# FCC RADIO TEST REPORT

| | | |
|---|---|---|
| FCC ID | : | Q87-03459 |
| Equipment | : | LINKSYS MAX-STREAM AC1900 MU-MIMO GIGABIT ROUTER, LINKSYS MAX-STREAM AC1750 MU-MIMO GIGABIT ROUTER |
| Brand Name | : | LINKSYS |
| Model Name | : | EA7500 V3, EA7430, EA7250, EA7500S |
| Applicant | : | Linksys LLC<br>121 Theory Drive, Irvine, CA 92617, USA |
| Standard | : | 47 CFR FCC Part 15.407 |

The product was received on Jun. 17, 2019, and testing was started from Jul. 08, 2019 and completed on Sep. 04, 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 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 |
|---|---|---|---|
| FR971025AB | 01 | Initial issue of report | Oct. 04, 2019 |
| FR971025AB | 02 | Revise the information on section 2.5 support equipment. | Nov. 07, 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 | 15.207 | AC Power-line Conducted Emissions | PASS | - |
| 3.2 | 15.407(a) | Emission Bandwidth | PASS | - |
| 3.3 | 15.407(a) | Maximum Conducted Output Power | PASS | - |
| 3.4 | 15.407(a) | Peak Power Spectral Density | PASS | - |
| 3.5 | 15.407(b) | Unwanted Emissions | PASS | - |

**Declaration of Conformity:**

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

**Comments and Explanations:**

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. 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 |
|---|---|---|---|
| 5150-5250 | a, n (HT20), ac (VHT20) | 5180-5240 | 36-48 [4] |
| 5725-5850 | | 5745-5825 | 149-165 [5] |
| 5150-5250 | n (HT40), ac (VHT40) | 5190-5230 | 38-46 [2] |
| 5725-5850 | | 5755-5795 | 151-159 [2] |
| 5150-5250 | ac (VHT80) | 5210 | 42 [1] |
| 5725-5850 | | 5775 | 155 [1] |

| Band | Mode | BWch (MHz) | Nant |
|---|---|---|---|
| 5.15-5.25GHz | 802.11a | 20 | 3TX |
| 5.15-5.25GHz | 802.11n HT20 | 20 | 3TX |
| 5.15-5.25GHz | 802.11n HT20-BF | 20 | 3TX |
| 5.15-5.25GHz | 802.11ac VHT20 | 20 | 3TX |
| 5.15-5.25GHz | 802.11ac VHT20-BF | 20 | 3TX |
| 5.15-5.25GHz | 802.11n HT40 | 40 | 3TX |
| 5.15-5.25GHz | 802.11n HT40-BF | 40 | 3TX |
| 5.15-5.25GHz | 802.11ac VHT40 | 40 | 3TX |
| 5.15-5.25GHz | 802.11ac VHT40-BF | 40 | 3TX |
| 5.15-5.25GHz | 802.11ac VHT80 | 80 | 3TX |
| 5.15-5.25GHz | 802.11ac VHT80-BF | 80 | 3TX |
| 5.725-5.85GHz | 802.11a | 20 | 3TX |
| 5.725-5.85GHz | 802.11n HT20 | 20 | 3TX |
| 5.725-5.85GHz | 802.11n HT20-BF | 20 | 3TX |
| 5.725-5.85GHz | 802.11ac VHT20 | 20 | 3TX |
| 5.725-5.85GHz | 802.11ac VHT20-BF | 20 | 3TX |
| 5.725-5.85GHz | 802.11n HT40 | 40 | 3TX |
| 5.725-5.85GHz | 802.11n HT40-BF | 40 | 3TX |
| 5.725-5.85GHz | 802.11ac VHT40 | 40 | 3TX |
| 5.725-5.85GHz | 802.11ac VHT40-BF | 40 | 3TX |
| 5.725-5.85GHz | 802.11ac VHT80 | 80 | 3TX |
| 5.725-5.85GHz | 802.11ac VHT80-BF | 80 | 3TX |

Note:
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 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

| Ant. | Port | | Brand | P/N | Antenna Type | Connector | Gain (dBi) | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2.4G | 5G | | | | | 2.4GHz | 5GHz Band 1 | 5GHz Band 4 |
| 1 | 3 | 1 | FIT | 4TS4009-A0007-JH | Dipole Antenna | I-PEX | 3.17 | 3.22 | 2.77 |
| 2 | 2 | 2 | FIT | 4TS4009-A0008-JH | Dipole Antenna | I-PEX | 3.12 | 2.90 | 2.87 |
| 3 | 1 | 3 | FIT | 4TS4009-A0009-JH | Dipole Antenna | I-PEX | 2.54 | 3.15 | 3.06 |

Note 1: The above information was declared by manufacturer.

