

TEST REPORT

| | |
|------------------------|---|
| EUT Description | WLAN and BT, 2x2 PCIe M.2 1216 adapter card |
| Brand Name | Intel® Wi-Fi 6E AX211 |
| Model Name | AX211D2W |
| FCC/IC ID | FCCID: PD9AX211D2 / ICID: 1000M-AX211D2 |
| Date of Test Start/End | 2020-12-01 / 2020-12-21 |
| Features | 802.11ax, Dual Band, 2x2 Wi-Fi + Bluetooth® 5.2 (see section 5) |

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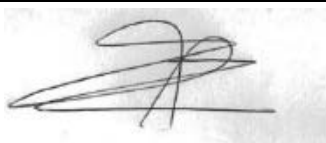
| | |
|---------------------|--|
| Reference Standards | FCC CFR Title 47 Part 15 C RSS-247 issue 2, RSS-Gen issue 5 A1 (see section 1) |
|---------------------|--|

| | |
|----------------------------|--|
| Test Report identification | 201120-03.TR04 |
| Revision Control | Rev. 00 This test report revision replaces any previous test report revision (see section 8) |

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1. Standards, reference documents and applicable test methods

| | |
|------|--|
| FCC | <ol style="list-style-type: none"> 1. FCC Title 47 CFR part 15 - Subpart C – §15.247 Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz. 2019-10-01 Edition 2. FCC Title 47 CFR part 15 - Subpart C – §15.209 Radiated emission limits; general requirements. 2019-10-01 Edition 3. FCC OET KDB 558074 D01 v05r02 - Guidance for compliance measurements on digital transmission system, frequency hopping spread spectrum system, and hybrid system devices operating under section 15.247 of the FCC rules. 4. FCC OET KDB 662911 D01 v02r01 - Emissions Testing of Transmitters with Multiple Outputs in the Same Band. 5. ANSI C63.10-2013 - American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices |
| ISED | <ol style="list-style-type: none"> 1. RSS-247 Issue 2 - Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and License-Exempt Local Area Network (LE-LAN) Devices. 2. RSS-Gen Issue 5 A1- General Requirements for Compliance of Radio Apparatus. 3. FCC OET KDB 558074 D01 v05r02 - Guidance for compliance measurements on digital transmission system, frequency hopping spread spectrum system, and hybrid system devices operating under section 15.247 of the FCC rules. 4. FCC OET KDB 662911 D01 v02r01 - Emissions Testing of Transmitters with Multiple Outputs in the Same Band. 5. ANSI C63.10-2013 - American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices |

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.
- ✓ Intel WRF Lab has developed calibration and proficiency programs for its measurement equipment to ensure correlated and reliable results to its customers.
- ✓ This report is only referred to the item that has undergone the test.
- ✓ This report does not imply an approval of the product by the Certification Bodies or competent Authorities.
- ✓ Complete or partial reproduction of the report cannot be made without written permission of Intel WRF Lab.

3. Environmental Conditions

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

| | |
|-------------|----------------|
| Temperature | 21.0°C ± 3.1°C |
| Humidity | 44.5% ± 8.5% |

4. Test samples

| Sample | Control # | Description | Model | Serial # | Date of receipt | Note |
|--------|---------------|-----------------------|-----------------------|-------------------|-----------------|--|
| #1 | 201120-03.S07 | WiFi 6E Module | AX211D2W | WFM: D8F8834E56F1 | 2020-11-23 | RF Conducted |
| | 180000-01.S06 | Adapter 1216SD to M.2 | Adapter M2 | N/A | 2017-05-11 | |
| | 170000-01.S02 | Laptop | Latitude E5450 | 21HTPF2 | 2017-03-28 | |
| | 200611-01.S10 | Extender | PCB00651_01 | - | 2020-11-30 | |
| #2 | 201120-03.S09 | WiFi 6E Module | AX211D2W | WFM:DF8834E4C92 | 2020-11-23 | Used 1GHz-6.4GHz Radiated Spurious Emissions tests and 18GHz-26.5GHz 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 | |
| | 180000-01.S05 | Socket | Adapter 1216SD to M.2 | - | 2017-08-09 | |
| | 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 | 201120-03.S08 | WiFi 6E Module | AX211D2W | WFM:D8F8834E56AB | 2020-11-23 | Used for 30MHz-1GHz Radiated Spurious Emissions tests and 6.4GHz-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 | |
| | 180000-01.S02 | Socket | Adapter 1216SD to M.2 | - | 2017-08-09 | |
| | 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 | AX211D2W | | |
| 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) | |
| | 802.11a/n/ac/ax | 5.2GHz (5150.0 – 5350.0 MHz) 5.6GHz (5470.0 – 5725.0 MHz) 5.8GHz (5725.0 – 5850.0 MHz) | |
| Antenna Information | Bluetooth 5.2 | 2.4GHz (2400.0 – 2483.5 MHz) | |
| | 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) | +3.24 | +3.24 | |
| 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 b/g/n/ax 2.4GHz

| FCC part | RSS part | Test name | Verdict |
|----------------------|---|-----------------------------------|---------|
| 15.247 (a) (2) | RSS-247 Clause 5.2 (a) | 6dB Bandwidth | P |
| 15.247 (b) (3) | RSS-247 Clause 5.4 (d) | Maximum output power and E.I.R.P | P |
| 15.247 (e) | RSS-247 Clause 5.2 (b) | Power spectral density | P |
| 15.247 (d) 15.209 | RSS-247 Clause 5.5 RSS-Gen A1 Clause 8.9 | Out-of-band Emissions (conducted) | P |
| 15.247 (d) 15.209 | RSS-247 Clause 5.5 RSS-Gen A1 Clause 8.9 | Spurious Emissions (radiated) | P |

7.2. BLE

| FCC part | RSS part | Test name | Verdict |
|----------------------|---|-----------------------------------|---------|
| 15.247 (a) (2) | RSS-247 Clause 5.2 (a) | 6dB Bandwidth | P |
| 15.247 (b) (3) | RSS-247 Clause 5.4 (d) | Maximum output power and E.I.R.P. | P |
| 15.247 (e) | RSS-247 Clause 5.2 (b) | Power spectral density | P |
| 15.247 (d) 15.209 | RSS-247 Clause 5.5 RSS-Gen A1 Clause 8.9 | Out-of-band Emissions (conducted) | P |
| 15.247 (d) 15.209 | RSS-247 Clause 5.5 RSS-Gen A1 Clause 8.9 | Spurious Emissions (radiated) | P |

P: Pass
F: Fail
NM: Not Measured
NA: Not Applicable

8. Document Revision History

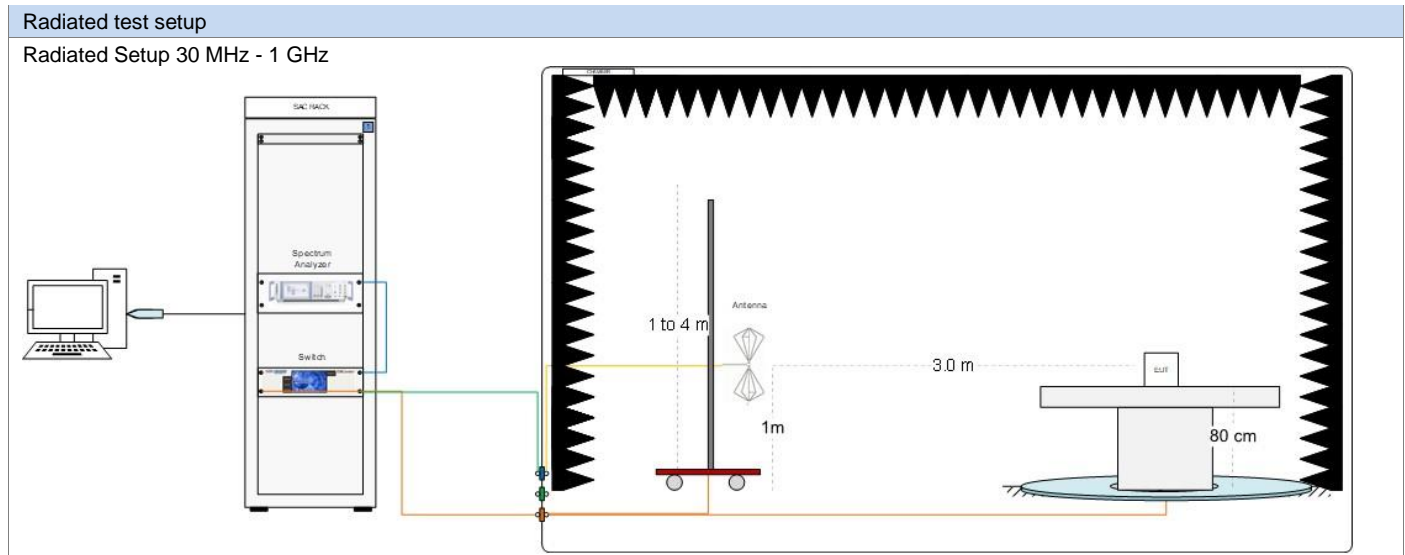
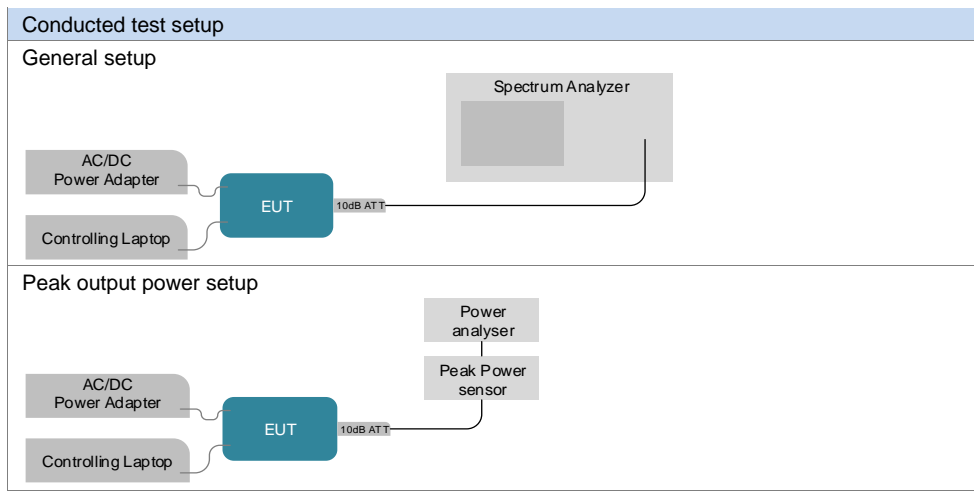
| Revision # | Modified by | Revision Details |
|------------|-------------|------------------|
| Rev. 00 | C.Requin | First Issue |

Annex A. Test & System Description

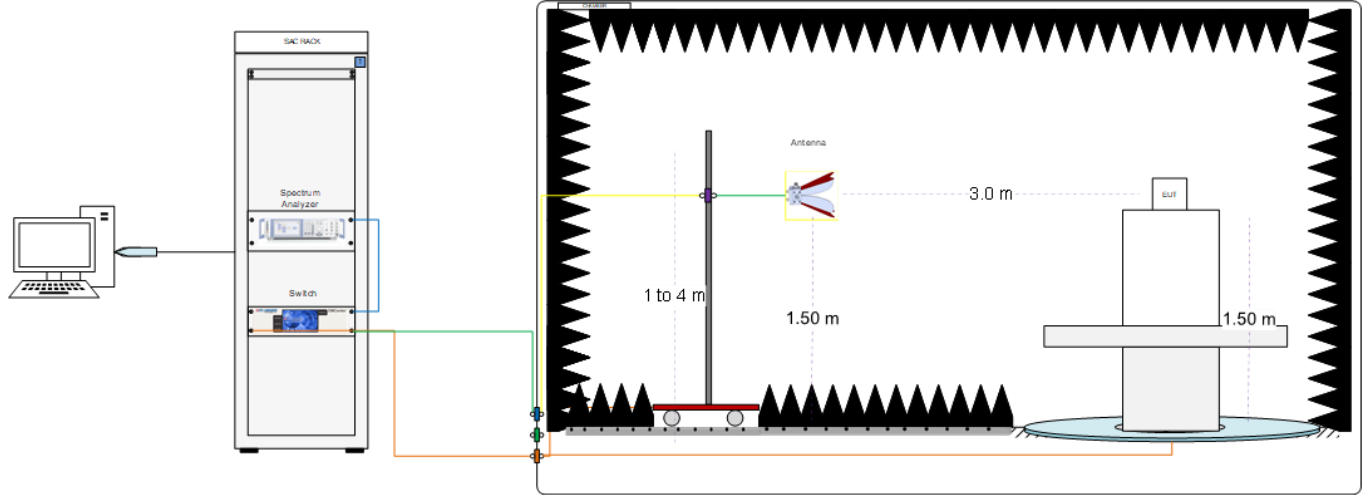
A.1 Measurement System

Measurements were performed using the following setups, made in accordance to the general provisions of FCC OET KDB 558074 D01 DTS Meas Guidance.

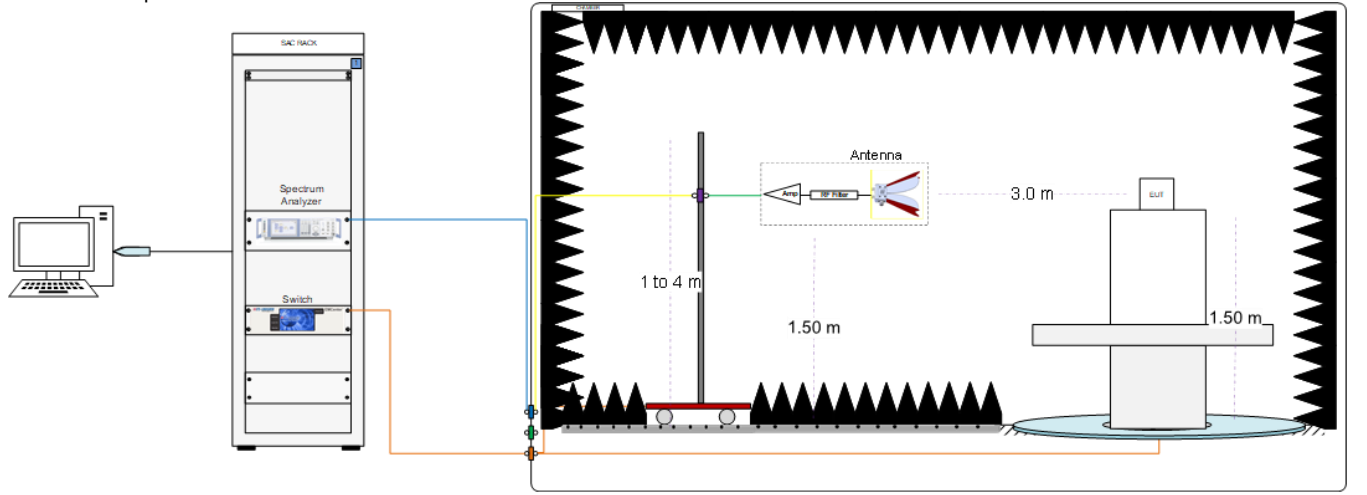
The DUT was installed in a test fixture and this test fixture is connected to a laptop computer and AC/DC power adapter. The laptop computer was used to configure the EUT to continuously transmit at a specified output power using all different modes and modulation schemes, using the Intel proprietary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



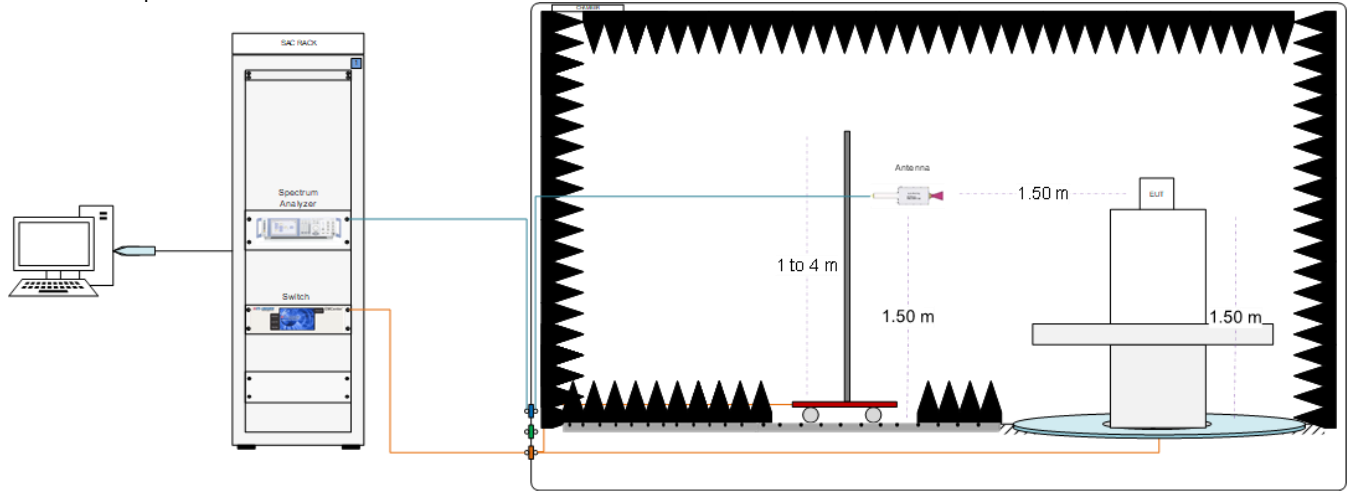
Radiated Setup 1 GHz – 6.4 GHz



Radiated Setup 6.4 GHz - 18 GHz



Radiated Setup 18 GHz – 26.5 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:

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

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:

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

where

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

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

D_{Meas} is the measurement distance, in m

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

A.2 Test Equipment List

Conducted setup

| ID# | Device | Type/Model | Serial # | Manufacturer | Cal. Date | Cal. Due Date |
|------|-------------------------|---------------------------------|-------------|-----------------|------------|---------------|
| 0316 | Spectrum Analyzer | FSV30 | 103309 | Rohde & Schwarz | 2019-09-02 | 2021-09-02 |
| 0884 | Peak Power Meter | MA24406A | 11138 | ANRITSU | 2019-11-12 | 2021-11-12 |
| 0442 | RF cable 50cm | Coax 2.92mm Male 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 |
| 0581 | Temp & Humidity Logger | RA12E-TH1-RAS | RA12-B89BE3 | Avtech | 2020-01-23 | 2022-01-23 |
| 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 30 MHz – 1 GHz | UBAA9115 BBVU9135 DGA9552N | + + 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 + HPF6.4 | 3117 | 00157736 | ETS-Lindgren | 2020-04-02 | 2022-04-02 |
| 0334 | Double-Ridged Waveguide Horn with Pre-Amplifier 18 GHz to 40 GHz | 3116C+PA | 00169308bis + 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- 200200 | MFR 64639223720-003 | Micro-coax | 2020-08-25 | 2021-02-25 |
| 0263 | Cable 1m - 1GHz to 18GHz | UFA147A | - | Utilflex | 2020-11-27 | 2021-05-27 |
| 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- 50U50U | MFR 64639 223230-001 | Micro-coax | 2020-11-27 | 2021-05-27 |
| 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 |

N/A: Not Applicable

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 | ± 0.12 | % |
| Power Spectral density | ± 1.47 | dB |
| Occupied bandwidth | ± 2.07 | % |
| Conducted Power | ± 1.03 | dB |
| Conducted Spurious Emission <26.5 GHz | ± 2.93 | dB |
| Radiated tests <1GHz | ± 5.26 | dB |
| Radiated tests 1GHz – 26.5 GHz | ± 4.85 | dB |

Annex B. Test Results DTS

The herein test results were performed by:

| Test case measurement | Test Engineer |
|-----------------------------------|----------------------------|
| 6dB Bandwidth | C.Requin |
| Maximum output power and E.I.R.P | C.Requin |
| Power spectral density | C.Requin |
| Out-of-band Emissions (conducted) | C.Requin |
| Spurious Emissions (radiated) | A.Lounes, N.Nachabe, N.Bui |

B.1 Test Conditions

For 802.11b/g modes 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 & 802.11ax40 (40MHz channel bandwidth) modes the EUT can transmit at both CHAIN A and CHAIN B RF outputs individually, and also simultaneously.

For Bluetooth Low Energy mode the EUT can transmit only at CHAIN A RF output.

