



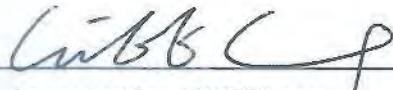
# FCC RADIO TEST REPORT

FCC ID : UXX-S5A950A  
Equipment : Advanced Edge Router with 4x4 dual-band AP  
Brand Name : Cradlepoint  
Model Name : S5A950A  
Applicant : Cradlepoint, Inc.  
1111 West Jefferson Street ,Boise ,Idaho,United States 83702  
Manufacturer : Cradlepoint, Inc.  
1111 West Jefferson Street ,Boise ,Idaho,United States 83702  
Standard : 47 CFR FCC Part 15.407

The product was received on Oct. 23, 2019, and testing was started from Nov. 07, 2019 and completed on Jan. 07, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

  
Approved by: Cliff Chang

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**  
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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**Appendix A. Test Results of AC Power-line Conducted Emissions****Appendix B. Test Results of Emission Bandwidth****Appendix C. Test Results of Maximum Conducted Output Power****Appendix D. Test Results of Peak Power Spectral Density****Appendix E. Test Results of Unwanted Emissions****Appendix F. Test Results of Radiated Emission Co-location****Appendix G. Test Photos****Photographs of EUT v01**



## History of this test report



## 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           | 15.407(a)       | Emission Bandwidth                | PASS               | -      |
| 3.3           | 15.407(a)       | Maximum Conducted Output Power    | PASS               | -      |
| 3.4           | 15.407(a)       | Peak Power Spectral Density       | PASS               | -      |
| 3.5           | 15.407(b)       | Unwanted Emissions                | PASS               | -      |

**Declaration of Conformity:**

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

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Sandy Chuang



# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

| Frequency Range (MHz) | IEEE Std. 802.11                       | Ch. Frequency (MHz) | Channel Number |
|-----------------------|----------------------------------------|---------------------|----------------|
| 5150-5250             | a, n (HT20), ac (VHT20),<br>ax (HEW20) | 5180-5240           | 36-48 [4]      |
| 5725-5850             |                                        | 5745-5825           | 149-165 [5]    |
| 5150-5250             | n (HT40), ac (VHT40),<br>ax (HEW40)    | 5190-5230           | 38-46 [2]      |
| 5725-5850             |                                        | 5755-5795           | 151-159 [2]    |
| 5150-5250             | ac (VHT80), ax (HEW80)                 | 5210                | 42 [1]         |
| 5725-5850             |                                        | 5775                | 155 [1]        |

| Band          | Mode              | BWch (MHz) | Nant |
|---------------|-------------------|------------|------|
| 5.15-5.25GHz  | 802.11a           | 20         | 4TX  |
| 5.15-5.25GHz  | 802.11n HT20      | 20         | 4TX  |
| 5.15-5.25GHz  | 802.11ac VHT20    | 20         | 4TX  |
| 5.15-5.25GHz  | 802.11ac VHT20-BF | 20         | 4TX  |
| 5.15-5.25GHz  | 802.11ax HEW20    | 20         | 4TX  |
| 5.15-5.25GHz  | 802.11ax HEW20-BF | 20         | 4TX  |
| 5.15-5.25GHz  | 802.11n HT40      | 40         | 4TX  |
| 5.15-5.25GHz  | 802.11ac VHT40    | 40         | 4TX  |
| 5.15-5.25GHz  | 802.11ac VHT40-BF | 40         | 4TX  |
| 5.15-5.25GHz  | 802.11ax HEW40    | 40         | 4TX  |
| 5.15-5.25GHz  | 802.11ax HEW40-BF | 40         | 4TX  |
| 5.15-5.25GHz  | 802.11ac VHT80    | 80         | 4TX  |
| 5.15-5.25GHz  | 802.11ac VHT80-BF | 80         | 4TX  |
| 5.15-5.25GHz  | 802.11ax HEW80    | 80         | 4TX  |
| 5.15-5.25GHz  | 802.11ax HEW80-BF | 80         | 4TX  |
| 5.725-5.85GHz | 802.11a           | 20         | 4TX  |
| 5.725-5.85GHz | 802.11n HT20      | 20         | 4TX  |
| 5.725-5.85GHz | 802.11ac VHT20    | 20         | 4TX  |
| 5.725-5.85GHz | 802.11ac VHT20-BF | 20         | 4TX  |
| 5.725-5.85GHz | 802.11ax HEW20    | 20         | 4TX  |
| 5.725-5.85GHz | 802.11ax HEW20-BF | 20         | 4TX  |
| 5.725-5.85GHz | 802.11n HT40      | 40         | 4TX  |
| 5.725-5.85GHz | 802.11ac VHT40    | 40         | 4TX  |
| 5.725-5.85GHz | 802.11ac VHT40-BF | 40         | 4TX  |
| 5.725-5.85GHz | 802.11ax HEW40    | 40         | 4TX  |



| Band          | Mode              | BWch (MHz) | Nant |
|---------------|-------------------|------------|------|
| 5.725-5.85GHz | 802.11ax HEW40-BF | 40         | 4TX  |
| 5.725-5.85GHz | 802.11ac VHT80    | 80         | 4TX  |
| 5.725-5.85GHz | 802.11ac VHT80-BF | 80         | 4TX  |
| 5.725-5.85GHz | 802.11ax HEW80    | 80         | 4TX  |
| 5.725-5.85GHz | 802.11ax HEW80-BF | 80         | 4TX  |

## Note:

- ◆ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ◆ VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ◆ HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ◆ BWch is the nominal channel bandwidth.
- ◆ Nss-Min is the minimum number of spatial streams.
- ◆ Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.



### 1.1.2 Antenna Information

#### <WLAN antenna gain>

| Ant. | Port | Brand | P/N          | Antenna Type | Connector   | Antenna Gain (dBi) |      | Cable Loss (dB) |     | True Gain (dBi) |      |
|------|------|-------|--------------|--------------|-------------|--------------------|------|-----------------|-----|-----------------|------|
|      |      |       |              |              |             | 2.4G               | 5G   | 2.4G            | 5G  | 2.4G            | 5G   |
| 1~4  | 1~4  | WNC   | 08.22100.011 | Dipole       | RP SMA Plug | 2.47               | 2.47 | 0.9             | 1.5 | 1.57            | 0.97 |

#### <WWAN antenna gain>

| Ant. | Port | Brand       | P/N        | Antenna Type | Connector | Gain (dBi)                     |  |
|------|------|-------------|------------|--------------|-----------|--------------------------------|--|
|      |      |             |            |              |           | Note 1 (WCDMA)<br>Note 2 (LTE) |  |
| 1~4  | 1~4  | Cradlepoint | 170760-000 | Dipole       | SMA Male  | Note 1 (WCDMA)<br>Note 2 (LTE) |  |

Note 1

| Ant. | Port | Band 2 |      | Band 4 |      |        | Band 5 |  |  |
|------|------|--------|------|--------|------|--------|--------|--|--|
|      |      | Band 2 | 1.34 | Band 4 | 0.86 | Band 5 | -0.57  |  |  |
| 1~4  | 1~4  |        |      |        |      |        |        |  |  |

Note 2

| Ant. | Port | Band 2 | Band 4 | Band 5 | Band 7 | Band 12 | Band 13 | Band 14 | Band 17 | Band 18 |
|------|------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
|      |      | 1.34   | 0.86   | -0.57  | 2.19   | 0.57    | 0.57    | 0.57    | 0.57    | -0.57   |
| 1~4  | 1~4  |        |        |        |        |         |         |         |         |         |

| Ant. | Port | Band 19 | Band 25 | Band 26 | Band 30 | Band 38 | Band 41 | Band 66 | Band 71 |
|------|------|---------|---------|---------|---------|---------|---------|---------|---------|
|      |      | -0.57   | 1.34    | -0.57   | 2.67    | 2.19    | 2.19    | 0.86    | 0.57    |
| 1~4  | 1~4  |         |         |         |         |         |         |         |         |

Note 2: The above information was declared by manufacturer.

#### For 2.4GHz function:

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

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

#### For 5GHz function:

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

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.



### 1.1.3 Table of WWAN module

| Module | Brand Name  | Model Name  | FCC ID                      | Function                                                                                              | Remark                                 |
|--------|-------------|-------------|-----------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------|
| 1      | Telit       | LM960       | RI7LM960                    | WCDMA Band 2, 4, 5 /<br>LTE Band 2, 4, 5, 7, 12,<br>13, 14, 17, 18, 19, 25,<br>26, 30, 38, 41, 66, 71 | Internal module<br>(would be marketed) |
| 2      | Cradlepoint | MC400-1200M | Contain FCC<br>ID: RI7LM960 |                                                                                                       |                                        |

### 1.1.4 Mode Test Duty Cycle

| Mode              | DC    | DCF(dB) | T(s)   | VBW(Hz) ≥ 1/T |
|-------------------|-------|---------|--------|---------------|
| 802.11a           | 0.942 | 0.26    | 1.98m  | 1k            |
| 802.11ax HEW20    | 0.961 | 0.17    | 5.449m | 300           |
| 802.11ax HEW20-BF | 0.961 | 0.17    | 1.961m | 1k            |
| 802.11ax HEW40    | 0.955 | 0.2     | 5.449m | 300           |
| 802.11ax HEW40-BF | 0.958 | 0.19    | 1.961m | 1k            |
| 802.11ax HEW80    | 0.958 | 0.19    | 5.449m | 300           |
| 802.11ax HEW80-BF | 0.929 | 0.32    | 1.98m  | 1k            |

Note:

- ◆ DC is Duty Cycle.
- ◆ DCF is Duty Cycle Factor.

### 1.1.5 EUT Operational Condition

|                                                                              |                                                                             |                                                |  |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------|--|
| EUT Power Type                                                               | From Power Adapter                                                          |                                                |  |
| Beamforming Function                                                         | <input checked="" type="checkbox"/> With beamforming                        | <input type="checkbox"/> Without beamforming   |  |
| The product has beamforming function for VHT/ax in 2.4GHz and ac/ax in 5GHz. |                                                                             |                                                |  |
| Function                                                                     | <input type="checkbox"/> Outdoor P2M                                        | <input checked="" type="checkbox"/> Indoor P2M |  |
|                                                                              | <input type="checkbox"/> Fixed P2P                                          | <input type="checkbox"/> Client                |  |
| Test Software Version                                                        | <For Non-Beamforming Mode> QSPR V5.0-00161<br><For Beamforming Mode> Telnet |                                                |  |

Note: The above information was declared by manufacturer.



## 1.2 Applicable 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
- ◆ FCC KDB 789033 D02 v02r01
- ◆ FCC KDB 662911 D01 v02r01
- ◆ FCC KDB 412172 D01 v01r01
- ◆ FCC KDB 414788 D01 v01r01

## 1.3 Testing Location Information

| Testing Location                    |        |                                                                                                                               |  |  |
|-------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------|--|--|
|                                     |        | ADD :                                                                                                                         |  |  |
| <input type="checkbox"/>            | HWA YA | ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)<br>TEL : 886-3-327-3456 FAX : 886-3-327-0973        |  |  |
| <input checked="" type="checkbox"/> | JHUBEI | ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.<br>TEL : 886-3-656-9065 FAX : 886-3-656-9085 |  |  |

| Test Condition                              | Test Site No. | Test Engineer | Test Environment     | Test Date                       |
|---------------------------------------------|---------------|---------------|----------------------|---------------------------------|
| RF Conducted                                | TH01-CB       | Owen Hsu      | 23.7-24.7°C / 57-61% | Nov. 07, 2019~<br>Nov. 08, 2019 |
| Radiated<br><Below 1GHz>                    | 03CH05-CB     | KJ Chang      | 18.1-19.1°C / 66-71% | Dec. 09, 2019~<br>Jan. 02, 2020 |
| Radiated<br><Radiated Emission Co-location> | 03CH01-CB     | KJ Chang      | 20.9-22.2°C / 53-56% | Jan. 07, 2020                   |
| Radiated<br><Above 1GHz>                    | 03CH01-CB     | KJ Chang      | 20.9-22.2°C / 53-56% | Dec. 09, 2019~<br>Jan. 02, 2020 |
| AC Conduction                               | CO01-CB       | GN Hou        | 22-24°C / 59-63%     | Dec. 05, 2019                   |

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

## 1.4 Measurement Uncertainty

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

| Test Items                           | Uncertainty | Remark                   |
|--------------------------------------|-------------|--------------------------|
| Conducted Emission (150kHz ~ 30MHz)  | 2.0 dB      | Confidence levels of 95% |
| Radiated Emission (30MHz ~ 1,000MHz) | 4.3 dB      | Confidence levels of 95% |
| Radiated Emission (1GHz ~ 18GHz)     | 4.3 dB      | Confidence levels of 95% |
| Radiated Emission (18GHz ~ 40GHz)    | 5.1 dB      | Confidence levels of 95% |
| Conducted Emission                   | 2.4 dB      | Confidence levels of 95% |
| Output Power Measurement             | 1.5 dB      | Confidence levels of 95% |
| Power Density Measurement            | 2.4 dB      | Confidence levels of 95% |
| Bandwidth Measurement                | 2%          | Confidence levels of 95% |



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

| Mode                              | Power Setting |
|-----------------------------------|---------------|
| 802.11a_Nss1,(6Mbps)_4TX          | -             |
| 5180MHz                           | 18            |
| 5200MHz                           | 23            |
| 5240MHz                           | 22            |
| 5745MHz                           | 23            |
| 5785MHz                           | 23            |
| 5825MHz                           | 23            |
| 802.11ax HEW20_Nss1,(MCS0)_4TX    | -             |
| 5180MHz                           | 18.5          |
| 5200MHz                           | 21.5          |
| 5240MHz                           | 22.5          |
| 5745MHz                           | 23            |
| 5785MHz                           | 23            |
| 5825MHz                           | 23            |
| 802.11ax HEW40_Nss1,(MCS0)_4TX    | -             |
| 5190MHz                           | 16            |
| 5230MHz                           | 19.5          |
| 5755MHz                           | 20.5          |
| 5795MHz                           | 21            |
| 802.11ax HEW80_Nss1,(MCS0)_4TX    | -             |
| 5210MHz                           | 16            |
| 5775MHz                           | 17.5          |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | -             |
| 5180MHz                           | 23            |
| 5200MHz                           | 24            |
| 5240MHz                           | 24            |
| 5745MHz                           | 24            |
| 5785MHz                           | 24            |
| 5825MHz                           | 24            |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | -             |
| 5190MHz                           | 22            |
| 5230MHz                           | 23            |
| 5755MHz                           | 22            |
| 5795MHz                           | 24            |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | -             |
| 5210MHz                           | 21            |



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Report No. : FR9O2202AB

| Mode    | Power Setting |
|---------|---------------|
| 5775MHz | 21            |

Note:

- There are two modes of EUT, one is beamforming mode, and the other is Non-beamforming mode for VHT/ax in 2.4GHz and ac/ax in 5GHz. Beamforming mode and Non-beamforming mode has been test and record in this test report.



## 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               |
| <b>Operating Mode</b>                                                                                                         | Normal Link                                                            |
| 1                                                                                                                             | EUT + Adapter 1 (Testing internal module - LTE B2)                     |
| 2                                                                                                                             | EUT + Adapter 2 (Testing internal module - LTE B2)                     |
| Mode 1 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3~5 will follow this same test mode. |                                                                        |
| 3                                                                                                                             | EUT + Adapter 1 (Testing internal module - WCDMA B2)                   |
| 4                                                                                                                             | EUT + Adapter 1 + External module (Testing external module - LTE B2)   |
| 5                                                                                                                             | EUT + Adapter 1 + External module (Testing external module - WCDMA B2) |
| For operating mode 4 is the worst case and it was record in this test report.                                                 |                                                                        |

| The Worst Case Mode for Following Conformance Tests |                                                                                     |
|-----------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Tests Item</b>                                   | Emission Bandwidth<br>Maximum Conducted Output Power<br>Peak Power Spectral Density |
| <b>Test Condition</b>                               | Conducted measurement at transmit chains                                            |



| The Worst Case Mode for Following Conformance Tests                                                                                                                                                                        |                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tests Item</b>                                                                                                                                                                                                          | Unwanted Emissions                                                                                                                                                                                                                                  |
| <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                                                                                                                                                                                                                                                 |
| The EUT can be placed in X-axis, Y-axis and Z-axis.<br>EUT X axis has been evaluated to be the worst case at Emissions in Unwanted Emissions <Above 1GHz>; thus, the measurement will follow this same test configuration. |                                                                                                                                                                                                                                                     |
| 1                                                                                                                                                                                                                          | EUT in X axis + 2.4GHz + Adapter 1                                                                                                                                                                                                                  |
| 2                                                                                                                                                                                                                          | EUT in X axis + 2.4GHz + Adapter 2                                                                                                                                                                                                                  |
| Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mod                                                                                                  |                                                                                                                                                                                                                                                     |
| 3                                                                                                                                                                                                                          | EUT in X axis + 5GHz + Adapter 2                                                                                                                                                                                                                    |
| For operating mode 2 is the worst case and it was record in this test report.                                                                                                                                              |                                                                                                                                                                                                                                                     |
| <b>Operating Mode &gt; 1GHz</b>                                                                                                                                                                                            | CTX                                                                                                                                                                                                                                                 |
| 1                                                                                                                                                                                                                          | EUT in X axis                                                                                                                                                                                                                                       |
| The EUT can be placed in X-axis, Y-axis and Z-axis. After evaluating, X-axis was the worst case, so the test will follow this same test configuration.                                                                     |                                                                                                                                                                                                                                                     |

| The Worst Case Mode for Following Conformance Tests    |                                                                    |
|--------------------------------------------------------|--------------------------------------------------------------------|
| <b>Tests Item</b>                                      | Simultaneous Transmission Analysis - Radiated Emission Co-location |
| <b>Test Condition</b>                                  | Radiated measurement                                               |
| <b>Operating Mode</b>                                  | Normal Link                                                        |
| 1                                                      | WLAN 2.4GHz + 5GHz                                                 |
| Refer to Appendix F for Radiated Emission Co-location. |                                                                    |

| The Worst Case Mode for Following Conformance Tests                                |                                                                         |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>Tests Item</b>                                                                  | Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation |
| <b>Operating Mode</b>                                                              |                                                                         |
| 1                                                                                  | WLAN 2.4GHz + WLAN 5GHz + external module                               |
| 2                                                                                  | WLAN 2.4GHz + WLAN 5GHz + internal module                               |
| Refer to Sporton Test Report No.: FA9O2202 for Co-location RF Exposure Evaluation. |                                                                         |



## 2.3 EUT Operation during Test

For CTX Mode:

<non-beamforming mode>

The EUT was programmed to be in continuously transmitting mode.

<beamforming mode>

During the test, the following programs under WIN XP were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by RX Device and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.



## 2.4 Accessories

| Accessories                       |            |              |                                                          |                                       |
|-----------------------------------|------------|--------------|----------------------------------------------------------|---------------------------------------|
| Equipment Name                    | Brand Name | Model Name   | Rating                                                   | Remark                                |
| Adapter 1                         | FSP        | FSP180-AWAN3 | Input: 100-240Vac, 2.3A, 50-60Hz<br>Output: 54Vdc, 3.34A | With the cable:<br>Non-shielded, 1.6m |
| Adapter 2                         | DELTA      | ADP-180AR B  | Input: 100-240Vac, 2.6A, 50-60Hz<br>Output: 54Vdc, 3.33A | With the cable:<br>Non-shielded, 1.6m |
| Battery                           | maxell     | CR2032       | DC 3V                                                    | -                                     |
| Other                             |            |              |                                                          |                                       |
| Power cable*1: Non-shielded, 0.4m |            |              |                                                          |                                       |



## 2.5 Support Equipment

For AC Conduction:

| Support Equipment |                 |             |               |                         |
|-------------------|-----------------|-------------|---------------|-------------------------|
| No.               | Equipment       | Brand Name  | Model Name    | FCC ID                  |
| A                 | Flash disk3.0   | Transcend   | 639205 7755   | N/A                     |
| B                 | 2.5G WAN NB     | DELL        | E6430         | N/A                     |
| C                 | 1G PoE LAN NB   | DELL        | E6430         | N/A                     |
| D                 | 1G LAN NB       | DELL        | E6430         | N/A                     |
| E                 | 2.4G NB         | SAMPO       | HT-B 907WL    | N/A                     |
| F                 | 5G NB           | SAMPO       | HT-B 907WL    | N/A                     |
| G                 | Nu stream       | X TRAMUS    | NuStreams-600 | N/A                     |
| H                 | Nu stream NB    | DELL        | E6430         | N/A                     |
| I                 | GPS antenna     | taoglas     | AA.162        | N/A                     |
| J                 | GPS simulator   | WELNAVIGATE | GS-100        | N/A                     |
| K                 | Base station    | Anritsu     | MT8820C       | N/A                     |
| L                 | SIM card        | N/A         | N/A           | N/A                     |
| M                 | External module | Cradlepoint | MC400-1200M   | Contain FCC ID:RI7LM960 |

For Radiated (below 1GHz):

| Support Equipment |           |            |            |        |
|-------------------|-----------|------------|------------|--------|
| No.               | Equipment | Brand Name | Model Name | FCC ID |
| A                 | Notebook  | DELL       | E4300      | N/A    |

For Radiated (above 1GHz) and RF Conducted:

<For Non-Beamforming Mode>

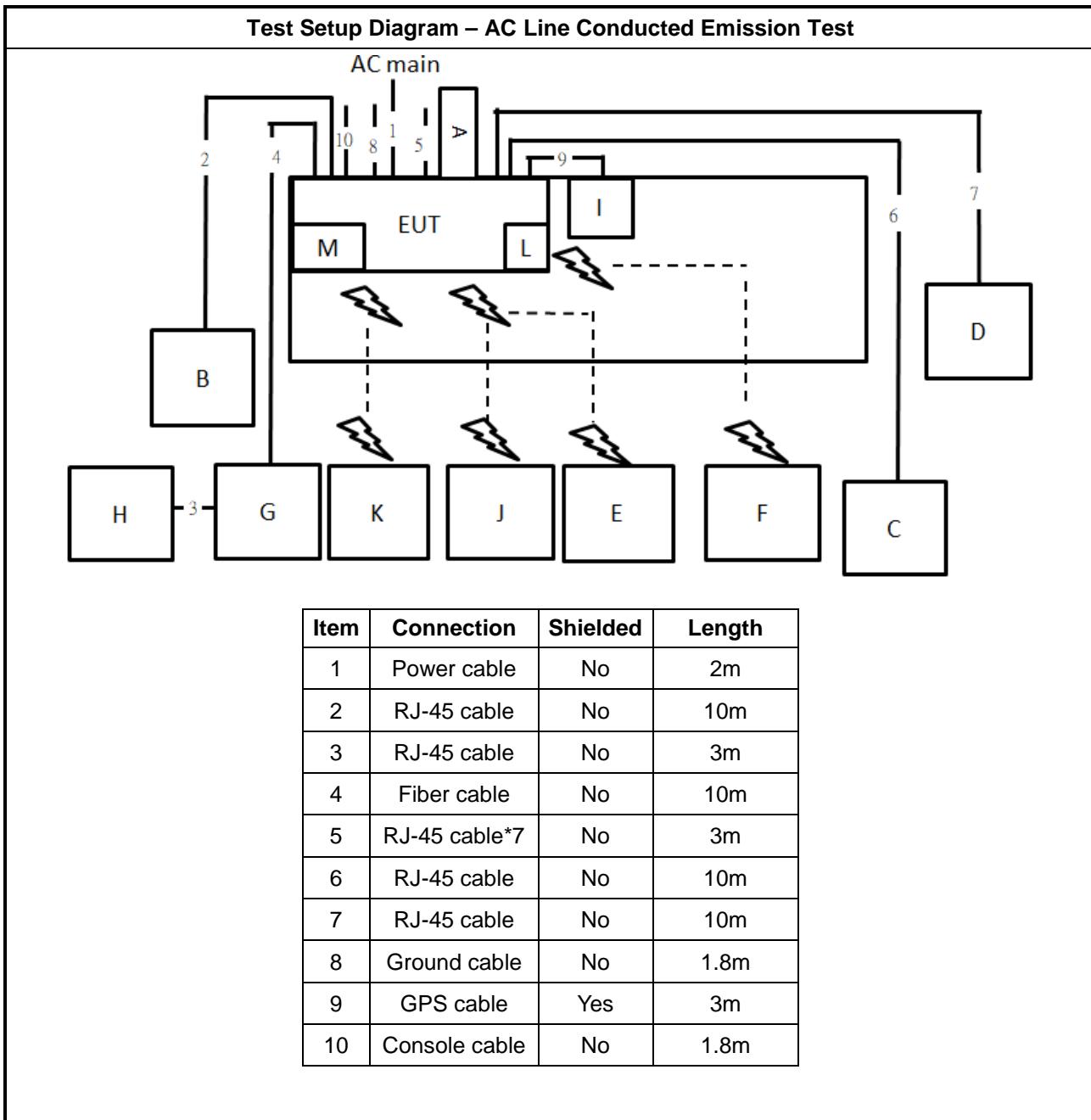
| Support Equipment |           |            |            |        |
|-------------------|-----------|------------|------------|--------|
| No.               | Equipment | Brand Name | Model Name | FCC ID |
| A                 | Notebook  | DELL       | E4300      | N/A    |

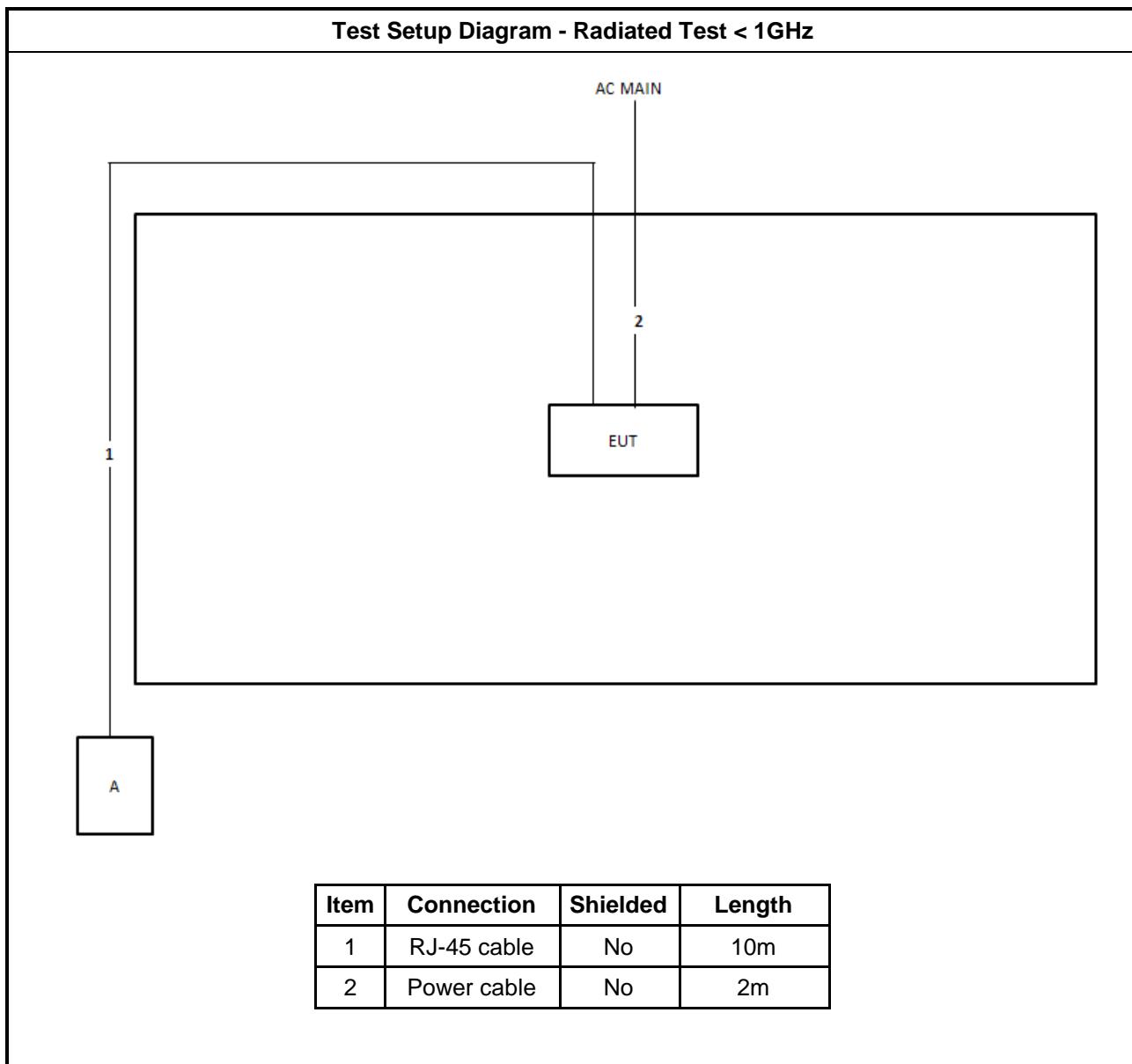
<For Beamforming Mode>

| Support Equipment |           |            |                   |        |
|-------------------|-----------|------------|-------------------|--------|
| No.               | Equipment | Brand Name | Model Name        | FCC ID |
| A                 | Notebook  | DELL       | E4300             | N/A    |
| B                 | Notebook  | DELL       | E4300             | N/A    |
| C                 | RX Device | WNC        | SEQC-D1 / S5A950A | N/A    |



## 2.6 Test Setup Diagram

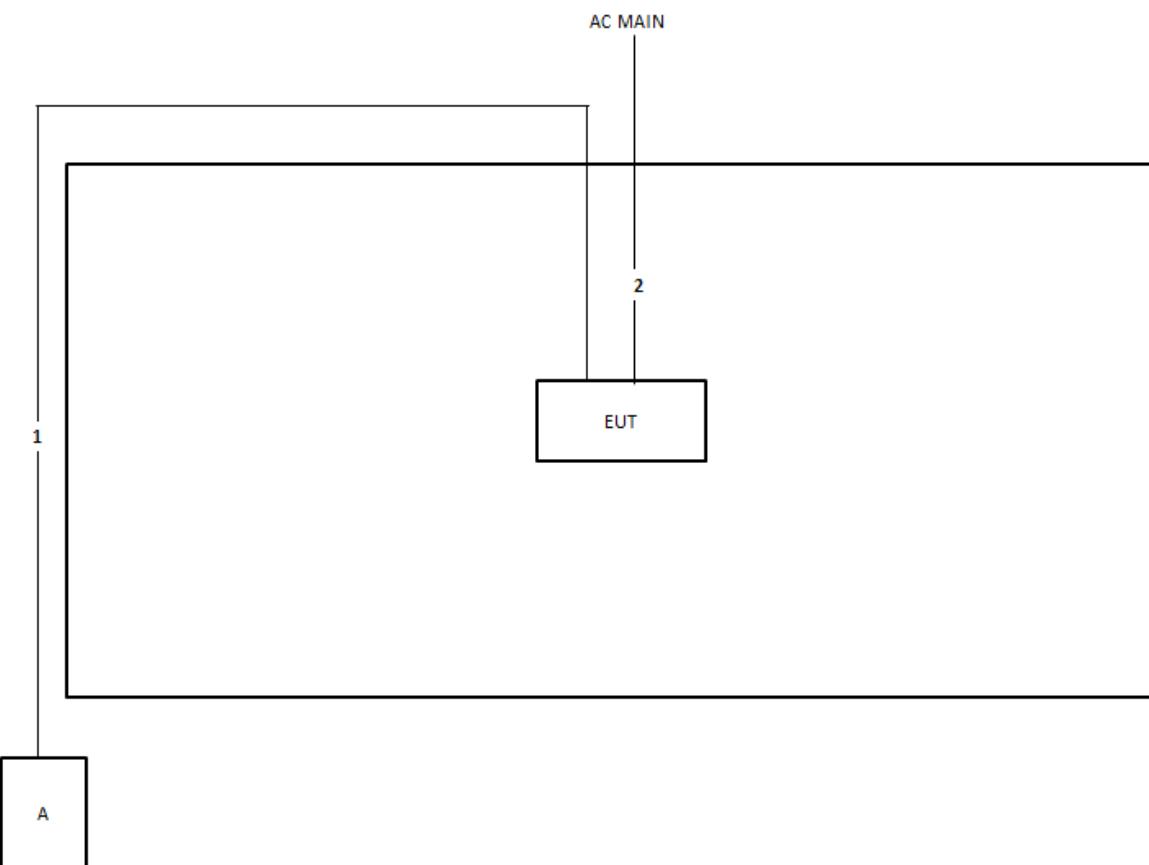






## Test Setup Diagram - Radiated Test &gt; 1GHz

&lt;For Non-Beamforming Mode&gt;

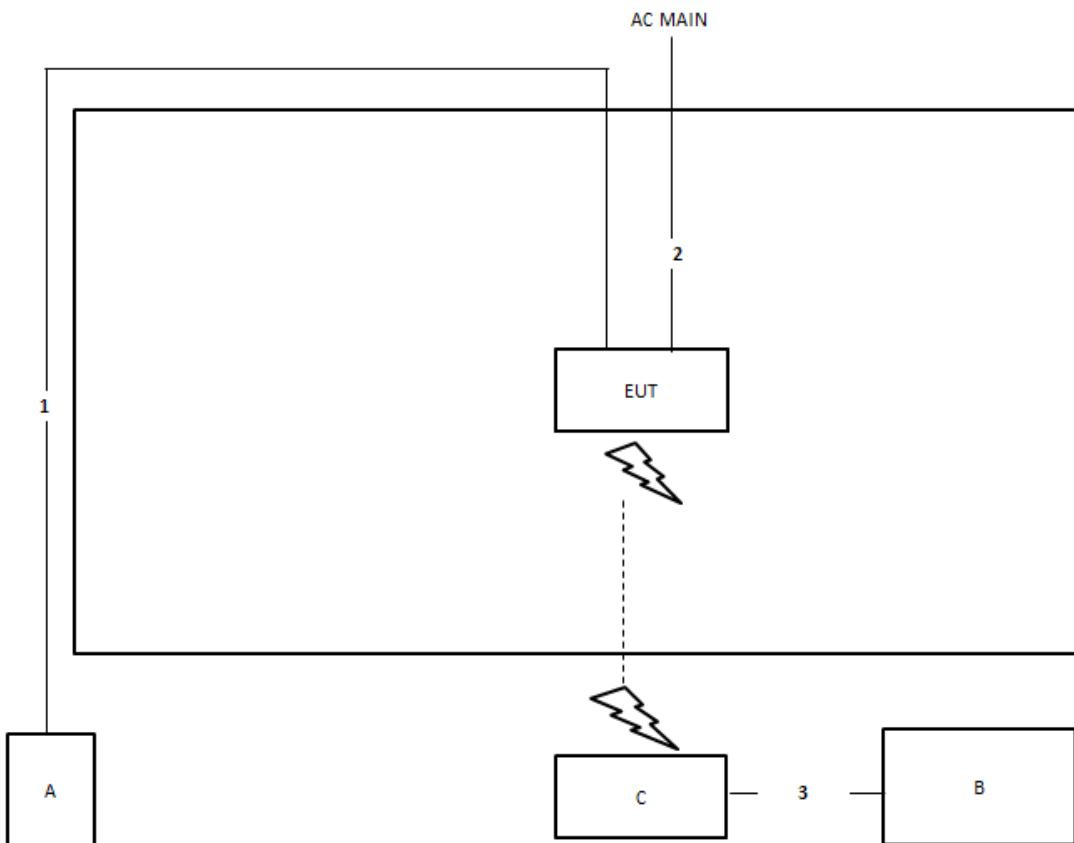


| Item | Connection  | Shielded | Length |
|------|-------------|----------|--------|
| 1    | RJ-45 cable | No       | 10m    |
| 2    | Power cable | No       | 2m     |



## Test Setup Diagram - Radiated Test &gt; 1GHz

&lt;For Beamforming Mode&gt;



| Item | Connection  | Shielded | Length |
|------|-------------|----------|--------|
| 1    | RJ-45 cable | No       | 10m    |
| 2    | Power cable | No       | 2m     |
| 3    | RJ-45 cable | No       | 1.5m   |



### 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.

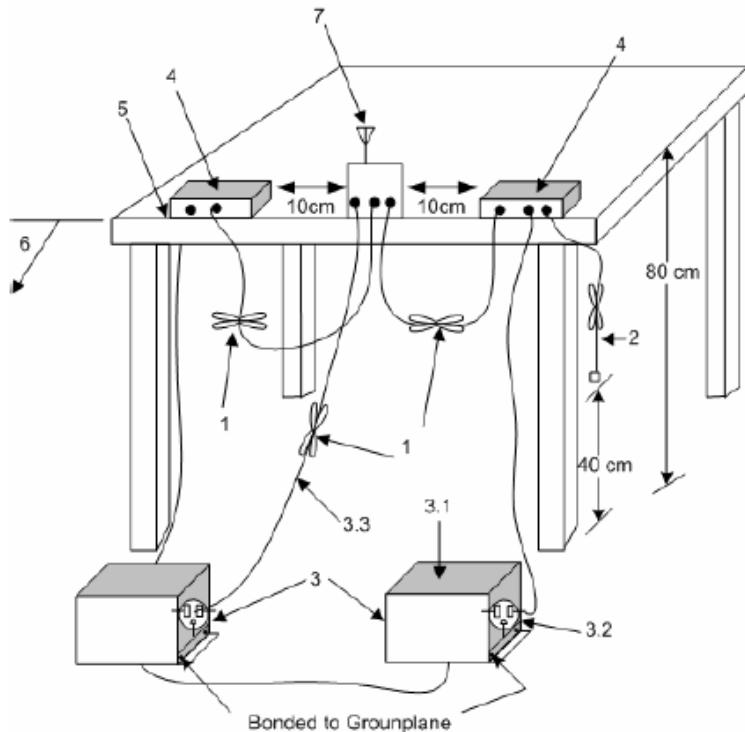
##### 3.1.3 Test Procedures

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



### 3.1.4 Test Setup

#### AC Power-line Conducted Emissions



- 1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
- 2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- 3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in  $50 \Omega$  loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
- 3.1—All other equipment powered from additional LISN(s).
- 3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
- 3.3—LISN at least 80 cm from nearest part of EUT chassis.
- 4—Non-EUT components of EUT system being tested.
- 5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
- 6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
- 7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

### 3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A



## 3.2 Emission Bandwidth

### 3.2.1 Emission Bandwidth Limit

| Emission Bandwidth Limit            |                                                                                                                                                                                           |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UNII Devices</b>                 |                                                                                                                                                                                           |
| <input checked="" type="checkbox"/> | For the 5.15-5.25 GHz band, N/A                                                                                                                                                           |
| <input type="checkbox"/>            | For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in MHz.    |
| <input type="checkbox"/>            | For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in MHz.   |
| <input checked="" type="checkbox"/> | For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq 500\text{kHz}$ .                                                                                                               |
| <b>LE-LAN Devices</b>               |                                                                                                                                                                                           |
| <input type="checkbox"/>            | For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz.                      |
| <input type="checkbox"/>            | For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz                        |
| <input type="checkbox"/>            | For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz |
| <input type="checkbox"/>            | For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq 500\text{kHz}$ .                                                                                                               |

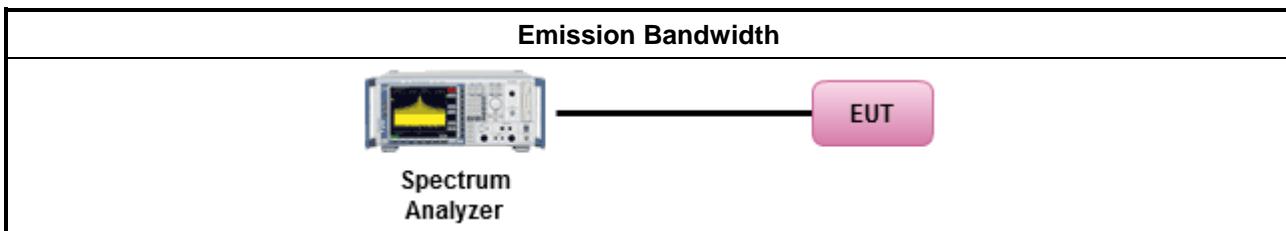
### 3.2.2 Measuring Instruments

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 FCC KDB 789033, clause C for EBW and clause D for OBW measurement.  |
| <input type="checkbox"/>            | Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.           |
| <input type="checkbox"/>            | Refer as IC RSS-Gen, clause 4.6 for 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                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UNII Devices</b>                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:                                                                                                                                                                                                                                   | <ul style="list-style-type: none"><li>▪ Outdoor AP: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6 \text{ dBi}</math>, then <math>P_{Out} = 30 - (G_{TX} - 6)</math>. e.i.r.p. at any elevation angle above 30 degrees <math>\leq 125\text{mW}</math> [21dBm]</li><li>▪ Indoor AP: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6 \text{ dBi}</math>, then <math>P_{Out} = 30 - (G_{TX} - 6)</math></li><li>▪ Point-to-point AP: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 23 \text{ dBi}</math>, then <math>P_{Out} = 30 - (G_{TX} - 23)</math>.</li><li>▪ Mobile or Portable Client: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 250 mW. If <math>G_{TX} &gt; 6 \text{ dBi}</math>, then <math>P_{Out} = 24 - (G_{TX} - 6)</math>.</li></ul> |
| <input type="checkbox"/> For the 5.25-5.35 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6 \text{ dBi}$ , then $P_{Out} = 24 - (G_{TX} - 6)$ .  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <input type="checkbox"/> For the 5.47-5.725 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6 \text{ dBi}$ , then $P_{Out} = 24 - (G_{TX} - 6)$ . |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:                                                                                                                                                                                                                                  | <ul style="list-style-type: none"><li>▪ Point-to-multipoint systems (P2M): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6 \text{ dBi}</math>, then <math>P_{Out} = 30 - (G_{TX} - 6)</math>.</li><li>▪ Point-to-point systems (P2P): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>LE-LAN Devices</b>                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <input type="checkbox"/> For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz.                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <input type="checkbox"/> For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <input type="checkbox"/> For the 5.725-5.85 GHz band:                                                                                                                                                                                                                                             | <ul style="list-style-type: none"><li>▪ Point-to-multipoint systems (P2M): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6 \text{ dBi}</math>, then <math>P_{Out} = 30 - (G_{TX} - 6)</math>.</li><li>▪ Point-to-point systems (P2P): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b><math>P_{Out}</math> = maximum conducted output power in dBm,<br/><math>G_{TX}</math> = the maximum transmitting antenna directional gain in dBi.</b>                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



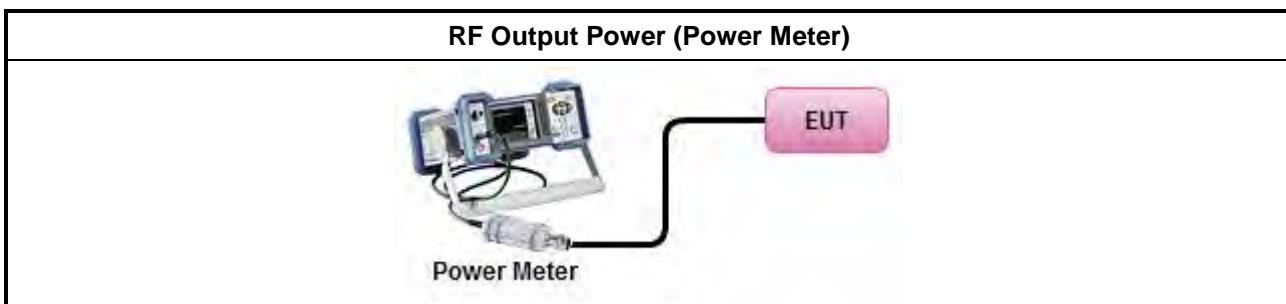
### 3.3.2 Measuring Instruments

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

### 3.3.3 Test Procedures

| Test Method                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ▪ Maximum Conducted Output Power |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                  | Average over on/off periods with duty factor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                  | <input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                  | <input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                  | Wideband RF power meter and average over on/off periods with duty factor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                  | <input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| ▪ For conducted measurement.     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                  | <ul style="list-style-type: none"><li>▪ If the EUT supports multiple transmit chains using options given below:<br/>Refer as FCC 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><li>▪ If multiple transmit chains, EIRP calculation could be following as methods:<br/><math>P_{total} = P_1 + P_2 + \dots + P_n</math><br/>(calculated in linear unit [mW] and transfer to log unit [dBm])<br/><math>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 Peak Power Spectral Density

### 3.4.1 Peak Power Spectral Density Limit

| Peak Power Spectral Density Limit                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UNII Devices</b>                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:                                                                                                                                                                                                                                 | <ul style="list-style-type: none"><li>▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 17 - (G_{TX} - 6)</math>.</li><li>▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 17 - (G_{TX} - 6)</math>.</li><li>▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If <math>G_{TX} &gt; 23</math> dBi, then <math>P_{Out} = 17 - (G_{TX} - 23)</math>.</li><li>▪ Mobile or Portable Client: the peak power spectral density (PPSD) <math>\leq 11</math> dBm/MHz. If <math>G_{TX} &gt; 6</math> dBi, then PPSD= <math>11 - (G_{TX} - 6)</math>..</li></ul> |
| <input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= $11 - (G_{TX} - 6)$ .                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <input type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= $11 - (G_{TX} - 6)$ .                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:                                                                                                                                                                                                                                | <ul style="list-style-type: none"><li>▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz. If <math>G_{TX} &gt; 6</math> dBi, then PPSD= <math>30 - (G_{TX} - 6)</math>.</li><li>▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>LE-LAN Devices</b>                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <input type="checkbox"/> For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) $\leq 10$ dBm/MHz.                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz.                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz.                                                                                                                                                           | <ul style="list-style-type: none"><li>▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where <math>\theta</math> is the angle above the local horizontal plane (of the Earth) as shown below:<br/>-13 dBW/MHz for <math>0^\circ \leq \theta &lt; 8^\circ</math> ; -13 – 0.716 (<math>\theta</math>-8) dBW/MHz for <math>8^\circ \leq \theta &lt; 40^\circ</math><br/>-35.9 – 1.22 (<math>\theta</math>-40) dBW/MHz for <math>40^\circ \leq \theta \leq 45^\circ</math> ; -42 dBW/MHz for <math>\theta &gt; 45^\circ</math></li></ul>                                                                                                                                                                                                                                |
| <input type="checkbox"/> For the 5.725-5.85 GHz band:                                                                                                                                                                                                                                           | <ul style="list-style-type: none"><li>▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz. If <math>G_{TX} &gt; 6</math> dBi, then PPSD= <math>30 - (G_{TX} - 6)</math>.</li><li>▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>PPSD</b> = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz<br><b>G<sub>TX</sub></b> = the maximum transmitting antenna directional gain in dBi. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |



### 3.4.2 Measuring Instruments

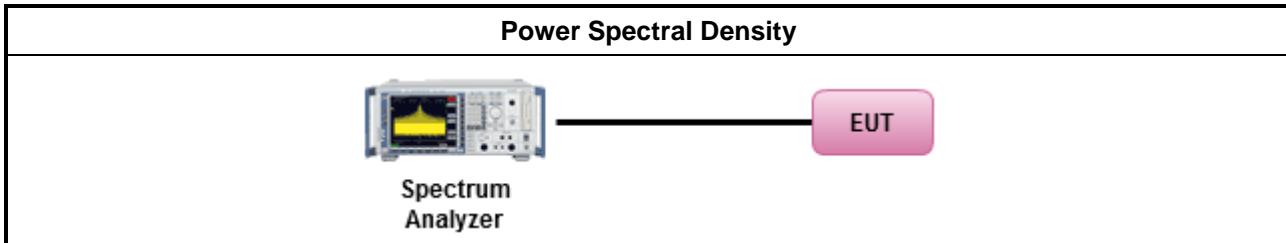
Refer a test equipment and calibration data table in this test report.

### 3.4.3 Test Procedures

| Test Method                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:</li></ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <input type="checkbox"/> Refer as FCC KDB 789033, F5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth                                                                                                                                                                                                  | [duty cycle ≥ 98% or external video / power trigger]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)                                                                                                                                                                                                                                                                               | duty cycle < 98% and average over on/off periods with duty factor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <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:</li></ul>                                                                                                                                                                                                                                                                       | <input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC 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. |
|                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/> Option 3: Measure and add $10 \log(N)$ dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with $10 \log(N)$ . Or each transmit chains shall be add $10 \log(N)$ to compared with the limit.                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"><li>▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods:<br/><math>PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n</math><br/>(calculated in linear unit [mW] and transfer to log unit [dBm])<br/><math>EIRP_{total} = PPSD_{total} + DG</math></li></ul>                                                                                                                                                                                                                                                                                                                                                                                     |



### 3.4.4 Test Setup



### 3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D



## 3.5 Unwanted Emissions

### 3.5.1 Transmitter Unwanted Emissions Limit

| Unwanted emissions below 1 GHz and restricted band emissions above 1GHz 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.

| Un-restricted band emissions above 1GHz Limit        |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Band                                       | Limit                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <input checked="" type="checkbox"/> 5.15 - 5.25 GHz  | e.i.r.p. -27 dBm [68.2 dBuV/m@3m]                                                                                                                                                                                                                                                                                                                                                                                               |
| <input type="checkbox"/> 5.25 - 5.35 GHz             | e.i.r.p. -27 dBm [68.2 dBuV/m@3m]                                                                                                                                                                                                                                                                                                                                                                                               |
| <input type="checkbox"/> 5.47 - 5.725 GHz            | e.i.r.p. -27 dBm [68.2 dBuV/m@3m]                                                                                                                                                                                                                                                                                                                                                                                               |
| <input checked="" type="checkbox"/> 5.725 - 5.85 GHz | all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. |

Note 1: 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).

### 3.5.2 Measuring Instruments

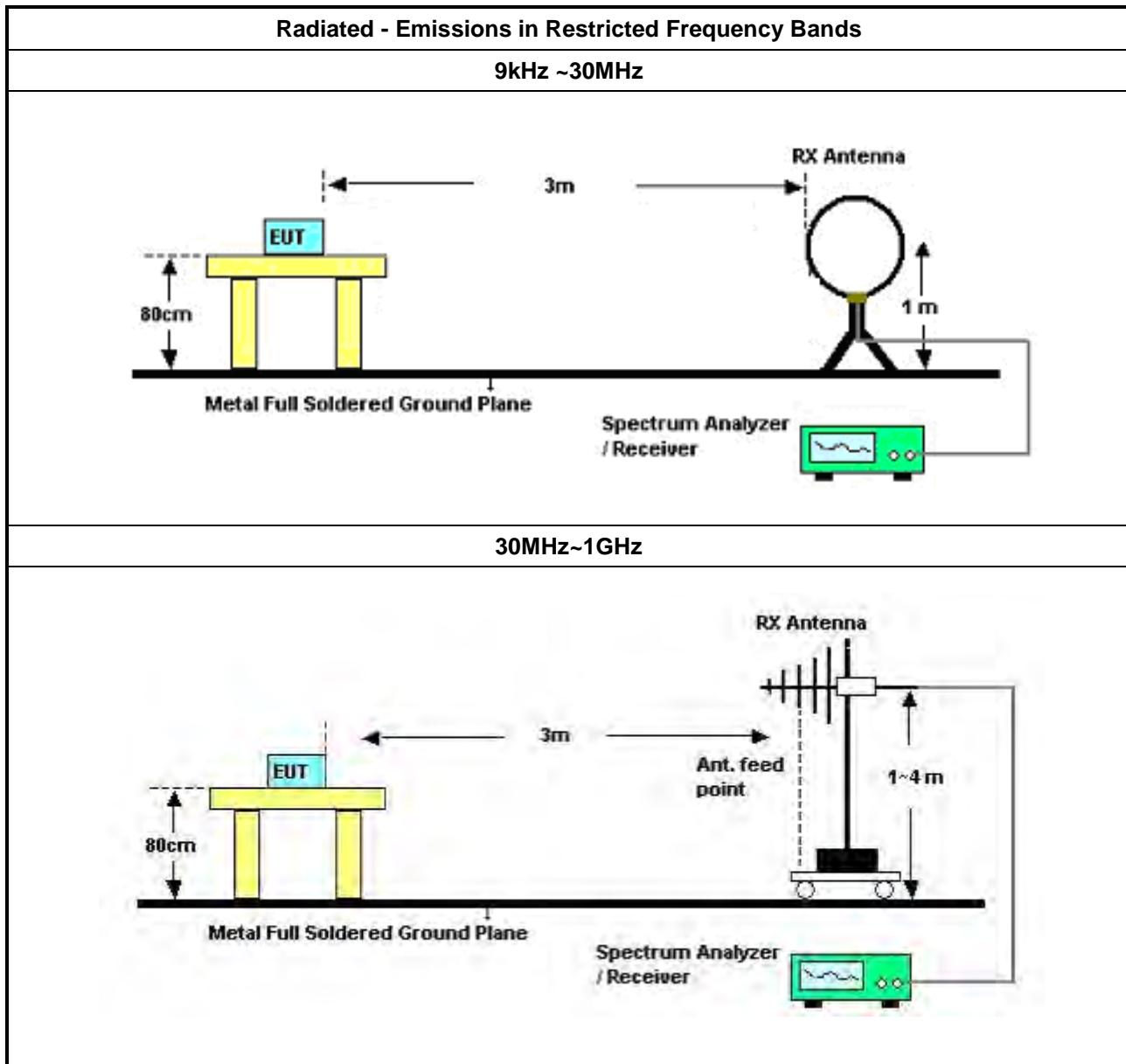
Refer a test equipment and calibration data table in this test report.

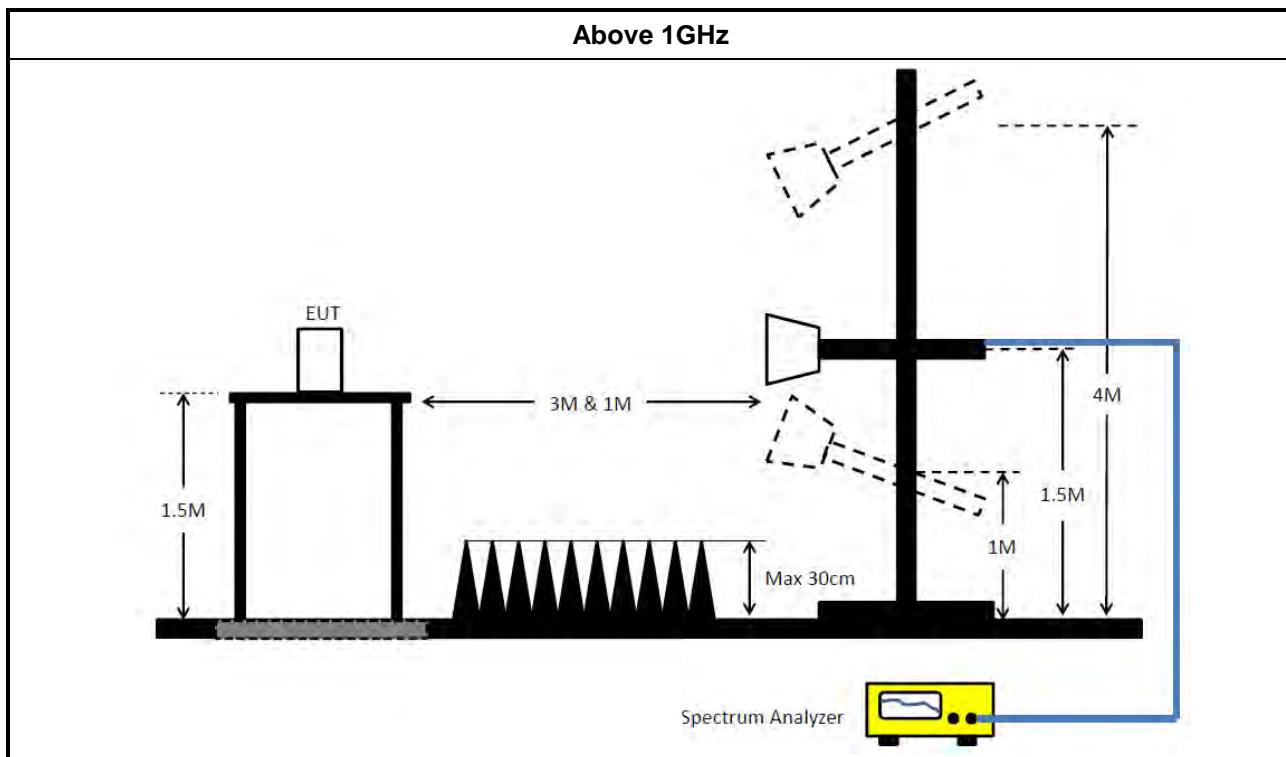
### 3.5.3 Test Procedures

| Test Method                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| ▪ 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. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. 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). |                                                                                                                         |
| ▪ The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                         |
| ▪ For the transmitter unwanted emissions shall be measured using following options below:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ▪ Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ▪ Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input checked="" type="checkbox"/> Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.                       |
| ▪ For radiated measurement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.                                                   |
| ▪ The any unwanted emissions level shall not exceed the fundamental emission level.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                         |
| ▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                         |



### 3.5.4 Test Setup





### 3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

### 3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

### 3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



## 4 Test Equipment and Calibration Data

| Instrument                        | Manufacturer | Model No.          | Serial No.       | Characteristics | Calibration Date | Calibration Due Date | Remark                |
|-----------------------------------|--------------|--------------------|------------------|-----------------|------------------|----------------------|-----------------------|
| EMI Receiver                      | Agilent      | N9038A             | My52260123       | 9kHz ~ 8.45GHz  | Jan. 28, 2019    | Jan. 29, 2020        | Conduction (CO01-CB)  |
| LISN                              | F.C.C.       | FCC-LISN-50-16-2   | 04083            | 150kHz ~ 100MHz | Dec. 24, 2018    | Dec. 23, 2019        | Conduction (CO01-CB)  |
| LISN                              | Schwarzbeck  | NSLK 8127          | 8127647          | 9kHz ~ 30MHz    | Jan. 11, 2019    | Jan. 10, 2020        | Conduction (CO01-CB)  |
| COND Cable                        | Woken        | Cable              | Low cable-CO01   | 9kHz ~ 30MHz    | May 21, 2019     | May 20, 2020         | Conduction (CO01-CB)  |
| Software                          | Audix        | E3                 | 6.120210n        | -               | N.C.R.           | N.C.R.               | Conduction (CO01-CB)  |
| Loop Antenna                      | Teseq        | HLA 6120           | 24155            | 9kHz - 30 MHz   | Mar. 29, 2019    | Mar. 28, 2020        | Radiation (03CH05-CB) |
| Bilog Antenna with 6dB Attenuator | TESE & EMCI  | CBL 6112D & N-6-06 | 35236 & AT-N0610 | 30MHz ~ 2GHz    | Mar. 28, 2019    | Mar. 27, 2020        | Radiation (03CH05-CB) |
| Pre-Amplifier                     | EMCI         | EMC330N            | 980331           | 20MHz ~ 3GHz    | May 01, 2019     | Apr. 30, 2020        | Radiation (03CH05-CB) |
| Spectrum Analyzer                 | R&S          | FSP40              | 100304           | 9kHz ~ 40GHz    | Aug. 15, 2019    | Aug. 14, 2020        | Radiation (03CH05-CB) |
| EMI Test Receiver                 | R&S          | ESCS               | 826547/017       | 9kHz ~ 2.75GHz  | May 15, 2019     | May 14, 2020         | Radiation (03CH05-CB) |
| RF Cable-low                      | Woken        | RG402              | LOW Cable-04+23  | 30MHz-1GHz      | Oct. 07, 2019    | Oct. 06, 2020        | Radiation (03CH05-CB) |
| Horn Antenna                      | ETS-LINDGREN | 3115               | 00075790         | 750MHz ~ 18GHz  | Nov. 04, 2019    | Nov. 03, 2020        | Radiation (03CH01-CB) |
| Horn Antenna                      | Schwarzbeck  | BBHA 9170          | BBHA9170252      | 15GHz ~ 40GHz   | Jun. 27, 2019    | Jun. 26, 2020        | Radiation (03CH01-CB) |
| Pre-Amplifier                     | Agilent      | 8449B              | 3008A02310       | 1GHz ~ 26.5GHz  | Jan. 08, 2019    | Jan. 07, 2020        | Radiation (03CH01-CB) |
| Spectrum Analyzer                 | R&S          | FSP40              | 100056           | 9kHz ~ 40GHz    | Jan. 31, 2019    | Jan. 30, 2020        | Radiation (03CH01-CB) |
| RF Cable-high                     | Woken        | RG402              | High Cable-16    | 1 GHz ~ 18 GHz  | Oct. 07, 2019    | Oct. 06, 2020        | Radiation (03CH01-CB) |
| RF Cable-high                     | Woken        | RG402              | High Cable-16+17 | 1 GHz ~ 18 GHz  | Oct. 07, 2019    | Oct. 06, 2020        | Radiation (03CH01-CB) |
| RF Cable-high                     | Woken        | RG402              | High Cable-40G#1 | 18GHz ~ 40 GHz  | Jul. 24, 2019    | Jul. 23, 2020        | Radiation (03CH01-CB) |

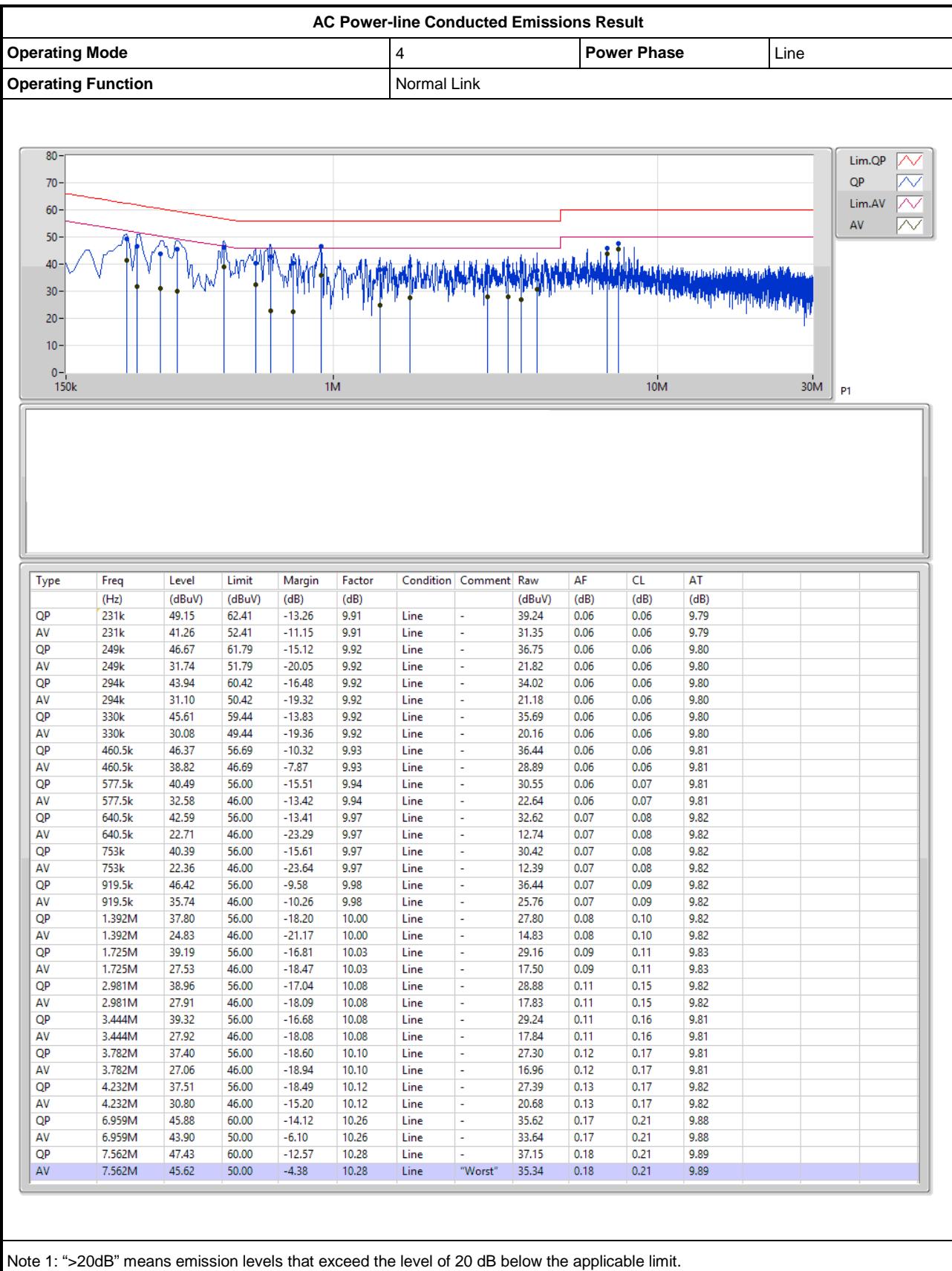
**FCC RADIO TEST REPORT**

Report No. : FR9O2202AB

| Instrument        | Manufacturer | Model No. | Serial No.       | Characteristics  | Calibration Date | Calibration Due Date | Remark                |
|-------------------|--------------|-----------|------------------|------------------|------------------|----------------------|-----------------------|
| RF Cable-high     | Woken        | RG402     | High Cable-40G#2 | 18GHz ~ 40 GHz   | Jul. 24, 2019    | Jul. 23, 2020        | Radiation (03CH01-CB) |
| Spectrum analyzer | R&S          | FSV40     | 100979           | 9kHz~40GHz       | Feb. 25, 2019    | Feb. 24, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken        | RG402     | High Cable-06    | 1 GHz – 26.5 GHz | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken        | RG402     | High Cable-07    | 1 GHz –26.5 GHz  | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken        | RG402     | High Cable-08    | 1 GHz –26.5 GHz  | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken        | RG402     | High Cable-09    | 1 GHz –26.5 GHz  | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken        | RG402     | High Cable-10    | 1 GHz –26.5 GHz  | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken        | RG402     | High Cable-28    | 1 GHz –26.5 GHz  | Nov. 19, 2018    | Nov. 18, 2019        | Conducted (TH01-CB)   |
| Power Sensor      | Agilent      | E9327A    | US40442088       | 50MHz~18GHz      | Jan. 15, 2019    | Jan. 14, 2020        | Conducted (TH01-CB)   |
| Power Meter       | Agilent      | E4416A    | GB41291199       | 50MHz~18GHz      | Jan. 15, 2019    | Jan. 14, 2020        | Conducted (TH01-CB)   |

Note: Calibration Interval of instruments listed above is one year.

