# FCC RADIO TEST REPORT

| | | |
|---|---|---|
| FCC ID | : | MSQ-RTAXJ300 |
| Equipment | : | AX3000 Dual Band Wi-Fi Router, AX5400 Dual Band Wi-Fi Router |
| Brand Name | : | ASUS |
| Model Name | : | RT-AX58U, RT-AX82U |
| Applicant | : | ASUSTeK COMPUTER INC.<br>4F, No. 150, Li-Te Rd., Peitou, Taipei 112, Taiwan |
| Manufacturer (1) | : | Datamax Electronics (DongGuan) Co., Ltd.<br>Niu Shan Foreign Economic Industrial Park, Dong Cheng District, Dong Guan City, Guang Dong, China |
| Manufacturer (2) | : | Compal Networking (KunShan) Co., LTD.<br>No. 520, Nabbang Rd., Economic & Technical Development Zone Kunshan, Jiangsu Province China |
| Manufacturer (3) | : | ARCADYAN TECHNOLOGY (VIETNAM) CO., LTD.<br>Ba Thien Industrial Park, Ba Hien commune, Binh Xuyen district, Vinh Phuc Province |
| Standard | : | 47 CFR FCC Part 15.407 |

The product was received on Jul. 12, 2019, and testing was started from Jul. 12, 2019 and completed on Aug. 02, 2019. 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 variant 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: Sam Chen

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

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# History of this test report

| Report No. | Version | Description | Issued Date |
|---|---|---|---|
| FR952922-01 | 01 | Initial issue of report | Aug. 27, 2019 |
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# Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items | Result (PASS/FAIL) | Remark |
|---|---|---|---|---|
| 1.1.2 | 15.203 | Antenna Requirement | PASS | - |
| 3.1 | 15.407(a) | Emission Bandwidth | PASS | - |
| 3.2 | 15.407(a) | Maximum Conducted Output Power | PASS | - |
| 3.3 | 15.407(a) | Peak Power Spectral Density | PASS | - |
| 3.4 | 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: Viola Huang**

# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

| Frequency Range (MHz) | IEEE Std. 802.11 | Ch. Frequency (MHz) | Channel Number |
|---|---|---|---|
| 5250-5350 | a, n (HT20), ac (VHT20), ax (HEW20) | 5260-5320 | 52-64 [4] |
| 5250-5350 | n (HT40), ac (VHT40), ax (HEW40) | 5270-5310 | 54-62 [2] |
| 5250-5350 | ac (VHT80), ax (HEW80) | 5290 | 58 [1] |
| 5150-5350 | ac (VHT160), ax (HEW160) | 5250 | 50 [1] |

| Band | Mode | BWch (MHz) | Nant |
|---|---|---|---|
| 5.25-5.35GHz | 802.11a | 20 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11n HT20 | 20 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11n HT20-BF | 20 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ac VHT20 | 20 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ac VHT20-BF | 20 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ax HEW20 | 20 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ax HEW20-BF | 20 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11n HT40 | 40 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11n HT40-BF | 40 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ac VHT40 | 40 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ac VHT40-BF | 40 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ax HEW40 | 40 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ax HEW40-BF | 40 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ac VHT80 | 80 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ac VHT80-BF | 80 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ax HEW80 | 80 | 2TX / 4TX |
| 5.25-5.35GHz | 802.11ax HEW80-BF | 80 | 2TX / 4TX |
| 5.15-5.35GHz | 802.11ac VHT160 | 160 | 2TX / 4TX |
| 5.15-5.35GHz | 802.11ac VHT160-BF | 160 | 2TX / 4TX |
| 5.15-5.35GHz | 802.11ax HEW160 | 160 | 2TX / 4TX |
| 5.15-5.35GHz | 802.11ax HEW160-BF | 160 | 2TX / 4TX |

Note:
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- HEW20, HEW40, HEW80 and HEW160 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

| Set | Ant. | Brand | P/N | Antenna Type | Connector | Gain (dBi) |
|---|---|---|---|---|---|---|
| 1 | 1 | PSA | RFDPA161314IMLB701 | Dipole Antenna | I-PEX | Note 1 |
| | 2 | PSA | RFDPA161311IM5B702 | Dipole Antenna | I-PEX | |
| | 3 | PSA | RFDPA161310IM5B701 | Dipole Antenna | I-PEX | |
| | 4 | PSA | RFDPA161316IMLB701 | Dipole Antenna | I-PEX | |
| 2 | 1 | M.gear | C660-510468-A | Dipole Antenna | I-PEX | |
| | 2 | M.gear | C660-510469-A | Dipole Antenna | I-PEX | |
| | 3 | M.gear | C660-510470-A | Dipole Antenna | I-PEX | |
| | 4 | M.gear | C660-510471-A | Dipole Antenna | I-PEX | |
| 3 | 1 | M.gear | C660-510472-A | Dipole Antenna | I-PEX | |
| | 2 | M.gear | C660-510473-A | Dipole Antenna | I-PEX | |
| | 3 | M.gear | C660-510474-A | Dipole Antenna | I-PEX | |
| | 4 | M.gear | C660-510475-A | Dipole Antenna | I-PEX | |
| 4 | 1 | PSA | RFDPA171314IMLB701 | Dipole Antenna | I-PEX | |
| | 2 | PSA | RFDPA171311IM5B702 | Dipole Antenna | I-PEX | |
| | 3 | PSA | RFDPA171310IM5B702 | Dipole Antenna | I-PEX | |
| | 4 | PSA | RFDPA171316IMLB701 | Dipole Antenna | I-PEX | |

Note 1:

| Set | Ant. | Port | | | 2.4GHz | 5GHz Band 1 | 5GHz Band 2 | 5GHz Band 4 |
|---|---|---|---|---|---|---|---|---|
| | | 2.4G 2TX | 5G 2TX | 5G 4TX | | | | |
| 1 | 1 | 2 | - | 2 | 1.71 | 1.75 | 1.89 | 1.70 |
| | 2 | - | 1 | 1 | - | 1.93 | 1.93 | 1.95 |
| | 3 | - | 2 | 4 | - | 1.75 | 1.85 | 1.89 |
| | 4 | 1 | - | 3 | 1.63 | 1.92 | 1.88 | 1.87 |
| 2 | 1 | 2 | - | 2 | 1.61 | 1.74 | 1.84 | 1.67 |
| | 2 | - | 1 | 1 | - | 1.76 | 1.8 | 1.87 |
| | 3 | - | 2 | 4 | - | 1.66 | 1.72 | 1.84 |
| | 4 | 1 | - | 3 | 1.6 | 1.88 | 1.82 | 1.86 |
| 3 | 1 | 2 | - | 2 | 1.7 | 1.71 | 1.85 | 1.68 |
| | 2 | - | 1 | 1 | - | 1.68 | 1.73 | 1.85 |
| | 3 | - | 2 | 4 | - | 1.63 | 1.74 | 1.77 |
| | 4 | 1 | - | 3 | 1.62 | 1.67 | 1.74 | 1.85 |
| 4 | 1 | 2 | - | 2 | 1.7 | 1.74 | 1.74 | 1.68 |
| | 2 | - | 1 | 1 | - | 1.86 | 1.9 | 1.9 |
| | 3 | - | 2 | 4 | - | 1.48 | 1.6 | 1.88 |
| | 4 | 1 | - | 3 | 1.61 | 1.63 | 1.71 | 1.86 |

Note 2: The above information was declared by manufacturer.

Note 3: The EUT has four sets of antennas and there are four antennas for each set.

Set 1~4 are the same type antenna. Only the highest gain Set 1 antenna was selected to test and record in this report.

**For 2.4GHz WLAN function**

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

Port 1 and port 2 can be used as transmitting/receiving antenna.

Port 1 and port 2 could transmit/receive simultaneously.

**For 5GHz WLAN function**

**IEEE 802.11a/n/ac/ax mode (2TX, 4TX/4RX):**

For 2TX

Port 1 and port 2 can be used as transmitting antenna.

Port 1 and port 2 could transmit simultaneously.

For 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 Mode Test Duty Cycle

**For 2T1S**

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|---|---|---|---|---|
| 802.11a | 0.98 | 0.09 | n/a (DC>=0.98) | n/a (DC>=0.98) |
| 802.11ax HEW20-BF | 0.975 | 0.11 | 1.148m | 1k |
| 802.11ax HEW40-BF | 0.981 | 0.08 | n/a (DC>=0.98) | n/a (DC>=0.98) |
| 802.11ax HEW80-BF | 0.974 | 0.11 | 1.243m | 1k |
| 802.11ax HEW160-BF | 0.976 | 0.11 | 1.243m | 1k |

**For 2T2S**

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|---|---|---|---|---|
| 802.11ax HEW20 | 0.954 | 0.2 | 2.923m | 1k |
| 802.11ax HEW40 | 0.94 | 0.27 | 4.365m | 300 |
| 802.11ax HEW80 | 0.967 | 0.15 | 5.348m | 300 |
| 802.11ax HEW160 | 0.816 | 0.88 | 4.832m | 300 |

**For 4T1S**

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|---|---|---|---|---|
| 802.11a | 0.98 | 0.09 | n/a (DC>=0.98) | n/a (DC>=0.98) |
| 802.11ax HEW20-BF | 0.975 | 0.11 | 1.148m | 1k |
| 802.11ax HEW40-BF | 0.981 | 0.08 | n/a (DC>=0.98) | n/a (DC>=0.98) |
| 802.11ax HEW80-BF | 0.974 | 0.11 | 1.243m | 1k |
| 802.11ax HEW160-BF | 0.976 | 0.11 | 1.243m | 1k |

**For 4T2S**

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|---|---|---|---|---|
| 802.11ax HEW20-BF | 0.954 | 0.2 | 2.923m | 1k |
| 802.11ax HEW40-BF | 0.94 | 0.27 | 4.365m | 300 |
| 802.11ax HEW80-BF | 0.967 | 0.15 | 5.348m | 300 |
| 802.11ax HEW160-BF | 0.816 | 0.88 | 4.832m | 300 |

Note:
- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

### 1.1.4 EUT Operational Condition

| | | | | |
|---|---|---|---|---|
| **EUT Power Type** | From Power Adapter | | | |
| **Beamforming Function** | ☒ | With beamforming | ☐ | Without beamforming |
| | For IEEE 802.11n/ax/VHT in 2.4GHz and IEEE 802.11n/ac/ax in 5GHz. | | | |
| **Function** | ☐ | Outdoor P2M | ☒ | Indoor P2M |
| | ☐ | Fixed P2P | ☐ | Client |
| **TPC Function** | ☒ | With TPC | ☐ | Without TPC |
| **Test Software Version** | Mtool V3.1.0.3 | | | |

Note: The above information was declared by manufacturer.

### 1.1.5 Table for Multiple Listing

The Equipment and model names in the following table are all refer to the identical product.

| Equipment | Model Name | Description |
|---|---|---|
| AX3000 Dual Band Wi-Fi Router, AX5400 Dual Band Wi-Fi Router | RT-AX82U, RT-AX58U | All the equipment and models are identical, the different equipment and model names served as marketing strategy. |

From the above table, equipment: AX3000 Dual Band Wi-Fi Router and model: RT-AX82U was selected as representative model for the test and its data was recorded in this report.

### 1.1.6 Table for SKU information

| SKU | Material | Housing | Brand | P/N |
|---|---|---|---|---|
| SKU 1 | PJ-45 port was covered by plastic. | There are two different housings. | LAN port : ETSWAP / Mingtek<br>WAN port : ETSWAP / Mingtek | LAN port : NS773602 / HN36201CG<br>WAN port: NS771802 / HN18101CG |
| SKU 2 | PJ-45 port was covered by metal. | | | |

### 1.1.7 Table for EUT supports functions

| Function | Support Type |
|---|---|
| AP Router | Master |
| Bridge | Slave without radar detection |
| Repeater | Master |

### 1.1.8 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR952922

Below is the table for the change of the product with respect to the original one.

| Modifications | Performance Checking |
|---|---|
| 1. Adding Band 2 (5250~5350 MHz) for this device.<br>2. Adding 160MHz for this device. | 1. Emission Bandwidth<br>2. Maximum Conducted Output Power<br>3. Peak Power Spectral Density<br>4. Radiated Emissions above 1GHz |

## 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

## 1.3 Testing Location Information

| Testing Location | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☐ | HWA YA | ADD | : | No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) | | | |
| | | TEL | : | 886-3-327-3456 | FAX | : | 886-3-327-0973 |
| ☒ | JHUBEI | ADD | : | No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. | | | |
| | | TEL | : | 886-3-656-9065 | FAX | : | 886-3-656-9085 |

| Test Condition | Test Site No. | Test Engineer | Test Environment | Test Date |
|---|---|---|---|---|
| RF Conducted | TH02-CB | Owen Hsu | 26.4~27.3°C / 61~63% | Jul. 18, 2019~Aug. 01, 2019 |
| Radiated above 1GHz | 03CH06-CB | KJ Chang | 25.8~28.2°C / 63~67% | Jul. 12, 2019~Aug. 02, 2019 |

Test site Designation No. TW0006 with FCC
Test site registered number IC 4086B 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 |
|---|---|---|
| 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

**For 2T1S**

| Mode | PowerSetting |
|---|---|
| 802.11a_Nss1,(6Mbps)_2TX | - |
| 5260MHz | 82 |
| 5300MHz | 82 |
| 5320MHz | 82 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | - |
| 5260MHz | 82 |
| 5300MHz | 82 |
| 5320MHz | 82 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX | - |
| 5270MHz | 82 |
| 5310MHz | 82 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX | - |
| 5290MHz | 79 |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | - |
| 5250MHz Straddle 5.15-5.25GHz | 73 |
| 5250MHz Straddle 5.25-5.35GHz | 73 |

**For 2T2S**

| Mode | PowerSetting |
|---|---|
| 802.11ax HEW20_Nss2,(MCS0)_2TX | - |
| 5260MHz | 82 |
| 5300MHz | 81 |
| 5320MHz | 81 |
| 802.11ax HEW40_Nss2,(MCS0)_2TX | - |
| 5270MHz | 82 |
| 5310MHz | 82 |
| 802.11ax HEW80_Nss2,(MCS0)_2TX | - |
| 5290MHz | 82 |
| 802.11ax HEW160_Nss2,(MCS0)_2TX | - |
| 5250MHz Straddle 5.15-5.25GHz | 81 |
| 5250MHz Straddle 5.25-5.35GHz | 81 |

**For 4T1S**

| Mode | PowerSetting |
|---|---|
| 802.11a_Nss1,(6Mbps)_4TX | - |
| 5260MHz | 63 |
| 5300MHz | 63 |
| 5320MHz | 63 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | - |
| 5260MHz | 62 |
| 5300MHz | 61 |
| 5320MHz | 62 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | - |
| 5270MHz | 62 |
| 5310MHz | 62 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | - |
| 5290MHz | 62 |
| 802.11ax HEW160-BF_Nss1,(MCS0)_4TX | - |
| 5250MHz Straddle 5.15-5.25GHz | 72 |
| 5250MHz Straddle 5.25-5.35GHz | 72 |

**For 4T2S**

| Mode | PowerSetting |
|---|---|
| 802.11ax HEW20-BF_Nss2,(MCS0)_4TX | - |
| 5260MHz | 69 |
| 5300MHz | 69 |
| 5320MHz | 69 |
| 802.11ax HEW40-BF_Nss2,(MCS0)_4TX | - |
| 5270MHz | 69 |
| 5310MHz | 69 |
| 802.11ax HEW80-BF_Nss2,(MCS0)_4TX | - |
| 5290MHz | 69 |
| 802.11ax HEW160-BF_Nss2,(MCS0)_4TX | - |
| 5250MHz Straddle 5.15-5.25GHz | 72 |
| 5250MHz Straddle 5.25-5.35GHz | 72 |

Note:
- After evaluating, 802.11ax mode has been evaluated to be the worst case, so it was selected to test and record in this test report.
- There are two modes of EUT for 802.11n/ax/VHT in 2.4GHz and 802.11n/ac/ax in 5GHz. One is beamforming mode, and the other is non-beamforming mode, after evaluating, beamforming mode has been evaluated to be the worst case, so it was selected to test and record in this test report.

## 2.2 The Worst Case Measurement Configuration

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

| The Worst Case Mode for Following Conformance Tests | |
|---|---|
| **Tests Item** | Unwanted Emissions |
| **Test Condition** | 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. |
| **Operating Mode > 1GHz** | CTX |
| 1 | SKU 1 (5GHz) + adapter 1 |

Note:The EUT only uses in Z axis.

## 2.3 EUT Operation during Test

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

During the test, the following programs under WIN 7 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 telnet.
3. Executed "Lantest20" to link with the remote workstation to transmit and receive packet by Device and transmit duty cycle no less than 98%.

## 2.4 Accessories

| Accessories | | | | |
|---|---|---|---|---|
| **Equipment Name** | **Brand Name** | **Model Name** | **P/N** | **Rating** |
| Adapter 1 | PI | AD2088320 | 010LF | INPUT: 100-240V ~ 50/60Hz, 0.8A<br>OUTPUT: 19V, 1.75A |
| Adapter 2 | PI | AD2088320 | 010-5LF | INPUT: 100-240V ~ 50/60Hz, 0.8A<br>OUTPUT: 19V, 1.75A |
| **Other** | | | | |
| RJ-45 cable*1, Non-shielded, 1.5m | | | | |

Note: The power adapter 1~ adapter 2 do not affect the test result of RF tests, so only adapter 1 was tested and recorded in this report.

## 2.5 Support Equipment

**For Radiated (above 1GHz):**
**(For non beamforming mode)**

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

**(For beamforming mode)**

| Support Equipment | | | | |
|---|---|---|---|---|
| **No.** | **Equipment** | **Brand Name** | **Model Name** | **FCC ID** |
| A | NB | DELL | E4300 | N/A |
| B | Device | ASUS | RT-AX88U | N/A |
| C | NB | DELL | E4300 | N/A |

**For RF Conducted:**
**(For non beamforming mode)**

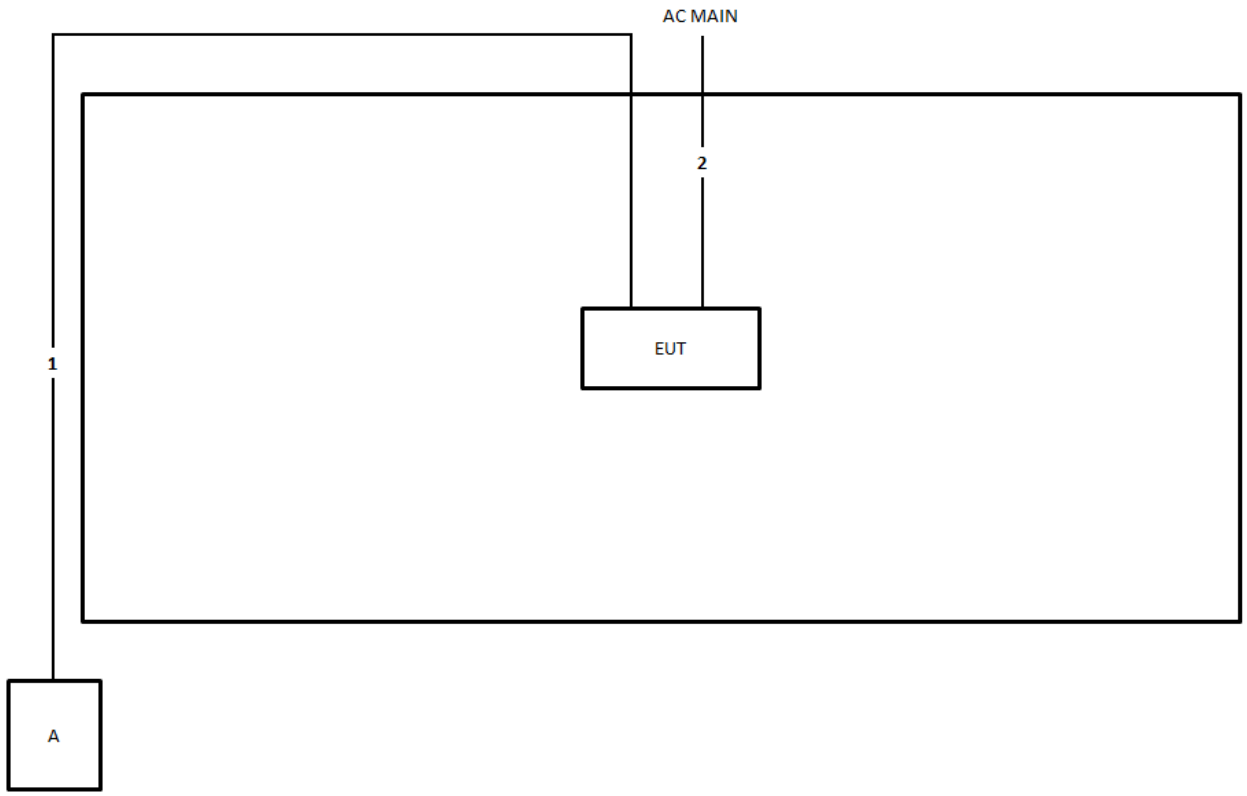
| Support Equipment | | | | |
|---|---|---|---|---|
| **No.** | **Equipment** | **Brand Name** | **Model Name** | **FCC ID** |
| A | NB | DELL | E4300 | N/A |

**(For beamforming mode)**

| Support Equipment | | | | |
|---|---|---|---|---|
| **No.** | **Equipment** | **Brand Name** | **Model Name** | **FCC ID** |
| A | NB | DELL | E4300 | N/A |
| B | NB | DELL | E4300 | N/A |
| C | Device | ASUS | RT-AX82U | N/A |

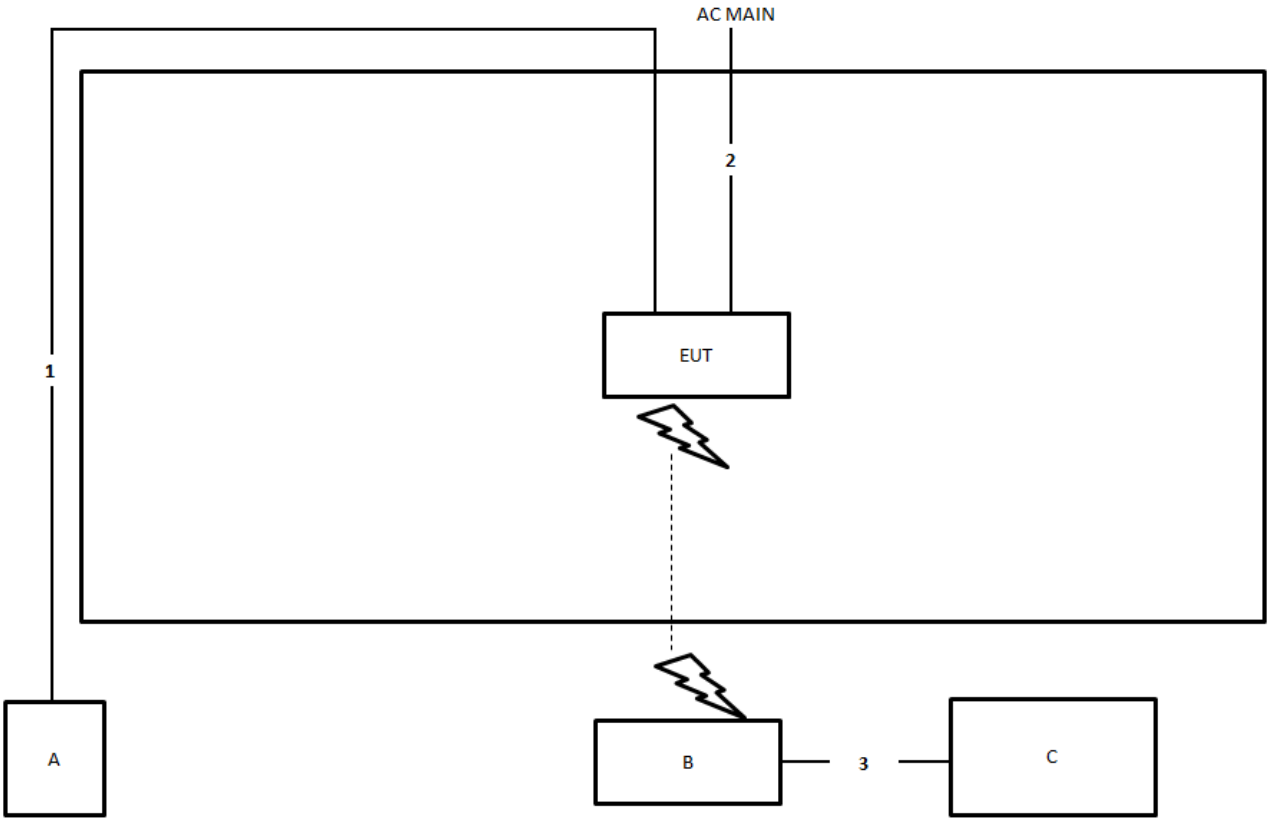
## 2.6 Test Setup Diagram

**Test Setup Diagram - Radiated Test > 1GHz / For non-beamforming mode**




| Item | Connection | Shielded | Length |
|---|---|---|---|
| 1 | RJ-45 cable | No | 10m |
| 2 | Power cable | No | 2.2m |

**Test Setup Diagram - Radiated Test > 1GHz / For beamforming mode**




| Item | Connection | Shielded | Length |
|---|---|---|---|
| 1 | RJ-45 cable | No | 10m |
| 2 | Power cable | No | 2.2m |
| 3 | RJ-45 cable | No | 1.5m |

# 3 Transmitter Test Result

## 3.1 Emission Bandwidth

### 3.1.1 Emission Bandwidth Limit

| Emission Bandwidth Limit | |
|---|---|
| **UNII Devices** | |
| ☒ | For the 5.15-5.25 GHz band, N/A |
| ☒ | For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. |
| ☐ | For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. |
| ☐ | For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz. |
| **LE-LAN Devices** | |
| ☐ | 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. |
| ☐ | 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 |
| ☐ | 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 |
| ☐ | For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz. |

### 3.1.2 Measuring Instruments

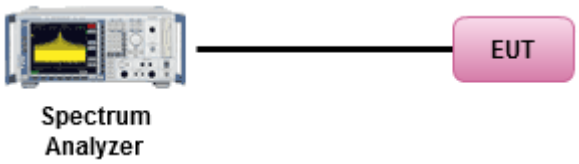
Refer a test equipment and calibration data table in this test report.

### 3.1.3 Test Procedures

| Test Method | | |
|---|---|---|
| ▪ | For the emission bandwidth shall be measured using one of the options below: | |
| | ☒ | Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement. |
| | ☐ | Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing. |
| | ☐ | Refer as IC RSS-Gen, clause 4.6 for bandwidth testing. |

### 3.1.4 Test Setup

**Emission Bandwidth**




### 3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

## 3.2 Maximum Conducted Output Power

### 3.2.1 Maximum Conducted Output Power Limit

| Maximum Conducted Output Power Limit | |
|---|---|
| **UNII Devices** | |
| ☒ | For the 5.15-5.25 GHz band: |
| | ▪ Outdoor AP: the maximum conducted output power ($P_{Out}$) shall not exceed the lesser of 1 W. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 30 – ($G_{TX}$ – 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm] |
| | ▪ Indoor AP: the maximum conducted output power ($P_{Out}$) shall not exceed the lesser of 1 W. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 30 – ($G_{TX}$ – 6) |
| | ▪ Point-to-point AP: the maximum conducted output power ($P_{Out}$) shall not exceed the lesser of 1 W If $G_{TX}$ > 23 dBi, then $P_{Out}$ = 30 – ($G_{TX}$ – 23). |
| | ▪ Mobile or Portable Client: the maximum conducted output power ($P_{Out}$) shall not exceed the lesser of 250 mW. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 24 – ($G_{TX}$ – 6). |
| ☒ | 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 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 24 – ($G_{TX}$ – 6). |
| ☐ | 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 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 24 – ($G_{TX}$ – 6). |
| ☐ | For the 5.725-5.85 GHz band: |
| | ▪ Point-to-multipoint systems (P2M): the maximum conducted output power ($P_{Out}$) shall not exceed the lesser of 1 W. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 30 – ($G_{TX}$ – 6). |
| | ▪ Point-to-point systems (P2P): the maximum conducted output power ($P_{Out}$) shall not exceed the lesser of 1 W. |
| **LE-LAN Devices** | |
| ☐ | 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. |
| ☐ | 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 |
| ☐ | 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 |
| ☐ | For the 5.725-5.85 GHz band: |
| | ▪ Point-to-multipoint systems (P2M): the maximum conducted output power ($P_{Out}$) shall not exceed the lesser of 1 W. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 30 – ($G_{TX}$ – 6). |
| | ▪ Point-to-point systems (P2P): the maximum conducted output power ($P_{Out}$) shall not exceed the lesser of 1 W. |
| **$P_{Out}$** = maximum conducted output power in dBm,<br>**$G_{TX}$** = the maximum transmitting antenna directional gain in dBi. | |

### 3.2.2 Measuring Instruments

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

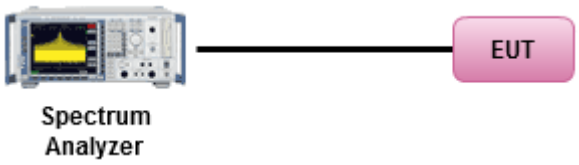
### 3.2.3 Test Procedures

| Test Method | |
|---|---|
| ▪ Maximum Conducted Output Power | |
| | Average over on/off periods with duty factor |
| | ☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging). |
| | ☐ 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 |
| | ☒ Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter). |
| ▪ For conducted measurement. | |
| | ▪ 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. |
| | ▪ If multiple transmit chains, EIRP calculation could be following as methods:<br>$P_{total} = P_1 + P_2 + \ldots + P_n$<br>(calculated in linear unit [mW] and transfer to log unit [dBm])<br>$EIRP_{total} = P_{total} + DG$ |

### 3.2.4 Test Setup

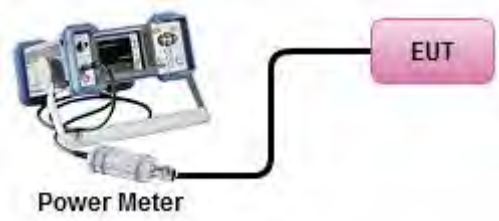
**For straddle channel**

**RF Output Power (Spectrum Analyzer)**




**For other channel**

**RF Output Power (Power Meter)**




### 3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

## 3.3 Peak Power Spectral Density

### 3.3.1 Peak Power Spectral Density Limit

| Peak Power Spectral Density Limit | |
|---|---|
| **UNII Devices** | |
| ☒ | For the 5.15-5.25 GHz band: |
| | ▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 17 – ($G_{TX}$ – 6). |
| | ▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 17 – ($G_{TX}$ – 6). |
| | ▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX}$ > 23 dBi, then $P_{Out}$ = 17 – ($G_{TX}$ – 23). |
| | ▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX}$ > 6 dBi, then PPSD= 11 – ($G_{TX}$ – 6).. |
| ☒ | For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX}$ > 6 dBi, then PPSD= 11 – ($G_{TX}$ – 6). |
| ☐ | For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX}$ > 6 dBi, then PPSD= 11 – ($G_{TX}$ – 6). |
| ☐ | For the 5.725-5.85 GHz band: |
| | ▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX}$ > 6 dBi, then PPSD= 30 – ($G_{TX}$ – 6). |
| | ▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. |
| **LE-LAN Devices** | |
| ☐ | For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz. |
| ☐ | For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. |
| | ▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below:<br>-13 dBW/MHz for 0° ≤ θ < 8° ; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ < 40°<br>-35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45° ; -42 dBW/MHz for θ > 45° |
| ☐ | For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. |
| ☐ | For the 5.725-5.85 GHz band: |
| | ▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX}$ > 6 dBi, then PPSD= 30 – ($G_{TX}$ – 6). |
| | ▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. |
| **PPSD** = 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>**$G_{TX}$** = the maximum transmitting antenna directional gain in dBi. | |

### 3.3.2 Measuring Instruments

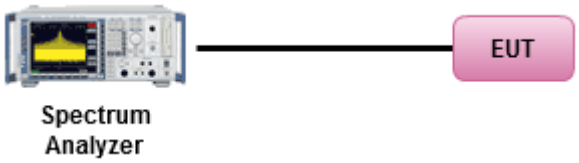
Refer a test equipment and calibration data table in this test report.

### 3.3.3 Test Procedures

| Test Method | | |
|---|---|---|
| ▪ 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: | | |
| | ☐ Refer as FCC KDB 789033, F)5) 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] | |
| | ☒ Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging). | |
| | ☐ 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 | |
| | ☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging). | |
| | ☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed) | |
| ▪ For conducted measurement. | | |
| | ▪ If the EUT supports multiple transmit chains using options given below: | |
| | | ☒ 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. |
| | | ☐ 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, |
| | | ☐ 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. |
| | ▪ | If multiple transmit chains, EIRP PPSD calculation could be following as methods:<br>$PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$<br>(calculated in linear unit [mW] and transfer to log unit [dBm])<br>$EIRP_{total} = PPSD_{total} + DG$ |

### 3.3.4 Test Setup

**Power Spectral Density**




### 3.3.5 Test Result of Peak Power Spectral Density

Refer as Appendix C

## 3.4 Unwanted Emissions

### 3.4.1 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** |
| ☒ 5.15 - 5.25 GHz | e.i.r.p. -27 dBm [68.2 dBuV/m@3m] |
| ☒ 5.25 - 5.35 GHz | e.i.r.p. -27 dBm [68.2 dBuV/m@3m] |
| ☐ 5.47 - 5.725 GHz | e.i.r.p. -27 dBm [68.2 dBuV/m@3m] |
| ☐ 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). |

### 3.4.2 Measuring Instruments

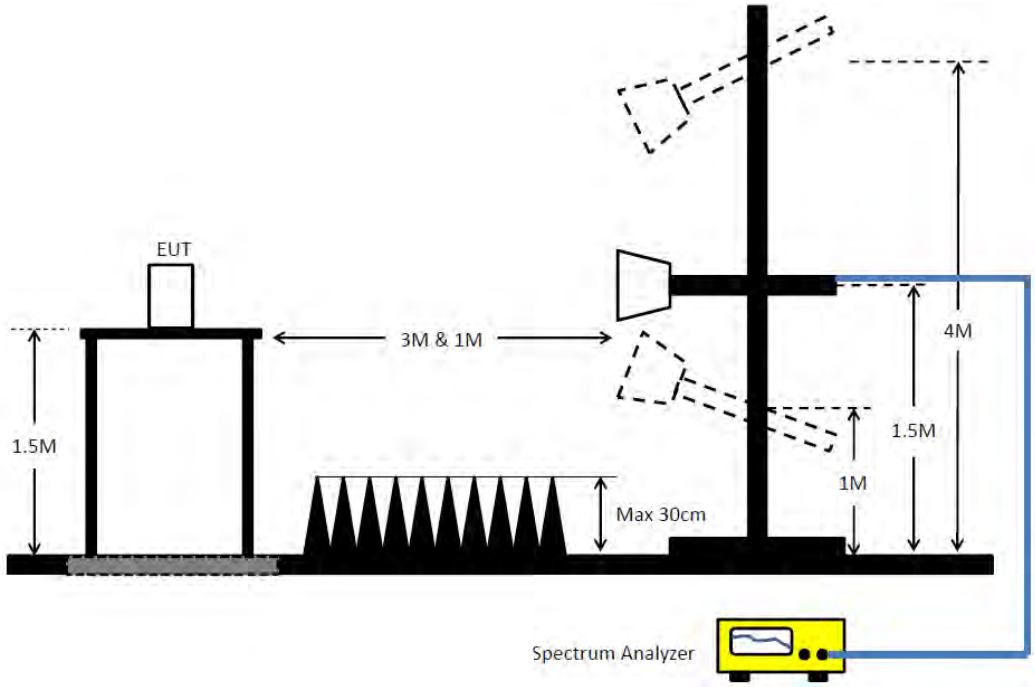
Refer a test equipment and calibration data table in this test report.

### 3.4.3 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 ≥ 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. | |
| | | ☐ Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging). |
| | | ☒ Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW). |
| | | ☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time. |
| | | ☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions. |
| | | ☒ Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit. |
| | | ☐ 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. | | |

### 3.4.4 Test Setup

| Transmitter Radiated Unwanted Emissions |
|---|
| Above 1GHz |




### 3.4.5 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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

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.

### 3.4.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D

# 4 Test Equipment and Calibration Data

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Calibration Due Date | Remark |
|---|---|---|---|---|---|---|---|
| Horn Antenna | SCHWARZBECK | BBHA9120D | 9120D-1292 | 1GHz~18GHz | Jul. 20, 2018 | Jul. 19, 2019 | Radiation (03CH06-CB) |
| Horn Antenna | SCHWARZBECK | BBHA9120D | 9120D-1292 | 1GHz~18GHz | Jul. 17, 2019 | Jul. 16, 2020 | Radiation (03CH06-CB) |
| Horn Antenna | SCHWARZBECK | BBHA 9170 | BBHA9170507 | 15GHz ~ 40GHz | Jun. 12, 2019 | Jun. 11, 2020 | Radiation (03CH06-CB) |
| Pre-Amplifier | Agilent | 83017A | MY53270064 | 0.5GHz ~ 26.5GHz | May 08, 2019 | May 07, 2020 | Radiation (03CH06-CB) |
| Amplifier | MITEQ | TTA1840-35-HG | 1864479 | 18GHz ~ 40GHz | Jul. 04, 2018 | Jul. 03, 2019 | Radiation (03CH06-CB) |
| Pre-Amplifier | MITEQ | TTA1840-35-HG | 1864479 | 18GHz ~ 40GHz | Jul. 03, 2019 | Jul. 02, 2020 | Radiation (03CH06-CB) |
| Spectrum analyzer | R&S | FSP40 | 100080 | 9kHz~40GHz | Oct. 03, 2018 | Oct. 02, 2019 | Radiation (03CH06-CB) |
| RF Cable-high | HUBER+ SUHNER | RG402 | High Cable-05 | 1GHz~18GHz | Oct. 08, 2018 | Oct. 07, 2019 | Radiation (03CH06-CB) |
| RF Cable-high | HUBER+ SUHNER | RG402 | High Cable-05+24 | 1GHz~18GHz | Oct. 08, 2018 | Oct. 07, 2019 | Radiation (03CH06-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#1 | 18GHz ~ 40 GHz | Jul. 27, 2018 | Jul. 26, 2019 | Radiation (03CH06-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#1 | 18GHz ~ 40 GHz | Jul. 24, 2019 | Jul. 23, 2020 | Radiation (03CH06-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#2 | 18GHz ~ 40 GHz | Jul. 27, 2018 | Jul. 26, 2019 | Radiation (03CH06-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#2 | 18GHz ~ 40 GHz | Jul. 24, 2019 | Jul. 23, 2020 | Radiation (03CH06-CB) |
| Spectrum analyzer | R&S | FSV40 | 101027 | 9kHz~40GHz | Jul. 02, 2019 | Jul. 01, 2020 | Conducted (TH02-CB) |
| Power Sensor | Anritsu | MA2411B | 1126203 | 300MHz~40GHz | Sep. 03, 2018 | Sep. 02, 2019 | Conducted (TH02-CB) |
| Power Meter | Anritsu | ML2495A | 1210004 | 300MHz~40GHz | Sep. 03, 2018 | Sep. 02, 2019 | Conducted (TH02-CB) |
| RF Cable-high | Woken | RG402 | High Cable-01 | 1 GHz – 26.5 GHz | Oct. 08, 2018 | Oct. 07, 2019 | Conducted (TH02-CB) |
| RF Cable-high | Woken | RG402 | High Cable-02 | 1 GHz – 26.5 GHz | Oct. 08, 2018 | Oct. 07, 2019 | Conducted (TH02-CB) |
| RF Cable-high | Woken | RG402 | High Cable-3 | 1 GHz – 26.5 GHz | Oct. 24, 2018 | Oct. 23, 2019 | Conducted (TH02-CB) |
| RF Cable-high | Woken | RG402 | High Cable-04 | 1 GHz – 26.5 GHz | Oct. 08, 2018 | Oct. 07, 2019 | Conducted (TH02-CB) |
| RF Cable-high | Woken | RG402 | High Cable-05 | 1 GHz – 26.5 GHz | Oct. 08, 2018 | Oct. 07, 2019 | Conducted (TH02-CB) |

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

**For 2T1S**
**Summary**

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| 5.15-5.25GHz | - | - | - | - | - |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | 81.36M | 77.081M | 77M1D1D | 81.2M | 77.001M |
| 5.25-5.35GHz | - | - | - | - | - |
| 802.11a_Nss1,(6Mbps)_2TX | 21.6M | 16.567M | 16M6D1D | 21.375M | 16.517M |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | 21.7M | 18.991M | 19M0D1D | 21.55M | 18.941M |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX | 39.95M | 37.681M | 37M7D1D | 39.85M | 37.531M |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX | 81.5M | 76.862M | 76M9D1D | 81.2M | 76.762M |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | 81.36M | 77.081M | 77M1D1D | 81.28M | 77.081M |

**Max-N dB** = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
**Max-OBW** = Maximum99% occupied bandwidth;
**Min-N dB** = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
**Min-OBW** = Minimum 99% occupied bandwidth;

## Result

| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) | Port 2-N dB (Hz) | Port 2-OBW (Hz) |
|---|---|---|---|---|---|---|
| 802.11a_Nss1,(6Mbps)_2TX | - | - | - | - | - | - |
| 5260MHz | Pass | Inf | 21.375M | 16.517M | 21.6M | 16.542M |
| 5300MHz | Pass | Inf | 21.4M | 16.567M | 21.475M | 16.567M |
| 5320MHz | Pass | Inf | 21.425M | 16.567M | 21.425M | 16.542M |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5260MHz | Pass | Inf | 21.6M | 18.991M | 21.6M | 18.966M |
| 5300MHz | Pass | Inf | 21.55M | 18.966M | 21.575M | 18.941M |
| 5320MHz | Pass | Inf | 21.675M | 18.966M | 21.7M | 18.991M |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5270MHz | Pass | Inf | 39.85M | 37.681M | 39.85M | 37.531M |
| 5310MHz | Pass | Inf | 39.85M | 37.531M | 39.95M | 37.531M |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5290MHz | Pass | Inf | 81.5M | 76.762M | 81.2M | 76.862M |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | Inf | 81.36M | 77.001M | 81.2M | 77.081M |
| 5250MHz Straddle 5.25-5.35GHz | Pass | Inf | 81.36M | 77.081M | 81.28M | 77.081M |

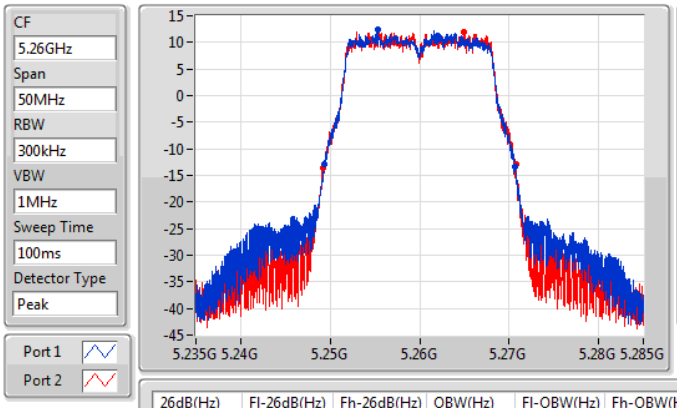
**Port X-N dB** = Port **X** 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
**Port X-OBW** = Port **X** 99% occupied bandwidth;

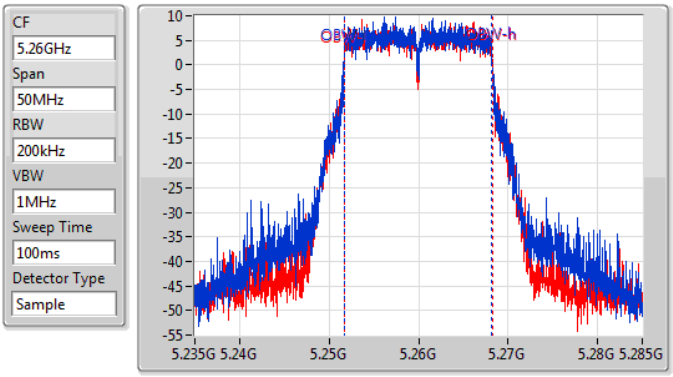
## 802.11a_Nss1,(6Mbps)_2TX

## EBW

## 5260MHz

19/07/2019



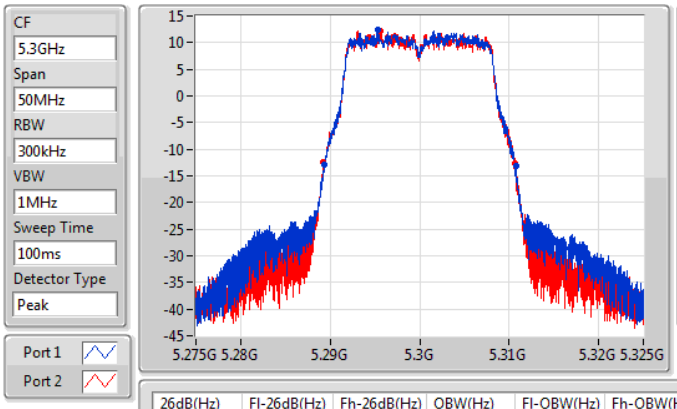

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.375M | 5.249325G | 5.2707G | 16.517M | 5.251679G | 5.268196G | Inf | 1 |
| 21.6M | 5.24915G | 5.27075G | 16.542M | 5.251679G | 5.268221G | Inf | 2 |

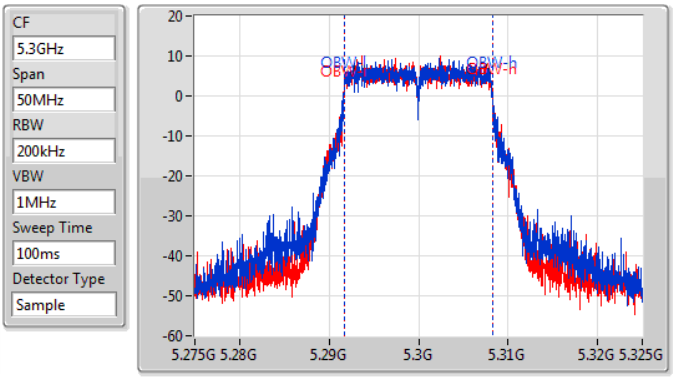
## 802.11a_Nss1,(6Mbps)_2TX

## EBW

## 5300MHz

19/07/2019



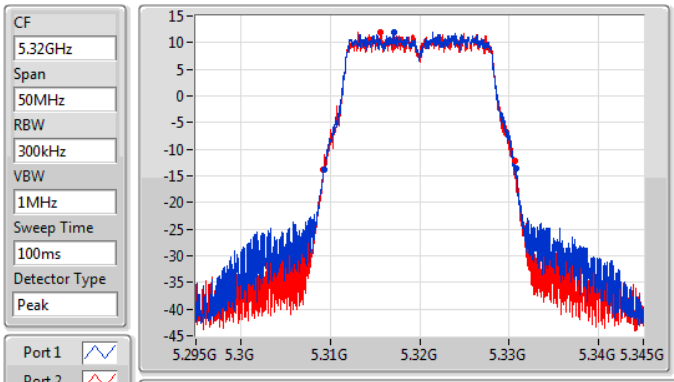

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.4M | 5.289325G | 5.310725G | 16.567M | 5.291654G | 5.308221G | Inf | 1 |
| 21.475M | 5.289225G | 5.3107G | 16.567M | 5.291654G | 5.308221G | Inf | 2 |

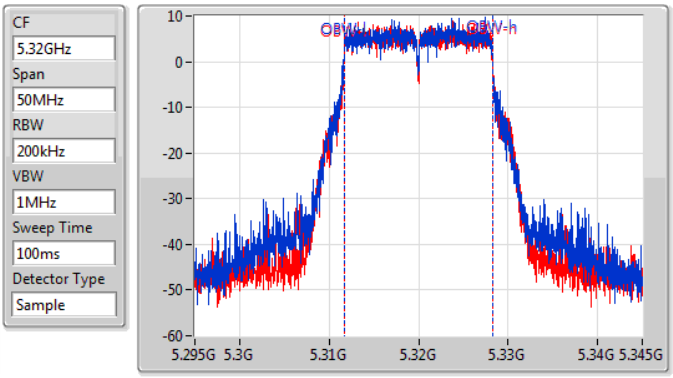
## 802.11a_Nss1,(6Mbps)_2TX

**EBW**

**5320MHz**

19/07/2019



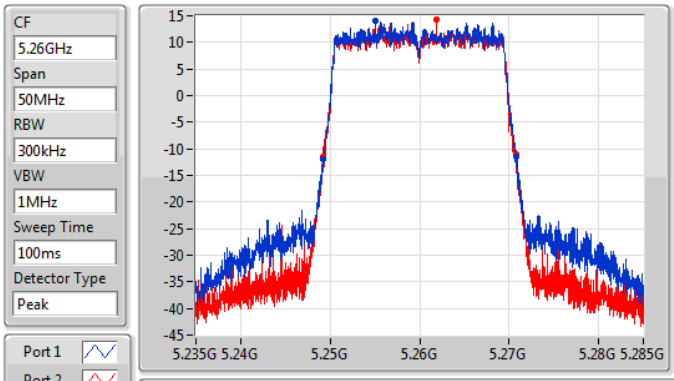

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.425M | 5.309325G | 5.33075G | 16.567M | 5.311654G | 5.328221G | Inf | 1 |
| 21.425M | 5.309225G | 5.33065G | 16.542M | 5.311679G | 5.328221G | Inf | 2 |

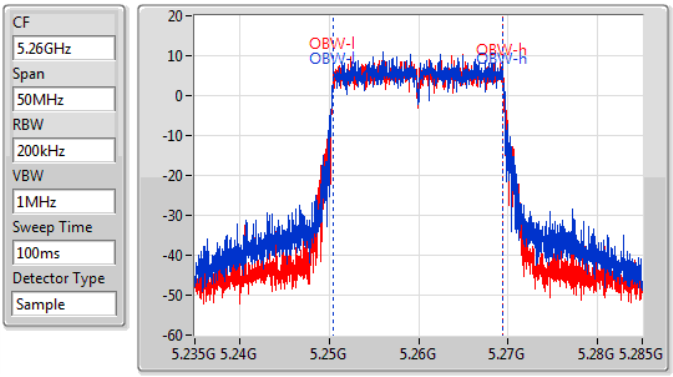
## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

**EBW**

**5260MHz**

19/07/2019



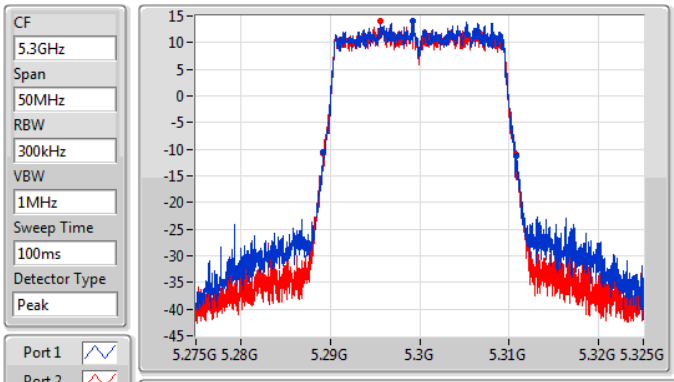

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.6M | 5.24925G | 5.27085G | 18.991M | 5.250455G | 5.269445G | Inf | 1 |
| 21.6M | 5.24915G | 5.27075G | 18.966M | 5.25048G | 5.269445G | Inf | 2 |

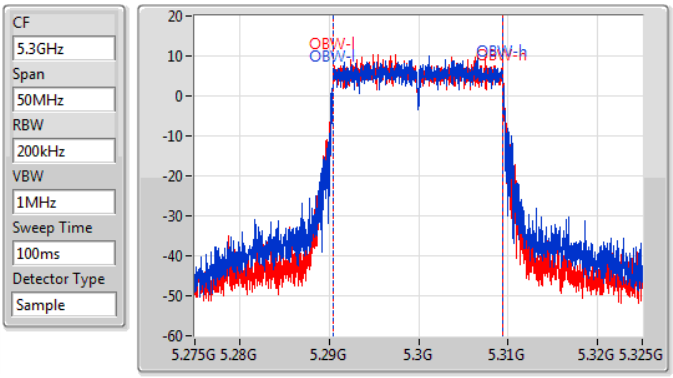
## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

**EBW**

### 5300MHz

19/07/2019



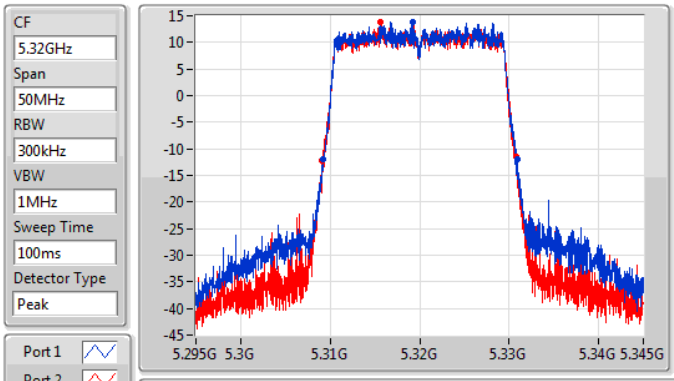

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.55M | 5.289275G | 5.310825G | 18.966M | 5.290455G | 5.30942G | Inf | 1 |
| 21.575M | 5.2892G | 5.310775G | 18.941M | 5.29048G | 5.30942G | Inf | 2 |

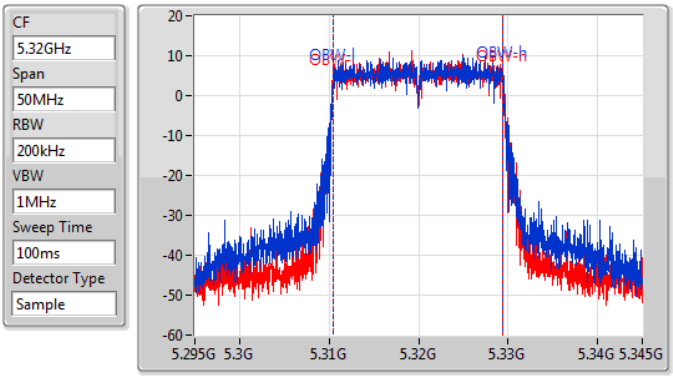
## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

**EBW**

### 5320MHz

19/07/2019



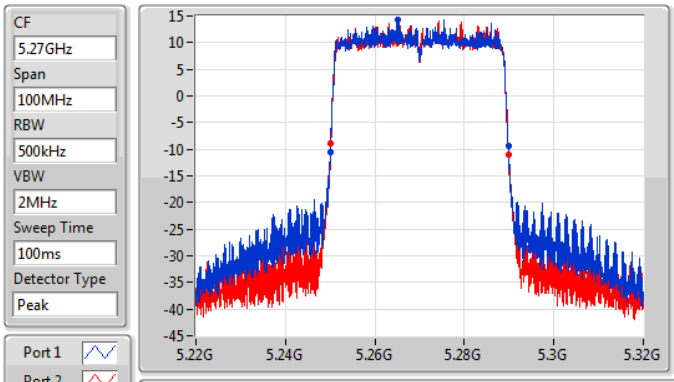

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.675M | 5.30925G | 5.330925G | 18.966M | 5.31048G | 5.329445G | Inf | 1 |
| 21.7M | 5.309125G | 5.330825G | 18.991M | 5.310455G | 5.329445G | Inf | 2 |