Note 2: The EUT has three antennas.

**For 2.4GHz WLAN function**

**IEEE 802.11b/g/n mode (3TX/3RX):**

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

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

**For 5GHz WLAN function**

**IEEE 802.11a/n/ac mode (3TX/3RX):**

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

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

### 1.1.3 Mode Test Duty Cycle

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|---|---|---|---|---|
| 802.11a | 0.958 | 0.19 | 1.397m | 1k |
| 802.11ac VHT20-BF | 0.958 | 0.19 | 1.317m | 1k |
| 802.11ac VHT40-BF | 0.917 | 0.38 | 656.563u | 3k |
| 802.11ac VHT80-BF | 0.845 | 0.73 | 324.375u | 10k |

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 IEEE802.11n in 2.4GHz and 11n/ac in 5GHz. | | | |
| **Function** | ☐ | Outdoor P2M | ☒ | Indoor P2M |
| | ☐ | Fixed P2P | ☐ | Client |
| **Test Software Version** | QATool:v 0.0.2.5 | | | |

Note: The above information was declared by manufacturer.

### 1.1.5 EUT Supports Type

The EUT supports master (AP router, bridge, repeater) functions, only the master (AP router) was performed for all the tests, and it was based on manufacturer's request.

### 1.1.6 Table for Multiple Listing

| Equipment Name | Model Name | Description |
|---|---|---|
| LINKSYS MAX-STREAM AC1900 MU-MIMO GIGABIT ROUTER | EA7500 V3 | All the equipment names/model names are identical, the different equipment names/model names served as marketing strategy. |
| | EA7430 | |
| | EA7500S | |
| LINKSYS MAX-STREAM AC1750 MU-MIMO GIGABIT ROUTER | EA7250 | |

From the above list, equipment name: LINKSYS MAX-STREAM AC1900 MU-MIMO GIGABIT ROUTER and model name: EA7500 V3 was selected as representative model for the test and its data was recorded in this report.

## 1.2 Applicable Standards

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

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 789033 D02 v02r01
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01

## 1.3 Testing Location Information

| Testing Location | | | |
|---|---|---|---|
| ☐ | 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 | TH01-CB | Eddie Weng | 25.4~26.9°C / 62~66% | Jul. 11, 2019 ~ Aug. 13, 2019 |
| Radiated below 1GHz | 03CH06-CB | KJ Chang | 23.8~25.5°C / 59~63% | Aug. 08, 2019 ~ Sep. 04, 2019 |
| Radiated above 1GHz | 03CH04-CB | KJ Chang | 25.3~25.7°C / 60~65% | Jul. 08, 2019 ~ Aug. 12, 2019 |
| AC Conduction | CO01-CB | Max Lin | 23.2~24.1°C / 55~56% | Jul. 08, 2019 ~ Jul. 09, 2019 |

Test site Designation No. TW0006 with FCC
Test site registered number IC 4086D with Industry Canada.

## 1.4 Measurement Uncertainty

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

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

# 2 Test Configuration of EUT

## 2.1 Test Channel Mode

| Mode | PowerSetting |
|---|---|
| 802.11a_Nss1,(6Mbps)_3TX | - |
| 5180MHz | 22 |
| 5200MHz | 26 |
| 5240MHz | 26 |
| 5745MHz | 2C |
| 5785MHz | 2B |
| 5825MHz | 28 |
| 802.11ac VHT20-BF_Nss1,(MCS0)_3TX | - |
| 5180MHz | 34 |
| 5200MHz | 39 |
| 5240MHz | 39 |
| 5745MHz | 46 |
| 5785MHz | 46 |
| 5825MHz | 48 |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | - |
| 5190MHz | 30 |
| 5230MHz | 36 |
| 5755MHz | 41 |
| 5795MHz | 42 |
| 802.11ac VHT80-BF_Nss1,(MCS0)_3TX | - |
| 5210MHz | 24 |
| 5775MHz | 33 |