NCR means Non-Calibration required.



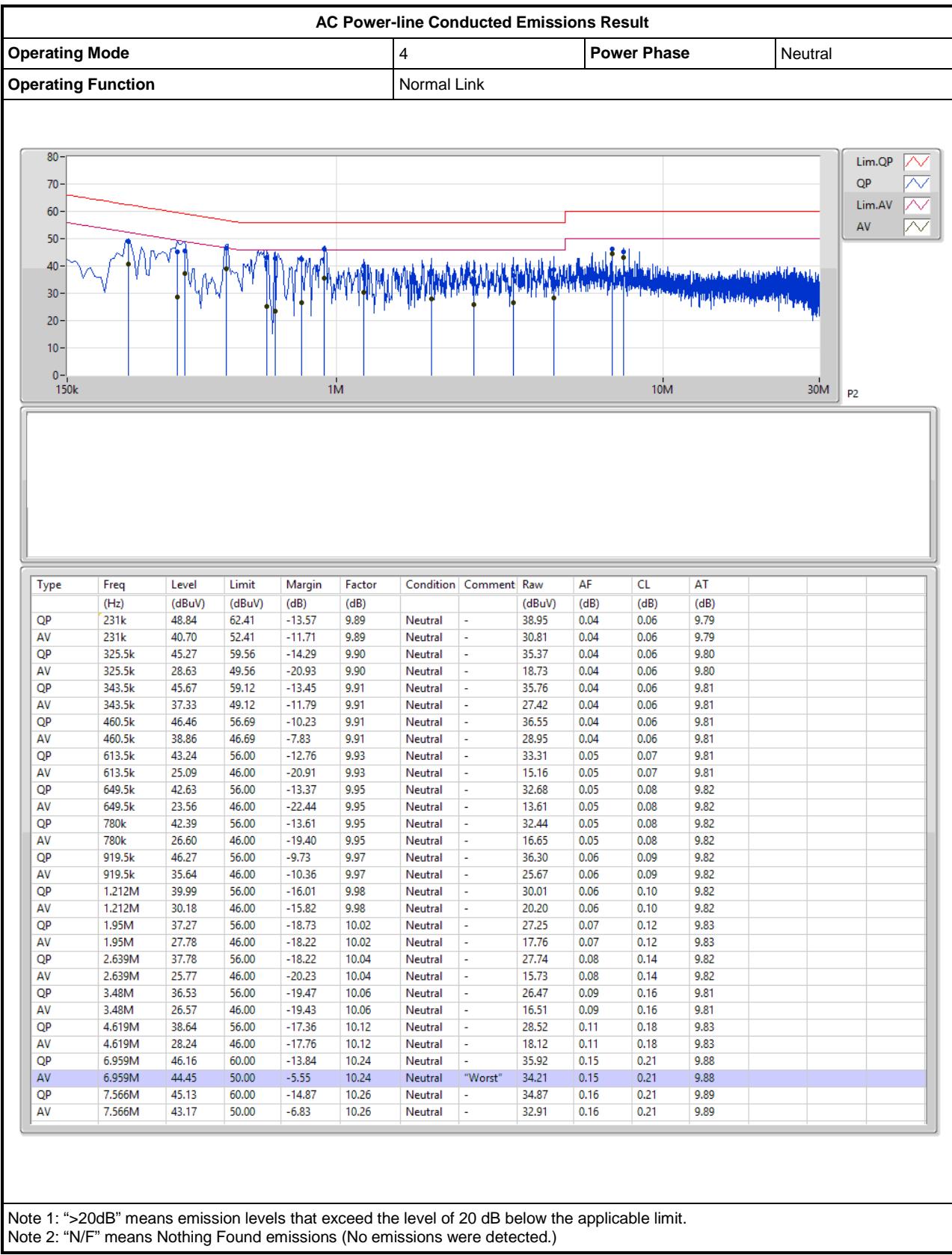
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)



## AC Power-line Conducted Emissions Result

Appendix A



**Summary**

| Mode                              | Max-N dB<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(Hz) |
|-----------------------------------|------------------|-----------------|----------|------------------|-----------------|
| 5.15-5.25GHz                      | -                | -               | -        | -                | -               |
| 802.11a_Nss1,(6Mbps)_4TX          | 42.175M          | 23.563M         | 23M6D1D  | 19.075M          | 16.367M         |
| 802.11ax HEW20_Nss1,(MCS0)_4TX    | 42.175M          | 19.99M          | 20M0D1D  | 21.425M          | 18.891M         |
| 802.11ax HEW40_Nss1,(MCS0)_4TX    | 47.95M           | 37.931M         | 37M9D1D  | 40.9M            | 37.631M         |
| 802.11ax HEW80_Nss1,(MCS0)_4TX    | 82.2M            | 77.061M         | 77M1D1D  | 81.4M            | 76.962M         |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 21.75M           | 18.96M          | 19M0D1D  | 20.575M          | 18.883M         |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | 41.3M            | 37.808M         | 37M8D1D  | 39.45M           | 37.68M          |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | 81.9M            | 77.29M          | 77M3D1D  | 80.8M            | 76.884M         |
| 5.725-5.85GHz                     | -                | -               | -        | -                | -               |
| 802.11a_Nss1,(6Mbps)_4TX          | 16.3M            | 30.585M         | 30M6D1D  | 15.375M          | 24.988M         |
| 802.11ax HEW20_Nss1,(MCS0)_4TX    | 19.1M            | 29.61M          | 29M6D1D  | 15.975M          | 23.213M         |
| 802.11ax HEW40_Nss1,(MCS0)_4TX    | 38.05M           | 56.372M         | 56M4D1D  | 36.6M            | 38.281M         |
| 802.11ax HEW80_Nss1,(MCS0)_4TX    | 77.6M            | 77.561M         | 77M6D1D  | 74.1M            | 76.862M         |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 18.9M            | 19M             | 19M0D1D  | 17.3M            | 18.859M         |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | 37.7M            | 37.825M         | 37M8D1D  | 33.6M            | 37.604M         |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | 74.2M            | 77.174M         | 77M2D1D  | 21.8M            | 76.915M         |

**Max-N dB** = Maximum6dB downbandwidth for 5.725-5.85GHz band / Maximum26dB downbandwidth for other band;

**Max-OBW** = Maximum99% occupied bandwidth;

**Min-N dB** = Minimum6dB downbandwidth for 5.725-5.85GHz band / Maximum26dB downbandwidth for other band;

**Min-OBW** = Minimum99% occupied bandwidth;



## Result

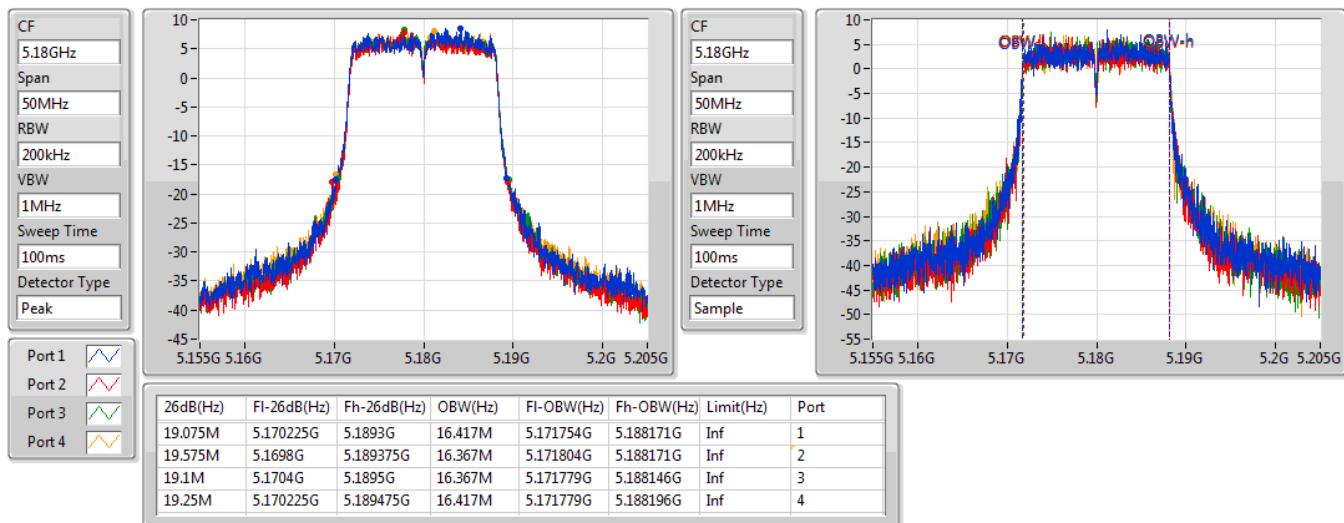
| Mode                              | Result | Limit<br>(Hz) | Port 1-N dB<br>(Hz) | Port 1-OBW<br>(Hz) | Port 2-N dB<br>(Hz) | Port 2-OBW<br>(Hz) | Port 3-N dB<br>(Hz) | Port 3-OBW<br>(Hz) | Port 4-N dB<br>(Hz) | Port 4-OBW<br>(Hz) |
|-----------------------------------|--------|---------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
| 802.11a_Nss1,(6Mbps)_4TX          | -      | -             | -                   | -                  | -                   | -                  | -                   | -                  | -                   | -                  |
| 5180MHz                           | Pass   | Inf           | 19.075M             | 16.417M            | 19.575M             | 16.367M            | 19.1M               | 16.367M            | 19.25M              | 16.417M            |
| 5200MHz                           | Pass   | Inf           | 40.575M             | 21.214M            | 40.375M             | 22.039M            | 41.475M             | 23.563M            | 42.175M             | 22.239M            |
| 5240MHz                           | Pass   | Inf           | 37.475M             | 17.416M            | 36.925M             | 17.016M            | 36.65M              | 17.241M            | 38.925M             | 18.691M            |
| 5745MHz                           | Pass   | 500k          | 16.275M             | 27.886M            | 16.275M             | 26.812M            | 15.675M             | 27.736M            | 16.3M               | 28.261M            |
| 5785MHz                           | Pass   | 500k          | 16.275M             | 29.16M             | 15.875M             | 28.936M            | 16.3M               | 28.136M            | 15.375M             | 25.262M            |
| 5825MHz                           | Pass   | 500k          | 15.925M             | 28.686M            | 15.925M             | 29.135M            | 16.3M               | 30.585M            | 16.25M              | 24.988M            |
| 802.11ax HEW20_Nss1,(MCS0)_4TX    | -      | -             | -                   | -                  | -                   | -                  | -                   | -                  | -                   | -                  |
| 5180MHz                           | Pass   | Inf           | 21.625M             | 18.916M            | 21.425M             | 18.891M            | 21.975M             | 18.941M            | 21.55M              | 18.916M            |
| 5200MHz                           | Pass   | Inf           | 34.875M             | 19.065M            | 33.7M               | 19.04M             | 33.525M             | 19.09M             | 38.475M             | 19.19M             |
| 5240MHz                           | Pass   | Inf           | 42.175M             | 19.89M             | 41.15M              | 19.315M            | 42.1M               | 19.765M            | 41.875M             | 19.99M             |
| 5745MHz                           | Pass   | 500k          | 19.1M               | 28.036M            | 15.975M             | 26.912M            | 17.525M             | 27.436M            | 18.7M               | 27.761M            |
| 5785MHz                           | Pass   | 500k          | 18.575M             | 28.611M            | 18.9M               | 28.936M            | 18.95M              | 27.486M            | 18.475M             | 23.213M            |
| 5825MHz                           | Pass   | 500k          | 17.85M              | 28.936M            | 18.45M              | 28.211M            | 18.7M               | 29.61M             | 18.9M               | 24.388M            |
| 802.11ax HEW40_Nss1,(MCS0)_4TX    | -      | -             | -                   | -                  | -                   | -                  | -                   | -                  | -                   | -                  |
| 5190MHz                           | Pass   | Inf           | 41.15M              | 37.731M            | 40.9M               | 37.631M            | 41.1M               | 37.731M            | 41.1M               | 37.681M            |
| 5230MHz                           | Pass   | Inf           | 43.7M               | 37.831M            | 46.45M              | 37.831M            | 47.95M              | 37.931M            | 43.45M              | 37.681M            |
| 5755MHz                           | Pass   | 500k          | 37.9M               | 38.281M            | 36.6M               | 39.88M             | 38.05M              | 43.028M            | 37.8M               | 38.381M            |
| 5795MHz                           | Pass   | 500k          | 37.9M               | 41.279M            | 37.85M              | 52.824M            | 37.55M              | 56.372M            | 37.95M              | 44.328M            |
| 802.11ax HEW80_Nss1,(MCS0)_4TX    | -      | -             | -                   | -                  | -                   | -                  | -                   | -                  | -                   | -                  |
| 5210MHz                           | Pass   | Inf           | 82.1M               | 77.061M            | 81.4M               | 76.962M            | 82.2M               | 77.061M            | 81.9M               | 76.962M            |
| 5775MHz                           | Pass   | 500k          | 77.5M               | 77.461M            | 76M                 | 76.862M            | 77.6M               | 77.161M            | 74.1M               | 77.561M            |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | -      | -             | -                   | -                  | -                   | -                  | -                   | -                  | -                   | -                  |
| 5180MHz                           | Pass   | Inf           | 21.075M             | 18.922M            | 20.575M             | 18.942M            | 21.3M               | 18.913M            | 21.075M             | 18.898M            |
| 5200MHz                           | Pass   | Inf           | 21.425M             | 18.9M              | 21.475M             | 18.96M             | 21.4M               | 18.914M            | 21.3M               | 18.924M            |
| 5240MHz                           | Pass   | Inf           | 21M                 | 18.883M            | 21.425M             | 18.895M            | 21.225M             | 18.888M            | 21.75M              | 18.911M            |
| 5745MHz                           | Pass   | 500k          | 18.625M             | 18.92M             | 18.9M               | 18.908M            | 18.875M             | 18.929M            | 18.875M             | 18.919M            |
| 5785MHz                           | Pass   | 500k          | 18.3M               | 18.903M            | 18.825M             | 18.93M             | 17.3M               | 18.907M            | 18.8M               | 18.893M            |
| 5825MHz                           | Pass   | 500k          | 18.275M             | 18.89M             | 18.75M              | 19M                | 18.1M               | 18.943M            | 18.1M               | 18.859M            |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | -      | -             | -                   | -                  | -                   | -                  | -                   | -                  | -                   | -                  |
| 5190MHz                           | Pass   | Inf           | 39.45M              | 37.692M            | 40.85M              | 37.808M            | 39.65M              | 37.753M            | 40.3M               | 37.692M            |
| 5230MHz                           | Pass   | Inf           | 41.3M               | 37.721M            | 40.8M               | 37.689M            | 40.8M               | 37.68M             | 40.45M              | 37.782M            |
| 5755MHz                           | Pass   | 500k          | 37.55M              | 37.719M            | 37.45M              | 37.679M            | 33.8M               | 37.604M            | 37.6M               | 37.664M            |
| 5795MHz                           | Pass   | 500k          | 37.7M               | 37.784M            | 33.6M               | 37.825M            | 37.4M               | 37.75M             | 37.65M              | 37.732M            |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | -      | -             | -                   | -                  | -                   | -                  | -                   | -                  | -                   | -                  |
| 5210MHz                           | Pass   | Inf           | 80.9M               | 76.884M            | 80.8M               | 77.069M            | 81M                 | 77.29M             | 81.9M               | 77.228M            |
| 5775MHz                           | Pass   | 500k          | 73.7M               | 76.915M            | 74.2M               | 77.054M            | 21.8M               | 77.174M            | 32.4M               | 76.958M            |

Port X-N dB = Port X6dB downbandwidth for 5.725-5.85GHz band / 26dB downbandwidth for other band

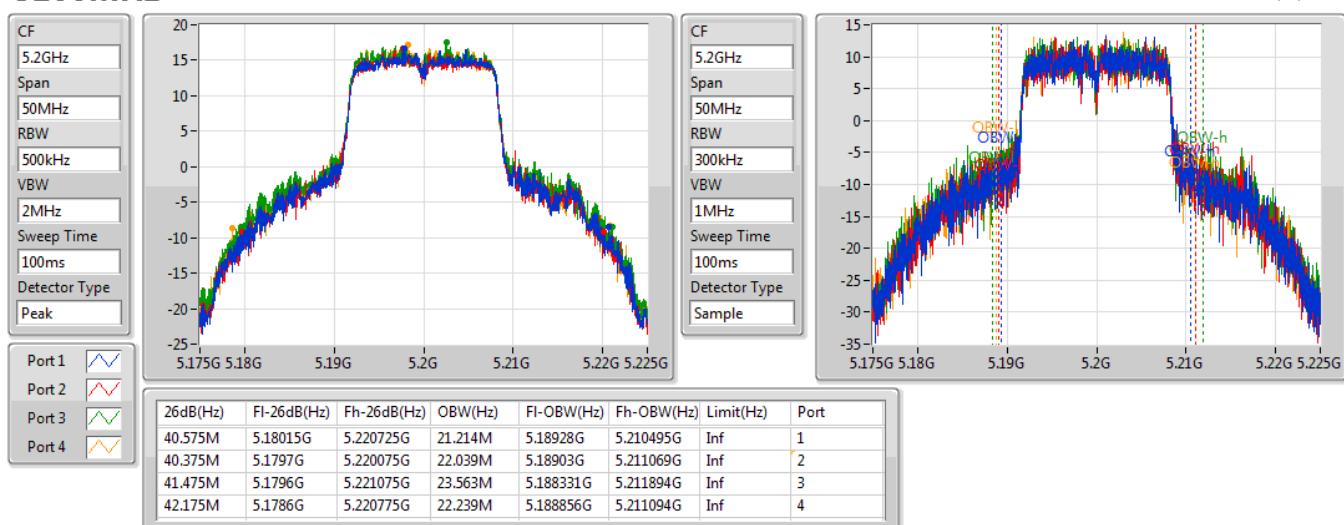
Port X-OBW = Port X99% occupied bandwidth;

**802.11a\_Nss1,(6Mbps)\_4TX**
**EBW**
**5180MHz**

07/11/2019

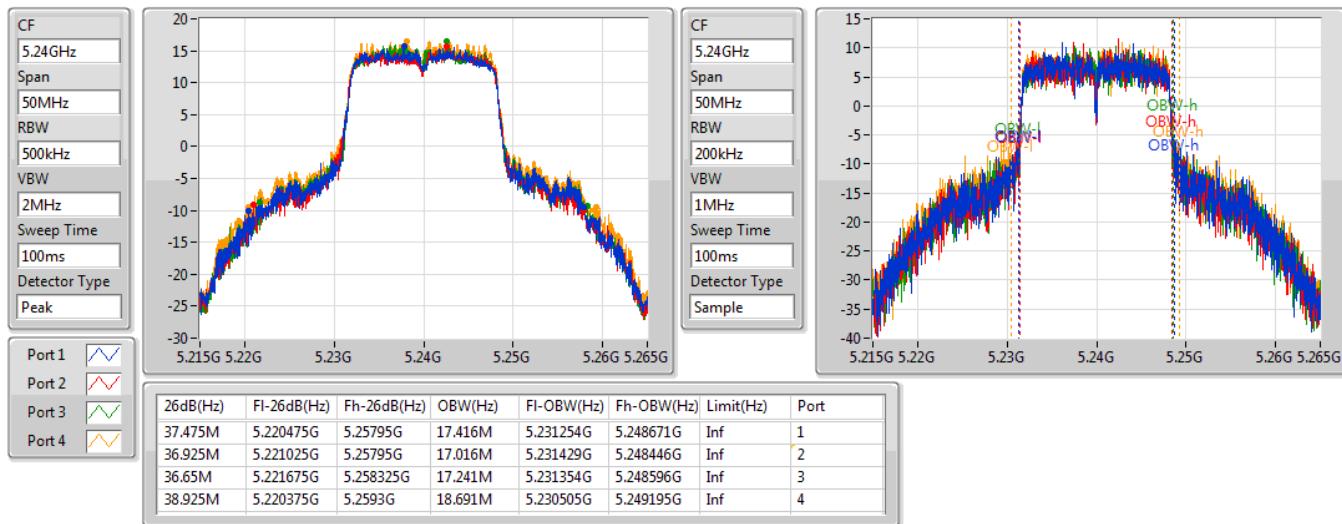

**802.11a\_Nss1,(6Mbps)\_4TX**
**EBW**
**5200MHz**

07/11/2019

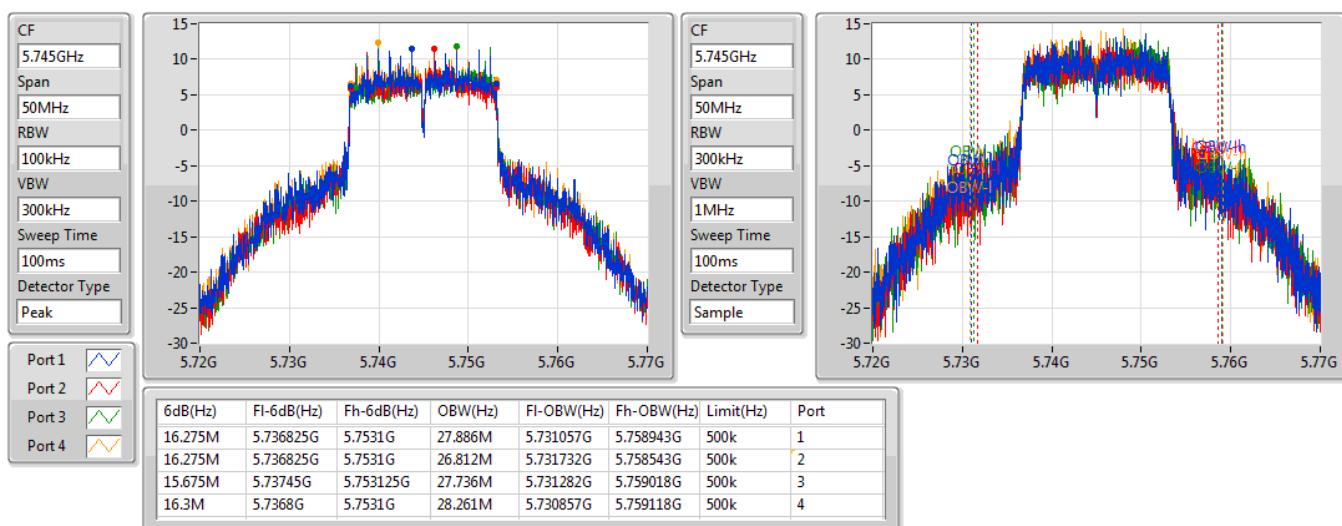


**802.11a\_Nss1,(6Mbps)\_4TX**
**EBW**
**5240MHz**

07/11/2019

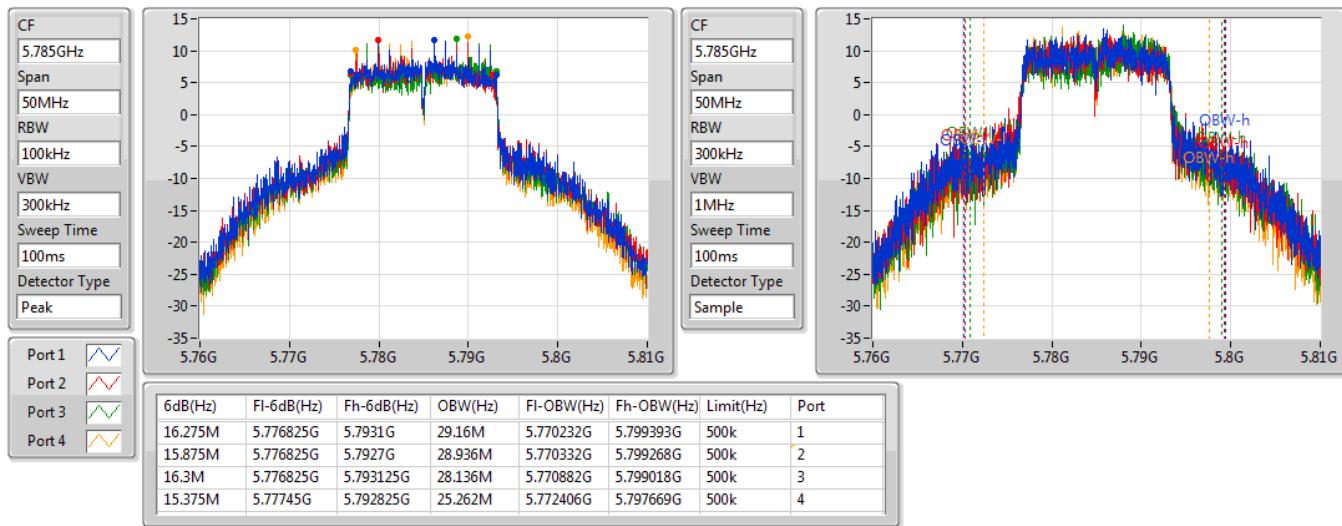

**802.11a\_Nss1,(6Mbps)\_4TX**
**EBW**
**5745MHz**

07/11/2019

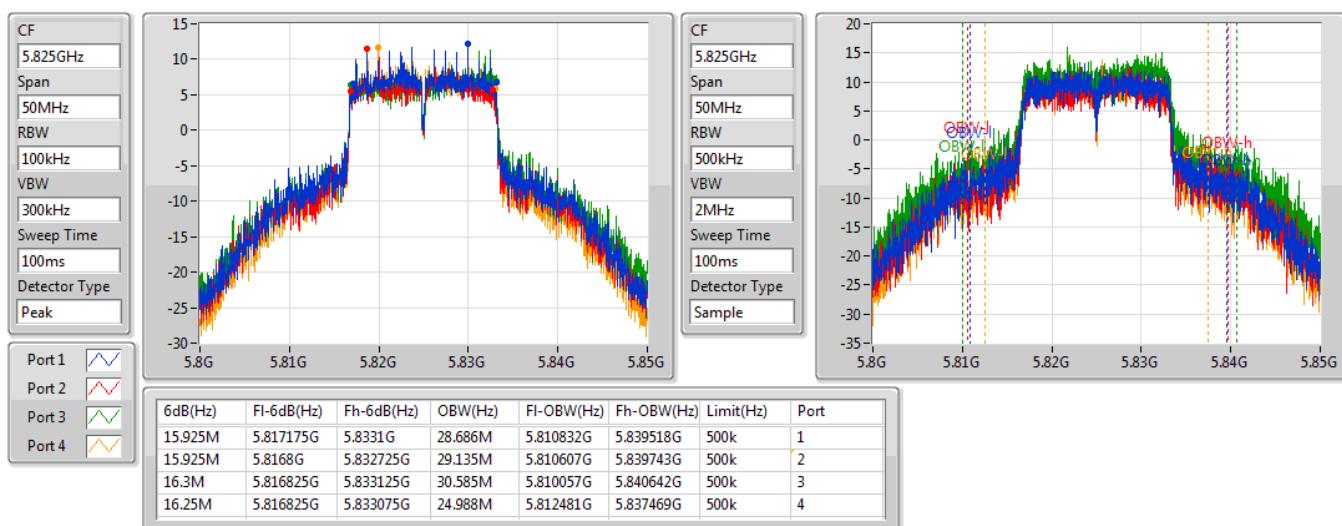


**802.11a\_Nss1,(6Mbps)\_4TX**
**EBW**
**5785MHz**

07/11/2019

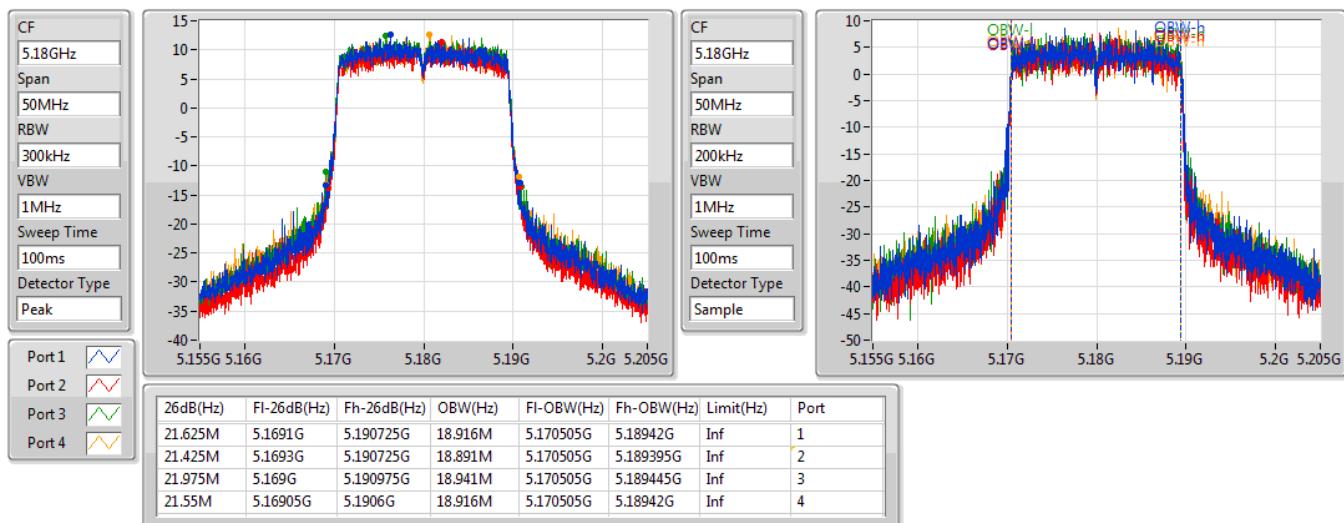

**802.11a\_Nss1,(6Mbps)\_4TX**
**EBW**
**5825MHz**

07/11/2019

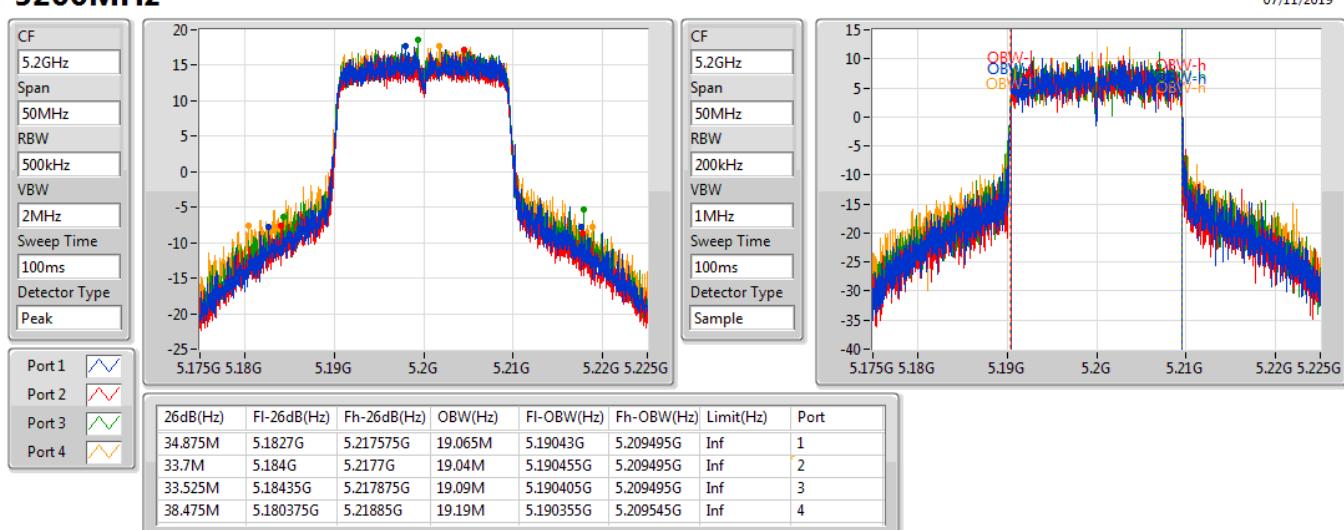


**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**EBW**
**5180MHz**

07/11/2019

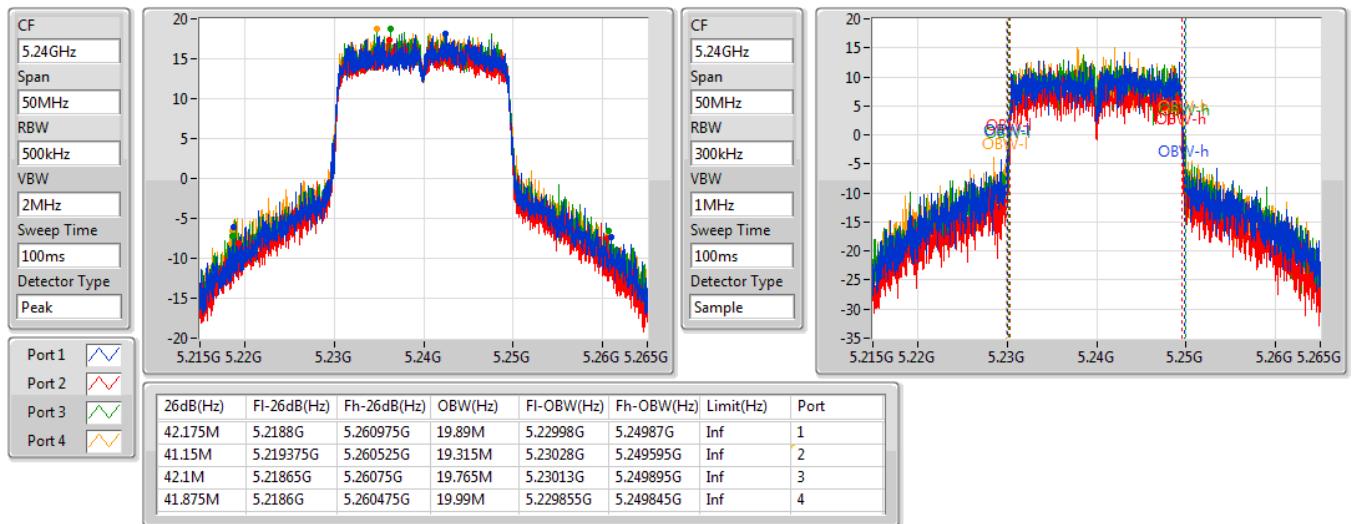

**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**EBW**
**5200MHz**

07/11/2019

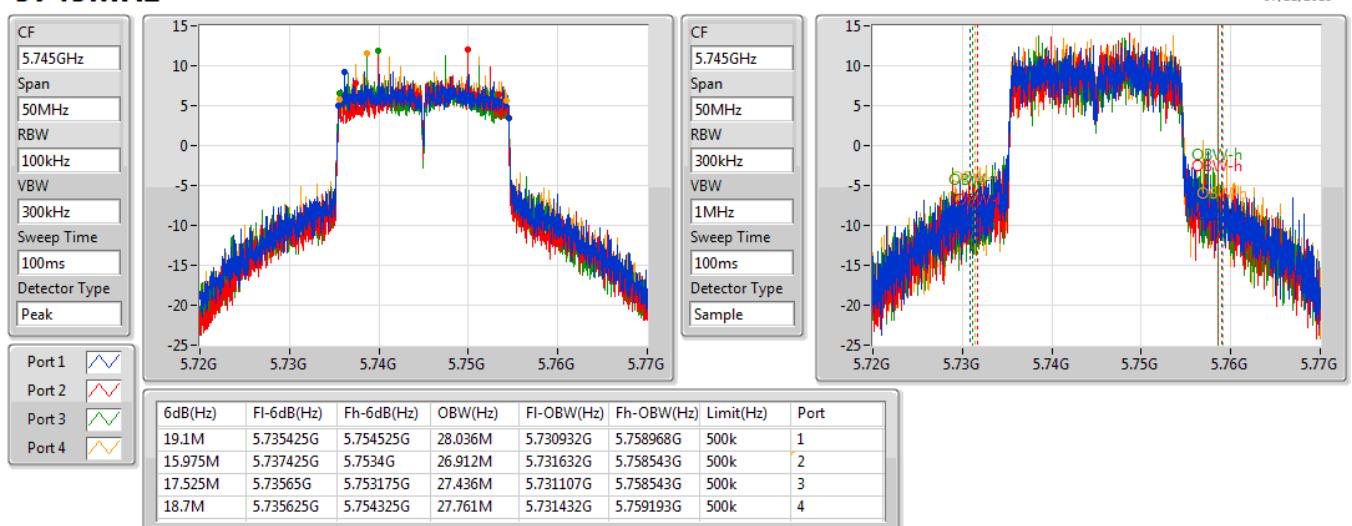


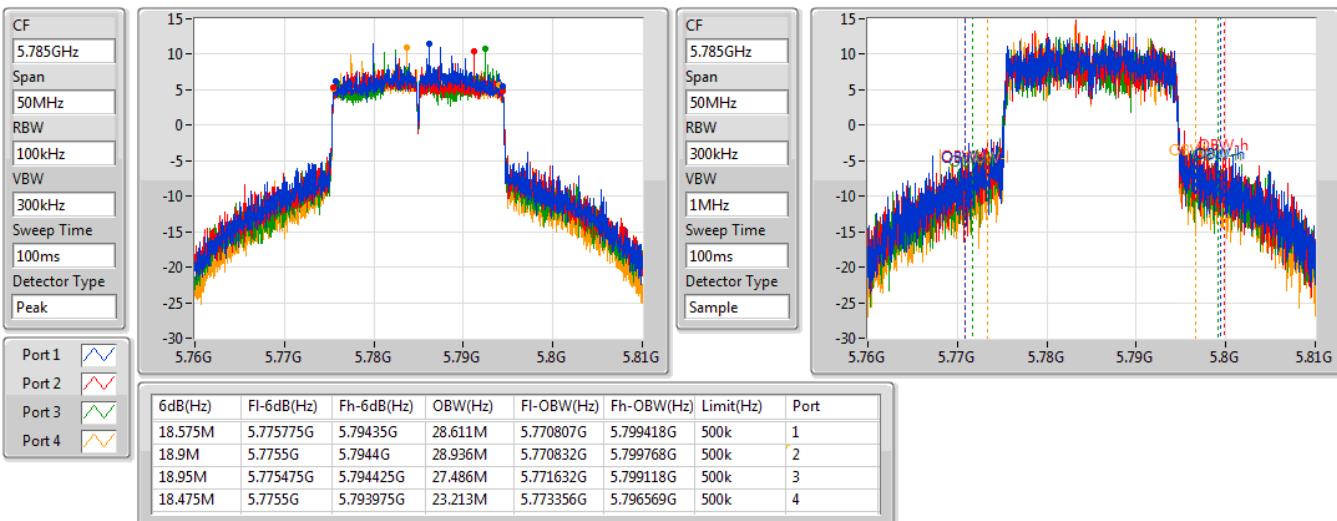
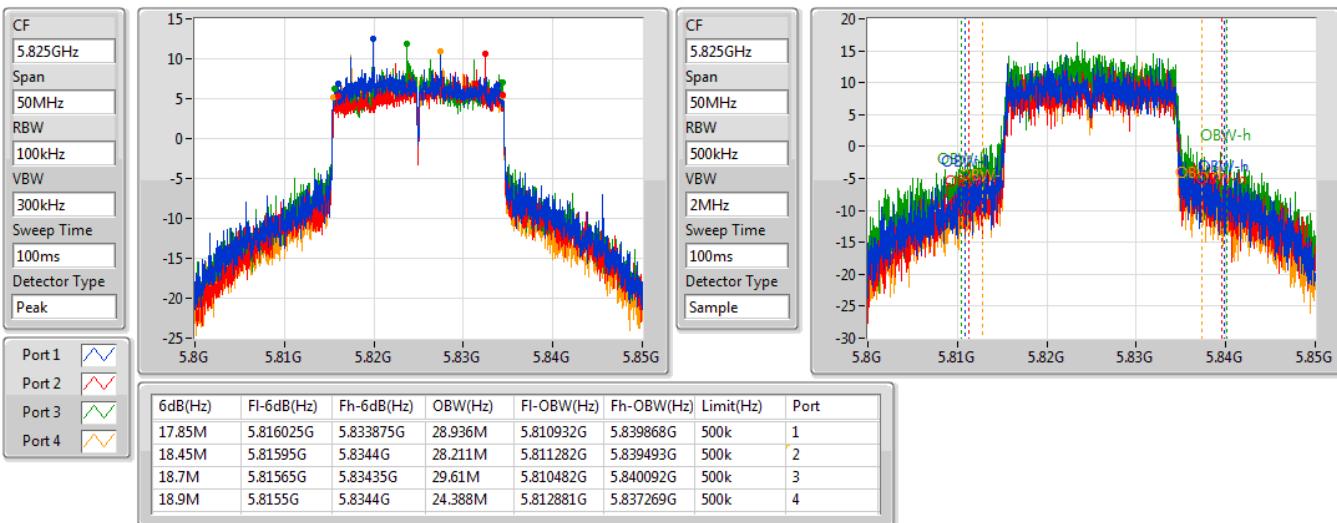
**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**EBW**
**5240MHz**

07/11/2019


**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**EBW**
**5745MHz**

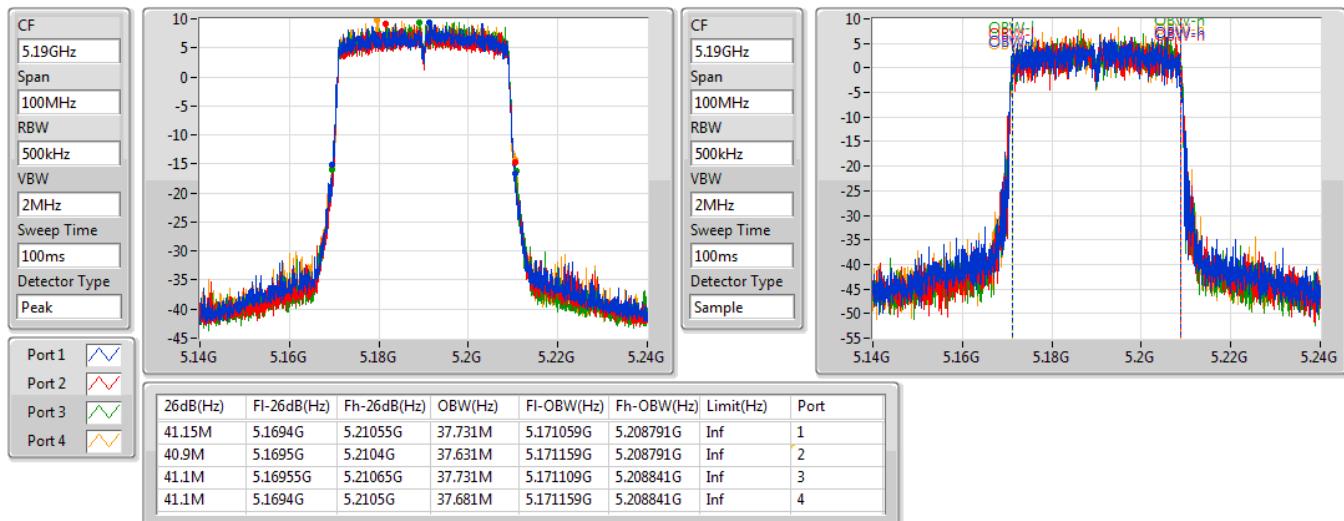
07/11/2019



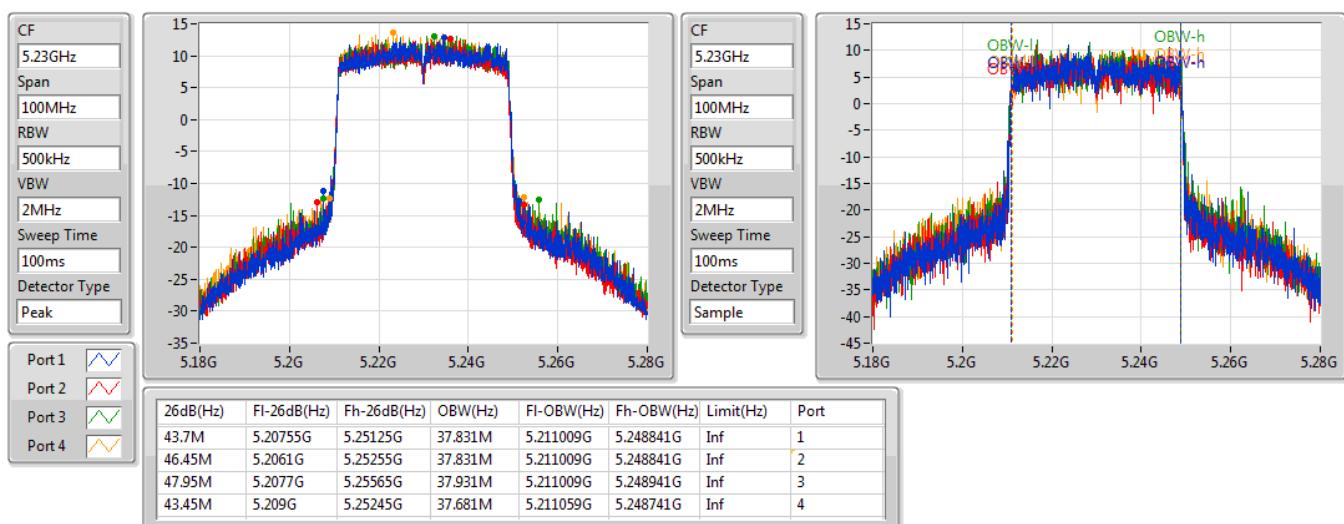
**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**EBW**
**5785MHz**