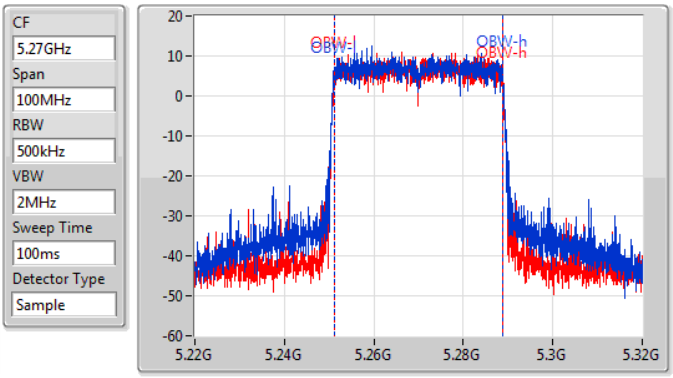
## 802.11ax HEW40-BF_Nss1,(MCS0)_2TX

**EBW**

### 5270MHz

19/07/2019



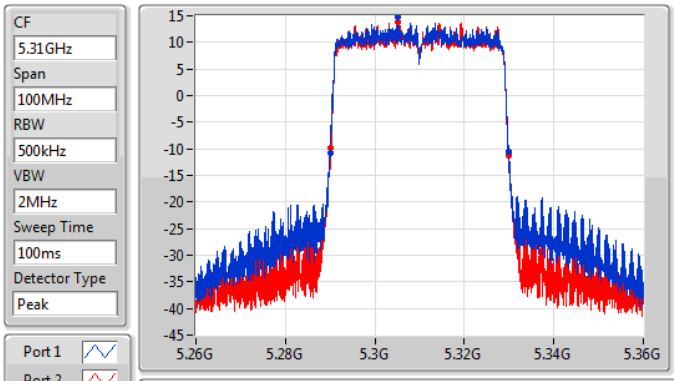

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 39.85M | 5.24995G | 5.2898G | 37.681M | 5.251109G | 5.288791G | Inf | 1 |
| 39.85M | 5.2501G | 5.28995G | 37.531M | 5.251159G | 5.288691G | Inf | 2 |

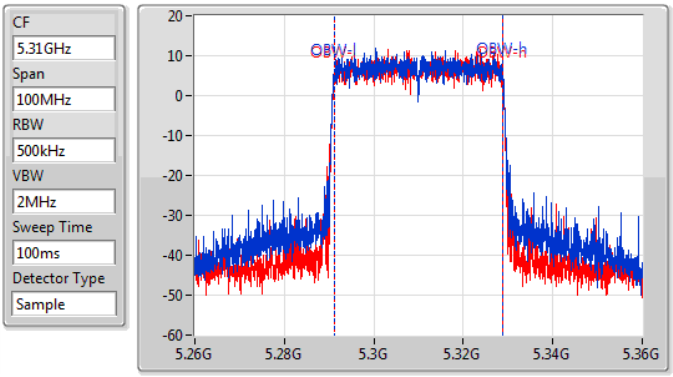
## 802.11ax HEW40-BF_Nss1,(MCS0)_2TX

**EBW**

### 5310MHz

19/07/2019



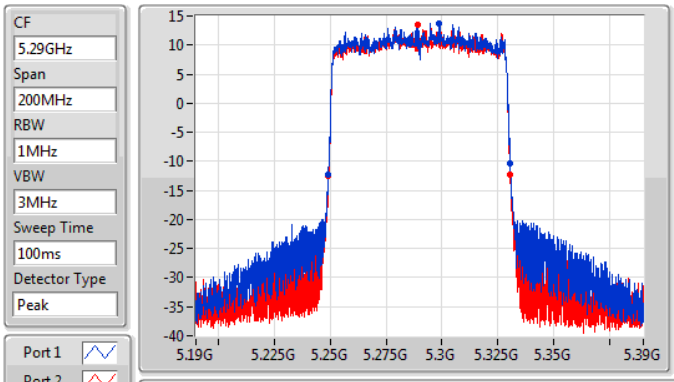

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 39.85M | 5.28995G | 5.3298G | 37.531M | 5.291159G | 5.328691G | Inf | 1 |
| 39.95M | 5.29G | 5.32995G | 37.531M | 5.291159G | 5.328691G | Inf | 2 |

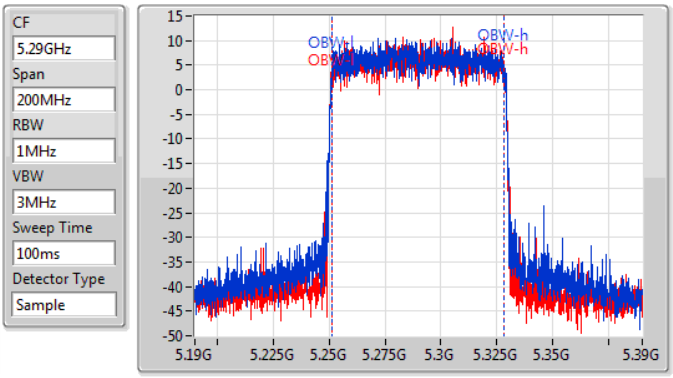
## 802.11ax HEW80-BF_Nss1,(MCS0)_2TX

**EBW**

### 5290MHz

19/07/2019



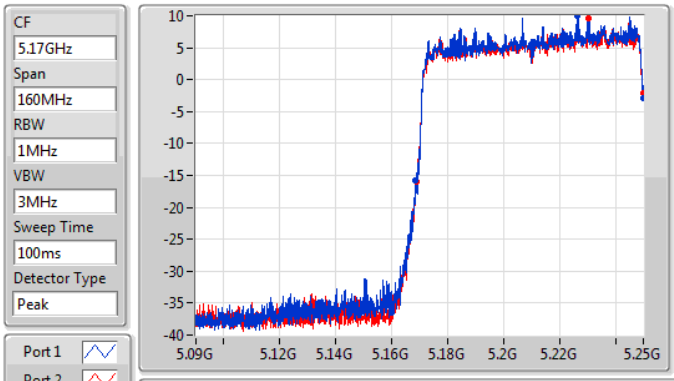

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.5M | 5.2491G | 5.3306G | 76.762M | 5.251519G | 5.328281G | Inf | 1 |
| 81.2M | 5.2492G | 5.3304G | 76.862M | 5.251519G | 5.328381G | Inf | 2 |

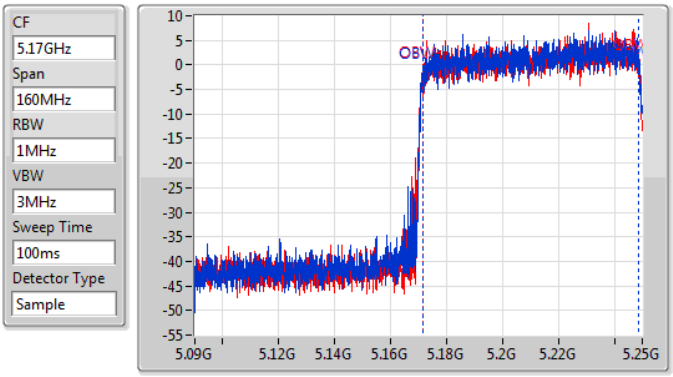
## 802.11ax HEW160-BF_Nss1,(MCS0)_2TX

**EBW**

### 5250MHz Straddle 5.15-5.25GHz

19/07/2019




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.36M | 5.16864G | 5.25G | 77.001M | 5.171759G | 5.248761G | Inf | 1 |
| 81.2M | 5.1688G | 5.25G | 77.081M | 5.171679G | 5.248761G | Inf | 2 |

## 802.11ax HEW160-BF_Nss1,(MCS0)_2TX

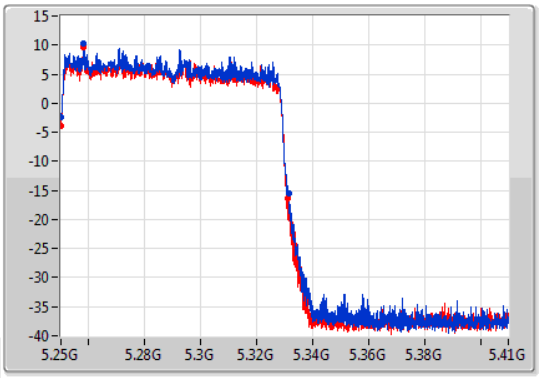
## EBW

## 5250MHz Straddle 5.25-5.35GHz

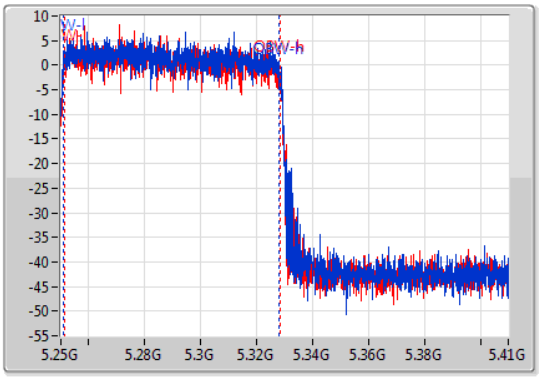
19/07/2019

CF 5.33GHz
Span 160MHz
RBW 1MHz
VBW 3MHz
Sweep Time 100ms
Detector Type Peak

Port 1
Port 2




CF 5.33GHz
Span 160MHz
RBW 1MHz
VBW 3MHz
Sweep Time 100ms
Detector Type Sample




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.36M | 5.25G | 5.33136G | 77.081M | 5.251G | 5.328081G | Inf | 1 |
| 81.28M | 5.25G | 5.33128G | 77.081M | 5.251159G | 5.328241G | Inf | 2 |

**For 2T2S**
**Summary**

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| 5.15-5.25GHz | - | - | - | - | - |
| 802.11ax HEW160_Nss2,(MCS0)_2TX | 81.36M | 77.081M | 77M1D1D | 81.12M | 76.922M |
| 5.25-5.35GHz | - | - | - | - | - |
| 802.11ax HEW20_Nss2,(MCS0)_2TX | 21.65M | 18.966M | 19M0D1D | 21.3M | 18.941M |
| 802.11ax HEW40_Nss2,(MCS0)_2TX | 40.15M | 37.631M | 37M6D1D | 39.95M | 37.581M |
| 802.11ax HEW80_Nss2,(MCS0)_2TX | 81.5M | 77.161M | 77M2D1D | 81.5M | 76.762M |
| 802.11ax HEW160_Nss2,(MCS0)_2TX | 81.04M | 77.081M | 77M1D1D | 80.96M | 77.081M |

**Max-N dB** = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
**Max-OBW** = Maximum99% occupied bandwidth;
**Min-N dB** = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
**Min-OBW** = Minimum 99% occupied bandwidth;

## Result

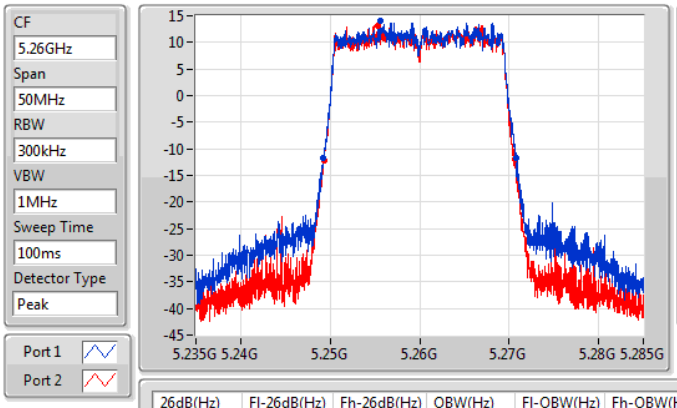
| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) | Port 2-N dB (Hz) | Port 2-OBW (Hz) |
|---|---|---|---|---|---|---|
| 802.11ax HEW20_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5260MHz | Pass | Inf | 21.55M | 18.966M | 21.3M | 18.966M |
| 5300MHz | Pass | Inf | 21.65M | 18.966M | 21.375M | 18.941M |
| 5320MHz | Pass | Inf | 21.525M | 18.941M | 21.35M | 18.941M |
| 802.11ax HEW40_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5270MHz | Pass | Inf | 40.15M | 37.631M | 40M | 37.581M |
| 5310MHz | Pass | Inf | 40M | 37.581M | 39.95M | 37.581M |
| 802.11ax HEW80_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5290MHz | Pass | Inf | 81.5M | 77.161M | 81.5M | 76.762M |
| 802.11ax HEW160_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | Inf | 81.36M | 77.081M | 81.12M | 76.922M |
| 5250MHz Straddle 5.25-5.35GHz | Pass | Inf | 80.96M | 77.081M | 81.04M | 77.081M |

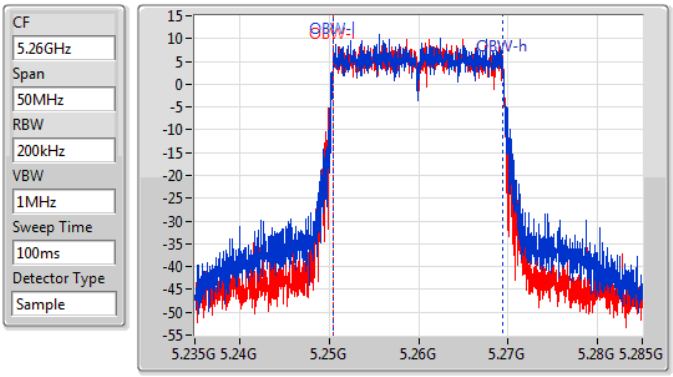
**Port X-N dB** = Port **X** 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
**Port X-OBW** = Port **X** 99% occupied bandwidth;

## 802.11ax HEW20_Nss2,(MCS0)_2TX EBW

### 5260MHz

22/07/2019



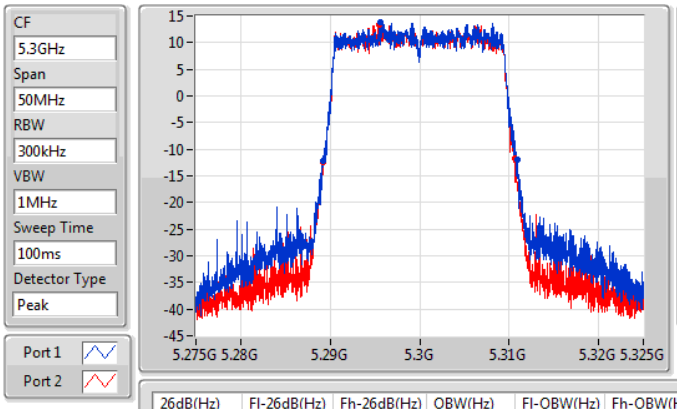



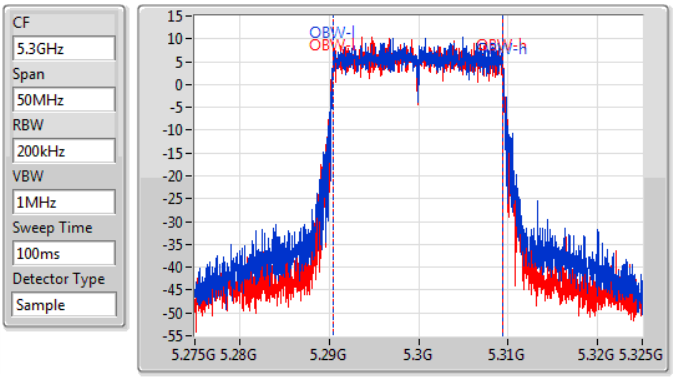

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.55M | 5.249275G | 5.270825G | 18.966M | 5.250455G | 5.26942G | Inf | 1 |
| 21.3M | 5.2493G | 5.2706G | 18.966M | 5.250455G | 5.26942G | Inf | 2 |

## 802.11ax HEW20_Nss2,(MCS0)_2TX EBW

### 5300MHz

22/07/2019



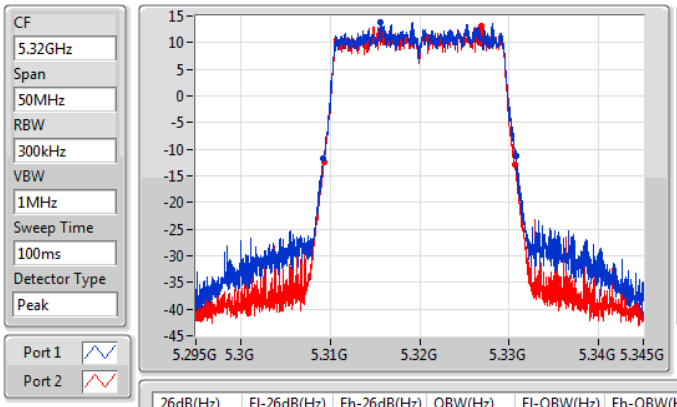

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.65M | 5.289225G | 5.310875G | 18.966M | 5.29043G | 5.309395G | Inf | 1 |
| 21.375M | 5.28925G | 5.310625G | 18.941M | 5.290455G | 5.309395G | Inf | 2 |

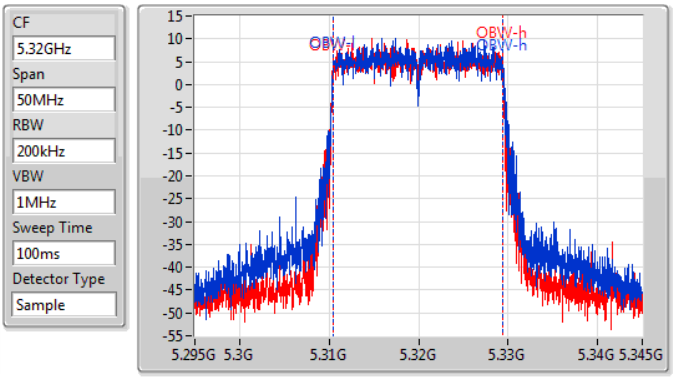
## 802.11ax HEW20_Nss2,(MCS0)_2TX

**EBW**

### 5320MHz

22/07/2019



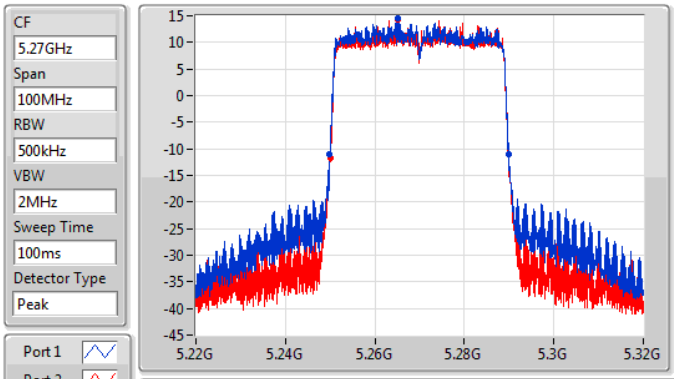

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.525M | 5.30925G | 5.330775G | 18.941M | 5.31048G | 5.32942G | Inf | 1 |
| 21.35M | 5.3093G | 5.33065G | 18.941M | 5.310455G | 5.329395G | Inf | 2 |

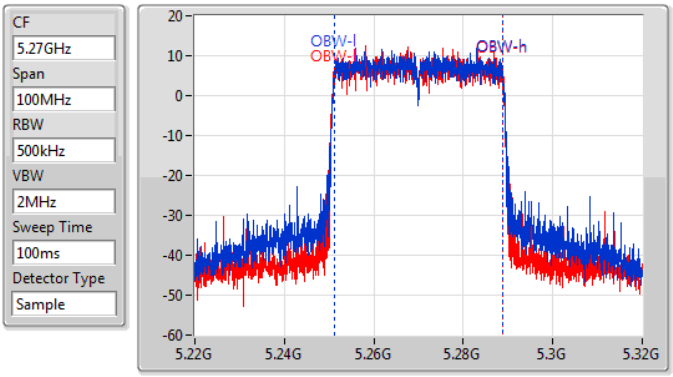
## 802.11ax HEW40_Nss2,(MCS0)_2TX

**EBW**

### 5270MHz

22/07/2019



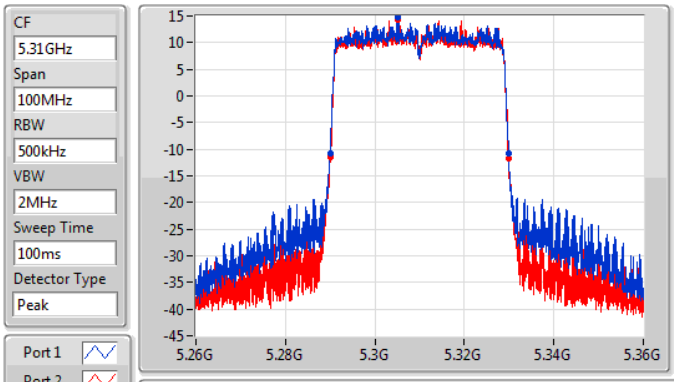

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 40.15M | 5.24985G | 5.29G | 37.631M | 5.251159G | 5.288791G | Inf | 1 |
| 40M | 5.24995G | 5.28995G | 37.581M | 5.251109G | 5.288691G | Inf | 2 |

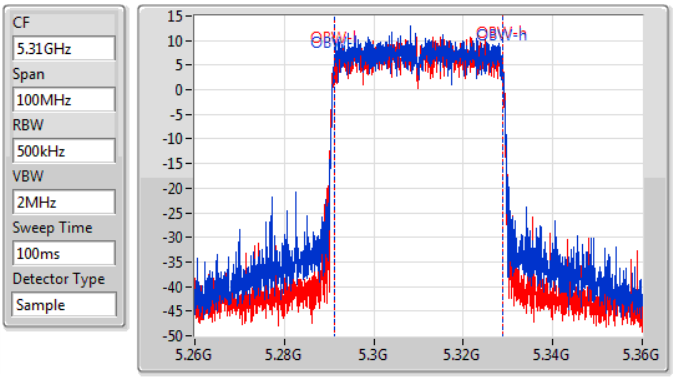
## 802.11ax HEW40_Nss2,(MCS0)_2TX

**EBW**

**5310MHz**

22/07/2019



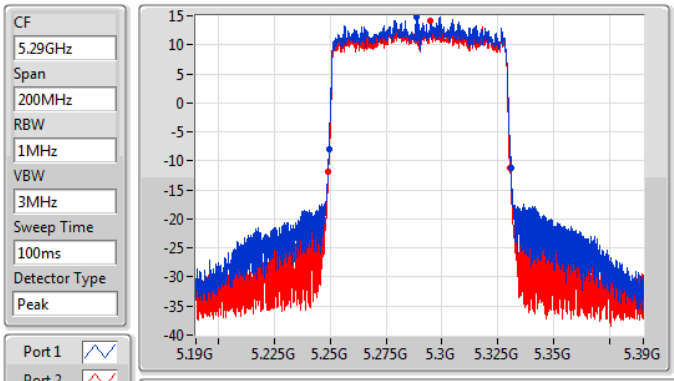

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 40M | 5.28995G | 5.32995G | 37.581M | 5.291109G | 5.328691G | Inf | 1 |
| 39.95M | 5.28995G | 5.3299G | 37.581M | 5.291109G | 5.328691G | Inf | 2 |

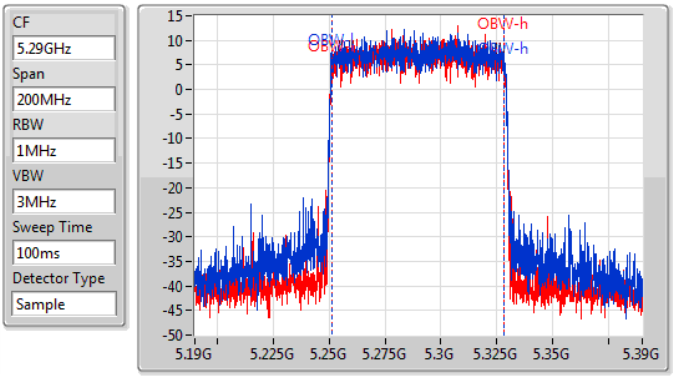
## 802.11ax HEW80_Nss2,(MCS0)_2TX

**EBW**

**5290MHz**

22/07/2019



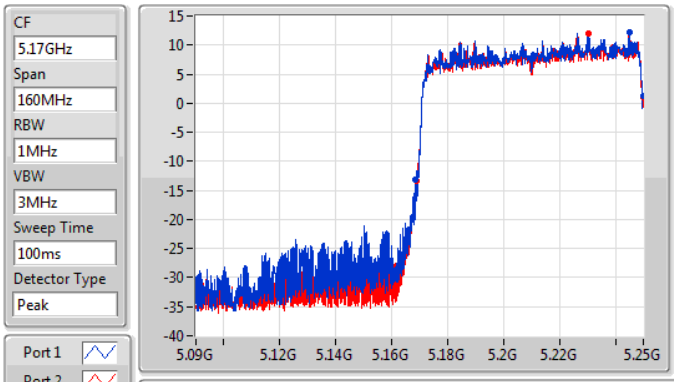

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.5M | 5.2494G | 5.3309G | 77.161M | 5.251219G | 5.328381G | Inf | 1 |
| 81.5M | 5.2491G | 5.3306G | 76.762M | 5.251519G | 5.328281G | Inf | 2 |

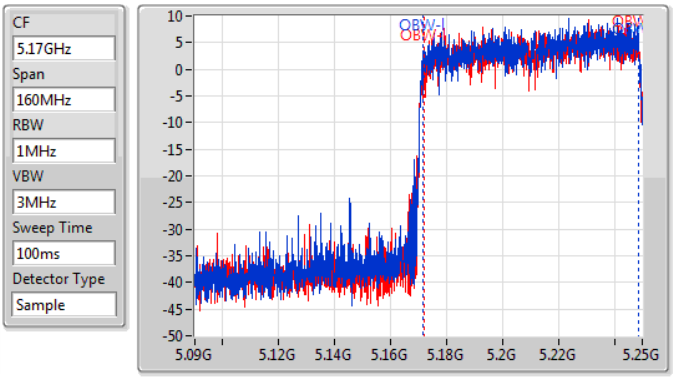
## 802.11ax HEW160_Nss2,(MCS0)_2TX

## EBW

## 5250MHz Straddle 5.15-5.25GHz

22/07/2019



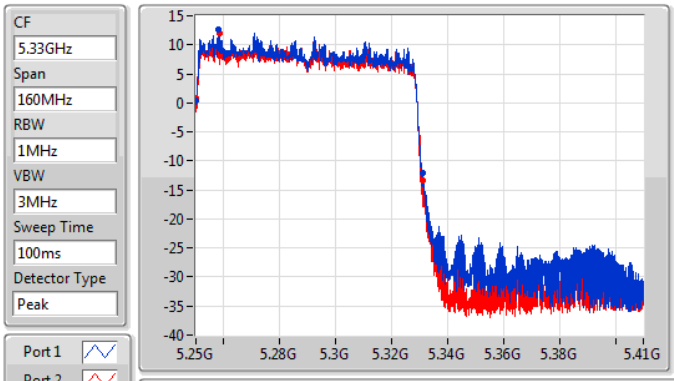

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.36M | 5.16864G | 5.25G | 77.081M | 5.171679G | 5.248761G | Inf | 1 |
| 81.12M | 5.16888G | 5.25G | 76.922M | 5.171839G | 5.248761G | Inf | 2 |

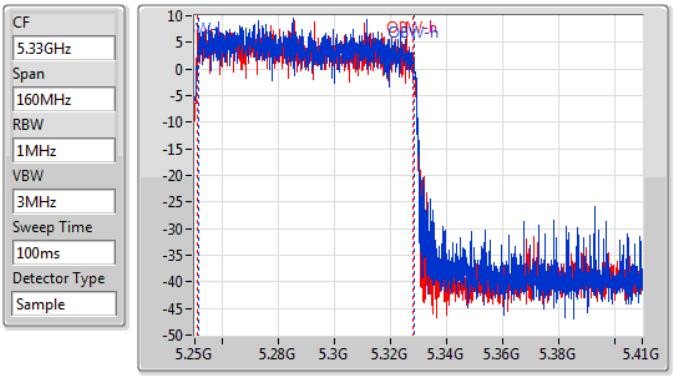
## 802.11ax HEW160_Nss2,(MCS0)_2TX

## EBW

## 5250MHz Straddle 5.25-5.35GHz

22/07/2019




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 80.96M | 5.25G | 5.33096G | 77.081M | 5.251159G | 5.328241G | Inf | 1 |
| 81.04M | 5.25G | 5.33104G | 77.081M | 5.251079G | 5.328161G | Inf | 2 |

**For 4T1S**
**Summary**

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| 5.15-5.25GHz | - | - | - | - | - |
| 802.11ax HEW160-BF_Nss1,(MCS0)_4TX | 81.36M | 77.001M | 77M0D1D | 80.88M | 77.001M |
| 5.25-5.35GHz | - | - | - | - | - |
| 802.11a_Nss1,(6Mbps)_4TX | 21.675M | 16.617M | 16M6D1D | 21.35M | 16.517M |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 21.85M | 19.015M | 19M0D1D | 21.325M | 18.941M |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | 40M | 37.631M | 37M6D1D | 39.8M | 37.481M |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | 81.9M | 77.061M | 77M1D1D | 81.3M | 76.962M |
| 802.11ax HEW160-BF_Nss1,(MCS0)_4TX | 81.36M | 77.161M | 77M2D1D | 80.88M | 77.081M |

**Max-N dB** = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
**Max-OBW** = Maximum99% occupied bandwidth;
**Min-N dB** = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
**Min-OBW** = Minimum 99% occupied bandwidth;

## Result

| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) | Port 2-N dB (Hz) | Port 2-OBW (Hz) | Port 3-N dB (Hz) | Port 3-OBW (Hz) | Port 4-N dB (Hz) | Port 4-OBW (Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a_Nss1,(6Mbps)_4TX | - | - | - | - | - | - | - | - | - | - |
| 5260MHz | Pass | Inf | 21.35M | 16.592M | 21.675M | 16.567M | 21.575M | 16.592M | 21.55M | 16.592M |
| 5300MHz | Pass | Inf | 21.45M | 16.517M | 21.675M | 16.592M | 21.55M | 16.567M | 21.5M | 16.592M |
| 5320MHz | Pass | Inf | 21.425M | 16.542M | 21.625M | 16.617M | 21.575M | 16.592M | 21.525M | 16.542M |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - | - | - |
| 5260MHz | Pass | Inf | 21.525M | 18.941M | 21.575M | 18.966M | 21.85M | 18.966M | 21.35M | 18.941M |
| 5300MHz | Pass | Inf | 21.625M | 18.941M | 21.675M | 19.015M | 21.775M | 18.966M | 21.325M | 18.966M |
| 5320MHz | Pass | Inf | 21.575M | 19.015M | 21.65M | 18.966M | 21.85M | 19.015M | 21.325M | 18.991M |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - | - | - |
| 5270MHz | Pass | Inf | 40M | 37.481M | 39.8M | 37.631M | 40M | 37.631M | 39.95M | 37.581M |
| 5310MHz | Pass | Inf | 40M | 37.581M | 39.8M | 37.531M | 39.95M | 37.531M | 39.85M | 37.581M |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - | - | - |
| 5290MHz | Pass | Inf | 81.6M | 76.962M | 81.3M | 77.061M | 81.9M | 77.061M | 81.3M | 76.962M |
| 802.11ax HEW160-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | Inf | 81.36M | 77.001M | 81.2M | 77.001M | 80.88M | 77.001M | 81.2M | 77.001M |
| 5250MHz Straddle 5.25-5.35GHz | Pass | Inf | 81.36M | 77.081M | 80.88M | 77.161M | 81.04M | 77.081M | 81.04M | 77.081M |

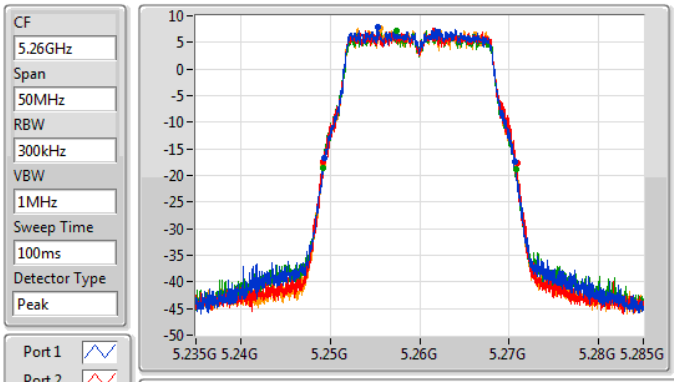
**Port X-N dB** = Port **X** 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
**Port X-OBW** = Port **X** 99% occupied bandwidth;

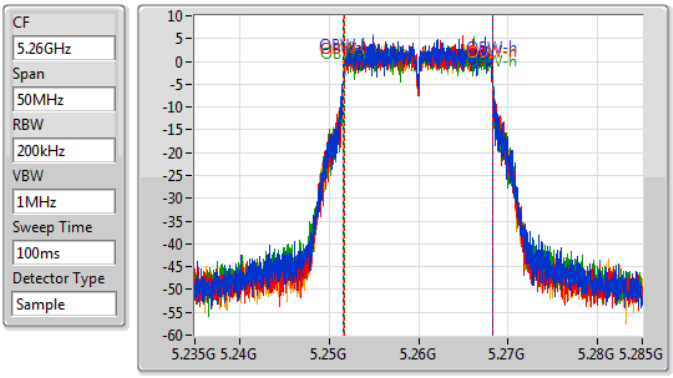
## 802.11a_Nss1,(6Mbps)_4TX

## EBW

### 5260MHz

18/07/2019



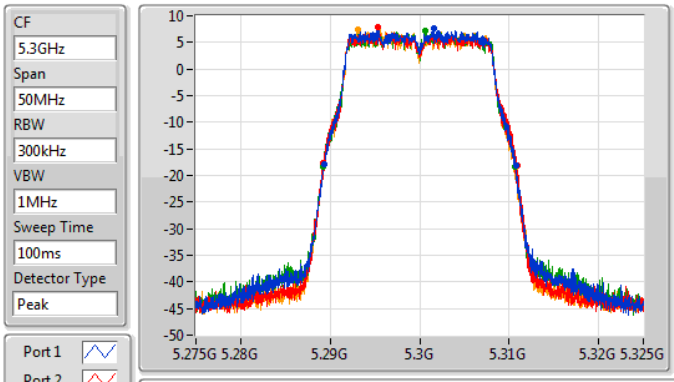

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.35M | 5.24935G | 5.2707G | 16.592M | 5.251629G | 5.268221G | Inf | 1 |
| 21.675M | 5.2492G | 5.270875G | 16.567M | 5.251654G | 5.268221G | Inf | 2 |
| 21.575M | 5.249175G | 5.27075G | 16.592M | 5.251654G | 5.268246G | Inf | 3 |
| 21.55M | 5.249225G | 5.270775G | 16.592M | 5.251629G | 5.268221G | Inf | 4 |

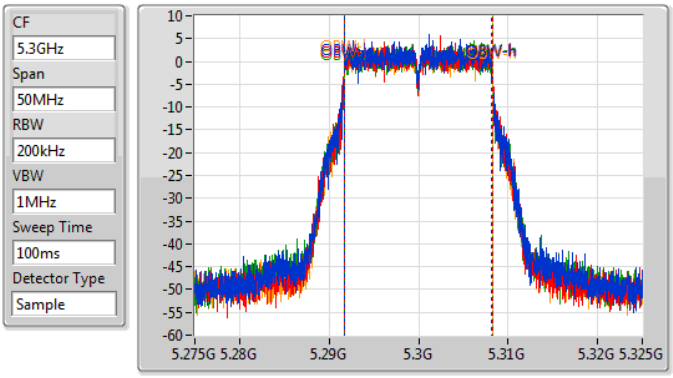
## 802.11a_Nss1,(6Mbps)_4TX

## EBW

### 5300MHz

18/07/2019



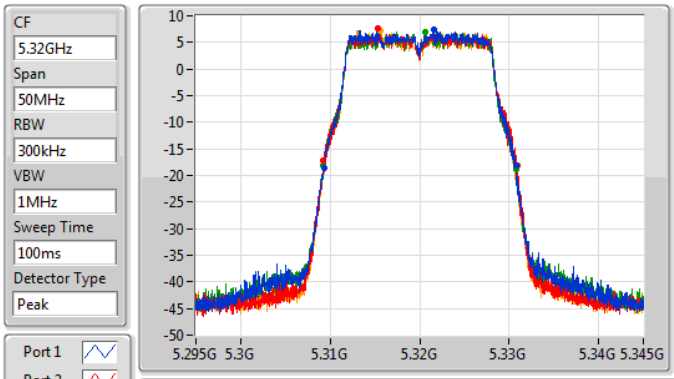

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.45M | 5.2893G | 5.31075G | 16.517M | 5.291679G | 5.308196G | Inf | 1 |
| 21.675M | 5.289225G | 5.3109G | 16.592M | 5.291654G | 5.308246G | Inf | 2 |
| 21.55M | 5.28915G | 5.3107G | 16.567M | 5.291654G | 5.308221G | Inf | 3 |
| 21.5M | 5.289275G | 5.310775G | 16.592M | 5.291654G | 5.308246G | Inf | 4 |

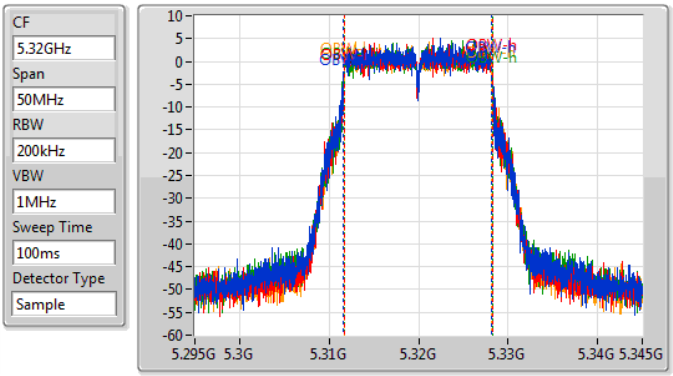
## 802.11a_Nss1,(6Mbps)_4TX

**EBW**

**5320MHz**

18/07/2019



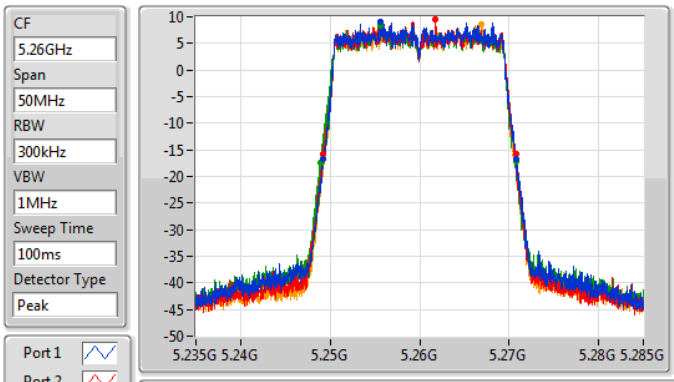

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.425M | 5.3093G | 5.330725G | 16.542M | 5.311629G | 5.328171G | Inf | 1 |
| 21.625M | 5.30925G | 5.330875G | 16.617M | 5.311654G | 5.328271G | Inf | 2 |
| 21.575M | 5.309175G | 5.33075G | 16.592M | 5.311654G | 5.328246G | Inf | 3 |
| 21.525M | 5.309275G | 5.3308G | 16.542M | 5.311654G | 5.328196G | Inf | 4 |

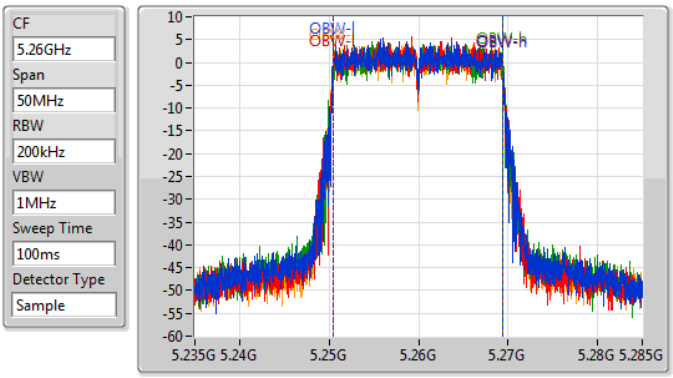
## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX

**EBW**

**5260MHz**

18/07/2019



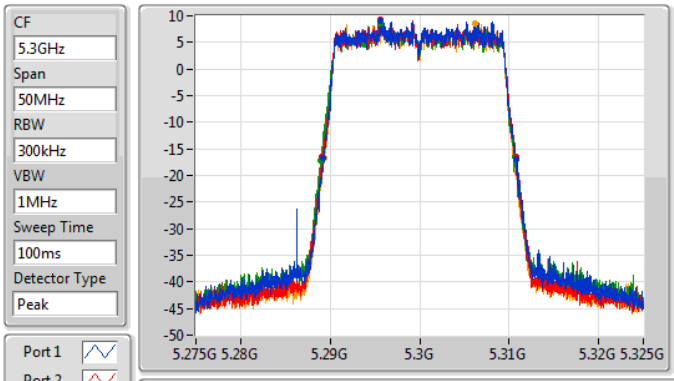



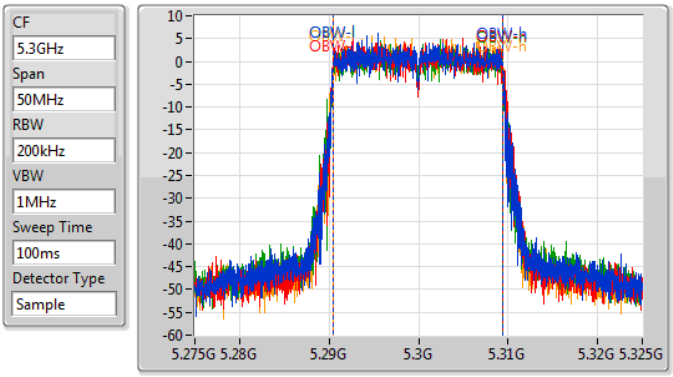

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.525M | 5.249275G | 5.2708G | 18.941M | 5.250455G | 5.269395G | Inf | 1 |
| 21.575M | 5.2492G | 5.270775G | 18.966M | 5.250455G | 5.26942G | Inf | 2 |
| 21.85M | 5.2489G | 5.27075G | 18.966M | 5.250455G | 5.26942G | Inf | 3 |
| 21.35M | 5.249275G | 5.270625G | 18.941M | 5.250455G | 5.269395G | Inf | 4 |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

### 5300MHz

18/07/2019



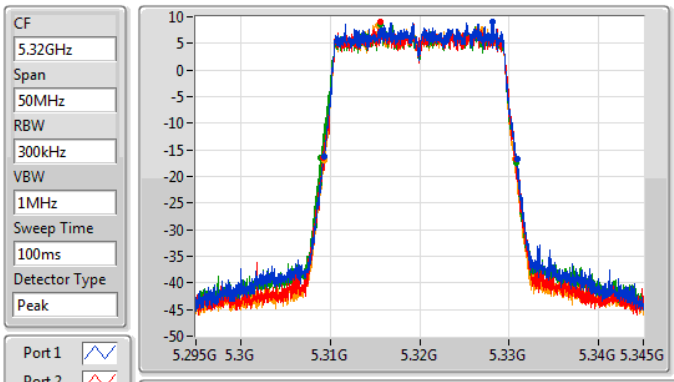



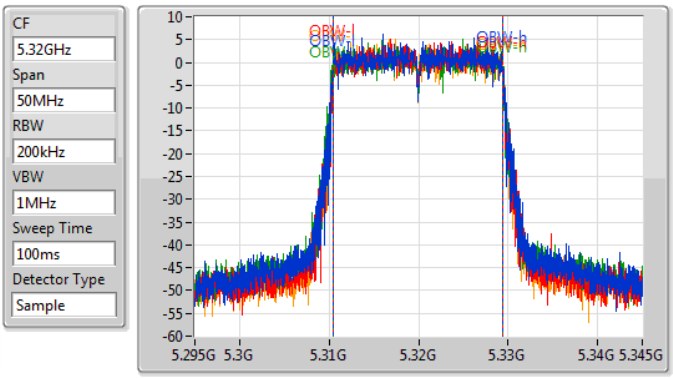

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.625M | 5.289225G | 5.31085G | 18.941M | 5.290455G | 5.309395G | Inf | 1 |
| 21.675M | 5.289125G | 5.3108G | 19.015M | 5.29043G | 5.309445G | Inf | 2 |
| 21.775M | 5.288925G | 5.3107G | 18.966M | 5.29043G | 5.309395G | Inf | 3 |
| 21.325M | 5.2893G | 5.310625G | 18.966M | 5.290455G | 5.30942G | Inf | 4 |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

### 5320MHz

18/07/2019



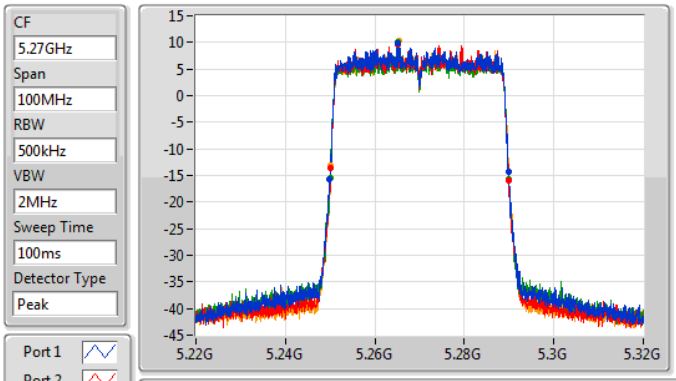



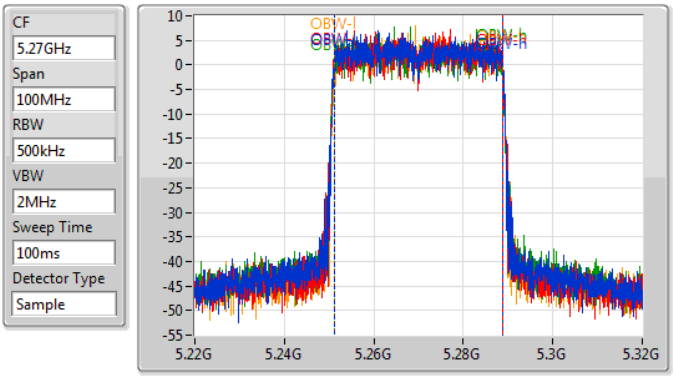

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.575M | 5.3093G | 5.330875G | 19.015M | 5.31043G | 5.329445G | Inf | 1 |
| 21.65M | 5.30915G | 5.3308G | 18.966M | 5.31048G | 5.329445G | Inf | 2 |
| 21.85M | 5.308975G | 5.330825G | 19.015M | 5.310405G | 5.32942G | Inf | 3 |
| 21.325M | 5.3093G | 5.330625G | 18.991M | 5.310455G | 5.329445G | Inf | 4 |

## 802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

### 5270MHz

18/07/2019



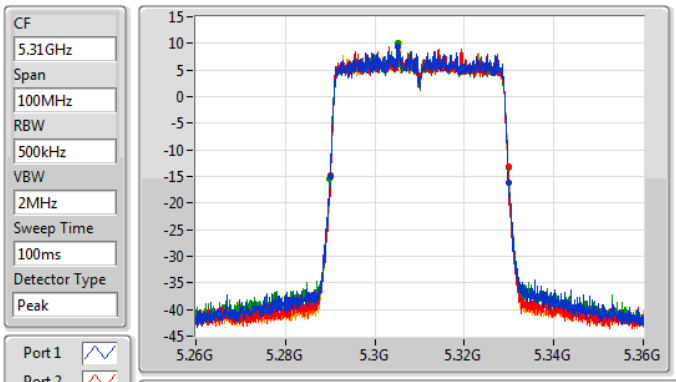



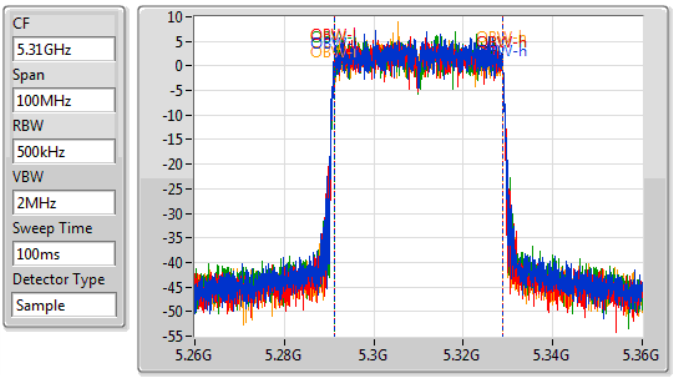

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 40M | 5.24985G | 5.28985G | 37.481M | 5.251209G | 5.288691G | Inf | 1 |
| 39.8M | 5.25005G | 5.28985G | 37.631M | 5.251109G | 5.288741G | Inf | 2 |
| 40M | 5.24995G | 5.28995G | 37.631M | 5.251109G | 5.288741G | Inf | 3 |
| 39.95M | 5.2501G | 5.29005G | 37.581M | 5.251159G | 5.288741G | Inf | 4 |

## 802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

### 5310MHz

18/07/2019



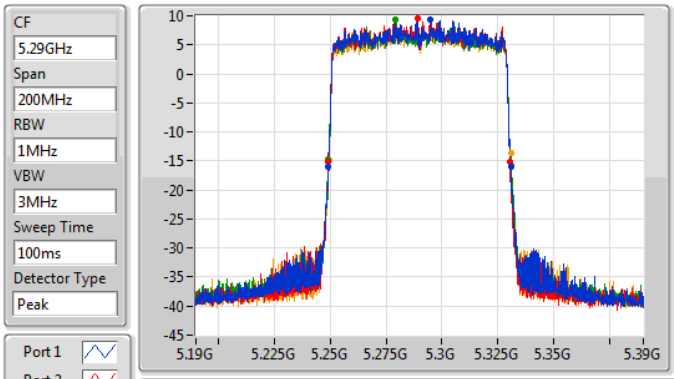



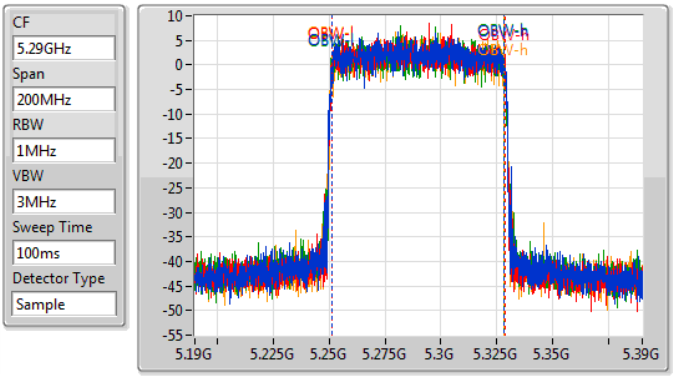

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 40M | 5.28995G | 5.32995G | 37.581M | 5.291159G | 5.328741G | Inf | 1 |
| 39.8M | 5.29G | 5.3298G | 37.531M | 5.291209G | 5.328741G | Inf | 2 |
| 39.95M | 5.28985G | 5.3298G | 37.531M | 5.291159G | 5.328691G | Inf | 3 |
| 39.85M | 5.29G | 5.32985G | 37.581M | 5.291159G | 5.328741G | Inf | 4 |

## 802.11ax HEW80-BF_Nss1,(MCS0)_4TX EBW

## 5290MHz

18/07/2019



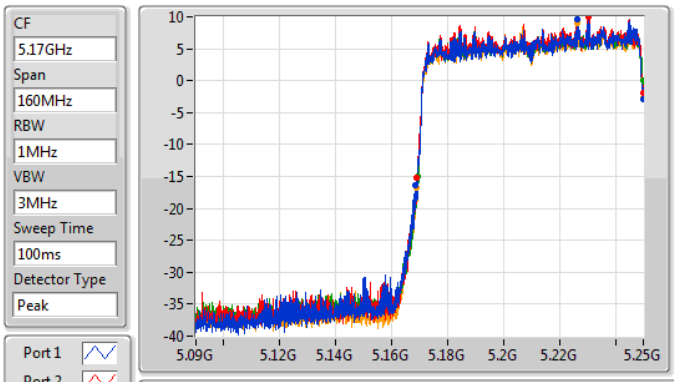



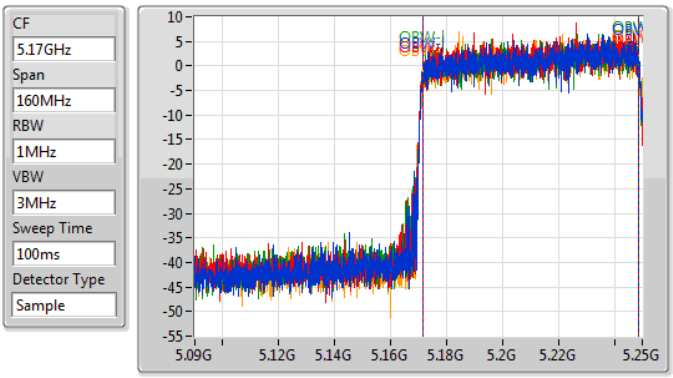

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.6M | 5.2492G | 5.3308G | 76.962M | 5.251419G | 5.328381G | Inf | 1 |
| 81.3M | 5.2492G | 5.3305G | 77.061M | 5.251419G | 5.328481G | Inf | 2 |
| 81.9M | 5.2491G | 5.331G | 77.061M | 5.251219G | 5.328281G | Inf | 3 |
| 81.3M | 5.2494G | 5.3307G | 76.962M | 5.251419G | 5.328381G | Inf | 4 |

## 802.11ax HEW160-BF_Nss1,(MCS0)_4TX EBW

## 5250MHz Straddle 5.15-5.25GHz

18/07/2019




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.36M | 5.16864G | 5.25G | 77.001M | 5.171679G | 5.248681G | Inf | 1 |
| 81.2M | 5.1688G | 5.25G | 77.001M | 5.171679G | 5.248681G | Inf | 2 |
| 80.88M | 5.16912G | 5.25G | 77.001M | 5.171759G | 5.248761G | Inf | 3 |
| 81.2M | 5.1688G | 5.25G | 77.001M | 5.171759G | 5.248761G | Inf | 4 |

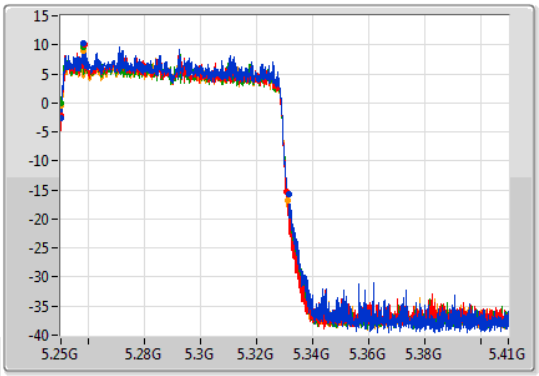
## 802.11ax HEW160-BF_Nss1,(MCS0)_4TX

## EBW

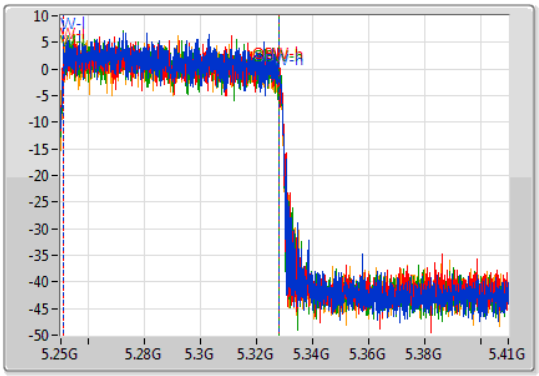
## 5250MHz Straddle 5.25-5.35GHz

18/07/2019

CF 5.33GHz
Span 160MHz
RBW 1MHz
VBW 3MHz
Sweep Time 100ms
Detector Type Peak




CF 5.33GHz
Span 160MHz
RBW 1MHz
VBW 3MHz
Sweep Time 100ms
Detector Type Sample




Port 1
Port 2
Port 3
Port 4

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.36M | 5.25G | 5.33136G | 77.081M | 5.251G | 5.328081G | Inf | 1 |
| 80.88M | 5.25G | 5.33088G | 77.161M | 5.251G | 5.328161G | Inf | 2 |
| 81.04M | 5.25G | 5.33104G | 77.081M | 5.251079G | 5.328161G | Inf | 3 |
| 81.04M | 5.25G | 5.33104G | 77.081M | 5.251079G | 5.328161G | Inf | 4 |

