



# FCC Radio Test Report

**FCC ID** : LDKVEHVR2777  
**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 Jun. 02, 2023. 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: Jackson Tsai

**SPORTON INTERNATIONAL INC. Hsinhua Laboratory**

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



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## History of this test report

| Report No.    | Version | Description             | Issued Date   |
|---------------|---------|-------------------------|---------------|
| FR180526-13AC | 01      | Initial issue of report | Jun. 26, 2023 |
|               |         |                         |               |
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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               | -      |

Note 1: From Sporton Project No.: FR180526AC (Serving Radio)

### 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:** Ryan Hsiao

**Report Producer:** Ann Hou

# 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                                                                      |                                              |  |
| HW Version                          | V03                                                                           |                                              |  |
| 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           |

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

#### 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           |

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

#### 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           |

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

**Non-Beamforming\_Scanning Radio\_1T1S**

| Mode                           | DC    | DCF(dB) | T(s)   | VBW(Hz) $\geq 1/T$ |
|--------------------------------|-------|---------|--------|--------------------|
| 802.11b_Nss1,(1Mbps)_1TX       | 0.951 | 0.22    | 7.026m | 300                |
| 802.11g_Nss1,(6Mbps)_1TX       | 0.923 | 0.35    | 1.433m | 1k                 |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | 0.934 | 0.3     | 5.446m | 300                |

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

**Non-Beamforming\_Scanning Radio\_2T1S**

| Mode                           | DC    | DCF(dB) | T(s)   | VBW(Hz) $\geq 1/T$ |
|--------------------------------|-------|---------|--------|--------------------|
| 802.11b_Nss1,(1Mbps)_2TX       | 0.951 | 0.22    | 7.026m | 300                |
| 802.11g_Nss1,(6Mbps)_2TX       | 0.923 | 0.35    | 1.433m | 1k                 |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | 0.934 | 0.3     | 5.446m | 300                |

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

**Beamforming\_Serving Radio Primary\_2T1S**

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

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

**Beamforming\_Serving Radio Primary\_4T1S**

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

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

**Beamforming\_Scanning Radio\_2T1S**

| Mode                              | DC    | DCF(dB) | T(s)   | VBW(Hz) $\geq 1/T$ |
|-----------------------------------|-------|---------|--------|--------------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | 0.934 | 0.3     | 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<br>(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<br>(Serving Radio)                           | CO04-HY                                                                                 | Tony Chang    | 22.1~23.7°C / 51~60% | 27/Aug/2021             |
| AC Conduction<br>(Scanning Radio)                          | CO04-HY                                                                                 | Nick Wu       | 21.4~22.8°C / 55~59% | 31/May/2023             |
| RF Conducted<br>(Serving Radio)                            | TH01-HY                                                                                 | Barry Hsiao   | 24.2~26.9°C / 49~60% | 12/Aug/2021~28/Sep/2021 |
| RF Conducted<br>(Scanning Radio)                           | TH07-HY                                                                                 | Yuna Lin      | 20.9~23.8°C / 48~60% | 15/May/2023~02/Jun/2023 |
| Radiated<br>(Serving Radio)                                | 03CH03-HY                                                                               | Justin Pan    | 24.6~26.9°C / 50~55% | 13/Aug/2021~30/Sep/2021 |
| Radiated<br>(Scanning Radio)                               | 03CH03-HY                                                                               | Ivan Chung    | 22.1~23.4°C / 50~54% | 28/May/2023~31/May/2023 |
| Radiated<br>(Co-location)                                  | 03CH03-HY                                                                               | Ivan Chung    | 22.3~22.5°C / 49~51% | 02/Jun/2023             |
| <input type="checkbox"/> Wen 33rd.St.<br>(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 ( $k=2$ ))

### Serving Radio

| 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% |

### Scanning Radio & Radiated (Co-location)

| Test Items                                  | Uncertainty | Remark                   |
|---------------------------------------------|-------------|--------------------------|
| AC Power-line Conducted Emissions           | 4.53 dB     | Confidence levels of 95% |
| Bandwidth                                   | 3 MHz       | Confidence levels of 95% |
| Maximum Conducted Output Power              | 2 dB        | Confidence levels of 95% |
| Power Spectral Density                      | 2 dB        | Confidence levels of 95% |
| Emissions in Non-restricted Frequency Bands | 0.14 dB     | Confidence levels of 95% |
| Emissions in Restricted Frequency Bands     | 4.8 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            |

**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            |



|                      |          |
|----------------------|----------|
| <b>Test Software</b> | Dos v6.1 |
|----------------------|----------|

**Non-Beamforming\_Scanning Radio\_1T1S**

| <b>Mode</b>                    | <b>Power Setting</b> |
|--------------------------------|----------------------|
| 802.11b_Nss1,(1Mbps)_1TX       | -                    |
| 2412MHz                        | 17                   |
| 2437MHz                        | 17                   |
| 2457MHz                        | 17                   |
| 2462MHz                        | 17                   |
| 802.11g_Nss1,(6Mbps)_1TX       | -                    |
| 2412MHz                        | 16                   |
| 2417MHz                        | 17                   |
| 2437MHz                        | 17                   |
| 2457MHz                        | 17                   |
| 2462MHz                        | 15                   |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | -                    |
| 2412MHz                        | 13                   |
| 2417MHz                        | 17                   |
| 2437MHz                        | 17                   |
| 2457MHz                        | 17                   |
| 2462MHz                        | 13                   |

**Non-Beamforming\_Scanning Radio\_2T1S**

| <b>Mode</b>                    | <b>Power Setting</b> |
|--------------------------------|----------------------|
| 802.11b_Nss1,(1Mbps)_2TX       | -                    |
| 2412MHz                        | 17                   |
| 2437MHz                        | 17                   |
| 2462MHz                        | 17                   |
| 802.11g_Nss1,(6Mbps)_2TX       | -                    |
| 2412MHz                        | 14                   |
| 2417MHz                        | 17                   |
| 2437MHz                        | 17                   |
| 2457MHz                        | 17                   |
| 2462MHz                        | 13                   |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | -                    |
| 2412MHz                        | 12                   |
| 2417MHz                        | 16                   |
| 2437MHz                        | 17                   |
| 2457MHz                        | 16                   |
| 2462MHz                        | 11                   |



**Beamforming\_Scanning Radio\_2T1S**

| Mode                              | Power Setting |
|-----------------------------------|---------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | -             |
| 2412MHz                           | 12            |
| 2417MHz                           | 16            |
| 2437MHz                           | 17            |
| 2457MHz                           | 16            |
| 2462MHz                           | 11            |

## 2.2 The Worst Case Measurement Configuration

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

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

| The Worst Case Mode for Following Conformance Tests |                                                                                                                                                                                                                                                     |                                                                                     |                                                                                       |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Tests Item</b>                                   | Emissions in Restricted Frequency Bands                                                                                                                                                                                                             |                                                                                     |                                                                                       |
| <b>Test Condition</b>                               | Radiated measurement<br>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. |                                                                                     |                                                                                       |
| <b>Operating Mode &lt; 1GHz</b>                     | CTX                                                                                                                                                                                                                                                 |                                                                                     |                                                                                       |
| 1                                                   | PoE mode; Serving Radio Primary_4T1S                                                                                                                                                                                                                |                                                                                     |                                                                                       |
| 2                                                   | PoE mode; Scanning Radio_2T1S                                                                                                                                                                                                                       |                                                                                     |                                                                                       |
| <b>Operating Mode &gt; 1GHz</b>                     | CTX                                                                                                                                                                                                                                                 |                                                                                     |                                                                                       |
| <b>Orthogonal Planes of EUT</b>                     | <b>X Plane</b>                                                                                                                                                                                                                                      | <b>Y Plane</b>                                                                      | <b>Z Plane</b>                                                                        |
|                                                     |                                                                                                                                                                  |  |  |
| <b>Worst Planes of EUT</b>                          |                                                                                                                                                                                                                                                     | V                                                                                   |                                                                                       |

| The Worst Case Mode for Following Conformance Tests    |                                                                                                                              |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Tests Item</b>                                      | Simultaneous Transmission Analysis                                                                                           |
| <b>Test Condition</b>                                  | Radiated measurement                                                                                                         |
| <b>Operating Mode</b>                                  | Normal Link                                                                                                                  |
| 1                                                      | WLAN 2.4G (Serving Radio Primary)+ WLAN 5G (Serving Radio Primary)+<br>WLAN 5G (Serving Radio Secondary)+ WLAN 6G+ Bluetooth |
| Refer to Appendix G for Radiated Emission Co-location. |                                                                                                                              |

| The Worst Case Mode for Following Conformance Tests                                   |                                                                                                                              |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Tests Item</b>                                                                     | Simultaneous Transmission Analysis                                                                                           |
| <b>Operating Mode</b>                                                                 | CTX                                                                                                                          |
| 1                                                                                     | WLAN 2.4G (Serving Radio Primary)+ WLAN 5G (Serving Radio Primary)+<br>WLAN 5G (Serving Radio Secondary)+ WLAN 6G+ Bluetooth |
| Refer to Sporton Test Report No.: FA180526-13 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   | -      |
| 2                                 | AC Power cable | Power sync | PW-GPC180-3 | -      |

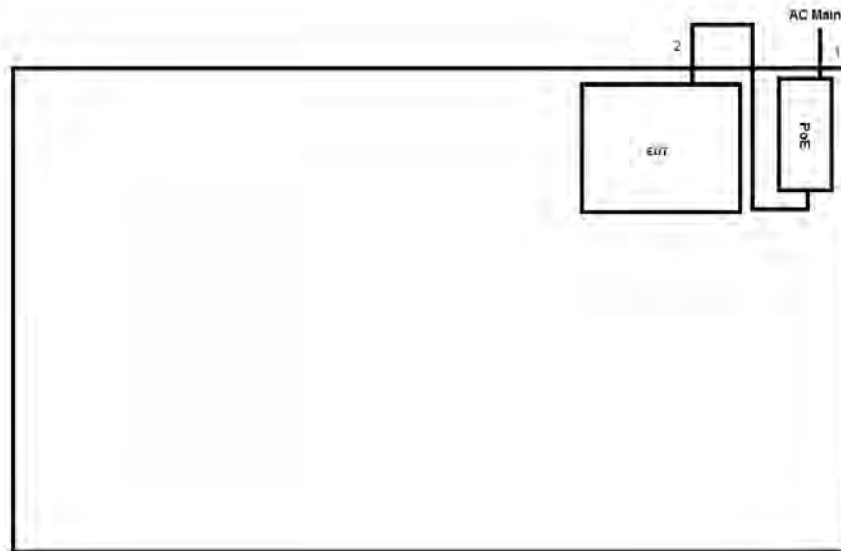
| Support Equipment – Conducted |                |            |            |        |
|-------------------------------|----------------|------------|------------|--------|
| No.                           | Equipment      | Brand Name | Model Name | Remark |
| 1                             | Notebook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

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

| Support Equipment – Radiated (Scanning Radio) |                |            |             |        |
|-----------------------------------------------|----------------|------------|-------------|--------|
| No.                                           | Equipment      | Brand Name | Model Name  | Remark |
| 1                                             | RJ45 cable     | Power sync | CAT-6E-01   | -      |
| 2                                             | AC Power cable | Power sync | PW-GPC180-3 | -      |

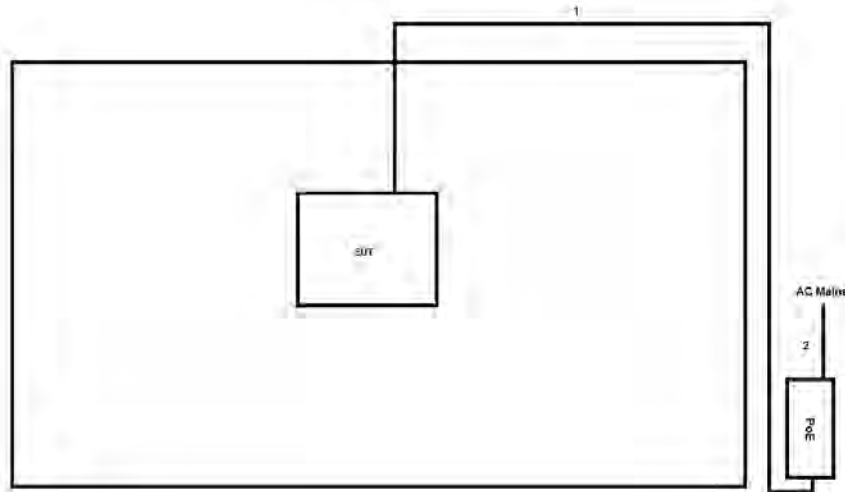
## 2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



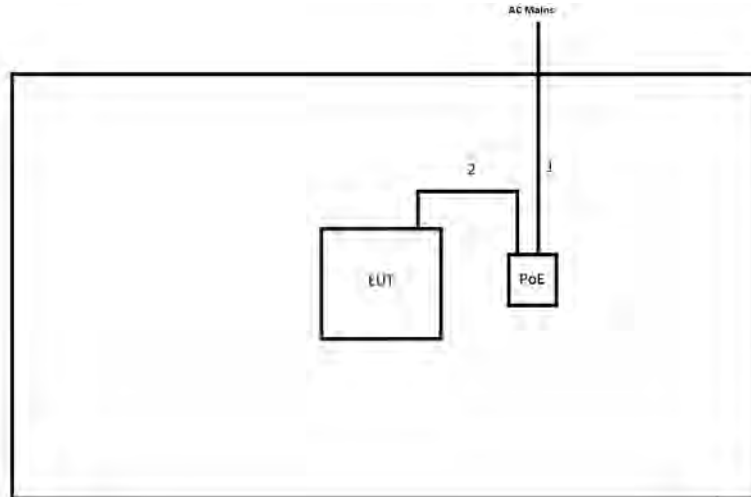
| Item | Connection     | Shielded | Length(m) | Remark |
|------|----------------|----------|-----------|--------|
| 1    | AC Power cable | No       | 1.8       | -      |
| 2    | RJ45 cable     | No       | 10        | -      |

## Test Setup Diagram - Radiated Test (Serving Radio)



| Item | Connection     | Shielded | Length(m) | Remark |
|------|----------------|----------|-----------|--------|
| 1    | RJ45 cable     | No       | 10        | -      |
| 2    | AC power cable | No       | 1.8       | -      |

## Test Setup Diagram - Radiated Test (Scanning Radio)



| Item | Connection     | Shielded | Length(m) | Remark |
|------|----------------|----------|-----------|--------|
| 1    | AC Power cable | No       | 1.8       | -      |
| 2    | RJ45 cable     | No       | 1.0       | -      |

### 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

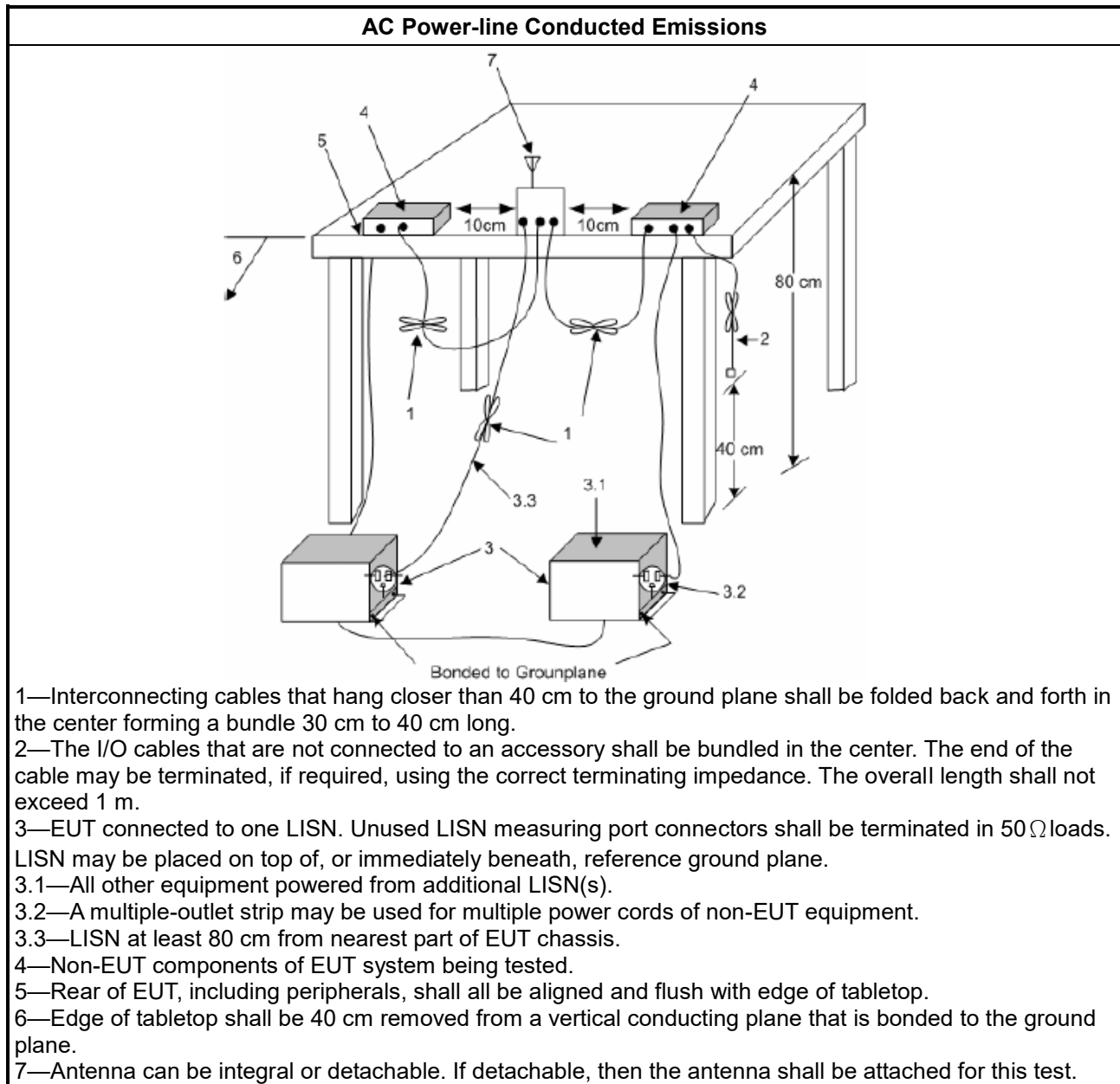
| Test Method                                                                                                      |
|------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 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                                 |                                |
|-----------------------------------------------------|--------------------------------|
| <b>Systems using digital modulation techniques:</b> |                                |
| ▪                                                   | 6 dB bandwidth $\geq$ 500 kHz. |

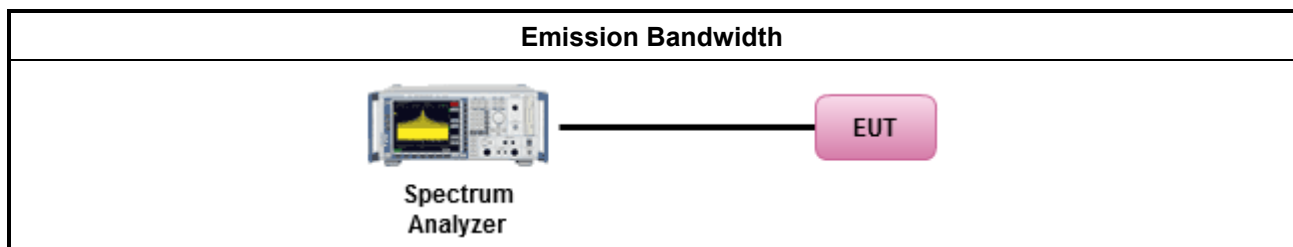
### 3.2.2 Measuring Instruments

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

### 3.2.3 Test Procedures

| Test Method                         |                                                                                  |
|-------------------------------------|----------------------------------------------------------------------------------|
| ▪                                   | 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                                                                                                                              |   |                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|----------------------------------------------------------------------------------------------------|
|                                                                                                                                                                   | ▪ | If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)                                           |
|                                                                                                                                                                   | ▪ | Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm     |
|                                                                                                                                                                   | ▪ | Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm        |
|                                                                                                                                                                   | ▪ | Smart antenna system (SAS):                                                                        |
|                                                                                                                                                                   | - | Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm                         |
|                                                                                                                                                                   | - | Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm                        |
|                                                                                                                                                                   | - | 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:                                                                                                                                             |   |                                                                                                    |
|                                                                                                                                                                   | ▪ | 2400-2483.5 MHz Band                                                                               |
|                                                                                                                                                                   | ▪ | Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)                                    |
|                                                                                                                                                                   | ▪ | Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm               |
|                                                                                                                                                                   | ▪ | Smart antenna system (SAS)                                                                         |
|                                                                                                                                                                   | - | Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm                                  |
|                                                                                                                                                                   | - | Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm                                 |
|                                                                                                                                                                   | - | 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,<br>$G_{TX}$ = the maximum transmitting antenna directional gain in dBi. |   |                                                                                                    |

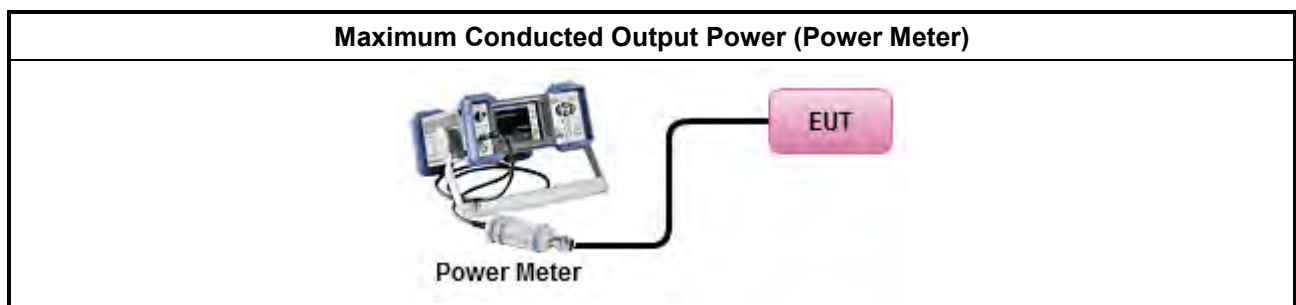
#### 3.3.2 Measuring Instruments

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"> <li>Maximum Peak Conducted Output Power</li> </ul>                                                                                                                                                                                                                                                                              |                                                                                             |
| <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"> <li>Maximum Average Conducted Output Power</li> </ul>                                                                                                                                                                                                                                                                           |                                                                                             |
| <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"> <li>For conducted measurement.</li> </ul>                                                                                                                                                                                                                                                                                       |                                                                                             |
| <ul style="list-style-type: none"> <li>If the EUT supports multiple transmit chains using options given below:<br/>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.</li> </ul> |                                                                                             |
| <ul style="list-style-type: none"> <li>If multiple transmit chains, EIRP calculation could be following as methods:<br/> <math display="block">P_{total} = P_1 + P_2 + \dots + P_n</math> (calculated in linear unit [mW] and transfer to log unit [dBm])<br/> <math display="block">EIRP_{total} = P_{total} + DG</math> </li> </ul>                              |                                                                                             |

### 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 |                                                |
|------------------------------|------------------------------------------------|
| ▪                            | Power Spectral Density (PSD) $\leq 8$ dBm/3kHz |

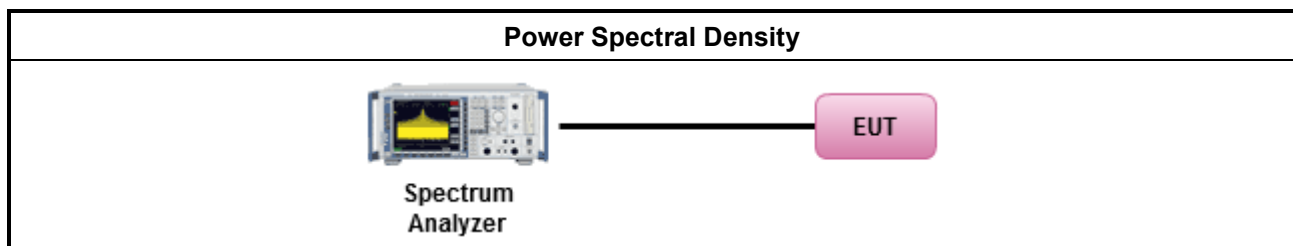
#### 3.4.2 Measuring Instruments

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

#### 3.4.3 Test Procedures

| Test Method                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ▪                                   | 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| ▪                                   | For conducted measurement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| ▪                                   | If The EUT supports multiple transmit chains using options given below:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| ▪                                   | 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         |
| <p>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.</p> <p>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.</p> |            |

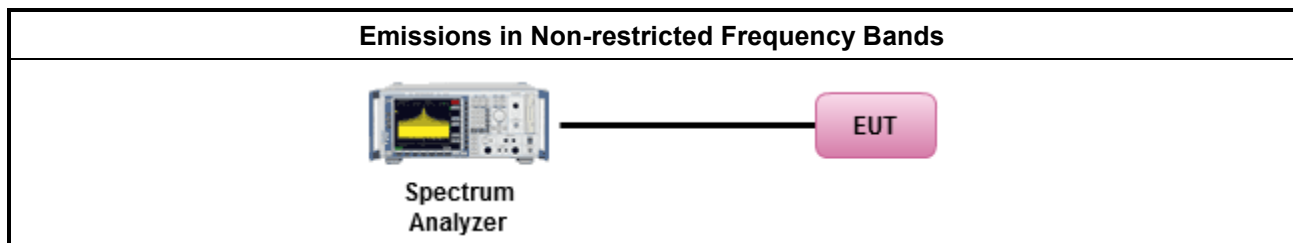
#### 3.5.2 Measuring Instruments

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"> <li>Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.</li> </ul> |

#### 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

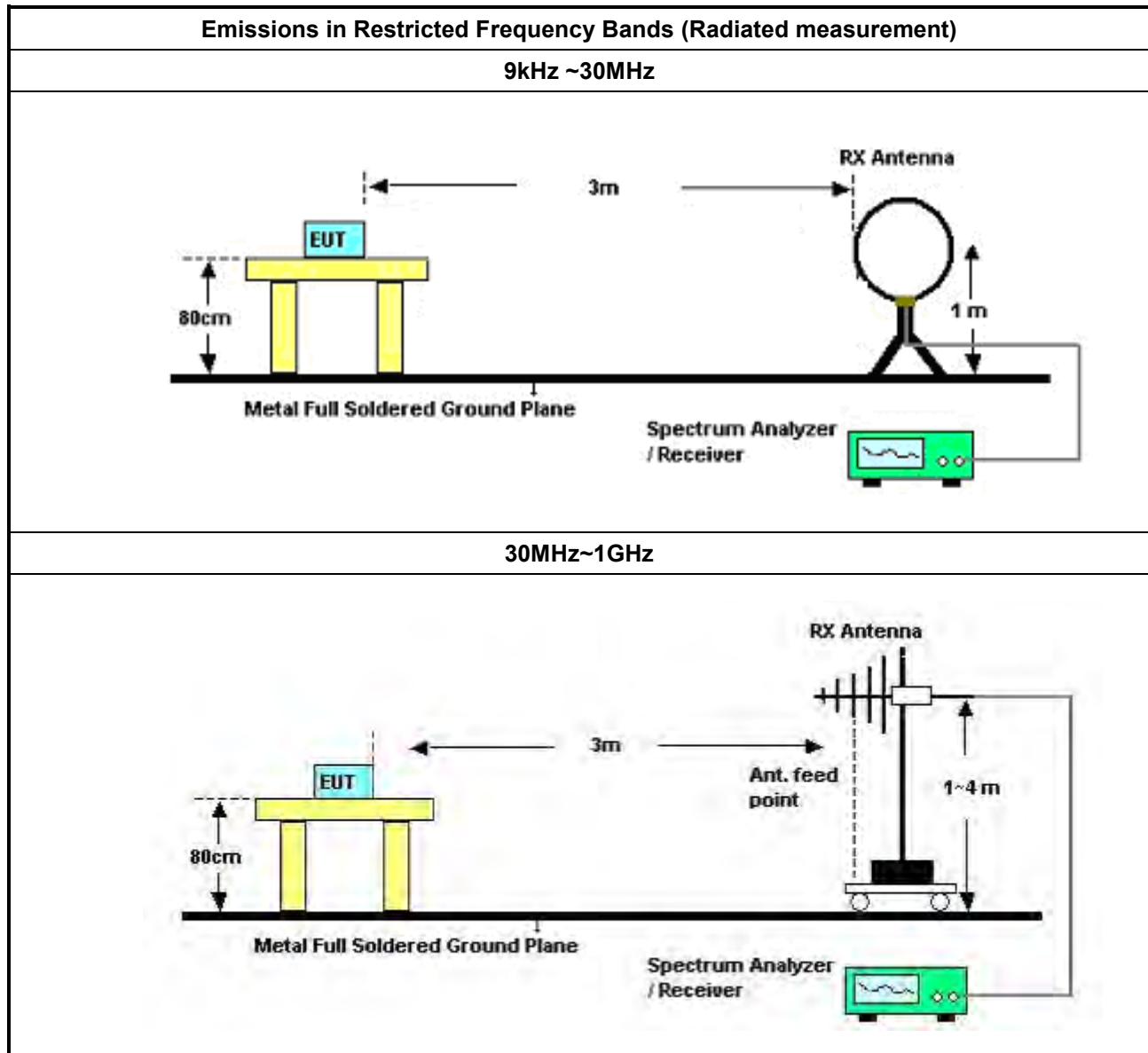
| Test Method                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>The average emission levels shall be measured in [duty cycle <math>\geq</math> 98 or duty factor].</li> </ul>                                                                        |                                                                                                                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>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.</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>For the transmitter unwanted emissions shall be measured using following options below:</li> </ul>                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.</li> </ul>                                                                                                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>For the transmitter band-edge emissions shall be measured using following options below:</li> </ul>                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                           |
|                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.</li> </ul>                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.</li> </ul>                                                                                                                                                                                                       |
| <ul style="list-style-type: none"> <li>Use the following spectrum analyzer settings:</li> </ul>                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Set RBW=100 kHz for <math>f &lt; 1</math> GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.</li> </ul>                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Set RBW = 1 MHz, VBW= 3MHz for <math>f \geq 1</math> GHz for peak measurement.<br/>For average measurement, refer as 1.1.4.</li> </ul>                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.</li> </ul>                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                                      |
|                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.</li> </ul>                                                                                                                                                                                                       |
| <ul style="list-style-type: none"> <li>For conducted and cabinet radiation measurement, refer as KDB 558074, clause 3 (12.7.4.2 of ANSI C63.10).</li> </ul>                                                                 |                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>For conducted unwanted emissions into restricted bands (absolute emission limits).<br/>Devices with multiple transmit chains using options given below:<br/>(1) Measure and sum the spectra across the outputs or<br/>(2) Measure and add 10 log(N) dB</li> </ul>                                                                                   |
|                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>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.</li> </ul> |

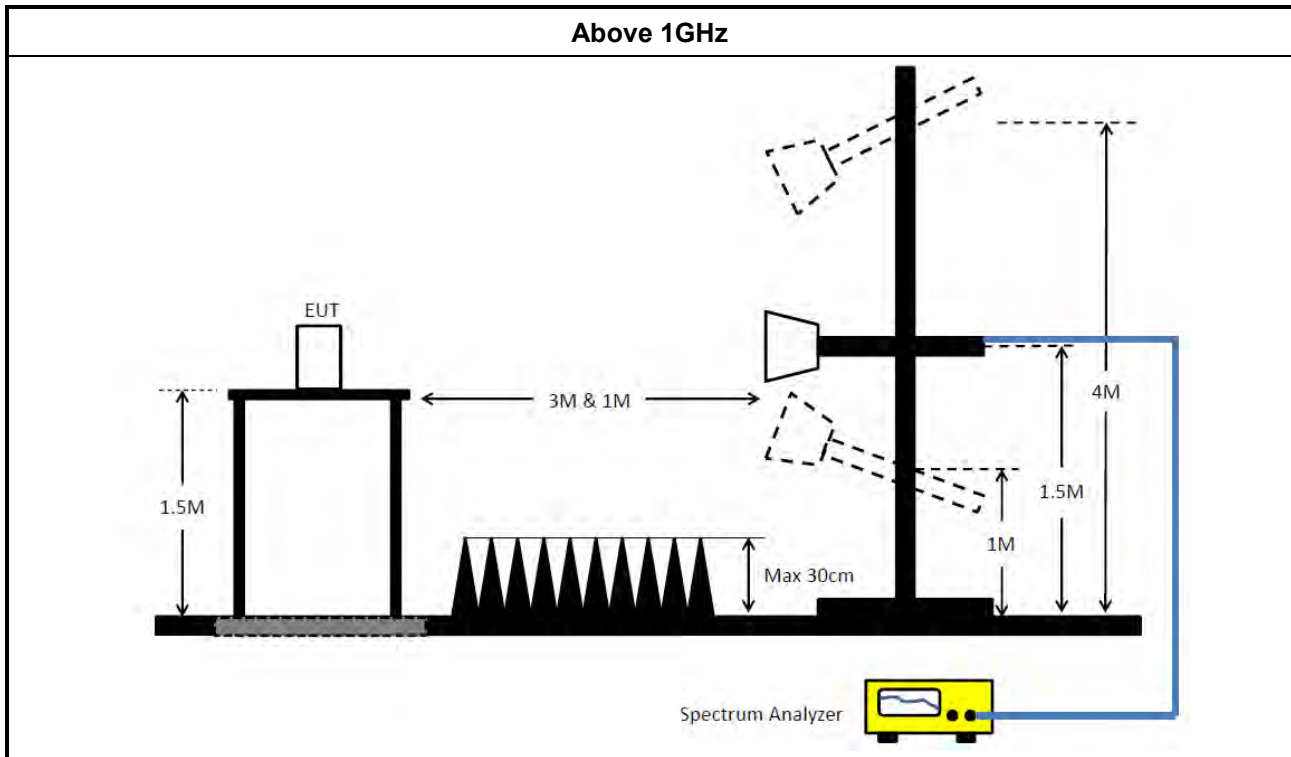
### 3.6.4 Measurement Results Calculation

The measured Level is calculated using:

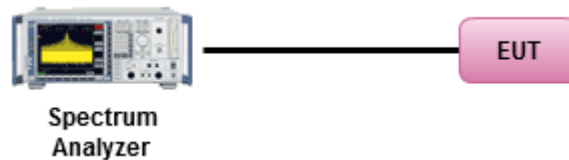
Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

### 3.6.5 Test Setup





### Emissions in Restricted Frequency Bands (Conducted measurement)



### 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 (Serving Radio)

| 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<br>Pulse Limiter | SCHWARZBECK         | VTSD 9561-F | 9561-F041     | 9kHz ~ 30MHz  | 21/Sep/2020      | 20/Sep/2021          |

### Instrument for Conducted Test (Serving Radio)

| 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<br>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 (Serving Radio)

| Instrument                             | Manufacturer /Brand | Model No.                 | Serial No.                    | Spec.            | Calibration Date | Calibration Due Date |
|----------------------------------------|---------------------|---------------------------|-------------------------------|------------------|------------------|----------------------|
| 3m Semi Anechoic<br>Chamber            | SIDT<br>FRANKONIA   | SAC-3M                    | 03CH03-HY                     | 30MHz~1GHz<br>3m | 03/Aug/2021      | 02/Aug/2022          |
| 3m Semi Anechoic<br>Chamber            | SIDT<br>FRANKONIA   | SAC-3M                    | 03CH03-HY                     | 1GHz~18GHz<br>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<br>Preamplifier       | KEYSIGHT            | 83017A                    | MY53270196                    | 1GHz~26.5GHz     | 06/Oct/2020      | 05/Oct/2021          |
| Bilog Antenna &<br>5dB Attenuator      | SCHAFFNER /<br>MTJ  | CBL 6112B /<br>MTJ6102-05 | 2723 / 2                      | 30MHz~1GHz       | 06/Sep/2020      | 05/Sep/2021          |
| Double Ridged<br>Guide Horn<br>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<br>-1+CB021-2 | 30MHz~1GHz       | 17/Mar/2021      | 16/Mar/2022          |
| RF CABLE 5+6m                          | HUBER+SUHNE<br>R    | SUOFLEX<br>104            | SN MY38596/4+SN<br>804300/4   | 1GHz~40GHz       | 28/Jul/2021      | 27/Jul/2022          |
| Broadband Horn<br>Antenna              | SCHWARZBECK         | BBHA 9170                 | BBHA 9170221                  | 15GHz~40GHz      | 11/Mar/2021      | 10/Mar/2022          |
| Microwave<br>Premplifier               | EMC<br>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 AC Conduction (Scanning Radio)**

| Instrument                     | Manufacturer /Brand | Model No.   | Serial No.    | Spec.         | Calibration Date | Calibration Due Date |
|--------------------------------|---------------------|-------------|---------------|---------------|------------------|----------------------|
| EMI Test Receiver              | R&S                 | ESR         | 102318        | 9kHz ~ 3.6GHz | 29/Dec/2022      | 28/Dec/2023          |
| Two-Line V-Network             | R&S                 | ENV 216     | 100003        | 9kHz ~ 30MHz  | 16/Feb/2023      | 15/Feb/2024          |
| RF Cable 5m                    | TITAN               | TITAN       | CO04-cable-01 | 9 kHz~200MHz  | 28/Feb/2023      | 27/Feb/2024          |
| Impuls Begrenzer Pulse Limiter | SCHWARZBECK         | VTSD 9561-F | 9561-F041     | 9kHz ~ 30MHz  | 25/Oct/2022      | 24/Oct/2023          |
| Software                       | Sporton             | SENSE-EMI   | V5.10.8.7     | -             | NCR              | NCR                  |

**Instrument for Conducted Test (Scanning Radio)**

| Instrument               | Manufacturer /Brand | Model No. | Serial No. | Spec.        | Calibration Date | Calibration Due Date |
|--------------------------|---------------------|-----------|------------|--------------|------------------|----------------------|
| Signal Analyzer          | R&S                 | FSV 40    | 101515     | 10Hz~40GHz   | 14/Feb/2023      | 13/Feb/2024          |
| SMB100A Signal Generator | R&S                 | SMB100A   | 181147     | 100kHz~40GHz | 21/Oct/2022      | 20/Oct/2023          |
| Pulse Sensor             | Anritsu             | MA2411B   | 1339407    | 300MHz~40GHz | 14/Dec/2022      | 13/Dec/2023          |
| Power Meter              | Anritsu             | ML2495A   | 1517010    | 300MHz~40GHz | 14/Dec/2022      | 13/Dec/2023          |
| SENSE-15247_DT S         | Sporton             | V5.11.6   | N/A        | N/A          | N/A              | N/A                  |

**Instrument for Radiated Test (Scanning Radio)**

| 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<br>3m | 01/Aug/2022      | 31/Jul/2023          |
| 3m Semi Anechoic Chamber         | SIDT FRANKONIA      | SAC-3M            | 03CH03-HY         | 1GHz~18GHz<br>3m | 02/Aug/2022      | 01/Aug/2023          |
| Signal Analyzer                  | R&S                 | FSV40             | 101500            | 10Hz~40GHz       | 26/Oct/2022      | 25/Oct/2023          |
| Amplifier                        | Aglient             | 8447D             | 2944A08033        | 10kHz~1.3GHz     | 07/Apr/2023      | 06/Apr/2024          |
| Double Ridged Guide Horn Antenna | SCHWARZBECK         | BBHA 9120 D       | 02267             | 1GHz ~18GHz      | 27/Sep/2022      | 26/Sep/2023          |
| Bilog Antenna & 6dB Attenuator   | SCHAFFNER / EMC     | CBL6112B / N-6-05 | 22237 / AT-N-0603 | 30MHz~1GHz       | 16/Oct/2022      | 15/Oct/2023          |
| RF Cable-R03m                    | Jye Bao             | RG142             | CB021             | 9kHz~30MHz       | 13/Jun/2022      | 12/Jun/2023          |
| RF Cable-R03m                    | Jye Bao             | RG142             | 03CH03-cable-02   | 30MHz~1GHz       | 23/Mar/2023      | 22/Mar/2024          |
| RF CABLE 5+6m                    | HUBER+SUHNER        | SUOFLEX 104       | 03CH03-cable-01   | 1GHz~40GHz       | 27/Jul/2022      | 26/Jul/2023          |
| Broadband Horn Antenna           | SCHWARZBECK         | BBHA 9170         | 1248              | 18GHz~40GHz      | 22/Aug/2022      | 21/Aug/2023          |
| Microwave Premplifier            | Agilent             | 8449B             | 3008A02326        | 1GHz~26.5GHz     | 14/Jul/2022      | 13/Jul/2023          |
| Microwave Premplifier            | EMC INSTRUMENTS     | EM18G40G          | 060604            | 18GHz ~ 40GHz    | 16/Mar/2023      | 15/Mar/2024          |
| Loop Antenna                     | TESEQ               | HLA 6120          | 31244             | 9kHz~30MHz       | 23/Mar/2023      | 22/Mar/2024          |
| EMI Test Receiver                | R&S                 | ESR               | 102318            | 9kHz~3.6GHz      | 29/Dec/2022      | 28/Dec/2023          |
| SENSE_15247_D TS                 | Sporton             | V5.11             | NA                | NA               | NA               | NA                   |

**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<br>3m | 02/Aug/2022      | 01/Aug/2023          |
| Signal Analyzer                  | R&S                 | FSV40       | 101500          | 10Hz~40GHz       | 26/Oct/2022      | 25/Oct/2023          |
| Double Ridged Guide Horn Antenna | SCHWARZBECK         | BBHA 9120 D | 02267           | 1GHz ~18GHz      | 27/Sep/2022      | 26/Sep/2023          |
| RF CABLE 5+6m                    | HUBER+SUHNER        | SUOFLEX 104 | 03CH03-cable-01 | 1GHz~40GHz       | 27/Jul/2022      | 26/Jul/2023          |
| Broadband Horn Antenna           | SCHWARZBECK         | BBHA 9170   | 1248            | 18GHz~40GHz      | 22/Aug/2022      | 21/Aug/2023          |
| Microwave Premplifier            | Agilent             | 8449B       | 3008A02326      | 1GHz~26.5GHz     | 14/Jul/2022      | 13/Jul/2023          |
| Microwave Premplifier            | EMC INSTRUMENTS     | EM18G40G    | 060604          | 18GHz ~ 40GHz    | 16/Mar/2023      | 15/Mar/2024          |
| SENSE_15407_EMI                  | Sporton             | V5.11       | NA              | NA               | NA               | NA                   |



**Conducted Emissions at Powerline\_  
Non-Beamforming\_Scanning Radio\_2T1S**

**Appendix A.1**

**Summary**

| Mode   | Result | Type | Freq<br>(Hz) | Level<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) | Condition |
|--------|--------|------|--------------|-----------------|-----------------|----------------|-----------|
| Mode 1 | Pass   | AV   | 447.846k     | 27.95           | 46.92           | -18.97         | Line      |



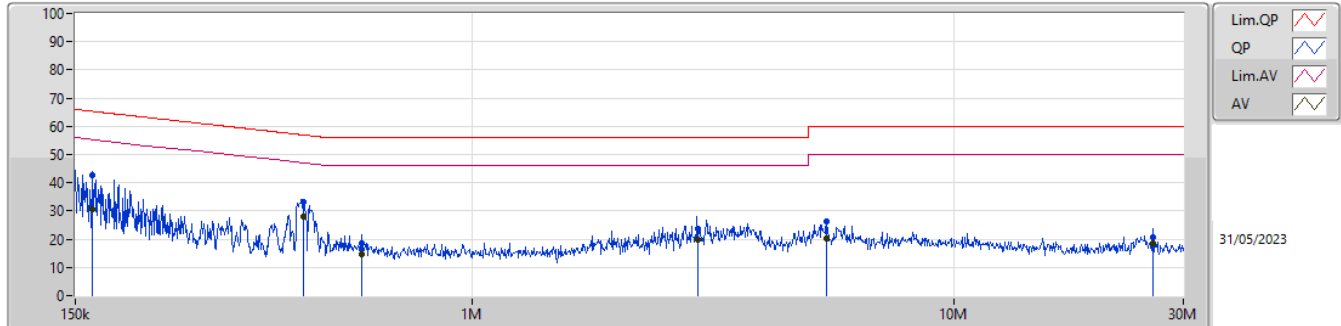
**Conducted Emissions at Powerline  
Non-Beamforming Scanning Radio 2T1S**

**Appendix A.1**

**Mode Configure**

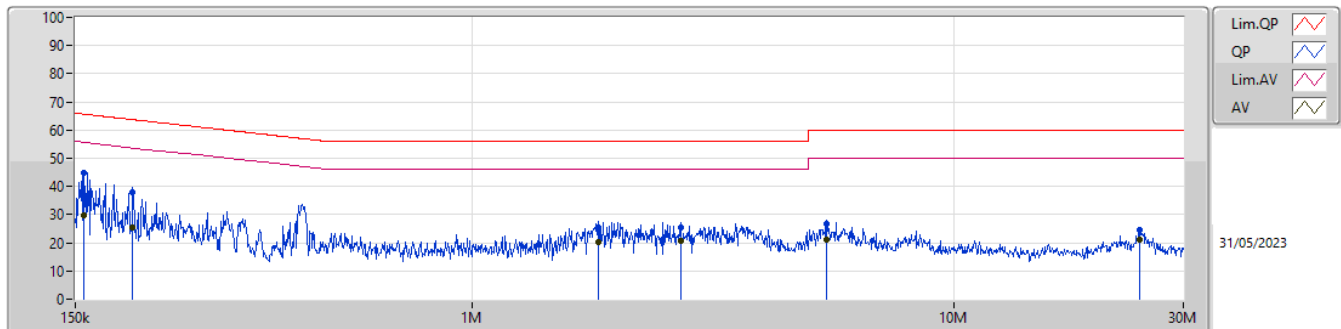
| Mode   | Result | Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Condition | Comments |
|--------|--------|------|-----------|--------------|--------------|-------------|-----------|----------|
| Mode 1 | Pass   | QP   | 162.467k  | 42.59        | 65.33        | -22.74      | Line      | -        |
| Mode 1 | Pass   | AV   | 162.467k  | 30.69        | 55.33        | -24.64      | Line      | -        |
| Mode 1 | Pass   | QP   | 447.846k  | 33.12        | 56.92        | -23.80      | Line      | -        |
| Mode 1 | Pass   | AV   | 447.846k  | 27.95        | 46.92        | -18.97      | Line      | -        |
| Mode 1 | Pass   | QP   | 589.868k  | 18.35        | 56.00        | -37.65      | Line      | -        |
| Mode 1 | Pass   | AV   | 589.868k  | 14.66        | 46.00        | -31.34      | Line      | -        |
| Mode 1 | Pass   | QP   | 2.936M    | 23.82        | 56.00        | -32.18      | Line      | -        |
| Mode 1 | Pass   | AV   | 2.936M    | 19.78        | 46.00        | -26.22      | Line      | -        |
| Mode 1 | Pass   | QP   | 5.45M     | 26.17        | 60.00        | -33.83      | Line      | -        |
| Mode 1 | Pass   | AV   | 5.45M     | 20.47        | 50.00        | -29.53      | Line      | -        |
| Mode 1 | Pass   | QP   | 25.961M   | 20.63        | 60.00        | -39.37      | Line      | -        |
| Mode 1 | Pass   | AV   | 25.961M   | 18.46        | 50.00        | -31.54      | Line      | -        |
| Mode 1 | Pass   | QP   | 156.109k  | 44.82        | 65.67        | -20.85      | Neutral   | -        |
| Mode 1 | Pass   | AV   | 156.109k  | 29.82        | 55.67        | -25.85      | Neutral   | -        |
| Mode 1 | Pass   | QP   | 197.568k  | 38.00        | 63.71        | -25.71      | Neutral   | -        |
| Mode 1 | Pass   | AV   | 197.568k  | 25.33        | 53.71        | -28.38      | Neutral   | -        |
| Mode 1 | Pass   | QP   | 1.826M    | 25.45        | 56.00        | -30.55      | Neutral   | -        |
| Mode 1 | Pass   | AV   | 1.826M    | 20.40        | 46.00        | -25.60      | Neutral   | -        |
| Mode 1 | Pass   | QP   | 2.71M     | 25.52        | 56.00        | -30.48      | Neutral   | -        |
| Mode 1 | Pass   | AV   | 2.71M     | 20.54        | 46.00        | -25.46      | Neutral   | -        |
| Mode 1 | Pass   | QP   | 5.45M     | 26.51        | 60.00        | -33.49      | Neutral   | -        |
| Mode 1 | Pass   | AV   | 5.45M     | 21.00        | 50.00        | -29.00      | Neutral   | -        |
| Mode 1 | Pass   | QP   | 24.354M   | 24.55        | 60.00        | -35.45      | Neutral   | -        |
| Mode 1 | Pass   | AV   | 24.354M   | 21.08        | 50.00        | -28.92      | Neutral   | -        |

Conducted Emissions at Powerline\_Mode 1



| Type | Freq<br>(Hz) | Level<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) | Factor<br>(dB) | Condition | Comment | Raw<br>(dBuV) | LISN<br>(dB) | CL<br>(dB) | AT<br>(dB) |  |  |  |  |  |  |
|------|--------------|-----------------|-----------------|----------------|----------------|-----------|---------|---------------|--------------|------------|------------|--|--|--|--|--|--|
| QP   | 162.467k     | 42.59           | 65.33           | -22.74         | 19.61          | Line      | -       | 22.98         | 9.65         | 0.03       | 9.93       |  |  |  |  |  |  |
| AV   | 162.467k     | 30.69           | 55.33           | -24.64         | 19.61          | Line      | -       | 11.08         | 9.65         | 0.03       | 9.93       |  |  |  |  |  |  |
| QP   | 447.846k     | 33.12           | 56.92           | -23.80         | 19.64          | Line      | -       | 13.48         | 9.64         | 0.04       | 9.96       |  |  |  |  |  |  |
| AV   | 447.846k     | 27.95           | 46.92           | -18.97         | 19.64          | Line      | -       | 8.31          | 9.64         | 0.04       | 9.96       |  |  |  |  |  |  |
| QP   | 589.868k     | 18.35           | 56.00           | -37.65         | 19.63          | Line      | -       | -1.28         | 9.64         | 0.04       | 9.95       |  |  |  |  |  |  |
| AV   | 589.868k     | 14.66           | 46.00           | -31.34         | 19.63          | Line      | -       | -4.97         | 9.64         | 0.04       | 9.95       |  |  |  |  |  |  |
| QP   | 2.936M       | 23.82           | 56.00           | -32.18         | 19.73          | Line      | -       | 4.09          | 9.69         | 0.11       | 9.93       |  |  |  |  |  |  |
| AV   | 2.936M       | 19.78           | 46.00           | -26.22         | 19.73          | Line      | -       | 0.05          | 9.69         | 0.11       | 9.93       |  |  |  |  |  |  |
| QP   | 5.45M        | 26.17           | 60.00           | -33.83         | 19.82          | Line      | -       | 6.35          | 9.73         | 0.15       | 9.94       |  |  |  |  |  |  |
| AV   | 5.45M        | 20.47           | 50.00           | -29.53         | 19.82          | Line      | -       | 0.65          | 9.73         | 0.15       | 9.94       |  |  |  |  |  |  |
| QP   | 25.961M      | 20.63           | 60.00           | -39.37         | 20.07          | Line      | -       | 0.56          | 9.78         | 0.32       | 9.97       |  |  |  |  |  |  |
| AV   | 25.961M      | 18.46           | 50.00           | -31.54         | 20.07          | Line      | -       | -1.61         | 9.78         | 0.32       | 9.97       |  |  |  |  |  |  |

Conducted Emissions at Powerline\_Mode 1



| Type | Freq<br>(Hz) | Level<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) | Factor<br>(dB) | Condition | Comment | Raw<br>(dBuV) | LISN<br>(dB) | CL<br>(dB) | AT<br>(dB) |  |  |  |  |  |  |
|------|--------------|-----------------|-----------------|----------------|----------------|-----------|---------|---------------|--------------|------------|------------|--|--|--|--|--|--|
| QP   | 156.109k     | 44.82           | 65.67           | -20.85         | 19.59          | Neutral   | -       | 25.23         | 9.63         | 0.03       | 9.93       |  |  |  |  |  |  |
| AV   | 156.109k     | 29.82           | 55.67           | -25.85         | 19.59          | Neutral   | -       | 10.23         | 9.63         | 0.03       | 9.93       |  |  |  |  |  |  |
| QP   | 197.568k     | 38.00           | 63.71           | -25.71         | 19.58          | Neutral   | -       | 18.42         | 9.62         | 0.03       | 9.93       |  |  |  |  |  |  |
| AV   | 197.568k     | 25.33           | 53.71           | -28.38         | 19.58          | Neutral   | -       | 5.75          | 9.62         | 0.03       | 9.93       |  |  |  |  |  |  |
| QP   | 1.826M       | 25.45           | 56.00           | -30.55         | 19.68          | Neutral   | -       | 5.77          | 9.66         | 0.08       | 9.94       |  |  |  |  |  |  |
| AV   | 1.826M       | 20.40           | 46.00           | -25.60         | 19.68          | Neutral   | -       | 0.72          | 9.66         | 0.08       | 9.94       |  |  |  |  |  |  |
| QP   | 2.71M        | 25.52           | 56.00           | -30.48         | 19.71          | Neutral   | -       | 5.81          | 9.67         | 0.10       | 9.94       |  |  |  |  |  |  |
| AV   | 2.71M        | 20.54           | 46.00           | -25.46         | 19.71          | Neutral   | -       | 0.83          | 9.67         | 0.10       | 9.94       |  |  |  |  |  |  |
| QP   | 5.45M        | 26.51           | 60.00           | -33.49         | 19.81          | Neutral   | -       | 6.70          | 9.72         | 0.15       | 9.94       |  |  |  |  |  |  |
| AV   | 5.45M        | 21.00           | 50.00           | -29.00         | 19.81          | Neutral   | -       | 1.19          | 9.72         | 0.15       | 9.94       |  |  |  |  |  |  |
| QP   | 24.354M      | 24.55           | 60.00           | -35.45         | 20.30          | Neutral   | -       | 4.25          | 10.02        | 0.31       | 9.97       |  |  |  |  |  |  |
| AV   | 24.354M      | 21.08           | 50.00           | -28.92         | 20.30          | Neutral   | -       | 0.78          | 10.02        | 0.31       | 9.97       |  |  |  |  |  |  |