**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**EBW**
**5825MHz**


**802.11ax HEW40\_Nss1,(MCS0)\_4TX**
**EBW**
**5190MHz**

07/11/2019

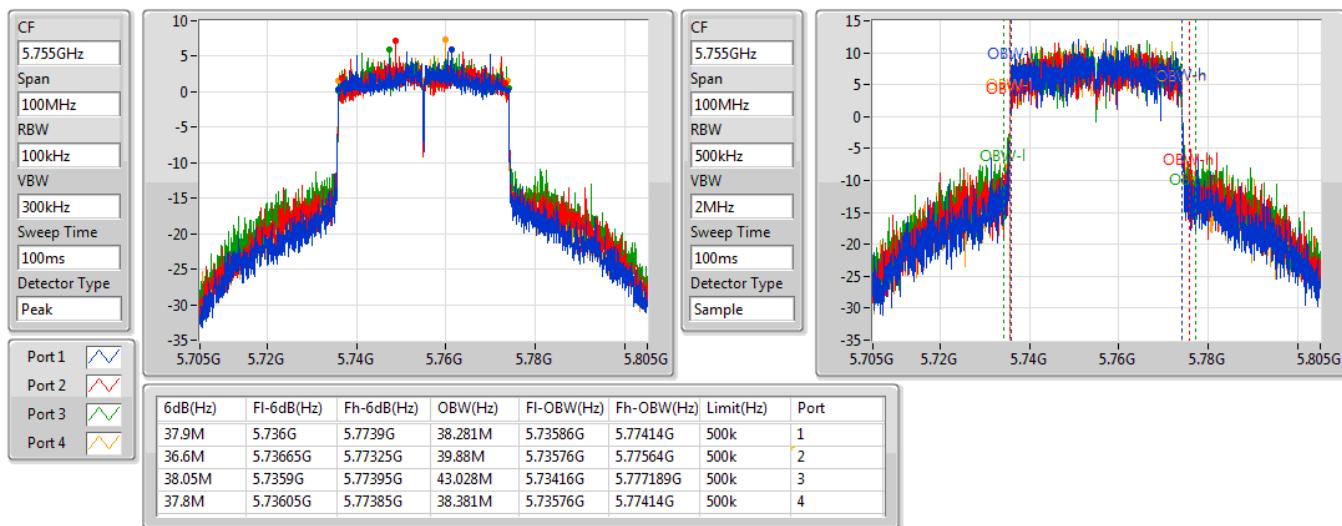

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**
**EBW**
**5230MHz**

07/11/2019

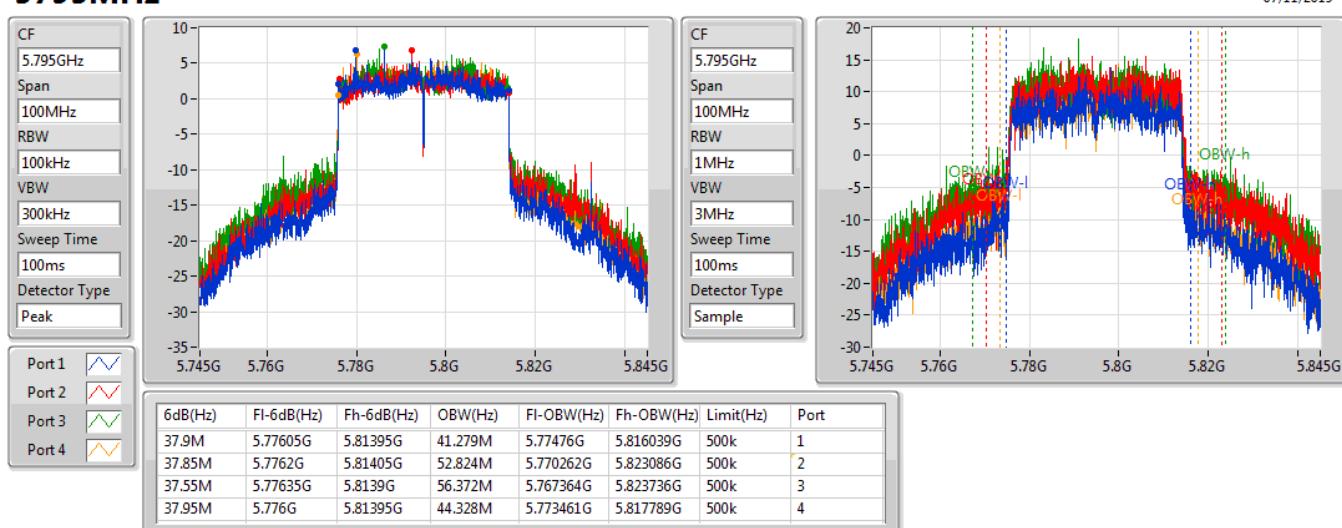


**802.11ax HEW40\_Nss1,(MCS0)\_4TX**
**EBW**
**5755MHz**

07/11/2019

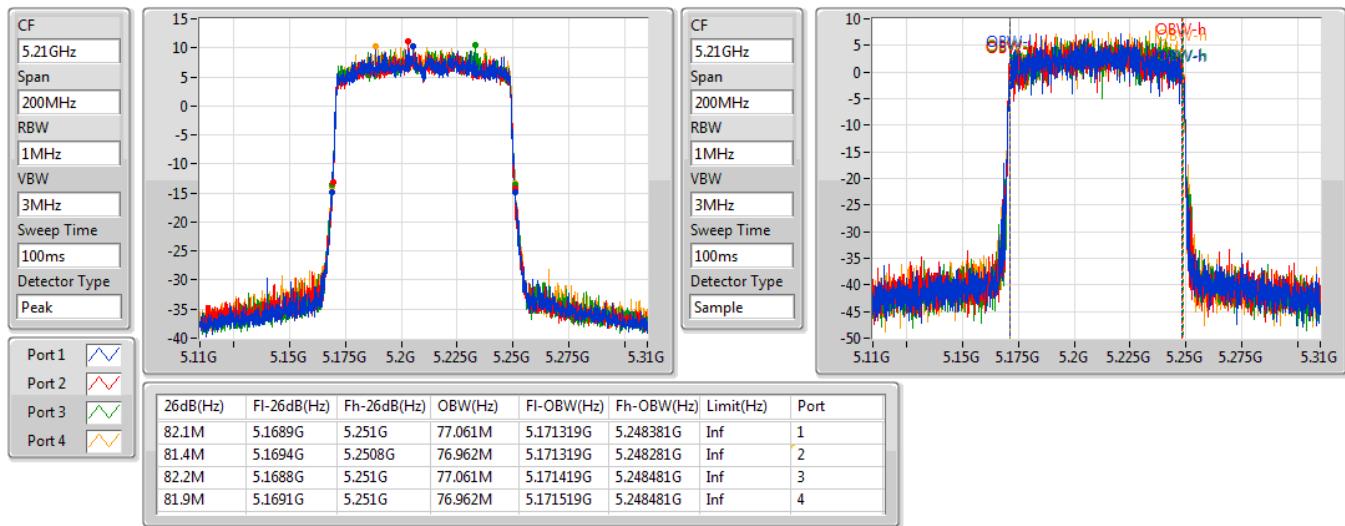

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**
**EBW**
**5795MHz**

07/11/2019

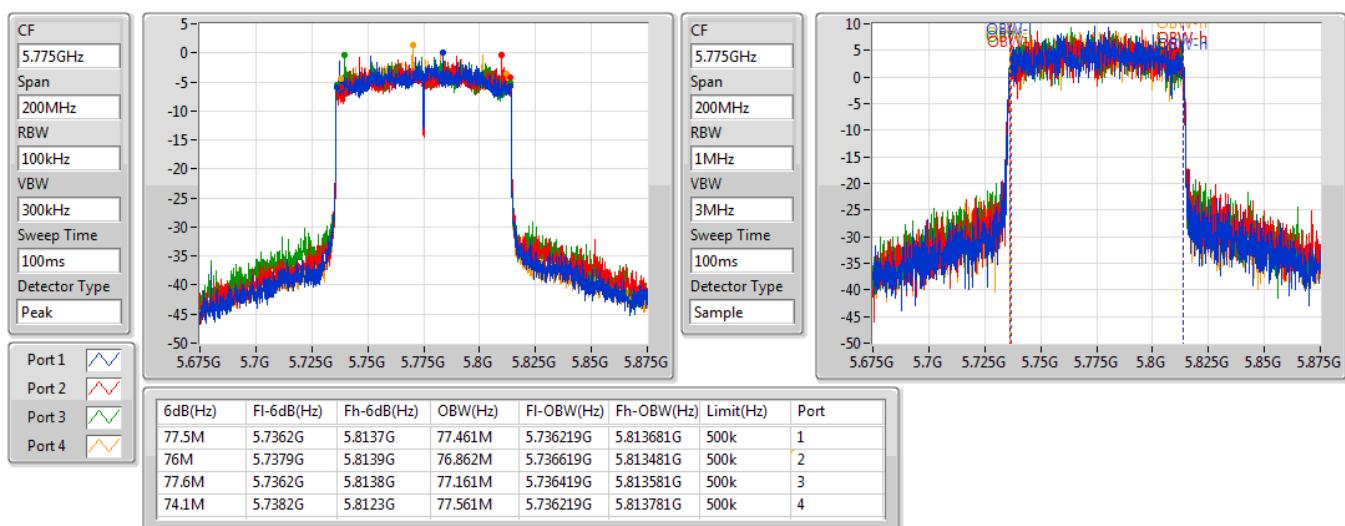


**802.11ax HEW80\_Nss1,(MCS0)\_4TX**
**EBW**
**5210MHz**

07/11/2019

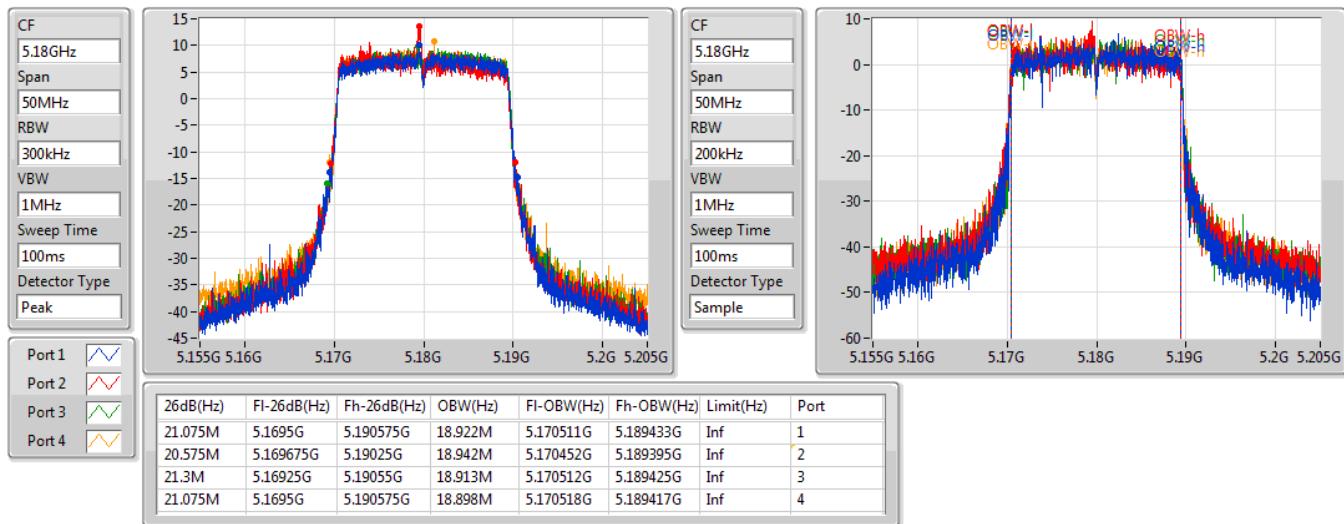

**802.11ax HEW80\_Nss1,(MCS0)\_4TX**
**EBW**
**5775MHz**

07/11/2019

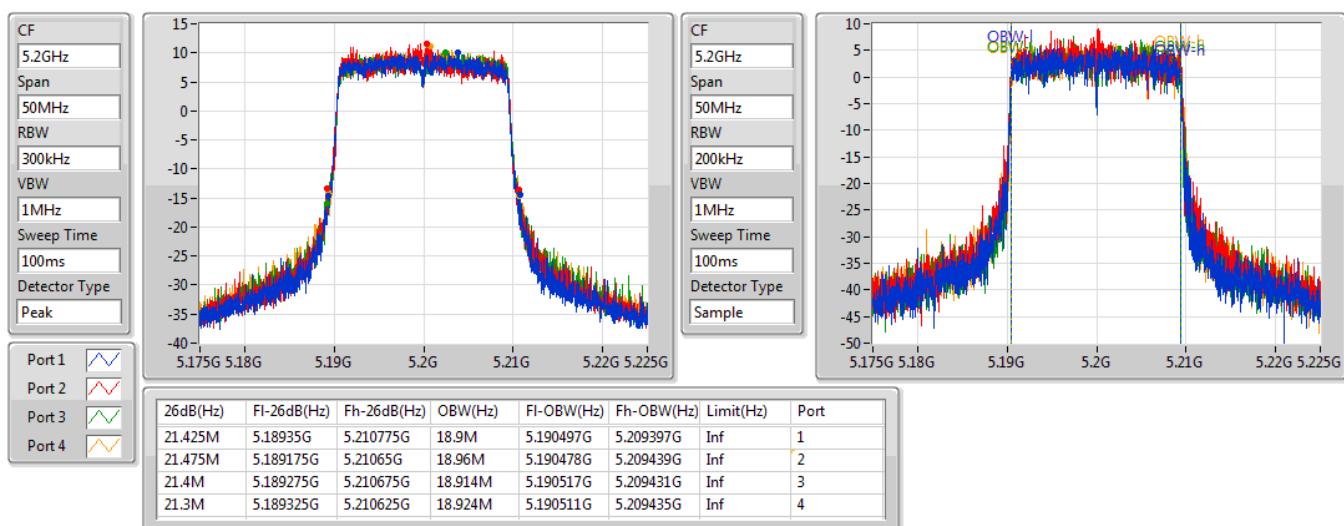


**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5180MHz**

24/12/2019

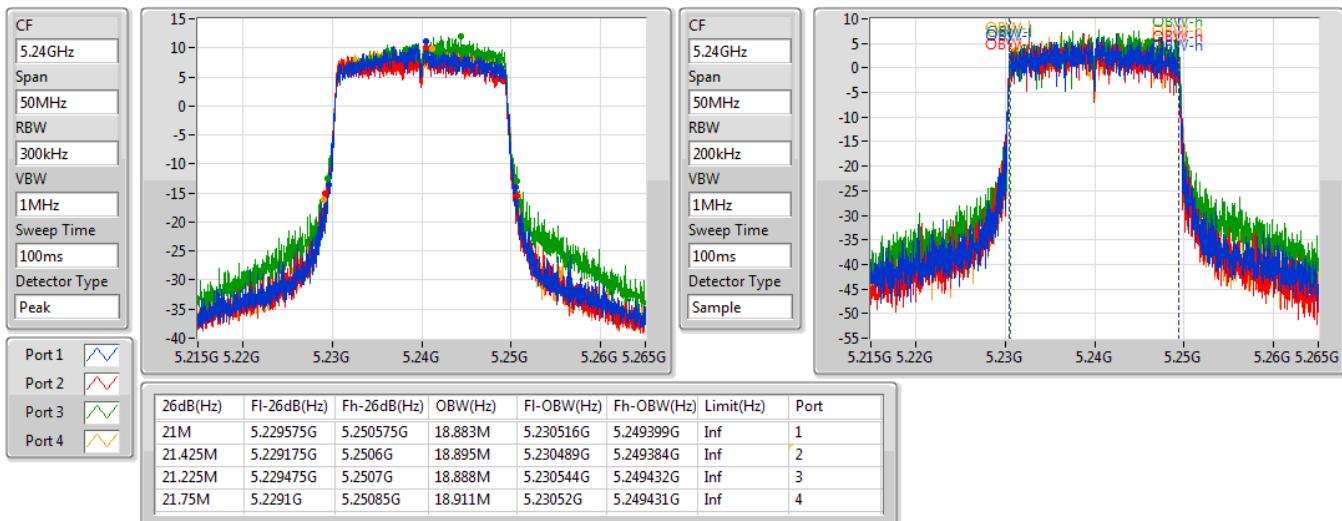

**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5200MHz**

24/12/2019

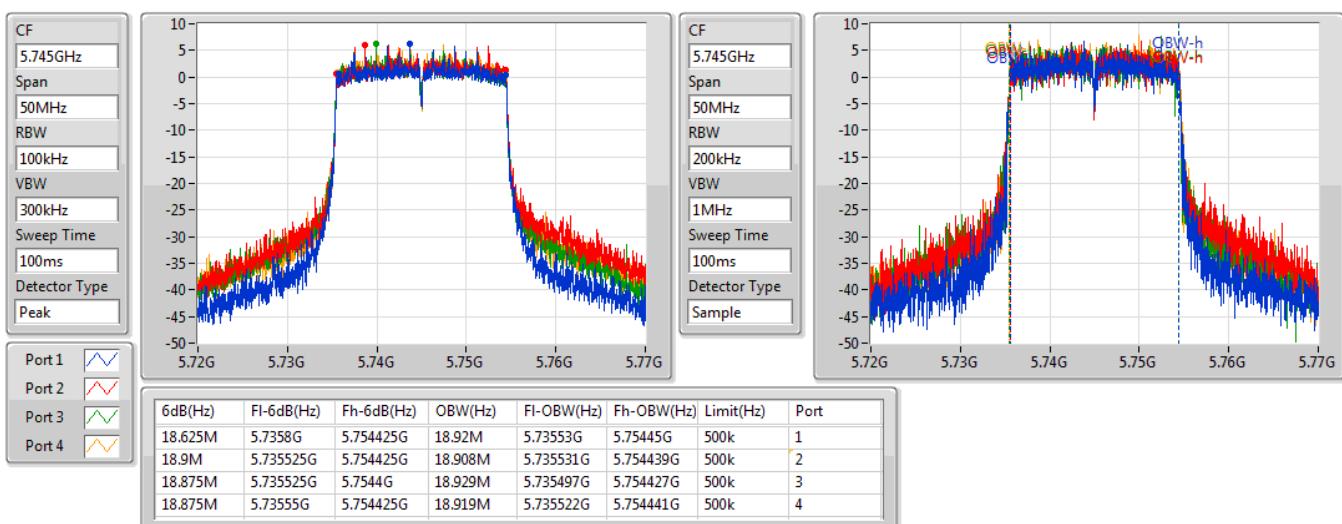


**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5240MHz**

24/12/2019

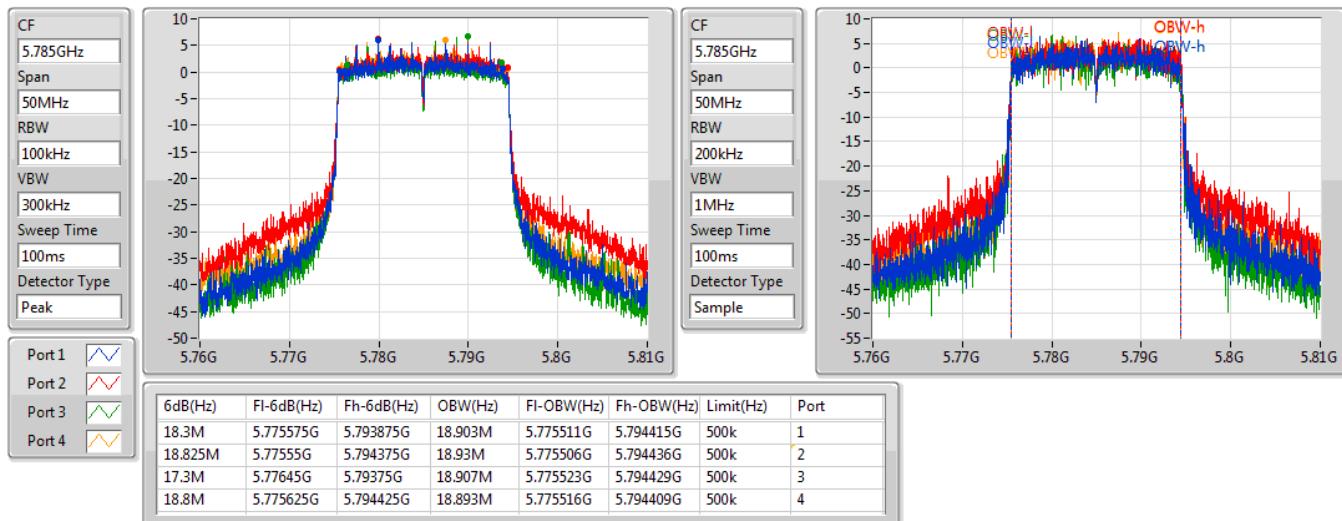

**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5745MHz**

24/12/2019

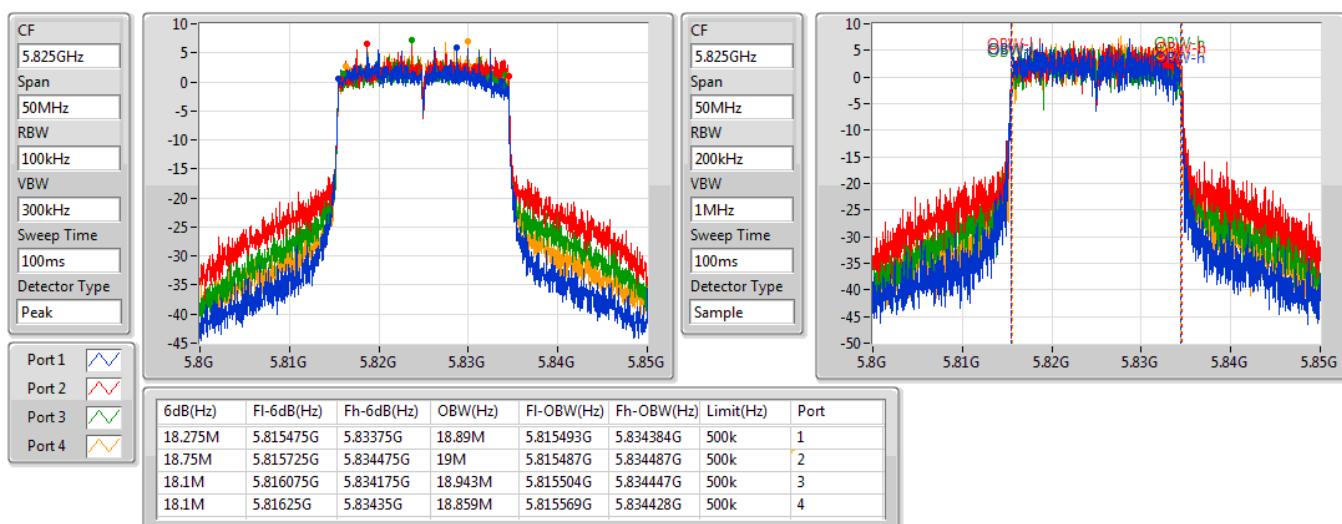


**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5785MHz**

24/12/2019

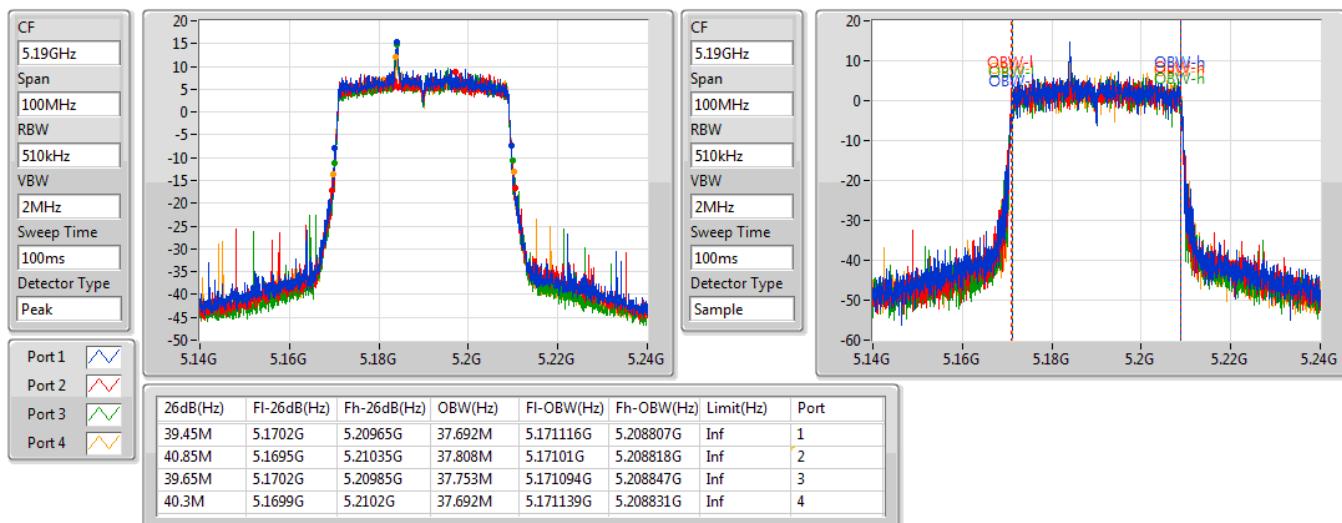

**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5825MHz**

24/12/2019

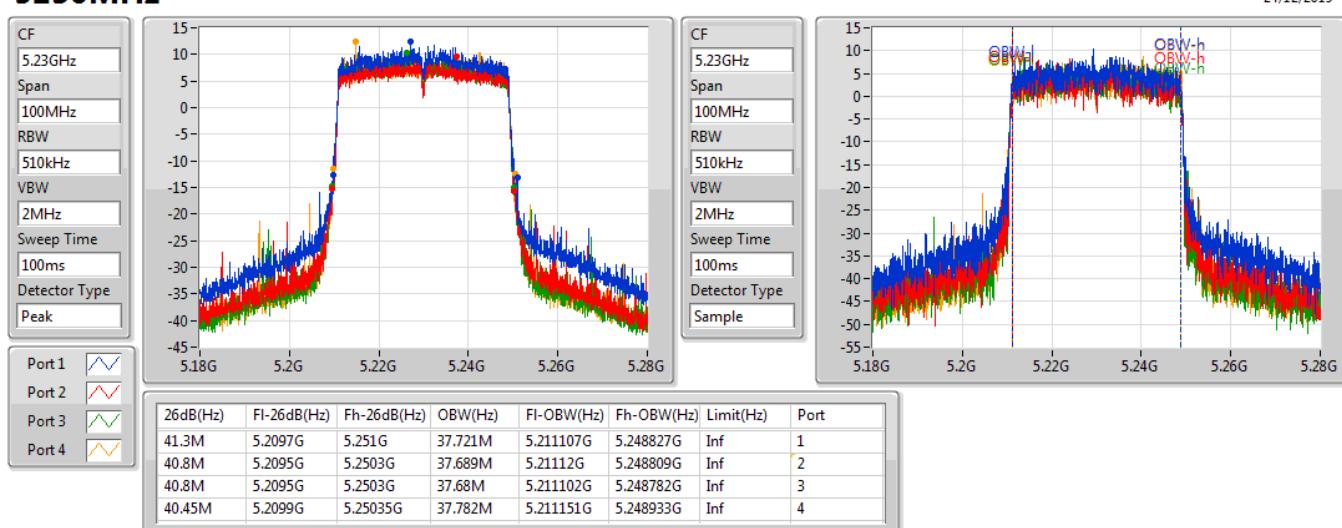


**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5190MHz**

24/12/2019

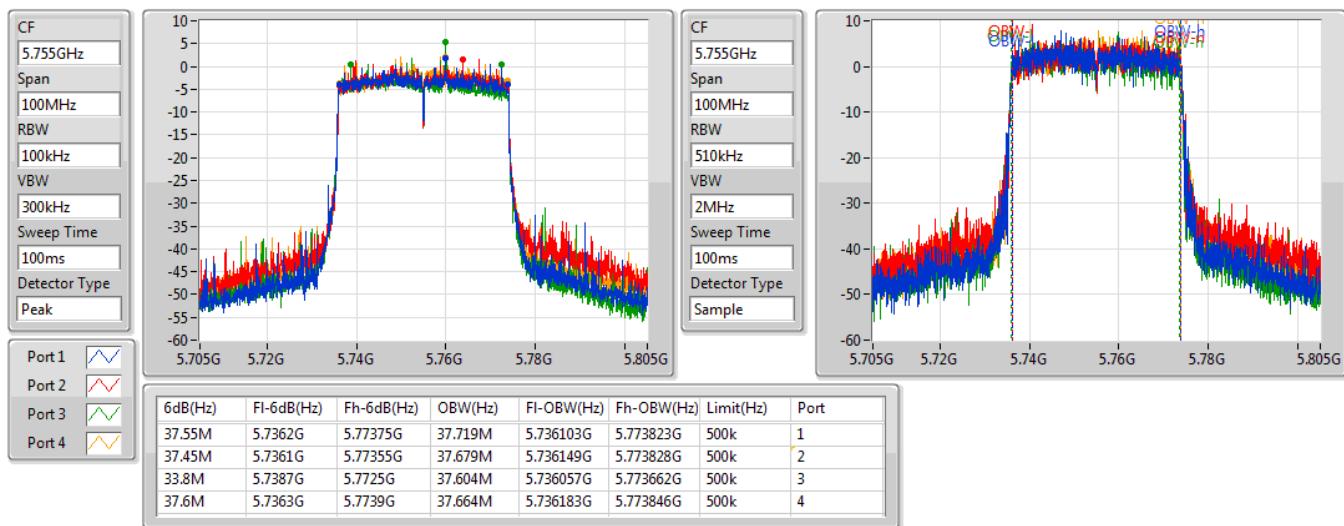

**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5230MHz**

24/12/2019

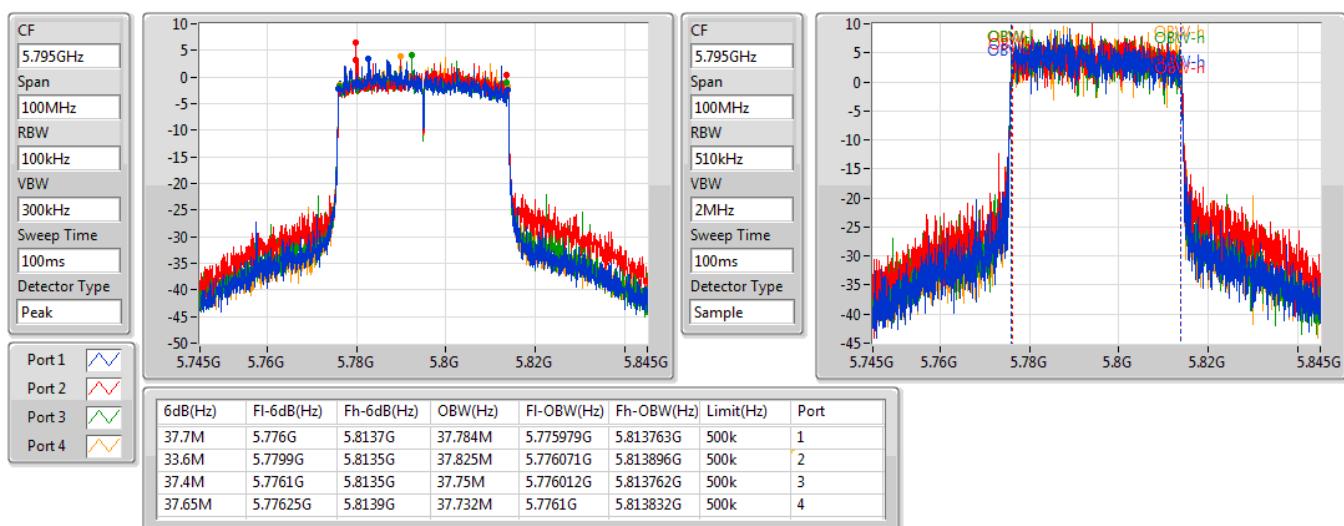


**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5755MHz**

24/12/2019

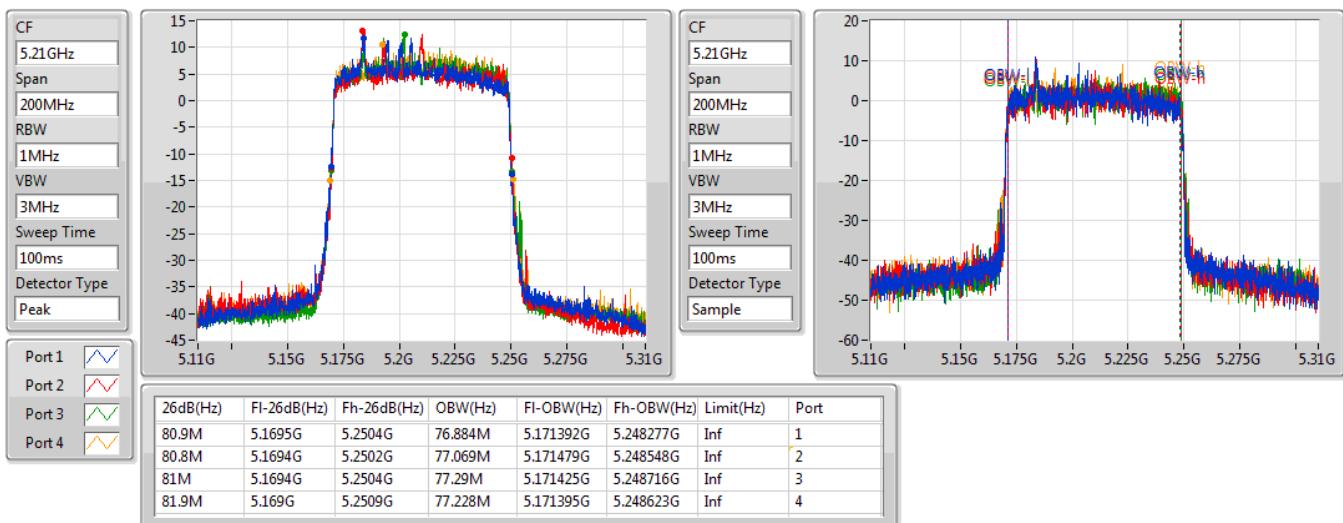

**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5795MHz**

24/12/2019

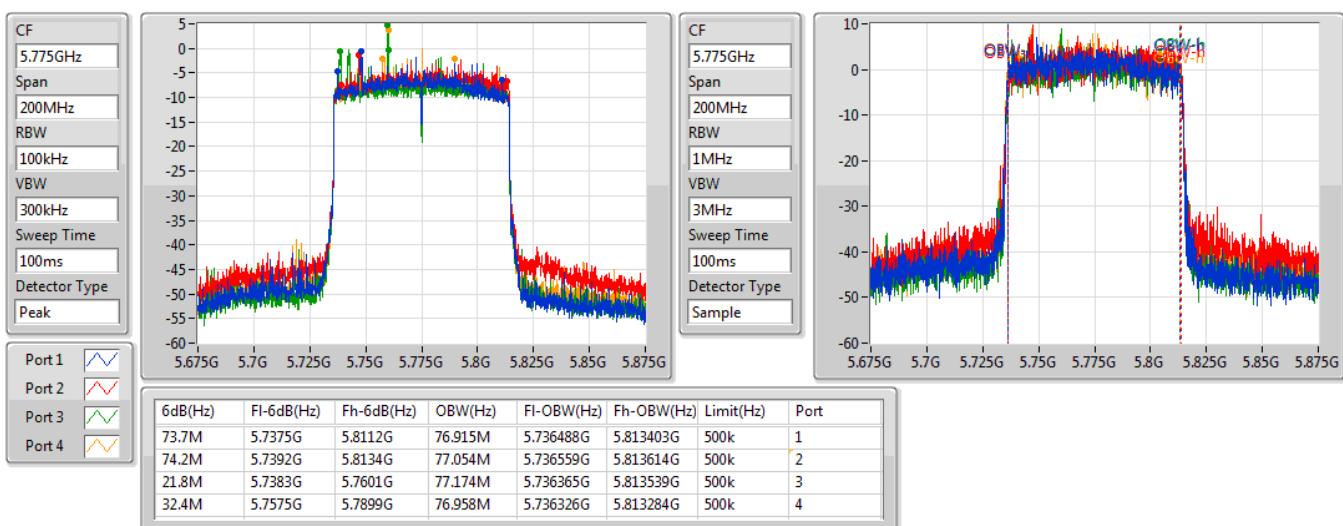


**802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5210MHz**

24/12/2019


**802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX**
**EBW**
**5775MHz**

24/12/2019



**Summary**

| Mode                              | Total Power<br>(dBm) | Total Power<br>(W) |
|-----------------------------------|----------------------|--------------------|
| 5.15-5.25GHz                      | -                    | -                  |
| 802.11a_Nss1,(6Mbps)_4TX          | 28.63                | 0.72946            |
| 802.11ax HEW20_Nss1,(MCS0)_4TX    | 28.37                | 0.68707            |
| 802.11ax HEW40_Nss1,(MCS0)_4TX    | 26.15                | 0.41210            |
| 802.11ax HEW80_Nss1,(MCS0)_4TX    | 22.56                | 0.18030            |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 24.65                | 0.29174            |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | 23.35                | 0.21627            |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | 21.80                | 0.15136            |
| 5.725-5.85GHz                     | -                    | -                  |
| 802.11a_Nss1,(6Mbps)_4TX          | 28.65                | 0.73282            |
| 802.11ax HEW20_Nss1,(MCS0)_4TX    | 28.47                | 0.70307            |
| 802.11ax HEW40_Nss1,(MCS0)_4TX    | 27.94                | 0.62230            |
| 802.11ax HEW80_Nss1,(MCS0)_4TX    | 24.22                | 0.26424            |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 24.39                | 0.27479            |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | 24.55                | 0.28510            |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | 21.57                | 0.14355            |



## 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) |
|-----------------------------------|--------|-------------|-----------------|-----------------|-----------------|-----------------|----------------------|----------------------|
| 802.11a_Nss1,(6Mbps)_4TX          | -      | -           | -               | -               | -               | -               | -                    | -                    |
| 5180MHz                           | Pass   | 0.97        | 18.50           | 18.05           | 18.46           | 18.56           | 24.42                | 30.00                |
| 5200MHz                           | Pass   | 0.97        | 22.58           | 22.43           | 22.75           | 22.69           | 28.63                | 30.00                |
| 5240MHz                           | Pass   | 0.97        | 21.79           | 21.58           | 21.73           | 22.28           | 27.87                | 30.00                |
| 5745MHz                           | Pass   | 0.97        | 22.66           | 22.40           | 22.38           | 23.06           | 28.65                | 30.00                |
| 5785MHz                           | Pass   | 0.97        | 22.64           | 22.59           | 22.16           | 22.58           | 28.52                | 30.00                |
| 5825MHz                           | Pass   | 0.97        | 22.57           | 21.72           | 22.10           | 22.40           | 28.23                | 30.00                |
| 802.11ax HEW20_Nss1,(MCS0)_4TX    | -      | -           | -               | -               | -               | -               | -                    | -                    |
| 5180MHz                           | Pass   | 0.97        | 19.19           | 18.44           | 19.22           | 19.16           | 25.03                | 30.00                |
| 5200MHz                           | Pass   | 0.97        | 21.58           | 21.18           | 21.71           | 21.91           | 27.62                | 30.00                |
| 5240MHz                           | Pass   | 0.97        | 22.35           | 22.11           | 22.32           | 22.60           | 28.37                | 30.00                |
| 5745MHz                           | Pass   | 0.97        | 22.56           | 22.21           | 22.17           | 22.83           | 28.47                | 30.00                |
| 5785MHz                           | Pass   | 0.97        | 22.60           | 22.27           | 22.02           | 22.33           | 28.33                | 30.00                |
| 5825MHz                           | Pass   | 0.97        | 22.47           | 21.63           | 21.78           | 22.28           | 28.07                | 30.00                |
| 802.11ax HEW40_Nss1,(MCS0)_4TX    | -      | -           | -               | -               | -               | -               | -                    | -                    |
| 5190MHz                           | Pass   | 0.97        | 16.54           | 16.12           | 16.80           | 16.85           | 22.61                | 30.00                |
| 5230MHz                           | Pass   | 0.97        | 20.04           | 19.76           | 20.14           | 20.55           | 26.15                | 30.00                |
| 5755MHz                           | Pass   | 0.97        | 21.10           | 21.17           | 21.52           | 21.63           | 27.38                | 30.00                |
| 5795MHz                           | Pass   | 0.97        | 21.60           | 21.63           | 21.99           | 22.41           | 27.94                | 30.00                |
| 802.11ax HEW80_Nss1,(MCS0)_4TX    | -      | -           | -               | -               | -               | -               | -                    | -                    |
| 5210MHz                           | Pass   | 0.97        | 16.31           | 16.29           | 16.66           | 16.86           | 22.56                | 30.00                |
| 5775MHz                           | Pass   | 0.97        | 18.12           | 18.08           | 18.29           | 18.32           | 24.22                | 30.00                |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | -      | -           | -               | -               | -               | -               | -                    | -                    |
| 5180MHz                           | Pass   | 6.99        | 16.98           | 17.01           | 17.52           | 17.50           | 23.28                | 29.01                |
| 5200MHz                           | Pass   | 6.99        | 18.37           | 18.88           | 18.57           | 18.67           | 24.65                | 29.01                |
| 5240MHz                           | Pass   | 6.99        | 17.79           | 17.13           | 18.77           | 18.49           | 24.11                | 29.01                |
| 5745MHz                           | Pass   | 6.99        | 17.90           | 18.41           | 18.30           | 18.80           | 24.38                | 29.01                |
| 5785MHz                           | Pass   | 6.99        | 17.83           | 18.51           | 17.27           | 18.43           | 24.06                | 29.01                |
| 5825MHz                           | Pass   | 6.99        | 17.67           | 18.79           | 18.31           | 18.62           | 24.39                | 29.01                |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | -      | -           | -               | -               | -               | -               | -                    | -                    |
| 5190MHz                           | Pass   | 6.99        | 17.18           | 15.91           | 16.23           | 16.26           | 22.44                | 29.01                |
| 5230MHz                           | Pass   | 6.99        | 16.13           | 17.38           | 17.65           | 17.95           | 23.35                | 29.01                |
| 5755MHz                           | Pass   | 6.99        | 16.01           | 16.67           | 15.98           | 17.01           | 22.46                | 29.01                |
| 5795MHz                           | Pass   | 6.99        | 18.29           | 18.73           | 18.29           | 18.77           | 24.55                | 29.01                |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | -      | -           | -               | -               | -               | -               | -                    | -                    |
| 5210MHz                           | Pass   | 6.99        | 15.60           | 15.46           | 15.85           | 16.17           | 21.80                | 29.01                |
| 5775MHz                           | Pass   | 6.99        | 15.48           | 16.28           | 14.96           | 15.38           | 21.57                | 29.01                |

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

**Summary**

| Mode                              | PD<br>(dBm/RBW) |
|-----------------------------------|-----------------|
| 5.15-5.25GHz                      | -               |
| 802.11a_Nss1,(6Mbps)_4TX          | 15.79           |
| 802.11ax HEW20_Nss1,(MCS0)_4TX    | 14.78           |
| 802.11ax HEW40_Nss1,(MCS0)_4TX    | 9.85            |
| 802.11ax HEW80_Nss1,(MCS0)_4TX    | 3.34            |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 10.56           |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | 9.60            |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | 6.84            |
| 5.725-5.85GHz                     | -               |
| 802.11a_Nss1,(6Mbps)_4TX          | 14.42           |
| 802.11ax HEW20_Nss1,(MCS0)_4TX    | 13.50           |
| 802.11ax HEW40_Nss1,(MCS0)_4TX    | 10.28           |
| 802.11ax HEW80_Nss1,(MCS0)_4TX    | 3.46            |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 8.91            |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | 6.26            |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | 4.92            |

**RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;



## Result

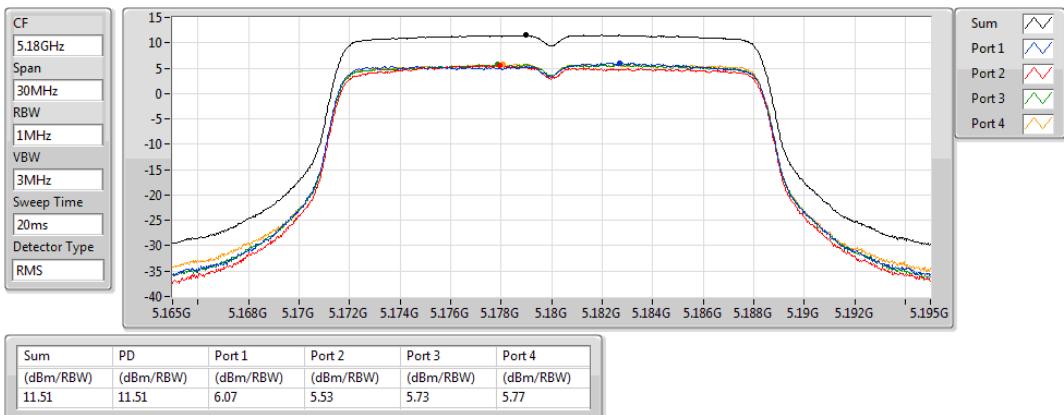
| Mode                              | Result | DG<br>(dBi) | Port 1<br>(dBm/RBW) | Port 2<br>(dBm/RBW) | Port 3<br>(dBm/RBW) | Port 4<br>(dBm/RBW) | PD<br>(dBm/RBW) | PD Limit<br>(dBm/RBW) |
|-----------------------------------|--------|-------------|---------------------|---------------------|---------------------|---------------------|-----------------|-----------------------|
| 802.11a_Nss1,(6Mbps)_4TX          | -      | -           | -                   | -                   | -                   | -                   | -               | -                     |
| 5180MHz                           | Pass   | 6.99        | 6.07                | 5.53                | 5.73                | 5.77                | 11.51           | 16.01                 |
| 5200MHz                           | Pass   | 6.99        | 9.77                | 9.63                | 10.13               | 9.98                | 15.79           | 16.01                 |
| 5240MHz                           | Pass   | 6.99        | 9.18                | 8.84                | 9.27                | 9.57                | 15.06           | 16.01                 |
| 5745MHz                           | Pass   | 6.99        | 8.40                | 8.72                | 8.58                | 8.74                | 14.42           | 29.01                 |
| 5785MHz                           | Pass   | 6.99        | 8.50                | 8.46                | 8.60                | 8.28                | 14.18           | 29.01                 |
| 5825MHz                           | Pass   | 6.99        | 8.75                | 8.18                | 8.48                | 8.38                | 14.04           | 29.01                 |
| 802.11ax HEW20_Nss1,(MCS0)_4TX    | -      | -           | -                   | -                   | -                   | -                   | -               | -                     |
| 5180MHz                           | Pass   | 6.99        | 6.00                | 5.00                | 5.90                | 5.67                | 11.61           | 16.01                 |
| 5200MHz                           | Pass   | 6.99        | 8.17                | 7.75                | 8.35                | 8.60                | 14.07           | 16.01                 |
| 5240MHz                           | Pass   | 6.99        | 9.07                | 8.61                | 9.27                | 9.11                | 14.78           | 16.01                 |
| 5745MHz                           | Pass   | 6.99        | 7.47                | 7.71                | 7.46                | 7.84                | 13.50           | 29.01                 |
| 5785MHz                           | Pass   | 6.99        | 7.88                | 7.53                | 7.43                | 7.47                | 13.34           | 29.01                 |
| 5825MHz                           | Pass   | 6.99        | 7.69                | 7.02                | 8.02                | 7.35                | 13.24           | 29.01                 |
| 802.11ax HEW40_Nss1,(MCS0)_4TX    | -      | -           | -                   | -                   | -                   | -                   | -               | -                     |
| 5190MHz                           | Pass   | 6.99        | 0.61                | -0.19               | 0.77                | 0.66                | 6.27            | 16.01                 |
| 5230MHz                           | Pass   | 6.99        | 3.96                | 3.58                | 4.26                | 4.61                | 9.85            | 16.01                 |
| 5755MHz                           | Pass   | 6.99        | 3.78                | 3.75                | 4.37                | 4.25                | 9.52            | 29.01                 |
| 5795MHz                           | Pass   | 6.99        | 4.18                | 4.28                | 4.90                | 4.75                | 10.28           | 29.01                 |
| 802.11ax HEW80_Nss1,(MCS0)_4TX    | -      | -           | -                   | -                   | -                   | -                   | -               | -                     |
| 5210MHz                           | Pass   | 6.99        | -2.62               | -2.73               | -2.48               | -2.10               | 3.34            | 16.01                 |
| 5775MHz                           | Pass   | 6.99        | -2.20               | -2.33               | -1.43               | -2.12               | 3.46            | 29.01                 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | -      | -           | -                   | -                   | -                   | -                   | -               | -                     |
| 5180MHz                           | Pass   | 6.99        | 3.37                | 5.67                | 3.73                | 3.80                | 9.93            | 16.01                 |
| 5200MHz                           | Pass   | 6.99        | 4.56                | 5.77                | 4.80                | 4.89                | 10.56           | 16.01                 |
| 5240MHz                           | Pass   | 6.99        | 4.34                | 4.36                | 5.64                | 4.51                | 10.41           | 16.01                 |
| 5745MHz                           | Pass   | 6.99        | 2.56                | 3.19                | 3.02                | 3.59                | 8.91            | 29.01                 |
| 5785MHz                           | Pass   | 6.99        | 2.54                | 3.23                | 2.03                | 3.24                | 8.56            | 29.01                 |
| 5825MHz                           | Pass   | 6.99        | 2.64                | 3.56                | 2.75                | 3.65                | 8.86            | 29.01                 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | -      | -           | -                   | -                   | -                   | -                   | -               | -                     |
| 5190MHz                           | Pass   | 6.99        | 4.59                | -0.36               | 4.99                | 3.90                | 9.60            | 16.01                 |
| 5230MHz                           | Pass   | 6.99        | 2.48                | 0.68                | 1.16                | 1.19                | 7.15            | 16.01                 |
| 5755MHz                           | Pass   | 6.99        | -1.45               | -0.82               | 1.29                | -0.59               | 5.42            | 29.01                 |
| 5795MHz                           | Pass   | 6.99        | 0.64                | 1.25                | 0.10                | 0.91                | 6.26            | 29.01                 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | -      | -           | -                   | -                   | -                   | -                   | -               | -                     |
| 5210MHz                           | Pass   | 6.99        | 2.69                | 2.77                | -0.54               | -3.14               | 6.84            | 16.01                 |
| 5775MHz                           | Pass   | 6.99        | -5.08               | -4.83               | 0.81                | 1.58                | 4.92            | 29.01                 |

**DG** = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

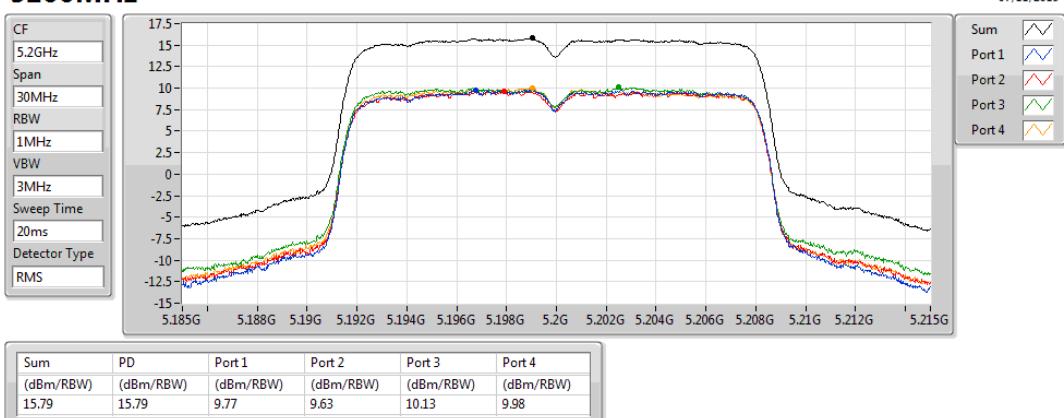
**PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

**802.11a\_Nss1,(6Mbps)\_4TX**
**PSD**
**5180MHz**

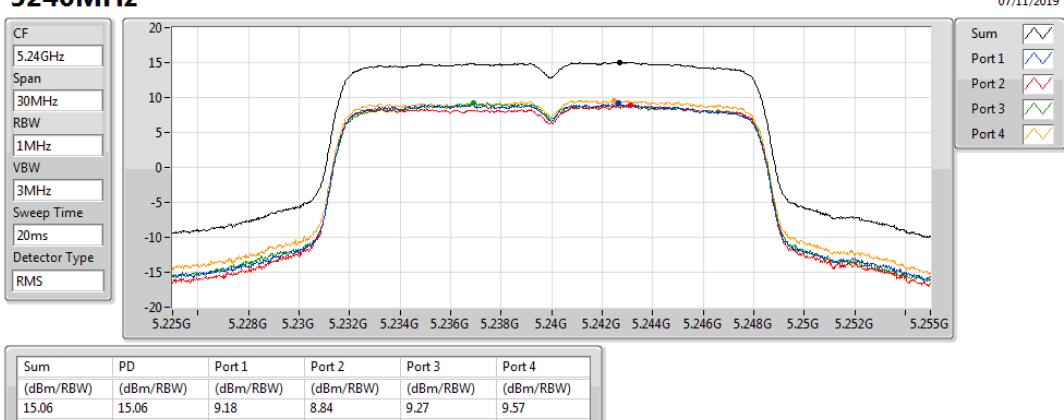
07/11/2019


**802.11a\_Nss1,(6Mbps)\_4TX**
**PSD**
**5200MHz**

07/11/2019

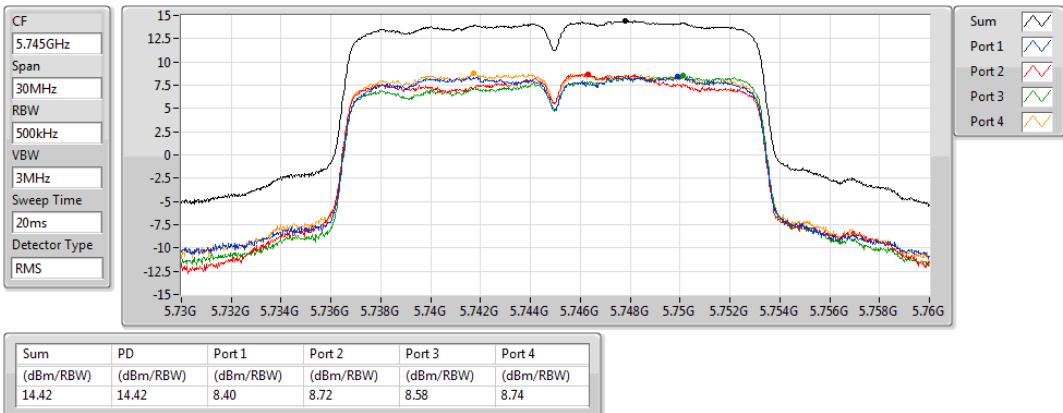

**802.11a\_Nss1,(6Mbps)\_4TX**
**PSD**
**5240MHz**

07/11/2019

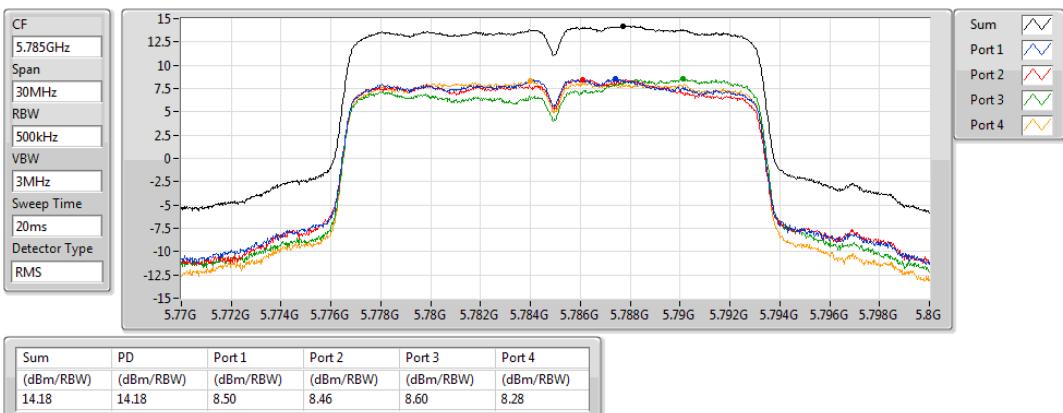


**802.11a\_Nss1,(6Mbps)\_4TX****PSD****5745MHz**

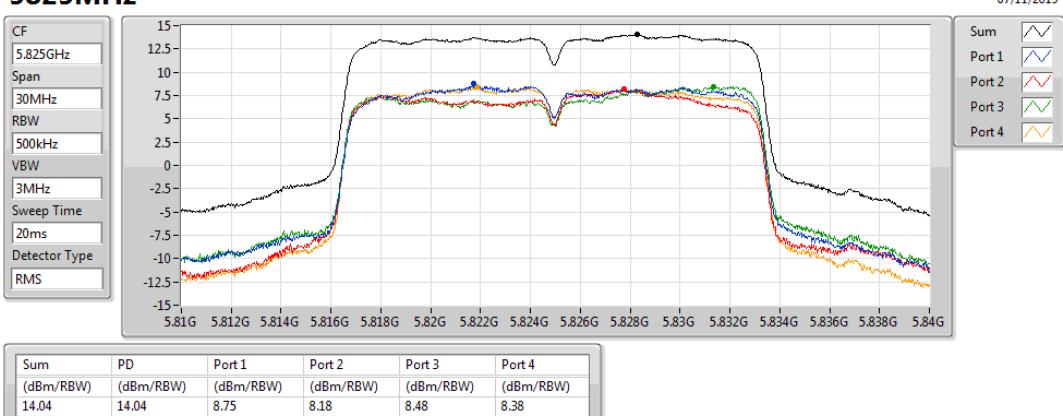
07/11/2019

**802.11a\_Nss1,(6Mbps)\_4TX****PSD****5785MHz**

07/11/2019

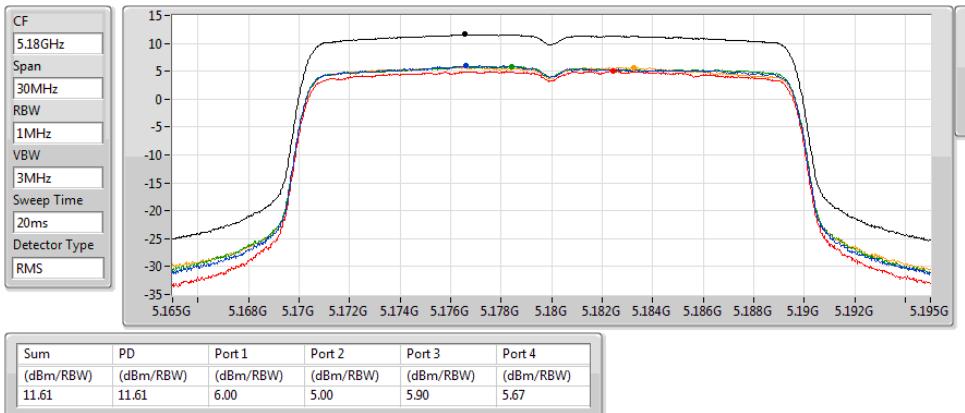
**802.11a\_Nss1,(6Mbps)\_4TX****PSD****5825MHz**