**For 4T2S**
**Summary**

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| 5.15-5.25GHz | - | - | - | - | - |
| 802.11ax HEW160-BF_Nss2,(MCS0)_4TX | 81.28M | 77.321M | 77M3D1D | 80.96M | 77.001M |
| 5.25-5.35GHz | - | - | - | - | - |
| 802.11ax HEW20-BF_Nss2,(MCS0)_4TX | 21.925M | 18.991M | 19M0D1D | 21.325M | 18.916M |
| 802.11ax HEW40-BF_Nss2,(MCS0)_4TX | 40.15M | 37.681M | 37M7D1D | 39.7M | 37.431M |
| 802.11ax HEW80-BF_Nss2,(MCS0)_4TX | 81.9M | 77.161M | 77M2D1D | 81.1M | 76.862M |
| 802.11ax HEW160-BF_Nss2,(MCS0)_4TX | 81.36M | 77.161M | 77M2D1D | 80.8M | 77.001M |

**Max-N dB** = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
**Max-OBW** = Maximum99% occupied bandwidth;
**Min-N dB** = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
**Min-OBW** = Minimum 99% occupied bandwidth;

## Result

| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) | Port 2-N dB (Hz) | Port 2-OBW (Hz) | Port 3-N dB (Hz) | Port 3-OBW (Hz) | Port 4-N dB (Hz) | Port 4-OBW (Hz) |
|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ax HEW20-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - | - | - |
| 5260MHz | Pass | Inf | 21.475M | 18.966M | 21.7M | 18.966M | 21.775M | 18.966M | 21.325M | 18.916M |
| 5300MHz | Pass | Inf | 21.525M | 18.941M | 21.6M | 18.966M | 21.8M | 18.966M | 21.475M | 18.941M |
| 5320MHz | Pass | Inf | 21.625M | 18.966M | 21.725M | 18.991M | 21.925M | 18.966M | 21.325M | 18.991M |
| 802.11ax HEW40-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - | - | - |
| 5270MHz | Pass | Inf | 40.15M | 37.681M | 40M | 37.581M | 40.1M | 37.531M | 39.7M | 37.431M |
| 5310MHz | Pass | Inf | 40M | 37.581M | 39.9M | 37.481M | 39.85M | 37.581M | 40M | 37.581M |
| 802.11ax HEW80-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - | - | - |
| 5290MHz | Pass | Inf | 81.7M | 77.161M | 81.1M | 76.862M | 81.9M | 77.061M | 81.8M | 76.862M |
| 802.11ax HEW160-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | Inf | 81.28M | 77.321M | 80.96M | 77.161M | 81.2M | 77.001M | 81.12M | 77.161M |
| 5250MHz Straddle 5.25-5.35GHz | Pass | Inf | 81.36M | 77.001M | 80.8M | 77.001M | 81.2M | 77.161M | 81.12M | 77.161M |

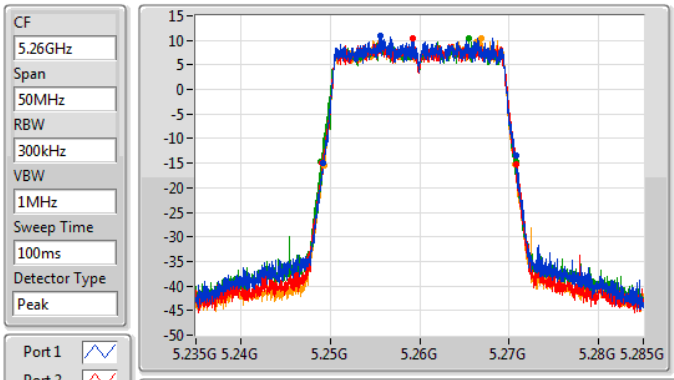
**Port X-N dB** = Port **X** 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
**Port X-OBW** = Port **X** 99% occupied bandwidth;

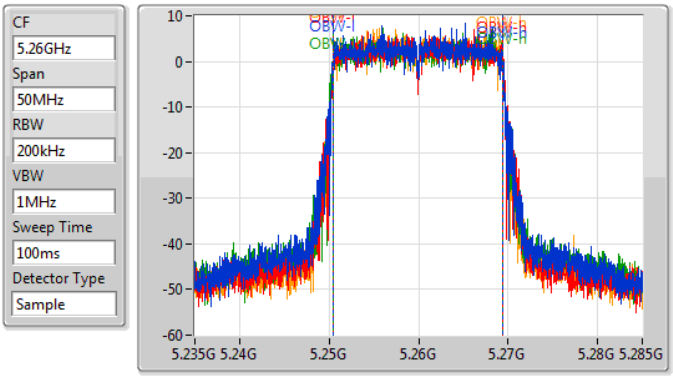
## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

**EBW**

### 5260MHz

19/07/2019



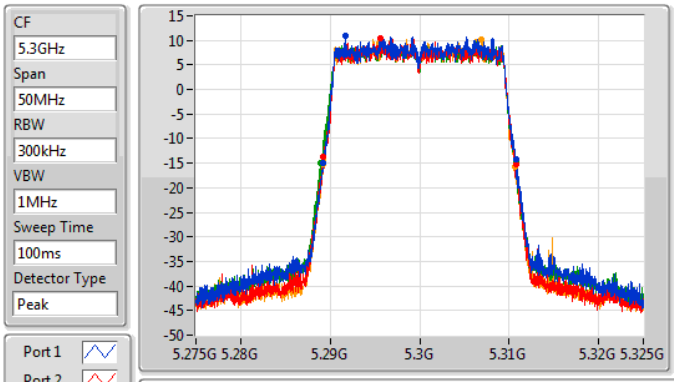

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.475M | 5.24925G | 5.270725G | 18.966M | 5.250455G | 5.26942G | Inf | 1 |
| 21.7M | 5.249125G | 5.270825G | 18.966M | 5.25048G | 5.269445G | Inf | 2 |
| 21.775M | 5.24895G | 5.270725G | 18.966M | 5.25043G | 5.269395G | Inf | 3 |
| 21.325M | 5.2493G | 5.270625G | 18.916M | 5.25048G | 5.269395G | Inf | 4 |

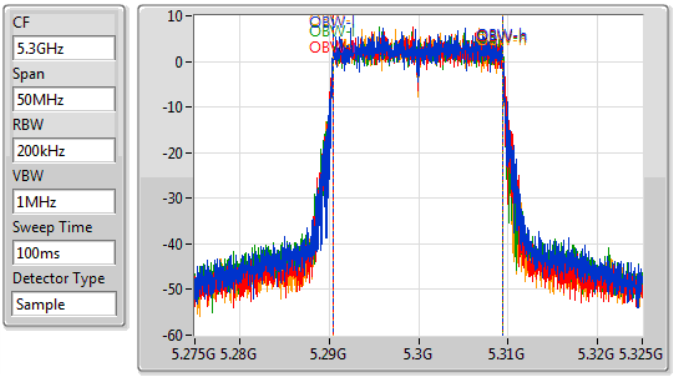
## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

**EBW**

### 5300MHz

19/07/2019



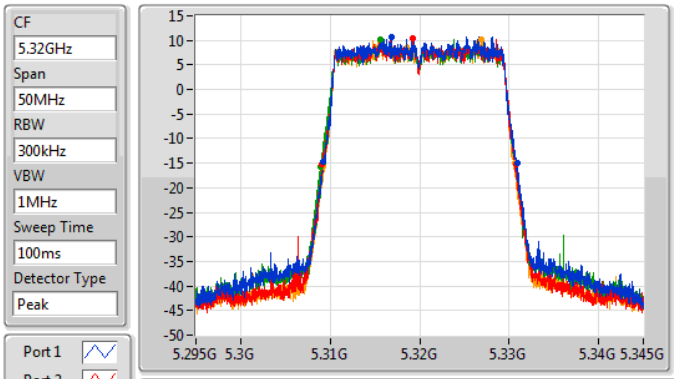



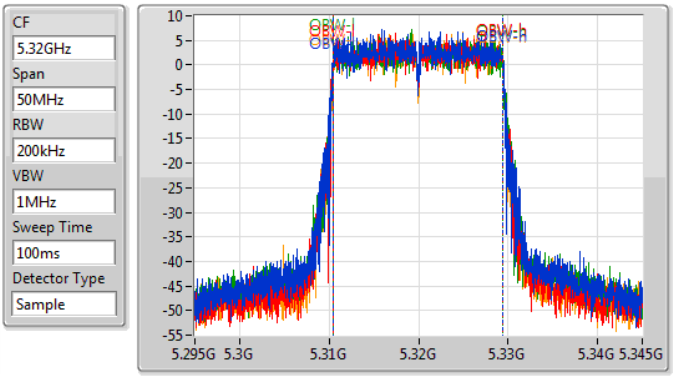

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.525M | 5.28925G | 5.310775G | 18.941M | 5.290455G | 5.309395G | Inf | 1 |
| 21.6M | 5.289225G | 5.310825G | 18.966M | 5.290455G | 5.30942G | Inf | 2 |
| 21.8M | 5.288925G | 5.310725G | 18.966M | 5.290455G | 5.30942G | Inf | 3 |
| 21.475M | 5.28915G | 5.310625G | 18.941M | 5.290455G | 5.309395G | Inf | 4 |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX EBW

## 5320MHz

19/07/2019



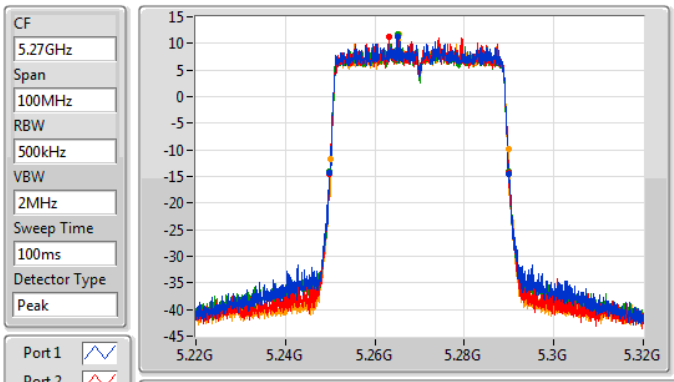



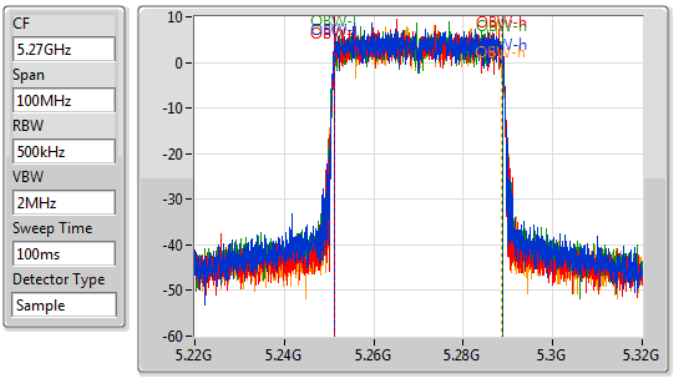

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 21.625M | 5.30925G | 5.330875G | 18.966M | 5.310455G | 5.32942G | Inf | 1 |
| 21.725M | 5.3091G | 5.330825G | 18.991M | 5.310455G | 5.329445G | Inf | 2 |
| 21.925M | 5.3089G | 5.330825G | 18.966M | 5.31048G | 5.329445G | Inf | 3 |
| 21.325M | 5.309275G | 5.3306G | 18.991M | 5.31043G | 5.32942G | Inf | 4 |

## 802.11ax HEW40-BF_Nss2,(MCS0)_4TX EBW

## 5270MHz

19/07/2019



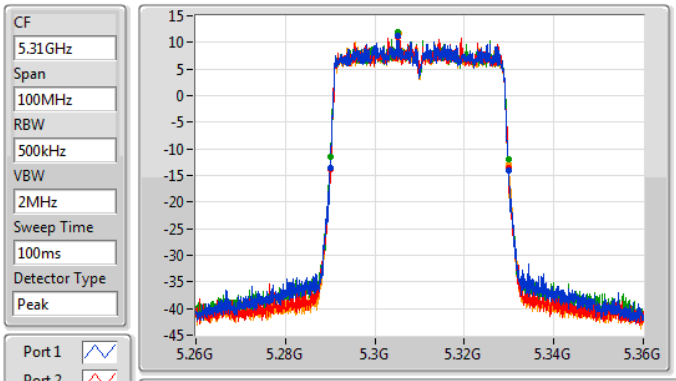

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 40.15M | 5.24985G | 5.29G | 37.681M | 5.251109G | 5.288791G | Inf | 1 |
| 40M | 5.2499G | 5.2899G | 37.581M | 5.251209G | 5.288791G | Inf | 2 |
| 40.1M | 5.24985G | 5.28995G | 37.531M | 5.251159G | 5.288691G | Inf | 3 |
| 39.7M | 5.2501G | 5.2898G | 37.431M | 5.251209G | 5.288641G | Inf | 4 |

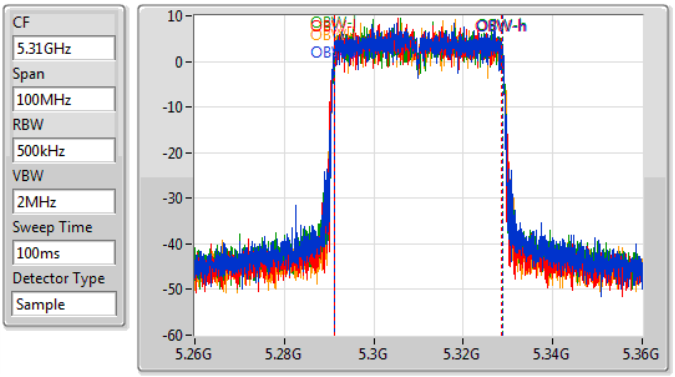
## 802.11ax HEW40-BF_Nss2,(MCS0)_4TX

**EBW**

**5310MHz**

19/07/2019



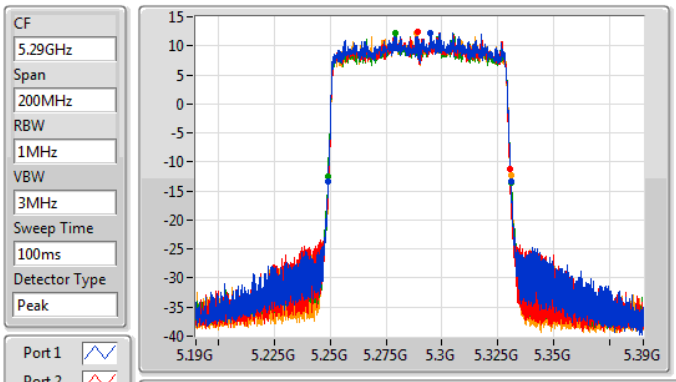

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 40M | 5.28995G | 5.32995G | 37.581M | 5.291159G | 5.328741G | Inf | 1 |
| 39.9M | 5.29G | 5.3299G | 37.481M | 5.291159G | 5.328641G | Inf | 2 |
| 39.85M | 5.29G | 5.32985G | 37.581M | 5.291159G | 5.328741G | Inf | 3 |
| 40M | 5.28995G | 5.32995G | 37.581M | 5.291159G | 5.328741G | Inf | 4 |

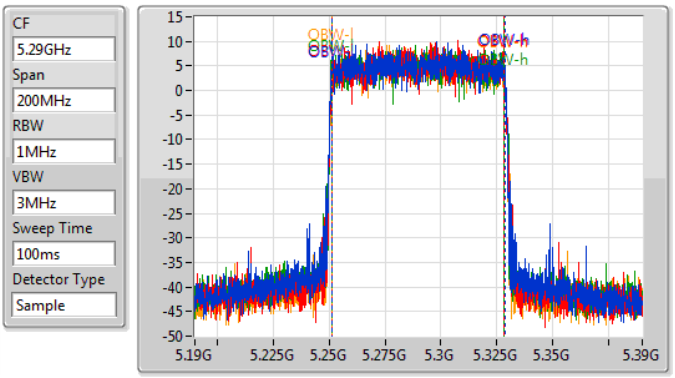
## 802.11ax HEW80-BF_Nss2,(MCS0)_4TX

**EBW**

**5290MHz**

19/07/2019



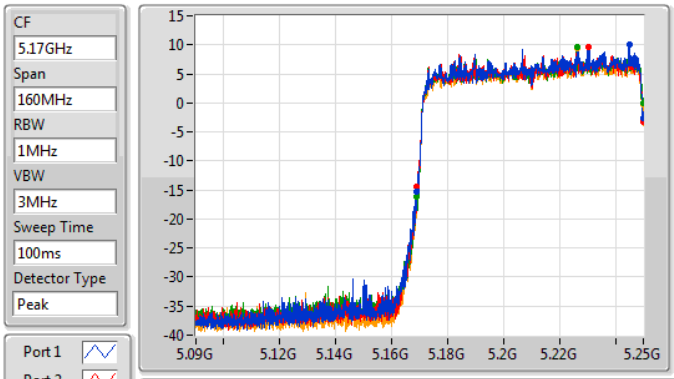

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.7M | 5.2491G | 5.3308G | 77.161M | 5.251319G | 5.328481G | Inf | 1 |
| 81.1M | 5.2492G | 5.3303G | 76.862M | 5.251419G | 5.328281G | Inf | 2 |
| 81.9M | 5.2491G | 5.331G | 77.061M | 5.251219G | 5.328281G | Inf | 3 |
| 81.8M | 5.2491G | 5.3309G | 76.862M | 5.251519G | 5.328381G | Inf | 4 |

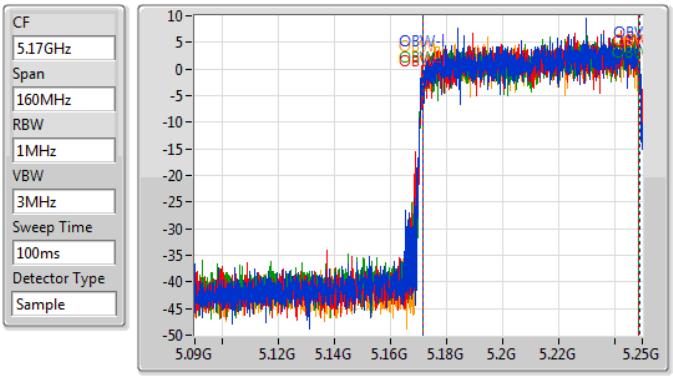
## 802.11ax HEW160-BF_Nss2,(MCS0)_4TX

## EBW

## 5250MHz Straddle 5.15-5.25GHz

19/07/2019



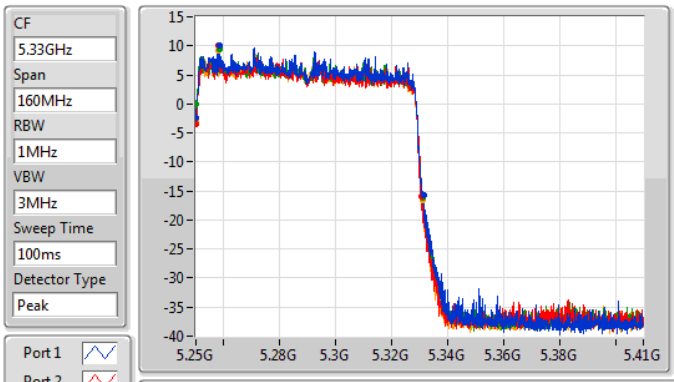

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.28M | 5.16872G | 5.25G | 77.321M | 5.171599G | 5.248921G | Inf | 1 |
| 80.96M | 5.16904G | 5.25G | 77.161M | 5.171679G | 5.248841G | Inf | 2 |
| 81.2M | 5.1688G | 5.25G | 77.001M | 5.171679G | 5.248681G | Inf | 3 |
| 81.12M | 5.16888G | 5.25G | 77.161M | 5.171759G | 5.248921G | Inf | 4 |

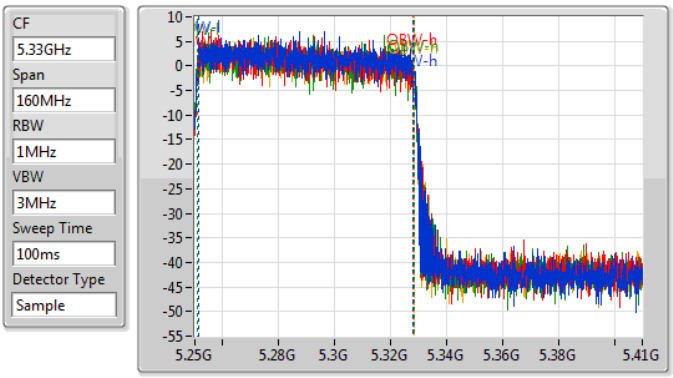
## 802.11ax HEW160-BF_Nss2,(MCS0)_4TX

## EBW

## 5250MHz Straddle 5.25-5.35GHz

19/07/2019




| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.36M | 5.25G | 5.33136G | 77.001M | 5.251159G | 5.328161G | Inf | 1 |
| 80.8M | 5.25G | 5.3308G | 77.001M | 5.251159G | 5.328161G | Inf | 2 |
| 81.2M | 5.25G | 5.3312G | 77.161M | 5.251079G | 5.328241G | Inf | 3 |
| 81.12M | 5.25G | 5.33112G | 77.161M | 5.251079G | 5.328241G | Inf | 4 |

**For 2T1S**
**Summary**

| Mode | Total Power (dBm) | Total Power (W) |
|---|---|---|
| 5.15-5.25GHz | - | - |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | 18.77 | 0.07534 |
| 5.25-5.35GHz | - | - |
| 802.11a_Nss1,(6Mbps)_2TX | 23.91 | 0.24604 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | 23.94 | 0.24774 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX | 23.97 | 0.24946 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX | 23.11 | 0.20464 |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | 18.69 | 0.07396 |

## Result

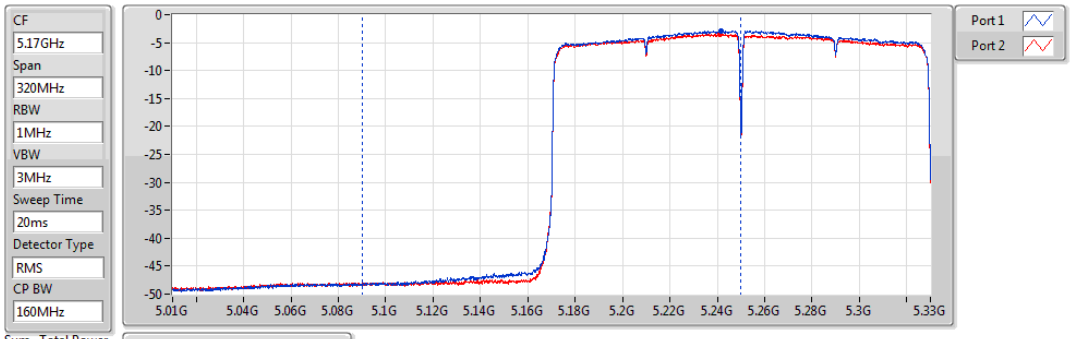
| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|---|---|---|---|---|---|---|
| 802.11a_Nss1,(6Mbps)_2TX | - | - | - | - | - | - |
| 5260MHz | Pass | 1.93 | 20.79 | 20.63 | 23.72 | 23.98 |
| 5300MHz | Pass | 1.93 | 21.06 | 20.73 | 23.91 | 23.98 |
| 5320MHz | Pass | 1.93 | 20.99 | 20.61 | 23.81 | 23.98 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5260MHz | Pass | 4.90 | 20.79 | 20.82 | 23.82 | 23.98 |
| 5300MHz | Pass | 4.90 | 21.19 | 20.61 | 23.92 | 23.98 |
| 5320MHz | Pass | 4.90 | 20.97 | 20.88 | 23.94 | 23.98 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5270MHz | Pass | 4.90 | 21.20 | 20.70 | 23.97 | 23.98 |
| 5310MHz | Pass | 4.90 | 21.09 | 20.74 | 23.93 | 23.98 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5290MHz | Pass | 4.90 | 20.27 | 19.93 | 23.11 | 23.98 |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | 4.85 | 15.96 | 15.54 | 18.77 | 30.00 |
| 5250MHz Straddle 5.25-5.35GHz | Pass | 4.90 | 16.01 | 15.32 | 18.69 | 23.98 |

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

**802.11ax HEW160-BF_Nss1,(MCS0)_2TX** **AV Power**

**5250MHz Straddle 5.15-5.25GHz**

19/07/2019



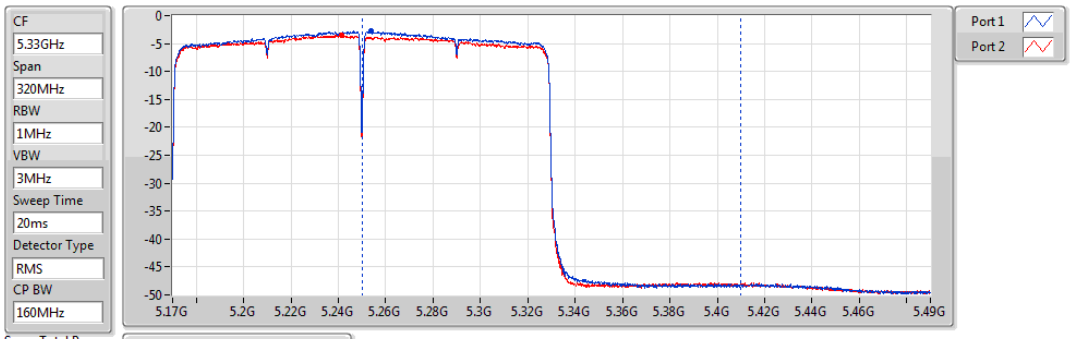

Sum=Total Power
PX=Port X

| Sum(dBm) | P1(dBm) | P2(dBm) |
|---|---|---|
| 18.77 | 15.96 | 15.54 |

**802.11ax HEW160-BF_Nss1,(MCS0)_2TX** **AV Power**

**5250MHz Straddle 5.25-5.35GHz**

19/07/2019




Sum=Total Power
PX=Port X

| Sum(dBm) | P1(dBm) | P2(dBm) |
|---|---|---|
| 18.69 | 16.01 | 15.32 |

**For 2T2S**
**Summary**

| Mode | Total Power (dBm) | Total Power (W) |
|---|---|---|
| 5.15-5.25GHz | - | - |
| 802.11ax HEW160_Nss2,(MCS0)_2TX | 21.87 | 0.15382 |
| 5.25-5.35GHz | - | - |
| 802.11ax HEW20_Nss2,(MCS0)_2TX | 23.96 | 0.24889 |
| 802.11ax HEW40_Nss2,(MCS0)_2TX | 23.96 | 0.24889 |
| 802.11ax HEW80_Nss2,(MCS0)_2TX | 23.91 | 0.24604 |
| 802.11ax HEW160_Nss2,(MCS0)_2TX | 21.88 | 0.15417 |

**Result**

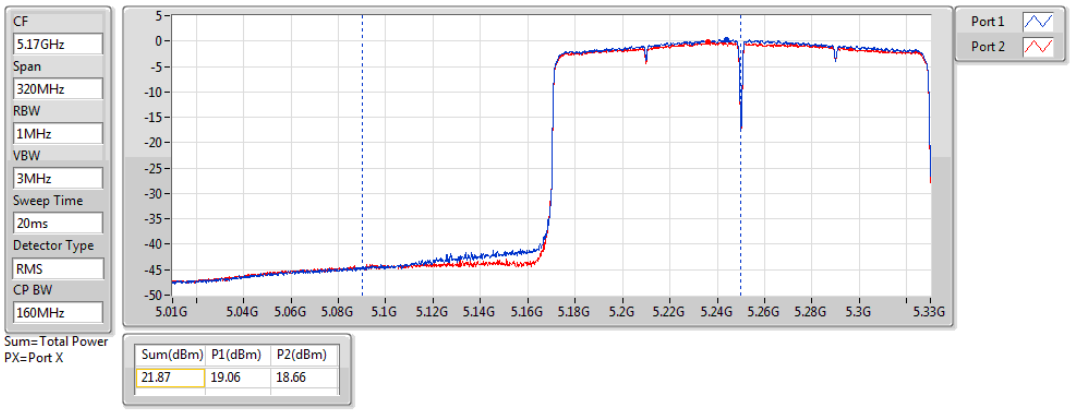
| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|---|---|---|---|---|---|---|
| 802.11ax HEW20_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5260MHz | Pass | 1.89 | 21.12 | 20.65 | 23.90 | 23.98 |
| 5300MHz | Pass | 1.89 | 21.18 | 20.6 | 23.91 | 23.98 |
| 5320MHz | Pass | 1.89 | 21.22 | 20.67 | 23.96 | 23.98 |
| 802.11ax HEW40_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5270MHz | Pass | 1.89 | 21.17 | 20.65 | 23.93 | 23.98 |
| 5310MHz | Pass | 1.89 | 21.19 | 20.69 | 23.96 | 23.98 |
| 802.11ax HEW80_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5290MHz | Pass | 1.89 | 21.21 | 20.57 | 23.91 | 23.98 |
| 802.11ax HEW160_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | 1.84 | 19.06 | 18.66 | 21.87 | 30.00 |
| 5250MHz Straddle 5.25-5.35GHz | Pass | 1.89 | 19.04 | 18.7 | 21.88 | 23.98 |

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

**802.11ax HEW160_Nss2,(MCS0)_2TX** **AV Power**

**5250MHz Straddle 5.15-5.25GHz**

22/07/2019

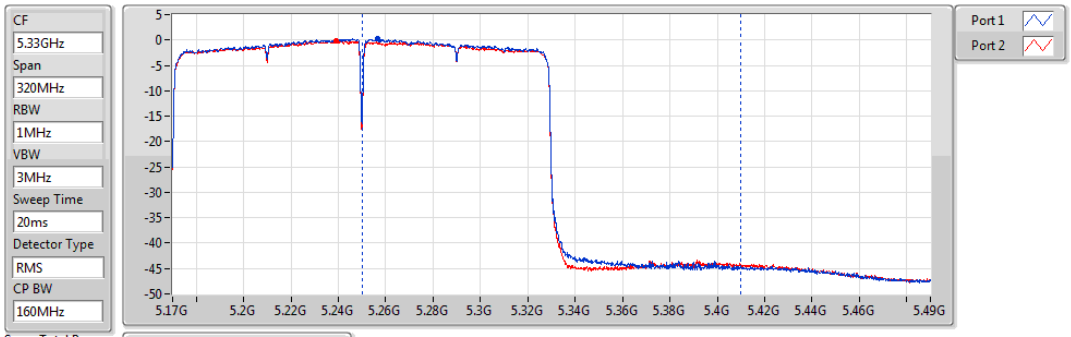



| Sum(dBm) | P1(dBm) | P2(dBm) |
|---|---|---|
| 21.87 | 19.06 | 18.66 |

**802.11ax HEW160_Nss2,(MCS0)_2TX** **AV Power**

**5250MHz Straddle 5.25-5.35GHz**

22/07/2019




| Sum(dBm) | P1(dBm) | P2(dBm) |
|---|---|---|
| 21.88 | 19.04 | 18.70 |

**For 4T1S**
**Summary**

| Mode | Total Power (dBm) | Total Power (W) |
|---|---|---|
| 5.15-5.25GHz | - | - |
| 802.11ax HEW160-BF_Nss1,(MCS0)_4TX | 22.15 | 0.16406 |
| 5.25-5.35GHz | - | - |
| 802.11a_Nss1,(6Mbps)_4TX | 22.10 | 0.16218 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 22.05 | 0.16032 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | 22.02 | 0.15922 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | 21.92 | 0.15560 |
| 802.11ax HEW160-BF_Nss1,(MCS0)_4TX | 22.04 | 0.15996 |

**Result**

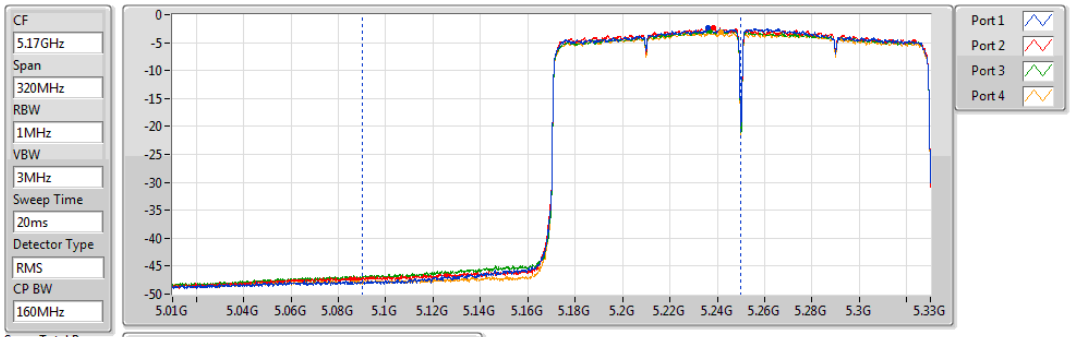
| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Port 3 (dBm) | Port 4 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|---|---|---|---|---|---|---|---|---|
| 802.11a_Nss1,(6Mbps)_4TX | - | - | - | - | - | - | - | - |
| 5260MHz | Pass | 1.93 | 16.53 | 16.12 | 15.60 | 15.81 | 22.05 | 23.98 |
| 5300MHz | Pass | 1.93 | 16.36 | 16.08 | 15.92 | 15.94 | 22.10 | 23.98 |
| 5320MHz | Pass | 1.93 | 16.38 | 16.05 | 15.99 | 15.78 | 22.08 | 23.98 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5260MHz | Pass | 7.91 | 15.91 | 16.17 | 15.72 | 15.91 | 21.95 | 22.07 |
| 5300MHz | Pass | 7.91 | 15.86 | 15.97 | 15.86 | 15.67 | 21.86 | 22.07 |
| 5320MHz | Pass | 7.91 | 16.28 | 16.17 | 15.79 | 15.87 | 22.05 | 22.07 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5270MHz | Pass | 7.91 | 16.13 | 15.99 | 15.98 | 15.89 | 22.02 | 22.07 |
| 5310MHz | Pass | 7.91 | 16.03 | 16.07 | 15.82 | 15.73 | 21.94 | 22.07 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5290MHz | Pass | 7.91 | 16.03 | 16.10 | 15.87 | 15.57 | 21.92 | 22.07 |
| 802.11ax HEW160-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | 7.86 | 16.24 | 16.41 | 16.04 | 15.82 | 22.15 | 28.14 |
| 5250MHz Straddle 5.25-5.35GHz | Pass | 7.91 | 16.39 | 16.08 | 15.97 | 15.59 | 22.04 | 22.07 |

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

**802.11ax HEW160-BF_Nss1,(MCS0)_4TX** **AV Power**

**5250MHz Straddle 5.15-5.25GHz**

23/07/2019



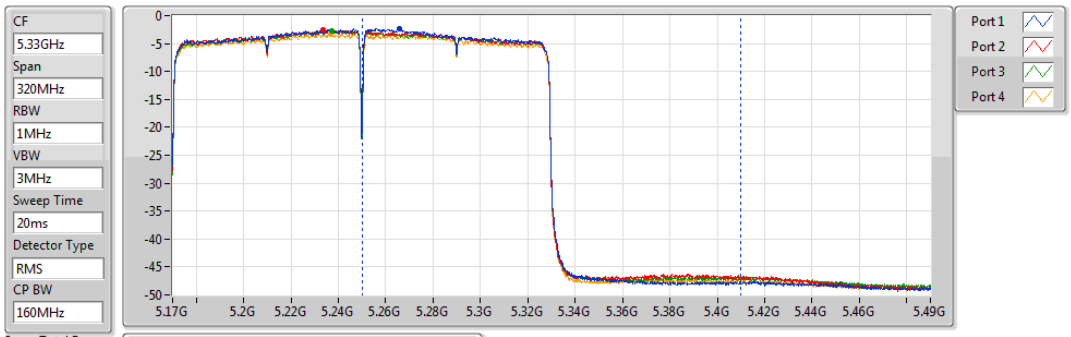

Sum=Total Power
PX=Port X

| Sum(dBm) | P1(dBm) | P2(dBm) | P3(dBm) | P4(dBm) |
|---|---|---|---|---|
| 22.15 | 16.24 | 16.41 | 16.04 | 15.82 |

**802.11ax HEW160-BF_Nss1,(MCS0)_4TX** **AV Power**

**5250MHz Straddle 5.25-5.35GHz**

23/07/2019




Sum=Total Power
PX=Port X

| Sum(dBm) | P1(dBm) | P2(dBm) | P3(dBm) | P4(dBm) |
|---|---|---|---|---|
| 22.04 | 16.39 | 16.08 | 15.97 | 15.59 |

**For 4T2S**
**Summary**

| Mode | Total Power (dBm) | Total Power (W) |
|---|---|---|
| 5.15-5.25GHz | - | - |
| 802.11ax HEW160-BF_Nss2,(MCS0)_4TX | 22.37 | 0.17258 |
| 5.25-5.35GHz | - | - |
| 802.11ax HEW20-BF_Nss2,(MCS0)_4TX | 23.93 | 0.24717 |
| 802.11ax HEW40-BF_Nss2,(MCS0)_4TX | 23.86 | 0.24322 |
| 802.11ax HEW80-BF_Nss2,(MCS0)_4TX | 23.88 | 0.24434 |
| 802.11ax HEW160-BF_Nss2,(MCS0)_4TX | 22.29 | 0.16943 |

**Result**

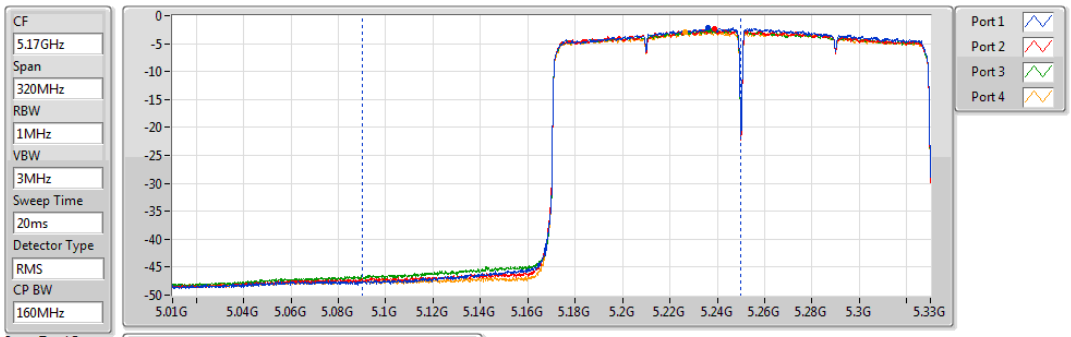
| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Port 3 (dBm) | Port 4 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|---|---|---|---|---|---|---|---|---|
| 802.11ax HEW20-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5260MHz | Pass | 4.90 | 18.06 | 17.81 | 17.70 | 17.83 | 23.87 | 23.98 |
| 5300MHz | Pass | 4.90 | 18.15 | 17.77 | 17.85 | 17.87 | 23.93 | 23.98 |
| 5320MHz | Pass | 4.90 | 18.09 | 17.87 | 17.79 | 17.61 | 23.86 | 23.98 |
| 802.11ax HEW40-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5270MHz | Pass | 4.90 | 17.97 | 17.80 | 17.73 | 17.74 | 23.83 | 23.98 |
| 5310MHz | Pass | 4.90 | 18.04 | 17.89 | 17.74 | 17.68 | 23.86 | 23.98 |
| 802.11ax HEW80-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5290MHz | Pass | 4.90 | 18.11 | 17.93 | 17.70 | 17.70 | 23.88 | 23.98 |
| 802.11ax HEW160-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | 4.85 | 16.55 | 16.41 | 16.34 | 16.10 | 22.37 | 30.00 |
| 5250MHz Straddle 5.25-5.35GHz | Pass | 4.90 | 16.75 | 16.14 | 16.16 | 15.98 | 22.29 | 23.98 |

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

**802.11ax HEW160-BF_Nss2,(MCS0)_4TX** **AV Power**

**5250MHz Straddle 5.15-5.25GHz**

19/07/2019

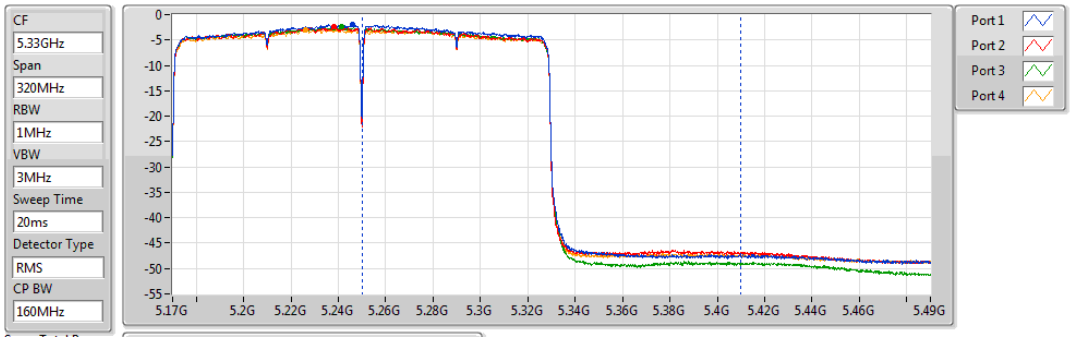



| Sum(dBm) | P1(dBm) | P2(dBm) | P3(dBm) | P4(dBm) |
|---|---|---|---|---|
| 22.37 | 16.55 | 16.41 | 16.34 | 16.10 |

**802.11ax HEW160-BF_Nss2,(MCS0)_4TX** **AV Power**

**5250MHz Straddle 5.25-5.35GHz**

19/07/2019




| Sum(dBm) | P1(dBm) | P2(dBm) | P3(dBm) | P4(dBm) |
|---|---|---|---|---|
| 22.29 | 16.75 | 16.14 | 16.16 | 15.98 |

**For 2T1S**
**Summary**

| Mode | PD (dBm/RBW) |
|---|---|
| 5.15-5.25GHz | - |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | -0.27 |
| 5.25-5.35GHz | - |
| 802.11a_Nss1,(6Mbps)_2TX | 10.85 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | 10.37 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX | 7.50 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX | 3.86 |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | -0.42 |

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

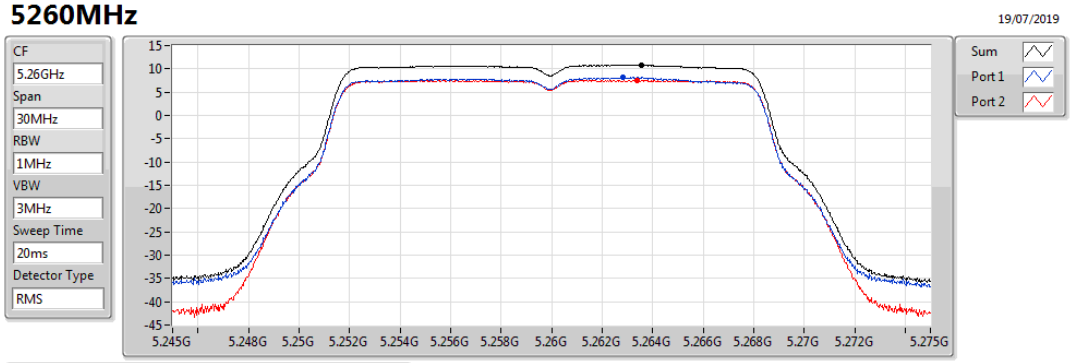
## Result

| Mode | Result | DG (dBi) | Port 1 (dBm/RBW) | Port 2 (dBm/RBW) | PD (dBm/RBW) | PD Limit (dBm/RBW) |
|---|---|---|---|---|---|---|
| 802.11a_Nss1,(6Mbps)_2TX | - | - | - | - | - | - |
| 5260MHz | Pass | 4.90 | 8.15 | 7.53 | 10.85 | 11.00 |
| 5300MHz | Pass | 4.90 | 8.12 | 7.61 | 10.79 | 11.00 |
| 5320MHz | Pass | 4.90 | 7.99 | 7.62 | 10.75 | 11.00 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5260MHz | Pass | 4.90 | 7.47 | 7.41 | 10.37 | 11.00 |
| 5300MHz | Pass | 4.90 | 7.50 | 7.16 | 10.27 | 11.00 |
| 5320MHz | Pass | 4.90 | 7.46 | 7.24 | 10.29 | 11.00 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5270MHz | Pass | 4.90 | 4.79 | 4.32 | 7.50 | 11.00 |
| 5310MHz | Pass | 4.90 | 4.76 | 4.26 | 7.44 | 11.00 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5290MHz | Pass | 4.90 | 1.21 | 0.71 | 3.86 | 11.00 |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | 4.85 | -3.04 | -3.50 | -0.27 | 17.00 |
| 5250MHz Straddle 5.25-5.35GHz | Pass | 4.90 | -2.99 | -3.82 | -0.42 | 11.00 |

**DG** = Directional Gain; **RBW** = 500 kHz 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 X power density;

## 802.11a_Nss1,(6Mbps)_2TX PSD

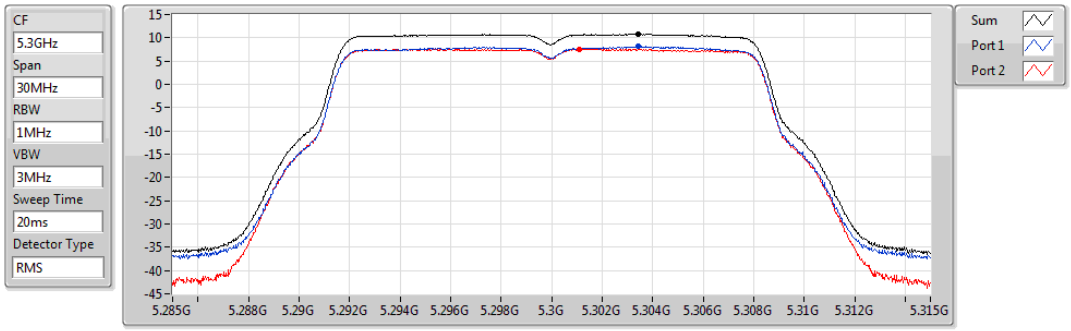
### 5260MHz




| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.85 | 10.85 | 8.15 | 7.53 |

## 802.11a_Nss1,(6Mbps)_2TX PSD

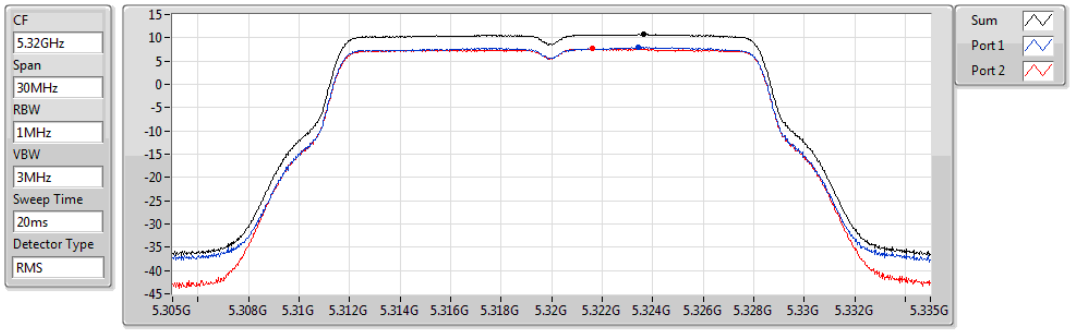
### 5300MHz




| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.79 | 10.79 | 8.12 | 7.61 |

## 802.11a_Nss1,(6Mbps)_2TX PSD

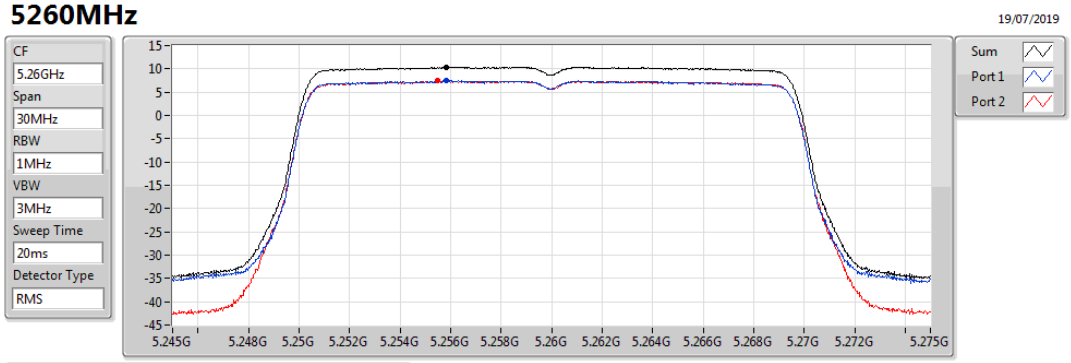
### 5320MHz




| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.75 | 10.75 | 7.99 | 7.62 |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

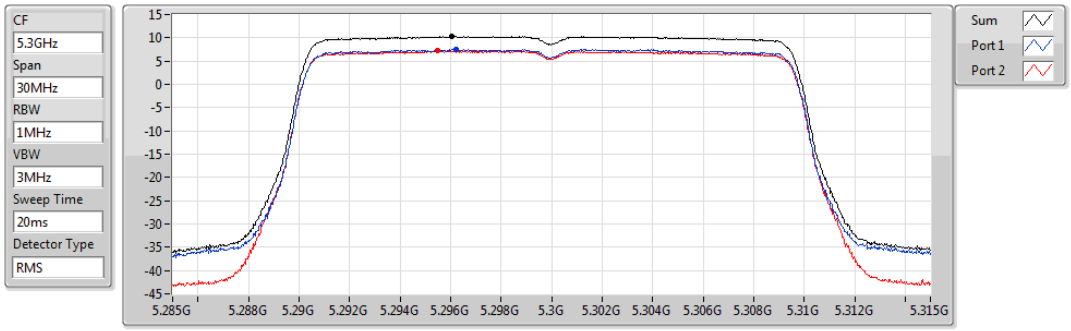
### 5260MHz




| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.37 | 10.37 | 7.47 | 7.41 |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

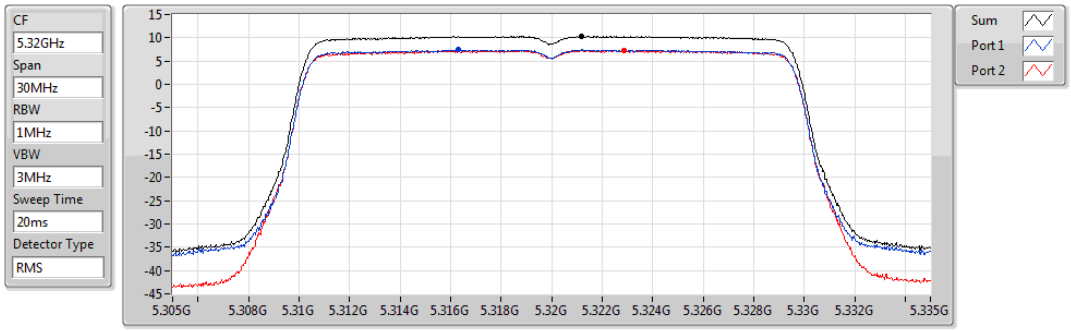
### 5300MHz




| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.27 | 10.27 | 7.50 | 7.16 |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX PSD

### 5320MHz

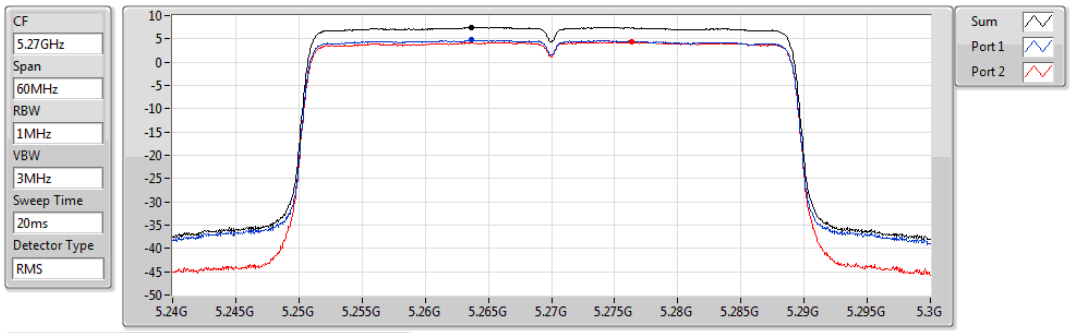



| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.29 | 10.29 | 7.46 | 7.24 |

## 802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

### 5270MHz

19/07/2019

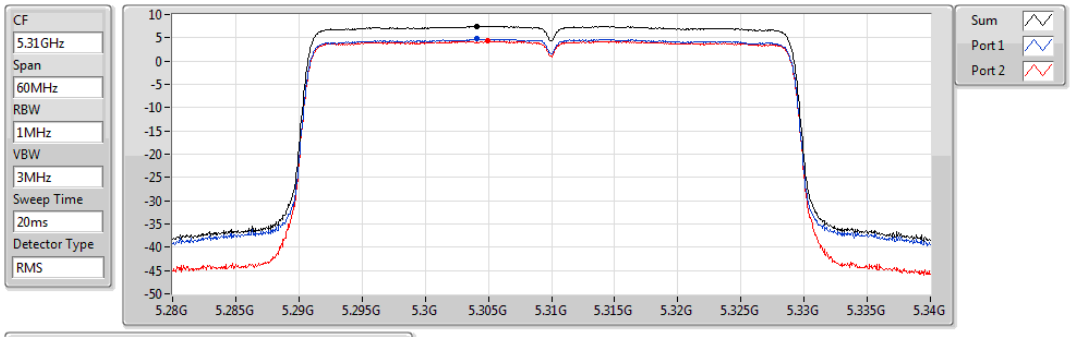



| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 7.50 | 7.50 | 4.79 | 4.32 |

## 802.11ax HEW40-BF_Nss1,(MCS0)_2TX PSD

### 5310MHz

19/07/2019

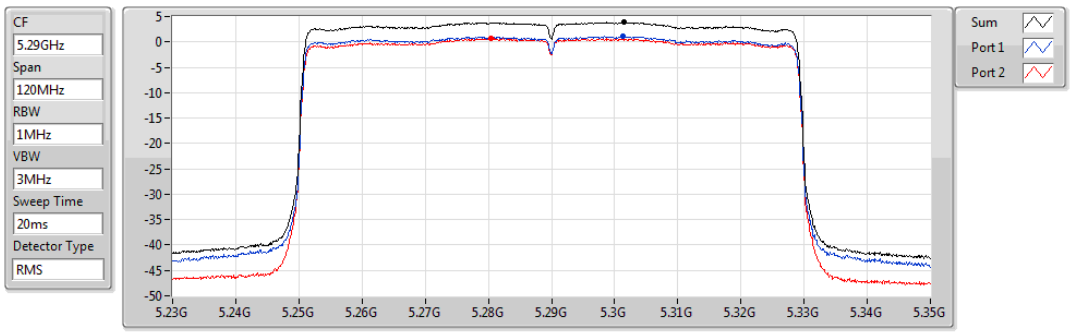



| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 7.44 | 7.44 | 4.76 | 4.26 |

