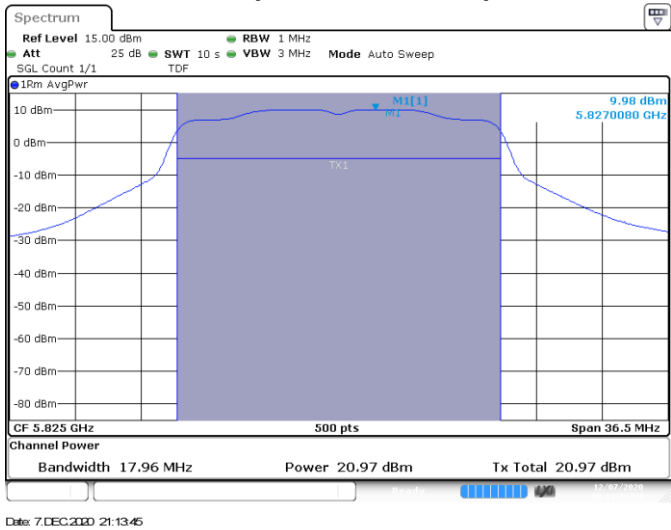
C.1.3 Maximum output power

SISO-B, 802.11a, 6Mbps



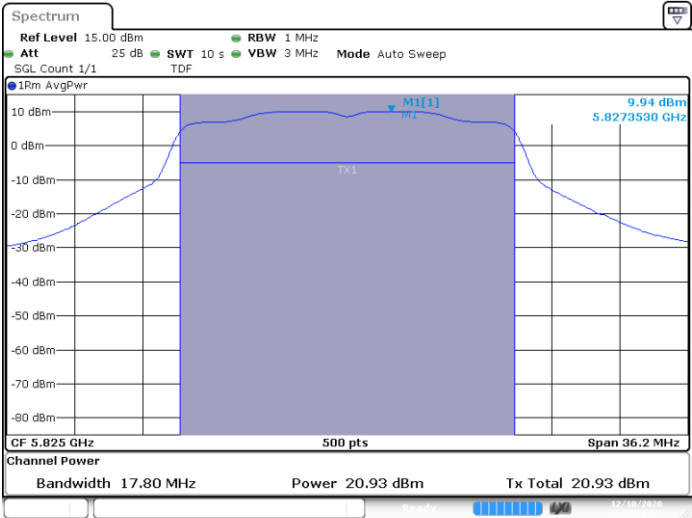
Channel 157

MIMO-A, 802.11n20, HT8



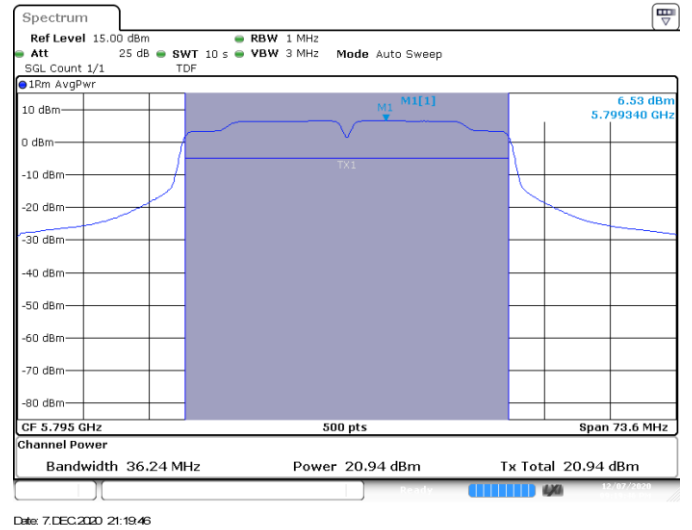
Channel 165

MIMO-B, 802.11n20, HT8



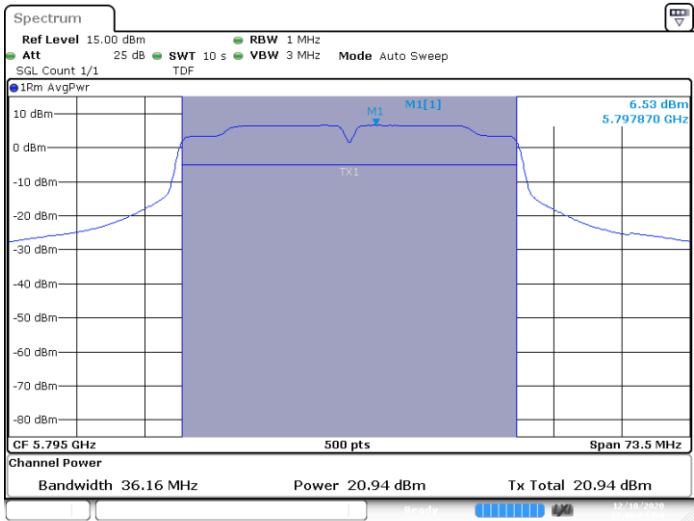
Channel 165

MIMO-A, 802.11n40, HT8



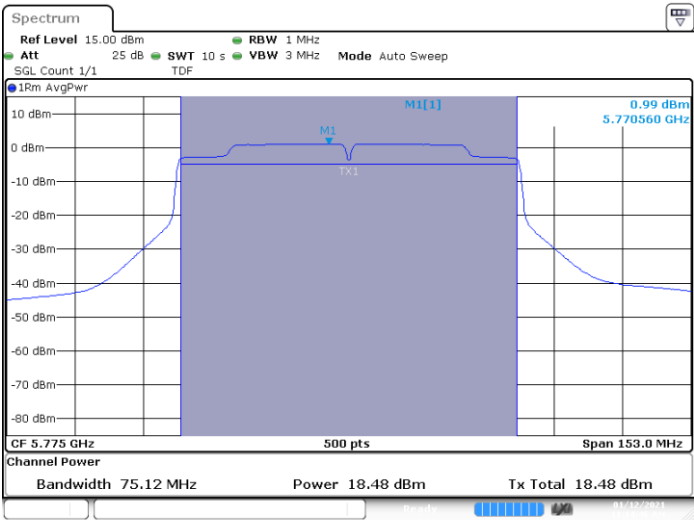
Channel 159

MIMO-B, 802.11n40, HT8



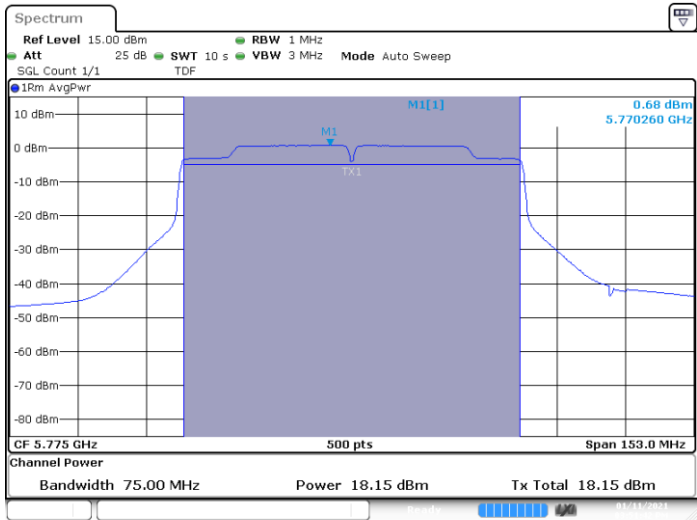
Channel 159

MIMO-A, 802.11ac80, VHT0



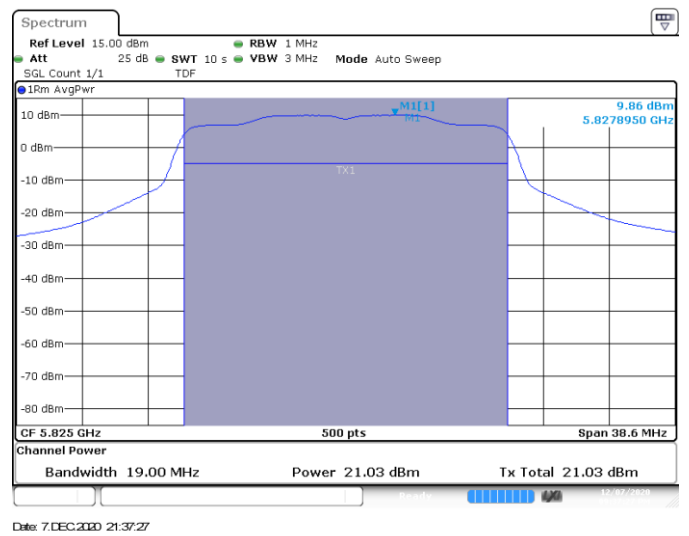
Channel 155

MIMO-B, 802.11ac80, VHT0



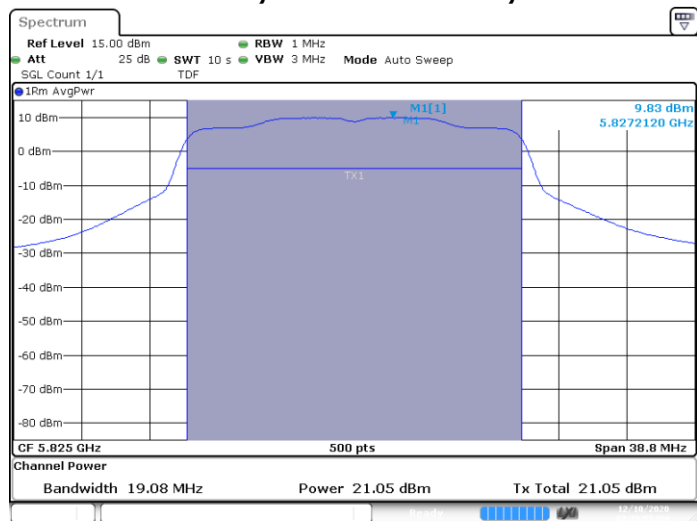
Channel 155

MIMO-A, 802.11ax20, HE0



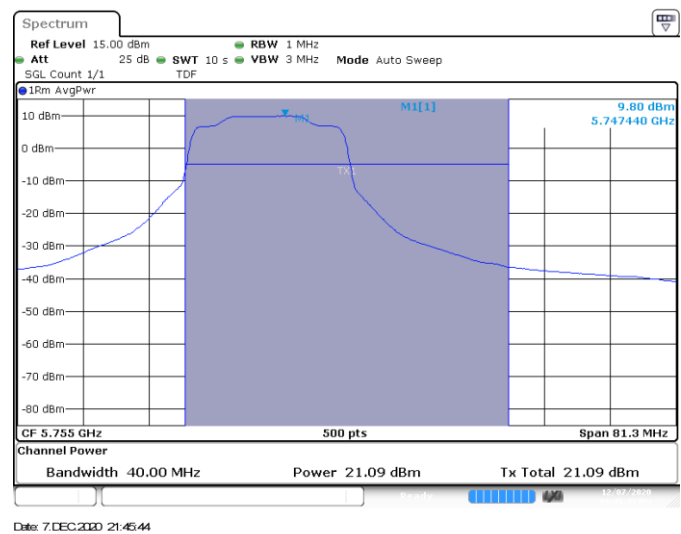
Channel 165

MIMO-B, 802.11ax20, HE0



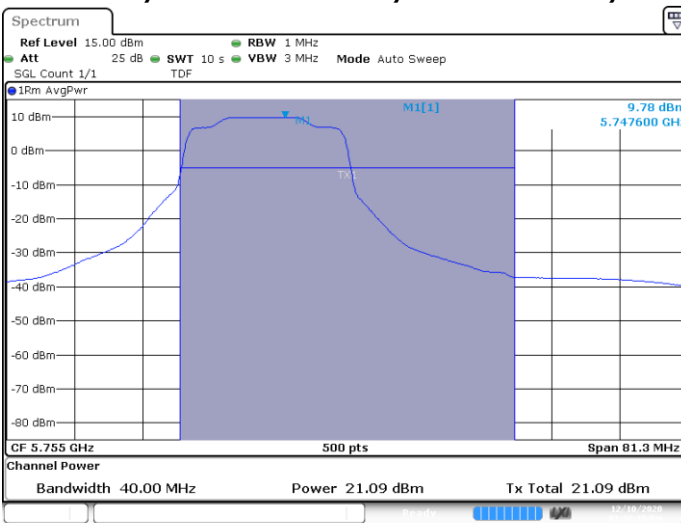
Channel 165

MIMO-A, 802.11ax40, RU242/61, HE0



Channel 151

MIMO-B, 802.11ax40, RU242/61, HE0



Channel 151