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 | 802.11b | 20 | 1Mbps |
| | 802.11g | 20 | 6Mbps |
| | 802.11n | 20 | HT0 |
| | | 40 | HT0 |
| | 802.11ax | 20 | HE0 |
| | | 40 | HE0 |
| MIMO | 802.11n | 20/40 | HT8 |
| | 802.11ax | 20/40 | HE0 |

B.2 Test Results Tables

B.2.1 6dB & 99% Bandwidth

Test limits

| FCC part | RSS part | Limits |
|----------------|---------------------------|---|
| 15.247 (a) (2) | RSS-247 Clause 5.2 (a) | Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. 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 through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

Results tables

| Mode | Rate | Antenna | Channel | Freq [MHz] | 6dB BW [MHz] | 99% BW [MHz] |
|-----------|-------|---------|---------|------------|--------------|--------------|
| 802.11b | 1Mbps | SISO A | 1 | 2412 | 8.56 | 13.82 |
| | | | 7 | 2442 | 9.02 | 13.50 |
| | | | 11 | 2462 | 9.07 | 13.96 |
| | | | 12 | 2467 | 9.04 | 13.80 |
| | | | 13 | 2472 | 8.56 | 13.52 |
| | | SISO B | 1 | 2412 | 9.01 | 13.69 |
| | | | 7 | 2442 | 9.06 | 13.78 |
| | | | 11 | 2462 | 9.04 | 13.78 |
| | | | 12 | 2467 | 8.56 | 13.49 |
| | | | 13 | 2472 | 9.02 | 13.31 |
| 802.11g | 6Mbps | SISO A | 1 | 2412 | 15.31 | 17.77 |
| | | | 7 | 2442 | 15.04 | 16.69 |
| | | | 11 | 2462 | 14.98 | 16.65 |
| | | | 12 | 2467 | 16.33 | 16.43 |
| | | | 13 | 2472 | 15.07 | 16.75 |
| | | SISO B | 1 | 2412 | 15.05 | 18.84 |
| | | | 7 | 2442 | 13.80 | 16.69 |
| | | | 11 | 2462 | 15.10 | 16.69 |
| | | | 12 | 2467 | 16.33 | 16.42 |
| | | | 13 | 2472 | 15.31 | 17.77 |
| 802.11n20 | HT0 | SISO A | 1 | 2412 | 13.76 | 17.81 |
| | | | 7 | 2442 | 15.07 | 18.42 |
| | | | 11 | 2462 | 15.35 | 17.76 |
| | | | 12 | 2467 | 14.92 | 17.75 |
| | | | 13 | 2472 | 17.53 | 17.59 |
| | | SISO B | 1 | 2412 | 13.83 | 17.78 |
| | | | 7 | 2442 | 14.36 | 19.24 |
| | | | 11 | 2462 | 14.66 | 17.77 |
| | | | 12 | 2467 | 15.05 | 17.72 |
| | | | 13 | 2472 | 17.54 | 17.59 |
| | HT8 | MIMO A | 1 | 2412 | 15.30 | 17.78 |
| | | | 7 | 2442 | 15.66 | 18.61 |
| | | | 11 | 2462 | 15.06 | 17.76 |
| | | | 12 | 2467 | 13.87 | 17.74 |
| | | | 13 | 2472 | 17.54 | 17.60 |
| MIMO B | 1 | 2412 | 15.41 | 17.76 | | |
| | 7 | 2442 | 15.66 | 18.15 | | |
| | 11 | 2462 | 16.25 | 17.76 | | |
| | 12 | 2467 | 15.07 | 17.72 | | |
| | 13 | 2472 | 17.56 | 17.60 | | |
| 802.11n40 | HT0 | SISO A | 3 | 2422 | 32.57 | 36.01 |
| | | | 7 | 2442 | 32.56 | 36.01 |
| | | | 9 | 2452 | 32.50 | 36.00 |
| | | | 10 | 2457 | 35.01 | 36.00 |
| | | | 11 | 2462 | 36.34 | 36.21 |
| | | SISO B | 3 | 2422 | 33.85 | 36.01 |
| | | | 7 | 2442 | 31.08 | 36.01 |
| | | | 9 | 2452 | 32.54 | 36.00 |
| | | | 10 | 2457 | 35.12 | 36.00 |
| | | | 11 | 2462 | 36.31 | 36.20 |
| | HT8 | MIMO A | 3 | 2422 | 35.02 | 36.01 |
| | | | 7 | 2442 | 33.87 | 36.08 |
| | | | 9 | 2452 | 30.09 | 36.00 |
| | | | 10 | 2457 | 33.80 | 36.00 |
| | | | 11 | 2462 | 36.33 | 36.20 |
| MIMO B | 3 | 2422 | 35.10 | 35.91 | | |
| | 7 | 2442 | 35.09 | 35.92 | | |
| | 9 | 2452 | 32.51 | 35.89 | | |
| | 10 | 2457 | 35.07 | 35.90 | | |
| | 11 | 2462 | 36.33 | 36.15 | | |

Max Value

| Mode | Rate | Antenna | Channel | Freq [MHz] | RU config. | 6dB BW [MHz] | 99% BW [MHz] | | | |
|------------|--------|---------|------------|------------|------------|--------------|--------------|--------|-------|-------|
| 802.11ax20 | HE0 | SISO A | 1 | 2412 | Full | 15.08 | 18.89 | | | |
| | | | | | 26/0 | 2.03 | 18.23 | | | |
| | | | | | 52/37 | 16.95 | 17.81 | | | |
| | | | | | 106/53 | 17.06 | 17.88 | | | |
| | | | 7 | 2442 | Full | 15.50 | 19.05 | | | |
| | | | | | 11 | 2462 | Full | 16.42 | 18.90 | |
| | | | | | 12 | 2467 | Full | 15.03 | 18.89 | |
| | | | | | 13 | 2472 | Full | 18.10 | 18.71 | |
| | | | 13 | 2472 | 26/8 | 1.93 | 17.77 | | | |
| | | | | | 52/40 | 16.87 | 17.93 | | | |
| | | | | | 106/54 | 16.84 | 17.95 | | | |
| | | | | | Full | 17.34 | 18.90 | | | |
| | | SISO B | 1 | 2412 | 26/0 | 2.00 | 18.25 | | | |
| | | | | | 52/37 | 16.98 | 18.37 | | | |
| | | | | | 106/53 | 17.15 | 17.91 | | | |
| | | | | | Full | 15.37 | 19.01 | | | |
| | | | 7 | 2442 | 11 | 2462 | Full | 16.97 | 18.88 | |
| | | | | | 12 | 2467 | Full | 15.41 | 18.87 | |
| | | | | | 13 | 2472 | Full | 18.28 | 18.71 | |
| | | | | | 26/8 | 1.99 | 17.98 | | | |
| | | | 13 | 2472 | 52/40 | 15.64 | 17.89 | | | |
| | | | | | 106/54 | 16.95 | 17.66 | | | |
| | | | | | Full | 15.04 | 18.89 | | | |
| | | | | | 26/0 | 2.02 | 18.21 | | | |
| | | MIMO A | 1 | 2412 | 52/37 | 17.03 | 18.29 | | | |
| | | | | | 106/53 | 17.06 | 17.72 | | | |
| | | | | | Full | 16.36 | 19.06 | | | |
| | | | | | 7 | 2442 | Full | 17.00 | 18.89 | |
| | | | 11 | 2462 | 12 | 2467 | Full | 17.75 | 18.91 | |
| | | | | | 13 | 2472 | Full | 18.08 | 18.73 | |
| | | | | | 26/8 | 1.99 | 17.89 | | | |
| | | | | | 52/40 | 16.91 | 17.75 | | | |
| | | | 13 | 2472 | 106/54 | 16.96 | 18.07 | | | |
| | | | | | Full | 15.13 | 18.90 | | | |
| | | | | | 26/0 | 12.01 | 18.16 | | | |
| | | | | | 52/37 | 17.00 | 17.96 | | | |
| | | MIMO B | 1 | 2412 | 106/53 | 18.32 | 17.91 | | | |
| | | | | | Full | 16.37 | 19.15 | | | |
| | | | | | 7 | 2442 | Full | 15.11 | 18.90 | |
| | | | | | 11 | 2462 | Full | 15.07 | 18.89 | |
| | | | 12 | 2467 | 13 | 2472 | Full | 17.89 | 18.73 | |
| | | | | | 26/8 | 1.96 | 18.13 | | | |
| | | | | | 52/40 | 14.38 | 17.74 | | | |
| | | | | | 106/54 | 16.99 | 17.55 | | | |
| | | | 802.11ax40 | HE0 | SISO A | 3 | 2422 | Full | 34.98 | 37.43 |
| | | | | | | | | 242/61 | 18.11 | 18.86 |
| | | | | | | 7 | 2442 | Full | 35.09 | 37.46 |
| | | | | | | | | 9 | 2452 | Full |
| 10 | 2457 | Full | | | | 35.99 | 37.45 | | | |
| | | 11 | | | | 2462 | Full | 37.42 | 37.53 | |
| 11 | 2462 | 242/62 | | | | 18.53 | 18.64 | | | |
| | | 3 | | | | 2422 | Full | 33.66 | 37.45 | |
| | | 7 | | | | 2442 | 242/61 | 14.05 | 18.86 | |
| | | 9 | | | | 2452 | Full | 35.94 | 37.49 | |
| SISO B | 11 | 2462 | | | | Full | 35.11 | 37.44 | | |
| | | | | | | 10 | 2457 | Full | 35.04 | 37.47 |
| | | | Full | | 36.97 | 37.54 | | | | |
| | | | 242/62 | | 18.37 | 18.64 | | | | |
| MIMO A | 3 | 2422 | Full | | 33.46 | 37.45 | | | | |
| | | | 242/61 | | 15.75 | 18.85 | | | | |
| | 7 | 2442 | Full | | 35.02 | 37.52 | | | | |
| | | | 9 | | 2452 | Full | 35.43 | 37.43 | | |
| | 10 | 2457 | Full | | 35.37 | 37.43 | | | | |
| | | | 11 | | 2462 | Full | 37.23 | 37.52 | | |
| | 11 | 2462 | 242/62 | | 18.19 | 18.64 | | | | |
| | | | 3 | | 2422 | Full | 32.48 | 37.39 | | |
| | | | 7 | | 2442 | 242/61 | 17.97 | 18.84 | | |
| | | | 9 | | 2452 | Full | 33.85 | 37.47 | | |
| | MIMO B | 10 | 2457 | | Full | 35.08 | 37.42 | | | |
| | | | | | Full | 34.99 | 37.42 | | | |
| Full | | | | | 37.29 | 37.56 | | | | |
| 11 | | | | | 2462 | 242/62 | 18.26 | 18.65 | | |

Max Value

B.2.2 Maximum Output Power and antenna gain

Test limits

| | Limits |
|----------------------------|--|
| FCC Part 15.247 (b) (3) | <p>(b) The maximum peak conducted output power of the intentional radiator shall not exceed the following:</p> <p>(3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level.</p> <p>(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi.</p> |
| RSS-247 Clause 5.4 (d) | <p>For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e).</p> <p>As an alternative to a peak power measurement, compliance can be based on a measurement of the maximum conducted output power. The maximum conducted output power is the total transmit power delivered to all antennas and antenna elements, averaged across all symbols in the signalling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or transmitting at a reduced power level. If multiple modes of operation are implemented, the maximum conducted output power is the highest total transmit power occurring in any mode.</p> |

Test procedure

The Maximum Peak Conducted Output Power was measured using a broadband peak power meter methods for 20MHz and 40MHz channel bandwidth as authorized in chapter 2.0 "Power limits, definitions and device configuration" of FCC OET KDB 558074 D01

For MIMO mode, according to the measure-and-sum approach defined in FCC OET KDB 662911 D01 - Guidance for Emission Testing of Transmitters with Multiple Outputs in the Same Band, 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. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

Results tables:

Maximum peak power are shown in table below with **min** and **max** values highlighted. Maximum average output power are shown for indicative purpose only

| Mode | Rate | # Ch | Freq [MHz] | Ant | Meas Peak Cond.Power [dBm] | EIRP [dBm] | EIRP [mW] | Peak Cond.Power [mW] | Meas. Avg Cond.Power [dBm] | Max. Avg Cond.Power* [dBm] | EIRP [mW] | Avg Cond.Power [mW] |
|--------------|-------|--------------|--------------|--------------|----------------------------|------------|-----------|----------------------|----------------------------|----------------------------|-----------|---------------------|
| 802.11b | 1Mbps | 1 | 2412 | SISO A | 24.10 | 27.34 | 542.00 | 257.04 | 21.01 | 21.01 | 266.07 | 126.18 |
| | | | | SISO B | 24.18 | 27.42 | 552.08 | 261.82 | 21.02 | 21.02 | 266.69 | 126.47 |
| | | 7 | 2442 | SISO A | 23.95 | 27.19 | 523.60 | 248.31 | 20.75 | 20.75 | 250.61 | 118.85 |
| | | | | SISO B | 24.17 | 27.41 | 550.81 | 261.22 | 20.94 | 20.94 | 261.82 | 124.17 |
| | | 11 | 2462 | SISO A | 24.35 | 27.59 | 574.12 | 272.27 | 21.11 | 21.11 | 272.27 | 129.12 |
| | | | | SISO B | 24.23 | 27.47 | 558.47 | 264.85 | 20.96 | 20.96 | 263.03 | 124.74 |
| 12 | 2467 | SISO A | 22.90 | 26.14 | 411.15 | 194.98 | 19.63 | 19.63 | 193.64 | 91.83 | | |
| | | SISO B | 22.59 | 25.83 | 382.82 | 181.55 | 19.32 | 19.32 | 180.30 | 85.51 | | |
| 13 | 2472 | SISO A | 20.42 | 23.66 | 232.27 | 110.15 | 17.09 | 17.09 | 107.89 | 51.17 | | |
| | | SISO B | 19.31 | 22.55 | 179.89 | 85.31 | 16.00 | 16.00 | 83.95 | 39.81 | | |
| 802.11g | 6Mbps | 1 | 2412 | SISO A | 27.58 | 30.82 | 1207.81 | 572.80 | 19.34 | 19.52 | 188.68 | 89.48 |
| | | | | SISO B | 27.88 | 31.12 | 1294.20 | 613.76 | 19.64 | 19.82 | 202.18 | 95.88 |
| | | 7 | 2442 | SISO A | 29.42 | 32.66 | 1845.02 | 874.98 | 21.02 | 21.20 | 277.80 | 131.74 |
| | | | | SISO B | 29.55 | 32.79 | 1901.08 | 901.57 | 21.62 | 21.80 | 318.95 | 151.26 |
| | | 11 | 2462 | SISO A | 27.01 | 30.25 | 1059.25 | 502.34 | 18.70 | 18.88 | 162.83 | 77.22 |
| | | | | SISO B | 26.71 | 29.95 | 988.55 | 468.81 | 18.35 | 18.53 | 150.22 | 71.24 |
| 12 | 2467 | SISO A | 23.36 | 26.60 | 457.09 | 216.77 | 15.12 | 15.30 | 71.41 | 33.86 | | |
| | | SISO B | 23.73 | 26.97 | 497.74 | 236.05 | 15.40 | 15.58 | 76.16 | 36.12 | | |
| 13 | 2472 | SISO A | 20.44 | 23.68 | 233.35 | 110.66 | 12.09 | 12.27 | 35.54 | 16.86 | | |
| | | SISO B | 20.44 | 23.68 | 233.35 | 110.66 | 12.18 | 12.36 | 36.29 | 17.21 | | |
| 802.11n20 | HTO | 1 | 2412 | SISO A | 27.16 | 30.40 | 1096.48 | 520.00 | 18.93 | 18.93 | 164.82 | 78.16 |
| | | | | SISO B | 27.39 | 30.63 | 1156.11 | 548.28 | 19.13 | 19.13 | 172.58 | 81.85 |
| | | 7 | 2442 | SISO A | 29.36 | 32.60 | 1819.70 | 862.98 | 20.97 | 20.97 | 263.63 | 125.03 |
| | | | | SISO B | 29.41 | 32.65 | 1840.77 | 872.97 | 21.69 | 21.69 | 311.17 | 147.57 |
| | | 11 | 2462 | SISO A | 26.68 | 29.92 | 981.75 | 465.59 | 18.47 | 18.47 | 148.25 | 70.31 |
| | | | | SISO B | 26.85 | 30.09 | 1020.94 | 484.17 | 18.51 | 18.51 | 149.62 | 70.96 |
| | 12 | 2467 | SISO A | 23.65 | 26.89 | 488.65 | 231.74 | 15.32 | 15.32 | 71.78 | 34.04 | |
| | | | SISO B | 23.52 | 26.76 | 474.24 | 224.91 | 15.21 | 15.21 | 69.98 | 33.19 | |
| | 13 | 2472 | SISO A | 20.77 | 24.01 | 251.77 | 119.40 | 12.42 | 12.42 | 36.81 | 17.46 | |
| | | | SISO B | 20.49 | 23.73 | 236.05 | 111.94 | 12.12 | 12.12 | 34.36 | 16.29 | |
| | HT8 | 1 | 2412 | MIMO A | 25.26 | 28.50 | 707.95 | 335.74 | 16.98 | 16.98 | 105.20 | 49.89 |
| | | | | MIMO B | 25.61 | 28.85 | 767.36 | 363.92 | 17.00 | 17.00 | 105.68 | 50.12 |
| | | | | Combined A+B | 28.45 | 31.69 | 1475.31 | 699.65 | 20.00 | 20.00 | 210.88 | 100.01 |
| | | 7 | 2442 | MIMO A | 29.55 | 32.79 | 1901.08 | 901.57 | 20.73 | 20.73 | 249.46 | 118.30 |
| | | | | MIMO B | 29.83 | 33.07 | 2027.68 | 961.61 | 20.32 | 20.32 | 226.99 | 107.65 |
| | | | | Combined A+B | 29.91 | 33.15 | 2065.38 | 979.49 | 23.54 | 23.54 | 476.45 | 225.95 |
| | | 11 | 2462 | MIMO A | 25.57 | 28.81 | 760.33 | 360.58 | 17.25 | 17.25 | 111.94 | 53.09 |
| | | | | MIMO B | 26.00 | 29.24 | 839.46 | 398.11 | 17.40 | 17.40 | 115.88 | 54.95 |
| Combined A+B | | | | 28.80 | 32.04 | 1599.79 | 758.69 | 20.34 | 20.34 | 227.82 | 108.04 | |
| 12 | | 2467 | MIMO A | 20.04 | 23.28 | 212.81 | 100.93 | 11.75 | 11.75 | 31.55 | 14.96 | |
| | | | MIMO B | 20.49 | 23.73 | 236.05 | 111.94 | 11.82 | 11.82 | 32.06 | 15.21 | |
| | | | Combined A+B | 23.28 | 26.52 | 448.86 | 212.87 | 14.80 | 14.80 | 63.61 | 30.17 | |
| 13 | 2472 | MIMO A | 17.32 | 20.56 | 113.76 | 53.95 | 8.88 | 8.88 | 16.29 | 7.73 | | |
| | | MIMO B | 17.42 | 20.66 | 116.41 | 55.21 | 8.72 | 8.72 | 15.70 | 7.45 | | |
| | | Combined A+B | 20.38 | 23.62 | 230.18 | 109.16 | 11.81 | 11.81 | 32.00 | 15.17 | | |
| 802.11n40 | HTO | 3 | 2422 | SISO A | 24.65 | 27.89 | 615.18 | 291.74 | 16.34 | 16.34 | 90.78 | 43.05 |
| | | | | SISO B | 23.60 | 26.84 | 483.06 | 229.09 | 15.32 | 15.32 | 71.78 | 34.04 |
| | | 7 | 2442 | SISO A | 26.07 | 29.31 | 853.10 | 404.58 | 17.79 | 17.79 | 126.77 | 60.12 |
| | | | | SISO B | 26.00 | 29.24 | 839.46 | 398.11 | 17.69 | 17.69 | 123.88 | 58.75 |
| | | 9 | 2452 | SISO A | 25.68 | 28.92 | 779.83 | 369.83 | 17.37 | 17.37 | 115.08 | 54.58 |
| | | | | SISO B | 24.13 | 27.37 | 545.76 | 258.82 | 15.84 | 15.84 | 80.91 | 38.37 |
| | 10 | 2457 | SISO A | 21.22 | 24.46 | 279.25 | 132.43 | 12.91 | 12.91 | 41.21 | 19.54 | |
| | | | SISO B | 20.88 | 24.12 | 258.23 | 122.46 | 12.60 | 12.60 | 38.37 | 18.20 | |
| | 11 | 2462 | SISO A | 19.57 | 22.81 | 190.99 | 90.57 | 11.26 | 11.26 | 28.18 | 13.37 | |
| | | | SISO B | 18.46 | 21.70 | 147.91 | 70.15 | 10.15 | 10.15 | 21.83 | 10.35 | |
| | HT8 | 3 | 2422 | MIMO A | 23.98 | 27.22 | 527.23 | 250.03 | 15.62 | 15.62 | 76.91 | 36.48 |
| | | | | MIMO B | 24.46 | 27.70 | 588.84 | 279.25 | 15.80 | 15.80 | 80.17 | 38.02 |
| | | | | Combined A+B | 27.24 | 30.48 | 1116.07 | 529.29 | 18.72 | 18.72 | 157.08 | 74.49 |
| | | 7 | 2442 | MIMO A | 23.88 | 27.12 | 515.23 | 244.34 | 15.56 | 15.56 | 75.86 | 35.97 |
| | | | | MIMO B | 24.42 | 27.66 | 583.45 | 276.69 | 15.72 | 15.72 | 78.70 | 37.33 |
| | | | | Combined A+B | 27.17 | 30.41 | 1098.67 | 521.04 | 18.65 | 18.65 | 154.56 | 73.30 |
| | | 9 | 2452 | MIMO A | 22.78 | 26.02 | 399.94 | 189.67 | 14.47 | 14.47 | 59.02 | 27.99 |
| | | | | MIMO B | 24.02 | 27.26 | 532.11 | 252.35 | 15.35 | 15.35 | 72.28 | 34.28 |
| Combined A+B | | | | 26.45 | 29.69 | 932.05 | 442.02 | 17.94 | 17.94 | 131.30 | 62.27 | |
| 10 | | 2457 | MIMO A | 20.20 | 23.44 | 220.80 | 104.71 | 11.86 | 11.86 | 32.36 | 15.35 | |
| | | | MIMO B | 20.55 | 23.79 | 239.33 | 113.50 | 11.91 | 11.91 | 32.73 | 15.52 | |
| | | | Combined A+B | 23.39 | 26.63 | 460.13 | 218.21 | 14.90 | 14.90 | 65.09 | 30.87 | |
| 11 | 2462 | MIMO A | 17.10 | 20.34 | 108.14 | 51.29 | 8.71 | 8.71 | 15.67 | 7.43 | | |
| | | MIMO B | 17.31 | 20.55 | 113.50 | 53.83 | 8.58 | 8.58 | 15.21 | 7.21 | | |
| Combined A+B | 20.22 | 23.46 | 221.64 | 105.11 | 11.66 | 11.66 | 30.87 | 14.64 | | | | |