**Conducted Emissions at Powerline\_  
Non-Beamforming\_Serving Radio Primary\_4T1S**

**Appendix A.2**

**Summary**

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



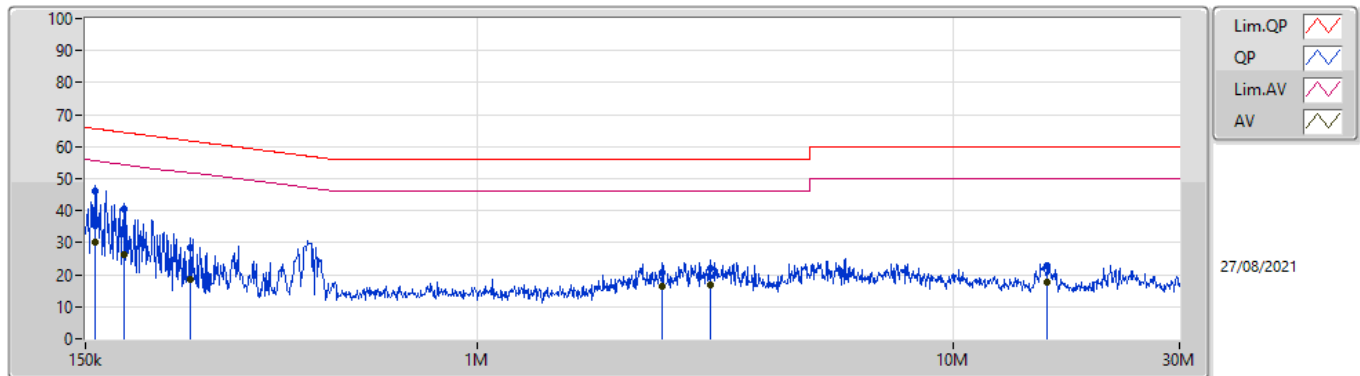
# **Conducted Emissions at Powerline** **Non-Beamforming\_Serving Radio Primary\_4T1S**

## **Appendix A.2**

### **Result**

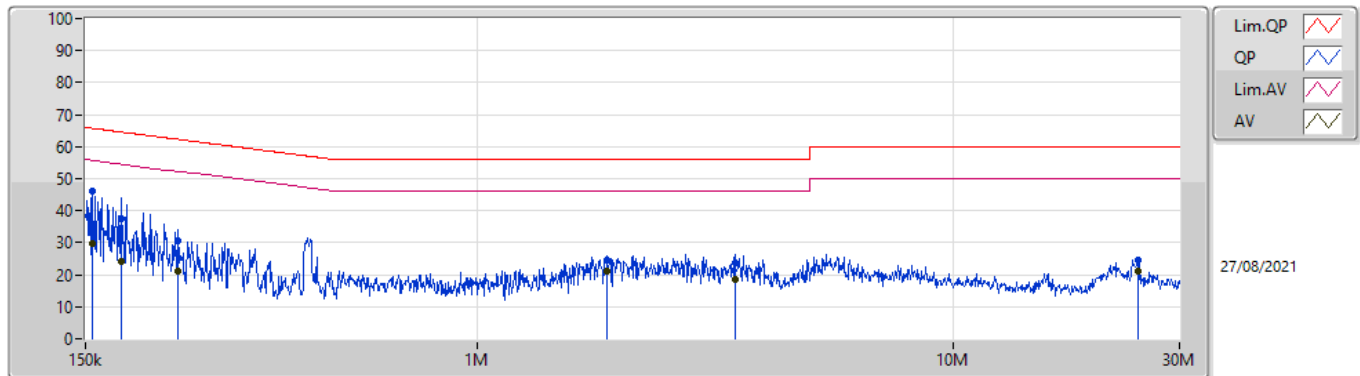
| Mode   | Result | Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Condition | Comments |
|--------|--------|------|-----------|--------------|--------------|-------------|-----------|----------|
| Mode 1 | Pass   | QP   | 156.734k  | 46.07        | 65.64        | -19.57      | Line      | -        |
| 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<br>(Hz) | Level<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) | Factor<br>(dB) | Condition | Comment | Raw<br>(dBuV) | LISN<br>(dB) | CL<br>(dB) | AT<br>(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<br>(Hz) | Level<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) | Factor<br>(dB) | Condition | Comment | Raw<br>(dBuV) | LISN<br>(dB) | CL<br>(dB) | AT<br>(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<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(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<br>(Hz) | Port 1-N dB<br>(Hz) | Port 1-OBW<br>(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            |

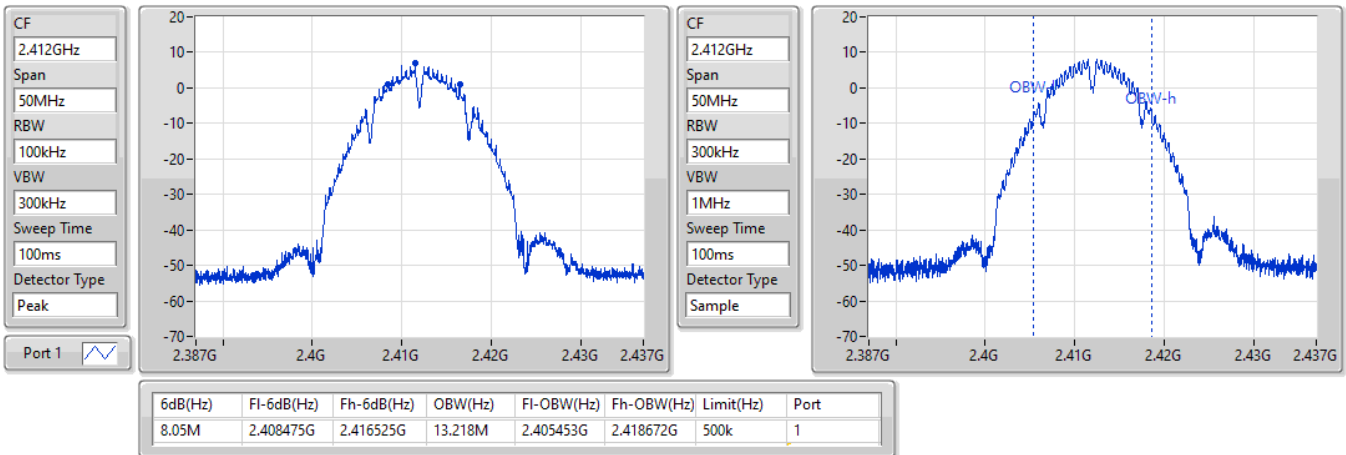
Port X-N dB = Port X 6dB down bandwidth;  
Port X-OBW = Port X 99% occupied bandwidth

## 802.11b\_Nss1,(1Mbps)\_1TX

EBW

2412MHz

12/08/2021

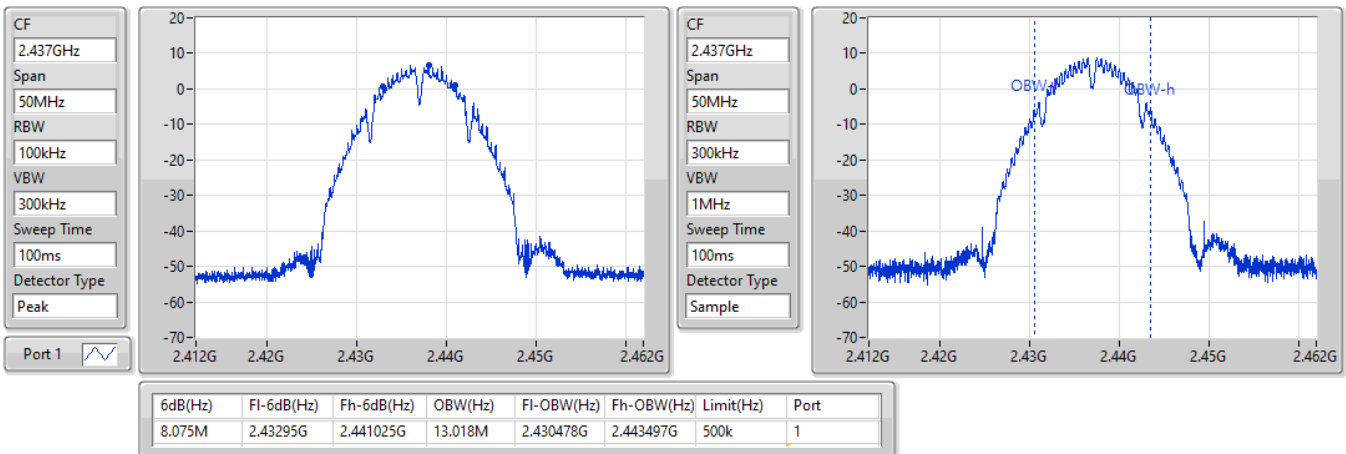


## 802.11b\_Nss1,(1Mbps)\_1TX

EBW

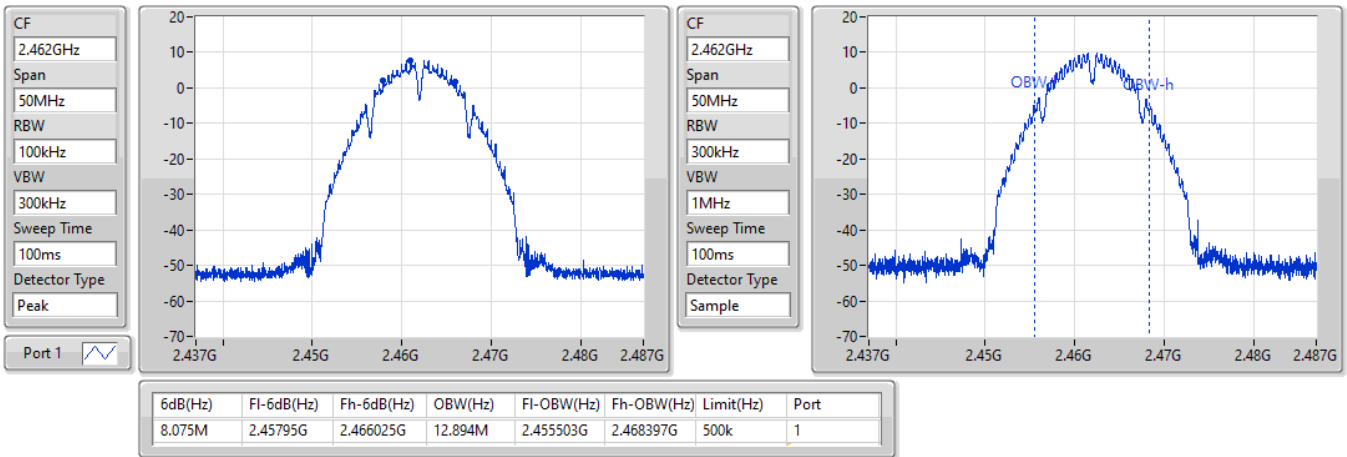
2437MHz

12/08/2021

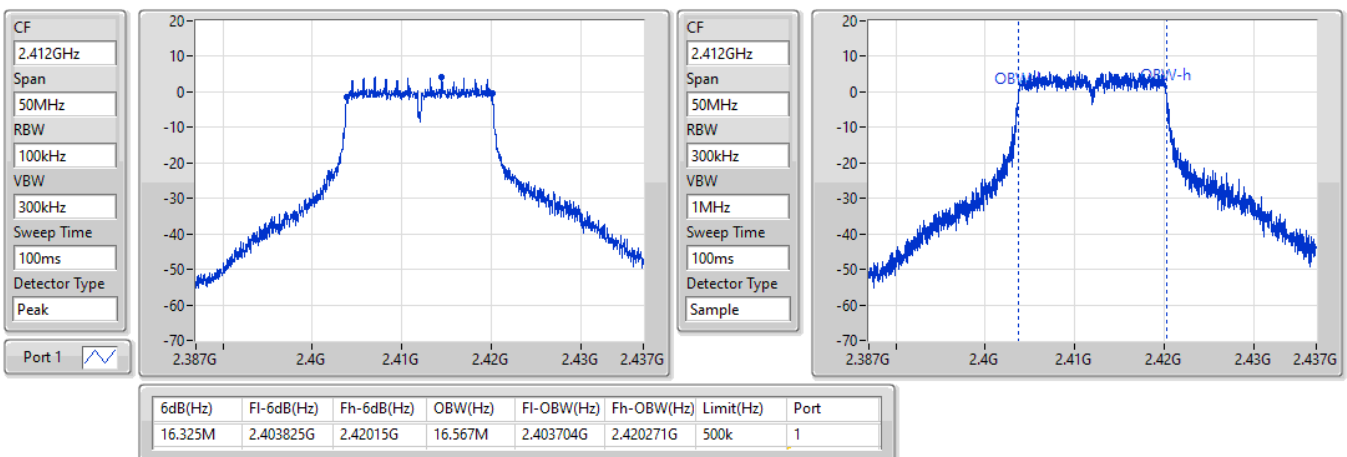


**802.11b\_Nss1,(1Mbps)\_1TX**
**EBW**
**2462MHz**

12/08/2021


**802.11g\_Nss1,(6Mbps)\_1TX**
**EBW**
**2412MHz**

12/08/2021

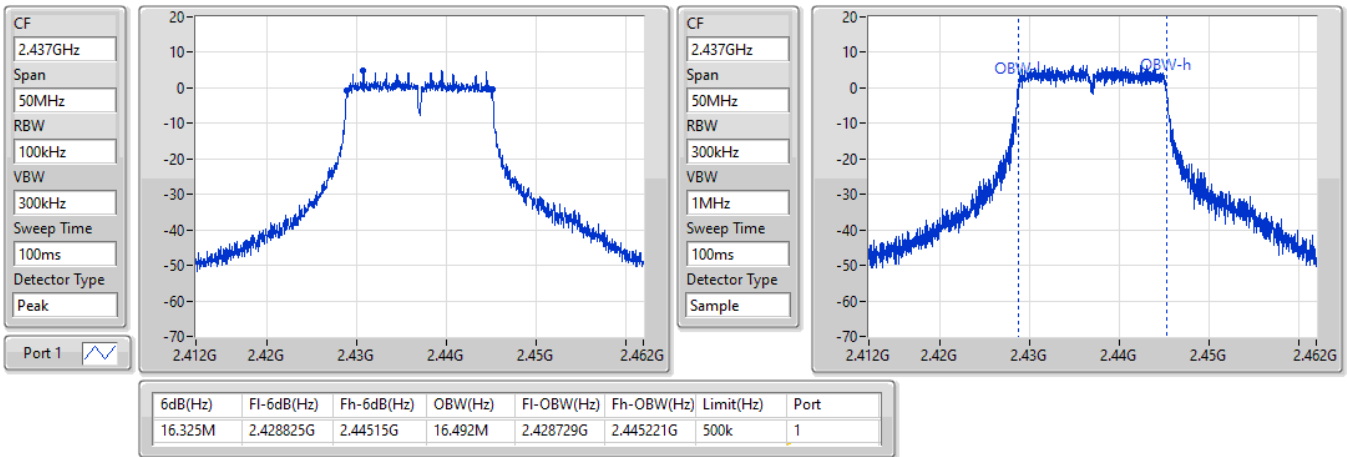


## 802.11g\_Nss1,(6Mbps)\_1TX

EBW

2437MHz

12/08/2021

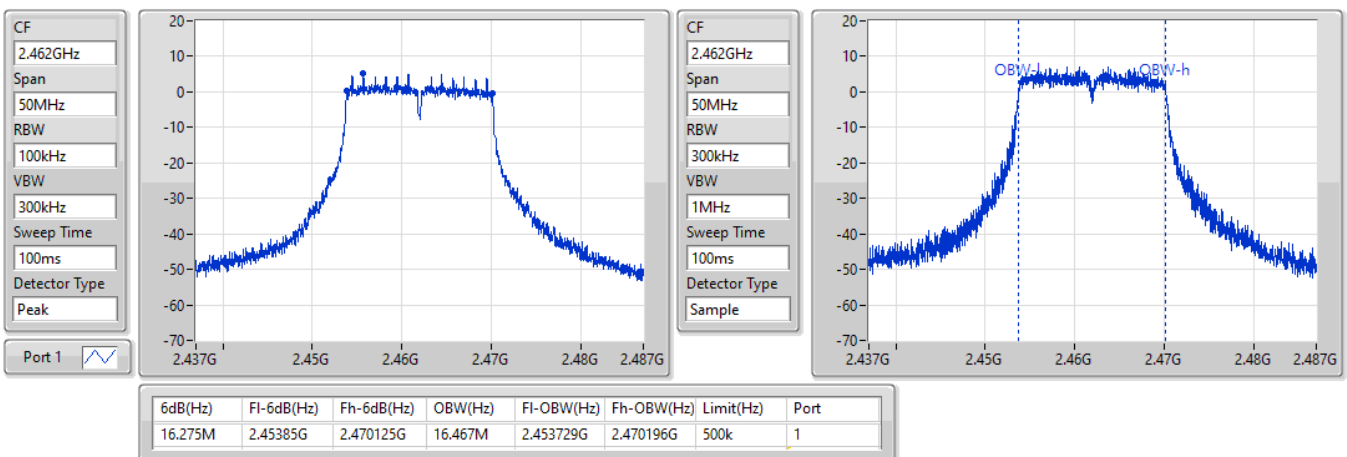


## 802.11g\_Nss1,(6Mbps)\_1TX

EBW

2462MHz

12/08/2021

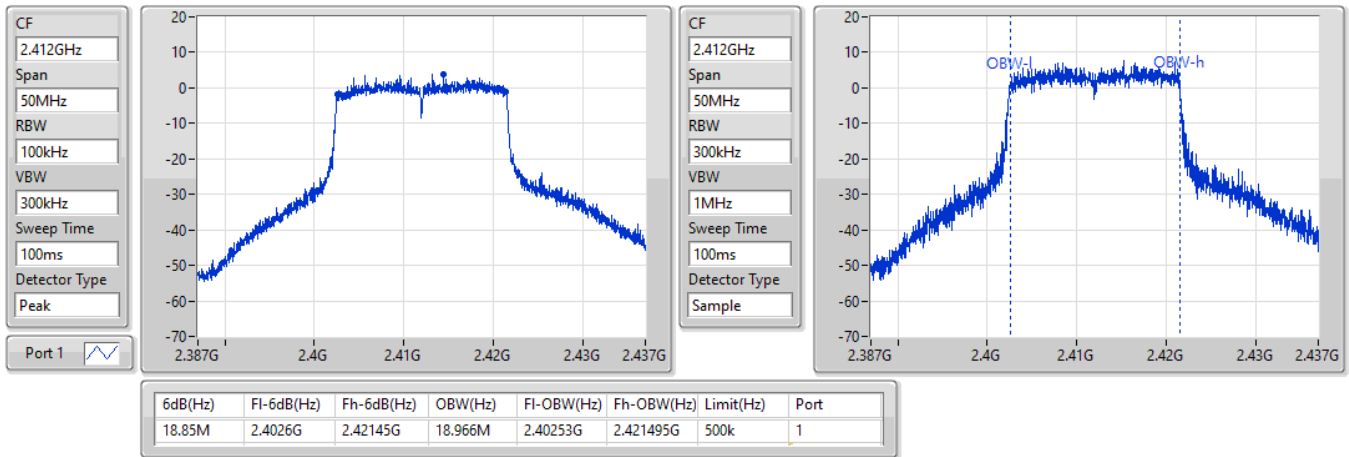


## 802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2412MHz

12/08/2021

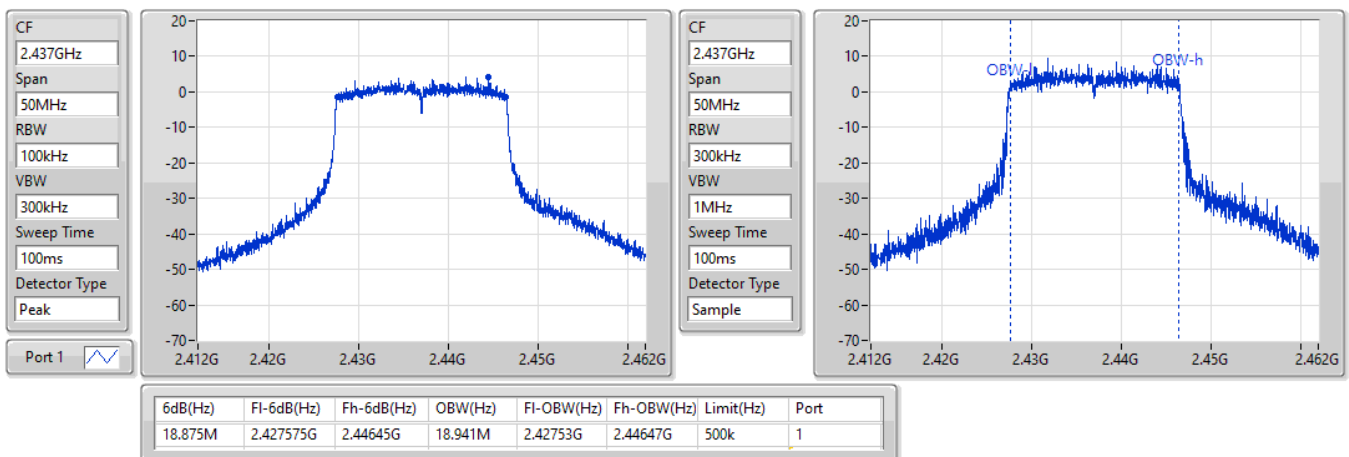


## 802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2437MHz

12/08/2021

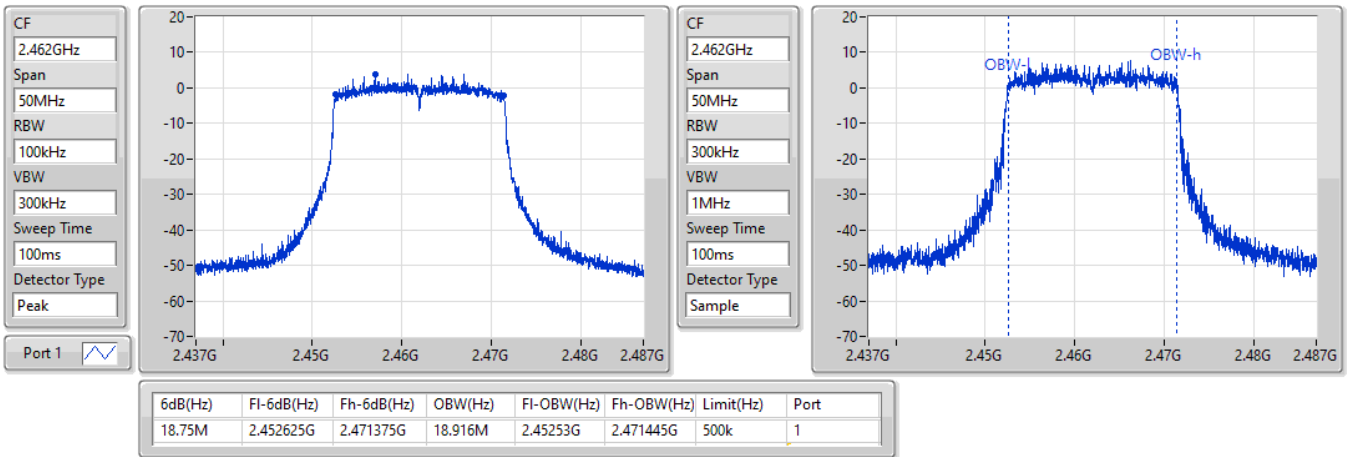


## 802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

12/08/2021



**Summary**

| Mode                           | Max-N dB<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(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<br>(Hz) | Port 1-N dB<br>(Hz) | Port 1-OBW<br>(Hz) | Port 2-N dB<br>(Hz) | Port 2-OBW<br>(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            |

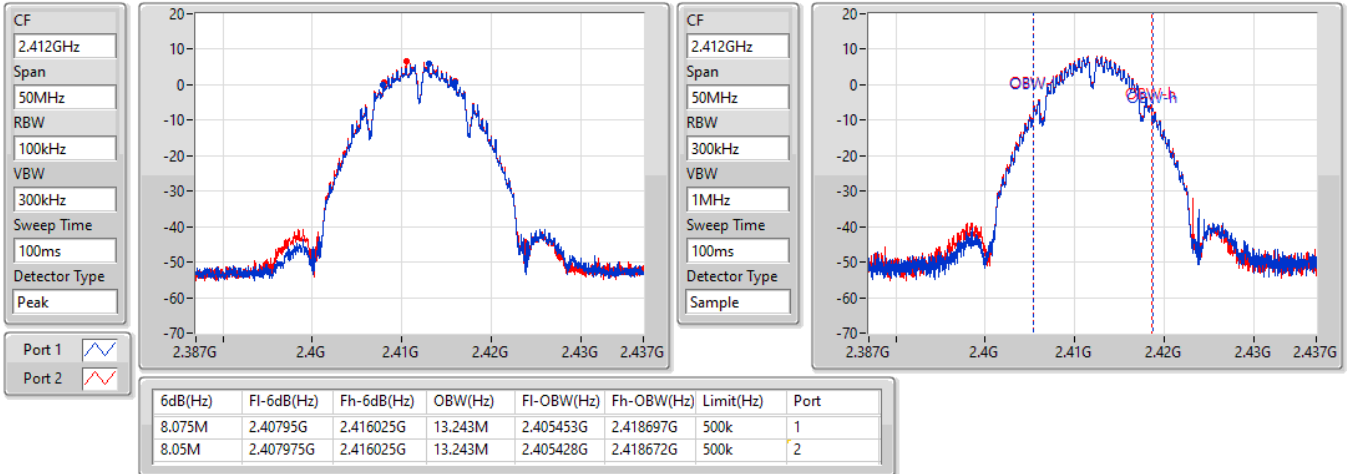
Port X-N dB = Port X 6dB down bandwidth;  
Port X-OBW = Port X 99% occupied bandwidth

## 802.11b\_Nss1,(1Mbps)\_2TX

EBW

2412MHz

12/08/2021

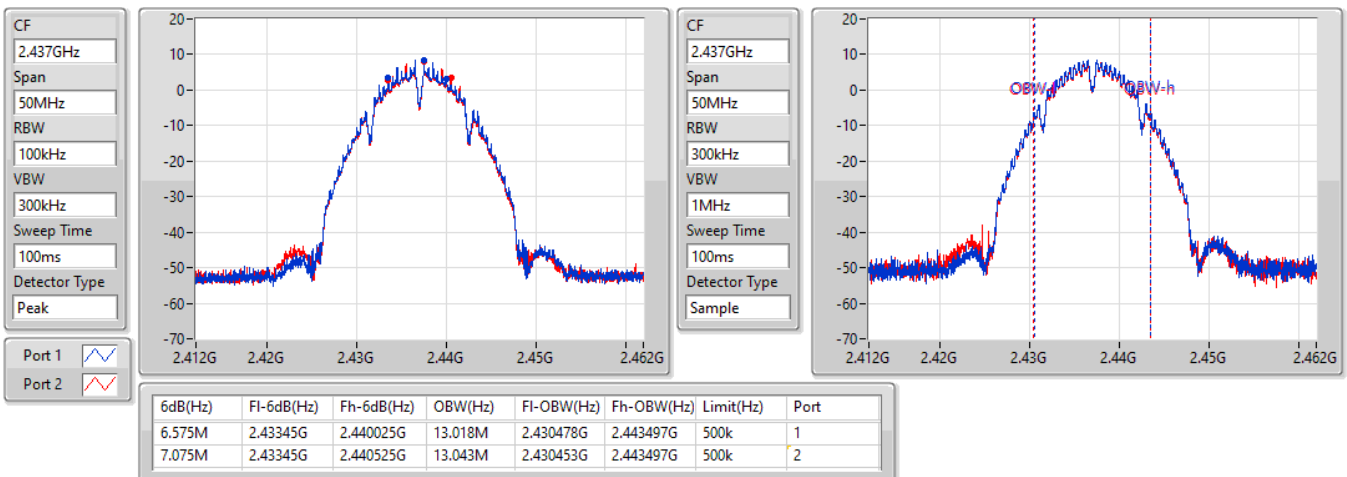


## 802.11b\_Nss1,(1Mbps)\_2TX

EBW

2437MHz

12/08/2021

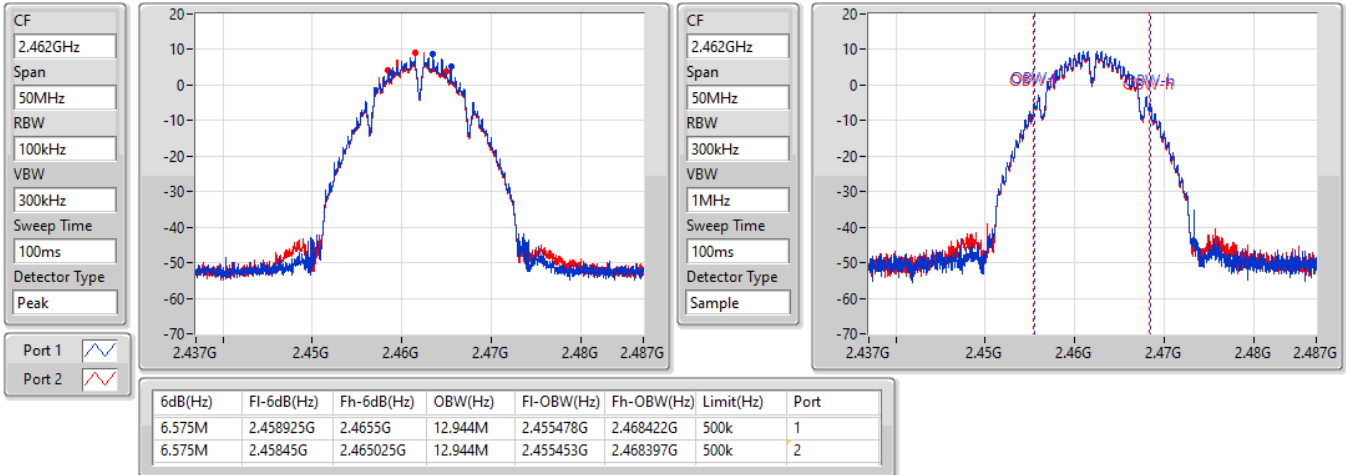


## 802.11b\_Nss1,(1Mbps)\_2TX

EBW

2462MHz

12/08/2021

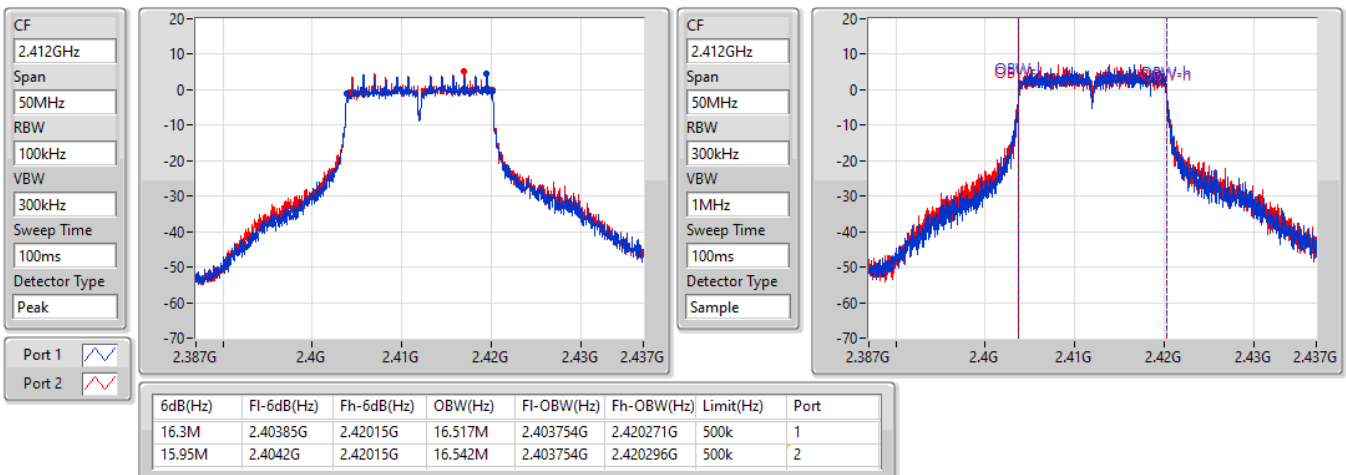


## 802.11g\_Nss1,(6Mbps)\_2TX

EBW

2412MHz

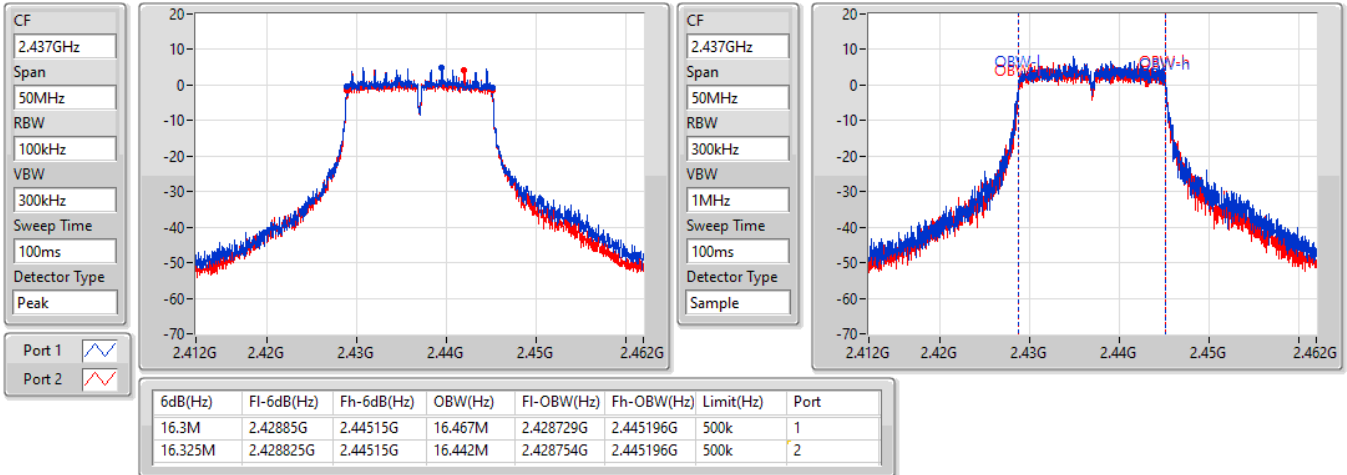
12/08/2021



## 802.11g\_Nss1,(6Mbps)\_2TX

2437MHz

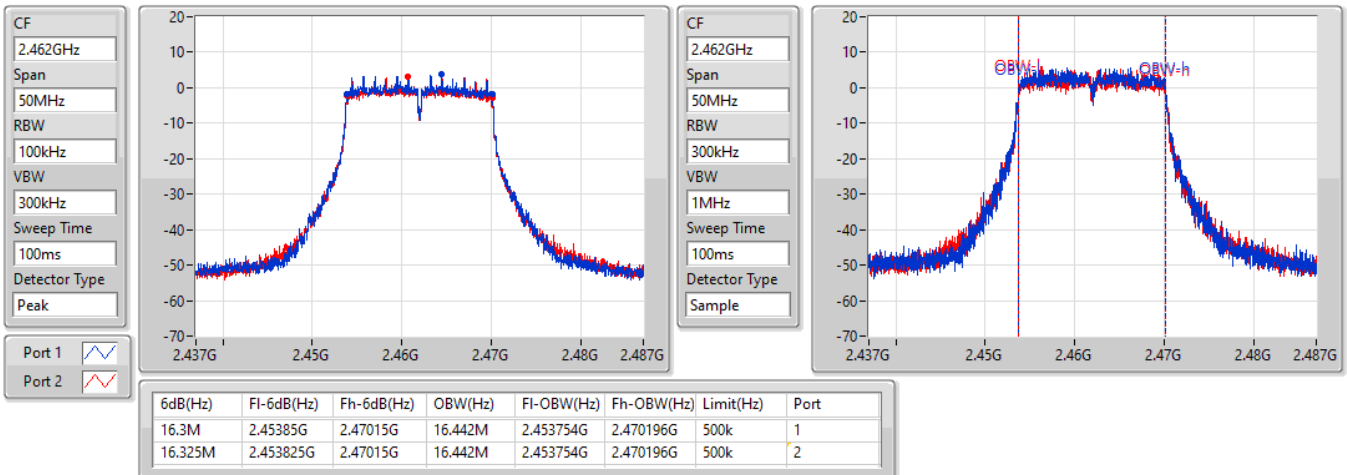
12/08/2021



## 802.11g\_Nss1,(6Mbps)\_2TX

2462MHz

12/08/2021

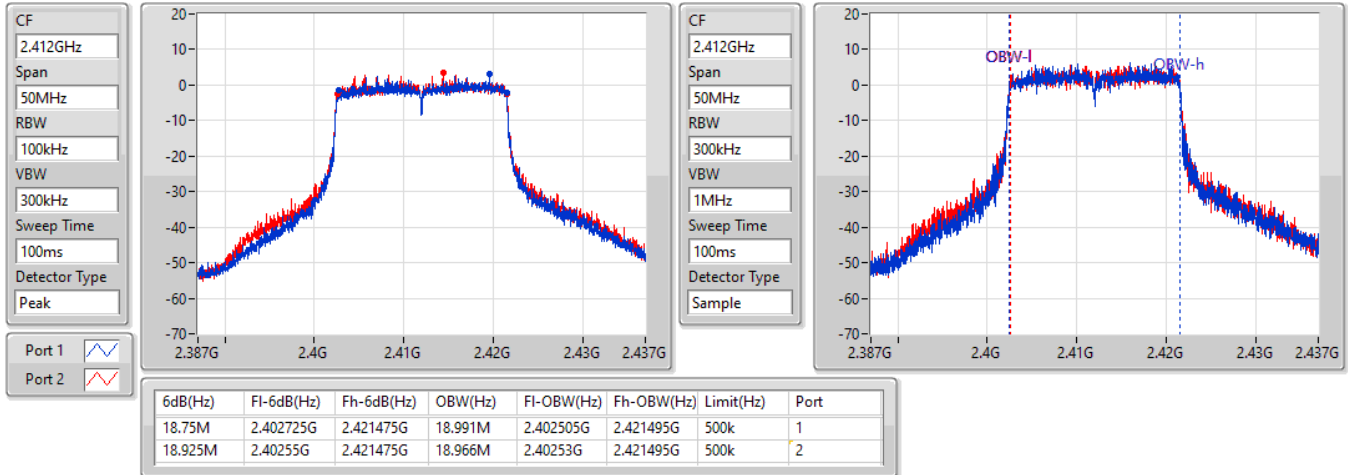


## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2412MHz

12/08/2021

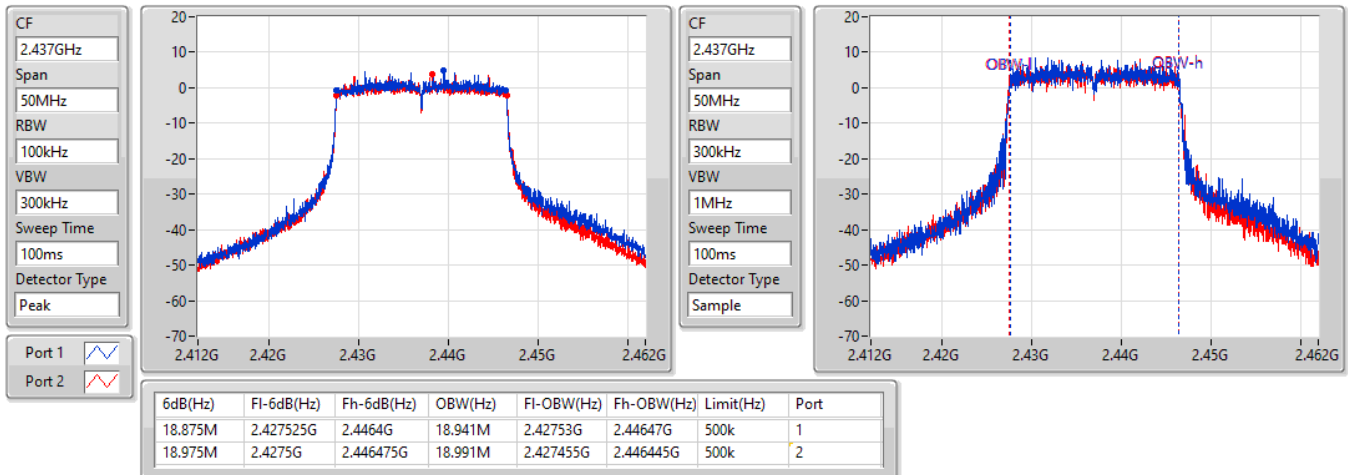


## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2437MHz

12/08/2021

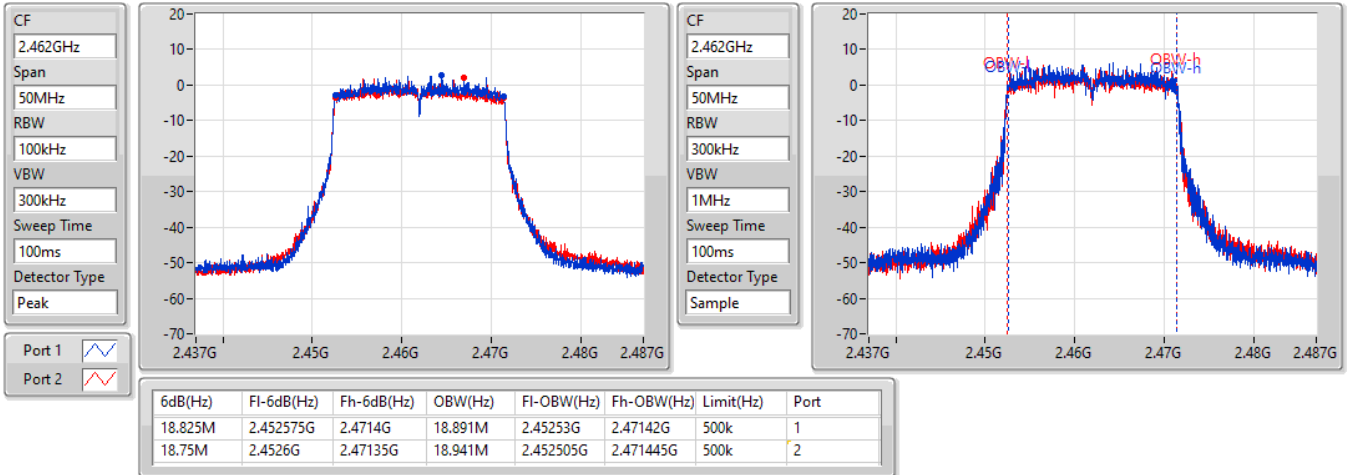


# 802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2462MHz

12/08/2021



**Summary**

| Mode                           | Max-N dB<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(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

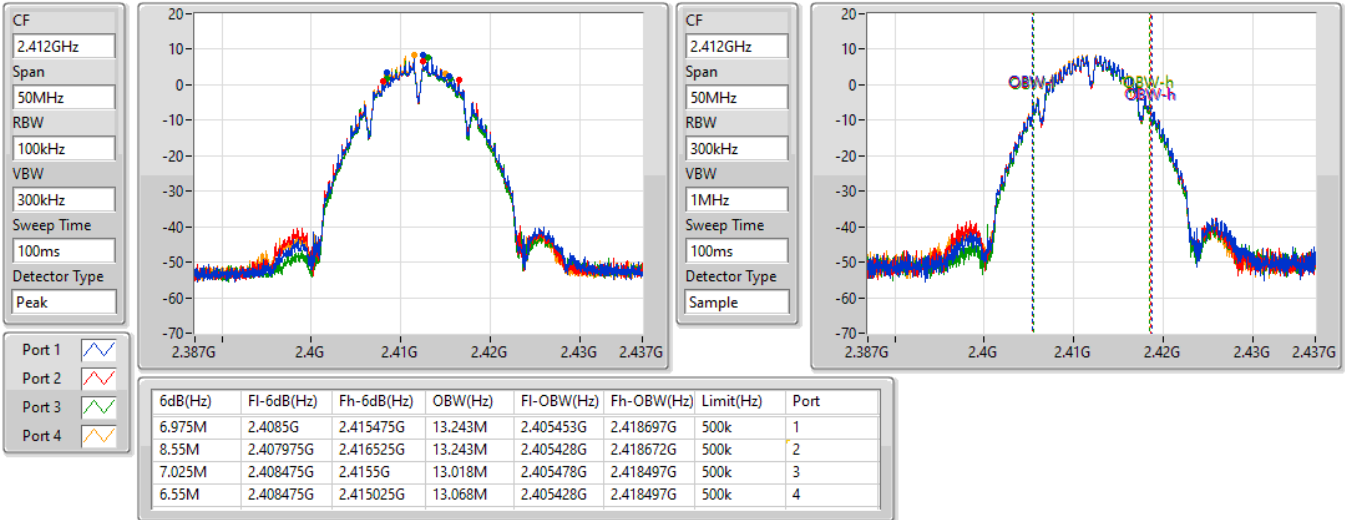
**Result**

| 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         |

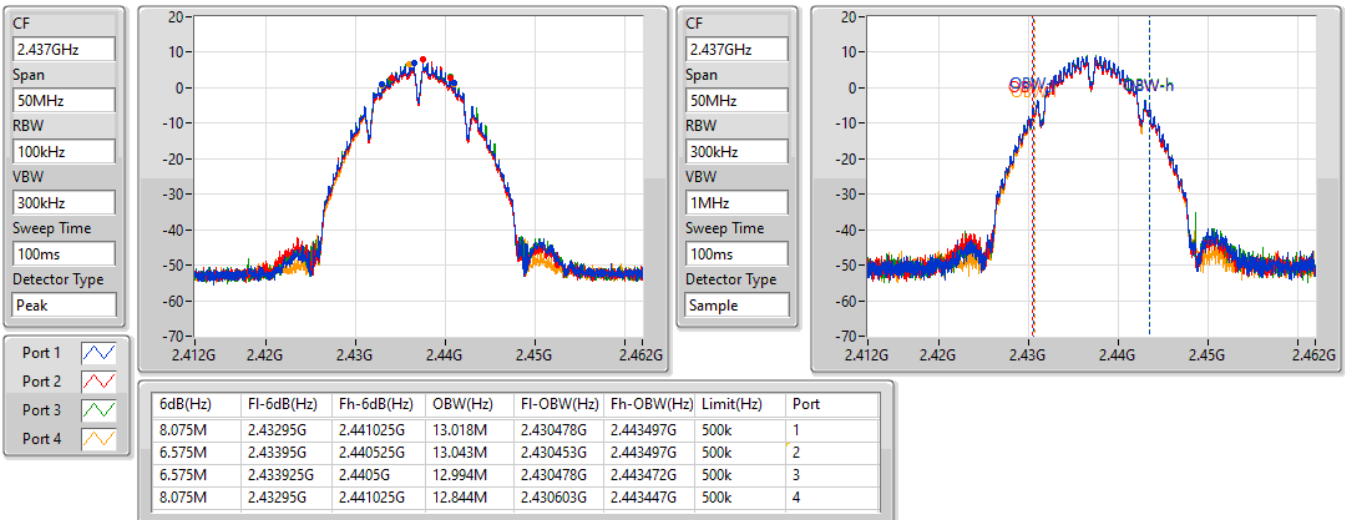
Port X-N dB = Port X 6dB down bandwidth;  
Port X-OBW = Port X 99% occupied bandwidth

