



FCC Radio Test Report

FCC ID : LDKMU6CR2417
Equipment : Cisco Catalyst 9136I Access Point
Brand Name : Cisco
Model Name : C9136I-B
Applicant : Cisco Systems Inc
125 West Tasman Drive , San Jose, CA 95134, USA.
Manufacturer : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134, USA.
Standard : 47 CFR FCC Part 15.247

The product was received on Aug. 09, 2021, and testing was started from Aug. 12, 2021 and completed on Sep. 30, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



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PHOTOGRAPHS OF EUT V01



History of this test report

| Report No. | Version | Description | Issued Date |
|------------|---------|-------------------------|---------------|
| FR180526AC | 01 | Initial issue of report | Oct. 25, 2021 |
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Summary of Test Result

| Report Clause | Ref. Std. Clause | Test Items | Result (PASS/FAIL) | Remark |
|---------------|------------------|---|--------------------|--------|
| 1.1.2 | 15.203 | Antenna Requirement | PASS | - |
| 3.1 | 15.207 | AC Power-line Conducted Emissions | PASS | - |
| 3.2 | 15.247(a) | DTS Bandwidth | PASS | - |
| 3.3 | 15.247(b) | Maximum Conducted Output Power | PASS | - |
| 3.4 | 15.247(e) | Power Spectral Density | PASS | - |
| 3.5 | 15.247(d) | Emissions in Non-restricted Frequency Bands | PASS | - |
| 3.6 | 15.247(d) | Emissions in Restricted Frequency Bands | PASS | - |

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and explanations:

The EUT supports beamforming and CDD modes, and the CDD mode is the worse case. Therefore, all test items are evaluated in the report. The beamforming mode only evaluateds the output power.

Reviewed by: Ben Tseng

Report Producer: Amber Chiu



1 General Description

1.1 Information

1.1.1 RF General Information

| Frequency Range (MHz) | IEEE Std. 802.11 | Ch. Frequency (MHz) | Channel Number |
|-----------------------|----------------------------------|---------------------|----------------|
| 2400-2483.5 | b, g, n (HT20), VHT20, ax(HEW20) | 2412-2462 | 1-11 [11] |

<Serving Radio>

Non-Beamforming_1T1S

| Band | Mode | BWch (MHz) | Nant |
|---------------|----------------|------------|------|
| 2.4-2.4835GHz | 802.11b | 20 | 1TX |
| 2.4-2.4835GHz | 802.11g | 20 | 1TX |
| 2.4-2.4835GHz | 802.11ax HEW20 | 20 | 1TX |

Non-Beamforming_2T1S

| Band | Mode | BWch (MHz) | Nant |
|---------------|----------------|------------|------|
| 2.4-2.4835GHz | 802.11b | 20 | 2TX |
| 2.4-2.4835GHz | 802.11g | 20 | 2TX |
| 2.4-2.4835GHz | 802.11ax HEW20 | 20 | 2TX |

Non-Beamforming_4T1S

| Band | Mode | BWch (MHz) | Nant |
|---------------|----------------|------------|------|
| 2.4-2.4835GHz | 802.11b | 20 | 4TX |
| 2.4-2.4835GHz | 802.11g | 20 | 4TX |
| 2.4-2.4835GHz | 802.11ax HEW20 | 20 | 4TX |

Beamforming_2T1S

| Band | Mode | BWch (MHz) | Nant |
|---------------|-------------------|------------|------|
| 2.4-2.4835GHz | 802.11ax HEW20-BF | 20 | 2TX |

Beamforming_4T1S

| Band | Mode | BWch (MHz) | Nant |
|---------------|-------------------|------------|------|
| 2.4-2.4835GHz | 802.11ax HEW20-BF | 20 | 4TX |



<Scanning Radio>

Non-Beamforming_1T1S

| Band | Mode | BWch (MHz) | Nant |
|---------------|----------------|------------|------|
| 2.4-2.4835GHz | 802.11b | 20 | 1TX |
| 2.4-2.4835GHz | 802.11g | 20 | 1TX |
| 2.4-2.4835GHz | 802.11ax HEW20 | 20 | 1TX |

Non-Beamforming_2T1S

| Band | Mode | BWch (MHz) | Nant |
|---------------|----------------|------------|------|
| 2.4-2.4835GHz | 802.11b | 20 | 2TX |
| 2.4-2.4835GHz | 802.11g | 20 | 2TX |
| 2.4-2.4835GHz | 802.11ax HEW20 | 20 | 2TX |

Beamforming_2T1S

| Band | Mode | BWch (MHz) | Nant |
|---------------|-------------------|------------|------|
| 2.4-2.4835GHz | 802.11ax HEW20-BF | 20 | 2TX |

Note:

- ◆ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ◆ 11g, HT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ◆ VHT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ◆ HEW20 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ◆ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

| Ant. | Brand | Model Name | Antenna Type | Connector |
|------|---------|---------------|--------------|-----------|
| 1 | Foxconn | 361.01530.005 | PIFA | I-PEX |
| 2 | Foxconn | 361.01530.005 | PIFA | I-PEX |
| 3 | Foxconn | 361.01530.005 | PIFA | I-PEX |
| 4 | Foxconn | 361.01530.005 | PIFA | I-PEX |
| 5 | Foxconn | 361.01530.005 | Dipole | I-PEX |
| 6 | Foxconn | 361.01530.005 | Dipole | I-PEX |
| 7 | Foxconn | 361.01530.005 | Dipole | I-PEX |
| 8 | Foxconn | 361.01530.005 | Dipole | I-PEX |
| 9 | Foxconn | 361.01530.005 | PIFA | I-PEX |
| 10 | Foxconn | 361.01530.005 | PIFA | I-PEX |
| 11 | Foxconn | 361.01530.005 | PIFA | I-PEX |
| 12 | Foxconn | 361.01530.005 | PIFA | I-PEX |
| 13 | Foxconn | 361.01530.005 | PIFA | I-PEX |
| 14 | Foxconn | 361.01530.005 | PIFA | I-PEX |
| 15 | Foxconn | 361.01530.005 | PIFA | I-PEX |

Serving Radio

| Ant. | Port | Gain (dBi) | | | | | |
|------|------|------------|------------|--------------|---------|----|----|
| | | 2.4G | 5G Primary | 5G Secondary | 5G Dual | 6G | BT |
| 1 | 1 | 4 | 5 | - | 5 | - | - |
| 2 | 2 | 4 | 5 | - | 5 | - | - |
| 3 | 3 | 4 | 5 | - | 5 | - | - |
| 4 | 4 | 4 | 5 | - | 5 | - | - |
| 5 | 5 | - | - | 5 | 5 | - | - |
| 6 | 6 | - | - | 5 | 5 | - | - |
| 7 | 7 | - | - | 5 | 5 | - | - |
| 8 | 8 | - | - | 5 | 5 | - | - |
| 9 | 1 | - | - | | | 6 | - |
| 10 | 2 | - | - | | | 6 | - |
| 11 | 3 | - | - | | | 6 | - |
| 12 | 4 | - | - | | | 6 | - |



Scanning Radio

| Ant. | Port | Gain (dBi) | | | |
|------|------|------------|----|----|----|
| | | 2.4G | 5G | 6G | BT |
| 13 | 1 | 6 | 6 | 6 | - |
| 14 | 2 | 6 | 6 | 6 | - |

| Ant. | Port | Gain (dBi) | | | |
|------|------|------------|----|----|----|
| | | 2.4G | 5G | 6G | BT |
| 15 | 1 | - | - | - | 5 |

Note 1: The EUT has fifteen antennas.

Note 2: The antenna for dual mode is cross polarized.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax mode (2TX/2RX)

Ant. 13 (port 1) and Ant. 14 (port 2) could transmit/receive simultaneously.

For IEEE 802.11 b/g/n/VHT/ax mode (4TX/4RX)

Ant. 1 (port 1), Ant. 2 (port 2), Ant. 3 (port 3) and Ant. 4 (port 4) could transmit/receive simultaneously.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Only Ant. 15 (port 1) can be used as transmitting/receiving antenna.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax mode (2TX/2RX)

Ant. 13 (port 1) and Ant. 14 (port 2) could transmit/receive simultaneously.

For IEEE 802.11 a/n/ac/ax mode (4TX/4RX)

Ant. 1 (port 1), Ant. 2 (port 2), Ant. 3 (port 3) and Ant. 4 (port 4) could transmit/receive simultaneously.

Ant. 5 (port 5), Ant. 6 (port 6), Ant. 7 (port 7) and Ant. 8 (port 8) could transmit/receive simultaneously.

For IEEE 802.11 a/n/ac/ax mode (8TX/8RX)

Ant. 1 (port 1), Ant. 2 (port 2), Ant. 3 (port 3), Ant. 4 (port 4), Ant. 5 (port 5), Ant. 6 (port 6), Ant. 7 (port 7), and Ant. 8 (port 8) could transmit/receive simultaneously.

For 6GHz function:

For IEEE 802.11 a/ax mode (2TX/2RX)

Ant. 13 (port 1) and Ant. 14 (port 2) could transmit/receive simultaneously.

For IEEE 802.11 a/ax mode (4TX/4RX)

Ant. 9 (port 1), Ant. 10 (port 2), Ant. 11 (port 3) and Ant. 12 (port 4) could transmit/receive simultaneously.



1.1.3 EUT Information

| Operational Condition | | | |
|-------------------------------------|---|---------------------|--|
| EUT Power Type | From PoE | | |
| EUT Function | <input checked="" type="checkbox"/> | Point-to-multipoint | <input type="checkbox"/> Point-to-point |
| Beamforming Function | <input checked="" type="checkbox"/> | With beamforming | <input type="checkbox"/> Without beamforming |
| Resource Unit (802.11ax) | <input checked="" type="checkbox"/> | Full RU | <input type="checkbox"/> Partial RU |
| Type of EUT | | | |
| <input checked="" type="checkbox"/> | Stand-alone | | |
| <input type="checkbox"/> | Combined (EUT where the radio part is fully integrated within another device) | | |
| | Combined Equipment - Brand Name / Model No.: | | ... |
| <input type="checkbox"/> | Plug-in radio (EUT intended for a variety of host systems) | | |
| | Host System - Brand Name / Model No.: | | ... |
| <input type="checkbox"/> | Other: | | |

1.1.4 Mode Test Duty Cycle

Non-Beamforming_Serving Radio Primary_1T1S

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|--------------------------------|-------|---------|--------|---------------|
| 802.11b_Nss1,(1Mbps)_1TX | 0.907 | 0.42 | 7.025m | 300 |
| 802.11g_Nss1,(6Mbps)_1TX | 0.949 | 0.23 | 1.433m | 1k |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | 0.937 | 0.28 | 5.446m | 300 |

Non-Beamforming_Serving Radio Primary_2T1S

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|--------------------------------|-------|---------|--------|---------------|
| 802.11b_Nss1,(1Mbps)_2TX | 0.907 | 0.42 | 7.025m | 300 |
| 802.11g_Nss1,(6Mbps)_2TX | 0.949 | 0.23 | 1.433m | 1k |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | 0.937 | 0.28 | 5.446m | 300 |

Non-Beamforming_Serving Radio Primary_4T1S

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|--------------------------------|-------|---------|--------|---------------|
| 802.11b_Nss1,(1Mbps)_4TX | 0.907 | 0.42 | 7.025m | 300 |
| 802.11g_Nss1,(6Mbps)_4TX | 0.949 | 0.23 | 1.433m | 1k |
| 802.11ax HEW20_Nss1,(MCS0)_4TX | 0.937 | 0.28 | 5.446m | 300 |



Non-Beamforming_Scanning Radio_1T1S

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|--------------------------------|-------|---------|--------|---------------|
| 802.11b_Nss1,(1Mbps)_1TX | 0.943 | 0.25 | 7.025m | 300 |
| 802.11g_Nss1,(6Mbps)_1TX | 0.926 | 0.33 | 1.433m | 1k |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | 0.944 | 0.25 | 5.446m | 300 |

Non-Beamforming_Scanning Radio_2T1S

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|--------------------------------|-------|---------|--------|---------------|
| 802.11b_Nss1,(1Mbps)_2TX | 0.943 | 0.25 | 7.025m | 300 |
| 802.11g_Nss1,(6Mbps)_2TX | 0.926 | 0.33 | 1.433m | 1k |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | 0.944 | 0.25 | 5.446m | 300 |

Beamforming_Serving Radio Primary_2T1S

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|-----------------------------------|-------|---------|--------|---------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | 0.937 | 0.28 | 5.446m | 300 |

Beamforming_Serving Radio Primary_4T1S

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|-----------------------------------|-------|---------|--------|---------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 0.937 | 0.28 | 5.446m | 300 |

Beamforming_Scanning Radio_2T1S

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|-----------------------------------|-------|---------|--------|---------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | 0.944 | 0.25 | 5.446m | 300 |

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.



1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF:

- ◆ KDB 558074 D01 v05r02
- ◆ KDB 662911 D01 v02r01
- ◆ KDB 414788 D01 v01r01

1.3 Testing Location Information

| Test Lab. : Sporton International Inc. Hsinhua Laboratory | | | | |
|--|-----------------------------|---|----------------------|-------------------------|
| <input checked="" type="checkbox"/> | Hsinhua (TAF: 3785) | ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.) | | |
| | | TEL: 886-3-327-3456 | FAX: 886-3-327-0973 | |
| Test site Designation No. TW3785 with FCC. | | | | |
| Test Condition | Test Site No. | Test Engineer | Test Environment | Test Date |
| AC Conduction | CO04-HY | Tony Chang | 22.1~23.7°C / 51~60% | 27/Aug/2021 |
| RF Conducted | TH01-HY | Barry Hsiao | 24.2~26.9°C / 49~60% | 12/Aug/2021~28/Sep/2021 |
| Radiated | 03CH03-HY | Justin Pan | 24.6~26.9°C / 50~55% | 13/Aug/2021~30/Sep/2021 |
| <input type="checkbox"/> | Wen 33rd.St. (TAF: 3785) | ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) | | |
| | | TEL: 886-3-318-0787 | FAX: 886-3-318-0287 | |
| Test site Designation No. TW0008 with FCC. | | | | |

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

| Test Items | Uncertainty | Remark |
|--------------------------------------|-------------|--------------------------|
| Conducted Emission (150kHz ~ 30MHz) | 0.9 dB | Confidence levels of 95% |
| Radiated Emission (9kHz ~ 30MHz) | 2.4 dB | Confidence levels of 95% |
| Radiated Emission (30MHz ~ 1,000MHz) | 3.7 dB | Confidence levels of 95% |
| Radiated Emission (1GHz ~ 18GHz) | 3.6 dB | Confidence levels of 95% |
| Radiated Emission (18GHz ~ 40GHz) | 3.5 dB | Confidence levels of 95% |
| Conducted Emission | 1.0 dB | Confidence levels of 95% |
| Temperature | 0.41 °C | Confidence levels of 95% |
| Humidity | 3.4 % | Confidence levels of 95% |



2 Test Configuration of EUT

2.1 Test Channel Mode

| | |
|---------------|-------|
| Test Software | Putty |
|---------------|-------|

Non-Beamforming_Serving Radio Primary_1T1S

| Mode | Power Setting |
|--------------------------------|---------------|
| 802.11b_Nss1,(1Mbps)_1TX | - |
| 2412MHz | 17 |
| 2437MHz | 17 |
| 2462MHz | 17 |
| 802.11g_Nss1,(6Mbps)_1TX | - |
| 2412MHz | 17 |
| 2437MHz | 17 |
| 2462MHz | 16 |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | - |
| 2412MHz | 17 |
| 2437MHz | 17 |
| 2462MHz | 15 |

Non-Beamforming_Serving Radio Primary_2T1S

| Mode | Power Setting |
|--------------------------------|---------------|
| 802.11b_Nss1,(1Mbps)_2TX | - |
| 2412MHz | 17 |
| 2437MHz | 17 |
| 2462MHz | 17 |
| 802.11g_Nss1,(6Mbps)_2TX | - |
| 2412MHz | 17 |
| 2437MHz | 17 |
| 2462MHz | 15 |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | - |
| 2412MHz | 16 |
| 2437MHz | 17 |
| 2462MHz | 14 |



Non-Beamforming_Serving Radio Primary_4T1S

| Mode | Power Setting |
|--------------------------------|---------------|
| 802.11b_Nss1,(1Mbps)_4TX | - |
| 2412MHz | 17 |
| 2437MHz | 17 |
| 2462MHz | 17 |
| 802.11g_Nss1,(6Mbps)_4TX | - |
| 2412MHz | 15 |
| 2437MHz | 17 |
| 2462MHz | 13 |
| 802.11ax HEW20_Nss1,(MCS0)_4TX | - |
| 2412MHz | 14 |
| 2437MHz | 17 |
| 2462MHz | 11 |

Non-Beamforming_Scanning Radio_1T1S

| Mode | Power Setting |
|--------------------------------|---------------|
| 802.11b_Nss1,(1Mbps)_1TX | - |
| 2412MHz | 17 |
| 2437MHz | 16 |
| 2462MHz | 12 |
| 802.11g_Nss1,(6Mbps)_1TX | - |
| 2412MHz | 16 |
| 2437MHz | 17 |
| 2462MHz | 15 |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | - |
| 2412MHz | 13 |
| 2437MHz | 17 |
| 2462MHz | 13 |



Non-Beamforming_Scanning Radio_2T1S

| Mode | Power Setting |
|--------------------------------|---------------|
| 802.11b_Nss1,(1Mbps)_2TX | - |
| 2412MHz | 17 |
| 2437MHz | 17 |
| 2462MHz | 17 |
| 802.11g_Nss1,(6Mbps)_2TX | - |
| 2412MHz | 14 |
| 2437MHz | 17 |
| 2462MHz | 13 |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | - |
| 2412MHz | 12 |
| 2437MHz | 17 |
| 2462MHz | 11 |

Beamforming_Serving Radio Primary_2T1S

| Mode | Power Setting |
|-----------------------------------|---------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | - |
| 2412MHz | 16 |
| 2437MHz | 17 |
| 2462MHz | 14 |

Beamforming_Serving Radio Primary_4T1S

| Mode | Power Setting |
|-----------------------------------|---------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | - |
| 2412MHz | 14 |
| 2437MHz | 17 |
| 2462MHz | 11 |




Beamforming_Scanning Radio_2T1S

| Mode | Power Setting |
|-----------------------------------|---------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | - |
| 2412MHz | 12 |
| 2437MHz | 17 |
| 2462MHz | 11 |

2.2 The Worst Case Measurement Configuration

| The Worst Case Mode for Following Conformance Tests | |
|---|---|
| Tests Item | AC power-line conducted emissions |
| Condition | AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz |
| Operating Mode | CTX |
| 1 | PoE mode; Scanning Radio_2T1S |
| 2 | PoE mode; Serving Radio Primary_4T1S |

| The Worst Case Mode for Following Conformance Tests | |
|---|---|
| Tests Item | DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands Emissions in Restricted Frequency Bands |
| Test Condition | Conducted measurement at transmit chains |

| The Worst Case Mode for Following Conformance Tests | | | |
|---|---|---|---|
| Tests Item | Emissions in Restricted Frequency Bands | | |
| Test Condition | Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type. | | |
| Operating Mode < 1GHz | CTX | | |
| 1 | PoE mode; Serving Radio Primary_4T1S | | |
| 2 | PoE mode; Scanning Radio_2T1S | | |
| Operating Mode > 1GHz | CTX | | |
| Orthogonal Planes of EUT | X Plane | Y Plane | Z Plane |
| |  |  |  |
| Worst Planes of EUT | | V | |



| The Worst Case Mode for Following Conformance Tests | |
|--|--|
| Tests Item | Simultaneous Transmission Analysis |
| Test Condition | Radiated measurement |
| Operating Mode | Normal Link |
| 1 | WLAN 2.4G (Serving Radio Primary)+ WLAN 5G (Serving Radio Primary) |
| Refer to Appendix G for Radiated Emission Co-location. | |

| The Worst Case Mode for Following Conformance Tests | |
|--|---|
| Tests Item | Simultaneous Transmission Analysis |
| Operating Mode | CTX |
| 1 | WLAN 2.4G (Serving Radio Primary)+ WLAN 5G (Serving Radio Primary)+ WLAN 5G (Serving Radio Secondary)+ WLAN 6G+ Bluetooth |
| Refer to Sporton Test Report No.: FA180526 for Co-location RF Exposure Evaluation. | |

2.3 Accessories

| Accessories | | | | |
|-------------|--------------|---|------------|------------|
| PoE | Brand Name | DELTA | Model Name | ADH-65AR B |
| | Power Rating | I/P: 100 - 240 Vac, 2.0 A, O/P: 56 Vdc, 1.161 A | | |

Reminder: Regarding to more detail and other information, please refer to user manual.