07/11/2019

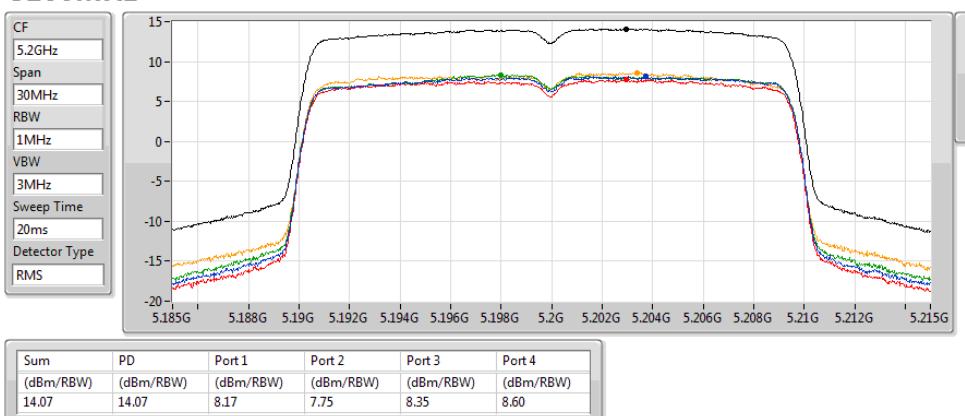


**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**PSD**
**5180MHz**

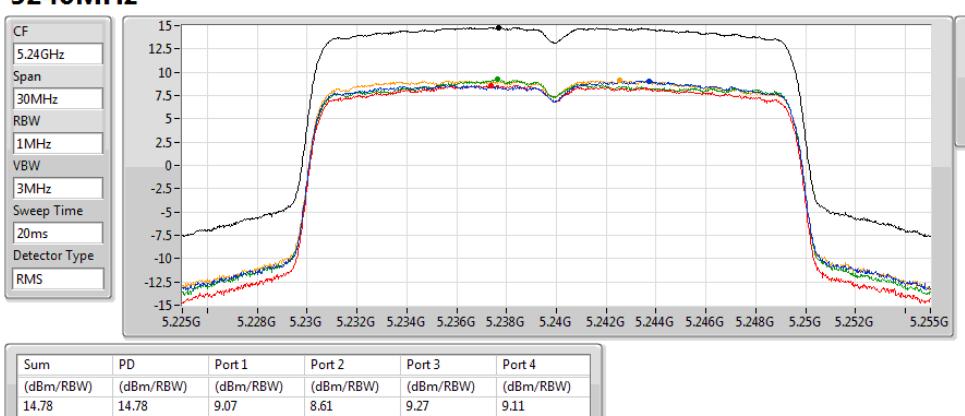
07/11/2019


**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**PSD**
**5200MHz**

07/11/2019

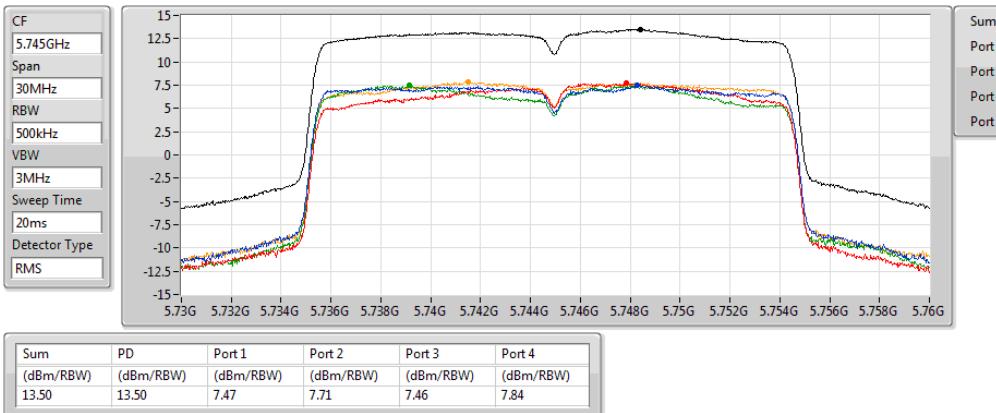

**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**PSD**
**5240MHz**

07/11/2019

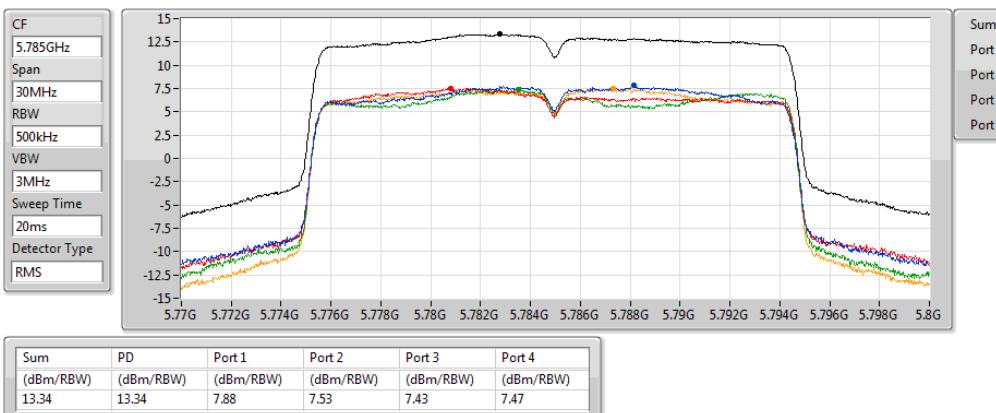


**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**PSD**
**5745MHz**

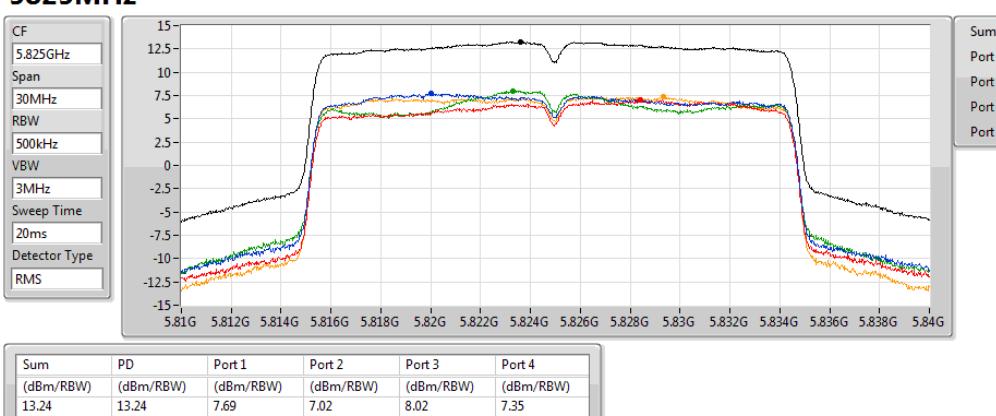
07/11/2019


**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**PSD**
**5785MHz**

07/11/2019

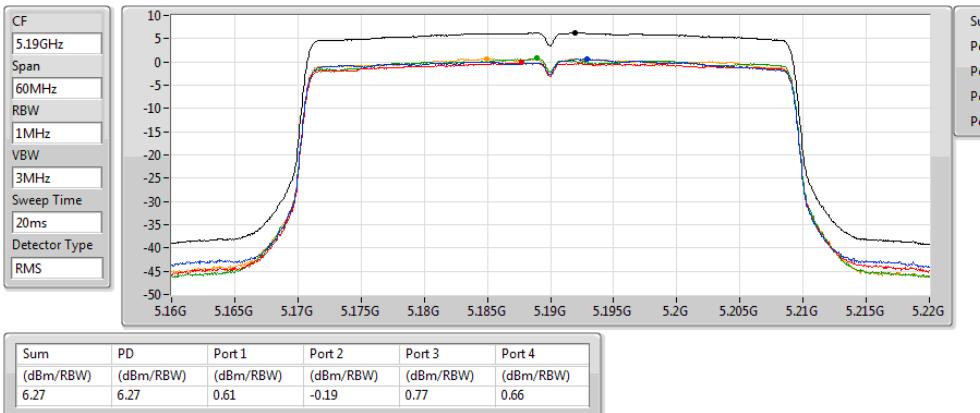

**802.11ax HEW20\_Nss1,(MCS0)\_4TX**
**PSD**
**5825MHz**

07/11/2019

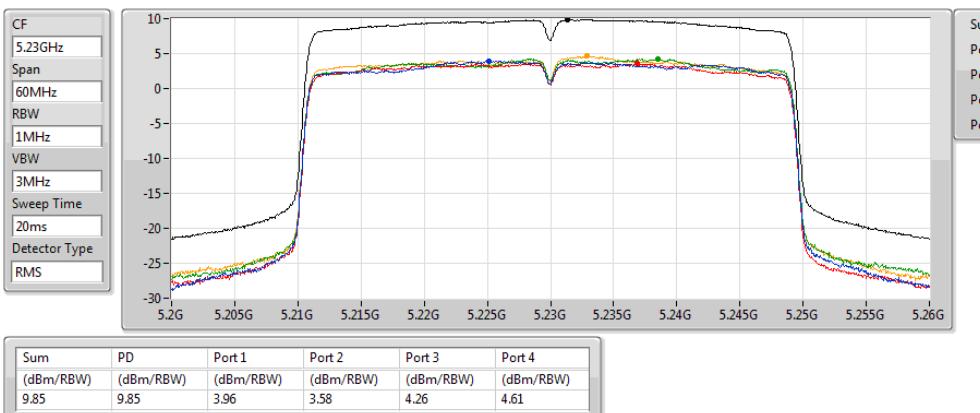


**802.11ax HEW40\_Nss1,(MCS0)\_4TX**
**PSD**
**5190MHz**

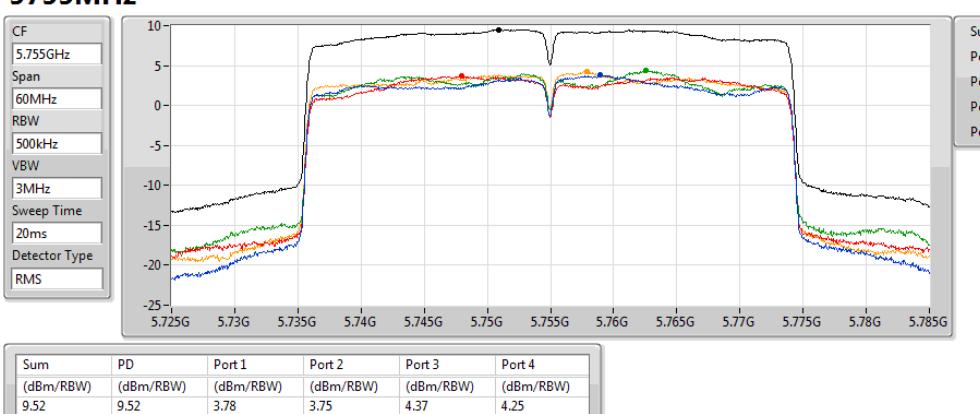
07/11/2019


**802.11ax HEW40\_Nss1,(MCS0)\_4TX**
**PSD**
**5230MHz**

07/11/2019

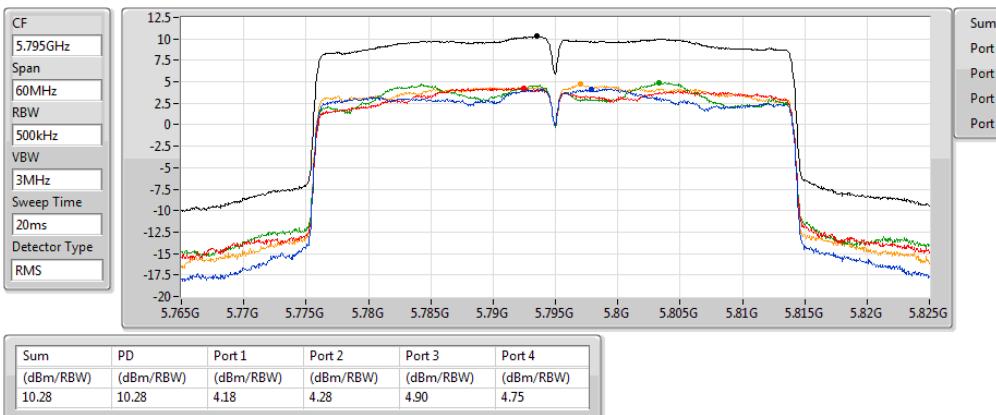

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**
**PSD**
**5755MHz**

07/11/2019

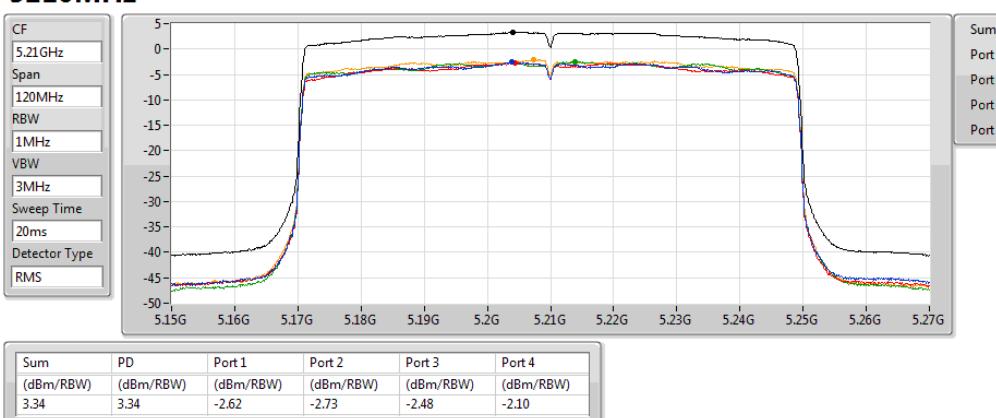


**802.11ax HEW40\_Nss1,(MCS0)\_4TX**
**PSD**
**5795MHz**

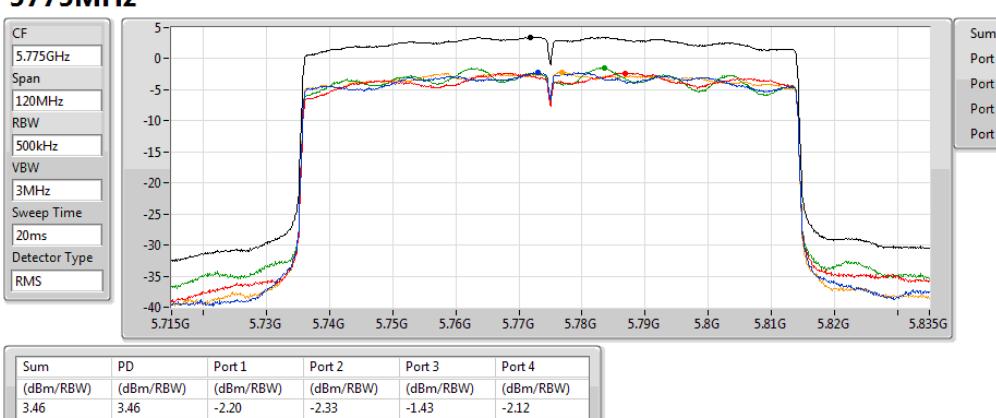
07/11/2019


**802.11ax HEW80\_Nss1,(MCS0)\_4TX**
**PSD**
**5210MHz**

07/11/2019


**802.11ax HEW80\_Nss1,(MCS0)\_4TX**
**PSD**
**5775MHz**

07/11/2019

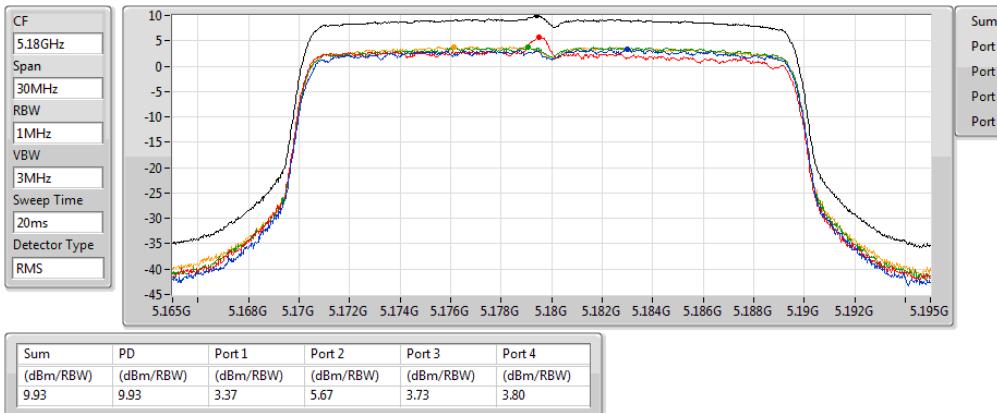


**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

PSD

**5180MHz**

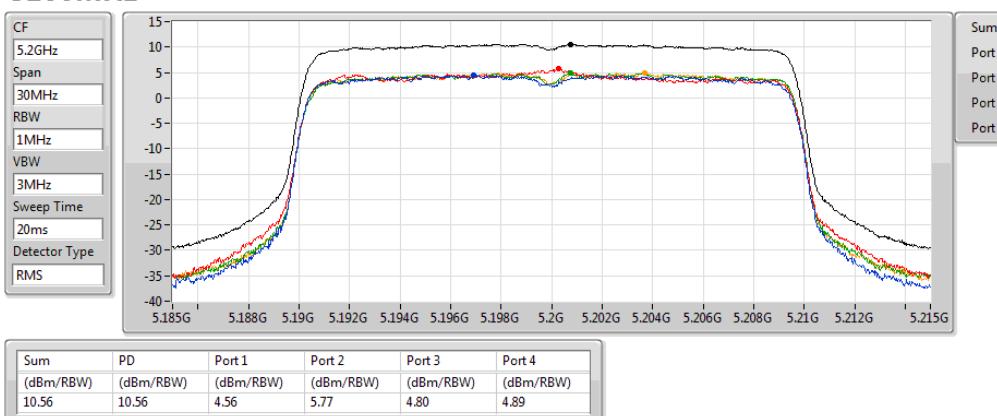
24/12/2019


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

PSD

**5200MHz**

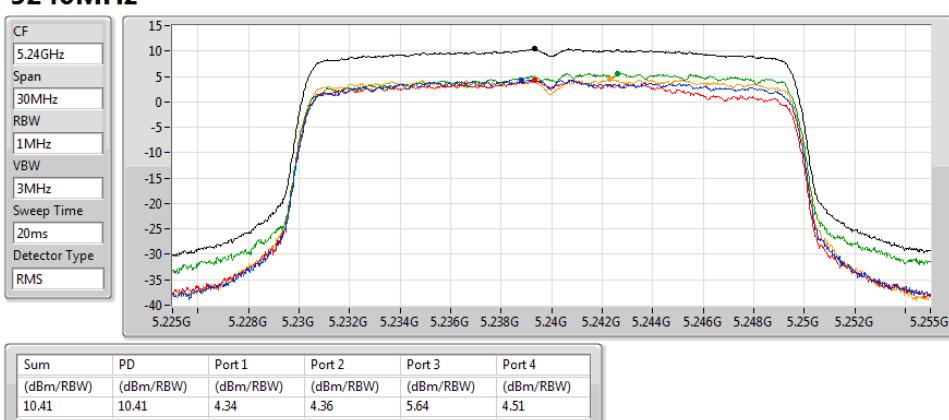
24/12/2019


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

PSD

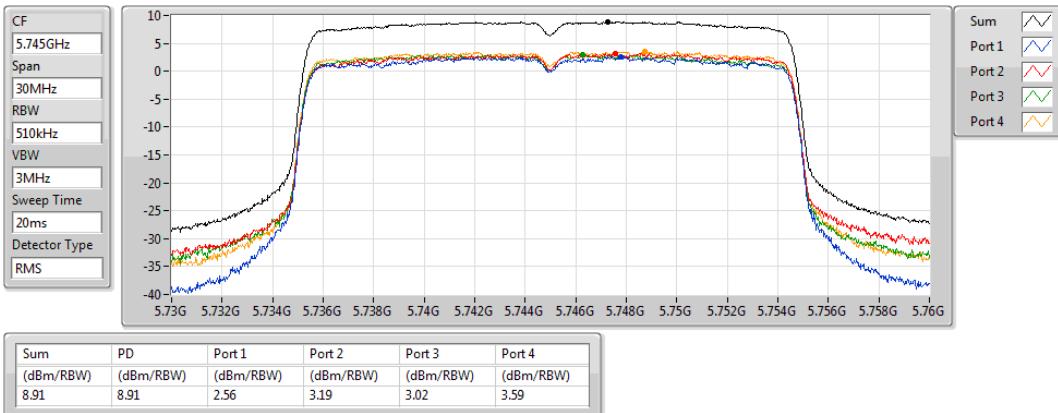
**5240MHz**

24/12/2019

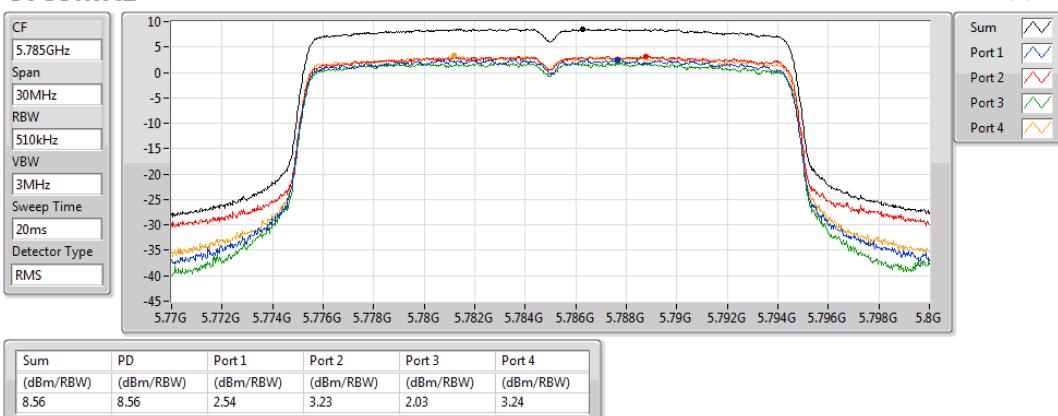


**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**
**PSD**
**5745MHz**

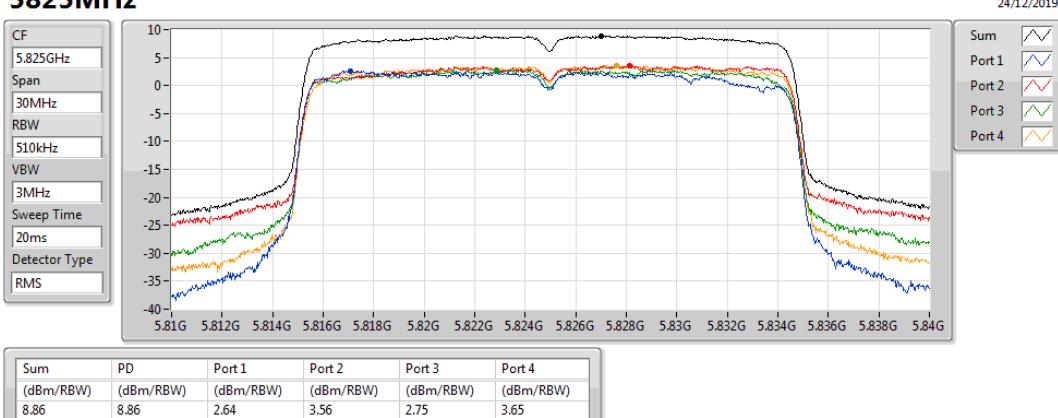
24/12/2019


**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**
**PSD**
**5785MHz**

24/12/2019

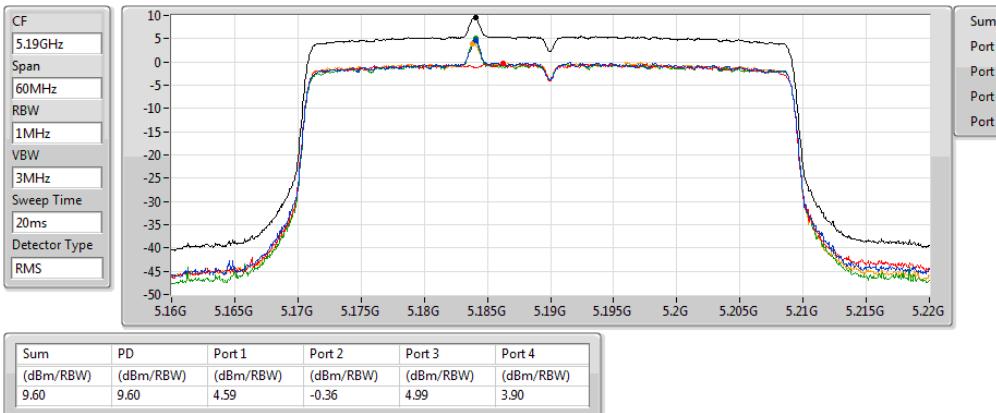

**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**
**PSD**
**5825MHz**

24/12/2019

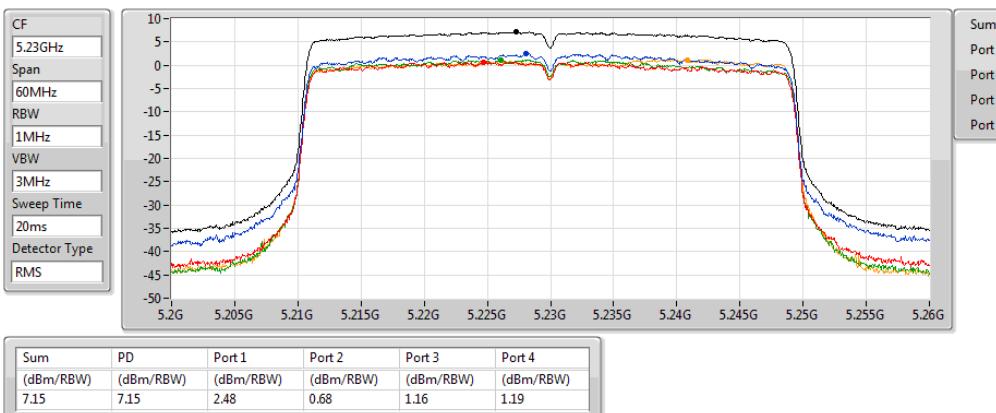


**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**
**PSD**
**5190MHz**

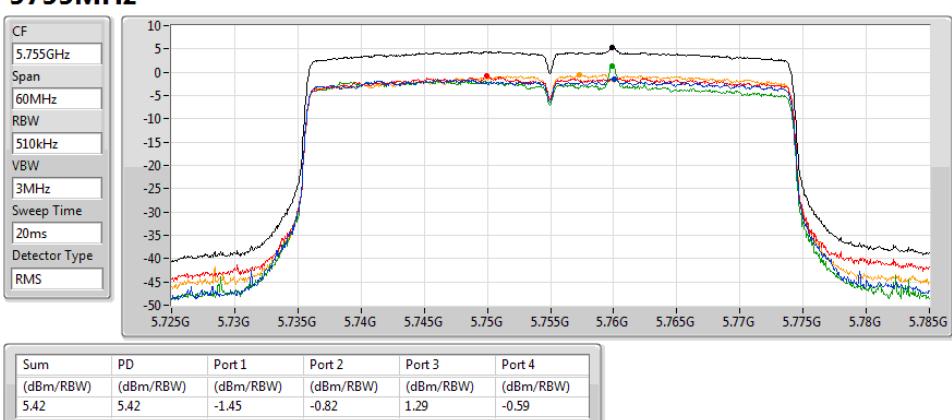
24/12/2019

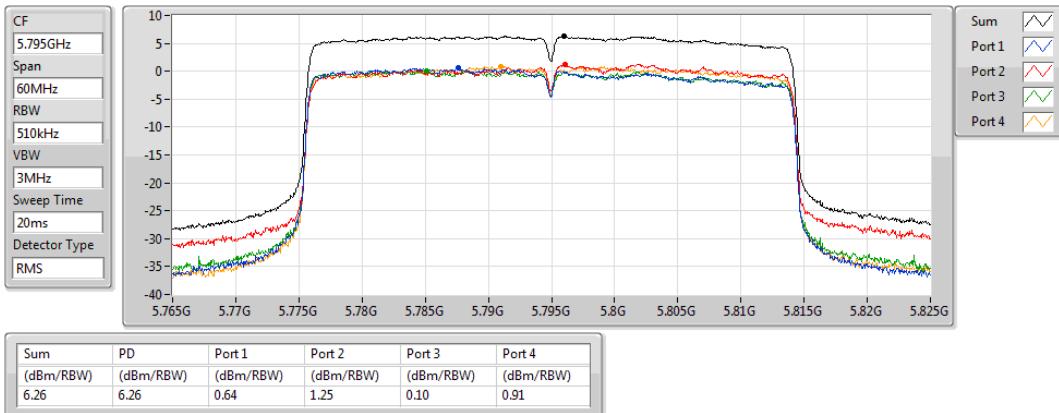
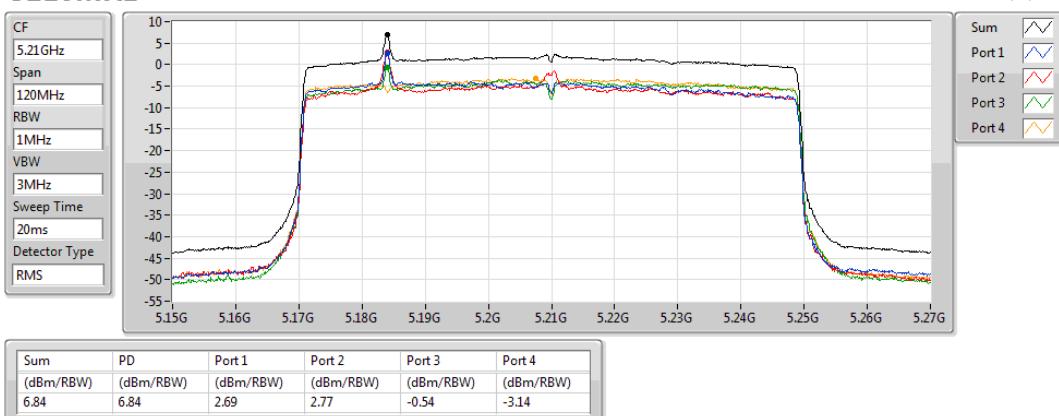
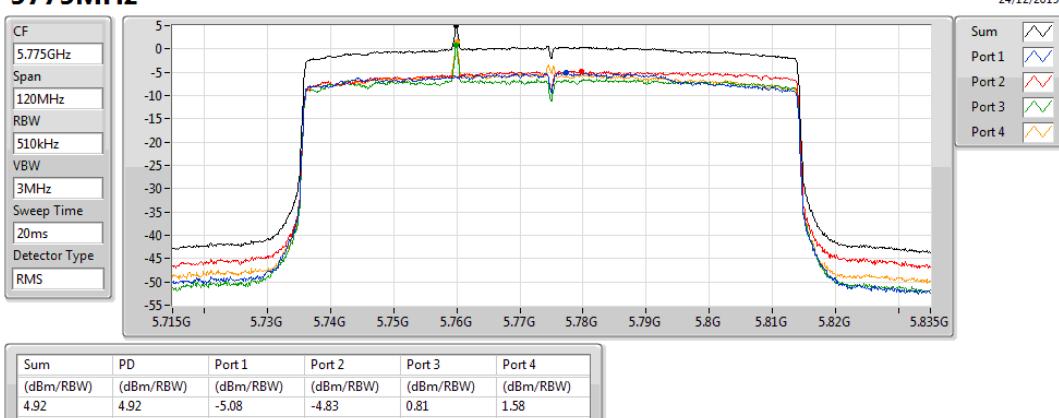

**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**
**PSD**
**5230MHz**

24/12/2019


**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**
**PSD**
**5755MHz**

24/12/2019

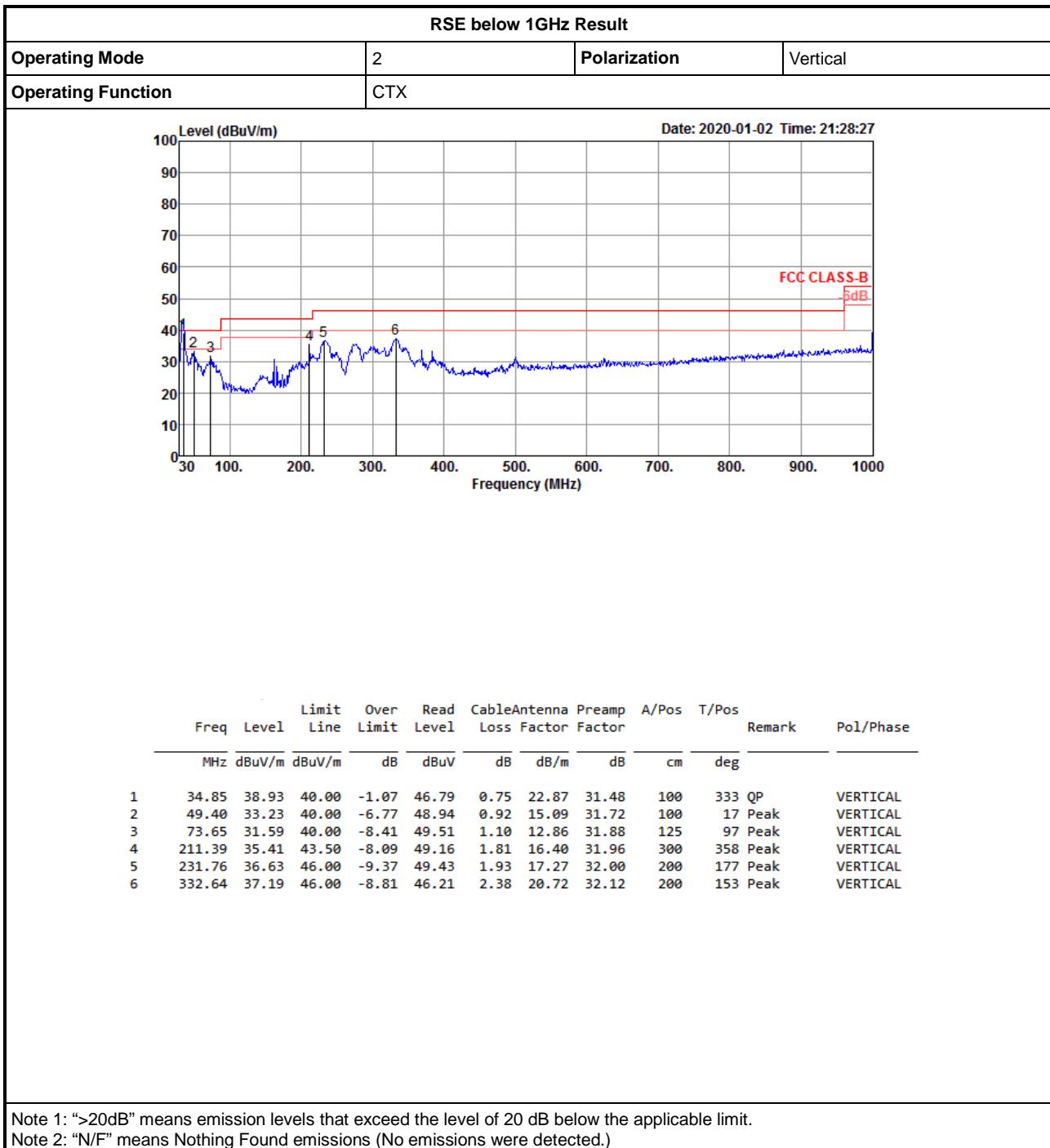


**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**
**5795MHz**

**802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX**
**5210MHz**

**802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX**
**5775MHz**




## RSE below 1GHz Result

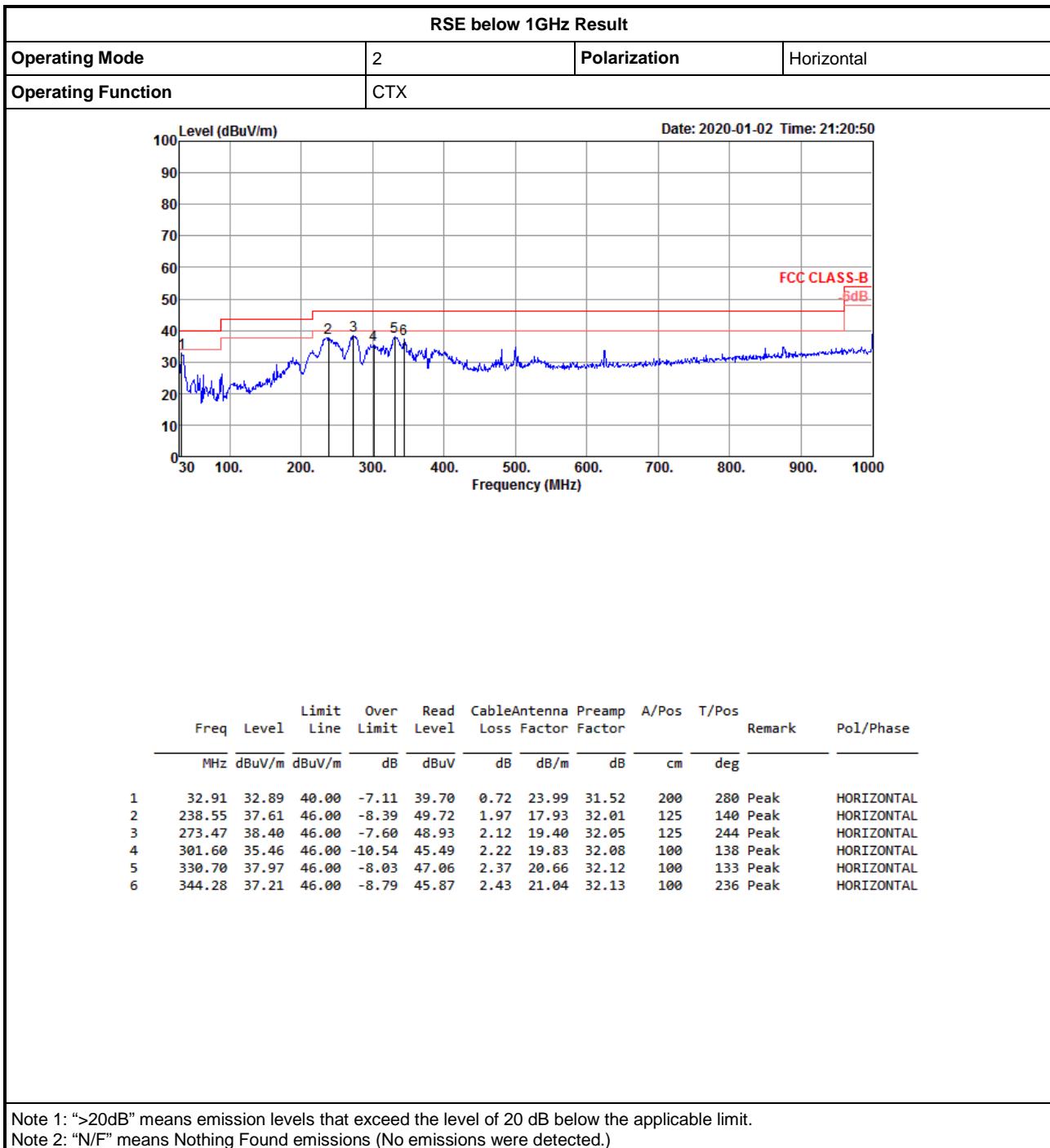
Appendix E.1





## RSE below 1GHz Result

Appendix E.1





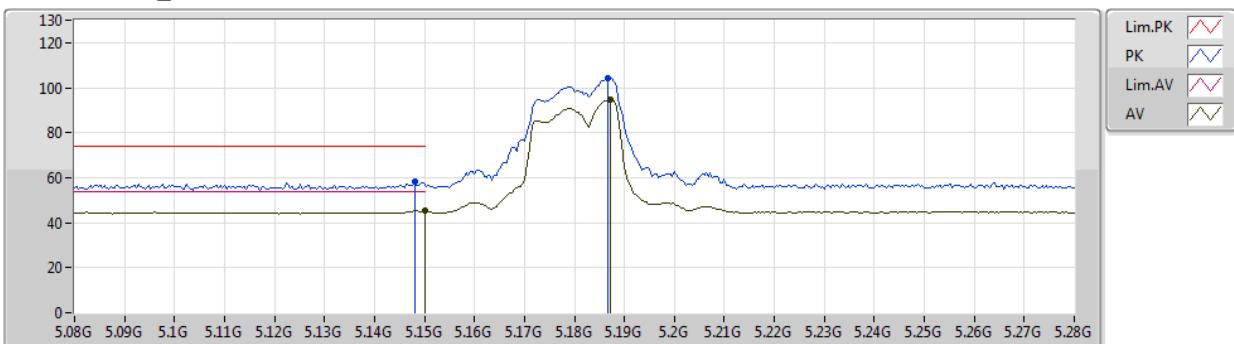
**<Non-beamforming mode>**

**Summary**

| Mode                           | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comments |
|--------------------------------|--------|------|-----------|----------------|----------------|-------------|-------------|----------|------------|-------------|------------|----------|
| 5.15-5.25GHz                   | -      | -    | -         | -              | -              | -           | -           | -        | -          | -           | -          | -        |
| 802.11ax HEW80_Nss1,(MCS0)_4TX | Pass   | AV   | 5.131G    | 53.92          | 54.00          | -0.08       | 4.24        | 3        | Horizontal | 60          | 1.63       | -        |

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

24/10/2019

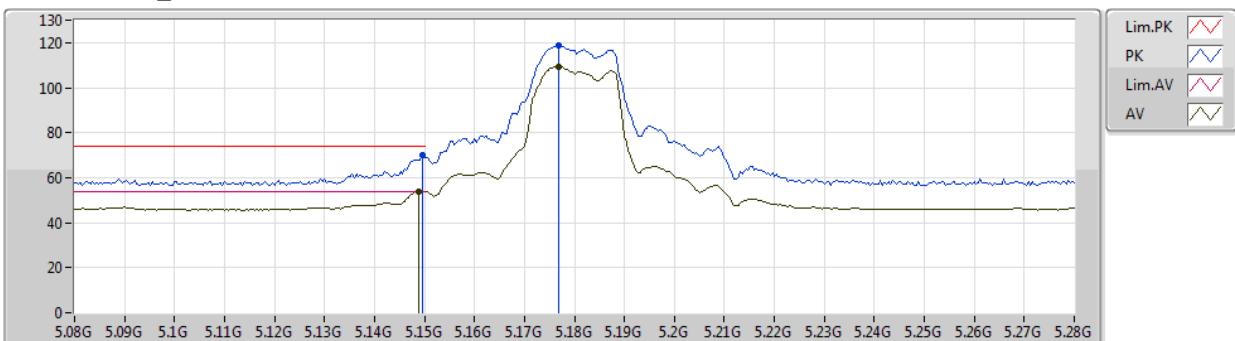
**5180MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 18  
 01-J-5-10  
 FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition (*) | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|---------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 5.148G    | 58.09          | 74.00          | -15.91      | 53.84      | 3        | Vertical      | 143         | 1.48       | -            | 33.05   | 5.65    | 34.45   |
| AV   | 5.15G     | 45.32          | 54.00          | -8.68       | 41.07      | 3        | Vertical      | 143         | 1.48       | -            | 33.05   | 5.65    | 34.45   |
| PK   | 5.1868G   | 104.22         | Inf            | -Inf        | 99.95      | 3        | Vertical      | 143         | 1.48       | -            | 33.09   | 5.64    | 34.46   |
| AV   | 5.1872G   | 94.84          | Inf            | -Inf        | 90.57      | 3        | Vertical      | 143         | 1.48       | -            | 33.09   | 5.64    | 34.46   |

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

24/10/2019

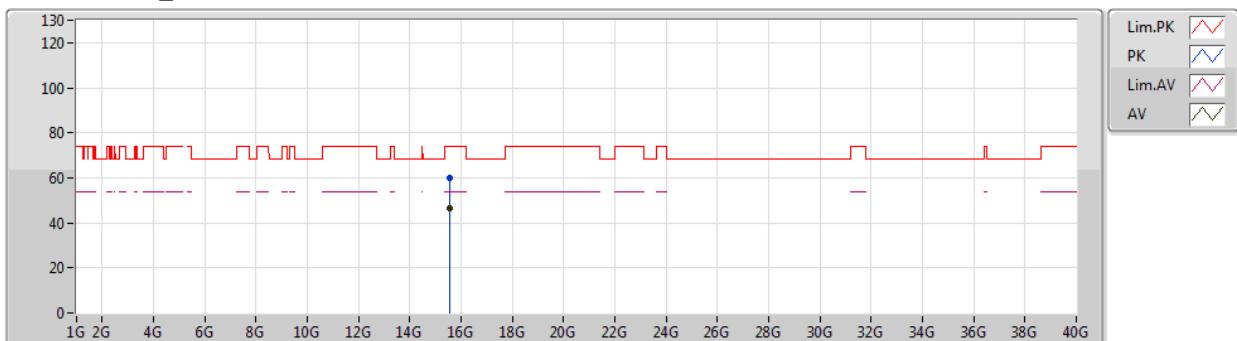
**5180MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 18  
 01-J-5-10  
 FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition (*) | Azimuth | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|---------------|---------|------------|--------------|---------|---------|---------|--|
| PK   | 5.1496G   | 70.03          | 74.00          | -3.97       | 65.78      | 3        | Horizontal    | 58      | 1.83       | -            | 33.05   | 5.65    | 34.45   |  |
| AV   | 5.1488G   | 53.83          | 54.00          | -0.17       | 49.58      | 3        | Horizontal    | 58      | 1.83       | -            | 33.05   | 5.65    | 34.45   |  |
| PK   | 5.1768G   | 118.80         | Inf            | -Inf        | 114.54     | 3        | Horizontal    | 58      | 1.83       | -            | 33.08   | 5.64    | 34.46   |  |
| AV   | 5.1768G   | 109.37         | Inf            | -Inf        | 105.11     | 3        | Horizontal    | 58      | 1.83       | -            | 33.08   | 5.64    | 34.46   |  |

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

24/10/2019

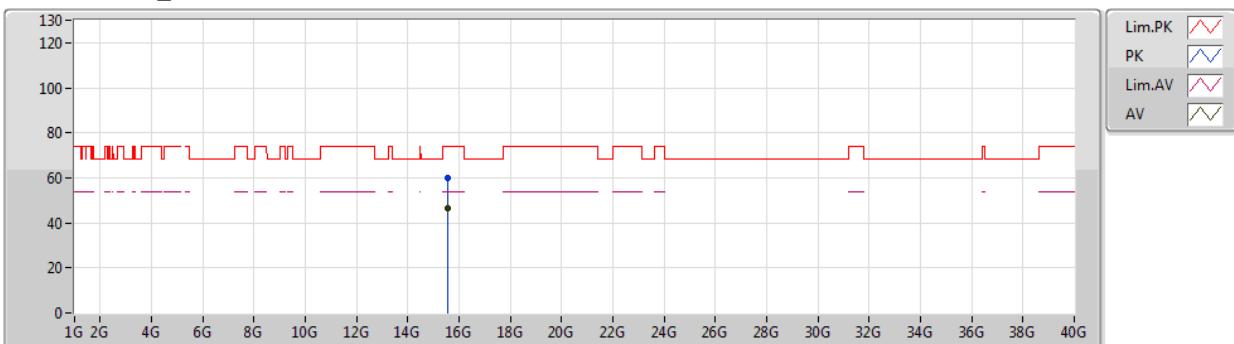
**5180MHz\_TX**

EUT X\_4TX\_Dipole  
Setting 18  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 15.54494G | 60.20          | 74.00          | -13.80      | 45.81      | 3        | Vertical  | 279         | 1.16       | -            | 38.87   | 10.50   | 34.98   |
| AV   | 15.53684G | 46.62          | 54.00          | -7.38       | 32.21      | 3        | Vertical  | 279         | 1.16       | -            | 38.89   | 10.50   | 34.98   |

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

24/10/2019

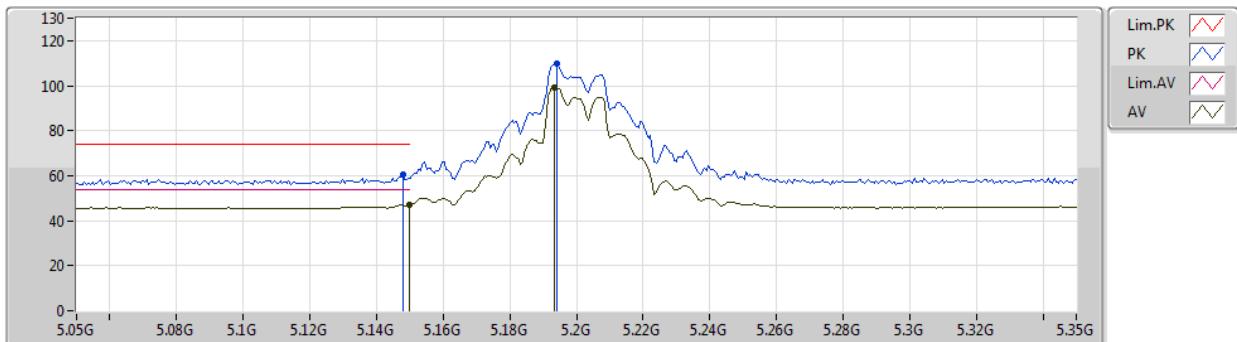
**5180MHz\_TX**

EUT X\_4TX\_Dipole  
Setting 18  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|--|
| PK   | 15.53744G | 59.69          | 74.00          | -14.31      | 45.28      | 3        | Horizontal | 139         | 2.20       | -            | 38.89   | 10.50   | 34.98   |  |
| AV   | 15.54024G | 46.56          | 54.00          | -7.44       | 32.16      | 3        | Horizontal | 139         | 2.20       | -            | 38.88   | 10.50   | 34.98   |  |

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

24/10/2019

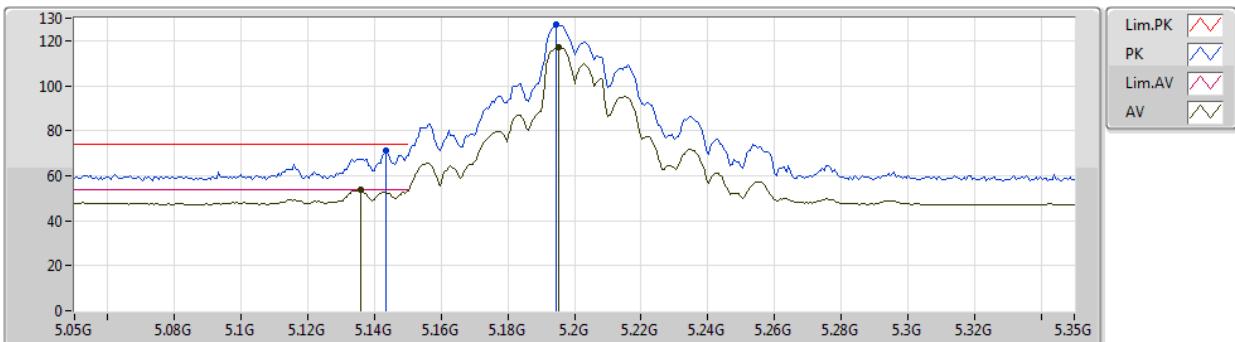
**5200MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 23  
 03-P-2-10  
 FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 5.1478G   | 60.26          | 74.00          | -13.74      | 54.76      | 3        | Vertical  | 104         | 1.33       | -            | 34.05   | 6.42    | 34.97   |
| AV   | 5.15G     | 46.90          | 54.00          | -7.10       | 41.40      | 3        | Vertical  | 104         | 1.33       | -            | 34.05   | 6.42    | 34.97   |
| PK   | 5.194G    | 109.77         | Inf            | -Inf        | 104.15     | 3        | Vertical  | 104         | 1.33       | -            | 34.09   | 6.51    | 34.98   |
| AV   | 5.1934G   | 99.26          | Inf            | -Inf        | 93.64      | 3        | Vertical  | 104         | 1.33       | -            | 34.09   | 6.51    | 34.98   |

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

24/10/2019

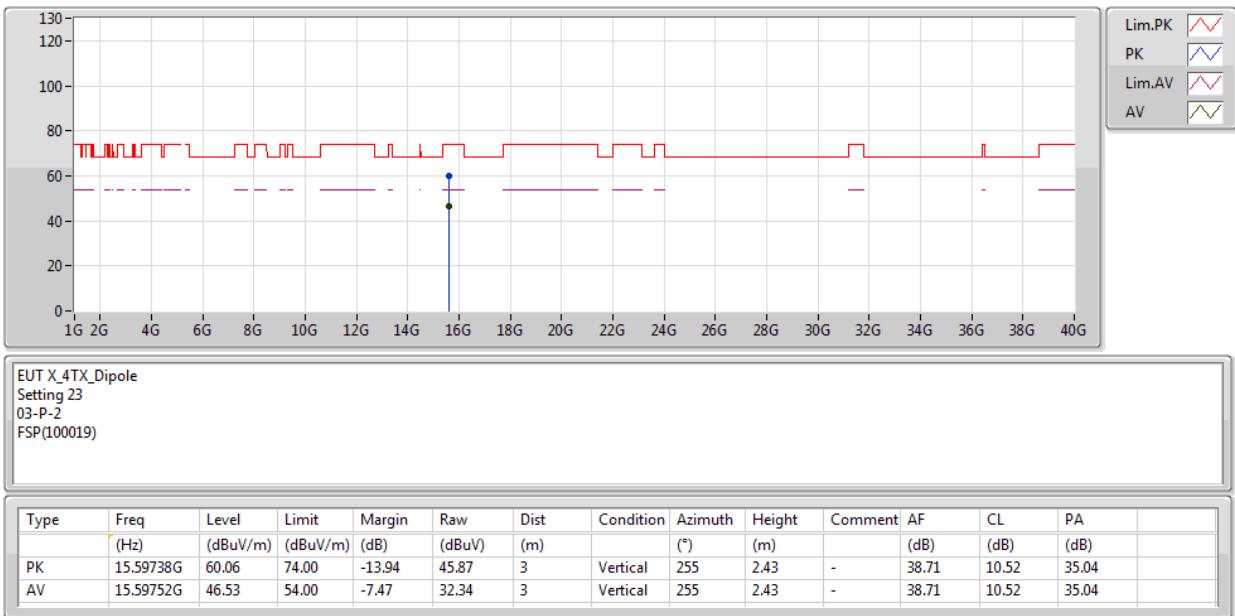
**5200MHz\_TX**


EUT\_X\_4TX\_Dipole  
Setting 23  
03-P-2-10  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition (*) | Azimuth | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|---------------|---------|------------|---------|---------|---------|---------|--|
| PK   | 5.1436G   | 70.99          | 74.00          | -3.01       | 65.51      | 3        | Horizontal    | 59      | 1.77       | -       | 34.04   | 6.41    | 34.97   |  |
| AV   | 5.1358G   | 53.70          | 54.00          | -0.30       | 48.23      | 3        | Horizontal    | 59      | 1.77       | -       | 34.04   | 6.40    | 34.97   |  |
| PK   | 5.1946G   | 127.04         | Inf            | -Inf        | 121.42     | 3        | Horizontal    | 59      | 1.77       | -       | 34.09   | 6.51    | 34.98   |  |
| AV   | 5.1952G   | 117.27         | Inf            | -Inf        | 111.64     | 3        | Horizontal    | 59      | 1.77       | -       | 34.10   | 6.51    | 34.98   |  |

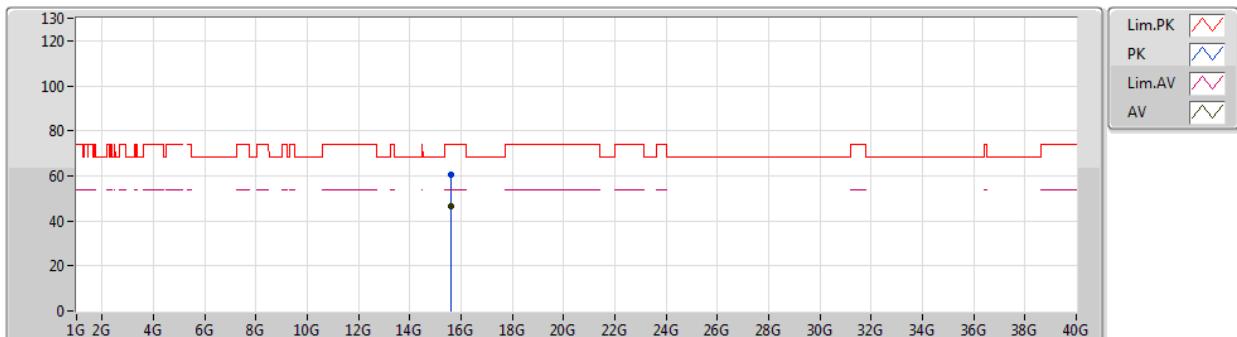
**802.11a\_Nss1,(6Mbps)\_4TX**

24/10/2019

**5200MHz\_TX**

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

24/10/2019

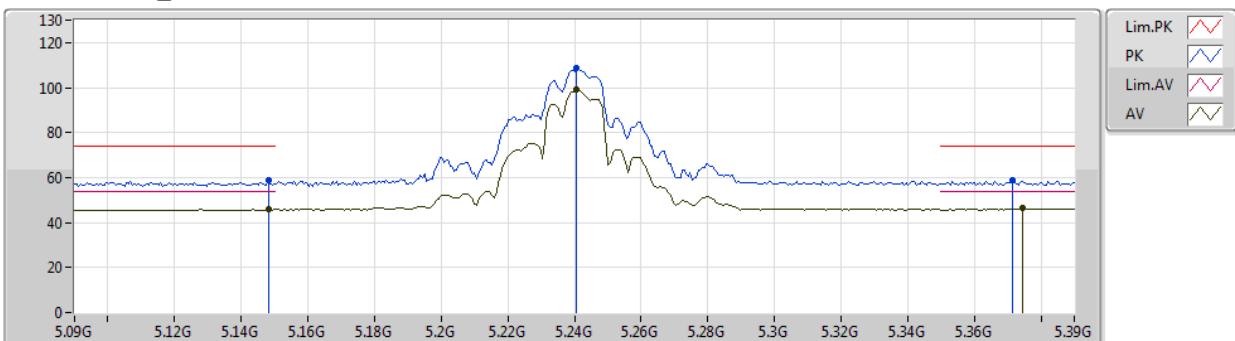
**5200MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 23  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|--|
| PK   | 15.599G   | 60.25          | 74.00          | -13.75      | 46.07      | 3        | Horizontal | 320         | 1.97       | -            | 38.70   | 10.52   | 35.04   |  |
| AV   | 15.5985G  | 46.53          | 54.00          | -7.47       | 32.35      | 3        | Horizontal | 320         | 1.97       | -            | 38.70   | 10.52   | 35.04   |  |

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

24/10/2019

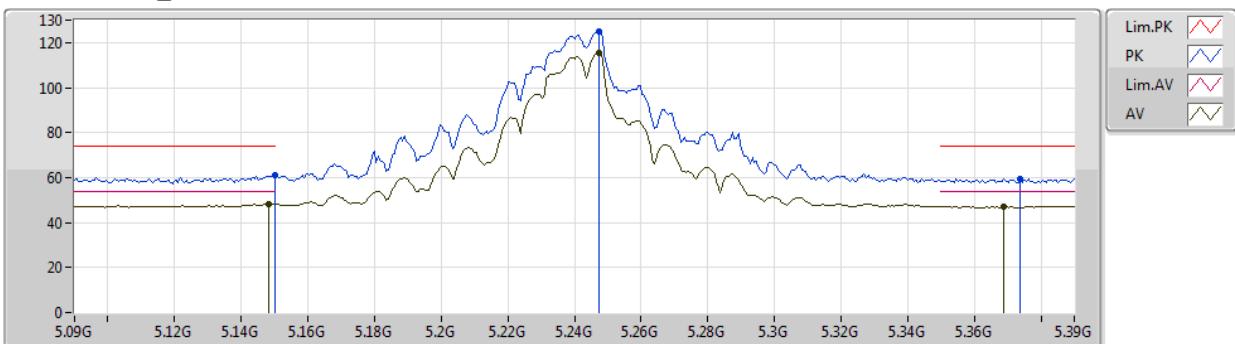
**5240MHz\_TX**


EUT\_X\_4TX\_Dipole  
Setting 23  
03-P-2-10  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.1482G   | 58.77          | 74.00          | -15.23      | 53.27      | 3        | Vertical  | 104         | 1.44       | -       | 34.05   | 6.42    | 34.97   |  |
| AV   | 5.1482G   | 45.76          | 54.00          | -8.24       | 40.26      | 3        | Vertical  | 104         | 1.44       | -       | 34.05   | 6.42    | 34.97   |  |
| PK   | 5.2406G   | 108.43         | Inf            | -Inf        | 102.73     | 3        | Vertical  | 104         | 1.44       | -       | 34.18   | 6.50    | 34.98   |  |
| AV   | 5.2406G   | 99.01          | Inf            | -Inf        | 93.31      | 3        | Vertical  | 104         | 1.44       | -       | 34.18   | 6.50    | 34.98   |  |
| PK   | 5.3714G   | 58.81          | 74.00          | -15.19      | 52.99      | 3        | Vertical  | 104         | 1.44       | -       | 34.37   | 6.44    | 34.99   |  |
| AV   | 5.3744G   | 46.30          | 54.00          | -7.70       | 40.48      | 3        | Vertical  | 104         | 1.44       | -       | 34.37   | 6.44    | 34.99   |  |

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

24/10/2019

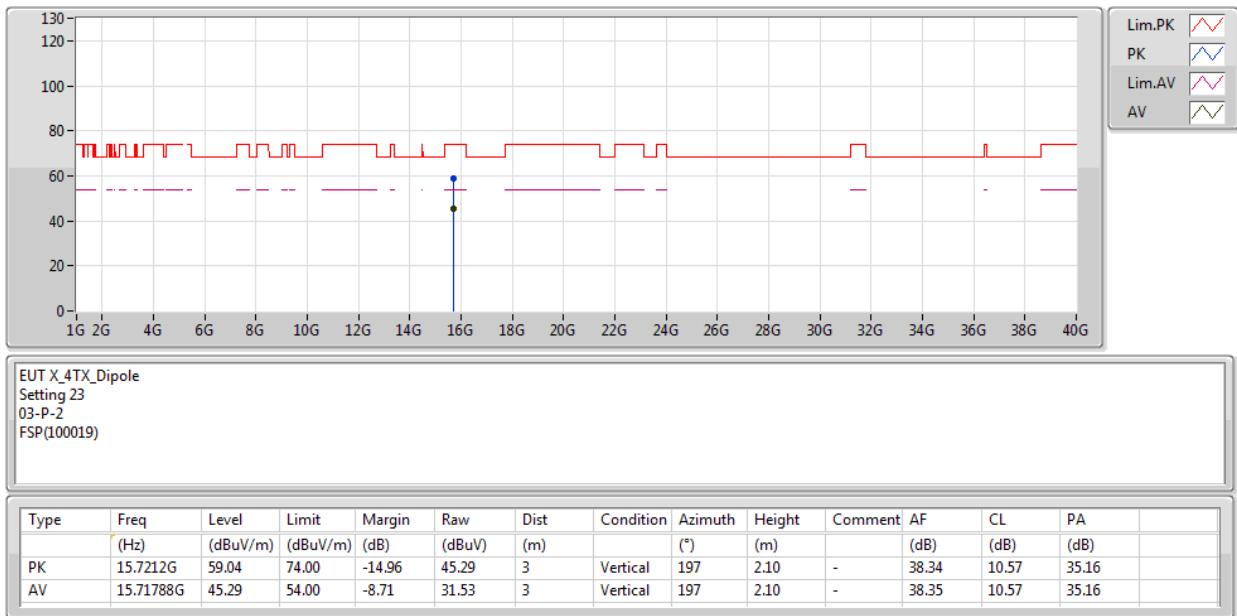
**5240MHz\_TX**


EUT\_X\_4TX\_Dipole  
Setting 23  
03-P-2-10  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|--|
| PK   | 5.15G     | 60.98          | 74.00          | -13.02      | 55.48      | 3        | Horizontal | 60          | 1.48       | -            | 34.05   | 6.42    | 34.97   |  |
| AV   | 5.1482G   | 48.22          | 54.00          | -5.78       | 42.72      | 3        | Horizontal | 60          | 1.48       | -            | 34.05   | 6.42    | 34.97   |  |
| PK   | 5.2472G   | 124.95         | Inf            | -Inf        | 119.24     | 3        | Horizontal | 60          | 1.48       | -            | 34.19   | 6.50    | 34.98   |  |
| AV   | 5.2472G   | 115.38         | Inf            | -Inf        | 109.67     | 3        | Horizontal | 60          | 1.48       | -            | 34.19   | 6.50    | 34.98   |  |
| PK   | 5.3738G   | 59.53          | 74.00          | -14.47      | 53.71      | 3        | Horizontal | 60          | 1.48       | -            | 34.37   | 6.44    | 34.99   |  |
| AV   | 5.369G    | 47.23          | 54.00          | -6.77       | 41.41      | 3        | Horizontal | 60          | 1.48       | -            | 34.37   | 6.44    | 34.99   |  |

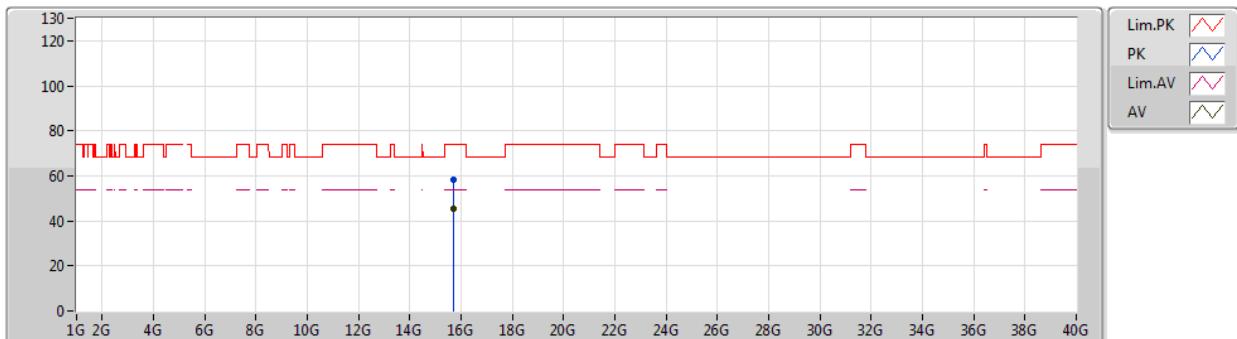
**802.11a\_Nss1,(6Mbps)\_4TX**

24/10/2019

**5240MHz\_TX**

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

24/10/2019

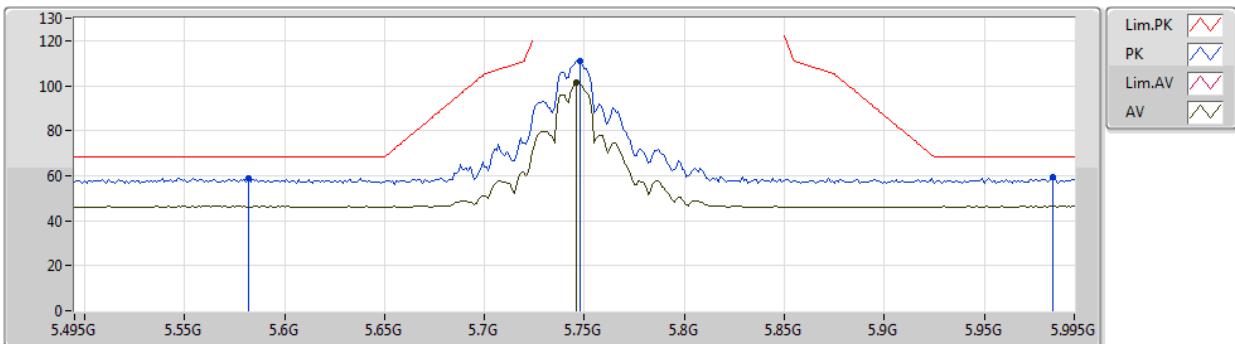
**5240MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 23  
 03-P-2  
 FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|--|
| PK   | 15.72262G | 58.51          | 74.00          | -15.49      | 44.77      | 3        | Horizontal | 210         | 1.85       | -            | 38.33   | 10.57   | 35.16   |  |
| AV   | 15.71924G | 45.30          | 54.00          | -8.70       | 31.55      | 3        | Horizontal | 210         | 1.85       | -            | 38.34   | 10.57   | 35.16   |  |

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

24/10/2019

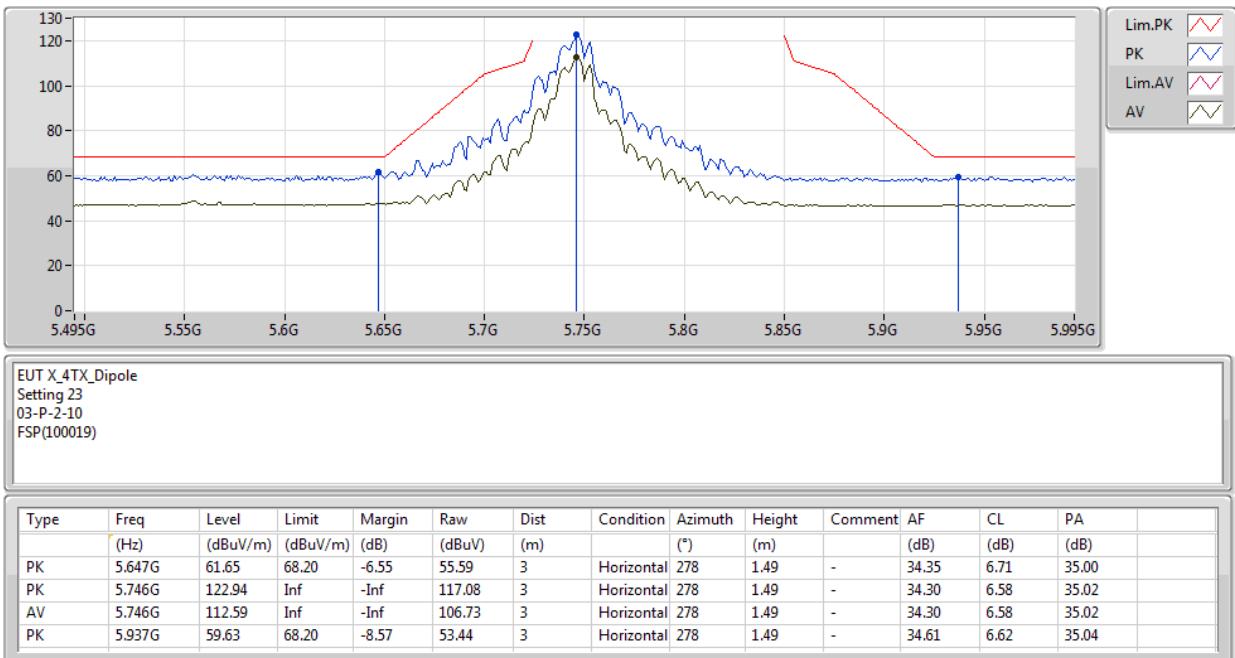
**5745MHz\_TX**


EUT\_X\_4TX\_Dipole  
Setting 23  
03-P-2-10  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.582G    | 59.00          | 68.20          | -9.20       | 52.84      | 3        | Vertical  | 69          | 1.42       | -       | 34.42   | 6.74    | 35.00   |  |
| PK   | 5.748G    | 110.92         | Inf            | -Inf        | 105.06     | 3        | Vertical  | 69          | 1.42       | -       | 34.30   | 6.58    | 35.02   |  |
| AV   | 5.746G    | 101.68         | Inf            | -Inf        | 95.82      | 3        | Vertical  | 69          | 1.42       | -       | 34.30   | 6.58    | 35.02   |  |
| PK   | 5.984G    | 59.15          | 68.20          | -9.05       | 52.79      | 3        | Vertical  | 69          | 1.42       | -       | 34.75   | 6.66    | 35.05   |  |

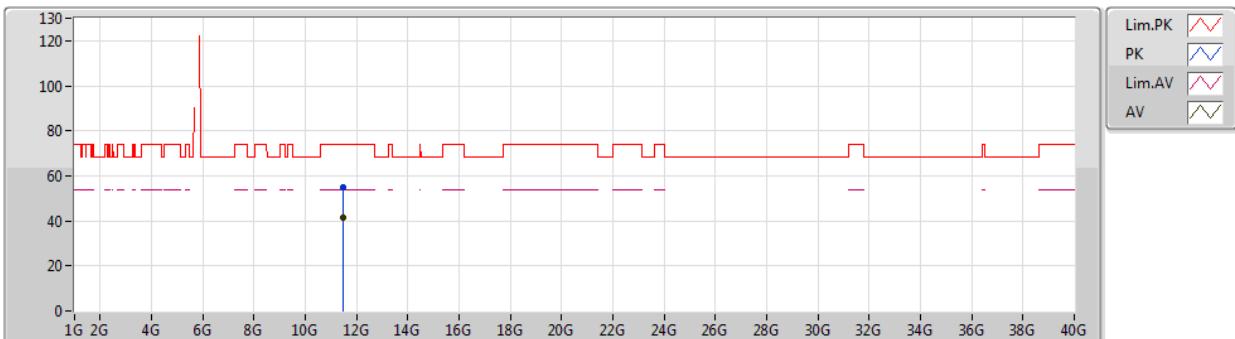
**802.11a\_Nss1,(6Mbps)\_4TX**

24/10/2019

**5745MHz\_TX**


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

24/10/2019

**5745MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 23  
 03-P-2  
 FSP(100019)

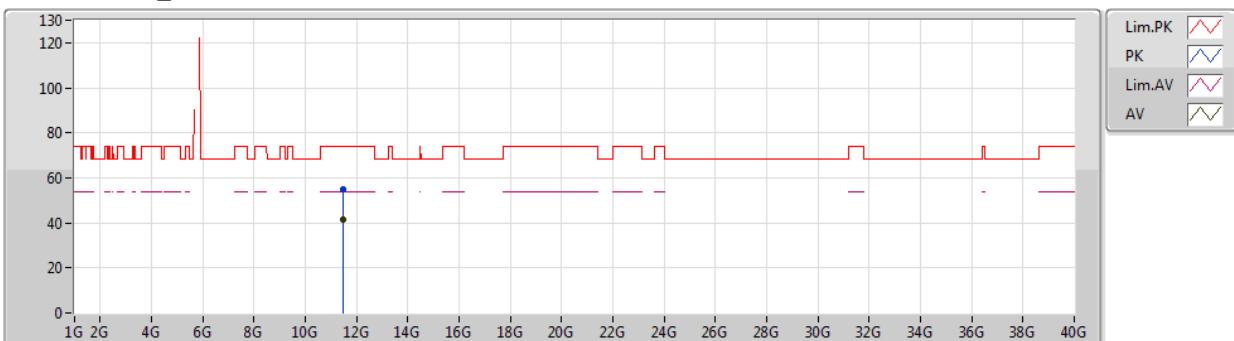
| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(*) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 11.49052G    | 54.98             | 74.00             | -19.02         | 41.98         | 3           | Vertical  | 72             | 1.32          | -       | 38.84      | 8.94       | 34.78      |
| AV   | 11.48756G    | 41.25             | 54.00             | -12.75         | 28.25         | 3           | Vertical  | 72             | 1.32          | -       | 38.84      | 8.94       | 34.78      |



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

24/10/2019

## 5745MHz\_TX

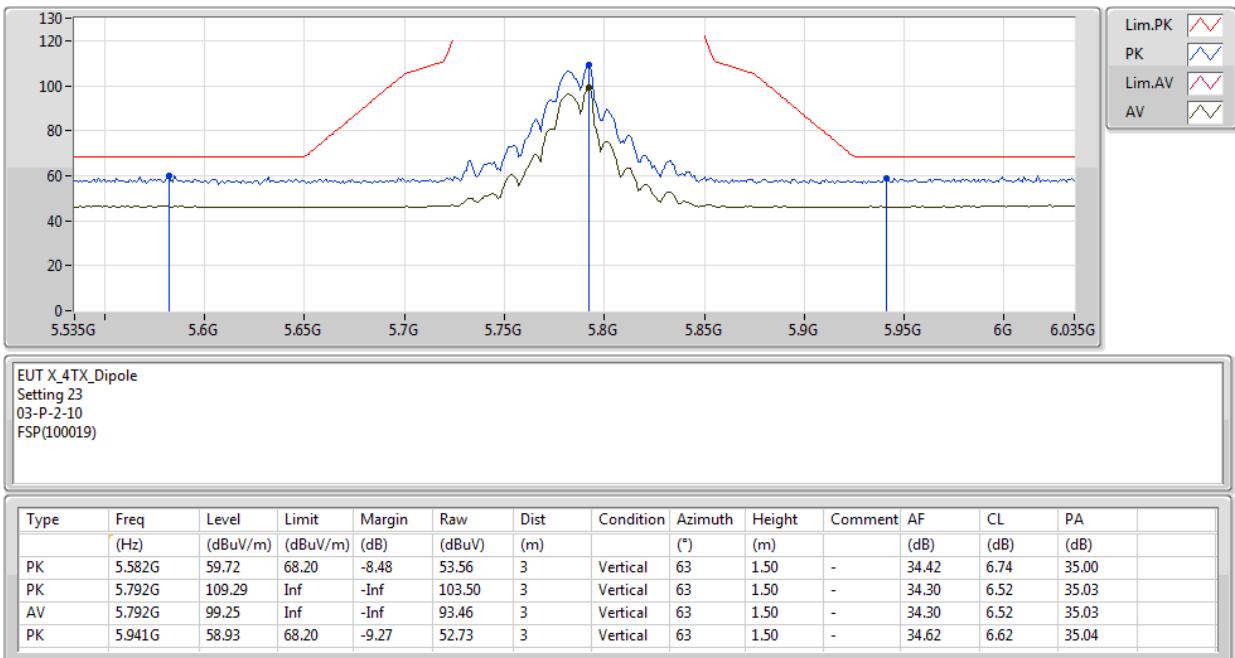


EUT X\_4TX\_Dipole  
Setting 23  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|--|
| PK   | 11.49396G | 54.93          | 74.00          | -19.07      | 41.92      | 3        | Horizontal | 158         | 1.48       | -            | 38.85   | 8.94    | 34.78   |  |
| AV   | 11.48986G | 41.57          | 54.00          | -12.43      | 28.57      | 3        | Horizontal | 158         | 1.48       | -            | 38.84   | 8.94    | 34.78   |  |