**802.11b\_Nss1,(1Mbps)\_4TX**
**EBW**
**2412MHz**

12/08/2021


**802.11b\_Nss1,(1Mbps)\_4TX**
**EBW**
**2437MHz**

12/08/2021

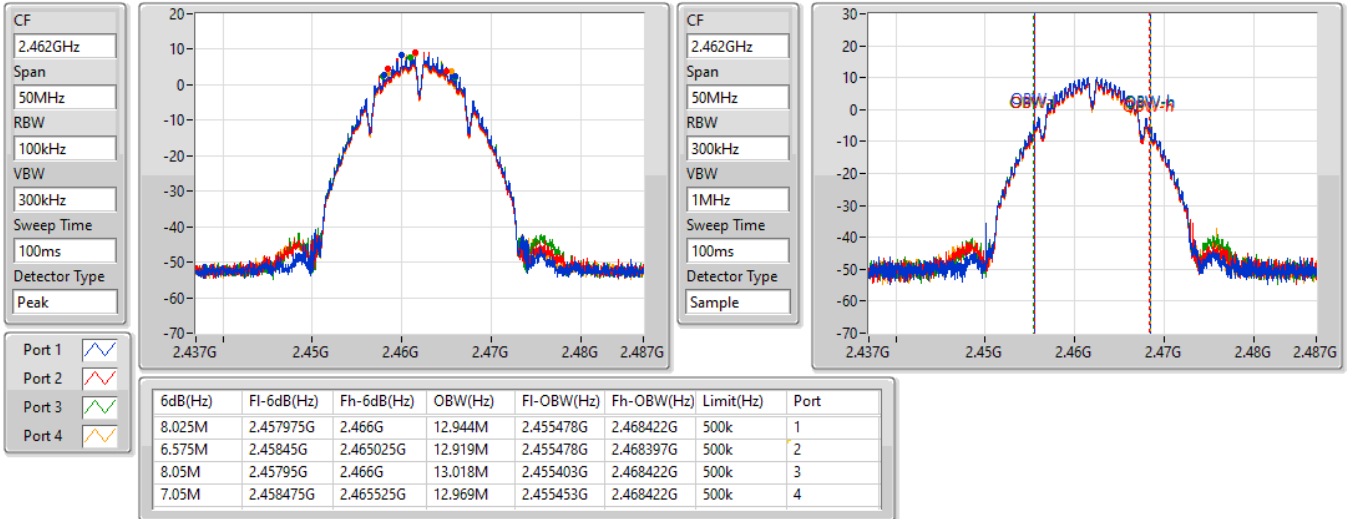


## 802.11b\_Nss1,(1Mbps)\_4TX

EBW

2462MHz

12/08/2021

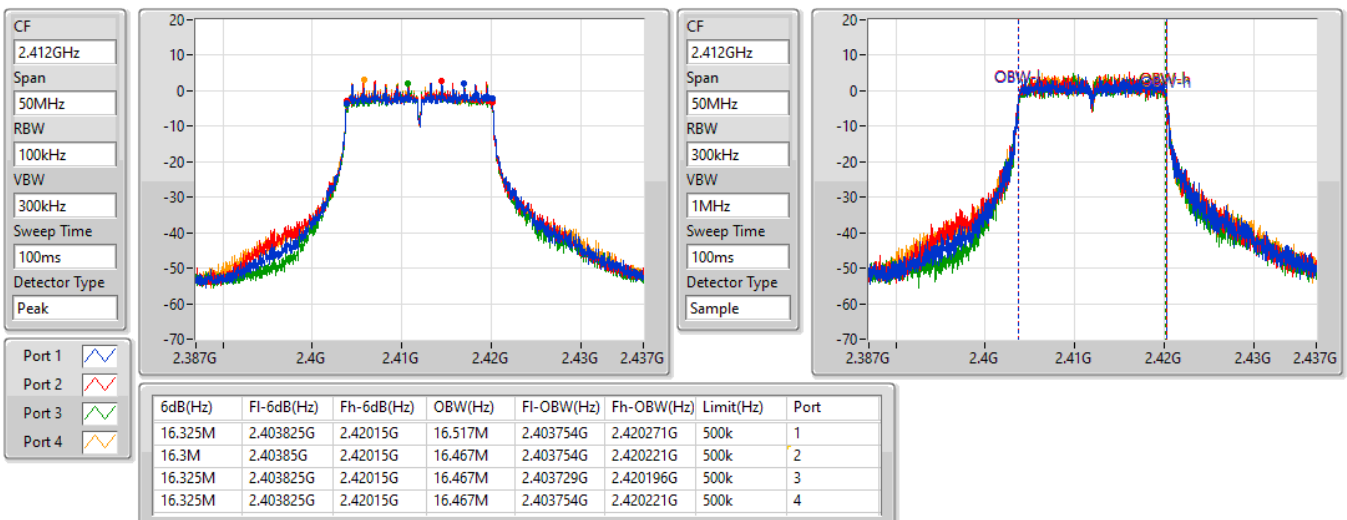


## 802.11g\_Nss1,(6Mbps)\_4TX

EBW

2412MHz

12/08/2021

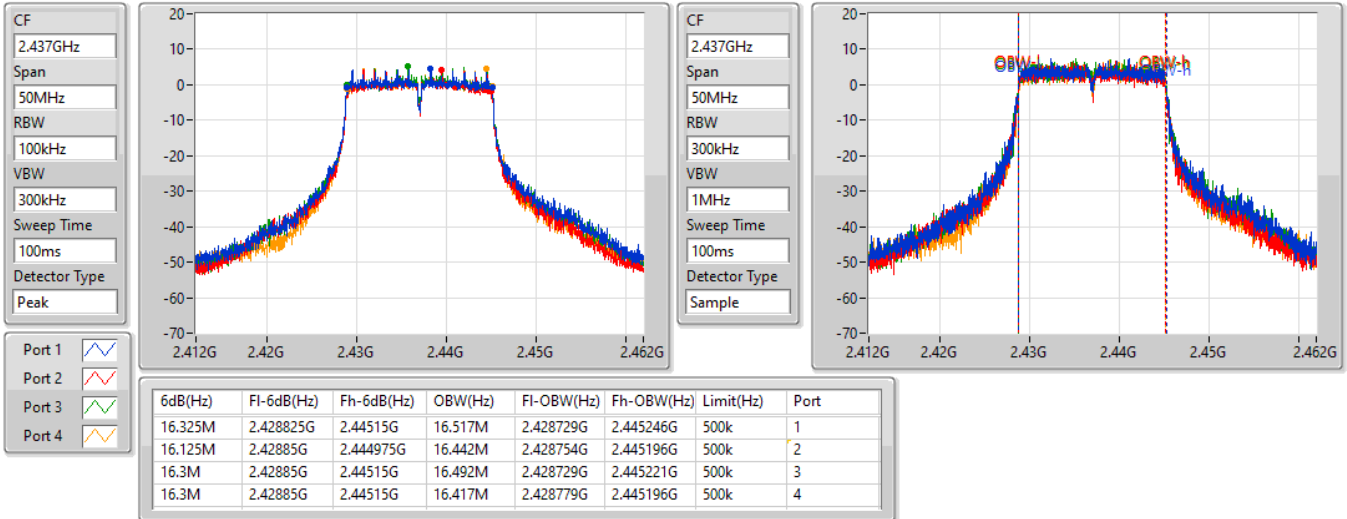


## 802.11g\_Nss1,(6Mbps)\_4TX

EBW

2437MHz

12/08/2021

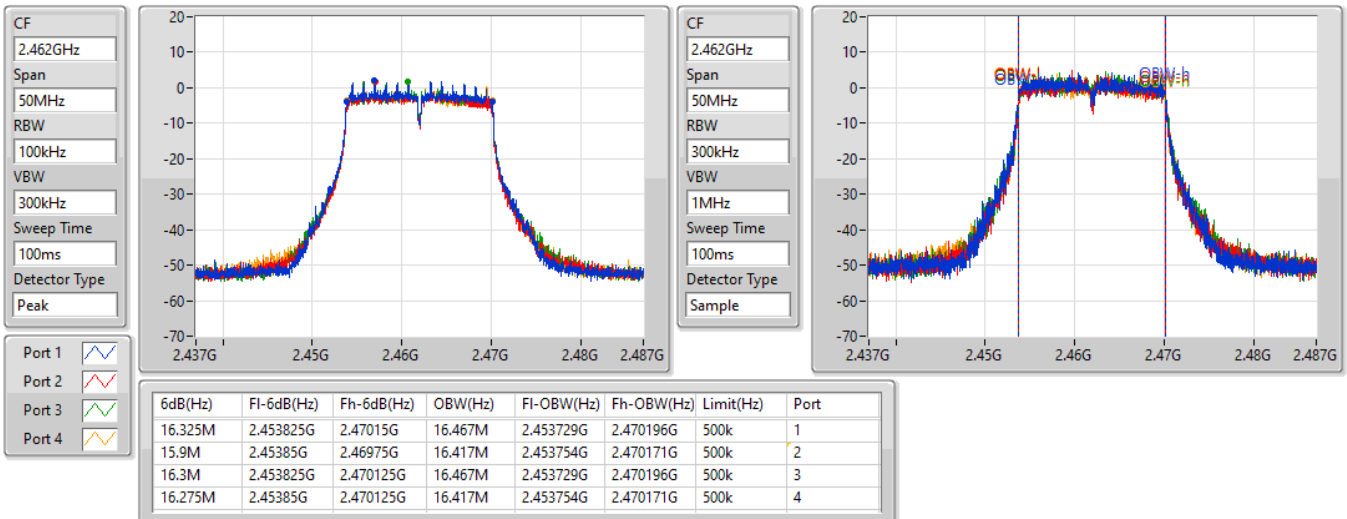


## 802.11g\_Nss1,(6Mbps)\_4TX

EBW

2462MHz

12/08/2021

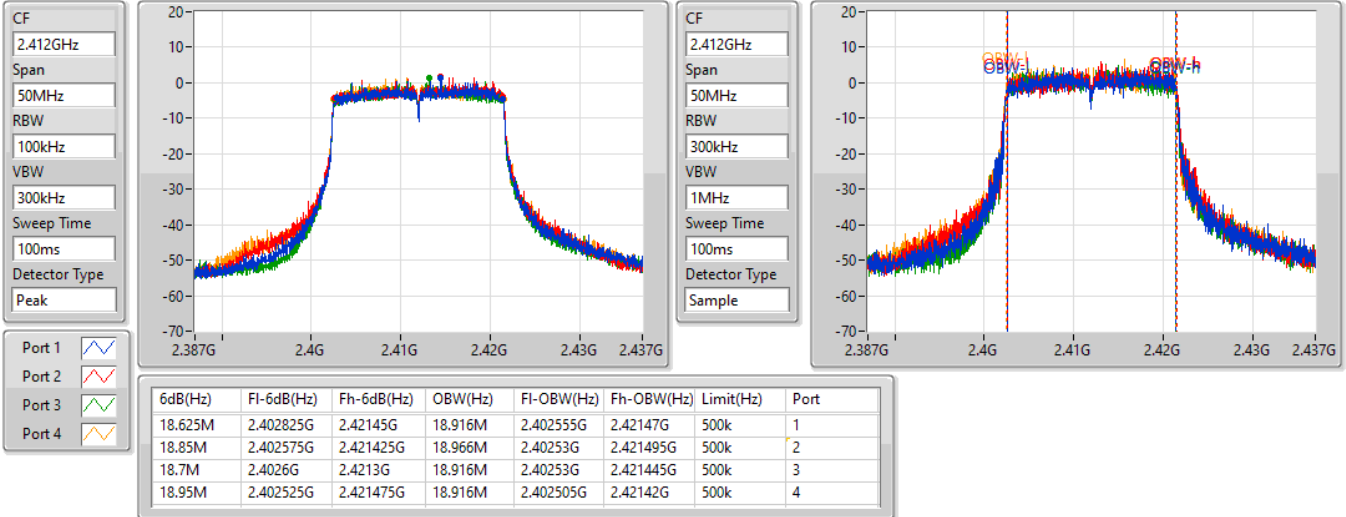


## 802.11ax HEW20\_Nss1,(MCS0)\_4TX

EBW

2412MHz

12/08/2021

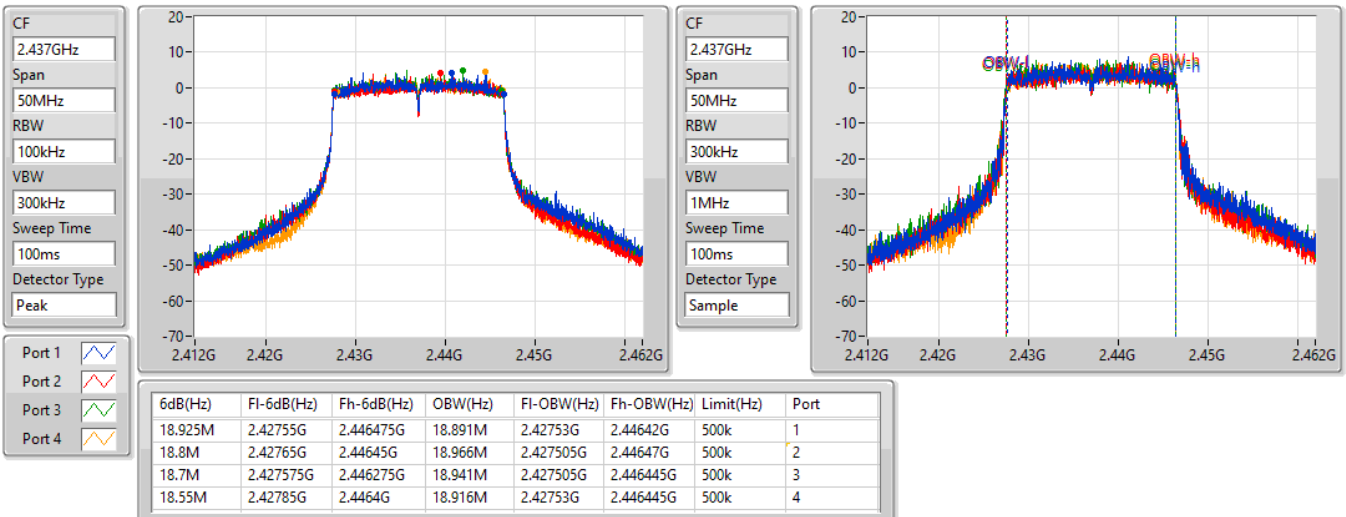


## 802.11ax HEW20\_Nss1,(MCS0)\_4TX

EBW

2437MHz

12/08/2021

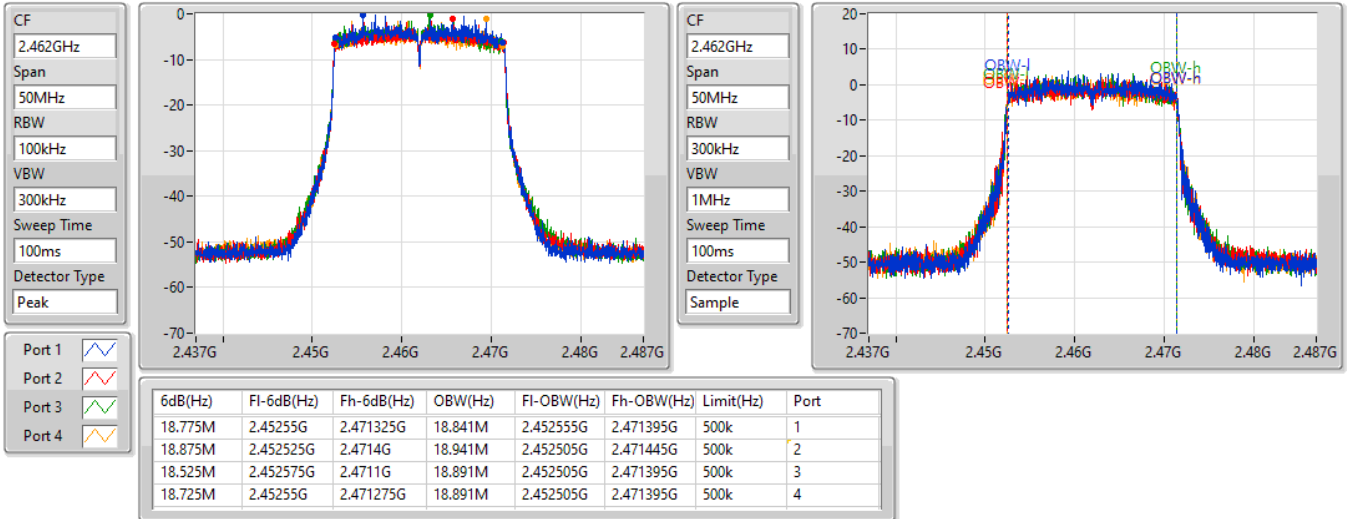


# 802.11ax HEW20\_Nss1,(MCS0)\_4TX

EBW

2462MHz

12/08/2021



**Summary**

| Mode                           | Max-N dB<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(Hz) |
|--------------------------------|------------------|-----------------|----------|------------------|-----------------|
| 2.4-2.4835GHz                  | -                | -               | -        | -                | -               |
| 802.11b_Nss1,(1Mbps)_1TX       | 8.575M           | 13.072M         | 13M1G1D  | 8.025M           | 13.029M         |
| 802.11g_Nss1,(6Mbps)_1TX       | 16.35M           | 16.549M         | 16M5D1D  | 16.325M          | 16.541M         |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | 19.075M          | 19.108M         | 19M1D1D  | 19M              | 19.077M         |

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<br>(Hz) | Port 1-N dB<br>(Hz) | Port 1-OBW<br>(Hz) |
|--------------------------------|--------|---------------|---------------------|--------------------|
| 802.11b_Nss1,(1Mbps)_1TX       | -      | -             | -                   | -                  |
| 2412MHz                        | Pass   | 500k          | 8.575M              | 13.072M            |
| 2437MHz                        | Pass   | 500k          | 8.575M              | 13.034M            |
| 2457MHz                        | Pass   | 500k          | 8.025M              | 13.029M            |
| 2462MHz                        | Pass   | 500k          | 8.55M               | 13.031M            |
| 802.11g_Nss1,(6Mbps)_1TX       | -      | -             | -                   | -                  |
| 2412MHz                        | Pass   | 500k          | 16.325M             | 16.548M            |
| 2417MHz                        | Pass   | 500k          | 16.325M             | 16.549M            |
| 2437MHz                        | Pass   | 500k          | 16.35M              | 16.541M            |
| 2457MHz                        | Pass   | 500k          | 16.325M             | 16.547M            |
| 2462MHz                        | Pass   | 500k          | 16.325M             | 16.542M            |
| 802.11ax_HEW20_Nss1,(MCS0)_1TX | -      | -             | -                   | -                  |
| 2412MHz                        | Pass   | 500k          | 19.025M             | 19.108M            |
| 2417MHz                        | Pass   | 500k          | 19.025M             | 19.084M            |
| 2437MHz                        | Pass   | 500k          | 19M                 | 19.096M            |
| 2457MHz                        | Pass   | 500k          | 19.025M             | 19.091M            |
| 2462MHz                        | Pass   | 500k          | 19.075M             | 19.077M            |

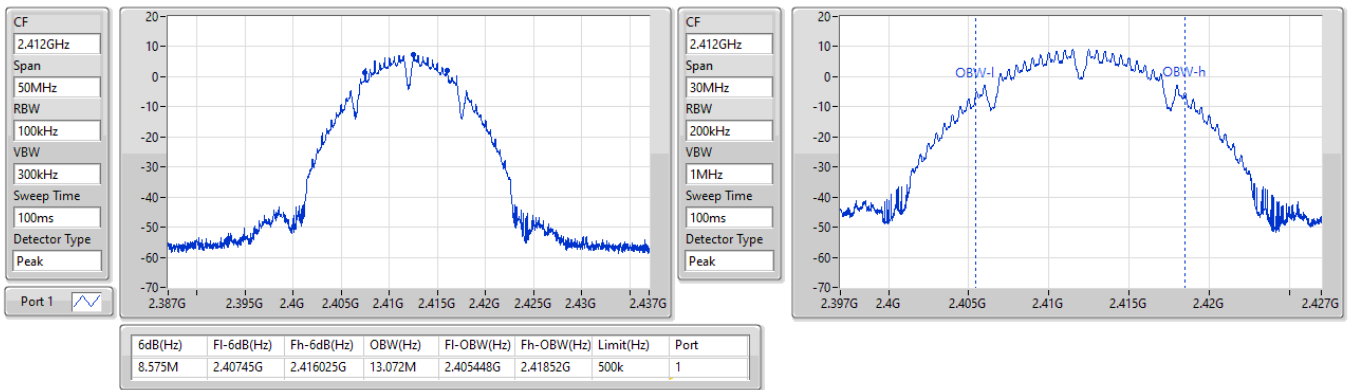
Port X-N dB = Port X 6dB down bandwidth;  
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2412MHz

15/05/2023

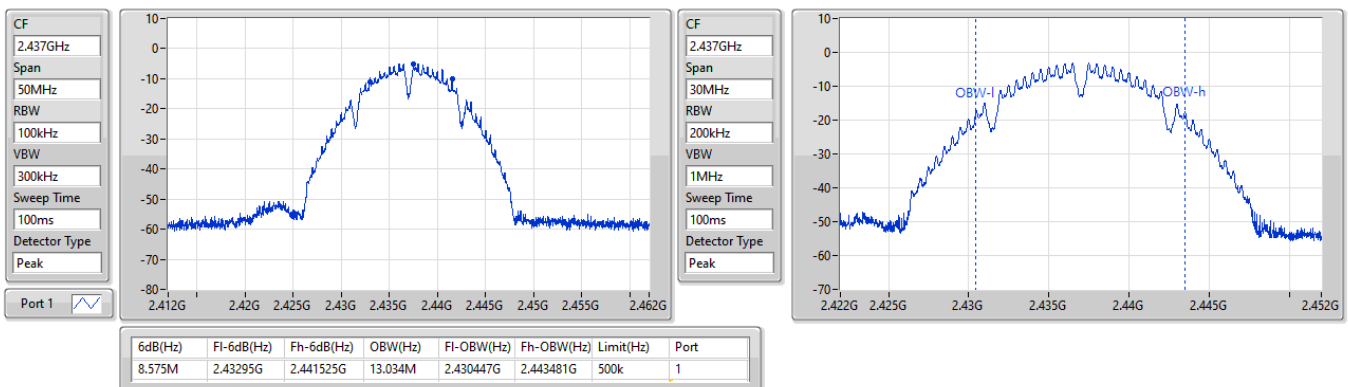


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2437MHz

31/05/2023

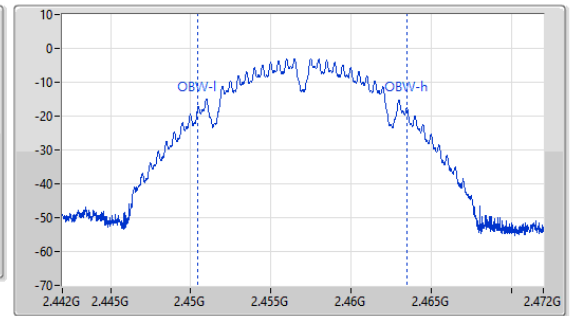
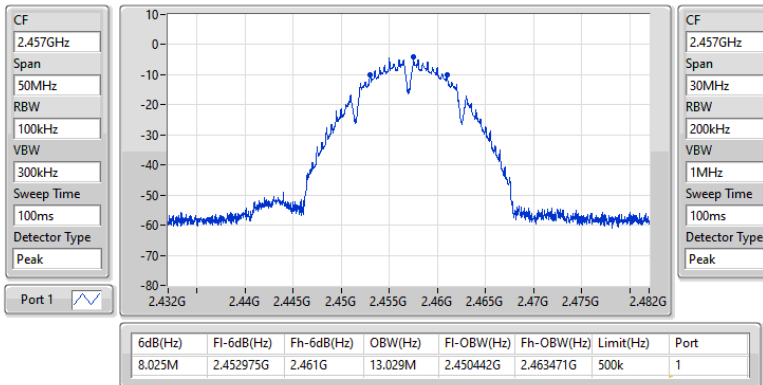


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2457MHz

31/05/2023

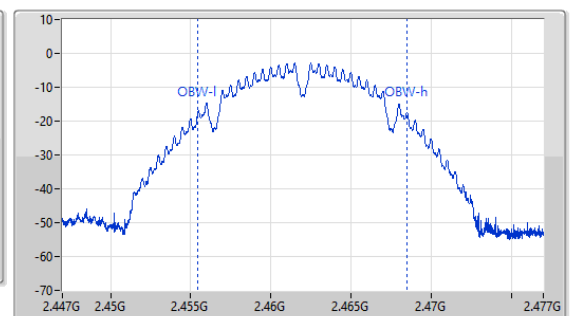
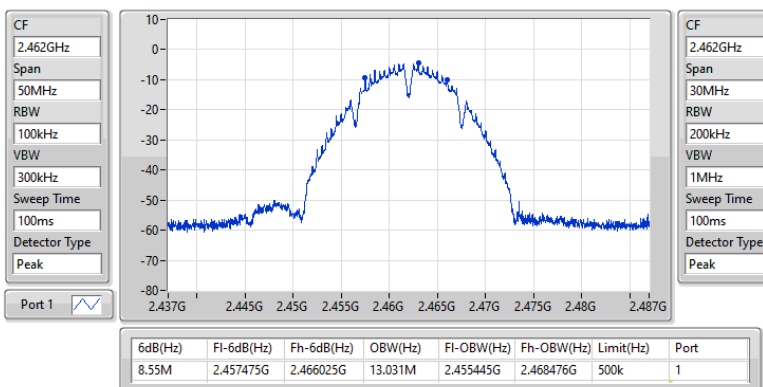


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2462MHz

31/05/2023

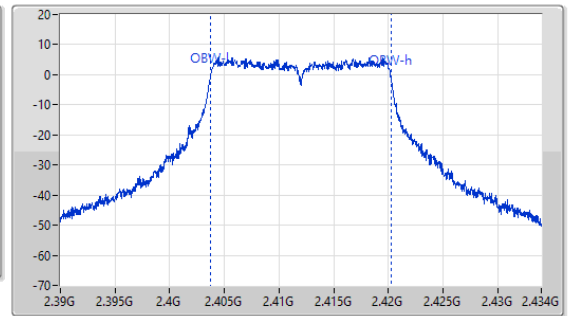
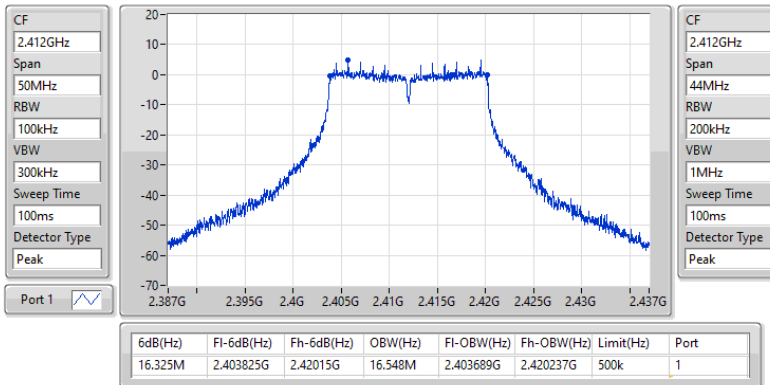


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2412MHz

23/05/2023

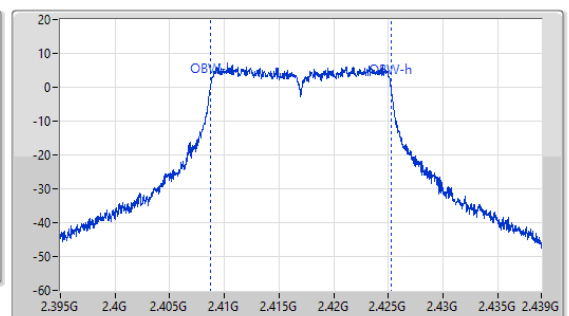
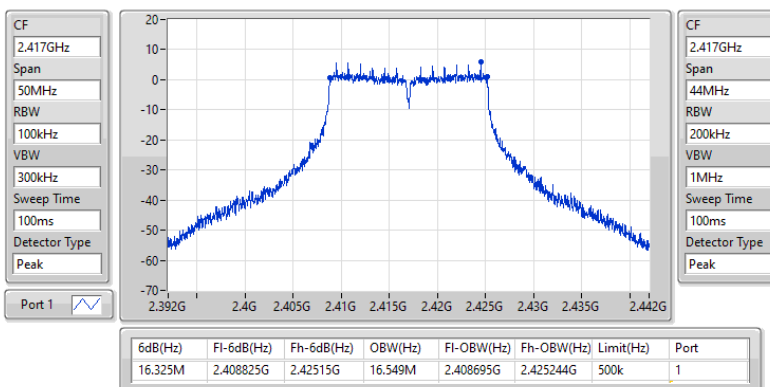


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2417MHz

23/05/2023

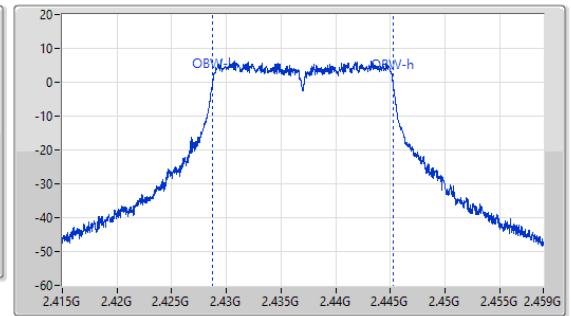
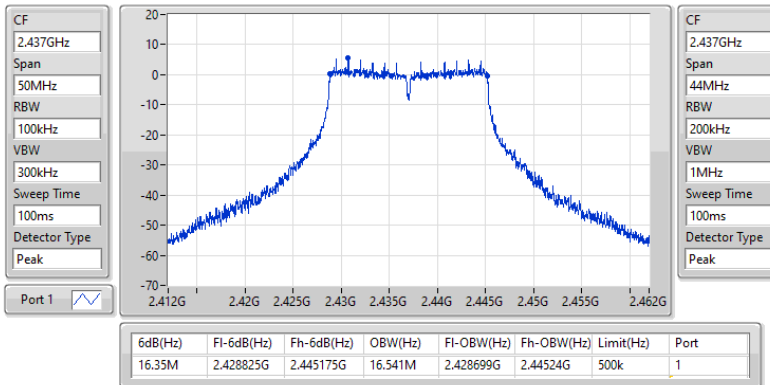


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2437MHz

15/05/2023

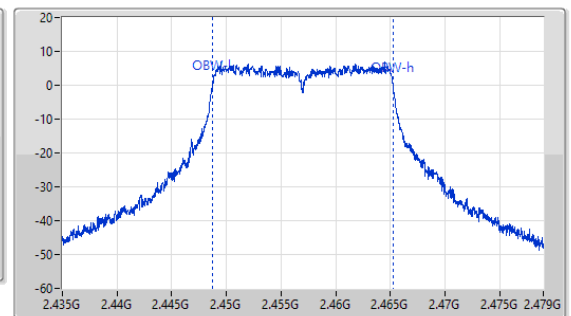
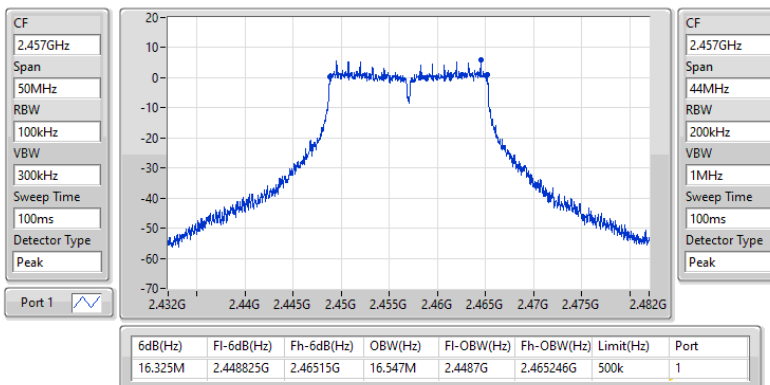


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2457MHz

23/05/2023

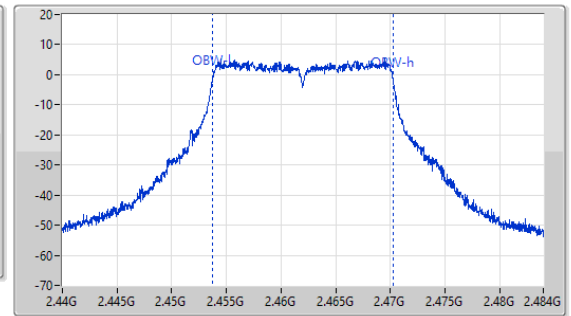
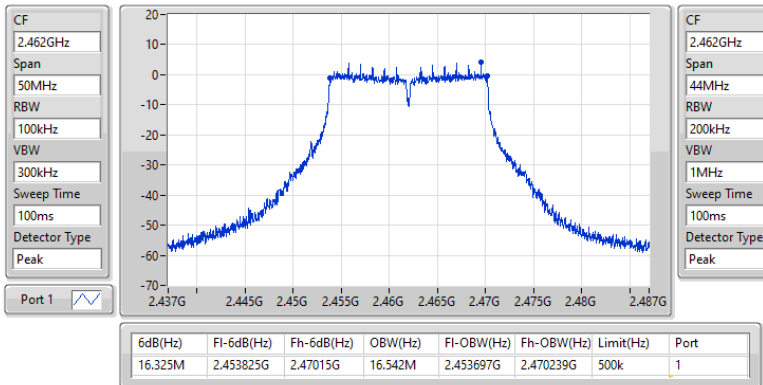


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2462MHz

23/05/2023

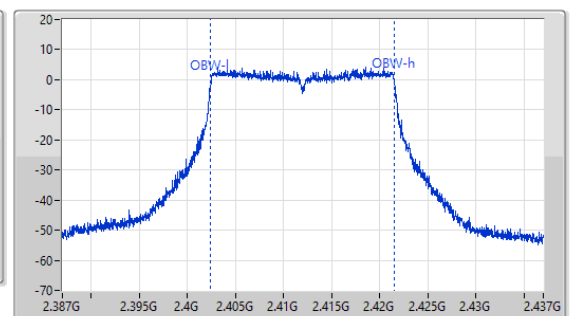
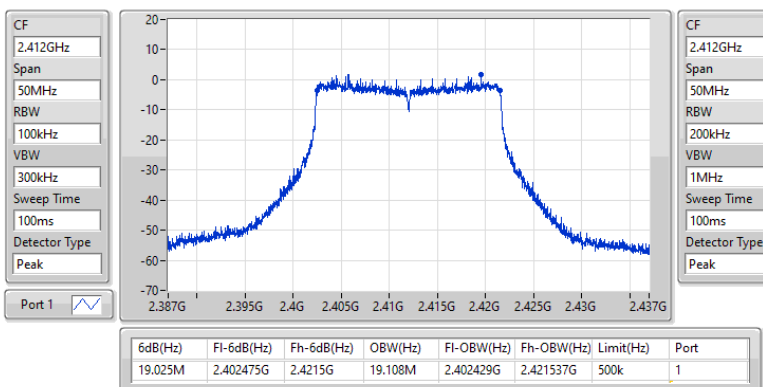


2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_1TX

EBW

2412MHz

23/05/2023

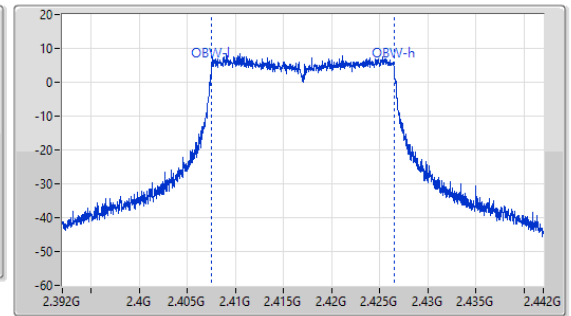
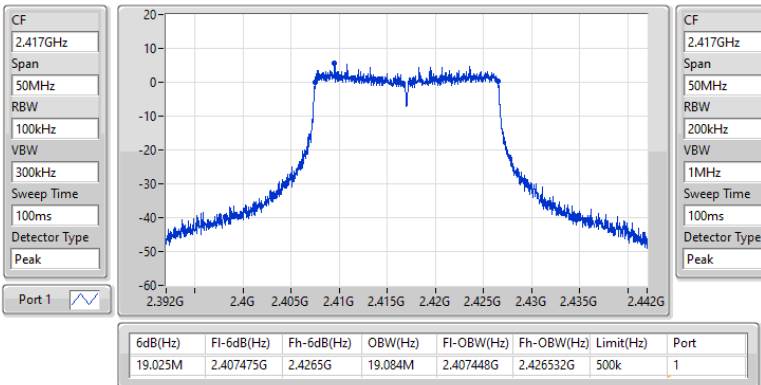


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2417MHz

15/05/2023

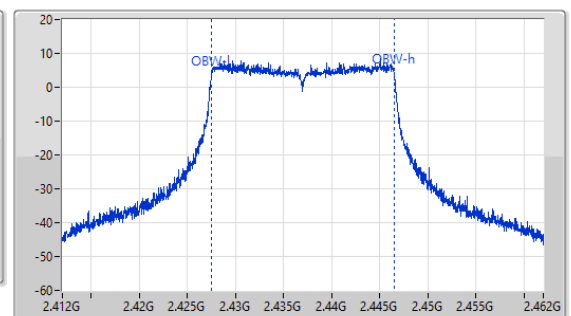
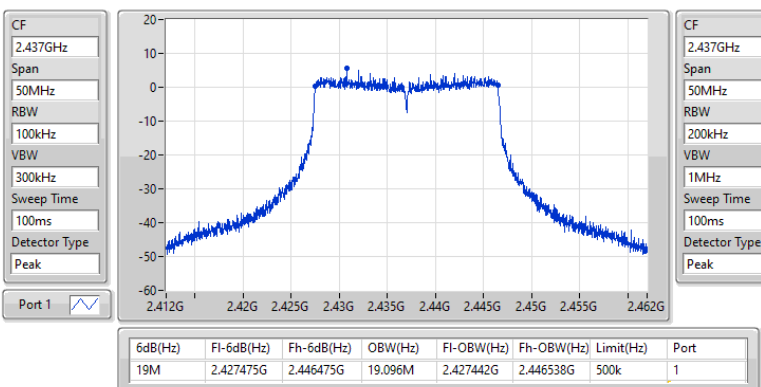


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2437MHz

15/05/2023

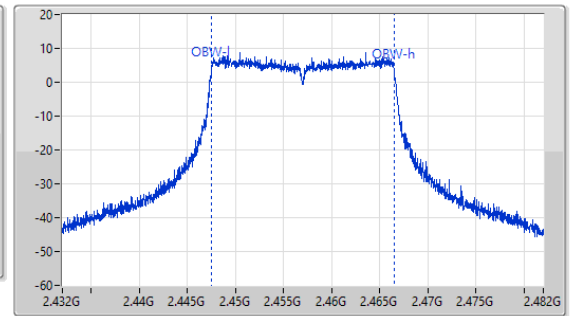
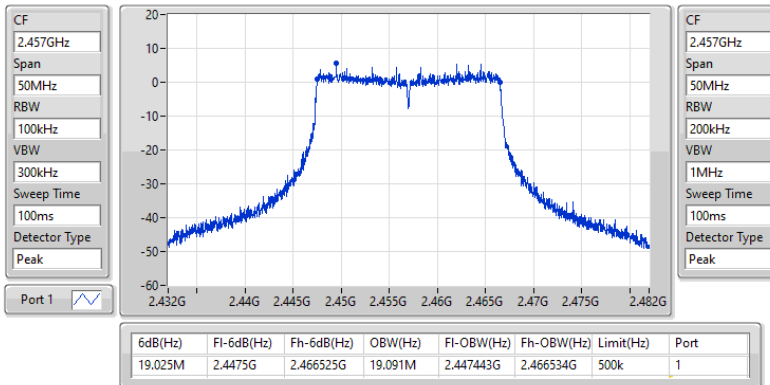


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2457MHz

15/05/2023

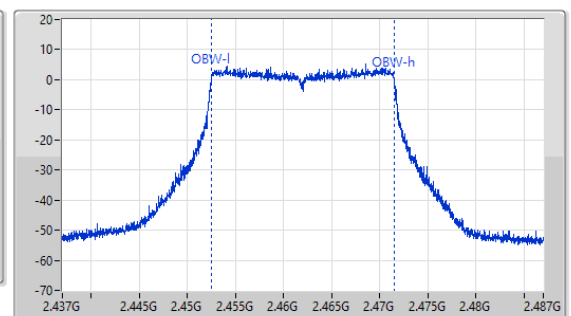
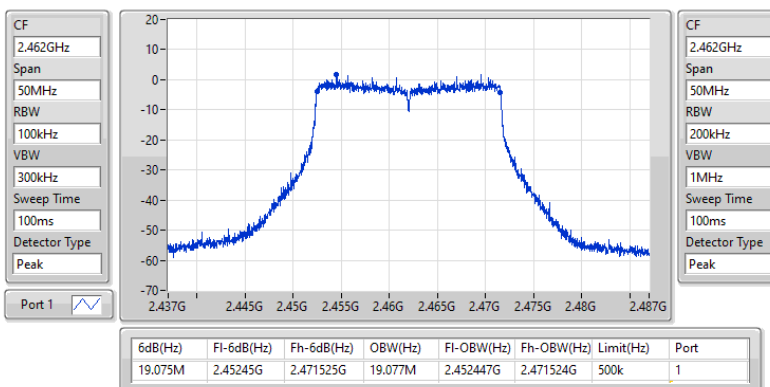


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

23/05/2023



**Summary**

| Mode                           | Max-N dB<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(Hz) |
|--------------------------------|------------------|-----------------|----------|------------------|-----------------|
| 2.4-2.4835GHz                  | -                | -               | -        | -                | -               |
| 802.11b_Nss1,(1Mbps)_2TX       | 8.575M           | 13.095M         | 13M1G1D  | 8.025M           | 13.073M         |
| 802.11g_Nss1,(6Mbps)_2TX       | 16.35M           | 16.556M         | 16M6D1D  | 16.325M          | 16.527M         |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | 19.1M            | 19.108M         | 19M1D1D  | 18.975M          | 19.081M         |

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<br>(Hz) | Port 1-N dB<br>(Hz) | Port 1-OBW<br>(Hz) | Port 2-N dB<br>(Hz) | Port 2-OBW<br>(Hz) |
|--------------------------------|--------|---------------|---------------------|--------------------|---------------------|--------------------|
| 802.11b_Nss1,(1Mbps)_2TX       | -      | -             | -                   | -                  | -                   | -                  |
| 2412MHz                        | Pass   | 500k          | 8.075M              | 13.09M             | 8.075M              | 13.094M            |
| 2437MHz                        | Pass   | 500k          | 8.025M              | 13.084M            | 8.075M              | 13.095M            |
| 2462MHz                        | Pass   | 500k          | 8.05M               | 13.073M            | 8.575M              | 13.084M            |
| 802.11g_Nss1,(6Mbps)_2TX       | -      | -             | -                   | -                  | -                   | -                  |
| 2412MHz                        | Pass   | 500k          | 16.325M             | 16.54M             | 16.325M             | 16.538M            |
| 2417MHz                        | Pass   | 500k          | 16.325M             | 16.556M            | 16.35M              | 16.547M            |
| 2437MHz                        | Pass   | 500k          | 16.325M             | 16.55M             | 16.35M              | 16.541M            |
| 2457MHz                        | Pass   | 500k          | 16.325M             | 16.541M            | 16.35M              | 16.547M            |
| 2462MHz                        | Pass   | 500k          | 16.35M              | 16.541M            | 16.35M              | 16.527M            |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | -      | -             | -                   | -                  | -                   | -                  |
| 2412MHz                        | Pass   | 500k          | 19.075M             | 19.1M              | 18.975M             | 19.084M            |
| 2417MHz                        | Pass   | 500k          | 19M                 | 19.083M            | 19M                 | 19.104M            |
| 2437MHz                        | Pass   | 500k          | 19.025M             | 19.1M              | 19.025M             | 19.099M            |
| 2457MHz                        | Pass   | 500k          | 19.025M             | 19.081M            | 19.1M               | 19.103M            |
| 2462MHz                        | Pass   | 500k          | 19.1M               | 19.108M            | 19.075M             | 19.098M            |

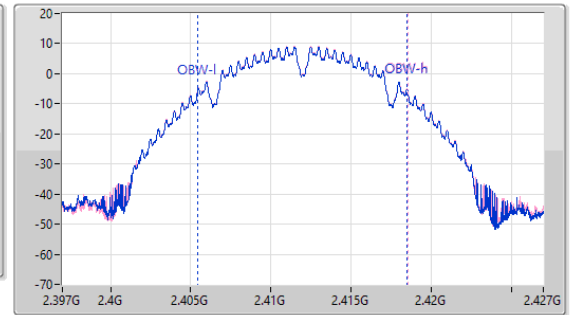
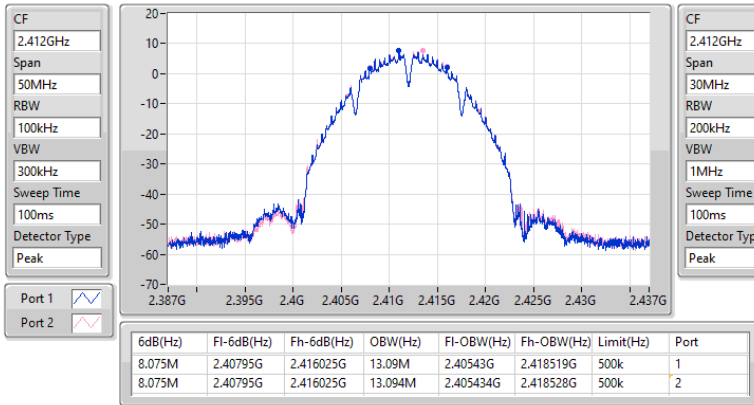
Port X-N dB = Port X 6dB down bandwidth;  
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

EBW

2412MHz

23/05/2023

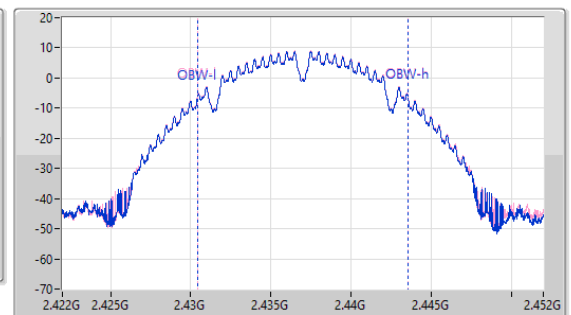
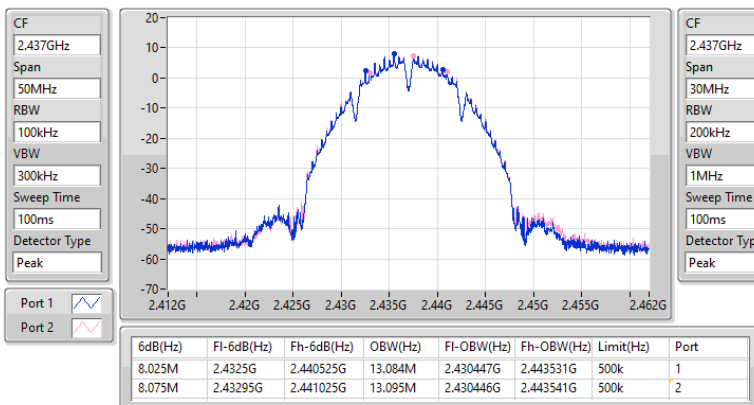


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

EBW

2437MHz

23/05/2023

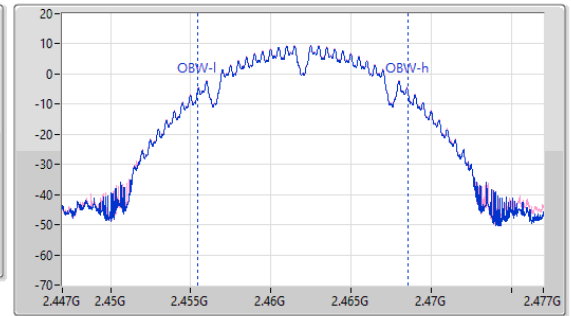
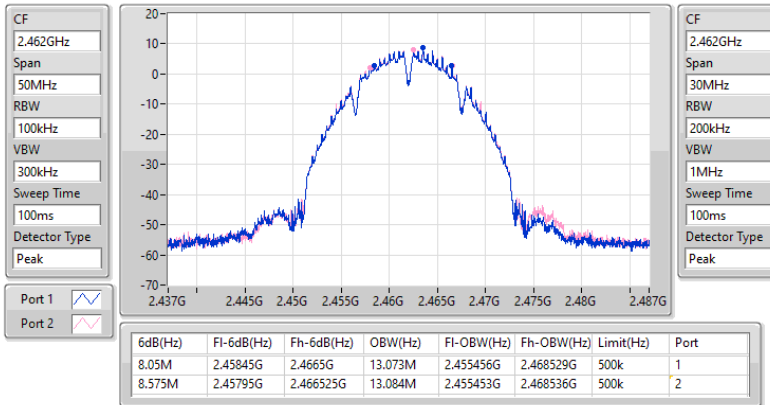


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

EBW

2462MHz

23/05/2023

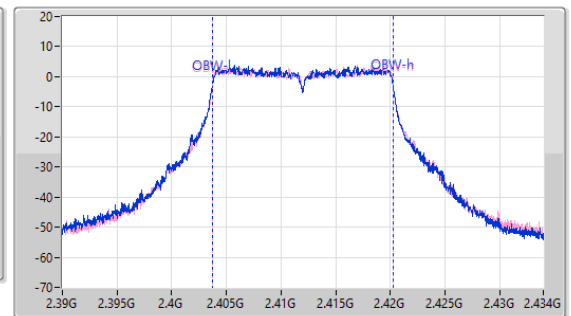
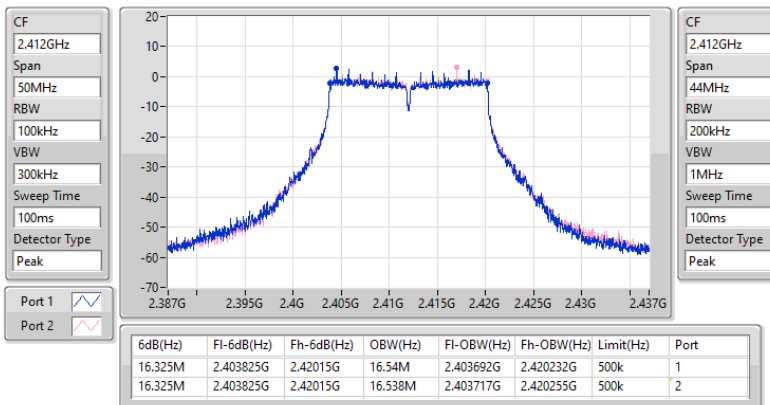


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

EBW

2412MHz

23/05/2023

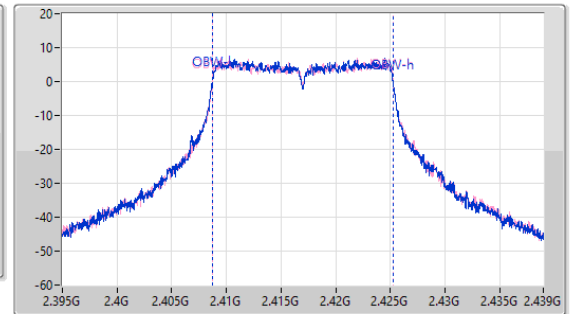
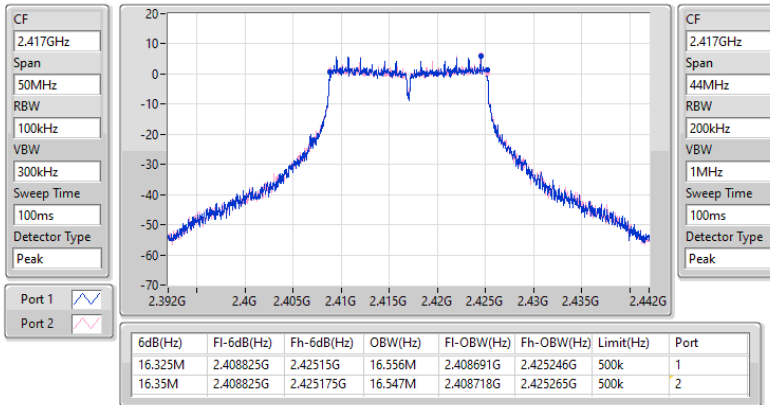


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

EBW

2417MHz

15/05/2023

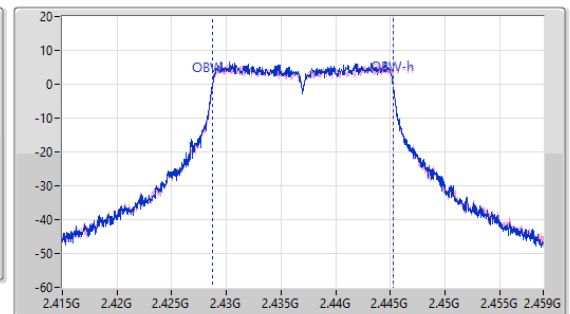
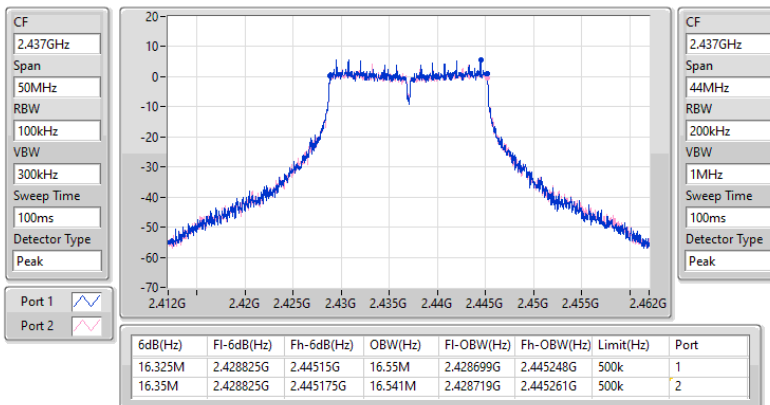


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

EBW

2437MHz

15/05/2023

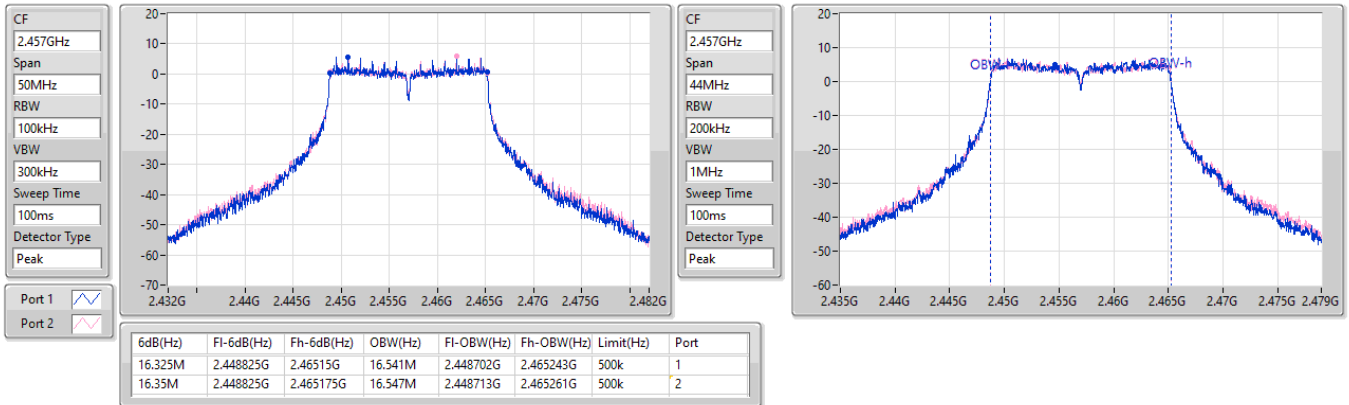


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

EBW

2457MHz

15/05/2023

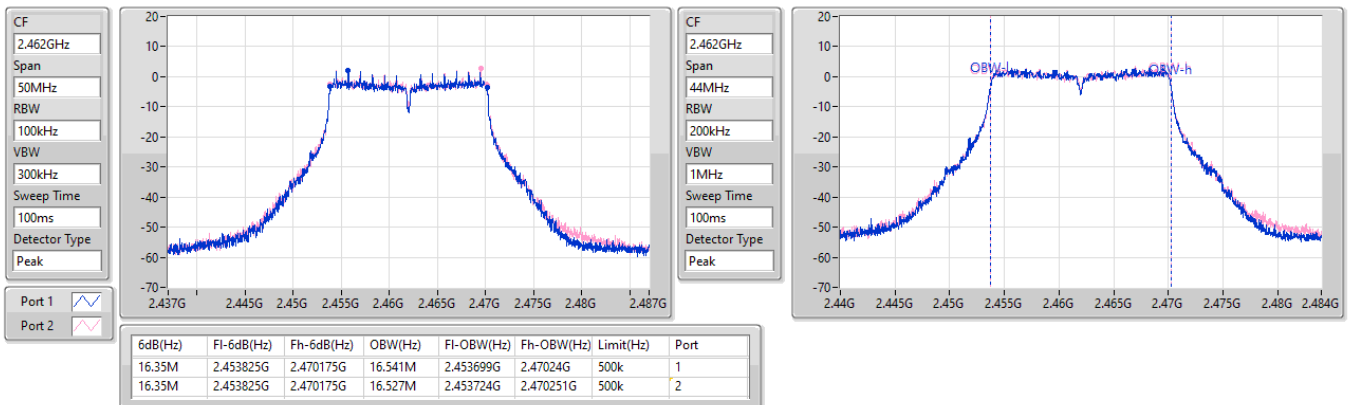


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

EBW

2462MHz

23/05/2023

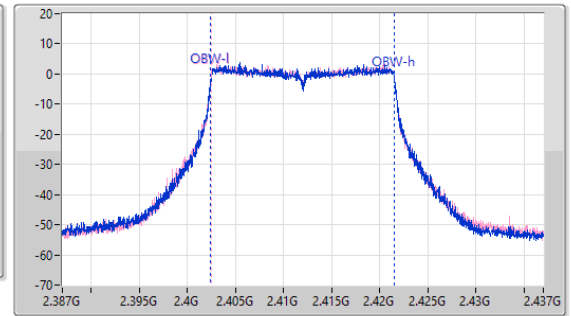
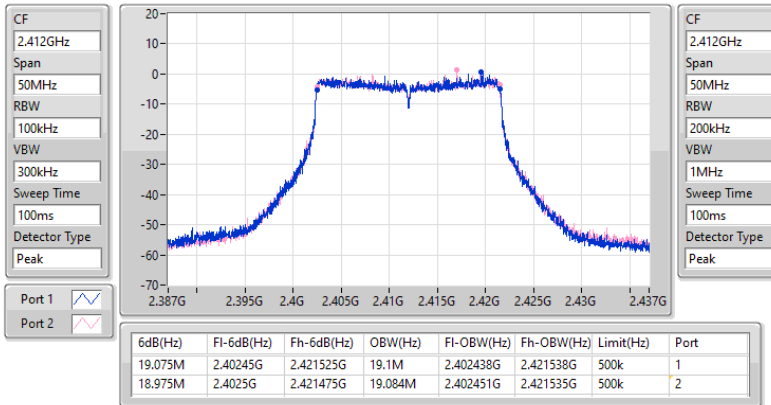