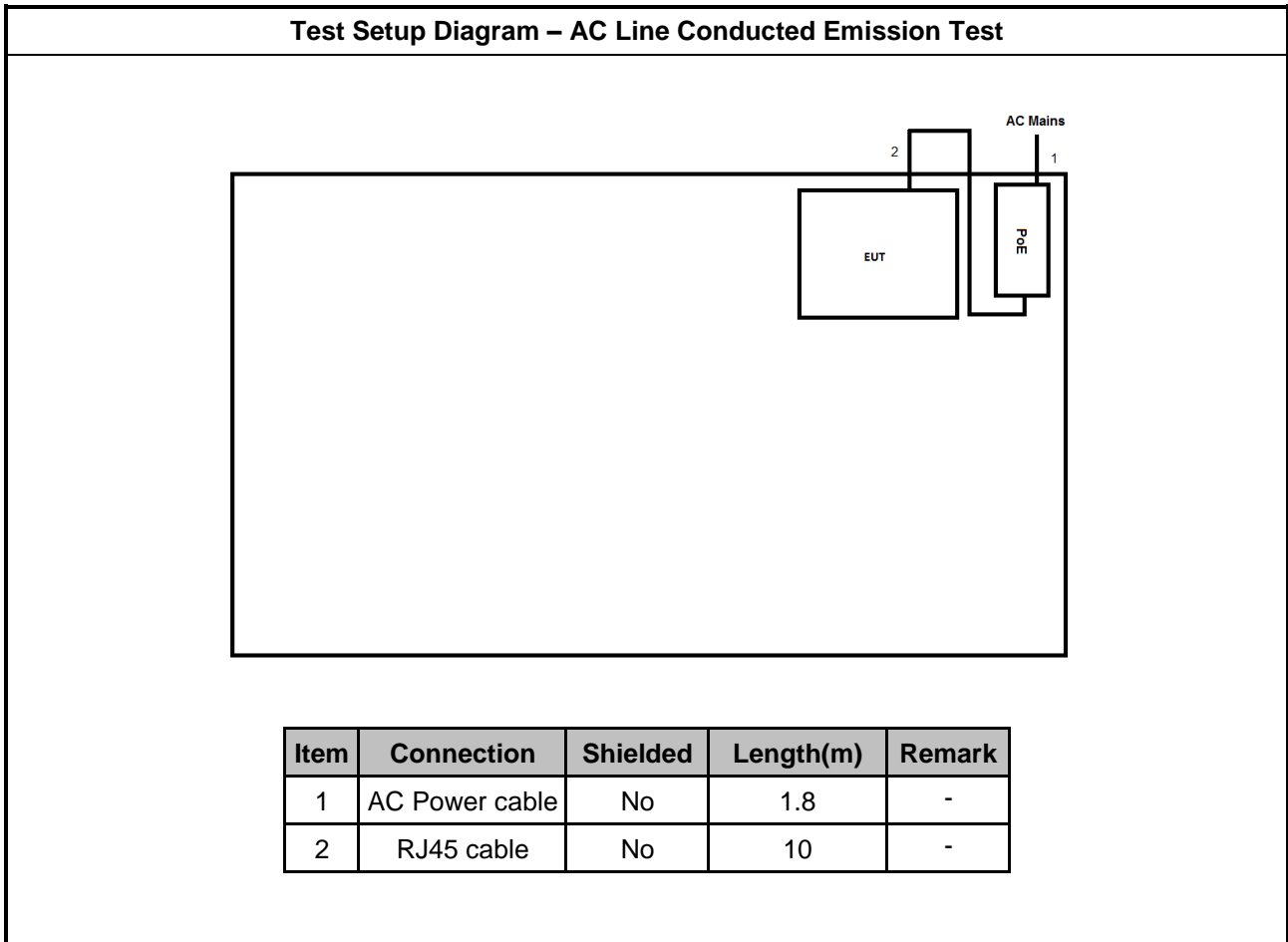
2.4 Support Equipment

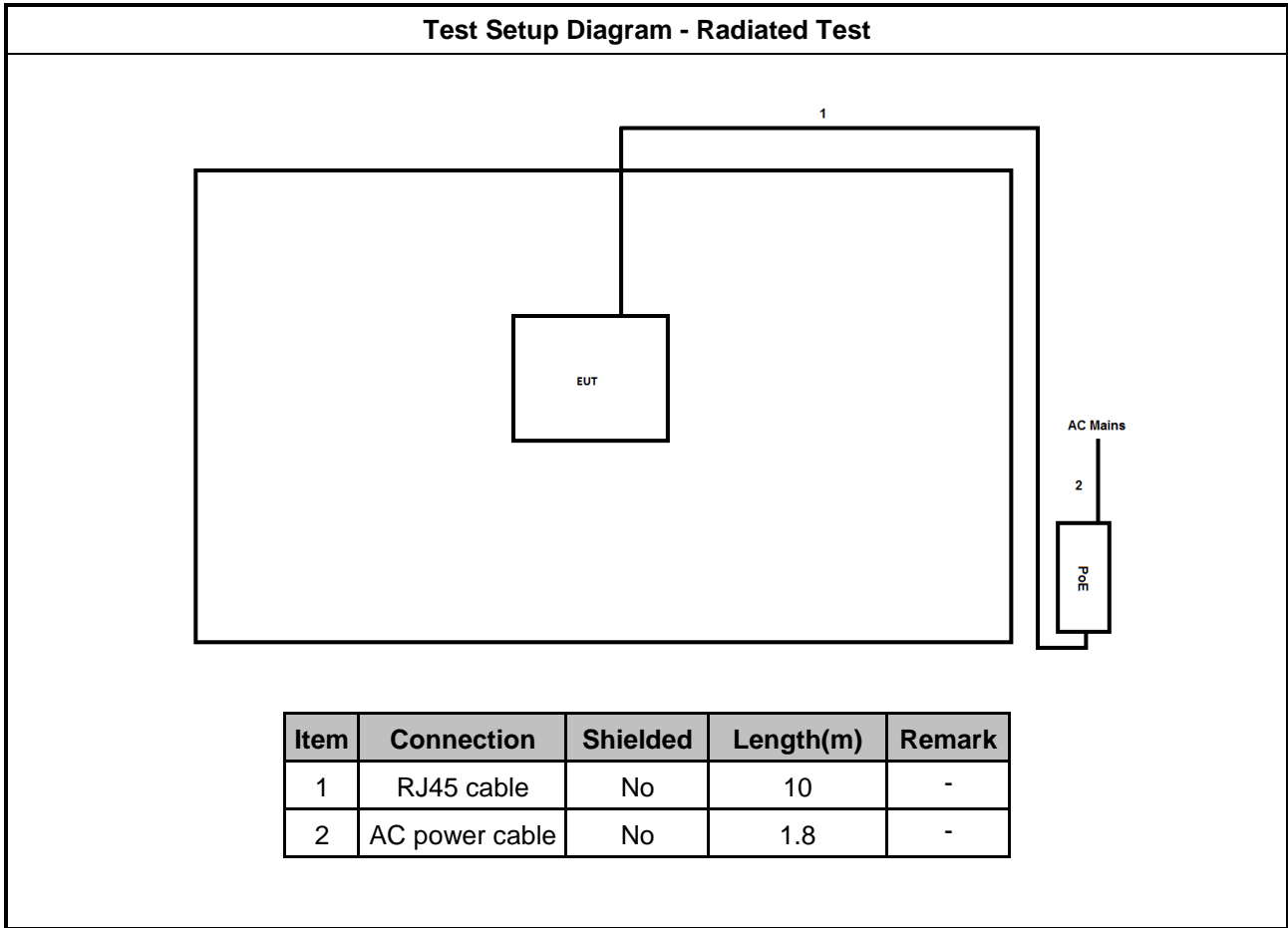
| Support Equipment – AC Conduction | | | | |
|-----------------------------------|------------|------------|------------|--------|
| No. | Equipment | Brand Name | Model Name | Remark |
| 1 | RJ45 cable | Power sync | CAT-6E-10 | - |

| Support Equipment – Conducted | | | | |
|-------------------------------|----------------|------------|------------|--------|
| No. | Equipment | Brand Name | Model Name | Remark |
| 1 | Notebook | DELL | E5410 | - |
| 2 | Adapter for NB | DELL | HA65NM130 | - |

| Support Equipment – Radiated | | | | |
|------------------------------|------------|------------|------------|--------|
| No. | Equipment | Brand Name | Model Name | Remark |
| 1 | RJ45 cable | Power sync | CAT-6E-10 | - |

2.5 Test Setup Diagram







3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

| AC Power-line Conducted Emissions Limit | | |
|---|------------|-----------|
| Frequency Emission (MHz) | Quasi-Peak | Average |
| 0.15-0.5 | 66 - 56 * | 56 - 46 * |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

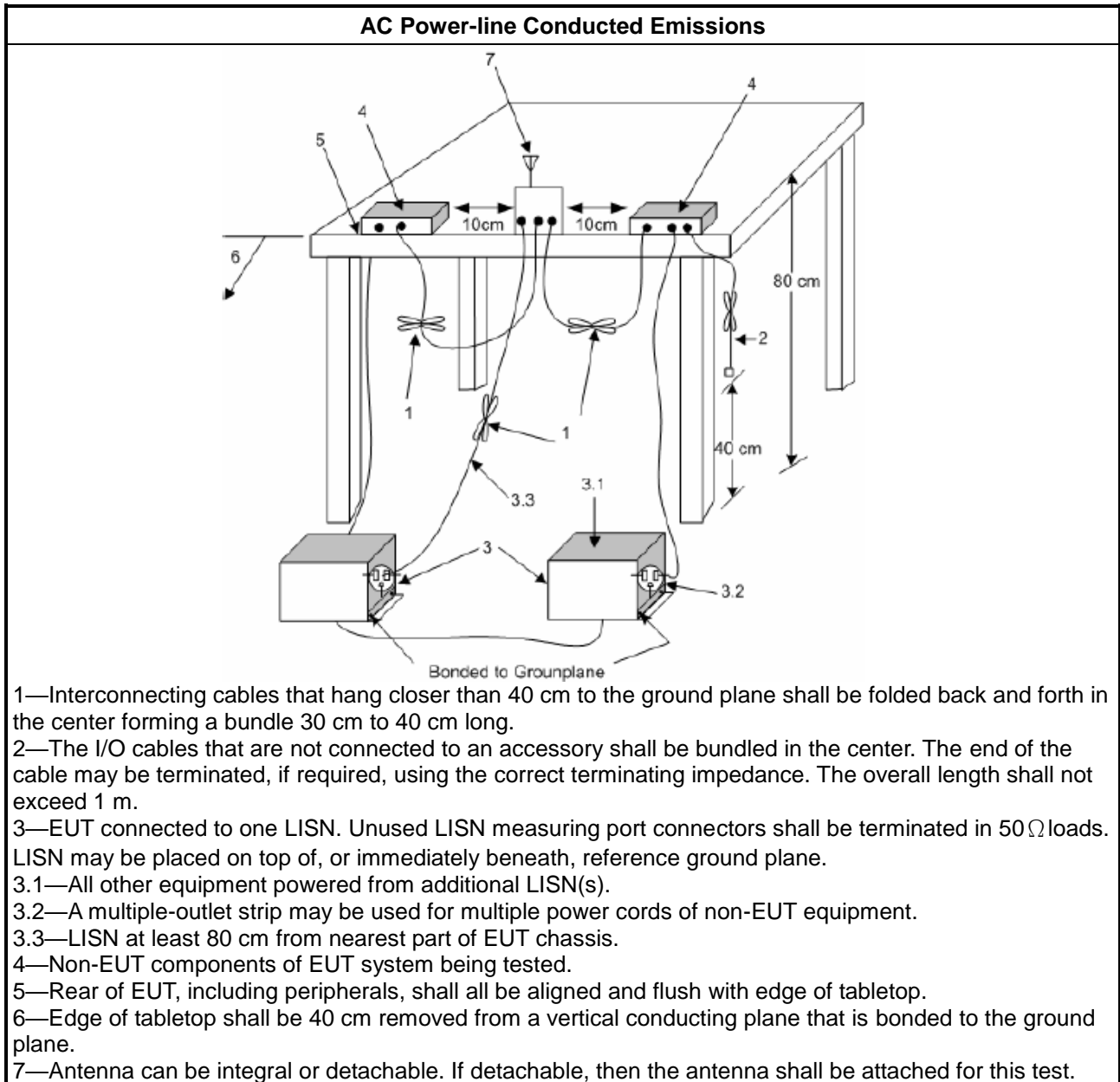
| Test Method |
|--|
| <input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions. |

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

| 6dB Bandwidth Limit |
|---|
| Systems using digital modulation techniques: |
| <ul style="list-style-type: none"> ▪ 6 dB bandwidth \geq 500 kHz. |

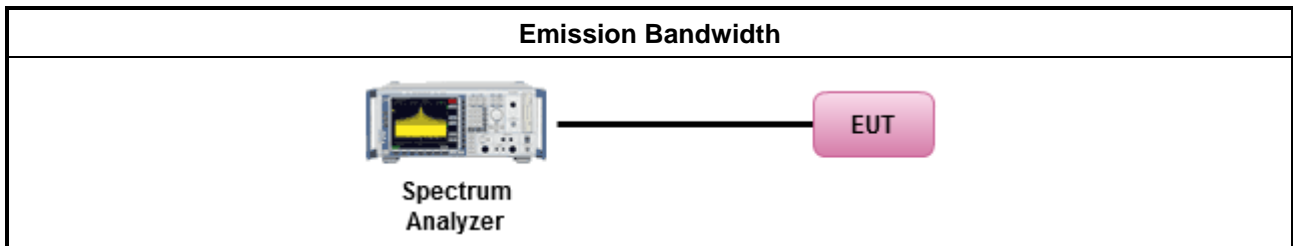
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

| Test Method |
|--|
| <ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: |
| <input checked="" type="checkbox"/> Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement. |
| <input type="checkbox"/> Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing. |
| <input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing. |

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

| Maximum Conducted Output Power Limit | |
|---|---|
| | <ul style="list-style-type: none"> ▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W) |
| | <ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm |
| | <ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm |
| | <ul style="list-style-type: none"> ▪ Smart antenna system (SAS): |
| | <ul style="list-style-type: none"> - Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm |
| | <ul style="list-style-type: none"> - Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm |
| | <ul style="list-style-type: none"> - Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm |
| e.i.r.p. Power Limit: | |
| | <ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band |
| | <ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W) |
| | <ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm |
| | <ul style="list-style-type: none"> ▪ Smart antenna system (SAS) |
| | <ul style="list-style-type: none"> - Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm |
| | <ul style="list-style-type: none"> - Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm |
| | <ul style="list-style-type: none"> - Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm |
| P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi. | |

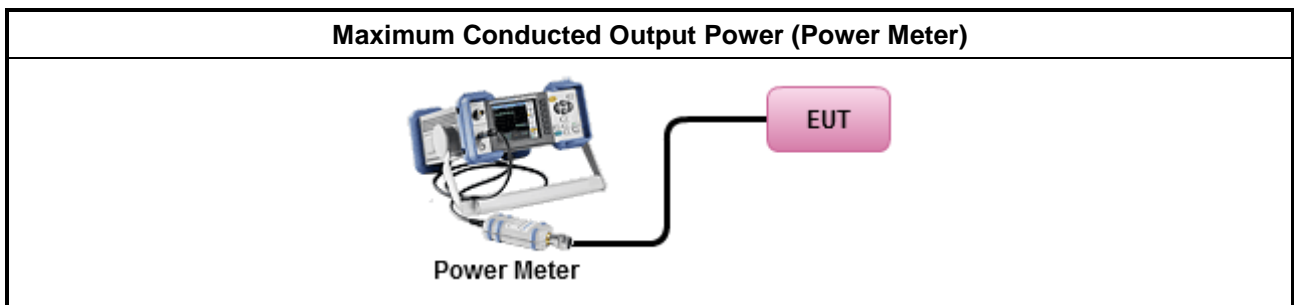
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

| Test Method | |
|--|--|
| <ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power | |
| | <input type="checkbox"/> Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method. |
| | <input type="checkbox"/> Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method. |
| | <input type="checkbox"/> Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter. |
| <ul style="list-style-type: none"> ▪ Maximum Average Conducted Output Power | |
| | <input type="checkbox"/> Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer. |
| | <input checked="" type="checkbox"/> Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter. |
| <ul style="list-style-type: none"> ▪ For conducted measurement. | |
| | <ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. |
| | <ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ |

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

| Power Spectral Density Limit |
|---|
| <ul style="list-style-type: none"> Power Spectral Density (PSD) \leq 8 dBm/3kHz |

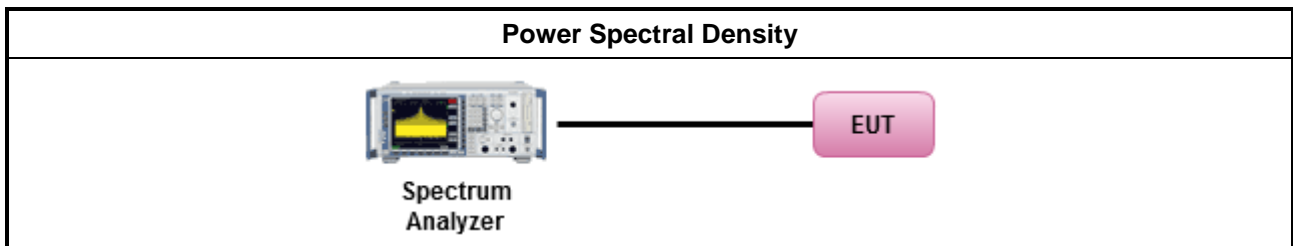
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

| Test Method |
|---|
| <ul style="list-style-type: none"> Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option). |
| <input checked="" type="checkbox"/> Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD. |
| <ul style="list-style-type: none"> For conducted measurement. <ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: <ul style="list-style-type: none"> Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace. |

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

| Un-restricted Band Emissions Limit | |
|------------------------------------|------------|
| RF output power procedure | Limit (dB) |
| Peak output power procedure | 20 |
| Average output power procedure | 30 |

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average level.

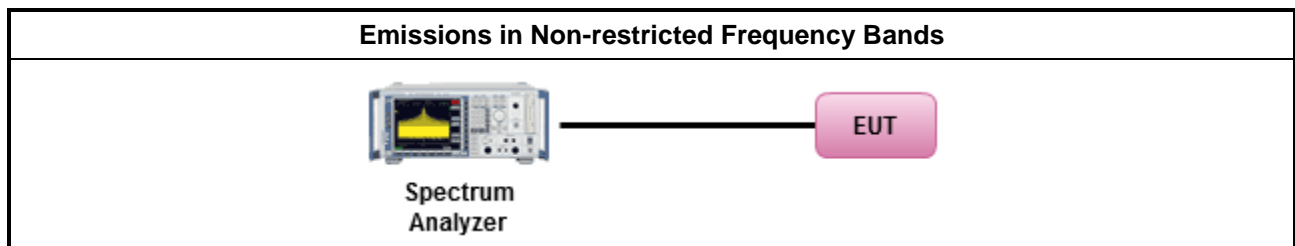
3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

| Test Method |
|--|
| <ul style="list-style-type: none"> Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands. |

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

| Restricted Band Emissions Limit | | | |
|---------------------------------|-----------------------|-------------------------|----------------------|
| Frequency Range (MHz) | Field Strength (uV/m) | Field Strength (dBuV/m) | Measure Distance (m) |
| 0.009~0.490 | 2400/F(kHz) | 48.5 - 13.8 | 300 |
| 0.490~1.705 | 24000/F(kHz) | 33.8 - 23 | 30 |
| 1.705~30.0 | 30 | 29 | 30 |
| 30~88 | 100 | 40 | 3 |
| 88~216 | 150 | 43.5 | 3 |
| 216~960 | 200 | 46 | 3 |
| Above 960 | 500 | 54 | 3 |

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.



3.6.3 Test Procedures

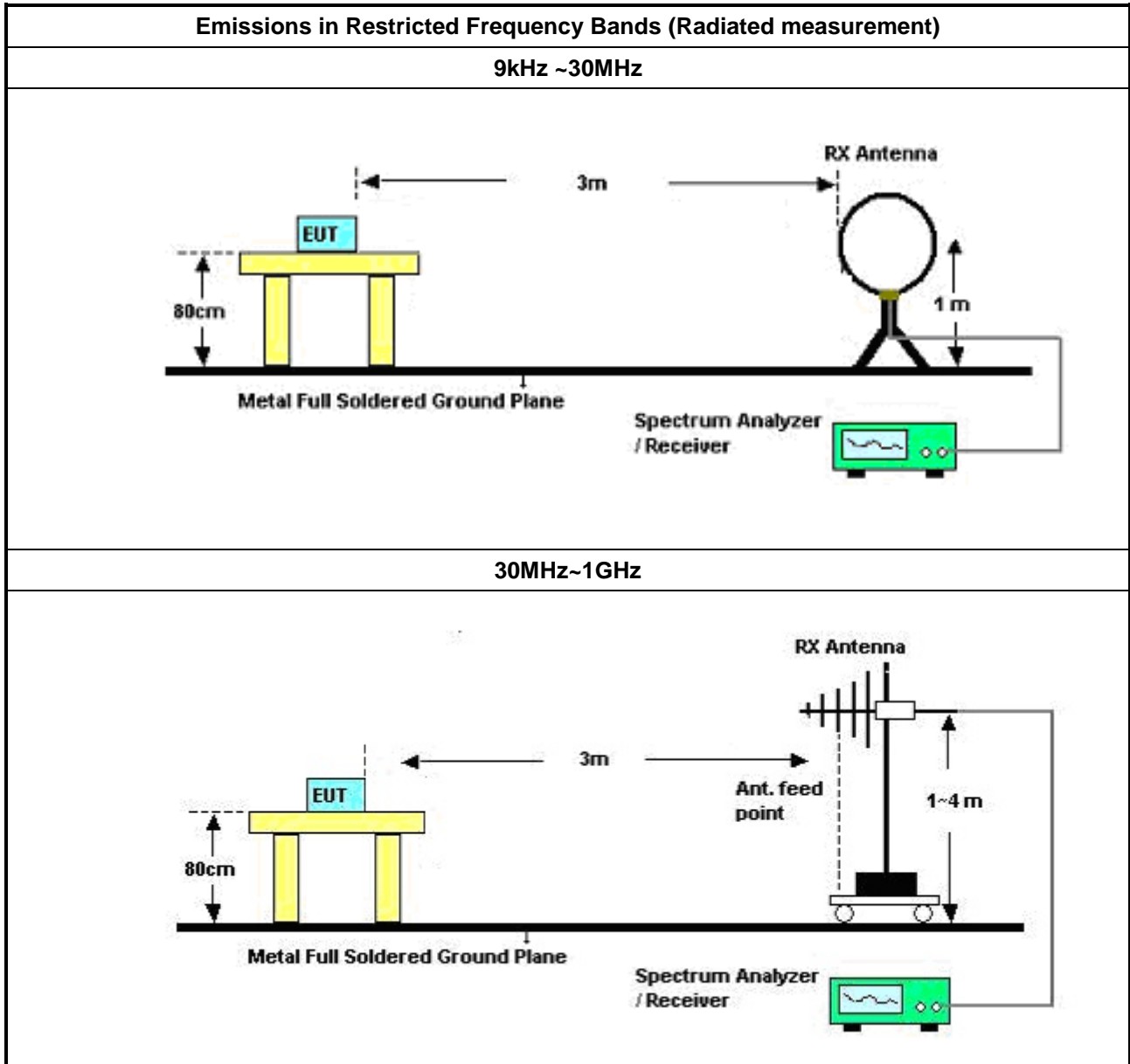
| Test Method | |
|-------------|--|
| | <ul style="list-style-type: none"> The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor]. |
| | <ul style="list-style-type: none"> Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band. |
| | <ul style="list-style-type: none"> For the transmitter unwanted emissions shall be measured using following options below: |
| | <ul style="list-style-type: none"> Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands. |
| | <ul style="list-style-type: none"> For the transmitter band-edge emissions shall be measured using following options below: |
| | <ul style="list-style-type: none"> Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below. |
| | <ul style="list-style-type: none"> Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements. |
| | <ul style="list-style-type: none"> Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels. |
| | <ul style="list-style-type: none"> Use the following spectrum analyzer settings: |
| | <ul style="list-style-type: none"> Set RBW=100 kHz for f < 1 GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold. |
| | <ul style="list-style-type: none"> Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4. |
| | <ul style="list-style-type: none"> KDB 414788 Open-Field Test Sites and Chamber Correlation Justification. |
| | <ul style="list-style-type: none"> Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field. |
| | <ul style="list-style-type: none"> Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result. |
| | <ul style="list-style-type: none"> For conducted and cabinet radiation measurement, refer as KDB 558074, clause 3 (12.7.4.2 of ANSI C63.10). |
| | <ul style="list-style-type: none"> For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: <ol style="list-style-type: none"> Measure and sum the spectra across the outputs or Measure and add 10 log(N) dB |
| | <ul style="list-style-type: none"> For KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. |

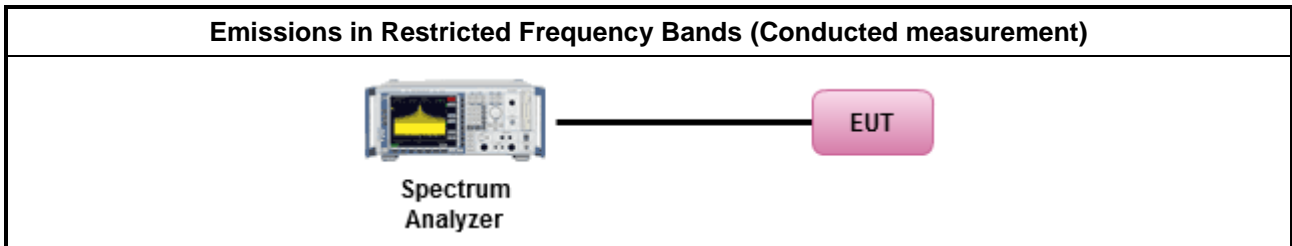
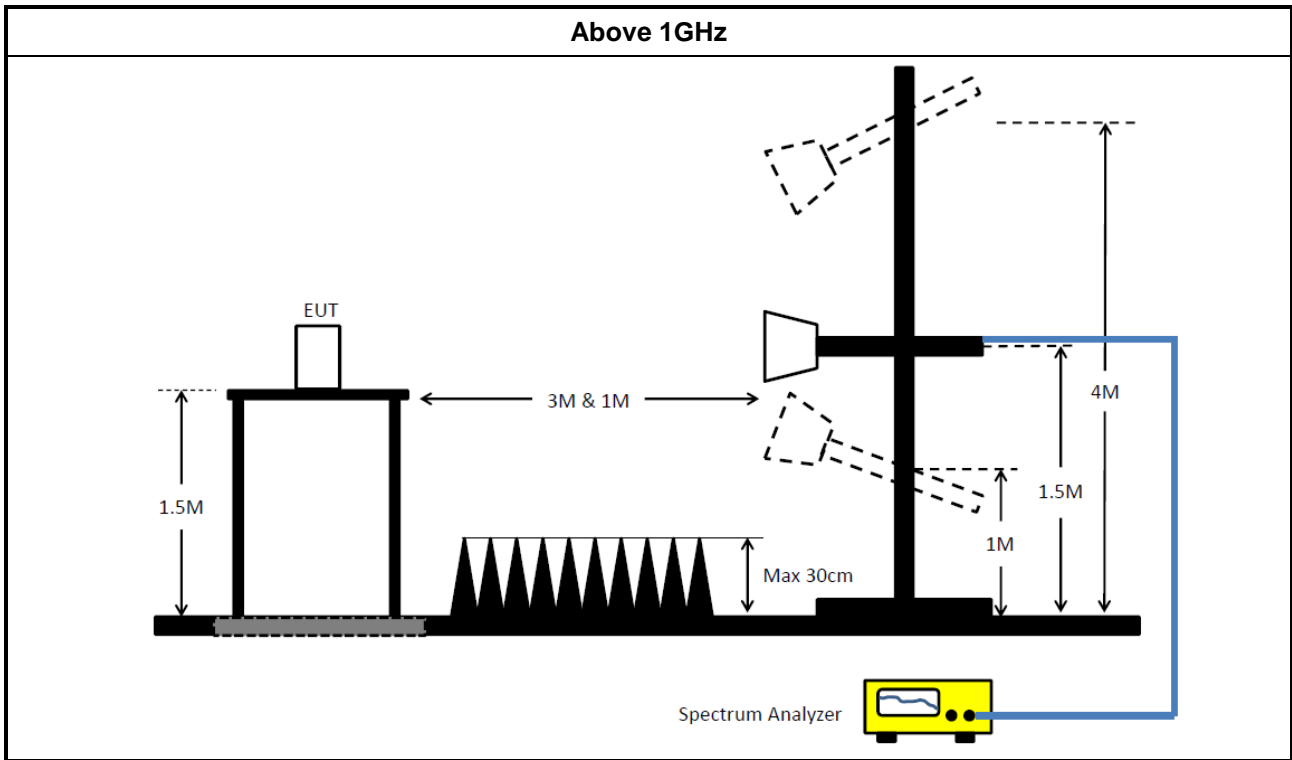
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.6.5 Test Setup