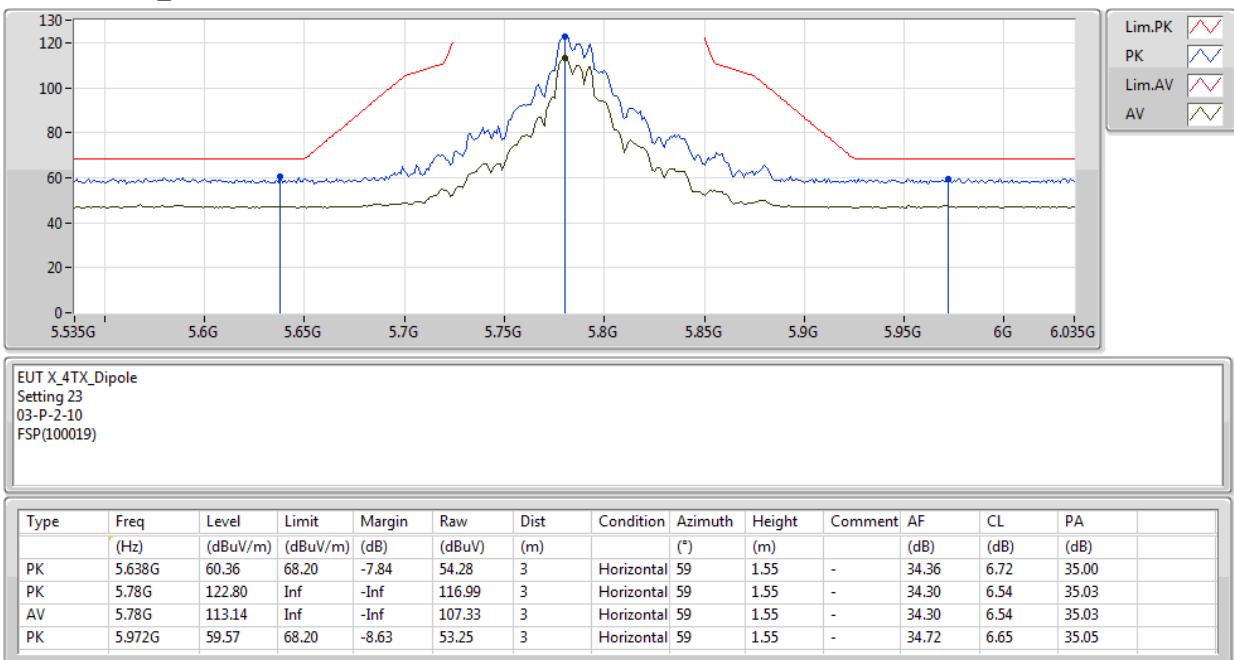
**802.11a\_Nss1,(6Mbps)\_4TX**

24/10/2019

**5785MHz\_TX**


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

24/10/2019

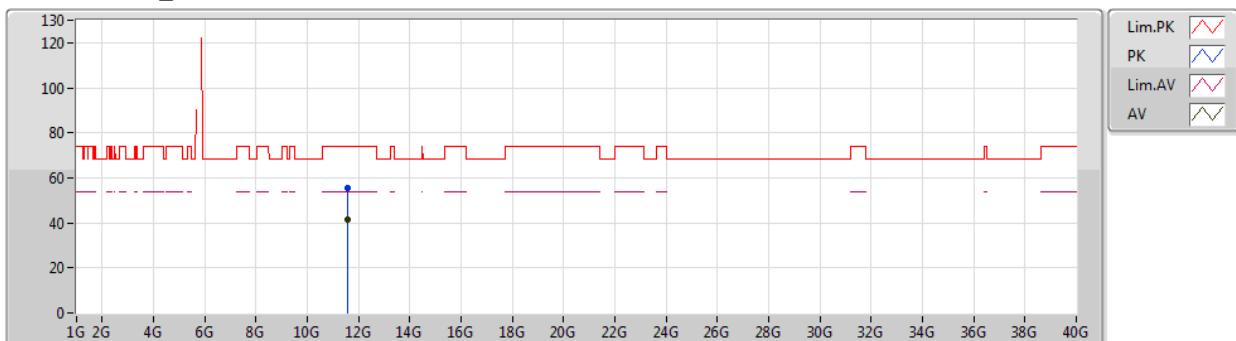
**5785MHz\_TX**




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

24/10/2019

## 5785MHz\_TX

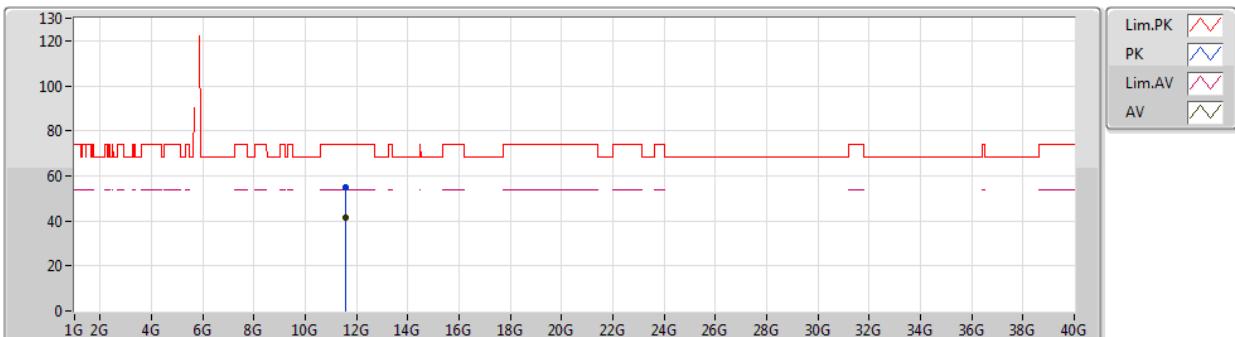


EUT X\_4TX\_Dipole  
Setting 23  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 11.57484G | 55.23          | 74.00          | -18.77      | 42.19      | 3        | Vertical  | 191         | 2.04       | -            | 38.90   | 8.93    | 34.79   |
| AV   | 11.57304G | 41.63          | 54.00          | -12.37      | 28.59      | 3        | Vertical  | 191         | 2.04       | -            | 38.90   | 8.93    | 34.79   |

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

24/10/2019

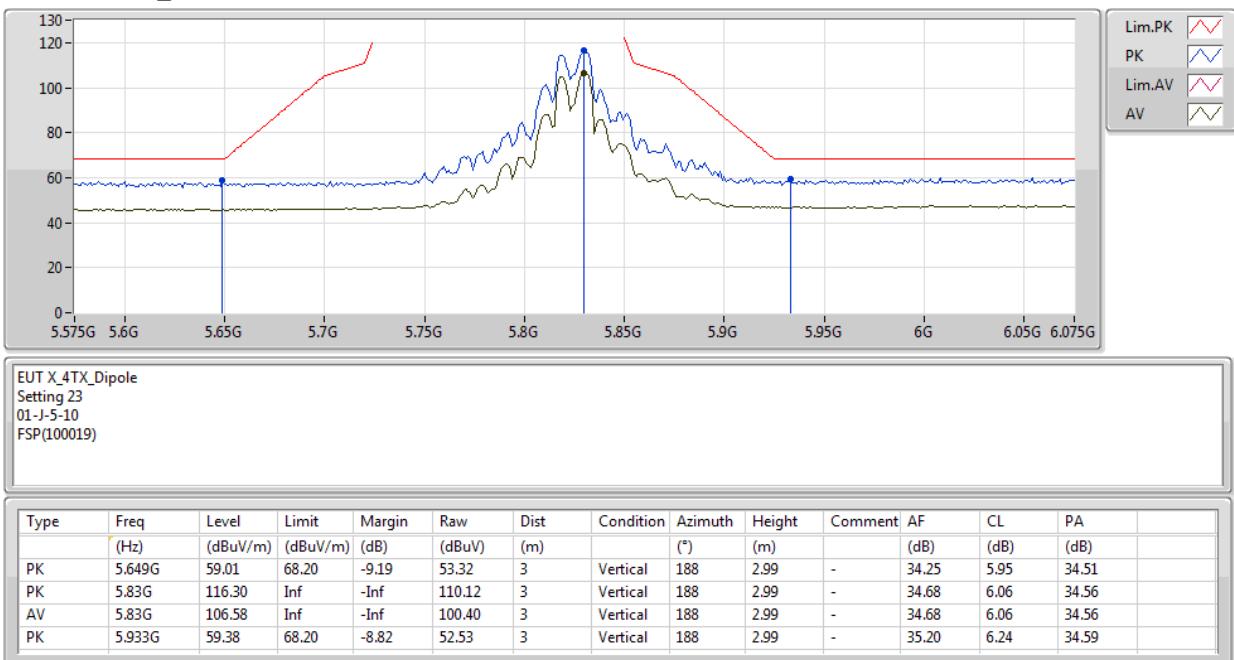
**5785MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 23  
 03-P-2  
 FSP(100019)

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(*) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 11.56778G    | 55.08             | 74.00             | -18.92         | 42.04         | 3           | Horizontal | 259            | 1.29          | -       | 38.90      | 8.93       | 34.79      |
| AV   | 11.56576G    | 41.58             | 54.00             | -12.42         | 28.54         | 3           | Horizontal | 259            | 1.29          | -       | 38.90      | 8.93       | 34.79      |

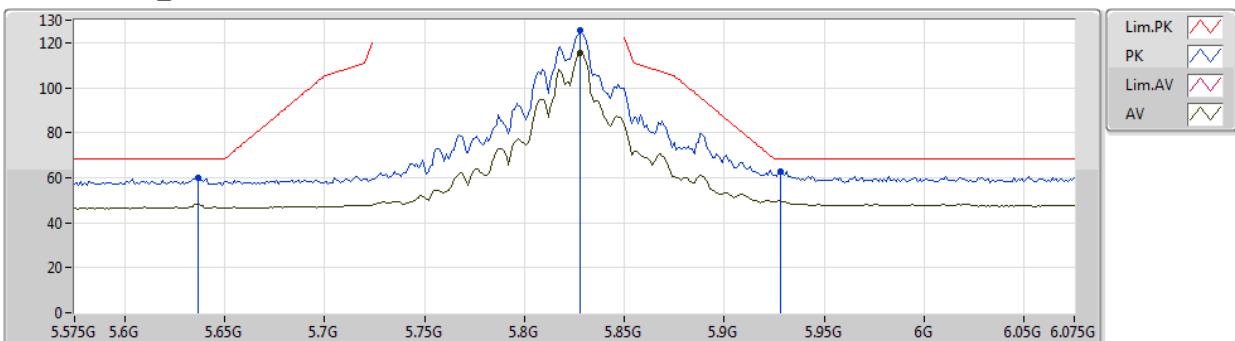
**802.11a\_Nss1,(6Mbps)\_4TX**

24/10/2019

**5825MHz\_TX**


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

24/10/2019

**5825MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 23  
01-J-5-10  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition (*) | Azimuth | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|---------------|---------|------------|--------------|---------|---------|---------|--|
| PK   | 5.637G    | 60.14          | 68.20          | -8.06       | 54.46      | 3        | Horizontal    | 57      | 2.46       | -            | 34.24   | 5.95    | 34.51   |  |
| PK   | 5.828G    | 125.37         | Inf            | -Inf        | 119.20     | 3        | Horizontal    | 57      | 2.46       | -            | 34.67   | 6.06    | 34.56   |  |
| AV   | 5.828G    | 115.49         | Inf            | -Inf        | 109.32     | 3        | Horizontal    | 57      | 2.46       | -            | 34.67   | 6.06    | 34.56   |  |
| PK   | 5.928G    | 62.73          | 68.20          | -5.47       | 55.91      | 3        | Horizontal    | 57      | 2.46       | -            | 35.18   | 6.23    | 34.59   |  |

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

24/10/2019

**5825MHz\_TX**

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

24/10/2019

**5825MHz\_TX**

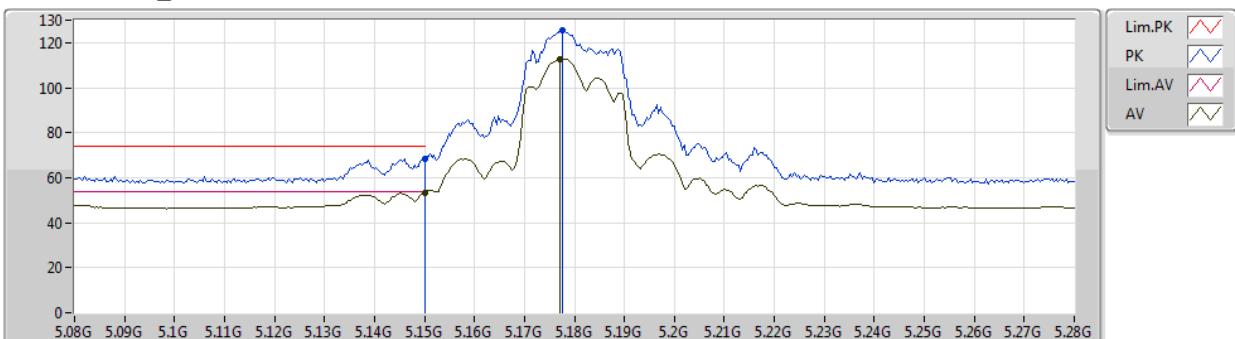

**802.11ax HEW20\_Nss1,(MCS0)\_4TX**

24/10/2019

**5180MHz\_TX**


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

24/10/2019

**5180MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 18.5  
 03-P-2-10  
 FSP(100019)

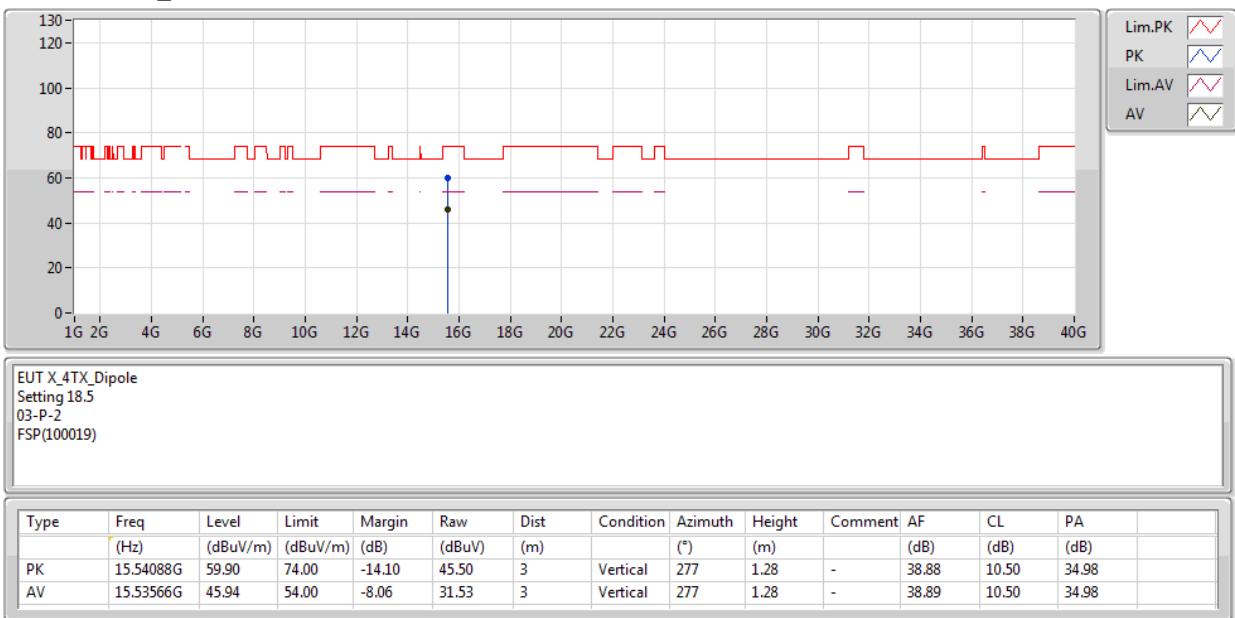
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.15G     | 68.22          | 74.00          | -5.78       | 62.72      | 3        | Horizontal | 58          | 1.50       | -       | 34.05   | 6.42    | 34.97   |  |
| AV   | 5.15G     | 53.45          | 54.00          | -0.55       | 47.95      | 3        | Horizontal | 58          | 1.50       | -       | 34.05   | 6.42    | 34.97   |  |
| PK   | 5.1776G   | 125.65         | Inf            | -Inf        | 120.07     | 3        | Horizontal | 58          | 1.50       | -       | 34.08   | 6.48    | 34.98   |  |
| AV   | 5.1772G   | 112.68         | Inf            | -Inf        | 107.10     | 3        | Horizontal | 58          | 1.50       | -       | 34.08   | 6.48    | 34.98   |  |



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

24/10/2019

## 5180MHz\_TX

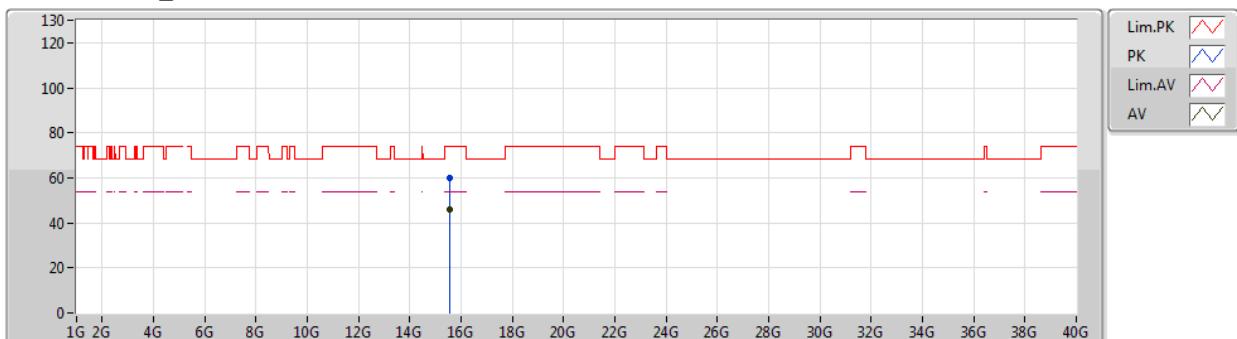




## 802.11ax HEW20\_Nss1,(MCS0)\_4TX

24/10/2019

## 5180MHz\_TX

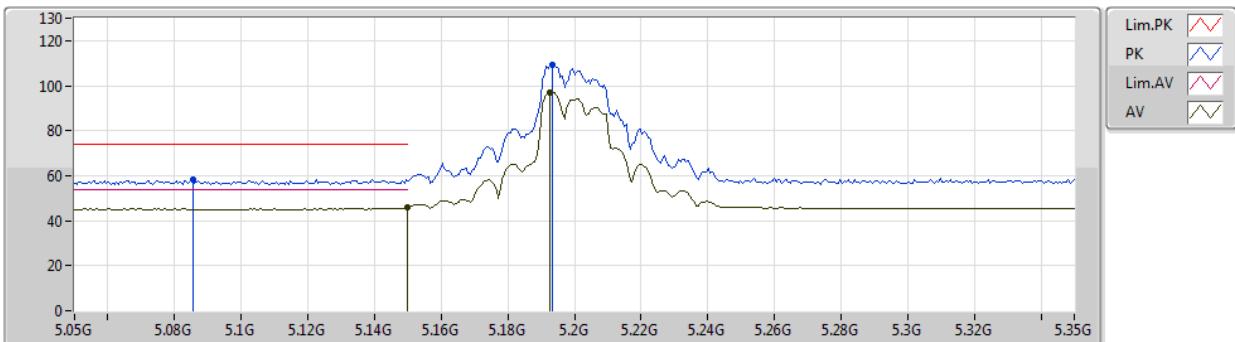


EUT X\_4TX\_Dipole  
Setting 18.5  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 15.53858G | 60.12          | 74.00          | -13.88      | 45.72      | 3        | Horizontal | 101         | 1.87       | -            | 38.88   | 10.50   | 34.98   |
| AV   | 15.54336G | 45.95          | 54.00          | -8.05       | 31.56      | 3        | Horizontal | 101         | 1.87       | -            | 38.87   | 10.50   | 34.98   |

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

24/10/2019

**5200MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 21.5  
03-P-2-10  
FSP(100019)

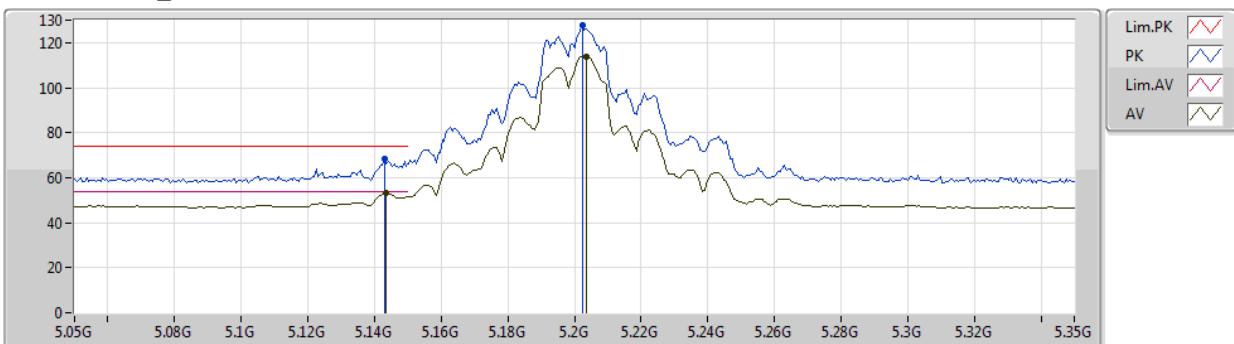
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.0854G   | 58.20          | 74.00          | -15.80      | 52.88      | 3        | Vertical  | 101         | 1.02       | -       | 33.99   | 6.30    | 34.97   |  |
| AV   | 5.15G     | 45.82          | 54.00          | -8.18       | 40.32      | 3        | Vertical  | 101         | 1.02       | -       | 34.05   | 6.42    | 34.97   |  |
| PK   | 5.1934G   | 109.47         | Inf            | -Inf        | 103.85     | 3        | Vertical  | 101         | 1.02       | -       | 34.09   | 6.51    | 34.98   |  |
| AV   | 5.1928G   | 97.06          | Inf            | -Inf        | 91.44      | 3        | Vertical  | 101         | 1.02       | -       | 34.09   | 6.51    | 34.98   |  |



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

24/10/2019

## 5200MHz\_TX



EUT X\_4TX\_Dipole  
Setting 21.5  
03-P-2-10  
FSP(100019)

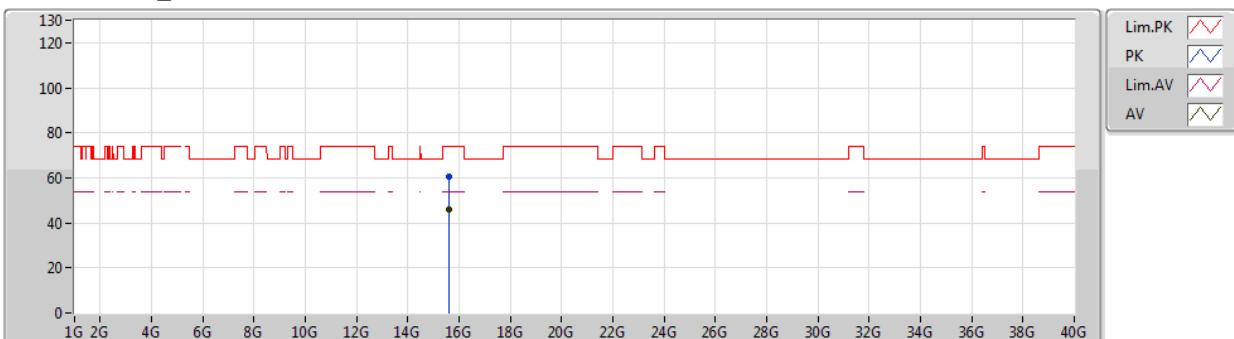
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.143G    | 68.12          | 74.00          | -5.88       | 62.64      | 3        | Horizontal | 60          | 1.90       | -       | 34.04   | 6.41    | 34.97   |  |
| AV   | 5.1436G   | 53.16          | 54.00          | -0.84       | 47.68      | 3        | Horizontal | 60          | 1.90       | -       | 34.04   | 6.41    | 34.97   |  |
| PK   | 5.2024G   | 127.48         | Inf            | -Inf        | 121.84     | 3        | Horizontal | 60          | 1.90       | -       | 34.10   | 6.52    | 34.98   |  |
| AV   | 5.2036G   | 113.98         | Inf            | -Inf        | 108.33     | 3        | Horizontal | 60          | 1.90       | -       | 34.11   | 6.52    | 34.98   |  |



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

24/10/2019

## 5200MHz\_TX



EUT X\_4TX\_Dipole  
Setting 21.5  
03-P-2  
FSP(100019)

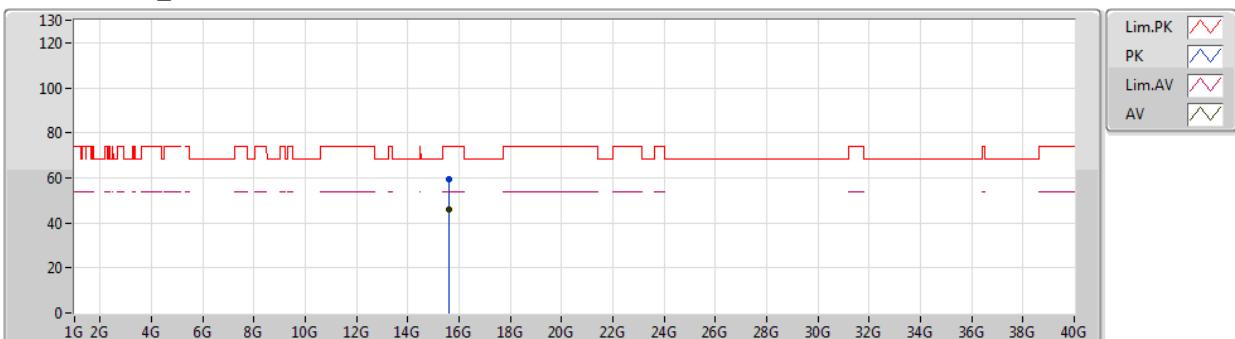
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 15.59974G | 60.62          | 74.00          | -13.38      | 46.44      | 3        | Vertical  | 237         | 1.51       | -            | 38.70   | 10.52   | 35.04   |
| AV   | 15.59896G | 45.99          | 54.00          | -8.01       | 31.81      | 3        | Vertical  | 237         | 1.51       | -            | 38.70   | 10.52   | 35.04   |



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

24/10/2019

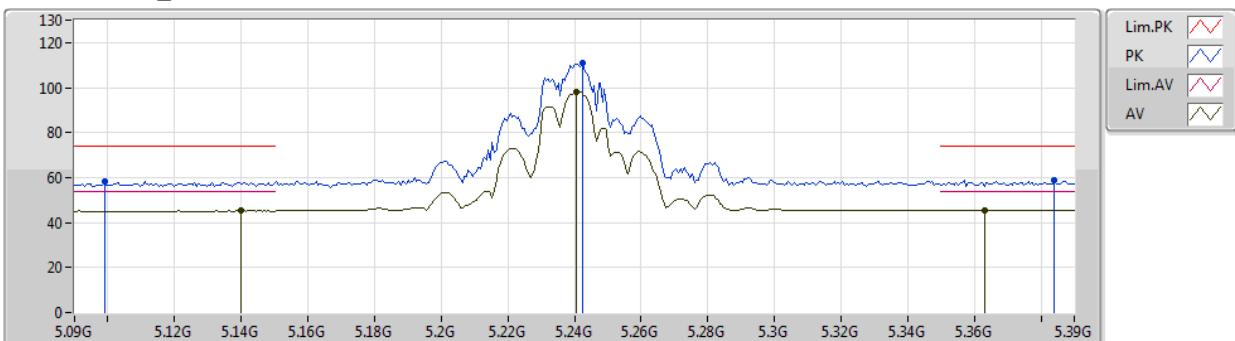
## 5200MHz\_TX



| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 15.60446G | 59.66          | 74.00          | -14.34      | 45.48      | 3        | Horizontal | 119         | 1.75       | -            | 38.69   | 10.53   | 35.04   |
| AV   | 15.60136G | 46.03          | 54.00          | -7.97       | 31.85      | 3        | Horizontal | 119         | 1.75       | -            | 38.70   | 10.52   | 35.04   |

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

24/10/2019

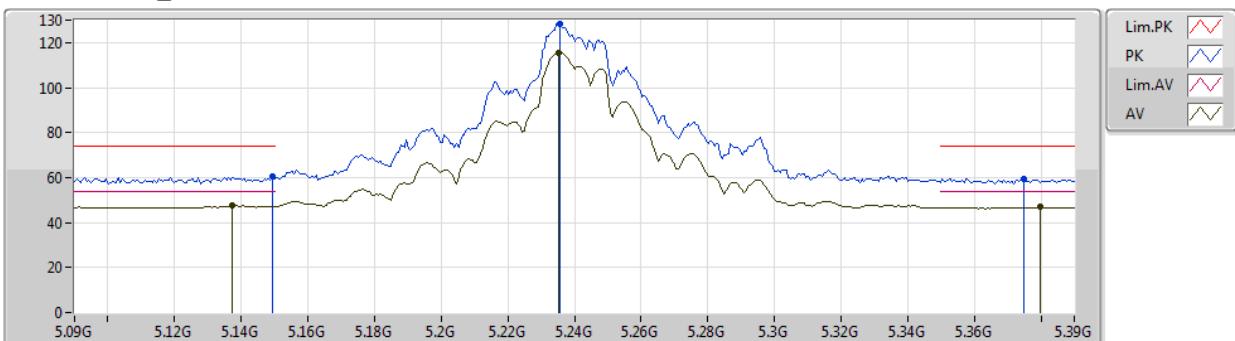
**5240MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 23  
 03-P-2-10  
 FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|--|
| PK   | 5.099G    | 58.39          | 74.00          | -15.61      | 53.03      | 3        | Vertical  | 116         | 1.53       | -            | 34.00   | 6.33    | 34.97   |  |
| AV   | 5.1398G   | 45.28          | 54.00          | -8.72       | 39.80      | 3        | Vertical  | 116         | 1.53       | -            | 34.04   | 6.41    | 34.97   |  |
| PK   | 5.2424G   | 110.80         | Inf            | -Inf        | 105.10     | 3        | Vertical  | 116         | 1.53       | -            | 34.18   | 6.50    | 34.98   |  |
| AV   | 5.2406G   | 98.21          | Inf            | -Inf        | 92.51      | 3        | Vertical  | 116         | 1.53       | -            | 34.18   | 6.50    | 34.98   |  |
| PK   | 5.384G    | 58.87          | 74.00          | -15.13      | 53.04      | 3        | Vertical  | 116         | 1.53       | -            | 34.38   | 6.44    | 34.99   |  |
| AV   | 5.363G    | 45.65          | 54.00          | -8.35       | 39.84      | 3        | Vertical  | 116         | 1.53       | -            | 34.36   | 6.44    | 34.99   |  |

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

24/10/2019

**5240MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 23  
 03-P-2-10  
 FSP(100019)

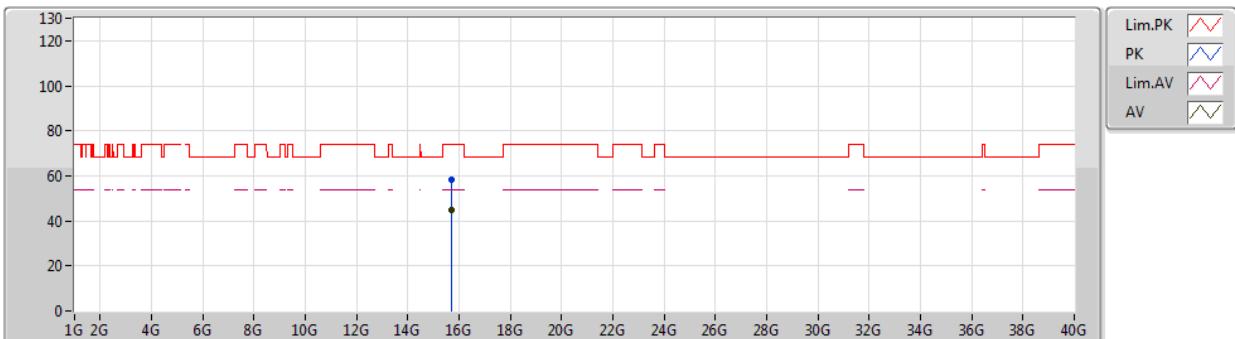
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.1494G   | 60.32          | 74.00          | -13.68      | 54.82      | 3        | Horizontal | 60          | 1.75       | -       | 34.05   | 6.42    | 34.97   |  |
| AV   | 5.1374G   | 47.54          | 54.00          | -6.46       | 42.07      | 3        | Horizontal | 60          | 1.75       | -       | 34.04   | 6.40    | 34.97   |  |
| PK   | 5.2358G   | 128.55         | Inf            | -Inf        | 122.86     | 3        | Horizontal | 60          | 1.75       | -       | 34.17   | 6.50    | 34.98   |  |
| AV   | 5.2352G   | 115.51         | Inf            | -Inf        | 109.82     | 3        | Horizontal | 60          | 1.75       | -       | 34.17   | 6.50    | 34.98   |  |
| PK   | 5.375G    | 59.66          | 74.00          | -14.34      | 53.84      | 3        | Horizontal | 60          | 1.75       | -       | 34.37   | 6.44    | 34.99   |  |
| AV   | 5.3798G   | 46.83          | 54.00          | -7.17       | 41.00      | 3        | Horizontal | 60          | 1.75       | -       | 34.38   | 6.44    | 34.99   |  |



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

24/10/2019

## 5240MHz\_TX

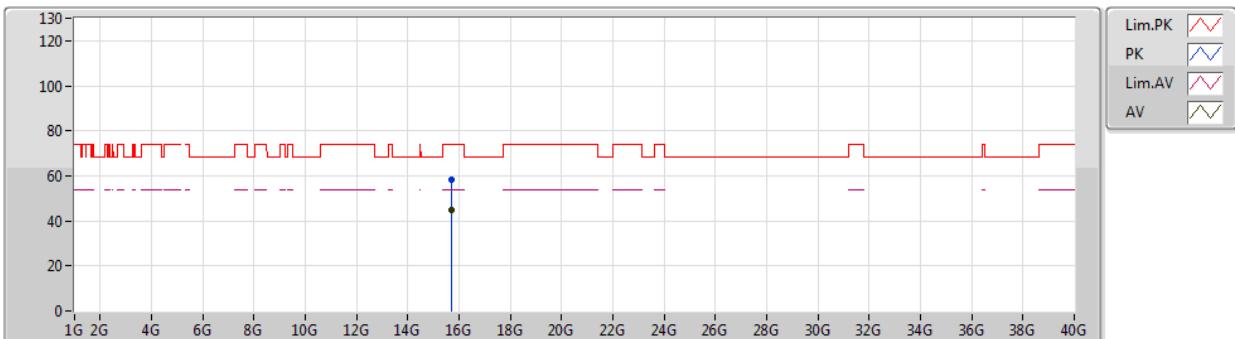


EUT X\_4TX\_Dipole  
Setting 23  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 15.72152G | 58.29          | 74.00          | -15.71      | 44.54      | 3        | Vertical  | 358         | 1.21       | -            | 38.34   | 10.57   | 35.16   |
| AV   | 15.71936G | 44.56          | 54.00          | -9.44       | 30.81      | 3        | Vertical  | 358         | 1.21       | -            | 38.34   | 10.57   | 35.16   |

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

24/10/2019

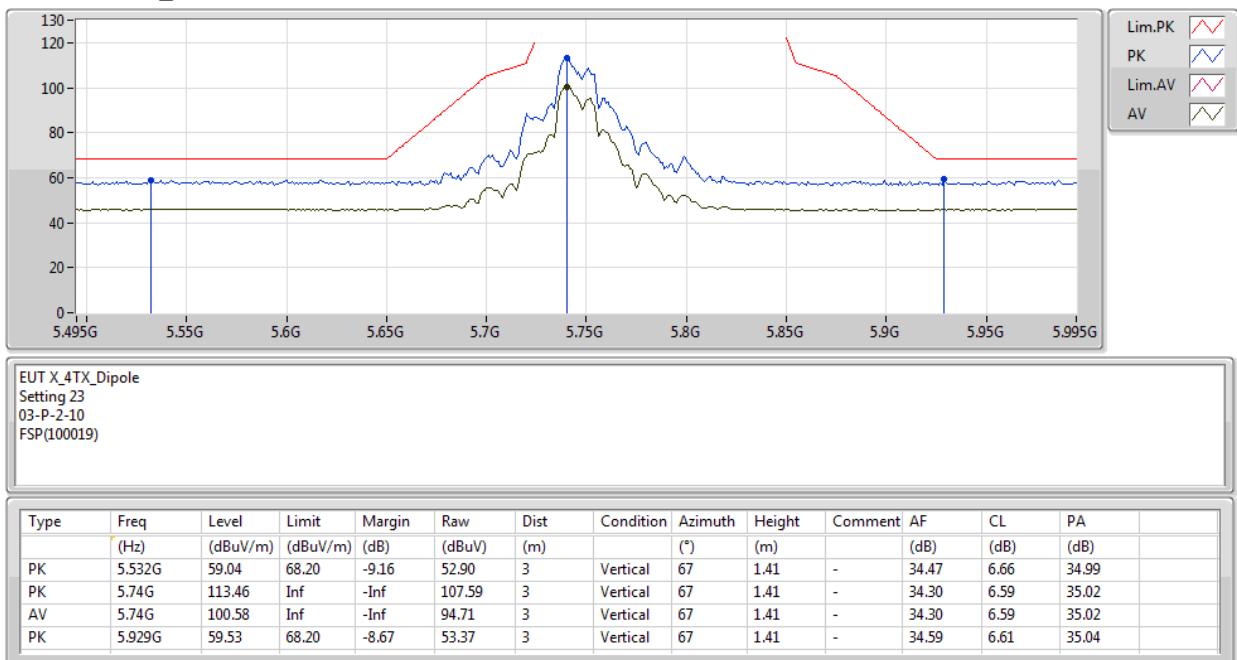
**5240MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 23  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 15.72414G | 58.49          | 74.00          | -15.51      | 44.75      | 3        | Horizontal | 218         | 2.47       | -            | 38.33   | 10.57   | 35.16   |
| AV   | 15.71884G | 44.59          | 54.00          | -9.41       | 30.84      | 3        | Horizontal | 218         | 2.47       | -            | 38.34   | 10.57   | 35.16   |

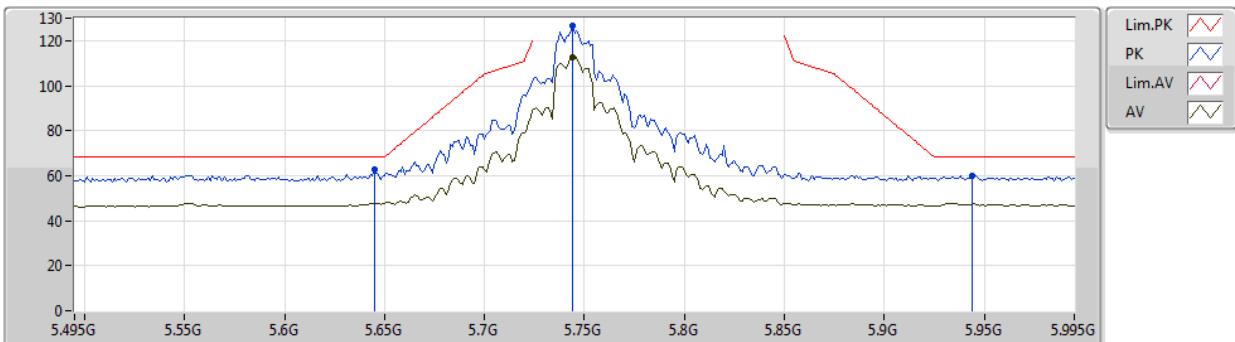
**802.11ax HEW20\_Nss1,(MCS0)\_4TX**

24/10/2019

**5745MHz\_TX**


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

24/10/2019

**5745MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 23  
 03-P-2-10  
 FSP(100019)

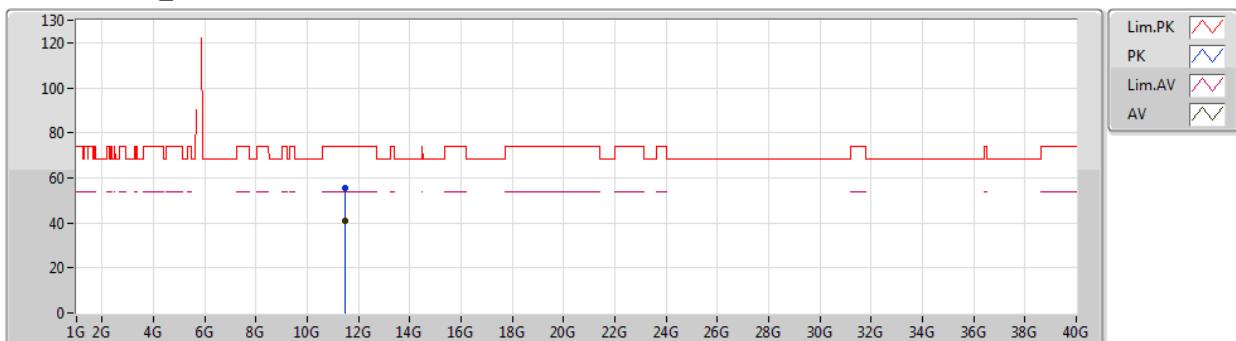
| Type | Freq (Hz) | Level (dBmV/m) | Limit (dBmV/m) | Margin (dB) | Raw (dBmV) | Dist (m) | Condition (*) | Azimuth | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|---------------|---------|------------|--------------|---------|---------|---------|
| PK   | 5.645G    | 62.67          | 68.20          | -5.53       | 56.61      | 3        | Horizontal    | 58      | 2.40       | -            | 34.35   | 6.71    | 35.00   |
| PK   | 5.744G    | 126.57         | Inf            | -Inf        | 120.71     | 3        | Horizontal    | 58      | 2.40       | -            | 34.30   | 6.58    | 35.02   |
| AV   | 5.744G    | 112.85         | Inf            | -Inf        | 106.99     | 3        | Horizontal    | 58      | 2.40       | -            | 34.30   | 6.58    | 35.02   |
| PK   | 5.944G    | 60.23          | 68.20          | -7.97       | 54.01      | 3        | Horizontal    | 58      | 2.40       | -            | 34.63   | 6.63    | 35.04   |



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

24/10/2019

## 5745MHz\_TX



EUT X\_4TX\_Dipole  
Setting 23  
03-P-2  
FSP(100019)

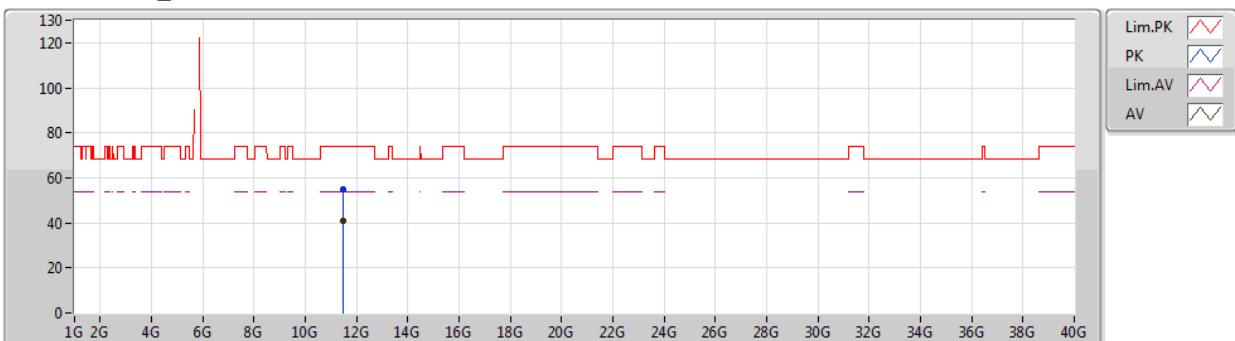
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 11.495G   | 55.45          | 74.00          | -18.55      | 42.44      | 3        | Vertical  | 48          | 2.26       | -            | 38.85   | 8.94    | 34.78   |
| AV   | 11.48944G | 40.81          | 54.00          | -13.19      | 27.81      | 3        | Vertical  | 48          | 2.26       | -            | 38.84   | 8.94    | 34.78   |



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

24/10/2019

## 5745MHz\_TX

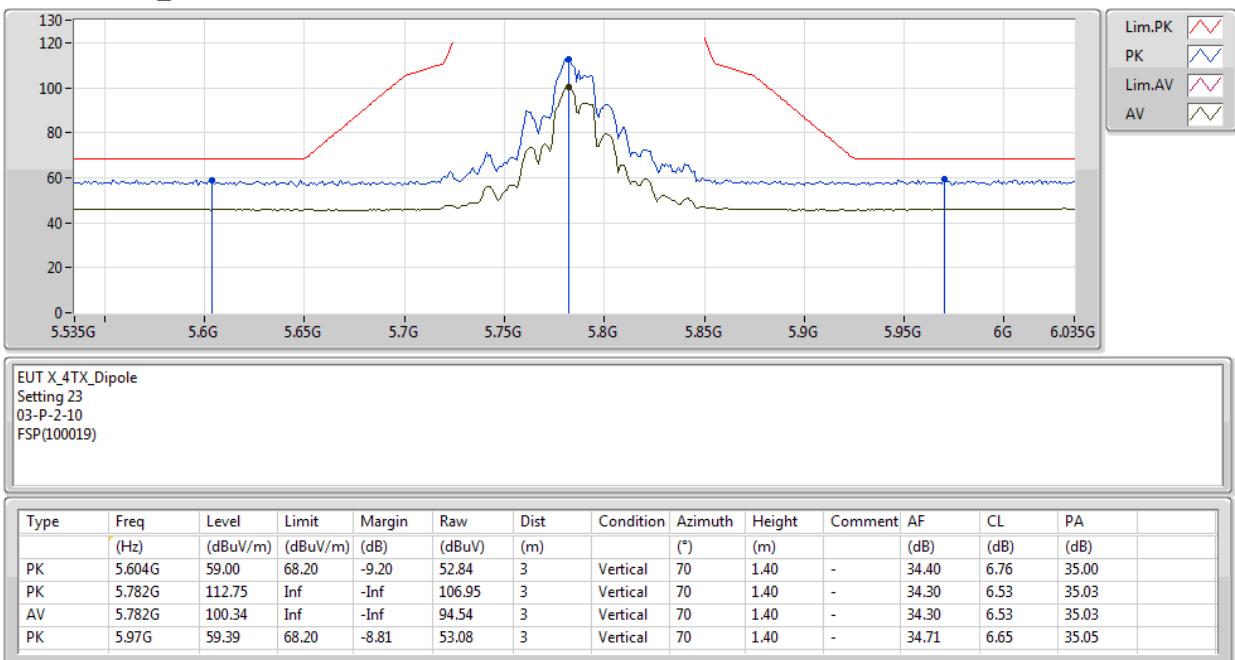


EUT X\_4TX\_Dipole  
Setting 23  
03-P-2  
FSP(100019)

| Type | Freq (Hz)   | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-------------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 11.494866 G | 55.18          | 74.00          | -18.82      | 42.17      | 3        | Horizontal | 181         | 2.08       | -            | 38.85   | 8.94    | 34.78   |
| AV   | 11.488486 G | 40.76          | 54.00          | -13.24      | 27.76      | 3        | Horizontal | 181         | 2.08       | -            | 38.84   | 8.94    | 34.78   |

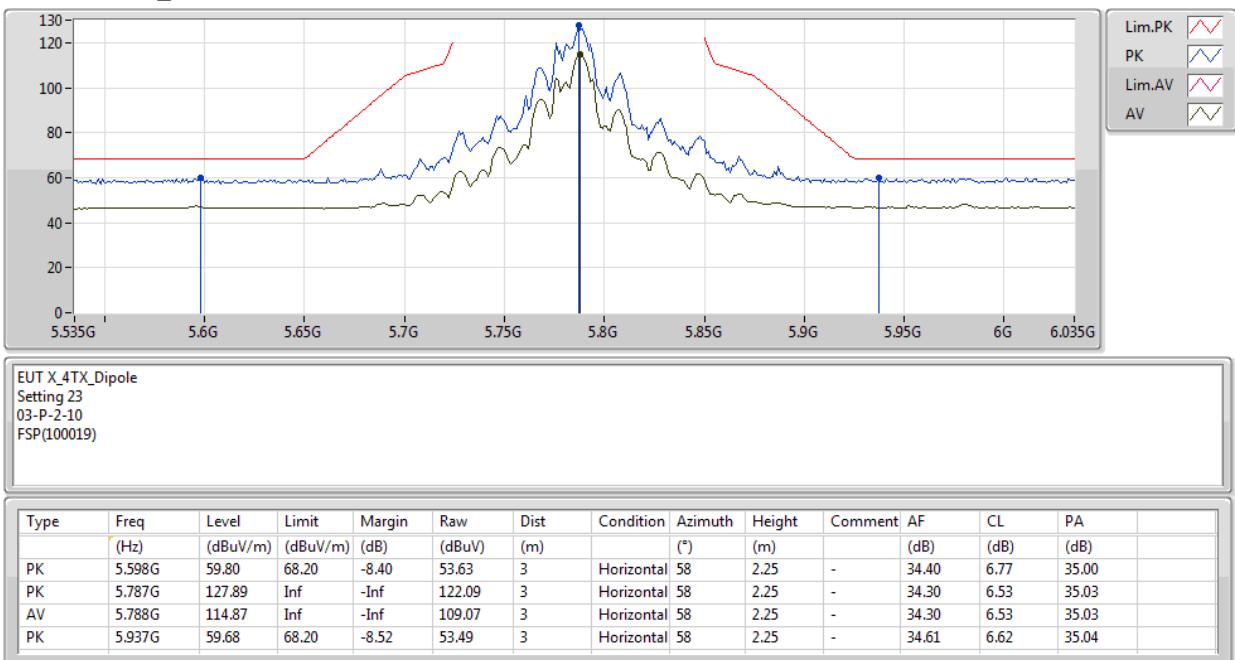
**802.11ax HEW20\_Nss1,(MCS0)\_4TX**

24/10/2019

**5785MHz\_TX**


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

24/10/2019

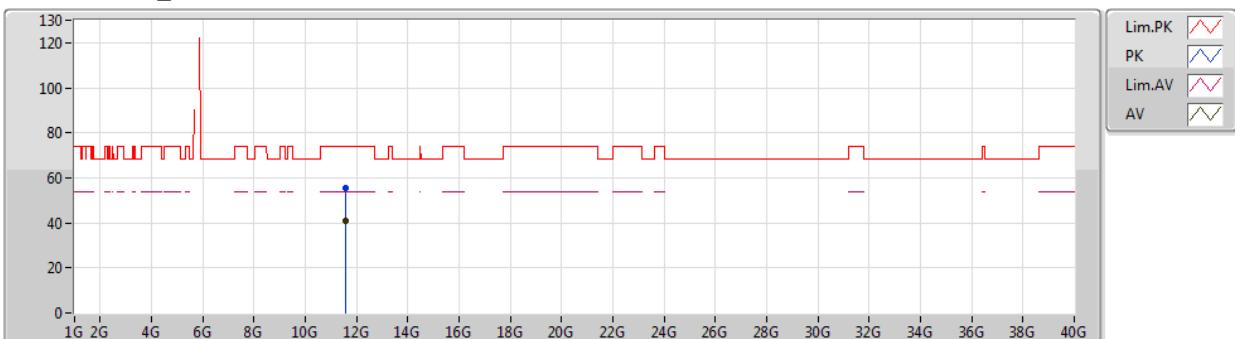
**5785MHz\_TX**




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

24/10/2019

## 5785MHz\_TX

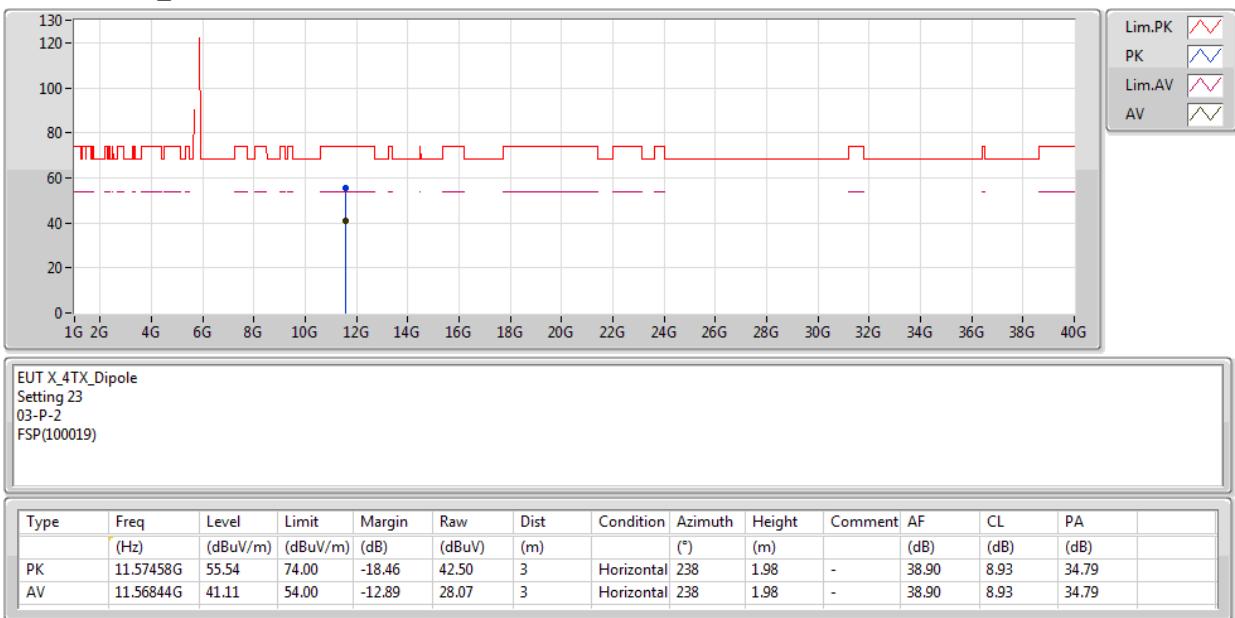


EUT X\_4TX\_Dipole  
Setting 23  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 11.57498G | 55.22          | 74.00          | -18.78      | 42.18      | 3        | Vertical  | 111         | 1.84       | -            | 38.90   | 8.93    | 34.79   |
| AV   | 11.57014G | 41.13          | 54.00          | -12.87      | 28.09      | 3        | Vertical  | 111         | 1.84       | -            | 38.90   | 8.93    | 34.79   |

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

24/10/2019

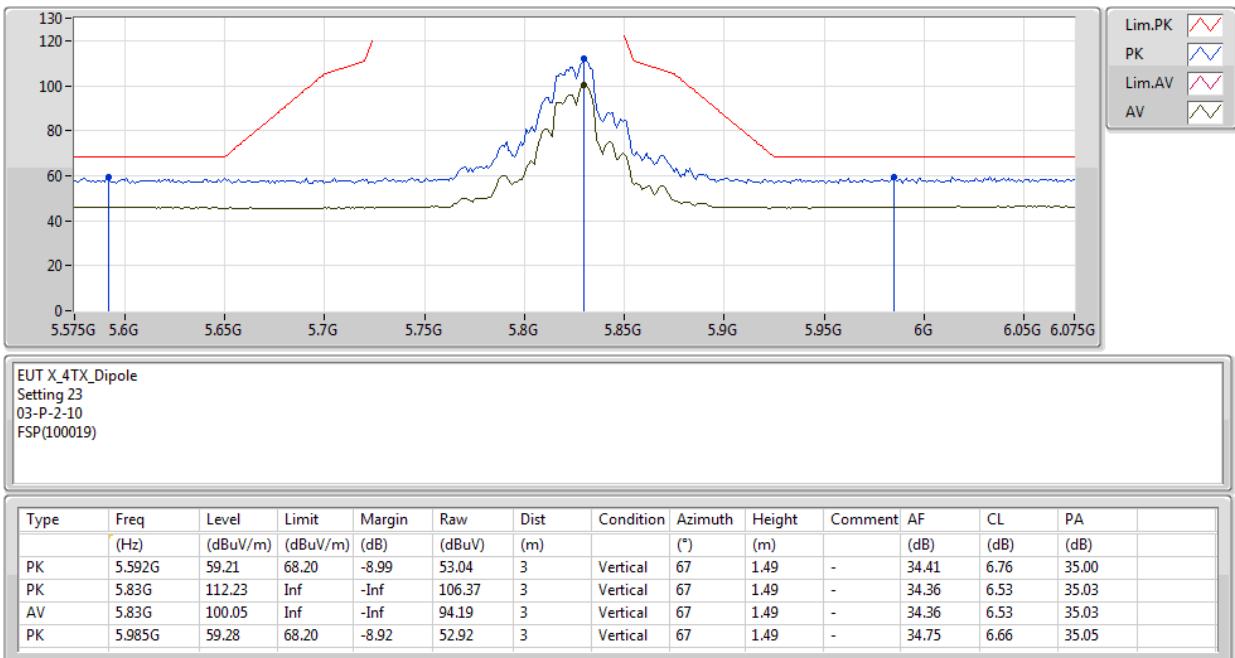
**5785MHz\_TX**




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

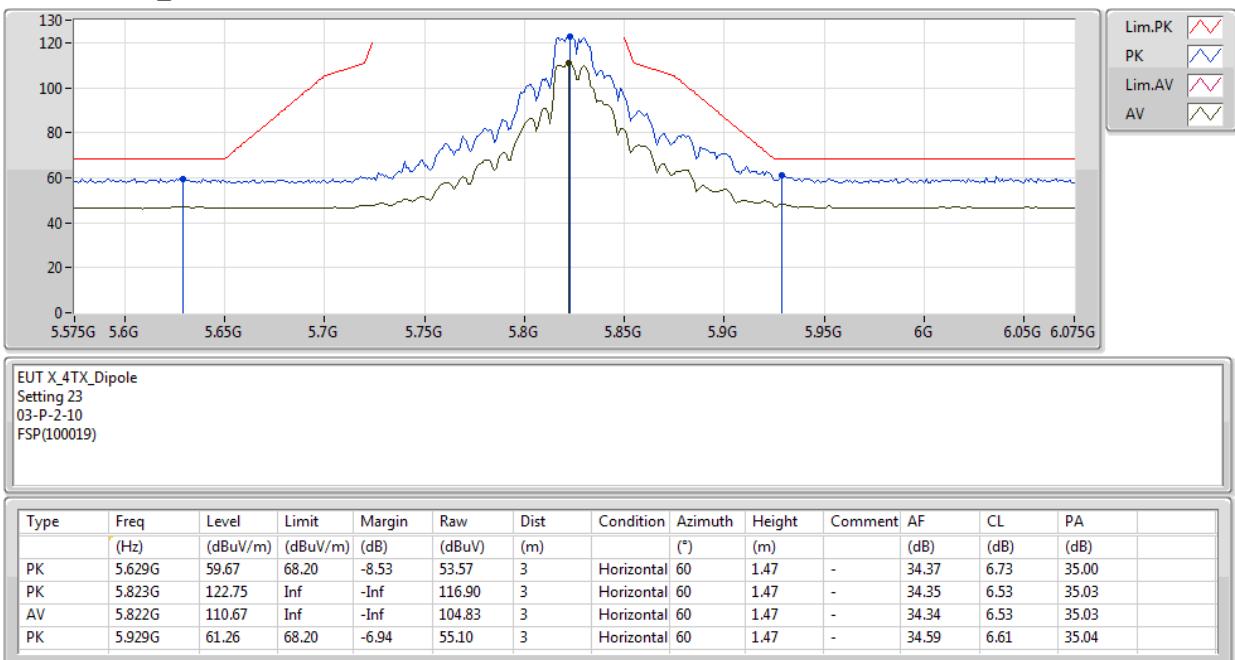
24/10/2019

## 5825MHz\_TX



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

24/10/2019

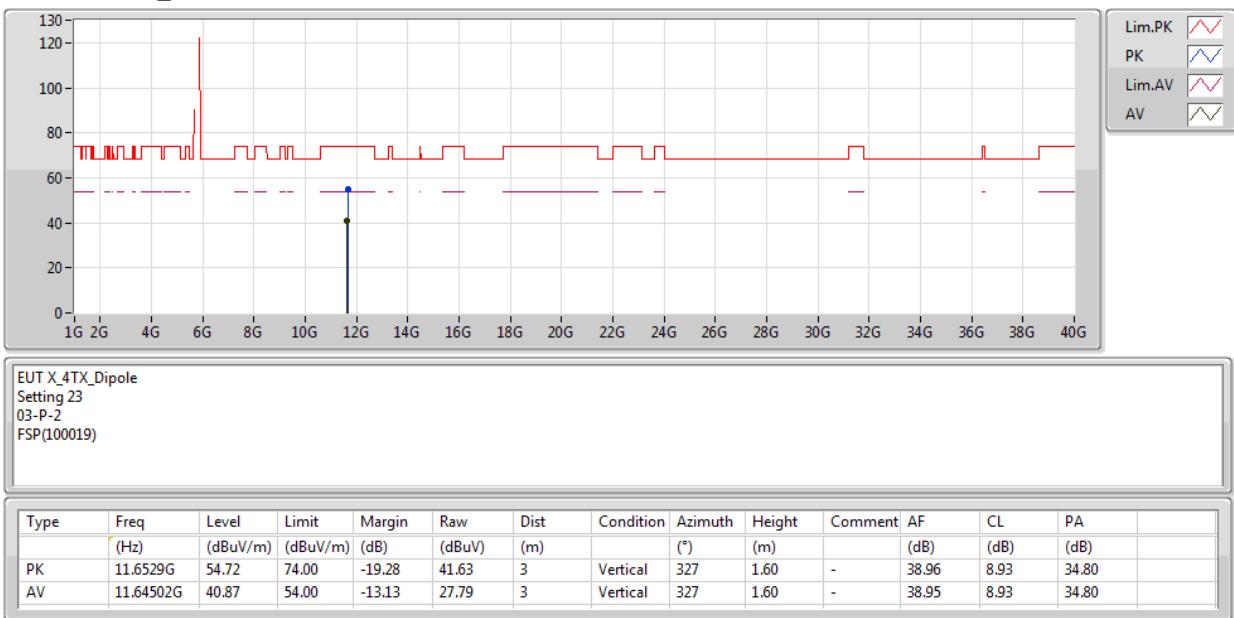
**5825MHz\_TX**




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

24/10/2019

## 5825MHz\_TX

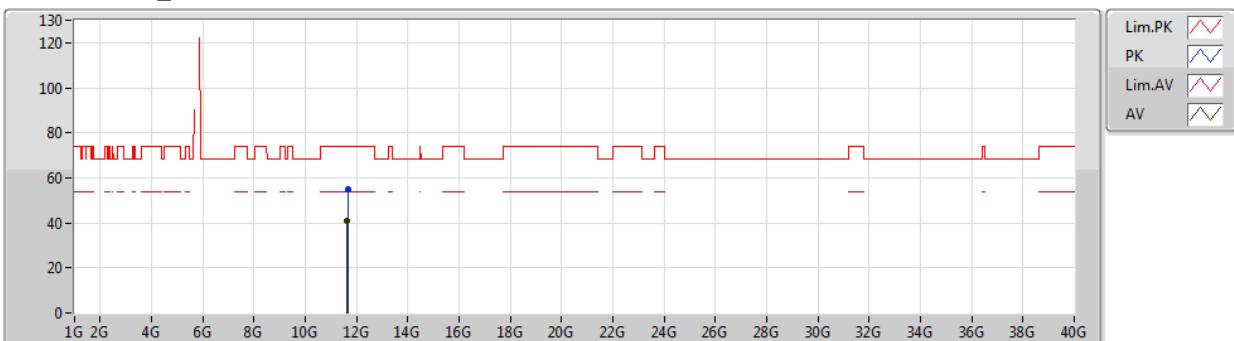




## 802.11ax HEW20\_Nss1,(MCS0)\_4TX

24/10/2019

## 5825MHz\_TX

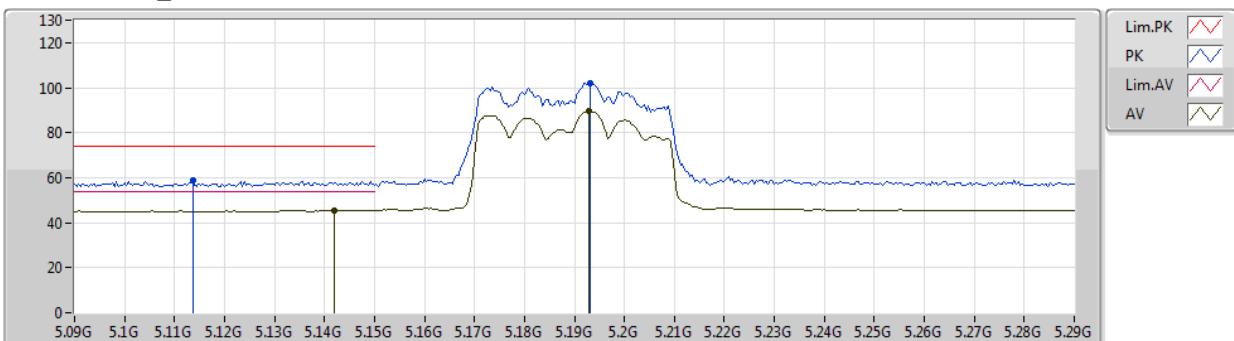


EUT X\_4TX\_Dipole  
Setting 23  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 11.65164G | 54.96          | 74.00          | -19.04      | 41.87      | 3        | Horizontal | 59          | 1.51       | -            | 38.96   | 8.93    | 34.80   |
| AV   | 11.64522G | 40.95          | 54.00          | -13.05      | 27.87      | 3        | Horizontal | 59          | 1.51       | -            | 38.95   | 8.93    | 34.80   |