* Duty cycle compensated

| Mode | Rate | # Ch | Freq [MHz] | Antenna | RU config | Meas Peak Cond.Power [dBm] | EIRP [dBm] | EIRP [mW] | Peak Cond.Power [mW] | Meas. Avg Cond.Power [dBm] | Max. Avg Cond.Power* [dBm] | EIRP [mW] | Avg Cond.Power [mW] | |
|------------|------|--------------|------------|---------|--------------|----------------------------|------------|-----------|----------------------|----------------------------|----------------------------|-----------|---------------------|--------|
| 802.11ax20 | HEO | 1 | 2412 | SISO A | Full | 27.38 | 30.62 | 1153.45 | 547.02 | 18.31 | 18.31 | 142.89 | 67.76 | |
| | | | | | 26/0 | 27.74 | 30.98 | 1253.14 | 594.29 | 19.78 | 19.78 | 200.45 | 95.06 | |
| | | | | | 52/37 | 29.04 | 32.28 | 1690.44 | 801.68 | 20.15 | 20.15 | 218.27 | 103.51 | |
| | | | | SISO B | 106/53 | 29.34 | 32.58 | 1811.34 | 859.01 | 19.99 | 19.99 | 210.38 | 99.77 | |
| | | | | | Full | 27.77 | 31.01 | 1261.83 | 598.41 | 18.75 | 18.75 | 158.12 | 74.99 | |
| | | | | | 26/0 | 27.66 | 30.90 | 1230.27 | 583.45 | 19.52 | 19.52 | 188.80 | 89.54 | |
| | | | | MIMO A | 52/37 | 28.88 | 32.12 | 1629.30 | 772.68 | 19.96 | 19.96 | 208.93 | 99.08 | |
| | | | | | 106/53 | 29.61 | 32.85 | 1927.52 | 914.11 | 20.22 | 20.22 | 221.82 | 105.20 | |
| | | | | | Full | 25.21 | 28.45 | 699.84 | 331.89 | 16.14 | 16.14 | 86.70 | 41.11 | |
| | | | | MIMO B | 26/0 | 26.85 | 30.09 | 1020.94 | 484.17 | 18.91 | 18.91 | 164.06 | 77.80 | |
| | | | | | 52/37 | 26.86 | 30.10 | 1023.29 | 485.29 | 19.19 | 19.19 | 174.98 | 82.99 | |
| | | | | | 106/53 | 28.44 | 31.68 | 1472.31 | 698.23 | 18.99 | 18.99 | 167.11 | 79.25 | |
| | | Combined A+B | Full | 26.41 | 29.65 | 922.57 | 437.52 | 17.28 | 17.28 | 112.72 | 53.46 | | | |
| | | | 26/0 | 26.80 | 30.04 | 1009.25 | 478.63 | 19.24 | 19.24 | 177.01 | 83.95 | | | |
| | | | 52/37 | 26.89 | 30.13 | 1030.39 | 488.65 | 19.40 | 19.40 | 183.65 | 87.10 | | | |
| | | MIMO A | 106/53 | 26.77 | 30.01 | 1002.31 | 475.34 | 19.22 | 19.22 | 176.20 | 83.56 | | | |
| | | | Full | 28.86 | 32.10 | 1622.41 | 769.42 | 19.76 | 19.76 | 199.42 | 94.57 | | | |
| | | | 26/0 | 29.83 | 33.07 | 2027.68 | 961.61 | 22.09 | 22.09 | 341.07 | 161.75 | | | |
| | | MIMO B | 52/37 | 29.88 | 33.12 | 2051.16 | 972.74 | 22.31 | 22.31 | 358.64 | 170.08 | | | |
| | | | 106/53 | 27.02 | 30.26 | 1061.7 | 503.501 | 22.12 | 22.12 | 343.31 | 162.81 | | | |
| | | | Full | 29.88 | 33.12 | 2051.16 | 972.75 | 21.03 | 21.03 | 267.30 | 126.77 | | | |
| | | 7 | 2442 | SISO A | Full | 29.88 | 33.12 | 2051.16 | 972.75 | 21.03 | 21.03 | 267.30 | 126.77 | |
| | | | | | SISO B | Full | 29.80 | 33.04 | 2013.72 | 954.99 | 20.74 | 20.74 | 250.03 | 118.58 |
| | | | | | MIMO A | Full | 29.83 | 33.07 | 2027.68 | 961.61 | 20.49 | 20.49 | 236.05 | 111.94 |
| | | | | | MIMO B | Full | 29.55 | 32.79 | 1901.08 | 901.57 | 20.81 | 20.81 | 254.10 | 120.50 |
| | | | | | Combined A+B | Full | 29.91 | 33.15 | 2065.38 | 979.49 | 23.66 | 23.66 | 490.15 | 232.45 |
| | | 11 | 2462 | SISO A | Full | 26.78 | 30.02 | 1004.62 | 476.43 | 17.69 | 17.69 | 123.88 | 58.75 | |
| | | | | | SISO B | Full | 26.66 | 29.90 | 977.24 | 463.45 | 17.68 | 17.68 | 123.59 | 58.61 |
| | | | | | MIMO A | Full | 24.73 | 27.97 | 626.61 | 297.17 | 15.66 | 15.66 | 77.62 | 36.81 |
| | | | | | MIMO B | Full | 25.06 | 28.30 | 676.08 | 320.63 | 15.81 | 15.81 | 80.35 | 38.11 |
| | | | | | Combined A+B | Full | 27.91 | 31.15 | 1302.70 | 617.79 | 18.75 | 18.75 | 157.98 | 74.92 |
| | | 12 | 2467 | SISO A | Full | 24.20 | 27.44 | 554.63 | 263.03 | 15.19 | 15.19 | 69.66 | 33.04 | |
| | | | | | SISO B | Full | 24.51 | 27.75 | 595.66 | 282.49 | 15.37 | 15.37 | 72.61 | 34.43 |
| | | | | | MIMO A | Full | 20.97 | 24.21 | 263.63 | 125.03 | 11.85 | 11.85 | 32.28 | 15.31 |
| | | | | | MIMO B | Full | 20.72 | 23.96 | 248.89 | 118.03 | 11.57 | 11.57 | 30.27 | 14.35 |
| | | | | | Combined A+B | Full | 23.86 | 27.10 | 512.52 | 243.06 | 14.72 | 14.72 | 62.55 | 29.67 |
| | | 13 | 2472 | SISO A | Full | 21.63 | 24.87 | 306.90 | 145.55 | 12.42 | 12.42 | 36.81 | 17.46 | |
| | | | | | 26/8 | 18.45 | 21.69 | 147.57 | 69.98 | 8.35 | 8.35 | 14.42 | 6.84 | |
| | | | | | 52/40 | 19.27 | 22.51 | 178.24 | 84.53 | 9.23 | 9.23 | 17.66 | 8.38 | |
| | | | | | 106/54 | 19.19 | 22.43 | 174.98 | 82.99 | 9.38 | 9.38 | 18.28 | 8.67 | |
| | | | | | Full | 21.53 | 24.77 | 299.92 | 142.23 | 12.36 | 12.36 | 36.31 | 17.22 | |
| | | | | | 26/8 | 18.51 | 21.75 | 149.62 | 70.96 | 8.23 | 8.23 | 14.03 | 6.65 | |
| | | | | SISO B | 52/40 | 19.73 | 22.97 | 198.15 | 93.97 | 9.30 | 9.30 | 17.95 | 8.51 | |
| | | | | | 106/54 | 19.77 | 23.01 | 199.99 | 94.84 | 9.78 | 9.78 | 20.04 | 9.51 | |
| | | | | | Full | 18.02 | 21.26 | 133.66 | 63.39 | 8.79 | 8.79 | 15.96 | 7.57 | |
| | | | | | 26/8 | 16.54 | 19.78 | 95.06 | 45.08 | 6.09 | 6.09 | 8.57 | 4.06 | |
| | | | | | 52/40 | 16.98 | 20.22 | 105.20 | 49.89 | 6.67 | 6.67 | 9.79 | 4.65 | |
| | | | | | 106/54 | 16.68 | 19.92 | 98.17 | 46.56 | 6.55 | 6.55 | 9.53 | 4.52 | |
| | | | | MIMO A | Full | 18.19 | 21.43 | 139.00 | 65.92 | 8.76 | 8.76 | 15.85 | 7.52 | |
| | | | | | 26/8 | 16.48 | 19.72 | 93.76 | 44.46 | 6.05 | 6.05 | 8.49 | 4.03 | |
| | | | | | 52/40 | 17.25 | 20.49 | 111.94 | 53.09 | 6.82 | 6.82 | 10.14 | 4.81 | |
| | | | | | 106/54 | 18.13 | 21.37 | 137.09 | 65.01 | 7.91 | 7.91 | 13.03 | 6.18 | |
| | | | | | Full | 21.12 | 24.36 | 272.65 | 129.30 | 11.79 | 11.79 | 31.81 | 15.08 | |
| | | | | | 26/8 | 19.52 | 22.76 | 188.82 | 89.54 | 9.08 | 9.08 | 17.06 | 8.09 | |
| | | MIMO B | 52/40 | 20.13 | 23.37 | 217.14 | 102.98 | 9.76 | 9.76 | 19.93 | 9.45 | | | |
| | | | 106/54 | 20.48 | 23.72 | 235.26 | 111.57 | 10.29 | 10.29 | 22.56 | 10.70 | | | |

* Duty cycle compensated

| Mode | Rate | # Ch | Freq [MHz] | Antenna | RU config | Meas Peak Cond.P over [dBm] | EIRP [dBm] | EIRP [mW] | Peak Cond.Power [mW] | Meas. Avg Cond.Po wer [dBm] | Max. Avg Cond.Po wer* [dBm] | EIRP [mW] | Avg Cond.Power [mW] |
|------------|------|--------------|------------|--------------|-----------|-----------------------------|------------|-----------|----------------------|-----------------------------|-----------------------------|-----------|---------------------|
| 802.11ax40 | HEO | 3 | 2422 | SISO A | Full | 25.31 | 28.55 | 716.14 | 339.63 | 16.05 | 16.05 | 84.92 | 40.27 |
| | | | | | 242/61 | 27.51 | 30.75 | 1188.50 | 563.64 | 18.43 | 18.43 | 146.89 | 69.66 |
| | | | | SISO B | Full | 24.69 | 27.93 | 620.87 | 294.44 | 15.44 | 15.44 | 73.79 | 34.99 |
| | | | | | 242/61 | 27.25 | 30.49 | 1119.44 | 530.88 | 18.16 | 18.16 | 138.04 | 65.46 |
| | | | | MIMO A | Full | 24.97 | 28.21 | 662.22 | 314.05 | 15.66 | 15.66 | 77.62 | 36.81 |
| | | | | | 242/61 | 25.91 | 29.15 | 822.24 | 389.94 | 16.84 | 16.84 | 101.86 | 48.31 |
| | | MIMO B | Full | 25.19 | 28.43 | 696.63 | 330.37 | 15.61 | 15.61 | 76.74 | 36.39 | | |
| | | | 242/61 | 26.15 | 29.39 | 868.96 | 412.10 | 16.88 | 16.88 | 102.80 | 48.75 | | |
| | | Combined A+B | Full | 28.09 | 31.33 | 1358.84 | 644.42 | 18.65 | 18.65 | 154.36 | 73.20 | | |
| | | | 242/61 | 29.04 | 32.28 | 1691.20 | 802.04 | 19.87 | 19.87 | 204.66 | 97.06 | | |
| | | 7 | 2442 | SISO A | Full | 27.11 | 30.35 | 1083.93 | 514.04 | 17.83 | 17.83 | 127.94 | 60.67 |
| | | | | | Full | 26.10 | 29.34 | 859.01 | 407.38 | 16.81 | 16.81 | 101.16 | 47.97 |
| | | | | MIMO A | Full | 24.63 | 27.87 | 612.35 | 290.40 | 15.38 | 15.38 | 72.78 | 34.51 |
| | | | | | Full | 25.12 | 28.36 | 685.49 | 325.09 | 15.70 | 15.70 | 78.34 | 37.15 |
| | | | | Combined A+B | Full | 27.89 | 31.13 | 1297.84 | 615.49 | 18.55 | 18.55 | 151.12 | 71.67 |
| | | 9 | 2452 | SISO A | Full | 26.61 | 29.85 | 966.05 | 458.14 | 17.29 | 17.29 | 112.98 | 53.58 |
| | | | | | Full | 24.85 | 28.09 | 644.17 | 305.49 | 15.52 | 15.52 | 75.16 | 35.65 |
| | | | | MIMO A | Full | 24.17 | 27.41 | 550.81 | 261.22 | 14.83 | 14.83 | 64.12 | 30.41 |
| | | | | | Full | 24.42 | 27.66 | 583.45 | 276.69 | 15.04 | 15.04 | 67.30 | 31.92 |
| | | | | Combined A+B | Full | 27.31 | 30.55 | 1134.25 | 537.91 | 17.95 | 17.95 | 131.42 | 62.32 |
| | | 10 | 2457 | SISO A | Full | 21.90 | 25.14 | 326.59 | 154.88 | 12.61 | 12.61 | 38.46 | 18.24 |
| | | | | | Full | 21.73 | 24.97 | 314.05 | 148.94 | 12.37 | 12.37 | 36.39 | 17.26 |
| | | | | MIMO A | Full | 21.02 | 24.26 | 266.69 | 126.47 | 11.64 | 11.64 | 30.76 | 14.59 |
| | | | | | Full | 21.19 | 24.43 | 277.33 | 131.52 | 11.60 | 11.60 | 30.48 | 14.45 |
| | | | | Combined A+B | Full | 24.12 | 27.36 | 544.02 | 258.00 | 14.63 | 14.63 | 61.24 | 29.04 |
| | | 11 | 2462 | SISO A | Full | 20.53 | 23.77 | 238.23 | 112.98 | 11.18 | 11.18 | 27.67 | 13.12 |
| | | | | | 242/62 | 18.91 | 22.15 | 164.06 | 77.80 | 9.49 | 9.49 | 18.75 | 8.89 |
| | | | | SISO B | Full | 19.34 | 22.58 | 181.13 | 85.90 | 9.99 | 9.99 | 21.04 | 9.98 |
| | | | | | 242/62 | 18.12 | 21.36 | 136.77 | 64.86 | 8.73 | 8.73 | 15.74 | 7.46 |
| | | | | MIMO A | Full | 18.23 | 21.47 | 140.28 | 66.53 | 8.92 | 8.92 | 16.44 | 7.80 |
| | | | | | 242/62 | 17.32 | 20.56 | 113.76 | 53.95 | 7.95 | 7.95 | 13.15 | 6.24 |
| | | | | MIMO B | Full | 18.39 | 21.63 | 145.55 | 69.02 | 8.78 | 8.78 | 15.92 | 7.55 |
| | | | | | 242/62 | 17.45 | 20.69 | 117.22 | 55.59 | 7.98 | 7.98 | 13.24 | 6.28 |
| | | Combined A+B | Full | 21.32 | 24.56 | 285.83 | 135.55 | 11.86 | 11.86 | 32.37 | 15.35 | | |
| | | 242/62 | 20.40 | 23.64 | 230.98 | 109.54 | 10.98 | 10.98 | 26.40 | 12.52 | | | |

* Duty cycle compensated

B.2.3 Power Spectral Density

Test limits

| FCC part | RSS part | Limits |
|------------|---------------------------|--|
| 15.247 (e) | RSS-247 Clause 5.2 (b) | For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density. |

Test procedure

The peak power spectral density level in the fundamental emission was measured using the *Method PKPSD (peak PSD)* according to section 11.10.2 of ANSI C63.10-2013.

For MIMO mode, the *Measure and add $10 \log(N_{ANT})$ dB*, (where N_{ANT} is the number of outputs) technique was used according to the *Guidance for Emission Testing of Transmitters with Multiple Outputs in the Same Band FCC OET KDB 662911 D01 Multiple Transmitter Output*.

With this technique, spectrum measurements are performed at each output of the device, and the quantity $10 \log(N_{ANT})$ dB is added to each spectrum value before comparing to the emission limit. Number of outputs = 2.

The conducted setup shown in section *Test & System Description* was used to measure the power spectral density. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

Results tables

| Mode | Rate | Channel | Freq [MHz] | Antenna | PSD Peak [dBm/3kHz] | MIMO Combined +10·log(N _{ant}) [dBm/3kHz] |
|-----------|-------|---------|------------|---------|---------------------|---|
| 802.11b | 1Mbps | 1 | 2412 | SISO A | -1.18 | n/a |
| | | | | SISO B | -1.24 | n/a |
| | | 7 | 2442 | SISO A | -1.55 | n/a |
| | | | | SISO B | -1.32 | n/a |
| | | 11 | 2462 | SISO A | -1.22 | n/a |
| | | | | SISO B | -1.30 | n/a |
| | | 12 | 2467 | SISO A | -2.66 | n/a |
| | | | | SISO B | -2.93 | n/a |
| | | 13 | 2472 | SISO A | -5.07 | n/a |
| | | | | SISO B | -6.21 | n/a |
| 802.11g | 6Mbps | 1 | 2412 | SISO A | -3.64 | n/a |
| | | | | SISO B | -3.19 | n/a |
| | | 7 | 2442 | SISO A | -1.69 | n/a |
| | | | | SISO B | -1.63 | n/a |
| | | 11 | 2462 | SISO A | -4.85 | n/a |
| | | | | SISO B | -4.68 | n/a |
| | | 12 | 2467 | SISO A | -8.31 | n/a |
| | | | | SISO B | -7.31 | n/a |
| | | 13 | 2472 | SISO A | -11.95 | n/a |
| | | | | SISO B | -12.19 | n/a |
| 802.11n20 | HT0 | 1 | 2412 | SISO A | -3.97 | n/a |
| | | | | SISO B | -4.38 | n/a |
| | | 7 | 2442 | SISO A | -2.93 | n/a |
| | | | | SISO B | -1.56 | n/a |
| | | 11 | 2462 | SISO A | -4.87 | n/a |
| | | | | SISO B | -4.91 | n/a |
| | | 12 | 2467 | SISO A | -8.43 | n/a |
| | | | | SISO B | -7.85 | n/a |
| | | 13 | 2472 | SISO A | -12.02 | n/a |
| | | | | SISO B | -11.31 | n/a |
| | HT8 | 1 | 2412 | MIMO A | -5.09 | -2.08 |
| | | | | MIMO B | -5.56 | -2.55 |
| | | 7 | 2442 | MIMO A | -1.64 | 1.37 |
| | | | | MIMO B | -3.27 | -0.26 |
| | | 11 | 2462 | MIMO A | -6.25 | -3.24 |
| | | | | MIMO B | -6.04 | -3.03 |
| | | 12 | 2467 | MIMO A | -12.12 | -9.11 |
| | | | | MIMO B | -11.43 | -8.42 |
| | | 13 | 2472 | MIMO A | -15.34 | -12.33 |
| | | | | MIMO B | -15.27 | -12.26 |
| 802.11n40 | HT0 | 3 | 2422 | SISO A | -9.61 | n/a |
| | | | | SISO B | -11.51 | n/a |
| | | 7 | 2442 | SISO A | -8.90 | n/a |
| | | | | SISO B | -9.01 | n/a |
| | | 9 | 2452 | SISO A | -8.91 | n/a |
| | | | | SISO B | -9.50 | n/a |
| | | 10 | 2457 | SISO A | -14.17 | n/a |
| | | | | SISO B | -14.77 | n/a |
| | | 11 | 2462 | SISO A | -16.47 | n/a |
| | | | | SISO B | -16.18 | n/a |
| | HT8 | 3 | 2422 | MIMO A | -10.65 | -7.64 |
| | | | | MIMO B | -10.54 | -7.53 |
| | | 7 | 2442 | MIMO A | -10.85 | -7.84 |
| | | | | MIMO B | -10.16 | -7.15 |
| | | 9 | 2452 | MIMO A | -12.10 | -9.09 |
| | | | | MIMO B | -11.37 | -8.36 |
| | | 10 | 2457 | MIMO A | -14.99 | -11.98 |
| | | | | MIMO B | -14.14 | -11.13 |
| 11 | 2462 | MIMO A | -18.98 | -15.97 | | |
| | | MIMO B | -18.09 | -15.08 | | |