3.6.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument for AC Conduction

| Instrument | Manufacturer /Brand | Model No. | Serial No. | Spec. | Calibration Date | Calibration Due Date |
|--------------------------------|---------------------|-------------|---------------|---------------|------------------|----------------------|
| EMI Test Receiver | R&S | ESR | 102052 | 9kHz ~ 3.6GHz | 19/Apr/2021 | 18/Apr/2022 |
| LISN | R&S | ENV216 | 101295 | 9kHz ~ 30MHz | 11/Nov/2020 | 10/Nov/2021 |
| RF Cable 5m | TITAN | TITAN | CO04-cable-01 | 0.1MHz~200MHz | 03/Mar/2021 | 02/Mar/2022 |
| Impuls Begrenzer Pulse Limiter | SCHWARZBECK | VTSD 9561-F | 9561-F041 | 9kHz ~ 30MHz | 21/Sep/2020 | 20/Sep/2021 |

Instrument for Conducted Test

| Instrument | Manufacturer /Brand | Model No. | Serial No. | Spec. | Calibration Date | Calibration Due Date |
|--------------------------|---------------------|-----------|------------|--------------|------------------|----------------------|
| Signal Analyzer | R&S | FSV 40 | 101013 | 10Hz~40GHz | 30/Mar/2021 | 29/Mar/2022 |
| SMB100A Signal Generator | R&S | SMB100A03 | 181147 | 100kHz~40GHz | 20/Oct/2020 | 19/Oct/2021 |
| Pulse Sensor | Anritsu | MA2411B | 0917017 | 300MHz~40GHz | 23/Feb/2021 | 22/Feb/2022 |
| Power Meter | Anritsu | ML2495A | 0949003 | 300MHz~40GHz | 23/Feb/2021 | 22/Feb/2022 |



Instrument for Radiated Test

| Instrument | Manufacturer /Brand | Model No. | Serial No. | Spec. | Calibration Date | Calibration Due Date |
|----------------------------------|---------------------|------------------------|---------------------------|------------------|------------------|----------------------|
| 3m Semi Anechoic Chamber | SIDT FRANKONIA | SAC-3M | 03CH03-HY | 30MHz~1GHz 3m | 03/Aug/2021 | 02/Aug/2022 |
| 3m Semi Anechoic Chamber | SIDT FRANKONIA | SAC-3M | 03CH03-HY | 1GHz~18GHz 3m | 03/Aug/2021 | 02/Aug/2022 |
| Signal Analyzer | R&S | FSV 40 | 101515 | 10Hz~40GHz | 26/Mar/2021 | 25/Mar/2022 |
| Amplifier | HP | 8447D | 2944A08033 | 10kHz~1.3GHz | 13/Apr/2021 | 12/Apr/2022 |
| Microwave System Preamplifier | KEYSIGHT | 83017A | MY53270196 | 1GHz~26.5GHz | 06/Oct/2020 | 05/Oct/2021 |
| Bilog Antenna & 5dB Attenuator | SCHAFFNER / MTJ | CBL 6112B / MTJ6102-05 | 2723 / 2 | 30MHz~1GHz | 06/Sep/2020 | 05/Sep/2021 |
| Double Ridged Guide Horn Antenna | SCHWARZBECK | BBHA 9120 D | BBHA 9120 D 1531 | 1GHz~18GHz | 24/Mar/2021 | 23/Mar/2022 |
| RF Cable-R03m | Jye Bao | RG142 | CB021 | 9kHz~30MHz | 16/Jun/2021 | 15/Jun/2022 |
| RF Cable-R03m | Jye Bao | RG142 | MY37335/4+CB021-1+CB021-2 | 30MHz~1GHz | 17/Mar/2021 | 16/Mar/2022 |
| RF CABLE 5+6m | HUBER+SUHNER | SUOFLEX 104 | SN MY38596/4+SN 804300/4 | 1GHz~40GHz | 28/Jul/2021 | 27/Jul/2022 |
| Broadband Horn Antenna | SCHWARZBECK | BBHA 9170 | BBHA 9170221 | 15GHz~40GHz | 11/Mar/2021 | 10/Mar/2022 |
| Microwave Premplifier | EMC INSTRUMENTS | EM18G40G | 060604 | 18GHz ~ 40GHz | 09/Mar/2021 | 08/Mar/2022 |
| EMI Test Receiver | R&S | ESR3 | 102052 | 9kHz~3.6GHz | 19/Apr/2021 | 18/Apr/2022 |
| Loop Antenna | TESEQ | HLA 6120 | 31244 | 9kHz~30MHz | 16/Mar/2021 | 15/Mar/2022 |

Instrument for Radiated Emission Co-location

| Instrument | Manufacturer /Brand | Model No. | Serial No. | Spec. | Calibration Date | Calibration Due Date |
|----------------------------------|---------------------|-------------|--------------------------|------------------|------------------|----------------------|
| 3m Semi Anechoic Chamber | SIDT FRANKONIA | SAC-3M | 03CH03-HY | 1GHz~18GHz 3m | 03/Aug/2021 | 02/Aug/2022 |
| Signal Analyzer | R&S | FSV40 | 101515 | 9kHz~40GHz | 26/Mar/2021 | 25/Mar/2022 |
| Microwave Preamplifier | Agilent | 8449B | 3008A02326 | 1GHz~26.5GHz | 15/Jul/2021 | 14/Jul/2022 |
| Double Ridged Guide Horn Antenna | SCHWARZBECK | BBHA 9120 D | BBHA 9120 D 1531 | 1GHz~18GHz | 24/Mar/2021 | 23/Mar/2022 |
| RF CABLE 5+6m | HUBER+SUHNER | SUOFLEX 104 | SN MY38596/4+SN 804300/4 | 1GHz~40GHz | 28/Jul/2021 | 27/Jul/2022 |
| Broadband Horn Antenna | SCHWARZBECK | BBHA 9170 | BBHA 9170221 | 15GHz~40GHz | 11/Mar/2021 | 10/Mar/2022 |
| Microwave Premplifier | EMC INSTRUMENTS | EM18G40G | 060604 | 18GHz ~ 40GHz | 09/Mar/2021 | 08/Mar/2022 |



**Conducted Emissions at Powerline_
Non-Beamforming_ Scanning Radio_ 2T1S**

Appendix A.1

Summary

| Mode | Result | Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Condition |
|--------|--------|------|-----------|--------------|--------------|-------------|-----------|
| Mode 1 | Pass | QP | 151.807k | 47.06 | 65.90 | -18.84 | Neutral |



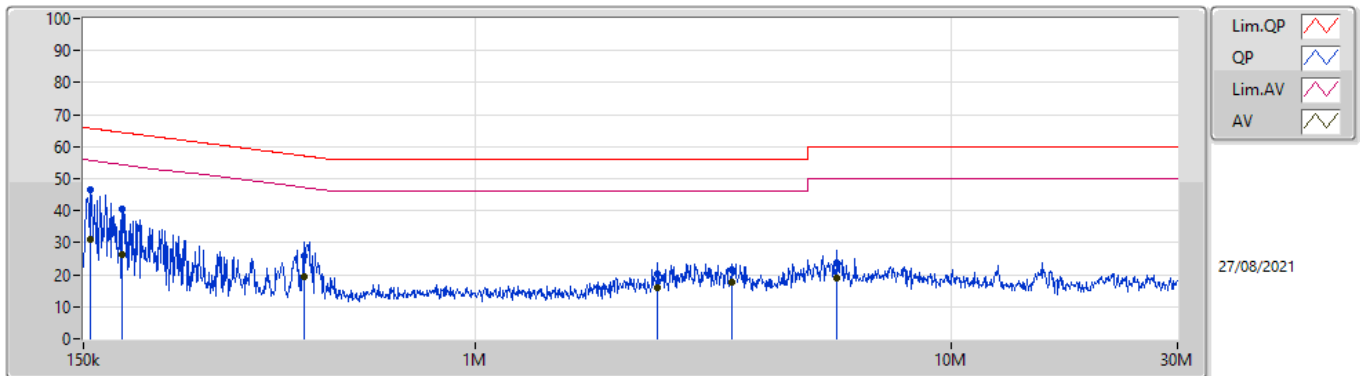
**Conducted Emissions at Powerline
Non-Beamforming Scanning Radio 2T1S**

Appendix A.1

Result

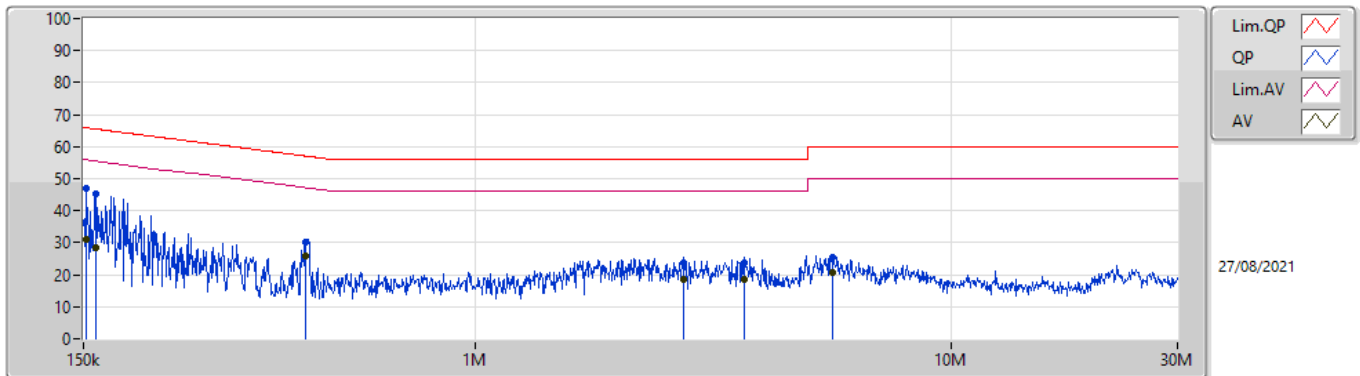
| Mode | Result | Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Condition | Comments |
|--------|--------|------|-----------|--------------|--------------|-------------|-----------|----------|
| Mode 1 | Pass | QP | 154.868k | 46.40 | 65.73 | -19.33 | Line | - |
| Mode 1 | Pass | AV | 154.868k | 31.18 | 55.73 | -24.55 | Line | - |
| Mode 1 | Pass | QP | 180.957k | 40.51 | 64.43 | -23.92 | Line | - |
| Mode 1 | Pass | AV | 180.957k | 26.30 | 54.43 | -28.13 | Line | - |
| Mode 1 | Pass | QP | 435.504k | 25.87 | 57.15 | -31.28 | Line | - |
| Mode 1 | Pass | AV | 435.504k | 19.39 | 47.15 | -27.76 | Line | - |
| Mode 1 | Pass | QP | 2.424M | 20.43 | 56.00 | -35.57 | Line | - |
| Mode 1 | Pass | AV | 2.424M | 16.16 | 46.00 | -29.84 | Line | - |
| Mode 1 | Pass | QP | 3.472M | 21.46 | 56.00 | -34.54 | Line | - |
| Mode 1 | Pass | AV | 3.472M | 17.61 | 46.00 | -28.39 | Line | - |
| Mode 1 | Pass | QP | 5.764M | 23.91 | 60.00 | -36.09 | Line | - |
| Mode 1 | Pass | AV | 5.764M | 18.90 | 50.00 | -31.10 | Line | - |
| Mode 1 | Pass | QP | 151.807k | 47.06 | 65.90 | -18.84 | Neutral | - |
| Mode 1 | Pass | AV | 151.807k | 31.05 | 55.90 | -24.85 | Neutral | - |
| Mode 1 | Pass | QP | 159.256k | 45.20 | 65.50 | -20.30 | Neutral | - |
| Mode 1 | Pass | AV | 159.256k | 28.27 | 55.50 | -27.23 | Neutral | - |
| Mode 1 | Pass | QP | 438.995k | 30.04 | 57.09 | -27.05 | Neutral | - |
| Mode 1 | Pass | AV | 438.995k | 26.03 | 47.09 | -21.06 | Neutral | - |
| Mode 1 | Pass | QP | 2.743M | 23.75 | 56.00 | -32.25 | Neutral | - |
| Mode 1 | Pass | AV | 2.743M | 18.71 | 46.00 | -27.29 | Neutral | - |
| Mode 1 | Pass | QP | 3.671M | 23.64 | 56.00 | -32.36 | Neutral | - |
| Mode 1 | Pass | AV | 3.671M | 18.72 | 46.00 | -27.28 | Neutral | - |
| Mode 1 | Pass | QP | 5.65M | 25.48 | 60.00 | -34.52 | Neutral | - |
| Mode 1 | Pass | AV | 5.65M | 20.52 | 50.00 | -29.48 | Neutral | - |

Conducted Emissions at Powerline_Mode 1



| Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Factor (dB) | Condition | Comment | Raw (dBuV) | LISN (dB) | CL (dB) | AT (dB) | | | |
|------|--------------|-----------------|-----------------|----------------|----------------|-----------|---------|---------------|--------------|------------|------------|--|--|--|
| QP | 154.868k | 46.40 | 65.73 | -19.33 | 19.63 | Line | - | 26.77 | 9.69 | 0.04 | 9.90 | | | |
| AV | 154.868k | 31.18 | 55.73 | -24.55 | 19.63 | Line | - | 11.55 | 9.69 | 0.04 | 9.90 | | | |
| QP | 180.957k | 40.51 | 64.43 | -23.92 | 19.62 | Line | - | 20.89 | 9.68 | 0.04 | 9.90 | | | |
| AV | 180.957k | 26.30 | 54.43 | -28.13 | 19.62 | Line | - | 6.68 | 9.68 | 0.04 | 9.90 | | | |
| QP | 435.504k | 25.87 | 57.15 | -31.28 | 19.62 | Line | - | 6.25 | 9.67 | 0.06 | 9.89 | | | |
| AV | 435.504k | 19.39 | 47.15 | -27.76 | 19.62 | Line | - | -0.23 | 9.67 | 0.06 | 9.89 | | | |
| QP | 2.424M | 20.43 | 56.00 | -35.57 | 19.62 | Line | - | 0.81 | 9.68 | 0.11 | 9.83 | | | |
| AV | 2.424M | 16.16 | 46.00 | -29.84 | 19.62 | Line | - | -3.46 | 9.68 | 0.11 | 9.83 | | | |
| QP | 3.472M | 21.46 | 56.00 | -34.54 | 19.70 | Line | - | 1.76 | 9.69 | 0.13 | 9.88 | | | |
| AV | 3.472M | 17.61 | 46.00 | -28.39 | 19.70 | Line | - | -2.09 | 9.69 | 0.13 | 9.88 | | | |
| QP | 5.764M | 23.91 | 60.00 | -36.09 | 19.76 | Line | - | 4.15 | 9.70 | 0.16 | 9.90 | | | |
| AV | 5.764M | 18.90 | 50.00 | -31.10 | 19.76 | Line | - | -0.86 | 9.70 | 0.16 | 9.90 | | | |

Conducted Emissions at Powerline_Mode 1



| Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Factor (dB) | Condition | Comment | Raw (dBuV) | LISN (dB) | CL (dB) | AT (dB) | | | |
|------|--------------|-----------------|-----------------|----------------|----------------|-----------|---------|---------------|--------------|------------|------------|--|--|--|
| QP | 151.807k | 47.06 | 65.90 | -18.84 | 19.63 | Neutral | - | 27.43 | 9.69 | 0.04 | 9.90 | | | |
| AV | 151.807k | 31.05 | 55.90 | -24.85 | 19.63 | Neutral | - | 11.42 | 9.69 | 0.04 | 9.90 | | | |
| QP | 159.256k | 45.20 | 65.50 | -20.30 | 19.63 | Neutral | - | 25.57 | 9.69 | 0.04 | 9.90 | | | |
| AV | 159.256k | 28.27 | 55.50 | -27.23 | 19.63 | Neutral | - | 8.64 | 9.69 | 0.04 | 9.90 | | | |
| QP | 438.995k | 30.04 | 57.09 | -27.05 | 19.62 | Neutral | - | 10.42 | 9.67 | 0.06 | 9.89 | | | |
| AV | 438.995k | 26.03 | 47.09 | -21.06 | 19.62 | Neutral | - | 6.41 | 9.67 | 0.06 | 9.89 | | | |
| QP | 2.743M | 23.75 | 56.00 | -32.25 | 19.65 | Neutral | - | 4.10 | 9.68 | 0.12 | 9.85 | | | |
| AV | 2.743M | 18.71 | 46.00 | -27.29 | 19.65 | Neutral | - | -0.94 | 9.68 | 0.12 | 9.85 | | | |
| QP | 3.671M | 23.64 | 56.00 | -32.36 | 19.72 | Neutral | - | 3.92 | 9.69 | 0.14 | 9.89 | | | |
| AV | 3.671M | 18.72 | 46.00 | -27.28 | 19.72 | Neutral | - | -1.00 | 9.69 | 0.14 | 9.89 | | | |
| QP | 5.65M | 25.48 | 60.00 | -34.52 | 19.77 | Neutral | - | 5.71 | 9.71 | 0.16 | 9.90 | | | |
| AV | 5.65M | 20.52 | 50.00 | -29.48 | 19.77 | Neutral | - | 0.75 | 9.71 | 0.16 | 9.90 | | | |



**Conducted Emissions at Powerline_
Non-Beamforming_Serving Radio Primary_4T1S**

Appendix A.2

Summary

| Mode | Result | Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Condition |
|--------|--------|------|-----------|--------------|--------------|-------------|-----------|
| Mode 1 | Pass | QP | 154.868k | 46.28 | 65.73 | -19.45 | Neutral |



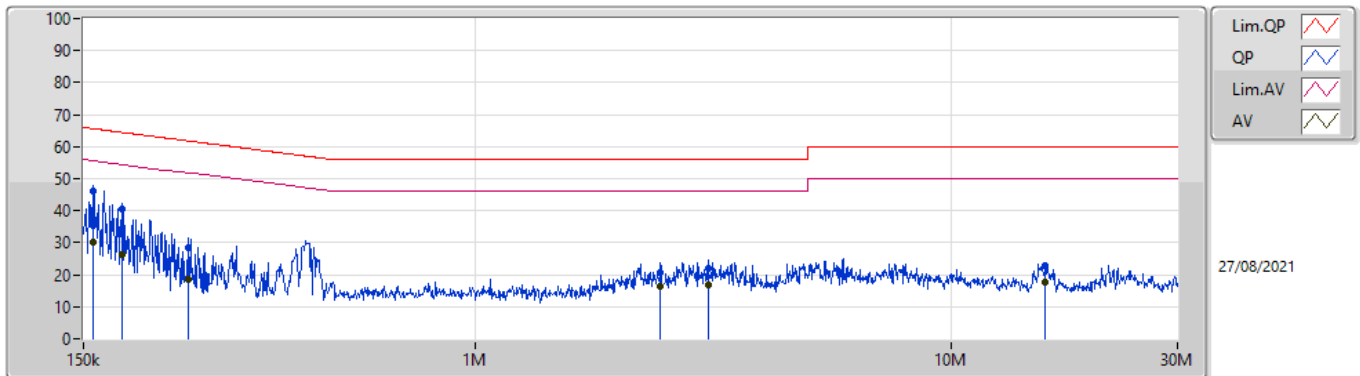
**Conducted Emissions at Powerline
Non-Beamforming_Serving Radio Primary_4T1S**

Appendix A.2

Result

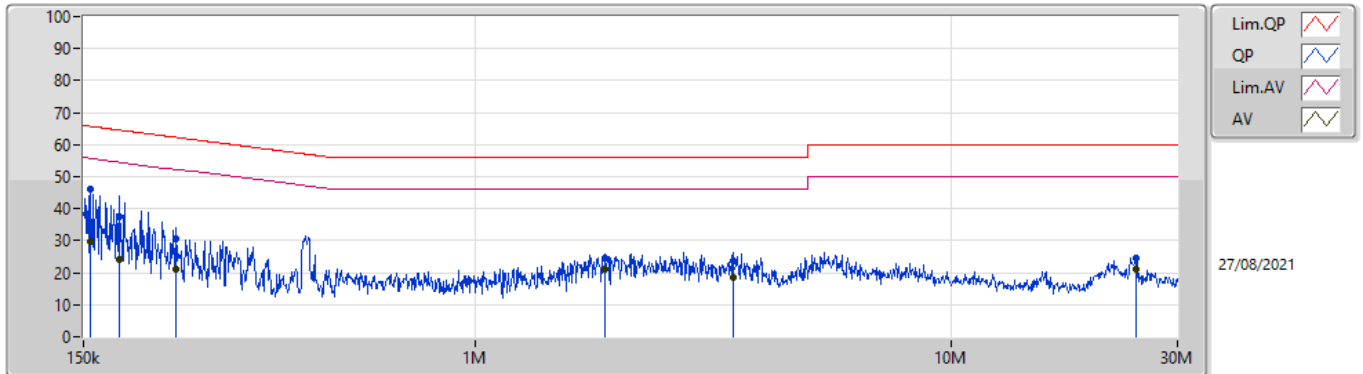
| Mode | Result | Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Condition | Comments |
|--------|--------|------|-----------|--------------|--------------|-------------|-----------|----------|
| Mode 1 | Pass | QP | 156.734k | 46.07 | 65.64 | -19.57 | Line | - |
| Mode 1 | Pass | AV | 156.734k | 30.15 | 55.64 | -25.49 | Line | - |
| Mode 1 | Pass | QP | 180.957k | 40.47 | 64.43 | -23.96 | Line | - |
| Mode 1 | Pass | AV | 180.957k | 26.38 | 54.43 | -28.05 | Line | - |
| Mode 1 | Pass | QP | 249.042k | 28.47 | 61.79 | -33.32 | Line | - |
| Mode 1 | Pass | AV | 249.042k | 18.62 | 51.79 | -33.17 | Line | - |
| Mode 1 | Pass | QP | 2.453M | 20.50 | 56.00 | -35.50 | Line | - |
| Mode 1 | Pass | AV | 2.453M | 16.51 | 46.00 | -29.49 | Line | - |
| Mode 1 | Pass | QP | 3.092M | 21.90 | 56.00 | -34.10 | Line | - |
| Mode 1 | Pass | AV | 3.092M | 16.83 | 46.00 | -29.17 | Line | - |
| Mode 1 | Pass | QP | 15.825M | 23.00 | 60.00 | -37.00 | Line | - |
| Mode 1 | Pass | AV | 15.825M | 17.70 | 50.00 | -32.30 | Line | - |
| Mode 1 | Pass | QP | 154.868k | 46.28 | 65.73 | -19.45 | Neutral | - |
| Mode 1 | Pass | AV | 154.868k | 29.64 | 55.73 | -26.09 | Neutral | - |
| Mode 1 | Pass | QP | 178.091k | 37.47 | 64.57 | -27.10 | Neutral | - |
| Mode 1 | Pass | AV | 178.091k | 24.22 | 54.57 | -30.35 | Neutral | - |
| Mode 1 | Pass | QP | 234.567k | 30.62 | 62.29 | -31.67 | Neutral | - |
| Mode 1 | Pass | AV | 234.567k | 21.15 | 52.29 | -31.14 | Neutral | - |
| Mode 1 | Pass | QP | 1.877M | 24.78 | 56.00 | -31.22 | Neutral | - |
| Mode 1 | Pass | AV | 1.877M | 21.08 | 46.00 | -24.92 | Neutral | - |
| Mode 1 | Pass | QP | 3.485M | 23.71 | 56.00 | -32.29 | Neutral | - |
| Mode 1 | Pass | AV | 3.485M | 18.72 | 46.00 | -27.28 | Neutral | - |
| Mode 1 | Pass | QP | 24.549M | 24.74 | 60.00 | -35.26 | Neutral | - |
| Mode 1 | Pass | AV | 24.549M | 21.29 | 50.00 | -28.71 | Neutral | - |