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**

24/10/2019

**5190MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 16  
 03-P-2-10  
 FSP(100019)

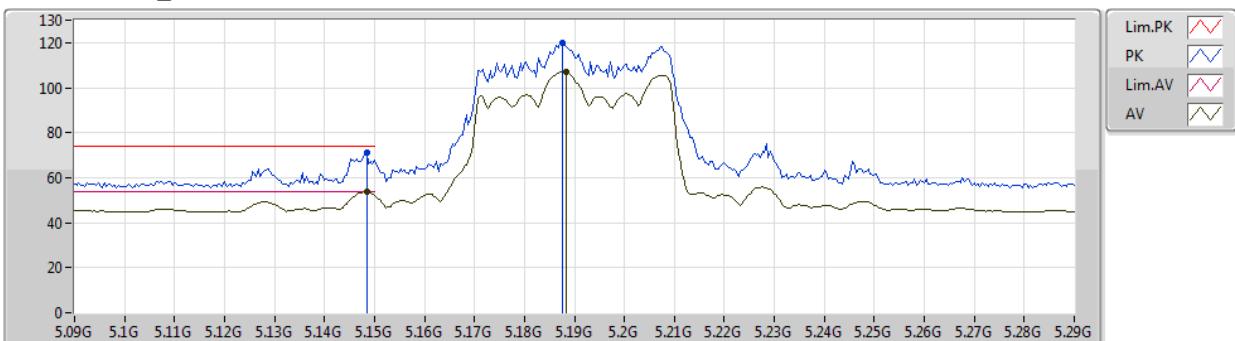
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.1136G   | 58.71          | 74.00          | -15.29      | 53.31      | 3        | Vertical  | 103         | 1.01       | -       | 34.01   | 6.36    | 34.97   |  |
| AV   | 5.142G    | 45.45          | 54.00          | -8.55       | 39.97      | 3        | Vertical  | 103         | 1.01       | -       | 34.04   | 6.41    | 34.97   |  |
| PK   | 5.1932G   | 101.86         | Inf            | -Inf        | 96.24      | 3        | Vertical  | 103         | 1.01       | -       | 34.09   | 6.51    | 34.98   |  |
| AV   | 5.1928G   | 89.63          | Inf            | -Inf        | 84.01      | 3        | Vertical  | 103         | 1.01       | -       | 34.09   | 6.51    | 34.98   |  |



## 802.11ax HEW40\_Nss1,(MCS0)\_4TX

24/10/2019

## 5190MHz\_TX



EUT X\_4TX\_Dipole  
Setting 16  
01-J-5-10  
FSP(100019)

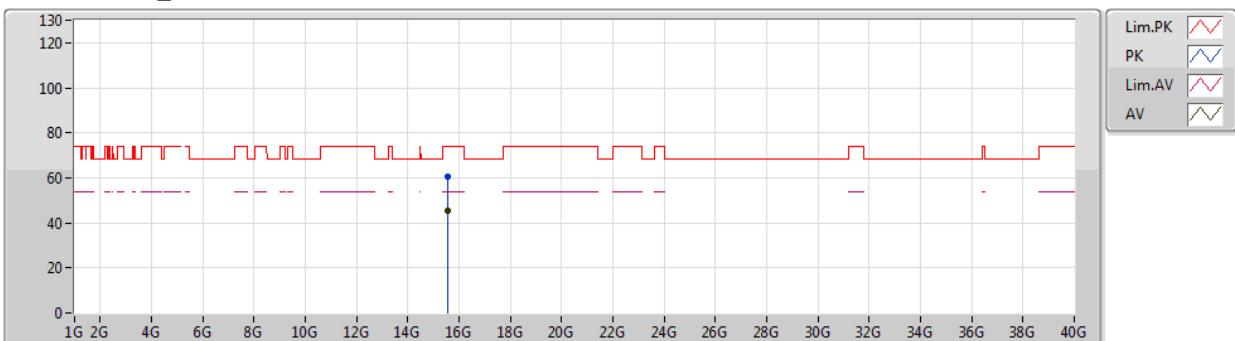
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition (*) | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|---------------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.1484G   | 70.91          | 74.00          | -3.09       | 66.66      | 3        | Horizontal    | 59          | 1.42       | -       | 33.05   | 5.65    | 34.45   |  |
| AV   | 5.1484G   | 53.90          | 54.00          | -0.10       | 49.65      | 3        | Horizontal    | 59          | 1.42       | -       | 33.05   | 5.65    | 34.45   |  |
| PK   | 5.1876G   | 119.85         | Inf            | -Inf        | 115.59     | 3        | Horizontal    | 59          | 1.42       | -       | 33.09   | 5.63    | 34.46   |  |
| AV   | 5.1884G   | 107.05         | Inf            | -Inf        | 102.79     | 3        | Horizontal    | 59          | 1.42       | -       | 33.09   | 5.63    | 34.46   |  |



## 802.11ax HEW40\_Nss1,(MCS0)\_4TX

24/10/2019

## 5190MHz\_TX

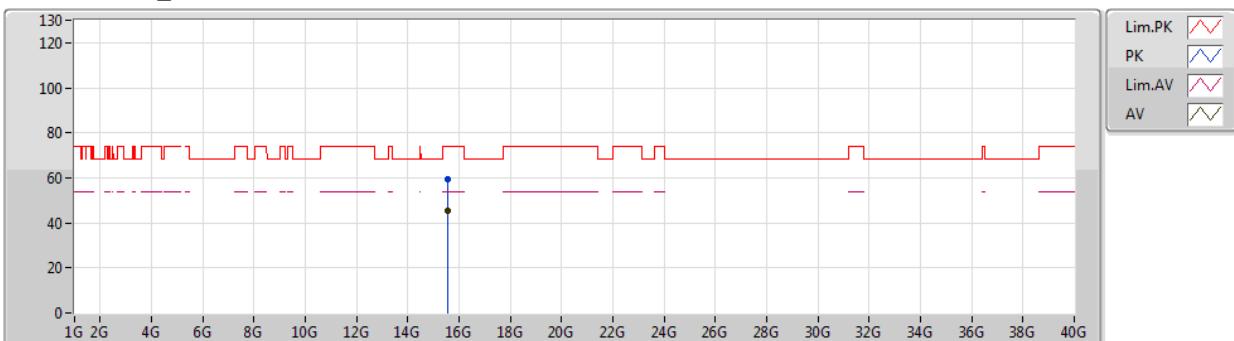


EUT X\_4TX\_Dipole  
Setting 16  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|--|
| PK   | 15.5726G  | 60.43          | 74.00          | -13.57      | 46.15      | 3        | Vertical  | 242         | 1.65       | -            | 38.78   | 10.51   | 35.01   |  |
| AV   | 15.57144G | 45.54          | 54.00          | -8.46       | 31.25      | 3        | Vertical  | 242         | 1.65       | -            | 38.79   | 10.51   | 35.01   |  |

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**

24/10/2019

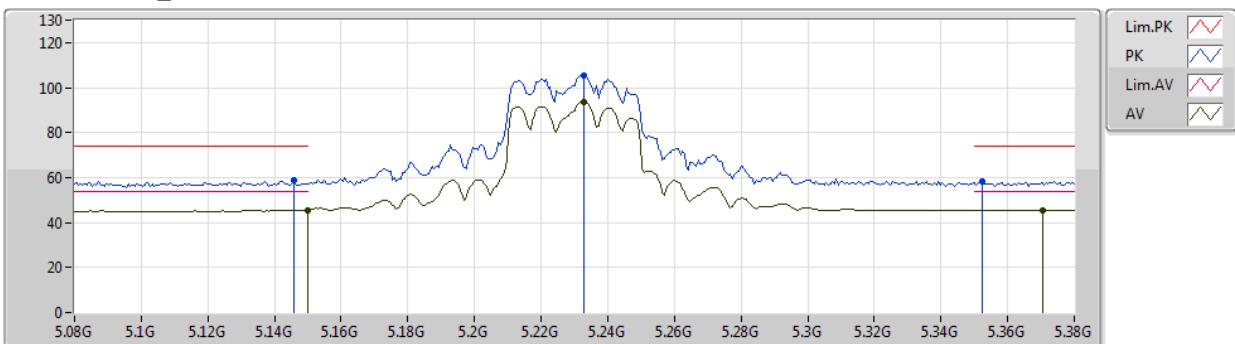
**5190MHz\_TX**

EUT X\_4TX\_Dipole  
Setting 16  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 15.5736G  | 59.65          | 74.00          | -14.35      | 45.37      | 3        | Horizontal | 226         | 2.47       | -            | 38.78   | 10.51   | 35.01   |
| AV   | 15.56622G | 45.48          | 54.00          | -8.52       | 31.18      | 3        | Horizontal | 226         | 2.47       | -            | 38.80   | 10.51   | 35.01   |

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**

24/10/2019

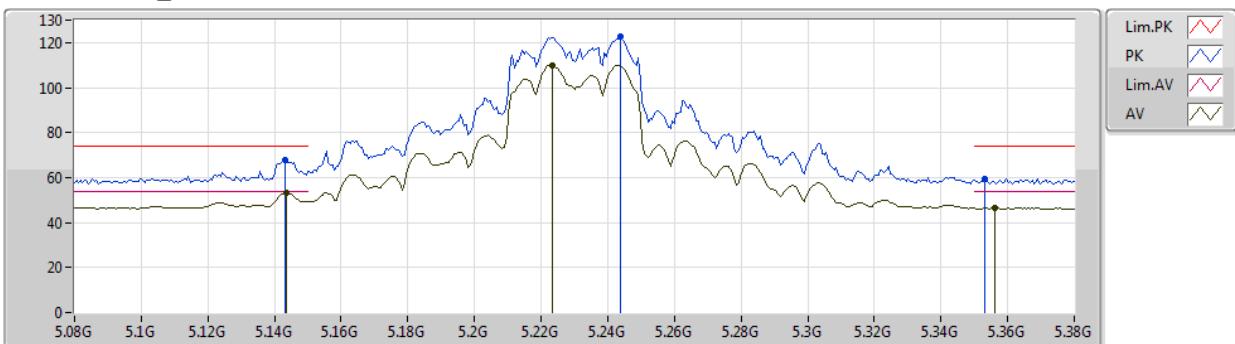
**5230MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 19.5  
03-P-2-10  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.146G    | 58.60          | 74.00          | -15.40      | 53.10      | 3        | Vertical  | 108         | 1.31       | -       | 34.05   | 6.42    | 34.97   |  |
| AV   | 5.15G     | 45.47          | 54.00          | -8.53       | 39.97      | 3        | Vertical  | 108         | 1.31       | -       | 34.05   | 6.42    | 34.97   |  |
| PK   | 5.233G    | 105.44         | Inf            | -Inf        | 99.75      | 3        | Vertical  | 108         | 1.31       | -       | 34.17   | 6.50    | 34.98   |  |
| AV   | 5.233G    | 93.53          | Inf            | -Inf        | 87.84      | 3        | Vertical  | 108         | 1.31       | -       | 34.17   | 6.50    | 34.98   |  |
| PK   | 5.3524G   | 58.51          | 74.00          | -15.49      | 52.70      | 3        | Vertical  | 108         | 1.31       | -       | 34.35   | 6.45    | 34.99   |  |
| AV   | 5.3704G   | 45.56          | 54.00          | -8.44       | 39.74      | 3        | Vertical  | 108         | 1.31       | -       | 34.37   | 6.44    | 34.99   |  |

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**

24/10/2019

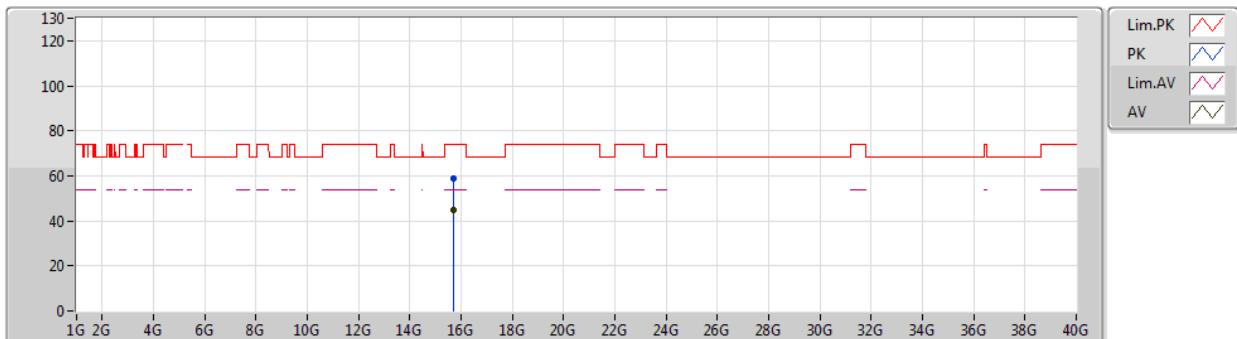
**5230MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 19.5  
03-P-2-10  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|--|
| PK   | 5.143G    | 68.00          | 74.00          | -6.00       | 62.52      | 3        | Horizontal | 59          | 1.91       | -            | 34.04   | 6.41    | 34.97   |  |
| AV   | 5.1436G   | 53.01          | 54.00          | -0.99       | 47.53      | 3        | Horizontal | 59          | 1.91       | -            | 34.04   | 6.41    | 34.97   |  |
| PK   | 5.2438G   | 122.63         | Inf            | -Inf        | 116.92     | 3        | Horizontal | 59          | 1.91       | -            | 34.19   | 6.50    | 34.98   |  |
| AV   | 5.2234G   | 109.94         | Inf            | -Inf        | 104.26     | 3        | Horizontal | 59          | 1.91       | -            | 34.15   | 6.51    | 34.98   |  |
| PK   | 5.353G    | 59.62          | 74.00          | -14.38      | 53.81      | 3        | Horizontal | 59          | 1.91       | -            | 34.35   | 6.45    | 34.99   |  |
| AV   | 5.356G    | 46.35          | 54.00          | -7.65       | 40.53      | 3        | Horizontal | 59          | 1.91       | -            | 34.36   | 6.45    | 34.99   |  |

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**

24/10/2019

**5230MHz\_TX**

EUT X\_4TX\_Dipole  
Setting 19.5  
03-P-2  
FSP(100019)

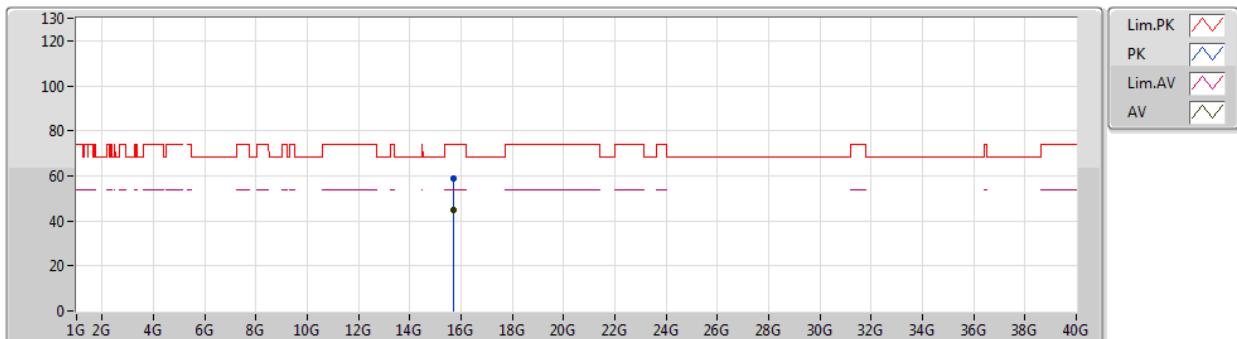
| Type | Freq (Hz)  | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|------------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 15.686626G | 58.59          | 74.00          | -15.41      | 44.72      | 3        | Vertical  | 109         | 2.25       | -            | 38.44   | 10.56   | 35.13   |
| AV   | 15.68526G  | 44.70          | 54.00          | -9.30       | 30.83      | 3        | Vertical  | 109         | 2.25       | -            | 38.44   | 10.56   | 35.13   |



## 802.11ax HEW40\_Nss1,(MCS0)\_4TX

24/10/2019

## 5230MHz\_TX

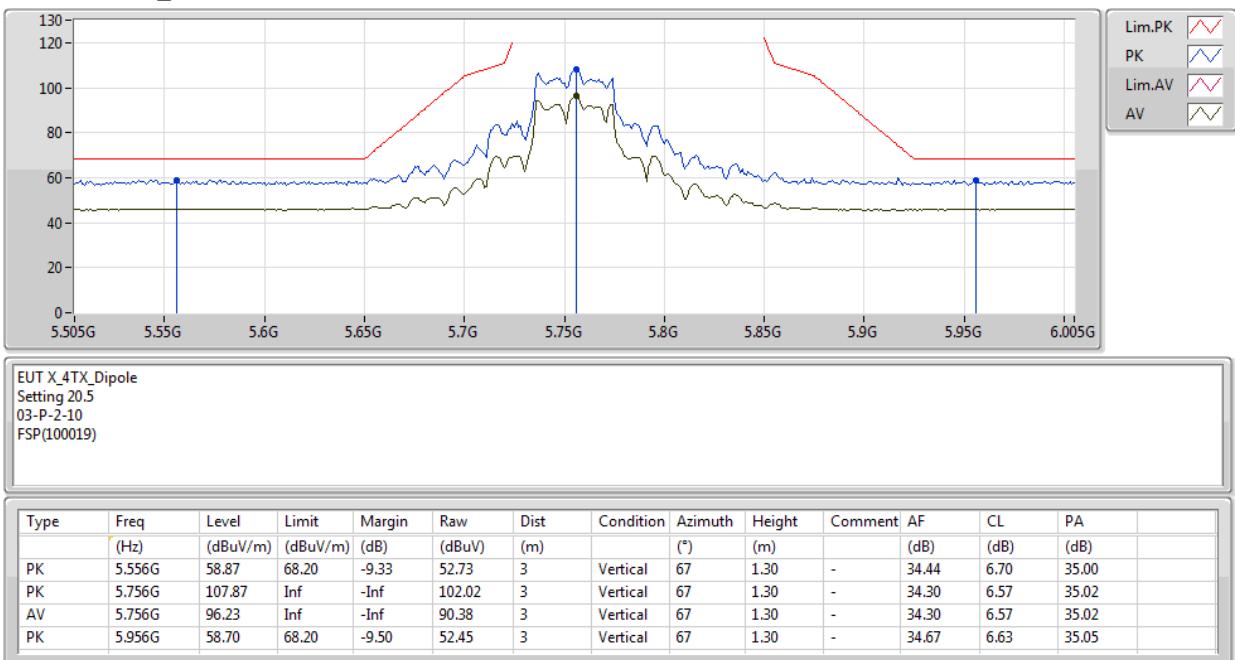


EUT X\_4TX\_Dipole  
Setting 19.5  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 15.69402G | 58.62          | 74.00          | -15.38      | 44.77      | 3        | Horizontal | 168         | 1.99       | -            | 38.42   | 10.56   | 35.13   |
| AV   | 15.68518G | 44.76          | 54.00          | -9.24       | 30.89      | 3        | Horizontal | 168         | 1.99       | -            | 38.44   | 10.56   | 35.13   |

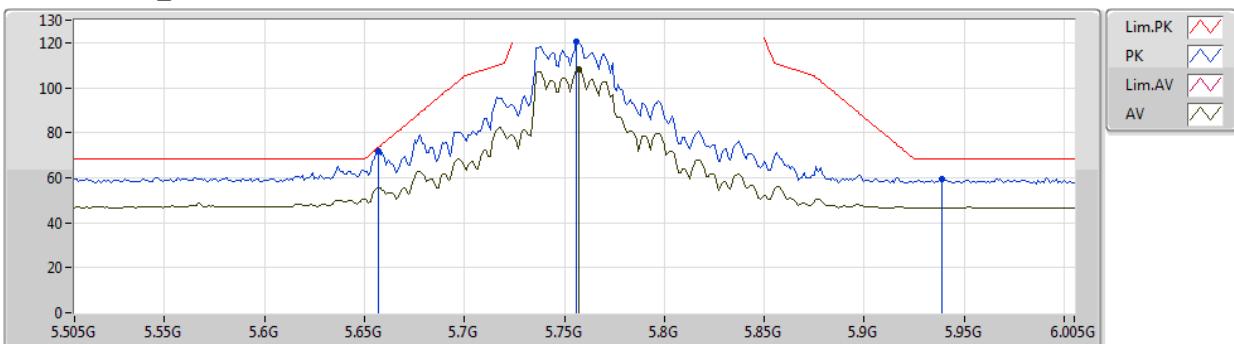
**802.11ax HEW40\_Nss1,(MCS0)\_4TX**

24/10/2019

**5755MHz\_TX**


**802.11ax HEW40\_Nss1,(MCS0)\_4TX**

24/10/2019

**5755MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 20.5  
03-P-2-10  
FSP(100019)

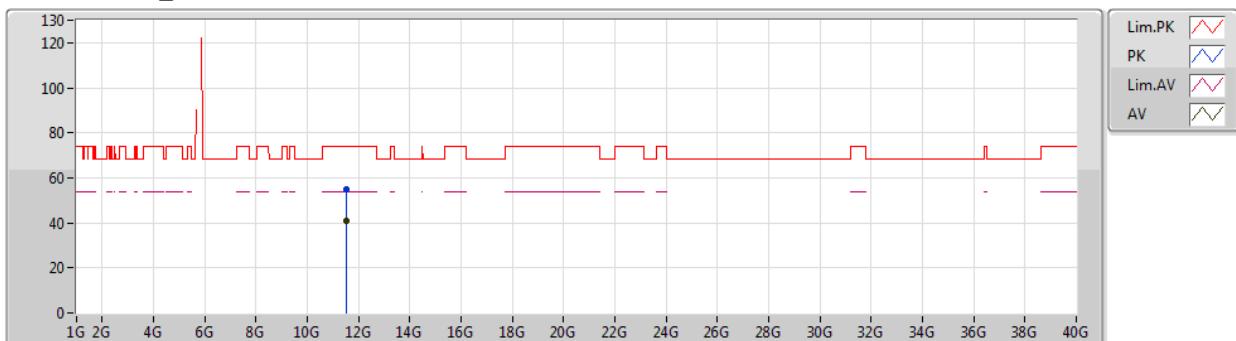
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.657G    | 71.86          | 73.38          | -1.52       | 65.83      | 3        | Horizontal | 278         | 1.50       | -       | 34.34   | 6.70    | 35.01   |  |
| PK   | 5.756G    | 120.39         | Inf            | -Inf        | 114.54     | 3        | Horizontal | 278         | 1.50       | -       | 34.30   | 6.57    | 35.02   |  |
| AV   | 5.757G    | 108.25         | Inf            | -Inf        | 102.40     | 3        | Horizontal | 278         | 1.50       | -       | 34.30   | 6.57    | 35.02   |  |
| PK   | 5.939G    | 59.51          | 68.20          | -8.69       | 53.31      | 3        | Horizontal | 278         | 1.50       | -       | 34.62   | 6.62    | 35.04   |  |



## 802.11ax HEW40\_Nss1,(MCS0)\_4TX

24/10/2019

## 5755MHz\_TX

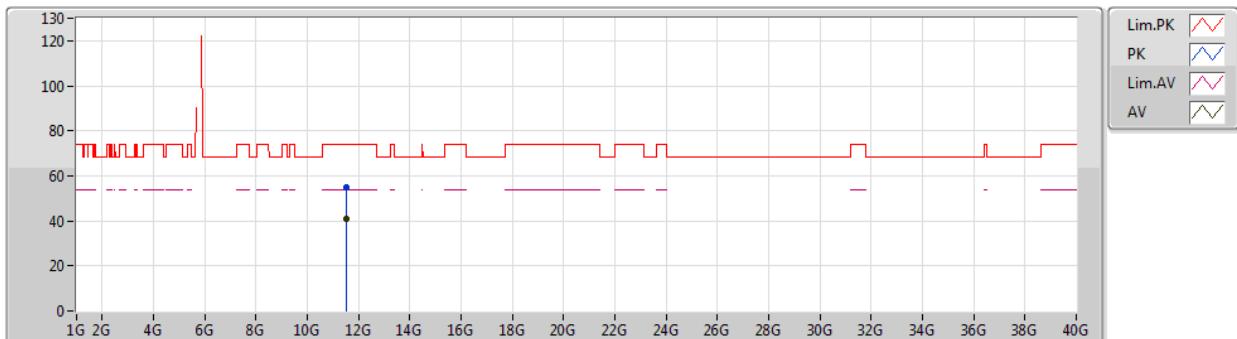


EUT X\_4TX\_Dipole  
Setting 20.5  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 11.50692G | 54.91          | 74.00          | -19.09      | 41.91      | 3        | Vertical  | 288         | 2.23       | -            | 38.85   | 8.93    | 34.78   |
| AV   | 11.50822G | 40.96          | 54.00          | -13.04      | 27.95      | 3        | Vertical  | 288         | 2.23       | -            | 38.86   | 8.93    | 34.78   |

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**

24/10/2019

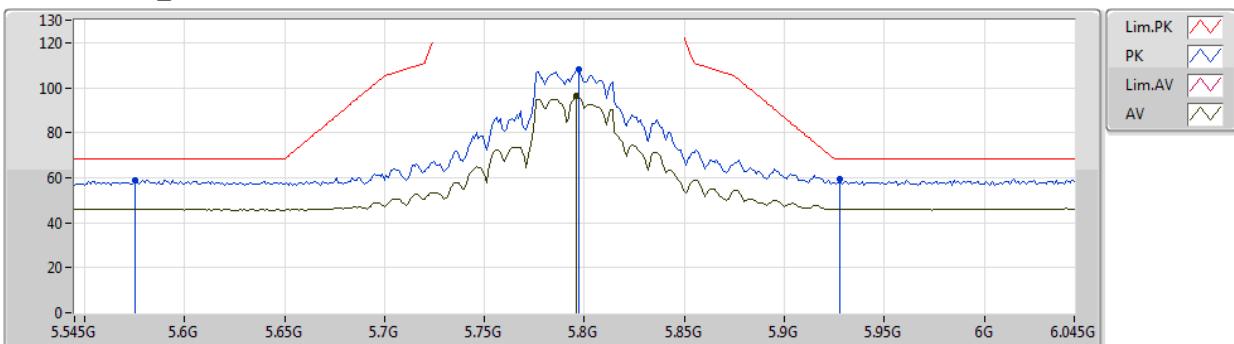
**5755MHz\_TX**


EUT X\_4TX\_Dipole  
 Setting 20.5  
 03-P-2  
 FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 11.5086G  | 54.80          | 74.00          | -19.20      | 41.79      | 3        | Horizontal | 120         | 2.30       | -            | 38.86   | 8.93    | 34.78   |
| AV   | 11.50512G | 40.95          | 54.00          | -13.05      | 27.95      | 3        | Horizontal | 120         | 2.30       | -            | 38.85   | 8.93    | 34.78   |

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**

24/10/2019

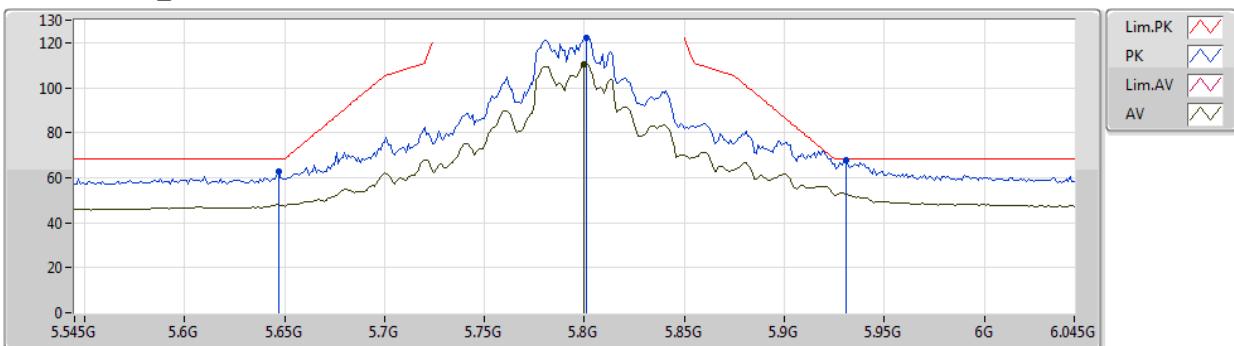
**5795MHz\_TX**


EUT\_X\_4TX\_Dipole  
 Setting 21  
 03-P-2-10  
 FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|--|
| PK   | 5.575G    | 59.05          | 68.20          | -9.15       | 52.90      | 3        | Vertical  | 69          | 1.43       | -       | 34.42   | 6.73    | 35.00   |  |
| PK   | 5.797G    | 108.07         | Inf            | -Inf        | 102.29     | 3        | Vertical  | 69          | 1.43       | -       | 34.30   | 6.51    | 35.03   |  |
| AV   | 5.796G    | 96.64          | Inf            | -Inf        | 90.85      | 3        | Vertical  | 69          | 1.43       | -       | 34.30   | 6.52    | 35.03   |  |
| PK   | 5.928G    | 59.54          | 68.20          | -8.66       | 53.39      | 3        | Vertical  | 69          | 1.43       | -       | 34.58   | 6.61    | 35.04   |  |

**802.11ax HEW40\_Nss1,(MCS0)\_4TX**

24/10/2019

**5795MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 21  
01-J-5-10  
FSP(100019)

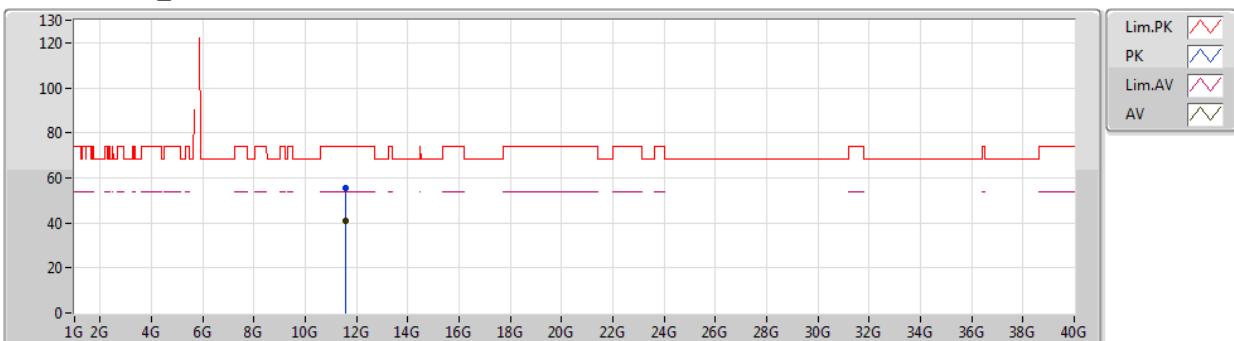
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition (*) | Azimuth | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|---------------|---------|------------|---------|---------|---------|---------|--|
| PK   | 5.647G    | 62.48          | 68.20          | -5.72       | 56.79      | 3        | Horizontal    | 58      | 2.19       | -       | 34.25   | 5.95    | 34.51   |  |
| PK   | 5.801G    | 122.31         | Inf            | -Inf        | 116.34     | 3        | Horizontal    | 58      | 2.19       | -       | 34.51   | 6.01    | 34.55   |  |
| AV   | 5.8G      | 110.43         | Inf            | -Inf        | 104.47     | 3        | Horizontal    | 58      | 2.19       | -       | 34.50   | 6.01    | 34.55   |  |
| PK   | 5.931G    | 67.90          | 68.20          | -0.30       | 61.07      | 3        | Horizontal    | 58      | 2.19       | -       | 35.19   | 6.23    | 34.59   |  |



## 802.11ax HEW40\_Nss1,(MCS0)\_4TX

24/10/2019

## 5795MHz\_TX



EUT X\_4TX\_Dipole  
Setting 21  
03-P-2  
FSP(100019)

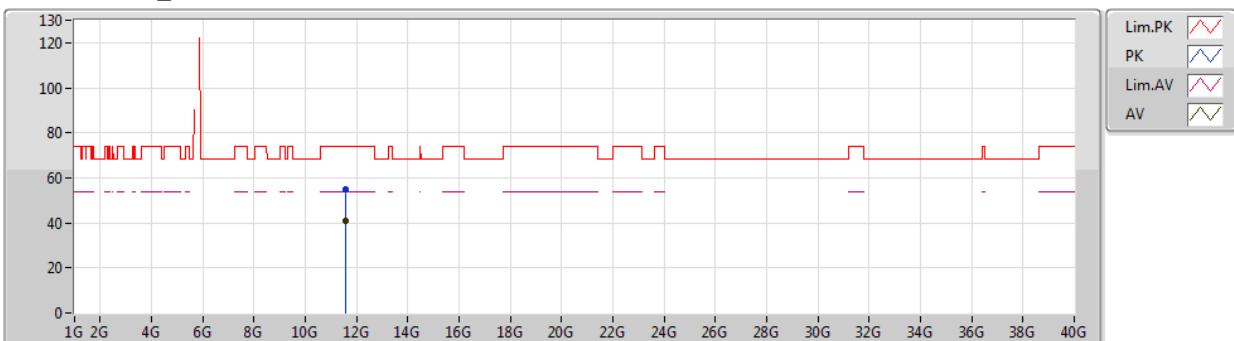
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 11.58982G | 55.29          | 74.00          | -18.71      | 42.24      | 3        | Vertical  | 128         | 2.17       | -            | 38.91   | 8.93    | 34.79   |
| AV   | 11.58938G | 41.07          | 54.00          | -12.93      | 28.02      | 3        | Vertical  | 128         | 2.17       | -            | 38.91   | 8.93    | 34.79   |



## 802.11ax HEW40\_Nss1,(MCS0)\_4TX

24/10/2019

## 5795MHz\_TX

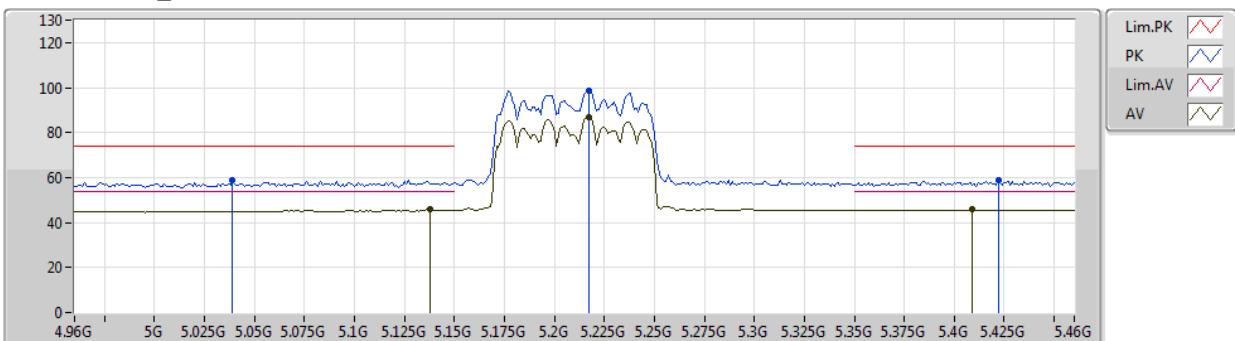


EUT X\_4TX\_Dipole  
Setting 21  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 11.59294G | 55.17          | 74.00          | -18.83      | 42.11      | 3        | Horizontal | 235         | 1.42       | -            | 38.92   | 8.93    | 34.79   |
| AV   | 11.58606G | 41.06          | 54.00          | -12.94      | 28.01      | 3        | Horizontal | 235         | 1.42       | -            | 38.91   | 8.93    | 34.79   |

**802.11ax HEW80\_Nss1,(MCS0)\_4TX**

24/10/2019

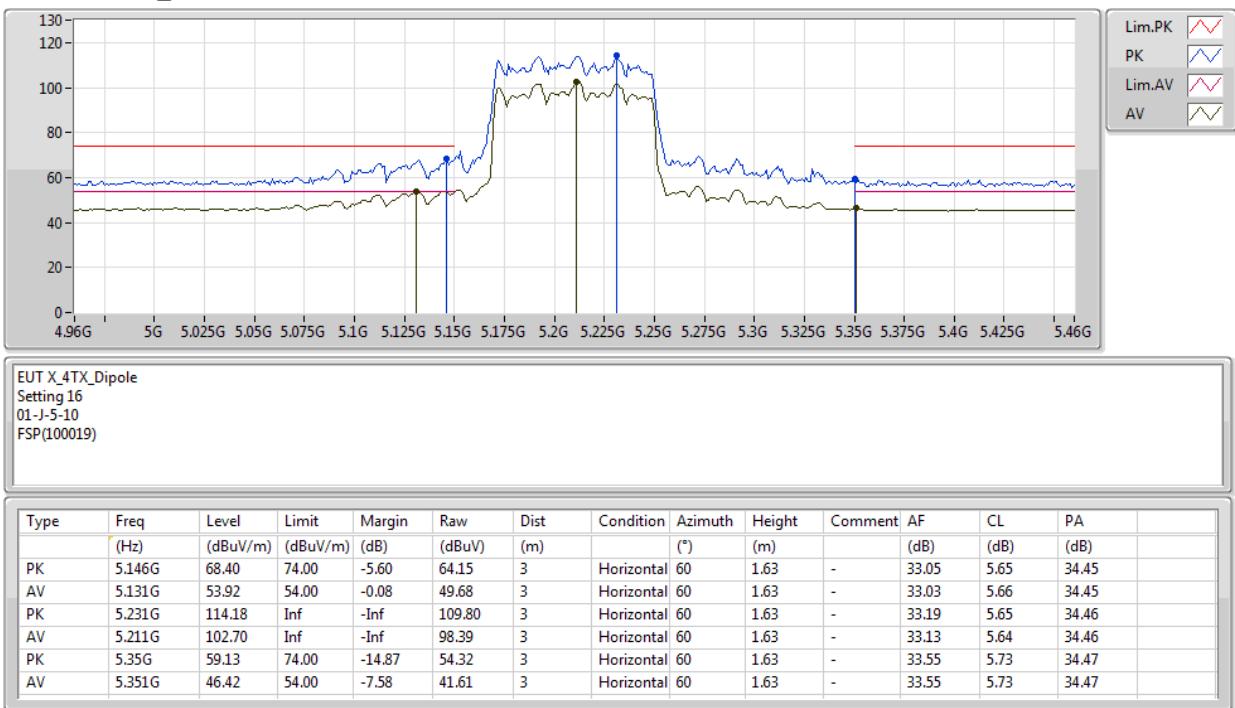
**5210MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 16  
03-P-2-10  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 5.039G    | 58.67          | 74.00          | -15.33      | 53.51      | 3        | Vertical  | 102         | 1.40       | -            | 33.94   | 6.19    | 34.97   |
| AV   | 5.138G    | 45.97          | 54.00          | -8.03       | 40.50      | 3        | Vertical  | 102         | 1.40       | -            | 34.04   | 6.40    | 34.97   |
| PK   | 5.217G    | 98.85          | Inf            | -Inf        | 93.19      | 3        | Vertical  | 102         | 1.40       | -            | 34.13   | 6.51    | 34.98   |
| AV   | 5.217G    | 87.07          | Inf            | -Inf        | 81.41      | 3        | Vertical  | 102         | 1.40       | -            | 34.13   | 6.51    | 34.98   |
| PK   | 5.422G    | 58.83          | 74.00          | -15.17      | 52.93      | 3        | Vertical  | 102         | 1.40       | -            | 34.42   | 6.47    | 34.99   |
| AV   | 5.409G    | 45.77          | 54.00          | -8.23       | 39.90      | 3        | Vertical  | 102         | 1.40       | -            | 34.41   | 6.45    | 34.99   |

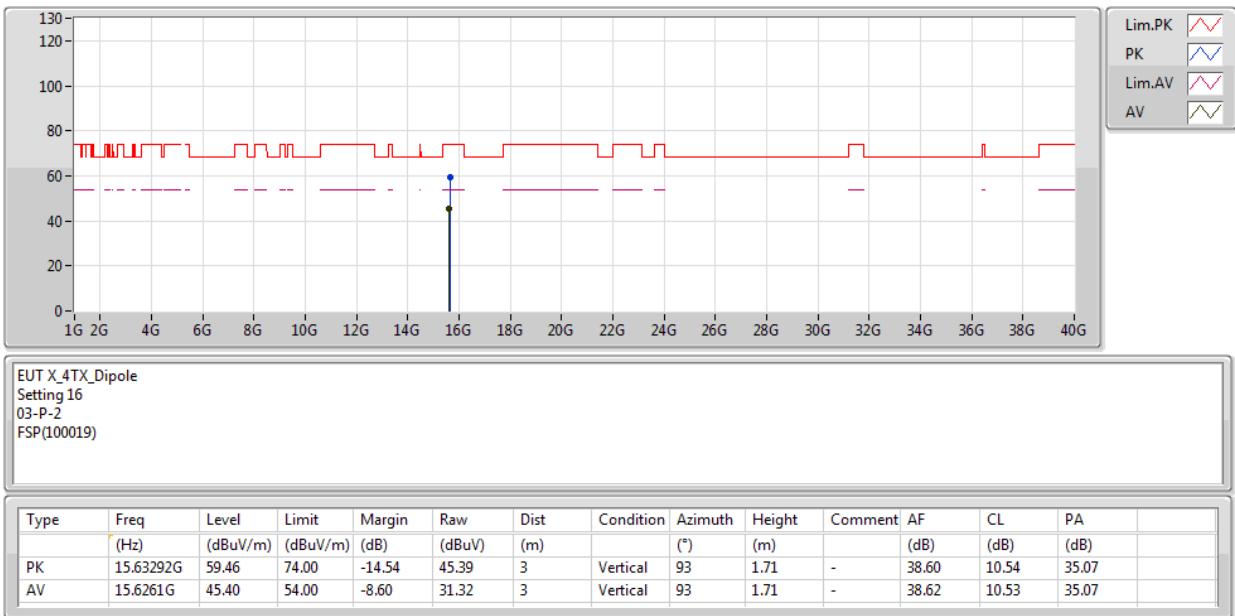
**802.11ax HEW80\_Nss1,(MCS0)\_4TX**

24/10/2019

**5210MHz\_TX**


**802.11ax HEW80\_Nss1,(MCS0)\_4TX**

24/10/2019

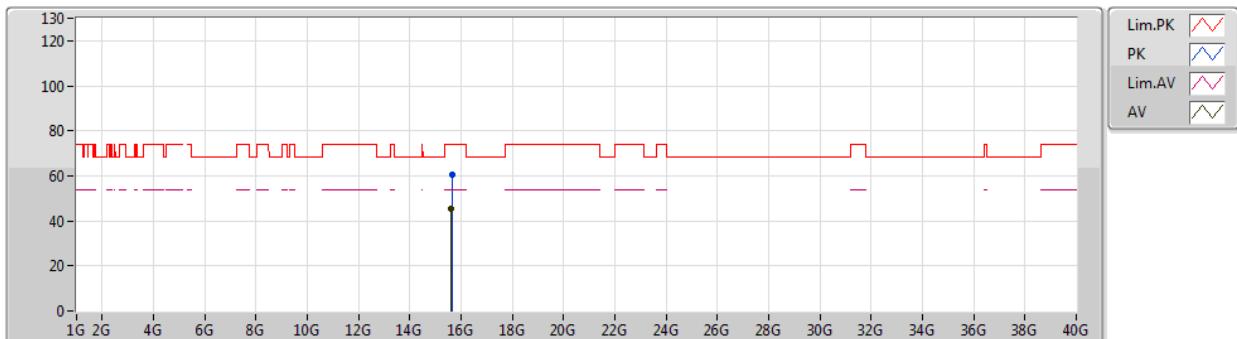
**5210MHz\_TX**




## 802.11ax HEW80\_Nss1,(MCS0)\_4TX

24/10/2019

## 5210MHz\_TX

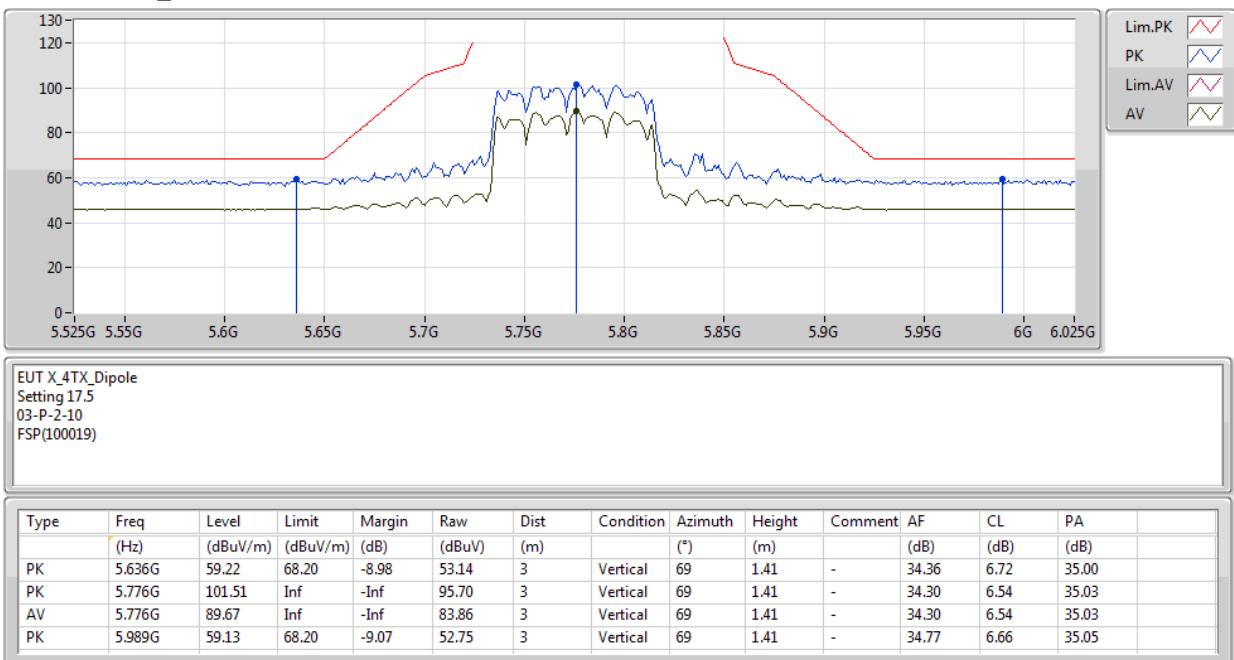


EUT X\_4TX\_Dipole  
Setting 16  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |  |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|--------------|---------|---------|---------|--|
| PK   | 15.6318G  | 60.56          | 74.00          | -13.44      | 46.49      | 3        | Horizontal | 185         | 1.61       | -            | 38.60   | 10.54   | 35.07   |  |
| AV   | 15.62948G | 45.46          | 54.00          | -8.54       | 31.38      | 3        | Horizontal | 185         | 1.61       | -            | 38.61   | 10.54   | 35.07   |  |

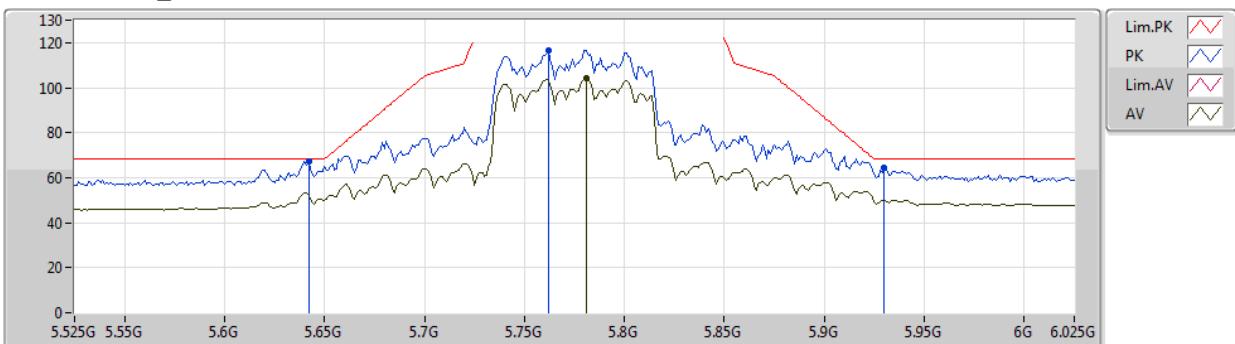
**802.11ax HEW80\_Nss1,(MCS0)\_4TX**

24/10/2019

**5775MHz\_TX**


**802.11ax HEW80\_Nss1,(MCS0)\_4TX**

24/10/2019

**5775MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 17.5  
01-J-5-10  
FSP(100019)

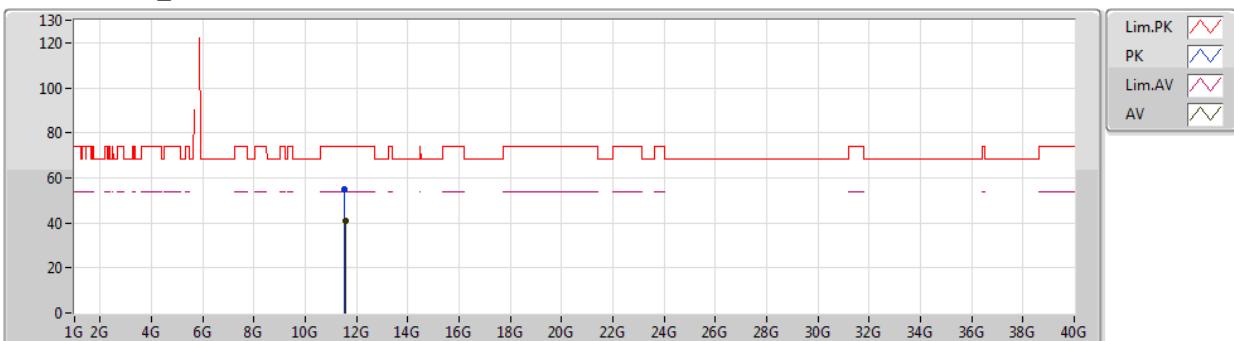
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition (*) | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|---------------|-------------|------------|--------------|---------|---------|---------|
| PK   | 5.642G    | 67.03          | 68.20          | -1.17       | 61.35      | 3        | Horizontal    | 59          | 2.33       | -            | 34.24   | 5.95    | 34.51   |
| PK   | 5.762G    | 116.76         | Inf            | -Inf        | 110.89     | 3        | Horizontal    | 59          | 2.33       | -            | 34.42   | 5.99    | 34.54   |
| AV   | 5.781G    | 103.99         | Inf            | -Inf        | 98.08      | 3        | Horizontal    | 59          | 2.33       | -            | 34.46   | 6.00    | 34.55   |
| PK   | 5.93G     | 64.65          | 68.20          | -3.55       | 57.82      | 3        | Horizontal    | 59          | 2.33       | -            | 35.19   | 6.23    | 34.59   |



## 802.11ax HEW80\_Nss1,(MCS0)\_4TX

24/10/2019

## 5775MHz\_TX

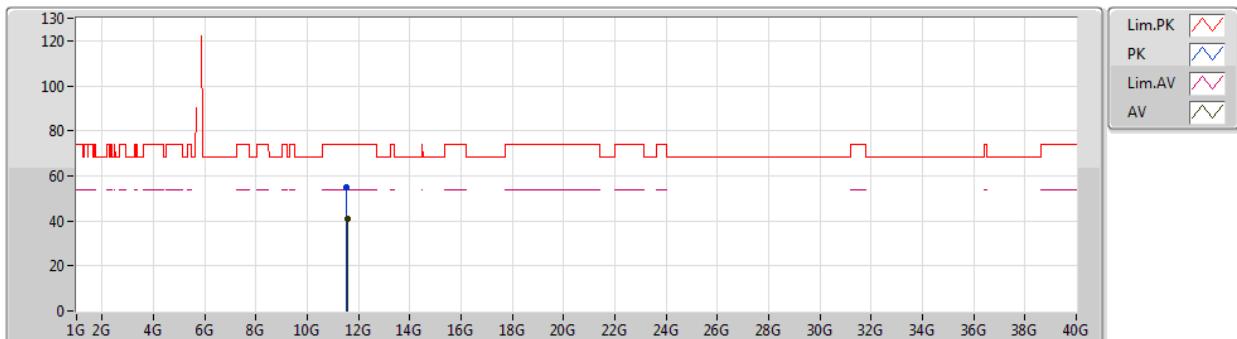


EUT X\_4TX\_Dipole  
Setting 17.5  
03-P-2  
FSP(100019)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment (dB) | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|--------------|---------|---------|---------|
| PK   | 11.54658G | 55.02          | 74.00          | -18.98      | 42.00      | 3        | Vertical  | 153         | 1.12       | -            | 38.88   | 8.93    | 34.79   |
| AV   | 11.55086G | 40.90          | 54.00          | -13.10      | 27.87      | 3        | Vertical  | 153         | 1.12       | -            | 38.89   | 8.93    | 34.79   |

**802.11ax HEW80\_Nss1,(MCS0)\_4TX**

24/10/2019

**5775MHz\_TX**


EUT X\_4TX\_Dipole  
Setting 17.5  
03-P-2  
FSP(100019)

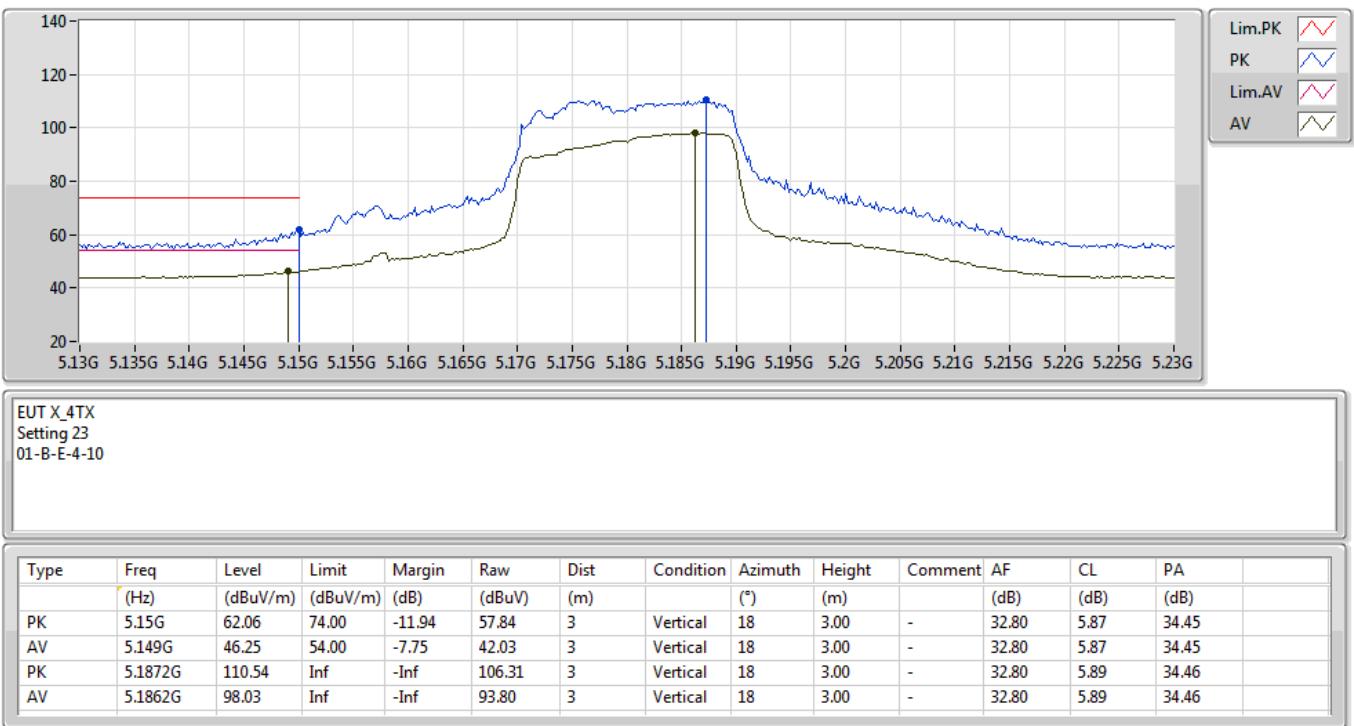
| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(*) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 11.54698G    | 54.95             | 74.00             | -19.05         | 41.93         | 3           | Horizontal | 205            | 1.26          | -       | 38.88      | 8.93       | 34.79      |
| AV   | 11.55018G    | 40.93             | 54.00             | -13.07         | 27.90         | 3           | Horizontal | 205            | 1.26          | -       | 38.89      | 8.93       | 34.79      |

**<beamforming mode>****Summary**

| Mode                              | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comments |
|-----------------------------------|--------|------|-----------|----------------|----------------|-------------|----------|------------|-------------|------------|----------|
| 5.15-5.25GHz                      | -      | -    | -         | -              | -              | -           | -        | -          | -           | -          | -        |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | Pass   | PK   | 5.1464G   | 73.83          | 74.00          | -0.17       | 3        | Horizontal | 289         | 1.80       | -        |

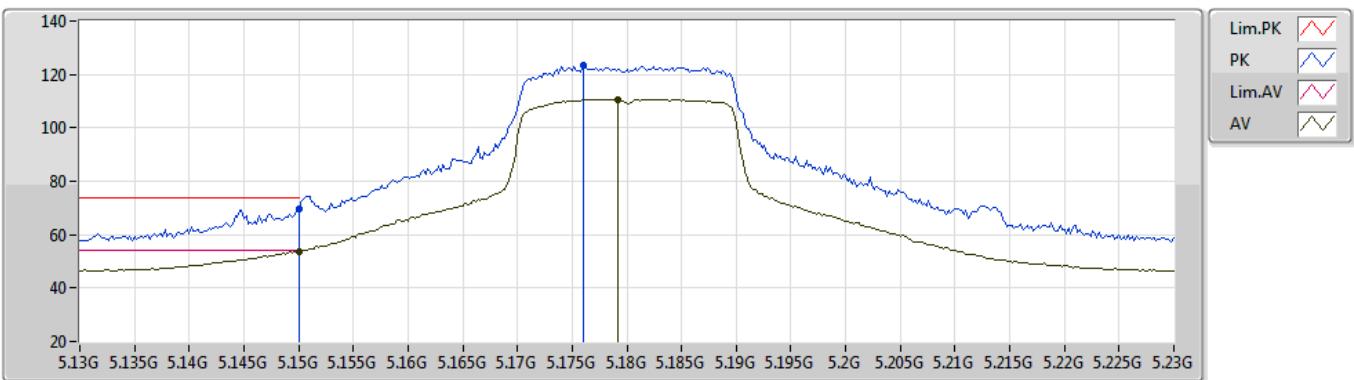
**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5180MHz\_TX**