**Spectrum**

Ref Level 15.00 dBm  
 Att 25 dB  
 SGL Count 1/1

RBW 1 MHz  
 VBW 3 MHz  
 Mode Auto Sweep

SWT 10 s  
 TDF

1Rm AvgPwr

10 dBm  
 0 dBm  
 -10 dBm  
 -20 dBm  
 -30 dBm  
 -40 dBm  
 -50 dBm  
 -60 dBm  
 -70 dBm  
 -80 dBm

M1  
 M1[1]

5.86 dBm  
 5.763100 GHz

CF 5.775 GHz  
 500 pts  
 Span 163.0 MHz

Channel Power

Bandwidth 80.00 MHz  
 Power 20.43 dBm  
 Tx Total 20.43 dBm

**Spectrum**

Ref Level 15.00 dBm

Att 25 dB RBW 1 MHz

SWT 10 s VBW 3 MHz Mode Auto Sweep

SGI Count 1/1 TDF

1M AvgPwr

10 dBm

0 dBm

-10 dBm

-20 dBm

-30 dBm

-40 dBm

-50 dBm

-60 dBm

-70 dBm

-80 dBm

CF 5.775 GHz

500 pts

Span 163.0 MHz

Channel Power

Bandwidth 80.00 MHz

Power 20.06 dBm

Tx Total 20.06 dBm

5.48 dBm

5.764080 GHz

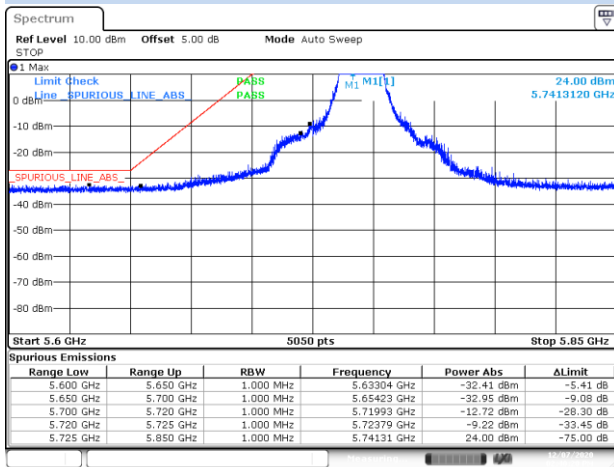
M1

M1[1]

51 of 66

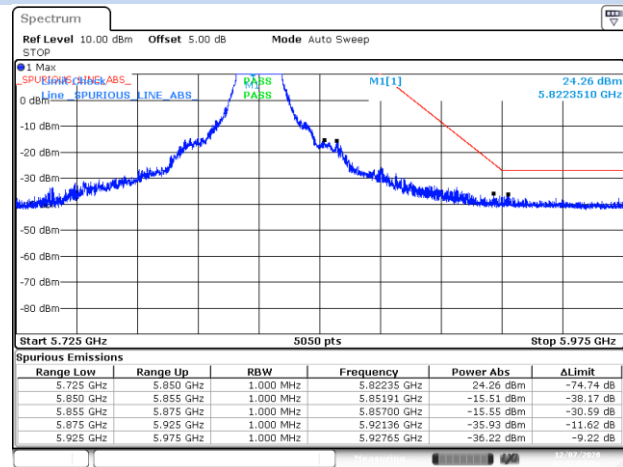
## C.1.4 Undesirable emission limits : out of band (Conducted)