## 802.11ax HEW80-BF_Nss1,(MCS0)_2TX PSD

### 5290MHz

19/07/2019

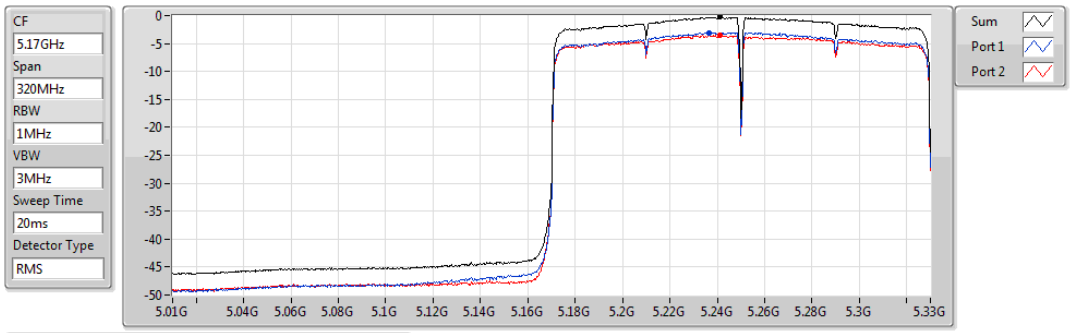



| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 3.86 | 3.86 | 1.21 | 0.71 |

## 802.11ax HEW160-BF_Nss1,(MCS0)_2TX PSD

### 5250MHz Straddle 5.15-5.25GHz

19/07/2019

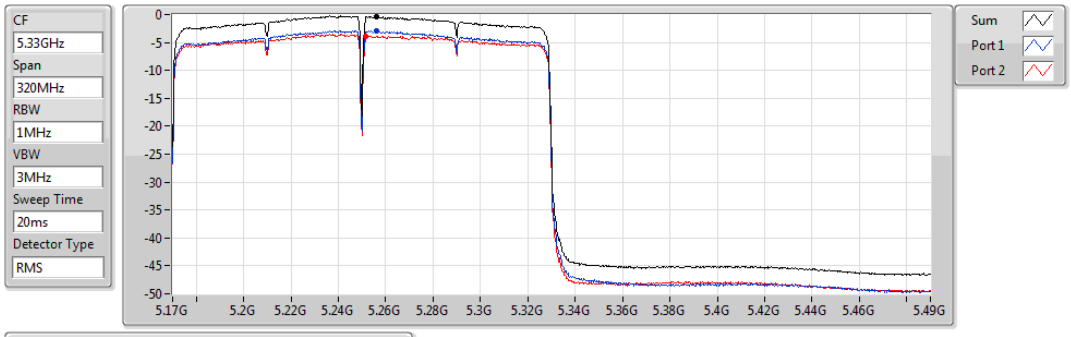



| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -0.27 | -0.27 | -3.04 | -3.50 |

## 802.11ax HEW160-BF_Nss1,(MCS0)_2TX PSD

### 5250MHz Straddle 5.25-5.35GHz

19/07/2019




| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -0.42 | -0.42 | -2.99 | -3.82 |

**For 2T2S**
**Summary**

| Mode | PD (dBm/RBW) |
|---|---|
| 5.15-5.25GHz | - |
| 802.11ax HEW160_Nss2,(MCS0)_2TX | 2.92 |
| 5.25-5.35GHz | - |
| 802.11ax HEW20_Nss2,(MCS0)_2TX | 10.26 |
| 802.11ax HEW40_Nss2,(MCS0)_2TX | 7.79 |
| 802.11ax HEW80_Nss2,(MCS0)_2TX | 4.95 |
| 802.11ax HEW160_Nss2,(MCS0)_2TX | 2.67 |

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

## Result

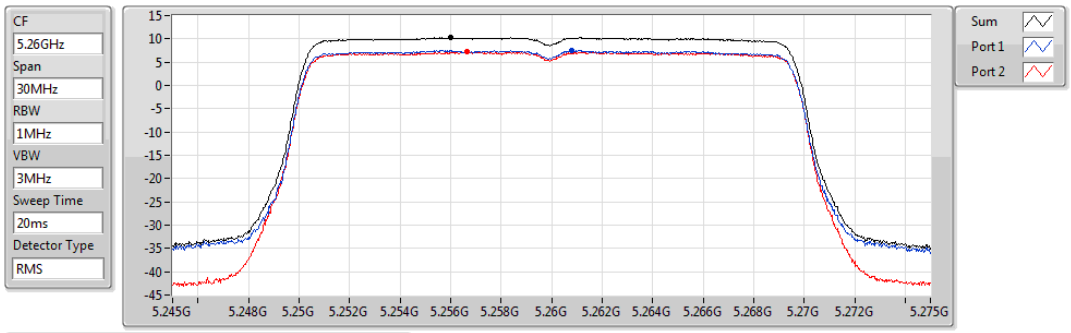
| Mode | Result | DG (dBi) | Port 1 (dBm/RBW) | Port 2 (dBm/RBW) | PD (dBm/RBW) | PD Limit (dBm/RBW) |
|---|---|---|---|---|---|---|
| 802.11ax HEW20_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5260MHz | Pass | 1.89 | 7.53 | 7.18 | 10.26 | 11.00 |
| 5300MHz | Pass | 1.89 | 7.57 | 7 | 10.20 | 11.00 |
| 5320MHz | Pass | 1.89 | 7.42 | 6.96 | 10.15 | 11.00 |
| 802.11ax HEW40_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5270MHz | Pass | 1.89 | 5.17 | 4.51 | 7.79 | 11.00 |
| 5310MHz | Pass | 1.89 | 5.15 | 4.55 | 7.77 | 11.00 |
| 802.11ax HEW80_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5290MHz | Pass | 1.89 | 2.34 | 1.8 | 4.95 | 11.00 |
| 802.11ax HEW160_Nss2,(MCS0)_2TX | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | 1.84 | 0.17 | -0.34 | 2.92 | 17.00 |
| 5250MHz Straddle 5.25-5.35GHz | Pass | 1.89 | 0.13 | -0.73 | 2.67 | 11.00 |

**DG** = Directional Gain; **RBW** = 500 kHz 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 X power density;

## 802.11ax HEW20_Nss2,(MCS0)_2TX PSD

### 5260MHz

22/07/2019

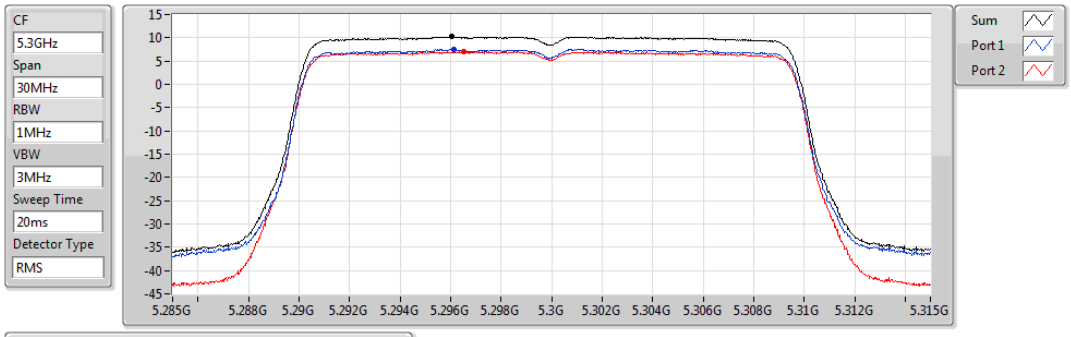



| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.26 | 10.26 | 7.53 | 7.18 |

## 802.11ax HEW20_Nss2,(MCS0)_2TX PSD

### 5300MHz

22/07/2019

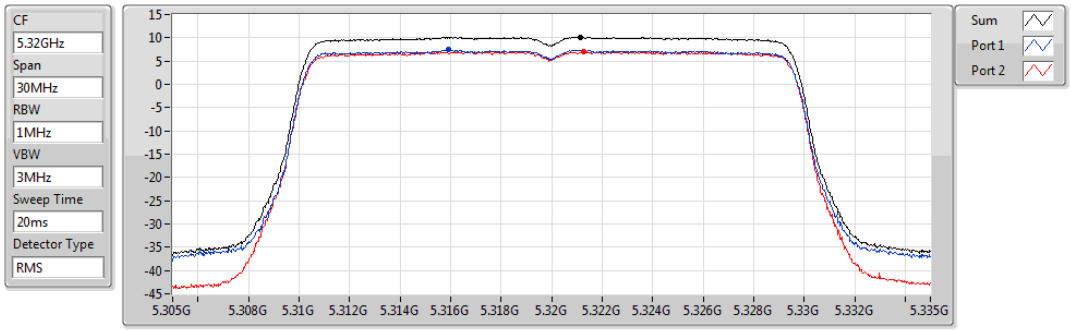



| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.20 | 10.20 | 7.57 | 7.00 |

## 802.11ax HEW20_Nss2,(MCS0)_2TX PSD

### 5320MHz

22/07/2019

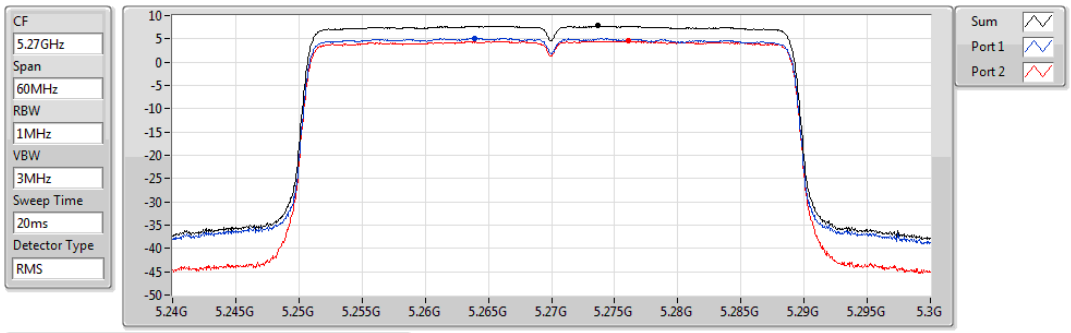



| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.15 | 10.15 | 7.42 | 6.96 |

## 802.11ax HEW40_Nss2,(MCS0)_2TX PSD

### 5270MHz

22/07/2019

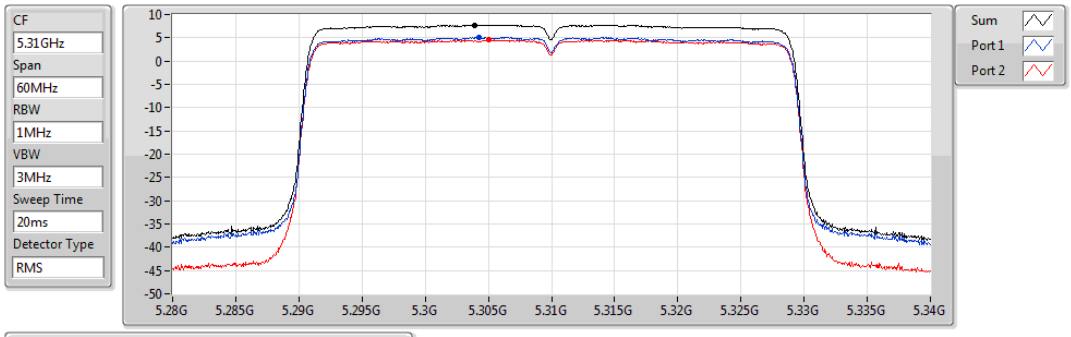



| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 7.79 | 7.79 | 5.17 | 4.51 |

## 802.11ax HEW40_Nss2,(MCS0)_2TX PSD

### 5310MHz

22/07/2019

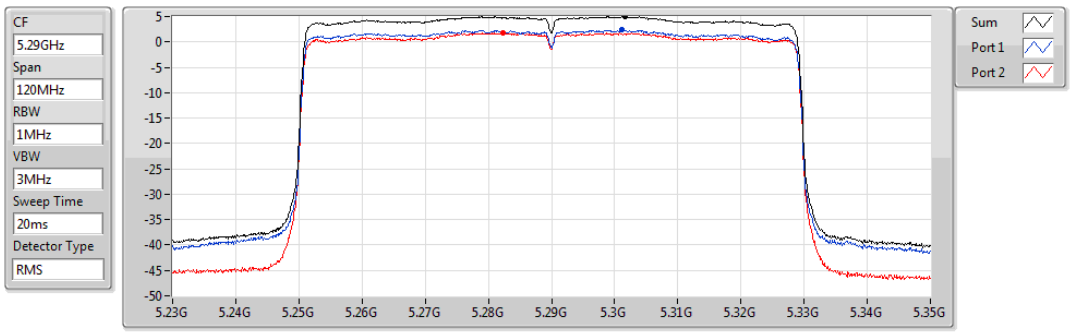



| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 7.77 | 7.77 | 5.15 | 4.55 |

## 802.11ax HEW80_Nss2,(MCS0)_2TX PSD

### 5290MHz

22/07/2019



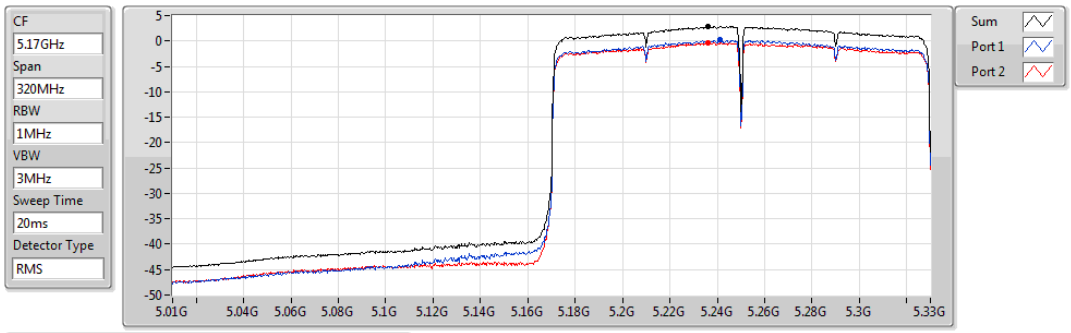

| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 4.95 | 4.95 | 2.34 | 1.80 |

## 802.11ax HEW160_Nss2,(MCS0)_2TX

**PSD**

### 5250MHz Straddle 5.15-5.25GHz

22/07/2019



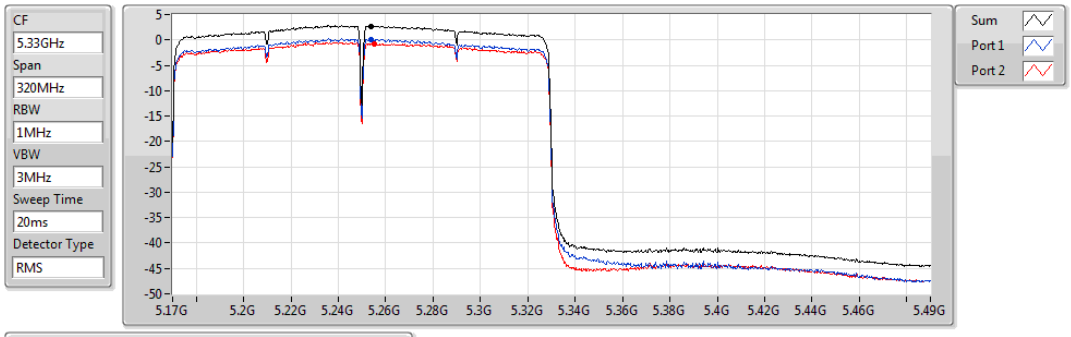

| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 2.92 | 2.92 | 0.17 | -0.34 |

## 802.11ax HEW160_Nss2,(MCS0)_2TX

**PSD**

### 5250MHz Straddle 5.25-5.35GHz

22/07/2019




| Sum | PD | Port 1 | Port 2 |
|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 2.67 | 2.67 | 0.13 | -0.73 |

**For 4T1S**
**Summary**

| Mode | PD (dBm/RBW) |
|---|---|
| 5.15-5.25GHz | - |
| 802.11ax HEW160-BF_Nss1,(MCS0)_4TX | 2.92 |
| 5.25-5.35GHz | - |
| 802.11a_Nss1,(6Mbps)_4TX | 9.01 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | 8.36 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | 5.81 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | 2.77 |
| 802.11ax HEW160-BF_Nss1,(MCS0)_4TX | 2.91 |

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

## Result

| Mode | Result | DG (dBi) | Port 1 (dBm/RBW) | Port 2 (dBm/RBW) | Port 3 (dBm/RBW) | Port 4 (dBm/RBW) | PD (dBm/RBW) | PD Limit (dBm/RBW) |
|---|---|---|---|---|---|---|---|---|
| 802.11a_Nss1,(6Mbps)_4TX | - | - | - | - | - | - | - | - |
| 5260MHz | Pass | 7.91 | 3.36 | 3.08 | 2.96 | 2.98 | 9.01 | 9.09 |
| 5300MHz | Pass | 7.91 | 3.48 | 2.88 | 3.03 | 2.82 | 8.96 | 9.09 |
| 5320MHz | Pass | 7.91 | 3.27 | 2.88 | 2.95 | 2.74 | 8.93 | 9.09 |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5260MHz | Pass | 7.91 | 2.67 | 2.67 | 2.35 | 2.43 | 8.36 | 9.09 |
| 5300MHz | Pass | 7.91 | 2.26 | 2.41 | 2.16 | 2.10 | 8.17 | 9.09 |
| 5320MHz | Pass | 7.91 | 2.66 | 2.52 | 2.26 | 2.30 | 8.34 | 9.09 |
| 802.11ax HEW40-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5270MHz | Pass | 7.91 | 0.15 | -0.10 | -0.43 | -0.16 | 5.81 | 9.09 |
| 5310MHz | Pass | 7.91 | -0.31 | -0.42 | -0.52 | -0.69 | 5.47 | 9.09 |
| 802.11ax HEW80-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5290MHz | Pass | 7.91 | -3.07 | -3.02 | -3.34 | -3.36 | 2.77 | 9.09 |
| 802.11ax HEW160-BF_Nss1,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | 7.86 | -2.79 | -2.71 | -3.03 | -3.56 | 2.92 | 15.14 |
| 5250MHz Straddle 5.25-5.35GHz | Pass | 7.91 | -2.44 | -2.97 | -2.95 | -3.47 | 2.91 | 9.09 |

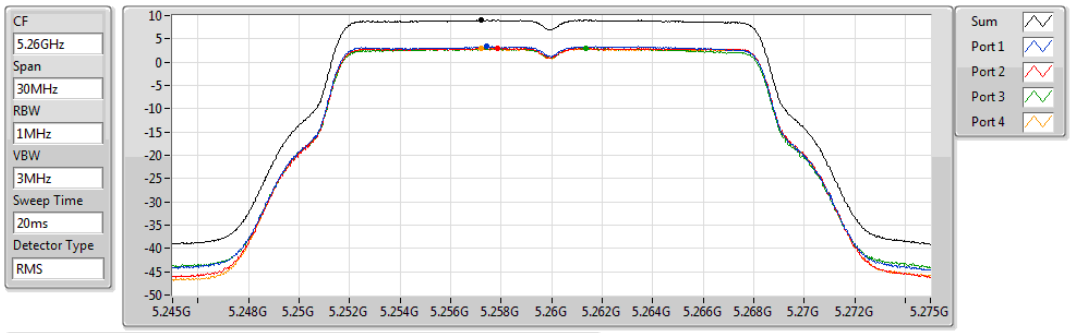
**DG** = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
**PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

## 802.11a_Nss1,(6Mbps)_4TX

**PSD**

### 5260MHz

18/07/2019



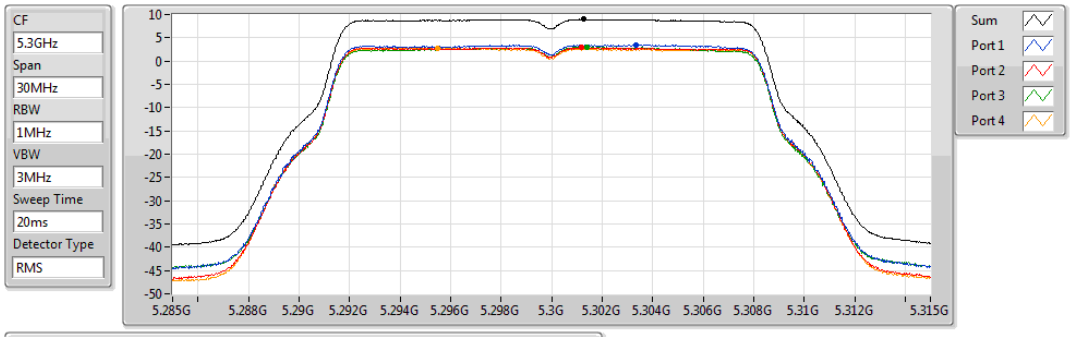

| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 9.01 | 9.01 | 3.36 | 3.08 | 2.96 | 2.98 |

## 802.11a_Nss1,(6Mbps)_4TX

**PSD**

### 5300MHz

18/07/2019



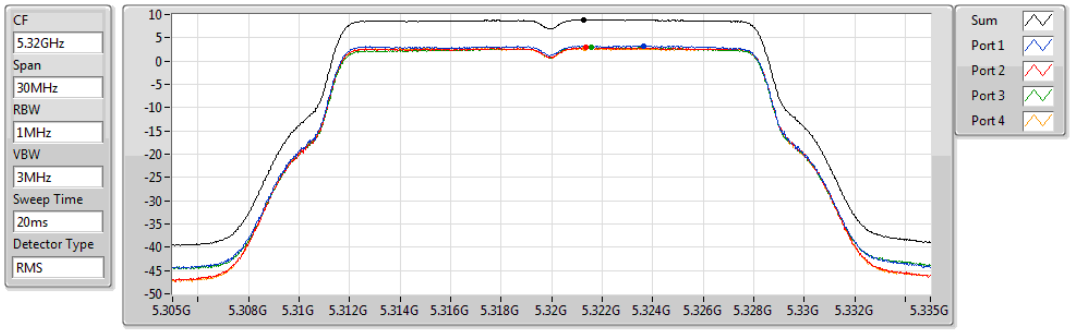

| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 8.96 | 8.96 | 3.48 | 2.88 | 3.03 | 2.82 |

## 802.11a_Nss1,(6Mbps)_4TX

**PSD**

### 5320MHz

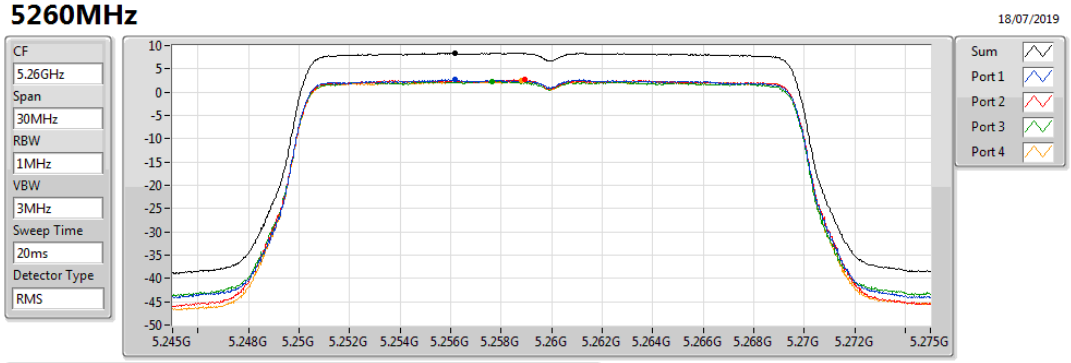
18/07/2019




| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 8.93 | 8.93 | 3.27 | 2.88 | 2.95 | 2.74 |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

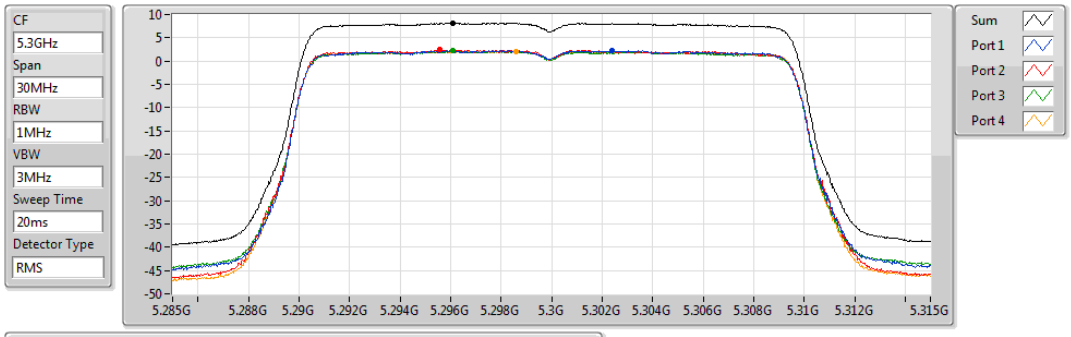
### 5260MHz




| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 8.36 | 8.36 | 2.67 | 2.67 | 2.35 | 2.43 |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

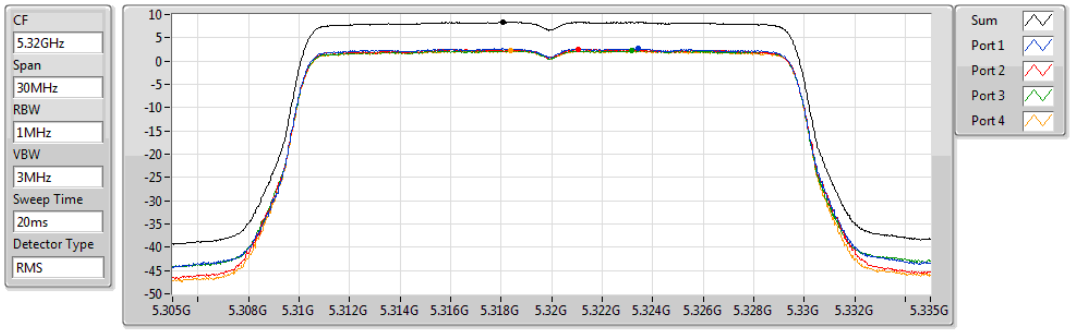
### 5300MHz




| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 8.17 | 8.17 | 2.26 | 2.41 | 2.16 | 2.10 |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

### 5320MHz

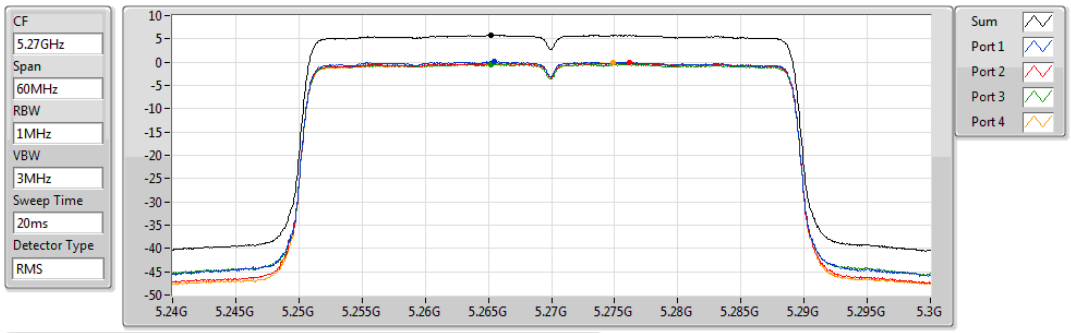



| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 8.34 | 8.34 | 2.66 | 2.52 | 2.26 | 2.30 |

## 802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

### 5270MHz

18/07/2019

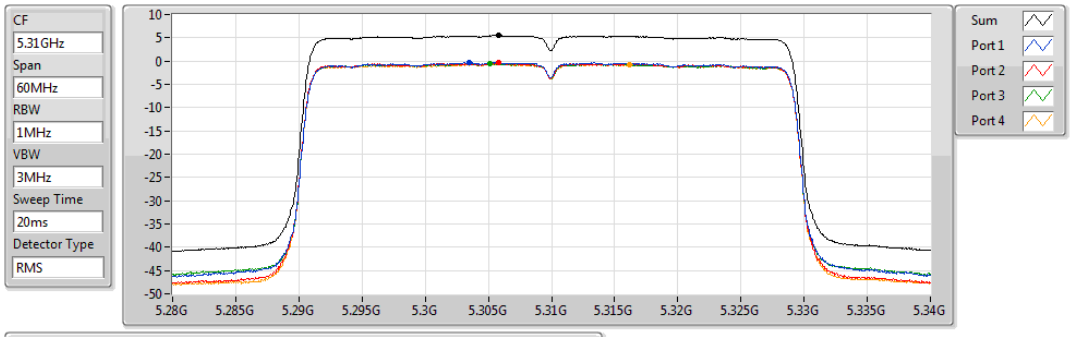



| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 5.81 | 5.81 | 0.15 | -0.10 | -0.43 | -0.16 |

## 802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

### 5310MHz

18/07/2019

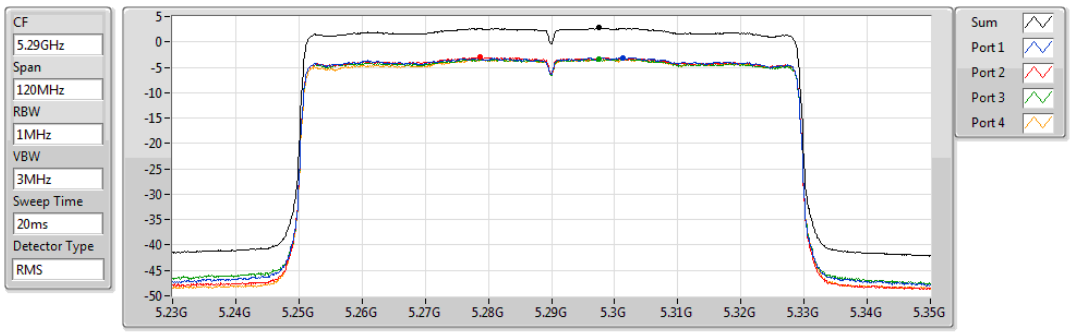



| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 5.47 | 5.47 | -0.31 | -0.42 | -0.52 | -0.69 |

## 802.11ax HEW80-BF_Nss1,(MCS0)_4TX PSD

### 5290MHz

18/07/2019



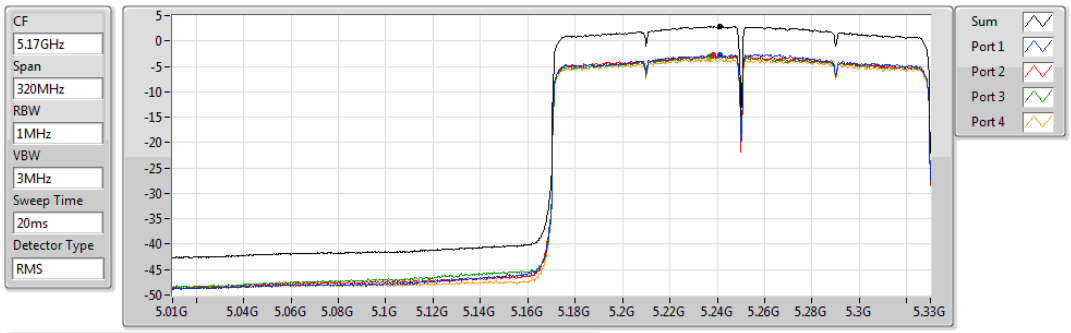

| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 2.77 | 2.77 | -3.07 | -3.02 | -3.34 | -3.36 |

## 802.11ax HEW160-BF_Nss1,(MCS0)_4TX

**PSD**

### 5250MHz Straddle 5.15-5.25GHz

23/07/2019



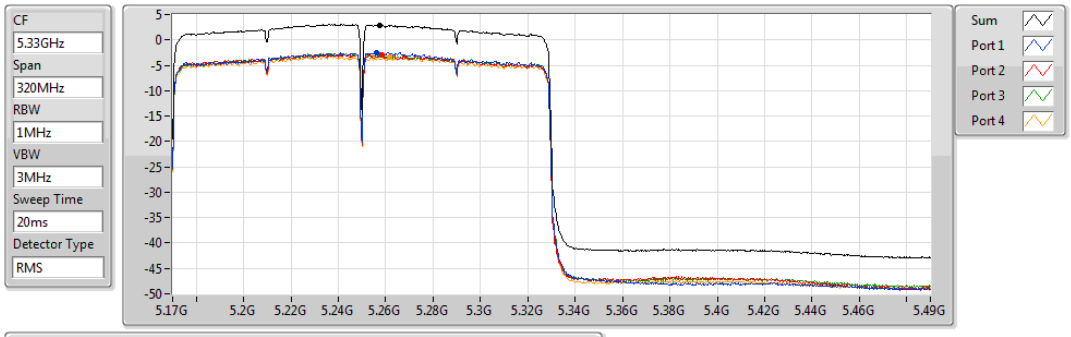

| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 2.92 | 2.92 | -2.79 | -2.71 | -3.03 | -3.56 |

## 802.11ax HEW160-BF_Nss1,(MCS0)_4TX

**PSD**

### 5250MHz Straddle 5.25-5.35GHz

23/07/2019




| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 2.91 | 2.91 | -2.44 | -2.97 | -2.95 | -3.47 |

**For 4T2S**
**Summary**

| Mode | PD (dBm/RBW) |
|---|---|
| 5.15-5.25GHz | - |
| 802.11ax HEW160-BF_Nss2,(MCS0)_4TX | 3.28 |
| 5.25-5.35GHz | - |
| 802.11ax HEW20-BF_Nss2,(MCS0)_4TX | 10.33 |
| 802.11ax HEW40-BF_Nss2,(MCS0)_4TX | 7.44 |
| 802.11ax HEW80-BF_Nss2,(MCS0)_4TX | 4.60 |
| 802.11ax HEW160-BF_Nss2,(MCS0)_4TX | 3.10 |

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

## Result

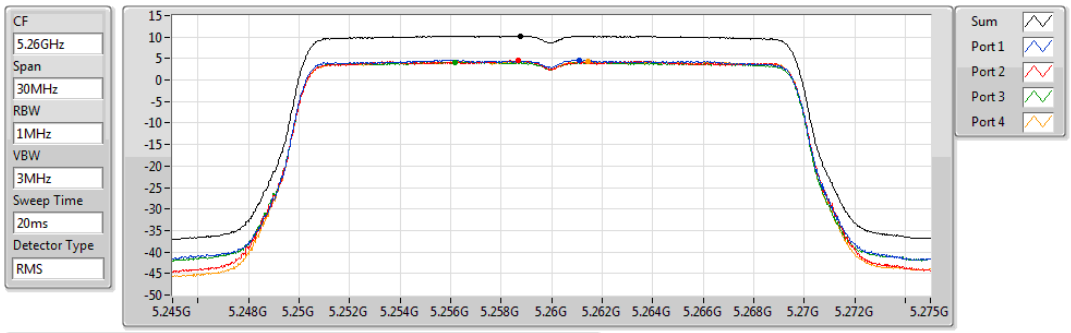
| Mode | Result | DG (dBi) | Port 1 (dBm/RBW) | Port 2 (dBm/RBW) | Port 3 (dBm/RBW) | Port 4 (dBm/RBW) | PD (dBm/RBW) | PD Limit (dBm/RBW) |
|---|---|---|---|---|---|---|---|---|
| 802.11ax HEW20-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5260MHz | Pass | 4.90 | 4.71 | 4.52 | 4.15 | 4.32 | 10.29 | 11.00 |
| 5300MHz | Pass | 4.90 | 4.73 | 4.38 | 4.29 | 4.29 | 10.33 | 11.00 |
| 5320MHz | Pass | 4.90 | 4.74 | 4.25 | 4.04 | 4.28 | 10.28 | 11.00 |
| 802.11ax HEW40-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5270MHz | Pass | 4.90 | 1.78 | 1.75 | 1.23 | 1.60 | 7.44 | 11.00 |
| 5310MHz | Pass | 4.90 | 1.70 | 1.41 | 1.41 | 1.40 | 7.42 | 11.00 |
| 802.11ax HEW80-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5290MHz | Pass | 4.90 | -0.83 | -1.26 | -1.22 | -1.34 | 4.60 | 11.00 |
| 802.11ax HEW160-BF_Nss2,(MCS0)_4TX | - | - | - | - | - | - | - | - |
| 5250MHz Straddle 5.15-5.25GHz | Pass | 4.85 | -2.24 | -2.60 | -2.75 | -2.80 | 3.28 | 17.00 |
| 5250MHz Straddle 5.25-5.35GHz | Pass | 4.90 | -2.24 | -2.84 | -2.95 | -3.06 | 3.10 | 11.00 |

**DG** = Directional Gain; **RBW** = 500 kHz 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 X power density;

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

### 5260MHz

19/07/2019

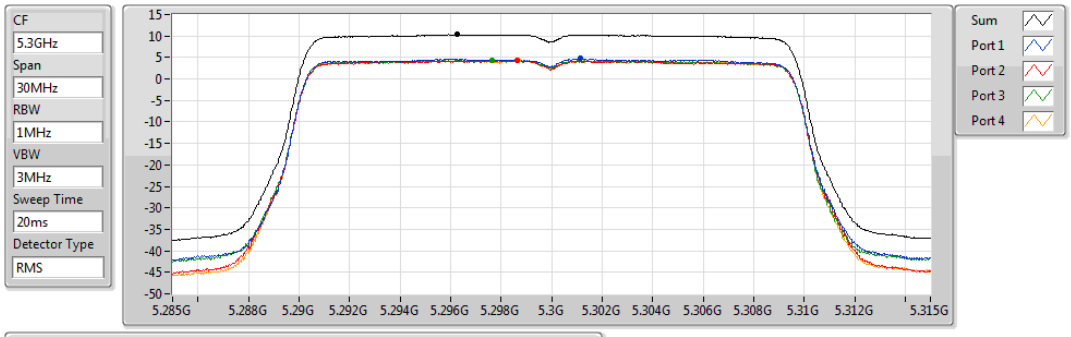



| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.29 | 10.29 | 4.71 | 4.52 | 4.15 | 4.32 |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

### 5300MHz

19/07/2019

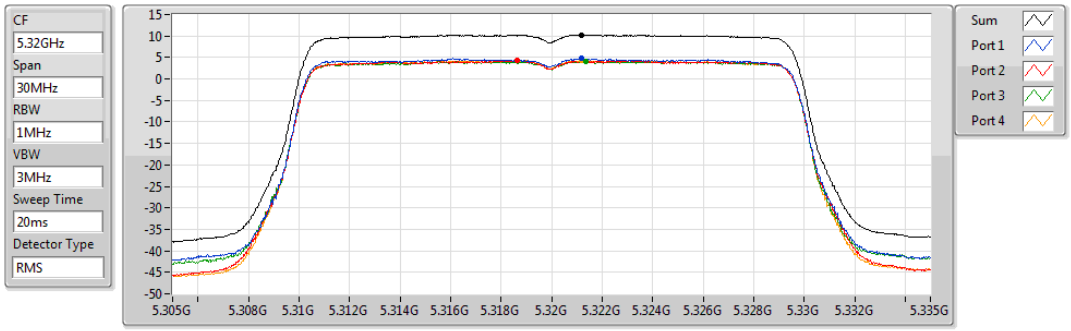



| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.33 | 10.33 | 4.73 | 4.38 | 4.29 | 4.29 |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX PSD

### 5320MHz

19/07/2019

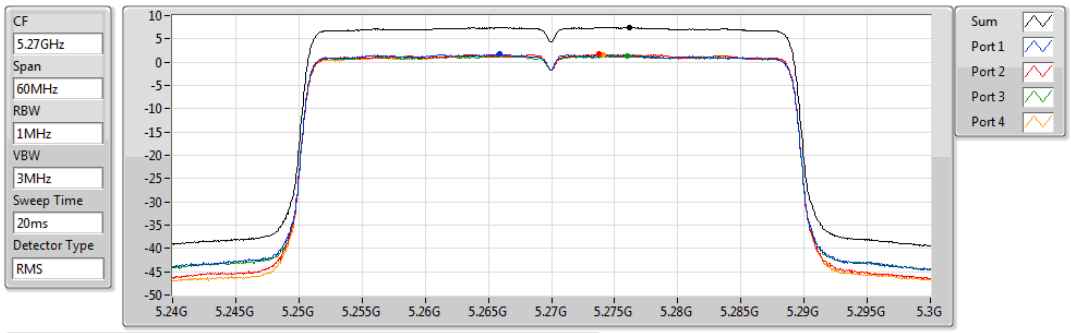



| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.28 | 10.28 | 4.74 | 4.25 | 4.04 | 4.28 |

## 802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

### 5270MHz

19/07/2019

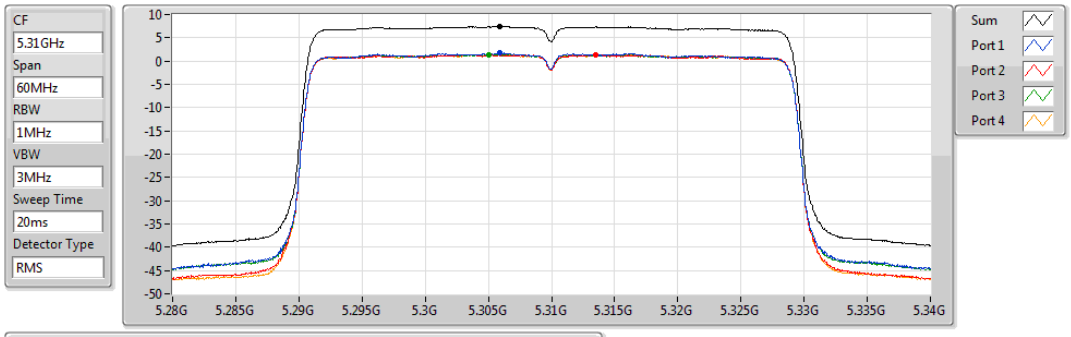



| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 7.44 | 7.44 | 1.78 | 1.75 | 1.23 | 1.60 |

## 802.11ax HEW40-BF_Nss2,(MCS0)_4TX PSD

### 5310MHz

19/07/2019

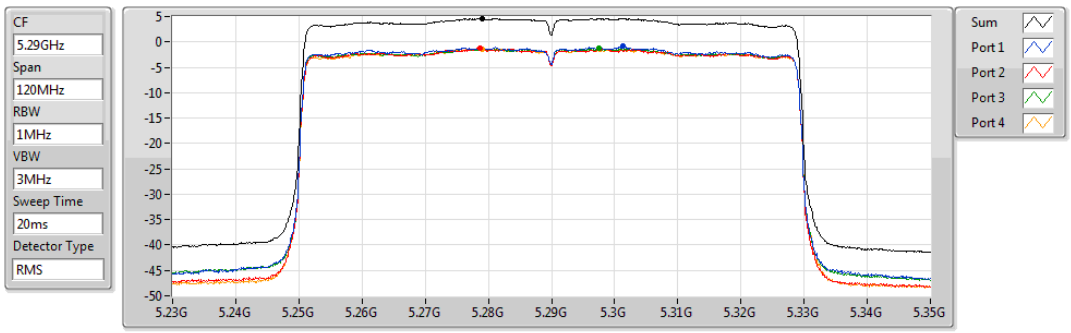



| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 7.42 | 7.42 | 1.70 | 1.41 | 1.41 | 1.40 |

## 802.11ax HEW80-BF_Nss2,(MCS0)_4TX PSD

### 5290MHz

19/07/2019



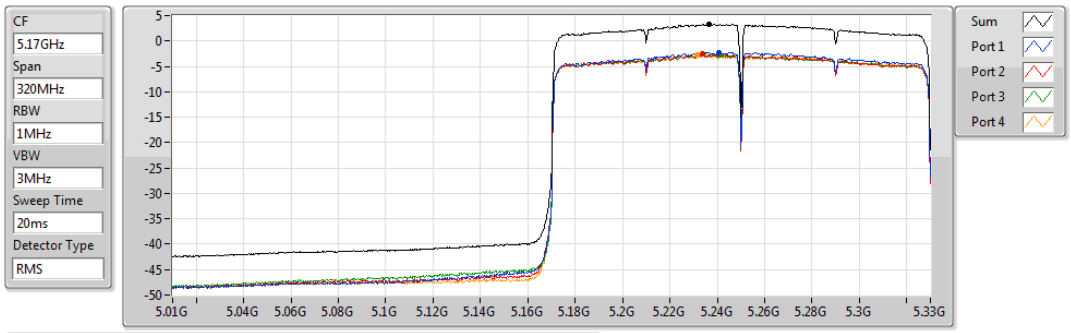

| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 4.60 | 4.60 | -0.83 | -1.26 | -1.22 | -1.34 |

## 802.11ax HEW160-BF_Nss2,(MCS0)_4TX

**PSD**

### 5250MHz Straddle 5.15-5.25GHz

19/07/2019



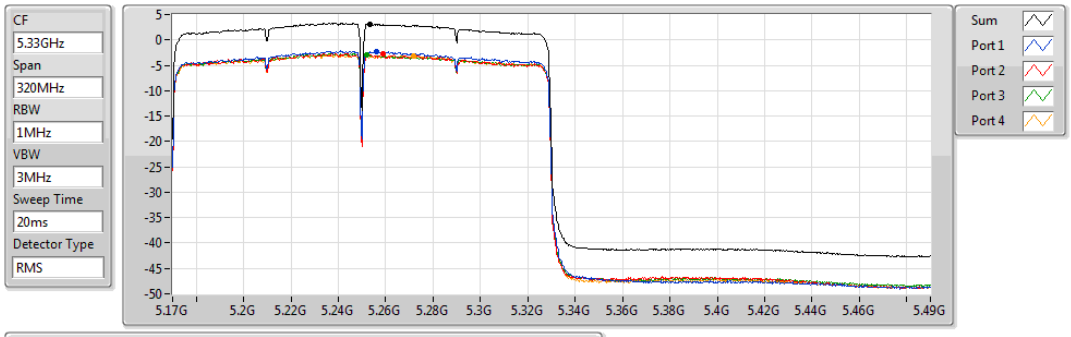

| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 3.28 | 3.28 | -2.24 | -2.60 | -2.75 | -2.80 |

## 802.11ax HEW160-BF_Nss2,(MCS0)_4TX

**PSD**

### 5250MHz Straddle 5.25-5.35GHz

19/07/2019




| Sum | PD | Port 1 | Port 2 | Port 3 | Port 4 |
|---|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 3.10 | 3.10 | -2.24 | -2.84 | -2.95 | -3.06 |

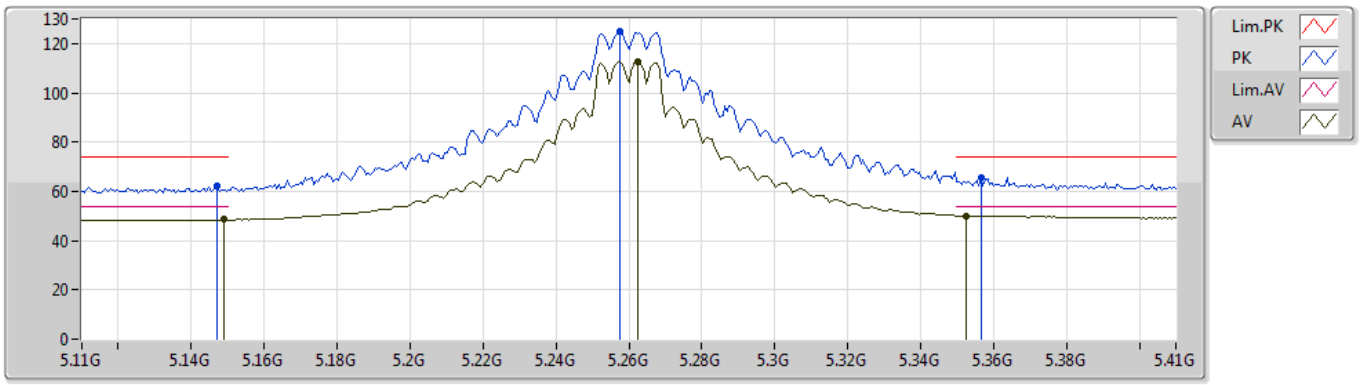
**For 2T1S / For non-beamforming mode**
**Summary**

| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.25-5.35GHz | - | - | - | - | - | - | - | - | - | - | - | - |
| 802.11a_Nss1,(6Mbps)_2TX | Pass | PK | 5.3512G | 73.98 | 74.00 | -0.02 | 7.21 | 3 | Vertical | 341 | 1.18 | - |

## 802.11a_Nss1,(6Mbps)_2TX

## 5260MHz_TX

22/07/2019



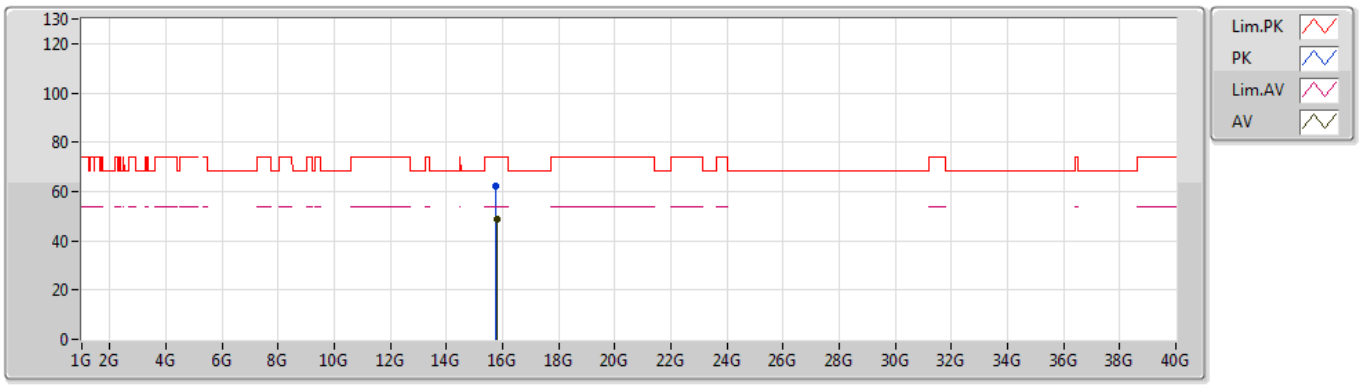

EUT Z_2TX
Setting 116
06-C-4-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1472G | 62.15 | 74.00 | -11.85 | 7.34 | 3 | Vertical | 336 | 1.02 | - |
| AV | 5.149G | 48.50 | 54.00 | -5.50 | 7.33 | 3 | Vertical | 336 | 1.02 | - |
| PK | 5.2576G | 124.78 | Inf | -Inf | 7.13 | 3 | Vertical | 336 | 1.02 | - |
| AV | 5.2624G | 112.78 | Inf | -Inf | 7.14 | 3 | Vertical | 336 | 1.02 | - |
| PK | 5.3566G | 65.65 | 74.00 | -8.35 | 7.23 | 3 | Vertical | 336 | 1.02 | - |
| AV | 5.3524G | 50.04 | 54.00 | -3.96 | 7.22 | 3 | Vertical | 336 | 1.02 | - |

## 802.11a_Nss1,(6Mbps)_2TX

## 5260MHz_TX

22/07/2019



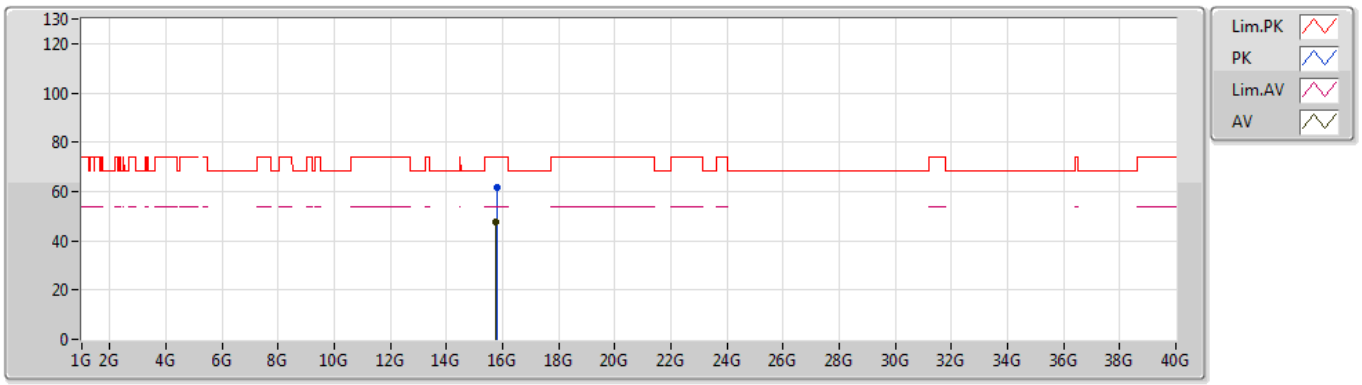

EUT Z_2TX
Setting 116
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.76926G | 62.35 | 74.00 | -11.65 | 17.21 | 3 | Vertical | 2 | 2.80 | - |
| AV | 15.77988G | 48.92 | 54.00 | -5.08 | 17.17 | 3 | Vertical | 2 | 2.80 | - |

## 802.11a_Nss1,(6Mbps)_2TX

## 5260MHz_TX

22/07/2019



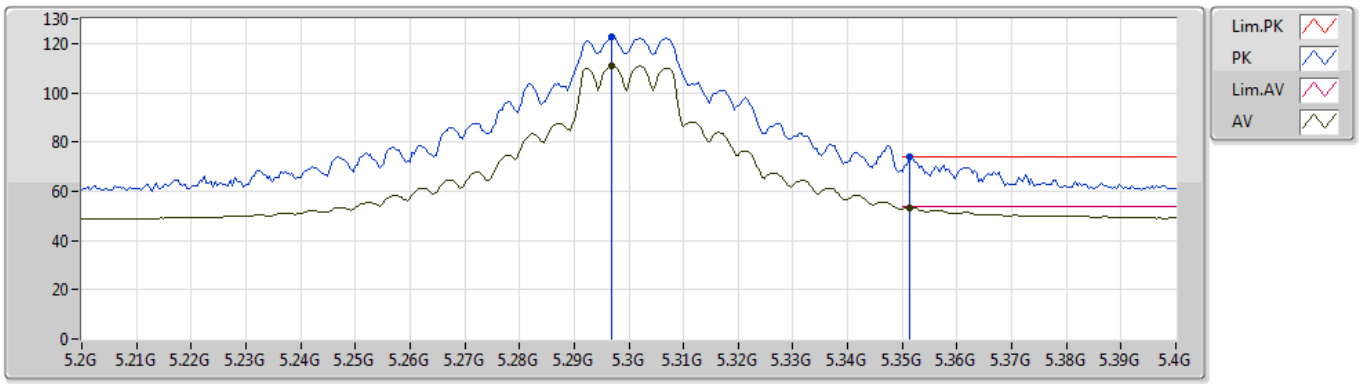

EUT Z_2TX
Setting 116
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.78924G | 61.64 | 74.00 | -12.36 | 17.14 | 3 | Horizontal | 194 | 1.50 | - |
| AV | 15.77124G | 47.68 | 54.00 | -6.32 | 17.21 | 3 | Horizontal | 194 | 1.50 | - |

## 802.11a_Nss1,(6Mbps)_2TX

## 5300MHz_TX

22/07/2019



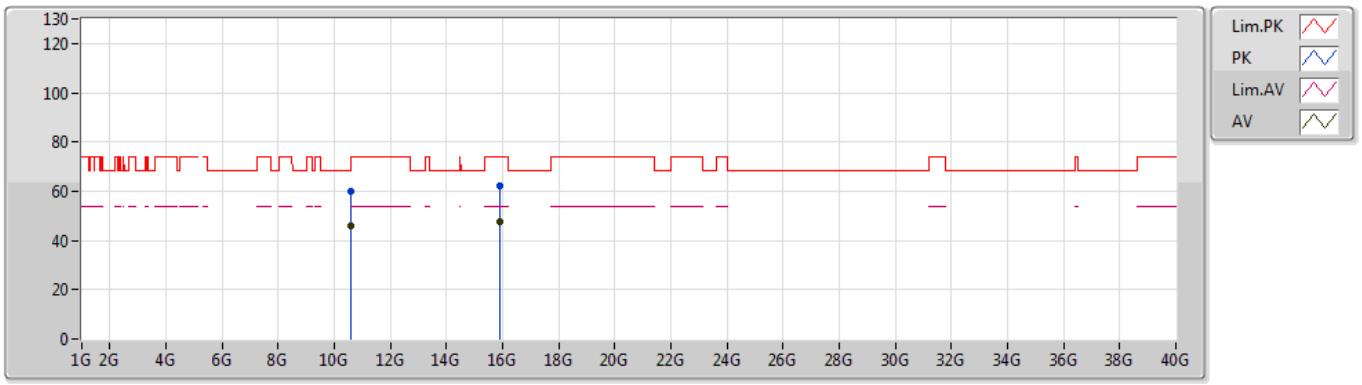

EUT Z_2TX
Setting 110
06-C-4-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.2968G | 122.46 | Inf | -Inf | 7.07 | 3 | Vertical | 341 | 1.18 | - |
| AV | 5.2968G | 110.72 | Inf | -Inf | 7.07 | 3 | Vertical | 341 | 1.18 | - |
| PK | 5.3512G | 73.98 | 74.00 | -0.02 | 7.21 | 3 | Vertical | 341 | 1.18 | - |
| AV | 5.3512G | 53.51 | 54.00 | -0.49 | 7.21 | 3 | Vertical | 341 | 1.18 | - |