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

11/12/2019

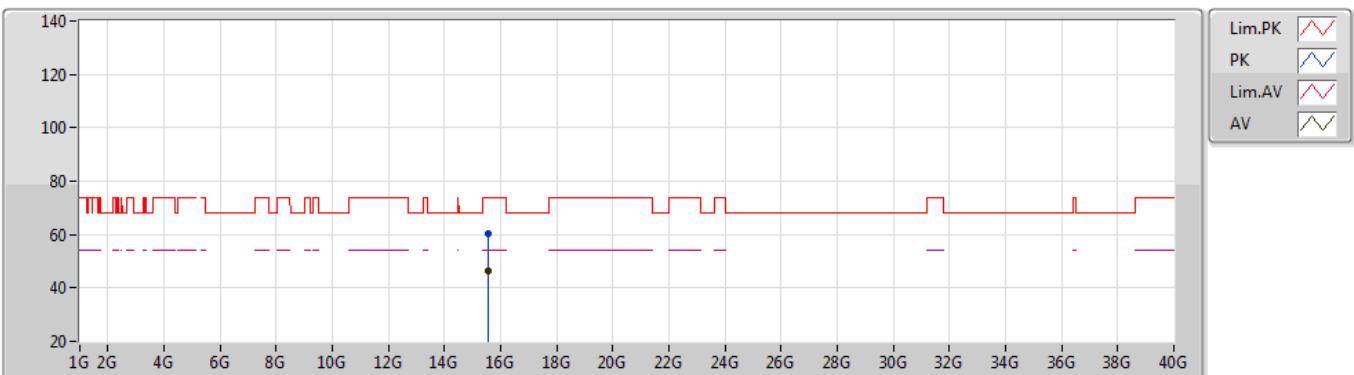
**5180MHz\_TX**


EUT X\_4TX  
Setting 23  
01-B-E-4-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.15G     | 69.90          | 74.00          | -4.10       | 65.68      | 3        | Horizontal | 91          | 1.38       | -       | 32.80   | 5.87    | 34.45   |
| AV   | 5.15G     | 53.49          | 54.00          | -0.51       | 49.27      | 3        | Horizontal | 91          | 1.38       | -       | 32.80   | 5.87    | 34.45   |
| PK   | 5.176G    | 123.41         | Inf            | -Inf        | 119.18     | 3        | Horizontal | 91          | 1.38       | -       | 32.80   | 5.89    | 34.46   |
| AV   | 5.1792G   | 110.67         | Inf            | -Inf        | 106.44     | 3        | Horizontal | 91          | 1.38       | -       | 32.80   | 5.89    | 34.46   |

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

11/12/2019

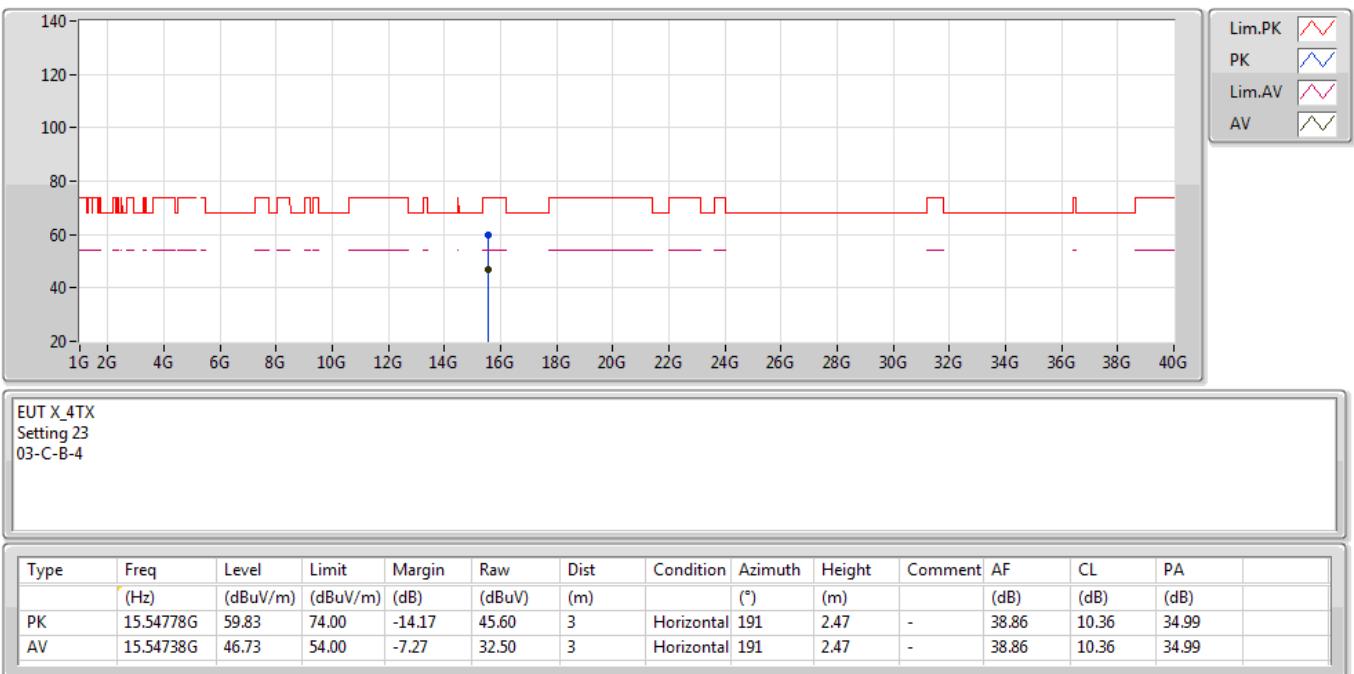
**5180MHz\_TX**

EUT X\_4TX  
Setting 23  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 15.54626G | 60.50          | 74.00          | -13.50      | 46.27      | 3        | Vertical  | 222         | 1.57       | -       | 38.86   | 10.36   | 34.99   |
| AV   | 15.5478G  | 46.48          | 54.00          | -7.52       | 32.25      | 3        | Vertical  | 222         | 1.57       | -       | 38.86   | 10.36   | 34.99   |

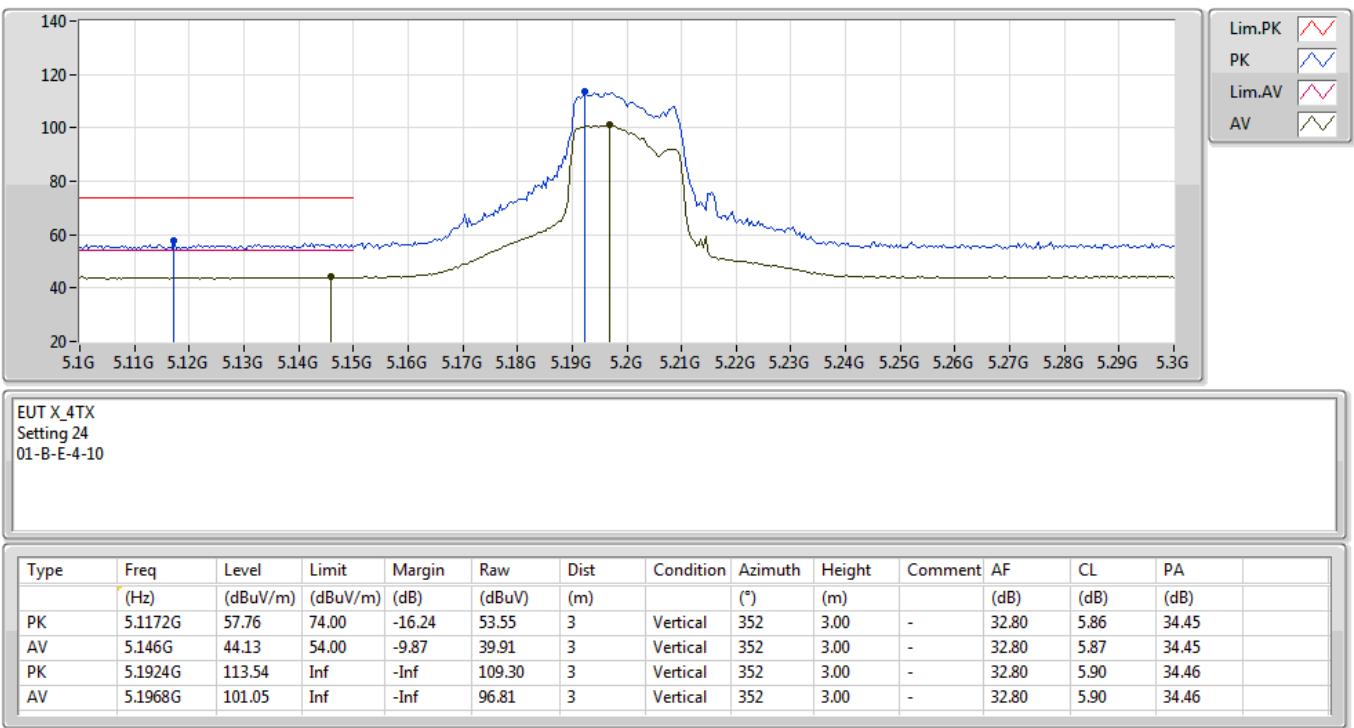
**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5180MHz\_TX**

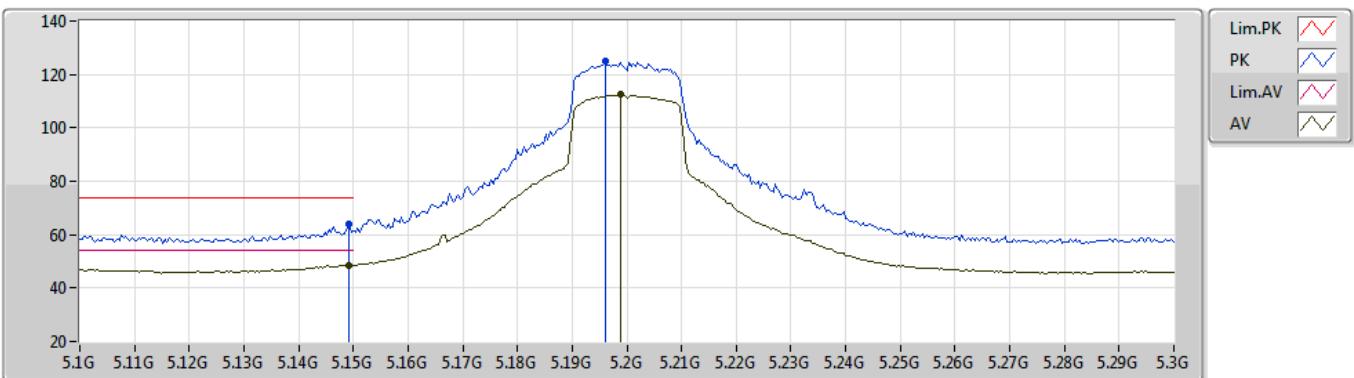
**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5200MHz\_TX**


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

11/12/2019

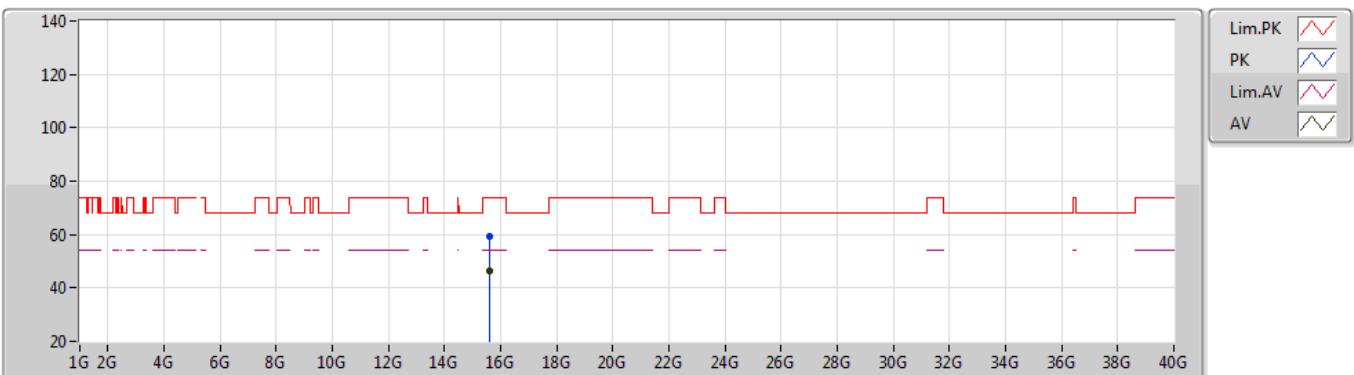
**5200MHz\_TX**


EUT X\_4TX  
Setting 24  
01-B-E-4-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.1492G   | 63.97          | 74.00          | -10.03      | 59.75      | 3        | Horizontal | 62          | 1.94       | -       | 32.80   | 5.87    | 34.45   |
| AV   | 5.1492G   | 48.70          | 54.00          | -5.30       | 44.48      | 3        | Horizontal | 62          | 1.94       | -       | 32.80   | 5.87    | 34.45   |
| PK   | 5.196G    | 124.77         | Inf            | -Inf        | 120.53     | 3        | Horizontal | 62          | 1.94       | -       | 32.80   | 5.90    | 34.46   |
| AV   | 5.1988G   | 112.42         | Inf            | -Inf        | 108.18     | 3        | Horizontal | 62          | 1.94       | -       | 32.80   | 5.90    | 34.46   |

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

11/12/2019

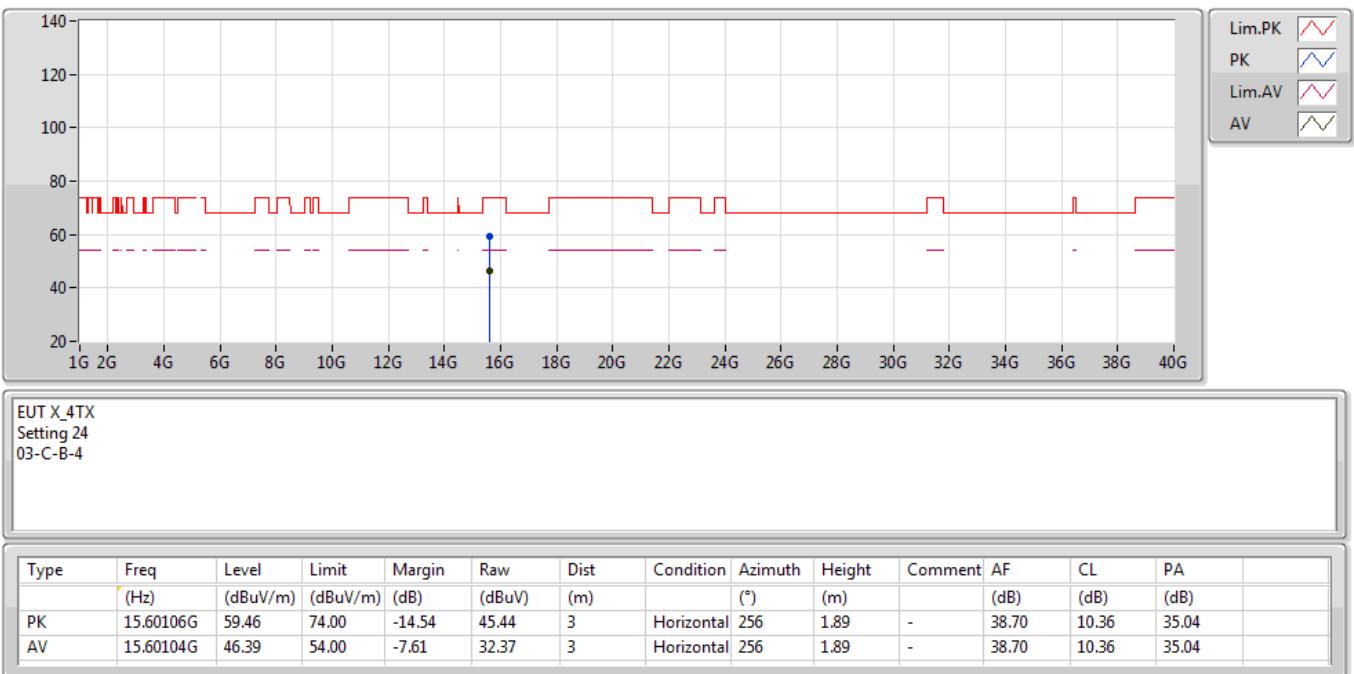
**5200MHz\_TX**

EUT X\_4TX  
Setting 24  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 15.60318G | 59.55          | 74.00          | -14.45      | 45.54      | 3        | Vertical  | 80          | 1.75       | -       | 38.69   | 10.36   | 35.04   |
| AV   | 15.60368G | 46.37          | 54.00          | -7.63       | 32.36      | 3        | Vertical  | 80          | 1.75       | -       | 38.69   | 10.36   | 35.04   |

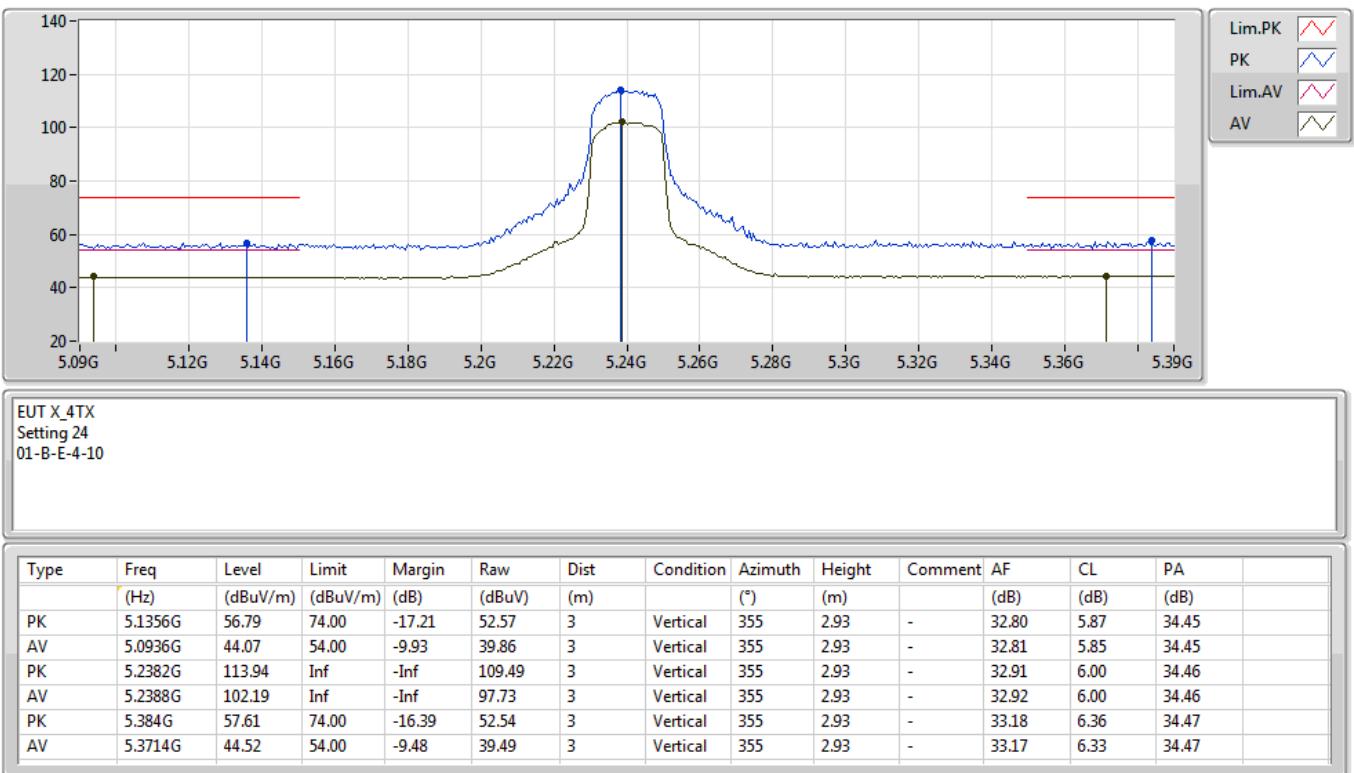
**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5200MHz\_TX**

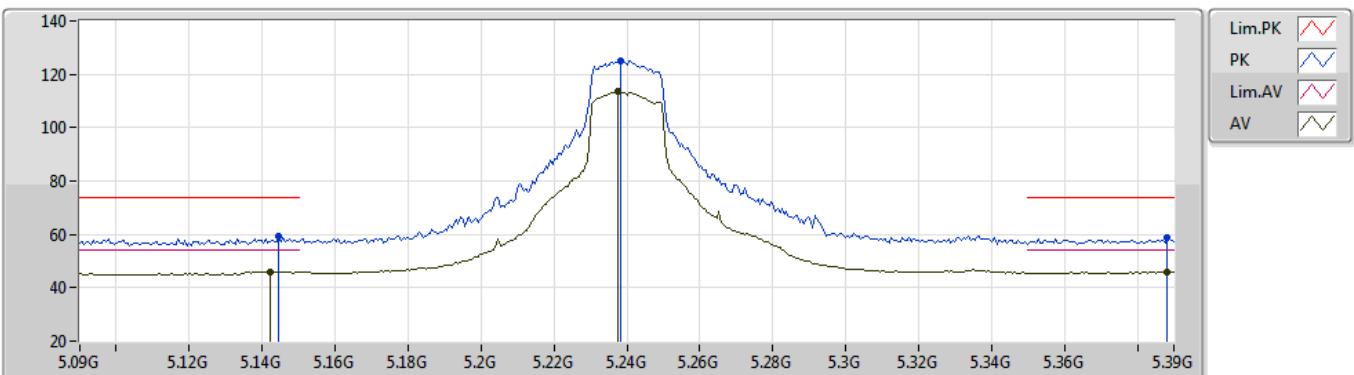
**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5240MHz\_TX**


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

11/12/2019

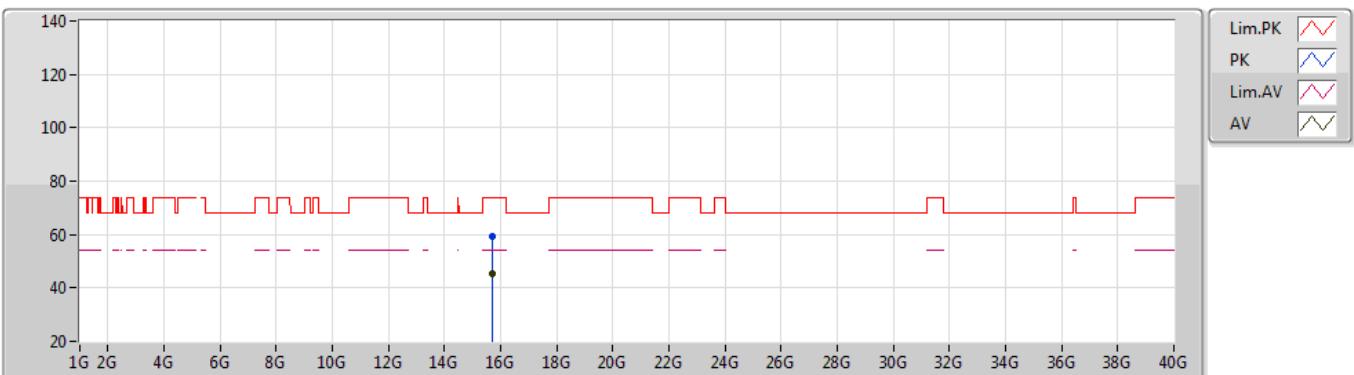
**5240MHz\_TX**


EUT X\_4TX  
Setting 24  
01-B-E-4-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.1446G   | 59.32          | 74.00          | -14.68      | 55.10      | 3        | Horizontal | 289         | 1.15       | -       | 32.80   | 5.87    | 34.45   |
| AV   | 5.1422G   | 46.12          | 54.00          | -7.88       | 41.90      | 3        | Horizontal | 289         | 1.15       | -       | 32.80   | 5.87    | 34.45   |
| PK   | 5.2382G   | 125.21         | Inf            | -Inf        | 120.76     | 3        | Horizontal | 289         | 1.15       | -       | 32.91   | 6.00    | 34.46   |
| AV   | 5.2376G   | 113.54         | Inf            | -Inf        | 109.09     | 3        | Horizontal | 289         | 1.15       | -       | 32.91   | 6.00    | 34.46   |
| PK   | 5.3882G   | 58.65          | 74.00          | -15.35      | 53.56      | 3        | Horizontal | 289         | 1.15       | -       | 33.19   | 6.37    | 34.47   |
| AV   | 5.3882G   | 45.92          | 54.00          | -8.08       | 40.83      | 3        | Horizontal | 289         | 1.15       | -       | 33.19   | 6.37    | 34.47   |

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

11/12/2019

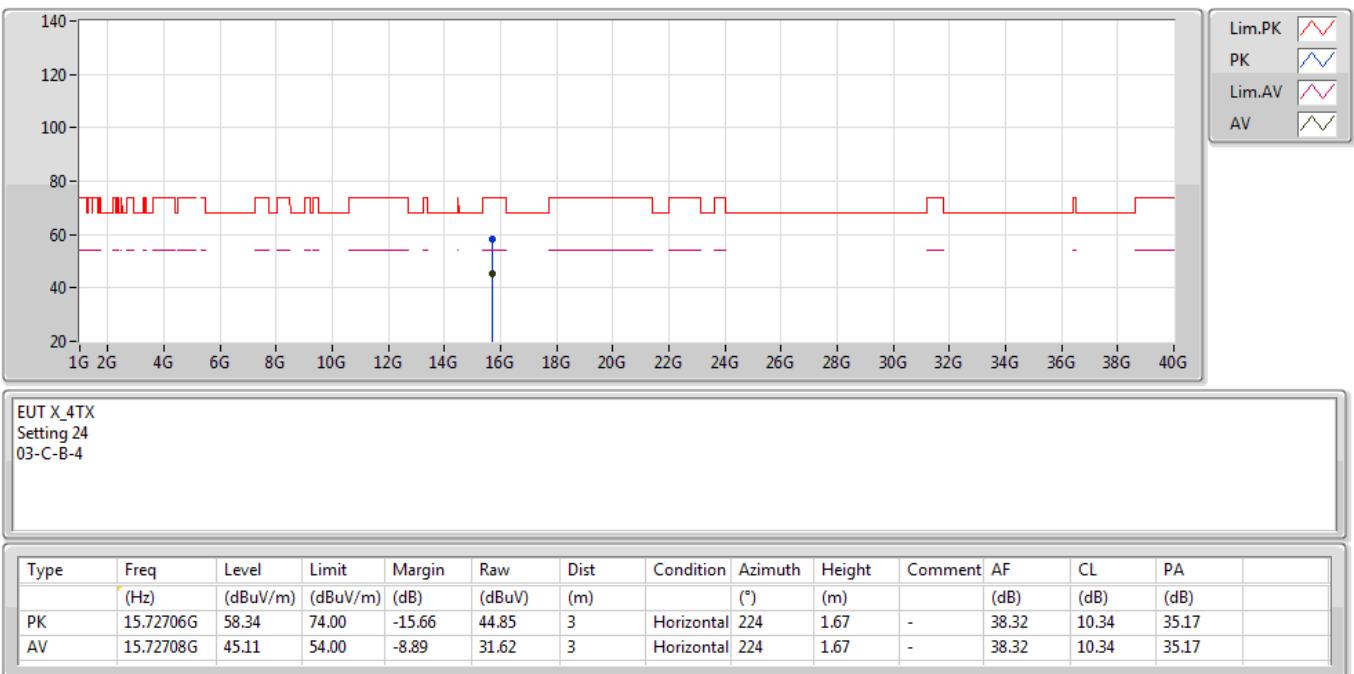
**5240MHz\_TX**

EUT X\_4TX  
Setting 24  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 15.7231G  | 59.07          | 74.00          | -14.93      | 45.56      | 3        | Vertical  | 74          | 1.70       | -       | 38.33   | 10.34   | 35.16   |
| AV   | 15.72398G | 45.31          | 54.00          | -8.69       | 31.80      | 3        | Vertical  | 74          | 1.70       | -       | 38.33   | 10.34   | 35.16   |

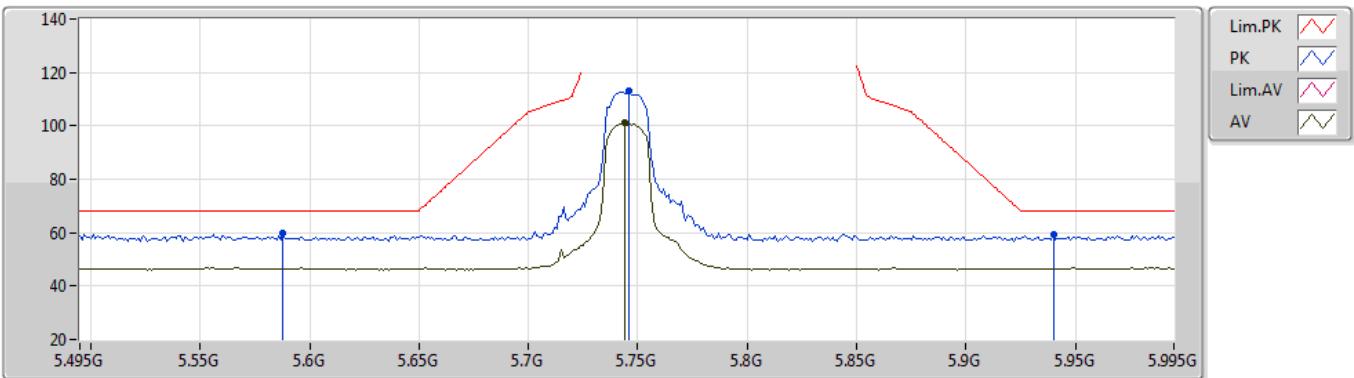
**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5240MHz\_TX**

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

11/12/2019

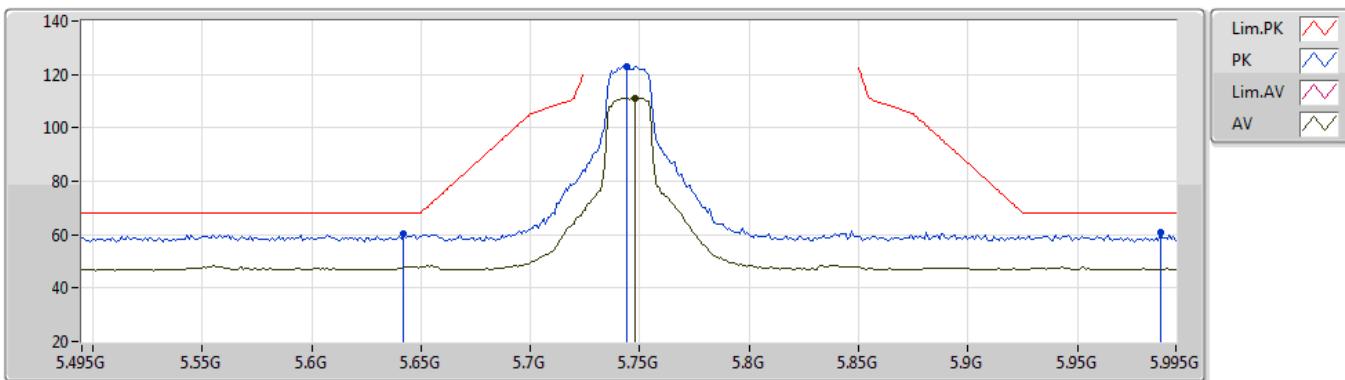
**5745MHz\_TX**


EUT X\_4TX  
Setting 24  
03-C-M-1-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.588G    | 59.59          | 68.20          | -8.61       | 53.30      | 3        | Vertical  | 351         | 2.51       | -       | 34.41   | 6.88    | 35.00   |
| PK   | 5.746G    | 112.85         | Inf            | -Inf        | 106.74     | 3        | Vertical  | 351         | 2.51       | -       | 34.30   | 6.83    | 35.02   |
| AV   | 5.744G    | 101.12         | Inf            | -Inf        | 95.01      | 3        | Vertical  | 351         | 2.51       | -       | 34.30   | 6.83    | 35.02   |
| PK   | 5.94G     | 59.20          | 68.20          | -9.00       | 52.75      | 3        | Vertical  | 351         | 2.51       | -       | 34.62   | 6.87    | 35.04   |

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

11/12/2019

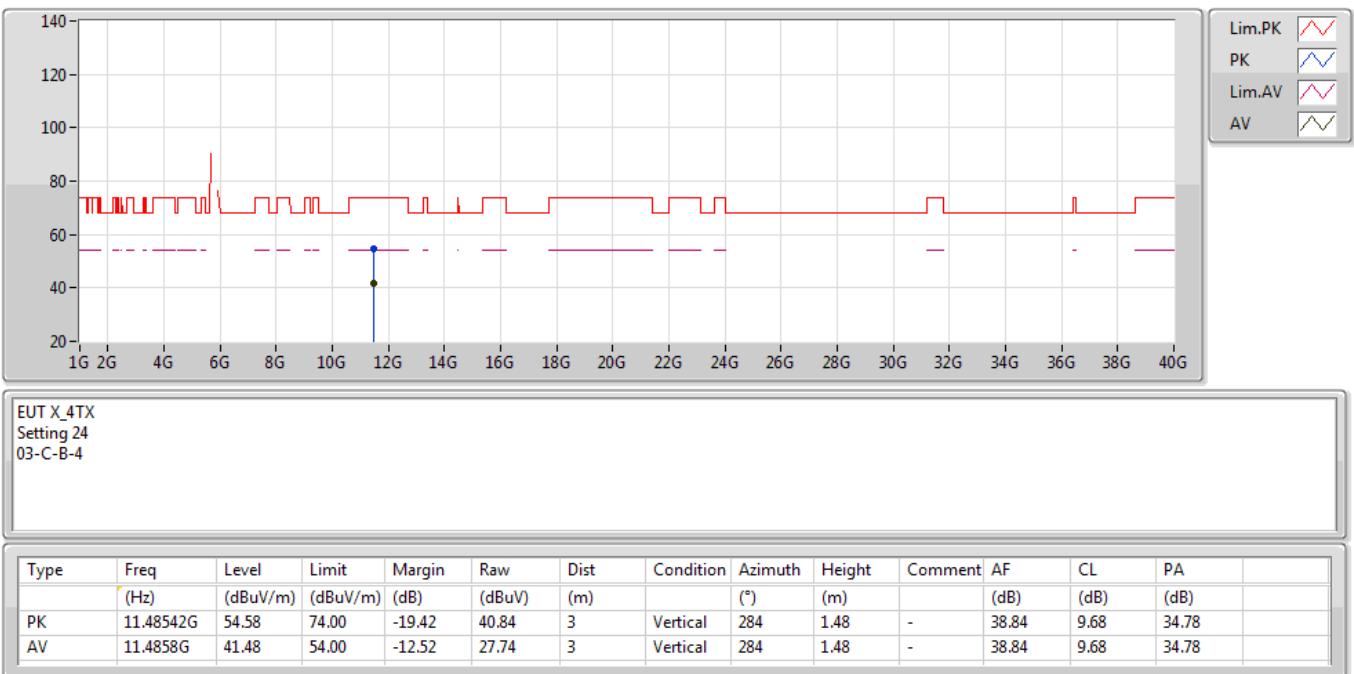
**5745MHz\_TX**


EUT X\_4TX  
Setting 24  
03-C-M-1-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.642G    | 60.26          | 68.20          | -7.94       | 54.02      | 3        | Horizontal | 279         | 1.40       | -       | 34.36   | 6.88    | 35.00   |
| PK   | 5.744G    | 123.03         | Inf            | -Inf        | 116.92     | 3        | Horizontal | 279         | 1.40       | -       | 34.30   | 6.83    | 35.02   |
| AV   | 5.748G    | 111.22         | Inf            | -Inf        | 105.11     | 3        | Horizontal | 279         | 1.40       | -       | 34.30   | 6.83    | 35.02   |
| PK   | 5.988G    | 60.79          | 68.20          | -7.41       | 54.19      | 3        | Horizontal | 279         | 1.40       | -       | 34.76   | 6.89    | 35.05   |

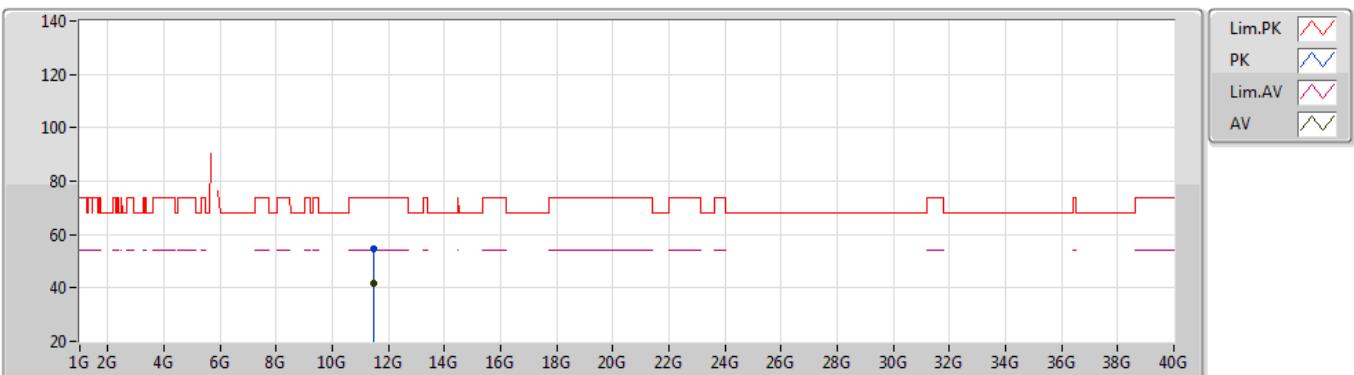
**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5745MHz\_TX**

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

11/12/2019

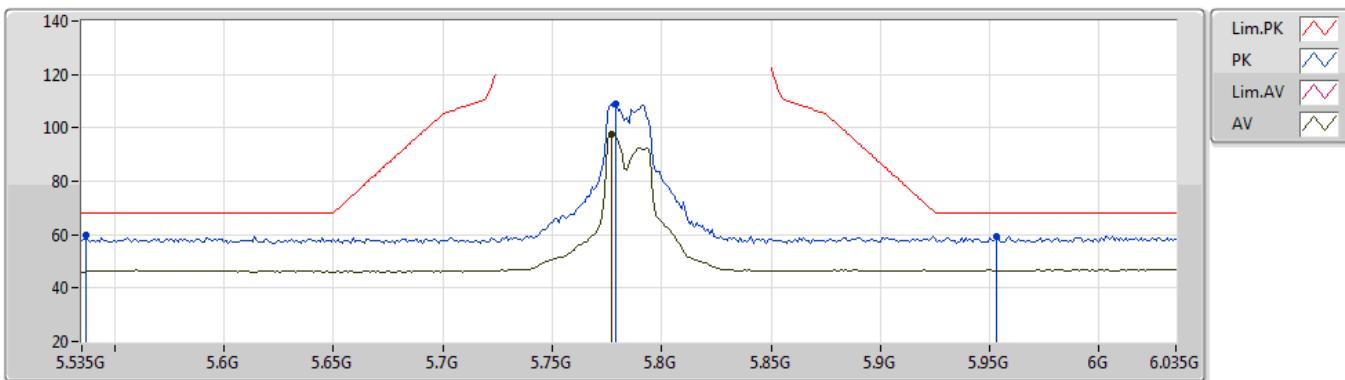
**5745MHz\_TX**

EUT X\_4TX  
Setting 24  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 11.49564G | 54.73          | 74.00          | -19.27      | 40.98      | 3        | Horizontal | 151         | 1.83       | -       | 38.85   | 9.68    | 34.78   |
| AV   | 11.48874G | 41.56          | 54.00          | -12.44      | 27.82      | 3        | Horizontal | 151         | 1.83       | -       | 38.84   | 9.68    | 34.78   |

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

11/12/2019

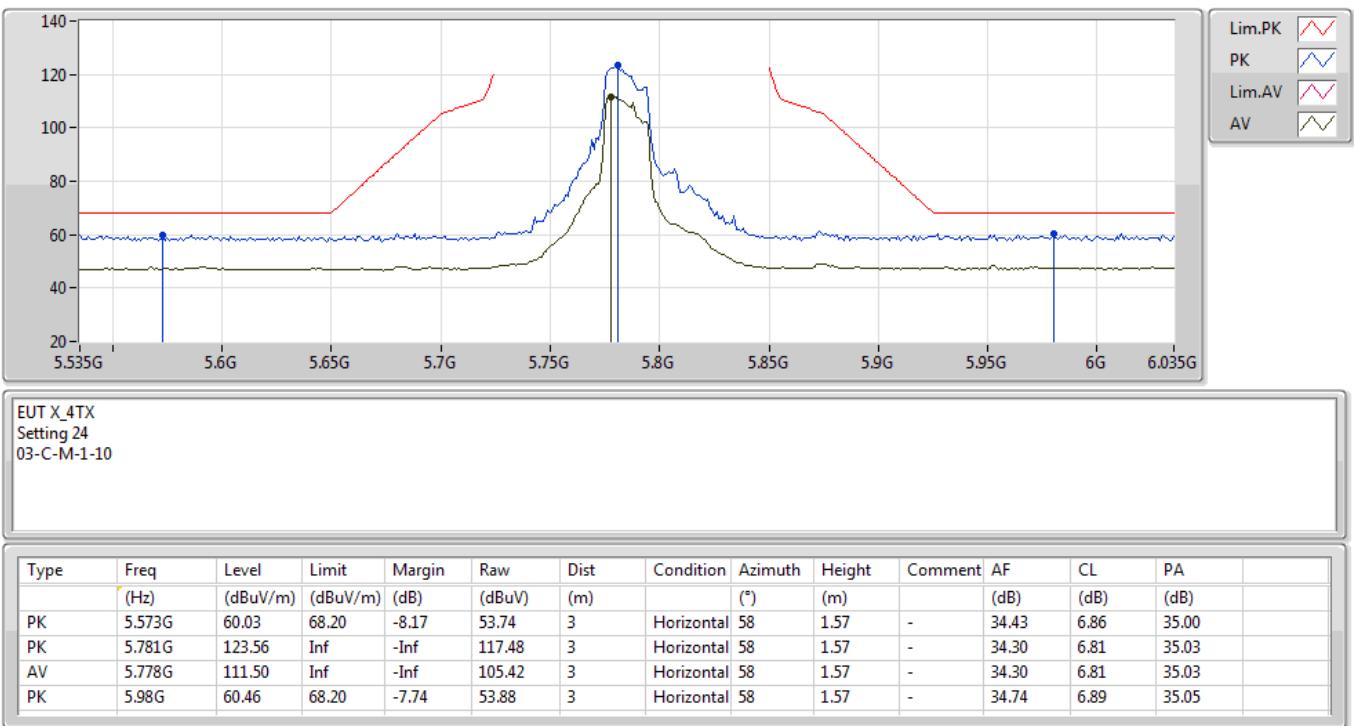
**5785MHz\_TX**

EUT X\_4TX  
Setting 24  
03-C-M-1-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.537G    | 59.83          | 68.20          | -8.37       | 53.55      | 3        | Vertical  | 175         | 2.68       | -       | 34.46   | 6.81    | 34.99   |
| PK   | 5.779G    | 109.16         | Inf            | -Inf        | 103.08     | 3        | Vertical  | 175         | 2.68       | -       | 34.30   | 6.81    | 35.03   |
| AV   | 5.777G    | 97.83          | Inf            | -Inf        | 91.75      | 3        | Vertical  | 175         | 2.68       | -       | 34.30   | 6.81    | 35.03   |
| PK   | 5.953G    | 59.32          | 68.20          | -8.88       | 52.83      | 3        | Vertical  | 175         | 2.68       | -       | 34.66   | 6.88    | 35.05   |

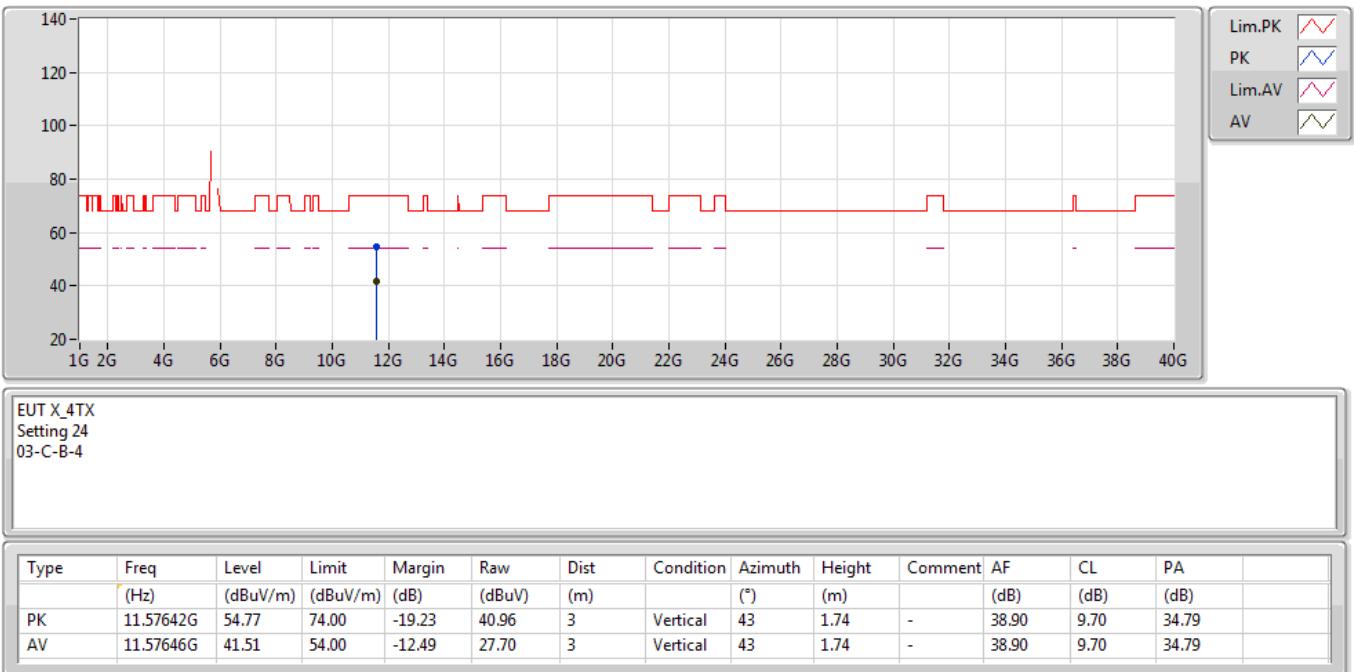
**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5785MHz\_TX**


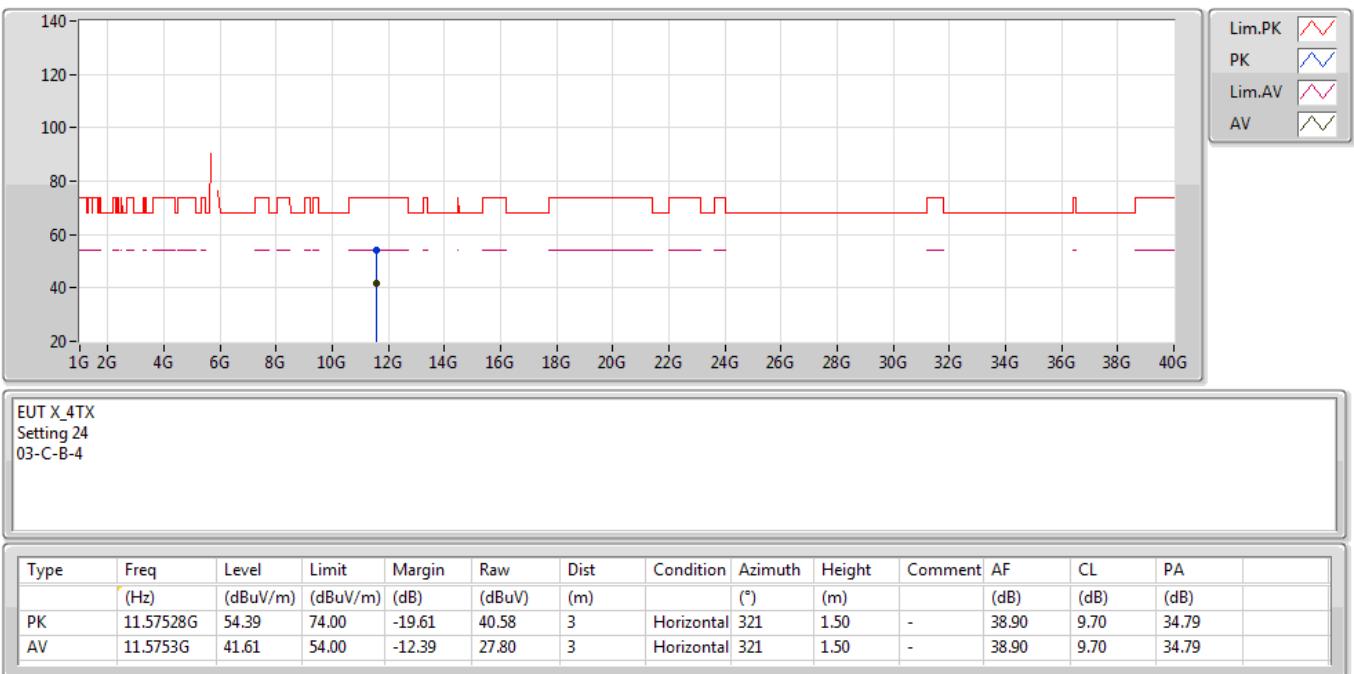
**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5785MHz\_TX**

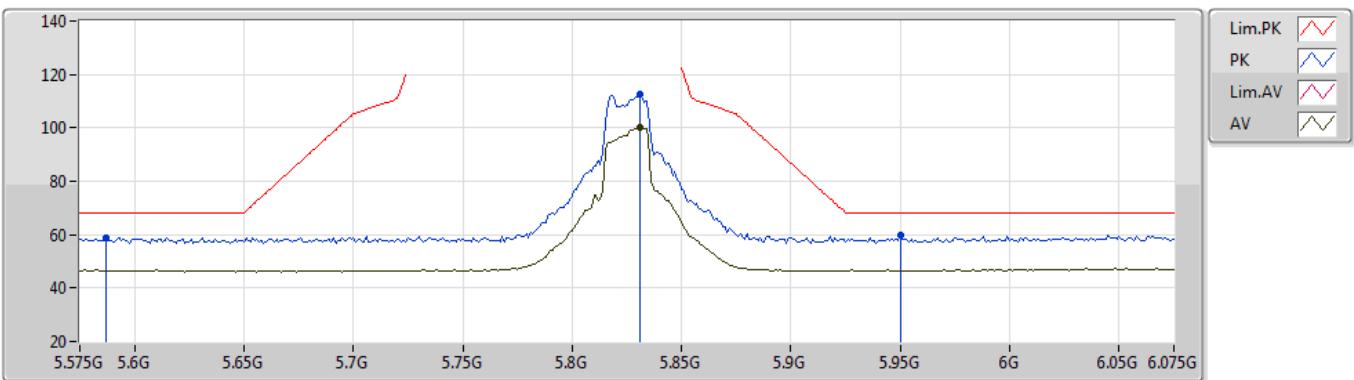
**802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5785MHz\_TX**

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

11/12/2019

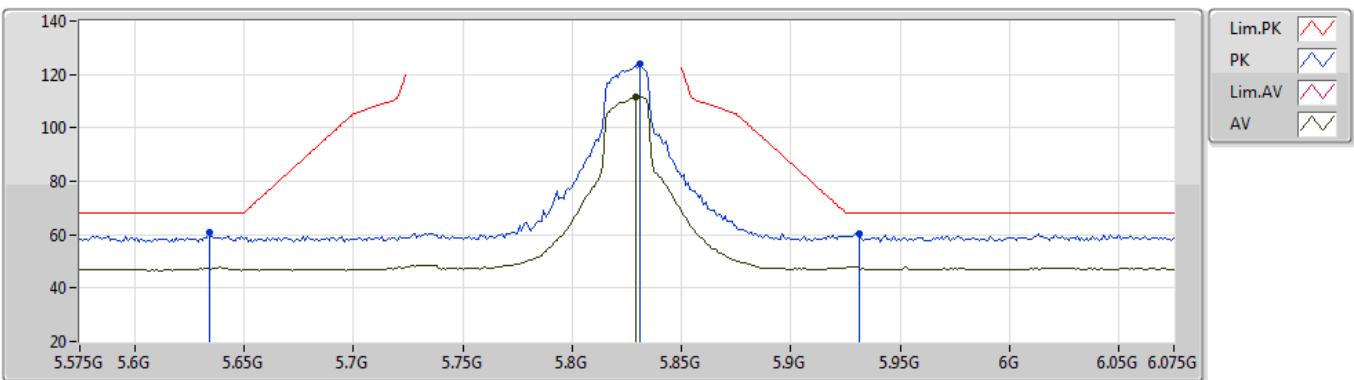
**5825MHz\_TX**

EUT X\_4TX  
Setting 24  
03-C-M-1-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.587G    | 58.78          | 68.20          | -9.42       | 52.49      | 3        | Vertical  | 20          | 2.64       | -       | 34.41   | 6.88    | 35.00   |
| PK   | 5.831G    | 112.77         | Inf            | -Inf        | 106.62     | 3        | Vertical  | 20          | 2.64       | -       | 34.36   | 6.82    | 35.03   |
| AV   | 5.831G    | 100.06         | Inf            | -Inf        | 93.91      | 3        | Vertical  | 20          | 2.64       | -       | 34.36   | 6.82    | 35.03   |
| PK   | 5.95G     | 59.72          | 68.20          | -8.48       | 53.25      | 3        | Vertical  | 20          | 2.64       | -       | 34.65   | 6.87    | 35.05   |

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

11/12/2019

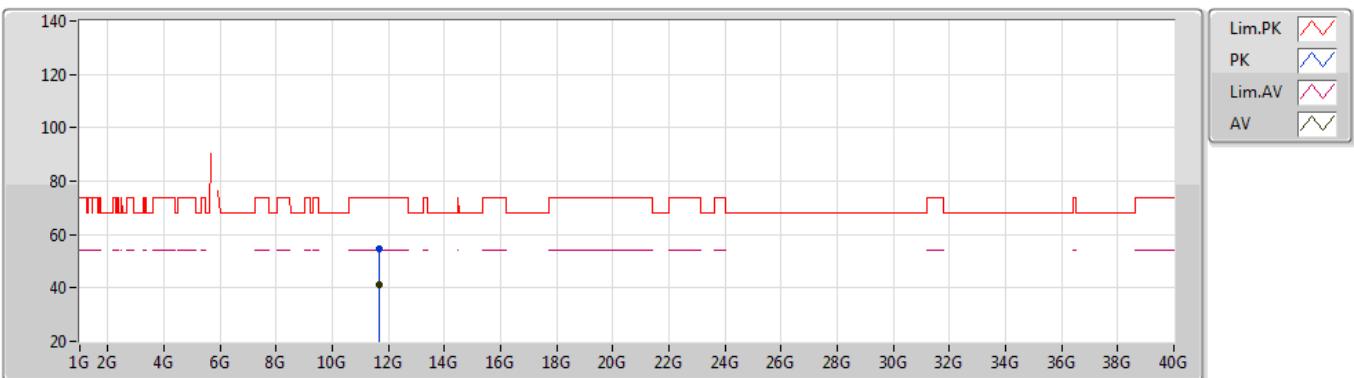
**5825MHz\_TX**


EUT X\_4TX  
Setting 24  
03-C-M-1-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.634G    | 60.95          | 68.20          | -7.25       | 54.70      | 3        | Horizontal | 277         | 1.16       | -       | 34.37   | 6.88    | 35.00   |
| PK   | 5.831G    | 123.79         | Inf            | -Inf        | 117.64     | 3        | Horizontal | 277         | 1.16       | -       | 34.36   | 6.82    | 35.03   |
| AV   | 5.829G    | 111.72         | Inf            | -Inf        | 105.58     | 3        | Horizontal | 277         | 1.16       | -       | 34.36   | 6.81    | 35.03   |
| PK   | 5.931G    | 60.29          | 68.20          | -7.91       | 53.87      | 3        | Horizontal | 277         | 1.16       | -       | 34.59   | 6.87    | 35.04   |

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

11/12/2019

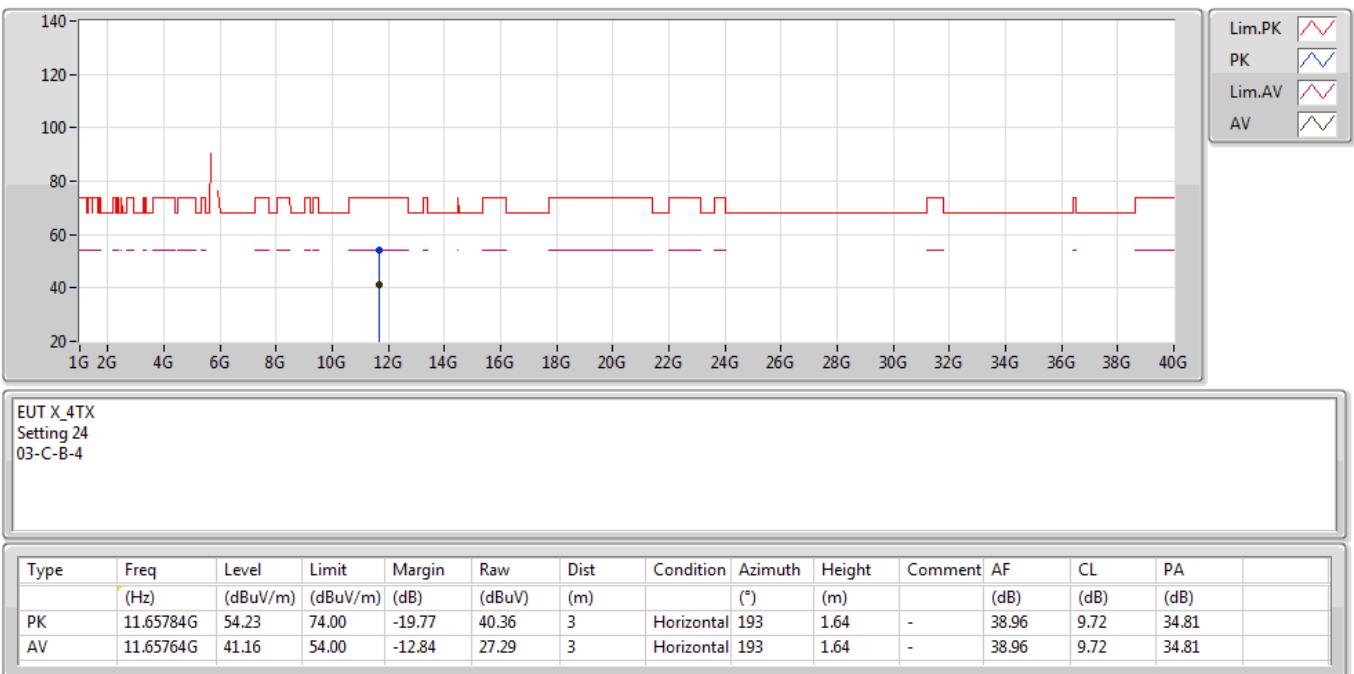
**5825MHz\_TX**

EUT X\_4TX  
Setting 24  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 11.6564G  | 54.86          | 74.00          | -19.14      | 40.99      | 3        | Vertical  | 186         | 1.95       | -       | 38.96   | 9.72    | 34.81   |
| AV   | 11.6553G  | 41.26          | 54.00          | -12.74      | 27.38      | 3        | Vertical  | 186         | 1.95       | -       | 38.96   | 9.72    | 34.80   |

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

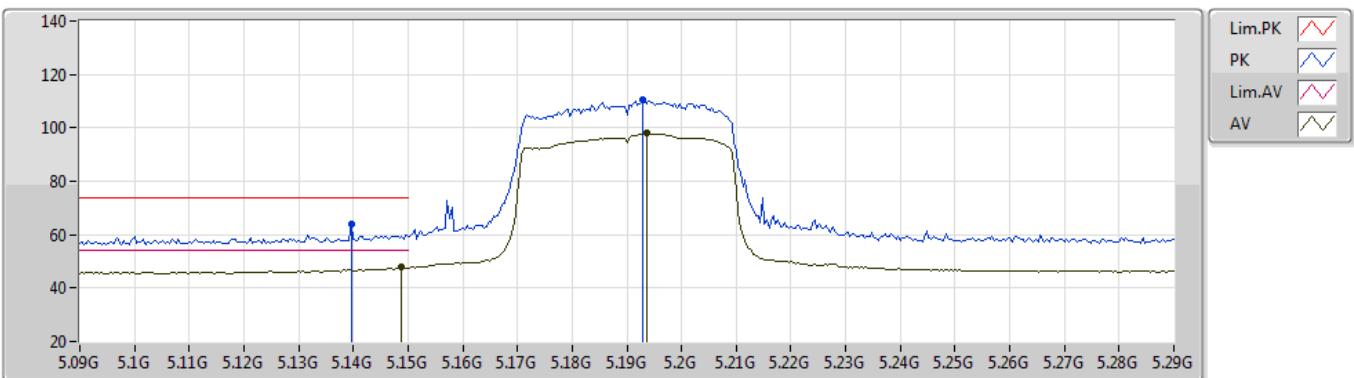
11/12/2019

**5825MHz\_TX**

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

11/12/2019

## 5190MHz\_TX

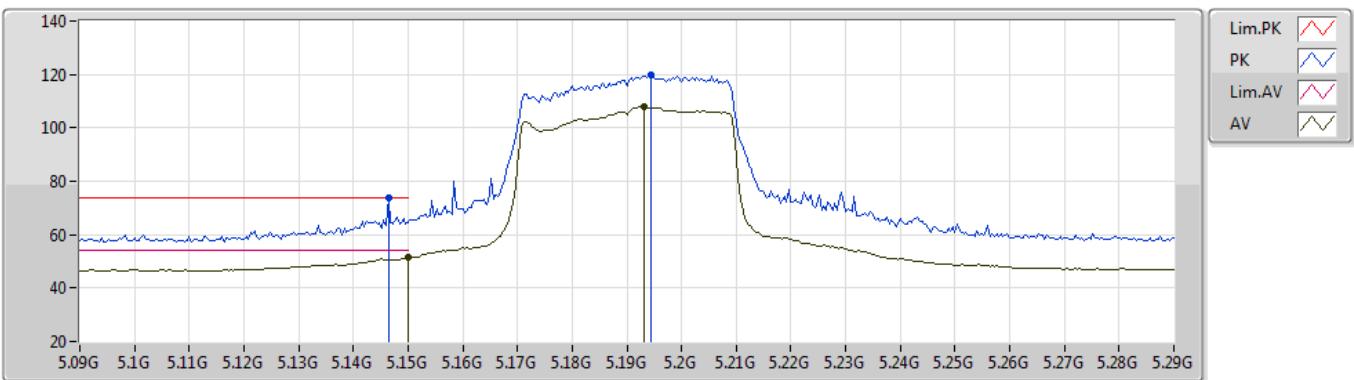


EUT X\_4TX  
Setting 22  
03-C-M-1-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.1396G   | 64.05          | 74.00          | -9.95       | 58.39      | 3        | Vertical  | 6           | 2.72       | -       | 34.04   | 6.59    | 34.97   |
| AV   | 5.1488G   | 47.69          | 54.00          | -6.31       | 42.00      | 3        | Vertical  | 6           | 2.72       | -       | 34.05   | 6.61    | 34.97   |
| PK   | 5.1928G   | 110.41         | Inf            | -Inf        | 104.61     | 3        | Vertical  | 6           | 2.72       | -       | 34.09   | 6.69    | 34.98   |
| AV   | 5.1936G   | 97.88          | Inf            | -Inf        | 92.08      | 3        | Vertical  | 6           | 2.72       | -       | 34.09   | 6.69    | 34.98   |