### SISO A



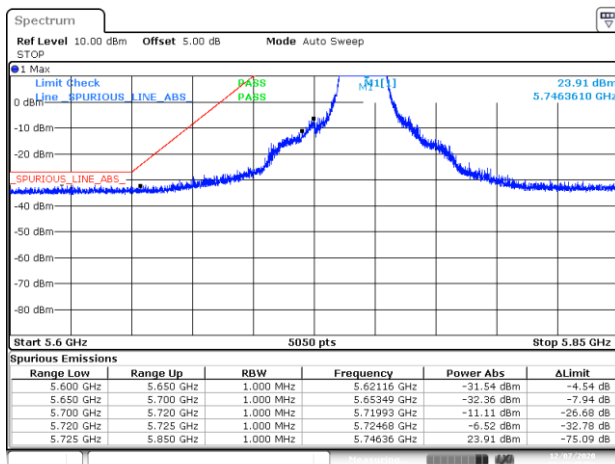
Date: 7 DEC 2020 14:40:21

BE-NR-LOW, SISO-A, 802.11a-6Mbps, Ch149



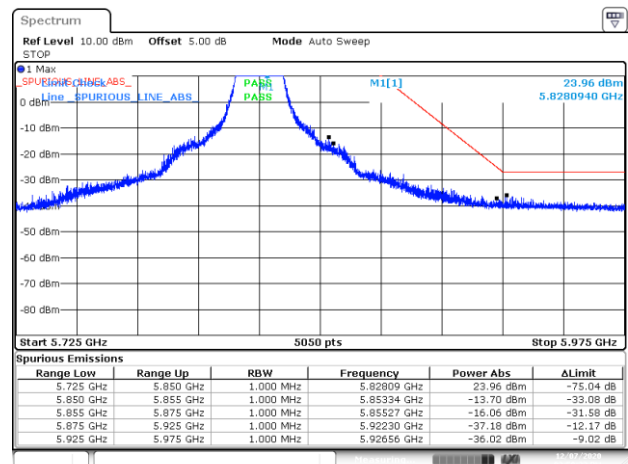
Date: 7 DEC 2020 14:42:57

BE-NR-HIGH, SISO-A, 802.11a-6Mbps, Ch165



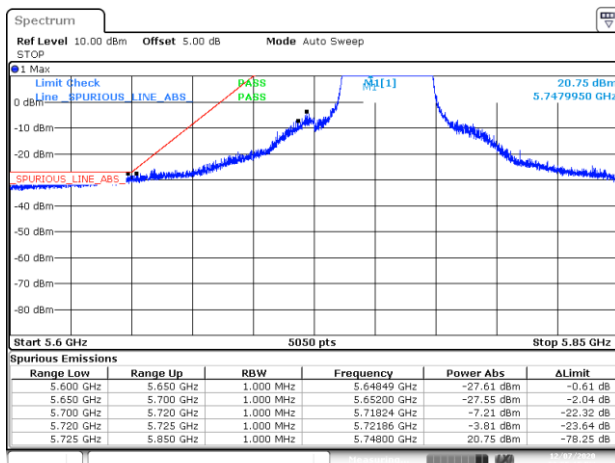
Date: 7 DEC 2020 14:47:47

BE-NR-LOW, SISO-A, 802.11n20-HT0, Ch149



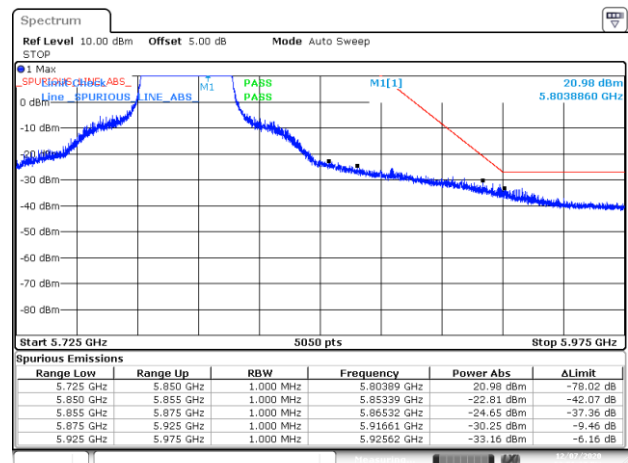
Date: 7 DEC 2020 14:50:23

BE-NR-HIGH, SISO-A, 802.11n20-HT0, Ch165



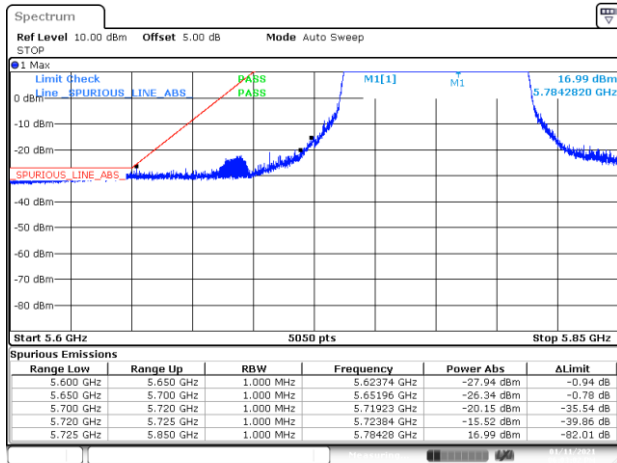
Date: 7 DEC 2020 14:55:15

BE-NR-LOW, SISO-A, 802.11n40-HT0, Ch151

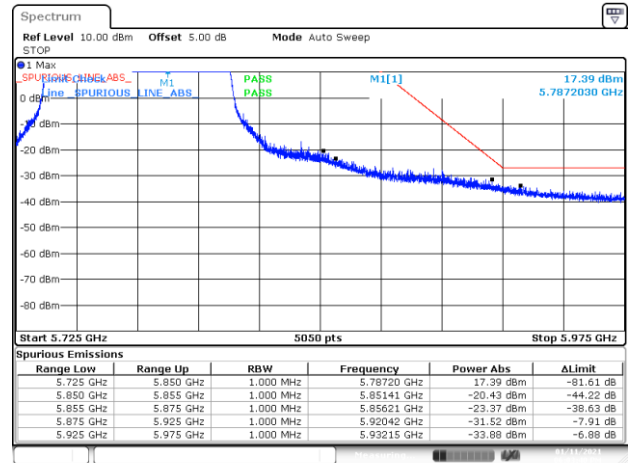


Date: 7 DEC 2020 14:58:27

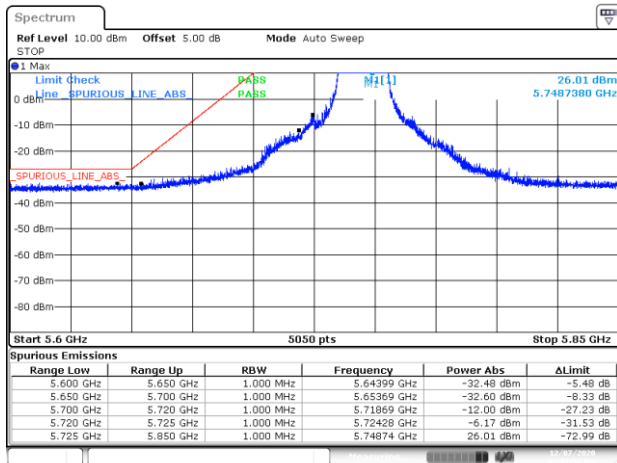
BE-NR-HIGH, SISO-A, 802.11n40-HT0, Ch159