## 802.11a_Nss1,(6Mbps)_2TX

## 5300MHz_TX

02/08/2019



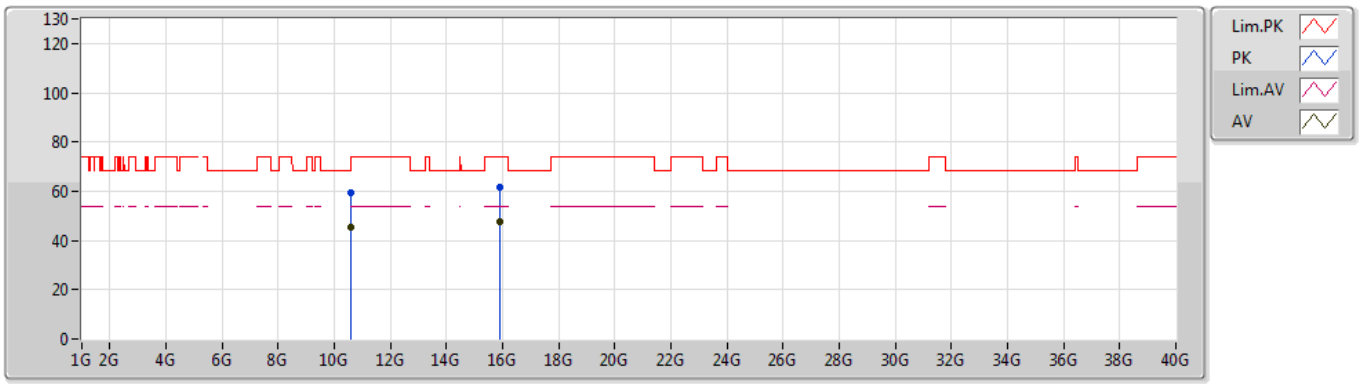

EUT Z_2TX
Setting 110
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.60328G | 59.71 | 74.00 | -14.29 | 16.44 | 3 | Vertical | 180 | 1.89 | - |
| AV | 10.6003G | 46.15 | 54.00 | -7.85 | 16.44 | 3 | Vertical | 180 | 1.89 | - |
| PK | 15.89376G | 62.06 | 74.00 | -11.94 | 16.75 | 3 | Vertical | 61 | 1.45 | - |
| AV | 15.8916G | 47.63 | 54.00 | -6.37 | 16.76 | 3 | Vertical | 61 | 1.45 | - |

## 802.11a_Nss1,(6Mbps)_2TX

## 5300MHz_TX

02/08/2019



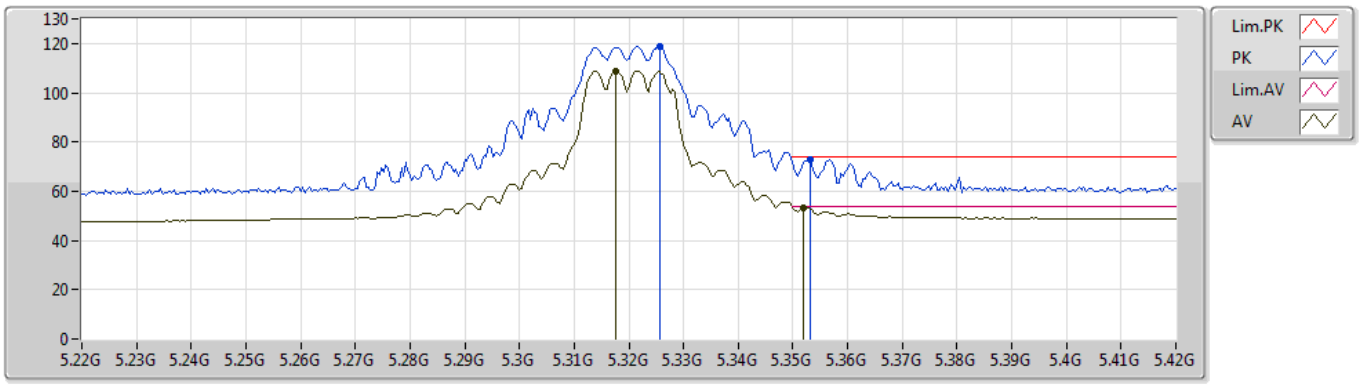

EUT Z_2TX
Setting 110
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.60024G | 59.24 | 74.00 | -14.76 | 16.44 | 3 | Horizontal | 14 | 1.82 | - |
| AV | 10.60606G | 45.44 | 54.00 | -8.56 | 16.45 | 3 | Horizontal | 14 | 1.82 | - |
| PK | 15.90462G | 61.51 | 74.00 | -12.49 | 16.71 | 3 | Horizontal | 236 | 1.50 | - |
| AV | 15.90258G | 47.61 | 54.00 | -6.39 | 16.72 | 3 | Horizontal | 236 | 1.50 | - |

## 802.11a_Nss1,(6Mbps)_2TX

## 5320MHz_TX

22/07/2019



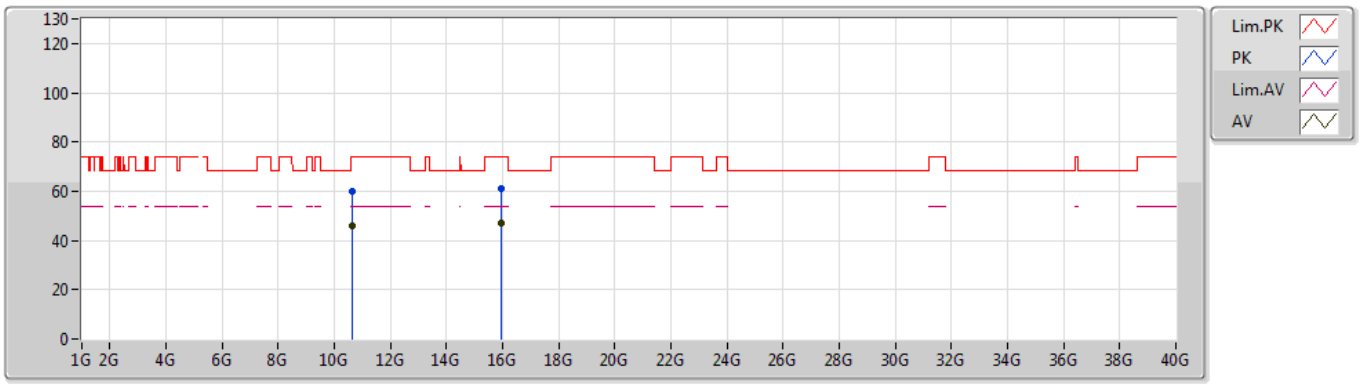

EUT Z_2TX
Setting 94
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3256G | 118.61 | Inf | -Inf | 7.15 | 3 | Vertical | 339 | 1.14 | - |
| AV | 5.3176G | 108.81 | Inf | -Inf | 7.11 | 3 | Vertical | 339 | 1.14 | - |
| PK | 5.3532G | 73.02 | 74.00 | -0.98 | 7.22 | 3 | Vertical | 339 | 1.14 | - |
| AV | 5.352G | 53.28 | 54.00 | -0.72 | 7.22 | 3 | Vertical | 339 | 1.14 | - |

## 802.11a_Nss1,(6Mbps)_2TX

## 5320MHz_TX

22/07/2019



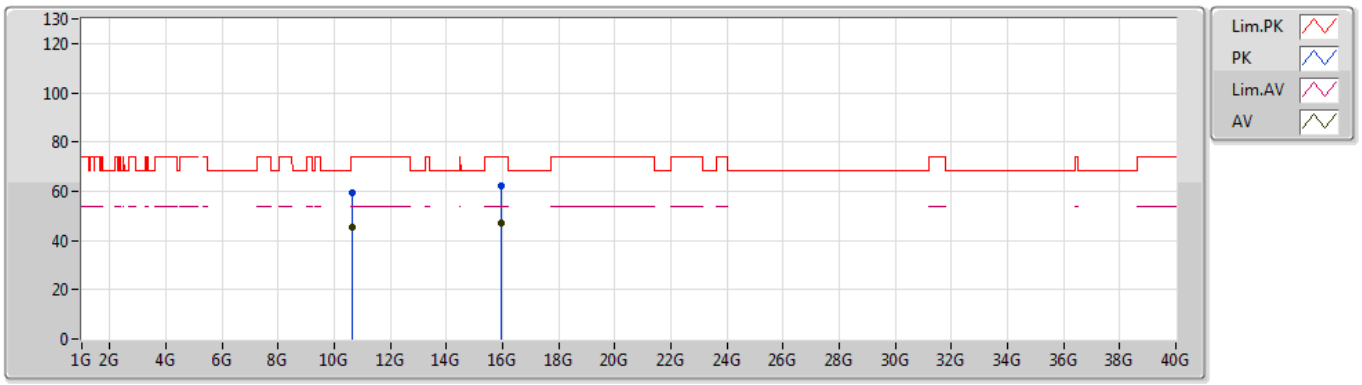

EUT Z_2TX
Setting 94
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.64132G | 59.95 | 74.00 | -14.05 | 16.51 | 3 | Vertical | 159 | 2.49 | - |
| AV | 10.64006G | 45.96 | 54.00 | -8.04 | 16.50 | 3 | Vertical | 159 | 2.49 | - |
| PK | 15.94878G | 60.85 | 74.00 | -13.15 | 16.54 | 3 | Vertical | 30 | 1.50 | - |
| AV | 15.9468G | 47.21 | 54.00 | -6.79 | 16.55 | 3 | Vertical | 30 | 1.50 | - |

## 802.11a_Nss1,(6Mbps)_2TX

## 5320MHz_TX

22/07/2019




EUT Z_2TX
Setting 94
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.6271G | 59.48 | 74.00 | -14.52 | 16.48 | 3 | Horizontal | 236 | 1.50 | - |
| AV | 10.62746G | 45.43 | 54.00 | -8.57 | 16.48 | 3 | Horizontal | 236 | 1.50 | - |
| PK | 15.95232G | 62.15 | 74.00 | -11.85 | 16.54 | 3 | Horizontal | 254 | 2.76 | - |
| AV | 15.94716G | 47.14 | 54.00 | -6.86 | 16.55 | 3 | Horizontal | 254 | 2.76 | - |

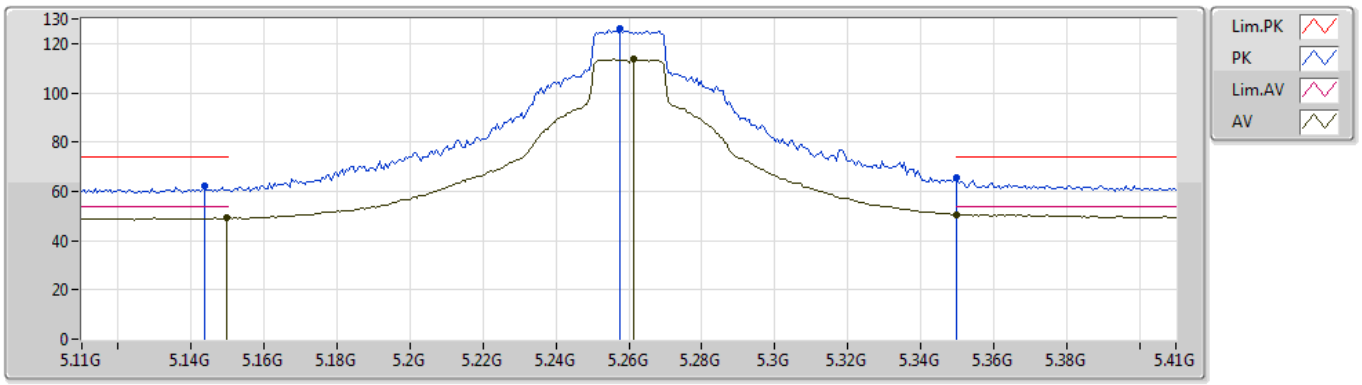
## 2T1S / For beamforming mode
## Summary

| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.25-5.35GHz | - | - | - | - | - | - | - | - | - | - | - | - |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX | Pass | AV | 5.3504G | 53.96 | 54.00 | -0.04 | 7.21 | 3 | Vertical | 340 | 1.32 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

## 5260MHz_TX

31/07/2019



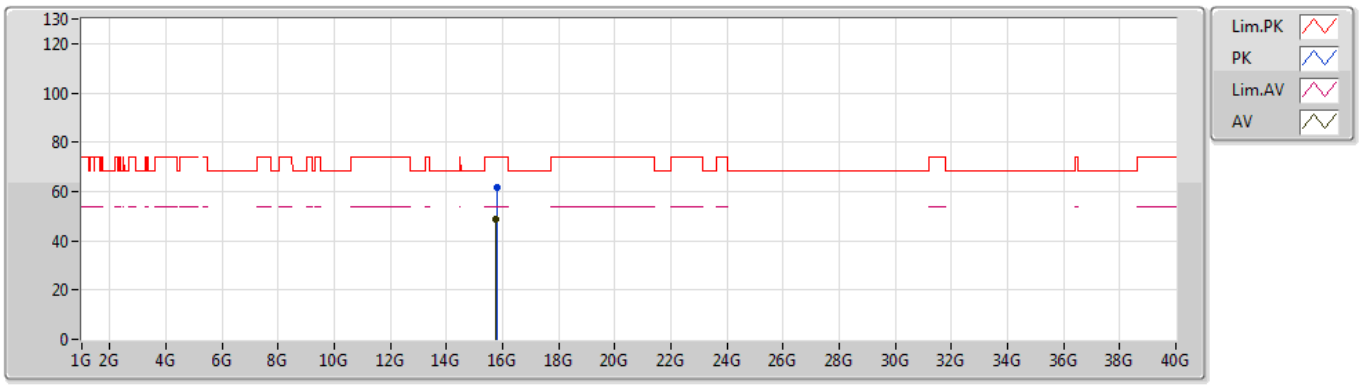

EUT Z_2TX
Setting 112
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1436G | 62.26 | 74.00 | -11.74 | 7.34 | 3 | Vertical | 341 | 1.33 | - |
| AV | 5.1496G | 49.19 | 54.00 | -4.81 | 7.33 | 3 | Vertical | 341 | 1.33 | - |
| PK | 5.2576G | 125.98 | Inf | -Inf | 7.13 | 3 | Vertical | 341 | 1.33 | - |
| AV | 5.2612G | 113.54 | Inf | -Inf | 7.14 | 3 | Vertical | 341 | 1.33 | - |
| PK | 5.35G | 65.65 | 74.00 | -8.35 | 7.21 | 3 | Vertical | 341 | 1.33 | - |
| AV | 5.35G | 50.57 | 54.00 | -3.43 | 7.21 | 3 | Vertical | 341 | 1.33 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

## 5260MHz_TX

31/07/2019



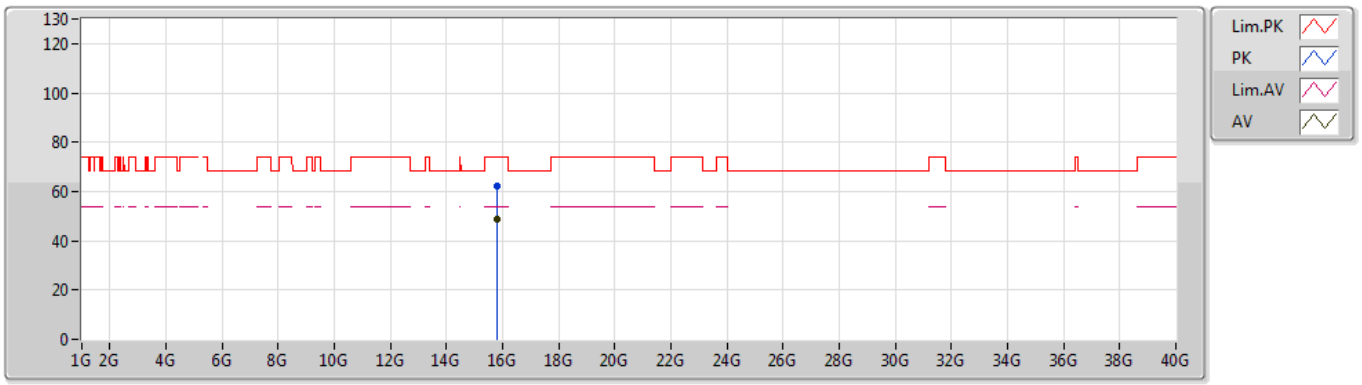

EUT Z_2TX
Setting 112
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.78774G | 61.81 | 74.00 | -12.19 | 17.15 | 3 | Vertical | 14 | 1.11 | - |
| AV | 15.76944G | 48.71 | 54.00 | -5.29 | 17.21 | 3 | Vertical | 14 | 1.11 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

## 5260MHz_TX

31/07/2019



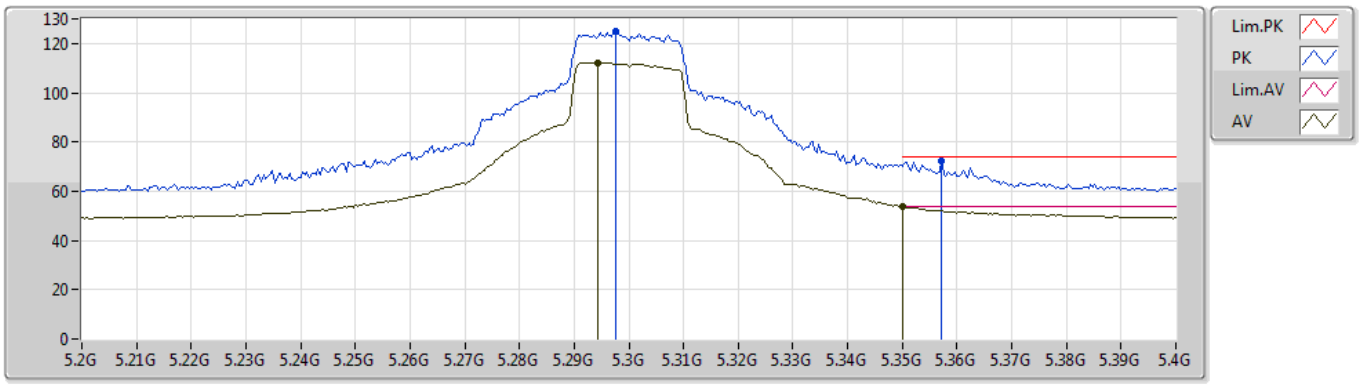

EUT Z_2TX
Setting 112
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.79344G | 62.44 | 74.00 | -11.56 | 17.13 | 3 | Horizontal | 61 | 1.67 | - |
| AV | 15.78876G | 48.94 | 54.00 | -5.06 | 17.14 | 3 | Horizontal | 61 | 1.67 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

## 5300MHz_TX

31/07/2019



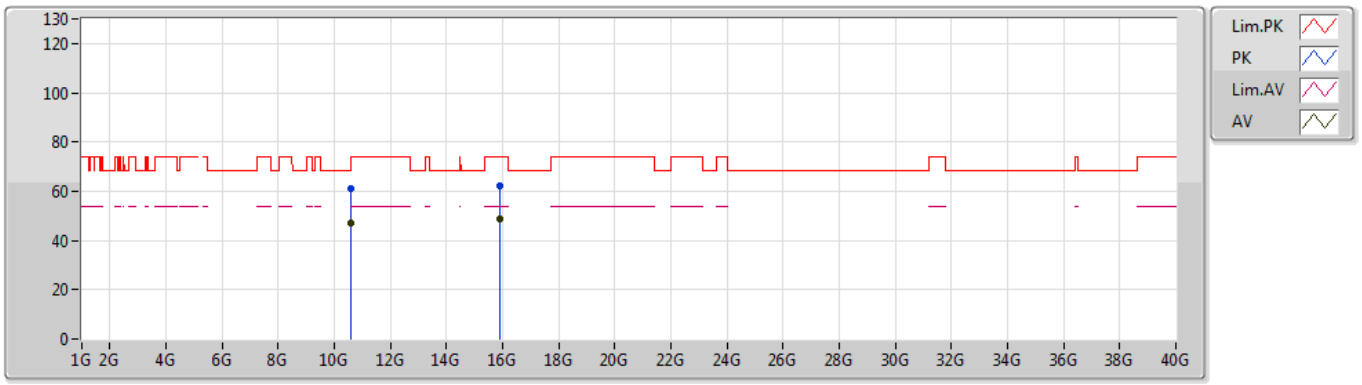

EUT Z_2TX
Setting 104
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.2976G | 124.94 | Inf | -Inf | 7.06 | 3 | Vertical | 345 | 2.01 | - |
| AV | 5.2944G | 112.15 | Inf | -Inf | 7.07 | 3 | Vertical | 345 | 2.01 | - |
| PK | 5.3572G | 72.39 | 74.00 | -1.61 | 7.23 | 3 | Vertical | 345 | 2.01 | - |
| AV | 5.35G | 53.86 | 54.00 | -0.14 | 7.21 | 3 | Vertical | 345 | 2.01 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

## 5300MHz_TX

02/08/2019



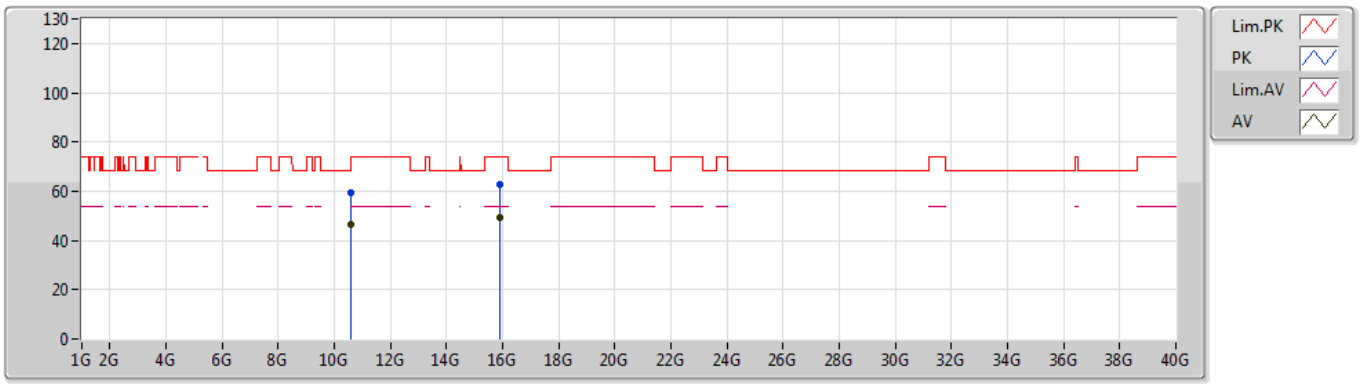

EUT Z_2TX
Setting 104
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.60874G | 60.89 | 74.00 | -13.11 | 16.45 | 3 | Vertical | 229 | 1.91 | - |
| AV | 10.60882G | 47.34 | 54.00 | -6.66 | 16.45 | 3 | Vertical | 229 | 1.91 | - |
| PK | 15.90984G | 62.09 | 74.00 | -11.91 | 16.70 | 3 | Vertical | 103 | 1.50 | - |
| AV | 15.90474G | 48.84 | 54.00 | -5.16 | 16.71 | 3 | Vertical | 103 | 1.50 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

## 5300MHz_TX

02/08/2019



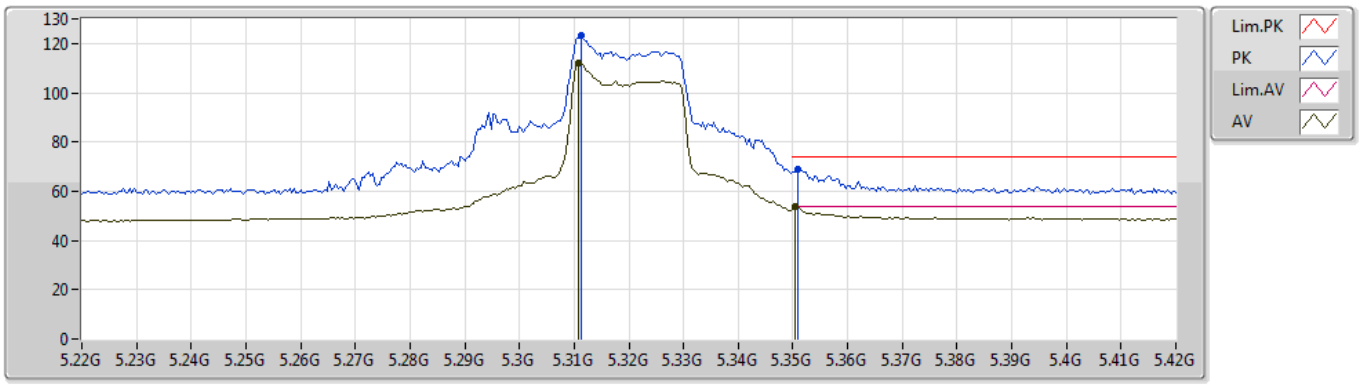

EUT Z_2TX
Setting 104
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.6078G | 59.55 | 74.00 | -14.45 | 16.45 | 3 | Horizontal | 349 | 1.25 | - |
| AV | 10.6012G | 46.47 | 54.00 | -7.53 | 16.44 | 3 | Horizontal | 349 | 1.25 | - |
| PK | 15.90012G | 62.71 | 74.00 | -11.29 | 16.73 | 3 | Horizontal | 165 | 1.01 | - |
| AV | 15.90792G | 49.06 | 54.00 | -4.94 | 16.70 | 3 | Horizontal | 165 | 1.01 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

## 5320MHz_TX

31/07/2019



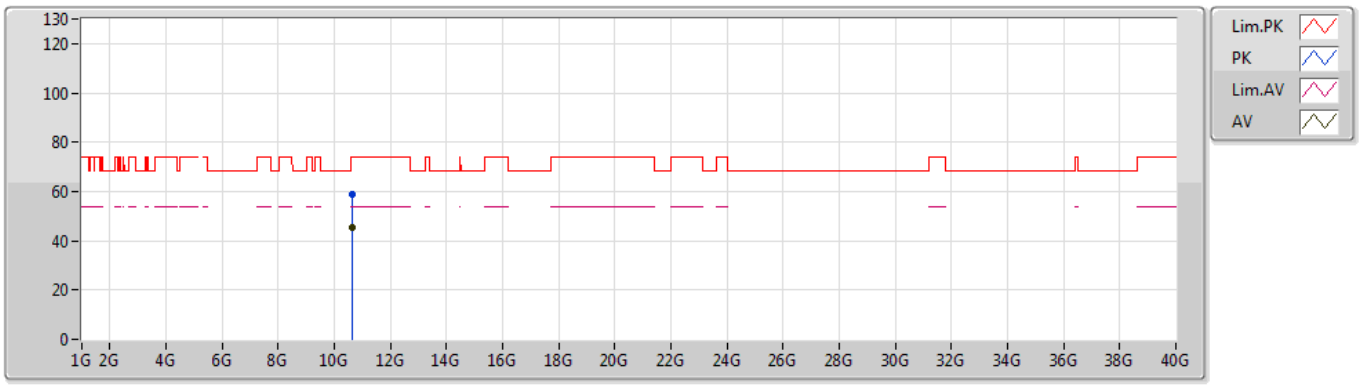

EUT Z_2TX
Setting 92
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3112G | 123.46 | Inf | -Inf | 7.09 | 3 | Vertical | 354 | 2.32 | - |
| AV | 5.3108G | 111.81 | Inf | -Inf | 7.09 | 3 | Vertical | 354 | 2.32 | - |
| PK | 5.3508G | 68.87 | 74.00 | -5.13 | 7.21 | 3 | Vertical | 354 | 2.32 | - |
| AV | 5.3504G | 53.80 | 54.00 | -0.20 | 7.21 | 3 | Vertical | 354 | 2.32 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

## 5320MHz_TX

31/07/2019



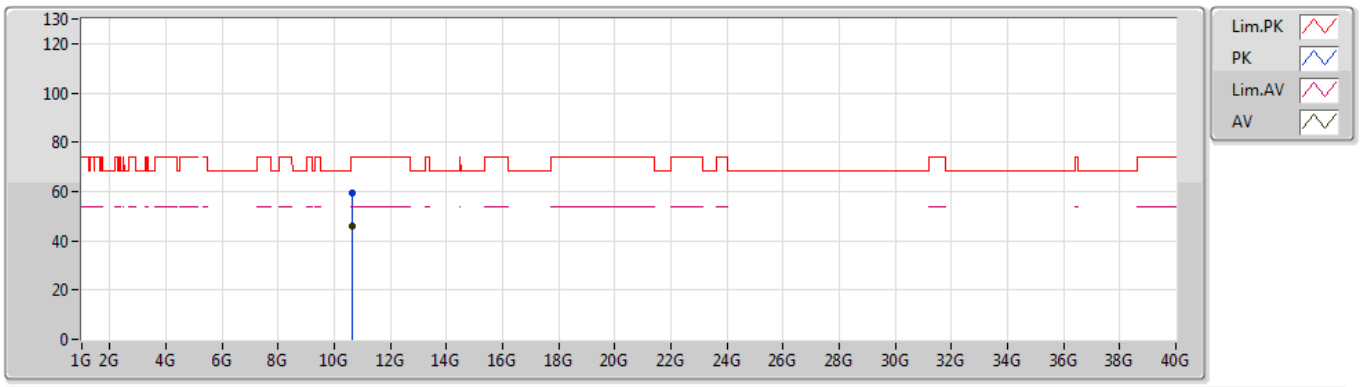

EUT Z_2TX
Setting 92
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.63284G | 58.73 | 74.00 | -15.27 | 16.49 | 3 | Vertical | 0 | 1.47 | - |
| AV | 10.63092G | 45.38 | 54.00 | -8.62 | 16.48 | 3 | Vertical | 0 | 1.47 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_2TX

## 5320MHz_TX

31/07/2019



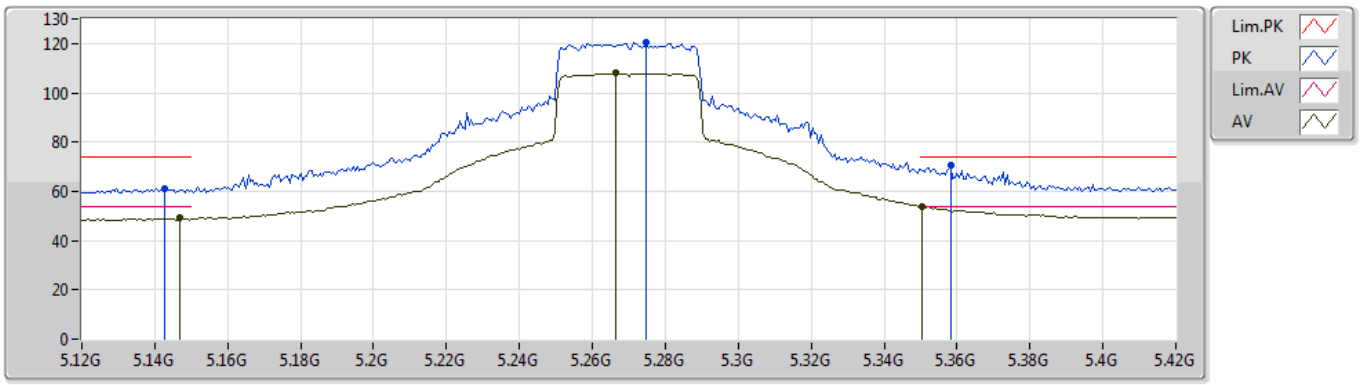

EUT Z_2TX
Setting 92
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.63612G | 59.35 | 74.00 | -14.65 | 16.49 | 3 | Horizontal | 108 | 1.44 | - |
| AV | 10.63732G | 45.73 | 54.00 | -8.27 | 16.50 | 3 | Horizontal | 108 | 1.44 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_2TX

## 5270MHz_TX

31/07/2019



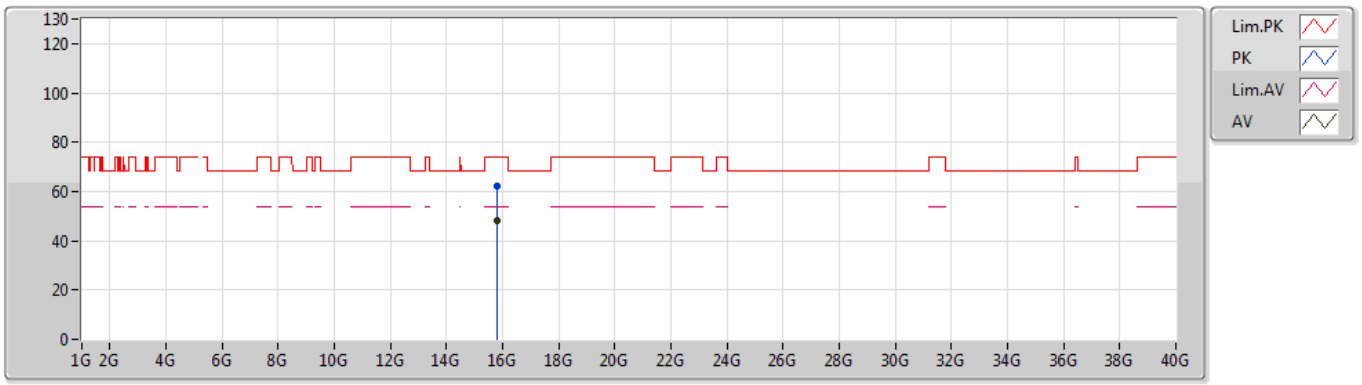

EUT Z_2TX
Setting 95
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1428G | 61.00 | 74.00 | -13.00 | 7.34 | 3 | Vertical | 340 | 1.32 | - |
| AV | 5.147G | 49.04 | 54.00 | -4.96 | 7.34 | 3 | Vertical | 340 | 1.32 | - |
| PK | 5.2748G | 120.61 | Inf | -Inf | 7.10 | 3 | Vertical | 340 | 1.32 | - |
| AV | 5.2664G | 107.90 | Inf | -Inf | 7.13 | 3 | Vertical | 340 | 1.32 | - |
| PK | 5.3582G | 70.62 | 74.00 | -3.38 | 7.23 | 3 | Vertical | 340 | 1.32 | - |
| AV | 5.3504G | 53.96 | 54.00 | -0.04 | 7.21 | 3 | Vertical | 340 | 1.32 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_2TX

## 5270MHz_TX

31/07/2019



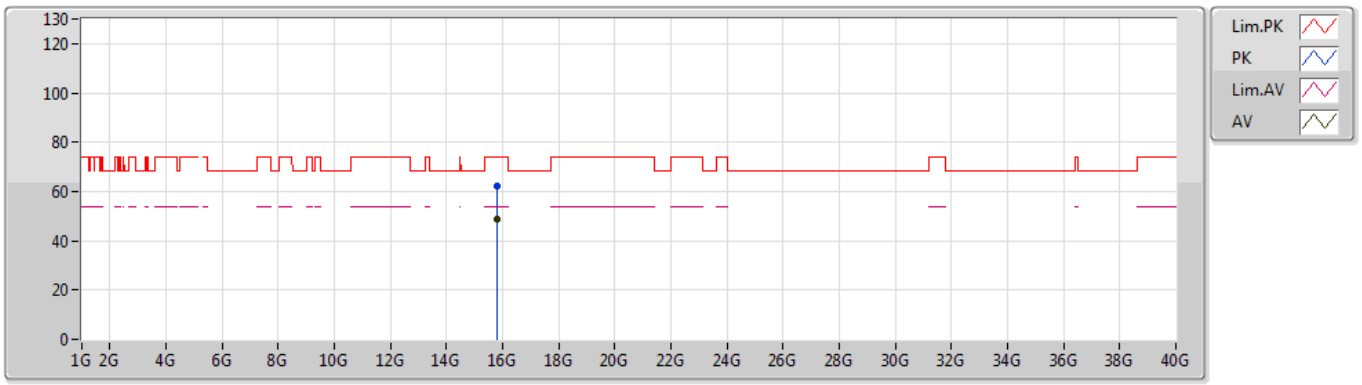

EUT Z_2TX
Setting 95
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.80768G | 62.35 | 74.00 | -11.65 | 17.07 | 3 | Vertical | 47 | 1.71 | - |
| AV | 15.813G | 48.44 | 54.00 | -5.56 | 17.05 | 3 | Vertical | 47 | 1.71 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_2TX

## 5270MHz_TX

31/07/2019



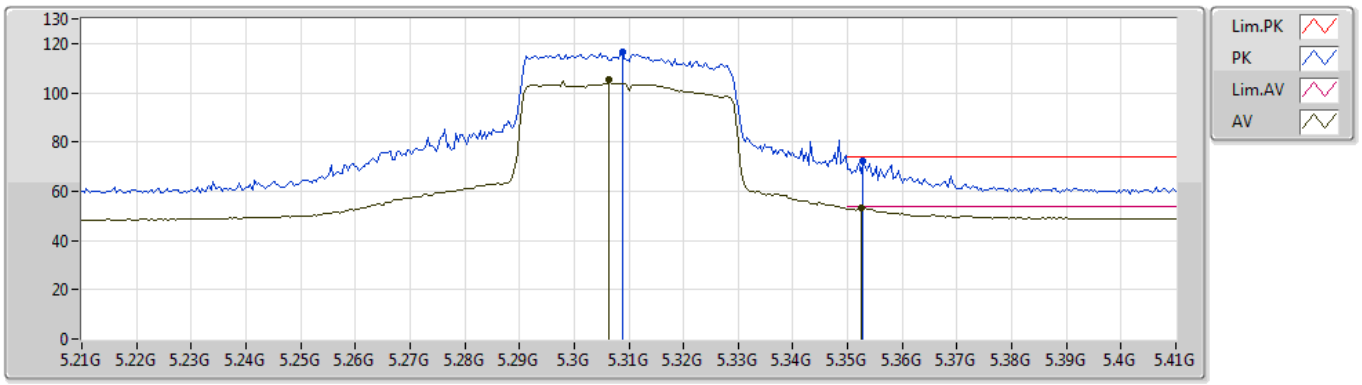

EUT Z_2TX
Setting 95
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.80472G | 62.46 | 74.00 | -11.54 | 17.08 | 3 | Horizontal | 191 | 1.14 | - |
| AV | 15.81068G | 48.51 | 54.00 | -5.49 | 17.06 | 3 | Horizontal | 191 | 1.14 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_2TX

## 5310MHz_TX

31/07/2019



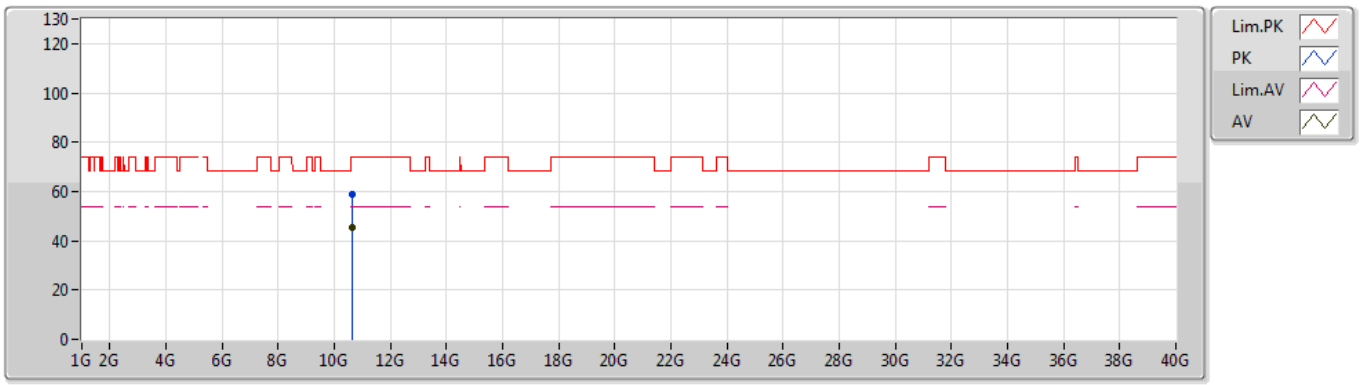

EUT Z_2TX
Setting 82
06-C-4-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3088G | 116.59 | Inf | -Inf | 7.10 | 3 | Vertical | 337 | 1.08 | - |
| AV | 5.3064G | 105.11 | Inf | -Inf | 7.08 | 3 | Vertical | 337 | 1.08 | - |
| PK | 5.3528G | 72.42 | 74.00 | -1.58 | 7.22 | 3 | Vertical | 337 | 1.08 | - |
| AV | 5.3524G | 53.31 | 54.00 | -0.69 | 7.22 | 3 | Vertical | 337 | 1.08 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_2TX

## 5310MHz_TX

31/07/2019



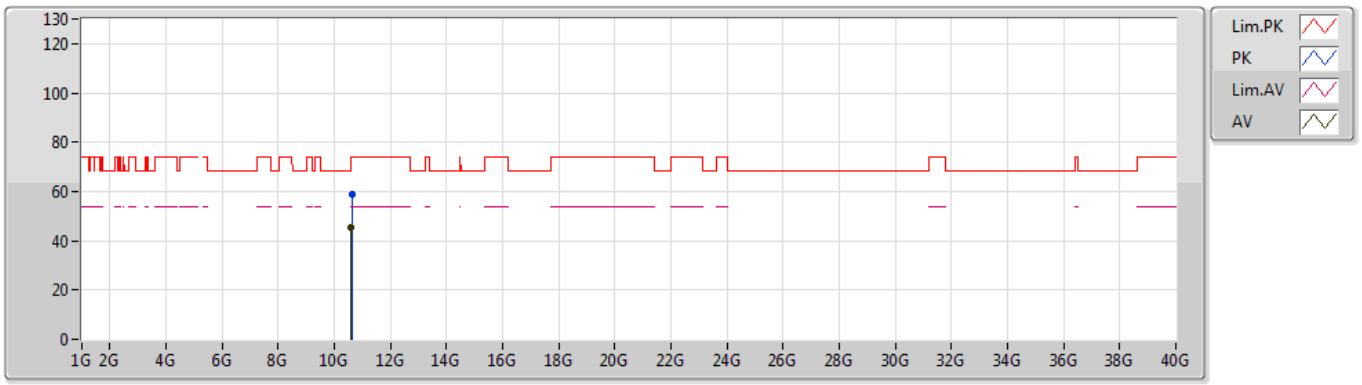

EUT Z_2TX
Setting 82
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.61692G | 58.84 | 74.00 | -15.16 | 16.46 | 3 | Vertical | 46 | 1.48 | - |
| AV | 10.62656G | 45.29 | 54.00 | -8.71 | 16.48 | 3 | Vertical | 46 | 1.48 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_2TX

## 5310MHz_TX

31/07/2019



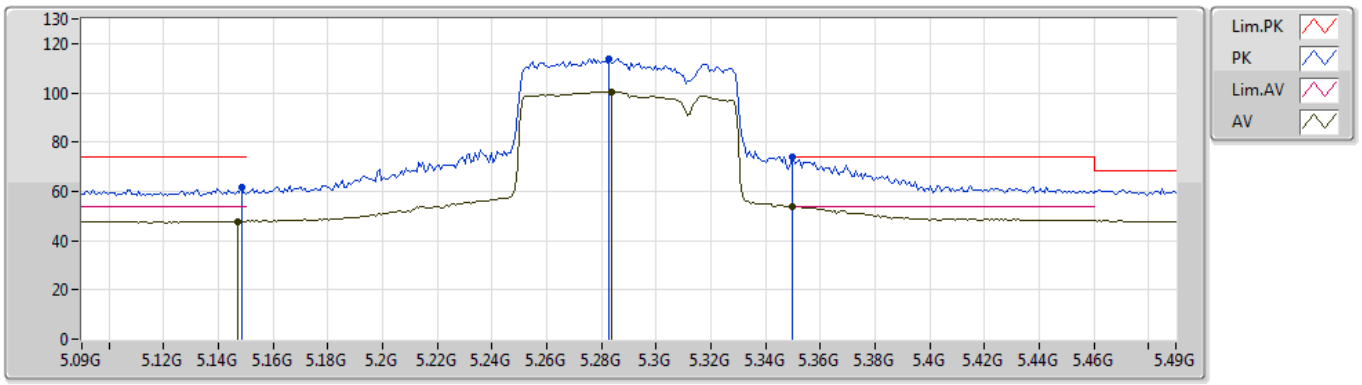

EUT Z_2TX
Setting 82
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.6186G | 59.01 | 74.00 | -14.99 | 16.47 | 3 | Horizontal | 13 | 1.88 | - |
| AV | 10.61G | 45.46 | 54.00 | -8.54 | 16.45 | 3 | Horizontal | 13 | 1.88 | - |

## 802.11ax HEW80-BF_Nss1,(MCS0)_2TX

## 5290MHz_TX

31/07/2019



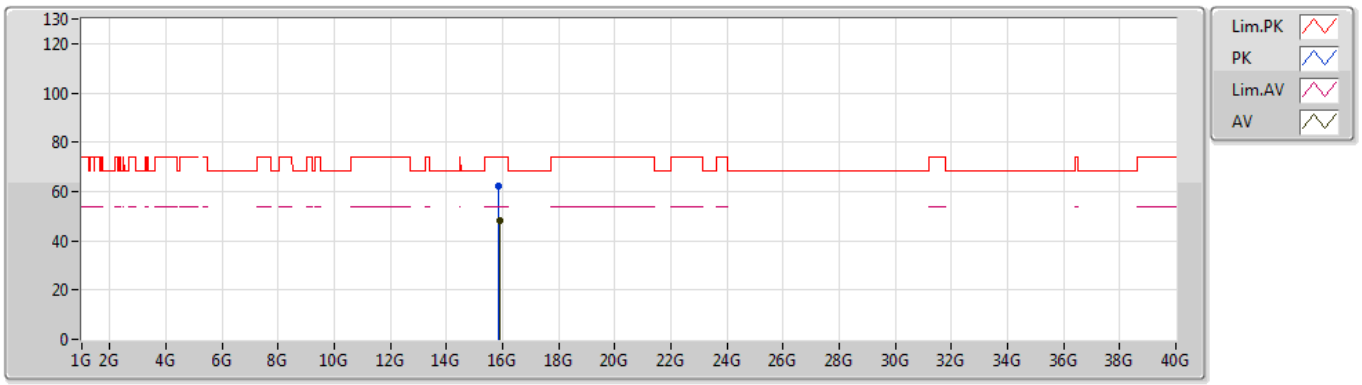

EUT Z_2TX
Setting 79
06-C-4-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1484G | 61.73 | 74.00 | -12.27 | 7.33 | 3 | Vertical | 344 | 2.07 | - |
| AV | 5.1468G | 47.90 | 54.00 | -6.10 | 7.34 | 3 | Vertical | 344 | 2.07 | - |
| PK | 5.2828G | 113.84 | Inf | -Inf | 7.09 | 3 | Vertical | 344 | 2.07 | - |
| AV | 5.2836G | 100.57 | Inf | -Inf | 7.09 | 3 | Vertical | 344 | 2.07 | - |
| PK | 5.35G | 73.76 | 74.00 | -0.24 | 7.21 | 3 | Vertical | 344 | 2.07 | - |
| AV | 5.35G | 53.92 | 54.00 | -0.08 | 7.21 | 3 | Vertical | 344 | 2.07 | - |

## 802.11ax HEW80-BF_Nss1,(MCS0)_2TX

## 5290MHz_TX

31/07/2019



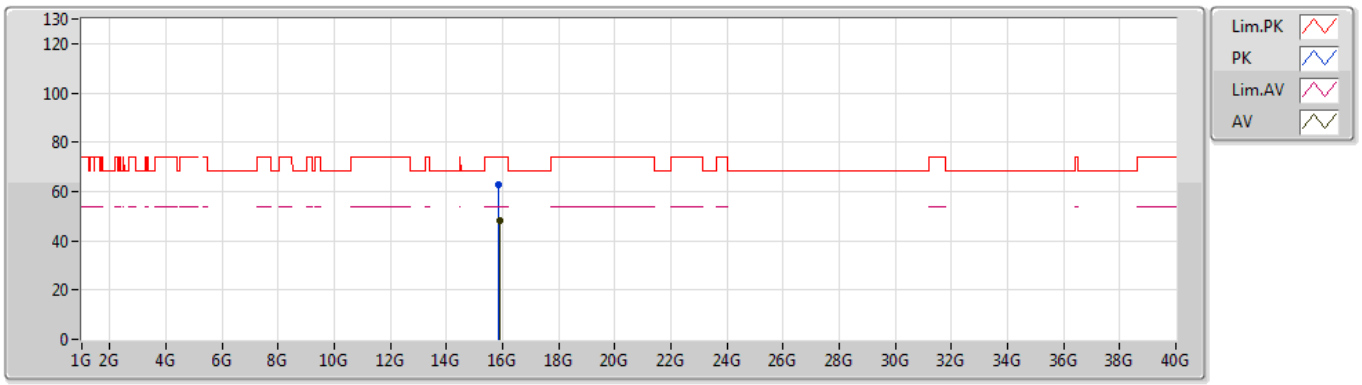

EUT Z_2TX
Setting 79
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.87552G | 62.37 | 74.00 | -11.63 | 16.82 | 3 | Vertical | 325 | 2.24 | - |
| AV | 15.87992G | 48.34 | 54.00 | -5.66 | 16.80 | 3 | Vertical | 325 | 2.24 | - |

## 802.11ax HEW80-BF_Nss1,(MCS0)_2TX

## 5290MHz_TX

31/07/2019



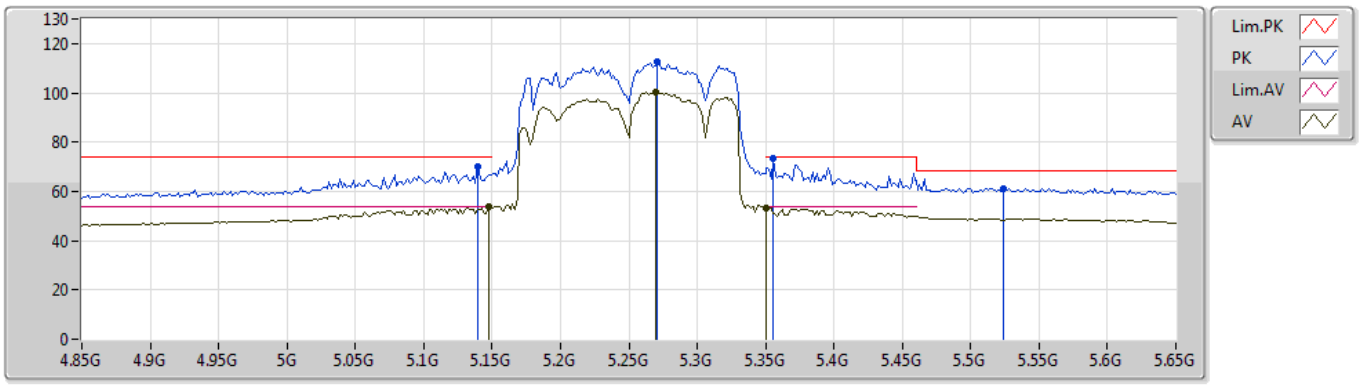

EUT Z_2TX
Setting 79
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.86048G | 62.50 | 74.00 | -11.50 | 16.88 | 3 | Horizontal | 350 | 2.10 | - |
| AV | 15.8788G | 48.32 | 54.00 | -5.68 | 16.80 | 3 | Horizontal | 350 | 2.10 | - |

## 802.11ax HEW160-BF_Nss1,(MCS0)_2TX

## 5250MHz_TX

31/07/2019



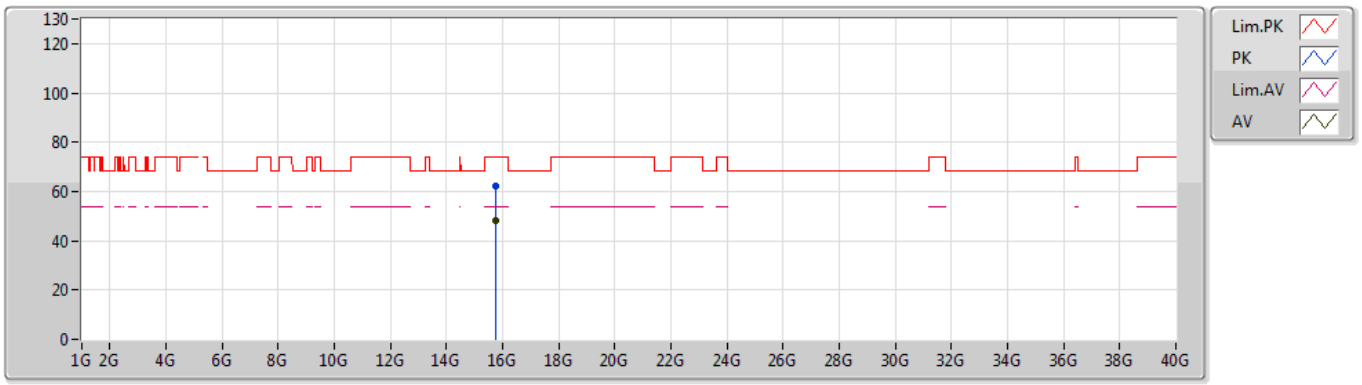

EUT Z_2TX
Setting 73
06-C-4-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1396G | 70.13 | 74.00 | -3.87 | 7.35 | 3 | Vertical | 56 | 1.90 | - |
| AV | 5.1476G | 53.55 | 54.00 | -0.45 | 7.33 | 3 | Vertical | 56 | 1.90 | - |
| PK | 5.2708G | 112.64 | Inf | -Inf | 7.11 | 3 | Vertical | 56 | 1.90 | - |
| AV | 5.2692G | 100.32 | Inf | -Inf | 7.12 | 3 | Vertical | 56 | 1.90 | - |
| PK | 5.3556G | 73.47 | 74.00 | -0.53 | 7.23 | 3 | Vertical | 56 | 1.90 | - |
| AV | 5.3508G | 53.51 | 54.00 | -0.49 | 7.21 | 3 | Vertical | 56 | 1.90 | - |
| PK | 5.5236G | 61.20 | 68.20 | -7.00 | 7.59 | 3 | Vertical | 56 | 1.90 | - |