| Mode | Rate | #Ch | Freq[MHz] | Antenna | RU config. | PSD Peak [dBm/3kHz] | MIMO Combined +10·log(N _{ant}) [dBm/3kHz] |
|------------|--------|--------|-----------|---------|------------|---------------------|---|
| 802.11ax20 | HE0 | 1 | 2412 | SISO A | Full | -5.53 | n/a |
| | | | | | 26/0 | 3.21 | n/a |
| | | | | | 52/37 | 1.20 | n/a |
| | | | | | 106/53 | -1.68 | n/a |
| | | | | SISO B | Full | -4.68 | n/a |
| | | | | | 26/0 | 3.51 | n/a |
| | | | | | 52/37 | 0.71 | n/a |
| | | | | | 106/53 | -1.30 | n/a |
| | | | | MIMO A | Full | -8.14 | -5.13 |
| | | | | | 26/0 | 2.61 | 5.62 |
| | | | | | 52/37 | 0.47 | 3.48 |
| | | | | | 106/53 | -2.62 | 0.39 |
| | | MIMO B | Full | -6.09 | -3.08 | | |
| | | | 26/0 | 2.46 | 5.47 | | |
| | | | 52/37 | 1.77 | 4.78 | | |
| | | | 106/53 | -2.27 | 0.74 | | |
| | | 7 | 2442 | SISO A | Full | -2.98 | n/a |
| | | | | | SISO B | Full | -3.48 |
| | | | | MIMO A | Full | -4.17 | -1.16 |
| | | | | | MIMO B | Full | -2.67 |
| | | 11 | 2462 | SISO A | Full | -6.15 | n/a |
| | | | | | SISO B | Full | -6.09 |
| | | | | MIMO A | Full | -8.69 | -5.68 |
| | | | | | MIMO B | Full | -7.91 |
| | | 12 | 2467 | SISO A | Full | -9.08 | n/a |
| | | | | | SISO B | Full | -9.50 |
| | | | | MIMO A | Full | -12.19 | -9.18 |
| | | | | | MIMO B | Full | -12.17 |
| | | 13 | 2472 | SISO A | Full | -12.69 | n/a |
| | | | | | 26/8 | -7.42 | n/a |
| | | | | | 52/40 | -9.37 | n/a |
| | | | | | 106/54 | -12.45 | n/a |
| | | | | SISO B | Full | -12.77 | n/a |
| | | | | | 26/8 | -7.69 | n/a |
| | | | | | 52/40 | -8.36 | n/a |
| | | | | | 106/54 | -12.65 | n/a |
| | | | | MIMO A | Full | -16.48 | -13.47 |
| | | | | | 26/8 | -9.88 | -6.87 |
| | | | | | 52/40 | -11.86 | -8.85 |
| | | | | | 106/54 | -15.03 | -12.02 |
| | | | | MIMO B | Full | -15.93 | -12.92 |
| | | | | | 26/8 | -9.70 | -6.69 |
| 52/40 | -11.91 | | | | -8.90 | | |
| 106/54 | -12.80 | | | | -9.79 | | |

| Mode | Rate | #Ch | Freq[MHz] | Antenna | RU config. | PSD Peak [dBm/3kHz] | MIMO Combined +10·log(N _{ant}) [dBm/3kHz] |
|------------|------|--------|-----------|---------|------------|---------------------|---|
| 802.11ax40 | HE0 | 3 | 2422 | SISO A | Full | -11.11 | n/a |
| | | | | | 242/61 | -4.45 | n/a |
| | | | | SISO B | Full | -11.39 | n/a |
| | | | | | 242/61 | -5.77 | n/a |
| | | MIMO A | Full | -10.91 | -7.90 | | |
| | | | 242/61 | -7.58 | -4.57 | | |
| | | MIMO B | Full | -11.78 | -8.77 | | |
| | | | 242/61 | -7.64 | -4.63 | | |
| | | 7 | 2442 | SISO A | Full | -9.55 | n/a |
| | | | | | Full | -9.86 | n/a |
| | | | | MIMO A | Full | -12.13 | -9.12 |
| | | | | | Full | -11.65 | -8.64 |
| | | 9 | 2452 | SISO A | Full | -9.78 | n/a |
| | | | | | Full | -11.54 | n/a |
| | | | | MIMO A | Full | -12.65 | -9.64 |
| | | | | | Full | -12.08 | -9.07 |
| | | 10 | 2457 | SISO A | Full | -14.85 | n/a |
| | | | | | Full | -14.87 | n/a |
| | | | | MIMO A | Full | -15.84 | -12.83 |
| | | | | | Full | -15.66 | -12.65 |
| 11 | 2462 | SISO A | Full | -17.06 | n/a | | |
| | | | 242/62 | -16.50 | n/a | | |
| | | SISO B | Full | -18.59 | n/a | | |
| | | | 242/62 | -16.38 | n/a | | |
| | | MIMO A | Full | -18.60 | -15.59 | | |
| | | | 242/62 | -17.16 | -14.15 | | |
| | | MIMO B | Full | -19.03 | -16.02 | | |
| | | | 242/62 | -16.98 | -13.97 | | |

B.2.4 Out-of-band emission (conducted)

Test Limits

| FCC part | RSS part | Limits | | | | | | | | | | | | | | | | | | | | |
|------------------|--------------------------|--|--------------------|-----------------------|-------------------------|--------------------|-------|-----|----|---|--------|-----|------|---|---------|-----|----|---|-----------|-----|----|---|
| 15.247 (d) | RSS-247 Clause 5.5 | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. | | | | | | | | | | | | | | | | | | | | |
| 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 border="1"> <thead> <tr> <th>Freq Range (MHz)</th> <th>Field Strength (μV/m)</th> <th>Field Strength (dBμV/m)</th> <th>Meas. Distance (m)</th> </tr> </thead> <tbody> <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> </tbody> </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. 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 lower band edge falling in restricted bands was measured using the primary method according to section 11.12.2.5.2 & 11.12.2.4 of ANSI C63.10-2013.

The upper band edge was measured using the following methods:

- Integration Method according to 11.13.3 of ANSI C63.10-2013
- Primary Method according 11.12.2.5.2 & 11.12.2.4 of ANSI C63.10-2013.

In case of band edge measurements falling in restricted bands, the declared antenna gain is also compensated in the graph.

For band edge measurements falling in restricted bands, the following limits in dBm were applied for the average detector after the conversion from the limits detailed above in dBμV/m, according to FCC 47 CFR part 15 - Subpart C – §15.209(a). The limits in dBm for peak detector are 20dB above the indicated values in the table.

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

The conducted setup shown in section *Test & System Description* was used to measure the out-of-band emissions. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

See Section B.2.7 for the screenshot results.

B.2.5 Radiated spurious emission

Standard references

| FCC part | RSS part | Limits | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|--|--------------------|-----------------------|-------------------------|--------------------|-------|-----|----|---|--------|-----|------|---|---------|-----|----|---|-----------|-----|----|---|
| <p>15.247 (d) 15.209</p> | <p>RSS-247 Clause 5.5 RSS-Gen A1 Clause 8.9</p> | <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 border="1"> <thead> <tr> <th data-bbox="564 495 762 555">Freq Range (MHz)</th> <th data-bbox="762 495 960 555">Field Strength (μV/m)</th> <th data-bbox="960 495 1158 555">Field Strength (dBμV/m)</th> <th data-bbox="1158 495 1350 555">Meas. Distance (m)</th> </tr> </thead> <tbody> <tr> <td data-bbox="564 555 762 584">30-88</td> <td data-bbox="762 555 960 584">100</td> <td data-bbox="960 555 1158 584">40</td> <td data-bbox="1158 555 1350 584">3</td> </tr> <tr> <td data-bbox="564 584 762 613">88-216</td> <td data-bbox="762 584 960 613">150</td> <td data-bbox="960 584 1158 613">43.5</td> <td data-bbox="1158 584 1350 613">3</td> </tr> <tr> <td data-bbox="564 613 762 642">216-960</td> <td data-bbox="762 613 960 642">200</td> <td data-bbox="960 613 1158 642">46</td> <td data-bbox="1158 613 1350 642">3</td> </tr> <tr> <td data-bbox="564 642 762 672">Above 960</td> <td data-bbox="762 642 960 672">500</td> <td data-bbox="960 642 1158 672">54</td> <td data-bbox="1158 642 1350 672">3</td> </tr> </tbody> </table> | 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 from 1 to 4 meters, the EUT azimuth over 360° and for both Vertical and Horizontal polarizations.

The radiated spurious emissions were measured on the worst case configuration selected from the chapter B.1 and using the lowest, middle and highest channels.

For 802.11ax20 and 802.11ax40 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 and 802.11n40 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 | Polar |
|-----------|------------|--------|--------|-------|
| MHz | dBµV/m | dBµV/m | dB | --- |
| 73.2 | 32.2 | 40.0 | 7.8 | V |

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

802.11b**1 GHz – 26.5 GHz, 802.11b, 1Mbps, Chain A****Radiated Spurious – CH1**

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 3379.5 | --- | 45.7 | 54.0 | 8.3 | H |
| 3379.5 | 58.5 | --- | 74.0 | 15.5 | H |
| 17833.2 | --- | 43.9 | 54.0 | 10.1 | V |
| 17833.2 | 55.2 | --- | 74.0 | 18.8 | V |
| 25242.5 | 49.4 | --- | 74.0 | 24.6 | H |
| 25259.5 | --- | 37.4 | 54.0 | 16.6 | V |

Radiated Spurious – CH7

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 3386.0 | --- | 45.7 | 54.0 | 8.3 | H |
| 3386.0 | 58.2 | --- | 74.0 | 15.8 | V |
| 17832.3 | 55.4 | --- | 74.0 | 18.6 | V |
| 17832.8 | --- | 44.1 | 54.0 | 9.9 | V |
| 25904.1 | 49.7 | --- | 74.0 | 24.3 | V |
| 25942.8 | --- | 38.5 | 54.0 | 15.5 | V |

Radiated Spurious – CH11

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 4923.7 | 51.7 | --- | 74.0 | 22.3 | H |
| 4923.7 | --- | 43.6 | 54.0 | 10.4 | H |
| 17812.5 | --- | 43.2 | 54.0 | 10.8 | H |
| 17812.5 | 55.3 | --- | 74.0 | 18.7 | V |
| 25836.5 | --- | 37.6 | 54.0 | 16.4 | H |
| 25836.5 | 49.9 | --- | 74.0 | 24.1 | H |

1 GHz – 26.5 GHz, 802.11b, 1Mbps, Chain B

Radiated Spurious – CH1

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|------------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 3391.5 | --- | 45.9 | 54.0 | 8.1 | H |
| 3392.5 | 58.3 | --- | 74.0 | 15.7 | H |
| 17821.7 | --- | 43.5 | 54.0 | 10.5 | H |
| 17821.7 | 55.7 | --- | 74.0 | 18.3 | V |
| 25904.5 | --- | 38.3 | 54.0 | 15.7 | H |
| 25928.1 | 49.7 | --- | 74.0 | 24.3 | V |

Radiated Spurious – CH7

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 3392.5 | 58.2 | --- | 74.0 | 15.8 | V |
| 3393.0 | --- | 45.6 | 54.0 | 8.4 | H |
| 17834.7 | --- | 44.2 | 54.0 | 9.8 | V |
| 17834.7 | 55 | --- | 74.0 | 19.0 | V |
| 25682.6 | --- | 36.9 | 54.0 | 17.1 | V |
| 25683.1 | 49.3 | --- | 74.0 | 24.7 | H |

Radiated Spurious – CH11

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3390.0 | --- | 45.6 | 54.0 | 8.4 | H |
| 3391.5 | 58.4 | --- | 74.0 | 15.6 | V |
| 17826.0 | --- | 43.7 | 54.0 | 10.3 | V |
| 17826.0 | 55.8 | --- | 74.0 | 18.2 | H |
| 24240.9 | --- | 37.7 | 54.0 | 16.3 | V |
| 24261.2 | 49 | --- | 74.0 | 25.0 | H |

802.11g

1 GHz – 26.5 GHz, 802.11g, 6Mbps, Chain A

Radiated Spurious – CH1

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3392.0 | 58 | --- | 74.0 | 16.0 | V |
| 3393.5 | --- | 45.6 | 54.0 | 8.4 | V |
| 17840.5 | --- | 43.6 | 54.0 | 10.4 | V |
| 17840.5 | 55.5 | --- | 74.0 | 18.5 | H |
| 23848.5 | 48 | --- | 74.0 | 26.0 | H |
| 23863.1 | --- | 37.2 | 54.0 | 16.8 | H |

Radiated Spurious – CH7

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3374.5 | --- | 46.3 | 54.0 | 7.7 | V |
| 3374.5 | 58.3 | --- | 74.0 | 15.7 | H |
| 17831.8 | --- | 43.7 | 54.0 | 10.3 | V |
| 17831.8 | 55.1 | --- | 74.0 | 18.9 | V |
| 24254.6 | --- | 37.6 | 54.0 | 16.4 | V |
| 24254.6 | 49 | --- | 74.0 | 25.0 | V |

Radiated Spurious – CH11

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 3377.5 | 58.1 | --- | 74.0 | 15.9 | H |
| 3382.0 | --- | 46 | 54.0 | 8.0 | H |
| 17822.1 | --- | 43.4 | 54.0 | 10.6 | V |
| 17822.1 | 55.3 | --- | 74.0 | 18.7 | V |
| 24236.6 | 49.1 | --- | 74.0 | 24.9 | H |
| 24241.8 | --- | 37.7 | 54.0 | 16.3 | H |

1 GHz – 26.5 GHz, 802.11g, 6Mbps, Chain B

Radiated Spurious – CH1

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 4832.2 | 51.2 | --- | 74.0 | 22.8 | H |
| 4832.2 | --- | 41.6 | 54.0 | 12.4 | V |
| 17814.9 | --- | 43.2 | 54.0 | 10.8 | H |
| 17814.9 | 55.3 | --- | 74.0 | 18.7 | H |
| 23848.9 | 47.6 | --- | 74.0 | 26.4 | H |
| 23865.9 | --- | 37 | 54.0 | 17.0 | V |

Radiated Spurious – CH7

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|------------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 3297.0 | --- | 46.4 | 54.0 | 7.6 | V |
| 3297.5 | 58.7 | --- | 74.0 | 15.3 | V |
| 17827.9 | --- | 43.9 | 54.0 | 10.1 | H |
| 17827.9 | 55.4 | --- | 74.0 | 18.6 | V |
| 24254.6 | 49.7 | --- | 74.0 | 24.3 | H |
| 24258.8 | --- | 37.9 | 54.0 | 16.1 | H |

Radiated Spurious – CH11

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3388.5 | --- | 45.7 | 54.0 | 8.3 | V |
| 3389.0 | 57.8 | --- | 74.0 | 16.2 | H |
| 17829.9 | --- | 43.4 | 54.0 | 10.6 | H |
| 17829.9 | 56.1 | --- | 74.0 | 17.9 | V |
| 24241.4 | --- | 37.4 | 54.0 | 16.6 | V |
| 24242.3 | 49.6 | --- | 74.0 | 24.4 | V |

802.11n

1 GHz – 26.5 GHz, 802.11n20, HT0, Chain A

Radiated Spurious – CH7

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3380.5 | --- | 46 | 54.0 | 8.0 | V |
| 3399.0 | 58.6 | --- | 74.0 | 15.4 | H |
| 17821.2 | --- | 43.4 | 54.0 | 10.6 | V |
| 17821.2 | 55.7 | --- | 74.0 | 18.3 | V |
| 25905.9 | --- | 38.3 | 54.0 | 15.7 | H |
| 25923.4 | 50.6 | --- | 74.0 | 23.4 | V |

1 GHz – 26.5 GHz, 802.11n20, HT0, Chain B

Radiated Spurious – CH7

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3372.5 | 58.4 | --- | 74.0 | 15.6 | V |
| 3375.0 | --- | 46.5 | 54.0 | 7.5 | H |
| 17831.3 | --- | 43.9 | 54.0 | 10.1 | V |
| 17831.3 | 55.3 | --- | 74.0 | 18.7 | V |
| 25914.9 | --- | 38.3 | 54.0 | 15.7 | V |
| 25930.5 | 50.7 | --- | 74.0 | 23.3 | H |

1 GHz – 26.5 GHz, 802.11n20, HT0, Chain A+B

Radiated Spurious – CH7

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3290.0 | 59.3 | --- | 74.0 | 14.7 | V |
| 3297.5 | --- | 46.8 | 54.0 | 7.2 | V |
| 17914.5 | --- | 43.2 | 54.0 | 10.8 | V |
| 17914.5 | 55.6 | --- | 74.0 | 18.4 | V |
| 25904.1 | 49.6 | --- | 74.0 | 24.4 | V |
| 25911.6 | --- | 38.6 | 54.0 | 15.4 | V |

1 GHz – 26.5 GHz, 802.11n40, HT0, Chain A

Radiated Spurious – CH9F

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3354.0 | 59.6 | --- | 74.0 | 14.4 | V |
| 3354.0 | --- | 45.9 | 54.0 | 8.1 | H |
| 17817.3 | --- | 43.5 | 54.0 | 10.5 | H |
| 17817.3 | 54.3 | --- | 74.0 | 19.7 | V |
| 25909.2 | --- | 38.4 | 54.0 | 15.6 | H |
| 25909.7 | 50.3 | --- | 74.0 | 23.7 | V |

1 GHz – 26.5 GHz, 802.11n40, HT0, Chain B

Radiated Spurious – CH9F

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3388.0 | --- | 45.7 | 54.0 | 8.3 | H |
| 3388.5 | 58.3 | --- | 74.0 | 15.7 | V |
| 17819.2 | --- | 43.5 | 54.0 | 10.5 | V |
| 17819.7 | 55.6 | --- | 74.0 | 18.4 | H |
| 24217.8 | --- | 38.2 | 54.0 | 15.8 | H |
| 24224.4 | 49.2 | --- | 74.0 | 24.8 | V |

1 GHz – 26.5 GHz, 802.11n40, HT0, Chain A+B

Radiated Spurious – CH9F

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 3318.0 | 58.9 | --- | 74.0 | 15.1 | H |
| 3322.0 | --- | 46.2 | 54.0 | 7.8 | H |
| 17949.2 | --- | 42.8 | 54.0 | 11.2 | V |
| 17949.2 | 55.4 | --- | 74.0 | 18.6 | H |
| 24223.9 | --- | 38.1 | 54.0 | 15.9 | V |
| 24245.1 | 49.6 | --- | 74.0 | 24.4 | H |

802.11ax

1 GHz – 26.5 GHz, 802.11ax20, HE0, Chain A

Radiated Spurious – CH1

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 3397.5 | --- | 45.8 | 54.0 | 8.2 | H |
| 3398.0 | 58.9 | --- | 74.0 | 15.1 | V |
| 17819.2 | 54.8 | --- | 74.0 | 19.2 | V |
| 17819.7 | --- | 43.5 | 54.0 | 10.5 | H |
| 23814.5 | 48.1 | --- | 74.0 | 25.9 | H |
| 23819.2 | --- | 36.5 | 54.0 | 17.5 | V |

Radiated Spurious – CH7

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|---------|---------|--------|--------|-------|
| MHz | dBµV/m | dBµV/m | dBµV/m | dB | --- |
| 3371.0 | --- | 46.5 | 54.0 | 7.5 | H |
| 3376.0 | 58.9 | --- | 74.0 | 15.1 | H |
| 17834.2 | --- | 43.7 | 54.0 | 10.3 | V |
| 17835.2 | 55.3 | --- | 74.0 | 18.7 | H |
| 25922.0 | --- | 38.2 | 54.0 | 15.8 | V |
| 25930.5 | 49.9 | --- | 74.0 | 24.1 | V |

Radiated Spurious – CH11

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3302.0 | 59.4 | --- | 74.0 | 14.6 | H |
| 3305.5 | --- | 46.1 | 54.0 | 7.9 | V |
| 17838.1 | --- | 43.9 | 54.0 | 10.1 | V |
| 17841.0 | 55 | --- | 74.0 | 19.0 | V |
| 25947.0 | --- | 38.5 | 54.0 | 15.5 | V |
| 25948.4 | 50.7 | --- | 74.0 | 23.3 | V |

1 GHz – 26.5 GHz, 802.11ax20, HE0, Chain B

Radiated Spurious – CH1

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3389.5 | 58.1 | --- | 74.0 | 15.9 | V |
| 3390.0 | --- | 45.7 | 54.0 | 8.3 | V |
| 17798.9 | --- | 42.9 | 54.0 | 11.1 | H |
| 17798.9 | 54.1 | --- | 74.0 | 19.9 | V |
| 23840.0 | 48 | --- | 74.0 | 26.0 | V |
| 23843.8 | --- | 36.5 | 54.0 | 17.5 | V |

Radiated Spurious – CH7

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3363.0 | 58.6 | --- | 74.0 | 15.4 | V |
| 3364.5 | --- | 46.2 | 54.0 | 7.8 | H |
| 17836.2 | --- | 43.3 | 54.0 | 10.7 | H |
| 17836.2 | 55.2 | --- | 74.0 | 18.8 | H |
| 24241.8 | --- | 38 | 54.0 | 16.0 | H |
| 24248.9 | 48.8 | --- | 74.0 | 25.2 | H |

Radiated Spurious – CH11

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3367.5 | 59 | --- | 74.0 | 15.0 | V |
| 3368.5 | --- | 46.3 | 54.0 | 7.7 | V |
| 17824.5 | --- | 43.6 | 54.0 | 10.4 | H |
| 17824.5 | 54.6 | --- | 74.0 | 19.4 | V |
| 24207.8 | 49.7 | --- | 74.0 | 24.3 | V |
| 24241.8 | --- | 38.2 | 54.0 | 15.8 | V |

1 GHz – 26.5 GHz, 802.11ax20, HE0, Chain A+B**Radiated Spurious – CH7**

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3367.5 | 58.8 | --- | 74.0 | 15.2 | V |
| 3371.0 | --- | 46.5 | 54.0 | 7.5 | H |
| 17984.5 | --- | 43.7 | 54.0 | 10.3 | V |
| 17984.5 | 55.5 | --- | 74.0 | 18.5 | H |
| 24226.7 | 49.5 | --- | 74.0 | 24.5 | H |
| 24244.2 | --- | 38 | 54.0 | 16.0 | V |

1 GHz – 26.5 GHz, 802.11ax40, HE0, Chain A**Radiated Spurious – CH3F**

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3219.0 | 58.8 | --- | 74.0 | 15.2 | V |
| 3222.0 | --- | 46 | 54.0 | 8.0 | H |
| 17830.8 | --- | 43.4 | 54.0 | 10.6 | V |
| 17831.3 | 55.1 | --- | 74.0 | 18.9 | V |
| 23900.4 | 48.4 | --- | 74.0 | 25.6 | V |
| 23907.5 | --- | 36.6 | 54.0 | 17.4 | V |

Radiated Spurious – CH6F

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3378.5 | --- | 46.1 | 54.0 | 7.9 | H |
| 3378.5 | 58.7 | --- | 74.0 | 15.3 | V |
| 17830.8 | --- | 43.7 | 54.0 | 10.3 | H |
| 17830.8 | 54.7 | --- | 74.0 | 19.3 | V |
| 25914.4 | --- | 38.6 | 54.0 | 15.4 | V |
| 25914.4 | 50.2 | --- | 74.0 | 23.8 | V |