Conducted Emissions at Powerline_Mode 1



| Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Factor (dB) | Condition | Comment | Raw (dBuV) | LISN (dB) | CL (dB) | AT (dB) |
|------|--------------|-----------------|-----------------|----------------|----------------|-----------|---------|---------------|--------------|------------|------------|
| QP | 156.734k | 46.07 | 65.64 | -19.57 | 19.63 | Line | - | 26.44 | 9.69 | 0.04 | 9.90 |
| AV | 156.734k | 30.15 | 55.64 | -25.49 | 19.63 | Line | - | 10.52 | 9.69 | 0.04 | 9.90 |
| QP | 180.957k | 40.47 | 64.43 | -23.96 | 19.62 | Line | - | 20.85 | 9.68 | 0.04 | 9.90 |
| AV | 180.957k | 26.38 | 54.43 | -28.05 | 19.62 | Line | - | 6.76 | 9.68 | 0.04 | 9.90 |
| QP | 249.042k | 28.47 | 61.79 | -33.32 | 19.63 | Line | - | 8.84 | 9.68 | 0.05 | 9.90 |
| AV | 249.042k | 18.62 | 51.79 | -33.17 | 19.63 | Line | - | -1.01 | 9.68 | 0.05 | 9.90 |
| QP | 2.453M | 20.50 | 56.00 | -35.50 | 19.62 | Line | - | 0.88 | 9.68 | 0.11 | 9.83 |
| AV | 2.453M | 16.51 | 46.00 | -29.49 | 19.62 | Line | - | -3.11 | 9.68 | 0.11 | 9.83 |
| QP | 3.092M | 21.90 | 56.00 | -34.10 | 19.68 | Line | - | 2.22 | 9.69 | 0.13 | 9.86 |
| AV | 3.092M | 16.83 | 46.00 | -29.17 | 19.68 | Line | - | -2.85 | 9.69 | 0.13 | 9.86 |
| QP | 15.825M | 23.00 | 60.00 | -37.00 | 19.85 | Line | - | 3.15 | 9.69 | 0.26 | 9.90 |
| AV | 15.825M | 17.70 | 50.00 | -32.30 | 19.85 | Line | - | -2.15 | 9.69 | 0.26 | 9.90 |

Conducted Emissions at Powerline_Mode 1



| Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Factor (dB) | Condition | Comment | Raw (dBuV) | LISN (dB) | CL (dB) | AT (dB) | | | |
|------|--------------|-----------------|-----------------|----------------|----------------|-----------|---------|---------------|--------------|------------|------------|--|--|--|
| QP | 154.868k | 46.28 | 65.73 | -19.45 | 19.63 | Neutral | - | 26.65 | 9.69 | 0.04 | 9.90 | | | |
| AV | 154.868k | 29.64 | 55.73 | -26.09 | 19.63 | Neutral | - | 10.01 | 9.69 | 0.04 | 9.90 | | | |
| QP | 178.091k | 37.47 | 64.57 | -27.10 | 19.62 | Neutral | - | 17.85 | 9.68 | 0.04 | 9.90 | | | |
| AV | 178.091k | 24.22 | 54.57 | -30.35 | 19.62 | Neutral | - | 4.60 | 9.68 | 0.04 | 9.90 | | | |
| QP | 234.567k | 30.62 | 62.29 | -31.67 | 19.62 | Neutral | - | 11.00 | 9.68 | 0.04 | 9.90 | | | |
| AV | 234.567k | 21.15 | 52.29 | -31.14 | 19.62 | Neutral | - | 1.53 | 9.68 | 0.04 | 9.90 | | | |
| QP | 1.877M | 24.78 | 56.00 | -31.22 | 19.58 | Neutral | - | 5.20 | 9.68 | 0.10 | 9.80 | | | |
| AV | 1.877M | 21.08 | 46.00 | -24.92 | 19.58 | Neutral | - | 1.50 | 9.68 | 0.10 | 9.80 | | | |
| QP | 3.485M | 23.71 | 56.00 | -32.29 | 19.70 | Neutral | - | 4.01 | 9.69 | 0.13 | 9.88 | | | |
| AV | 3.485M | 18.72 | 46.00 | -27.28 | 19.70 | Neutral | - | -0.98 | 9.69 | 0.13 | 9.88 | | | |
| QP | 24.549M | 24.74 | 60.00 | -35.26 | 19.94 | Neutral | - | 4.80 | 9.72 | 0.32 | 9.90 | | | |
| AV | 24.549M | 21.29 | 50.00 | -28.71 | 19.94 | Neutral | - | 1.35 | 9.72 | 0.32 | 9.90 | | | |



Summary

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|--------------------------------|---------------|--------------|----------|---------------|--------------|
| 2.4-2.4835GHz | - | - | - | - | - |
| 802.11b_Nss1,(1Mbps)_1TX | 8.075M | 13.218M | 13M2G1D | 8.05M | 12.894M |
| 802.11g_Nss1,(6Mbps)_1TX | 16.325M | 16.567M | 16M6D1D | 16.275M | 16.467M |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | 18.875M | 18.966M | 19M0D1D | 18.75M | 18.916M |

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



Result

| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) |
|--------------------------------|--------|------------|------------------|-----------------|
| 802.11b_Nss1,(1Mbps)_1TX | - | - | - | - |
| 2412MHz | Pass | 500k | 8.05M | 13.218M |
| 2437MHz | Pass | 500k | 8.075M | 13.018M |
| 2462MHz | Pass | 500k | 8.075M | 12.894M |
| 802.11g_Nss1,(6Mbps)_1TX | - | - | - | - |
| 2412MHz | Pass | 500k | 16.325M | 16.567M |
| 2437MHz | Pass | 500k | 16.325M | 16.492M |
| 2462MHz | Pass | 500k | 16.275M | 16.467M |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | - | - | - | - |
| 2412MHz | Pass | 500k | 18.85M | 18.966M |
| 2437MHz | Pass | 500k | 18.875M | 18.941M |
| 2462MHz | Pass | 500k | 18.75M | 18.916M |

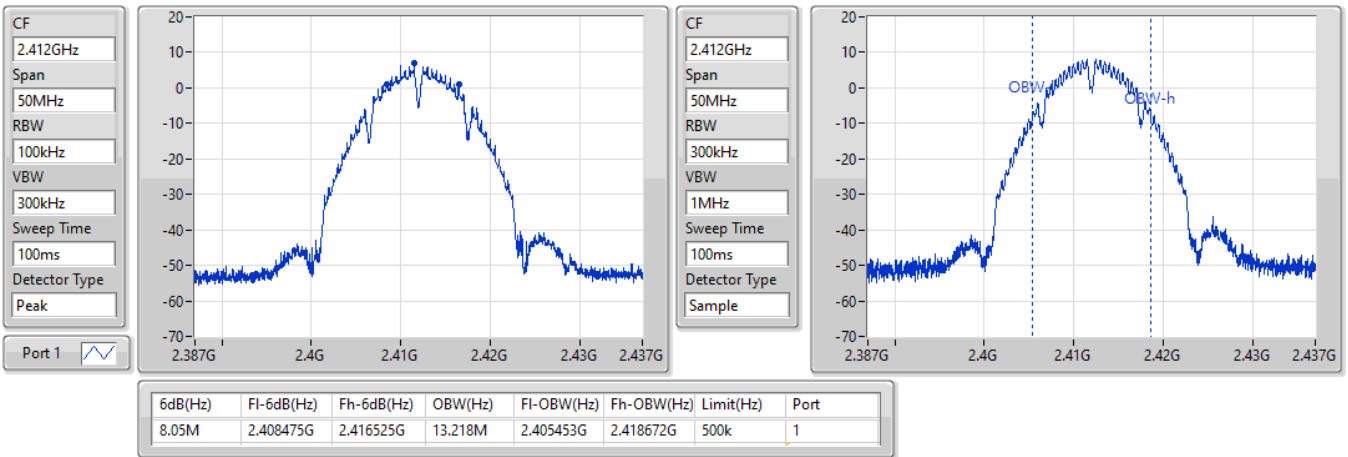
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_1TX

EBW

2412MHz

12/08/2021

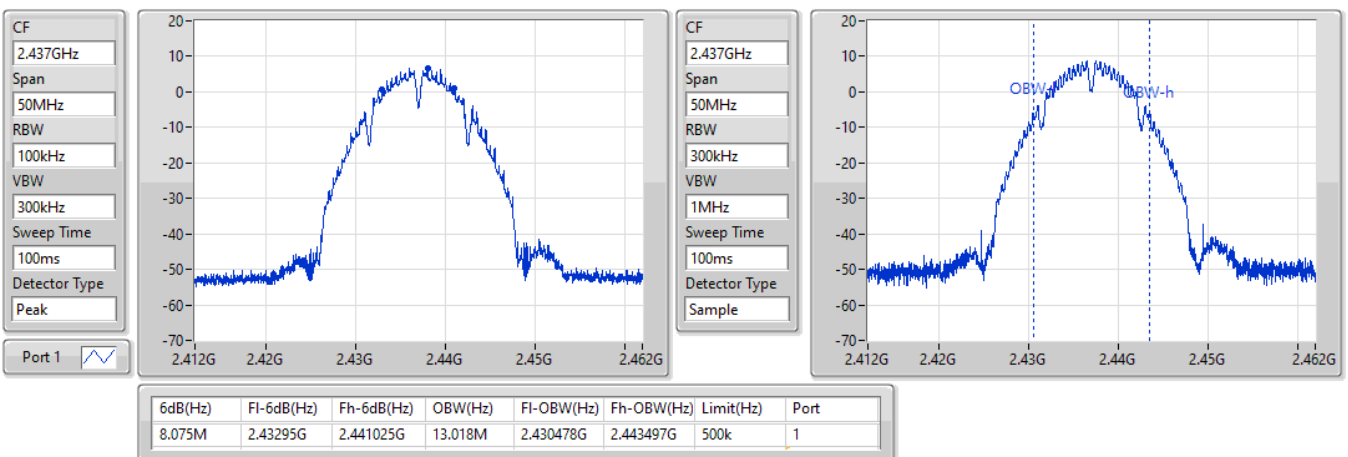


802.11b_Nss1,(1Mbps)_1TX

EBW

2437MHz

12/08/2021

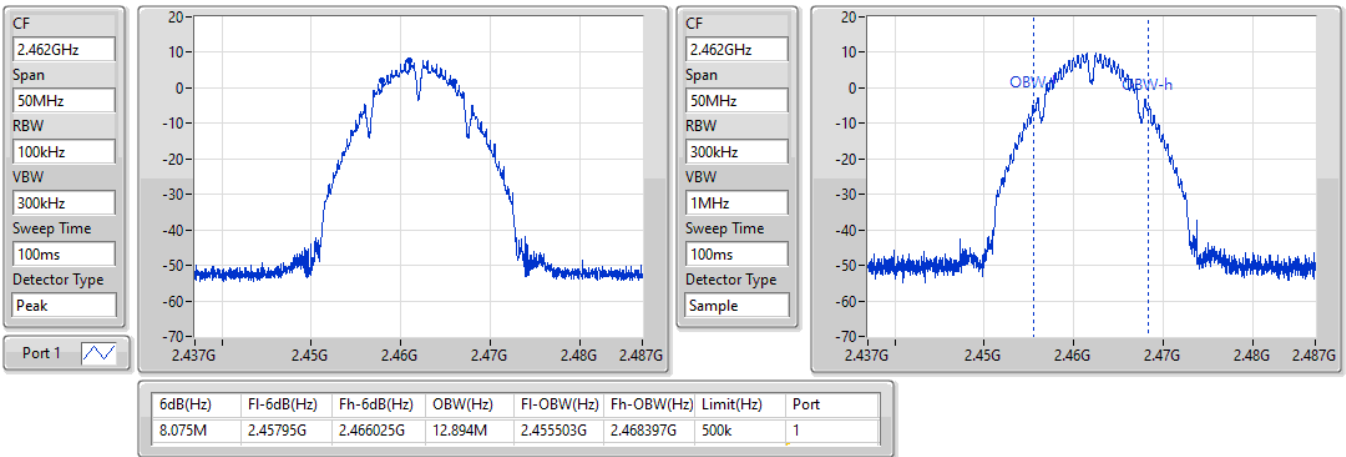


802.11b_Nss1,(1Mbps)_1TX

EBW

2462MHz

12/08/2021

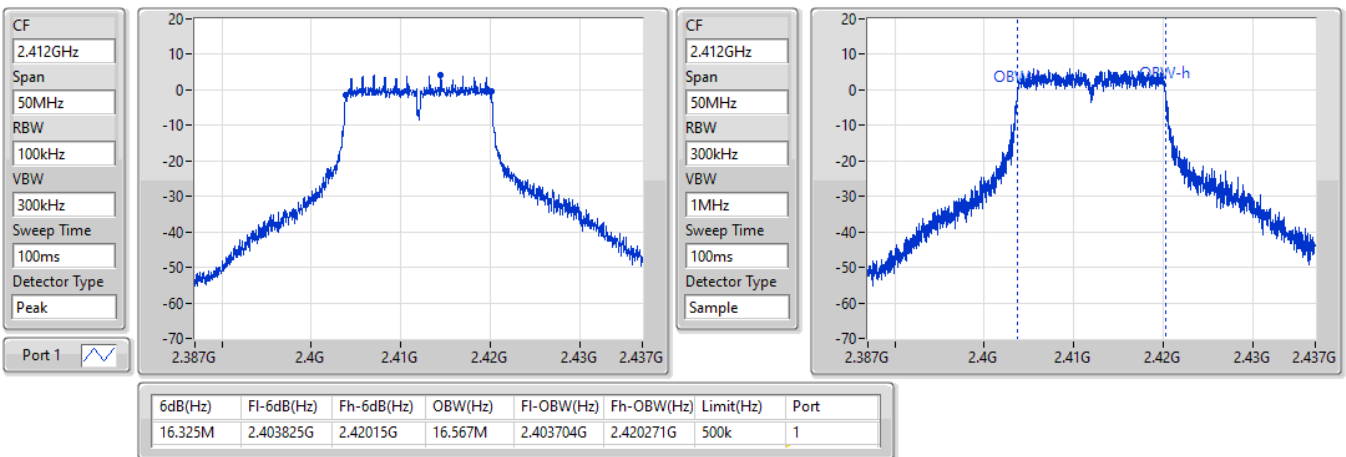


802.11g_Nss1,(6Mbps)_1TX

EBW

2412MHz

12/08/2021

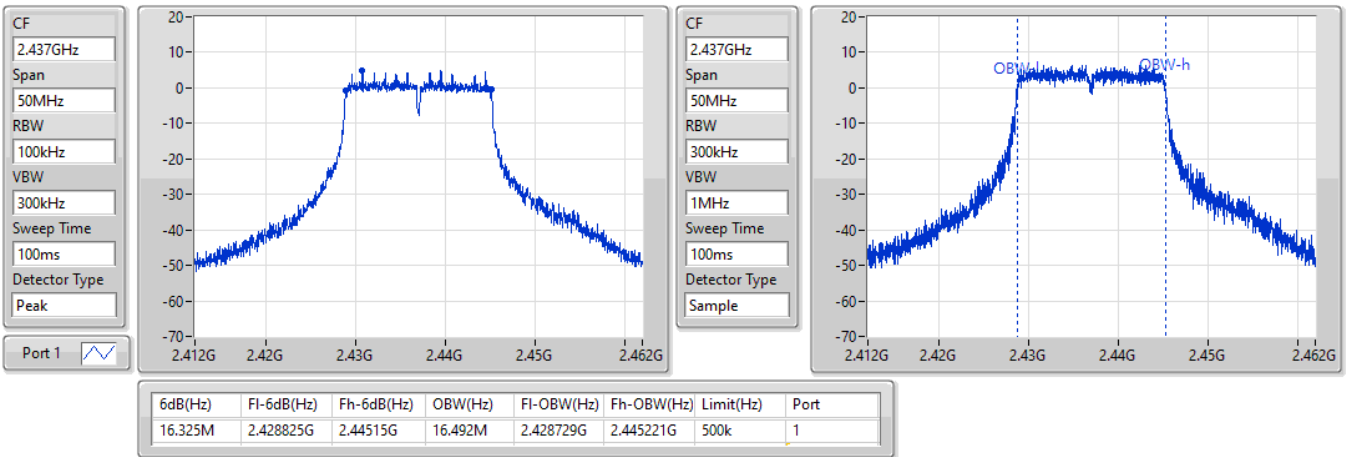


802.11g_Nss1,(6Mbps)_1TX

EBW

2437MHz

12/08/2021

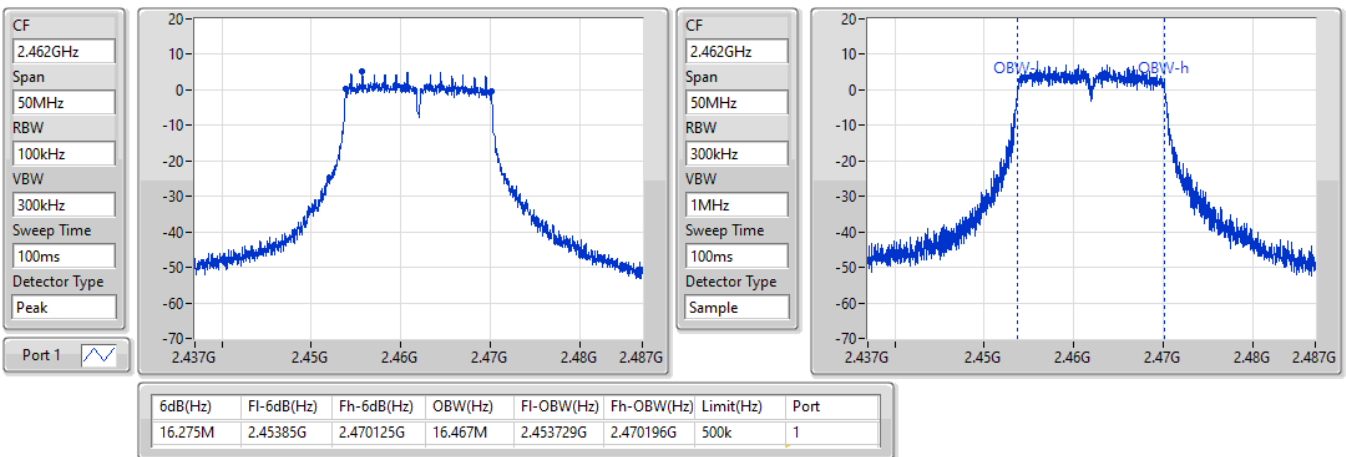


802.11g_Nss1,(6Mbps)_1TX

EBW

2462MHz

12/08/2021

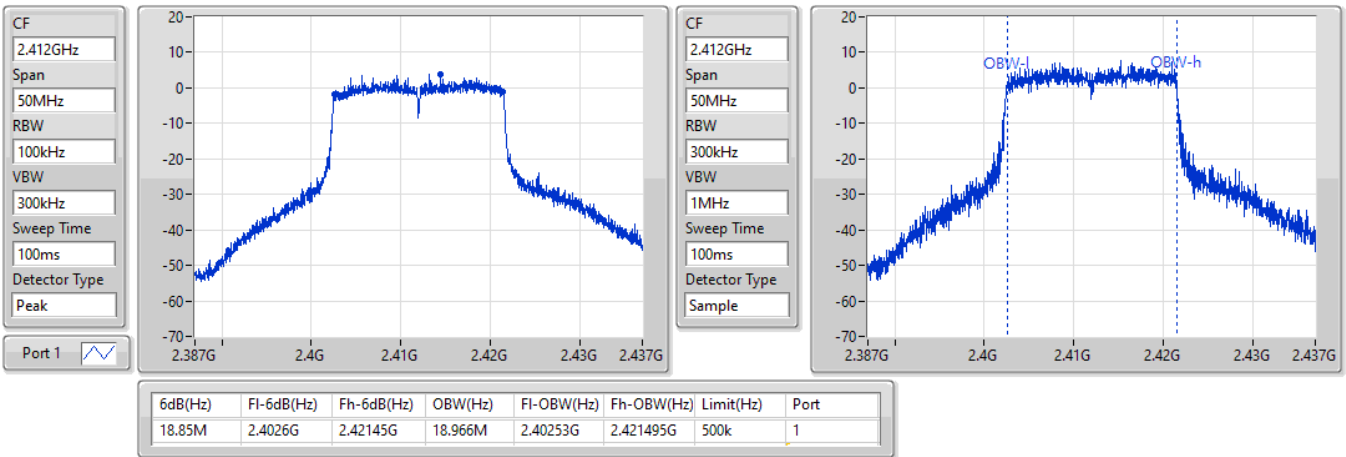


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

2412MHz

12/08/2021

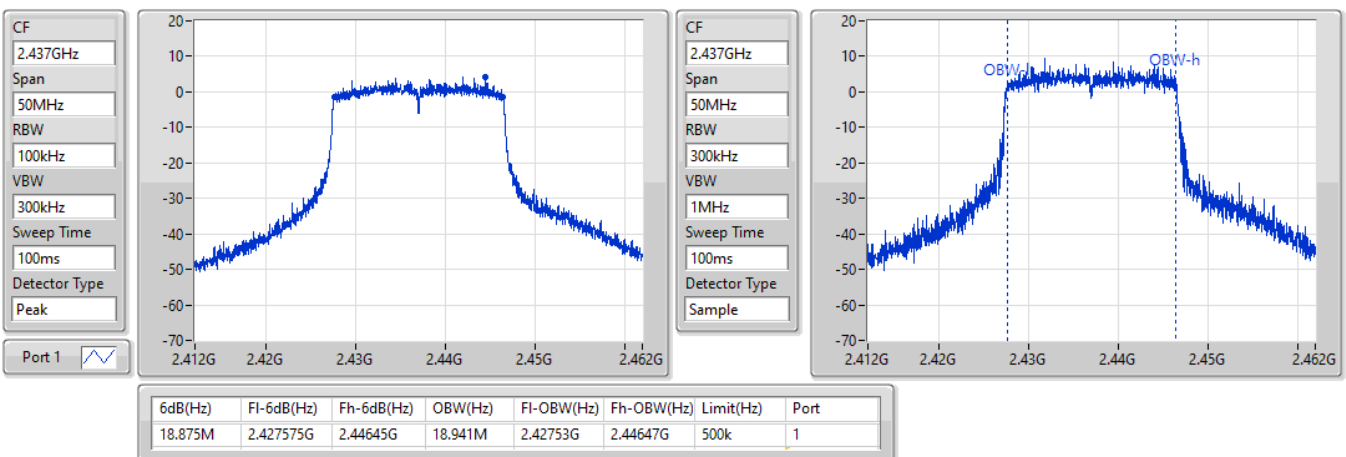


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

2437MHz

12/08/2021

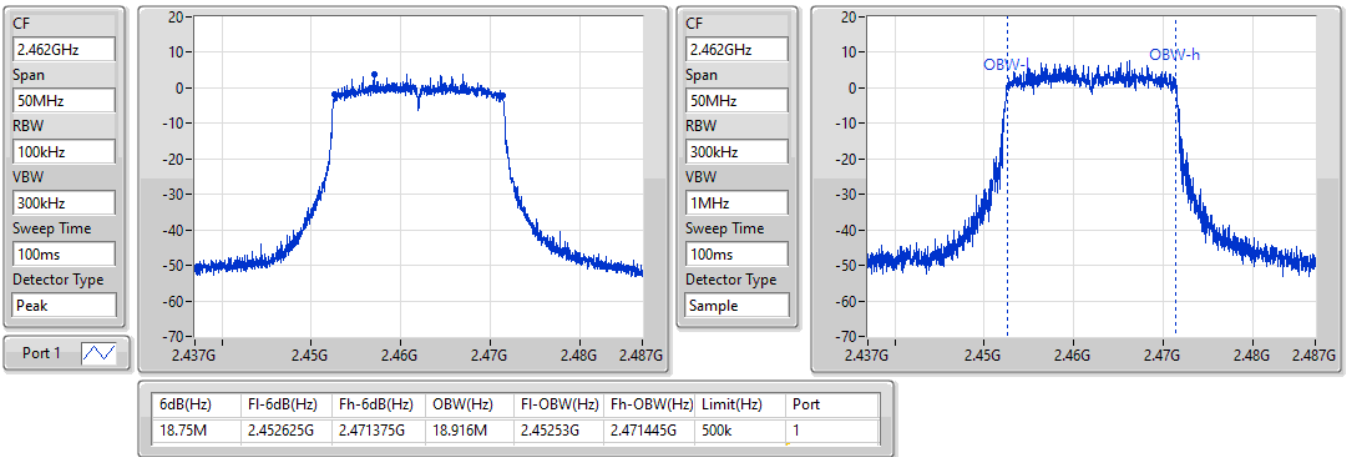


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

2462MHz

12/08/2021





Summary

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|--------------------------------|---------------|--------------|----------|---------------|--------------|
| 2.4-2.4835GHz | - | - | - | - | - |
| 802.11b_Nss1,(1Mbps)_2TX | 8.075M | 13.243M | 13M2G1D | 6.575M | 12.944M |
| 802.11g_Nss1,(6Mbps)_2TX | 16.325M | 16.542M | 16M5D1D | 15.95M | 16.442M |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | 18.975M | 18.991M | 19M0D1D | 18.75M | 18.891M |