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2412MHz

23/05/2023

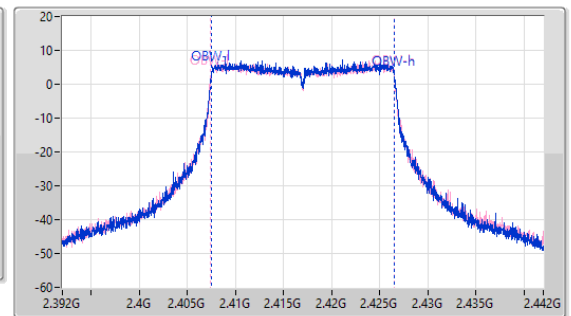
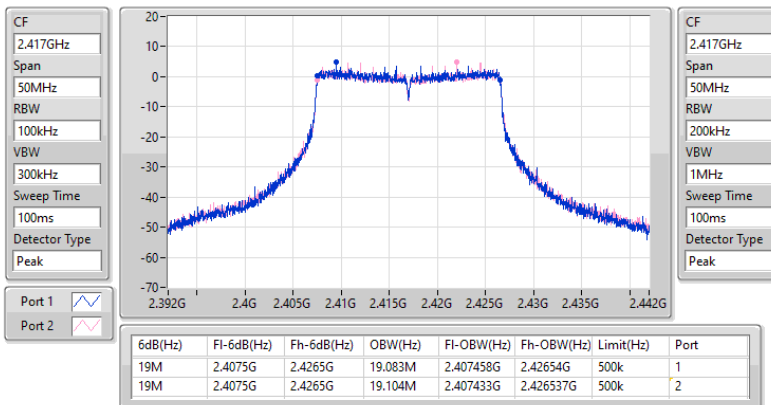


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2417MHz

15/05/2023

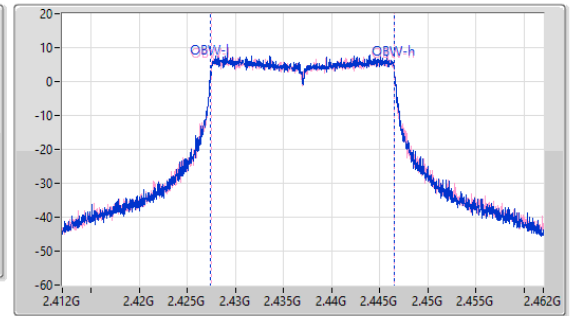
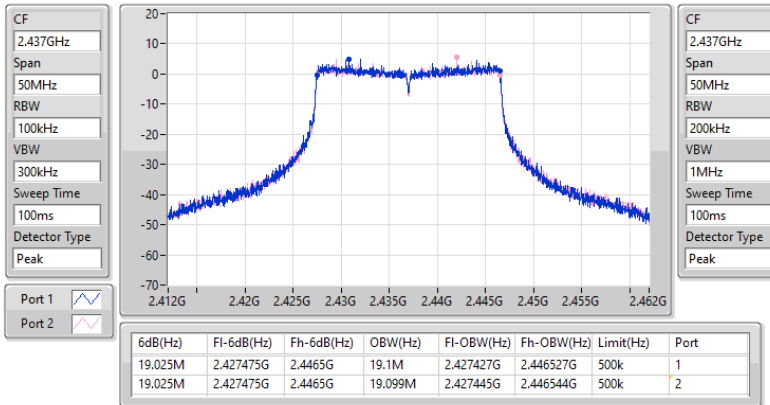


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2437MHz

15/05/2023

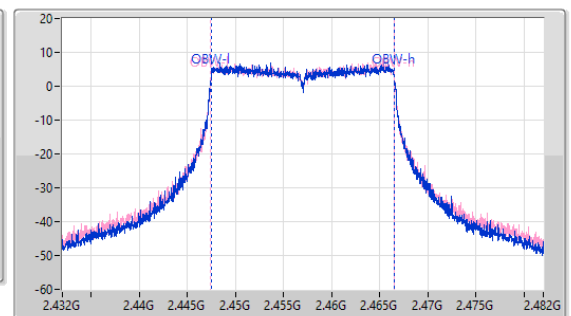
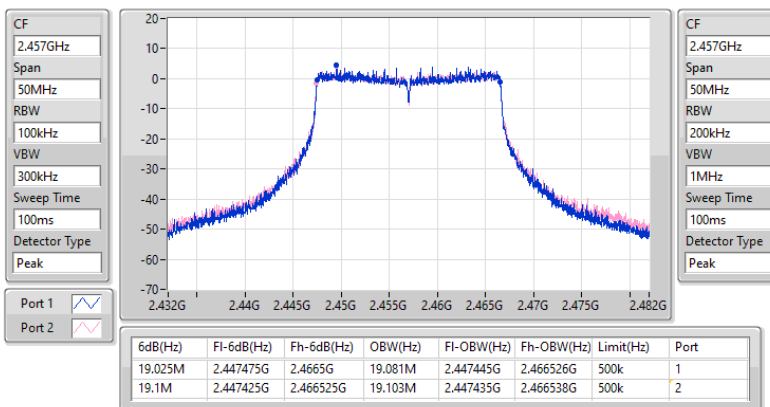


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2457MHz

15/05/2023

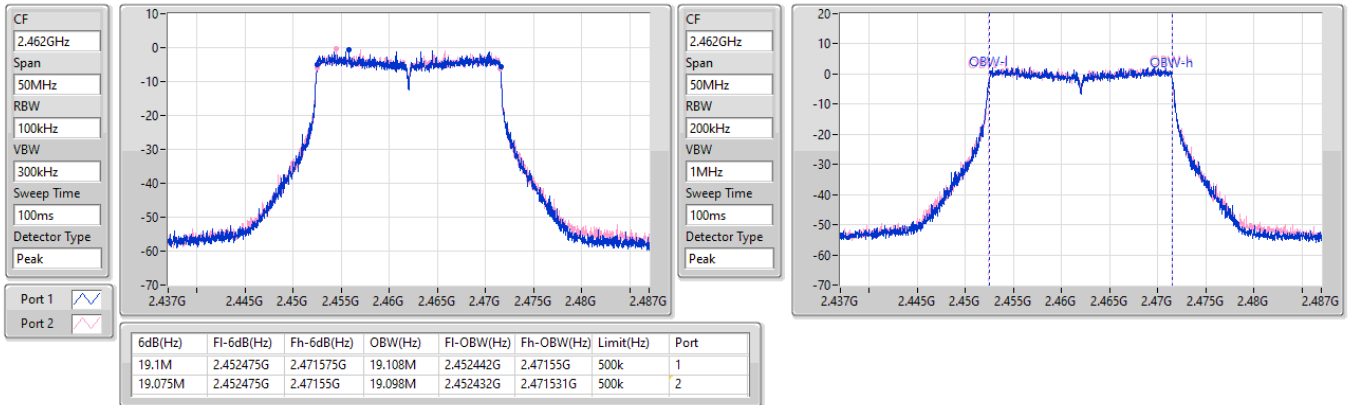


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2462MHz

23/05/2023





## Average Power\_Non-Beamforming\_Serving Radio Primary\_1T1S Appendix C.1

### Summary

| Mode                           | Total Power<br>(dBm) | Total Power<br>(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            |



## Average Power\_Non-Beamforming\_Serving Radio Primary\_1T1S Appendix C.1

### Result

| Mode                           | Result | DG<br>(dBi) | Port 1<br>(dBm) | Total Power<br>(dBm) | Power Limit<br>(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<br>(dBm) | Total Power<br>(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<br>(dBi) | Port 1<br>(dBm) | Port 2<br>(dBm) | Total Power<br>(dBm) | Power Limit<br>(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<br>(dBm) | Total Power<br>(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            |



## Average Power\_Non-Beamforming\_Serving Radio Primary\_4T1S Appendix C.3

### Result

| Mode                           | Result | DG<br>(dBi) | Port 1<br>(dBm) | Port 2<br>(dBm) | Port 3<br>(dBm) | Port 4<br>(dBm) | Total Power<br>(dBm) | Power Limit<br>(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<br>(dBm) | Total Power<br>(W) |
|--------------------------------|----------------------|--------------------|
| 2.4-2.4835GHz                  | -                    | -                  |
| 802.11b_Nss1,(1Mbps)_1TX       | 17.28                | 0.05346            |
| 802.11g_Nss1,(6Mbps)_1TX       | 16.55                | 0.04519            |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | 17.29                | 0.05358            |

**Result**

| Mode                           | Result | DG<br>(dBi) | Port 1<br>(dBm) | Total Power<br>(dBm) | Power Limit<br>(dBm) |
|--------------------------------|--------|-------------|-----------------|----------------------|----------------------|
| 802.11b_Nss1,(1Mbps)_1TX       | -      | -           | -               | -                    | -                    |
| 2412MHz                        | Pass   | 6.00        | 17.18           | 17.18                | 30.00                |
| 2437MHz                        | Pass   | 6.00        | 16.89           | 16.89                | 30.00                |
| 2457MHz                        | Pass   | 6.00        | 17.02           | 17.02                | 30.00                |
| 2462MHz                        | Pass   | 6.00        | 17.28           | 17.28                | 30.00                |
| 802.11g_Nss1,(6Mbps)_1TX       | -      | -           | -               | -                    | -                    |
| 2412MHz                        | Pass   | 6.00        | 15.54           | 15.54                | 30.00                |
| 2417MHz                        | Pass   | 6.00        | 16.45           | 16.45                | 30.00                |
| 2437MHz                        | Pass   | 6.00        | 16.54           | 16.54                | 30.00                |
| 2457MHz                        | Pass   | 6.00        | 16.55           | 16.55                | 30.00                |
| 2462MHz                        | Pass   | 6.00        | 14.89           | 14.89                | 30.00                |
| 802.11ax_HEW20_Nss1,(MCS0)_1TX | -      | -           | -               | -                    | -                    |
| 2412MHz                        | Pass   | 6.00        | 13.20           | 13.20                | 30.00                |
| 2417MHz                        | Pass   | 6.00        | 17.29           | 17.29                | 30.00                |
| 2437MHz                        | Pass   | 6.00        | 17.10           | 17.10                | 30.00                |
| 2457MHz                        | Pass   | 6.00        | 17.16           | 17.16                | 30.00                |
| 2462MHz                        | Pass   | 6.00        | 13.50           | 13.50                | 30.00                |

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



**Summary**

| Mode                           | Total Power<br>(dBm) | Total Power<br>(W) |
|--------------------------------|----------------------|--------------------|
| 2.4-2.4835GHz                  | -                    | -                  |
| 802.11b_Nss1,(1Mbps)_2TX       | 20.48                | 0.11169            |
| 802.11g_Nss1,(6Mbps)_2TX       | 19.81                | 0.09572            |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | 20.07                | 0.10162            |

**Result**

| Mode                           | Result | DG<br>(dBi) | Port 1<br>(dBm) | Port 2<br>(dBm) | Total Power<br>(dBm) | Power Limit<br>(dBm) |
|--------------------------------|--------|-------------|-----------------|-----------------|----------------------|----------------------|
| 802.11b_Nss1,(1Mbps)_2TX       | -      | -           | -               | -               | -                    | -                    |
| 2412MHz                        | Pass   | 6.00        | 17.00           | 17.21           | 20.12                | 30.00                |
| 2437MHz                        | Pass   | 6.00        | 16.88           | 17.12           | 20.01                | 30.00                |
| 2462MHz                        | Pass   | 6.00        | 17.32           | 17.61           | 20.48                | 30.00                |
| 802.11g_Nss1,(6Mbps)_2TX       | -      | -           | -               | -               | -                    | -                    |
| 2412MHz                        | Pass   | 6.00        | 13.76           | 13.90           | 16.84                | 30.00                |
| 2417MHz                        | Pass   | 6.00        | 16.78           | 16.81           | 19.81                | 30.00                |
| 2437MHz                        | Pass   | 6.00        | 16.56           | 16.41           | 19.50                | 30.00                |
| 2457MHz                        | Pass   | 6.00        | 16.62           | 16.77           | 19.71                | 30.00                |
| 2462MHz                        | Pass   | 6.00        | 13.06           | 13.26           | 16.17                | 30.00                |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | -      | -           | -               | -               | -                    | -                    |
| 2412MHz                        | Pass   | 6.00        | 12.45           | 12.60           | 15.54                | 30.00                |
| 2417MHz                        | Pass   | 6.00        | 16.42           | 16.25           | 19.35                | 30.00                |
| 2437MHz                        | Pass   | 6.00        | 17.12           | 17.00           | 20.07                | 30.00                |
| 2457MHz                        | Pass   | 6.00        | 16.25           | 16.42           | 19.35                | 30.00                |
| 2462MHz                        | Pass   | 6.00        | 11.72           | 11.94           | 14.84                | 30.00                |

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



**Summary**

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



**Result**

| Mode                              | Result | DG<br>(dBi) | Port 1<br>(dBm) | Port 2<br>(dBm) | Total Power<br>(dBm) | Power Limit<br>(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<br>(dBm) | Total Power<br>(W) |
|-----------------------------------|----------------------|--------------------|
| 2.4-2.4835GHz                     | -                    | -                  |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 22.25                | 0.16788            |



**Result**

| Mode                              | Result | DG<br>(dBi) | Port 1<br>(dBm) | Port 2<br>(dBm) | Port 3<br>(dBm) | Port 4<br>(dBm) | Total Power<br>(dBm) | Power Limit<br>(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<br>(dBm) | Total Power<br>(W) |
|-----------------------------------|----------------------|--------------------|
| 2.4-2.4835GHz                     | -                    | -                  |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | 19.99                | 0.09977            |



**Result**

| Mode                              | Result | DG<br>(dBi) | Port 1<br>(dBm) | Port 2<br>(dBm) | Total Power<br>(dBm) | Power Limit<br>(dBm) |
|-----------------------------------|--------|-------------|-----------------|-----------------|----------------------|----------------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | -      | -           | -               | -               | -                    | -                    |
| 2412MHz                           | Pass   | 9.01        | 12.38           | 12.53           | 15.47                | 26.99                |
| 2417MHz                           | Pass   | 9.01        | 16.34           | 16.17           | 19.27                | 26.99                |
| 2437MHz                           | Pass   | 9.01        | 17.04           | 16.92           | 19.99                | 26.99                |
| 2457MHz                           | Pass   | 9.01        | 16.20           | 16.37           | 19.30                | 26.99                |
| 2462MHz                           | Pass   | 9.01        | 11.65           | 11.87           | 14.77                | 26.99                |

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



**Summary**

| Mode                           | PD<br>(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;

**Result**

| Mode                           | Result | DG<br>(dBi) | Port 1<br>(dBm/RBW) | PD<br>(dBm/RBW) | PD Limit<br>(dBm/RBW) |
|--------------------------------|--------|-------------|---------------------|-----------------|-----------------------|
| 802.11b_Nss1,(1Mbps)_1TX       | -      | -           | -                   | -               | -                     |
| 2412MHz                        | Pass   | 4.00        | 6.15                | 6.15            | 8.00                  |
| 2437MHz                        | Pass   | 4.00        | -7.44               | -7.44           | 8.00                  |
| 2462MHz                        | Pass   | 4.00        | -9.82               | -9.82           | 8.00                  |
| 802.11g_Nss1,(6Mbps)_1TX       | -      | -           | -                   | -               | -                     |
| 2412MHz                        | Pass   | 4.00        | -10.49              | -10.49          | 8.00                  |
| 2437MHz                        | Pass   | 4.00        | -10.39              | -10.39          | 8.00                  |
| 2462MHz                        | Pass   | 4.00        | -11.70              | -11.70          | 8.00                  |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | -      | -           | -                   | -               | -                     |
| 2412MHz                        | Pass   | 4.00        | -10.64              | -10.64          | 8.00                  |
| 2437MHz                        | Pass   | 4.00        | -10.05              | -10.05          | 8.00                  |
| 2462MHz                        | Pass   | 4.00        | -10.96              | -10.96          | 8.00                  |

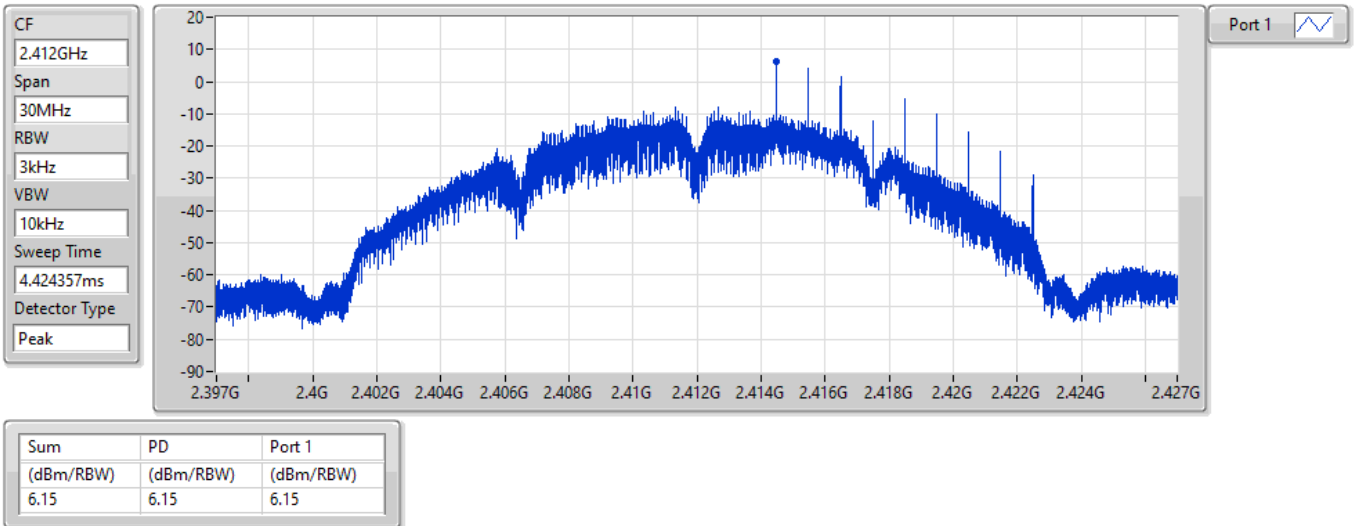
DG = Directional Gain; RBW = 3kHz;  
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

## 802.11b\_Nss1,(1Mbps)\_1TX

## PSD

2412MHz

12/08/2021

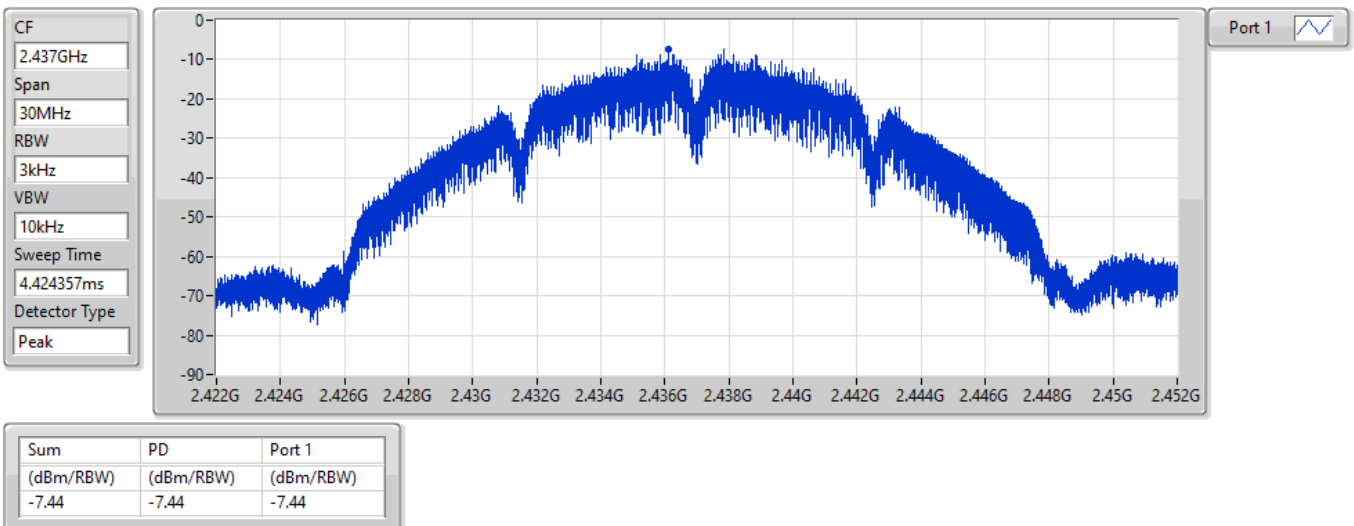


## 802.11b\_Nss1,(1Mbps)\_1TX

## PSD

2437MHz

12/08/2021

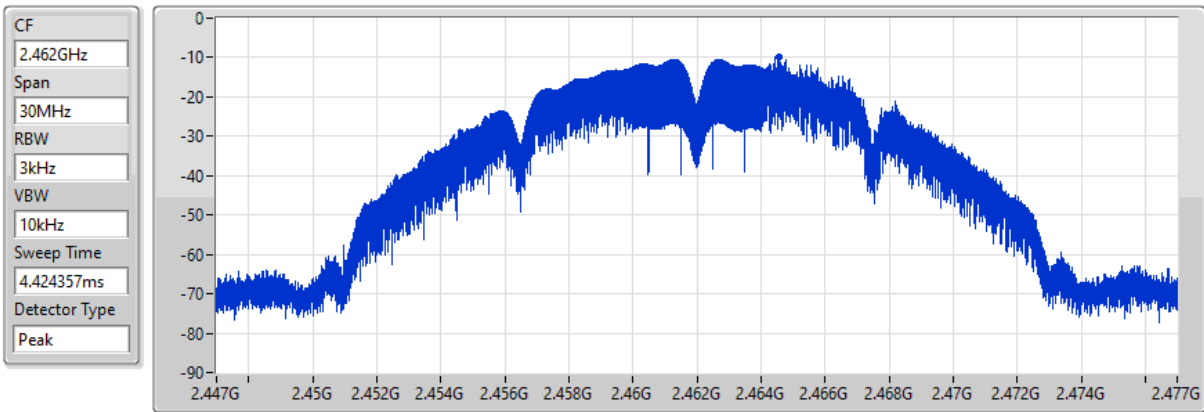


## 802.11b\_Nss1,(1Mbps)\_1TX

## PSD

2462MHz

12/08/2021



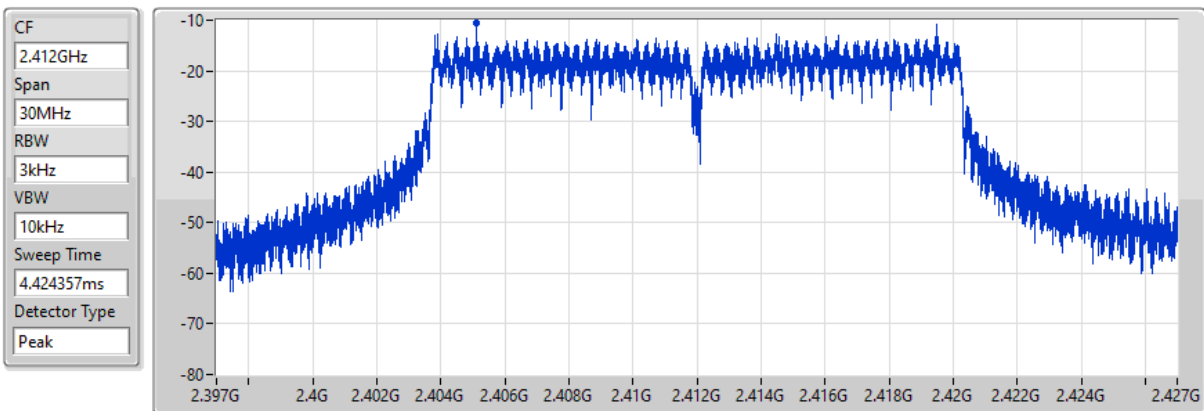
| Sum       | PD        | Port 1    |
|-----------|-----------|-----------|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -9.82     | -9.82     | -9.82     |

## 802.11g\_Nss1,(6Mbps)\_1TX

## PSD

2412MHz

12/08/2021



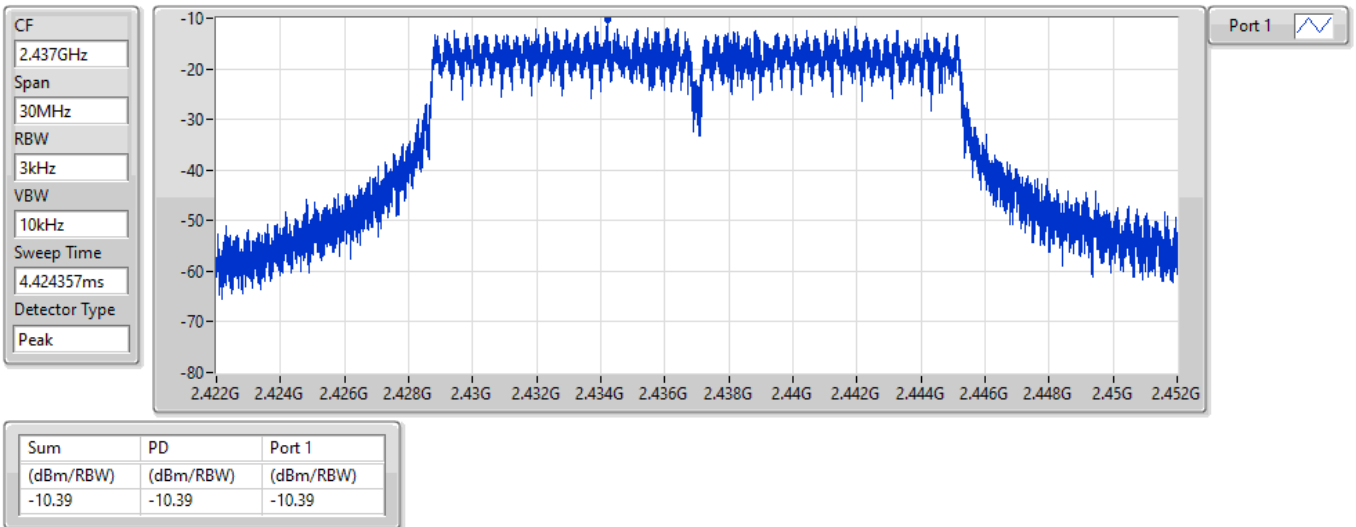
| Sum       | PD        | Port 1    |
|-----------|-----------|-----------|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -10.49    | -10.49    | -10.49    |

## 802.11g\_Nss1,(6Mbps)\_1TX

## PSD

2437MHz

12/08/2021

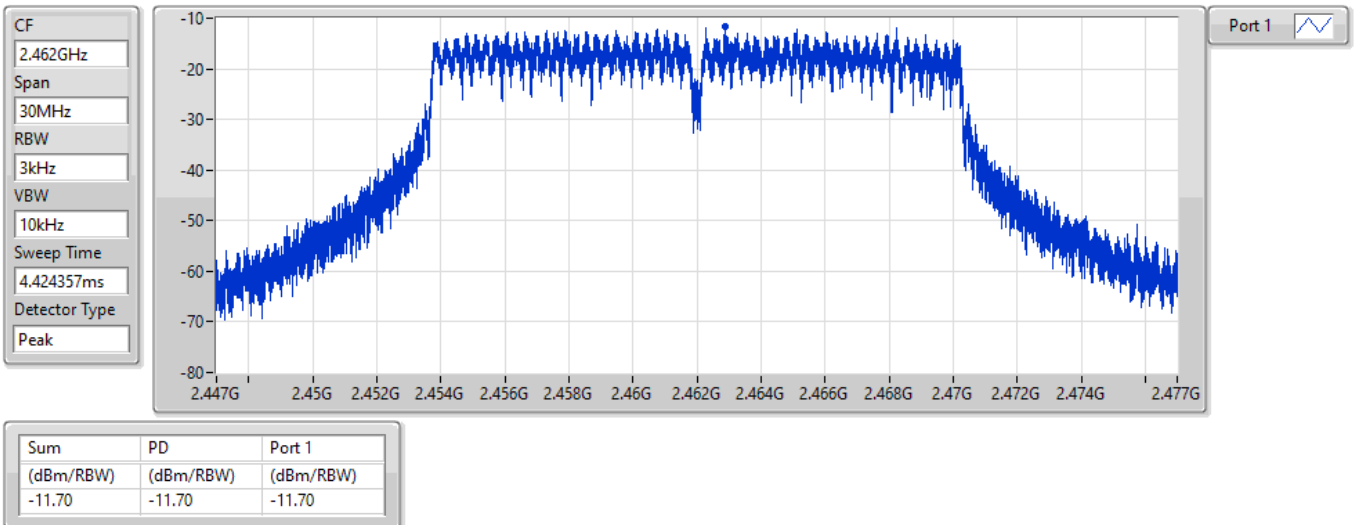


## 802.11g\_Nss1,(6Mbps)\_1TX

## PSD

2462MHz

12/08/2021

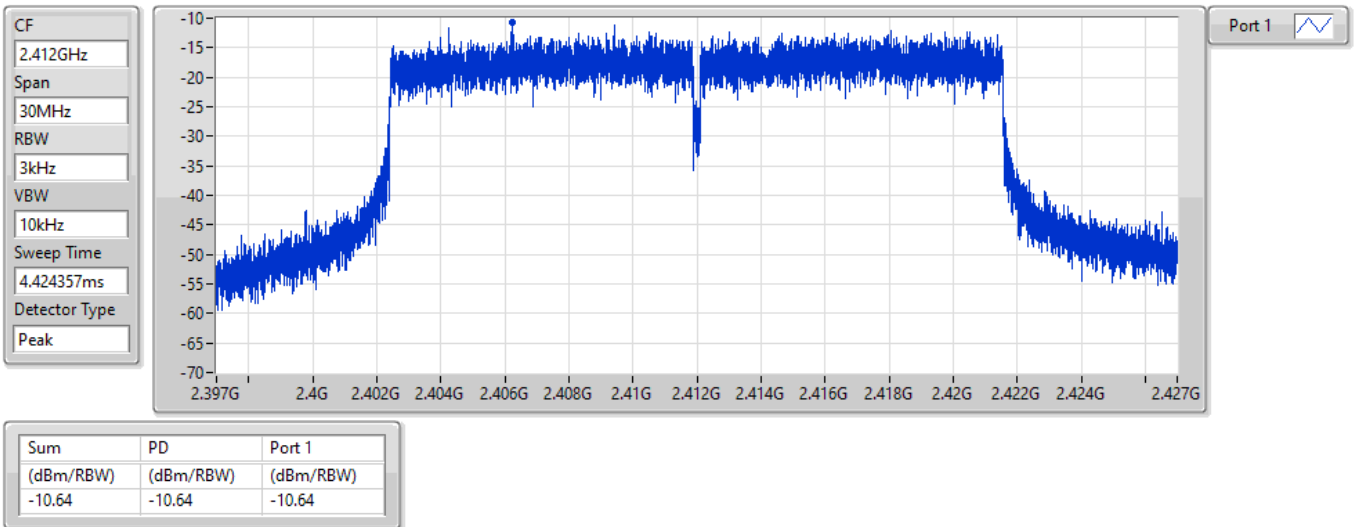


## 802.11ax HEW20\_Nss1,(MCS0)\_1TX

## PSD

2412MHz

12/08/2021

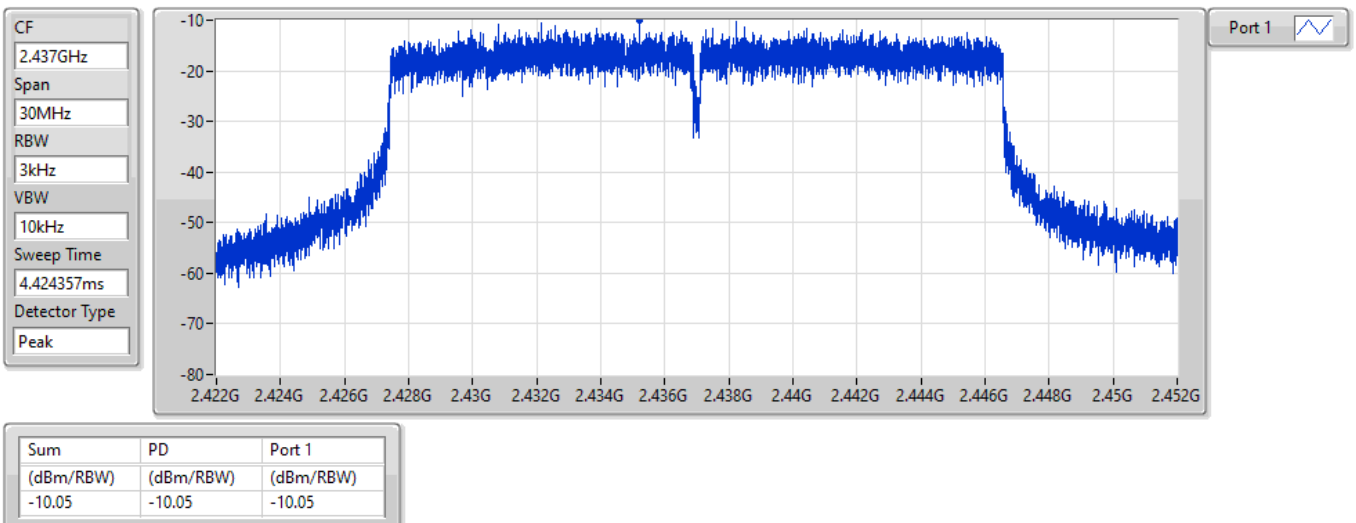


## 802.11ax HEW20\_Nss1,(MCS0)\_1TX

## PSD

2437MHz

12/08/2021

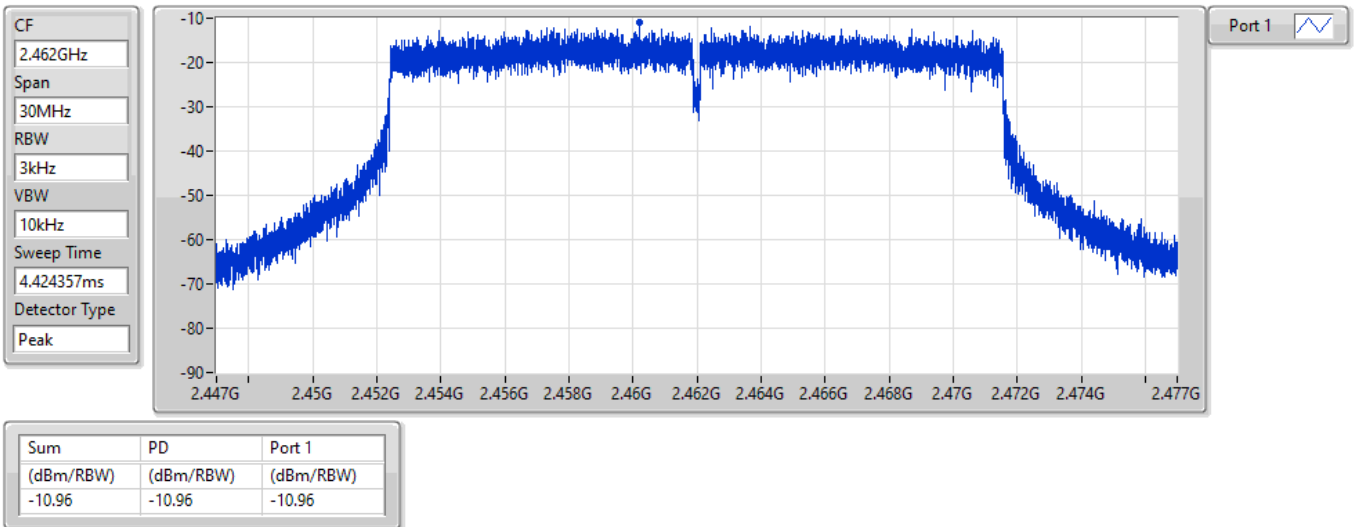


## 802.11ax HEW20\_Nss1,(MCS0)\_1TX

## PSD

2462MHz

12/08/2021





**Summary**

| Mode                           | PD<br>(dBm/RBW) |
|--------------------------------|-----------------|
| 2.4-2.4835GHz                  | -               |
| 802.11b_Nss1,(1Mbps)_2TX       | -5.10           |
| 802.11g_Nss1,(6Mbps)_2TX       | -9.91           |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | -8.36           |

RBW = 3kHz;

**Result**

| Mode                           | Result | DG<br>(dBi) | Port 1<br>(dBm/RBW) | Port 2<br>(dBm/RBW) | PD<br>(dBm/RBW) | PD Limit<br>(dBm/RBW) |
|--------------------------------|--------|-------------|---------------------|---------------------|-----------------|-----------------------|
| 802.11b_Nss1,(1Mbps)_2TX       | -      | -           | -                   | -                   | -               | -                     |
| 2412MHz                        | Pass   | 7.01        | -11.18              | -9.19               | -7.81           | 6.99                  |
| 2437MHz                        | Pass   | 7.01        | -10.77              | -12.13              | -8.90           | 6.99                  |
| 2462MHz                        | Pass   | 7.01        | -6.08               | -10.22              | -5.10           | 6.99                  |
| 802.11g_Nss1,(6Mbps)_2TX       | -      | -           | -                   | -                   | -               | -                     |
| 2412MHz                        | Pass   | 7.01        | -11.49              | -11.96              | -9.91           | 6.99                  |
| 2437MHz                        | Pass   | 7.01        | -11.61              | -11.43              | -10.24          | 6.99                  |
| 2462MHz                        | Pass   | 7.01        | -12.51              | -12.77              | -11.21          | 6.99                  |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | -      | -           | -                   | -                   | -               | -                     |
| 2412MHz                        | Pass   | 7.01        | -12.41              | -11.53              | -9.68           | 6.99                  |
| 2437MHz                        | Pass   | 7.01        | -10.47              | -10.33              | -8.36           | 6.99                  |
| 2462MHz                        | Pass   | 7.01        | -12.44              | -12.72              | -10.57          | 6.99                  |

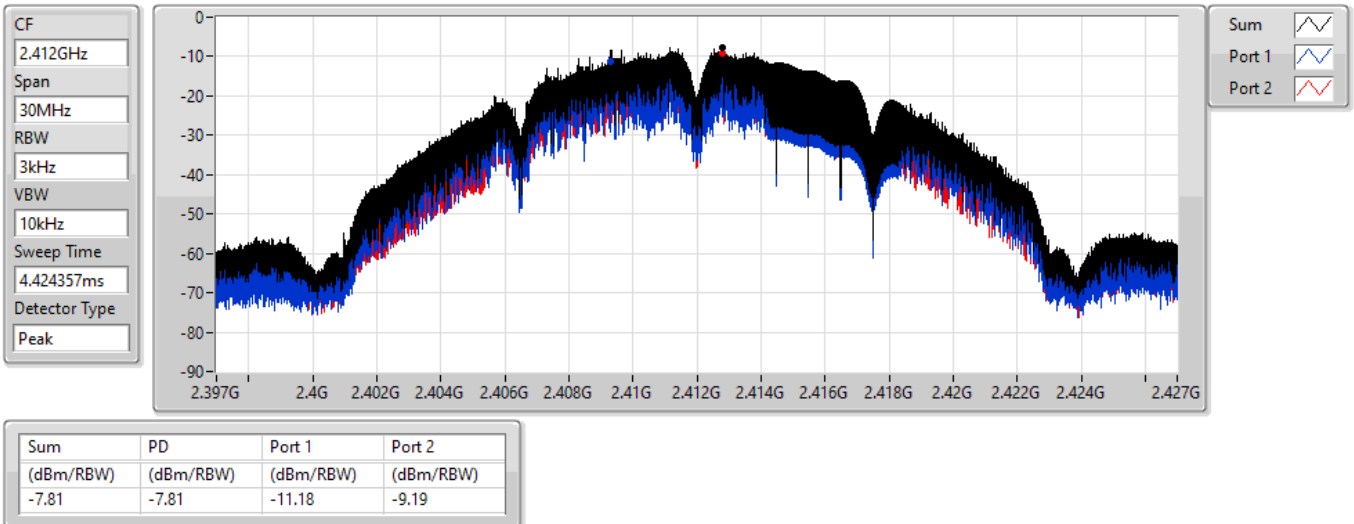
DG = Directional Gain; RBW = 3kHz;  
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

## 802.11b\_Nss1,(1Mbps)\_2TX

2412MHz

PSD

12/08/2021

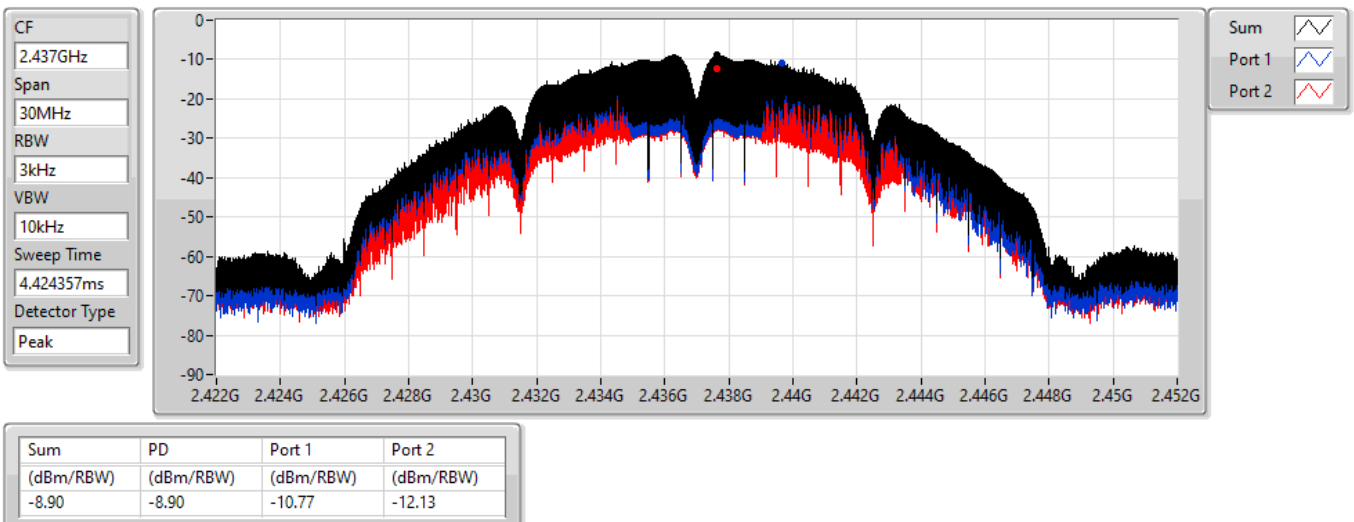


## 802.11b\_Nss1,(1Mbps)\_2TX

2437MHz

PSD

12/08/2021

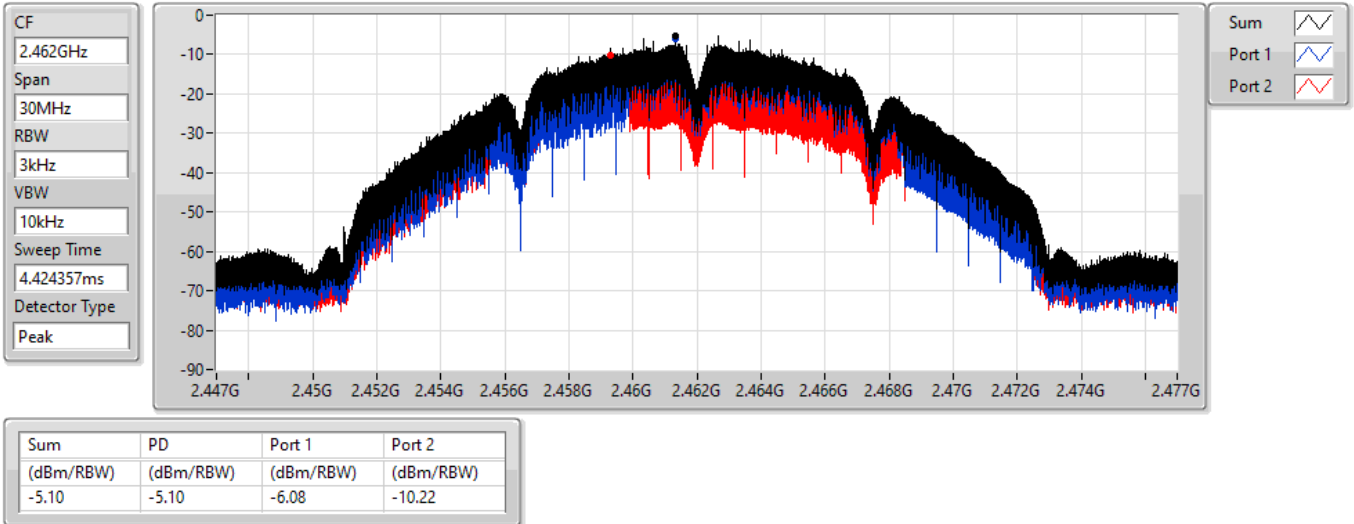


## 802.11b\_Nss1,(1Mbps)\_2TX

2462MHz

PSD

12/08/2021

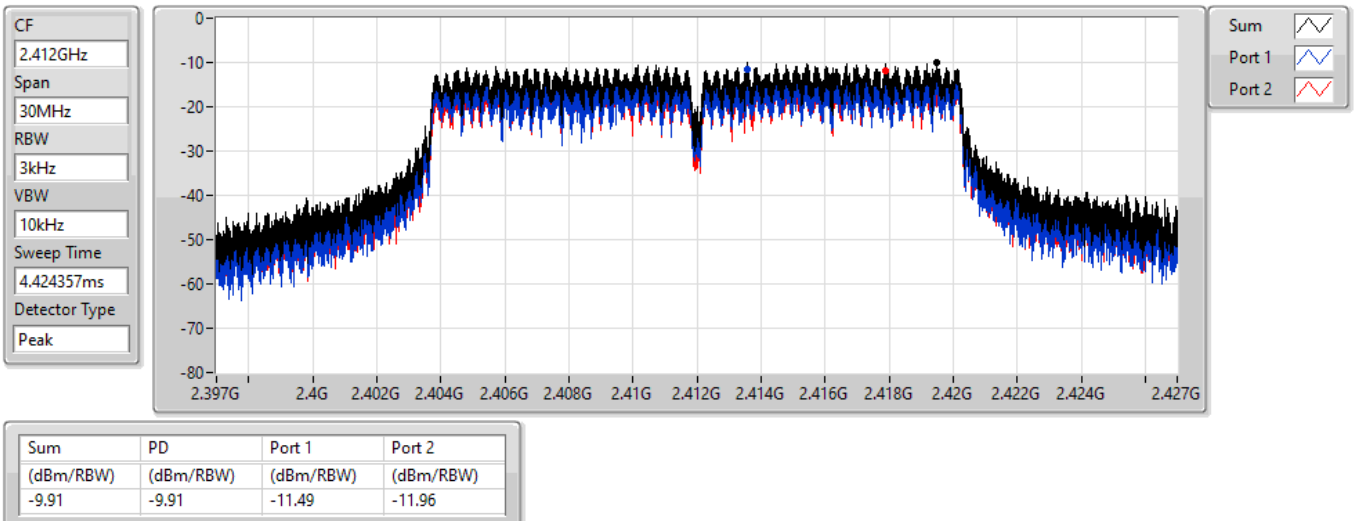


## 802.11g\_Nss1,(6Mbps)\_2TX

2412MHz

PSD

12/08/2021

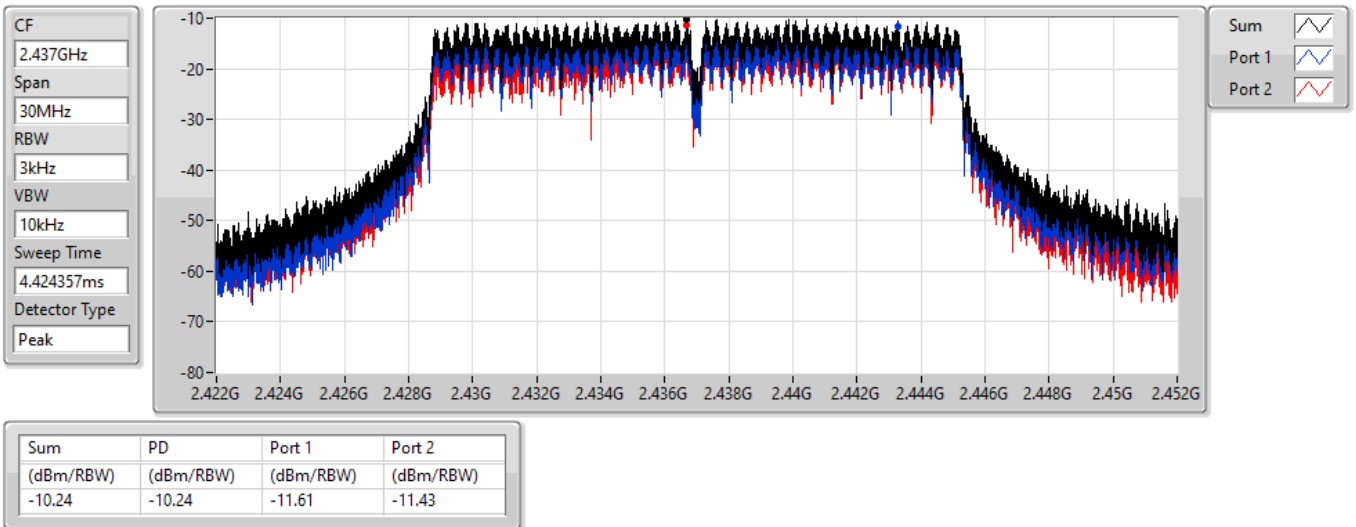


## 802.11g\_Nss1,(6Mbps)\_2TX

2437MHz

PSD

12/08/2021

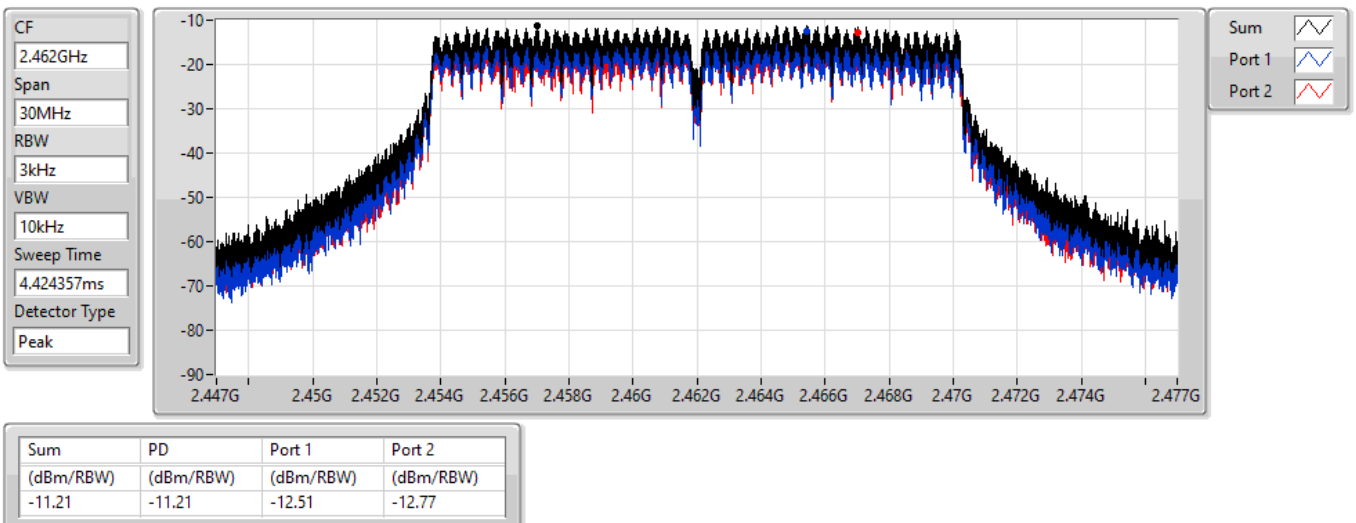


## 802.11g\_Nss1,(6Mbps)\_2TX

2462MHz

PSD

12/08/2021

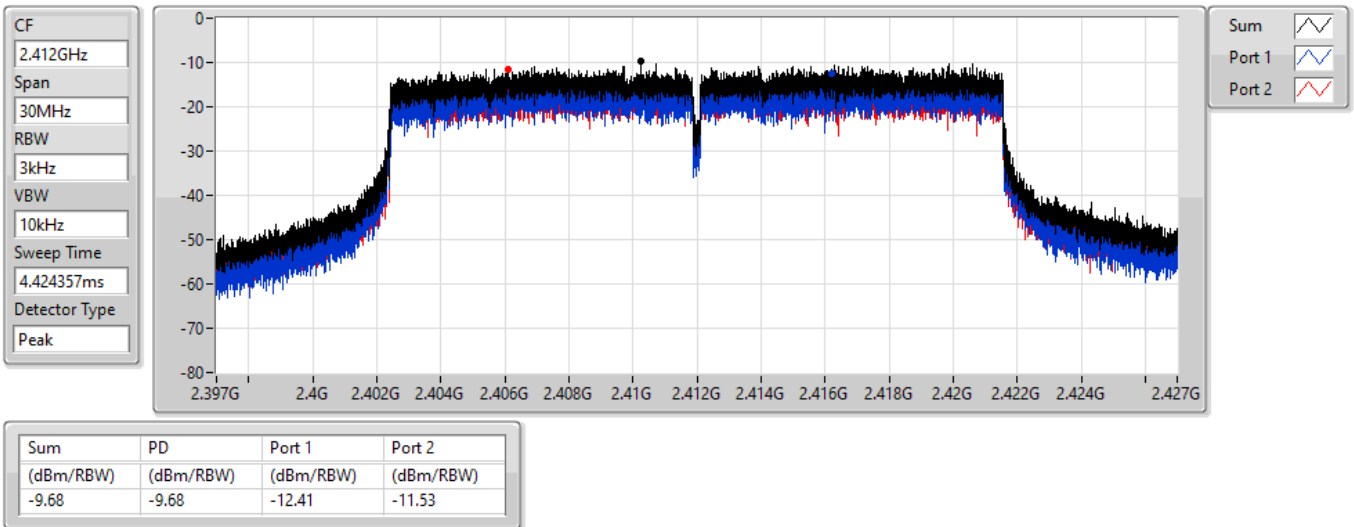


## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

## PSD

2412MHz

12/08/2021

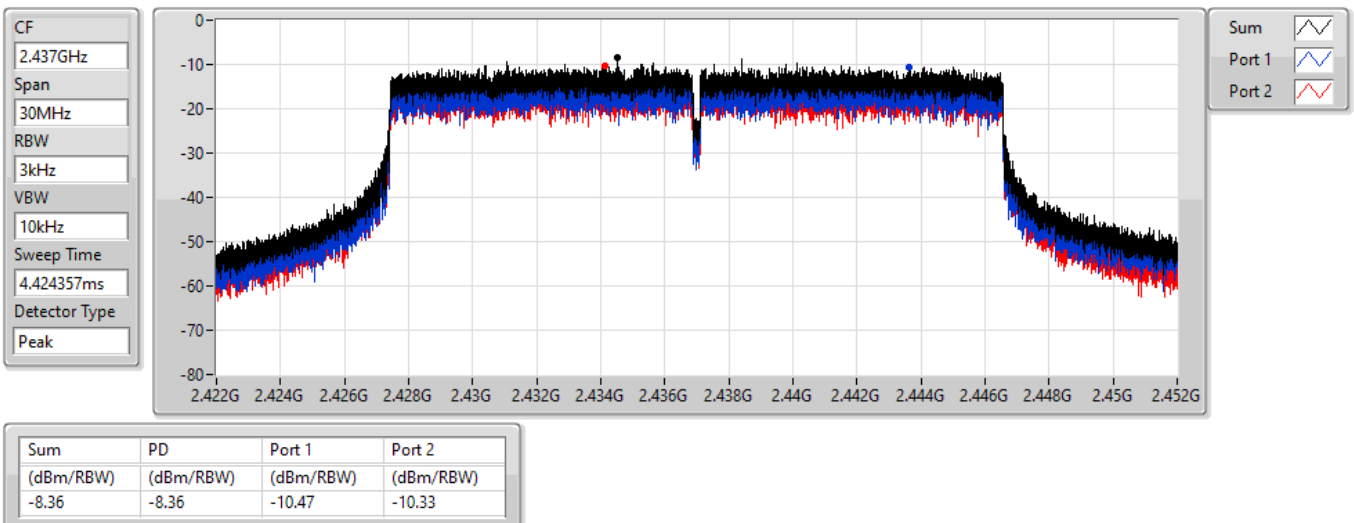


## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

## PSD

2437MHz

12/08/2021

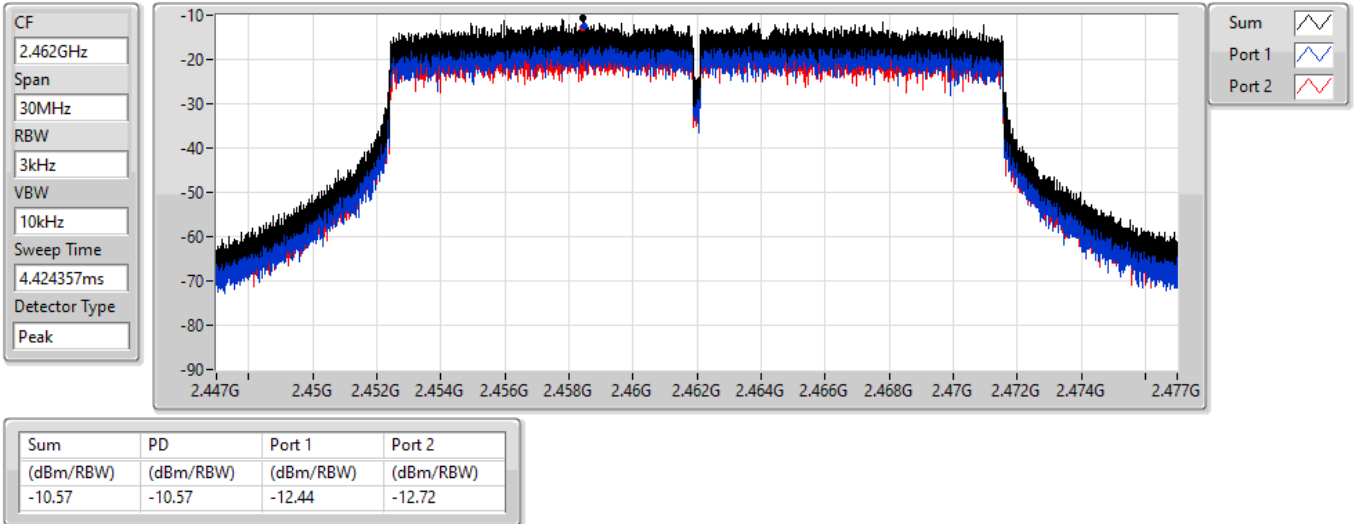


## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

2462MHz

PSD

12/08/2021





**Summary**

| Mode                           | PD<br>(dBm/RBW) |
|--------------------------------|-----------------|
| 2.4-2.4835GHz                  | -               |
| 802.11b_Nss1,(1Mbps)_4TX       | -3.62           |
| 802.11g_Nss1,(6Mbps)_4TX       | -7.08           |
| 802.11ax HEW20_Nss1,(MCS0)_4TX | -6.99           |