Radiated Spurious – CH9F

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3368.5 | 58.4 | --- | 74.0 | 15.6 | H |
| 3369.5 | --- | 46.2 | 54.0 | 7.8 | V |
| 17816.3 | --- | 43.2 | 54.0 | 10.8 | H |
| 17816.3 | 55.9 | --- | 74.0 | 18.1 | V |
| 24226.7 | --- | 38 | 54.0 | 16.0 | V |
| 24273.0 | 49.2 | --- | 74.0 | 24.8 | H |

1 GHz – 26.5 GHz, 802.11ax40, HE0, Chain B

Radiated Spurious – CH3F

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3309.5 | 58.7 | --- | 74.0 | 15.3 | V |
| 3311.5 | --- | 46 | 54.0 | 8.0 | V |
| 17806.7 | 54.4 | --- | 74.0 | 19.6 | V |
| 17807.2 | --- | 43.2 | 54.0 | 10.8 | V |
| 23726.2 | 48.2 | --- | 74.0 | 25.8 | H |
| 23763.0 | --- | 36.3 | 54.0 | 17.7 | V |

Radiated Spurious – CH6F

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3380.5 | --- | 45.8 | 54.0 | 8.2 | H |
| 3382.0 | 58.6 | --- | 74.0 | 15.4 | V |
| 17844.4 | --- | 43.3 | 54.0 | 10.7 | V |
| 17844.4 | 56.1 | --- | 74.0 | 17.9 | V |
| 25900.3 | --- | 38.4 | 54.0 | 15.6 | H |
| 25907.4 | 49.5 | --- | 74.0 | 24.5 | H |

Radiated Spurious – CH9F

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3374.5 | 58.4 | --- | 74.0 | 15.6 | V |
| 3375.5 | --- | 46.0 | 54.0 | 8.0 | V |
| 17836.2 | --- | 43.5 | 54.0 | 10.5 | V |
| 17836.2 | 55.1 | --- | 74.0 | 18.9 | V |
| 24215.9 | --- | 37.9 | 54.0 | 16.1 | V |
| 24271.1 | 48.9 | --- | 74.0 | 25.1 | V |

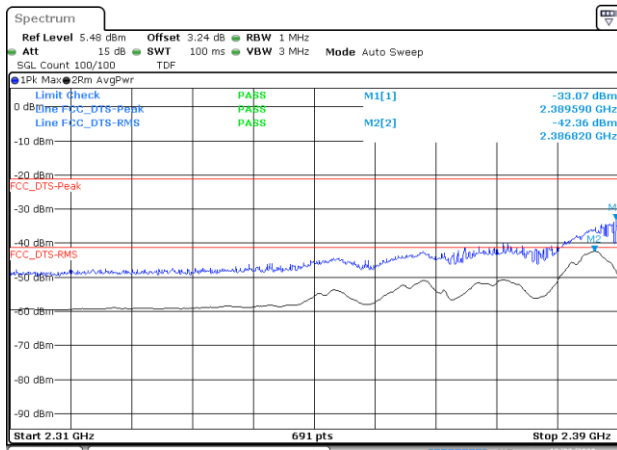
1 GHz – 26.5 GHz, 802.11ax40, HE0, Chain A+B**Radiated Spurious – CH9F**

| Frequency | MaxPeak | Average | Limit | Margin | Polar |
|-----------|--------------|--------------|--------------|--------|-------|
| MHz | dB μ V/m | dB μ V/m | dB μ V/m | dB | --- |
| 3389.0 | --- | 46.0 | 54.0 | 8.0 | H |
| 3391.5 | 59.4 | --- | 74.0 | 14.6 | V |
| 17914.0 | 55.7 | --- | 74.0 | 18.3 | H |
| 17914.0 | --- | 43.0 | 54.0 | 11.0 | V |
| 24252.2 | --- | 38.2 | 54.0 | 15.8 | V |
| 24280.1 | 49.5 | --- | 74.0 | 24.5 | H |

B.2.6 Test Results Screenshot

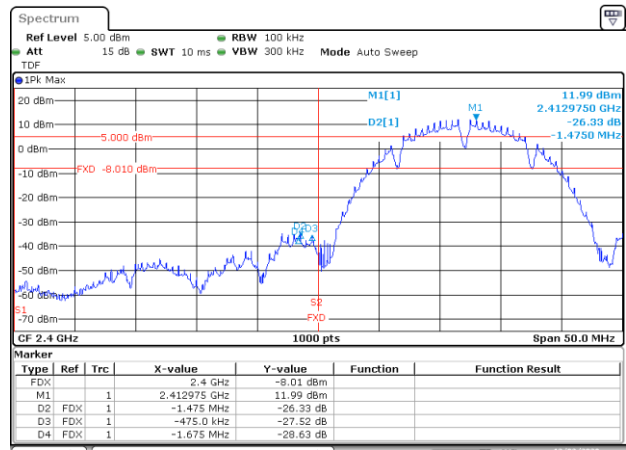
B.2.7 Out of band emissions - band-edge Low and High (conducted)

SISO-A



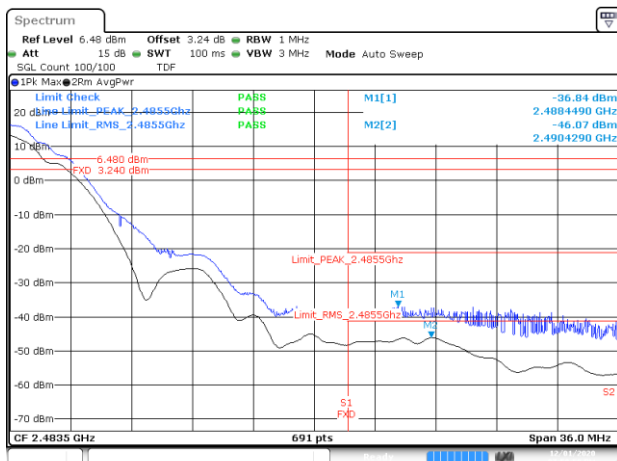
Date: 2 DEC 2020 14:01:10

BE-R-LOW, SISO-A, 802.11b-1Mbps, Ch1



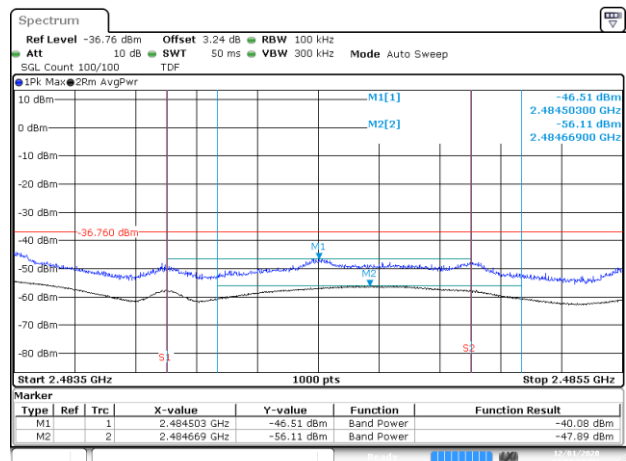
Date: 2 DEC 2020 14:02:45

BE-NR, SISO-A, 802.11b-1Mbps, Ch1



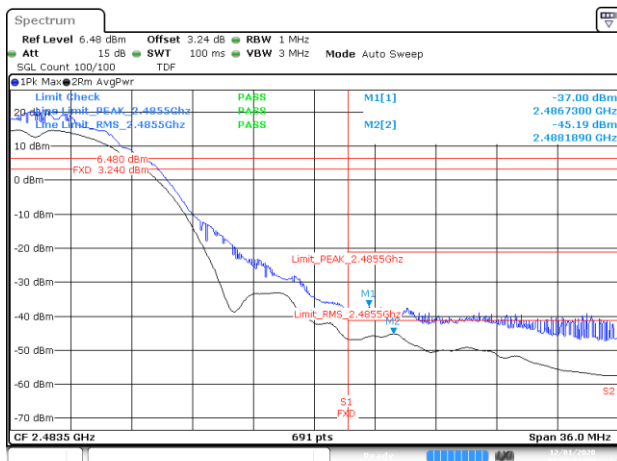
Date: 1 DEC 2020 19:59:51

BE-R-HIGH, SISO-A, 802.11b-1Mbps, Ch11



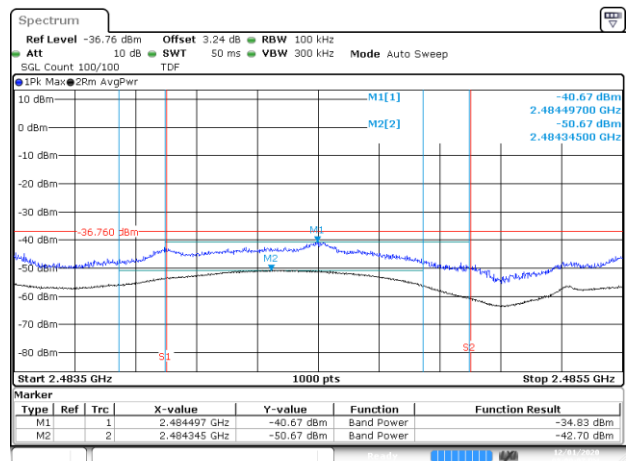
Date: 1 DEC 2020 19:59:57

BE-R-HIGH-2MHz, SISO-A, 802.11b-1Mbps, Ch11



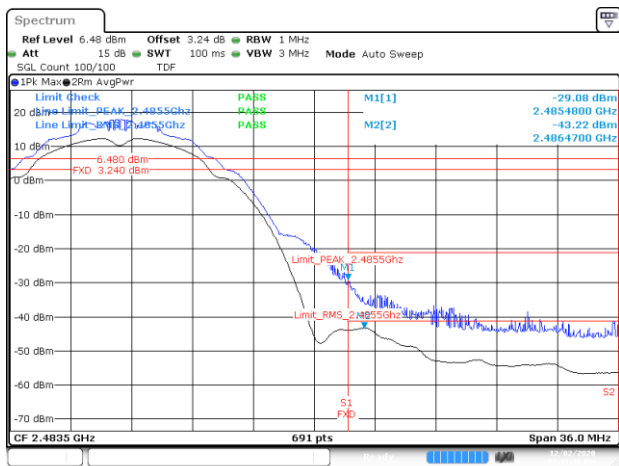
Date: 1 DEC 2020 20:00:01

BE-R-HIGH, SISO-A, 802.11b-1Mbps, Ch12



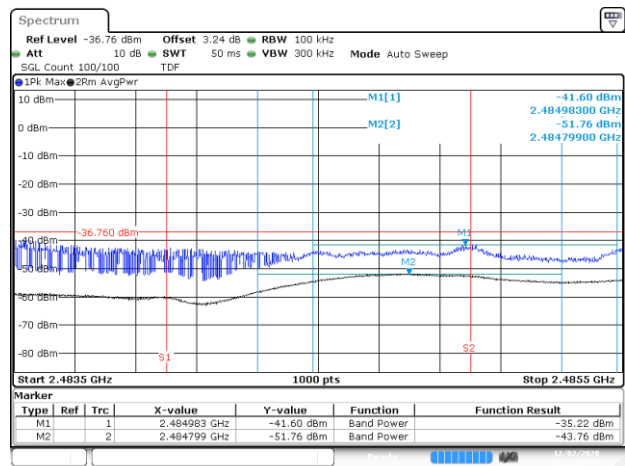
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BE-R-HIGH-2MHz, SISO-A, 802.11b-1Mbps, Ch12



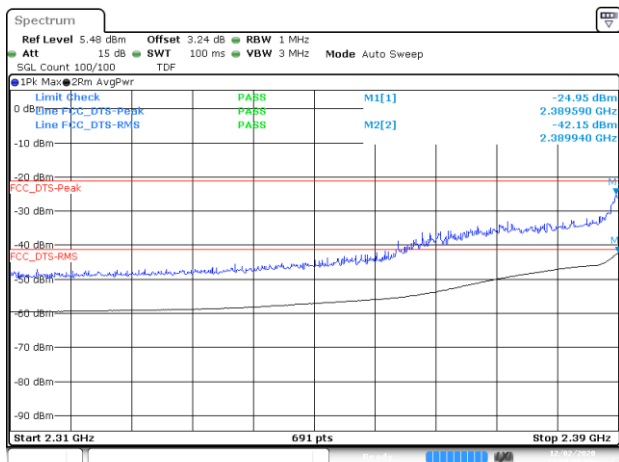
Date: 2 DEC 2020 14:11:46

BE-R-HIGH, SISO-A, 802.11b-1Mbps, Ch13



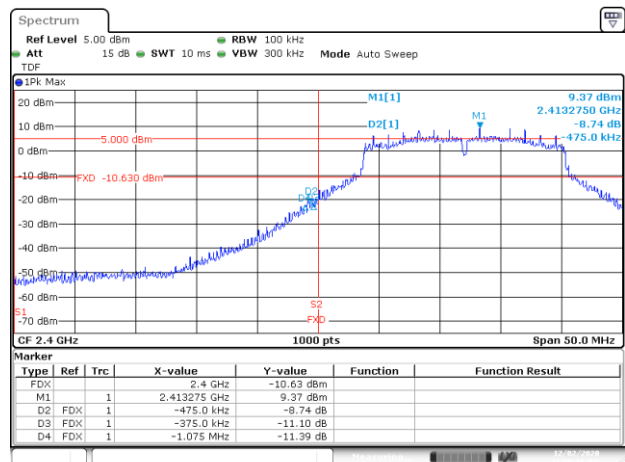
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BE-R-HIGH-2MHz, SISO-A, 802.11b-1Mbps, Ch13



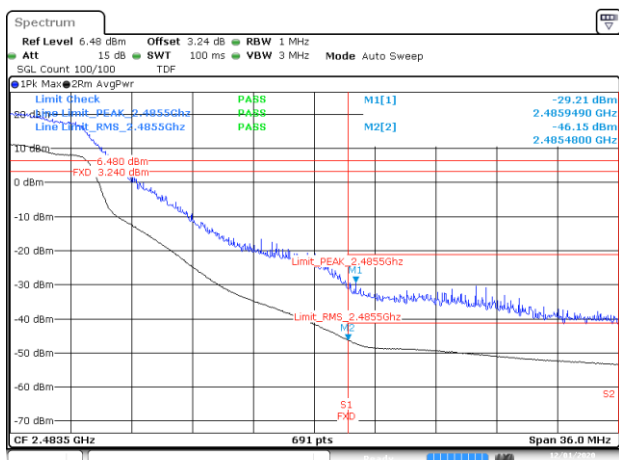
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BE-R-LOW, SISO-A, 802.11g-6Mbps, Ch1



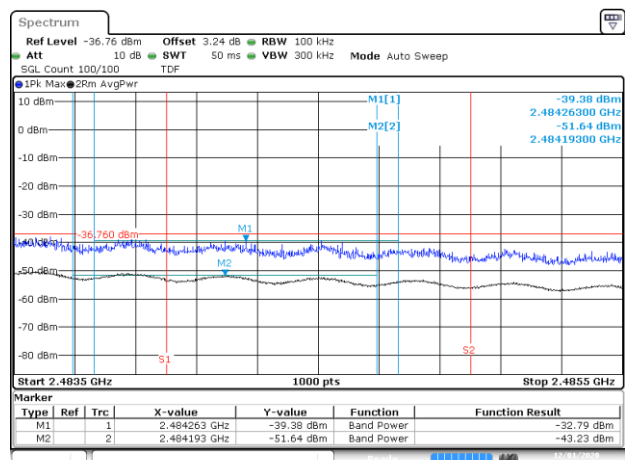
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BE-NR, SISO-A, 802.11g-6Mbps, Ch1



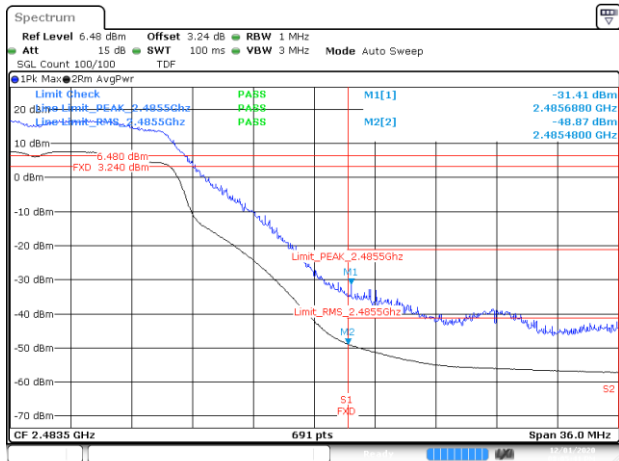
Date: 1 DEC 2020 20:04:31

BE-R-HIGH, SISO-A, 802.11g-6Mbps, Ch11



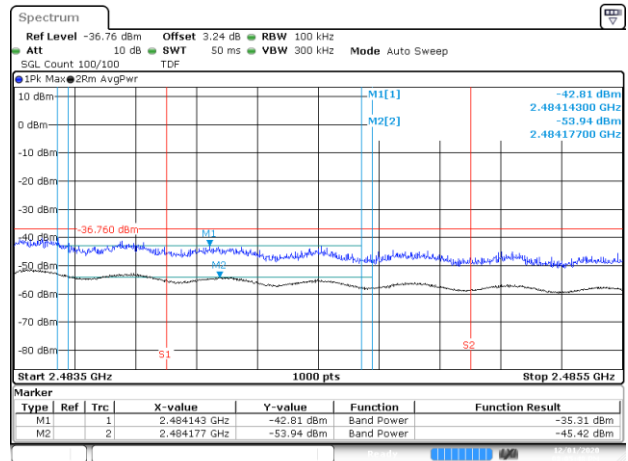
Date: 1 DEC 2020 20:04:36

BE-R-HIGH-2MHz, SISO-A, 802.11g-6Mbps, Ch11



Date: 1.DEC.2020 20:05:41

BE-R-HIGH, SISO-A, 802.11g-6Mbps, Ch12



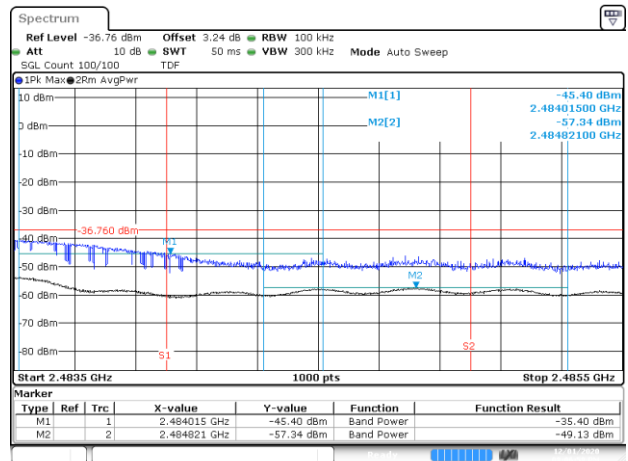
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BE-R-HIGH-2MHz, SISO-A, 802.11g-6Mbps, Ch12



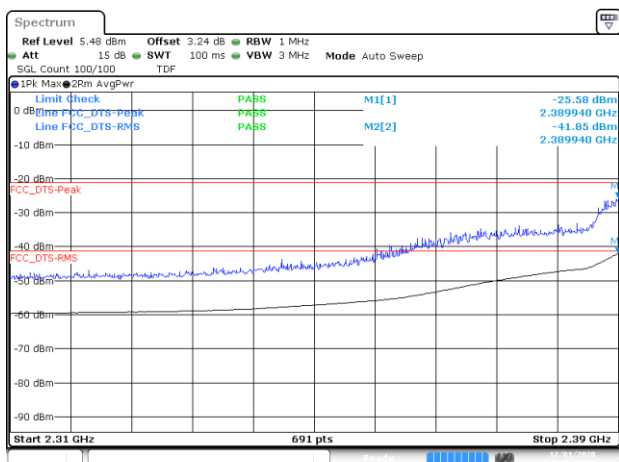
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BE-R-HIGH, SISO-A, 802.11g-6Mbps, Ch13



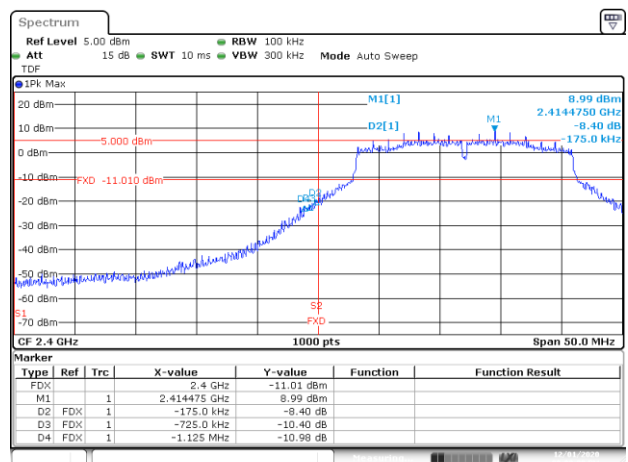
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BE-R-HIGH-2MHz, SISO-A, 802.11g-6Mbps, Ch13