**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

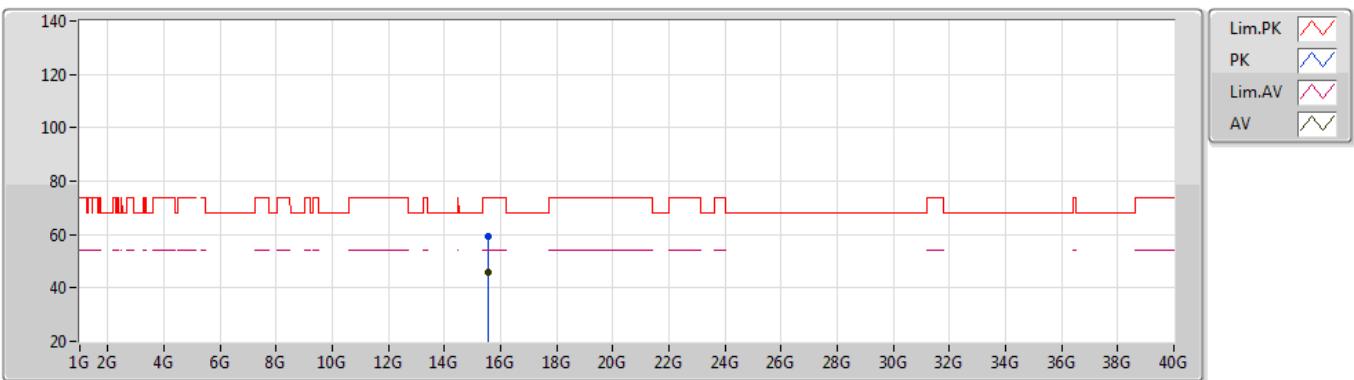
11/12/2019

**5190MHz\_TX**

 EUT X\_4TX  
 Setting 22  
 03-C-M-1-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.1464G   | 73.83          | 74.00          | -0.17       | 68.15      | 3        | Horizontal | 289         | 1.80       | -       | 34.05   | 6.60    | 34.97   |
| AV   | 5.15G     | 51.43          | 54.00          | -2.57       | 45.74      | 3        | Horizontal | 289         | 1.80       | -       | 34.05   | 6.61    | 34.97   |
| PK   | 5.1944G   | 119.96         | Inf            | -Inf        | 114.16     | 3        | Horizontal | 289         | 1.80       | -       | 34.09   | 6.69    | 34.98   |
| AV   | 5.1932G   | 107.70         | Inf            | -Inf        | 101.90     | 3        | Horizontal | 289         | 1.80       | -       | 34.09   | 6.69    | 34.98   |

**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

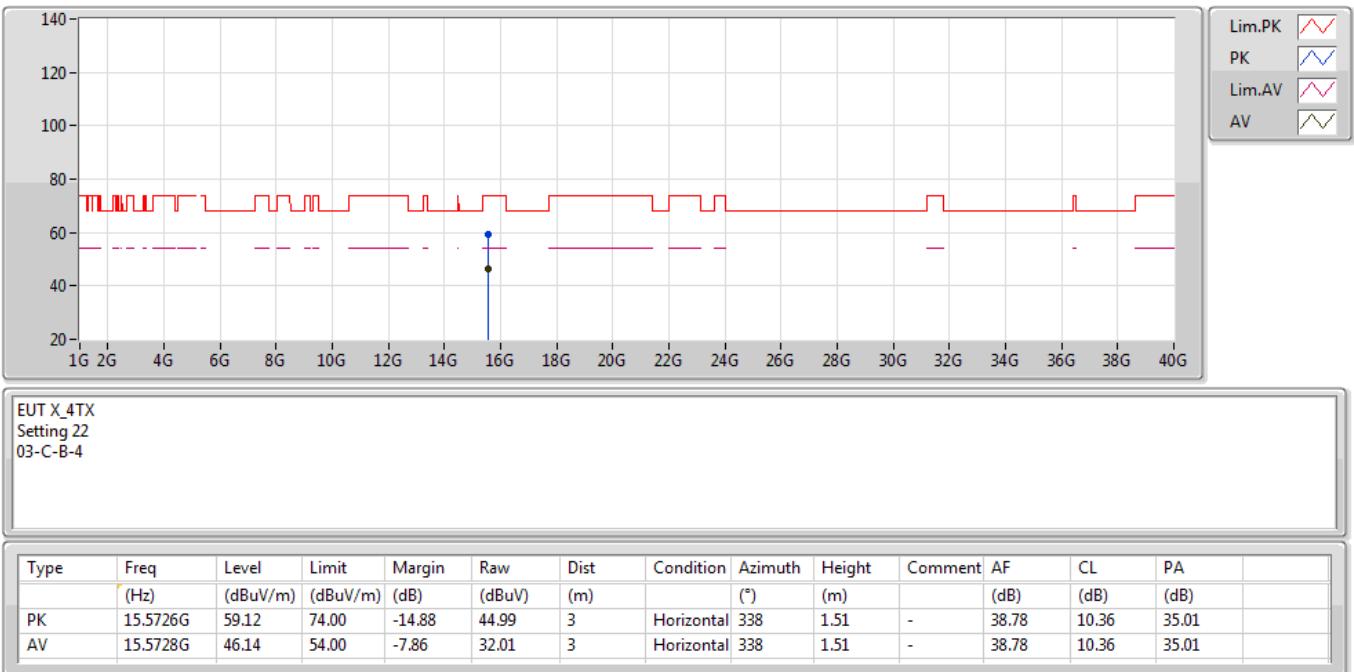
**5190MHz\_TX**

EUT X\_4TX  
Setting 22  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 15.57202G | 59.31          | 74.00          | -14.69      | 45.18      | 3        | Vertical  | 262         | 1.89       | -       | 38.78   | 10.36   | 35.01   |
| AV   | 15.57254G | 46.03          | 54.00          | -7.97       | 31.90      | 3        | Vertical  | 262         | 1.89       | -       | 38.78   | 10.36   | 35.01   |

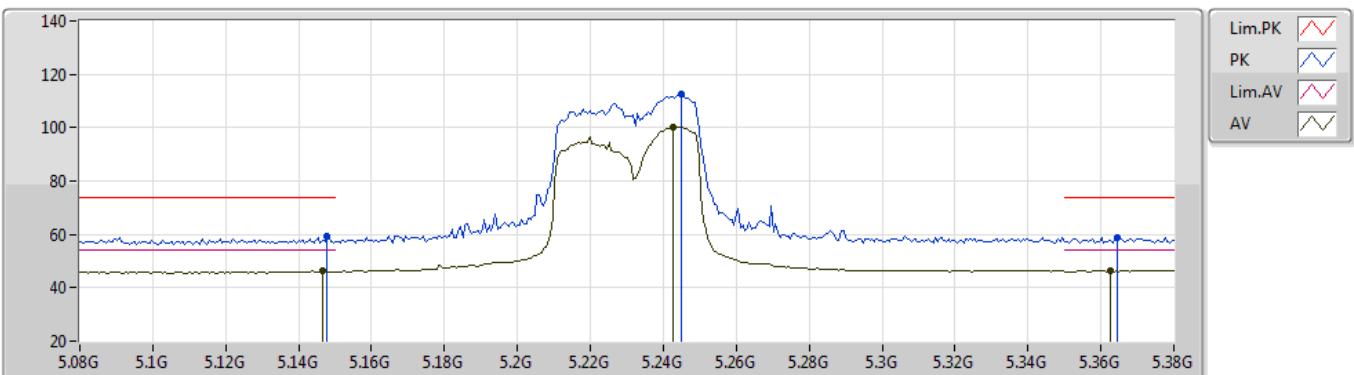
**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5190MHz\_TX**

**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

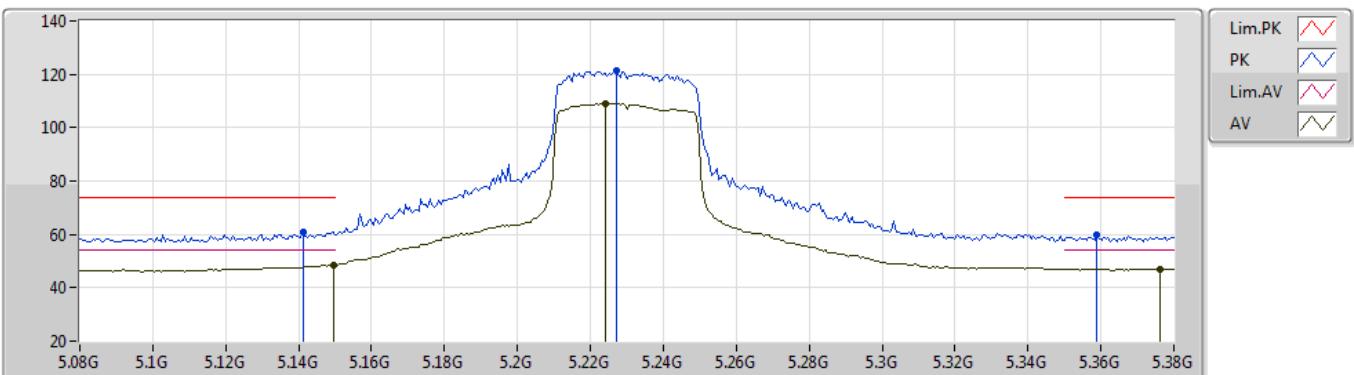
11/12/2019

**5230MHz\_TX**

 EUT X\_4TX  
 Setting 23  
 03-C-M-1-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.1478G   | 59.56          | 74.00          | -14.44      | 53.87      | 3        | Vertical  | 17          | 2.95       | -       | 34.05   | 6.61    | 34.97   |
| AV   | 5.1466G   | 46.22          | 54.00          | -7.78       | 40.54      | 3        | Vertical  | 17          | 2.95       | -       | 34.05   | 6.60    | 34.97   |
| PK   | 5.245G    | 112.67         | Inf            | -Inf        | 106.78     | 3        | Vertical  | 17          | 2.95       | -       | 34.19   | 6.68    | 34.98   |
| AV   | 5.2426G   | 100.32         | Inf            | -Inf        | 94.43      | 3        | Vertical  | 17          | 2.95       | -       | 34.19   | 6.68    | 34.98   |
| PK   | 5.3644G   | 59.01          | 74.00          | -14.99      | 53.02      | 3        | Vertical  | 17          | 2.95       | -       | 34.36   | 6.62    | 34.99   |
| AV   | 5.3626G   | 46.44          | 54.00          | -7.56       | 40.45      | 3        | Vertical  | 17          | 2.95       | -       | 34.36   | 6.62    | 34.99   |

**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

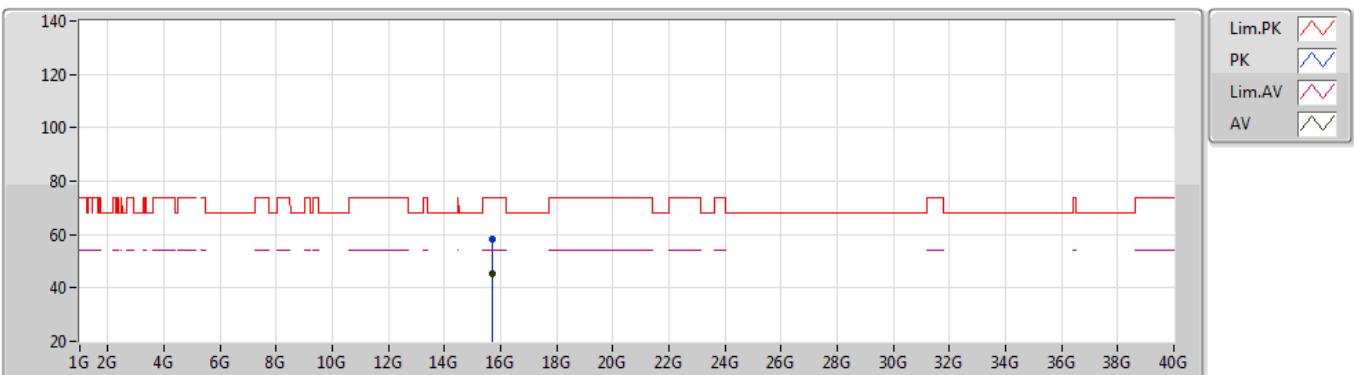
11/12/2019

**5230MHz\_TX**

 EUT X\_4TX  
 Setting 23  
 03-C-M-1-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.1412G   | 60.89          | 74.00          | -13.11      | 55.23      | 3        | Horizontal | 291         | 1.37       | -       | 34.04   | 6.59    | 34.97   |
| AV   | 5.1496G   | 48.51          | 54.00          | -5.49       | 42.82      | 3        | Horizontal | 291         | 1.37       | -       | 34.05   | 6.61    | 34.97   |
| PK   | 5.227G    | 121.22         | Inf            | -Inf        | 115.36     | 3        | Horizontal | 291         | 1.37       | -       | 34.15   | 6.69    | 34.98   |
| AV   | 5.224G    | 108.88         | Inf            | -Inf        | 103.02     | 3        | Horizontal | 291         | 1.37       | -       | 34.15   | 6.69    | 34.98   |
| PK   | 5.359G    | 59.60          | 74.00          | -14.40      | 53.61      | 3        | Horizontal | 291         | 1.37       | -       | 34.36   | 6.62    | 34.99   |
| AV   | 5.3764G   | 47.12          | 54.00          | -6.88       | 41.12      | 3        | Horizontal | 291         | 1.37       | -       | 34.38   | 6.61    | 34.99   |

**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

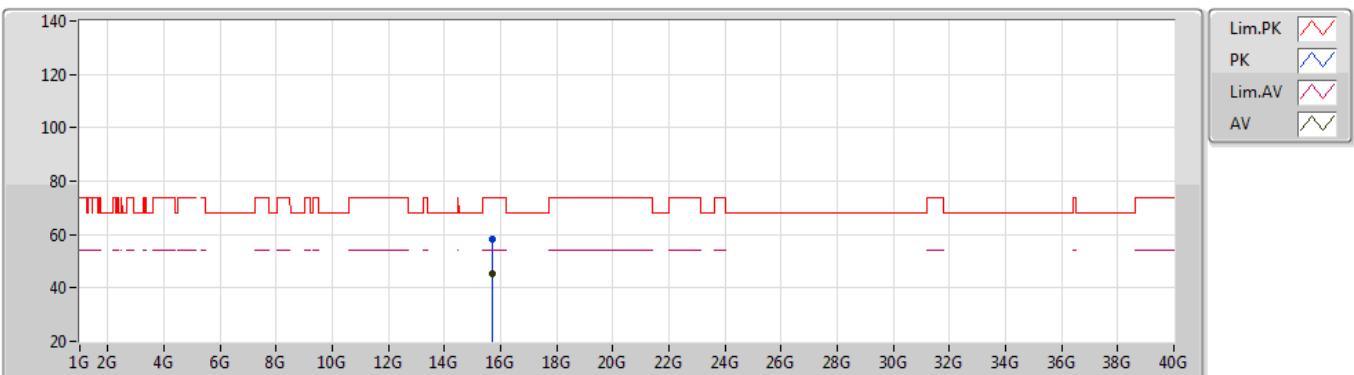
**5230MHz\_TX**

EUT X\_4TX  
Setting 23  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 15.6865G  | 58.34          | 74.00          | -15.66      | 44.69      | 3        | Vertical  | 121         | 1.59       | -       | 38.44   | 10.34   | 35.13   |
| AV   | 15.68668G | 45.34          | 54.00          | -8.66       | 31.69      | 3        | Vertical  | 121         | 1.59       | -       | 38.44   | 10.34   | 35.13   |

**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

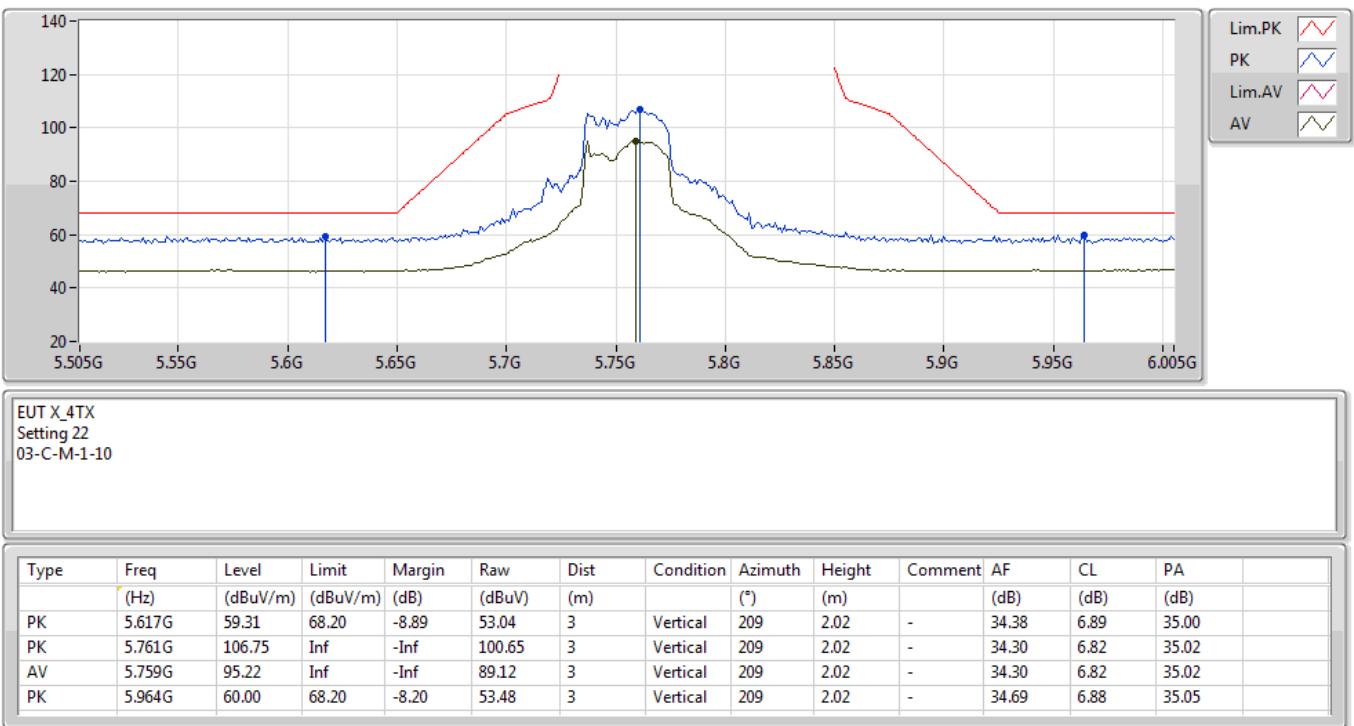
**5230MHz\_TX**

EUT X\_4TX  
Setting 23  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 15.69086G | 58.23          | 74.00          | -15.77      | 44.59      | 3        | Horizontal | 142         | 1.06       | -       | 38.43   | 10.34   | 35.13   |
| AV   | 15.69031G | 45.22          | 54.00          | -8.78       | 31.58      | 3        | Horizontal | 142         | 1.06       | -       | 38.43   | 10.34   | 35.13   |

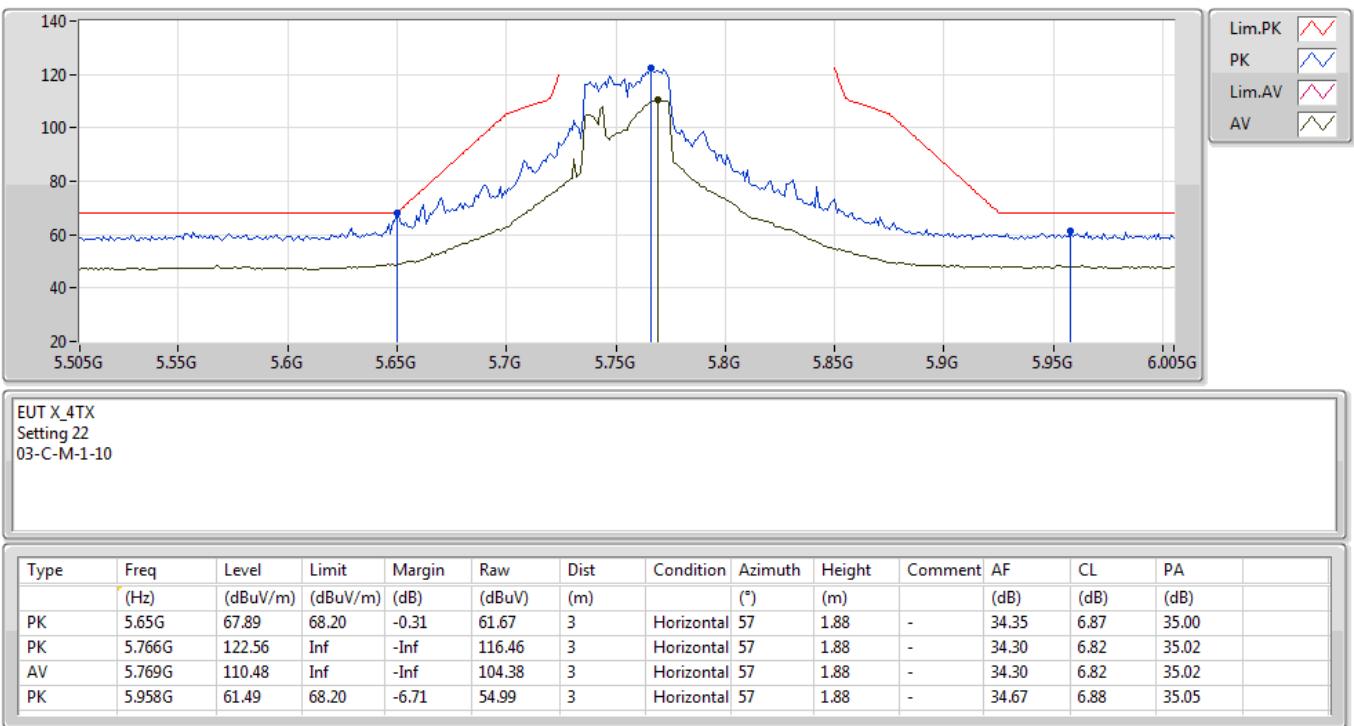
**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5755MHz\_TX**


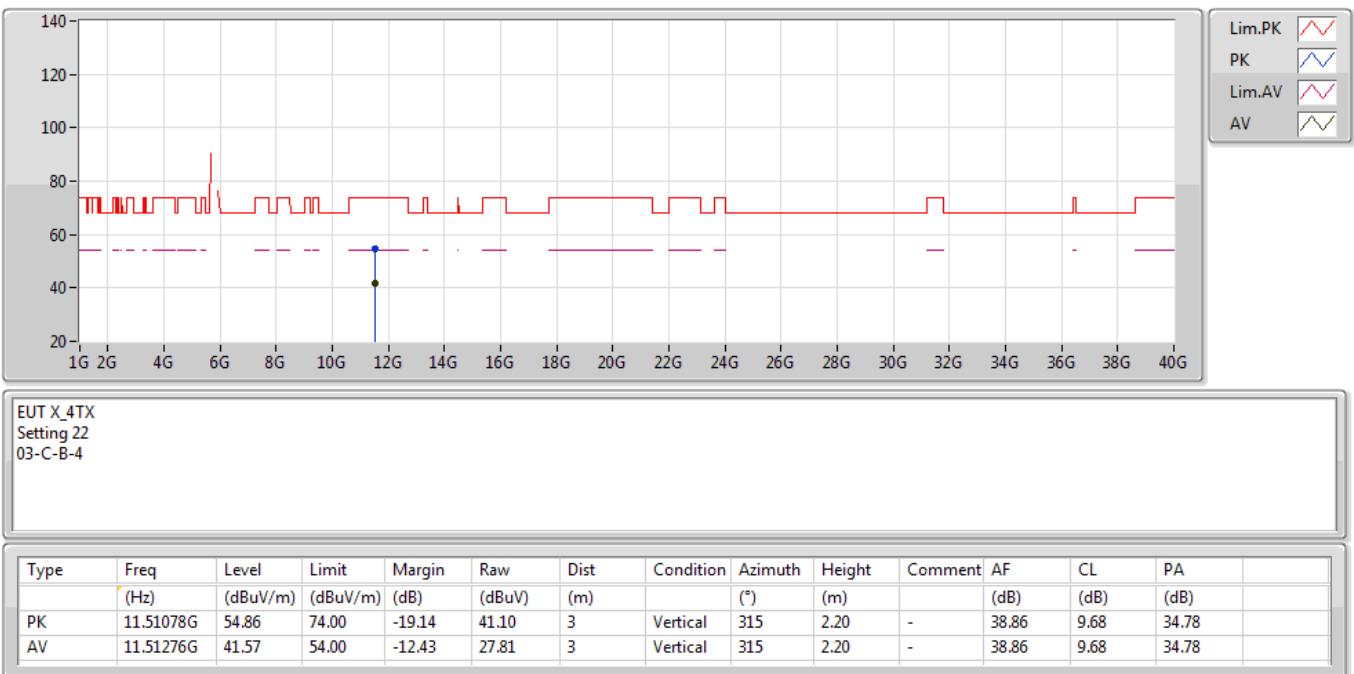
**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5755MHz\_TX**


**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

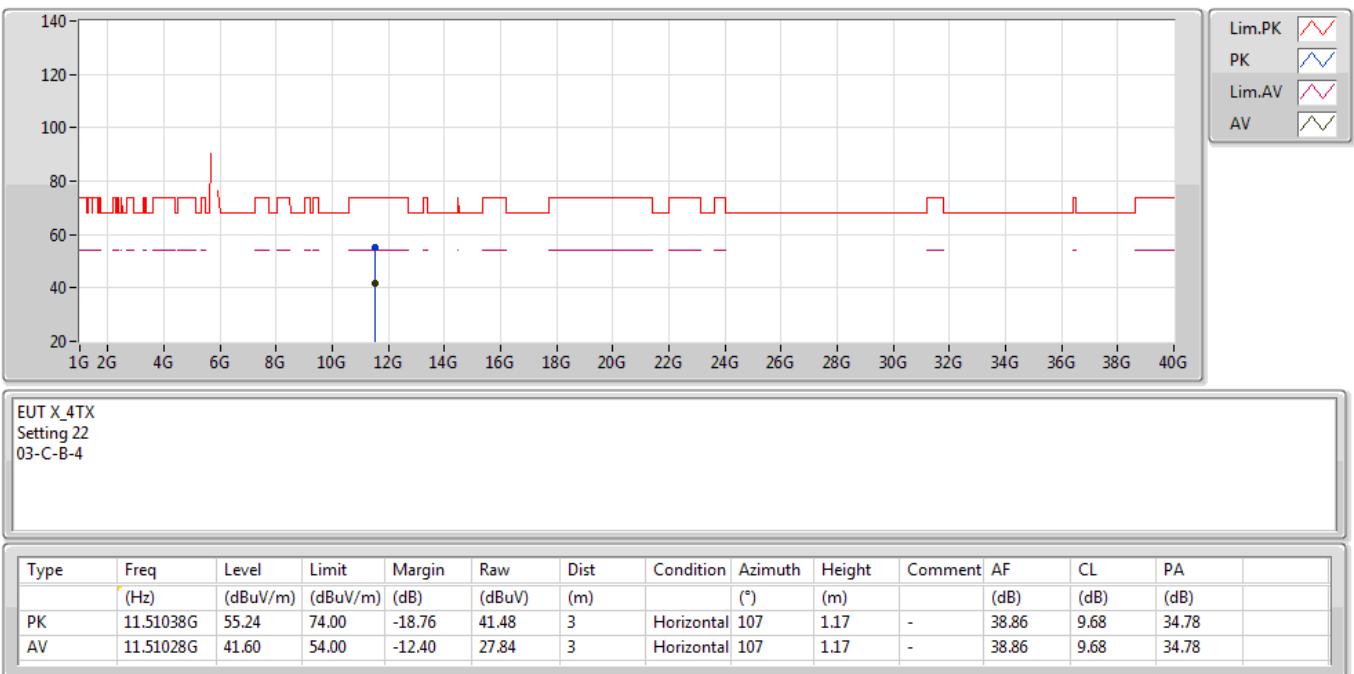
**5755MHz\_TX**



## 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

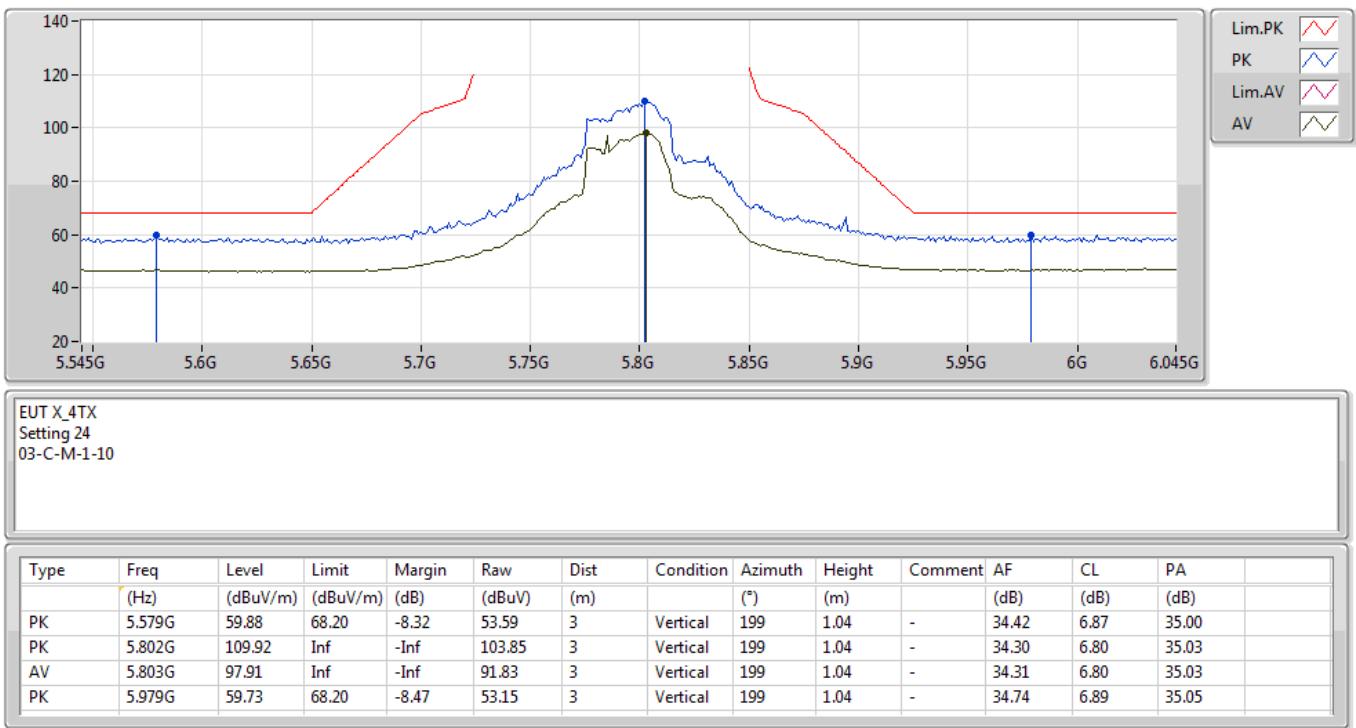
11/12/2019

## 5755MHz\_TX



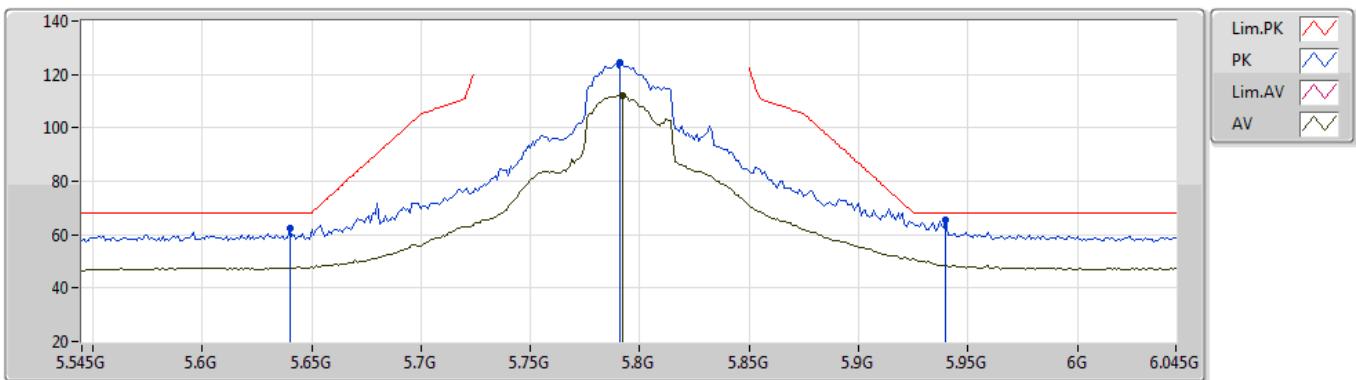
**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5795MHz\_TX**


**802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5795MHz\_TX**


EUT X\_4TX  
Setting 24  
03-C-M-1-10

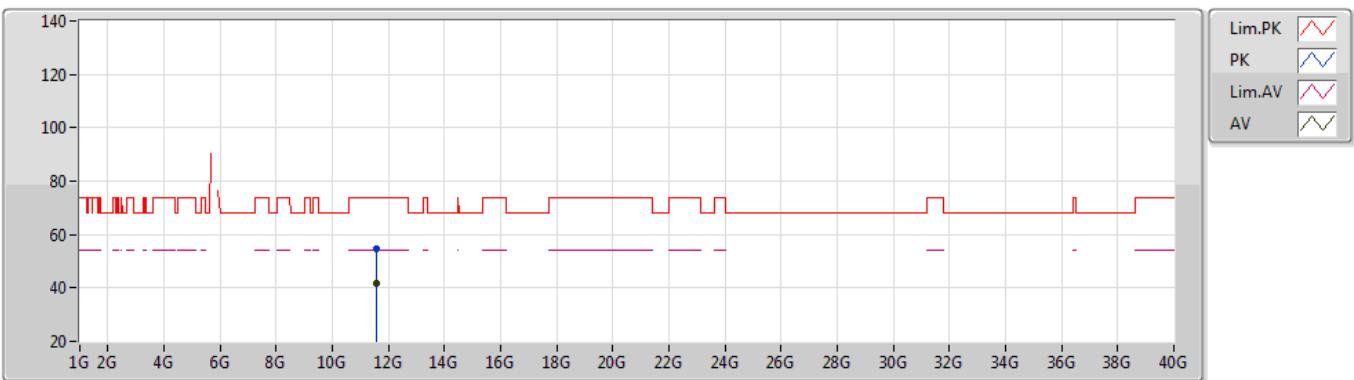
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.64G     | 62.36          | 68.20          | -5.84       | 56.12      | 3        | Horizontal | 313         | 1.24       | -       | 34.36   | 6.88    | 35.00   |
| PK   | 5.791G    | 124.33         | Inf            | -Inf        | 118.26     | 3        | Horizontal | 313         | 1.24       | -       | 34.30   | 6.80    | 35.03   |
| AV   | 5.792G    | 112.08         | Inf            | -Inf        | 106.01     | 3        | Horizontal | 313         | 1.24       | -       | 34.30   | 6.80    | 35.03   |
| PK   | 5.94G     | 65.29          | 68.20          | -2.91       | 58.84      | 3        | Horizontal | 313         | 1.24       | -       | 34.62   | 6.87    | 35.04   |



## 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

11/12/2019

## 5795MHz\_TX



EUT X\_4TX  
Setting 24  
03-C-B-4

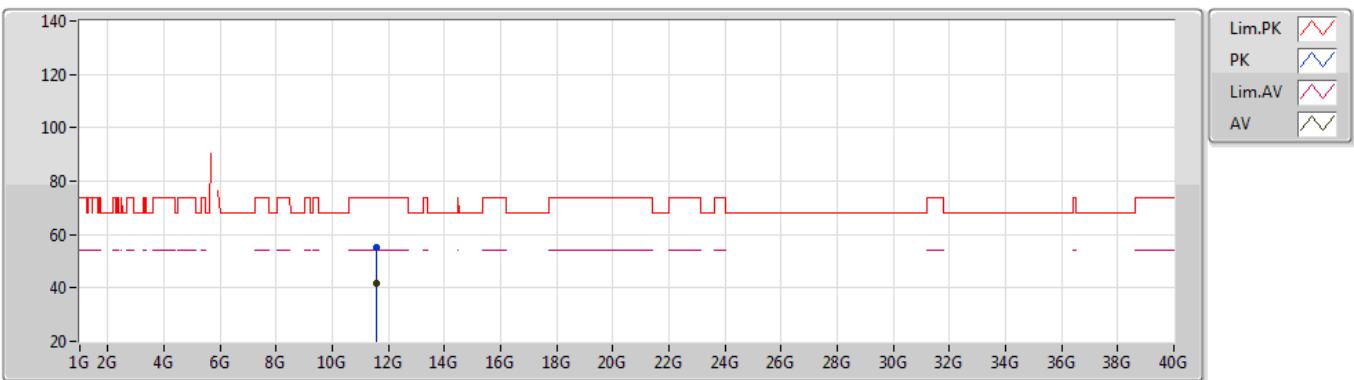
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 11.59118G | 54.84          | 74.00          | -19.16      | 41.02      | 3        | Vertical  | 48          | 2.26       | -       | 38.91   | 9.70    | 34.79   |
| AV   | 11.5912G  | 41.70          | 54.00          | -12.30      | 27.88      | 3        | Vertical  | 48          | 2.26       | -       | 38.91   | 9.70    | 34.79   |



## 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

11/12/2019

## 5795MHz\_TX

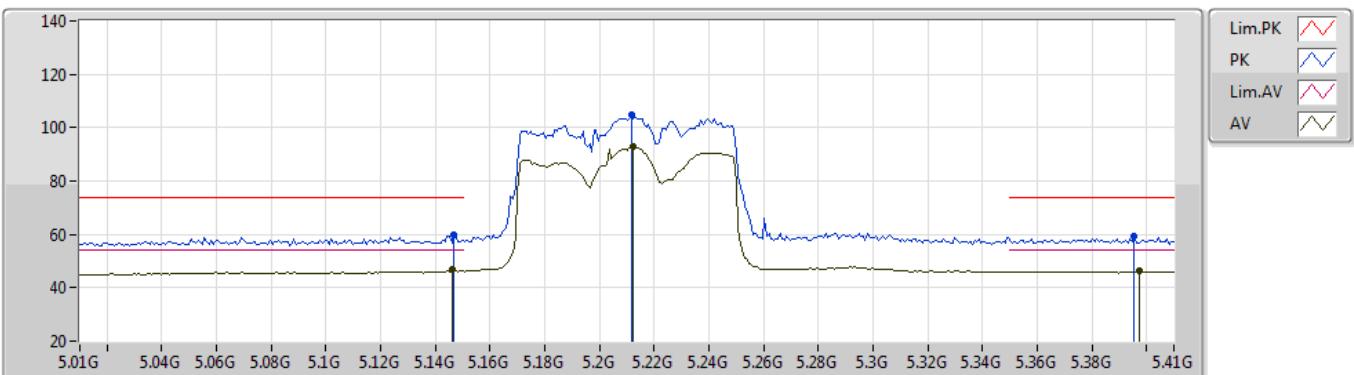


EUT X\_4TX  
Setting 24  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 11.58622G | 54.92          | 74.00          | -19.08      | 41.10      | 3        | Horizontal | 146         | 2.42       | -       | 38.91   | 9.70    | 34.79   |
| AV   | 11.5867G  | 41.74          | 54.00          | -12.26      | 27.92      | 3        | Horizontal | 146         | 2.42       | -       | 38.91   | 9.70    | 34.79   |

**802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

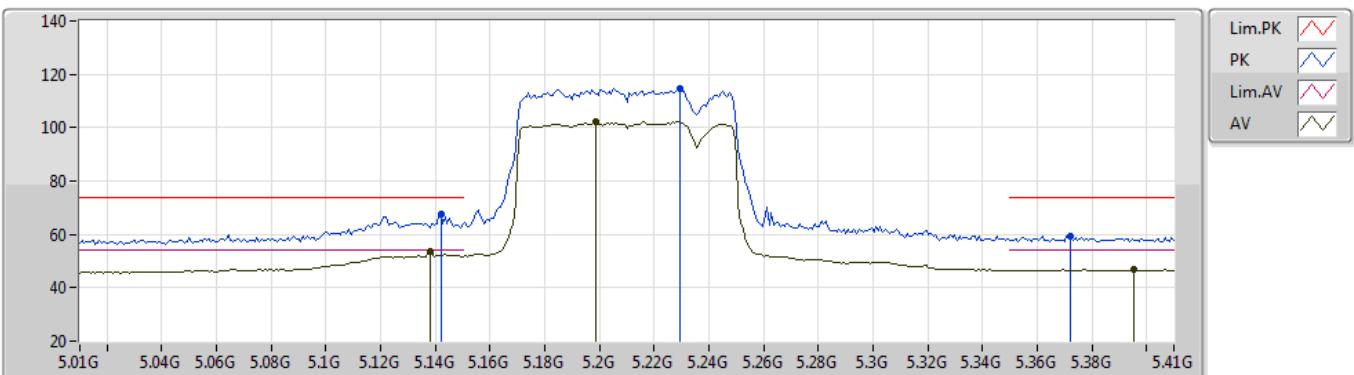
**5210MHz\_TX**


EUT X\_4TX  
Setting 21  
03-C-B-4-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.1468G   | 59.74          | 74.00          | -14.26      | 54.06      | 3        | Vertical  | 353         | 2.88       | -       | 34.05   | 6.60    | 34.97   |
| AV   | 5.1466G   | 46.69          | 54.00          | -7.31       | 41.01      | 3        | Vertical  | 353         | 2.88       | -       | 34.05   | 6.60    | 34.97   |
| PK   | 5.2116G   | 104.69         | Inf            | -Inf        | 98.86      | 3        | Vertical  | 353         | 2.88       | -       | 34.12   | 6.69    | 34.98   |
| AV   | 5.2124G   | 92.94          | Inf            | -Inf        | 87.11      | 3        | Vertical  | 353         | 2.88       | -       | 34.12   | 6.69    | 34.98   |
| PK   | 5.3956G   | 59.27          | 74.00          | -14.73      | 53.26      | 3        | Vertical  | 353         | 2.88       | -       | 34.40   | 6.60    | 34.99   |
| AV   | 5.3972G   | 46.17          | 54.00          | -7.83       | 40.16      | 3        | Vertical  | 353         | 2.88       | -       | 34.40   | 6.60    | 34.99   |

**802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX**

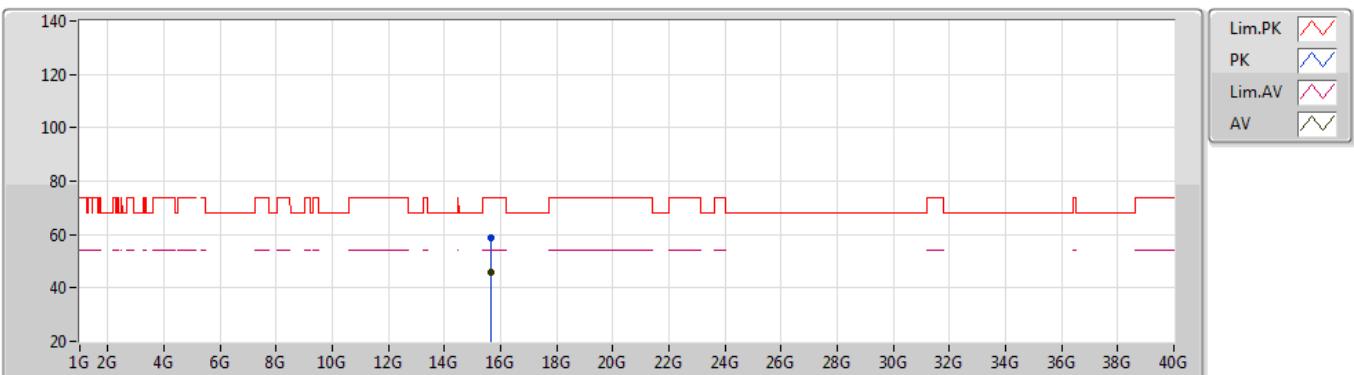
11/12/2019

**5210MHz\_TX**

 EUT X\_4TX  
 Setting 21  
 03-C-B-4-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.142G    | 67.64          | 74.00          | -6.36       | 61.97      | 3        | Horizontal | 290         | 1.33       | -       | 34.04   | 6.60    | 34.97   |
| AV   | 5.138G    | 53.83          | 54.00          | -0.17       | 48.17      | 3        | Horizontal | 290         | 1.33       | -       | 34.04   | 6.59    | 34.97   |
| PK   | 5.2292G   | 114.73         | Inf            | -Inf        | 108.86     | 3        | Horizontal | 290         | 1.33       | -       | 34.16   | 6.69    | 34.98   |
| AV   | 5.1988G   | 102.46         | Inf            | -Inf        | 96.64      | 3        | Horizontal | 290         | 1.33       | -       | 34.10   | 6.70    | 34.98   |
| PK   | 5.3724G   | 59.33          | 74.00          | -14.67      | 53.34      | 3        | Horizontal | 290         | 1.33       | -       | 34.37   | 6.61    | 34.99   |
| AV   | 5.3956G   | 46.76          | 54.00          | -7.24       | 40.75      | 3        | Horizontal | 290         | 1.33       | -       | 34.40   | 6.60    | 34.99   |

**802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

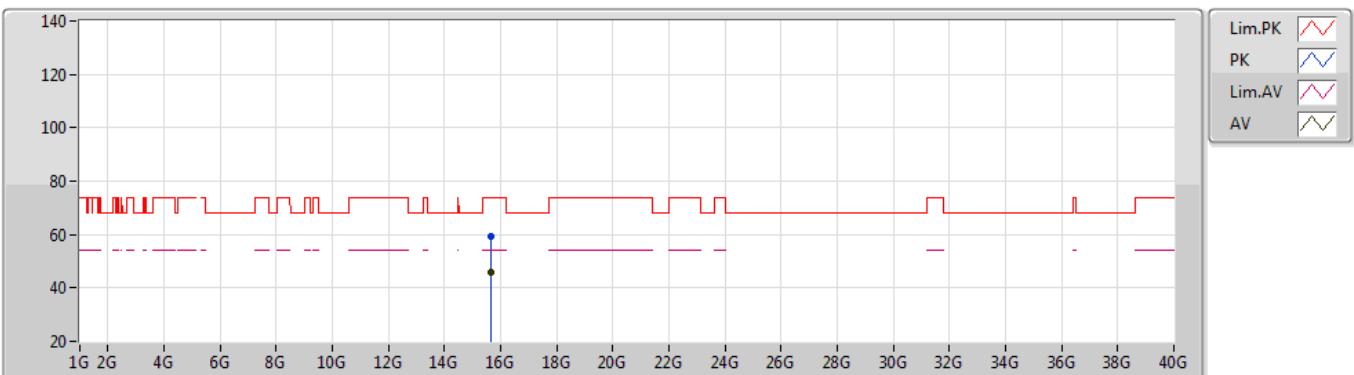
**5210MHz\_TX**

EUT X\_4TX  
Setting 21  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 15.6325G  | 58.86          | 74.00          | -15.14      | 44.98      | 3        | Vertical  | 201         | 1.72       | -       | 38.60   | 10.35   | 35.07   |
| AV   | 15.6335G  | 46.12          | 54.00          | -7.88       | 32.24      | 3        | Vertical  | 201         | 1.72       | -       | 38.60   | 10.35   | 35.07   |

**802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

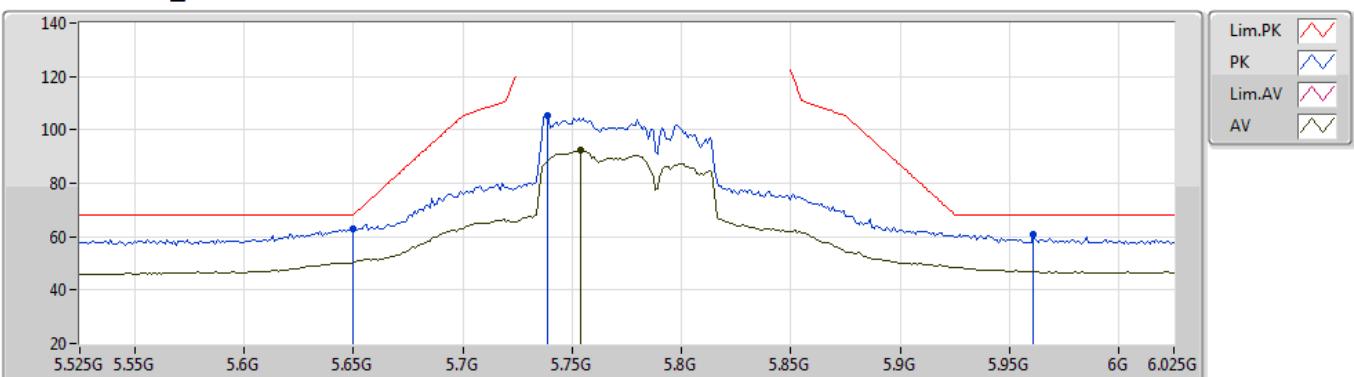
**5210MHz\_TX**

EUT X\_4TX  
Setting 21  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 15.6315G  | 59.29          | 74.00          | -14.71      | 45.40      | 3        | Horizontal | 250         | 1.34       | -       | 38.61   | 10.35   | 35.07   |
| AV   | 15.6329G  | 45.82          | 54.00          | -8.18       | 31.94      | 3        | Horizontal | 250         | 1.34       | -       | 38.60   | 10.35   | 35.07   |

**802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5775MHz\_TX**


EUT X\_4TX  
Setting 21  
03-C-B-4-10

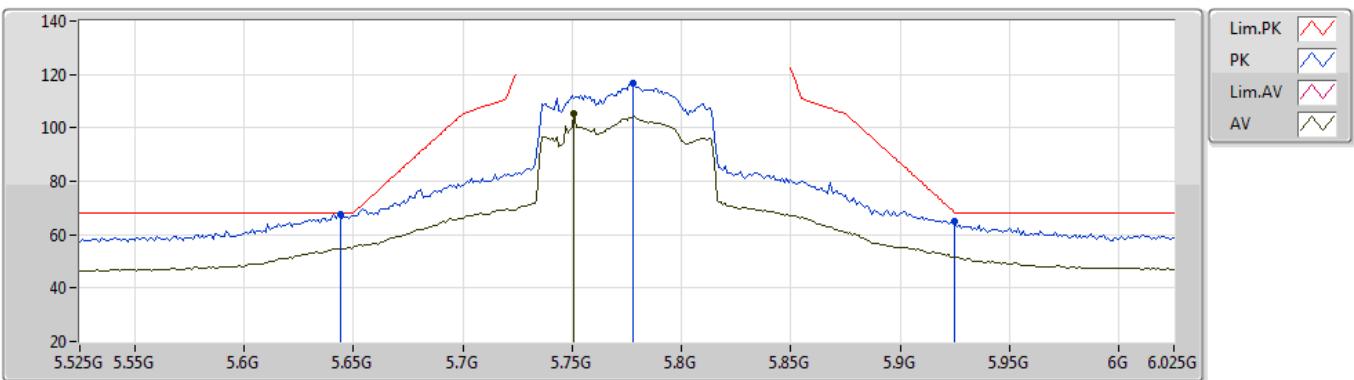
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.65G     | 62.98          | 68.20          | -5.22       | 56.76      | 3        | Vertical  | 172         | 2.49       | -       | 34.35   | 6.87    | 35.00   |
| PK   | 5.739G    | 105.39         | Inf            | -Inf        | 99.28      | 3        | Vertical  | 172         | 2.49       | -       | 34.30   | 6.83    | 35.02   |
| AV   | 5.754G    | 92.29          | Inf            | -Inf        | 86.19      | 3        | Vertical  | 172         | 2.49       | -       | 34.30   | 6.82    | 35.02   |
| PK   | 5.961G    | 60.93          | 68.20          | -7.27       | 54.42      | 3        | Vertical  | 172         | 2.49       | -       | 34.68   | 6.88    | 35.05   |



## 802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX

11/12/2019

## 5775MHz\_TX

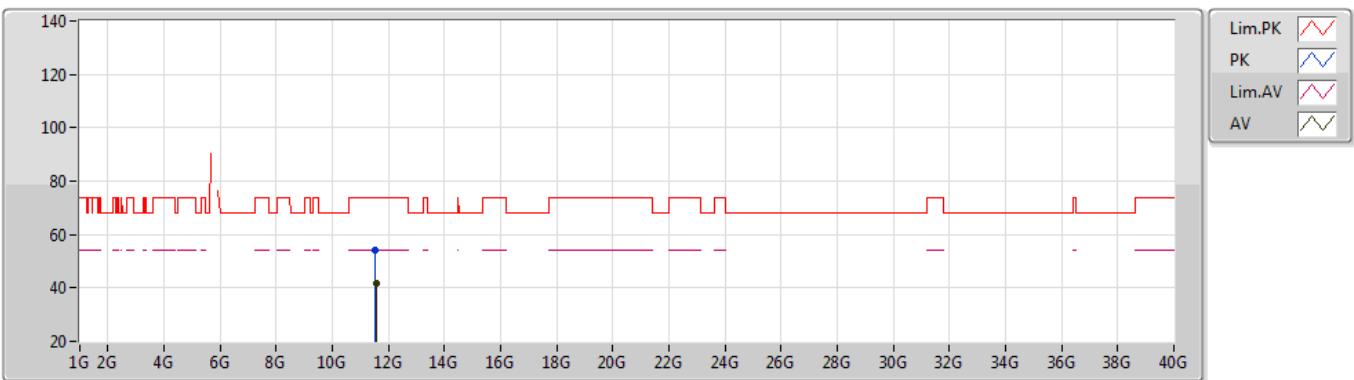


EUT X\_4TX  
Setting 21  
03-C-B-4-10

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (*) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 5.644G    | 67.64          | 68.20          | -0.56       | 61.40      | 3        | Horizontal | 54          | 2.26       | -       | 34.36   | 6.88    | 35.00   |
| PK   | 5.778G    | 116.52         | Inf            | -Inf        | 110.44     | 3        | Horizontal | 54          | 2.26       | -       | 34.30   | 6.81    | 35.03   |
| AV   | 5.751G    | 105.23         | Inf            | -Inf        | 99.13      | 3        | Horizontal | 54          | 2.26       | -       | 34.30   | 6.82    | 35.02   |
| PK   | 5.925G    | 65.11          | 68.20          | -3.09       | 58.71      | 3        | Horizontal | 54          | 2.26       | -       | 34.58   | 6.86    | 35.04   |

**802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX**

11/12/2019

**5775MHz\_TX**

EUT X\_4TX  
Setting 21  
03-C-B-4

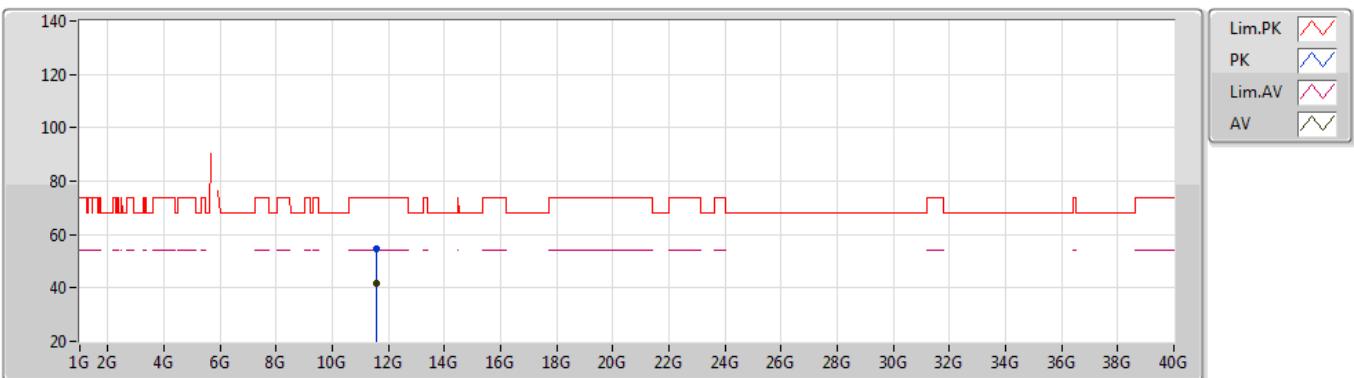
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK   | 11.54844G | 54.35          | 74.00          | -19.65      | 40.57      | 3        | Vertical  | 197         | 1.17       | -       | 38.88   | 9.69    | 34.79   |
| AV   | 11.56314G | 41.65          | 54.00          | -12.35      | 27.85      | 3        | Vertical  | 197         | 1.17       | -       | 38.89   | 9.70    | 34.79   |



## 802.11ax HEW80-BF\_Nss1,(MCS0)\_4TX

11/12/2019

## 5775MHz\_TX



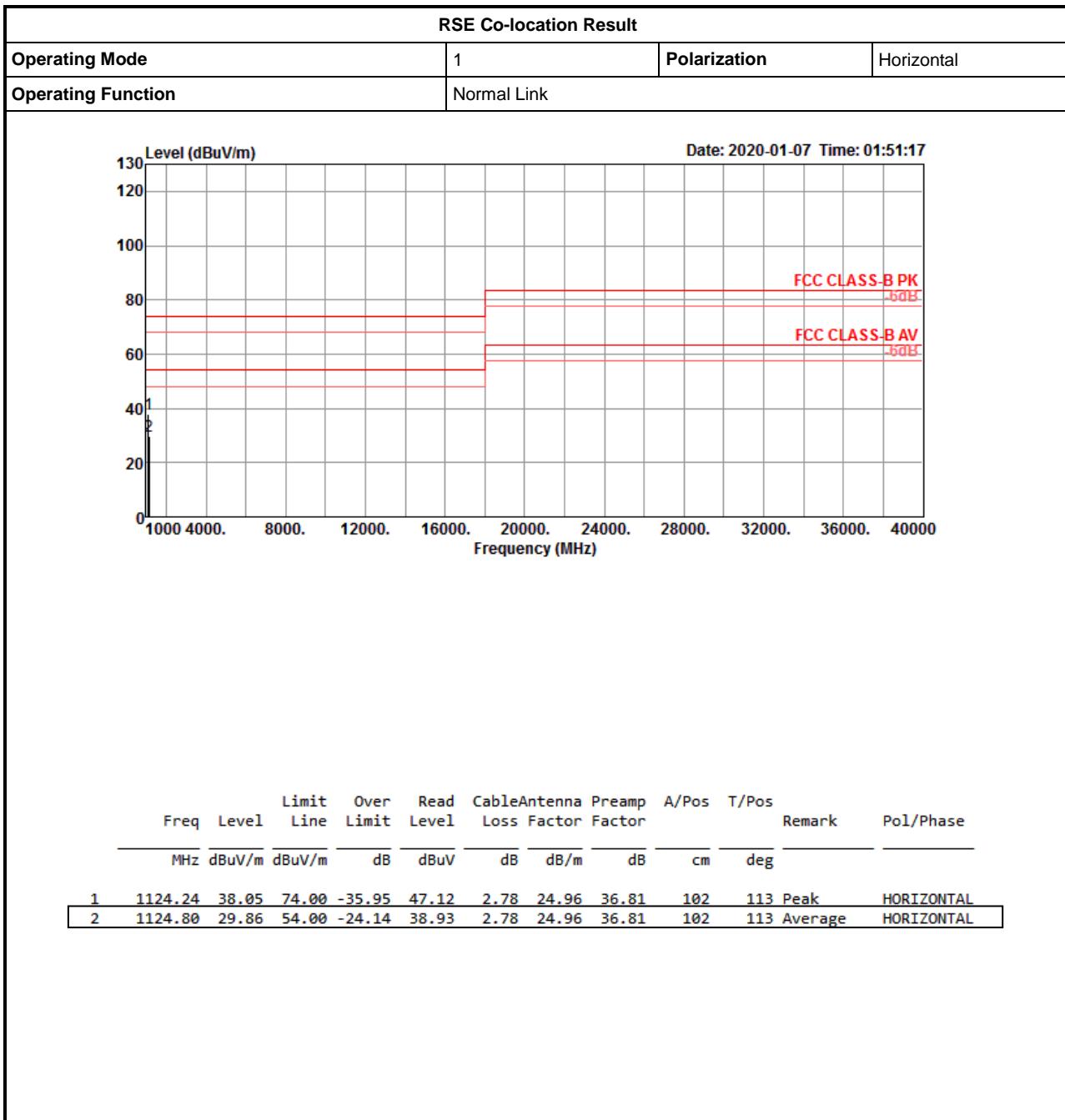
EUT X\_4TX  
Setting 21  
03-C-B-4

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK   | 11.5584G  | 54.51          | 74.00          | -19.49      | 40.72      | 3        | Horizontal | 255         | 2.31       | -       | 38.89   | 9.69    | 34.79   |
| AV   | 11.55528G | 41.54          | 54.00          | -12.46      | 27.75      | 3        | Horizontal | 255         | 2.31       | -       | 38.89   | 9.69    | 34.79   |



## RSE Co-location Result

Appendix F





## RSE Co-location Result

Appendix F