RBW = 3kHz;

**Result**

| Mode                           | Result | DG<br>(dBi) | Port 1<br>(dBm/RBW) | Port 2<br>(dBm/RBW) | Port 3<br>(dBm/RBW) | Port 4<br>(dBm/RBW) | PD<br>(dBm/RBW) | PD Limit<br>(dBm/RBW) |
|--------------------------------|--------|-------------|---------------------|---------------------|---------------------|---------------------|-----------------|-----------------------|
| 802.11b_Nss1,(1Mbps)_4TX       | -      | -           | -                   | -                   | -                   | -                   | -               | -                     |
| 2412MHz                        | Pass   | 10.02       | -11.18              | -8.16               | -8.40               | -7.27               | -4.40           | 3.98                  |
| 2437MHz                        | Pass   | 10.02       | -7.41               | -9.30               | -6.96               | -8.69               | -3.62           | 3.98                  |
| 2462MHz                        | Pass   | 10.02       | -9.80               | -8.45               | -8.91               | -7.66               | -4.21           | 3.98                  |
| 802.11g_Nss1,(6Mbps)_4TX       | -      | -           | -                   | -                   | -                   | -                   | -               | -                     |
| 2412MHz                        | Pass   | 10.02       | -12.23              | -12.68              | -14.48              | -13.69              | -8.96           | 3.98                  |
| 2437MHz                        | Pass   | 10.02       | -9.85               | -11.41              | -12.15              | -12.03              | -7.08           | 3.98                  |
| 2462MHz                        | Pass   | 10.02       | -13.33              | -14.02              | -14.96              | -14.53              | -9.47           | 3.98                  |
| 802.11ax HEW20_Nss1,(MCS0)_4TX | -      | -           | -                   | -                   | -                   | -                   | -               | -                     |
| 2412MHz                        | Pass   | 10.02       | -13.94              | -13.10              | -13.84              | -13.26              | -9.43           | 3.98                  |
| 2437MHz                        | Pass   | 10.02       | -10.58              | -11.49              | -10.78              | -10.98              | -6.99           | 3.98                  |
| 2462MHz                        | Pass   | 10.02       | -15.32              | -16.51              | -15.68              | -15.63              | -11.95          | 3.98                  |

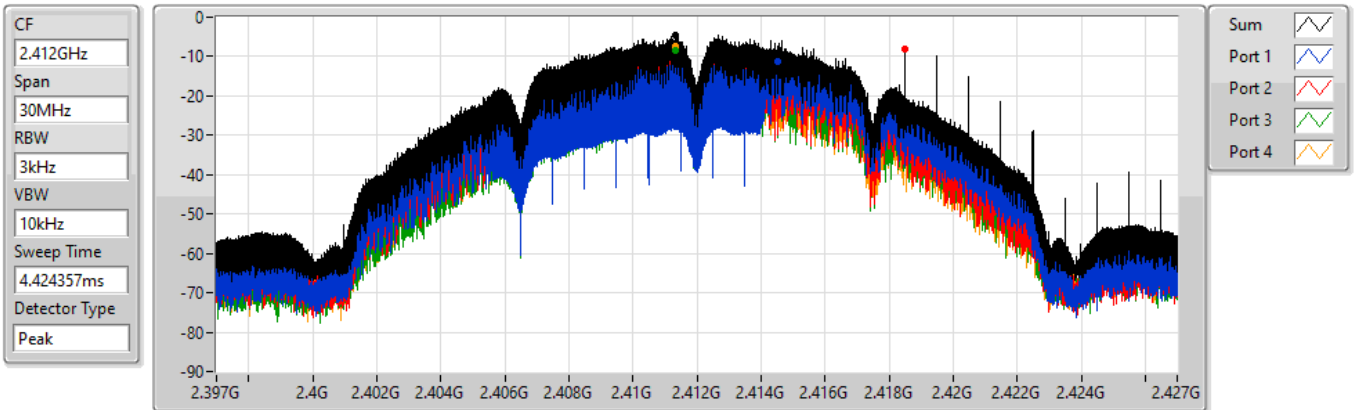
DG = Directional Gain; RBW = 3kHz;  
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

## 802.11b\_Nss1,(1Mbps)\_4TX

2412MHz

PSD

12/08/2021



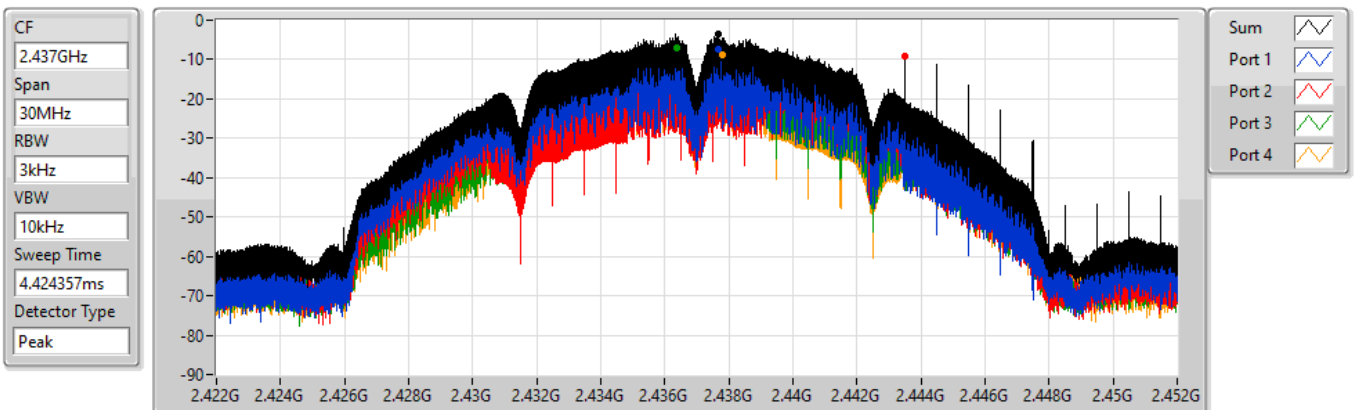
| Sum       | PD        | Port 1    | Port 2    | Port 3    | Port 4    |
|-----------|-----------|-----------|-----------|-----------|-----------|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -4.40     | -4.40     | -11.18    | -8.16     | -8.40     | -7.27     |

## 802.11b\_Nss1,(1Mbps)\_4TX

2437MHz

PSD

12/08/2021



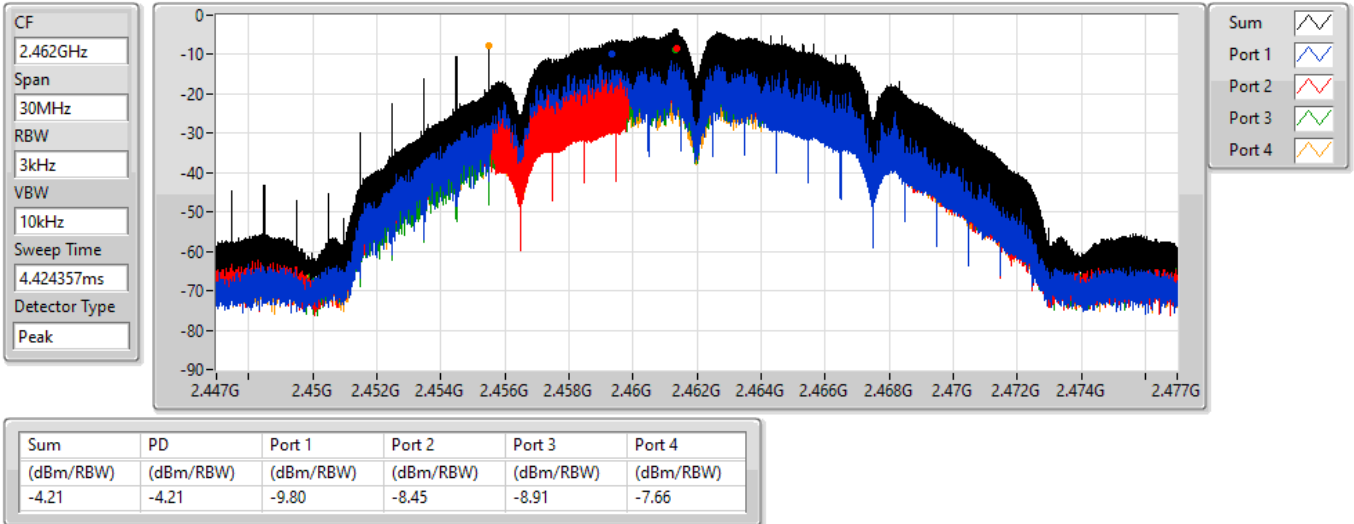
| Sum       | PD        | Port 1    | Port 2    | Port 3    | Port 4    |
|-----------|-----------|-----------|-----------|-----------|-----------|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -3.62     | -3.62     | -7.41     | -9.30     | -6.96     | -8.69     |

## 802.11b\_Nss1,(1Mbps)\_4TX

2462MHz

PSD

12/08/2021

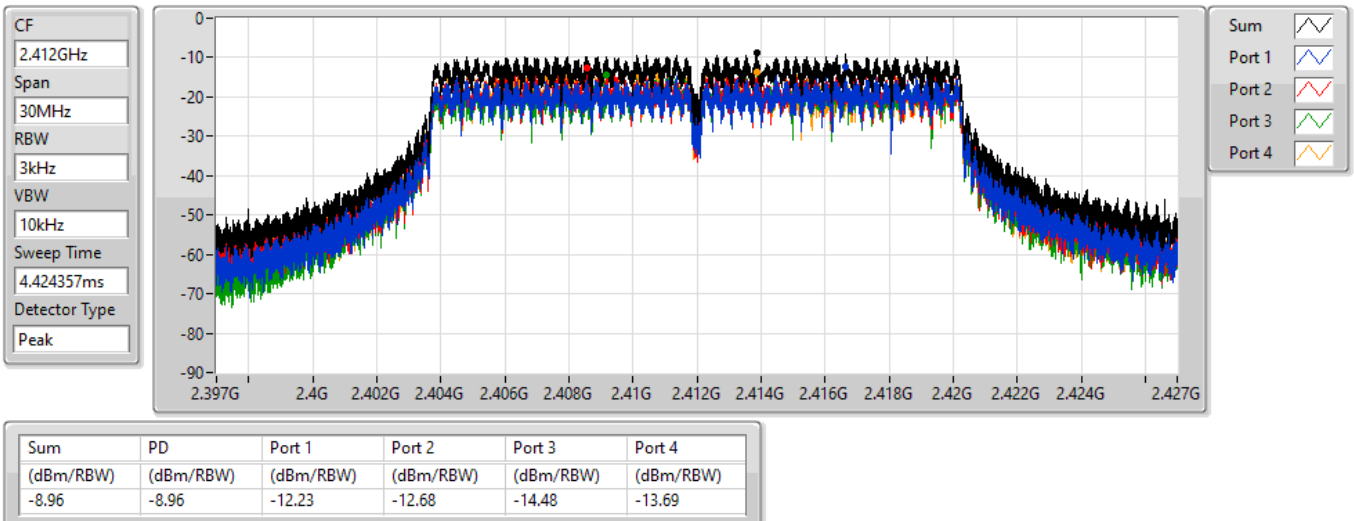


## 802.11g\_Nss1,(6Mbps)\_4TX

2412MHz

PSD

12/08/2021

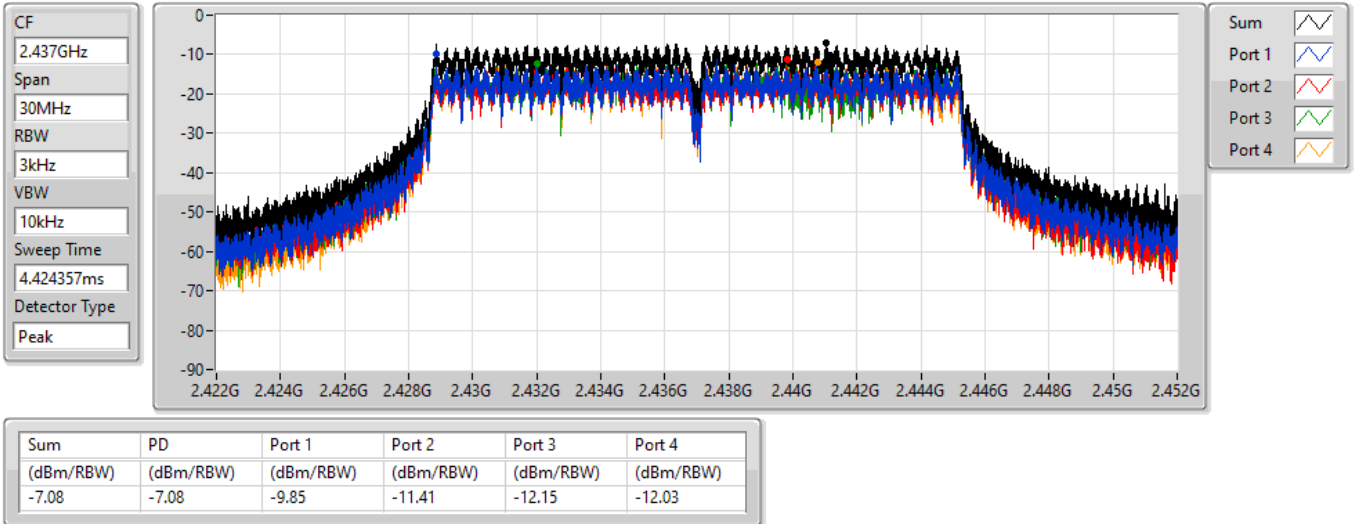


## 802.11g\_Nss1,(6Mbps)\_4TX

2437MHz

PSD

12/08/2021

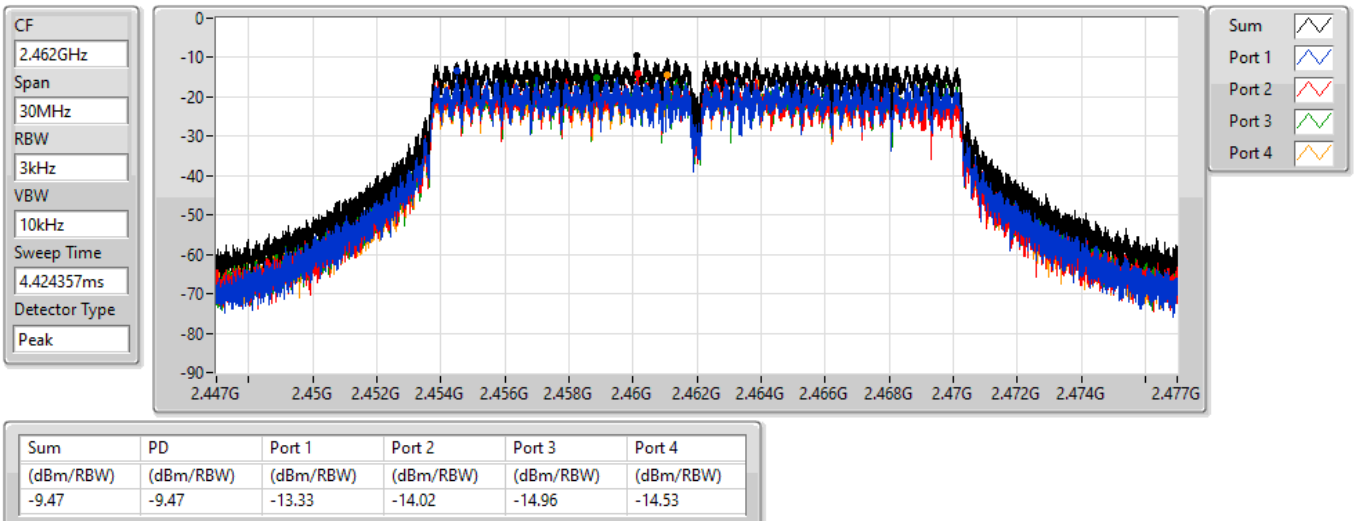


## 802.11g\_Nss1,(6Mbps)\_4TX

2462MHz

PSD

12/08/2021

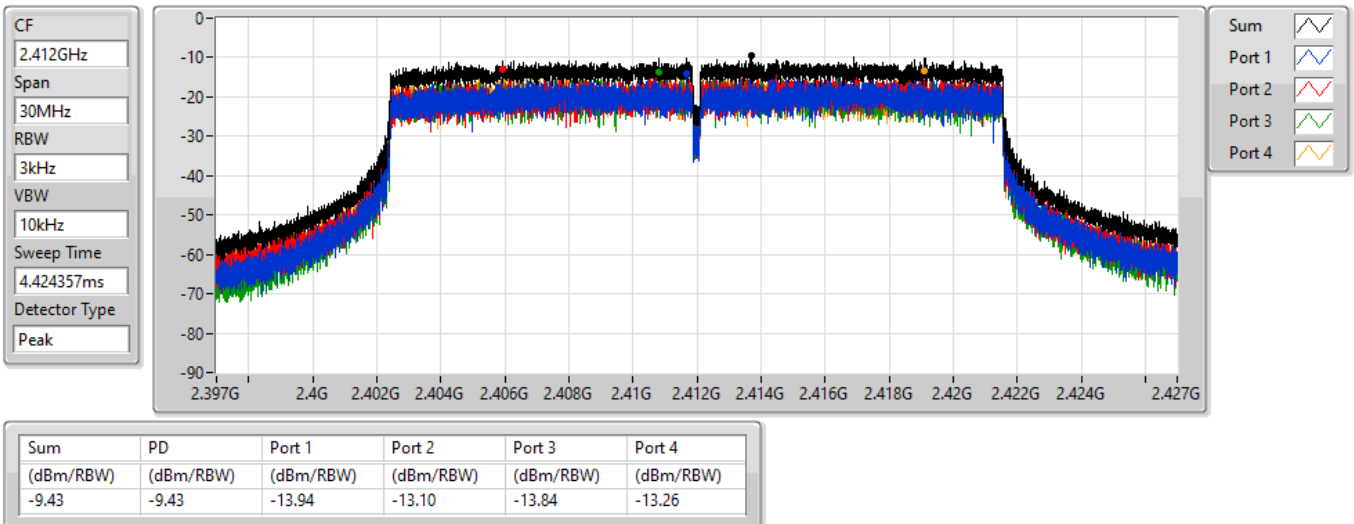


## 802.11ax HEW20\_Nss1,(MCS0)\_4TX

2412MHz

PSD

12/08/2021

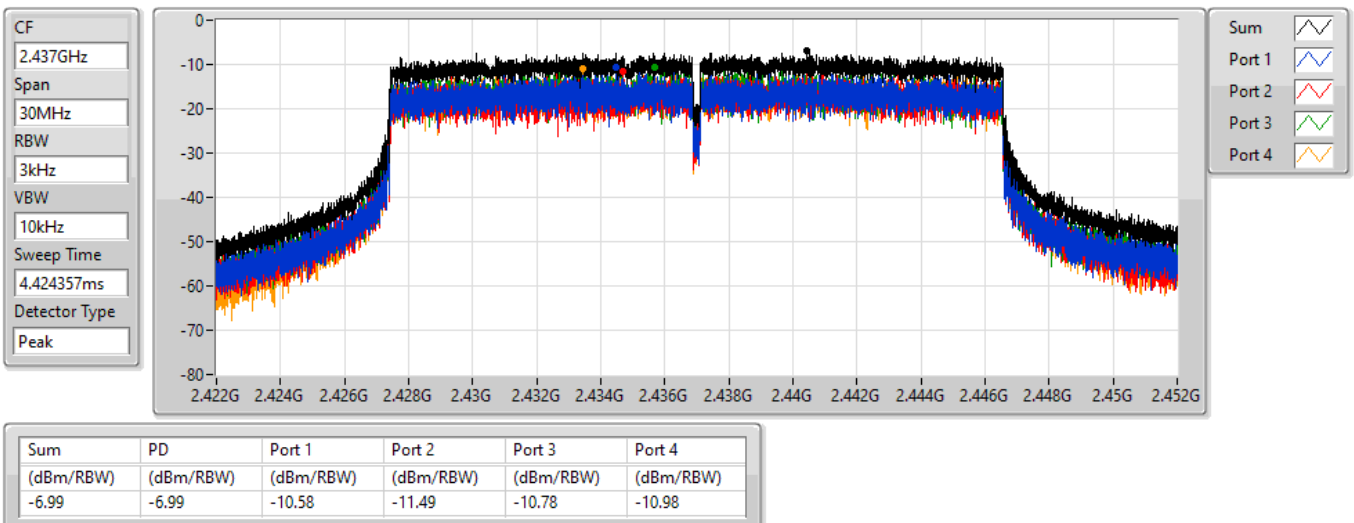


## 802.11ax HEW20\_Nss1,(MCS0)\_4TX

2437MHz

PSD

12/08/2021

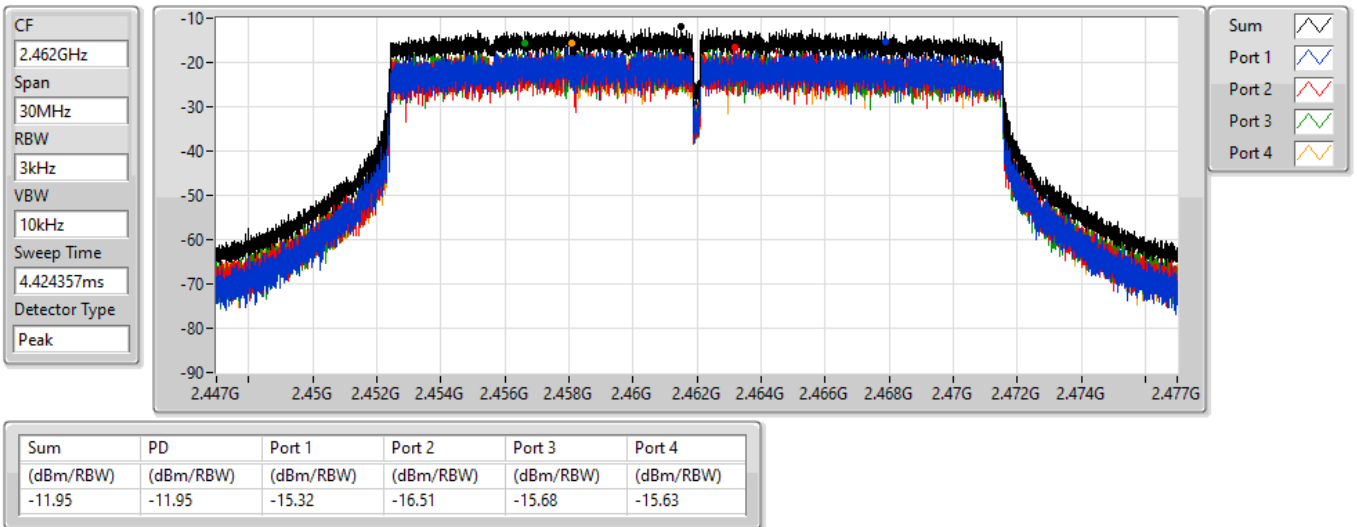


## 802.11ax HEW20\_Nss1,(MCS0)\_4TX

2462MHz

PSD

12/08/2021





**Summary**

| Mode                           | PD<br>(dBm/RBW) |
|--------------------------------|-----------------|
| 2.4-2.4835GHz                  | -               |
| 802.11b_Nss1,(1Mbps)_1TX       | -7.72           |
| 802.11g_Nss1,(6Mbps)_1TX       | -9.60           |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | -8.93           |

RBW = 3kHz;



Result

| Mode                           | Result | DG<br>(dBi) | Port 1<br>(dBm/RBW) | PD<br>(dBm/RBW) | PD Limit<br>(dBm/RBW) |
|--------------------------------|--------|-------------|---------------------|-----------------|-----------------------|
| 802.11b_Nss1,(1Mbps)_1TX       | -      | -           | -                   | -               | -                     |
| 2412MHz                        | Pass   | 6.00        | -7.72               | -7.72           | 8.00                  |
| 2437MHz                        | Pass   | 6.00        | -18.53              | -18.53          | 8.00                  |
| 2457MHz                        | Pass   | 6.00        | -16.41              | -16.41          | 8.00                  |
| 2462MHz                        | Pass   | 6.00        | -19.05              | -19.05          | 8.00                  |
| 802.11g_Nss1,(6Mbps)_1TX       | -      | -           | -                   | -               | -                     |
| 2412MHz                        | Pass   | 6.00        | -11.16              | -11.16          | 8.00                  |
| 2417MHz                        | Pass   | 6.00        | -9.89               | -9.89           | 8.00                  |
| 2437MHz                        | Pass   | 6.00        | -9.76               | -9.76           | 8.00                  |
| 2457MHz                        | Pass   | 6.00        | -9.60               | -9.60           | 8.00                  |
| 2462MHz                        | Pass   | 6.00        | -11.15              | -11.15          | 8.00                  |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | -      | -           | -                   | -               | -                     |
| 2412MHz                        | Pass   | 6.00        | -12.83              | -12.83          | 8.00                  |
| 2417MHz                        | Pass   | 6.00        | -8.93               | -8.93           | 8.00                  |
| 2437MHz                        | Pass   | 6.00        | -8.93               | -8.93           | 8.00                  |
| 2457MHz                        | Pass   | 6.00        | -9.01               | -9.01           | 8.00                  |
| 2462MHz                        | Pass   | 6.00        | -12.81              | -12.81          | 8.00                  |

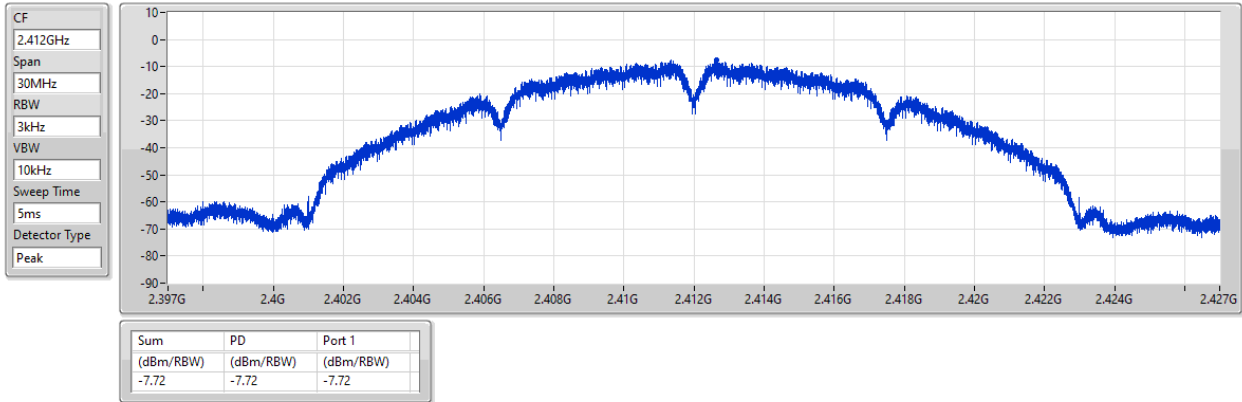
DG = Directional Gain; RBW = 3kHz;  
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

PSD

2412MHz

15/05/2023

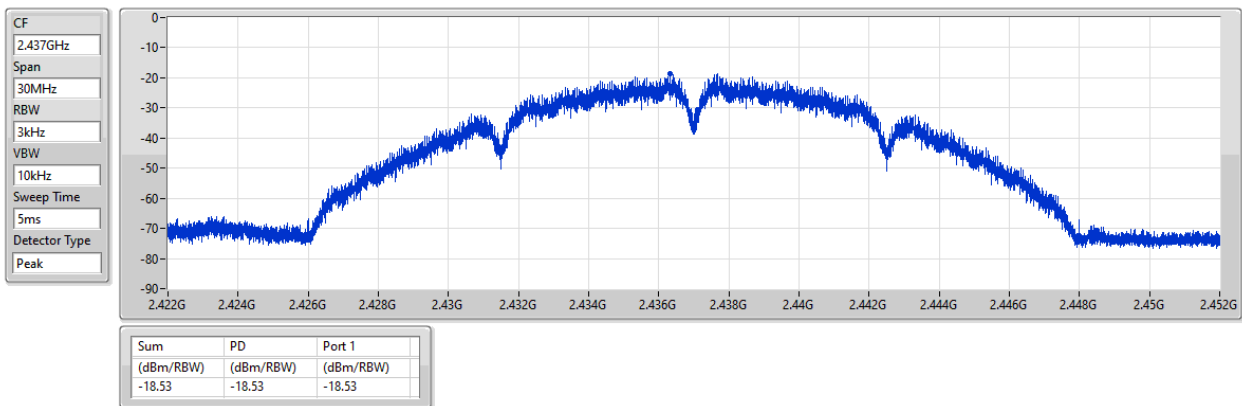


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

PSD

2437MHz

31/05/2023

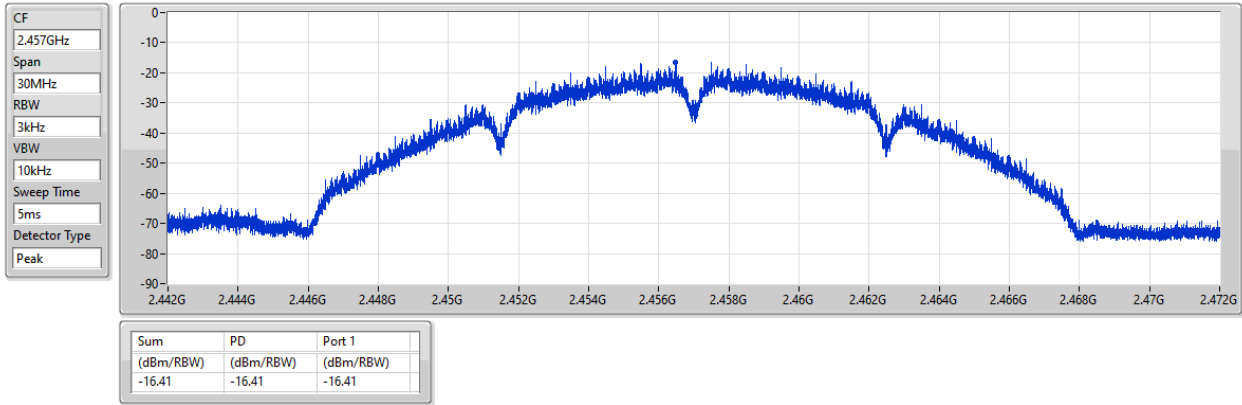


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

PSD

2457MHz

31/05/2023

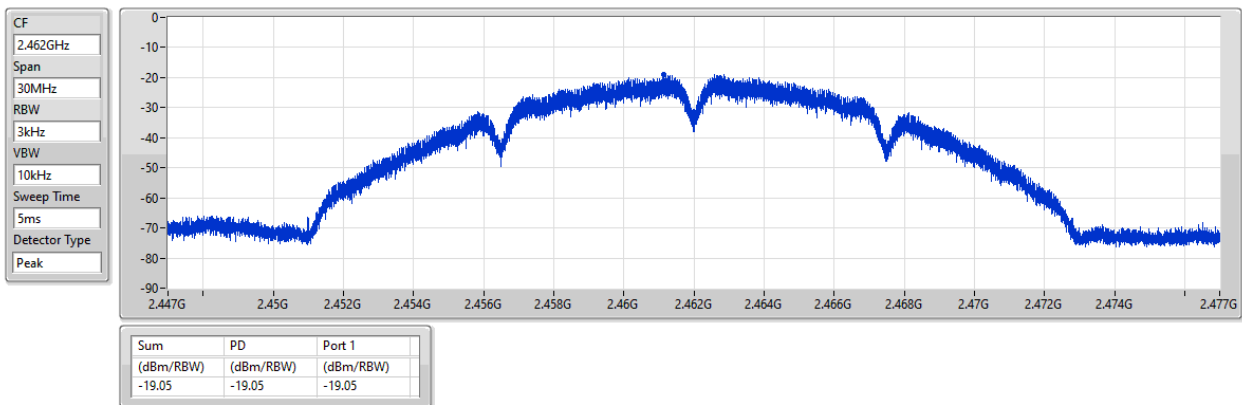


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

PSD

2462MHz

31/05/2023

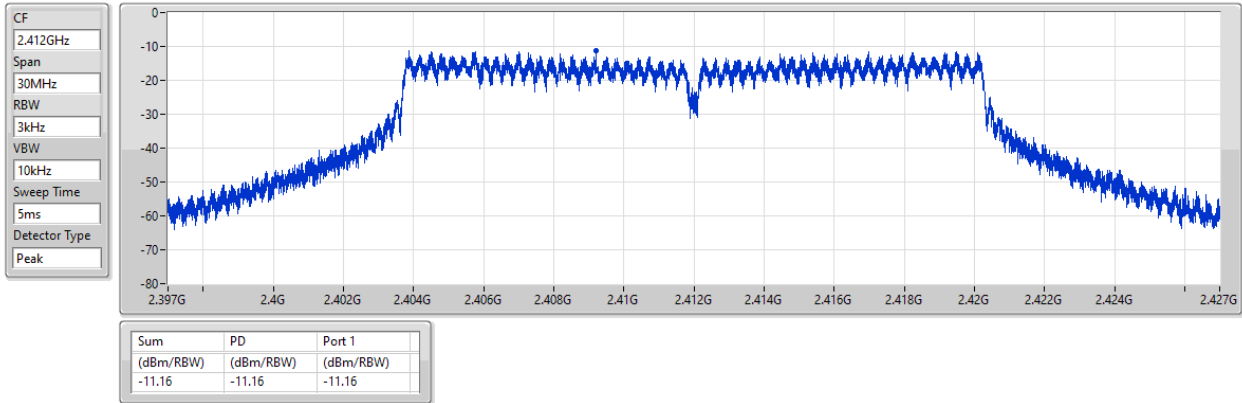


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

PSD

2412MHz

23/05/2023

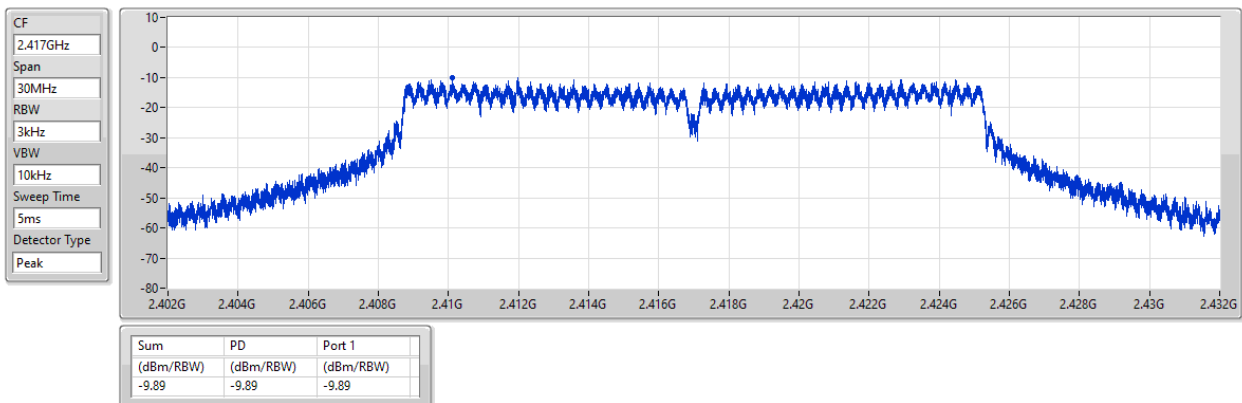


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

PSD

2417MHz

23/05/2023

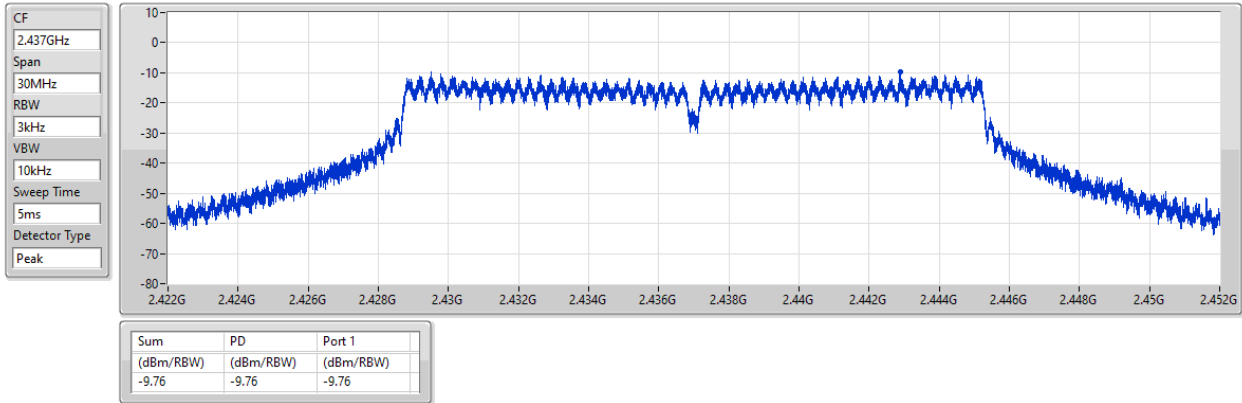


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

PSD

2437MHz

15/05/2023

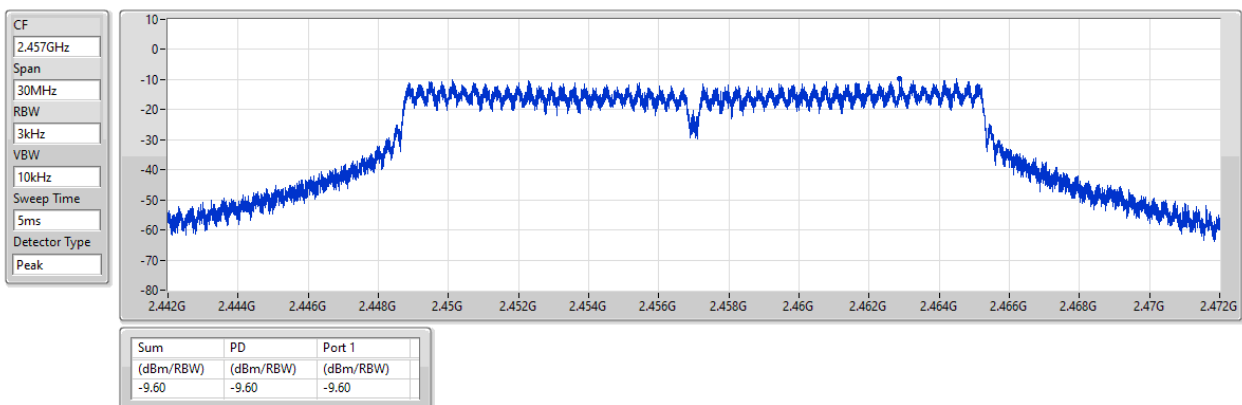


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

PSD

2457MHz

23/05/2023

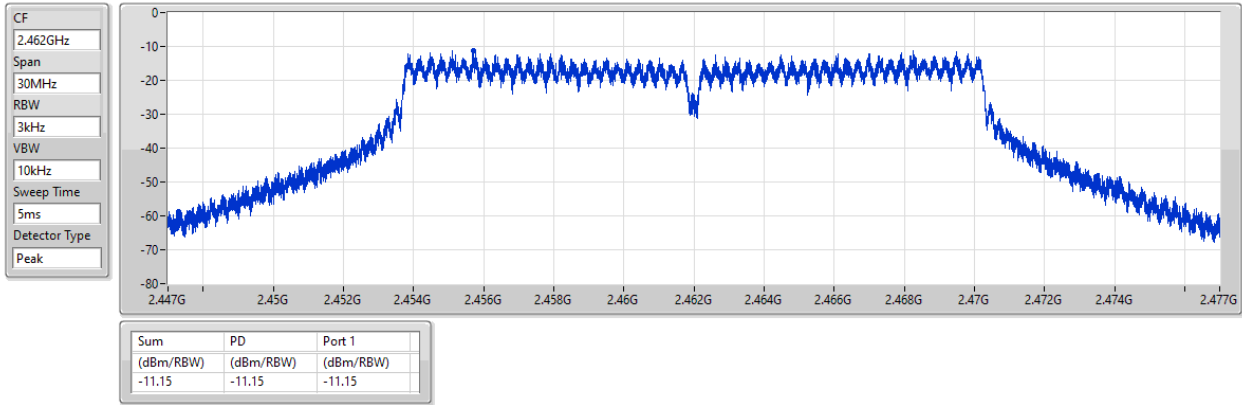


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

PSD

2462MHz

23/05/2023

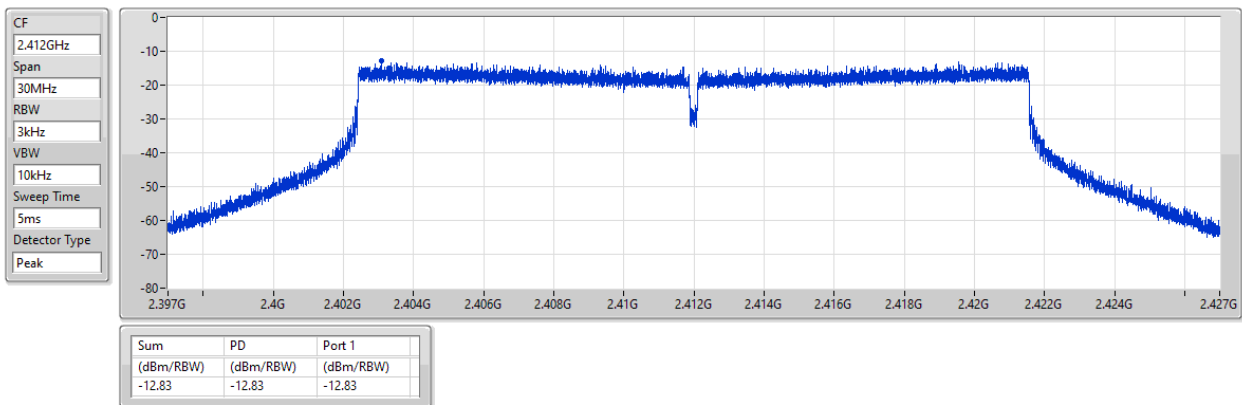


2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_1TX

PSD

2412MHz

23/05/2023

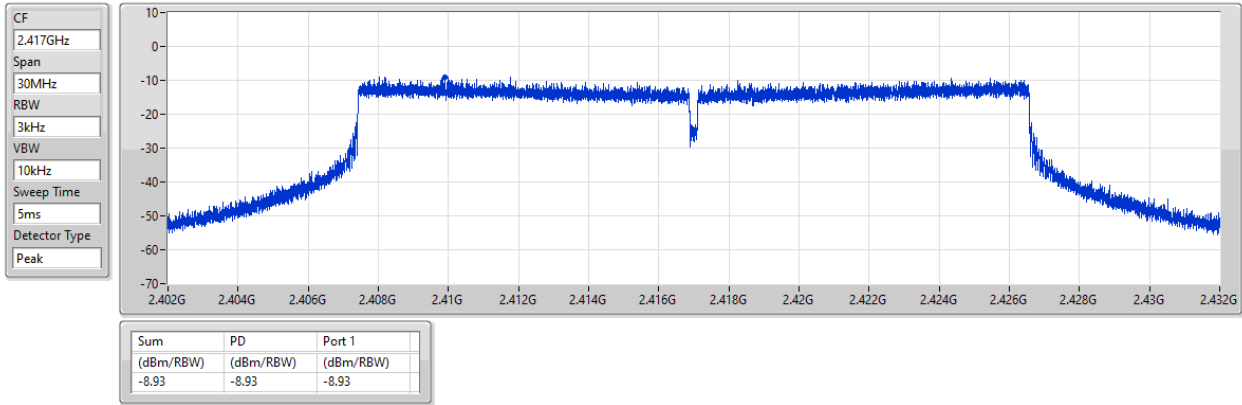


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

PSD

2417MHz

15/05/2023

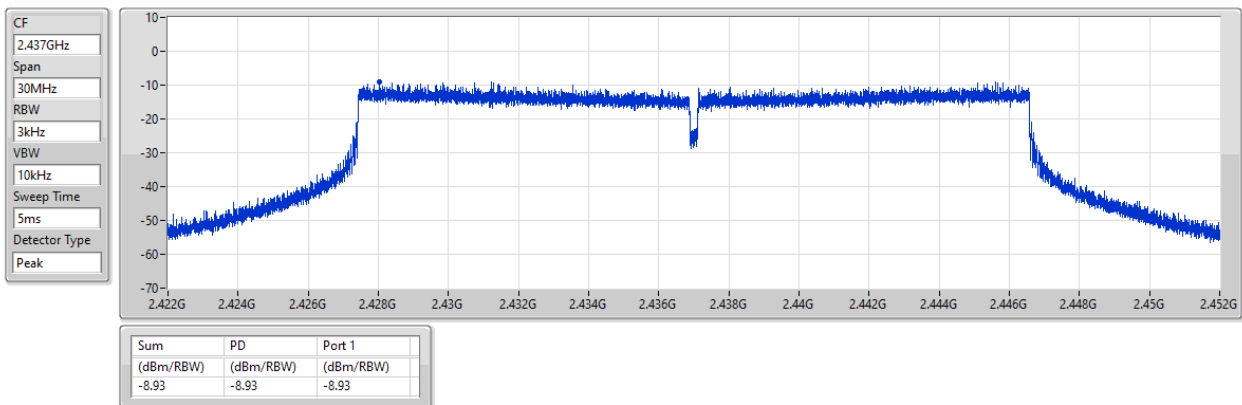


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

PSD

2437MHz

15/05/2023

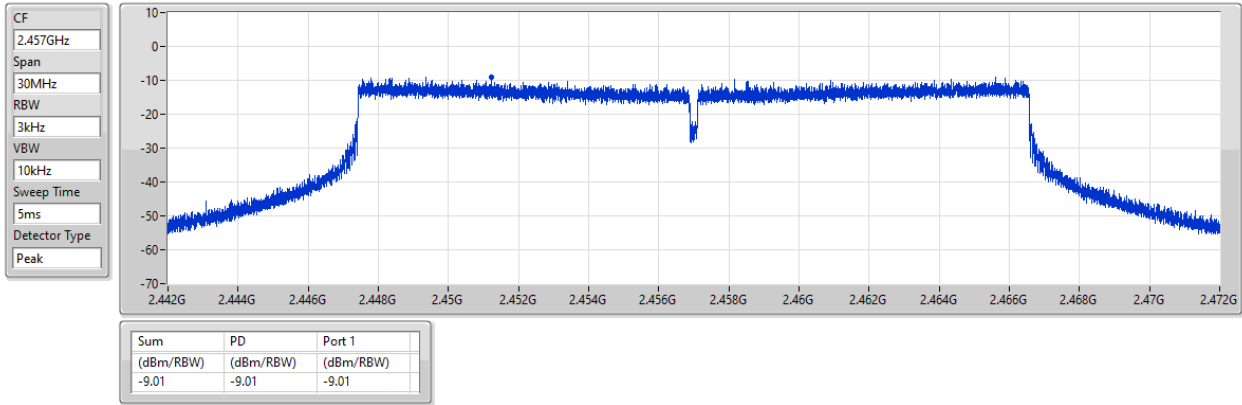


2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_1TX

PSD

2457MHz

15/05/2023

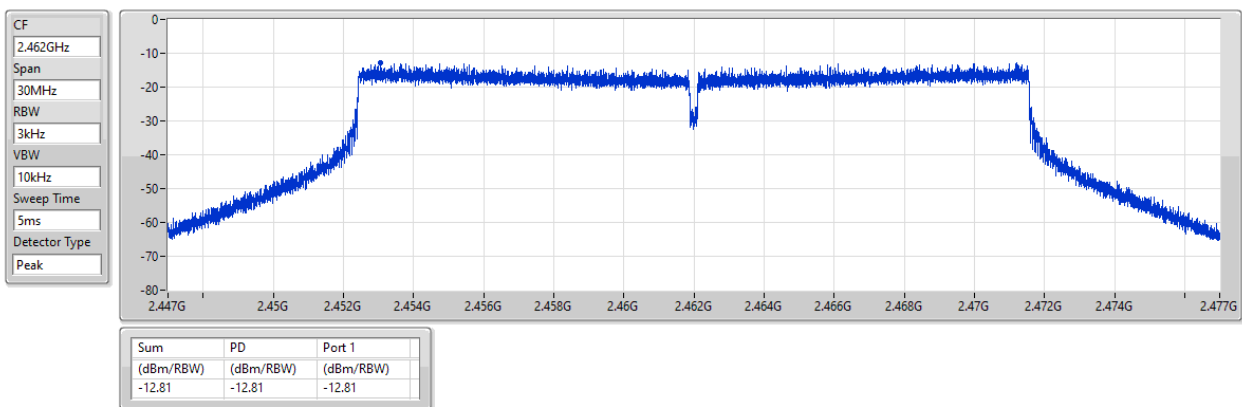


2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_1TX

PSD

2462MHz

23/05/2023





**Summary**

| Mode                           | PD<br>(dBm/RBW) |
|--------------------------------|-----------------|
| 2.4-2.4835GHz                  | -               |
| 802.11b_Nss1,(1Mbps)_2TX       | -3.66           |
| 802.11g_Nss1,(6Mbps)_2TX       | -6.75           |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | -5.84           |