## 802.11ax HEW160-BF_Nss1,(MCS0)_2TX

## 5250MHz_TX

31/07/2019



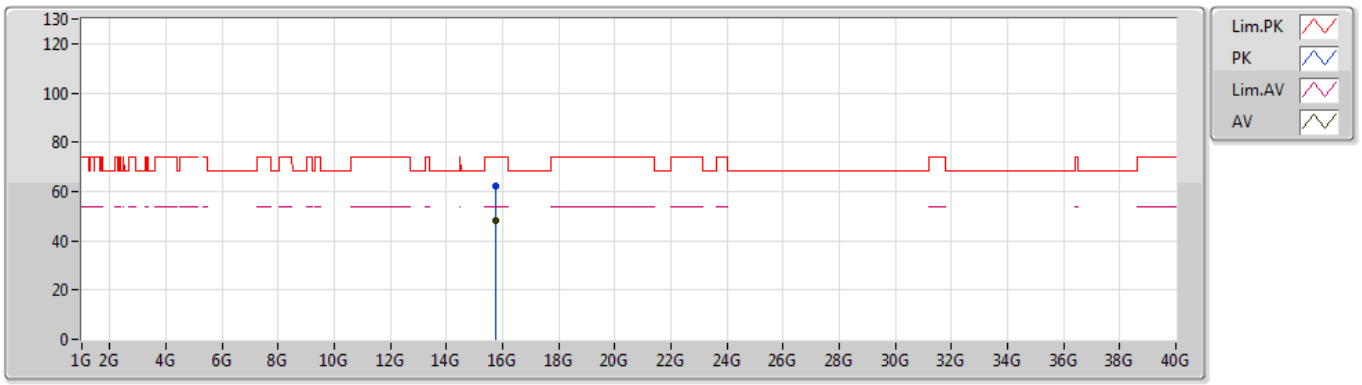

EUT Z_2TX
Setting 73
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.75188G | 62.19 | 74.00 | -11.81 | 17.27 | 3 | Vertical | 86 | 1.34 | - |
| AV | 15.75996G | 48.13 | 54.00 | -5.87 | 17.24 | 3 | Vertical | 86 | 1.34 | - |

## 802.11ax HEW160-BF_Nss1,(MCS0)_2TX

## 5250MHz_TX

31/07/2019




EUT Z_2TX
Setting 73
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.75608G | 62.28 | 74.00 | -11.72 | 17.26 | 3 | Horizontal | 237 | 1.99 | - |
| AV | 15.75476G | 48.00 | 54.00 | -6.00 | 17.26 | 3 | Horizontal | 237 | 1.99 | - |

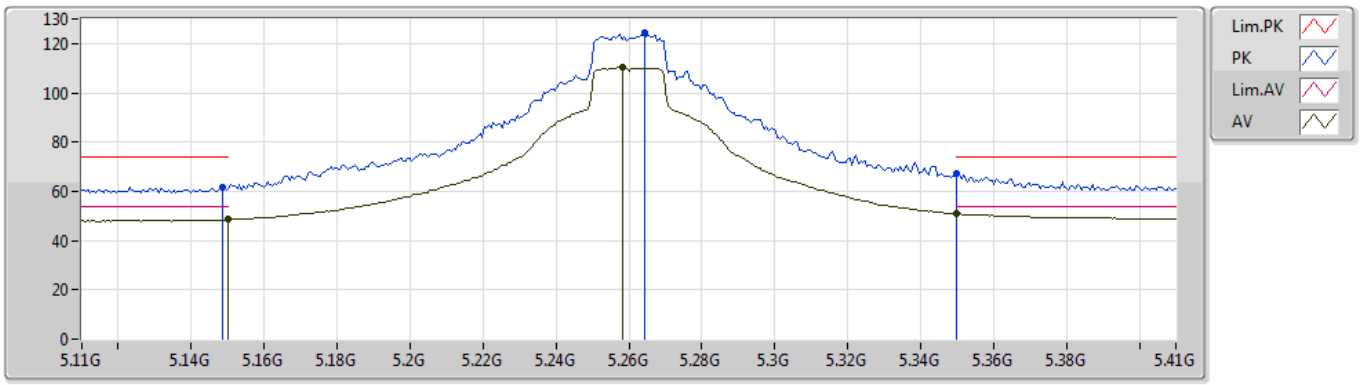
## 2T2S / For non-beamforming mode
## Summary

| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.25-5.35GHz | - | - | - | - | - | - | - | - | - | - | - | - |
| 802.11ax HEW80_Nss2,(MCS0)_2TX | Pass | AV | 5.351G | 53.96 | 54.00 | -0.04 | 7.21 | 3 | Vertical | 347 | 2.03 | - |

## 802.11ax HEW20_Nss2,(MCS0)_2TX

## 5260MHz_TX

23/07/2019



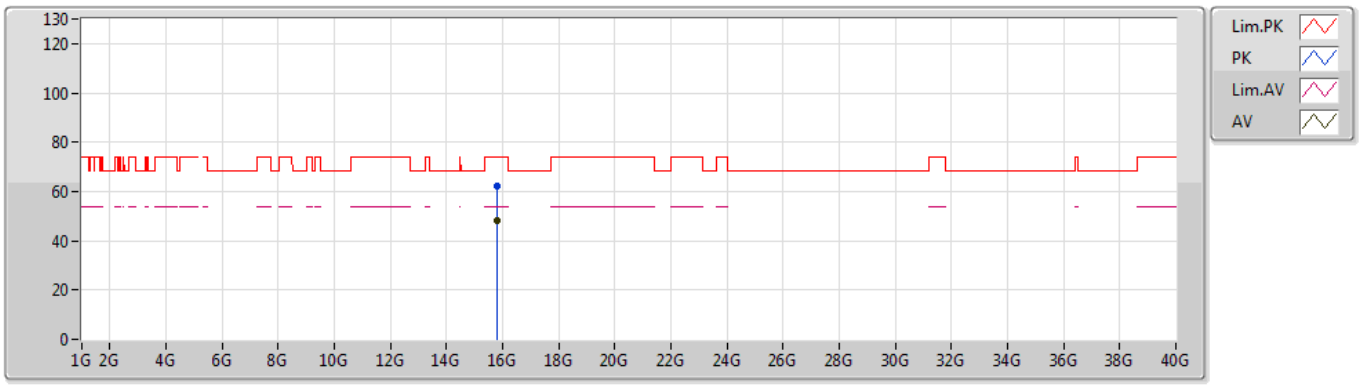

EUT Z_2TX
Setting 116
06-C-4-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1484G | 61.76 | 74.00 | -12.24 | 7.33 | 3 | Vertical | 343 | 1.09 | - |
| AV | 5.15G | 48.50 | 54.00 | -5.50 | 7.33 | 3 | Vertical | 343 | 1.09 | - |
| PK | 5.2642G | 124.13 | Inf | -Inf | 7.13 | 3 | Vertical | 343 | 1.09 | - |
| AV | 5.2582G | 110.20 | Inf | -Inf | 7.13 | 3 | Vertical | 343 | 1.09 | - |
| PK | 5.35G | 67.40 | 74.00 | -6.60 | 7.21 | 3 | Vertical | 343 | 1.09 | - |
| AV | 5.35G | 50.87 | 54.00 | -3.13 | 7.21 | 3 | Vertical | 343 | 1.09 | - |

## 802.11ax HEW20_Nss2,(MCS0)_2TX

## 5260MHz_TX

23/07/2019



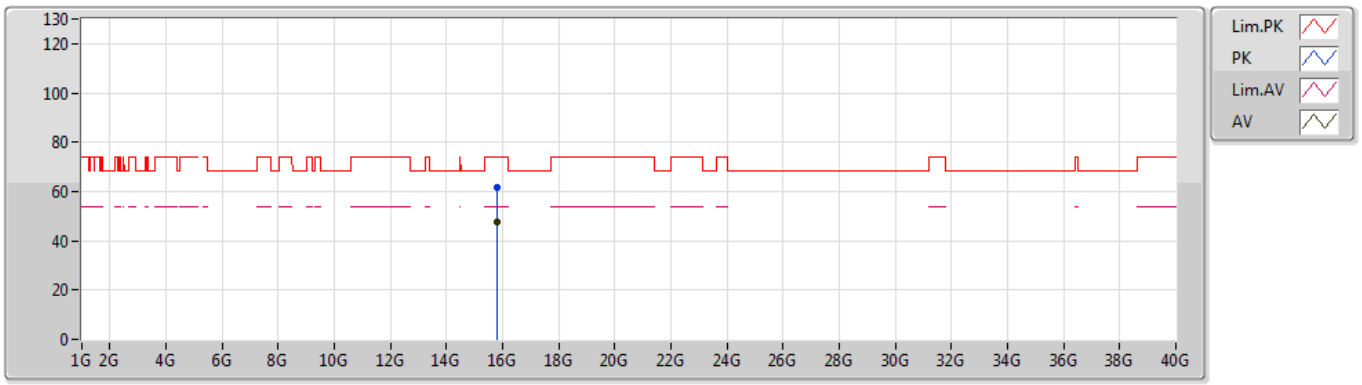

EUT Z_2TX
Setting 116
06-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.7904G | 62.15 | 74.00 | -11.85 | 17.14 | 3 | Vertical | 304 | 2.65 | - |
| AV | 15.78224G | 48.07 | 54.00 | -5.93 | 17.16 | 3 | Vertical | 304 | 2.65 | - |

## 802.11ax HEW20_Nss2,(MCS0)_2TX

## 5260MHz_TX

23/07/2019



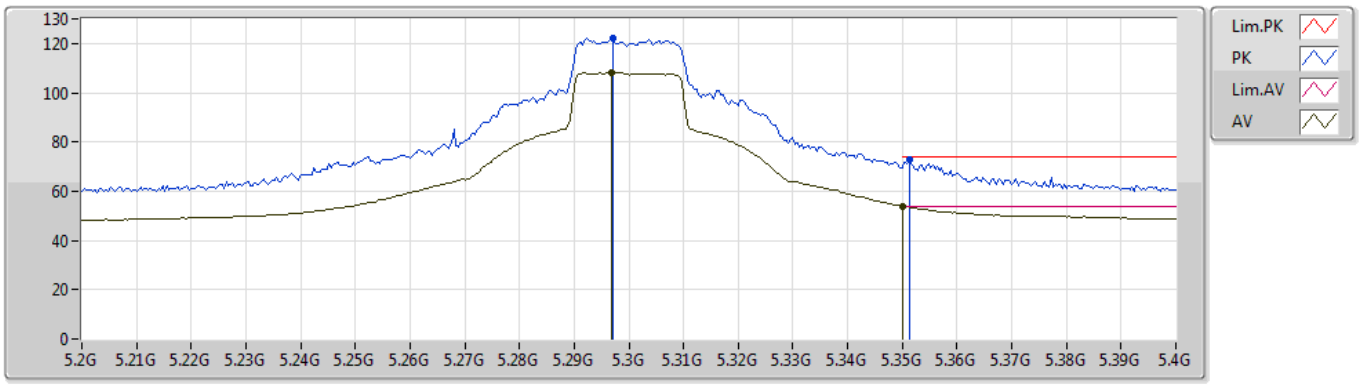

EUT Z_2TX
Setting 116
06-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.78408G | 61.73 | 74.00 | -12.27 | 17.15 | 3 | Horizontal | 15 | 1.50 | - |
| AV | 15.78952G | 47.80 | 54.00 | -6.20 | 17.14 | 3 | Horizontal | 15 | 1.50 | - |

## 802.11ax HEW20_Nss2,(MCS0)_2TX

## 5300MHz_TX

23/07/2019



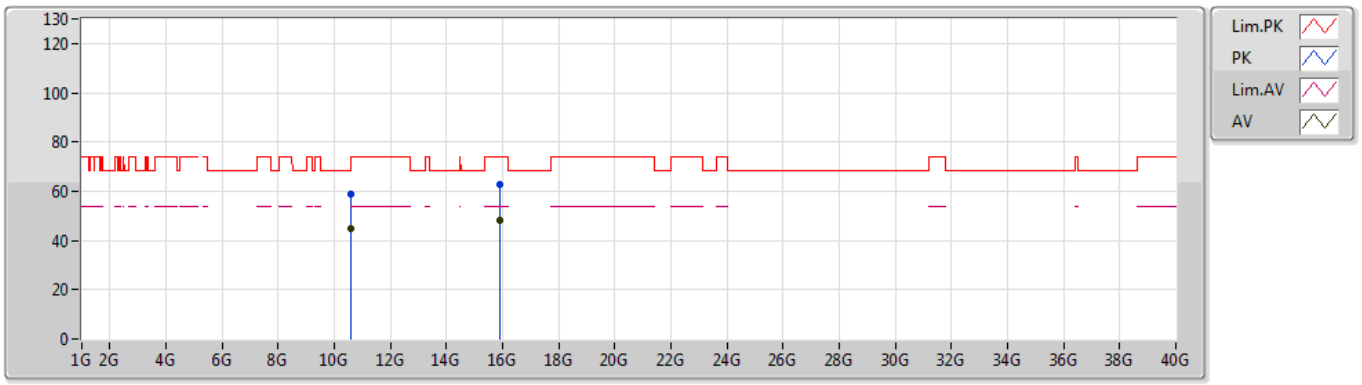

EUT Z_2TX
Setting 106
06-C-4-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.2972G | 122.06 | Inf | -Inf | 7.07 | 3 | Vertical | 343 | 1.27 | - |
| AV | 5.2968G | 108.39 | Inf | -Inf | 7.07 | 3 | Vertical | 343 | 1.27 | - |
| PK | 5.3512G | 72.77 | 74.00 | -1.23 | 7.21 | 3 | Vertical | 343 | 1.27 | - |
| AV | 5.35G | 53.91 | 54.00 | -0.09 | 7.21 | 3 | Vertical | 343 | 1.27 | - |

## 802.11ax HEW20_Nss2,(MCS0)_2TX

## 5300MHz_TX

23/07/2019



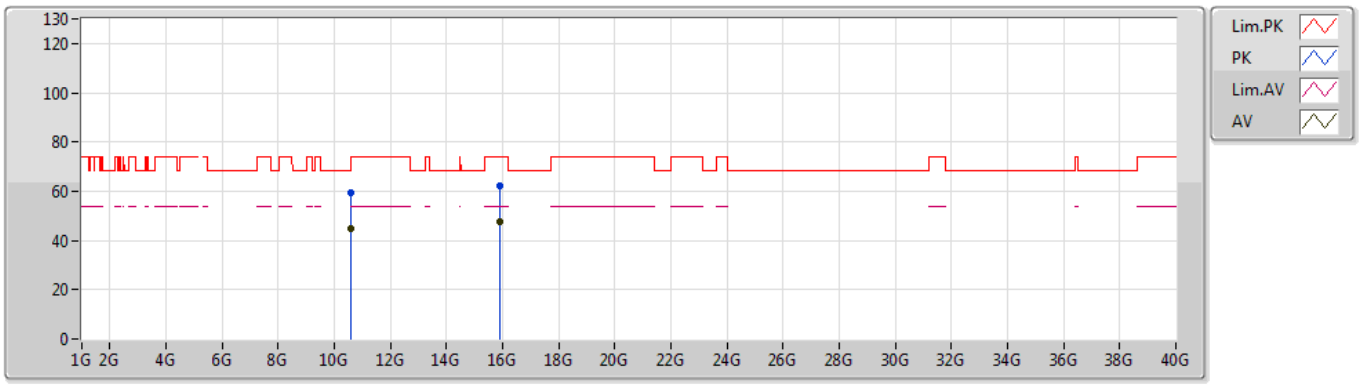

EUT Z_2TX
Setting 106
06-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.602G | 58.95 | 74.00 | -15.05 | 16.44 | 3 | Vertical | 334 | 1.50 | - |
| AV | 10.60048G | 44.79 | 54.00 | -9.21 | 16.44 | 3 | Vertical | 334 | 1.50 | - |
| PK | 15.89752G | 62.55 | 74.00 | -11.45 | 16.74 | 3 | Vertical | 97 | 1.05 | - |
| AV | 15.89416G | 47.93 | 54.00 | -6.07 | 16.75 | 3 | Vertical | 97 | 1.05 | - |

## 802.11ax HEW20_Nss2,(MCS0)_2TX

## 5300MHz_TX

23/07/2019



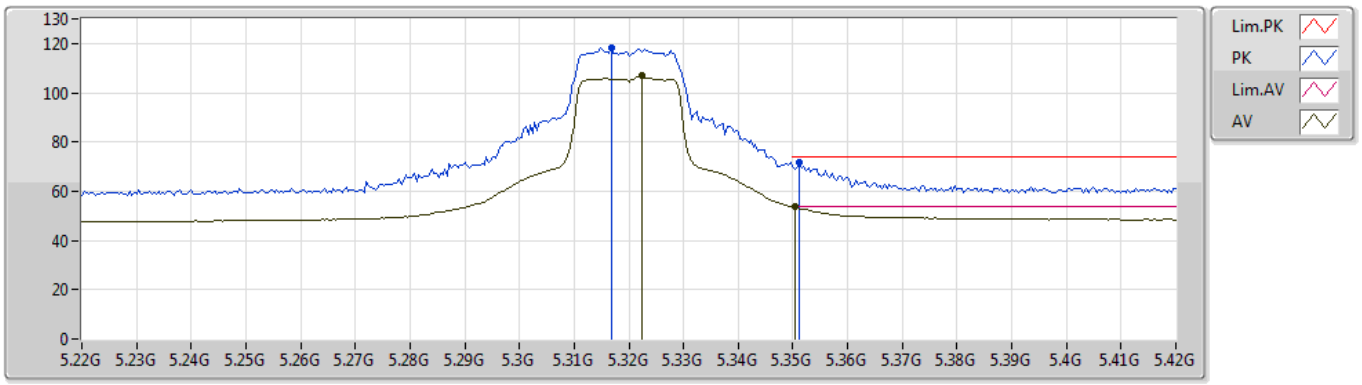

EUT Z_2TX
Setting 106
06-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.61424G | 59.28 | 74.00 | -14.72 | 16.46 | 3 | Horizontal | 196 | 2.44 | - |
| AV | 10.60984G | 44.88 | 54.00 | -9.12 | 16.45 | 3 | Horizontal | 196 | 2.44 | - |
| PK | 15.88664G | 62.37 | 74.00 | -11.63 | 16.77 | 3 | Horizontal | 185 | 1.50 | - |
| AV | 15.89008G | 47.89 | 54.00 | -6.11 | 16.77 | 3 | Horizontal | 185 | 1.50 | - |

## 802.11ax HEW20_Nss2,(MCS0)_2TX

## 5320MHz_TX

23/07/2019



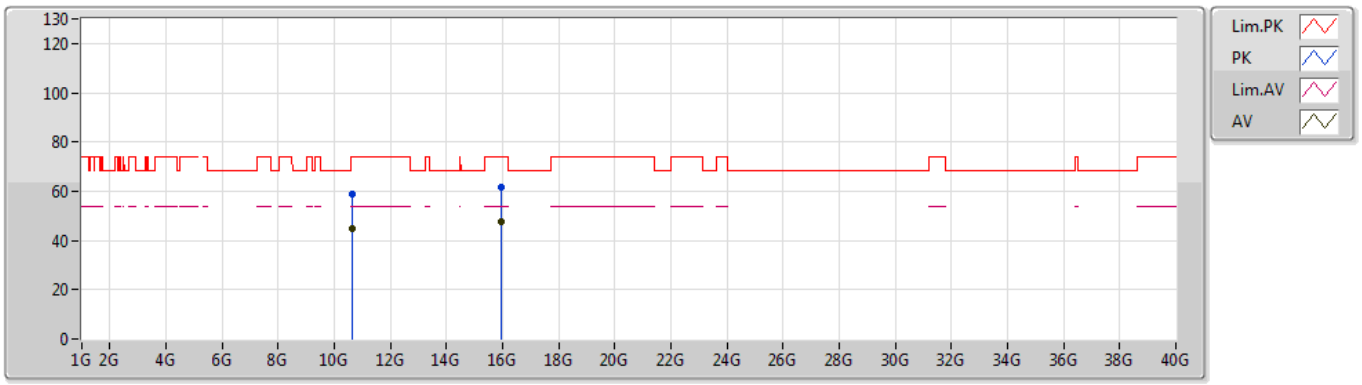

EUT Z_2TX
Setting 93
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3168G | 118.32 | Inf | -Inf | 7.11 | 3 | Vertical | 340 | 1.05 | - |
| AV | 5.3224G | 106.88 | Inf | -Inf | 7.13 | 3 | Vertical | 340 | 1.05 | - |
| PK | 5.3512G | 71.71 | 74.00 | -2.29 | 7.21 | 3 | Vertical | 340 | 1.05 | - |
| AV | 5.3504G | 53.56 | 54.00 | -0.44 | 7.21 | 3 | Vertical | 340 | 1.05 | - |

## 802.11ax HEW20_Nss2,(MCS0)_2TX

## 5320MHz_TX

23/07/2019



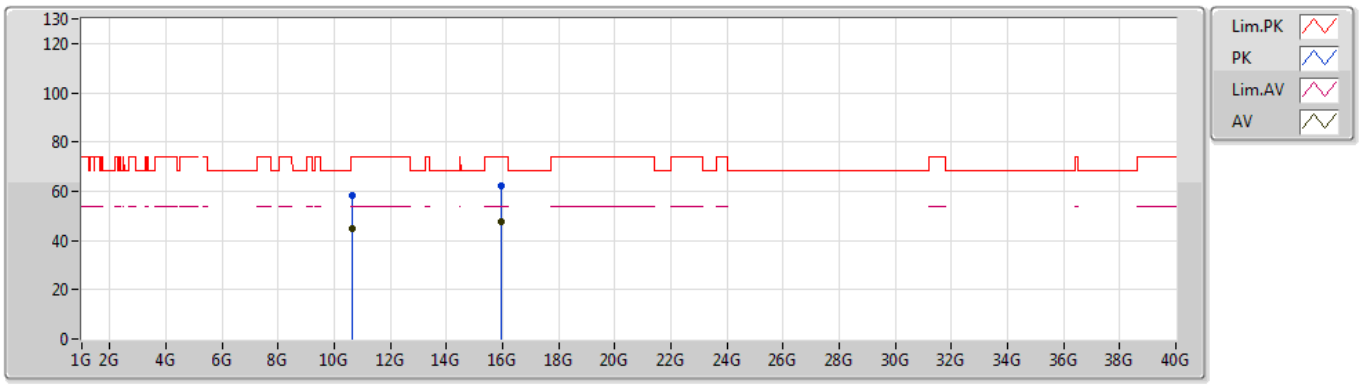

EUT Z_2TX
Setting 93
06-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.646G | 58.56 | 74.00 | -15.44 | 16.50 | 3 | Vertical | 254 | 1.63 | - |
| AV | 10.64168G | 44.74 | 54.00 | -9.26 | 16.51 | 3 | Vertical | 254 | 1.63 | - |
| PK | 15.96816G | 61.72 | 74.00 | -12.28 | 16.48 | 3 | Vertical | 272 | 1.46 | - |
| AV | 15.96392G | 47.42 | 54.00 | -6.58 | 16.49 | 3 | Vertical | 272 | 1.46 | - |

## 802.11ax HEW20_Nss2,(MCS0)_2TX

## 5320MHz_TX

23/07/2019



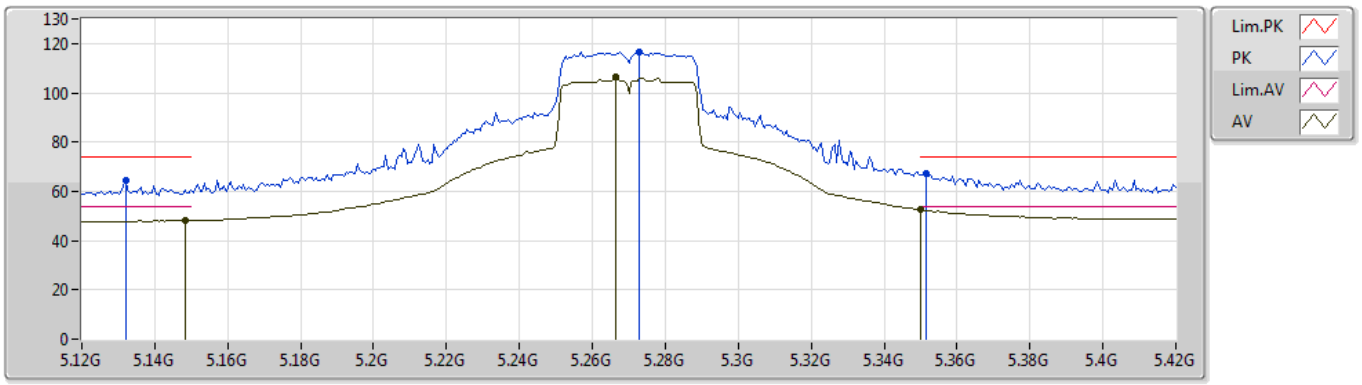

EUT Z_2TX
Setting 93
06-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.64184G | 58.51 | 74.00 | -15.49 | 16.51 | 3 | Horizontal | 88 | 2.21 | - |
| AV | 10.64168G | 44.77 | 54.00 | -9.23 | 16.51 | 3 | Horizontal | 88 | 2.21 | - |
| PK | 15.95656G | 62.35 | 74.00 | -11.65 | 16.52 | 3 | Horizontal | 241 | 1.50 | - |
| AV | 15.94328G | 47.53 | 54.00 | -6.47 | 16.57 | 3 | Horizontal | 241 | 1.50 | - |

## 802.11ax HEW40_Nss2,(MCS0)_2TX

## 5270MHz_TX

23/07/2019



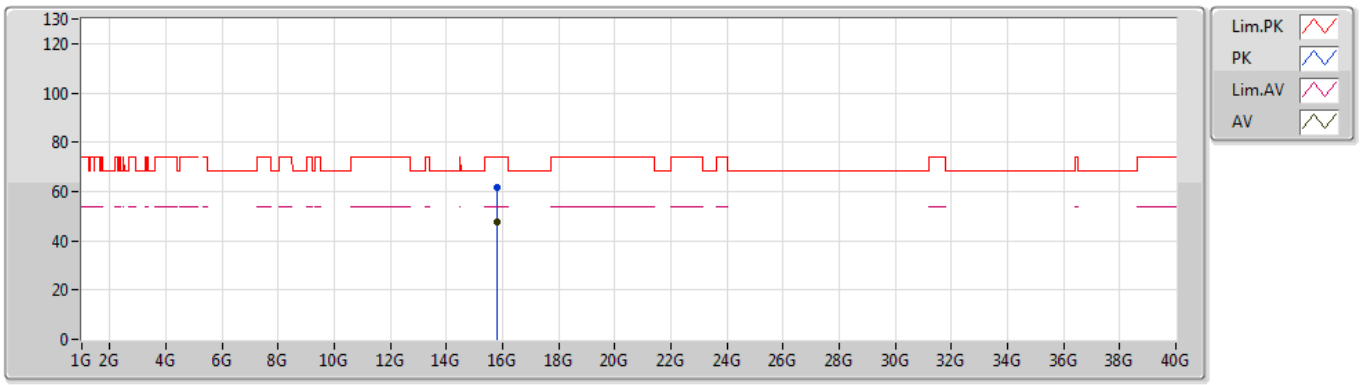

EUT Z_2TX
Setting 100
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.132G | 64.31 | 74.00 | -9.69 | 7.36 | 3 | Vertical | 341 | 1.38 | - |
| AV | 5.1482G | 48.16 | 54.00 | -5.84 | 7.33 | 3 | Vertical | 341 | 1.38 | - |
| PK | 5.273G | 116.67 | Inf | -Inf | 7.10 | 3 | Vertical | 341 | 1.38 | - |
| AV | 5.2664G | 106.27 | Inf | -Inf | 7.13 | 3 | Vertical | 341 | 1.38 | - |
| PK | 5.3516G | 67.26 | 74.00 | -6.74 | 7.21 | 3 | Vertical | 341 | 1.38 | - |
| AV | 5.35G | 52.48 | 54.00 | -1.52 | 7.21 | 3 | Vertical | 341 | 1.38 | - |

## 802.11ax HEW40_Nss2,(MCS0)_2TX

## 5270MHz_TX

23/07/2019



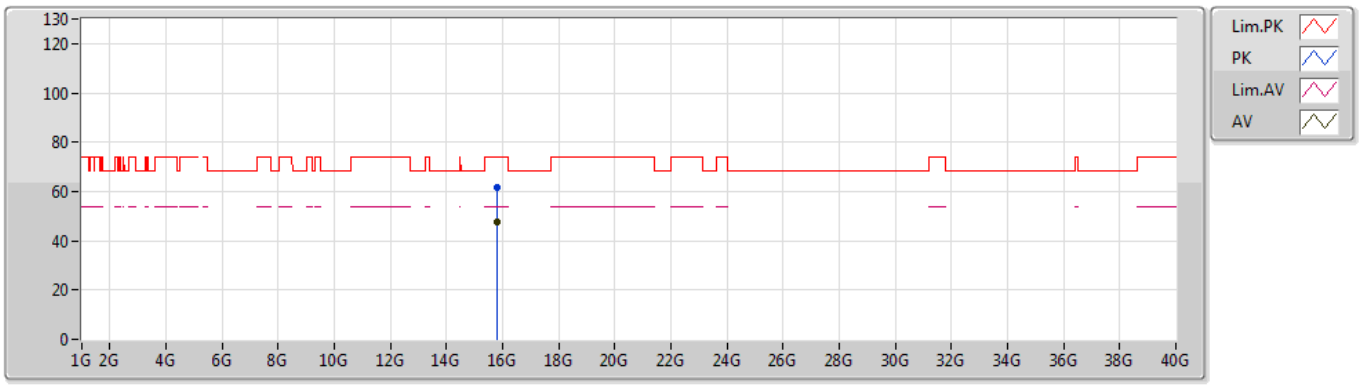

EUT Z_2TX
Setting 100
06-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.8228G | 61.66 | 74.00 | -12.34 | 17.01 | 3 | Vertical | 218 | 1.85 | - |
| AV | 15.8172G | 47.71 | 54.00 | -6.29 | 17.03 | 3 | Vertical | 218 | 1.85 | - |

## 802.11ax HEW40_Nss2,(MCS0)_2TX

## 5270MHz_TX

23/07/2019



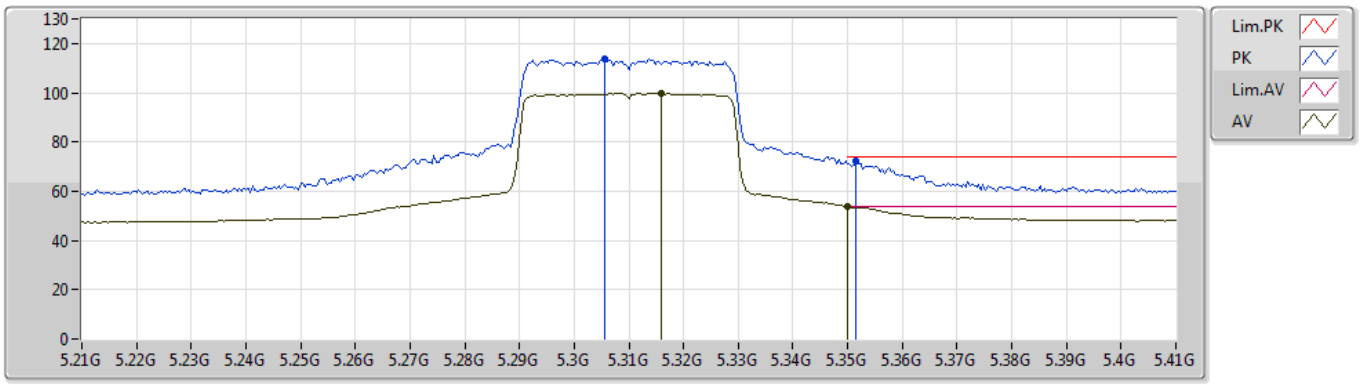

EUT Z_2TX
Setting 100
06-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.80328G | 61.60 | 74.00 | -12.40 | 17.09 | 3 | Horizontal | 357 | 1.55 | - |
| AV | 15.80576G | 47.79 | 54.00 | -6.21 | 17.07 | 3 | Horizontal | 357 | 1.55 | - |

## 802.11ax HEW40_Nss2,(MCS0)_2TX

## 5310MHz_TX

23/07/2019



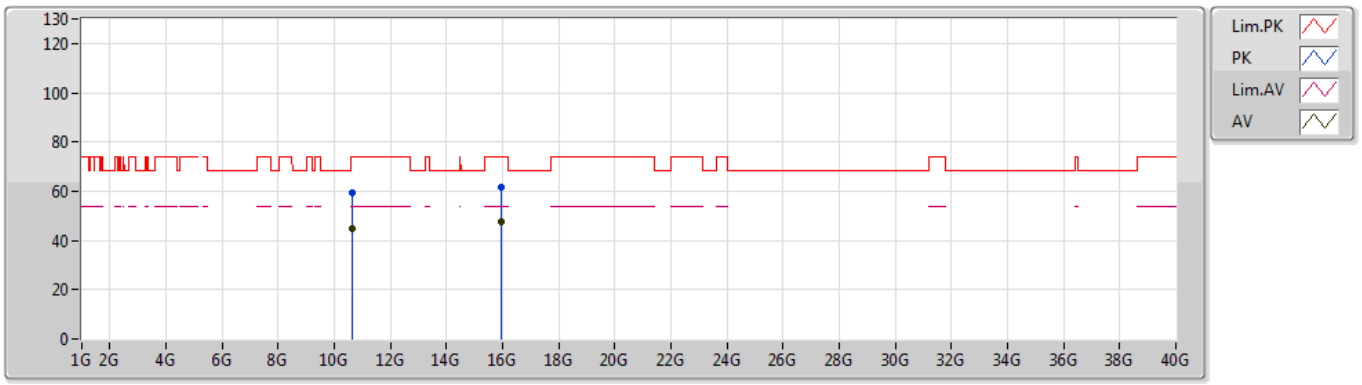

EUT Z_2TX
Setting 83
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3056G | 113.53 | Inf | -Inf | 7.08 | 3 | Vertical | 340 | 1.06 | - |
| AV | 5.316G | 99.66 | Inf | -Inf | 7.11 | 3 | Vertical | 340 | 1.06 | - |
| PK | 5.3516G | 72.05 | 74.00 | -1.95 | 7.21 | 3 | Vertical | 340 | 1.06 | - |
| AV | 5.35G | 53.79 | 54.00 | -0.21 | 7.21 | 3 | Vertical | 340 | 1.06 | - |

## 802.11ax HEW40_Nss2,(MCS0)_2TX

## 5310MHz_TX

23/07/2019



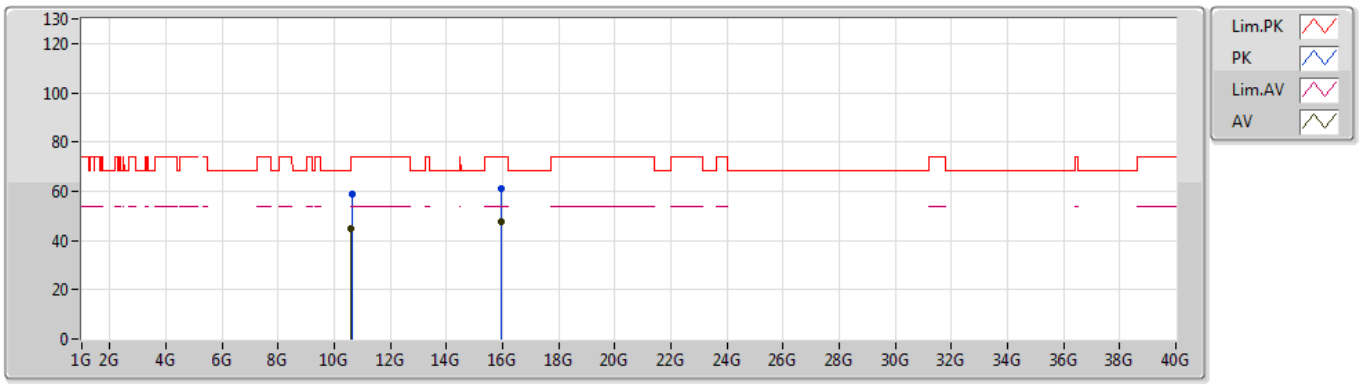

EUT Z_2TX
Setting 83
06-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.62608G | 59.35 | 74.00 | -14.65 | 16.48 | 3 | Vertical | 64 | 2.35 | - |
| AV | 10.62024G | 44.80 | 54.00 | -9.20 | 16.47 | 3 | Vertical | 64 | 2.35 | - |
| PK | 15.92976G | 61.80 | 74.00 | -12.20 | 16.62 | 3 | Vertical | 348 | 1.50 | - |
| AV | 15.92976G | 47.58 | 54.00 | -6.42 | 16.62 | 3 | Vertical | 348 | 1.50 | - |

## 802.11ax HEW40_Nss2,(MCS0)_2TX

## 5310MHz_TX

23/07/2019



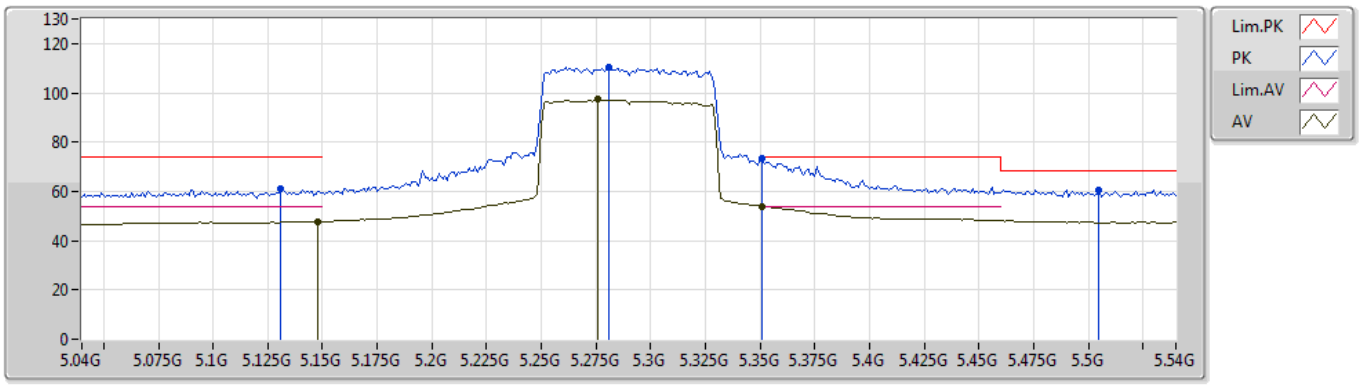

EUT Z_2TX
Setting 83
06-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.61576G | 58.86 | 74.00 | -15.14 | 16.46 | 3 | Horizontal | 316 | 1.82 | - |
| AV | 10.60264G | 44.77 | 54.00 | -9.23 | 16.44 | 3 | Horizontal | 316 | 1.82 | - |
| PK | 15.93456G | 61.21 | 74.00 | -12.79 | 16.60 | 3 | Horizontal | 139 | 2.24 | - |
| AV | 15.93344G | 47.72 | 54.00 | -6.28 | 16.61 | 3 | Horizontal | 139 | 2.24 | - |

## 802.11ax HEW80_Nss2,(MCS0)_2TX

## 5290MHz_TX

12/07/2019



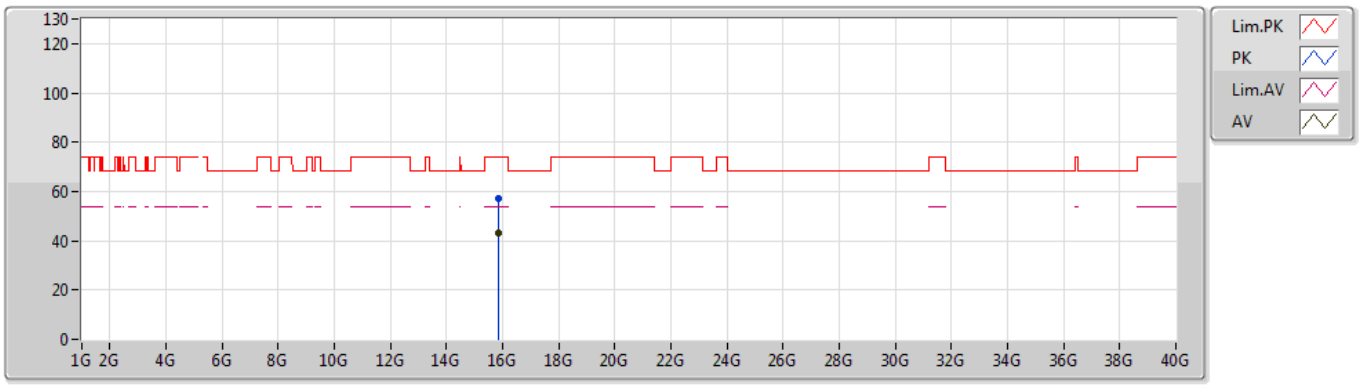

EUT Z_2TX
Setting 83
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.131G | 60.89 | 74.00 | -13.11 | 7.36 | 3 | Vertical | 347 | 2.03 | - |
| AV | 5.148G | 47.70 | 54.00 | -6.30 | 7.33 | 3 | Vertical | 347 | 2.03 | - |
| PK | 5.281G | 110.39 | Inf | -Inf | 7.10 | 3 | Vertical | 347 | 2.03 | - |
| AV | 5.276G | 97.27 | Inf | -Inf | 7.11 | 3 | Vertical | 347 | 2.03 | - |
| PK | 5.351G | 73.15 | 74.00 | -0.85 | 7.21 | 3 | Vertical | 347 | 2.03 | - |
| AV | 5.351G | 53.96 | 54.00 | -0.04 | 7.21 | 3 | Vertical | 347 | 2.03 | - |
| PK | 5.505G | 60.63 | 68.20 | -7.57 | 7.60 | 3 | Vertical | 347 | 2.03 | - |

## 802.11ax HEW80_Nss2,(MCS0)_2TX

## 5290MHz_TX

24/07/2019



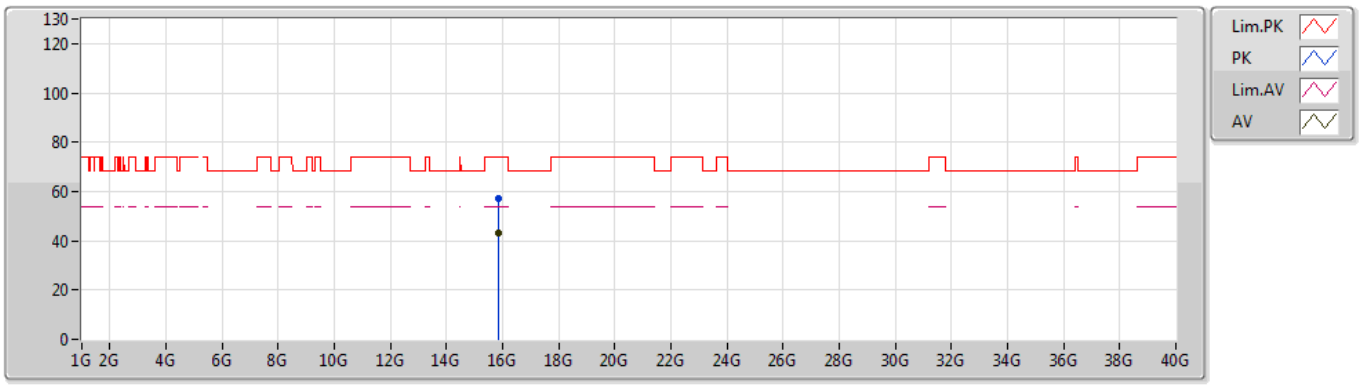

EUT Z_2TX
Setting 83
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.87692G | 57.07 | 74.00 | -16.93 | 13.18 | 3 | Vertical | 202 | 2.18 | - |
| AV | 15.86456G | 43.13 | 54.00 | -10.87 | 13.24 | 3 | Vertical | 202 | 2.18 | - |

## 802.11ax HEW80_Nss2,(MCS0)_2TX

## 5290MHz_TX

24/07/2019



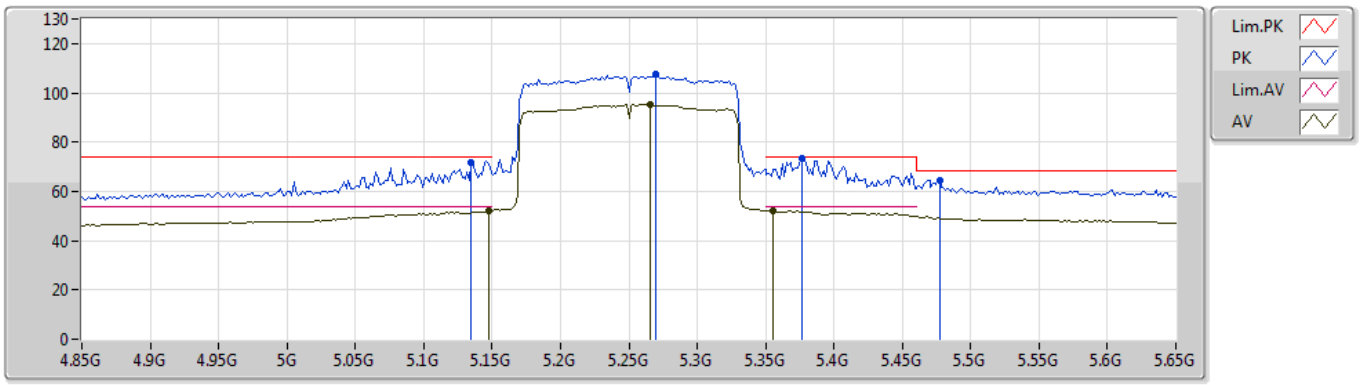

EUT Z_2TX
Setting 83
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.87452G | 57.12 | 74.00 | -16.88 | 13.20 | 3 | Horizontal | 187 | 2.15 | - |
| AV | 15.86956G | 43.11 | 54.00 | -10.89 | 13.21 | 3 | Horizontal | 187 | 2.15 | - |

## 802.11ax HEW160_Nss2,(MCS0)_2TX

## 5250MHz_TX

12/07/2019



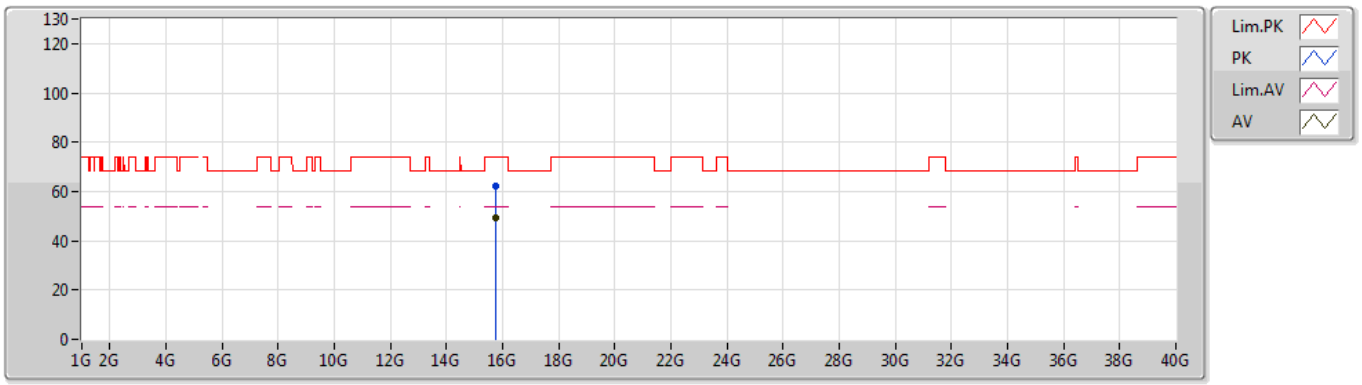

EUT Z_2TX
Setting 81
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1348G | 71.88 | 74.00 | -2.12 | 7.35 | 3 | Vertical | 342 | 1.30 | - |
| AV | 5.1476G | 52.04 | 54.00 | -1.96 | 7.33 | 3 | Vertical | 342 | 1.30 | - |
| PK | 5.2692G | 107.74 | Inf | -Inf | 7.12 | 3 | Vertical | 342 | 1.30 | - |
| AV | 5.266G | 95.18 | Inf | -Inf | 7.13 | 3 | Vertical | 342 | 1.30 | - |
| PK | 5.3764G | 73.61 | 74.00 | -0.39 | 7.30 | 3 | Vertical | 342 | 1.30 | - |
| AV | 5.3556G | 52.09 | 54.00 | -1.91 | 7.23 | 3 | Vertical | 342 | 1.30 | - |
| PK | 5.4772G | 64.58 | 68.20 | -3.62 | 7.54 | 3 | Vertical | 342 | 1.30 | - |

## 802.11ax HEW160_Nss2,(MCS0)_2TX

## 5250MHz_TX

24/07/2019



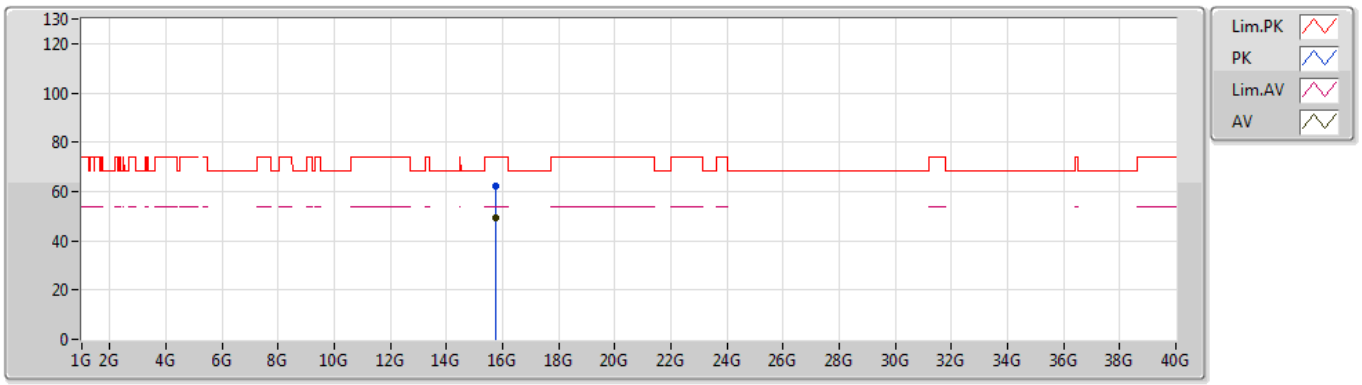

EUT Z_2TX
Setting 81
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.75508G | 61.94 | 74.00 | -12.06 | 17.54 | 3 | Vertical | 49 | 1.07 | - |
| AV | 15.75232G | 49.59 | 54.00 | -4.41 | 17.55 | 3 | Vertical | 49 | 1.07 | - |

## 802.11ax HEW160_Nss2,(MCS0)_2TX

## 5250MHz_TX

24/07/2019




EUT Z_2TX
Setting 81
06-S-5
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.751G | 62.02 | 74.00 | -11.98 | 17.55 | 3 | Horizontal | 188 | 1.02 | - |
| AV | 15.74596G | 49.53 | 54.00 | -4.47 | 17.58 | 3 | Horizontal | 188 | 1.02 | - |

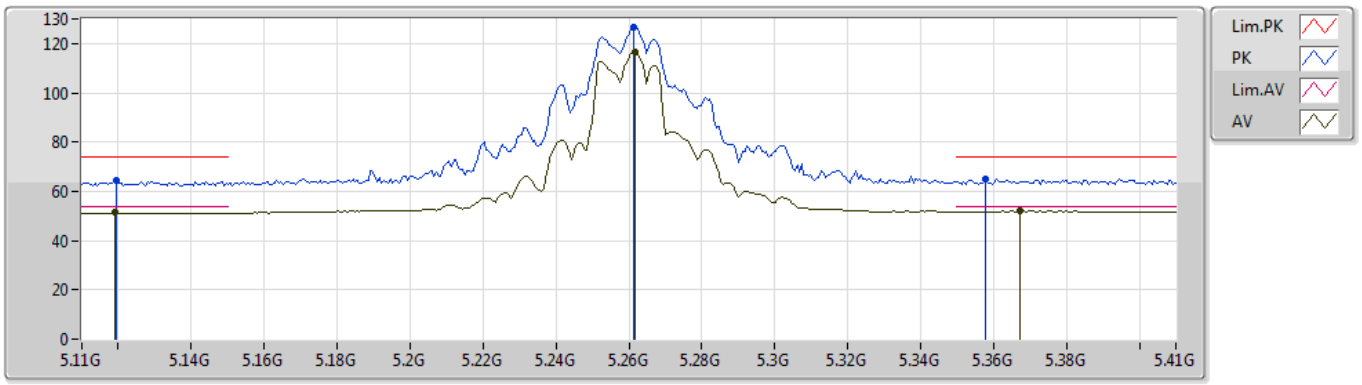
## 4T1S / For non-beamforming mode
## Summary

| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.25-5.35GHz | - | - | - | - | - | - | - | - | - | - | - | - |
| 802.11a_Nss1,(6Mbps)_4TX | Pass | AV | 5.3516G | 53.93 | 54.00 | -0.07 | 7.21 | 3 | Vertical | 343 | 2.03 | - |

## 802.11a_Nss1,(6Mbps)_4TX

## 5260MHz_TX

23/07/2019



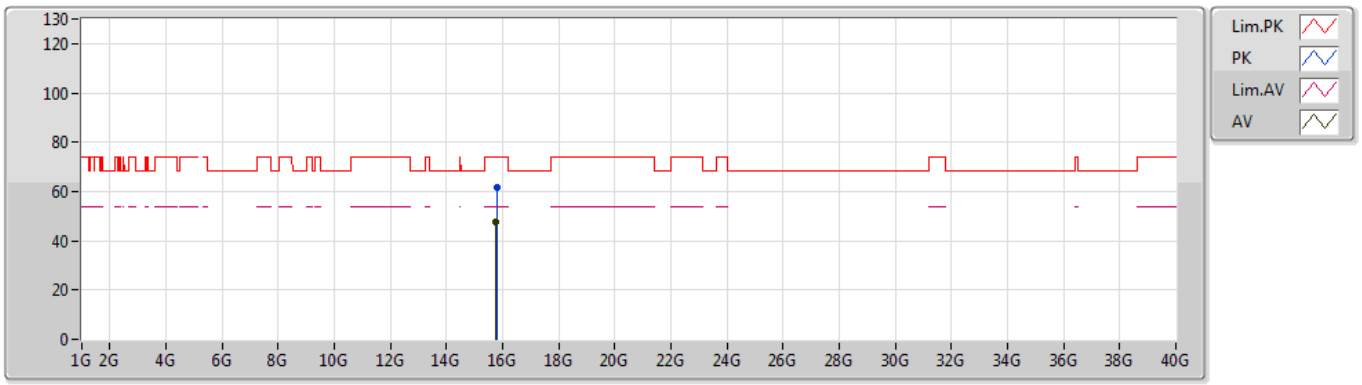

EUT Z_4TX
Setting 100
06-K-3-13
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1196G | 64.55 | 74.00 | -9.45 | 7.38 | 3 | Vertical | 342 | 2.04 | - |
| AV | 5.119G | 51.28 | 54.00 | -2.72 | 7.38 | 3 | Vertical | 342 | 2.04 | - |
| PK | 5.2612G | 126.48 | Inf | -Inf | 7.14 | 3 | Vertical | 342 | 2.04 | - |
| AV | 5.2618G | 116.35 | Inf | -Inf | 7.14 | 3 | Vertical | 342 | 2.04 | - |
| PK | 5.3578G | 65.19 | 74.00 | -8.81 | 7.23 | 3 | Vertical | 342 | 2.04 | - |
| AV | 5.3674G | 51.99 | 54.00 | -2.01 | 7.27 | 3 | Vertical | 342 | 2.04 | - |