BE-NR-LOW, SISO-A, 802.11ac80-VHT0, Ch155

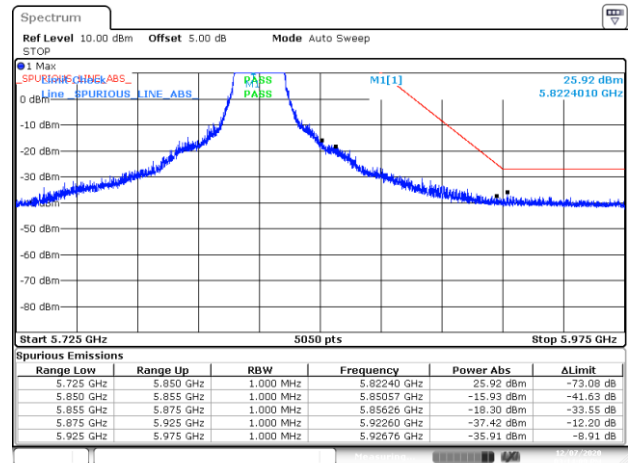


BE-NR-HIGH, SISO-A, 802.11ac80-VHT0, Ch155



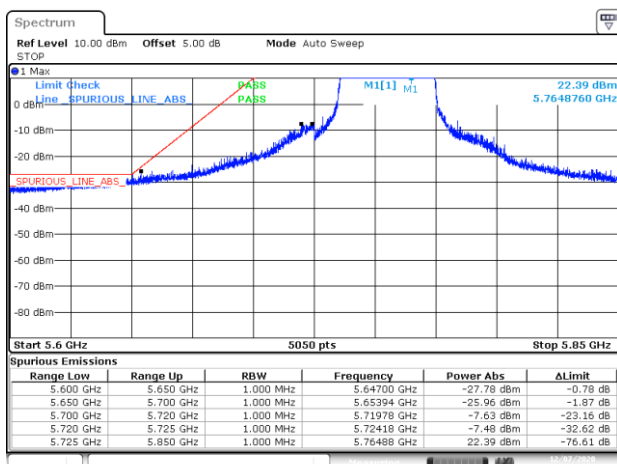
Date: 7 DEC 2020 15:07:57

BE-NR-LOW, SISO-A, 802.11ax20-HE0, Ch149



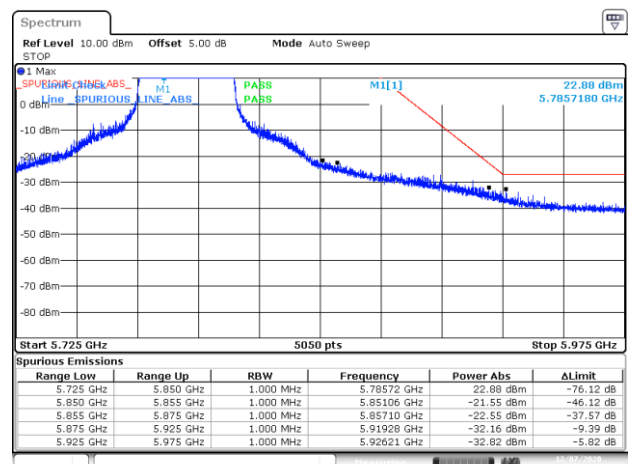
Date: 7 DEC 2020 15:14:10

BE-NR-HIGH, SISO-A, 802.11ax20-HE0, Ch165



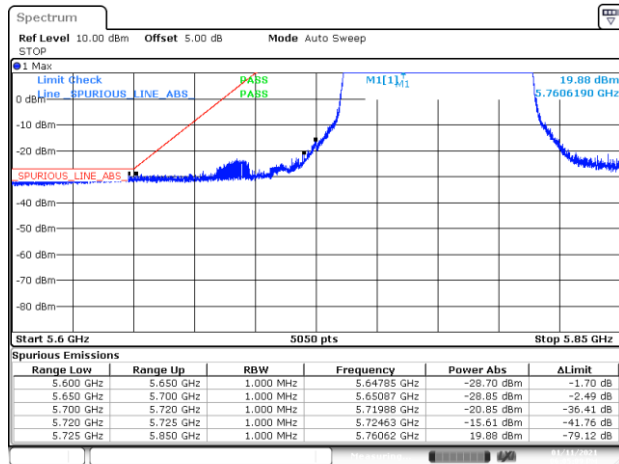
Date: 7 DEC 2020 17:55:43

BE-NR-LOW, SISO-A, 802.11ax40-HE0, Ch151

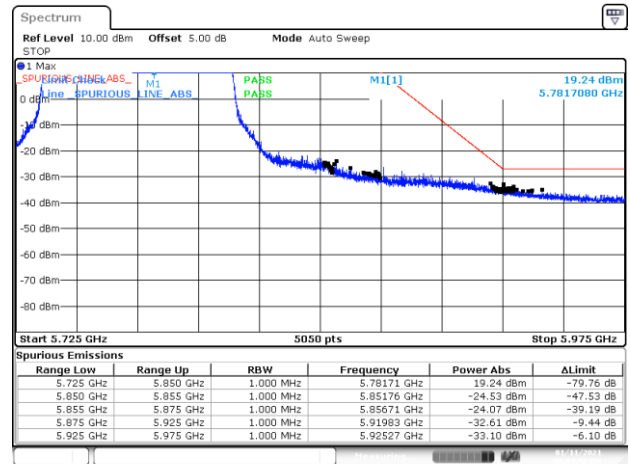


Date: 7 DEC 2020 15:23:40

BE-NR-HIGH, SISO-A, 802.11ax40-HE0, Ch159

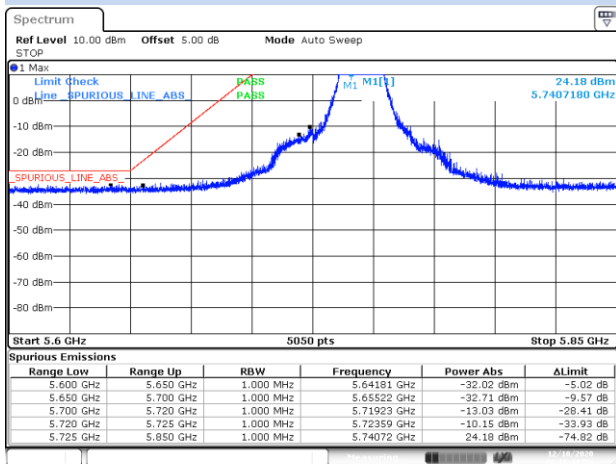


BE-NR-LOW, SISO-A, 802.11ax80-HE0, Ch155

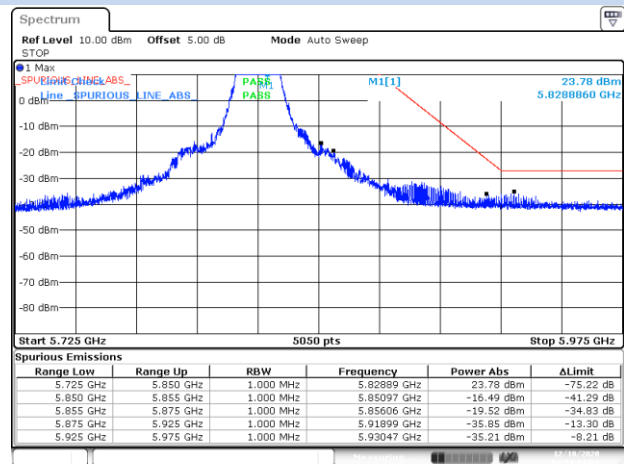


BE-NR-HIGH, SISO-A, 802.11ax80-HE0, Ch155

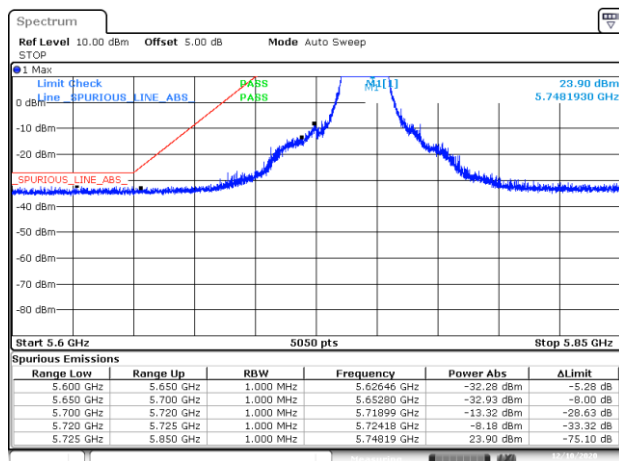
## SISO B



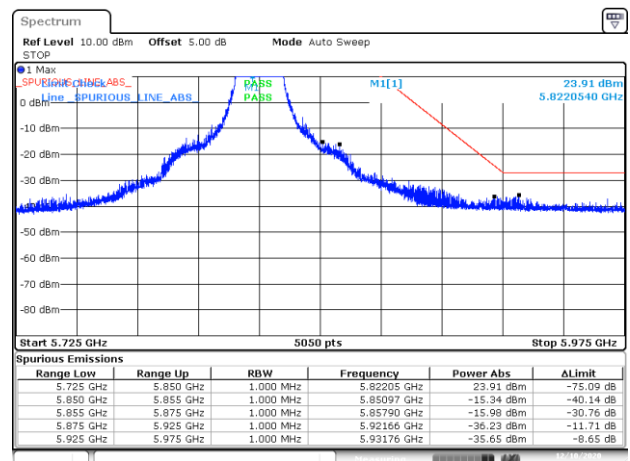
BE-NR-LOW, SISO-B, 802.11a-6Mbps, Ch149



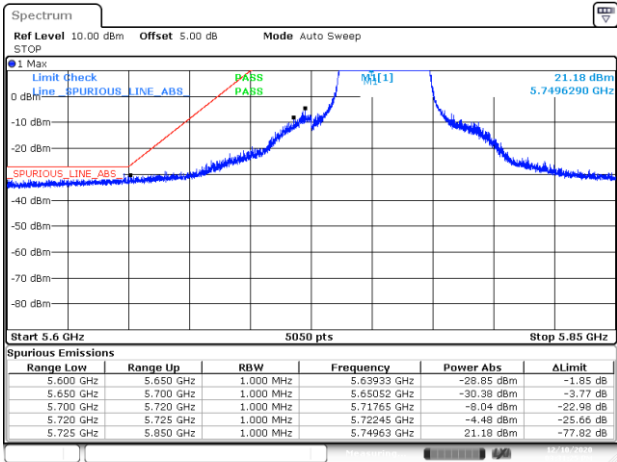
BE-NR-HIGH, SISO-B, 802.11a-6Mbps, Ch165