RBW = 3kHz;



Result

| Mode                           | Result | DG<br>(dBi) | Port 1<br>(dBm/RBW) | Port 2<br>(dBm/RBW) | PD<br>(dBm/RBW) | PD Limit<br>(dBm/RBW) |
|--------------------------------|--------|-------------|---------------------|---------------------|-----------------|-----------------------|
| 802.11b_Nss1,(1Mbps)_2TX       | -      | -           | -                   | -                   | -               | -                     |
| 2412MHz                        | Pass   | 9.01        | -7.11               | -6.83               | -3.96           | 4.99                  |
| 2437MHz                        | Pass   | 9.01        | -7.98               | -6.53               | -5.34           | 4.99                  |
| 2462MHz                        | Pass   | 9.01        | -6.74               | -5.60               | -3.66           | 4.99                  |
| 802.11g_Nss1,(6Mbps)_2TX       | -      | -           | -                   | -                   | -               | -                     |
| 2412MHz                        | Pass   | 9.01        | -11.75              | -12.58              | -10.01          | 4.99                  |
| 2417MHz                        | Pass   | 9.01        | -9.23               | -8.61               | -6.75           | 4.99                  |
| 2437MHz                        | Pass   | 9.01        | -8.75               | -8.74               | -7.08           | 4.99                  |
| 2457MHz                        | Pass   | 9.01        | -9.91               | -9.43               | -7.60           | 4.99                  |
| 2462MHz                        | Pass   | 9.01        | -13.80              | -11.98              | -10.34          | 4.99                  |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | -      | -           | -                   | -                   | -               | -                     |
| 2412MHz                        | Pass   | 9.01        | -13.25              | -13.21              | -10.98          | 4.99                  |
| 2417MHz                        | Pass   | 9.01        | -9.81               | -10.03              | -7.06           | 4.99                  |
| 2437MHz                        | Pass   | 9.01        | -8.59               | -8.42               | -5.84           | 4.99                  |
| 2457MHz                        | Pass   | 9.01        | -9.67               | -9.20               | -6.53           | 4.99                  |
| 2462MHz                        | Pass   | 9.01        | -13.96              | -13.70              | -11.01          | 4.99                  |

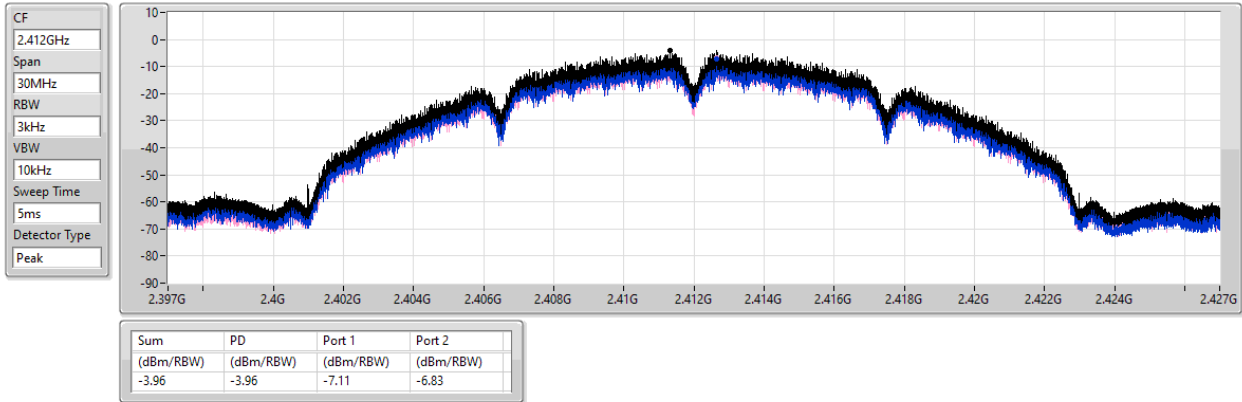
DG = Directional Gain; RBW = 3kHz;  
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

PSD

2412MHz

23/05/2023

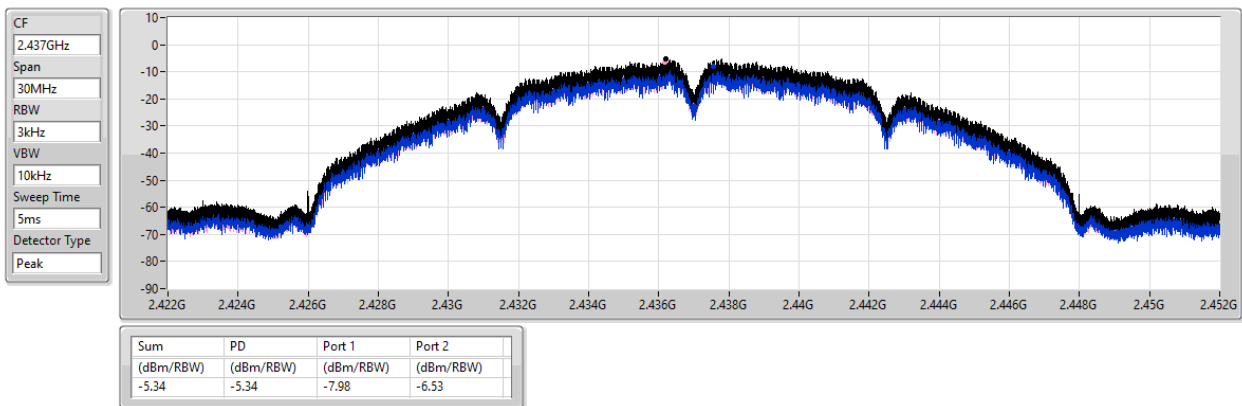


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

PSD

2437MHz

23/05/2023

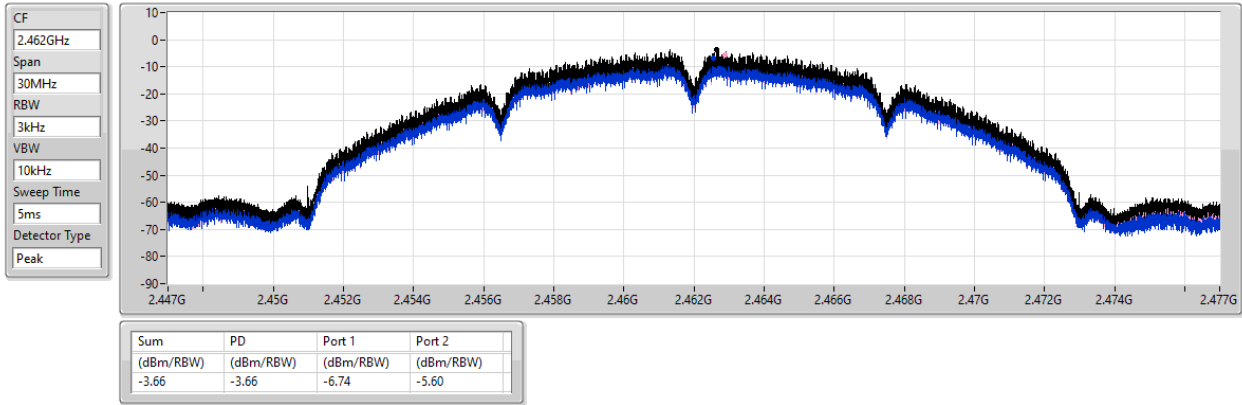


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

PSD

2462MHz

23/05/2023

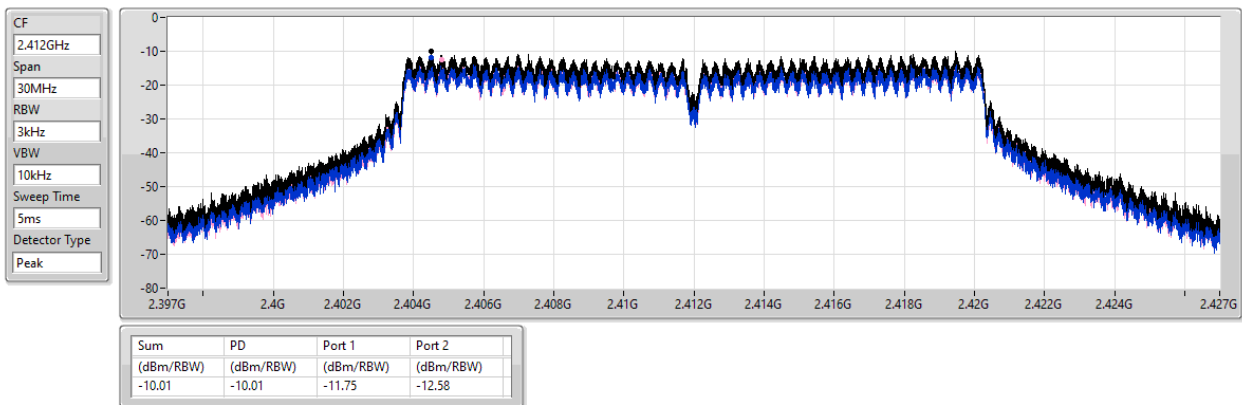


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

PSD

2412MHz

23/05/2023

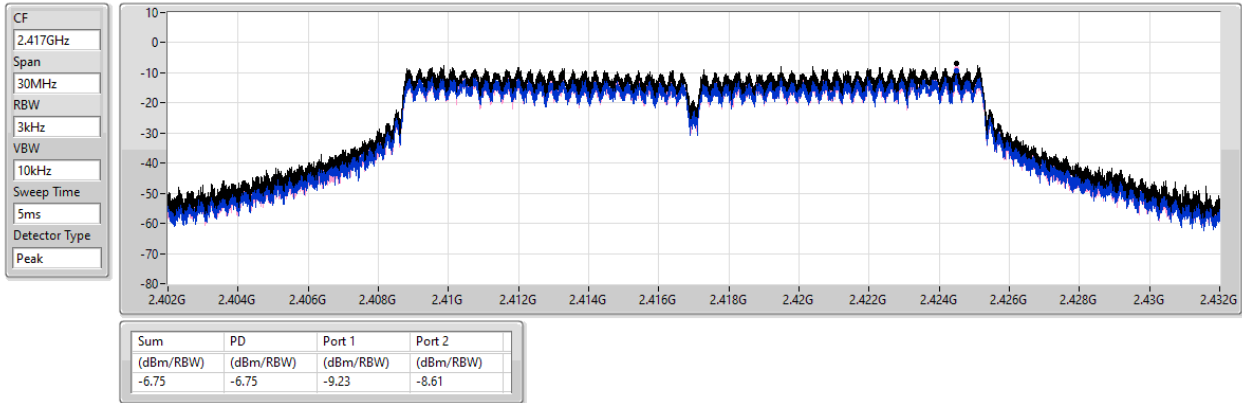


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

PSD

2417MHz

15/05/2023

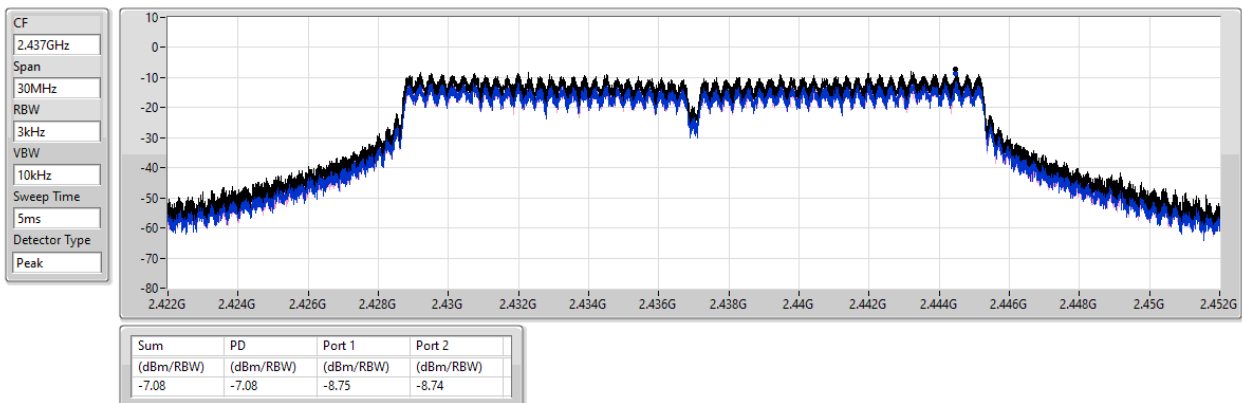


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

PSD

2437MHz

15/05/2023

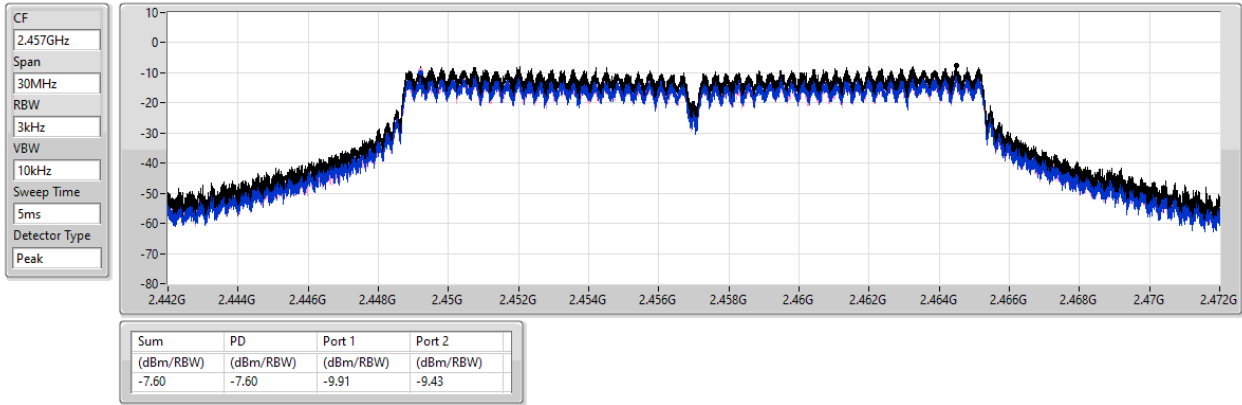


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

PSD

2457MHz

15/05/2023

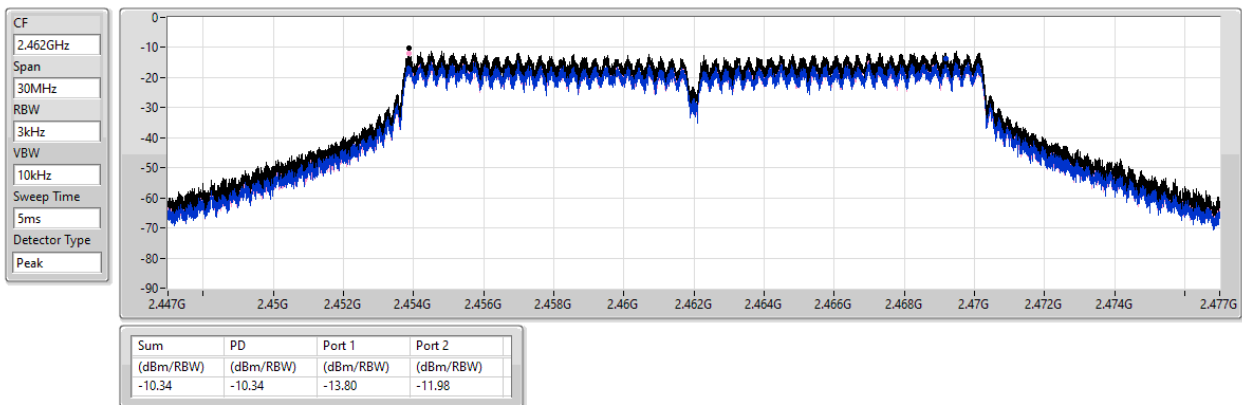


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

PSD

2462MHz

23/05/2023

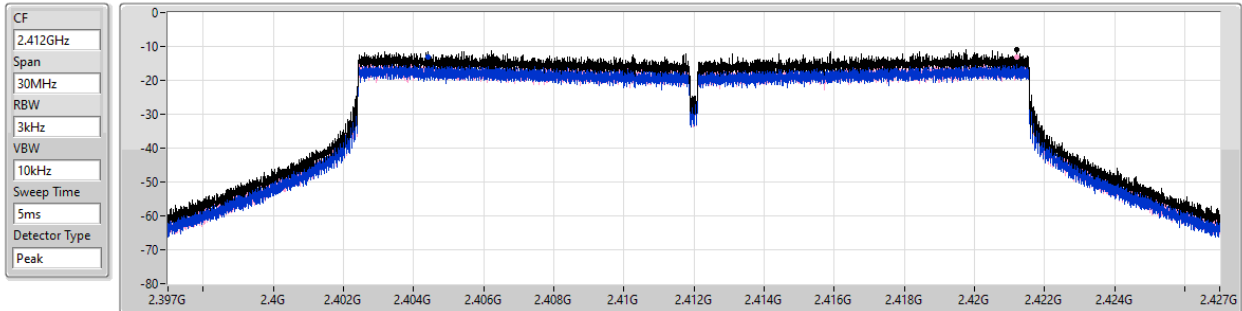


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

PSD

2412MHz

23/05/2023



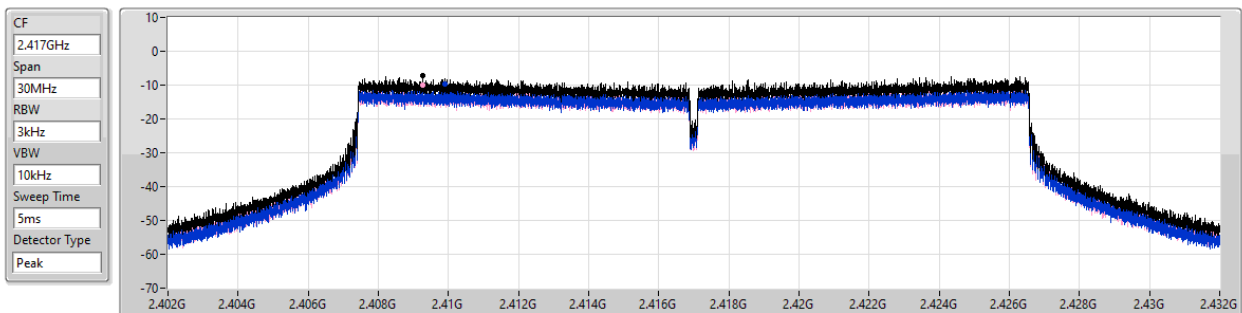
| Sum          | PD           | Port 1       | Port 2       |
|--------------|--------------|--------------|--------------|
| (dBm/100kHz) | (dBm/100kHz) | (dBm/100kHz) | (dBm/100kHz) |
| -10.98       | -10.98       | -13.25       | -13.21       |

2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

PSD

2417MHz

15/05/2023



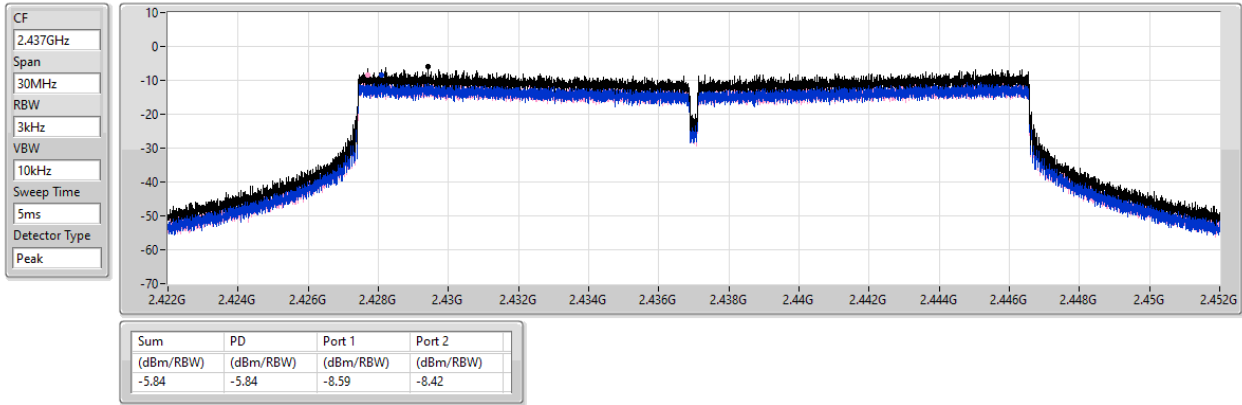
| Sum          | PD           | Port 1       | Port 2       |
|--------------|--------------|--------------|--------------|
| (dBm/100kHz) | (dBm/100kHz) | (dBm/100kHz) | (dBm/100kHz) |
| -7.06        | -7.06        | -9.81        | -10.03       |

2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

PSD

2437MHz

15/05/2023

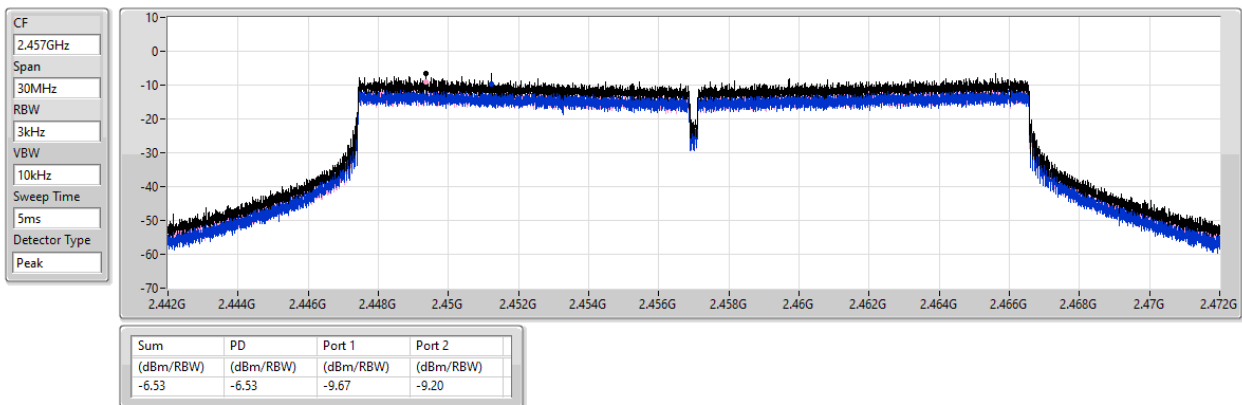


2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

PSD

2457MHz

15/05/2023

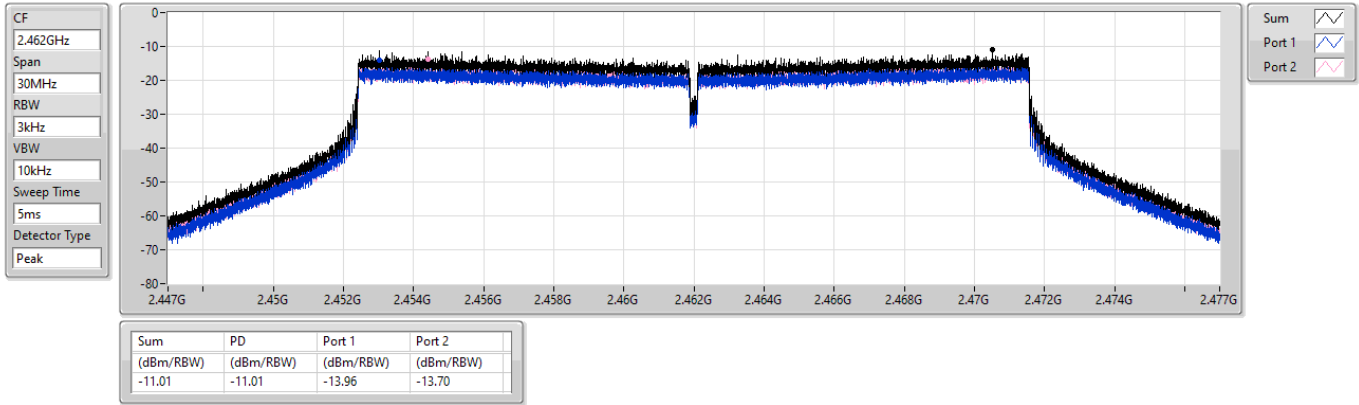


2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

PSD

2462MHz

23/05/2023





**CSE (Non-restricted Band)  
Non-Beamforming\_Serving Radio Primary\_1T1S**

**Appendix E.1**

**Summary**

| Mode                           | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|--------------------------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 2.4-2.4835GHz                  | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 802.11b_Nss1,(1Mbps)_1TX       | Pass   | 2.4615G     | 8.71         | -21.29         | 2.06875G     | -62.04         | 2.399G       | -45.80         | 2.4G         | -56.82         | 2.4865G      | -58.48         | 17.43666G    | -47.99         | 1    |
| 802.11g_Nss1,(6Mbps)_1TX       | Pass   | 2.45574G    | 4.87         | -25.13         | 2.13632G     | -61.65         | 2.39988G     | -30.41         | 2.4G         | -29.44         | 2.48742G     | -57.57         | 15.03167G    | -48.70         | 1    |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | Pass   | 2.44196G    | 3.93         | -26.07         | 2.14331G     | -61.13         | 2.39962G     | -27.91         | 2.4G         | -29.82         | 2.4845G      | -57.39         | 24.21051G    | -47.71         | 1    |



**CSE (Non-restricted Band)  
Non-Beamforming\_Serving Radio Primary\_1T1S**

**Appendix E.1**

**Result**

| Mode                           | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|--------------------------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 802.11b_Nss1,(1Mbps)_1TX       | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                        | Pass   | 2.4615G     | 8.71         | -21.29         | 2.06875G     | -62.04         | 2.399G       | -45.80         | 2.4G         | -56.82         | 2.4865G      | -58.48         | 17.43666G    | -47.99         | 1    |
| 2437MHz                        | Pass   | 2.4615G     | 8.71         | -21.29         | 2.30874G     | -61.39         | 2.39466G     | -59.60         | 2.4835G      | -60.88         | 2.48876G     | -58.95         | 23.17659G    | -48.71         | 1    |
| 2462MHz                        | Pass   | 2.4615G     | 8.71         | -21.29         | 2.17797G     | -61.96         | 2.39596G     | -59.65         | 2.4835G      | -61.95         | 2.4843G      | -58.34         | 24.84266G    | -48.08         | 1    |
| 802.11g_Nss1,(6Mbps)_1TX       | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                        | Pass   | 2.45574G    | 4.87         | -25.13         | 2.13632G     | -61.65         | 2.39988G     | -30.41         | 2.4G         | -29.44         | 2.48742G     | -57.57         | 15.03167G    | -48.70         | 1    |
| 2437MHz                        | Pass   | 2.45574G    | 4.87         | -25.13         | 2.14244G     | -61.46         | 2.4G         | -59.08         | 2.4G         | -59.04         | 2.50032G     | -58.40         | 24.55047G    | -48.43         | 1    |
| 2462MHz                        | Pass   | 2.45574G    | 4.87         | -25.13         | 1.83371G     | -61.70         | 2.39802G     | -58.12         | 2.4835G      | -50.36         | 2.48384G     | -50.21         | 24.49709G    | -48.82         | 1    |
| 802.11ax HEW20_Nss1,(MCS0)_1TX | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                        | Pass   | 2.44196G    | 3.93         | -26.07         | 2.14331G     | -61.13         | 2.39962G     | -27.91         | 2.4G         | -29.82         | 2.4845G      | -57.39         | 24.21051G    | -47.71         | 1    |
| 2437MHz                        | Pass   | 2.44196G    | 3.93         | -26.07         | 2.12758G     | -60.78         | 2.39998G     | -55.81         | 2.4G         | -56.37         | 2.48612G     | -57.07         | 24.52237G    | -48.16         | 1    |
| 2462MHz                        | Pass   | 2.44196G    | 3.93         | -26.07         | 2.16632G     | -61.31         | 2.398G       | -58.88         | 2.4835G      | -52.51         | 2.48476G     | -51.13         | 24.46899G    | -48.24         | 1    |

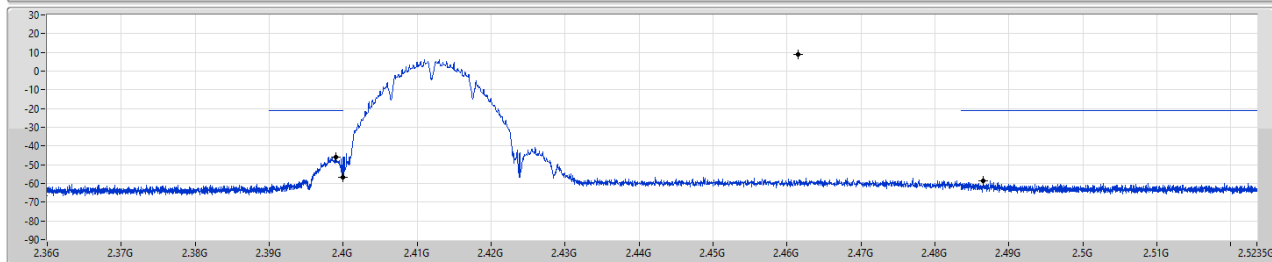
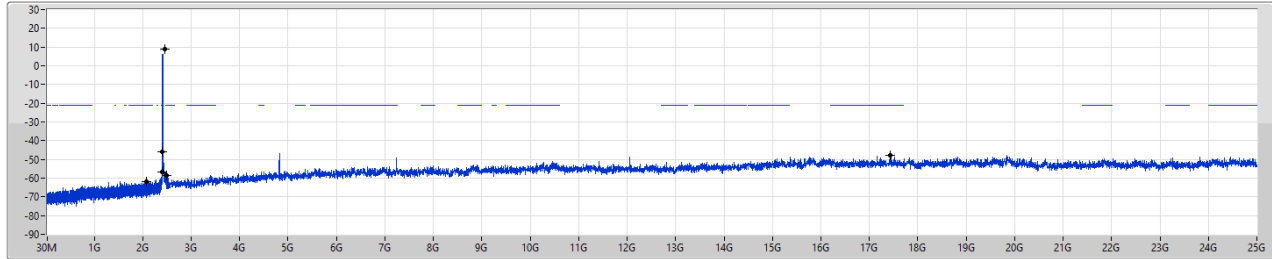
**802.11b\_Nss1,(1Mbps)\_1TX**

**2412MHz**

**CSEndB**

12/08/2021

Port 1



RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

| Ref(Hz) | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|---------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|------|
| 2.4615G | 8.71     | -21.29     | 2.06875G | -62.04     | 2.3996G  | -45.80     | 2.4G     | -56.82     | 2.4865G  | -58.48     | 2.43666G | -47.99     | 1    |

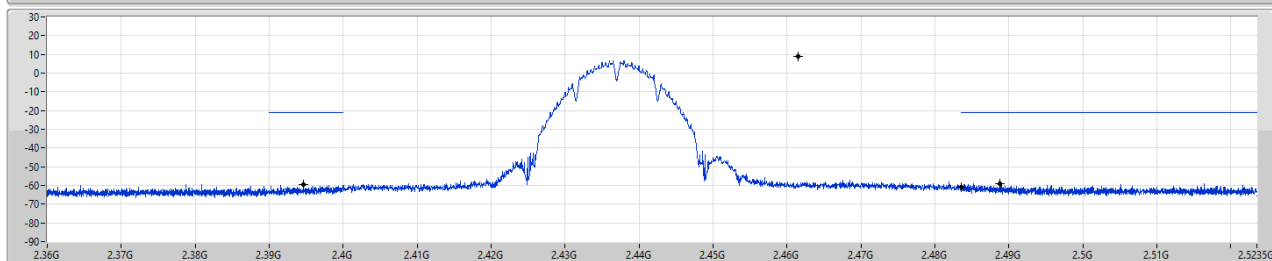
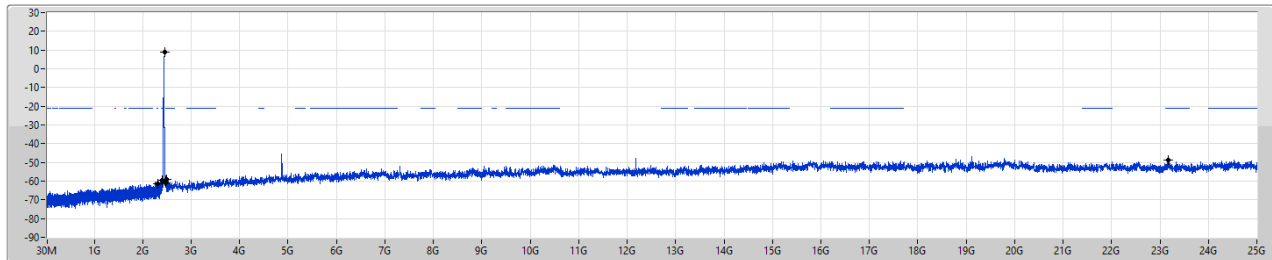
**802.11b\_Nss1,(1Mbps)\_1TX**

**2437MHz**

**CSEndB**

12/08/2021

Port 1



RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

| Ref(Hz) | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|---------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.4615G | 8.71     | -21.29     | 2.30874G | -61.39     | 2.39466G | -59.60     | 2.4835G  | -60.88     | 2.48876G | -58.95     | 2.317699G | -48.71     | 1    |

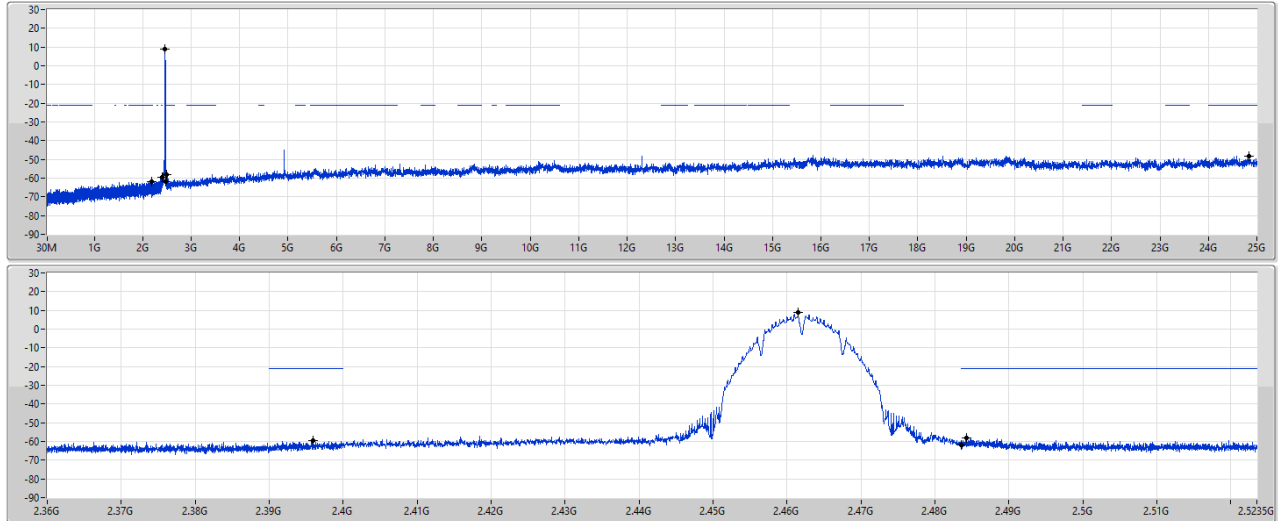
**802.11b\_Nss1,(1Mbps)\_1TX**

**2462MHz**

**CSEndB**

12/08/2021

Port 1 



| Ref(Hz) | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|---------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|------|
| 2.4615G | 8.71     | -21.29     | 2.17797G | -61.96     | 2.39596G | -59.65     | 2.4835G  | -61.95     | 2.4843G  | -58.34     | 2.48426G | -48.08     | 1    |

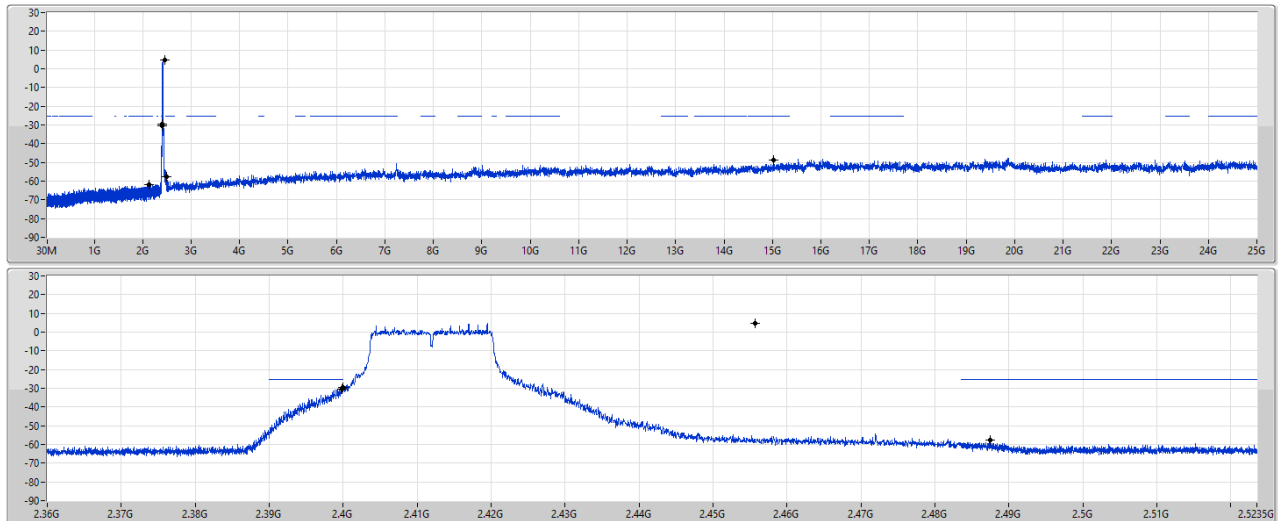
**802.11g\_Nss1,(6Mbps)\_1TX**

**2412MHz**

**CSEndB**

12/08/2021

Port 1 



| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.45574G | 4.87     | -25.13     | 2.13632G | -61.65     | 2.39988G | -30.41     | 2.4G     | -29.44     | 2.48742G | -57.57     | 15.03167G | -48.70     | 1    |

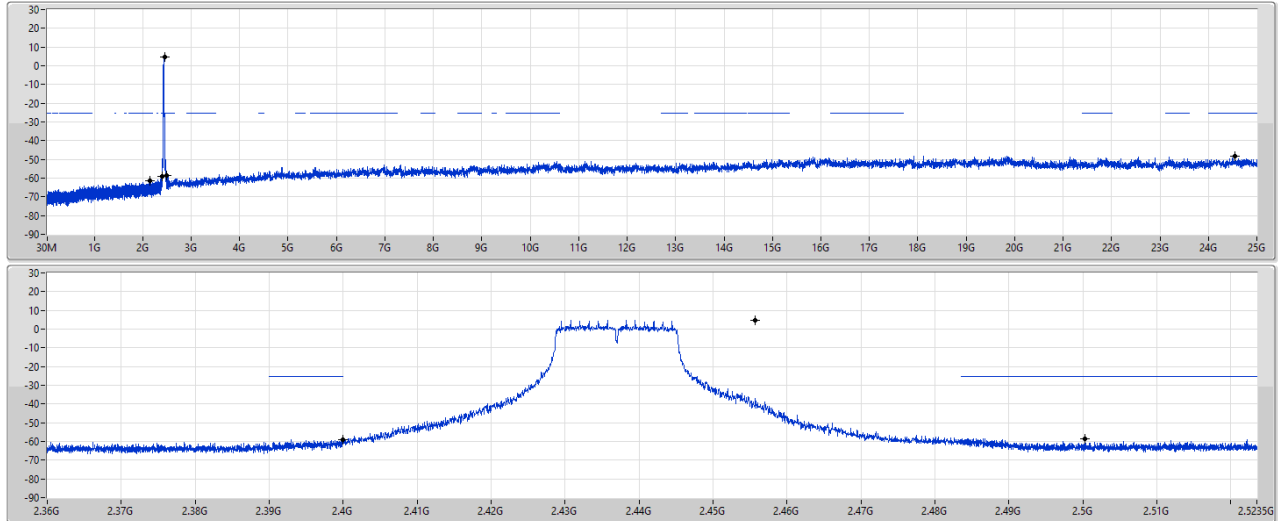
**802.11g\_Nss1,(6Mbps)\_1TX**

**2437MHz**

**CSEndB**

12/08/2021

Port 1



| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.45574G | 4.87     | -25.13     | 2.14244G | -61.46     | 2.4G     | -59.08     | 2.4G     | -59.04     | 2.50032G | -58.40     | 2.455047G | -48.43     | 1    |

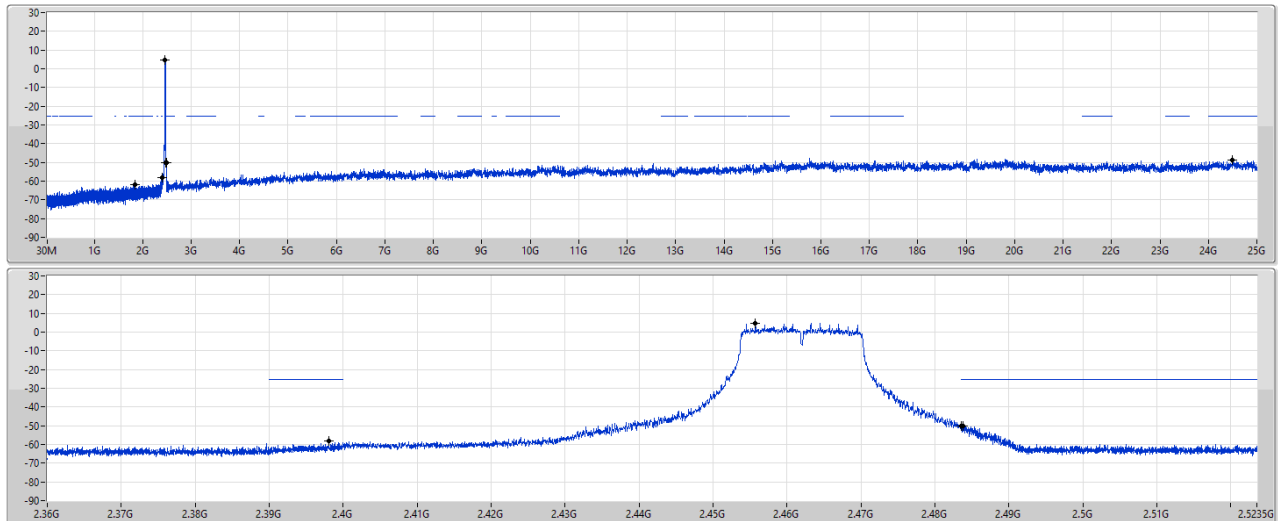
**802.11g\_Nss1,(6Mbps)\_1TX**

**2462MHz**

**CSEndB**

12/08/2021

Port 1



| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|------|
| 2.45574G | 4.87     | -25.13     | 1.83371G | -61.70     | 2.39802G | -58.12     | 2.48335G | -50.36     | 2.48384G | -50.21     | 2.49709G | -48.82     | 1    |

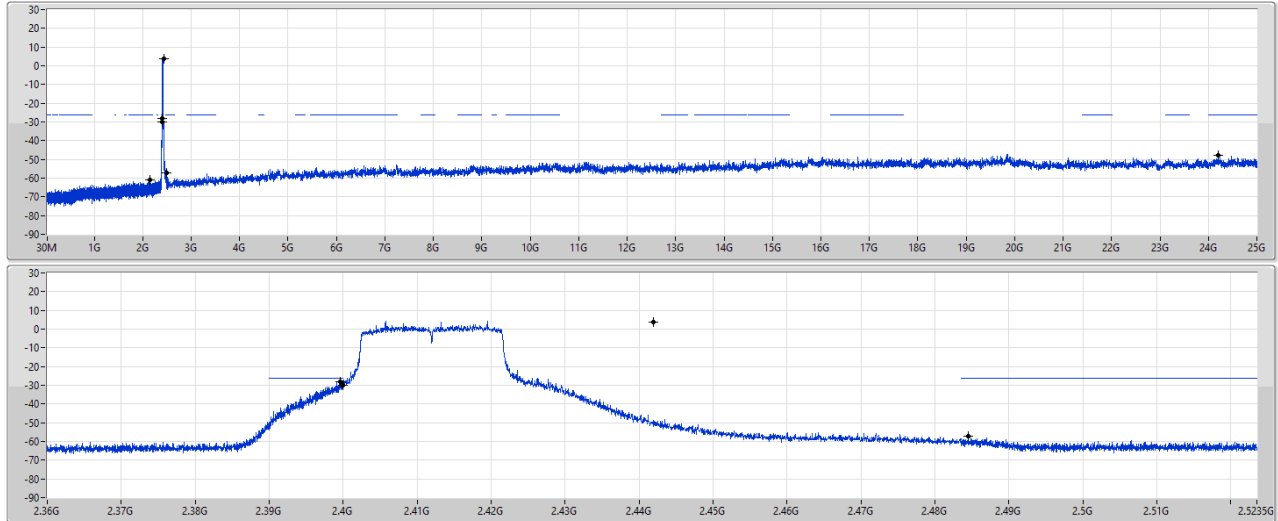
**802.11ax HEW20\_Nss1,(MCS0)\_1TX**

**2412MHz**

**CSENdB**

12/08/2021

Port 1



| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.44196G | 3.93     | -26.07     | 2.14331G | -61.13     | 2.39962G | -27.91     | 2.4G     | -29.82     | 2.4845G  | -57.39     | 24.21051G | -47.71     | 1    |

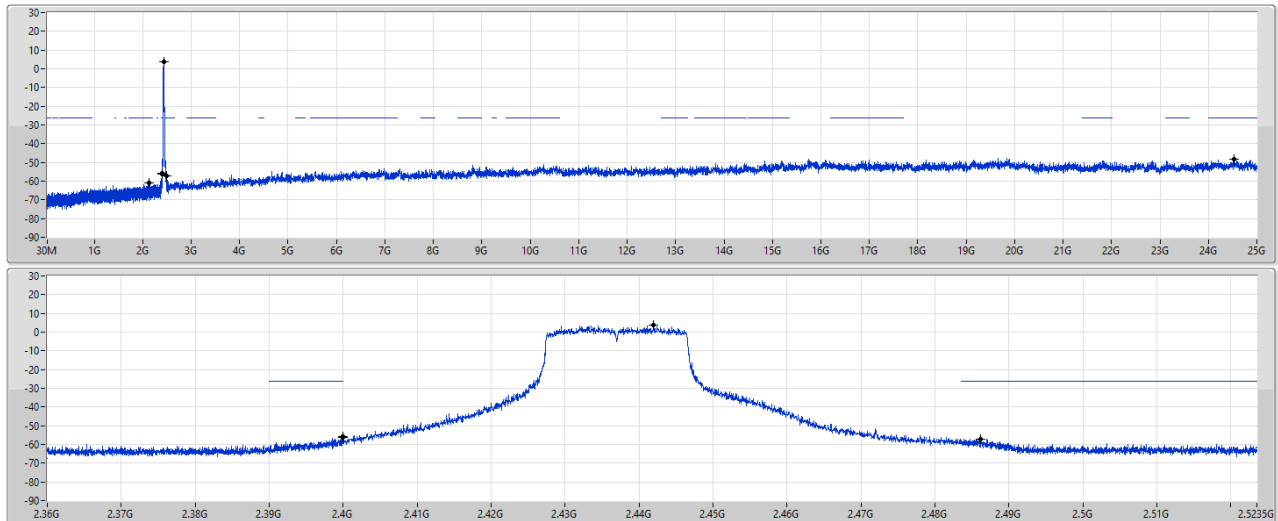
**802.11ax HEW20\_Nss1,(MCS0)\_1TX**

**2437MHz**

**CSENdB**

12/08/2021

Port 1



| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.44196G | 3.93     | -26.07     | 2.12758G | -60.78     | 2.39998G | -55.81     | 2.4G     | -56.37     | 2.48612G | -57.07     | 24.52237G | -48.16     | 1    |



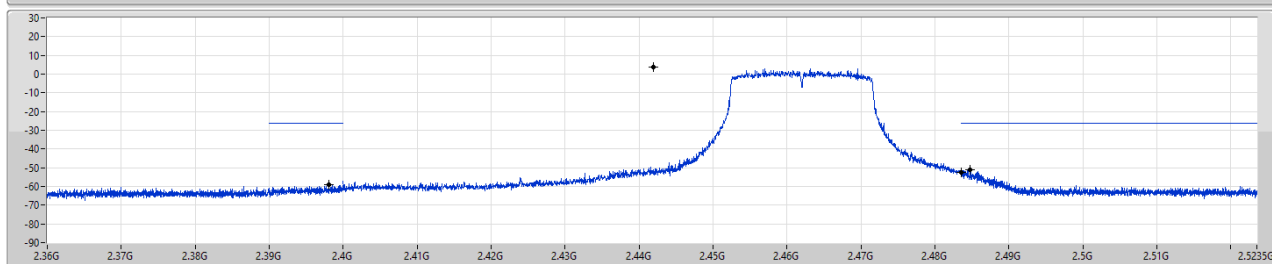
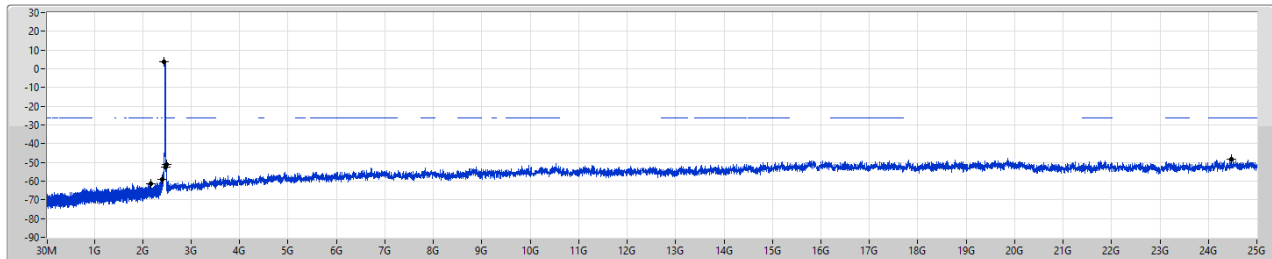
802.11ax HEW20\_Nss1,(MCS0)\_1TX

2462MHz

CSEndB

12/08/2021

Port 1



RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|------|
| 2.44196G | 3.93     | -26.07     | 2.16632G | -61.31     | 2.398G   | -58.88     | 2.4835G  | -52.51     | 2.48476G | -51.13     | 2.46899G | -48.24     | 1    |