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



Result

| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) | Port 2-N dB (Hz) | Port 2-OBW (Hz) |
|--------------------------------|--------|------------|------------------|-----------------|------------------|-----------------|
| 802.11b_Nss1,(1Mbps)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 500k | 8.075M | 13.243M | 8.05M | 13.243M |
| 2437MHz | Pass | 500k | 6.575M | 13.018M | 7.075M | 13.043M |
| 2462MHz | Pass | 500k | 6.575M | 12.944M | 6.575M | 12.944M |
| 802.11g_Nss1,(6Mbps)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 500k | 16.3M | 16.517M | 15.95M | 16.542M |
| 2437MHz | Pass | 500k | 16.3M | 16.467M | 16.325M | 16.442M |
| 2462MHz | Pass | 500k | 16.3M | 16.442M | 16.325M | 16.442M |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 500k | 18.75M | 18.991M | 18.925M | 18.966M |
| 2437MHz | Pass | 500k | 18.875M | 18.941M | 18.975M | 18.991M |
| 2462MHz | Pass | 500k | 18.825M | 18.891M | 18.75M | 18.941M |

Port X-N dB = Port X 6dB down bandwidth;
 Port X-OBW = Port X 99% occupied bandwidth

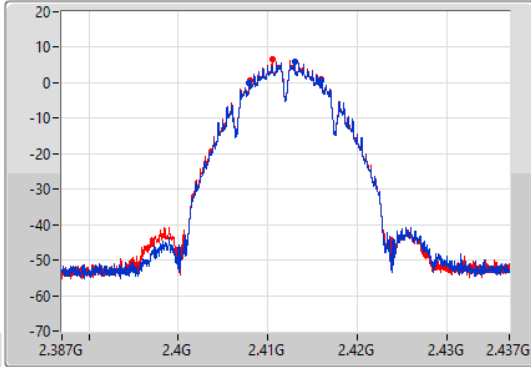
802.11b_Nss1,(1Mbps)_2TX

EBW

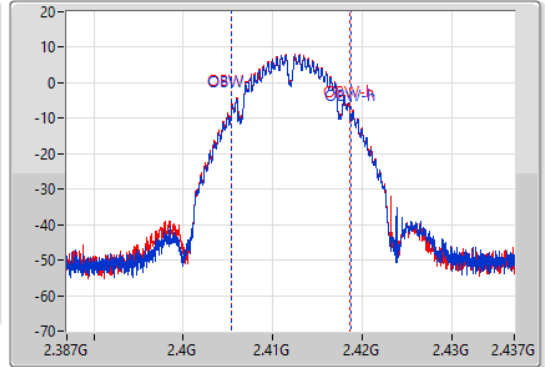
2412MHz

12/08/2021

CF
2.412GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.412GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 8.075M | 2.40795G | 2.416025G | 13.243M | 2.405453G | 2.418697G | 500k | 1 |
| 8.05M | 2.407975G | 2.416025G | 13.243M | 2.405428G | 2.418672G | 500k | 2 |

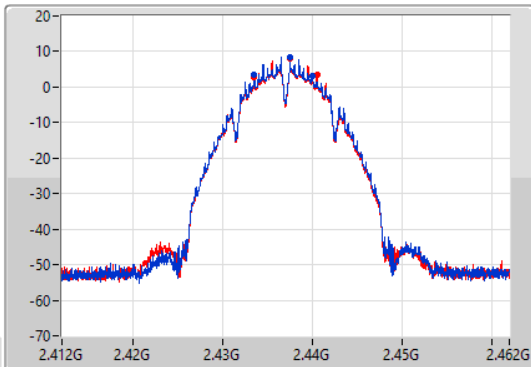
802.11b_Nss1,(1Mbps)_2TX

EBW

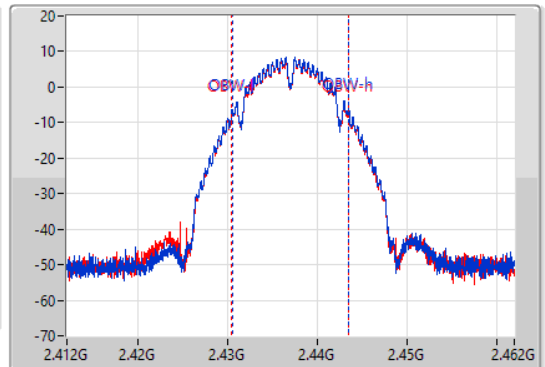
2437MHz

12/08/2021

CF
2.437GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.437GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 6.575M | 2.43345G | 2.440025G | 13.018M | 2.430478G | 2.443497G | 500k | 1 |
| 7.075M | 2.43345G | 2.440525G | 13.043M | 2.430453G | 2.443497G | 500k | 2 |

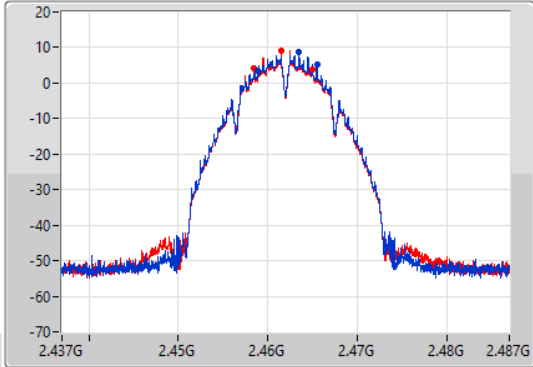
802.11b_Nss1,(1Mbps)_2TX

EBW

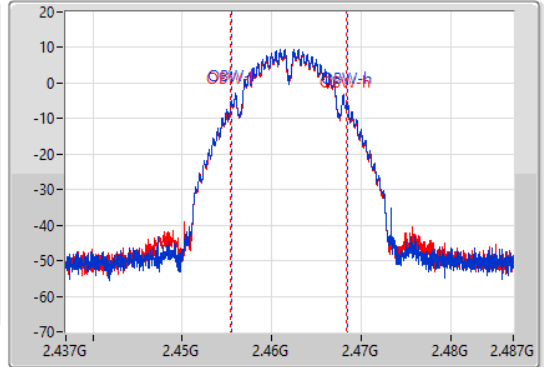
2462MHz

12/08/2021

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 6.575M | 2.458925G | 2.4655G | 12.944M | 2.455478G | 2.468422G | 500k | 1 |
| 6.575M | 2.45845G | 2.465025G | 12.944M | 2.455453G | 2.468397G | 500k | 2 |

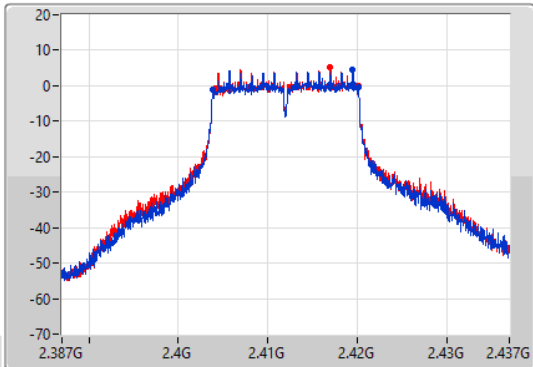
802.11g_Nss1,(6Mbps)_2TX

EBW

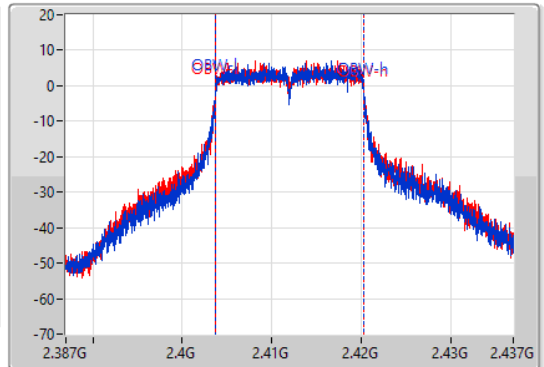
2412MHz

12/08/2021

CF
2.412GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.412GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 16.3M | 2.40385G | 2.42015G | 16.517M | 2.403754G | 2.420271G | 500k | 1 |
| 15.95M | 2.4042G | 2.42015G | 16.542M | 2.403754G | 2.420296G | 500k | 2 |

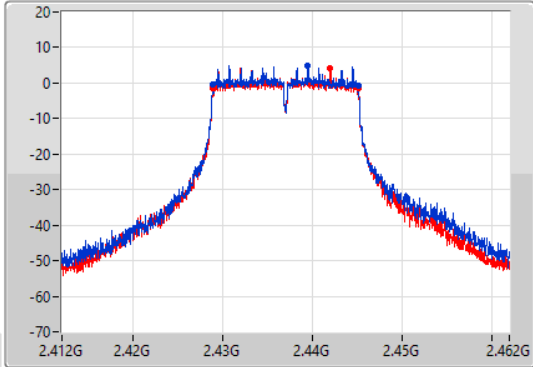
802.11g_Nss1,(6Mbps)_2TX

EBW

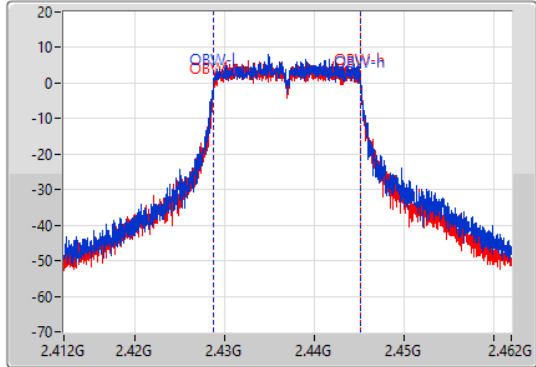
2437MHz

12/08/2021

CF
2.437GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.437GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 16.3M | 2.42885G | 2.44515G | 16.467M | 2.428729G | 2.445196G | 500k | 1 |
| 16.325M | 2.428825G | 2.44515G | 16.442M | 2.428754G | 2.445196G | 500k | 2 |

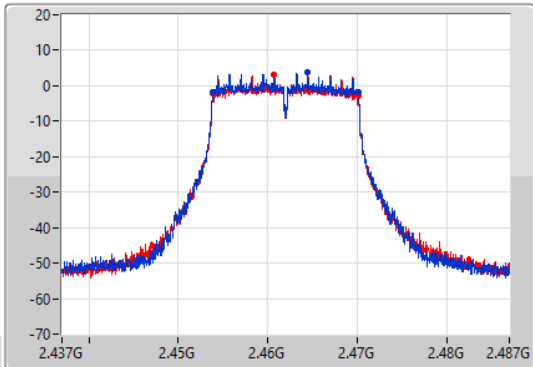
802.11g_Nss1,(6Mbps)_2TX

EBW

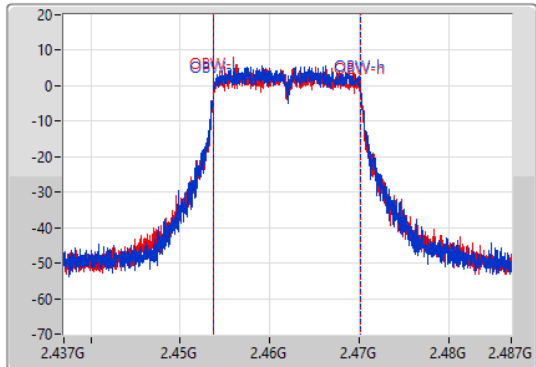
2462MHz

12/08/2021

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



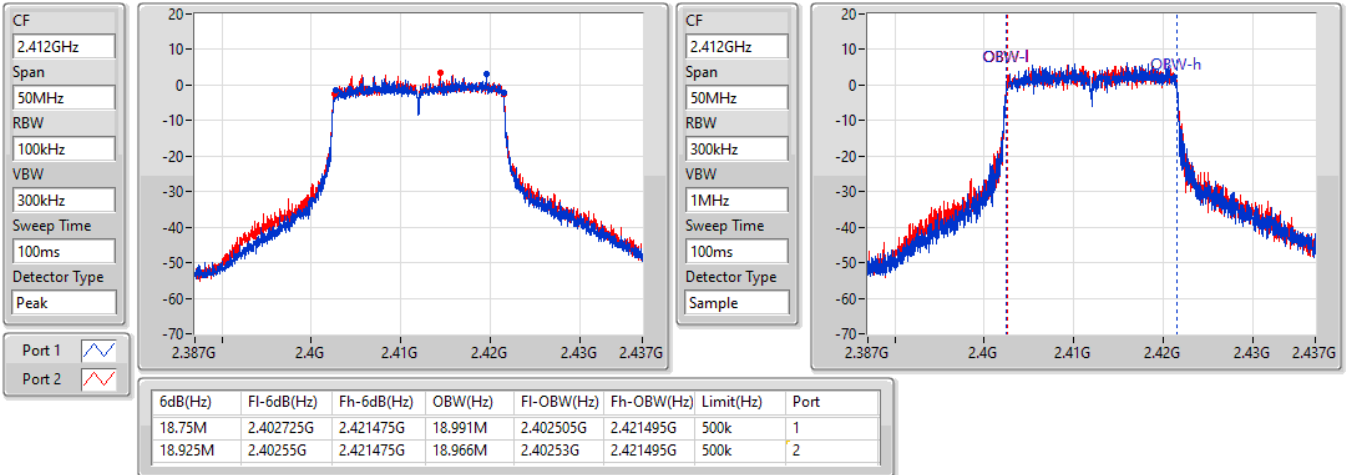
| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 16.3M | 2.45385G | 2.47015G | 16.442M | 2.453754G | 2.470196G | 500k | 1 |
| 16.325M | 2.453825G | 2.47015G | 16.442M | 2.453754G | 2.470196G | 500k | 2 |

802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2412MHz

12/08/2021

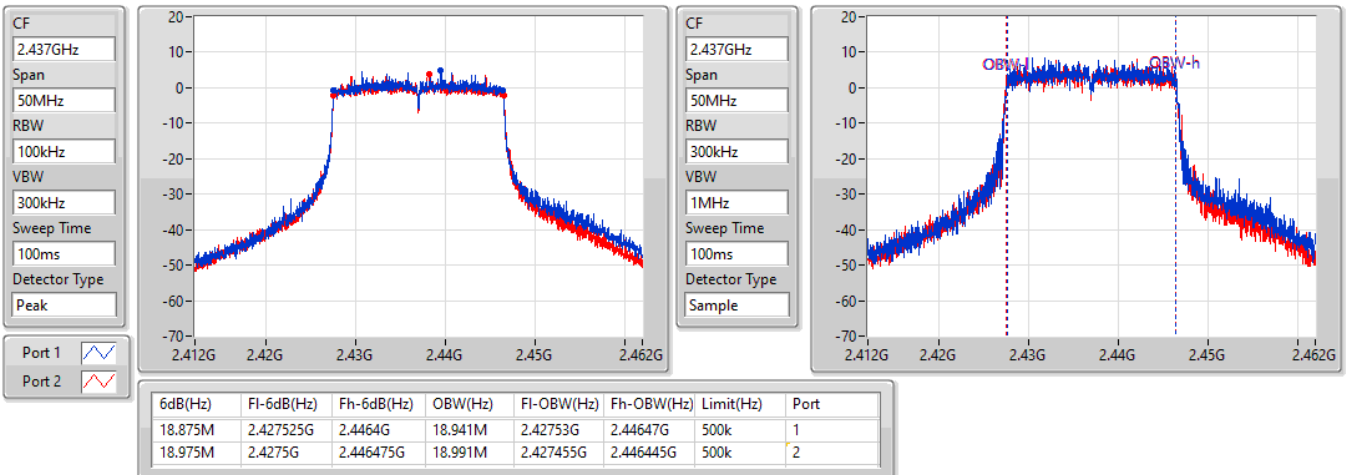


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2437MHz

12/08/2021

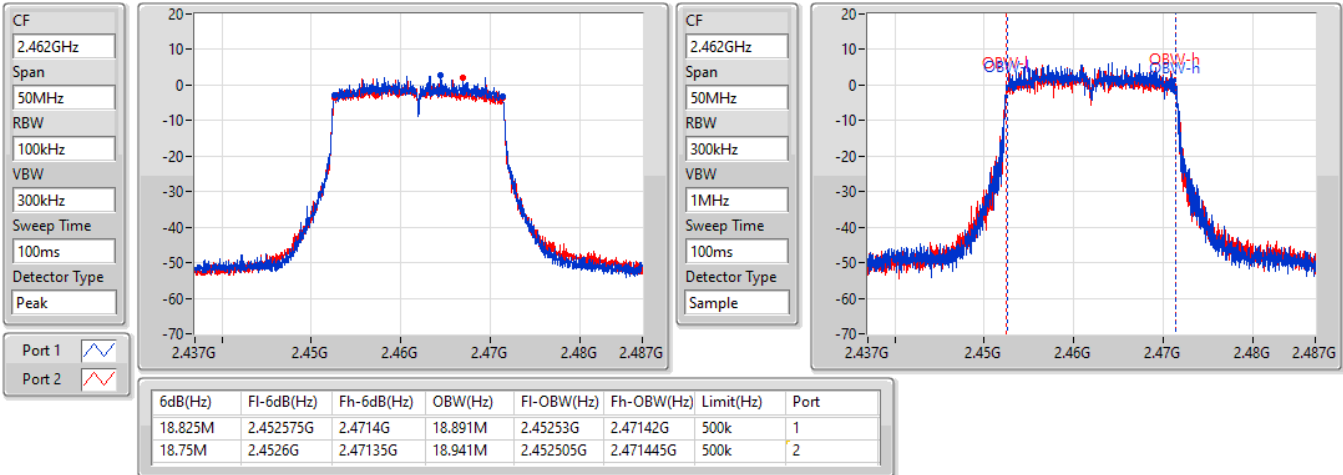


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2462MHz

12/08/2021





Summary

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|--------------------------------|---------------|--------------|----------|---------------|--------------|
| 2.4-2.4835GHz | - | - | - | - | - |
| 802.11b_Nss1,(1Mbps)_4TX | 8.55M | 13.243M | 13M2G1D | 6.55M | 12.844M |
| 802.11g_Nss1,(6Mbps)_4TX | 16.325M | 16.517M | 16M5D1D | 15.9M | 16.417M |
| 802.11ax HEW20_Nss1,(MCS0)_4TX | 18.95M | 18.966M | 19M0D1D | 18.525M | 18.841M |

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



Result

| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) | Port 2-N dB (Hz) | Port 2-OBW (Hz) | Port 3-N dB (Hz) | Port 3-OBW (Hz) | Port 4-N dB (Hz) | Port 4-OBW (Hz) |
|--------------------------------|--------|------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|
| 802.11b_Nss1,(1Mbps)_4TX | - | - | - | - | - | - | - | - | - | - |
| 2412MHz | Pass | 500k | 6.975M | 13.243M | 8.55M | 13.243M | 7.025M | 13.018M | 6.55M | 13.068M |
| 2437MHz | Pass | 500k | 8.075M | 13.018M | 6.575M | 13.043M | 6.575M | 12.994M | 8.075M | 12.844M |
| 2462MHz | Pass | 500k | 8.025M | 12.944M | 6.575M | 12.919M | 8.05M | 13.018M | 7.05M | 12.969M |
| 802.11g_Nss1,(6Mbps)_4TX | - | - | - | - | - | - | - | - | - | - |
| 2412MHz | Pass | 500k | 16.325M | 16.517M | 16.3M | 16.467M | 16.325M | 16.467M | 16.325M | 16.467M |
| 2437MHz | Pass | 500k | 16.325M | 16.517M | 16.125M | 16.442M | 16.3M | 16.492M | 16.3M | 16.417M |
| 2462MHz | Pass | 500k | 16.325M | 16.467M | 15.9M | 16.417M | 16.3M | 16.467M | 16.275M | 16.417M |
| 802.11ax HEW20_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - | - | - |
| 2412MHz | Pass | 500k | 18.625M | 18.916M | 18.85M | 18.966M | 18.7M | 18.916M | 18.95M | 18.916M |
| 2437MHz | Pass | 500k | 18.925M | 18.891M | 18.8M | 18.966M | 18.7M | 18.941M | 18.55M | 18.916M |
| 2462MHz | Pass | 500k | 18.775M | 18.841M | 18.875M | 18.941M | 18.525M | 18.891M | 18.725M | 18.891M |

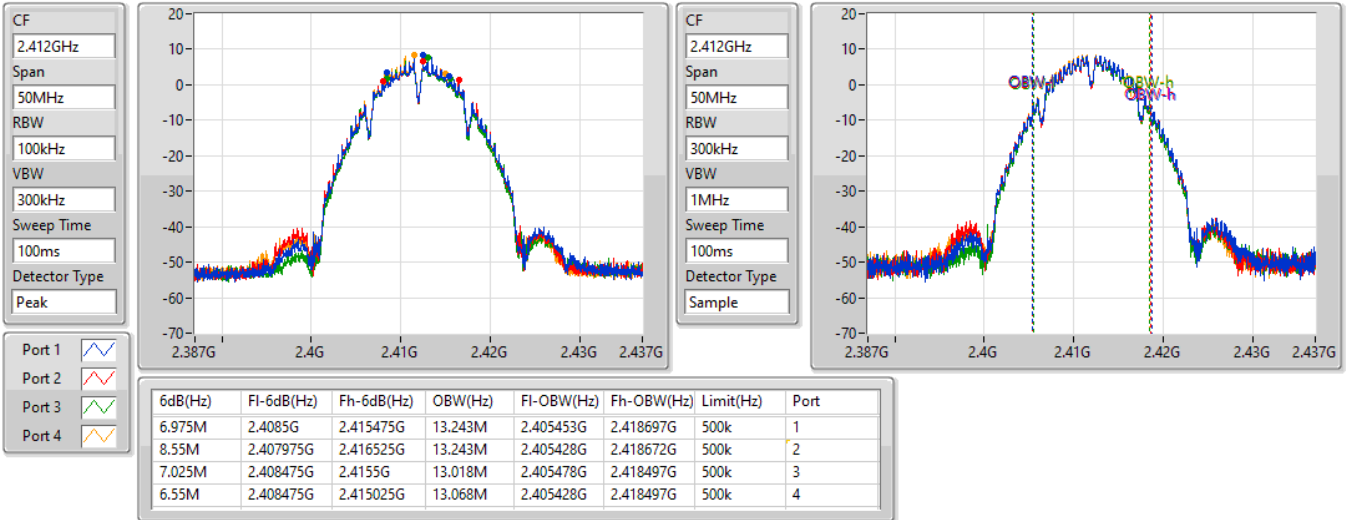
Port X-N dB = Port X 6dB down bandwidth;
 Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_4TX