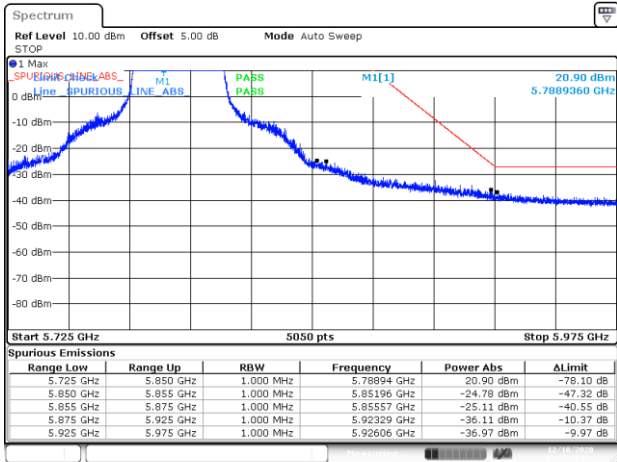
BE-NR-LOW, SISO-B, 802.11n20-HT0, Ch149



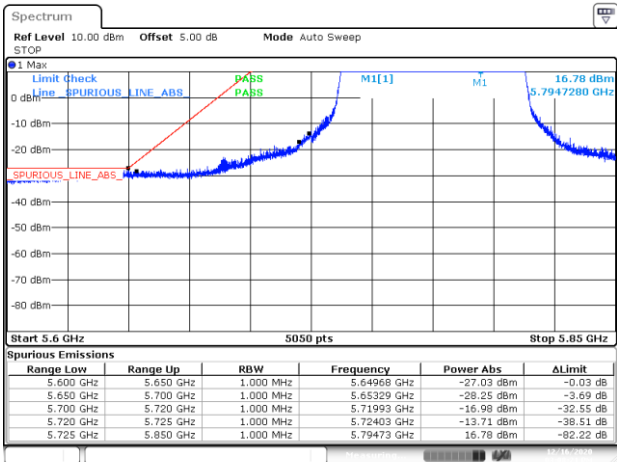
BE-NR-HIGH, SISO-B, 802.11n20-HT0, Ch165



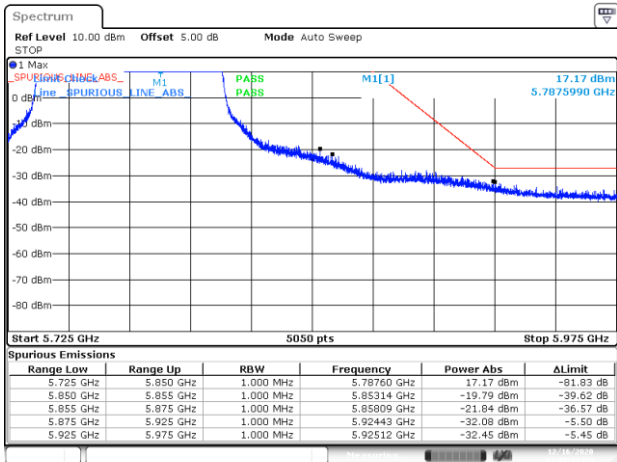
BE-NR-LOW, SISO-B, 802.11n40-HT0, Ch151



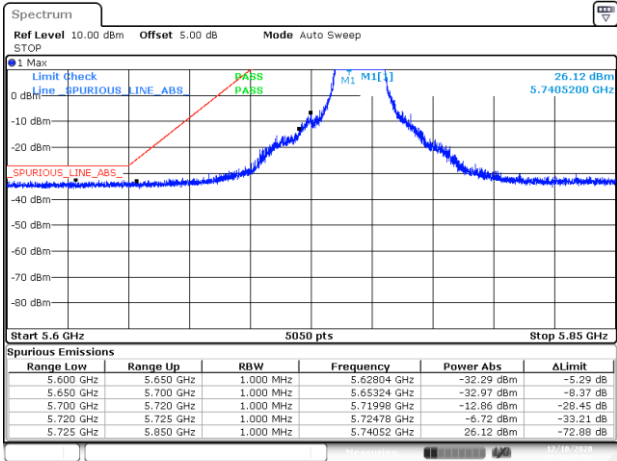
BE-NR-HIGH, SISO-B, 802.11n40-HT0, Ch159



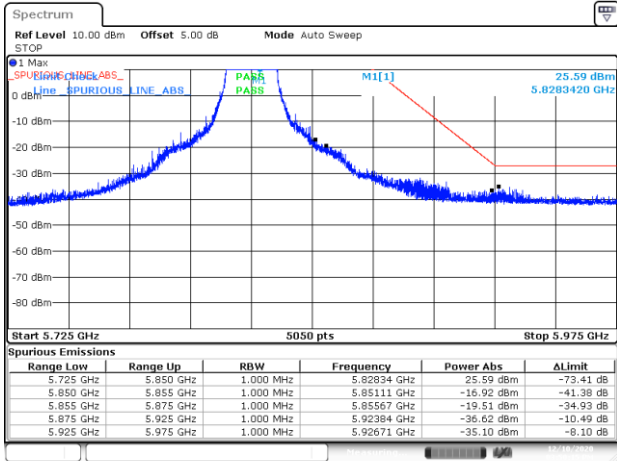
BE-NR-LOW, SISO-B, 802.11ac80-VHT0, Ch155



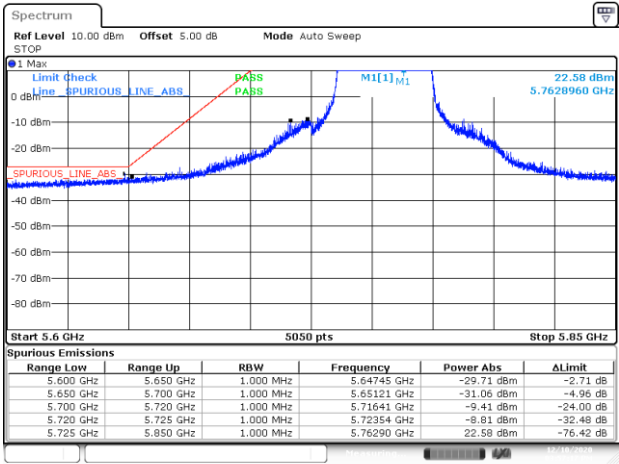
BE-NR-HIGH, SISO-B, 802.11ac80-VHT0, Ch155



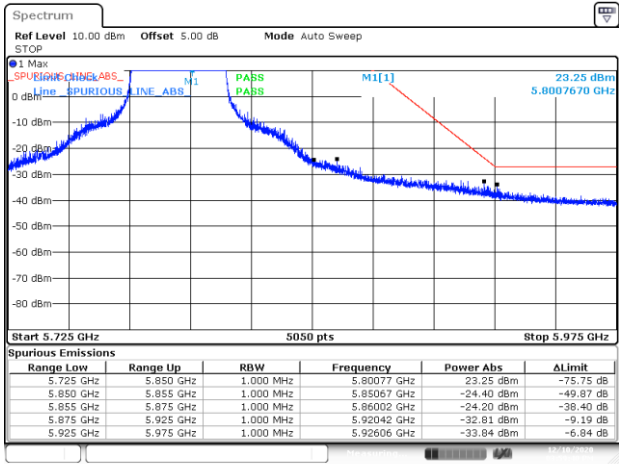
BE-NR-LOW, SISO-B, 802.11ax20-HE0, Ch149



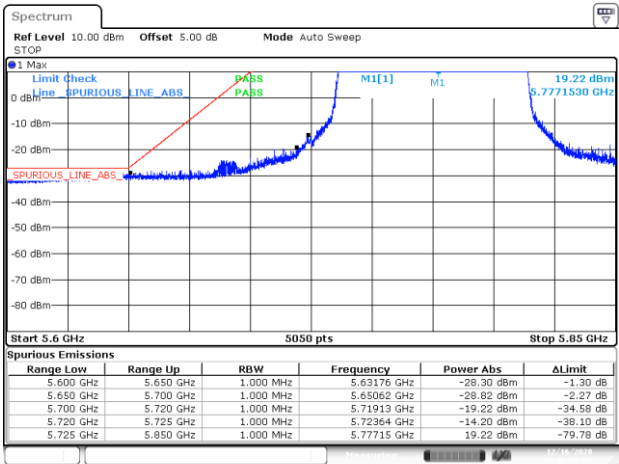
BE-NR-HIGH, SISO-B, 802.11ax20-HE0, Ch165



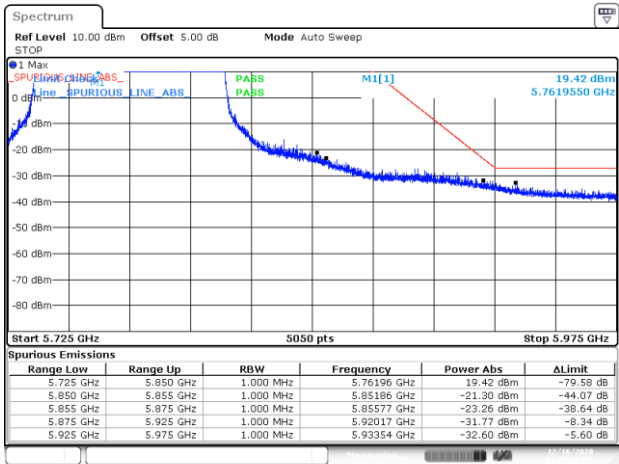
BE-NR-LOW, SISO-B, 802.11ax40-HE0, Ch151