## 802.11a_Nss1,(6Mbps)_4TX

## 5260MHz_TX

23/07/2019



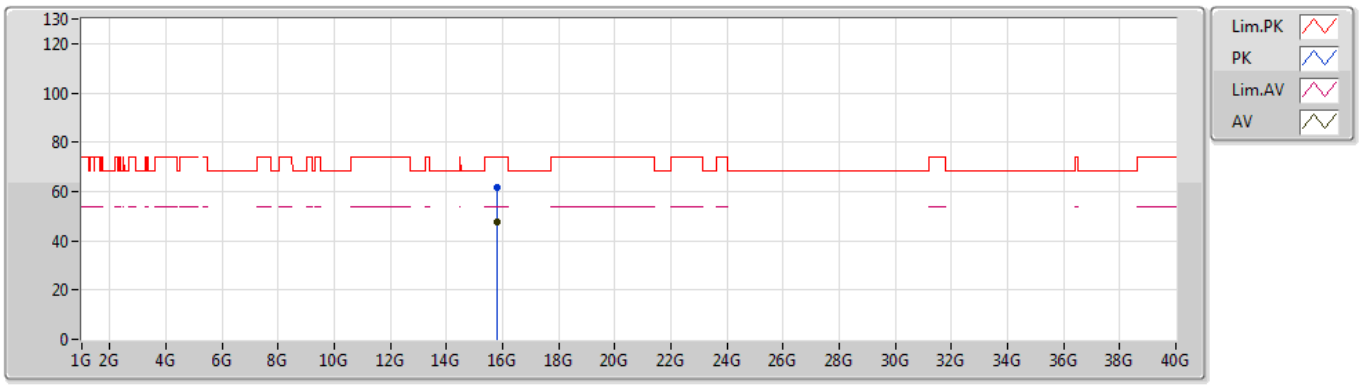

EUT Z_4TX
Setting 100
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.7926G | 61.80 | 74.00 | -12.20 | 17.13 | 3 | Vertical | 113 | 2.08 | - |
| AV | 15.77058G | 47.88 | 54.00 | -6.12 | 17.21 | 3 | Vertical | 113 | 2.08 | - |

## 802.11a_Nss1,(6Mbps)_4TX

## 5260MHz_TX

23/07/2019



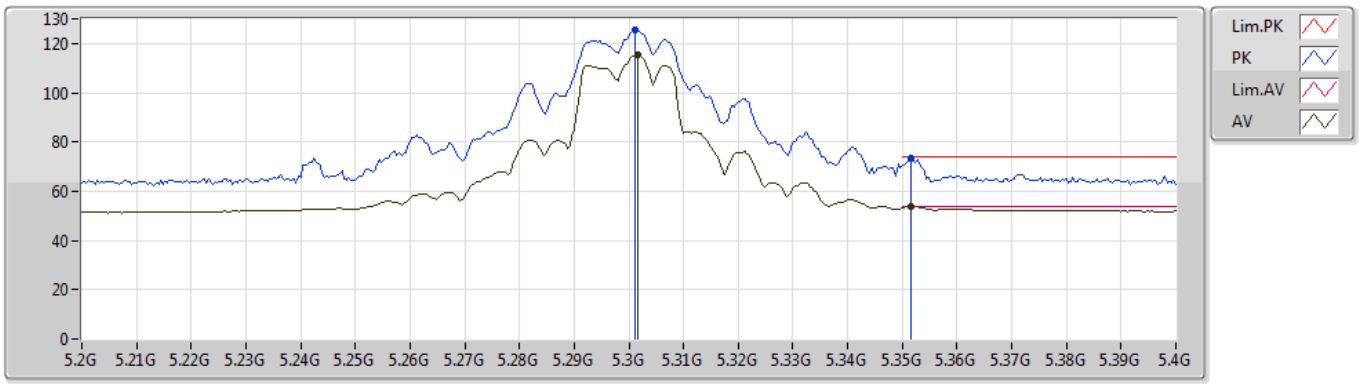

EUT Z_4TX
Setting 100
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.7806G | 61.78 | 74.00 | -12.22 | 17.17 | 3 | Horizontal | 139 | 1.50 | - |
| AV | 15.77934G | 47.87 | 54.00 | -6.13 | 17.17 | 3 | Horizontal | 139 | 1.50 | - |

## 802.11a_Nss1,(6Mbps)_4TX

## 5300MHz_TX

23/07/2019



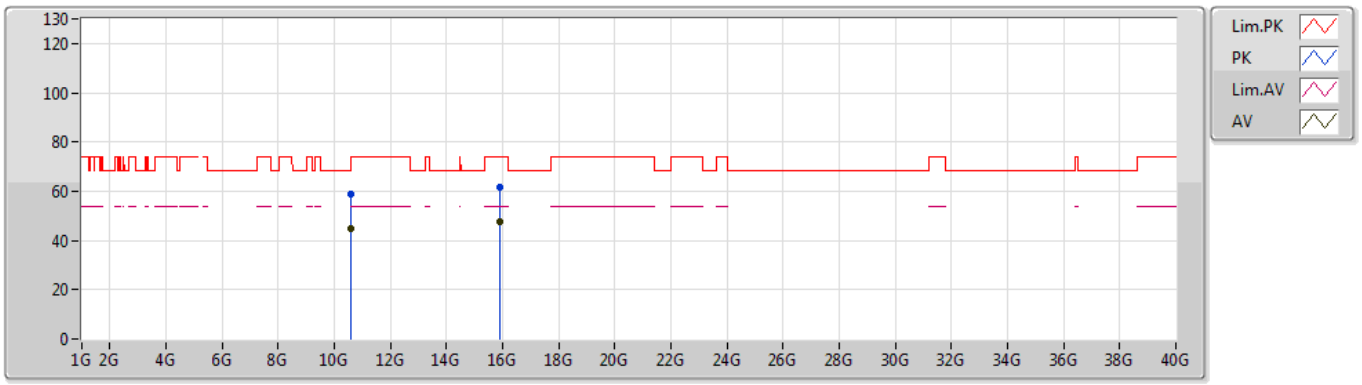

EUT Z_4TX
Setting 100
06-K-3-13
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3012G | 125.70 | Inf | -Inf | 7.06 | 3 | Vertical | 343 | 2.03 | - |
| AV | 5.3016G | 115.26 | Inf | -Inf | 7.06 | 3 | Vertical | 343 | 2.03 | - |
| PK | 5.3516G | 73.21 | 74.00 | -0.79 | 7.21 | 3 | Vertical | 343 | 2.03 | - |
| AV | 5.3516G | 53.93 | 54.00 | -0.07 | 7.21 | 3 | Vertical | 343 | 2.03 | - |

## 802.11a_Nss1,(6Mbps)_4TX

## 5300MHz_TX

02/08/2019



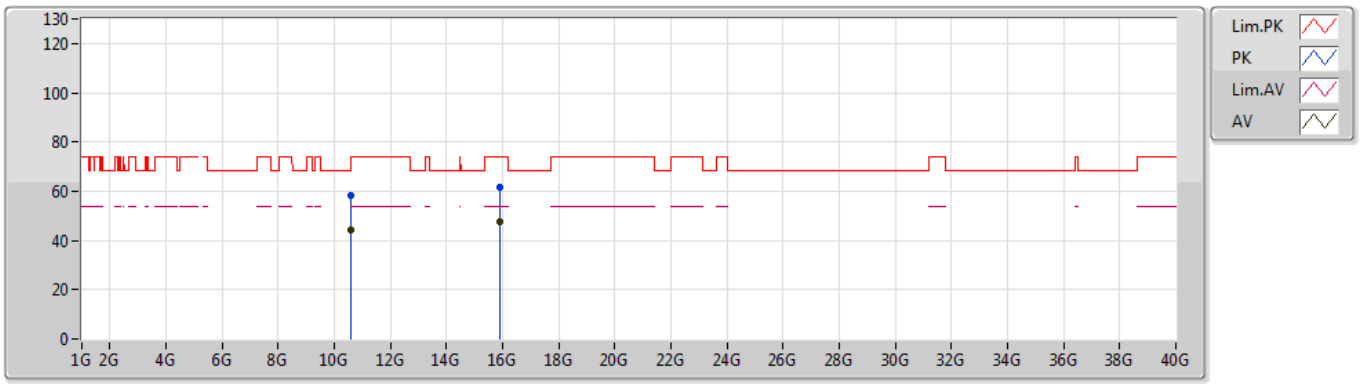

EUT Z_4TX
Setting 100
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.6083G | 58.63 | 74.00 | -15.37 | 16.45 | 3 | Vertical | 204 | 1.79 | - |
| AV | 10.6003G | 44.94 | 54.00 | -9.06 | 16.44 | 3 | Vertical | 204 | 1.79 | - |
| PK | 15.8937G | 61.91 | 74.00 | -12.09 | 16.76 | 3 | Vertical | 120 | 1.50 | - |
| AV | 15.9021G | 47.77 | 54.00 | -6.23 | 16.72 | 3 | Vertical | 120 | 1.50 | - |

## 802.11a_Nss1,(6Mbps)_4TX

## 5300MHz_TX

02/08/2019



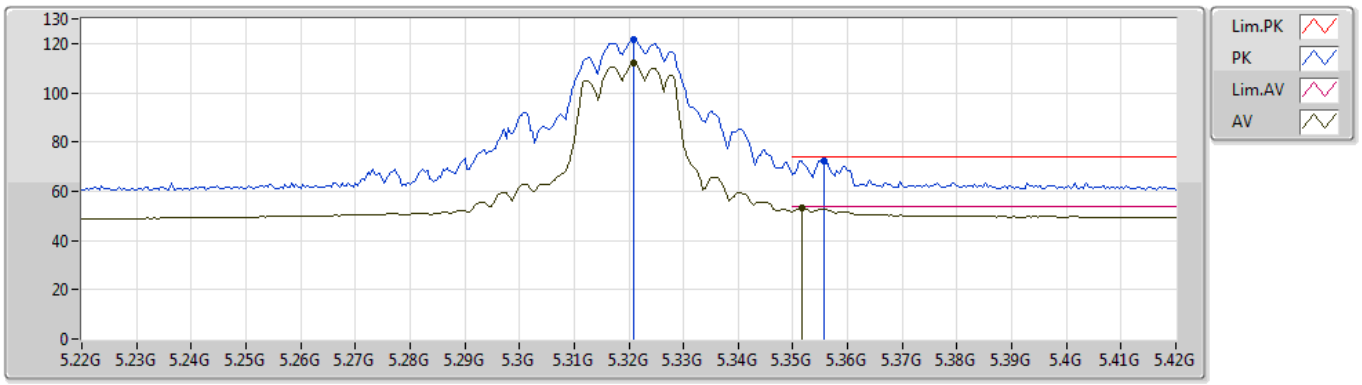

EUT Z_4TX
Setting 100
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.6026G | 58.17 | 74.00 | -15.83 | 16.44 | 3 | Horizontal | 302 | 1.50 | - |
| AV | 10.60246G | 44.53 | 54.00 | -9.47 | 16.44 | 3 | Horizontal | 302 | 1.50 | - |
| PK | 15.89202G | 61.37 | 74.00 | -12.63 | 16.76 | 3 | Horizontal | 134 | 1.34 | - |
| AV | 15.89706G | 47.79 | 54.00 | -6.21 | 16.74 | 3 | Horizontal | 134 | 1.34 | - |

## 802.11a_Nss1,(6Mbps)_4TX

## 5320MHz_TX

23/07/2019



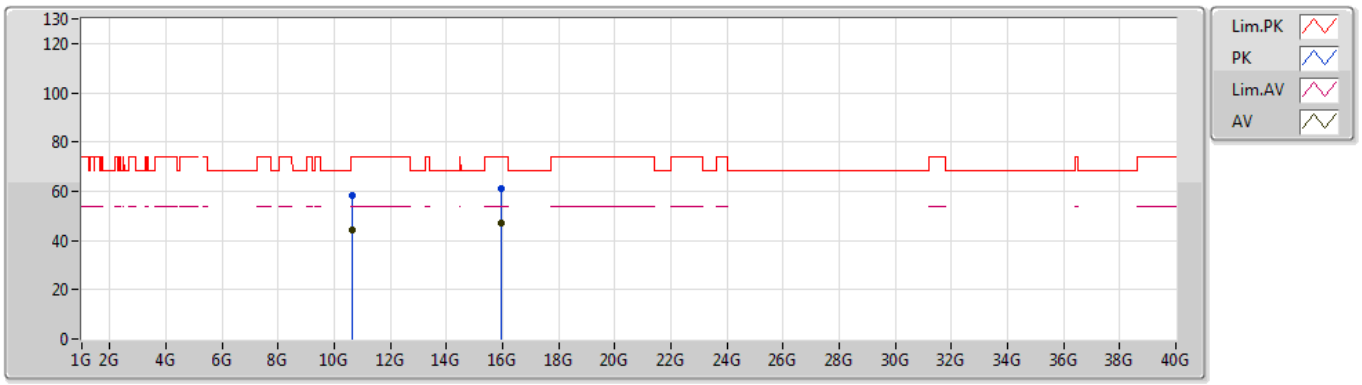

EUT Z_4TX
Setting 88
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3208G | 121.76 | Inf | -Inf | 7.12 | 3 | Vertical | 343 | 2.02 | - |
| AV | 5.3208G | 112.05 | Inf | -Inf | 7.12 | 3 | Vertical | 343 | 2.02 | - |
| PK | 5.3556G | 72.31 | 74.00 | -1.69 | 7.23 | 3 | Vertical | 343 | 2.02 | - |
| AV | 5.3516G | 53.04 | 54.00 | -0.96 | 7.21 | 3 | Vertical | 343 | 2.02 | - |

## 802.11a_Nss1,(6Mbps)_4TX

## 5320MHz_TX

23/07/2019



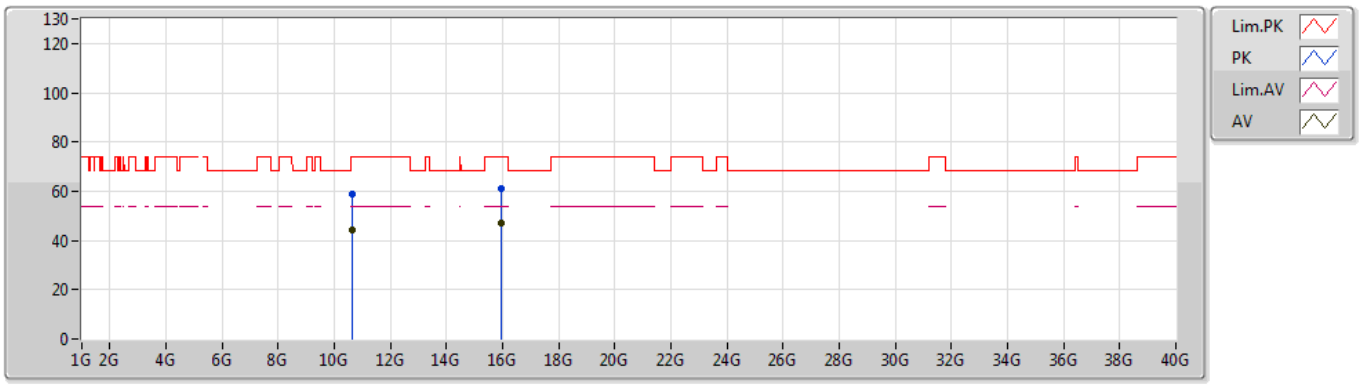

EUT Z_4TX
Setting 88
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.65068G | 58.08 | 74.00 | -15.92 | 16.51 | 3 | Vertical | 35 | 2.82 | - |
| AV | 10.6274G | 44.53 | 54.00 | -9.47 | 16.48 | 3 | Vertical | 35 | 2.82 | - |
| PK | 15.96012G | 61.22 | 74.00 | -12.78 | 16.51 | 3 | Vertical | 229 | 1.53 | - |
| AV | 15.9456G | 47.30 | 54.00 | -6.70 | 16.56 | 3 | Vertical | 229 | 1.53 | - |

## 802.11a_Nss1,(6Mbps)_4TX

## 5320MHz_TX

23/07/2019




EUT Z_4TX
Setting 88
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.63136G | 59.06 | 74.00 | -14.94 | 16.48 | 3 | Horizontal | 18 | 1.38 | - |
| AV | 10.62776G | 44.49 | 54.00 | -9.51 | 16.48 | 3 | Horizontal | 18 | 1.38 | - |
| PK | 15.9591G | 61.08 | 74.00 | -12.92 | 16.51 | 3 | Horizontal | 359 | 2.35 | - |
| AV | 15.94776G | 47.31 | 54.00 | -6.69 | 16.55 | 3 | Horizontal | 359 | 2.35 | - |

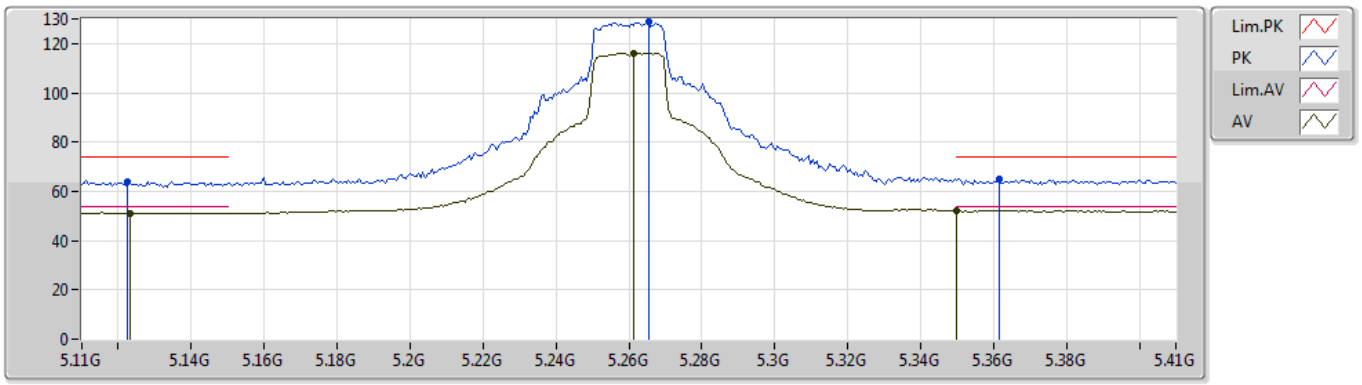
## 4T1S / For beamforming mode
## Summary

| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.25-5.35GHz | - | - | - | - | - | - | - | - | - | - | - | - |
| 802.11ax HEW20-BF_Nss1,(MCS0)_4TX | Pass | AV | 5.3508G | 53.97 | 54.00 | -0.03 | 7.21 | 3 | Vertical | 12 | 2.08 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX

## 5260MHz_TX

16/07/2019



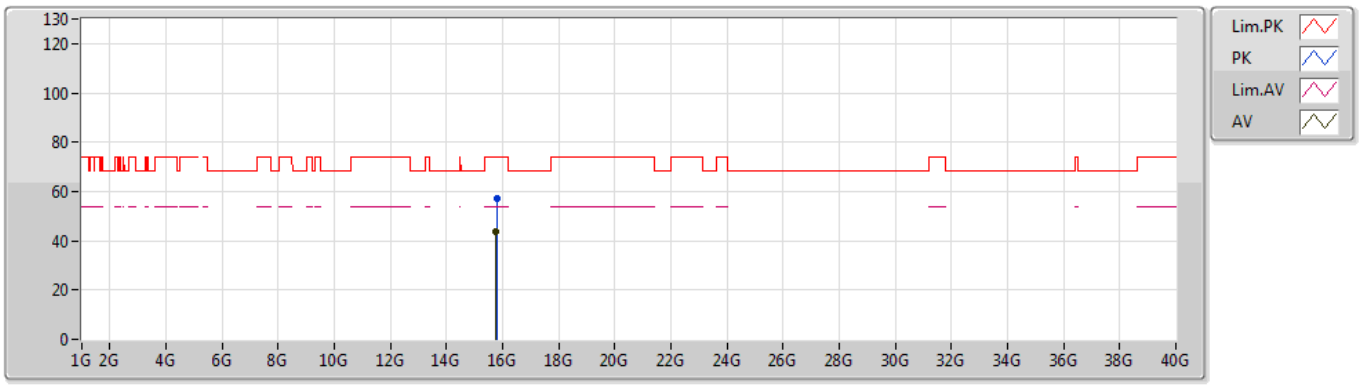

EUT Z_4TX
Setting 100
06-K-3-13
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1226G | 63.96 | 74.00 | -10.04 | 7.37 | 3 | Vertical | 270 | 2.15 | - |
| AV | 5.1232G | 51.26 | 54.00 | -2.74 | 7.37 | 3 | Vertical | 270 | 2.15 | - |
| PK | 5.2654G | 128.76 | Inf | -Inf | 7.13 | 3 | Vertical | 270 | 2.15 | - |
| AV | 5.2612G | 116.18 | Inf | -Inf | 7.14 | 3 | Vertical | 270 | 2.15 | - |
| PK | 5.3614G | 65.00 | 74.00 | -9.00 | 7.25 | 3 | Vertical | 270 | 2.15 | - |
| AV | 5.35G | 52.20 | 54.00 | -1.80 | 7.21 | 3 | Vertical | 270 | 2.15 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX

## 5260MHz_TX

25/07/2019



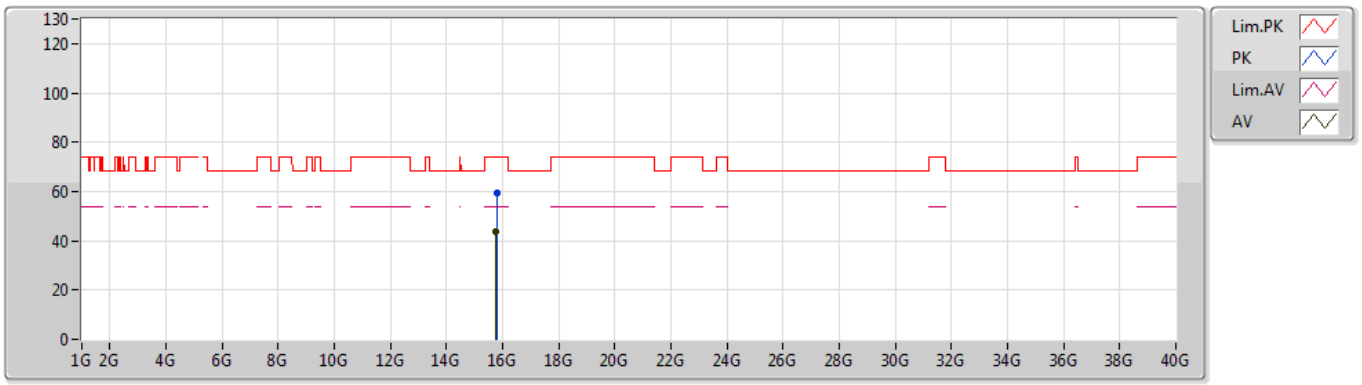

EUT Z_4TX
Setting 100
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.7797G | 57.30 | 74.00 | -16.70 | 13.53 | 3 | Vertical | 233 | 1.59 | - |
| AV | 15.76908G | 43.85 | 54.00 | -10.15 | 13.57 | 3 | Vertical | 233 | 1.59 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX

## 5260MHz_TX

25/07/2019



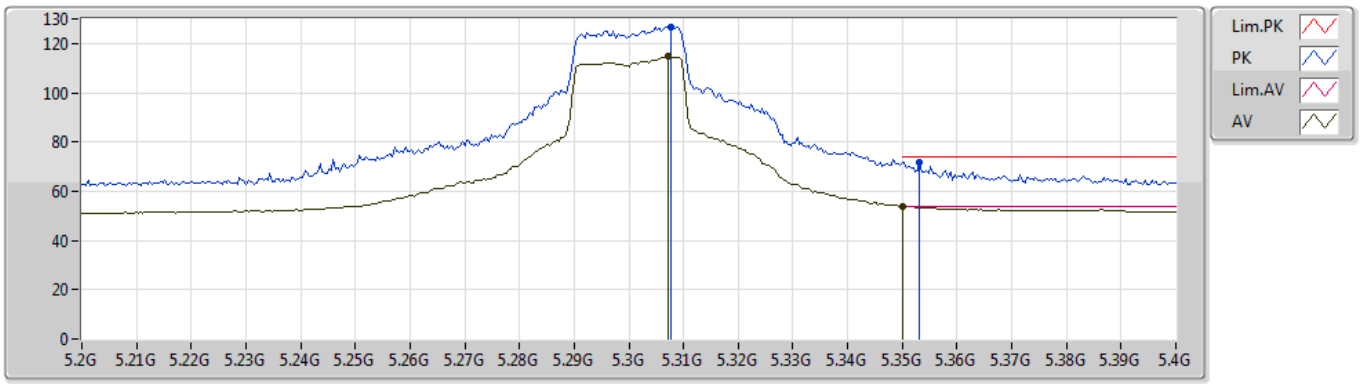

EUT Z_4TX
Setting 100
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.77916G | 59.20 | 74.00 | -14.80 | 13.53 | 3 | Horizontal | 351 | 2.08 | - |
| AV | 15.76638G | 43.68 | 54.00 | -10.32 | 13.58 | 3 | Horizontal | 351 | 2.08 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX

## 5300MHz_TX

16/07/2019



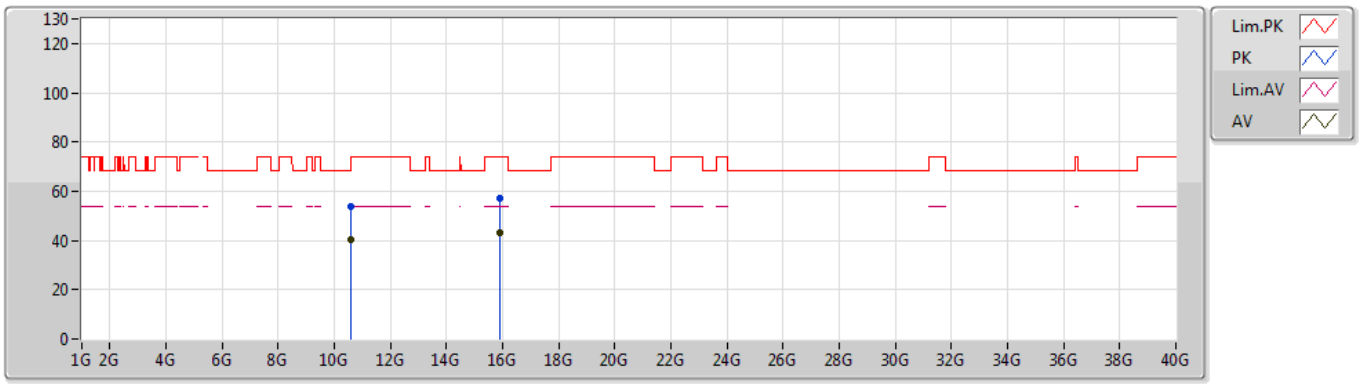

EUT Z_4TX
Setting 98
06-K-3-13
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3076G | 126.90 | Inf | -Inf | 7.08 | 3 | Vertical | 282 | 2.73 | - |
| AV | 5.3072G | 114.62 | Inf | -Inf | 7.08 | 3 | Vertical | 282 | 2.73 | - |
| PK | 5.3532G | 71.90 | 74.00 | -2.10 | 7.22 | 3 | Vertical | 282 | 2.73 | - |
| AV | 5.35G | 53.85 | 54.00 | -0.15 | 7.21 | 3 | Vertical | 282 | 2.73 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX

## 5300MHz_TX

25/07/2019



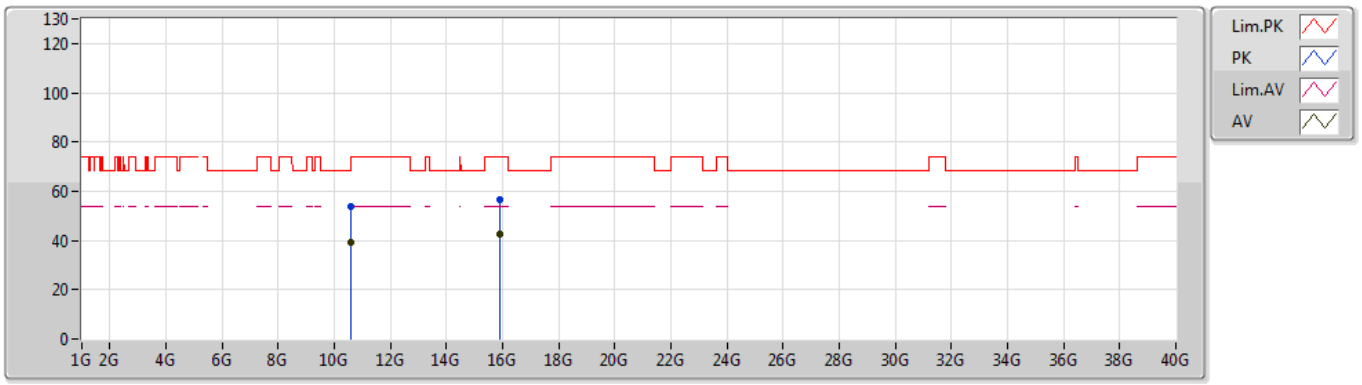

EUT Z_4TX
Setting 98
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.60102G | 53.98 | 74.00 | -20.02 | 12.40 | 3 | Vertical | 207 | 1.59 | - |
| AV | 10.60994G | 40.28 | 54.00 | -13.72 | 12.40 | 3 | Vertical | 207 | 1.59 | - |
| PK | 15.903G | 57.30 | 74.00 | -16.70 | 13.09 | 3 | Vertical | 278 | 2.01 | - |
| AV | 15.8868G | 42.99 | 54.00 | -11.01 | 13.15 | 3 | Vertical | 278 | 2.01 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX

## 5300MHz_TX

25/07/2019



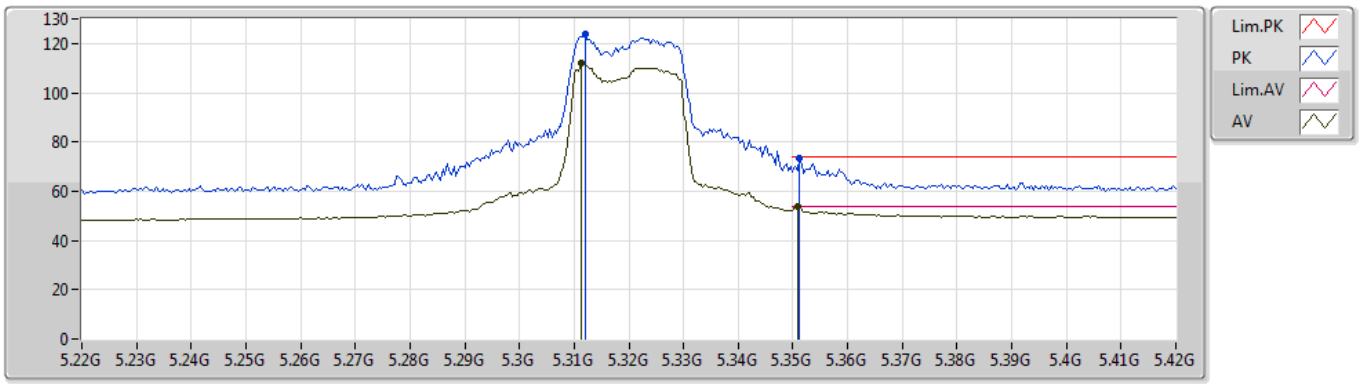

EUT Z_4TX
Setting 98
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.60814G | 53.61 | 74.00 | -20.39 | 12.40 | 3 | Horizontal | 193 | 2.22 | - |
| AV | 10.60762G | 39.43 | 54.00 | -14.57 | 12.40 | 3 | Horizontal | 193 | 2.22 | - |
| PK | 15.90246G | 56.71 | 74.00 | -17.29 | 13.09 | 3 | Horizontal | 257 | 1.64 | - |
| AV | 15.89712G | 42.75 | 54.00 | -11.25 | 13.11 | 3 | Horizontal | 257 | 1.64 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX

## 5320MHz_TX

16/07/2019



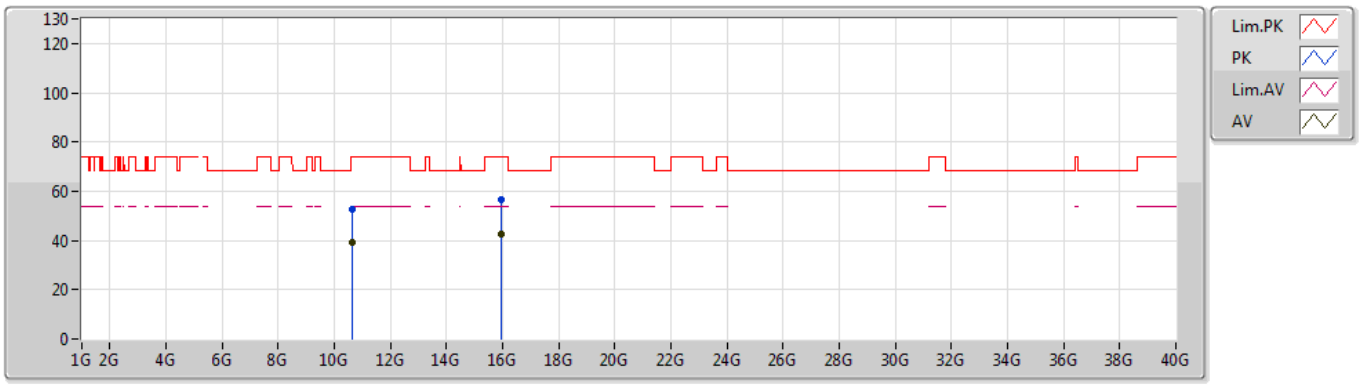

EUT Z_4TX
Setting 83
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.312G | 123.87 | Inf | -Inf | 7.10 | 3 | Vertical | 12 | 2.08 | - |
| AV | 5.3112G | 111.97 | Inf | -Inf | 7.09 | 3 | Vertical | 12 | 2.08 | - |
| PK | 5.3512G | 73.14 | 74.00 | -0.86 | 7.21 | 3 | Vertical | 12 | 2.08 | - |
| AV | 5.3508G | 53.97 | 54.00 | -0.03 | 7.21 | 3 | Vertical | 12 | 2.08 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX

## 5320MHz_TX

25/07/2019



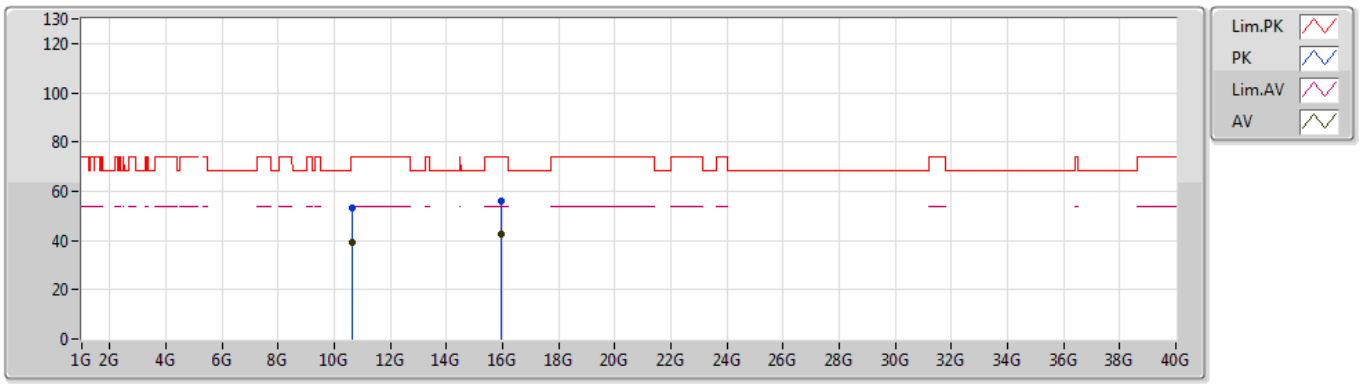

EUT Z_4TX
Setting 83
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.6316G | 52.94 | 74.00 | -21.06 | 12.43 | 3 | Vertical | 181 | 1.13 | - |
| AV | 10.62908G | 39.25 | 54.00 | -14.75 | 12.43 | 3 | Vertical | 181 | 1.13 | - |
| PK | 15.96576G | 56.85 | 74.00 | -17.15 | 12.86 | 3 | Vertical | 312 | 2.34 | - |
| AV | 15.95082G | 42.58 | 54.00 | -11.42 | 12.92 | 3 | Vertical | 312 | 2.34 | - |

## 802.11ax HEW20-BF_Nss1,(MCS0)_4TX

## 5320MHz_TX

25/07/2019



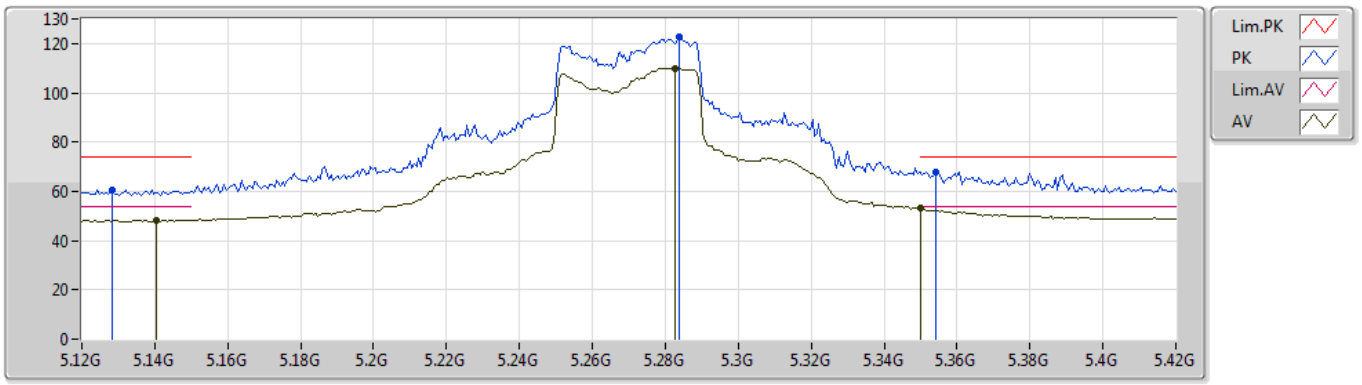

EUT Z_4TX
Setting 83
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.63866G | 53.42 | 74.00 | -20.58 | 12.43 | 3 | Horizontal | 209 | 1.78 | - |
| AV | 10.63502G | 39.25 | 54.00 | -14.75 | 12.43 | 3 | Horizontal | 209 | 1.78 | - |
| PK | 15.96546G | 56.29 | 74.00 | -17.71 | 12.86 | 3 | Horizontal | 258 | 1.86 | - |
| AV | 15.95304G | 42.57 | 54.00 | -11.43 | 12.91 | 3 | Horizontal | 258 | 1.86 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_4TX

## 5270MHz_TX

16/07/2019



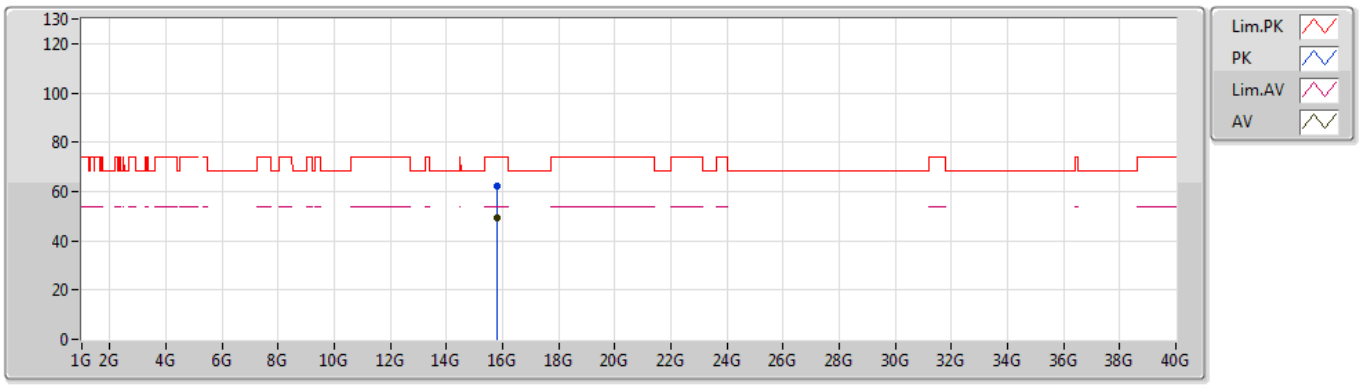

EUT Z_4TX
Setting 96
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1284G | 60.74 | 74.00 | -13.26 | 7.37 | 3 | Vertical | 20 | 3.00 | - |
| AV | 5.1404G | 48.32 | 54.00 | -5.68 | 7.35 | 3 | Vertical | 20 | 3.00 | - |
| PK | 5.2838G | 122.46 | Inf | -Inf | 7.09 | 3 | Vertical | 20 | 3.00 | - |
| AV | 5.2826G | 110.09 | Inf | -Inf | 7.09 | 3 | Vertical | 20 | 3.00 | - |
| PK | 5.354G | 67.76 | 74.00 | -6.24 | 7.22 | 3 | Vertical | 20 | 3.00 | - |
| AV | 5.35G | 53.30 | 54.00 | -0.70 | 7.21 | 3 | Vertical | 20 | 3.00 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_4TX

## 5270MHz_TX

26/07/2019



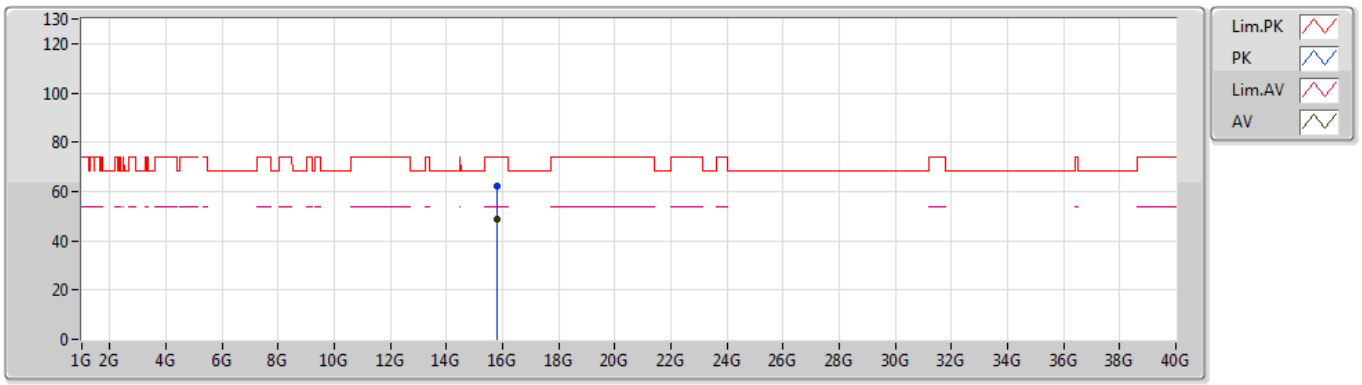

EUT Z_4TX
Setting 96
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.79944G | 62.18 | 74.00 | -11.82 | 17.10 | 3 | Vertical | 218 | 1.50 | - |
| AV | 15.80766G | 49.20 | 54.00 | -4.80 | 17.07 | 3 | Vertical | 218 | 1.50 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_4TX

## 5270MHz_TX

26/07/2019



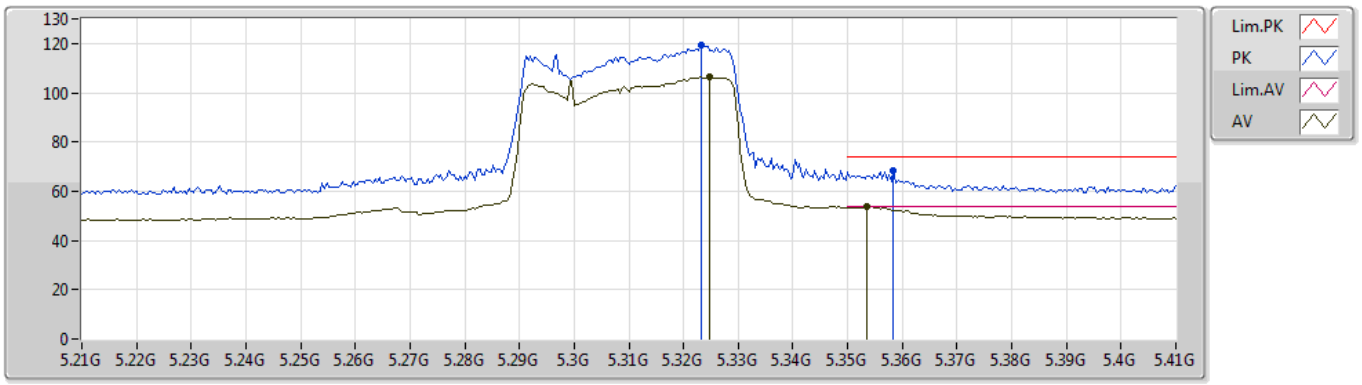

EUT Z_4TX
Setting 96
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.80616G | 62.36 | 74.00 | -11.64 | 17.08 | 3 | Horizontal | 344 | 1.50 | - |
| AV | 15.81684G | 48.98 | 54.00 | -5.02 | 17.03 | 3 | Horizontal | 344 | 1.50 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_4TX

## 5310MHz_TX

16/07/2019



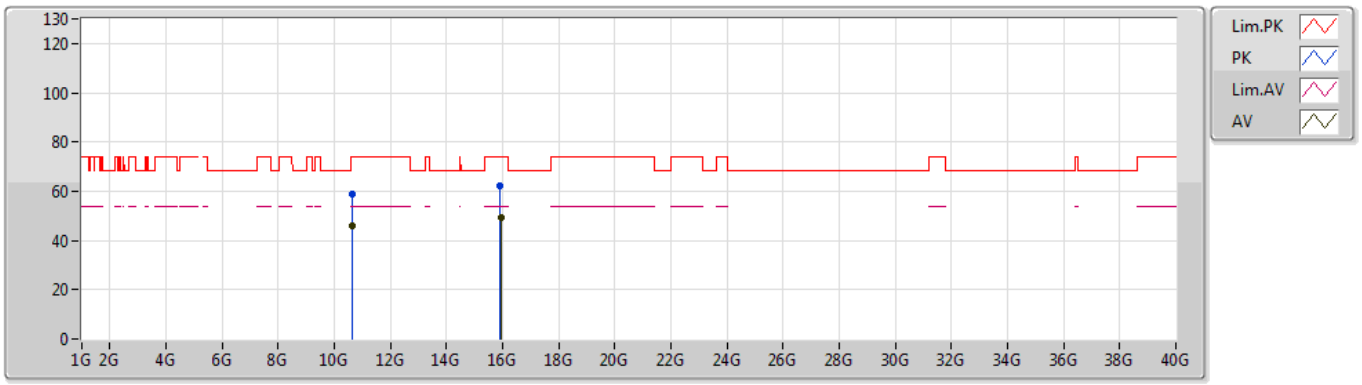

EUT Z_4TX
Setting 74
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3232G | 119.55 | Inf | -Inf | 7.13 | 3 | Vertical | 19 | 2.21 | - |
| AV | 5.3248G | 106.61 | Inf | -Inf | 7.13 | 3 | Vertical | 19 | 2.21 | - |
| PK | 5.3584G | 68.51 | 74.00 | -5.49 | 7.25 | 3 | Vertical | 19 | 2.21 | - |
| AV | 5.3536G | 53.70 | 54.00 | -0.30 | 7.22 | 3 | Vertical | 19 | 2.21 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_4TX

## 5310MHz_TX

26/07/2019



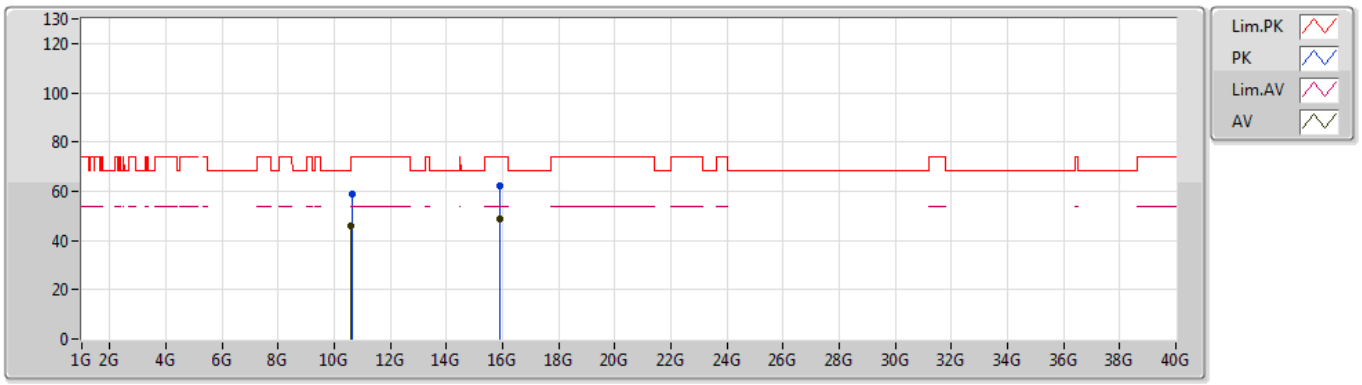

EUT Z_4TX
Setting 74
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.62294G | 58.81 | 74.00 | -15.19 | 16.48 | 3 | Vertical | 358 | 1.96 | - |
| AV | 10.61946G | 45.69 | 54.00 | -8.31 | 16.47 | 3 | Vertical | 358 | 1.96 | - |
| PK | 15.91914G | 62.23 | 74.00 | -11.77 | 16.65 | 3 | Vertical | 289 | 2.16 | - |
| AV | 15.93834G | 49.08 | 54.00 | -4.92 | 16.59 | 3 | Vertical | 289 | 2.16 | - |

## 802.11ax HEW40-BF_Nss1,(MCS0)_4TX

## 5310MHz_TX

26/07/2019



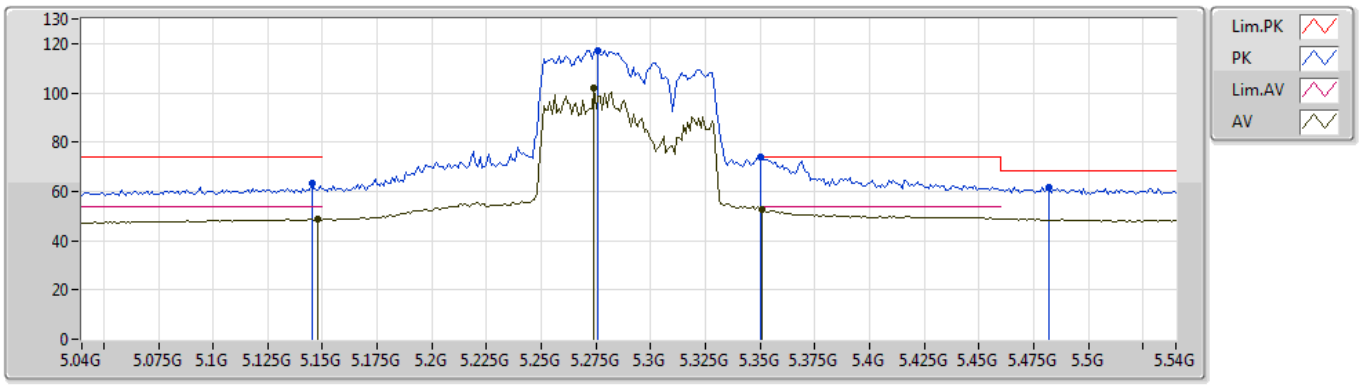

EUT Z_4TX
Setting 74
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.6236G | 58.60 | 74.00 | -15.40 | 16.48 | 3 | Horizontal | 331 | 2.28 | - |
| AV | 10.60518G | 45.67 | 54.00 | -8.33 | 16.45 | 3 | Horizontal | 331 | 2.28 | - |
| PK | 15.92604G | 62.36 | 74.00 | -11.64 | 16.63 | 3 | Horizontal | 199 | 2.34 | - |
| AV | 15.92166G | 48.84 | 54.00 | -5.16 | 16.64 | 3 | Horizontal | 199 | 2.34 | - |

## 802.11ax HEW80-BF_Nss1,(MCS0)_4TX

## 5290MHz_TX

17/07/2019



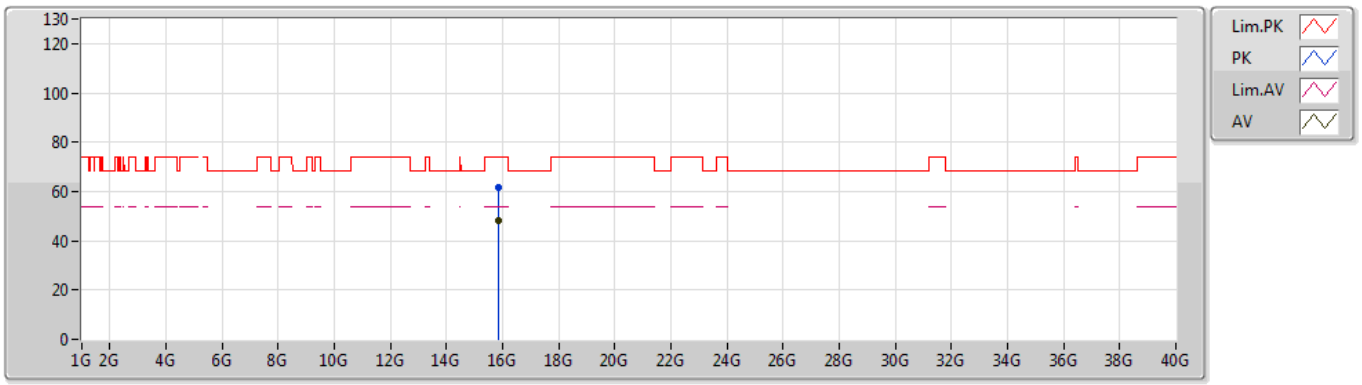

EUT Z_4TX
Setting 79
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.145G | 63.29 | 74.00 | -10.71 | 7.34 | 3 | Vertical | 88 | 2.05 | - |
| AV | 5.148G | 48.74 | 54.00 | -5.26 | 7.33 | 3 | Vertical | 88 | 2.05 | - |
| PK | 5.276G | 117.11 | Inf | -Inf | 7.11 | 3 | Vertical | 88 | 2.05 | - |
| AV | 5.274G | 101.93 | Inf | -Inf | 7.10 | 3 | Vertical | 88 | 2.05 | - |
| PK | 5.35G | 73.88 | 74.00 | -0.12 | 7.21 | 3 | Vertical | 88 | 2.05 | - |
| AV | 5.351G | 52.71 | 54.00 | -1.29 | 7.21 | 3 | Vertical | 88 | 2.05 | - |
| PK | 5.482G | 61.91 | 68.20 | -6.29 | 7.56 | 3 | Vertical | 88 | 2.05 | - |

## 802.11ax HEW80-BF_Nss1,(MCS0)_4TX

## 5290MHz_TX

26/07/2019



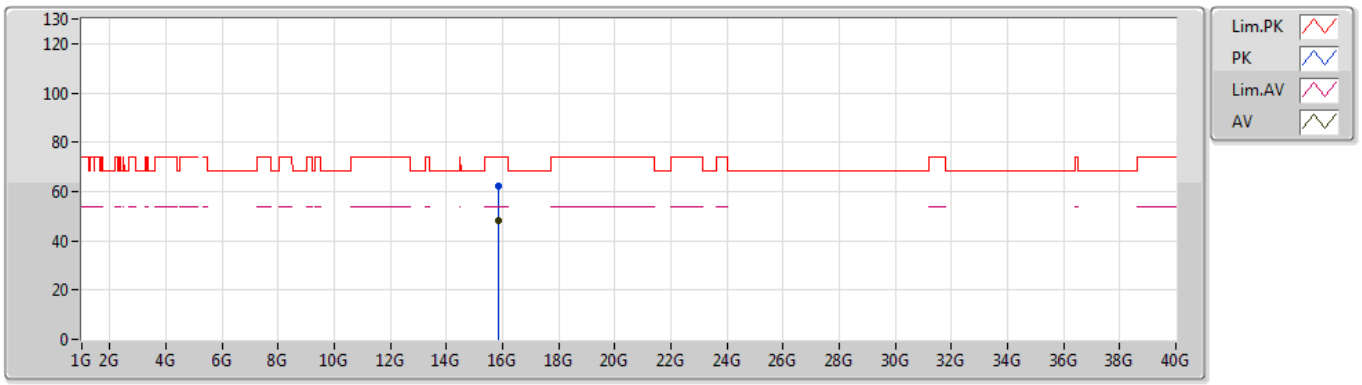

EUT Z_4TX
Setting 79
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.87284G | 61.87 | 74.00 | -12.13 | 16.83 | 3 | Vertical | 247 | 1.85 | - |
| AV | 15.87334G | 48.25 | 54.00 | -5.75 | 16.83 | 3 | Vertical | 247 | 1.85 | - |