EBW

2412MHz

12/08/2021

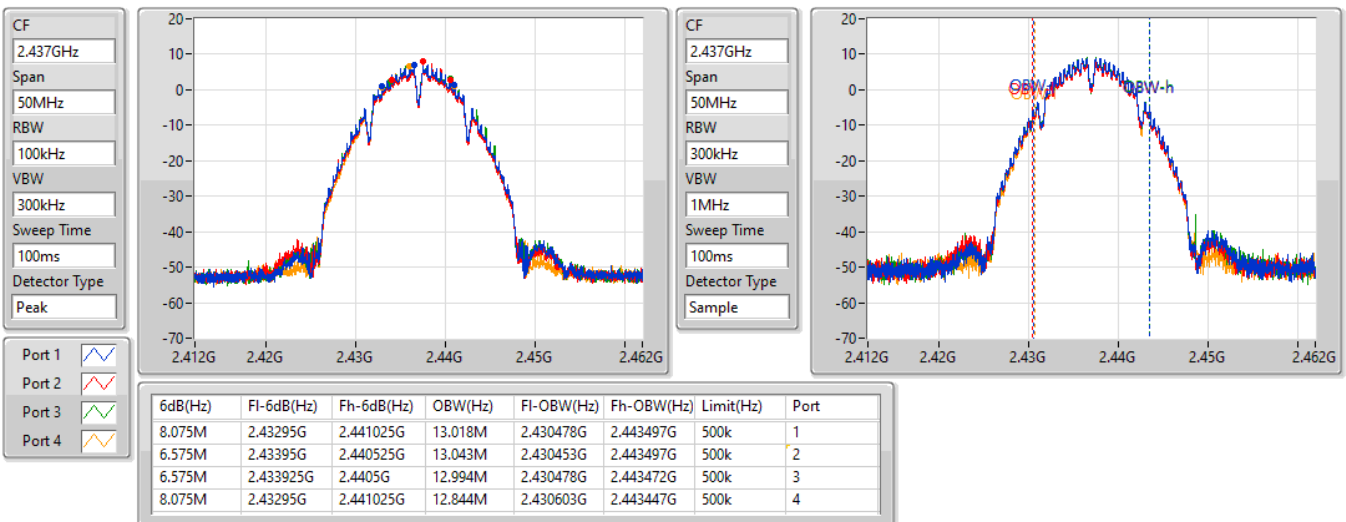


802.11b_Nss1,(1Mbps)_4TX

EBW

2437MHz

12/08/2021

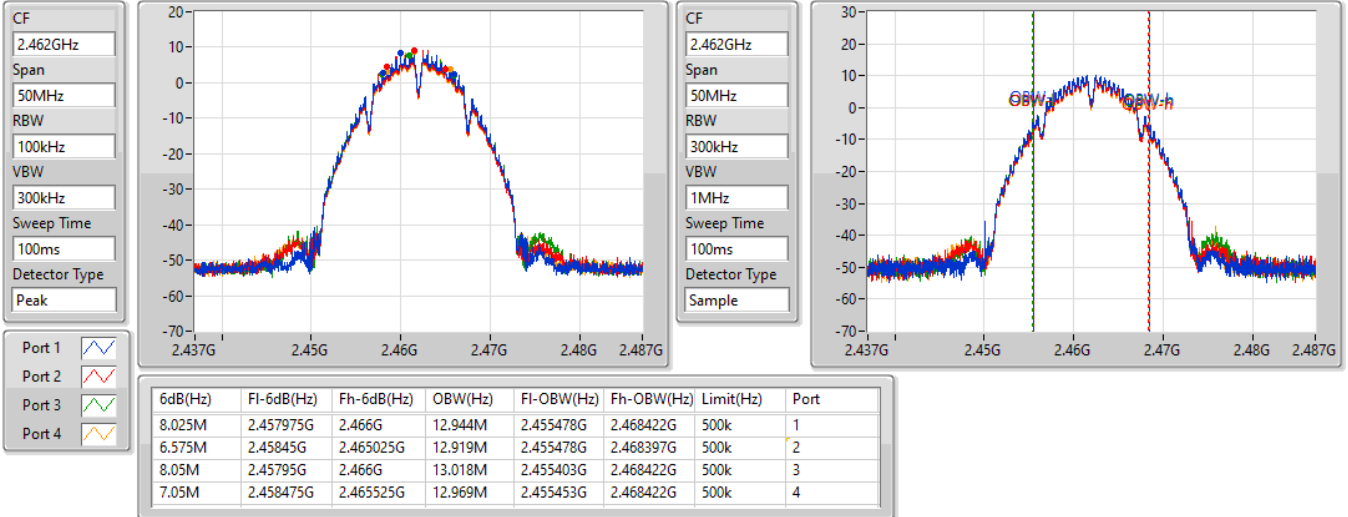


802.11b_Nss1,(1Mbps)_4TX

EBW

2462MHz

12/08/2021

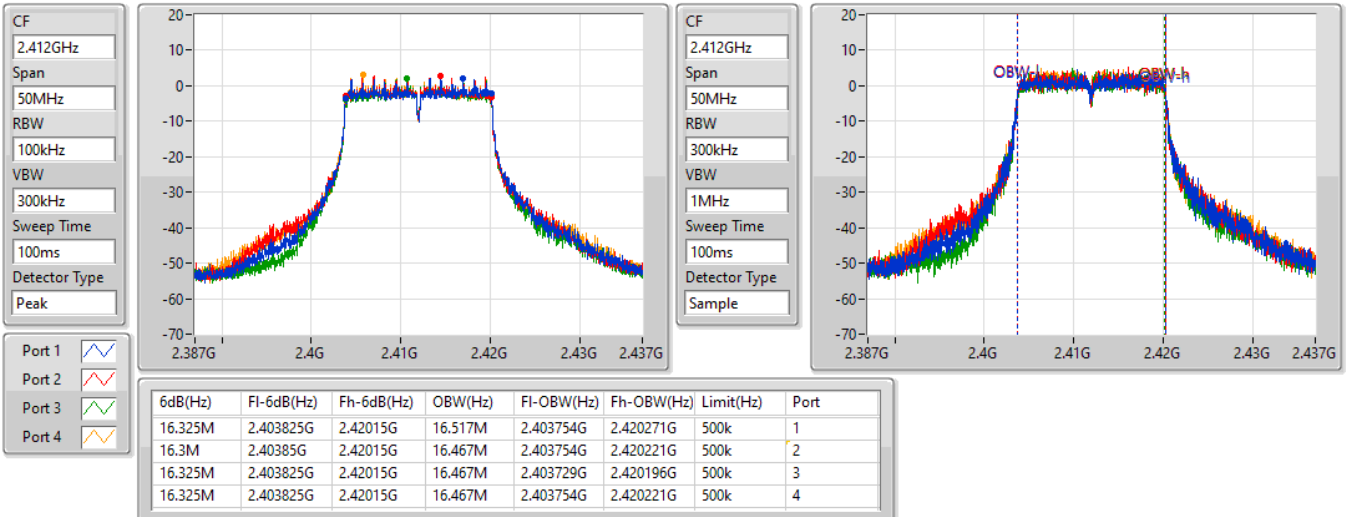


802.11g_Nss1,(6Mbps)_4TX

EBW

2412MHz

12/08/2021

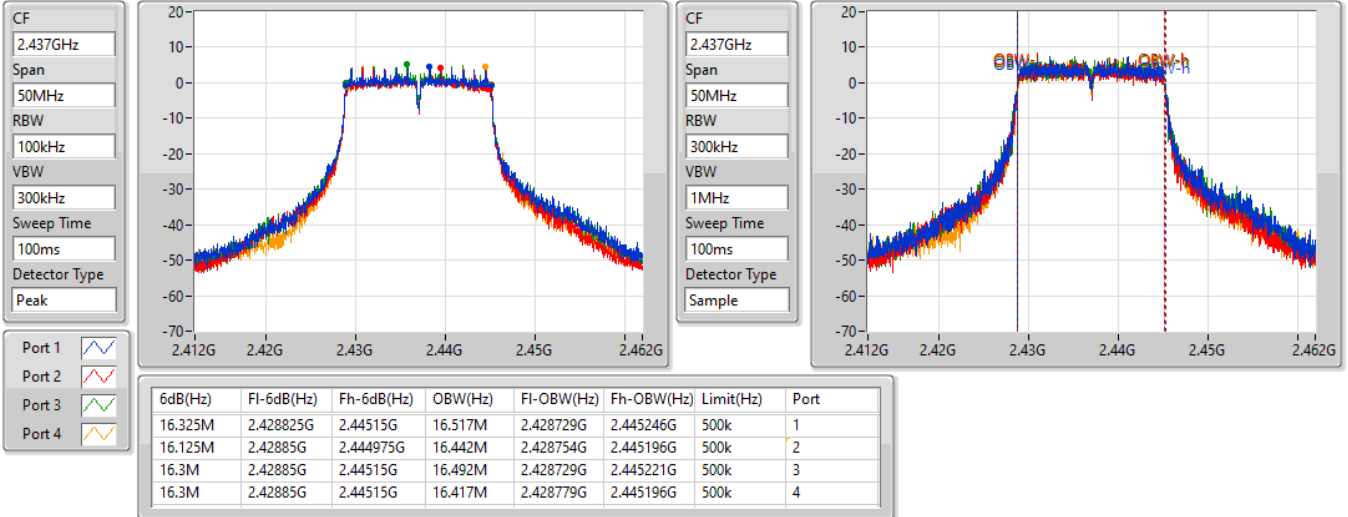


802.11g_Nss1,(6Mbps)_4TX

EBW

2437MHz

12/08/2021

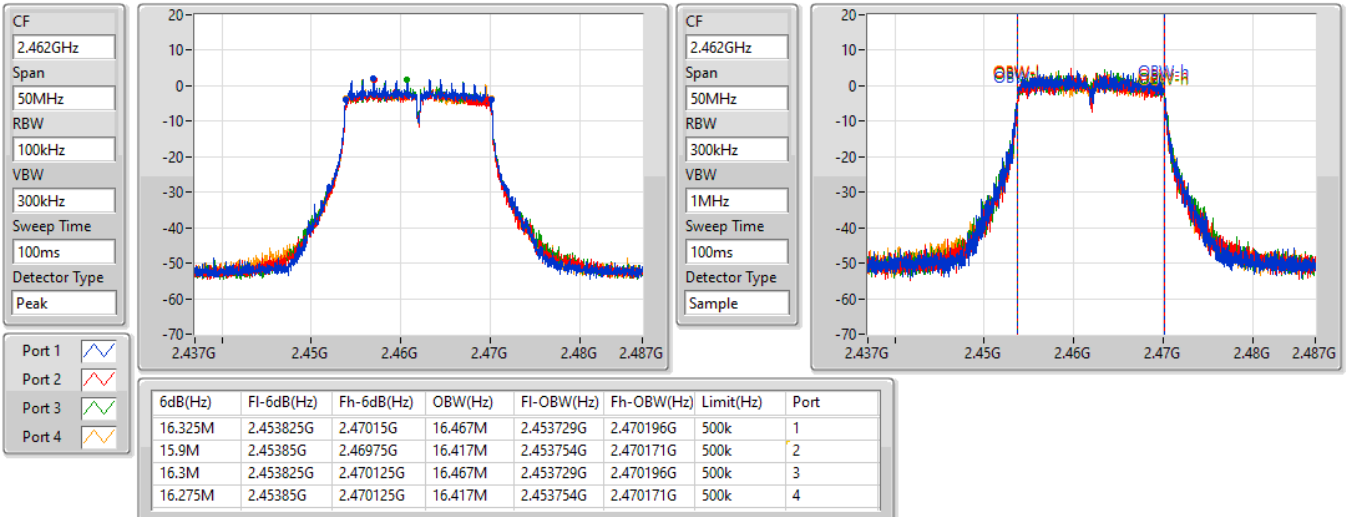


802.11g_Nss1,(6Mbps)_4TX

EBW

2462MHz

12/08/2021

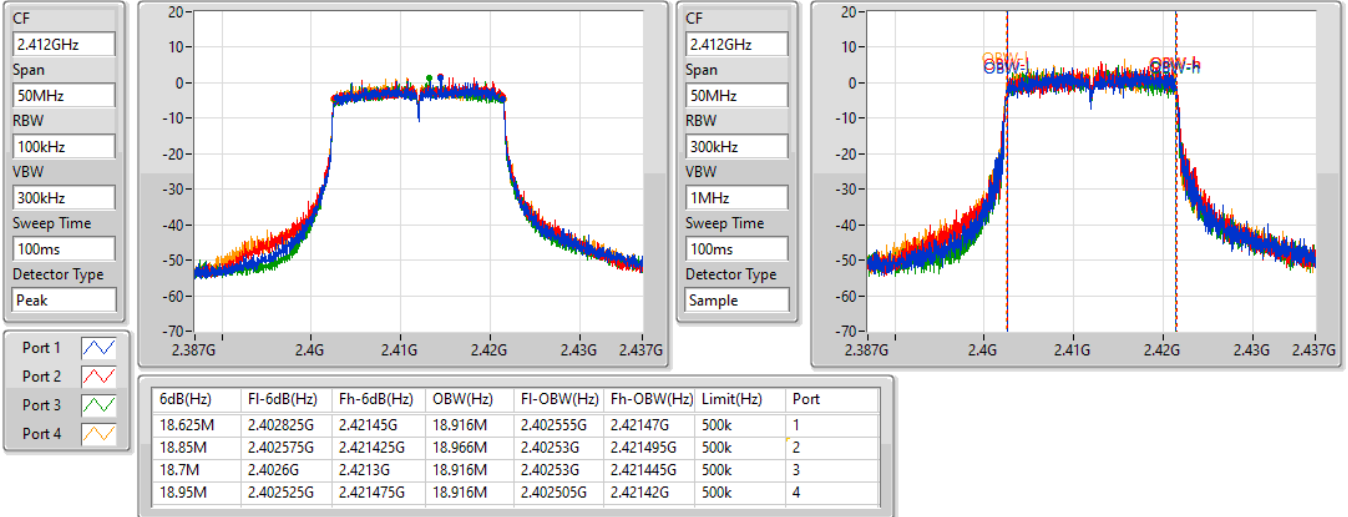


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

2412MHz

12/08/2021

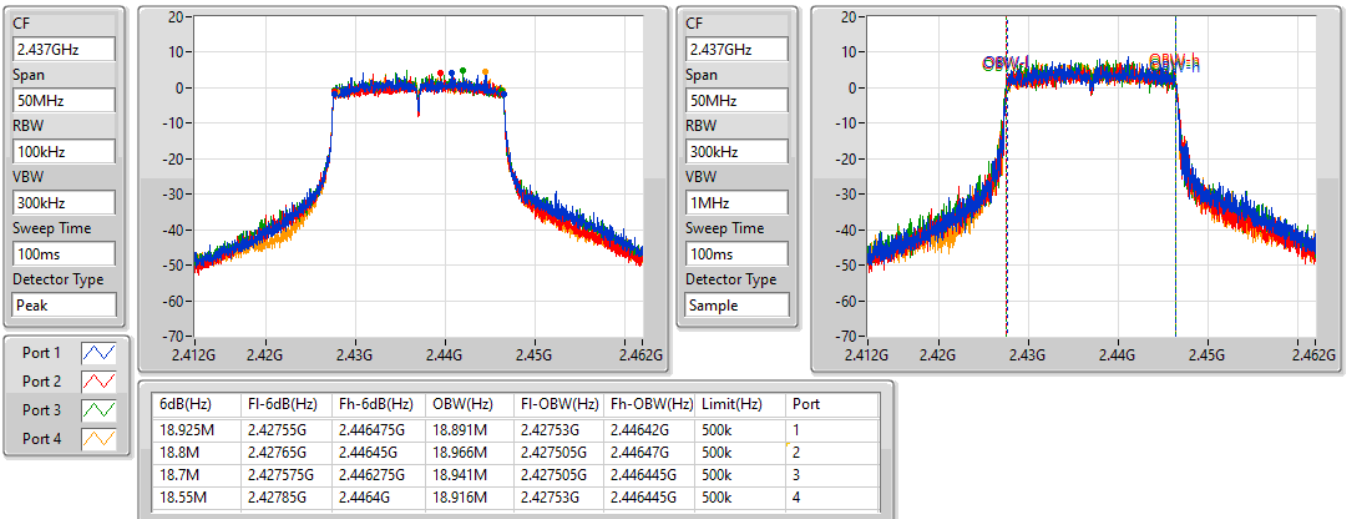


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

2437MHz

12/08/2021



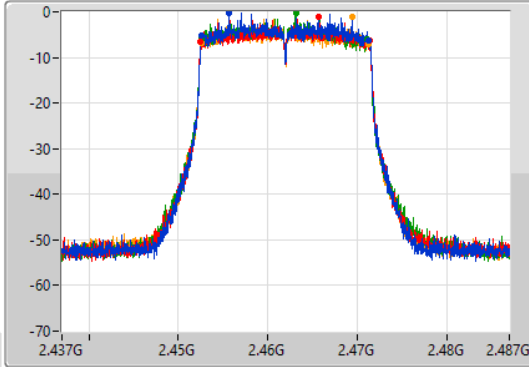
802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

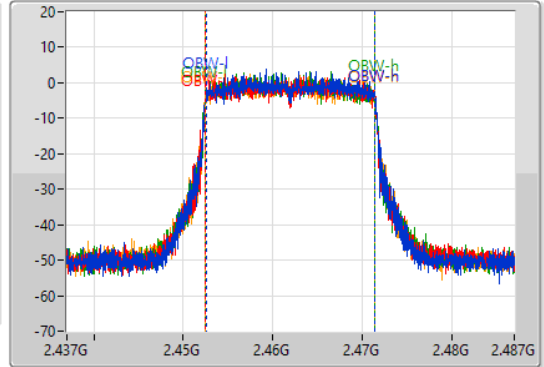
2462MHz

12/08/2021

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 18.775M | 2.45255G | 2.471325G | 18.841M | 2.452555G | 2.471395G | 500k | 1 |
| 18.875M | 2.452525G | 2.4714G | 18.941M | 2.452505G | 2.471445G | 500k | 2 |
| 18.525M | 2.452575G | 2.4711G | 18.891M | 2.452505G | 2.471395G | 500k | 3 |
| 18.725M | 2.45255G | 2.471275G | 18.891M | 2.452505G | 2.471395G | 500k | 4 |



Summary

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|--------------------------------|---------------|--------------|----------|---------------|--------------|
| 2.4-2.4835GHz | - | - | - | - | - |
| 802.11b_Nss1,(1Mbps)_1TX | 8.075M | 13.093M | 13M1G1D | 8.05M | 13.043M |
| 802.11g_Nss1,(6Mbps)_1TX | 16.35M | 16.617M | 16M6D1D | 16.325M | 16.567M |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | 19.05M | 19.115M | 19M1D1D | 19M | 19.04M |

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



Result

| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) |
|--------------------------------|--------|------------|------------------|-----------------|
| 802.11b_Nss1,(1Mbps)_1TX | - | - | - | - |
| 2412MHz | Pass | 500k | 8.05M | 13.093M |
| 2437MHz | Pass | 500k | 8.075M | 13.093M |
| 2462MHz | Pass | 500k | 8.075M | 13.043M |
| 802.11g_Nss1,(6Mbps)_1TX | - | - | - | - |
| 2412MHz | Pass | 500k | 16.325M | 16.617M |
| 2437MHz | Pass | 500k | 16.35M | 16.567M |
| 2462MHz | Pass | 500k | 16.325M | 16.617M |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | - | - | - | - |
| 2412MHz | Pass | 500k | 19.025M | 19.115M |
| 2437MHz | Pass | 500k | 19M | 19.115M |
| 2462MHz | Pass | 500k | 19.05M | 19.04M |

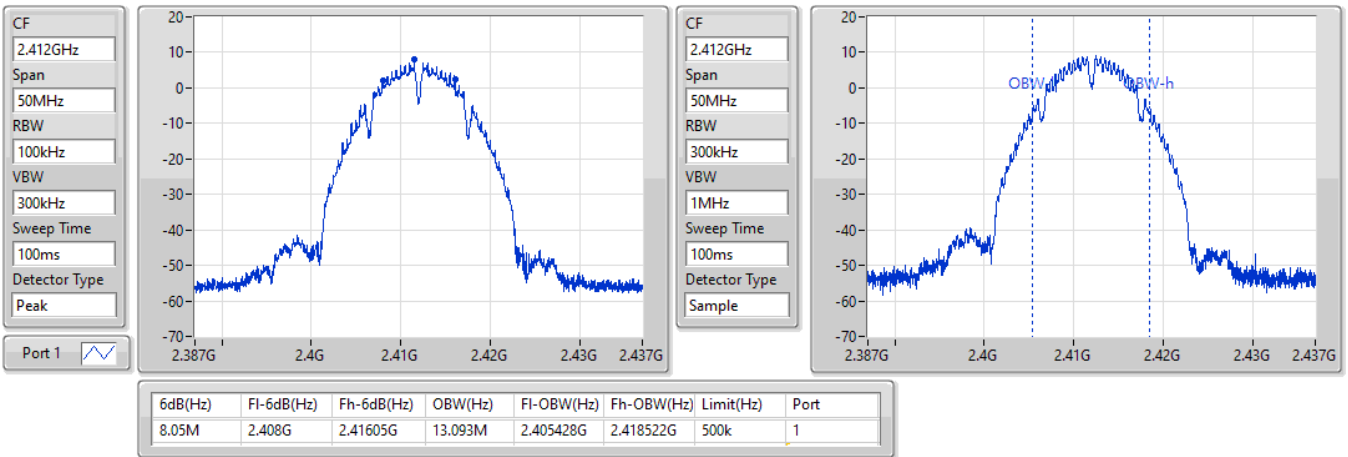
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_1TX