**Summary**

| Mode                           | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|--------------------------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 2.4-2.4835GHz                  | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 802.11b_Nss1,(1Mbps)_2TX       | Pass   | 2.4615G     | 9.73         | -20.27         | 2.16079G     | -59.93         | 2.399G       | -42.02         | 2.4G         | -51.85         | 2.48486G     | -58.00         | 16.78765G    | -48.46         | 2    |
| 802.11g_Nss1,(6Mbps)_2TX       | Pass   | 2.43073G    | 4.74         | -25.26         | 2.13982G     | -61.91         | 2.39924G     | -28.70         | 2.4G         | -29.39         | 2.48448G     | -58.40         | 24.57857G    | -48.37         | 2    |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | Pass   | 2.44075G    | 4.27         | -25.73         | 1.94351G     | -61.48         | 2.3999G      | -29.46         | 2.4G         | -29.50         | 2.48454G     | -58.17         | 24.52237G    | -47.67         | 2    |



**CSE (Non-restricted Band)  
Non-Beamforming\_Serving Radio Primary\_2T1S**

**Appendix E.2**

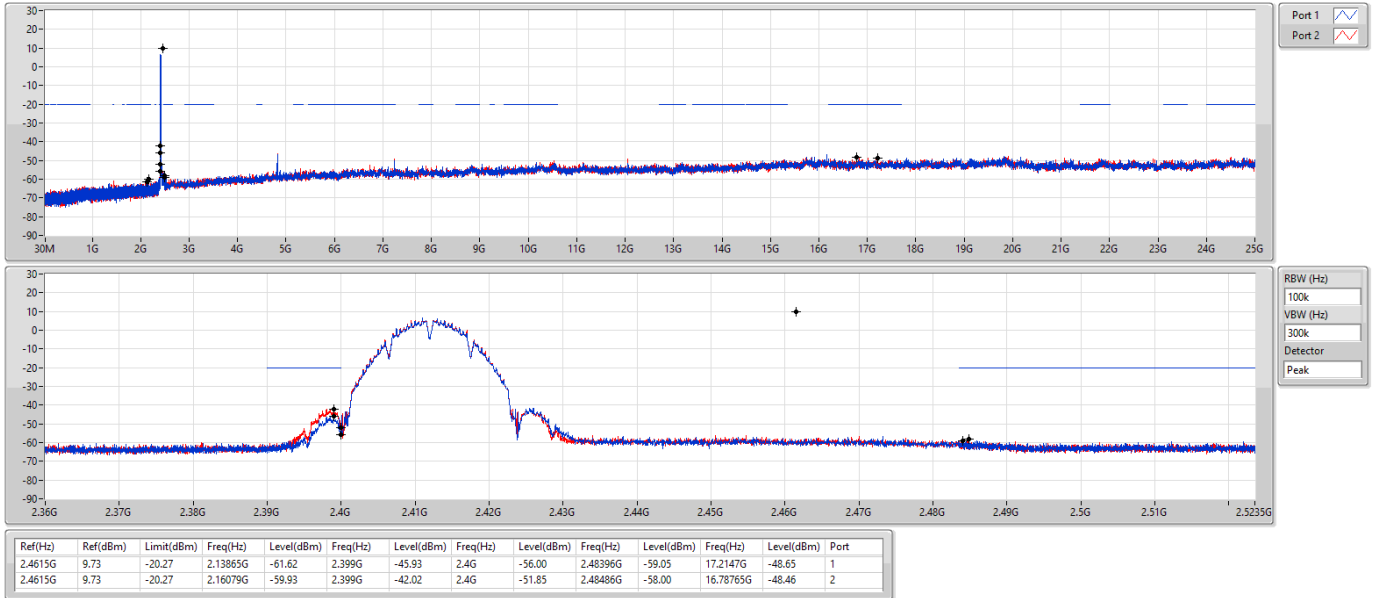
**Result**

| Mode                           | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|--------------------------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 802.11b_Nss1,(1Mbps)_2TX       | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                        | Pass   | 2.4615G     | 9.73         | -20.27         | 2.13865G     | -61.62         | 2.399G       | -45.93         | 2.4G         | -56.00         | 2.48396G     | -59.05         | 17.2147G     | -48.65         | 1    |
| 2412MHz                        | Pass   | 2.4615G     | 9.73         | -20.27         | 2.16079G     | -59.93         | 2.399G       | -42.02         | 2.4G         | -51.85         | 2.48486G     | -58.00         | 16.78765G    | -48.46         | 2    |
| 2437MHz                        | Pass   | 2.4615G     | 9.73         | -20.27         | 2.30437G     | -61.08         | 2.39902G     | -59.58         | 2.4835G      | -61.72         | 2.48686G     | -58.38         | 23.46598G    | -48.71         | 1    |
| 2437MHz                        | Pass   | 2.4615G     | 9.73         | -20.27         | 1.98807G     | -61.87         | 2.39638G     | -59.95         | 2.4835G      | -60.80         | 2.48584G     | -59.10         | 24.76962G    | -47.31         | 2    |
| 2462MHz                        | Pass   | 2.4615G     | 9.73         | -20.27         | 1.99186G     | -61.61         | 2.39704G     | -59.07         | 2.4835G      | -60.18         | 2.48446G     | -57.44         | 24.56171G    | -48.75         | 1    |
| 2462MHz                        | Pass   | 2.4615G     | 9.73         | -20.27         | 2.00526G     | -61.34         | 2.39596G     | -59.64         | 2.4835G      | -61.23         | 2.48464G     | -57.75         | 24.46337G    | -48.21         | 2    |
| 802.11g_Nss1,(6Mbps)_2TX       | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                        | Pass   | 2.43073G    | 4.74         | -25.26         | 1.98254G     | -62.12         | 2.39974G     | -30.45         | 2.4G         | -32.30         | 2.48466G     | -58.19         | 24.60947G    | -47.98         | 1    |
| 2412MHz                        | Pass   | 2.43073G    | 4.74         | -25.26         | 2.13982G     | -61.91         | 2.39924G     | -28.70         | 2.4G         | -29.39         | 2.48448G     | -58.40         | 24.57857G    | -48.37         | 2    |
| 2437MHz                        | Pass   | 2.43073G    | 4.74         | -25.26         | 2.1037G      | -60.66         | 2.39872G     | -59.00         | 2.4835G      | -60.78         | 2.4842G      | -58.00         | 15.16934G    | -49.38         | 1    |
| 2437MHz                        | Pass   | 2.43073G    | 4.74         | -25.26         | 2.19981G     | -61.51         | 2.3968G      | -58.84         | 2.4835G      | -58.72         | 2.4844G      | -59.21         | 17.31304G    | -48.23         | 2    |
| 2462MHz                        | Pass   | 2.43073G    | 4.74         | -25.26         | 2.08739G     | -61.85         | 2.39786G     | -59.41         | 2.4835G      | -54.40         | 2.48424G     | -52.82         | 15.21429G    | -48.45         | 1    |
| 2462MHz                        | Pass   | 2.43073G    | 4.74         | -25.26         | 2.14477G     | -61.01         | 2.39484G     | -58.91         | 2.4835G      | -54.78         | 2.48354G     | -53.21         | 24.50271G    | -48.20         | 2    |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                        | Pass   | 2.44075G    | 4.27         | -25.73         | 1.78769G     | -61.82         | 2.39996G     | -31.92         | 2.4G         | -32.07         | 2.48604G     | -58.01         | 15.19463G    | -47.96         | 1    |
| 2412MHz                        | Pass   | 2.44075G    | 4.27         | -25.73         | 1.94351G     | -61.48         | 2.3999G      | -29.46         | 2.4G         | -29.50         | 2.48454G     | -58.17         | 24.52237G    | -47.67         | 2    |
| 2437MHz                        | Pass   | 2.44075G    | 4.27         | -25.73         | 2.17098G     | -61.34         | 2.39952G     | -56.41         | 2.4G         | -58.29         | 2.4854G      | -56.36         | 24.46899G    | -48.84         | 1    |
| 2437MHz                        | Pass   | 2.44075G    | 4.27         | -25.73         | 2.14302G     | -60.67         | 2.39398G     | -58.67         | 2.4835G      | -60.43         | 2.48592G     | -57.12         | 17.23437G    | -48.59         | 2    |
| 2462MHz                        | Pass   | 2.44075G    | 4.27         | -25.73         | 2.30612G     | -61.08         | 2.39966G     | -58.53         | 2.4835G      | -55.46         | 2.48472G     | -54.14         | 16.44769G    | -48.40         | 1    |
| 2462MHz                        | Pass   | 2.44075G    | 4.27         | -25.73         | 2.12933G     | -61.58         | 2.39494G     | -59.34         | 2.4835G      | -52.52         | 2.48354G     | -50.76         | 21.8842G     | -48.09         | 2    |

**802.11b\_Nss1,(1Mbps)\_2TX**

**CSENdB**

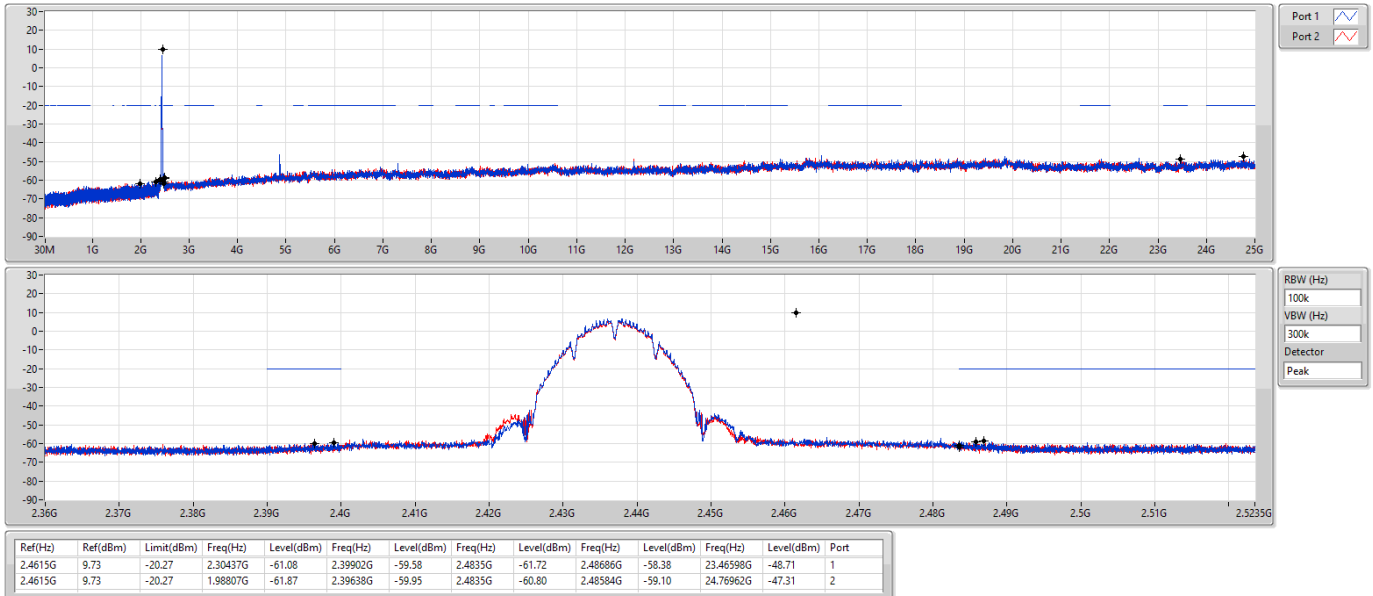
**2412MHz**



**802.11b\_Nss1,(1Mbps)\_2TX**

**CSENdB**

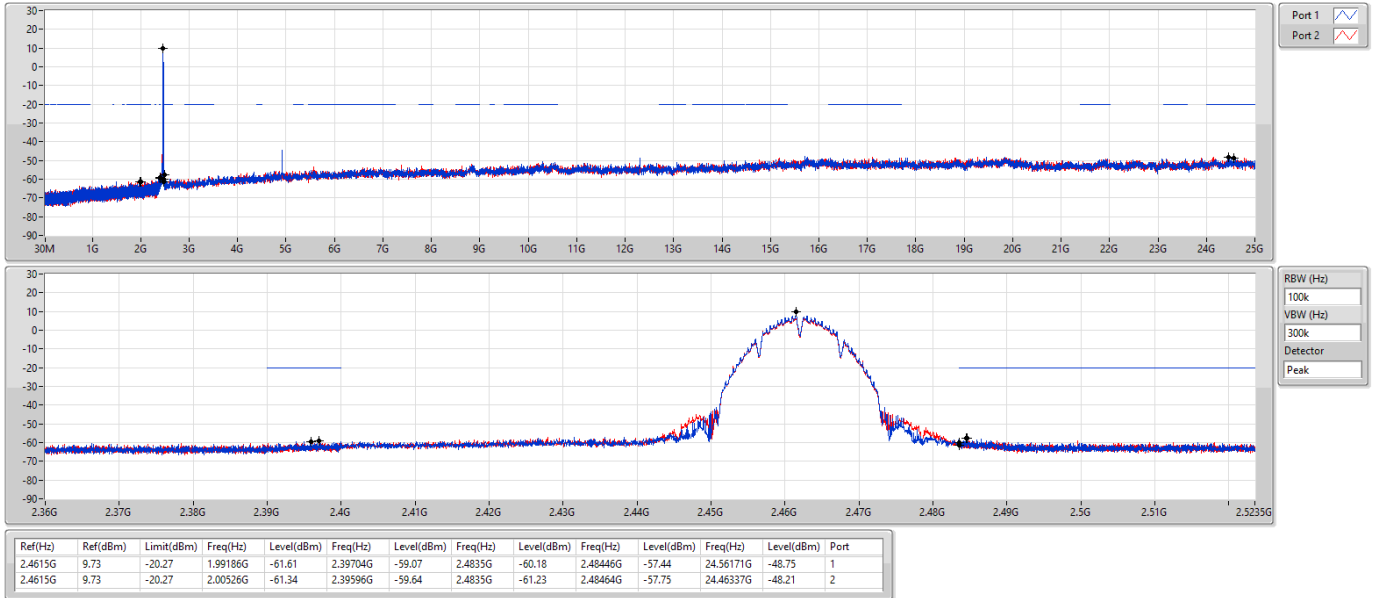
**2437MHz**



**802.11b\_Nss1,(1Mbps)\_2TX**

**2462MHz**

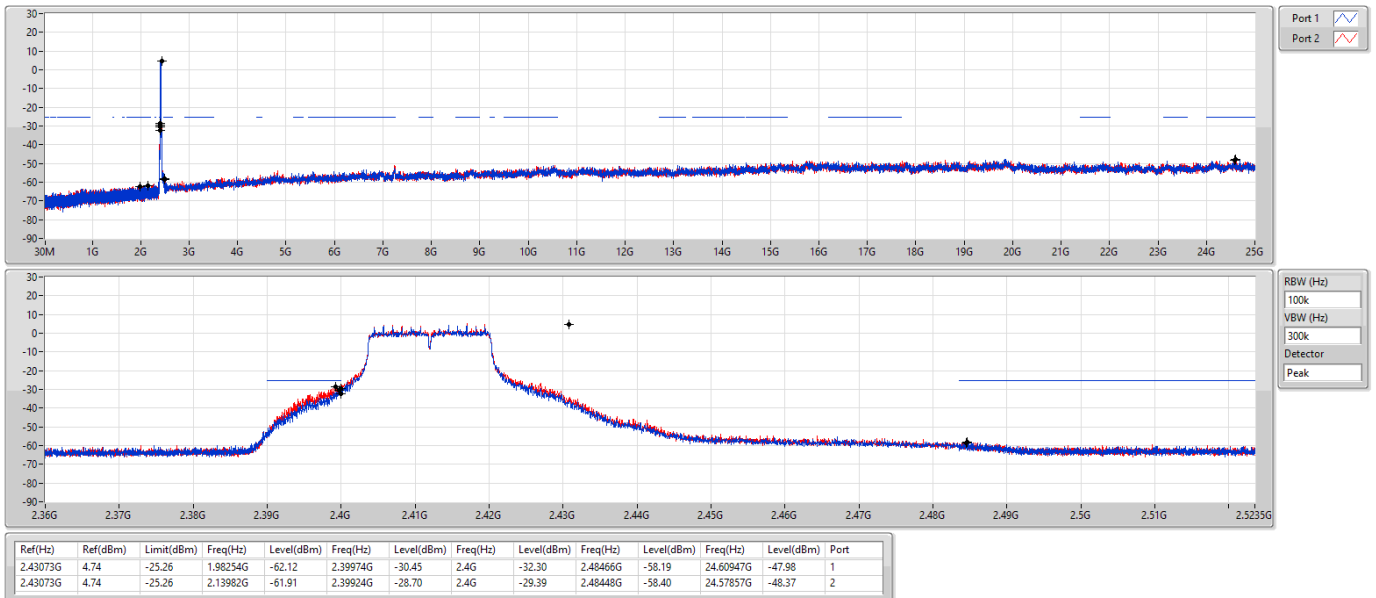
**CSENdB**



**802.11g\_Nss1,(6Mbps)\_2TX**

**2412MHz**

**CSENdB**

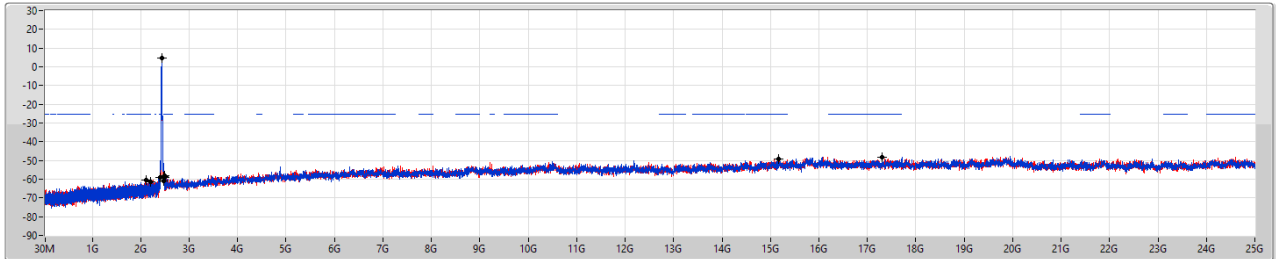


**802.11g\_Nss1,(6Mbps)\_2TX**

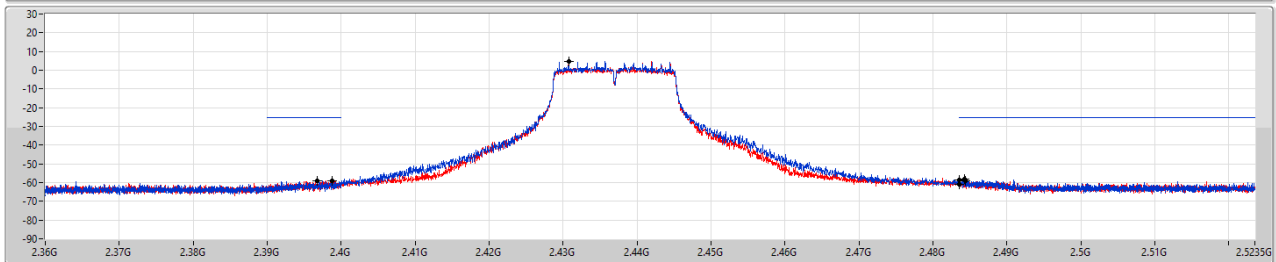
**2437MHz**

**CSENdB**

12/08/2021



Port 1  
Port 2



RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

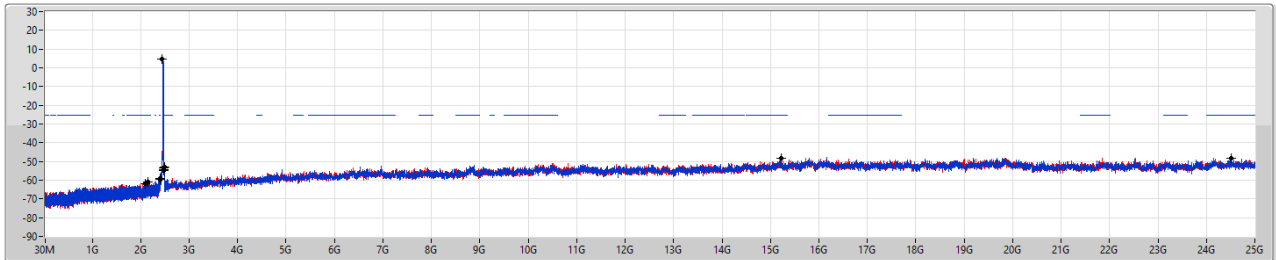
| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.43073G | 4.74     | -25.26     | 2.1037G  | -60.66     | 2.39872G | -59.00     | 2.4835G  | -60.78     | 2.4842G  | -58.00     | 15.16934G | -49.38     | 1    |
| 2.43073G | 4.74     | -25.26     | 2.19981G | -61.51     | 2.3968G  | -58.84     | 2.4835G  | -58.72     | 2.4844G  | -59.21     | 17.31304G | -48.23     | 2    |

**802.11g\_Nss1,(6Mbps)\_2TX**

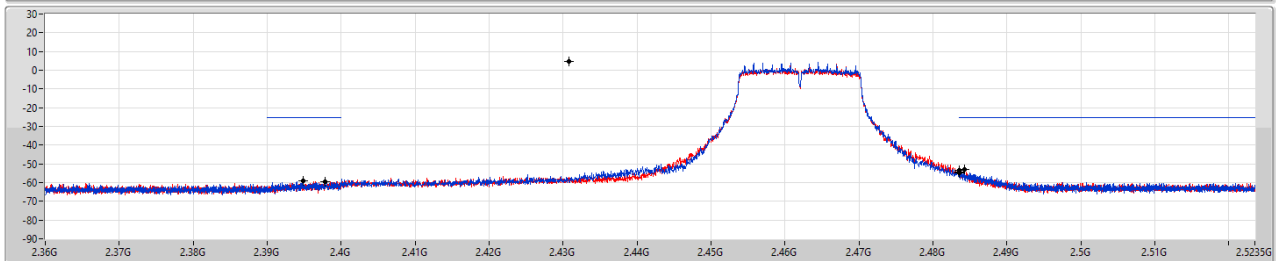
**2462MHz**

**CSENdB**

12/08/2021



Port 1  
Port 2



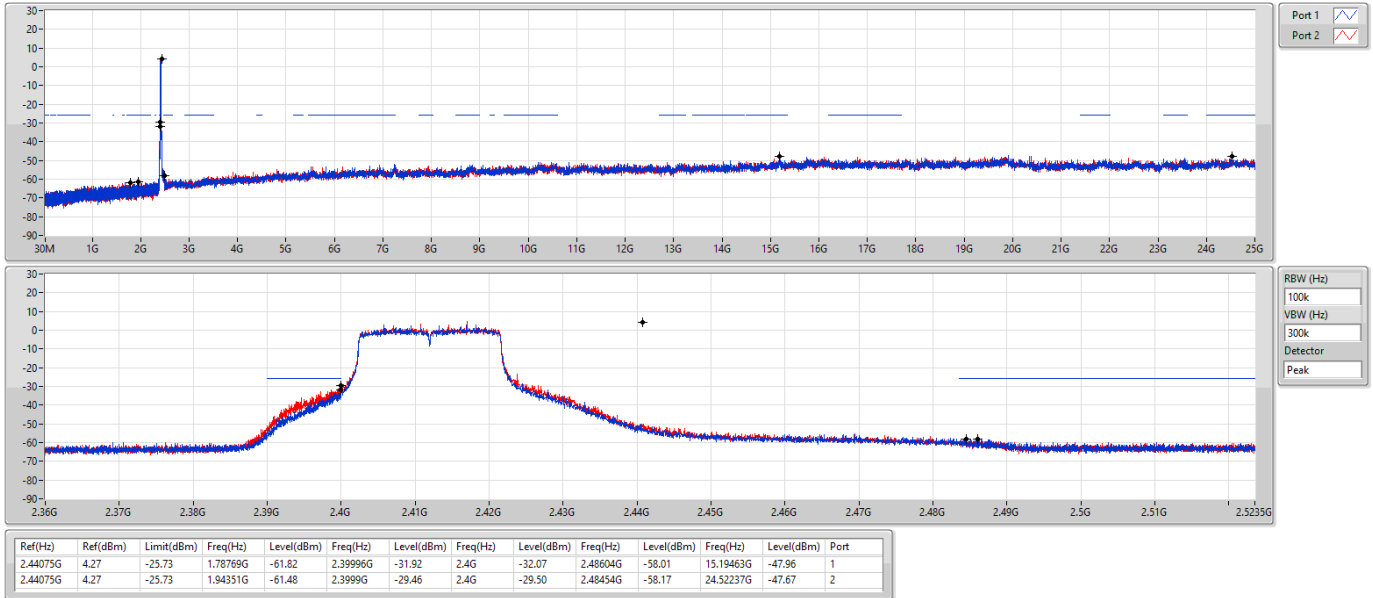
RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.43073G | 4.74     | -25.26     | 2.08739G | -61.85     | 2.39786G | -59.41     | 2.4835G  | -54.40     | 2.48424G | -52.82     | 15.21429G | -48.45     | 1    |
| 2.43073G | 4.74     | -25.26     | 2.14477G | -61.01     | 2.39484G | -58.91     | 2.4835G  | -54.78     | 2.48354G | -53.21     | 24.50271G | -48.20     | 2    |

802.11ax HEW20\_Nss1,(MCS0)\_2TX

CSENdB

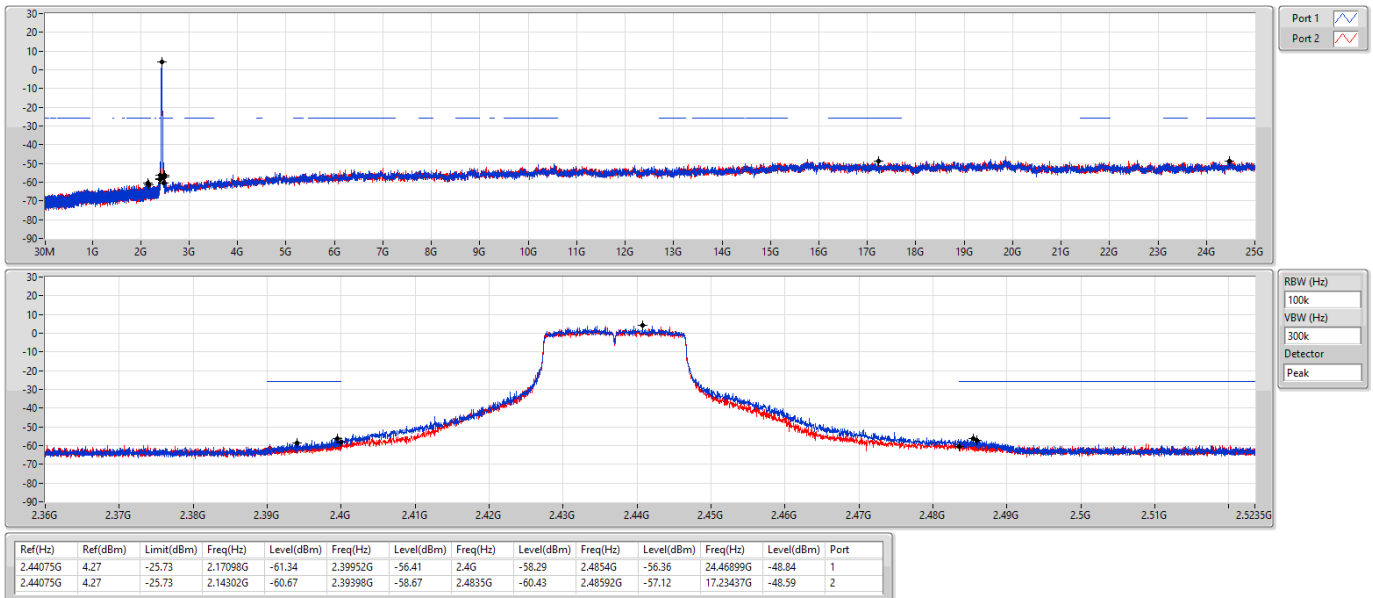
2412MHz



802.11ax HEW20\_Nss1,(MCS0)\_2TX

CSENdB

2437MHz

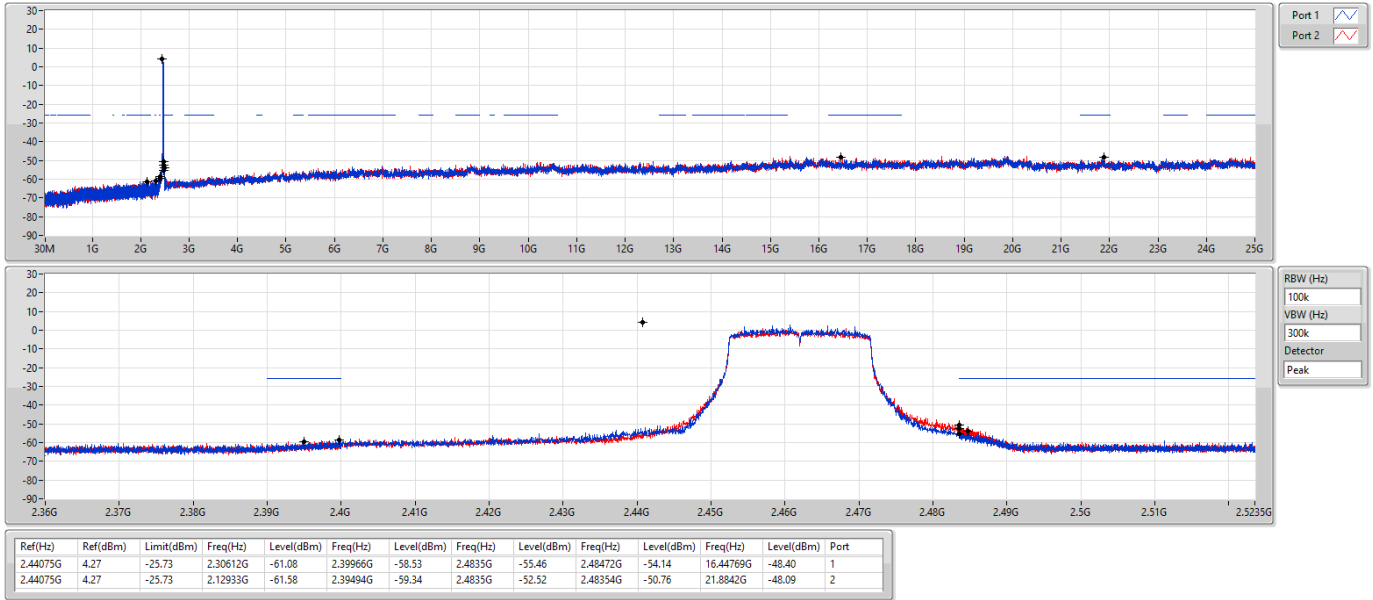




802.11ax HEW20\_Nss1,(MCS0)\_2TX

CSEndB

2462MHz





**CSE (Non-restricted Band)  
Non-Beamforming\_Serving Radio Primary\_4T1S**

**Appendix E.3**

**Summary**

| Mode                           | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|--------------------------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 2.4-2.4835GHz                  | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 802.11b_Nss1,(1Mbps)_4TX       | Pass   | 2.4625G     | 8.43         | -21.57         | 1.96652G     | -60.71         | 2.398G       | -41.69         | 2.4G         | -50.86         | 2.4859G      | -58.71         | 17.3889G     | -47.95         | 2    |
| 802.11g_Nss1,(6Mbps)_4TX       | Pass   | 2.43824G    | 5.22         | -24.78         | 1.65984G     | -61.93         | 2.39974G     | -34.30         | 2.4G         | -35.46         | 2.48498G     | -58.03         | 24.60666G    | -48.31         | 2    |
| 802.11ax HEW20_Nss1,(MCS0)_4TX | Pass   | 2.43945G    | 5.41         | -24.59         | 2.01312G     | -61.21         | 2.3998G      | -35.97         | 2.4G         | -35.72         | 2.48616G     | -58.97         | 24.28637G    | -48.48         | 2    |

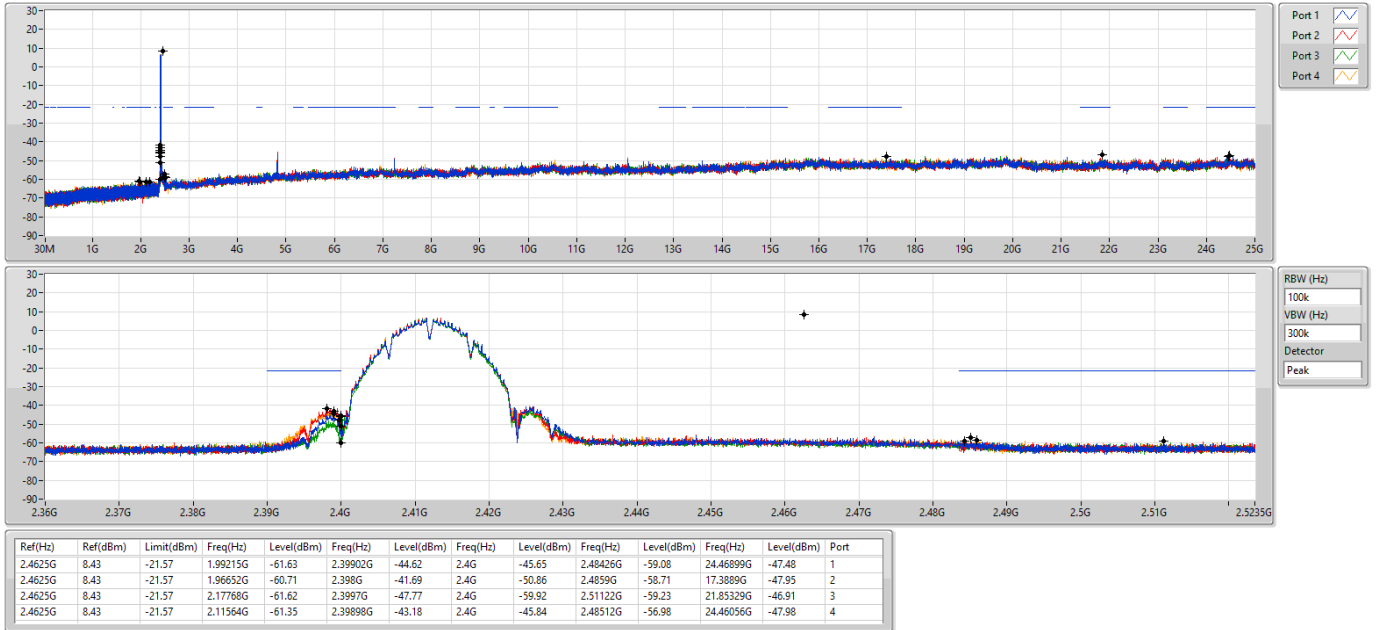
**Result**

| Mode                           | Result | Ref (Hz) | Ref (dBm) | Limit (dBm) | Freq (Hz) | Level (dBm) | Freq (Hz) | Level (dBm) | Freq (Hz) | Level (dBm) | Freq (Hz) | Level (dBm) | Freq (Hz) | Level (dBm) | Port |
|--------------------------------|--------|----------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|------|
| 802.11b_Nss1,(1Mbps)_4TX       | -      | -        | -         | -           | -         | -           | -         | -           | -         | -           | -         | -           | -         | -           | -    |
| 2412MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 1.99215G  | -61.63      | 2.39902G  | -44.62      | 2.4G      | -45.65      | 2.48426G  | -59.08      | 24.46899G | -47.48      | 1    |
| 2412MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 1.96652G  | -60.71      | 2.398G    | -41.69      | 2.4G      | -50.86      | 2.4859G   | -58.71      | 17.3889G  | -47.95      | 2    |
| 2412MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 2.17768G  | -61.62      | 2.3997G   | -47.77      | 2.4G      | -59.92      | 2.51122G  | -59.23      | 21.85329G | -46.91      | 3    |
| 2412MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 2.11564G  | -61.35      | 2.39898G  | -43.18      | 2.4G      | -45.84      | 2.48512G  | -56.98      | 24.46056G | -47.98      | 4    |
| 2437MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 1.76847G  | -61.61      | 2.4G      | -58.42      | 2.4G      | -59.47      | 2.48394G  | -58.21      | 24.21051G | -48.79      | 1    |
| 2437MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 2.19981G  | -61.55      | 2.39842G  | -59.33      | 2.4G      | -59.39      | 2.48384G  | -59.12      | 24.54485G | -47.69      | 2    |
| 2437MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 2.14098G  | -61.20      | 2.39196G  | -58.52      | 2.4835G   | -60.28      | 2.48488G  | -58.92      | 17.08265G | -49.24      | 3    |
| 2437MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 2.0606G   | -61.77      | 2.39796G  | -59.58      | 2.4G      | -60.57      | 2.48502G  | -56.61      | 24.80895G | -48.49      | 4    |
| 2462MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 1.73614G  | -59.88      | 2.4G      | -58.02      | 2.4835G   | -59.40      | 2.4838G   | -57.49      | 24.69095G | -48.14      | 1    |
| 2462MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 2.03846G  | -61.58      | 2.3929G   | -59.35      | 2.4G      | -60.41      | 2.48578G  | -58.04      | 16.50669G | -48.26      | 2    |
| 2462MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 2.10982G  | -62.03      | 2.39488G  | -59.66      | 2.4835G   | -60.97      | 2.48842G  | -58.15      | 24.4409G  | -47.94      | 3    |
| 2462MHz                        | Pass   | 2.4625G  | 8.43      | -21.57      | 1.79556G  | -61.69      | 2.39872G  | -59.64      | 2.4835G   | -59.40      | 2.48614G  | -58.52      | 15.18058G | -48.37      | 4    |
| 802.11g_Nss1,(6Mbps)_4TX       | -      | -        | -         | -           | -         | -           | -         | -           | -         | -           | -         | -           | -         | -           | -    |
| 2412MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 2.30816G  | -60.98      | 2.39966G  | -36.43      | 2.4G      | -36.93      | 2.48384G  | -57.22      | 24.53923G | -47.79      | 1    |
| 2412MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 1.65984G  | -61.93      | 2.39974G  | -34.30      | 2.4G      | -35.46      | 2.48498G  | -58.03      | 24.60666G | -48.31      | 2    |
| 2412MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 2.19166G  | -62.07      | 2.39988G  | -37.96      | 2.4G      | -39.60      | 2.48564G  | -57.66      | 24.53642G | -47.44      | 3    |
| 2412MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 2.1771G   | -60.83      | 2.3998G   | -35.82      | 2.4G      | -36.08      | 2.48376G  | -58.08      | 15.19182G | -48.14      | 4    |
| 2437MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 1.78507G  | -61.29      | 2.39992G  | -58.42      | 2.4G      | -58.47      | 2.48742G  | -58.42      | 15.20025G | -48.43      | 1    |
| 2437MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 2.11069G  | -61.22      | 2.4G      | -58.00      | 2.4G      | -58.96      | 2.484G    | -57.69      | 24.15151G | -48.26      | 2    |
| 2437MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 2.12001G  | -61.72      | 2.39218G  | -58.76      | 2.4G      | -58.89      | 2.48528G  | -57.42      | 24.20489G | -48.66      | 3    |
| 2437MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 2.30059G  | -61.18      | 2.39958G  | -58.22      | 2.4835G   | -59.44      | 2.48398G  | -58.48      | 24.82581G | -48.74      | 4    |
| 2462MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 1.78624G  | -61.51      | 2.39996G  | -59.32      | 2.4835G   | -60.26      | 2.48552G  | -57.78      | 21.92072G | -48.26      | 1    |
| 2462MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 2.1736G   | -61.59      | 2.39996G  | -59.10      | 2.4835G   | -58.00      | 2.4835G   | -56.09      | 24.89324G | -48.63      | 2    |
| 2462MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 2.11477G  | -60.76      | 2.39982G  | -58.05      | 2.4835G   | -58.01      | 2.48378G  | -56.38      | 24.57295G | -48.66      | 3    |
| 2462MHz                        | Pass   | 2.43824G | 5.22      | -24.78      | 2.09788G  | -61.26      | 2.39746G  | -59.83      | 2.4835G   | -58.66      | 2.4835G   | -56.77      | 15.23115G | -47.70      | 4    |
| 802.11ax HEW20_Nss1,(MCS0)_4TX | -      | -        | -         | -           | -         | -           | -         | -           | -         | -           | -         | -           | -         | -           | -    |
| 2412MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 1.82905G  | -61.69      | 2.39968G  | -36.35      | 2.4G      | -38.49      | 2.48604G  | -58.07      | 21.92634G | -48.96      | 1    |
| 2412MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 2.01312G  | -61.21      | 2.3998G   | -35.97      | 2.4G      | -35.72      | 2.48616G  | -58.97      | 24.28637G | -48.48      | 2    |
| 2412MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 2.13137G  | -60.88      | 2.4G      | -38.00      | 2.4G      | -38.47      | 2.48558G  | -59.10      | 17.16975G | -47.60      | 3    |
| 2412MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 1.97002G  | -62.13      | 2.39998G  | -36.22      | 2.4G      | -38.07      | 2.48572G  | -58.74      | 24.18523G | -48.13      | 4    |
| 2437MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 2.11389G  | -61.93      | 2.4G      | -56.40      | 2.4G      | -56.53      | 2.48626G  | -55.47      | 21.88139G | -47.83      | 1    |
| 2437MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 2.12205G  | -61.74      | 2.39628G  | -57.86      | 2.4G      | -58.59      | 2.48428G  | -58.41      | 24.49709G | -48.01      | 2    |
| 2437MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 1.93274G  | -61.90      | 2.3997G   | -57.20      | 2.4G      | -58.44      | 2.4857G   | -56.77      | 24.51395G | -48.22      | 3    |
| 2437MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 2.12467G  | -61.87      | 2.3995G   | -54.52      | 2.4G      | -56.61      | 2.48472G  | -57.44      | 17.37485G | -47.76      | 4    |
| 2462MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 2.12904G  | -59.99      | 2.39468G  | -59.59      | 2.4G      | -57.70      | 2.48522G  | -57.82      | 17.32989G | -47.97      | 1    |
| 2462MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 1.8276G   | -61.83      | 2.39686G  | -60.41      | 2.4835G   | -57.34      | 2.48362G  | -56.00      | 24.4999G  | -47.95      | 2    |
| 2462MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 2.14797G  | -61.62      | 2.39386G  | -59.75      | 2.4835G   | -58.51      | 2.4838G   | -57.24      | 24.12342G | -47.89      | 3    |
| 2462MHz                        | Pass   | 2.43945G | 5.41      | -24.59      | 2.12642G  | -60.67      | 2.3981G   | -60.02      | 2.4835G   | -58.25      | 2.4836G   | -57.92      | 24.82862G | -48.69      | 4    |

**802.11b\_Nss1,(1Mbps)\_4TX**

**CSENdB**

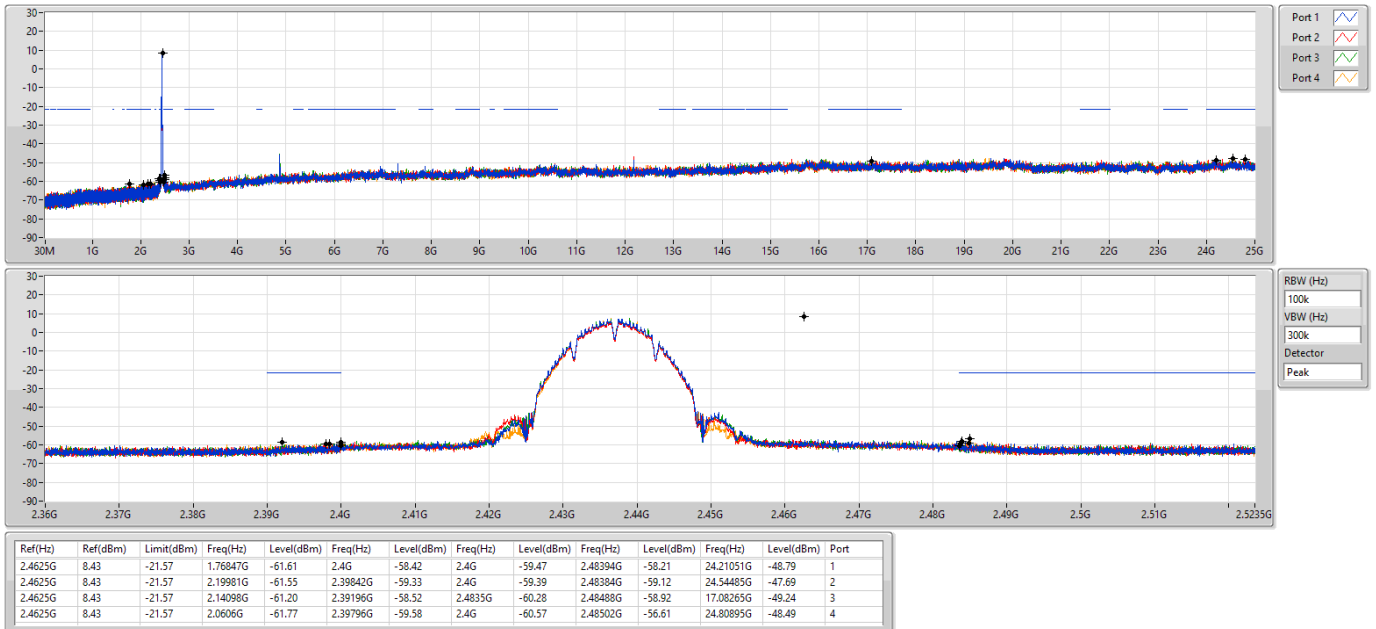
**2412MHz**



**802.11b\_Nss1,(1Mbps)\_4TX**

**CSENdB**

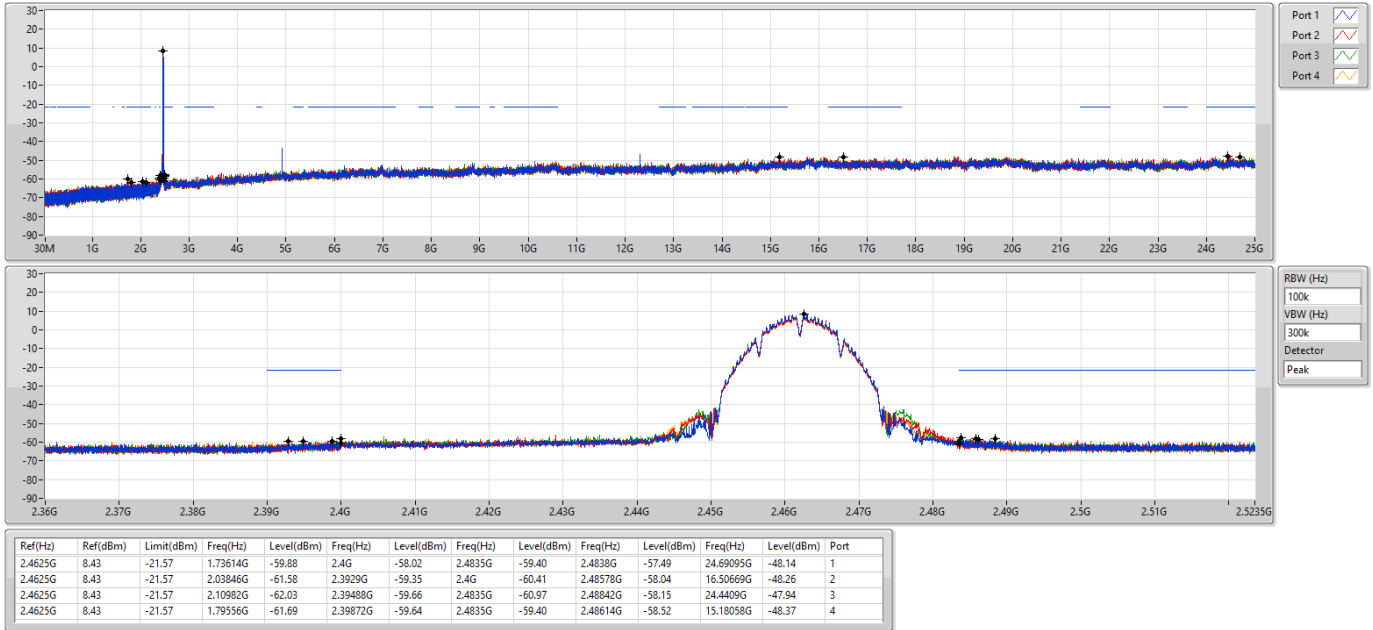
**2437MHz**



**802.11b\_Nss1,(1Mbps)\_4TX**

**CSENdb**

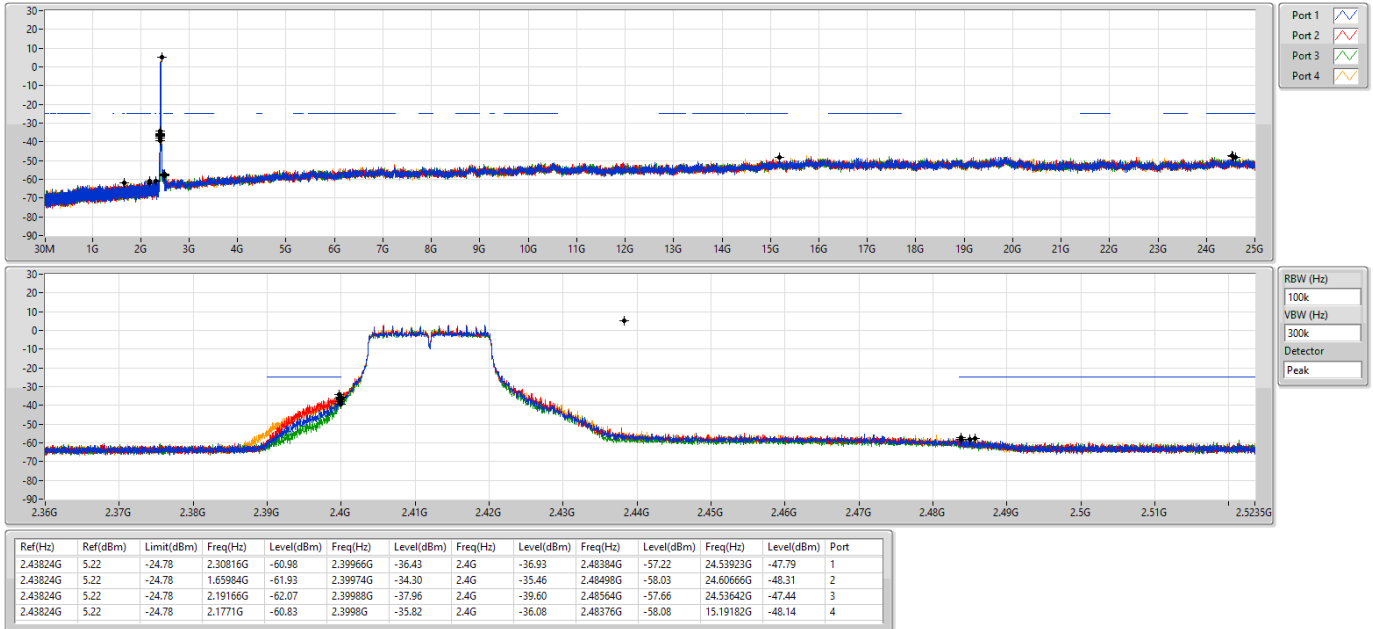
**2462MHz**



**802.11g\_Nss1,(6Mbps)\_4TX**

**CSENdb**

**2412MHz**

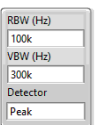
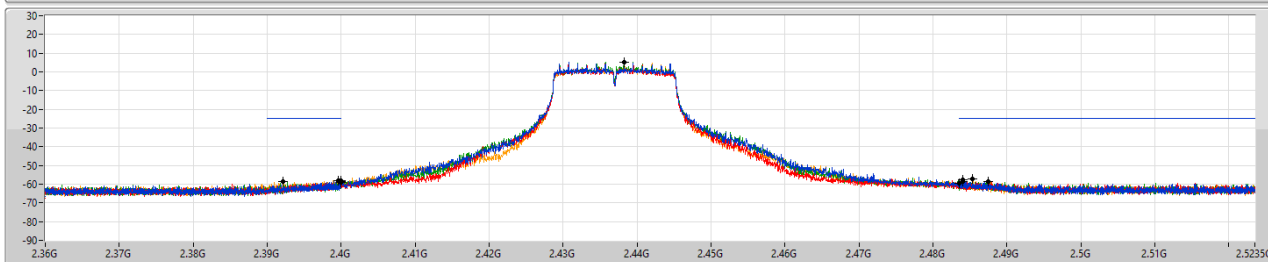
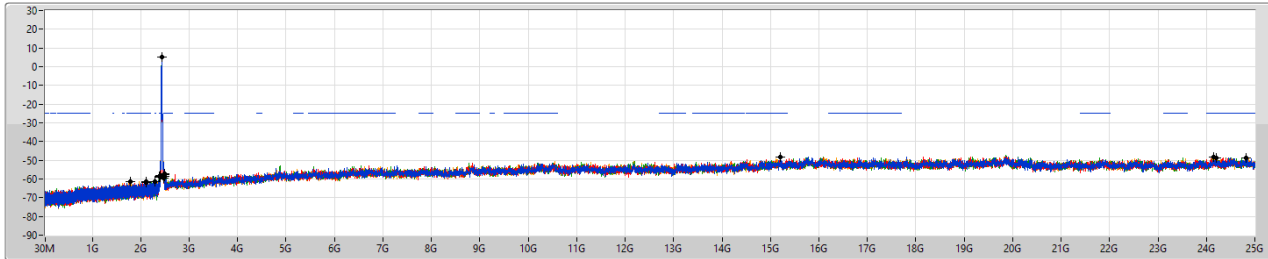