BE-NR-HIGH, SISO-B, 802.11ax40-HE0, Ch159

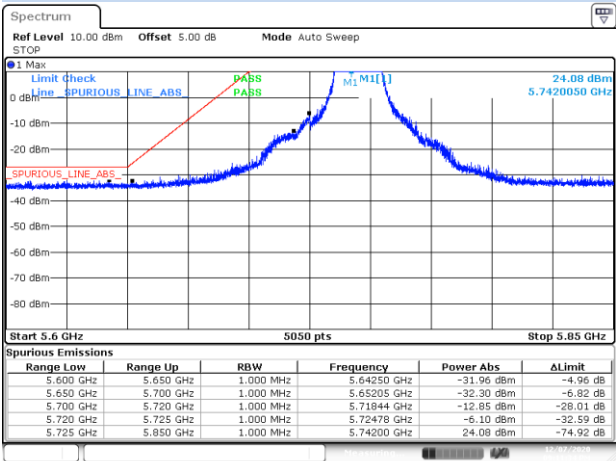


BE-NR-LOW, SISO-B, 802.11ax80-HE0, Ch155



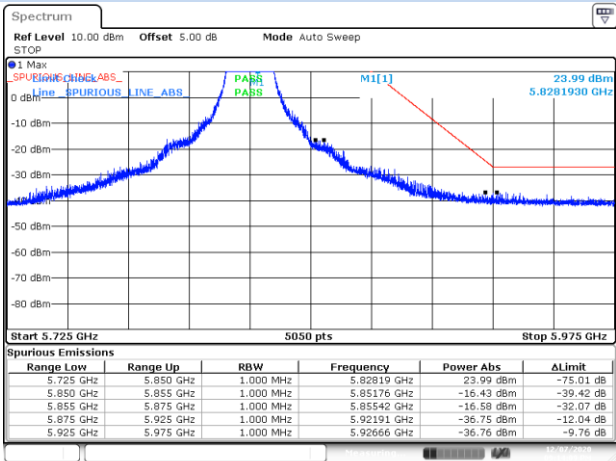
BE-NR-HIGH, SISO-B, 802.11ax80-HE0, Ch155

## MIMO A



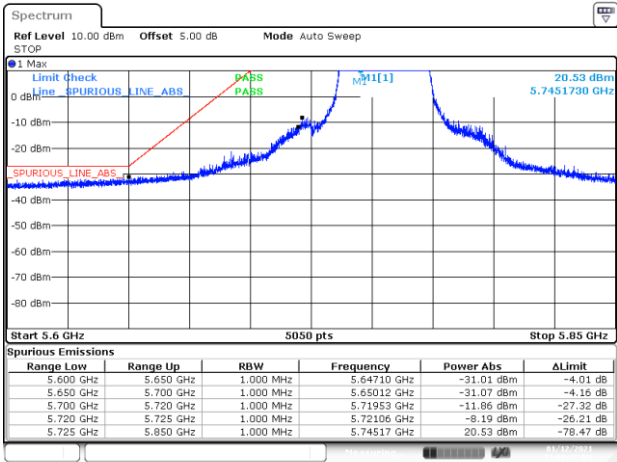
Date: 7 DEC 2020 21:11:34

BE-NR-LOW, MIMO-A, 802.11n20-HT8, Ch149

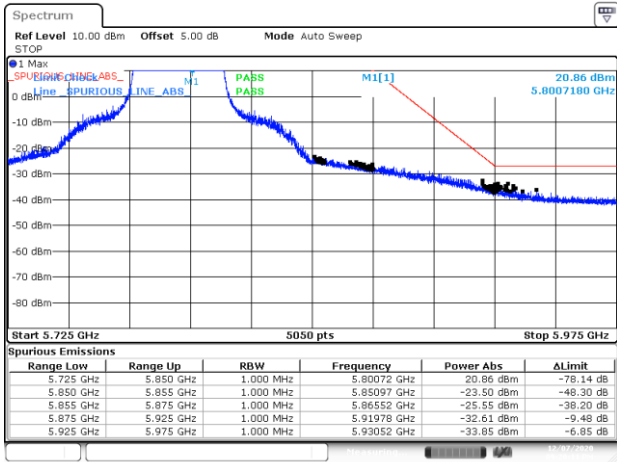


Date: 7 DEC 2020 21:14:10

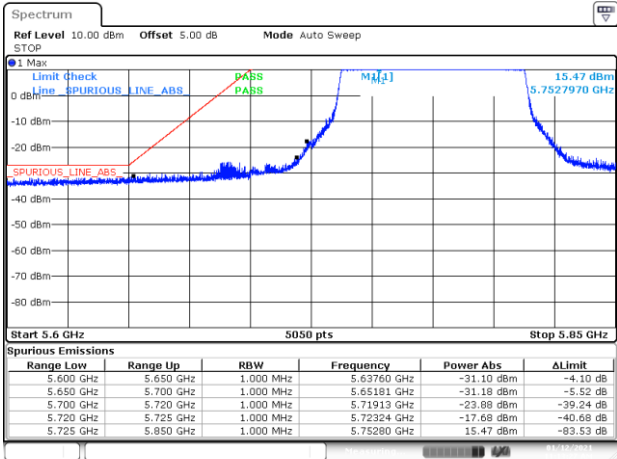
BE-NR-HIGH, MIMO-A, 802.11n20-HT8, Ch165



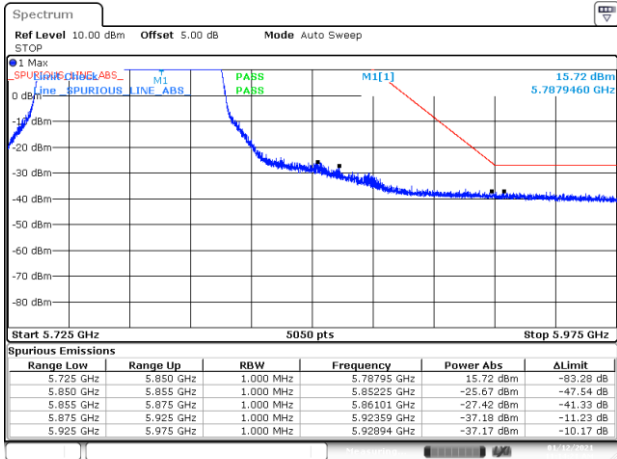
BE-NR-LOW, MIMO-A, 802.11n40-HT8, Ch151



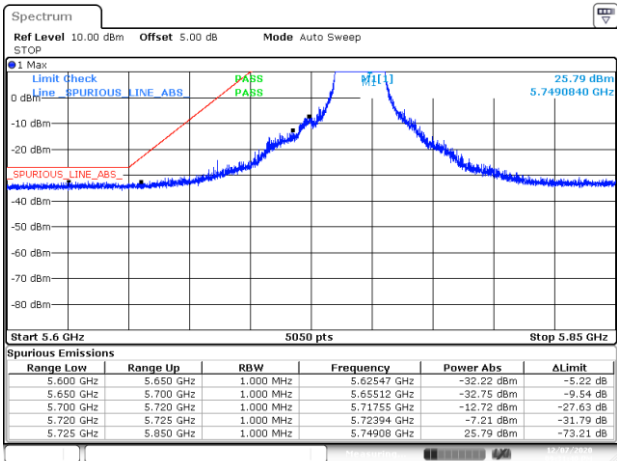
BE-NR-HIGH, MIMO-A, 802.11n40-HT8, Ch159



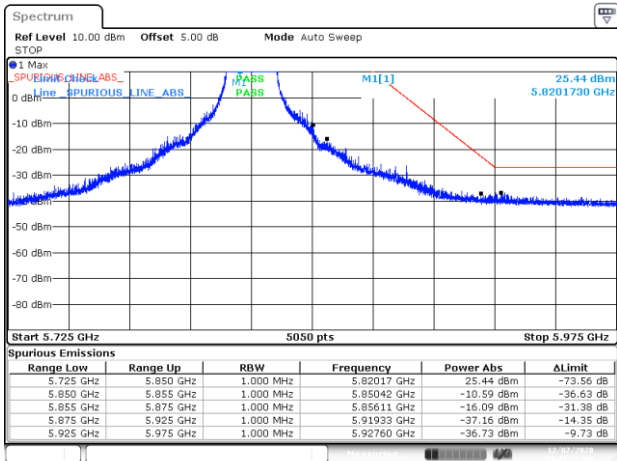
BE-NR-LOW, MIMO-A, 802.11ac80-VHT0, Ch155