## 802.11ax HEW80-BF_Nss1,(MCS0)_4TX

## 5290MHz_TX

26/07/2019



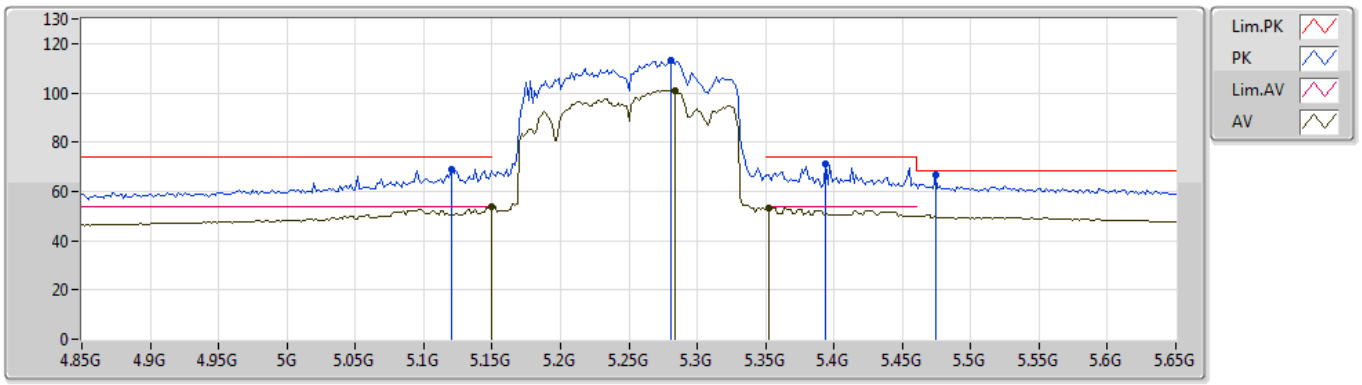

EUT Z_4TX
Setting 79
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.87044G | 62.30 | 74.00 | -11.70 | 16.84 | 3 | Horizontal | 248 | 1.90 | - |
| AV | 15.87184G | 48.29 | 54.00 | -5.71 | 16.83 | 3 | Horizontal | 248 | 1.90 | - |

## 802.11ax HEW160-BF_Nss1,(MCS0)_4TX

## 5250MHz_TX

18/07/2019



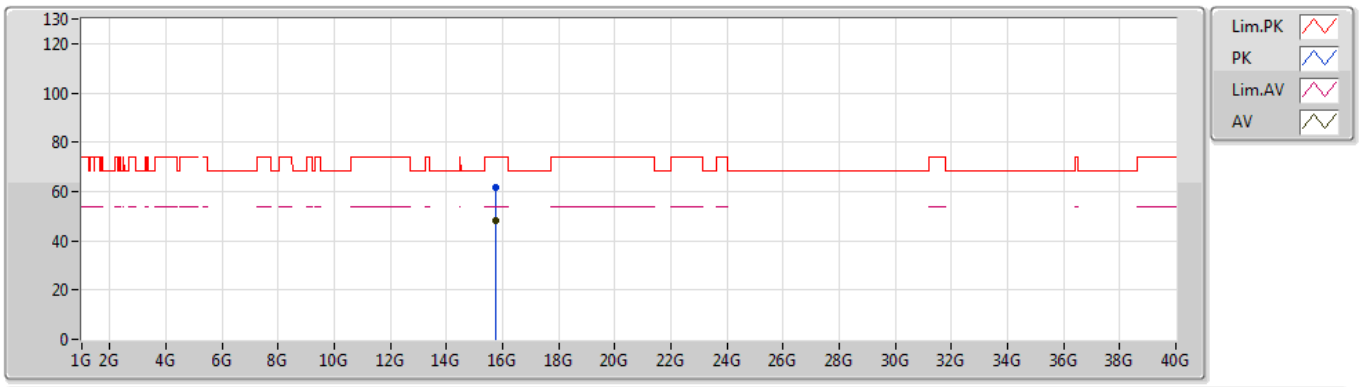

EUT Z_4TX
Setting 72
06-C-4-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1204G | 69.10 | 74.00 | -4.90 | 7.38 | 3 | Vertical | 50 | 2.16 | - |
| AV | 5.1492G | 53.83 | 54.00 | -0.17 | 7.33 | 3 | Vertical | 50 | 2.16 | - |
| PK | 5.2804G | 112.93 | Inf | -Inf | 7.10 | 3 | Vertical | 50 | 2.16 | - |
| AV | 5.2836G | 101.09 | Inf | -Inf | 7.09 | 3 | Vertical | 50 | 2.16 | - |
| PK | 5.394G | 71.34 | 74.00 | -2.66 | 7.35 | 3 | Vertical | 50 | 2.16 | - |
| AV | 5.3524G | 53.18 | 54.00 | -0.82 | 7.22 | 3 | Vertical | 50 | 2.16 | - |
| PK | 5.474G | 66.90 | 68.20 | -1.30 | 7.54 | 3 | Vertical | 50 | 2.16 | - |

## 802.11ax HEW160-BF_Nss1,(MCS0)_4TX

## 5250MHz_TX

26/07/2019



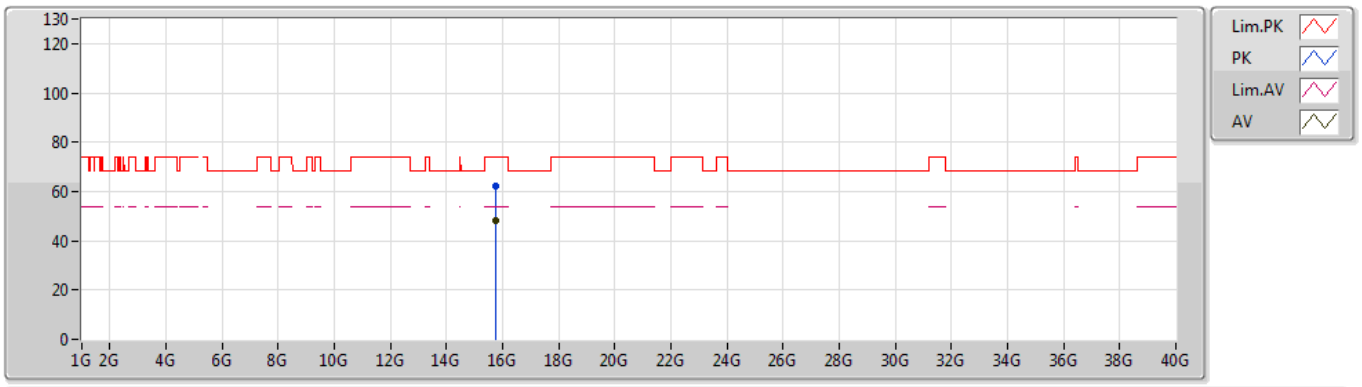

EUT Z_4TX
Setting 72
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.74526G | 61.80 | 74.00 | -12.20 | 17.31 | 3 | Vertical | 303 | 2.03 | - |
| AV | 15.75178G | 48.38 | 54.00 | -5.62 | 17.27 | 3 | Vertical | 303 | 2.03 | - |

## 802.11ax HEW160-BF_Nss1,(MCS0)_4TX

## 5250MHz_TX

26/07/2019




EUT Z_4TX
Setting 72
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.74596G | 62.28 | 74.00 | -11.72 | 17.31 | 3 | Horizontal | 195 | 2.47 | - |
| AV | 15.74932G | 48.17 | 54.00 | -5.83 | 17.29 | 3 | Horizontal | 195 | 2.47 | - |

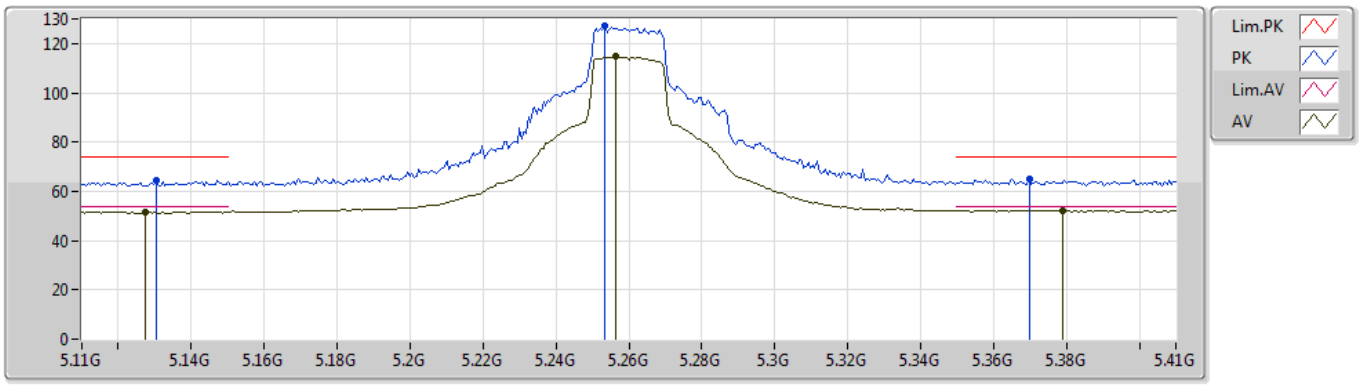
## 4T2S / For beamforming mode
## Summary

| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.25-5.35GHz | - | - | - | - | - | - | - | - | - | - | - | - |
| 802.11ax HEW20-BF_Nss2,(MCS0)_4TX | Pass | AV | 5.35G | 53.99 | 54.00 | -0.01 | 7.21 | 3 | Vertical | 344 | 2.85 | - |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

## 5260MHz_TX

17/07/2019



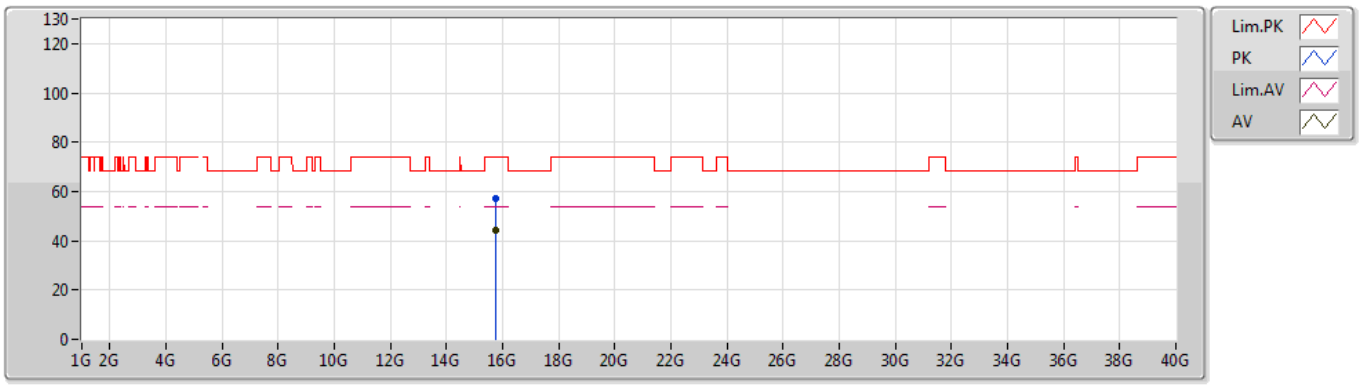

EUT Z_4TX
Setting 100
06-K-3-13
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1304G | 64.67 | 74.00 | -9.33 | 7.36 | 3 | Vertical | 351 | 2.30 | - |
| AV | 5.1274G | 51.72 | 54.00 | -2.28 | 7.37 | 3 | Vertical | 351 | 2.30 | - |
| PK | 5.2534G | 126.92 | Inf | -Inf | 7.14 | 3 | Vertical | 351 | 2.30 | - |
| AV | 5.2564G | 114.77 | Inf | -Inf | 7.14 | 3 | Vertical | 351 | 2.30 | - |
| PK | 5.3698G | 64.98 | 74.00 | -9.02 | 7.28 | 3 | Vertical | 351 | 2.30 | - |
| AV | 5.3788G | 52.31 | 54.00 | -1.69 | 7.31 | 3 | Vertical | 351 | 2.30 | - |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

## 5260MHz_TX

25/07/2019



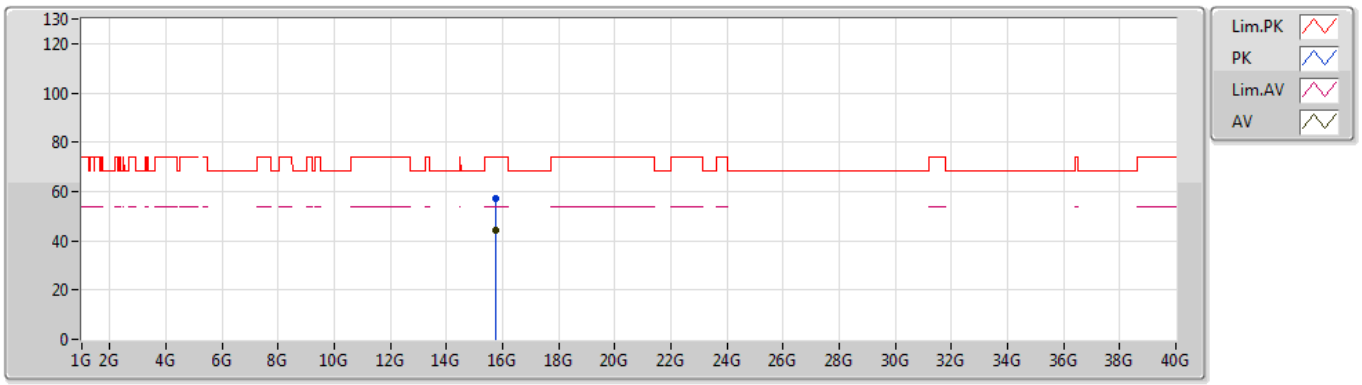

EUT Z_4TX
Setting 100
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.76572G | 57.19 | 74.00 | -16.81 | 13.58 | 3 | Vertical | 124 | 1.48 | - |
| AV | 15.77556G | 44.37 | 54.00 | -9.63 | 13.54 | 3 | Vertical | 124 | 1.48 | - |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

## 5260MHz_TX

25/07/2019



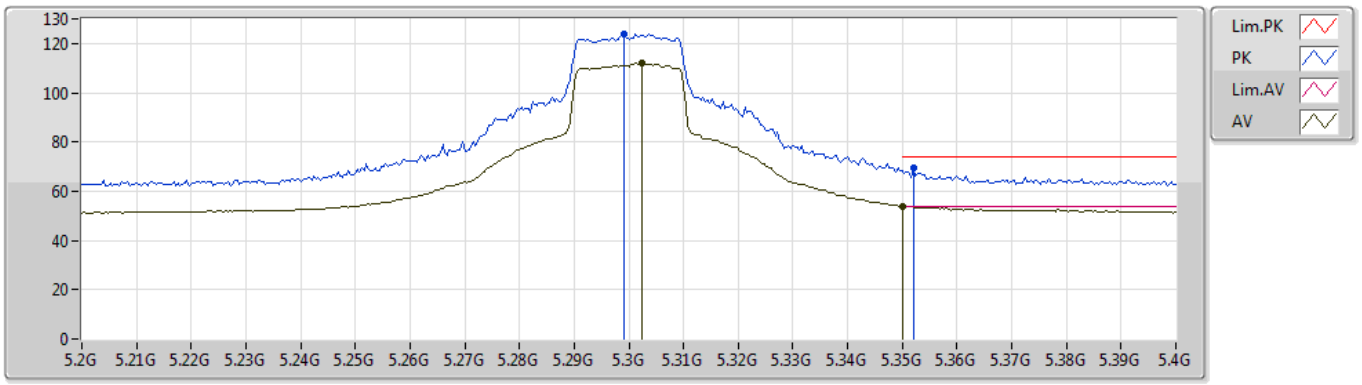

EUT Z_4TX
Setting 100
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.76824G | 57.32 | 74.00 | -16.68 | 13.58 | 3 | Horizontal | 243 | 1.26 | - |
| AV | 15.77076G | 44.24 | 54.00 | -9.76 | 13.57 | 3 | Horizontal | 243 | 1.26 | - |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

## 5300MHz_TX

17/07/2019



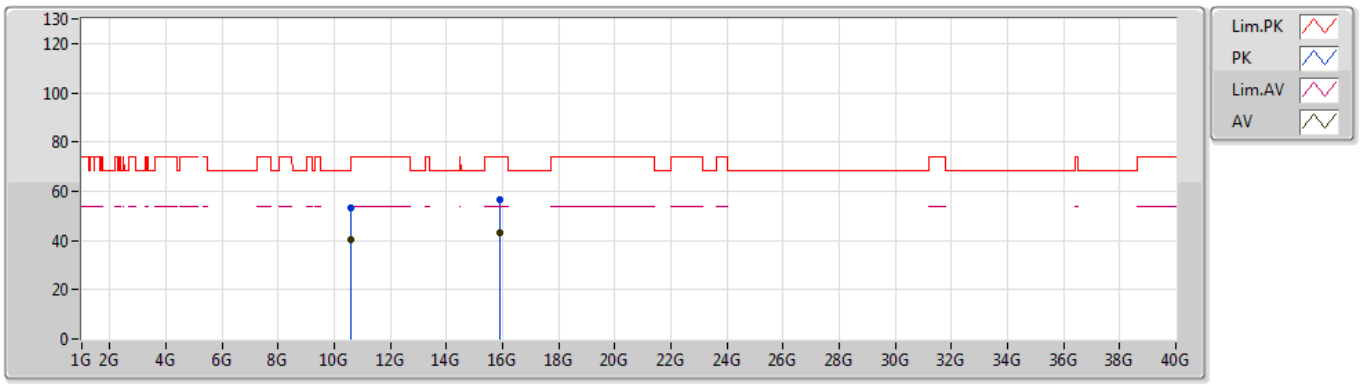

EUT Z_4TX
Setting 98
06-K-3-13
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.2992G | 124.04 | Inf | -Inf | 7.06 | 3 | Vertical | 344 | 2.85 | - |
| AV | 5.3024G | 111.93 | Inf | -Inf | 7.07 | 3 | Vertical | 344 | 2.85 | - |
| PK | 5.352G | 69.26 | 74.00 | -4.74 | 7.22 | 3 | Vertical | 344 | 2.85 | - |
| AV | 5.35G | 53.99 | 54.00 | -0.01 | 7.21 | 3 | Vertical | 344 | 2.85 | - |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

## 5300MHz_TX

25/07/2019



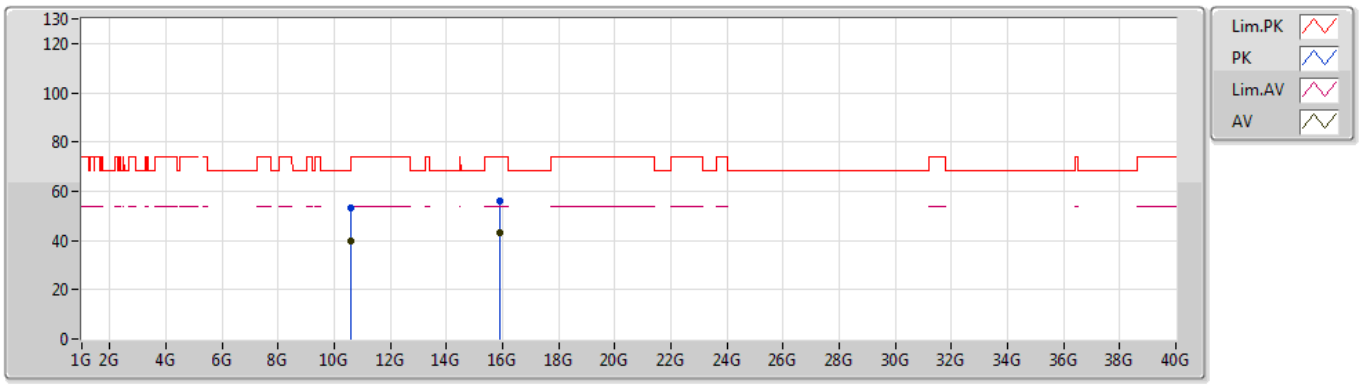

EUT Z_4TX
Setting 98
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.60108G | 53.34 | 74.00 | -20.66 | 12.40 | 3 | Vertical | 220 | 1.39 | - |
| AV | 10.60504G | 40.31 | 54.00 | -13.69 | 12.40 | 3 | Vertical | 220 | 1.39 | - |
| PK | 15.906G | 56.34 | 74.00 | -17.66 | 13.07 | 3 | Vertical | 343 | 1.48 | - |
| AV | 15.90204G | 43.31 | 54.00 | -10.69 | 13.09 | 3 | Vertical | 343 | 1.48 | - |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

## 5300MHz_TX

25/07/2019



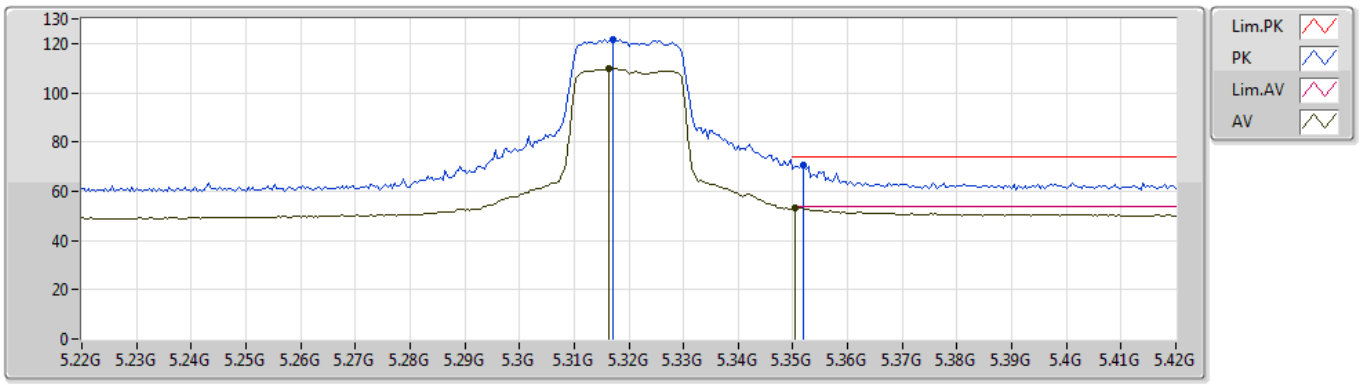

EUT Z_4TX
Setting 98
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.6147G | 52.96 | 74.00 | -21.04 | 12.41 | 3 | Horizontal | 310 | 1.48 | - |
| AV | 10.60336G | 39.78 | 54.00 | -14.22 | 12.40 | 3 | Horizontal | 310 | 1.48 | - |
| PK | 15.90372G | 56.01 | 74.00 | -17.99 | 13.09 | 3 | Horizontal | 240 | 1.33 | - |
| AV | 15.89982G | 43.16 | 54.00 | -10.84 | 13.10 | 3 | Horizontal | 240 | 1.33 | - |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

## 5320MHz_TX

17/07/2019



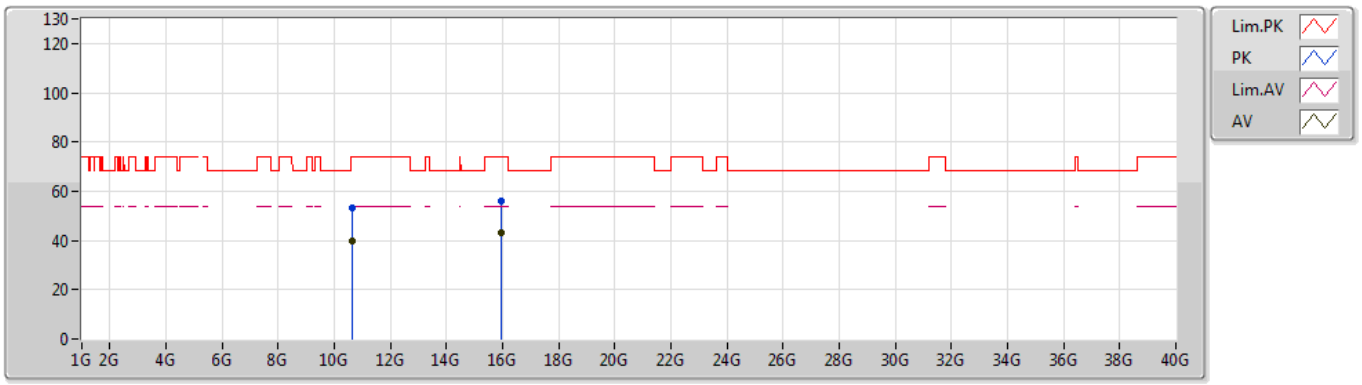

EUT Z_4TX
Setting 83
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3172G | 121.69 | Inf | -Inf | 7.11 | 3 | Vertical | 12 | 2.39 | - |
| AV | 5.3164G | 109.67 | Inf | -Inf | 7.11 | 3 | Vertical | 12 | 2.39 | - |
| PK | 5.352G | 70.41 | 74.00 | -3.59 | 7.22 | 3 | Vertical | 12 | 2.39 | - |
| AV | 5.3504G | 53.47 | 54.00 | -0.53 | 7.21 | 3 | Vertical | 12 | 2.39 | - |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

## 5320MHz_TX

25/07/2019



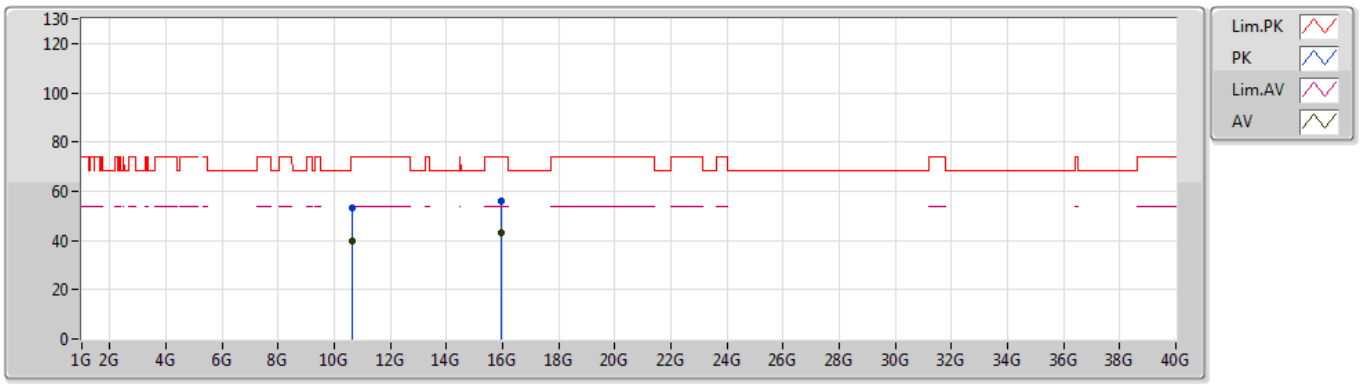

EUT Z_4TX
Setting 83
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.6399G | 53.27 | 74.00 | -20.73 | 12.44 | 3 | Vertical | 334 | 1.43 | - |
| AV | 10.63982G | 39.84 | 54.00 | -14.16 | 12.44 | 3 | Vertical | 334 | 1.43 | - |
| PK | 15.95988G | 55.80 | 74.00 | -18.20 | 12.88 | 3 | Vertical | 321 | 1.60 | - |
| AV | 15.951G | 43.11 | 54.00 | -10.89 | 12.92 | 3 | Vertical | 321 | 1.60 | - |

## 802.11ax HEW20-BF_Nss2,(MCS0)_4TX

## 5320MHz_TX

25/07/2019



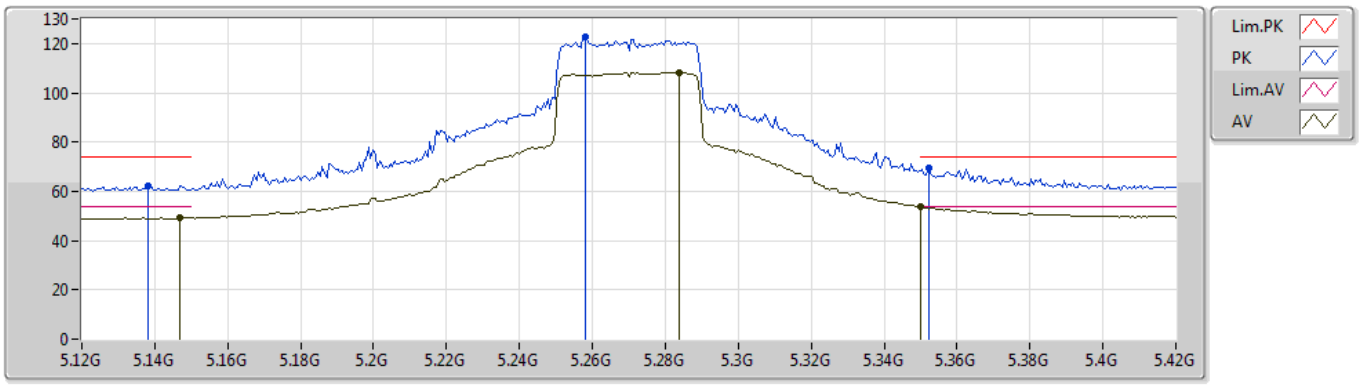

EUT Z_4TX
Setting 83
03-B-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.64518G | 53.10 | 74.00 | -20.90 | 12.44 | 3 | Horizontal | 94 | 2.31 | - |
| AV | 10.64324G | 39.69 | 54.00 | -14.31 | 12.44 | 3 | Horizontal | 94 | 2.31 | - |
| PK | 15.96402G | 56.21 | 74.00 | -17.79 | 12.88 | 3 | Horizontal | 103 | 2.43 | - |
| AV | 15.96556G | 43.06 | 54.00 | -10.94 | 12.86 | 3 | Horizontal | 103 | 2.43 | - |

## 802.11ax HEW40-BF_Nss2,(MCS0)_4TX

## 5270MHz_TX

17/07/2019



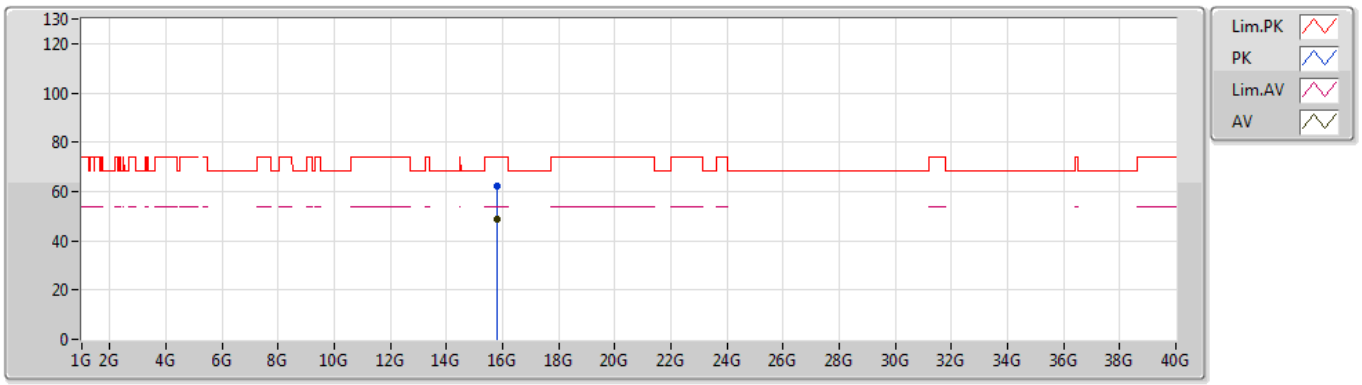

EUT Z_4TX
Setting 95
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.138G | 62.38 | 74.00 | -11.62 | 7.34 | 3 | Vertical | 271 | 2.01 | - |
| AV | 5.147G | 49.21 | 54.00 | -4.79 | 7.34 | 3 | Vertical | 271 | 2.01 | - |
| PK | 5.258G | 122.81 | Inf | -Inf | 7.13 | 3 | Vertical | 271 | 2.01 | - |
| AV | 5.2838G | 108.30 | Inf | -Inf | 7.09 | 3 | Vertical | 271 | 2.01 | - |
| PK | 5.3522G | 69.23 | 74.00 | -4.77 | 7.22 | 3 | Vertical | 271 | 2.01 | - |
| AV | 5.35G | 53.68 | 54.00 | -0.32 | 7.21 | 3 | Vertical | 271 | 2.01 | - |

## 802.11ax HEW40-BF_Nss2,(MCS0)_4TX

## 5270MHz_TX

26/07/2019



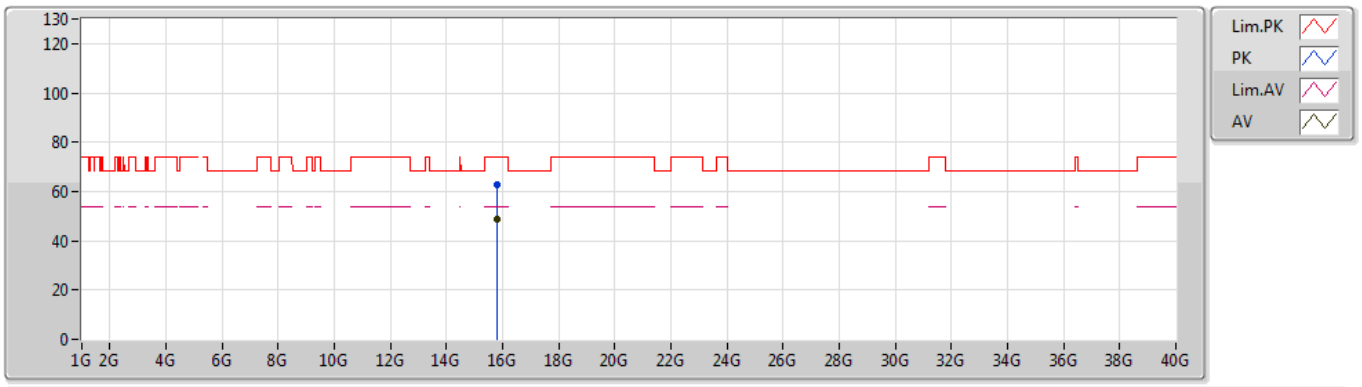

EUT Z_4TX
Setting 95
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.80592G | 62.10 | 74.00 | -11.90 | 17.07 | 3 | Vertical | 349 | 1.27 | - |
| AV | 15.8184G | 48.58 | 54.00 | -5.42 | 17.03 | 3 | Vertical | 349 | 1.27 | - |

## 802.11ax HEW40-BF_Nss2,(MCS0)_4TX

## 5270MHz_TX

26/07/2019



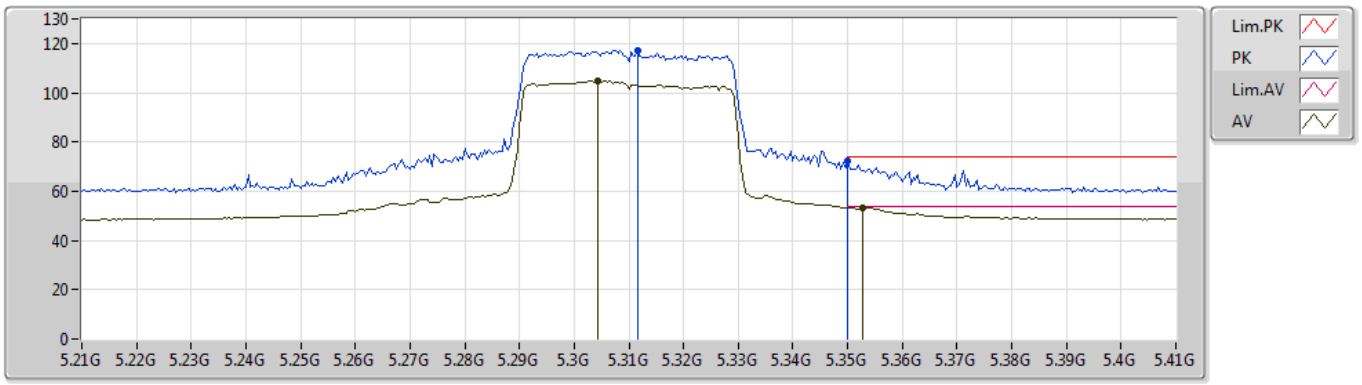

EUT Z_4TX
Setting 95
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.80034G | 62.79 | 74.00 | -11.21 | 17.10 | 3 | Horizontal | 311 | 1.95 | - |
| AV | 15.81474G | 48.59 | 54.00 | -5.41 | 17.04 | 3 | Horizontal | 311 | 1.95 | - |

## 802.11ax HEW40-BF_Nss2,(MCS0)_4TX

## 5310MHz_TX

17/07/2019



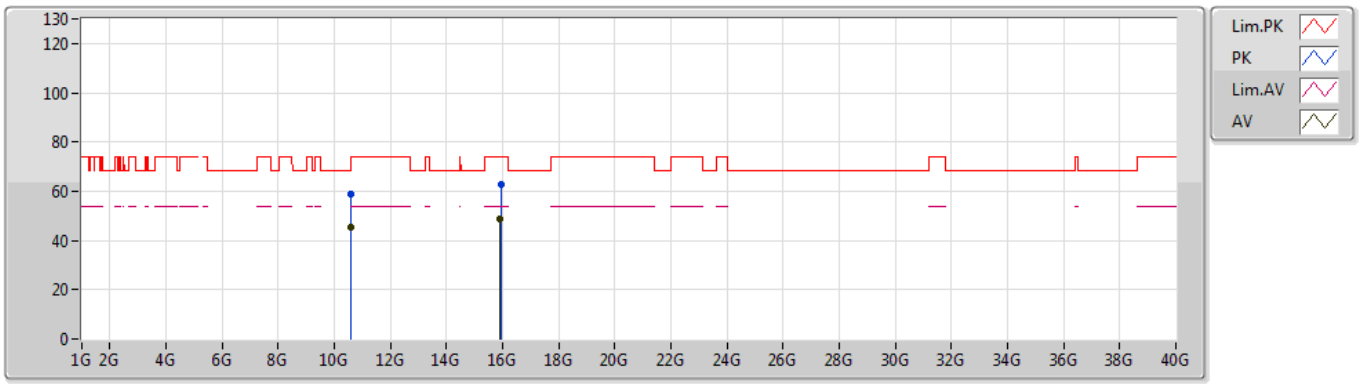

EUT Z_4TX
Setting 77
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.3116G | 117.08 | Inf | -Inf | 7.09 | 3 | Vertical | 345 | 1.95 | - |
| AV | 5.3044G | 104.62 | Inf | -Inf | 7.07 | 3 | Vertical | 345 | 1.95 | - |
| PK | 5.35G | 72.32 | 74.00 | -1.68 | 7.21 | 3 | Vertical | 345 | 1.95 | - |
| AV | 5.3528G | 53.46 | 54.00 | -0.54 | 7.22 | 3 | Vertical | 345 | 1.95 | - |

## 802.11ax HEW40-BF_Nss2,(MCS0)_4TX

## 5310MHz_TX

26/07/2019



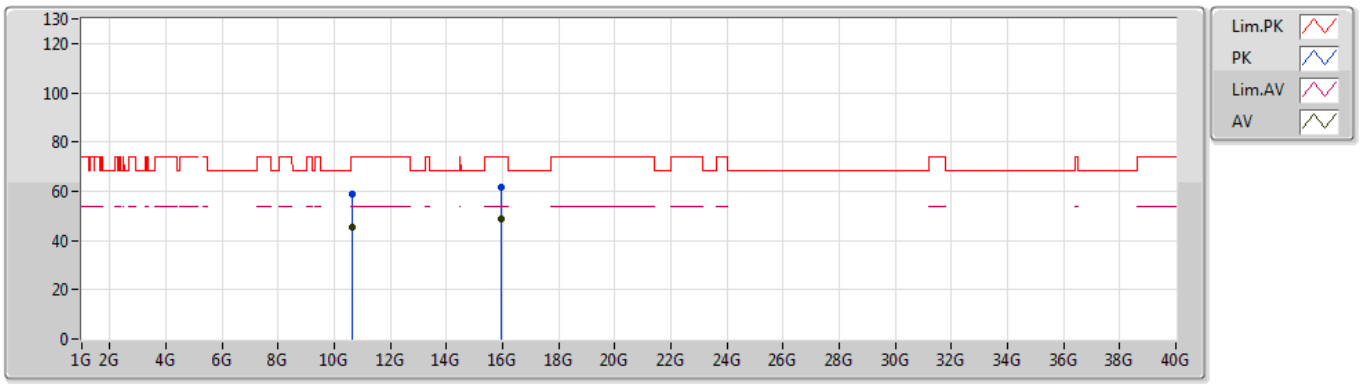

EUT Z_4TX
Setting 77
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.60644G | 59.08 | 74.00 | -14.92 | 16.45 | 3 | Vertical | 347 | 1.90 | - |
| AV | 10.60974G | 45.35 | 54.00 | -8.65 | 16.45 | 3 | Vertical | 347 | 1.90 | - |
| PK | 15.93446G | 62.82 | 74.00 | -11.18 | 16.60 | 3 | Vertical | 203 | 1.92 | - |
| AV | 15.9255G | 48.64 | 54.00 | -5.36 | 16.63 | 3 | Vertical | 203 | 1.92 | - |

## 802.11ax HEW40-BF_Nss2,(MCS0)_4TX

## 5310MHz_TX

26/07/2019



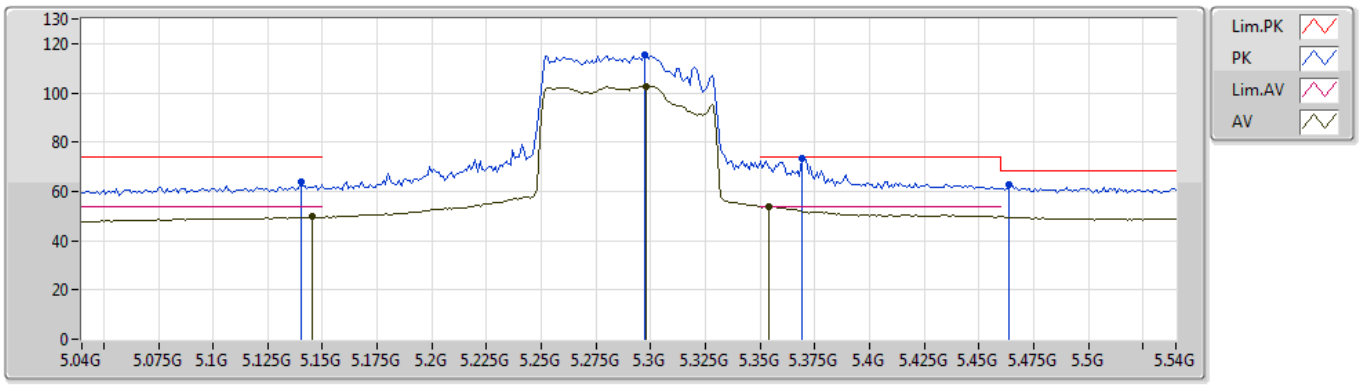

EUT Z_4TX
Setting 77
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.61636G | 58.87 | 74.00 | -15.13 | 16.46 | 3 | Horizontal | 340 | 1.83 | - |
| AV | 10.61516G | 45.12 | 54.00 | -8.88 | 16.46 | 3 | Horizontal | 340 | 1.83 | - |
| PK | 15.92674G | 61.84 | 74.00 | -12.16 | 16.62 | 3 | Horizontal | 92 | 2.01 | - |
| AV | 15.9267G | 48.55 | 54.00 | -5.45 | 16.62 | 3 | Horizontal | 92 | 2.01 | - |

## 802.11ax HEW80-BF_Nss2,(MCS0)_4TX

## 5290MHz_TX

17/07/2019



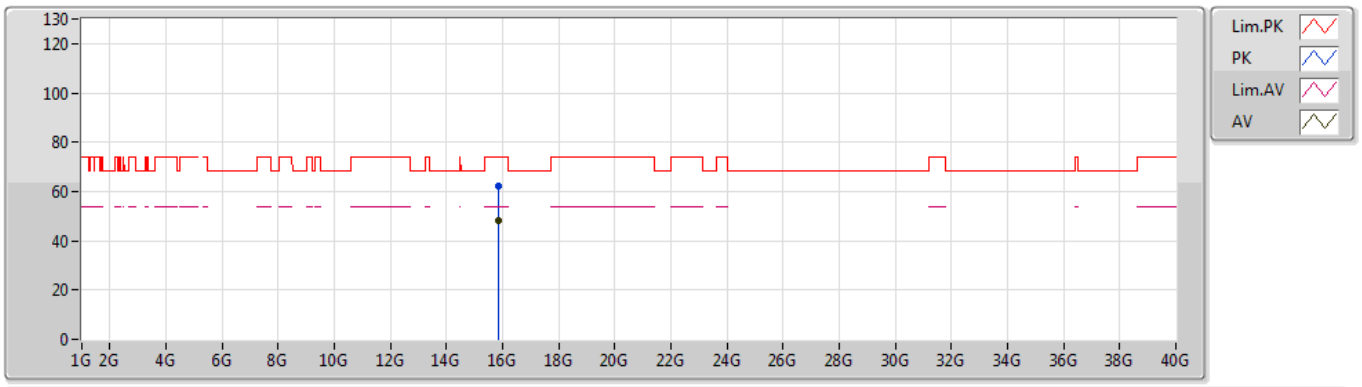

EUT Z_4TX
Setting 78
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.14G | 63.77 | 74.00 | -10.23 | 7.35 | 3 | Vertical | 347 | 2.03 | - |
| AV | 5.145G | 49.62 | 54.00 | -4.38 | 7.34 | 3 | Vertical | 347 | 2.03 | - |
| PK | 5.297G | 115.32 | Inf | -Inf | 7.07 | 3 | Vertical | 347 | 2.03 | - |
| AV | 5.298G | 102.81 | Inf | -Inf | 7.06 | 3 | Vertical | 347 | 2.03 | - |
| PK | 5.369G | 73.29 | 74.00 | -0.71 | 7.28 | 3 | Vertical | 347 | 2.03 | - |
| AV | 5.354G | 53.79 | 54.00 | -0.21 | 7.22 | 3 | Vertical | 347 | 2.03 | - |
| PK | 5.464G | 63.00 | 68.20 | -5.20 | 7.52 | 3 | Vertical | 347 | 2.03 | - |

## 802.11ax HEW80-BF_Nss2,(MCS0)_4TX

## 5290MHz_TX

26/07/2019



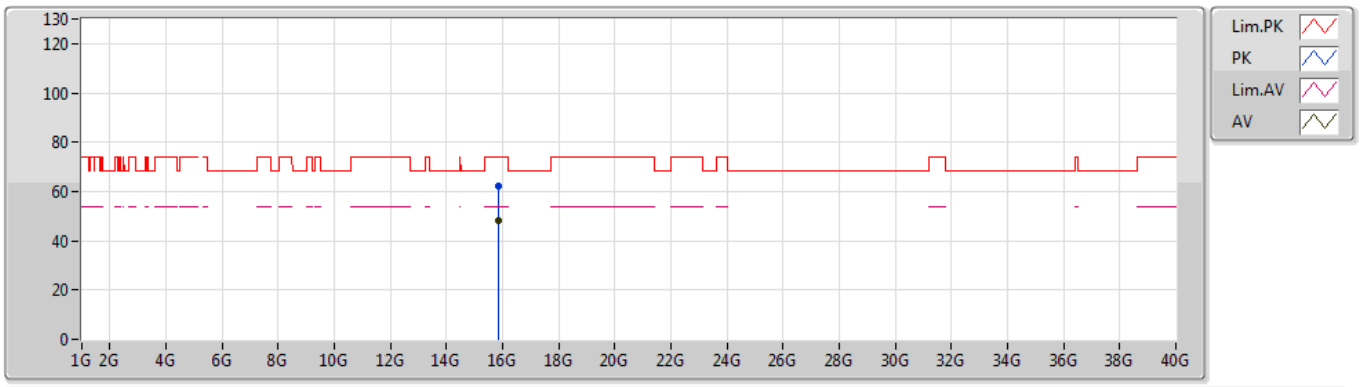

EUT Z_4TX
Setting 78
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.86884G | 62.39 | 74.00 | -11.61 | 16.84 | 3 | Vertical | 307 | 2.49 | - |
| AV | 15.86862G | 48.20 | 54.00 | -5.80 | 16.85 | 3 | Vertical | 307 | 2.49 | - |

## 802.11ax HEW80-BF_Nss2,(MCS0)_4TX

## 5290MHz_TX

26/07/2019



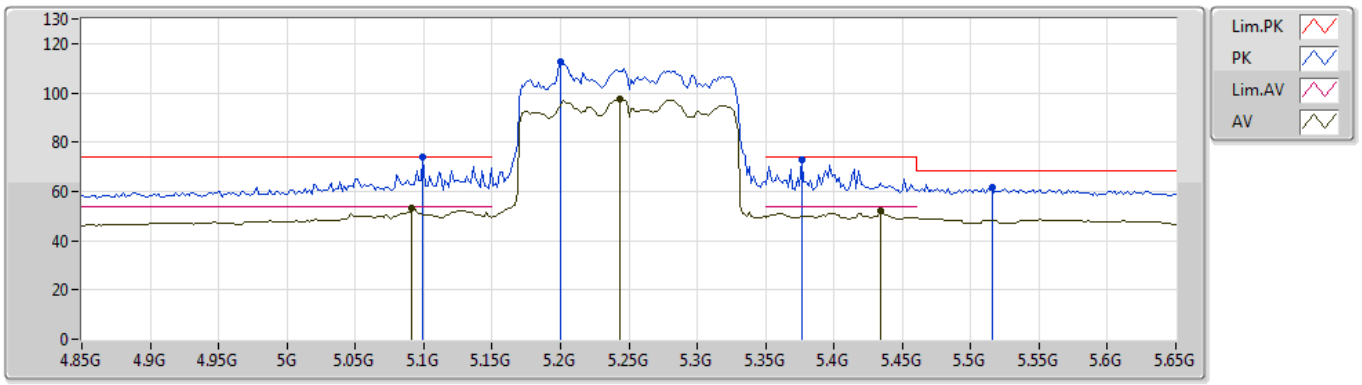

EUT Z_4TX
Setting 78
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.86528G | 61.96 | 74.00 | -12.04 | 16.85 | 3 | Horizontal | 203 | 1.60 | - |
| AV | 15.87062G | 48.14 | 54.00 | -5.86 | 16.84 | 3 | Horizontal | 203 | 1.60 | - |

## 802.11ax HEW160-BF_Nss2,(MCS0)_4TX

## 5250MHz_TX

18/07/2019



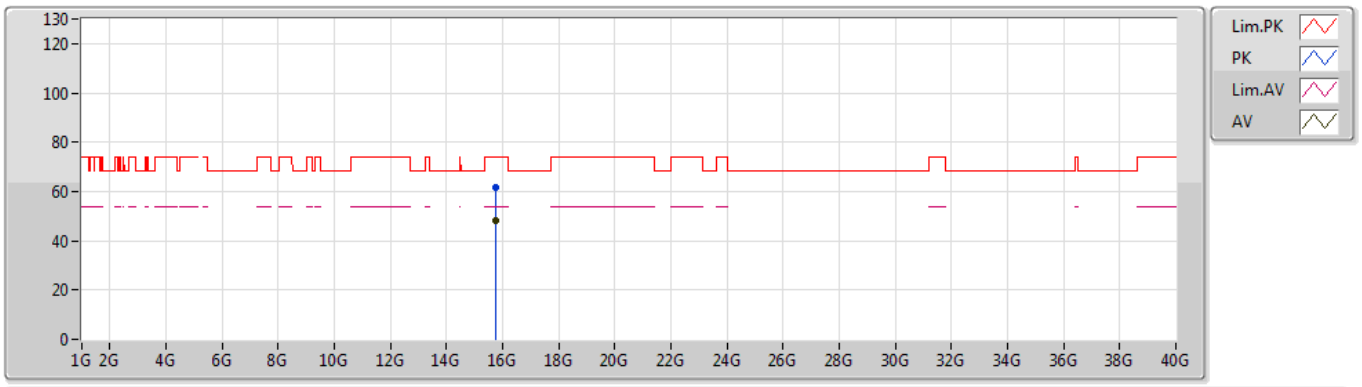

EUT Z_4TX
Setting 72
06-C-4-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.0996G | 73.90 | 74.00 | -0.10 | 7.41 | 3 | Vertical | 55 | 2.59 | - |
| AV | 5.0916G | 53.18 | 54.00 | -0.82 | 7.37 | 3 | Vertical | 55 | 2.59 | - |
| PK | 5.2004G | 112.73 | Inf | -Inf | 7.25 | 3 | Vertical | 55 | 2.59 | - |
| AV | 5.2436G | 97.52 | Inf | -Inf | 7.17 | 3 | Vertical | 55 | 2.59 | - |
| PK | 5.3764G | 72.73 | 74.00 | -1.27 | 7.30 | 3 | Vertical | 55 | 2.59 | - |
| AV | 5.434G | 51.94 | 54.00 | -2.06 | 7.45 | 3 | Vertical | 55 | 2.59 | - |
| PK | 5.5156G | 61.87 | 68.20 | -6.33 | 7.58 | 3 | Vertical | 55 | 2.59 | - |

## 802.11ax HEW160-BF_Nss2,(MCS0)_4TX

## 5250MHz_TX

26/07/2019



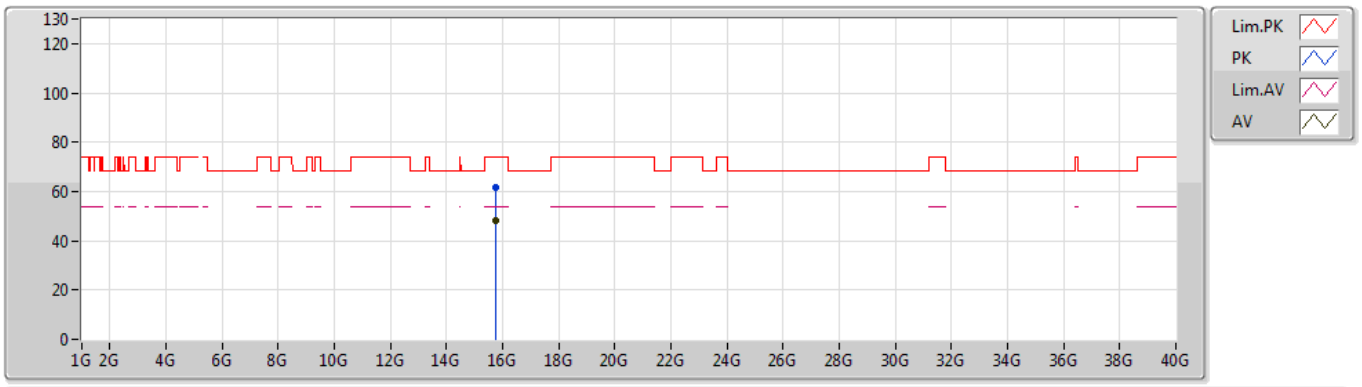

EUT Z_4TX
Setting 72
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.75354G | 61.72 | 74.00 | -12.28 | 17.27 | 3 | Vertical | 168 | 1.59 | - |
| AV | 15.7492G | 48.18 | 54.00 | -5.82 | 17.29 | 3 | Vertical | 168 | 1.59 | - |

## 802.11ax HEW160-BF_Nss2,(MCS0)_4TX

## 5250MHz_TX

26/07/2019




EUT Z_4TX
Setting 72
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.74538G | 61.83 | 74.00 | -12.17 | 17.31 | 3 | Horizontal | 339 | 2.11 | - |
| AV | 15.75286G | 48.13 | 54.00 | -5.87 | 17.27 | 3 | Horizontal | 339 | 2.11 | - |