EBW

2412MHz

26/08/2021

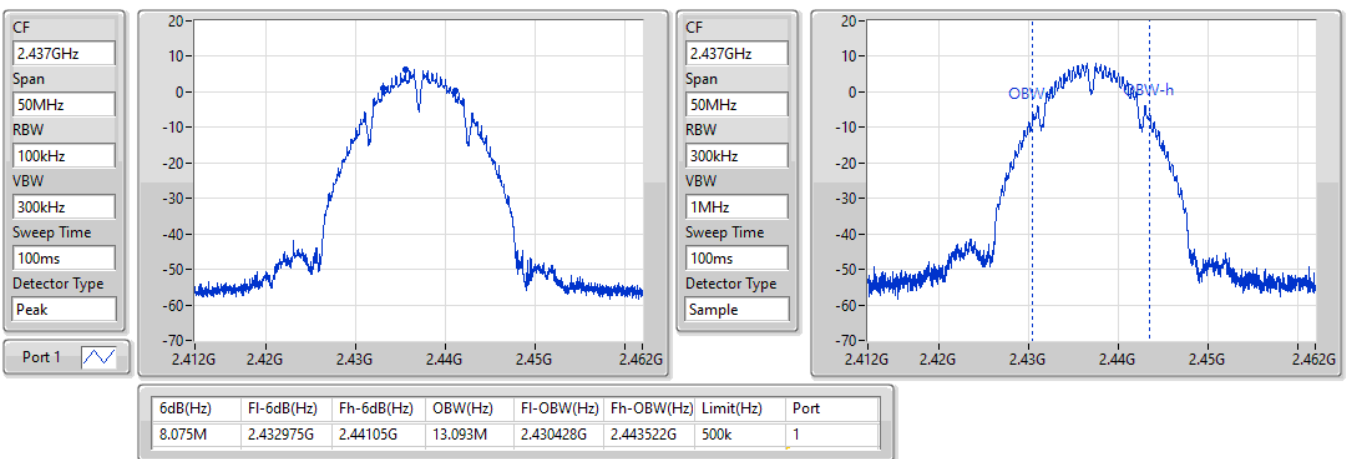


802.11b_Nss1,(1Mbps)_1TX

EBW

2437MHz

26/08/2021

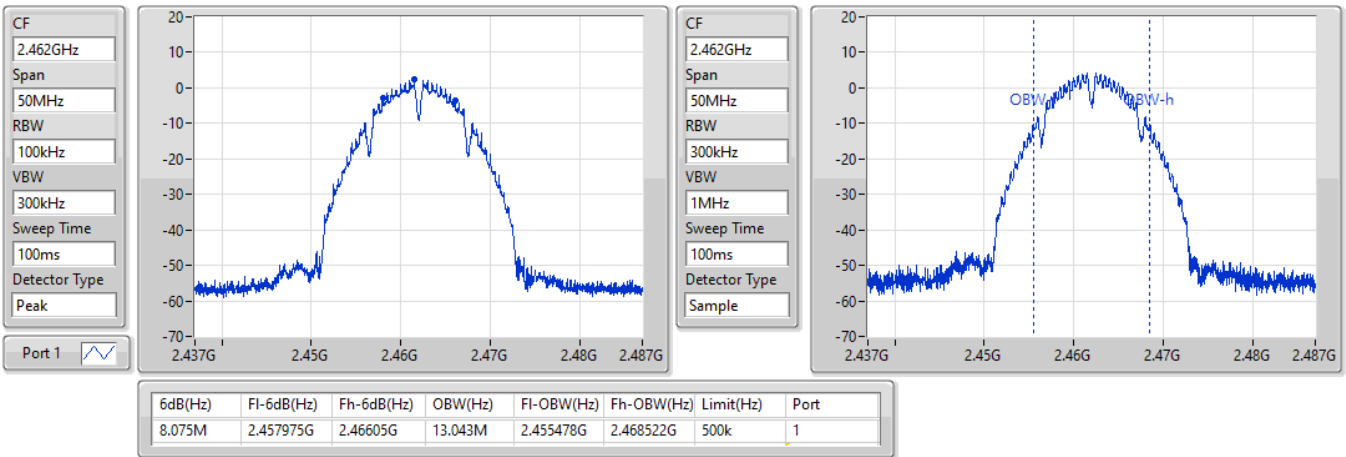


802.11b_Nss1,(1Mbps)_1TX

EBW

2462MHz

26/08/2021

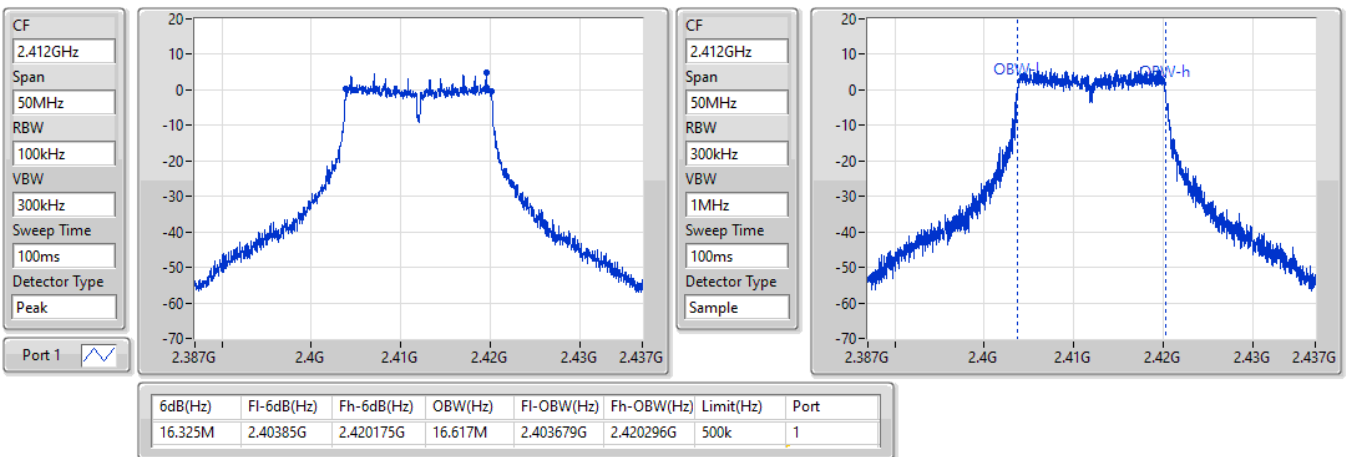


802.11g_Nss1,(6Mbps)_1TX

EBW

2412MHz

26/08/2021

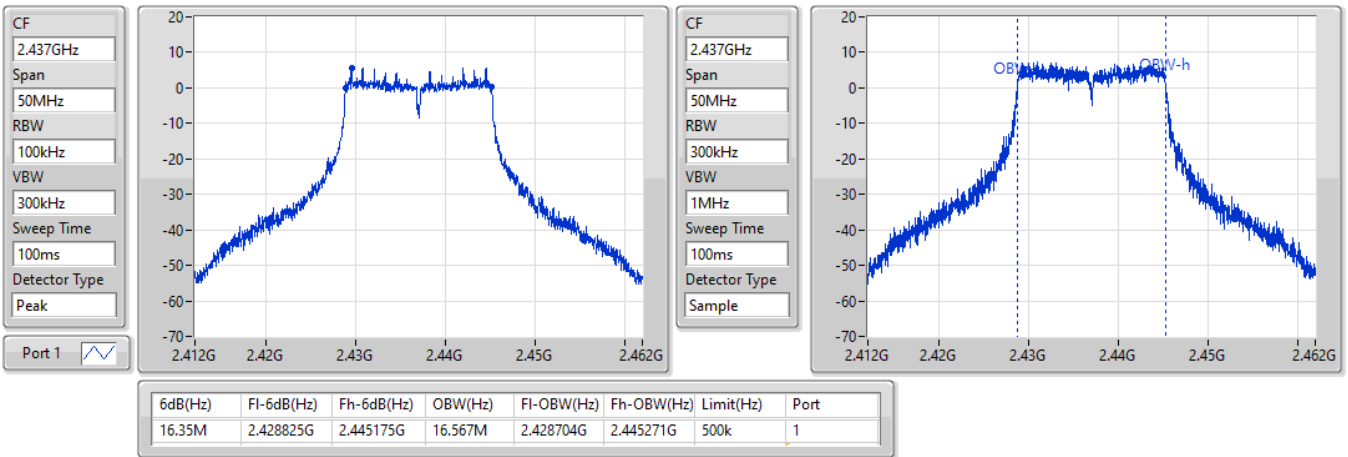


802.11g_Nss1,(6Mbps)_1TX

EBW

2437MHz

26/08/2021

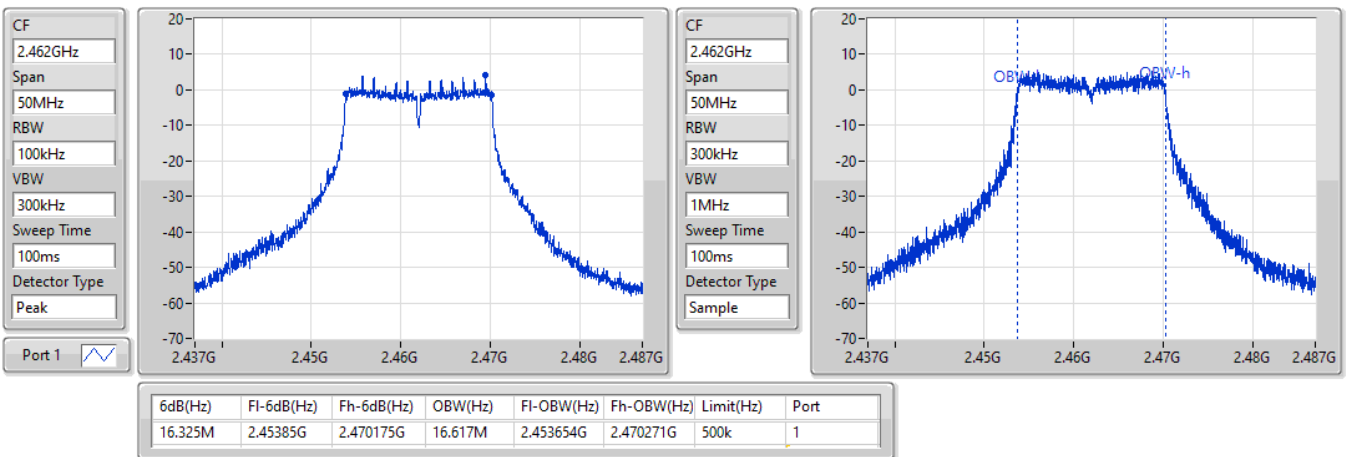


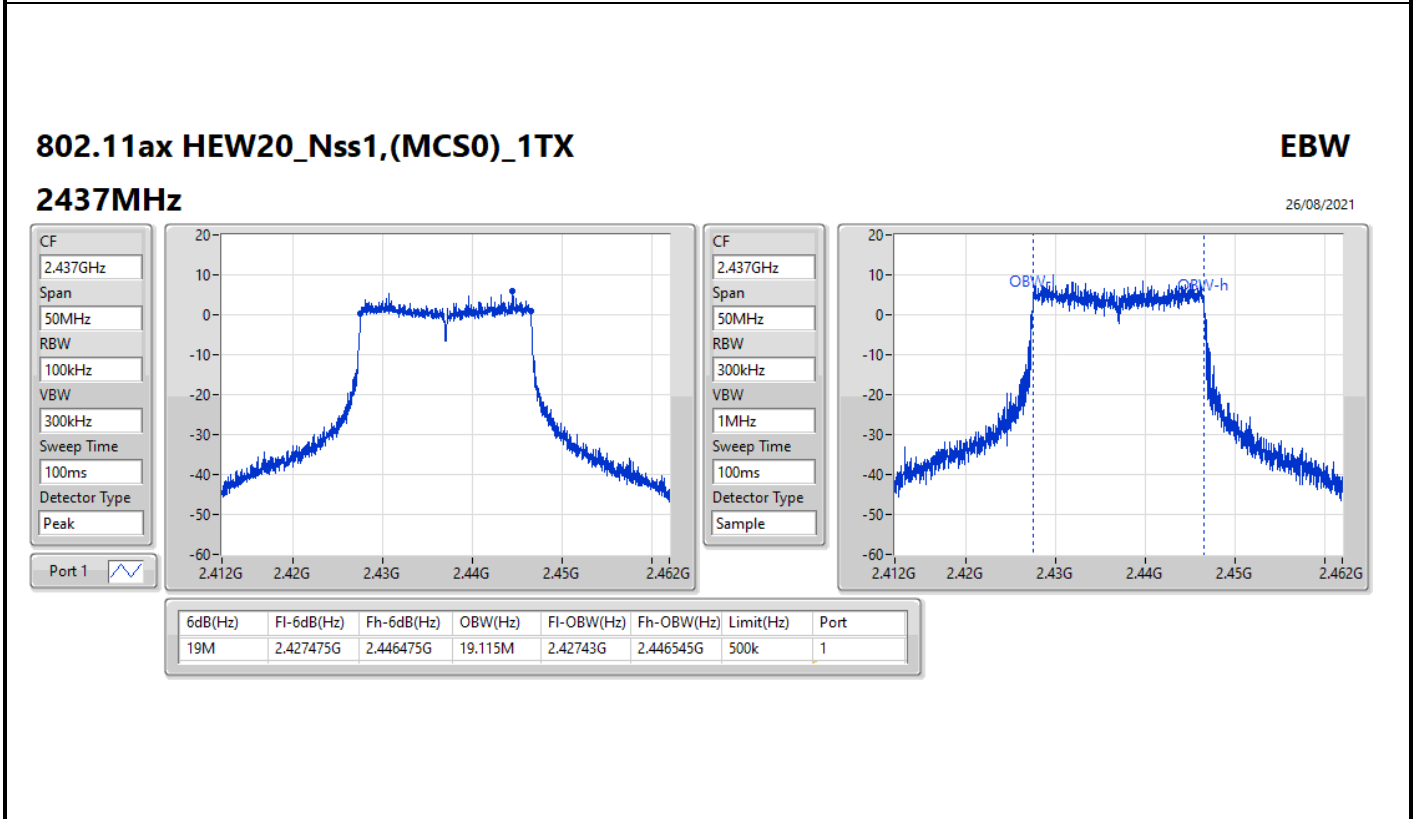
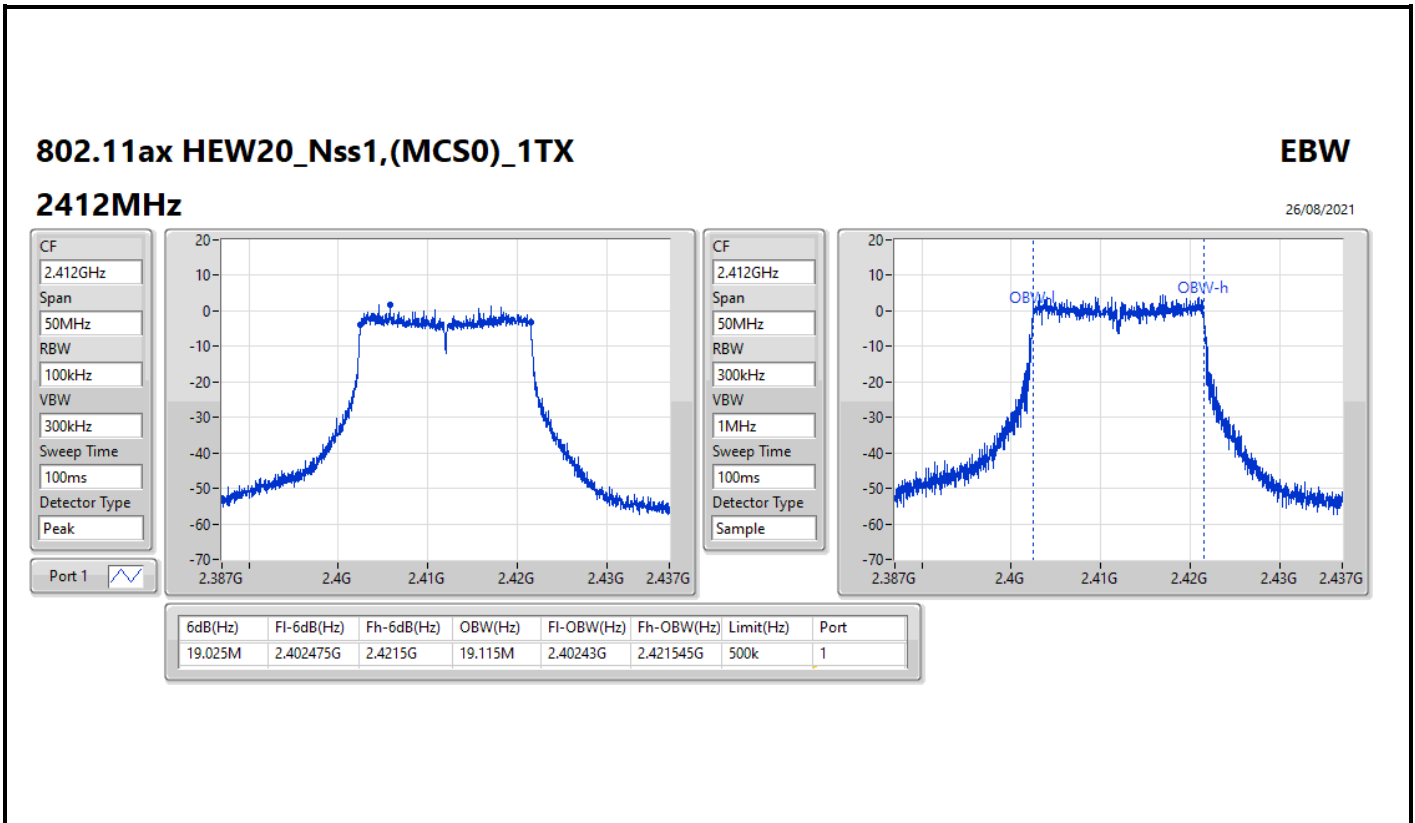
802.11g_Nss1,(6Mbps)_1TX

EBW

2462MHz

26/08/2021



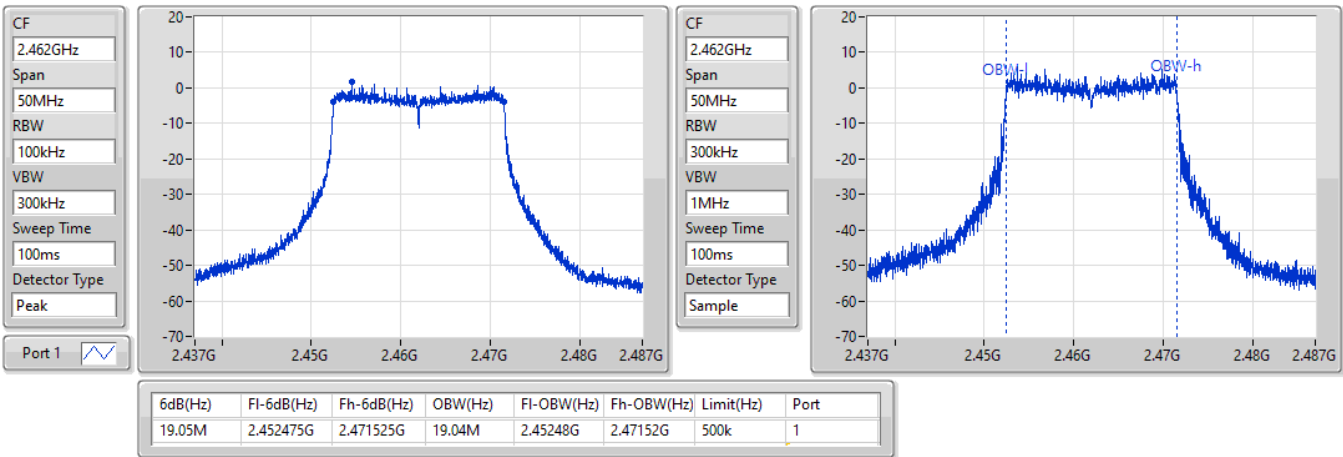


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

2462MHz

26/08/2021





Summary

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|--------------------------------|---------------|--------------|----------|---------------|--------------|
| 2.4-2.4835GHz | - | - | - | - | - |
| 802.11b_Nss1,(1Mbps)_2TX | 8.575M | 13.118M | 13M1G1D | 6.575M | 13.068M |
| 802.11g_Nss1,(6Mbps)_2TX | 16.35M | 16.617M | 16M6D1D | 16.325M | 16.592M |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | 19.025M | 19.09M | 19M1D1D | 18.9M | 19.04M |

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



Result

| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) | Port 2-N dB (Hz) | Port 2-OBW (Hz) |
|--------------------------------|--------|------------|------------------|-----------------|------------------|-----------------|
| 802.11b_Nss1,(1Mbps)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 500k | 8.075M | 13.118M | 7M | 13.068M |
| 2437MHz | Pass | 500k | 8.55M | 13.093M | 8.575M | 13.093M |
| 2462MHz | Pass | 500k | 6.575M | 13.093M | 8.05M | 13.068M |
| 802.11g_Nss1,(6Mbps)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 500k | 16.35M | 16.592M | 16.35M | 16.617M |
| 2437MHz | Pass | 500k | 16.325M | 16.592M | 16.325M | 16.617M |
| 2462MHz | Pass | 500k | 16.35M | 16.617M | 16.35M | 16.592M |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 500k | 19.025M | 19.065M | 18.975M | 19.09M |
| 2437MHz | Pass | 500k | 19.025M | 19.04M | 19.025M | 19.065M |
| 2462MHz | Pass | 500k | 19.025M | 19.065M | 18.9M | 19.065M |

Port X-N dB = Port X 6dB down bandwidth;
 Port X-OBW = Port X 99% occupied bandwidth

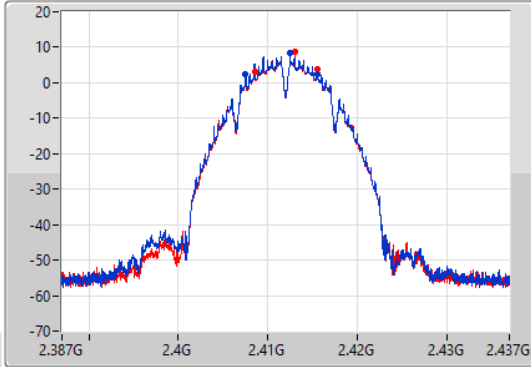
802.11b_Nss1,(1Mbps)_2TX

EBW

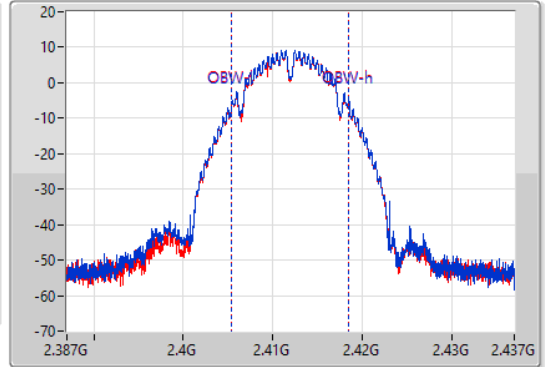
2412MHz

27/09/2021

CF
2.412GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.412GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 8.075M | 2.407475G | 2.41555G | 13.118M | 2.405403G | 2.418522G | 500k | 1 |
| 7M | 2.408525G | 2.415525G | 13.068M | 2.405428G | 2.418497G | 500k | 2 |

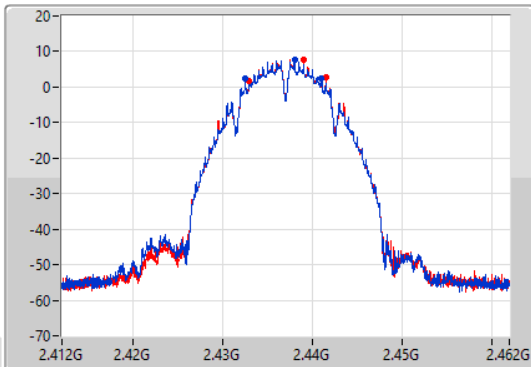
802.11b_Nss1,(1Mbps)_2TX

EBW

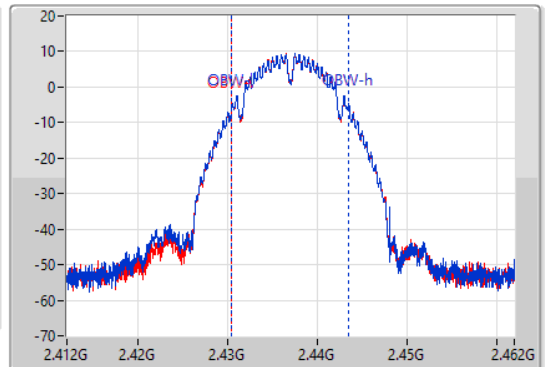
2437MHz

27/09/2021

CF
2.437GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.437GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