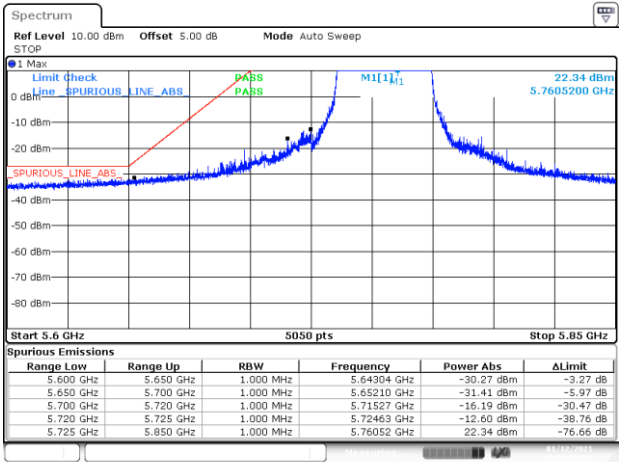
BE-NR-HIGH, MIMO-A, 802.11ac80-VHT0, Ch155



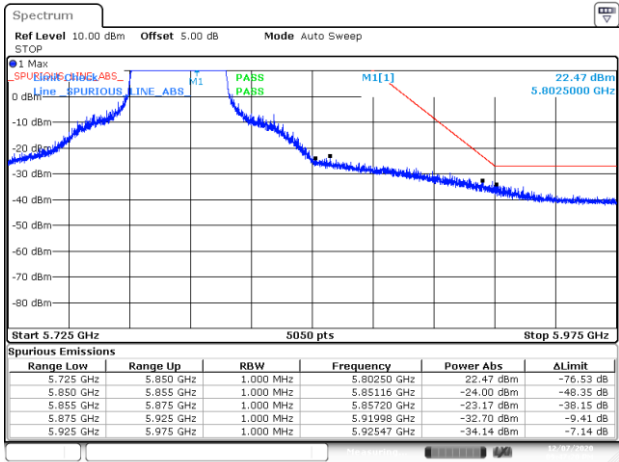
BE-NR-LOW, MIMO-A, 802.11ax20-HE0, Ch149



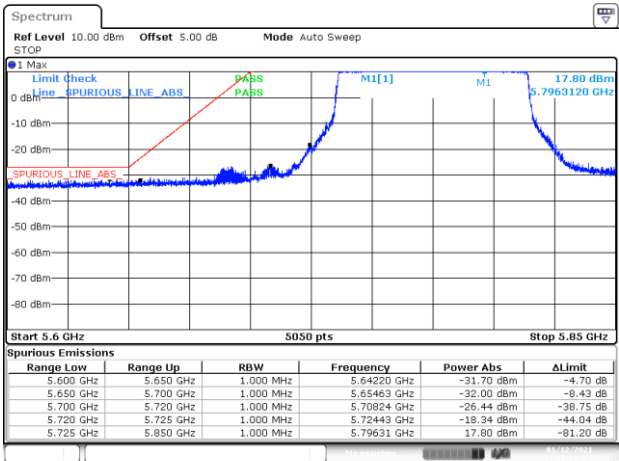
BE-NR-HIGH, MIMO-A, 802.11ax20-HE0, Ch165



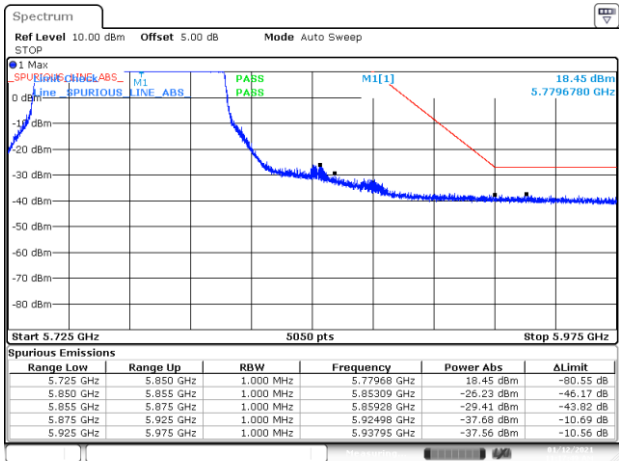
BE-NR-LOW, MIMO-A, 802.11ax40-HE0, Ch151



BE-NR-HIGH, MIMO-A, 802.11ax40-HE0, Ch159

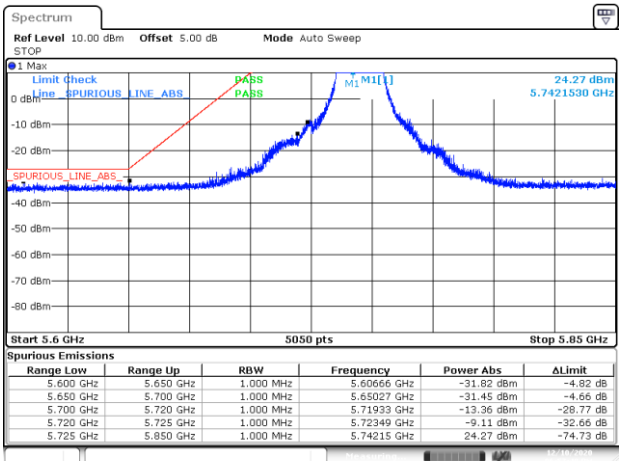


BE-NR-LOW, MIMO-A, 802.11ax80-HE0, Ch155

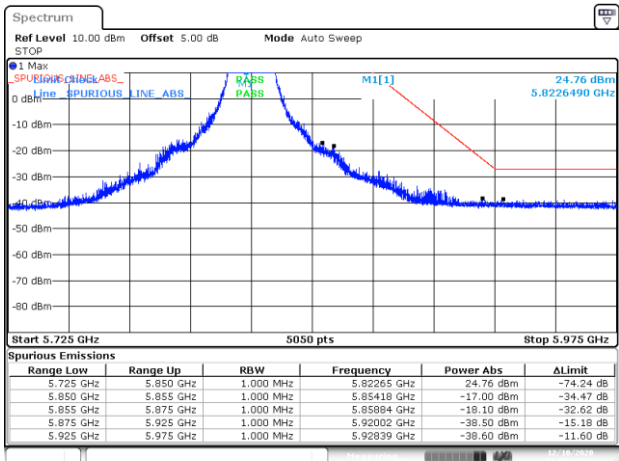


BE-NR-HIGH, MIMO-A, 802.11ax80-HE0, Ch155

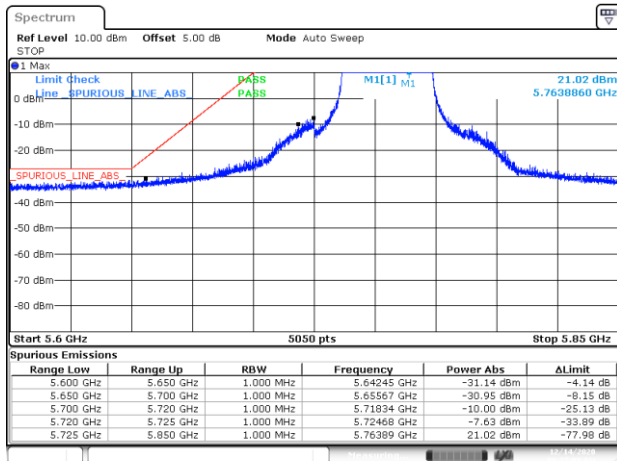
## MIMO B



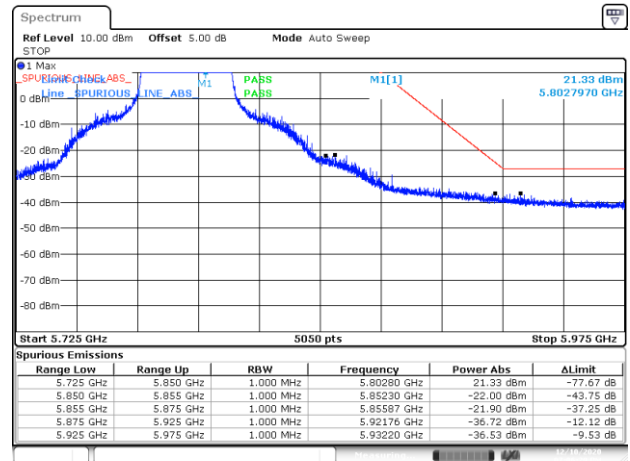
BE-NR-LOW, MIMO-B, 802.11n20-HT8, Ch149



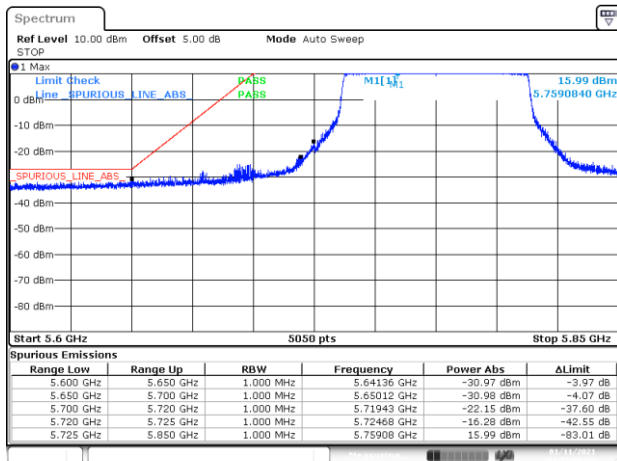
BE-NR-HIGH, MIMO-B, 802.11n20-HT8, Ch165