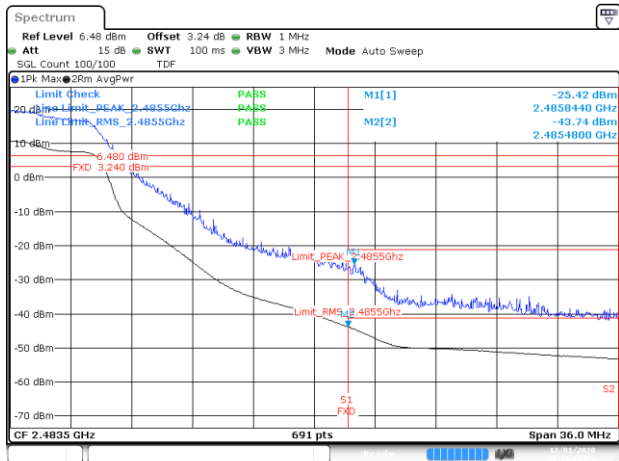
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BE-R-LOW, SISO-A, 802.11n20-HT0, Ch1



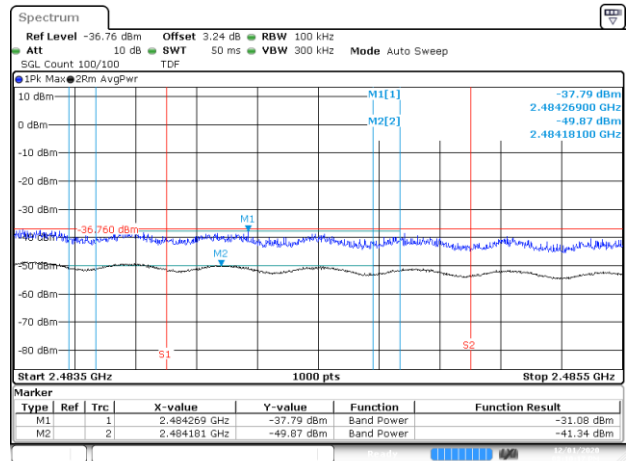
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BE-NR, SISO-A, 802.11n20-HT0, Ch1



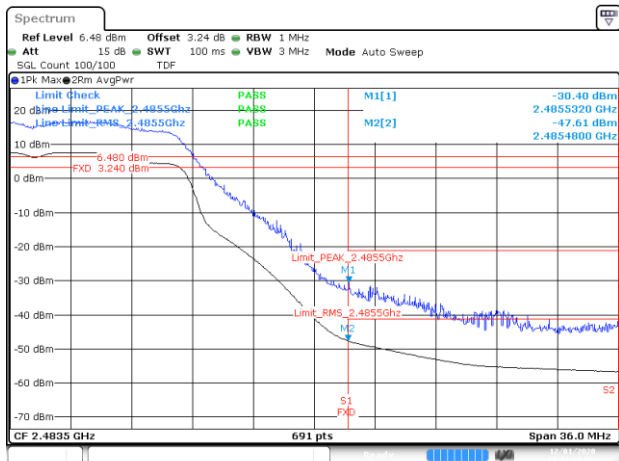
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BE-R-HIGH, SISO-A, 802.11n20-HT0, Ch11



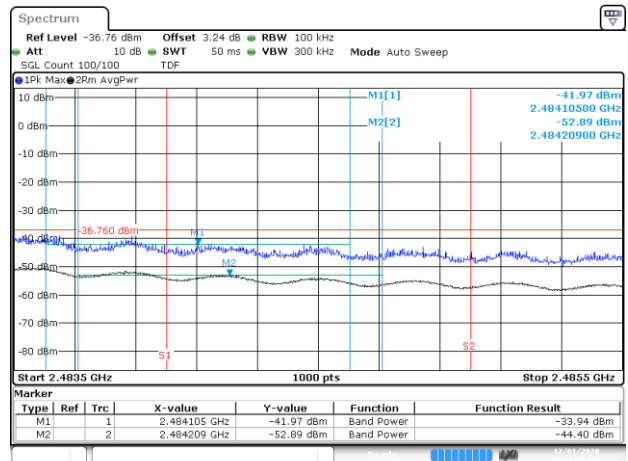
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BE-R-HIGH-2MHz, SISO-A, 802.11n20-HT0, Ch11



Date: 1.DEC.2010 20:11:21

BE-R-HIGH, SISO-A, 802.11n20-HT0, Ch12



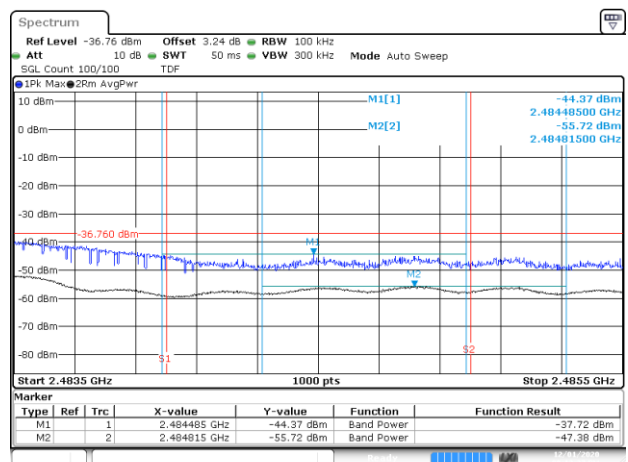
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BE-R-HIGH-2MHz, SISO-A, 802.11n20-HT0, Ch12



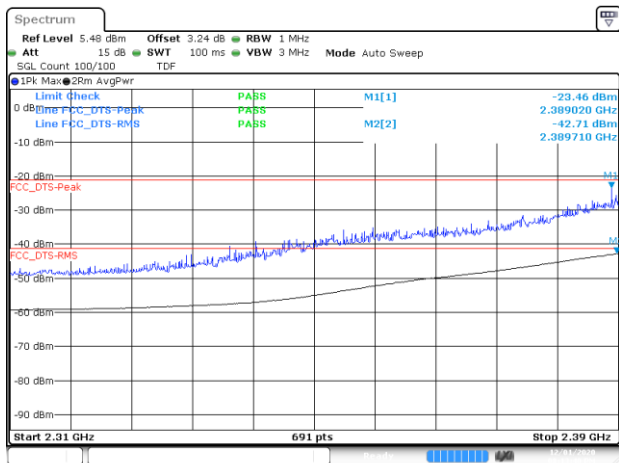
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BE-R-HIGH, SISO-A, 802.11n20-HT0, Ch13



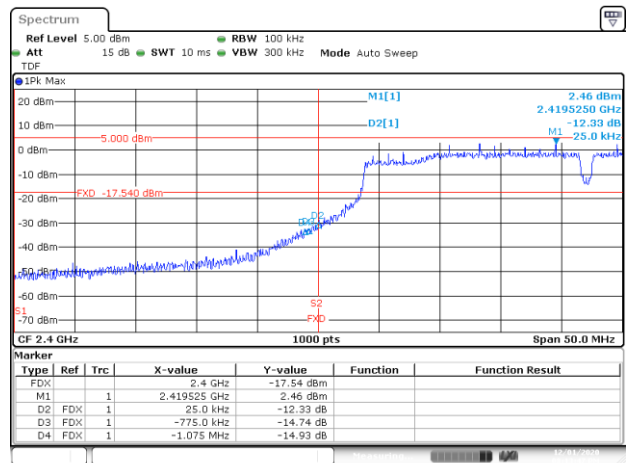
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BE-R-HIGH-2MHz, SISO-A, 802.11n20-HT0, Ch13



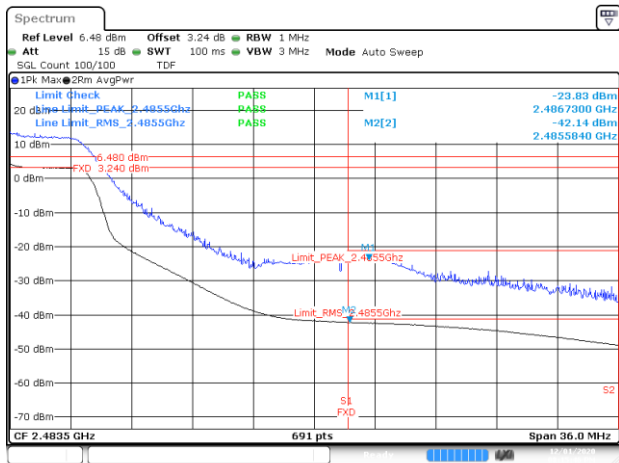
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BE-R-LOW, SISO-A, 802.11n40-HT0, Ch3



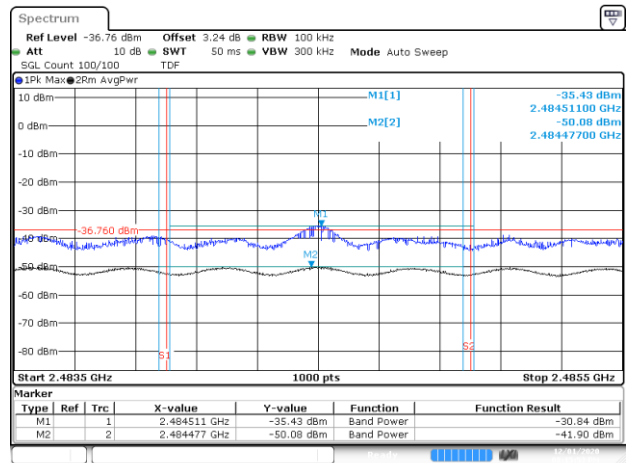
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BE-NR, SISO-A, 802.11n40-HT0, Ch3



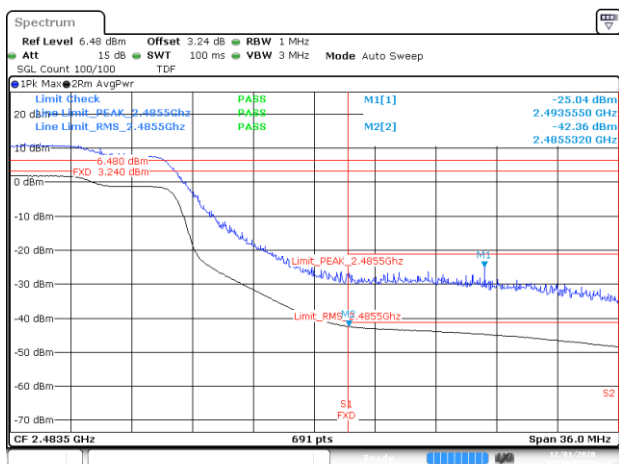
Date: 1.DEC.2020 20:15:47

BE-R-HIGH, SISO-A, 802.11n40-HT0, Ch9



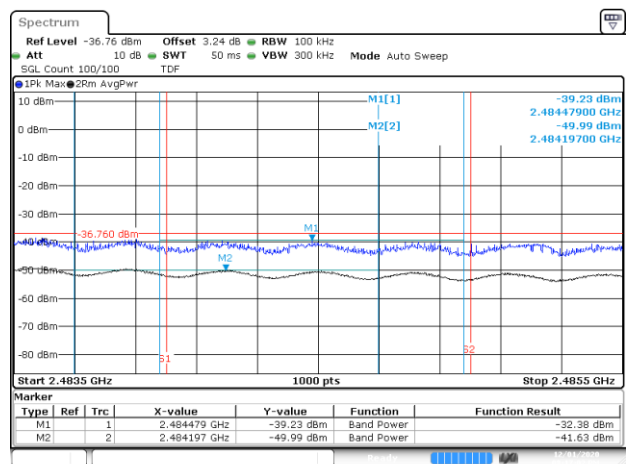
Date: 1.DEC.2020 20:15:53

BE-R-HIGH-2MHz, SISO-A, 802.11n40-HT0, Ch9



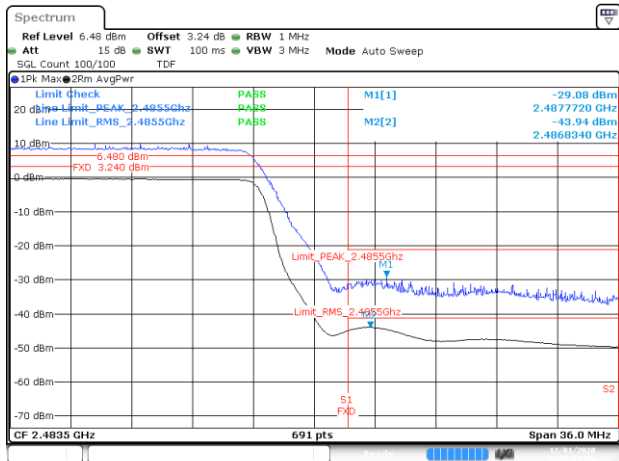
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BE-R-HIGH, SISO-A, 802.11n40-HT0, Ch10



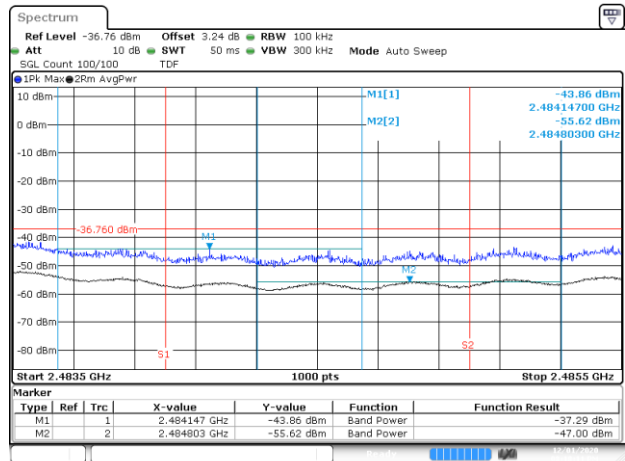
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BE-R-HIGH-2MHz, SISO-A, 802.11n40-HT0, Ch10



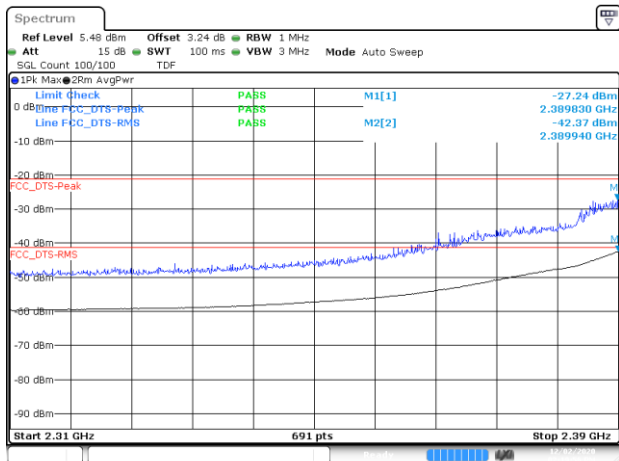
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BE-R-HIGH, SISO-A, 802.11n40-HT0, Ch11



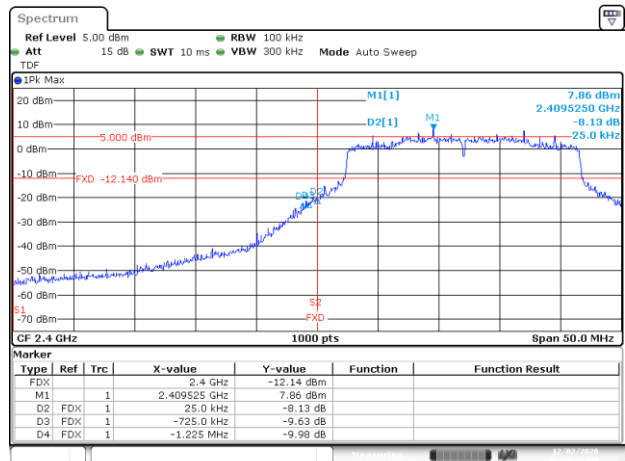
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BE-R-HIGH-2MHz, SISO-A, 802.11n40-HT0, Ch11



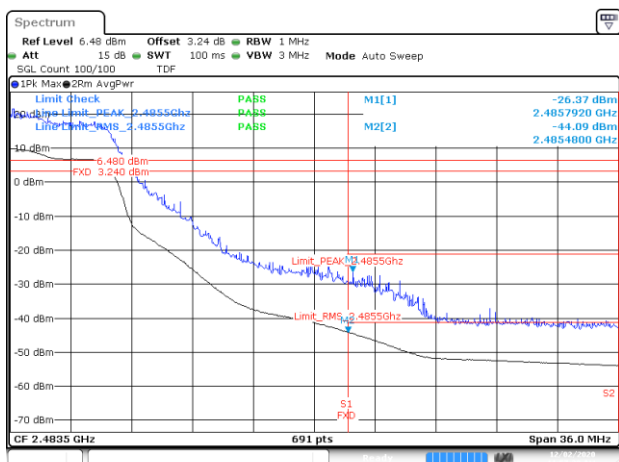
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BE-R-LOW, SISO-A, 802.11ax20-HE0, Ch1



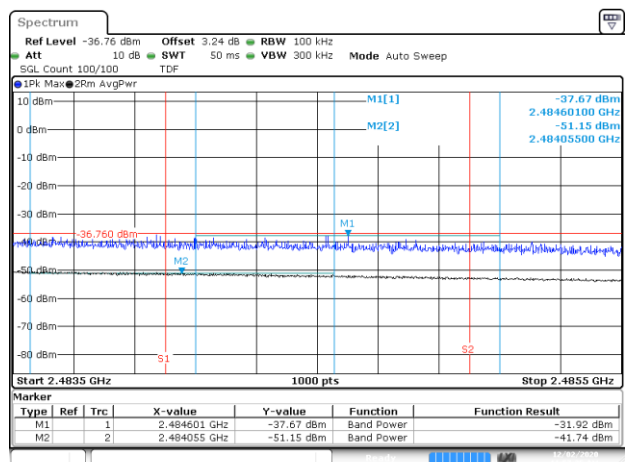
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BE-NR, SISO-A, 802.11ax20-HE0, Ch1



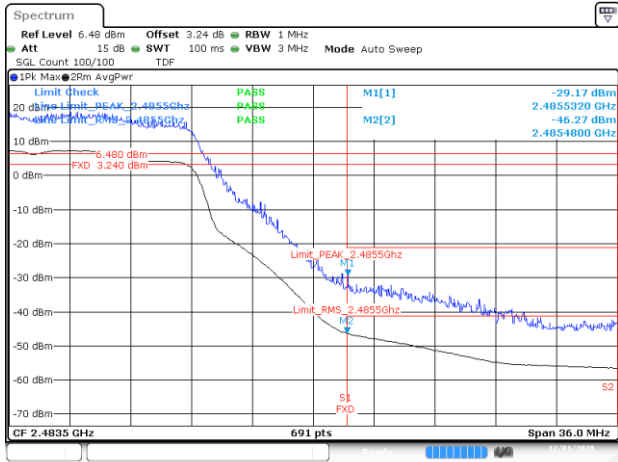
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BE-R-HIGH, SISO-A, 802.11ax20-HE0, Ch11

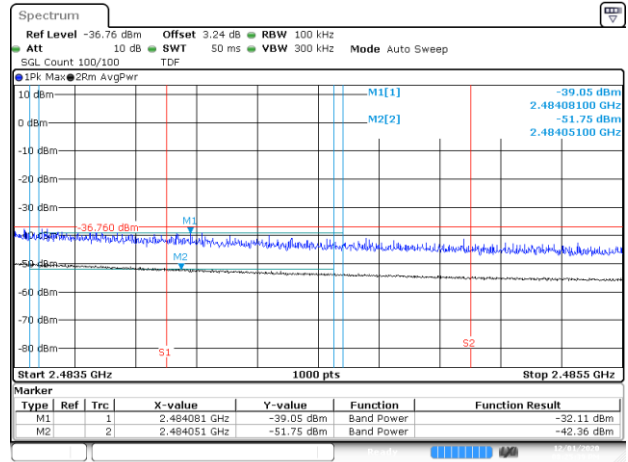


Date: 2 DEC 2010 11:57:36

BE-R-HIGH-2MHz, SISO-A, 802.11ax20-HE0, Ch11



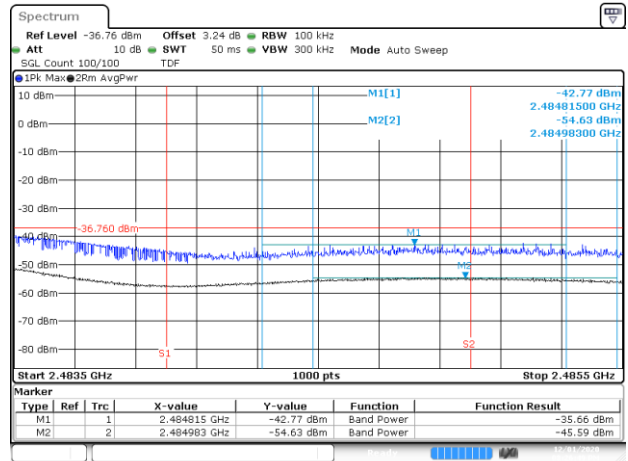
BE-R-HIGH, SISO-A, 802.11ax20-HE0, Ch12



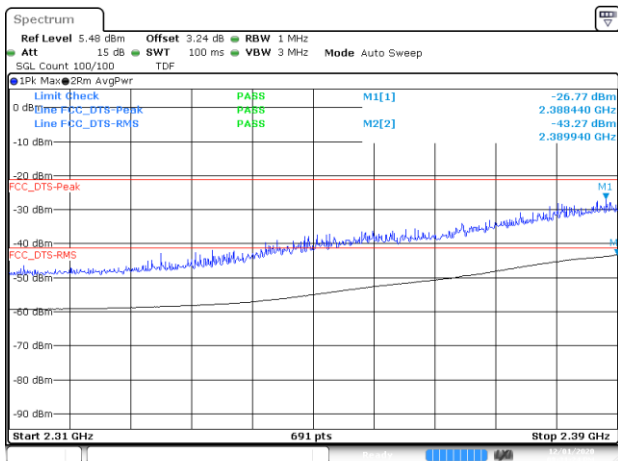
BE-R-HIGH-2MHz, SISO-A, 802.11ax20-HE0, Ch12