**802.11g\_Nss1,(6Mbps)\_4TX**

**2437MHz**

**CSENdB**

12/08/2021



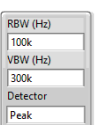
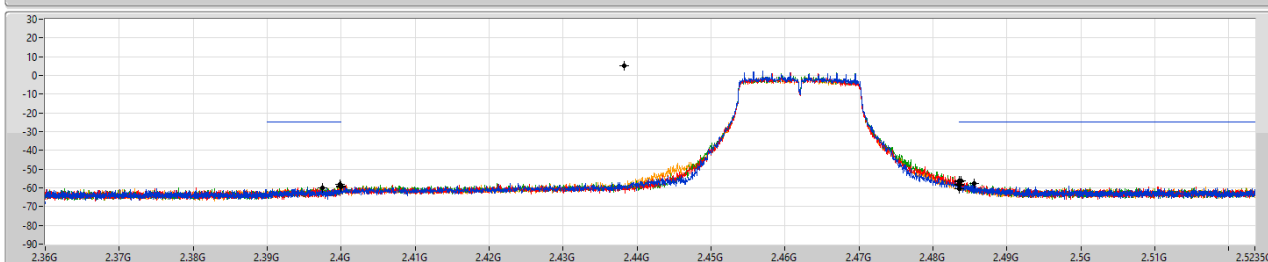
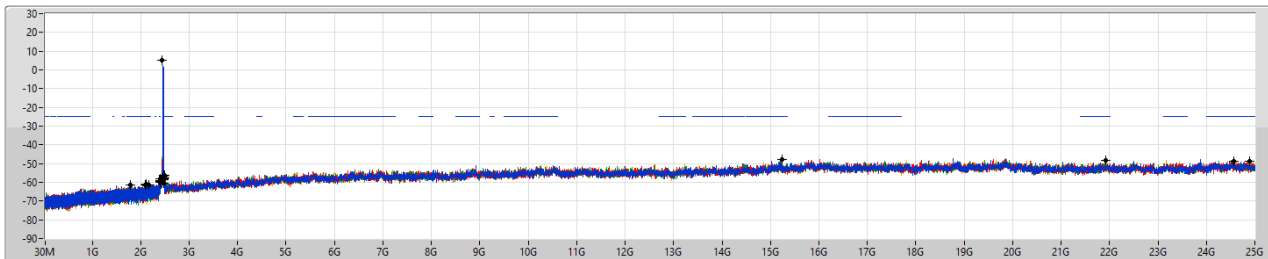
| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.43824G | 5.22     | -24.78     | 1.78507G | -61.29     | 2.39992G | -58.42     | 2.4G     | -58.47     | 2.48742G | -58.42     | 15.20025G | -48.43     | 1    |
| 2.43824G | 5.22     | -24.78     | 2.11069G | -61.22     | 2.4G     | -58.00     | 2.4G     | -58.96     | 2.484G   | -57.69     | 24.15151G | -48.26     | 2    |
| 2.43824G | 5.22     | -24.78     | 2.12001G | -61.72     | 2.39218G | -58.76     | 2.4G     | -58.89     | 2.48528G | -57.42     | 24.20489G | -48.66     | 3    |
| 2.43824G | 5.22     | -24.78     | 2.30059G | -61.18     | 2.39958G | -58.22     | 2.4835G  | -59.44     | 2.48398G | -58.48     | 24.82581G | -48.74     | 4    |

**802.11g\_Nss1,(6Mbps)\_4TX**

**2462MHz**

**CSENdB**

12/08/2021

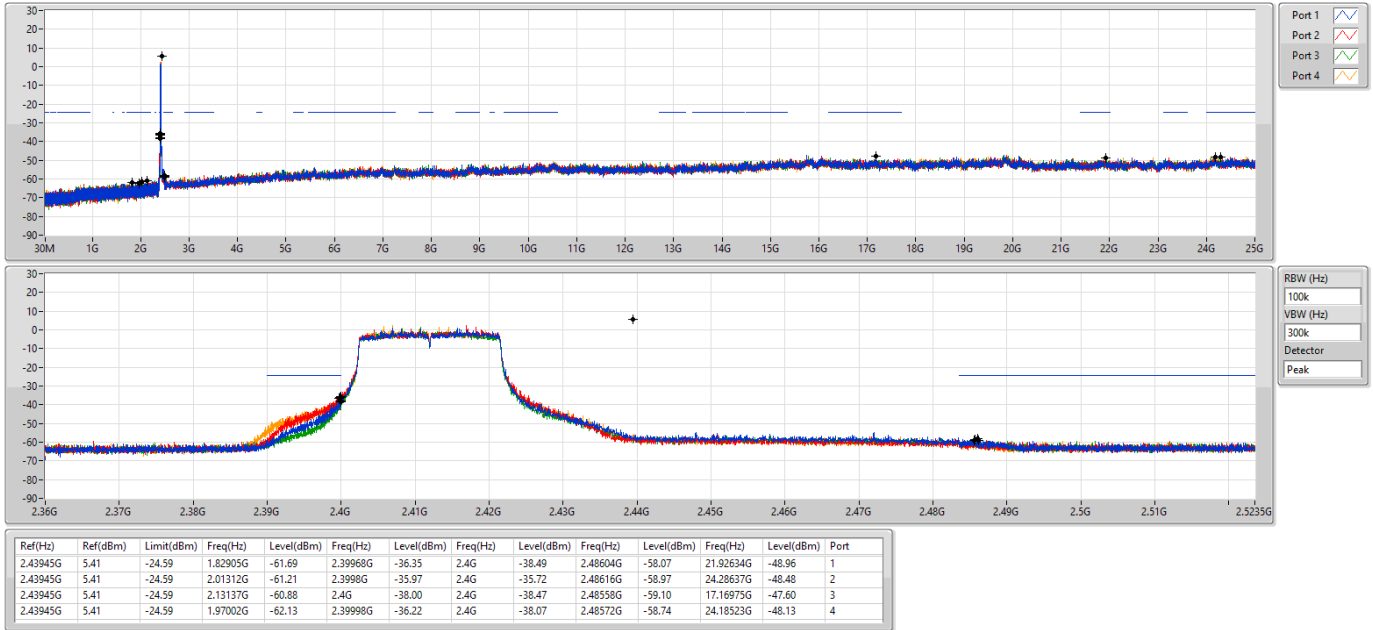


| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.43824G | 5.22     | -24.78     | 1.78624G | -61.51     | 2.39996G | -59.32     | 2.4835G  | -60.26     | 2.48552G | -57.78     | 21.92072G | -48.26     | 1    |
| 2.43824G | 5.22     | -24.78     | 2.1736G  | -61.59     | 2.39996G | -59.10     | 2.4835G  | -58.00     | 2.4835G  | -56.09     | 24.89324G | -48.63     | 2    |
| 2.43824G | 5.22     | -24.78     | 2.11477G | -60.76     | 2.39982G | -58.05     | 2.4835G  | -58.01     | 2.48378G | -56.38     | 24.57295G | -48.66     | 3    |
| 2.43824G | 5.22     | -24.78     | 2.09788G | -61.26     | 2.39746G | -59.83     | 2.4835G  | -58.66     | 2.4835G  | -56.77     | 15.23115G | -47.70     | 4    |

**802.11ax HEW20\_Nss1,(MCS0)\_4TX**

**CSENdb**

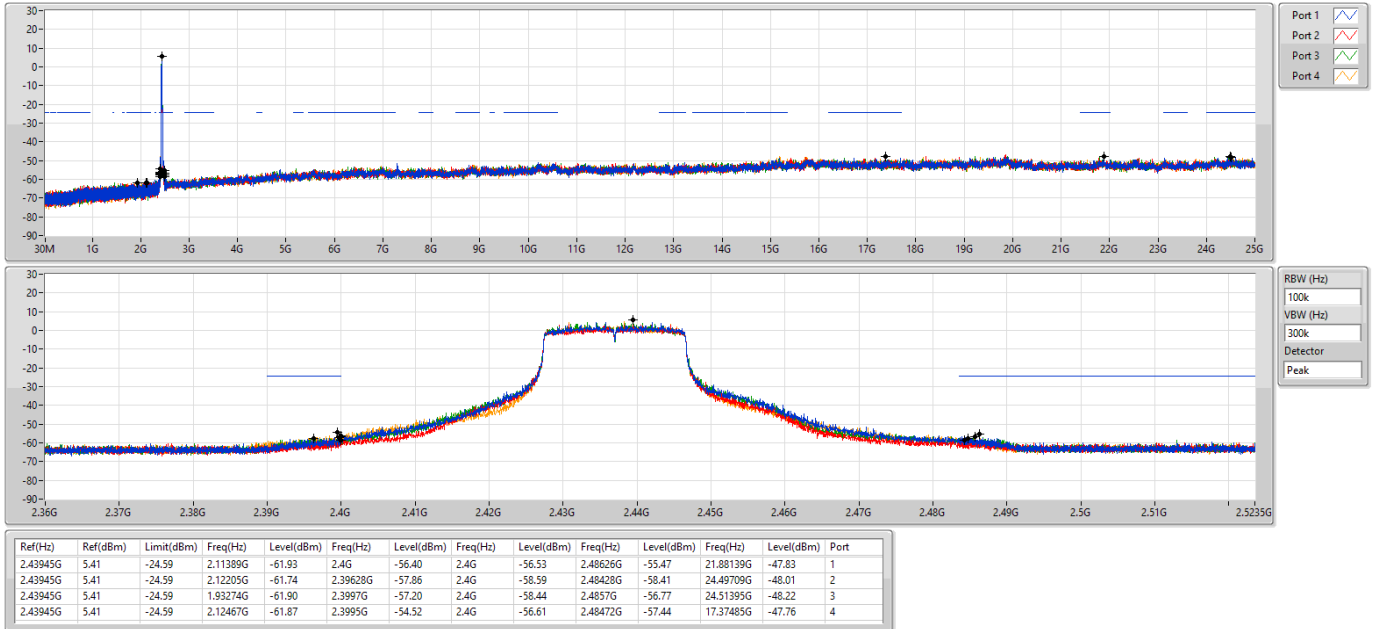
**2412MHz**



**802.11ax HEW20\_Nss1,(MCS0)\_4TX**

**CSENdb**

**2437MHz**



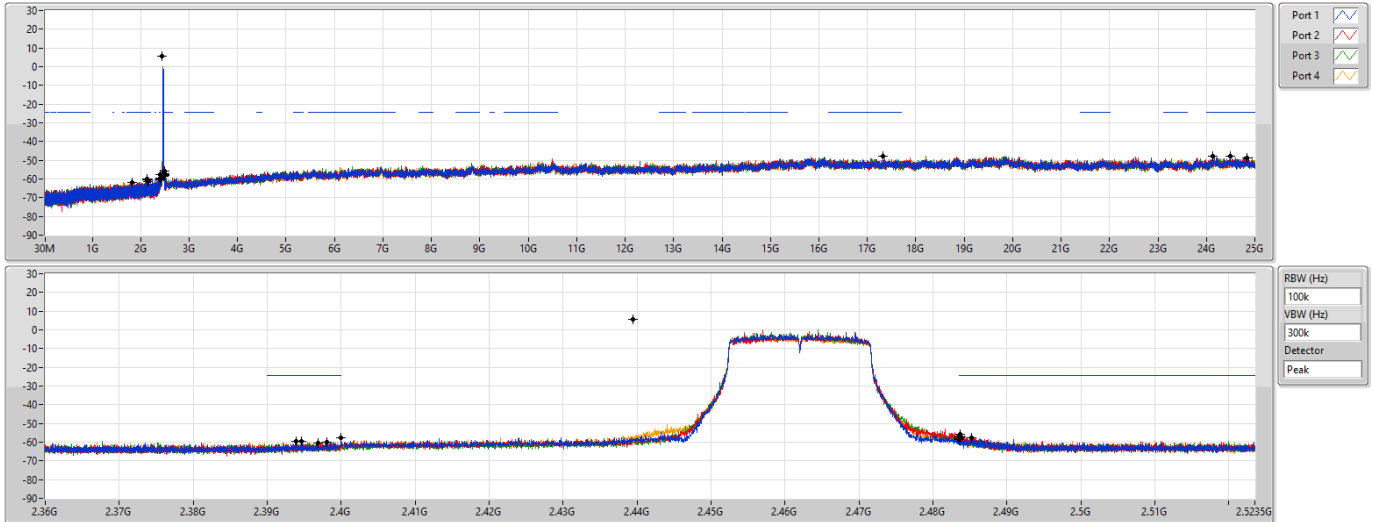


802.11ax HEW20\_Nss1,(MCS0)\_4TX

CSENdB

2462MHz

12/08/2021



| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.43945G | 5.41     | -24.59     | 2.12904G | -59.99     | 2.39468G | -59.59     | 2.4G     | -57.70     | 2.48522G | -57.82     | 17.32989G | -47.97     | 1    |
| 2.43945G | 5.41     | -24.59     | 1.8276G  | -61.83     | 2.39686G | -60.41     | 2.4835G  | -57.34     | 2.48362G | -56.00     | 24.4999G  | -47.95     | 2    |
| 2.43945G | 5.41     | -24.59     | 2.14797G | -61.62     | 2.39386G | -59.75     | 2.4835G  | -58.51     | 2.4838G  | -57.24     | 24.12342G | -47.89     | 3    |
| 2.43945G | 5.41     | -24.59     | 2.12642G | -60.67     | 2.3981G  | -60.02     | 2.4835G  | -58.25     | 2.4836G  | -57.92     | 24.82862G | -48.69     | 4    |



**CSE (Non-restricted Band)  
Non-Beamforming Scanning Radio 1T1S**

**Appendix E.4**

**Summary**

| Mode                          | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|-------------------------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 2.4-2.4835GHz                 | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 802.11b_Nss1(1Mbps)_1TX       | Pass   | 2.46313G    | -4.11        | -34.11         | 2.09904G     | -54.71         | 2.39864G     | -48.60         | 2.4G         | -52.63         | 2.51222G     | -50.75         | 7.23514G     | -41.03         | 1    |
| 802.11g_Nss1(6Mbps)_1TX       | Pass   | 2.44442G    | 5.76         | -24.24         | 2.30991G     | -53.77         | 2.39968G     | -31.06         | 2.4G         | -29.19         | 2.50542G     | -50.06         | 21.56671G    | -44.49         | 1    |
| 802.11ax HEW20_Nss1(MCS0)_1TX | Pass   | 2.44192G    | 4.78         | -25.22         | 2.30874G     | -53.79         | 2.4G         | -32.67         | 2.4G         | -32.63         | 2.50614G     | -51.53         | 21.85329G    | -44.93         | 1    |



**CSE (Non-restricted Band)  
Non-Beamforming Scanning Radio 1T1S**

**Appendix E.4**

**Result**

| Mode                          | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|-------------------------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 802.11b_Nss1(1Mbps)_1TX       | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                       | Pass   | 2.46313G    | -4.11        | -34.11         | 2.09904G     | -54.71         | 2.39864G     | -48.60         | 2.4G         | -52.63         | 2.51222G     | -50.75         | 7.23514G     | -41.03         | 1    |
| 2437MHz                       | Pass   | 2.46313G    | -4.11        | -34.11         | 2.10021G     | -54.62         | 2.39608G     | -50.71         | 2.4G         | -57.13         | 2.50862G     | -51.43         | 21.68753G    | -44.41         | 1    |
| 2462MHz                       | Pass   | 2.46313G    | -4.11        | -34.11         | 2.03613G     | -54.93         | 2.3984G      | -52.57         | 2.4G         | -56.16         | 2.52086G     | -51.77         | 21.651G      | -44.23         | 1    |
| 802.11g_Nss1(6Mbps)_1TX       | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                       | Pass   | 2.44442G    | 5.76         | -24.24         | 2.30991G     | -53.77         | 2.39968G     | -31.06         | 2.4G         | -29.19         | 2.50542G     | -50.06         | 21.56671G    | -44.49         | 1    |
| 2437MHz                       | Pass   | 2.44442G    | 5.76         | -24.24         | 2.07691G     | -54.81         | 2.39792G     | -52.59         | 2.4G         | -55.86         | 2.52046G     | -51.44         | 6.49903G     | -44.38         | 1    |
| 2462MHz                       | Pass   | 2.44442G    | 5.76         | -24.24         | 1.72857G     | -55.22         | 2.3968G      | -51.93         | 2.4G         | -57.17         | 2.50902G     | -51.82         | 6.56365G     | -43.53         | 1    |
| 802.11ax HEW20_Nss1(MCS0)_1TX | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                       | Pass   | 2.44192G    | 4.78         | -25.22         | 2.30874G     | -53.79         | 2.4G         | -32.67         | 2.4G         | -32.63         | 2.50614G     | -51.53         | 21.85329G    | -44.93         | 1    |
| 2437MHz                       | Pass   | 2.44192G    | 4.78         | -25.22         | 2.1538G      | -55.19         | 2.39144G     | -51.12         | 2.4G         | -54.17         | 2.51318G     | -50.67         | 6.49903G     | -44.55         | 1    |
| 2462MHz                       | Pass   | 2.44192G    | 4.78         | -25.22         | 2.16545G     | -54.27         | 2.39976G     | -52.29         | 2.4G         | -56.35         | 2.5091G      | -51.48         | 21.8561G     | -43.81         | 1    |

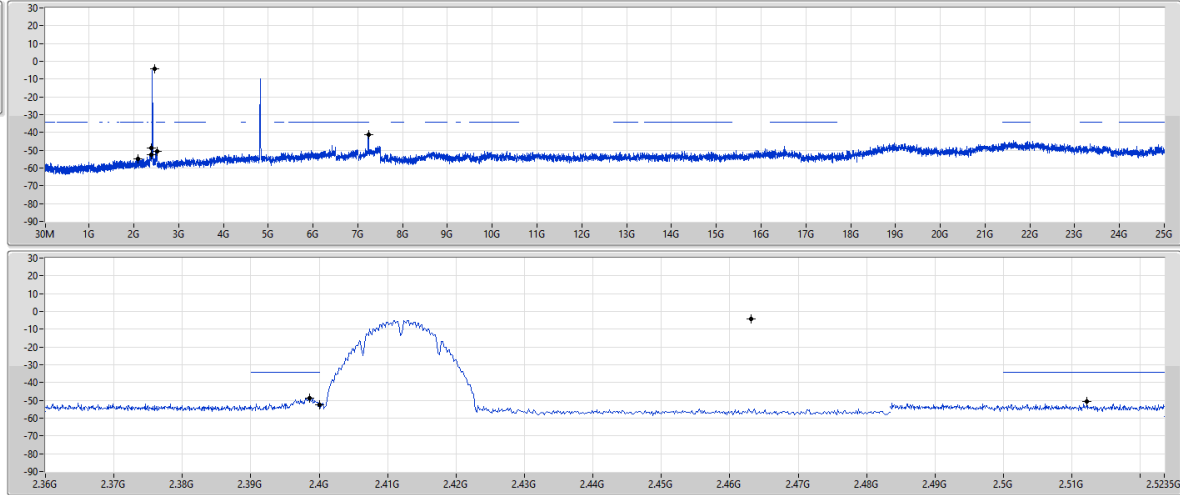
2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

CSEndB

2412MHz

31/05/2023

RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak



| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|------|
| 2.46313G | -4.11    | -34.11     | 2.09904G | -54.71     | 2.39864G | -48.60     | 2.4G     | -52.63     | 2.51222G | -50.75     | 7.23514G | -41.03     | 1    |

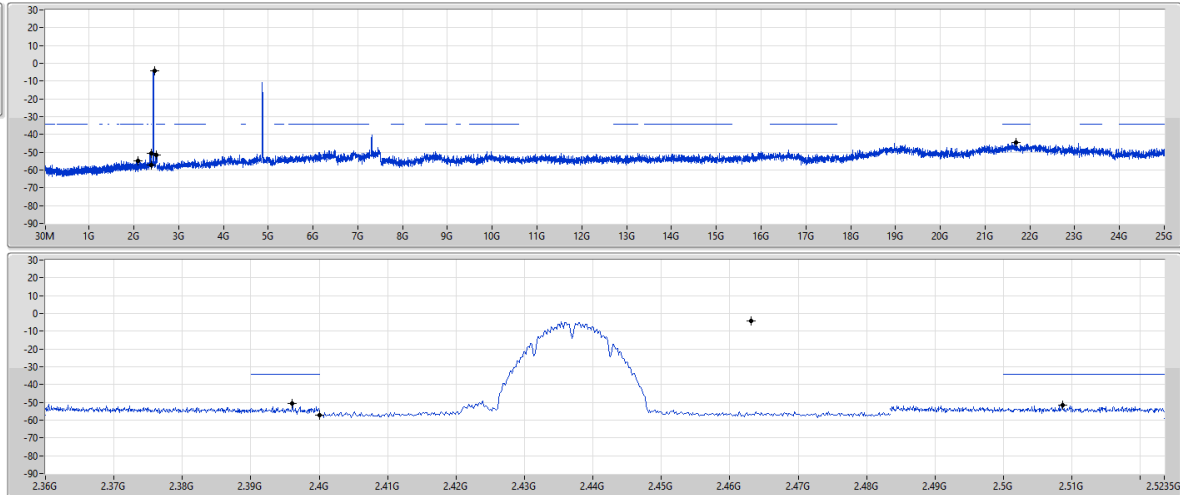
2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

CSEndB

2437MHz

31/05/2023

RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

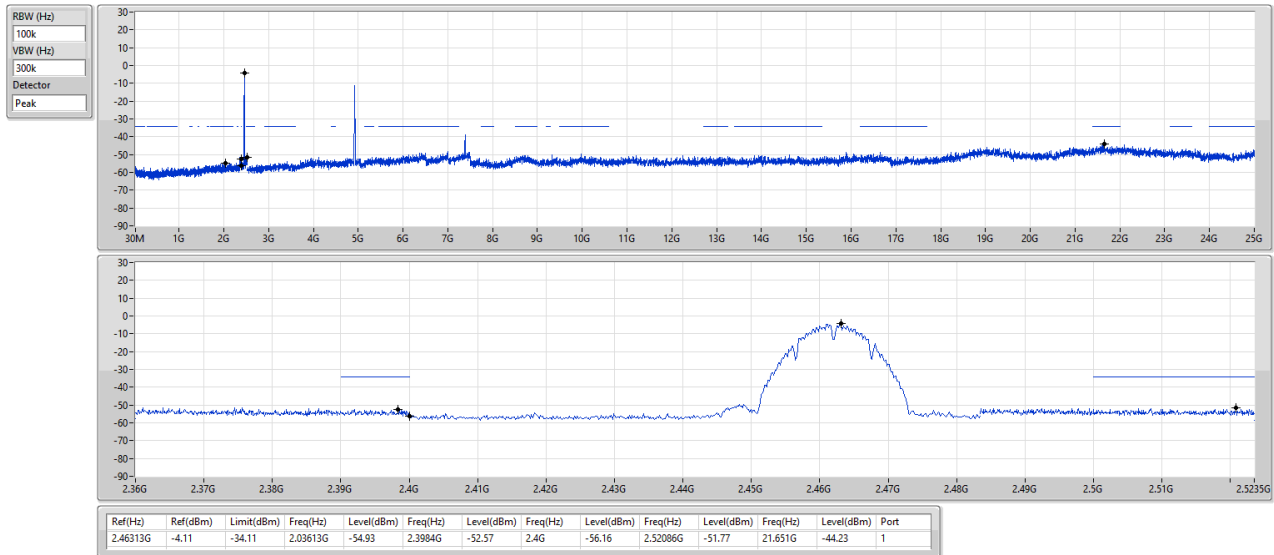


| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.46313G | -4.11    | -34.11     | 2.10021G | -54.62     | 2.39608G | -50.71     | 2.4G     | -57.13     | 2.50862G | -51.43     | 21.68753G | -44.41     | 1    |

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

CSEndB

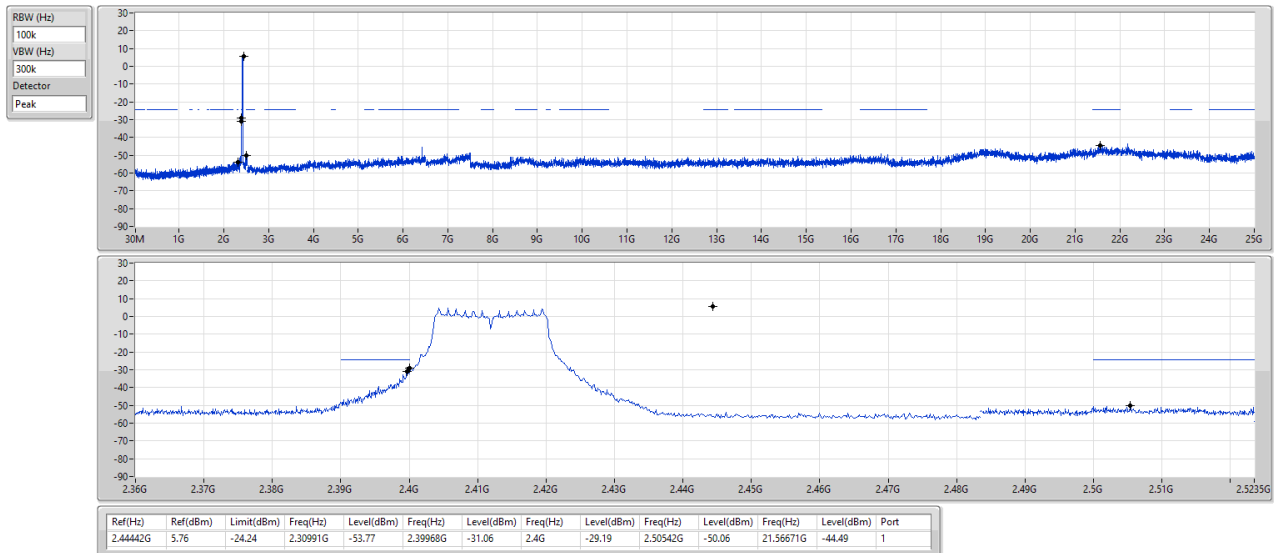
2462MHz



2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

CSEndB

2412MHz

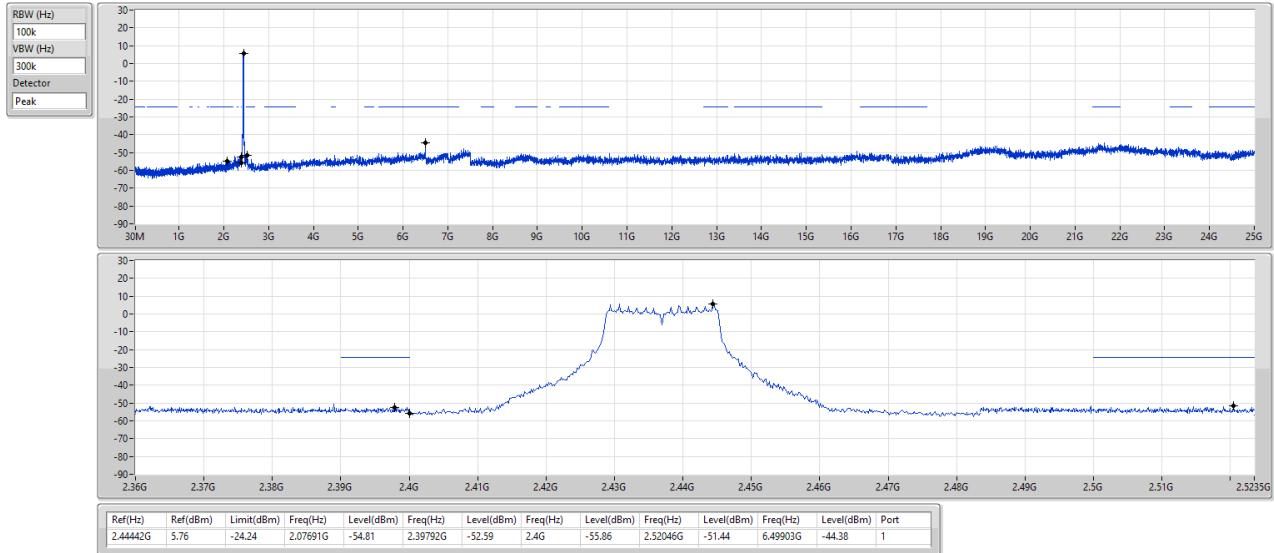


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

CSEndB

2437MHz

23/05/2023

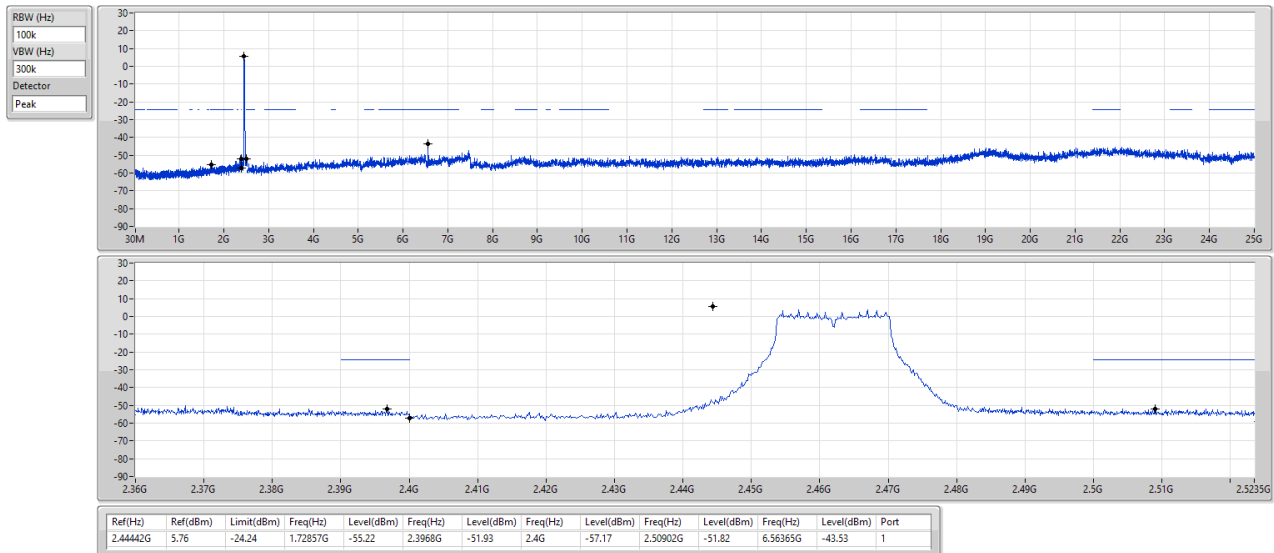


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

CSEndB

2462MHz

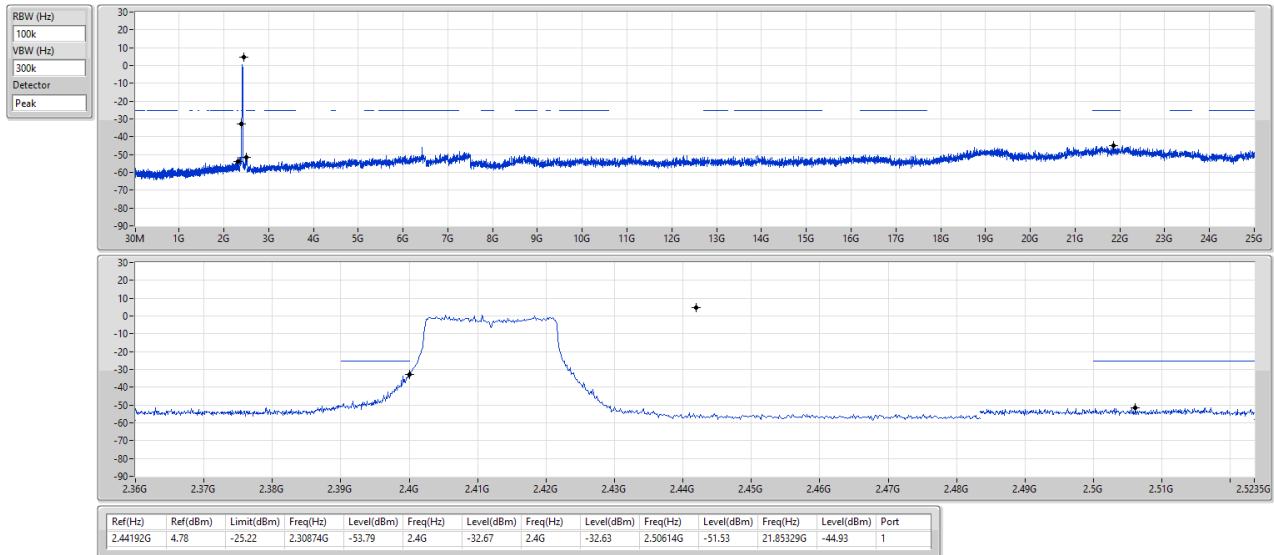
23/05/2023



2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_1TX

CSEndB

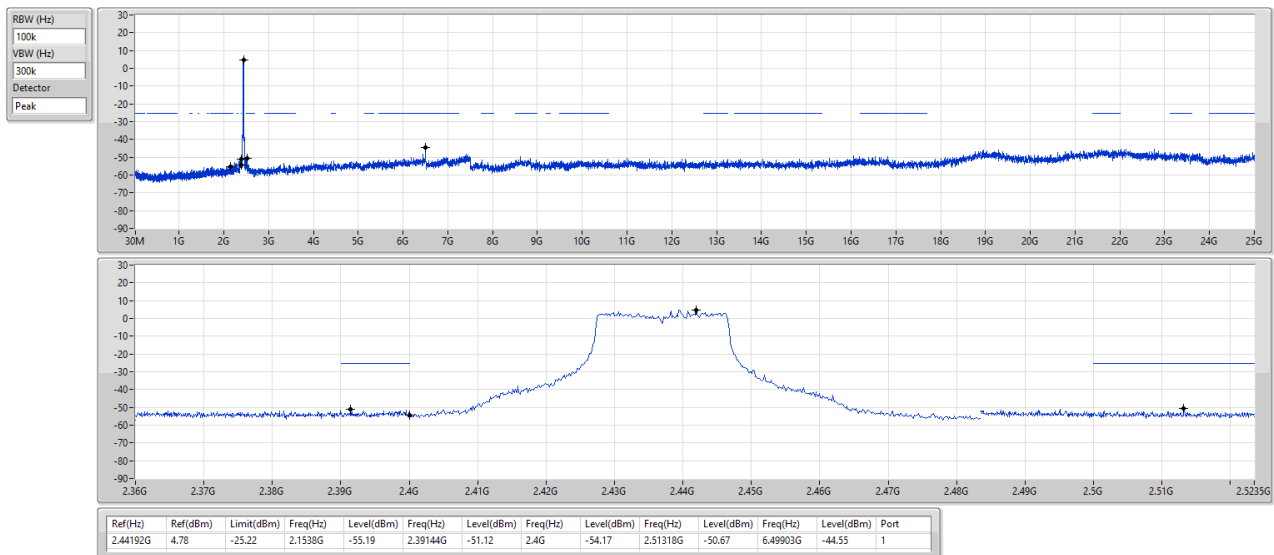
2412MHz



2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_1TX

CSEndB

2437MHz





**CSE (Non-restricted Band)  
Non-Beamforming Scanning Radio 1T1S**

**Appendix E.4**

2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_1TX

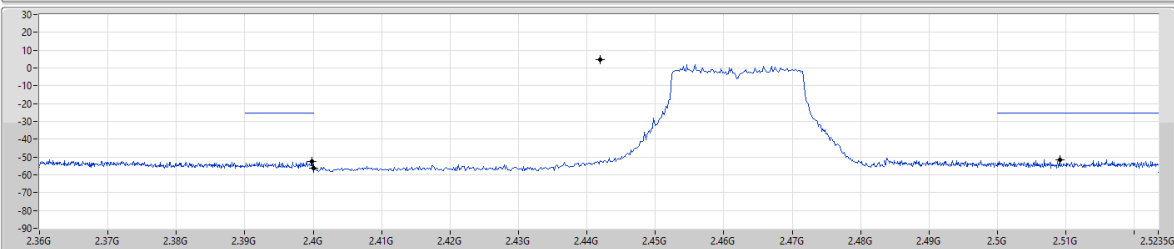
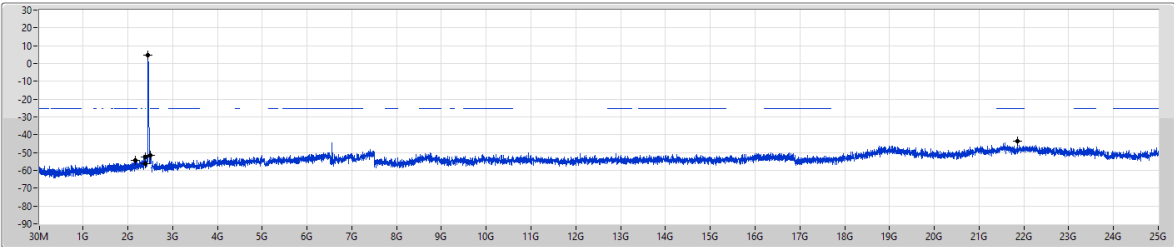
CSEndB

2462MHz

23/05/2023

RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

Port 1



| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|------|
| 2.44192G | 4.78     | -25.22     | 2.16545G | -54.27     | 2.39976G | -52.29     | 2.4G     | -56.35     | 2.5091G  | -51.48     | 21.8561G | -43.81     | 1    |



**CSE (Non-restricted Band)  
Non-Beamforming Scanning Radio 2T1S**

**Appendix E.5**

**Summary**

| Mode                           | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|--------------------------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 2.4-2.4835GHz                  | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 802.11b_Nss1,(1Mbps)_2TX       | Pass   | 2.46096G    | 8.17         | -21.83         | 2.14215G     | -54.16         | 2.39904G     | -43.25         | 2.4G         | -45.27         | 2.50694G     | -49.49         | 21.61729G    | -43.64         | 1    |
| 802.11g_Nss1,(6Mbps)_2TX       | Pass   | 2.44442G    | 5.93         | -24.07         | 2.18176G     | -54.78         | 2.39976G     | -33.59         | 2.4G         | -32.39         | 2.51558G     | -51.55         | 6.4316G      | -43.80         | 1    |
| 802.11ax HEW20_Nss1,(MCS0)_2TX | Pass   | 2.44442G    | 6.26         | -23.74         | 2.10021G     | -53.50         | 2.4G         | -33.45         | 2.4G         | -31.78         | 2.52158G     | -51.46         | 6.4316G      | -43.62         | 1    |



**CSE (Non-restricted Band)  
Non-Beamforming Scanning Radio 2T1S**

**Appendix E.5**

**Result**

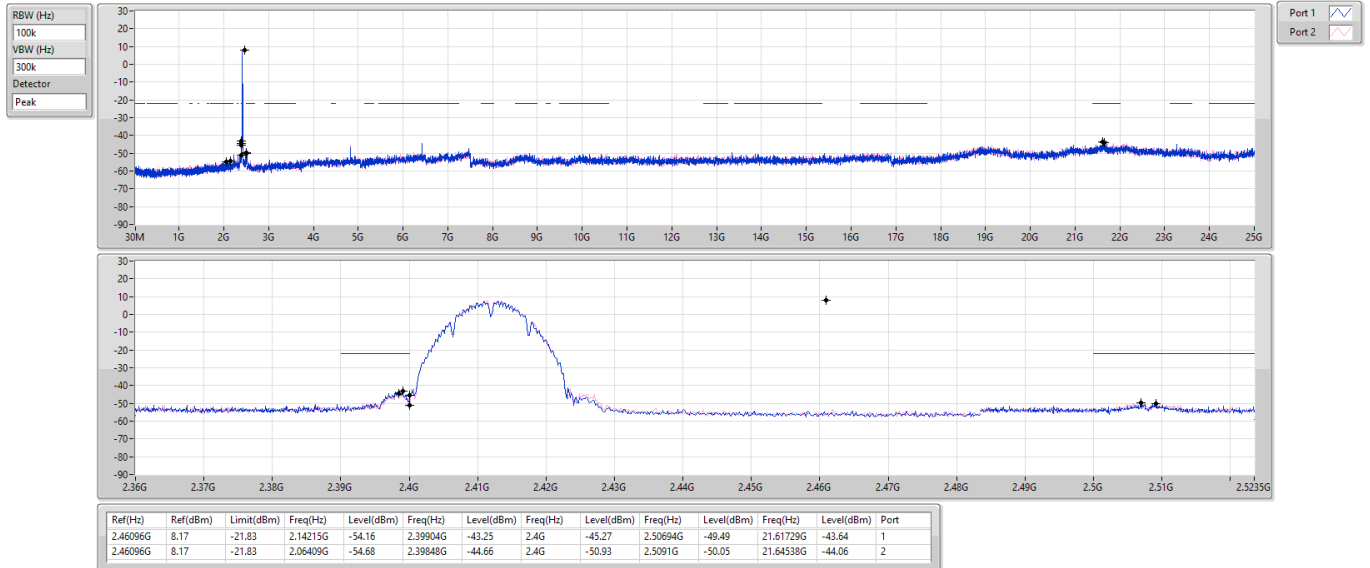
| Mode                           | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|--------------------------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 802.11b_Nss1.(1Mbps)_2TX       | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                        | Pass   | 2.46096G    | 8.17         | -21.83         | 2.14215G     | -54.16         | 2.39904G     | -43.25         | 2.4G         | -45.27         | 2.50694G     | -49.49         | 21.61729G    | -43.64         | 1    |
| 2412MHz                        | Pass   | 2.46096G    | 8.17         | -21.83         | 2.06409G     | -54.68         | 2.39848G     | -44.66         | 2.4G         | -50.93         | 2.5091G      | -50.05         | 21.64538G    | -44.06         | 2    |
| 2437MHz                        | Pass   | 2.46096G    | 8.17         | -21.83         | 2.30175G     | -54.16         | 2.39728G     | -52.25         | 2.4G         | -56.46         | 2.5183G      | -51.21         | 6.49903G     | -43.76         | 1    |
| 2437MHz                        | Pass   | 2.46096G    | 8.17         | -21.83         | 2.30175G     | -52.85         | 2.39464G     | -51.59         | 2.4G         | -55.68         | 2.51014G     | -51.71         | 21.64819G    | -44.18         | 2    |
| 2462MHz                        | Pass   | 2.46096G    | 8.17         | -21.83         | 2.07691G     | -53.48         | 2.3956G      | -51.93         | 2.4G         | -56.20         | 2.50766G     | -51.87         | 6.56365G     | -43.95         | 1    |
| 2462MHz                        | Pass   | 2.46096G    | 8.17         | -21.83         | 2.30525G     | -53.67         | 2.3944G      | -51.80         | 2.4G         | -56.50         | 2.51254G     | -51.36         | 21.6201G     | -45.01         | 2    |
| 802.11g_Nss1.(6Mbps)_2TX       | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                        | Pass   | 2.44442G    | 5.93         | -24.07         | 2.18176G     | -54.78         | 2.39976G     | -33.59         | 2.4G         | -32.39         | 2.51558G     | -51.55         | 6.4316G      | -43.80         | 1    |
| 2412MHz                        | Pass   | 2.44442G    | 5.93         | -24.07         | 2.30874G     | -54.75         | 2.39968G     | -33.16         | 2.4G         | -32.75         | 2.51246G     | -51.38         | 21.60886G    | -44.31         | 2    |
| 2437MHz                        | Pass   | 2.44442G    | 5.93         | -24.07         | 2.16312G     | -54.48         | 2.39088G     | -51.33         | 2.4G         | -55.82         | 2.50502G     | -51.68         | 6.49903G     | -43.98         | 1    |
| 2437MHz                        | Pass   | 2.44442G    | 5.93         | -24.07         | 2.30525G     | -54.64         | 2.3996G      | -51.31         | 2.4G         | -55.34         | 2.5047G      | -51.61         | 21.66224G    | -44.21         | 2    |
| 2462MHz                        | Pass   | 2.44442G    | 5.93         | -24.07         | 2.19108G     | -54.69         | 2.39512G     | -52.75         | 2.4G         | -57.23         | 2.50254G     | -51.82         | 6.56365G     | -43.22         | 1    |
| 2462MHz                        | Pass   | 2.44442G    | 5.93         | -24.07         | 2.17244G     | -54.09         | 2.39944G     | -51.84         | 2.4G         | -57.14         | 2.5099G      | -51.68         | 21.47962G    | -44.98         | 2    |
| 802.11ax HEW20_Nss1.(MCS0)_2TX | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2412MHz                        | Pass   | 2.44442G    | 6.26         | -23.74         | 2.10021G     | -53.50         | 2.4G         | -33.45         | 2.4G         | -31.78         | 2.52158G     | -51.46         | 6.4316G      | -43.62         | 1    |
| 2412MHz                        | Pass   | 2.44442G    | 6.26         | -23.74         | 2.30991G     | -54.05         | 2.4G         | -34.23         | 2.4G         | -34.36         | 2.50446G     | -51.05         | 21.68191G    | -43.67         | 2    |
| 2437MHz                        | Pass   | 2.44442G    | 6.26         | -23.74         | 2.30175G     | -54.28         | 2.39936G     | -51.21         | 2.4G         | -54.07         | 2.50142G     | -51.29         | 6.49903G     | -44.61         | 1    |
| 2437MHz                        | Pass   | 2.44442G    | 6.26         | -23.74         | 2.13865G     | -54.42         | 2.3976G      | -51.27         | 2.4G         | -54.13         | 2.51374G     | -51.26         | 21.64538G    | -45.13         | 2    |
| 2462MHz                        | Pass   | 2.44442G    | 6.26         | -23.74         | 2.17593G     | -54.98         | 2.39904G     | -53.15         | 2.4G         | -56.89         | 2.51646G     | -51.73         | 21.45152G    | -44.58         | 1    |
| 2462MHz                        | Pass   | 2.44442G    | 6.26         | -23.74         | 2.1969G      | -54.52         | 2.39344G     | -51.48         | 2.4G         | -57.06         | 2.5131G      | -52.26         | 21.72124G    | -43.92         | 2    |

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

CSEndB

2412MHz

23/05/2023

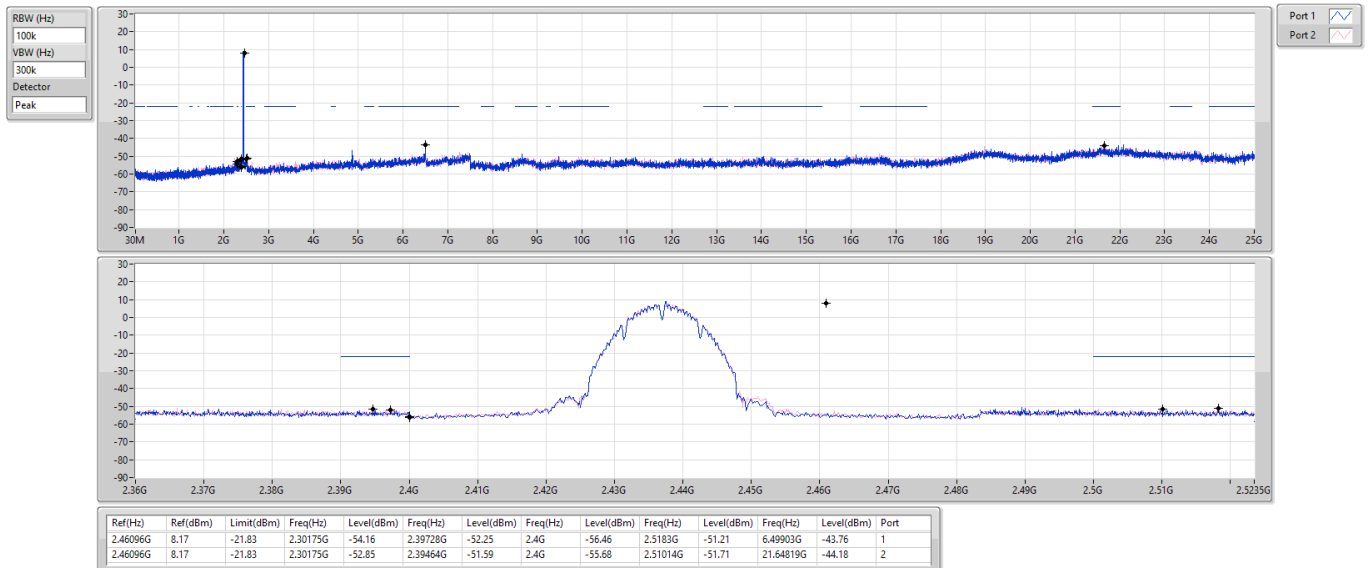


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

CSEndB

2437MHz

23/05/2023



2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

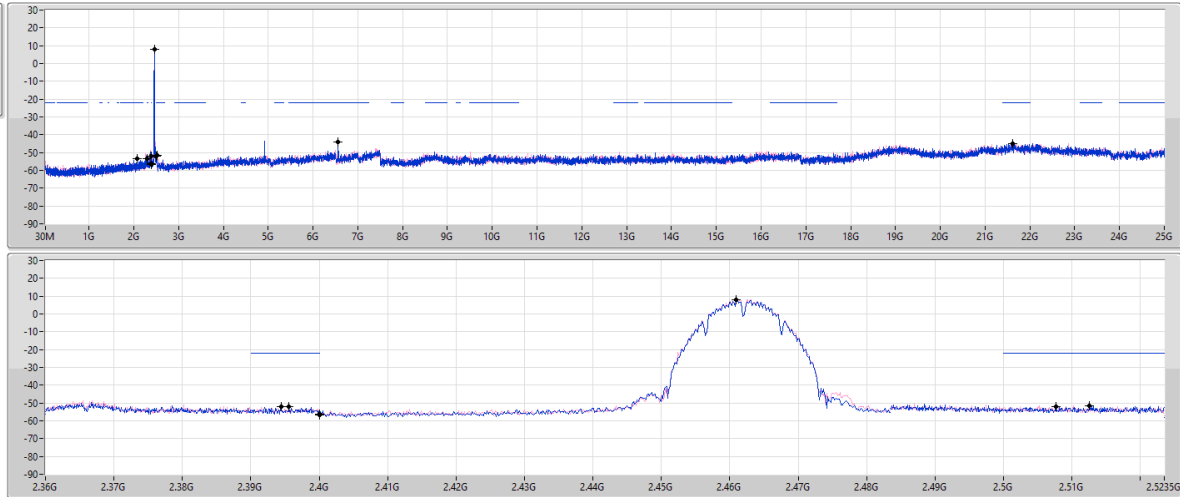
CSEndB

2462MHz

23/05/2023

RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

Port 1  
Port 2



| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|------|
| 2.46096G | 8.17     | -21.83     | 2.07691G | -53.48     | 2.3956G  | -51.93     | 2.4G     | -56.20     | 2.50766G | -51.87     | 6.56365G | -43.95     | 1    |
| 2.46096G | 8.17     | -21.83     | 2.30525G | -53.67     | 2.3944G  | -51.80     | 2.4G     | -56.50     | 2.51254G | -51.36     | 21.6201G | -45.01     | 2    |

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

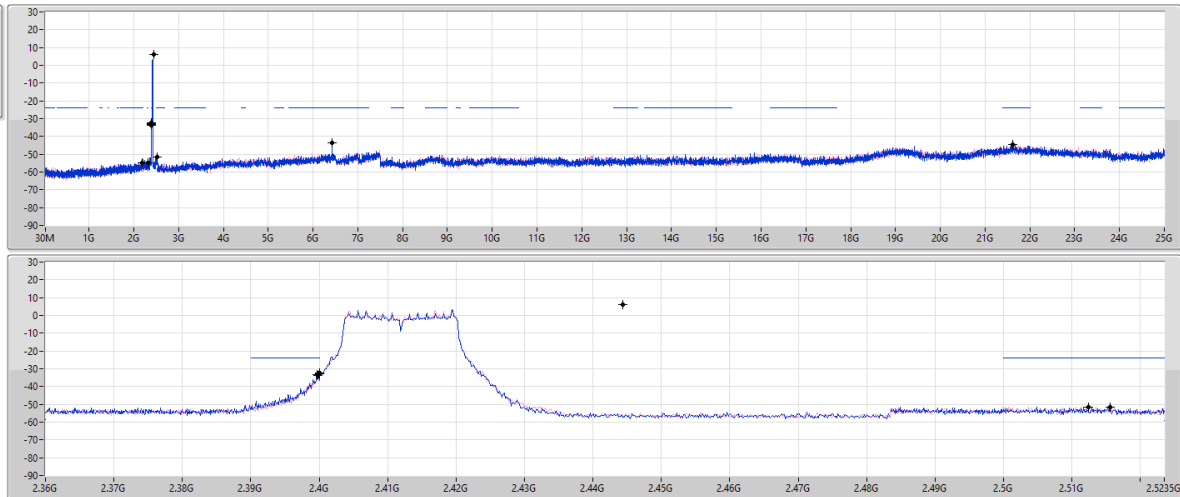
CSEndB

2412MHz

23/05/2023

RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

Port 1  
Port 2



| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.44442G | 5.93     | -24.07     | 2.18176G | -54.78     | 2.39978G | -33.39     | 2.4G     | -32.39     | 2.51538G | -51.55     | 6.4316G   | -43.80     | 1    |
| 2.44442G | 5.93     | -24.07     | 2.30874G | -54.75     | 2.39968G | -33.16     | 2.4G     | -32.75     | 2.51246G | -51.38     | 21.60886G | -44.31     | 2    |