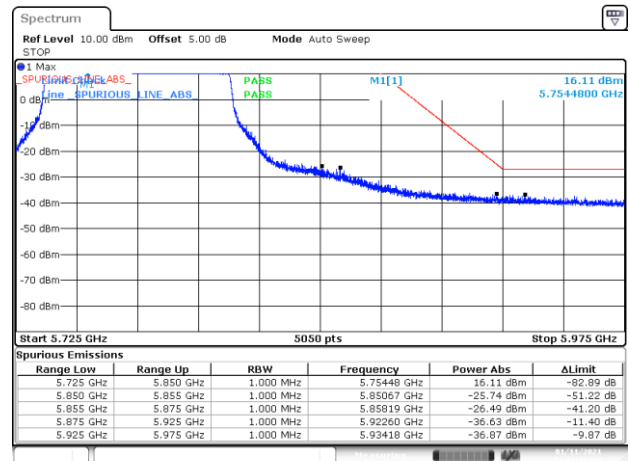
BE-NR-LOW, MIMO-B, 802.11n40-HT8, Ch151



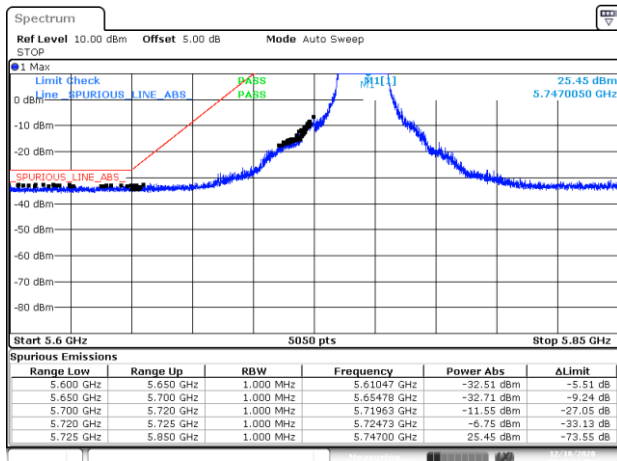
BE-NR-HIGH, MIMO-B, 802.11n40-HT8, Ch159



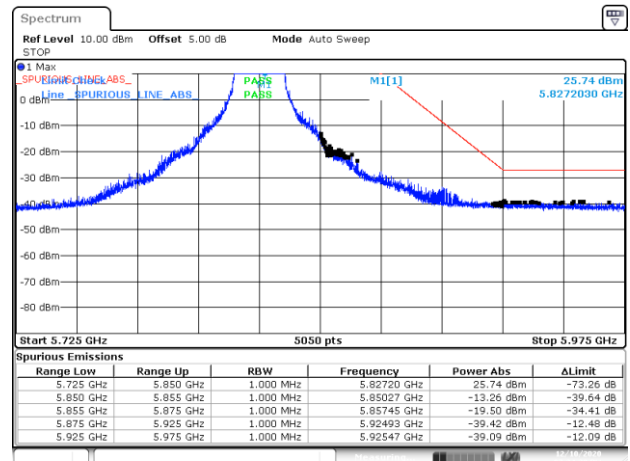
BE-NR-LOW, MIMO-B, 802.11ac80-VHT0, Ch155



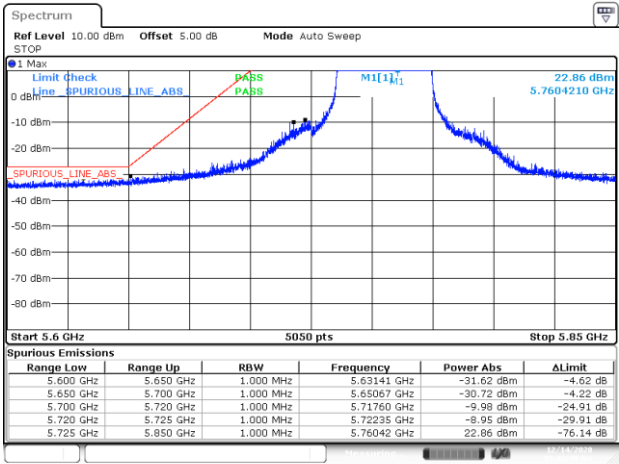
BE-NR-HIGH, MIMO-B, 802.11ac80-VHT0, Ch155



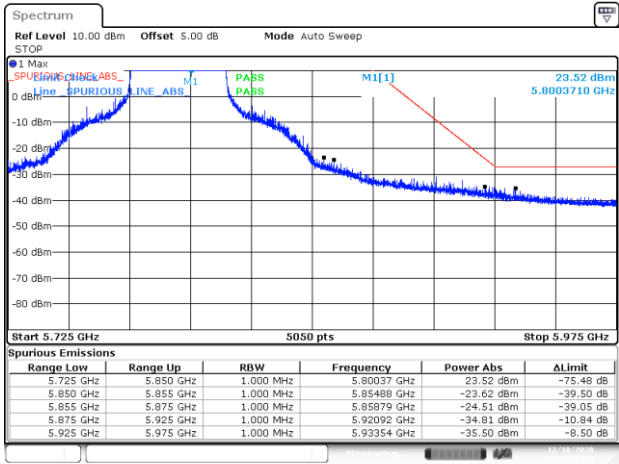
BE-NR-LOW, MIMO-B, 802.11ax20-HE0, Ch149



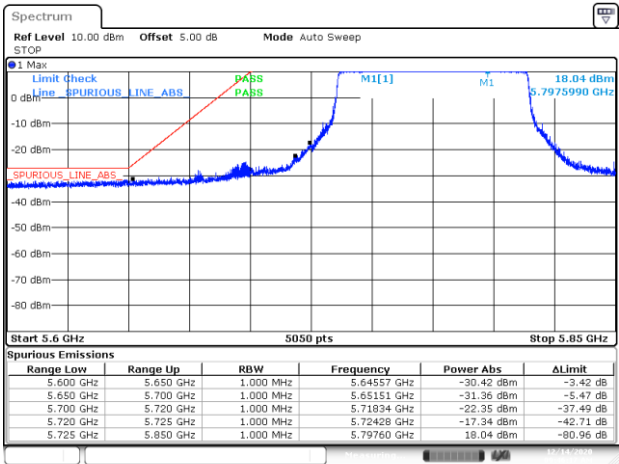
BE-NR-HIGH, MIMO-B, 802.11ax20-HE0, Ch165



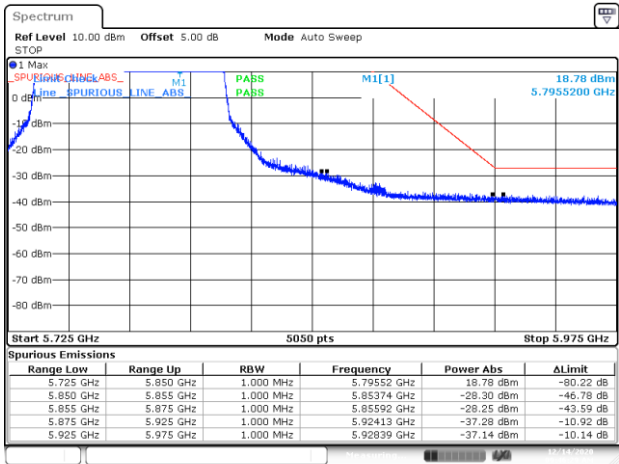
BE-NR-LOW, MIMO-B, 802.11ax40-HE0, Ch151



BE-NR-HIGH, MIMO-B, 802.11ax40-HE0, Ch159



BE-NR-LOW, MIMO-B, 802.11ax80-HE0, Ch155



BE-NR-HIGH, MIMO-B, 802.11ax80-HE0, Ch155