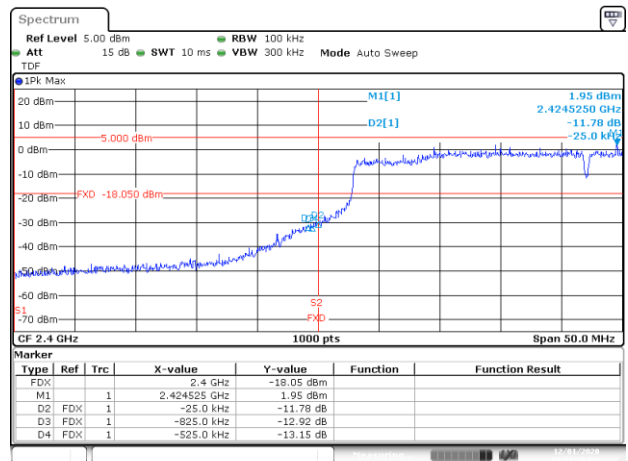
BE-R-HIGH, SISO-A, 802.11ax20-HE0, Ch13



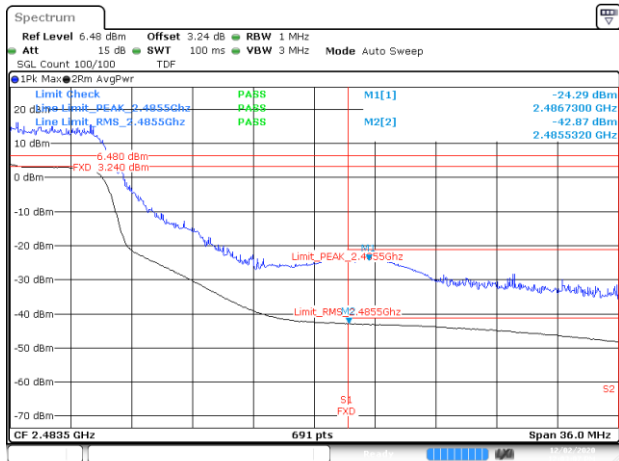
BE-R-HIGH-2MHz, SISO-A, 802.11ax20-HE0, Ch13



BE-R-LOW, SISO-A, 802.11ax40-HE0, Ch3

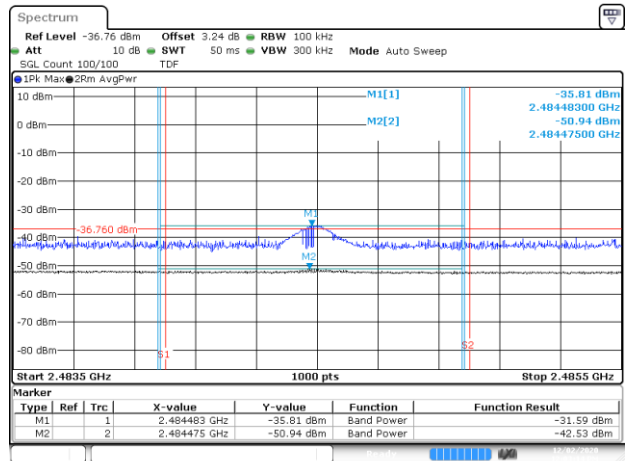


BE-NR, SISO-A, 802.11ax40-HE0, Ch3



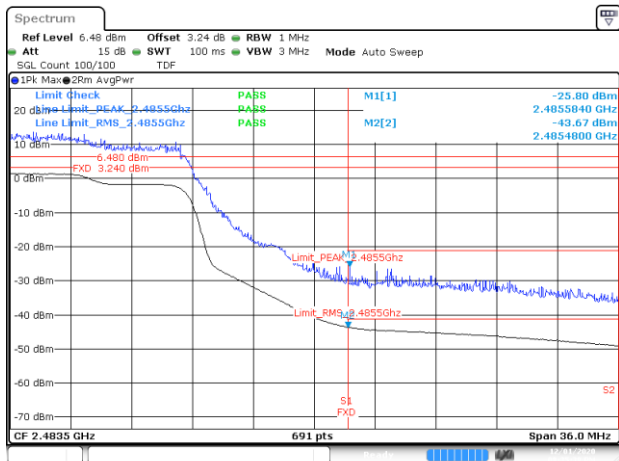
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BE-R-HIGH, SISO-A, 802.11ax40-HE0, Ch9



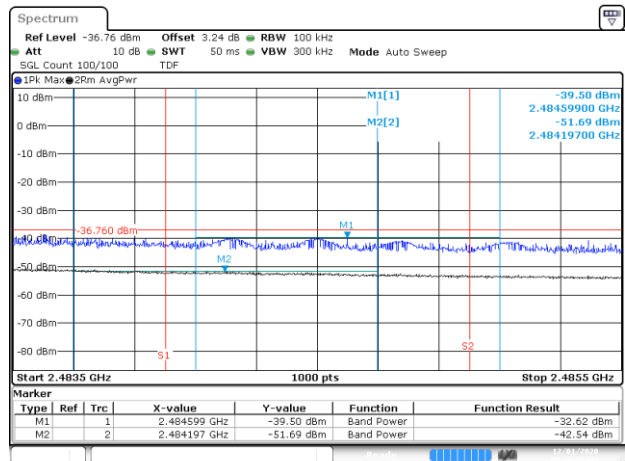
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BE-R-HIGH-2MHz, SISO-A, 802.11ax40-HE0, Ch9



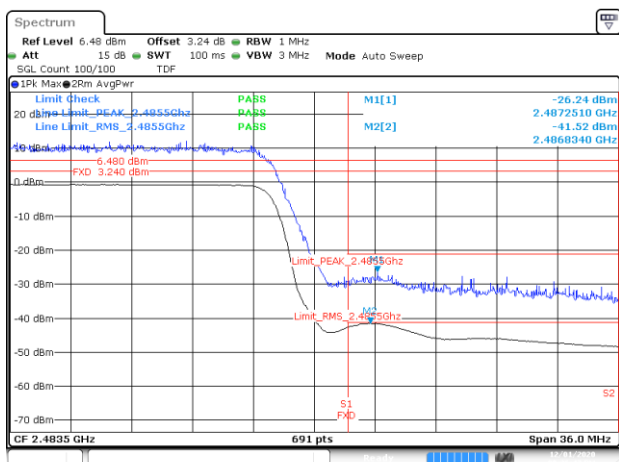
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BE-R-HIGH, SISO-A, 802.11ax40-HE0, Ch10



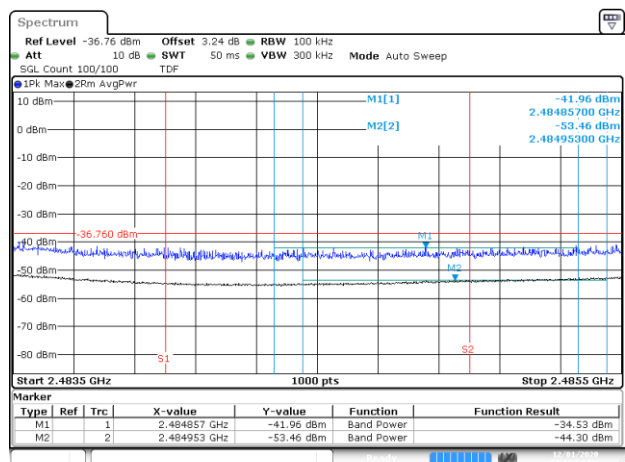
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BE-R-HIGH-2MHz, SISO-A, 802.11ax40-HE0, Ch10



Date: 1 DEC 2020 20:36:47

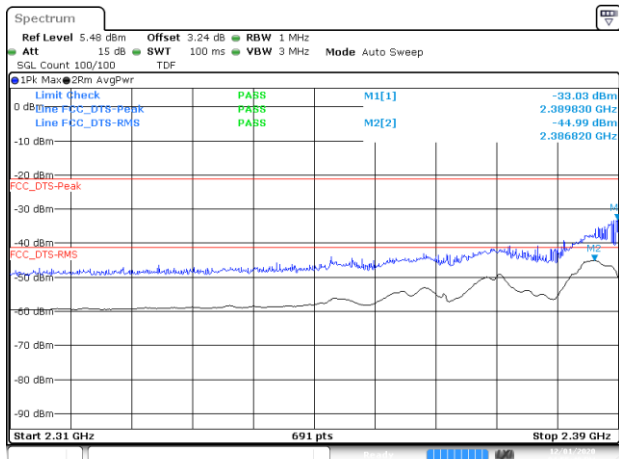
BE-R-HIGH, SISO-A, 802.11ax40-HE0, Ch11



Date: 1 DEC 2020 20:36:54

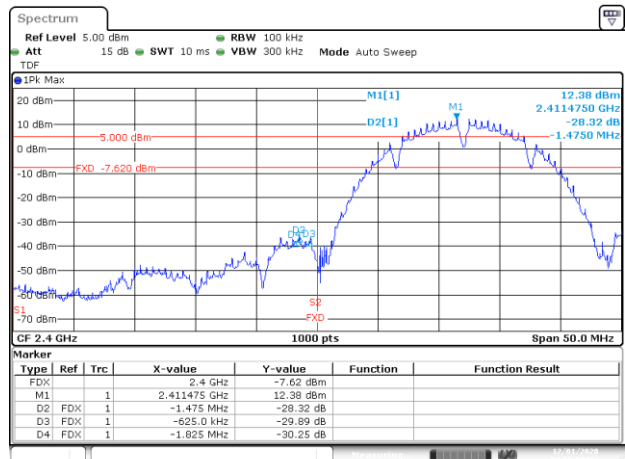
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SISO-B



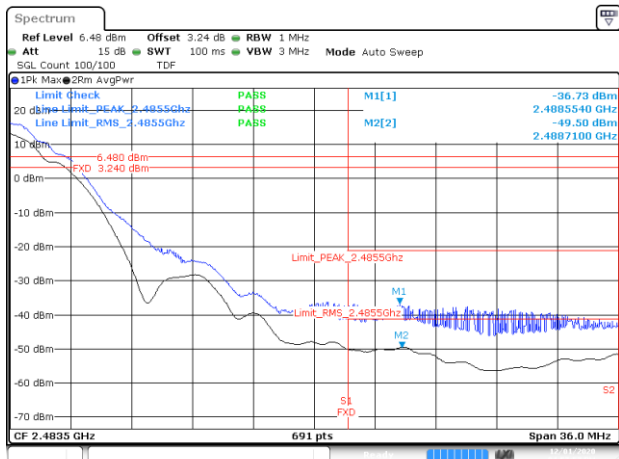
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BE-R-LOW, SISO-B, 802.11b-1Mbps, Ch1



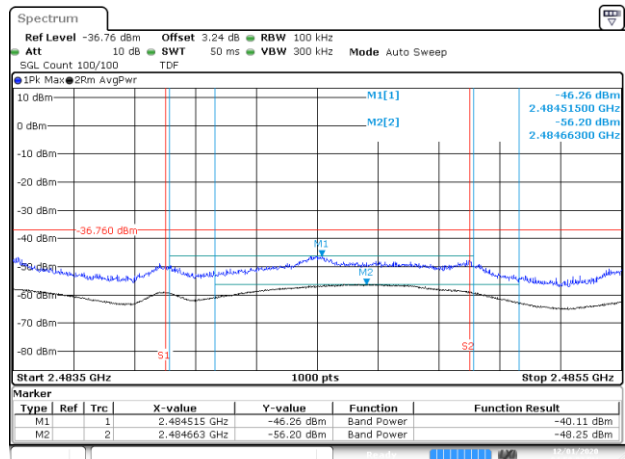
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BE-NR, SISO-B, 802.11b-1Mbps, Ch1



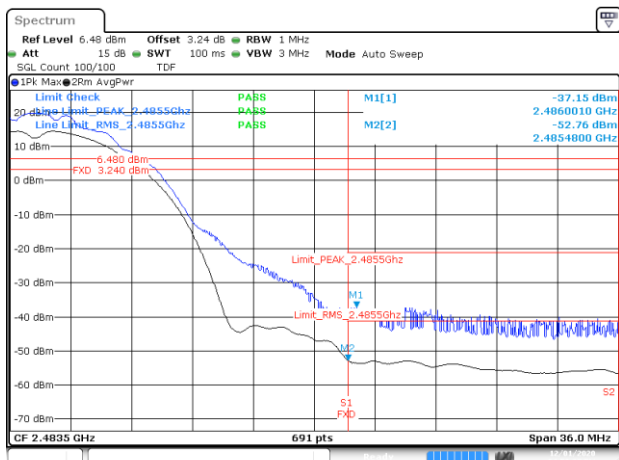
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BE-R-HIGH, SISO-B, 802.11b-1Mbps, Ch11



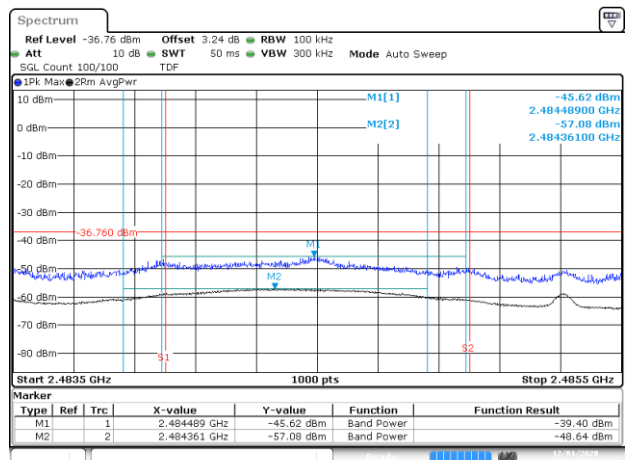
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BE-R-HIGH-2MHz, SISO-B, 802.11b-1Mbps, Ch11



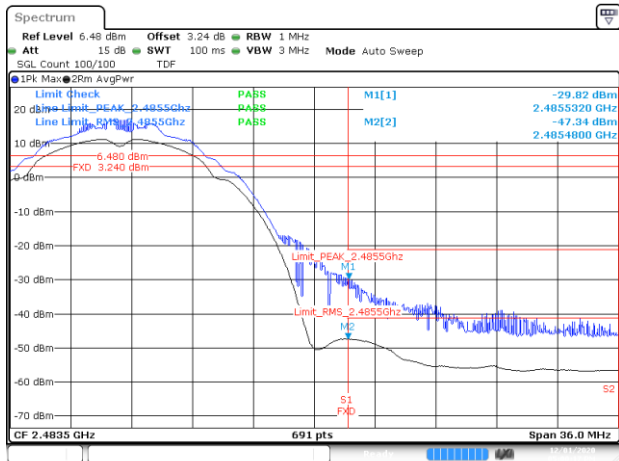
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BE-R-HIGH, SISO-B, 802.11b-1Mbps, Ch12



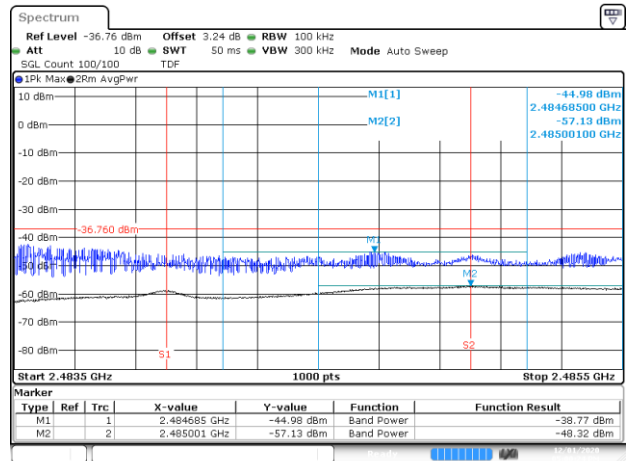
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BE-R-HIGH-2MHz, SISO-B, 802.11b-1Mbps, Ch12



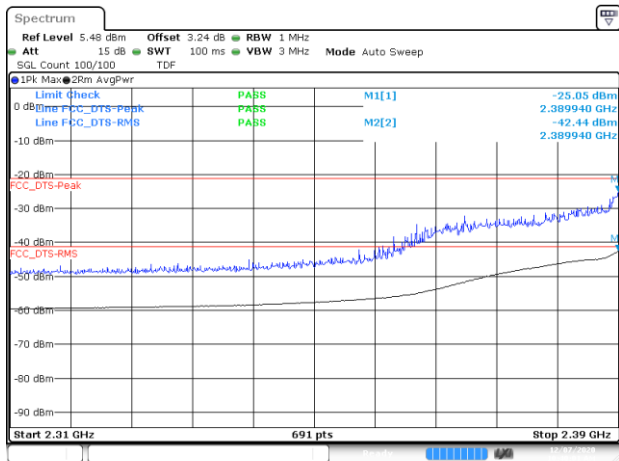
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BE-R-HIGH, SISO-B, 802.11b-1Mbps, Ch13

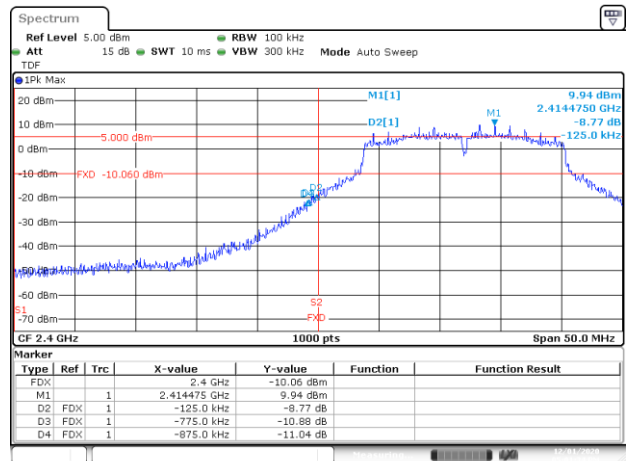


Date: 1.DEC.2020 17:00:24

BE-R-HIGH-2MHz, SISO-B, 802.11b-1Mbps, Ch13

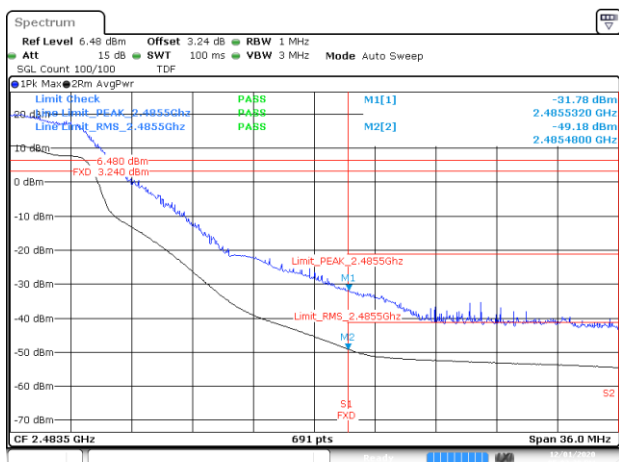


BE-R-LOW, SISO-B, 802.11g-6Mbps, Ch1



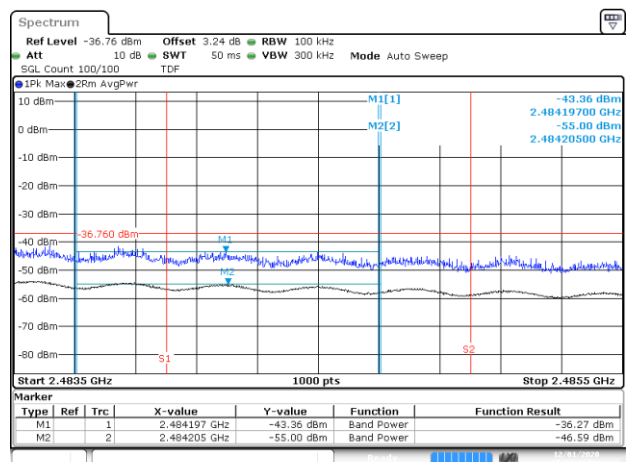
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BE-NR, SISO-B, 802.11g-6Mbps, Ch1



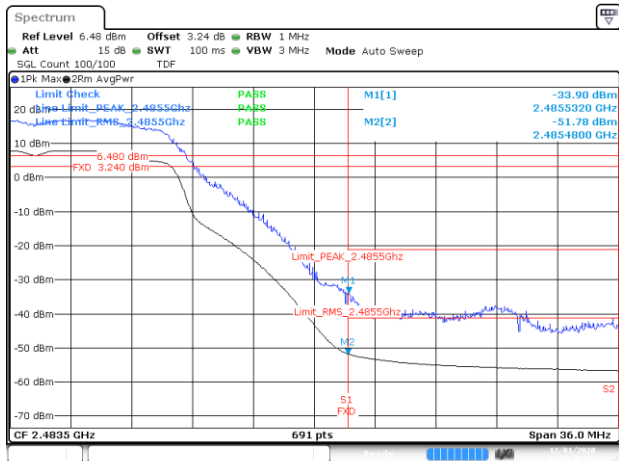
Date: 1.DEC.2020 17:03:36

BE-R-HIGH, SISO-B, 802.11g-6Mbps, Ch11



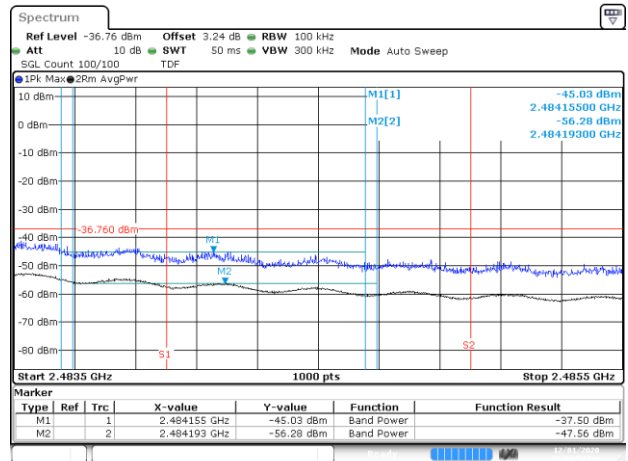
Date: 1.DEC.2020 17:03:44

BE-R-HIGH-2MHz, SISO-B, 802.11g-6Mbps, Ch11



Date: 1.DEC.2010 17:04:43

BE-R-HIGH, SISO-B, 802.11g-6Mbps, Ch12



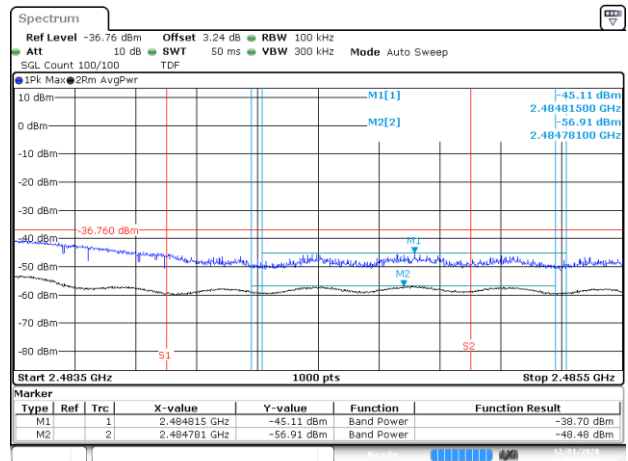
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BE-R-HIGH-2MHz, SISO-B, 802.11g-6Mbps, Ch12