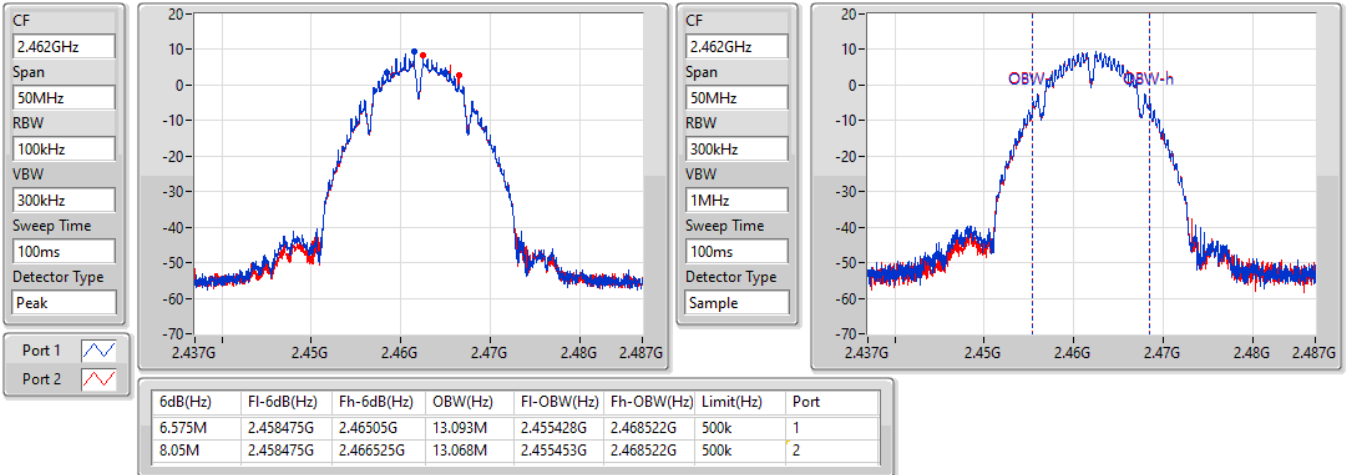
| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 8.55M | 2.432475G | 2.441025G | 13.093M | 2.430428G | 2.443522G | 500k | 1 |
| 8.575M | 2.43295G | 2.441525G | 13.093M | 2.430428G | 2.443522G | 500k | 2 |

802.11b_Nss1,(1Mbps)_2TX

EBW

2462MHz

27/09/2021

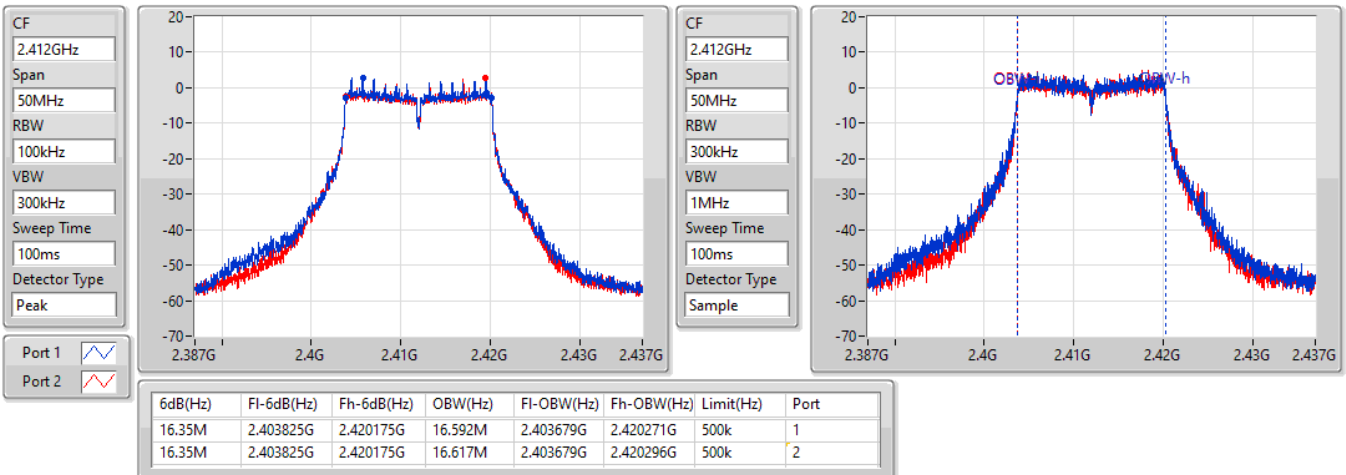


802.11g_Nss1,(6Mbps)_2TX

EBW

2412MHz

26/08/2021



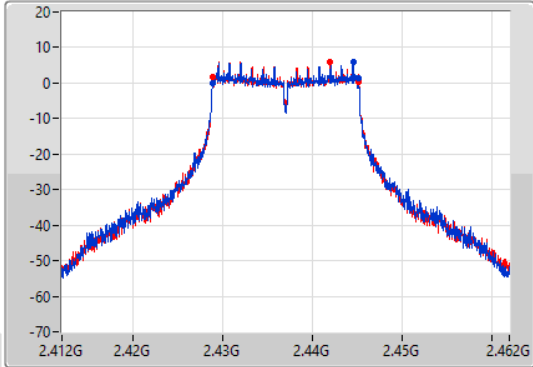
802.11g_Nss1,(6Mbps)_2TX

EBW

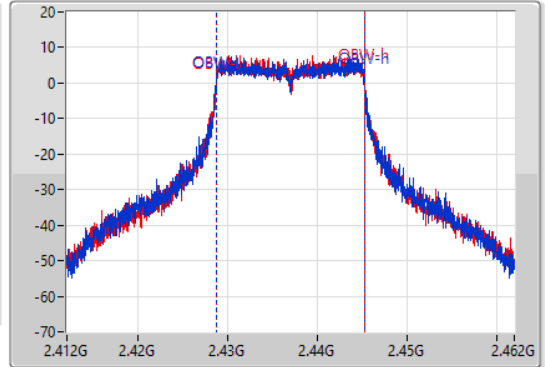
2437MHz

26/08/2021

CF
2.437GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.437GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 16.325M | 2.428825G | 2.44515G | 16.592M | 2.428679G | 2.445271G | 500k | 1 |
| 16.325M | 2.42885G | 2.445175G | 16.617M | 2.428679G | 2.445296G | 500k | 2 |

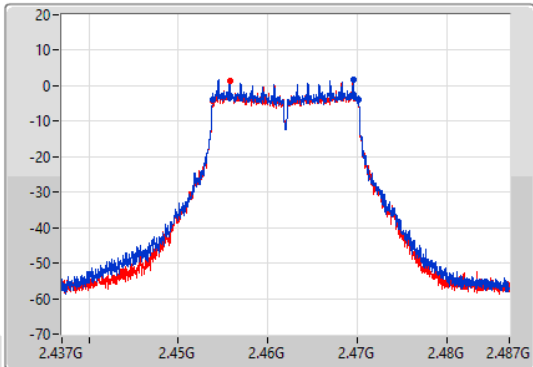
802.11g_Nss1,(6Mbps)_2TX

EBW

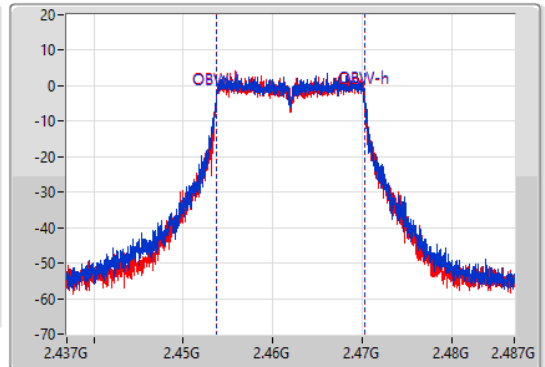
2462MHz

26/08/2021

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



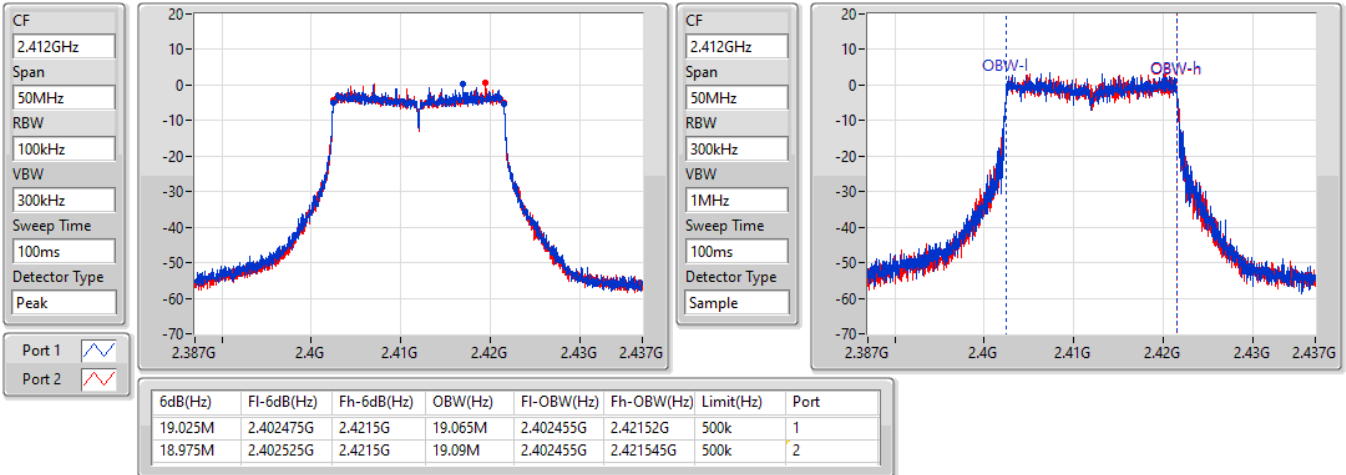
| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---------|------------|------------|---------|------------|------------|-----------|------|
| 16.35M | 2.453825G | 2.470175G | 16.617M | 2.453679G | 2.470296G | 500k | 1 |
| 16.35M | 2.453825G | 2.470175G | 16.592M | 2.453679G | 2.470271G | 500k | 2 |

802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2412MHz

26/08/2021

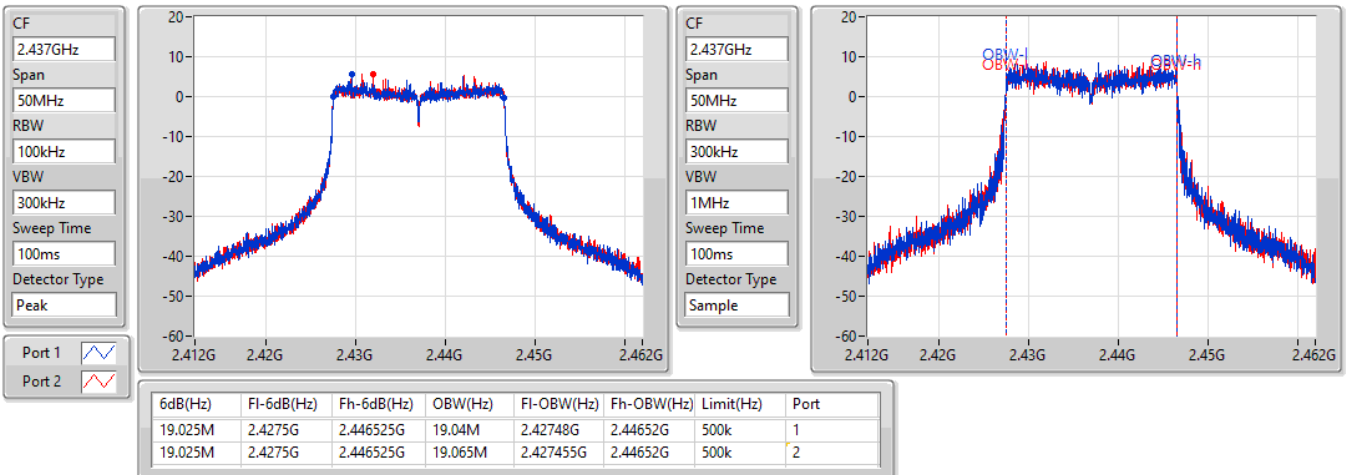


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2437MHz

26/08/2021

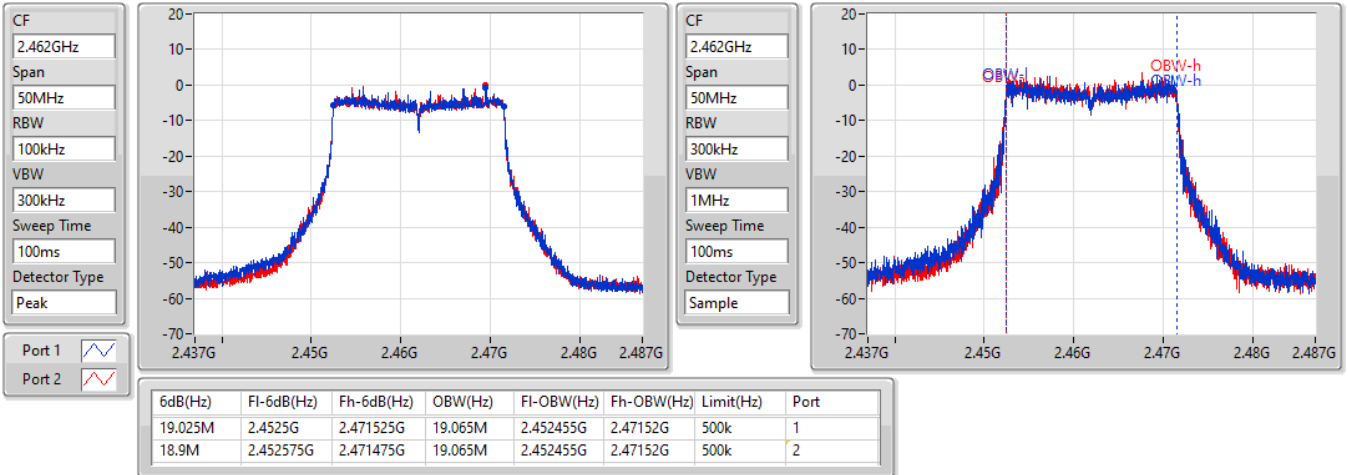


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2462MHz

26/08/2021





Summary

| Mode | Total Power (dBm) | Total Power (W) |
|--------------------------------|-------------------|-----------------|
| 2.4-2.4835GHz | - | - |
| 802.11b_Nss1,(1Mbps)_1TX | 17.45 | 0.05559 |
| 802.11g_Nss1,(6Mbps)_1TX | 16.25 | 0.04217 |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | 16.32 | 0.04285 |



Result

| Mode | Result | DG (dBi) | Port 1 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|--------------------------------|--------|----------|--------------|-------------------|-------------------|
| 802.11b_Nss1,(1Mbps)_1TX | - | - | - | - | - |
| 2412MHz | Pass | 4.00 | 15.79 | 15.79 | 30.00 |
| 2437MHz | Pass | 4.00 | 16.41 | 16.41 | 30.00 |
| 2462MHz | Pass | 4.00 | 17.45 | 17.45 | 30.00 |
| 802.11g_Nss1,(6Mbps)_1TX | - | - | - | - | - |
| 2412MHz | Pass | 4.00 | 15.59 | 15.59 | 30.00 |
| 2437MHz | Pass | 4.00 | 16.10 | 16.10 | 30.00 |
| 2462MHz | Pass | 4.00 | 16.25 | 16.25 | 30.00 |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | - | - | - | - | - |
| 2412MHz | Pass | 4.00 | 15.77 | 15.77 | 30.00 |
| 2437MHz | Pass | 4.00 | 16.32 | 16.32 | 30.00 |
| 2462MHz | Pass | 4.00 | 15.41 | 15.41 | 30.00 |

DG = Directional Gain; Port X = Port X output power



Average Power_Non-Beamforming_Serving Radio Primary_2T1S Appendix C.2

Summary

| Mode | Total Power (dBm) | Total Power (W) |
|--------------------------------|-------------------|-----------------|
| 2.4-2.4835GHz | - | - |
| 802.11b_Nss1,(1Mbps)_2TX | 19.95 | 0.09886 |
| 802.11g_Nss1,(6Mbps)_2TX | 18.77 | 0.07534 |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | 18.96 | 0.07870 |



Average Power_Non-Beamforming_Serving Radio Primary_2T1S Appendix C.2

Result

| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|--------------------------------|--------|-------------|-----------------|-----------------|----------------------|----------------------|
| 802.11b_Nss1,(1Mbps)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 4.00 | 15.54 | 15.85 | 18.71 | 30.00 |
| 2437MHz | Pass | 4.00 | 16.19 | 15.65 | 18.94 | 30.00 |
| 2462MHz | Pass | 4.00 | 17.17 | 16.70 | 19.95 | 30.00 |
| 802.11g_Nss1,(6Mbps)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 4.00 | 15.49 | 15.74 | 18.63 | 30.00 |
| 2437MHz | Pass | 4.00 | 16.02 | 15.48 | 18.77 | 30.00 |
| 2462MHz | Pass | 4.00 | 15.00 | 14.50 | 17.77 | 30.00 |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 4.00 | 14.76 | 15.14 | 17.96 | 30.00 |
| 2437MHz | Pass | 4.00 | 16.19 | 15.69 | 18.96 | 30.00 |
| 2462MHz | Pass | 4.00 | 14.20 | 13.69 | 16.96 | 30.00 |

DG = Directional Gain; Port X = Port X output power



Summary

| Mode | Total Power (dBm) | Total Power (W) |
|--------------------------------|-------------------|-----------------|
| 2.4-2.4835GHz | - | - |
| 802.11b_Nss1,(1Mbps)_4TX | 23.21 | 0.20941 |
| 802.11g_Nss1,(6Mbps)_4TX | 22.09 | 0.16181 |
| 802.11ax HEW20_Nss1,(MCS0)_4TX | 22.25 | 0.16788 |



Result

| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Port 3 (dBm) | Port 4 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|--------------------------------|--------|----------|--------------|--------------|--------------|--------------|-------------------|-------------------|
| 802.11b_Nss1,(1Mbps)_4TX | - | - | - | - | - | - | - | - |
| 2412MHz | Pass | 4.00 | 16.00 | 16.03 | 15.71 | 16.24 | 22.02 | 30.00 |
| 2437MHz | Pass | 4.00 | 16.68 | 15.92 | 16.76 | 16.18 | 22.42 | 30.00 |
| 2462MHz | Pass | 4.00 | 17.79 | 16.84 | 17.41 | 16.63 | 23.21 | 30.00 |
| 802.11g_Nss1,(6Mbps)_4TX | - | - | - | - | - | - | - | - |
| 2412MHz | Pass | 4.00 | 13.77 | 14.01 | 13.57 | 14.23 | 19.92 | 30.00 |
| 2437MHz | Pass | 4.00 | 16.14 | 15.58 | 16.45 | 16.08 | 22.09 | 30.00 |
| 2462MHz | Pass | 4.00 | 13.37 | 12.72 | 12.97 | 12.80 | 18.99 | 30.00 |
| 802.11ax HEW20_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 2412MHz | Pass | 4.00 | 12.92 | 13.34 | 12.68 | 13.39 | 19.11 | 30.00 |
| 2437MHz | Pass | 4.00 | 16.30 | 15.75 | 16.54 | 16.29 | 22.25 | 30.00 |
| 2462MHz | Pass | 4.00 | 11.45 | 10.86 | 11.21 | 10.86 | 17.12 | 30.00 |

DG = Directional Gain; Port X = Port X output power



Summary

| Mode | Total Power (dBm) | Total Power (W) |
|--------------------------------|-------------------|-----------------|
| 2.4-2.4835GHz | - | - |
| 802.11b_Nss1,(1Mbps)_1TX | 17.15 | 0.05188 |
| 802.11g_Nss1,(6Mbps)_1TX | 17.05 | 0.05070 |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | 17.56 | 0.05702 |



Result

| Mode | Result | DG (dBi) | Port 1 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|--------------------------------|--------|----------|--------------|-------------------|-------------------|
| 802.11b_Nss1,(1Mbps)_1TX | - | - | - | - | - |
| 2412MHz | Pass | 6.00 | 17.15 | 17.15 | 30.00 |
| 2437MHz | Pass | 6.00 | 16.29 | 16.29 | 30.00 |
| 2462MHz | Pass | 6.00 | 12.43 | 12.43 | 30.00 |
| 802.11g_Nss1,(6Mbps)_1TX | - | - | - | - | - |
| 2412MHz | Pass | 6.00 | 15.93 | 15.93 | 30.00 |
| 2437MHz | Pass | 6.00 | 17.05 | 17.05 | 30.00 |
| 2462MHz | Pass | 6.00 | 15.11 | 15.11 | 30.00 |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | - | - | - | - | - |
| 2412MHz | Pass | 6.00 | 13.59 | 13.59 | 30.00 |
| 2437MHz | Pass | 6.00 | 17.56 | 17.56 | 30.00 |
| 2462MHz | Pass | 6.00 | 13.59 | 13.59 | 30.00 |

DG = Directional Gain; Port X = Port X output power



Summary

| Mode | Total Power (dBm) | Total Power (W) |
|--------------------------------|-------------------|-----------------|
| 2.4-2.4835GHz | - | - |
| 802.11b_Nss1,(1Mbps)_2TX | 20.42 | 0.11015 |
| 802.11g_Nss1,(6Mbps)_2TX | 20.41 | 0.10990 |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | 20.73 | 0.11830 |



Result

| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|--------------------------------|--------|----------|--------------|--------------|-------------------|-------------------|
| 802.11b_Nss1,(1Mbps)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 6.00 | 17.12 | 17.06 | 20.10 | 30.00 |
| 2437MHz | Pass | 6.00 | 17.46 | 17.35 | 20.42 | 30.00 |
| 2462MHz | Pass | 6.00 | 17.25 | 17.29 | 20.28 | 30.00 |
| 802.11g_Nss1,(6Mbps)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 6.00 | 14.20 | 13.87 | 17.05 | 30.00 |
| 2437MHz | Pass | 6.00 | 17.43 | 17.36 | 20.41 | 30.00 |
| 2462MHz | Pass | 6.00 | 13.22 | 12.94 | 16.09 | 30.00 |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 6.00 | 11.87 | 12.42 | 15.16 | 30.00 |
| 2437MHz | Pass | 6.00 | 17.69 | 17.74 | 20.73 | 30.00 |
| 2462MHz | Pass | 6.00 | 11.55 | 11.69 | 14.63 | 30.00 |

DG = Directional Gain; Port X = Port X output power



Summary

| Mode | Total Power (dBm) | Total Power (W) |
|-----------------------------------|-------------------|-----------------|
| 2.4-2.4835GHz | - | - |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | 18.96 | 0.07870 |



Result

| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|-----------------------------------|--------|----------|--------------|--------------|-------------------|-------------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 7.01 | 14.76 | 15.14 | 17.96 | 28.99 |
| 2437MHz | Pass | 7.01 | 16.19 | 15.69 | 18.96 | 28.99 |
| 2462MHz | Pass | 7.01 | 14.20 | 13.69 | 16.96 | 28.99 |

DG = Directional Gain; Port X = Port X output power



Summary

| Mode | Total Power (dBm) | Total Power (W) |
|-----------------------------------|-------------------|-----------------|
| 2.4-2.4835GHz | - | - |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 22.25 | 0.16788 |



Result

| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Port 3 (dBm) | Port 4 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|-----------------------------------|--------|----------|--------------|--------------|--------------|--------------|-------------------|-------------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 2412MHz | Pass | 10.02 | 12.92 | 13.34 | 12.68 | 13.39 | 19.11 | 25.98 |
| 2437MHz | Pass | 10.02 | 16.30 | 15.75 | 16.54 | 16.29 | 22.25 | 25.98 |
| 2462MHz | Pass | 10.02 | 11.45 | 10.86 | 11.21 | 10.86 | 17.12 | 25.98 |

DG = Directional Gain; Port X = Port X output power



Summary

| Mode | Total Power (dBm) | Total Power (W) |
|-----------------------------------|-------------------|-----------------|
| 2.4-2.4835GHz | - | - |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | 20.73 | 0.11830 |



Result

| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|-----------------------------------|--------|----------|--------------|--------------|-------------------|-------------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 2412MHz | Pass | 9.01 | 11.87 | 12.42 | 15.16 | 26.99 |
| 2437MHz | Pass | 9.01 | 17.69 | 17.74 | 20.73 | 26.99 |
| 2462MHz | Pass | 9.01 | 11.55 | 11.69 | 14.63 | 26.99 |

DG = Directional Gain; Port X = Port X output power



Summary

| Mode | PD (dBm/RBW) |
|--------------------------------|-----------------|
| 2.4-2.4835GHz | - |
| 802.11b_Nss1,(1Mbps)_1TX | 6.15 |
| 802.11g_Nss1,(6Mbps)_1TX | -10.39 |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | -10.05 |

RBW = 3kHz;