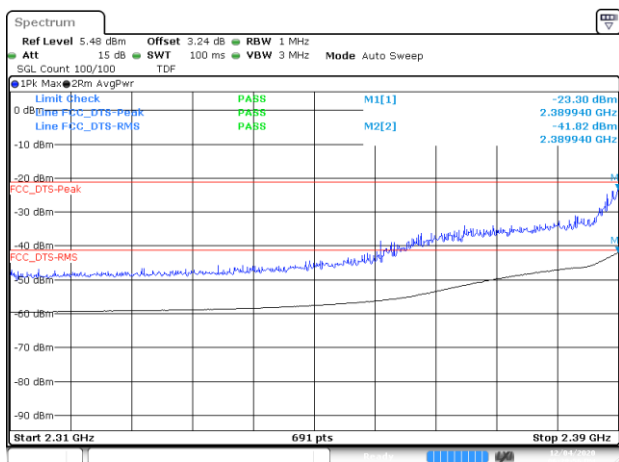
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BE-R-HIGH, SISO-B, 802.11g-6Mbps, Ch13

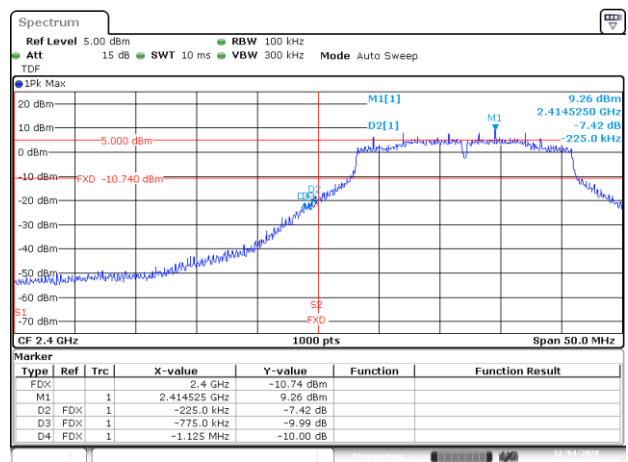


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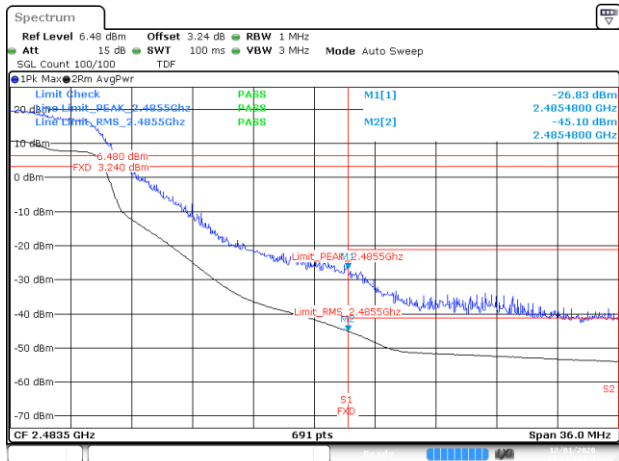
BE-R-HIGH-2MHz, SISO-B, 802.11g-6Mbps, Ch13



BE-R-LOW, SISO-B, 802.11n20-HT0, Ch1

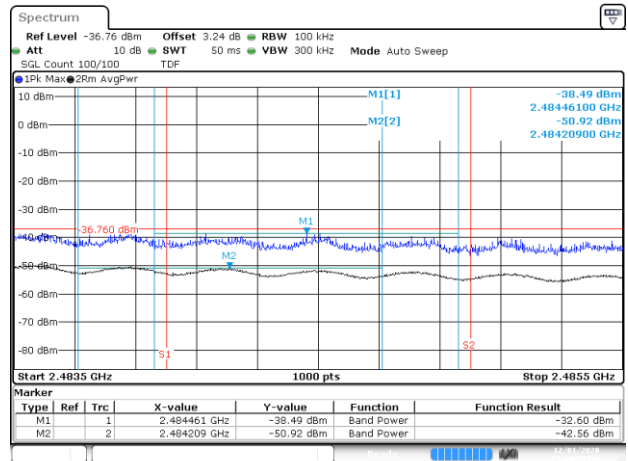


BE-NR, SISO-B, 802.11n20-HT0, Ch1



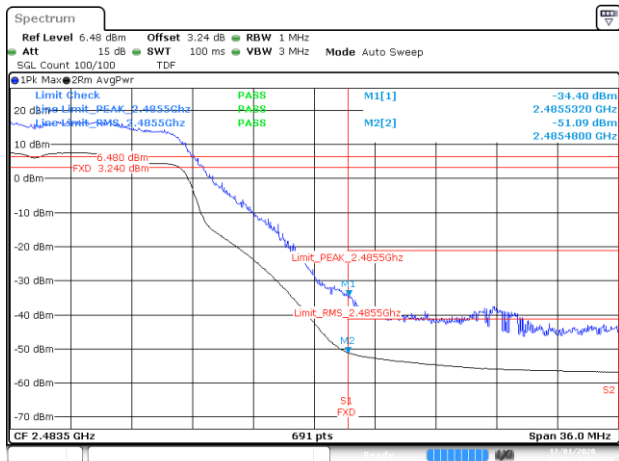
Date: 1.DEC.2020 17:09:19

BE-R-HIGH, SISO-B, 802.11n20-HT0, Ch11



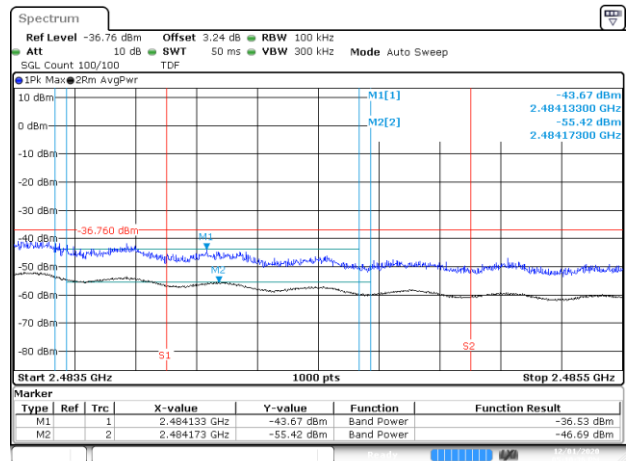
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BE-R-HIGH-2MHz, SISO-B, 802.11n20-HT0, Ch11



Date: 1.DEC.2020 17:10:29

BE-R-HIGH, SISO-B, 802.11n20-HT0, Ch12



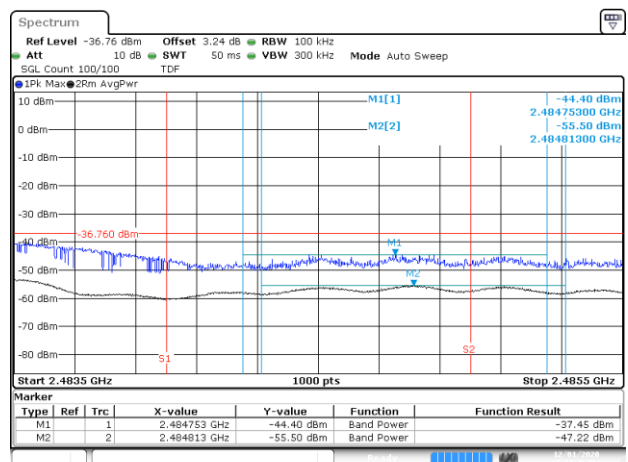
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BE-R-HIGH-2MHz, SISO-B, 802.11n20-HT0, Ch12



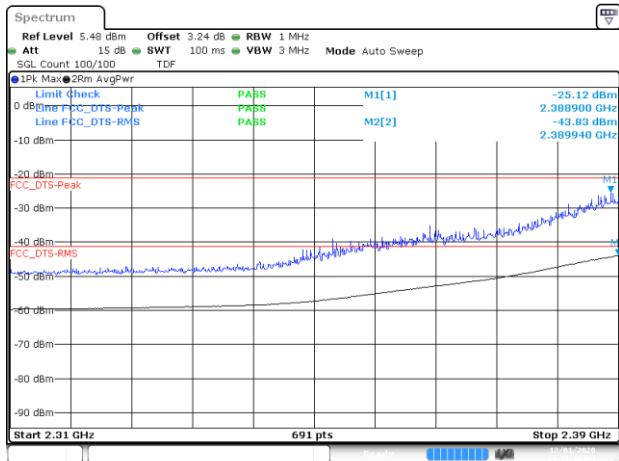
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BE-R-HIGH, SISO-B, 802.11n20-HT0, Ch13



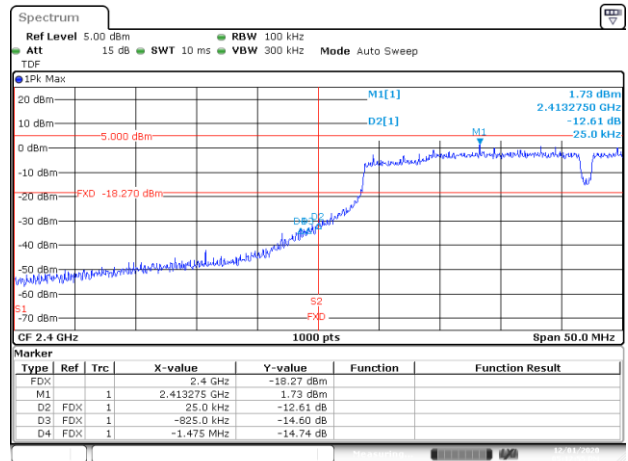
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BE-R-HIGH-2MHz, SISO-B, 802.11n20-HT0, Ch13



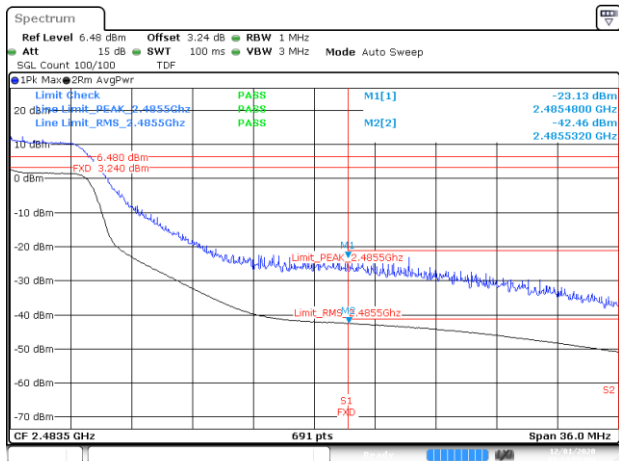
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BE-R-LOW, SISO-B, 802.11n40-HT0, Ch1



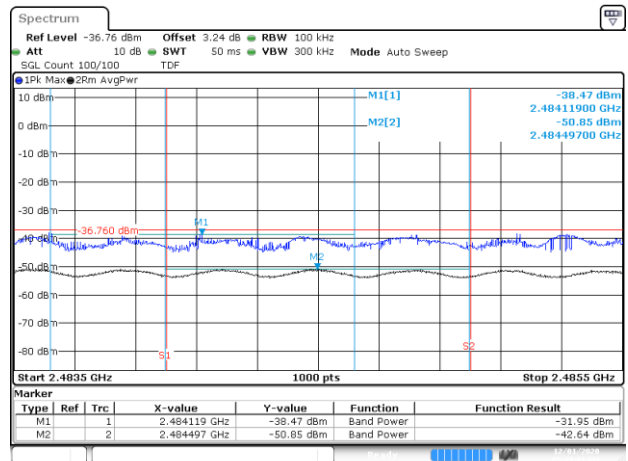
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BE-NR, SISO-B, 802.11n40-HT0, Ch1



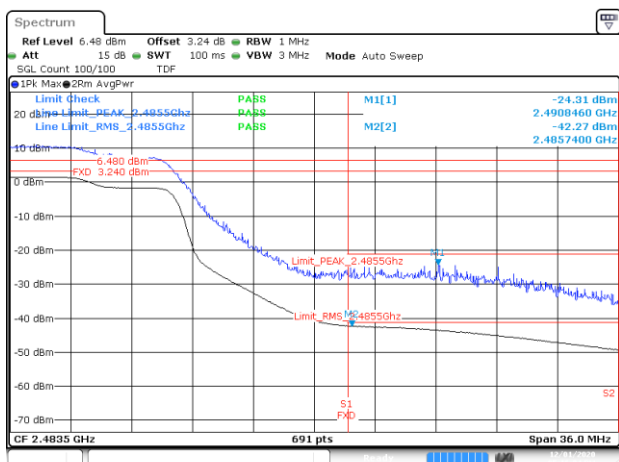
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BE-R-HIGH, SISO-B, 802.11n40-HT0, Ch11



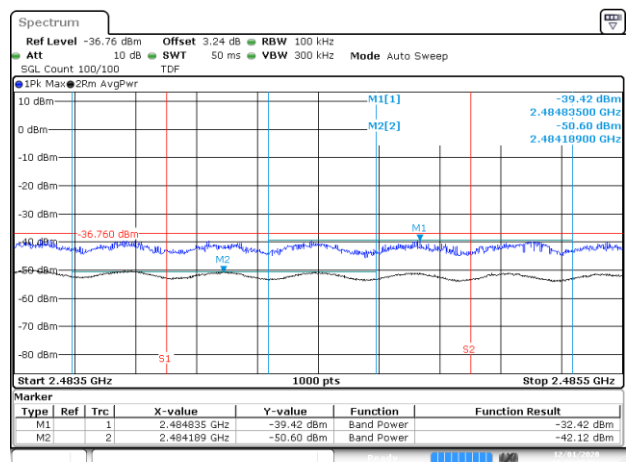
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BE-R-HIGH-2MHz, SISO-B, 802.11n40-HT0, Ch11



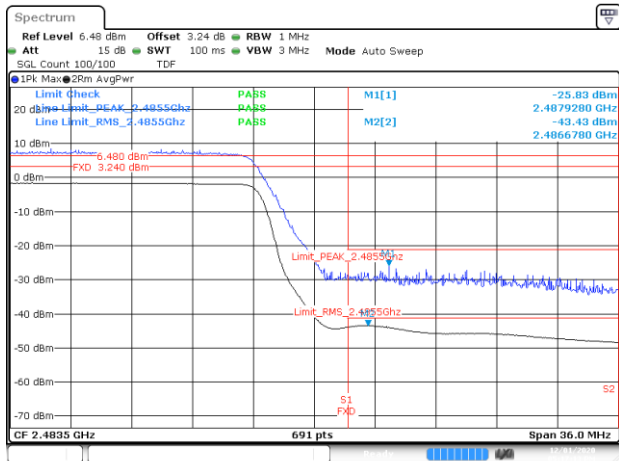
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BE-R-HIGH, SISO-B, 802.11n40-HT0, Ch12



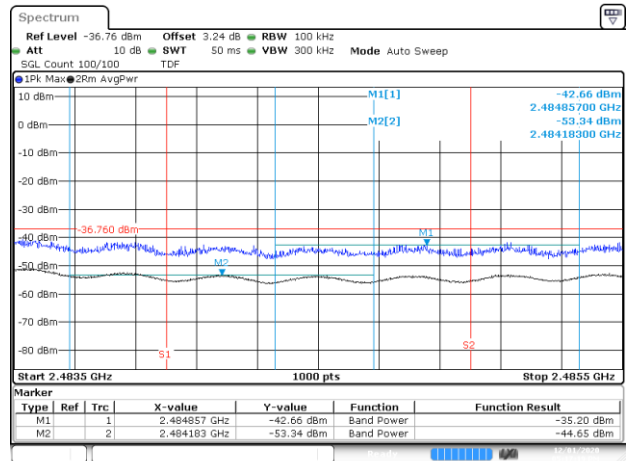
Date: 1.DEC.2020 17:16:11

BE-R-HIGH-2MHz, SISO-B, 802.11n40-HT0, Ch12



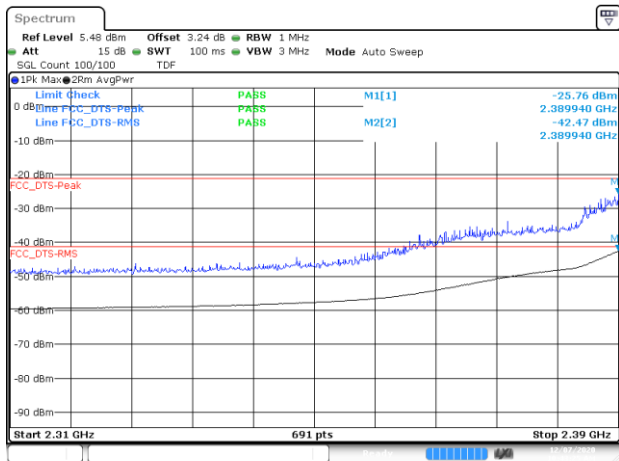
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BE-R-HIGH, SISO-B, 802.11n40-HT0, Ch13

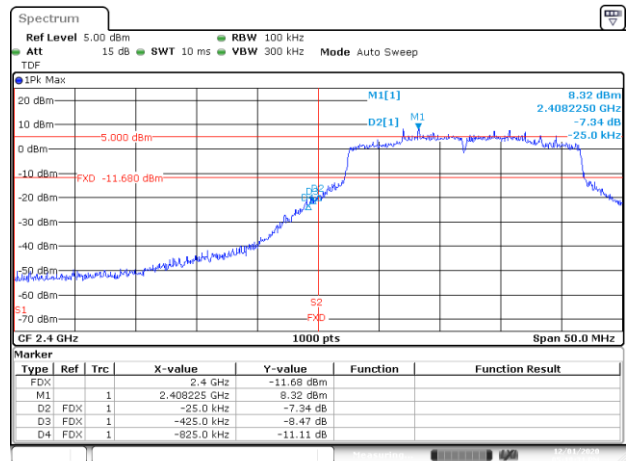


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BE-R-HIGH-2MHz, SISO-B, 802.11n40-HT0, Ch13

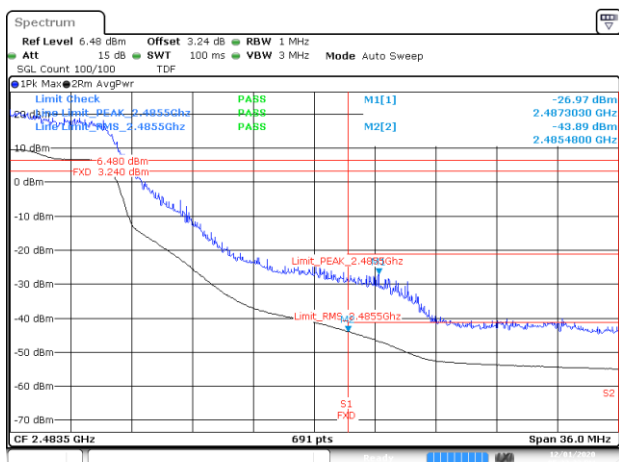


BE-R-LOW, SISO-B, 802.11ax20-HE0, Ch1



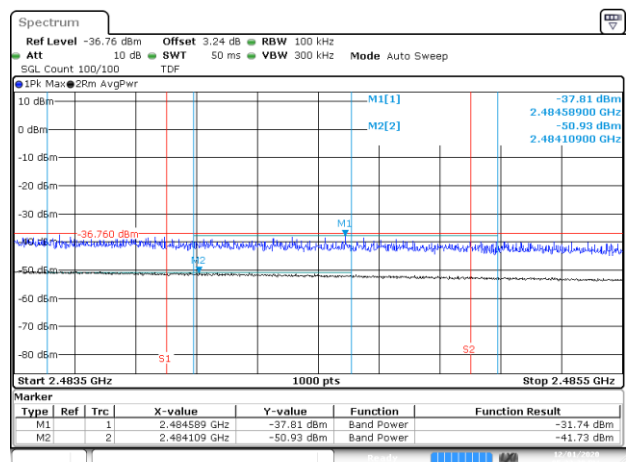
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BE-NR, SISO-B, 802.11ax20-HE0, Ch1



Date: 1.DEC.2020 17:23:33

BE-R-HIGH, SISO-B, 802.11ax20-HE0, Ch11



Date: 1.DEC.2020 17:23:39

BE-R-HIGH-2MHz, SISO-B, 802.11ax20-HE0, Ch11