Note:
- VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.
- There are two modes of EUT for 802.11n/ac 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** | AC power-line conducted emissions |
| **Condition** | AC power-line conducted measurement for line and neutral |
| **Operating Mode** | Normal Link |
| 1 | Normal Link-EUT + Adapter 1 |
| 2 | Normal Link-EUT + Adapter 2 |
| 3 | Normal Link-EUT + Adapter 3 |
| 4 | Normal Link-EUT + Adapter 4 |
| For operating mode 3 is the worst case and it was record in this test report. | |

| 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 |
| | The EUT was performed at Y axis and Z axis position for Unwanted Emissions test of harmonic, and the worst case was found at Y axis. So the measurement will follow this same test configuration. |
| 1 | EUT in Y axis-2.4G + Adapter 1 |
| 2 | EUT in Y axis-2.4G + Adapter 2 |
| 3 | EUT in Y axis-2.4G + Adapter 3 |
| 4 | EUT in Y axis-2.4G + Adapter 4 |
| Mode 4 has been evaluated to be the worst case among Mode 1~4, thus measurement for Mode 5 will follow this same test mode. | |
| 5 | EUT in Y axis-5G + Adapter 4 |
| For operating mode 4 is the worst case and it was record in this test report. | |

| | |
|---|---|
| **Operating Mode > 1GHz** | CTX |
| | The EUT was performed at Y axis and Z axis position and the harmonic worst case was found at Y axis and the bandedge worst case was found at Z axis. So the measurement will follow this same test configuration. |
| 1 | EUT in Y axis for harmonic and EUT in Z axis for bandedge |

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

| **The Worst Case Mode for Following Conformance Tests** | |
|---|---|
| **Tests Item** | Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation |
| **Operating Mode** | |
| 1 | WLAN 2.4GHz + WLAN 5GHz |
| Refer to Sporton Test Report No.: FA971025 for Co-location RF Exposure Evaluation. | |

## 2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated 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 "Lantest.exe" to link with the remote workstation to transmit and receive packet by Client and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

## 2.4 Accessories

| Accessories | | | |
|---|---|---|---|
| **Equipment Name** | **Brand Name** | **Model Name** | **Rating** |
| Adapter 1 (Interchangeable plug) | Ktec | KSA-24W-120200D5 | INPUT: 100-240V~50/60Hz, 0.6A<br>OUTPUT: 12V, 2.0A |
| Adapter 2 (Fixed plug) | Ktec | KSA-24W-120200HU | INPUT: 100-240V~50/60Hz, 0.6A<br>OUTPUT: 12V, 2.0A |
| Adapter 3 (Fixed plug) | APD | WB-24J12FU | INPUT: 100-240V~50-60Hz, 0.7A Max.<br>OUTPUT: 12V, 2A |
| Adapter 4 (Interchangeable plug) | APD | WB-24J12R | INPUT: 100-240V~50-60Hz, 0.7A Max.<br>OUTPUT: 12V, 2A |
| **Others** | | | |
| Plug of Ktec*1 (Use for Adapter 1) | | | |
| Plug of APD*1 (Use for Adapter 4) | | | |
| RJ-45 cable*1: Non-shielded, 0.9m | | | |

## 2.5 Support Equipment

**For AC Conduction:**

| Support Equipment | | | | |
|---|---|---|---|---|
| **No.** | **Equipment** | **Brand Name** | **Model Name** | **FCC ID** |
| A | Flash disk3.0 | Transcend | JetFlash-700 | N/A |
| B | LAN NB | DELL | E6430 | N/A |
| C | WAN NB | DELL | E6430 | N/A |
| D | 2.4G NB | DELL | E6430 | N/A |
| E | 5G NB | DELL | E6430 | N/A |

**For Radiated (below 1GHz):**

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

**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)**

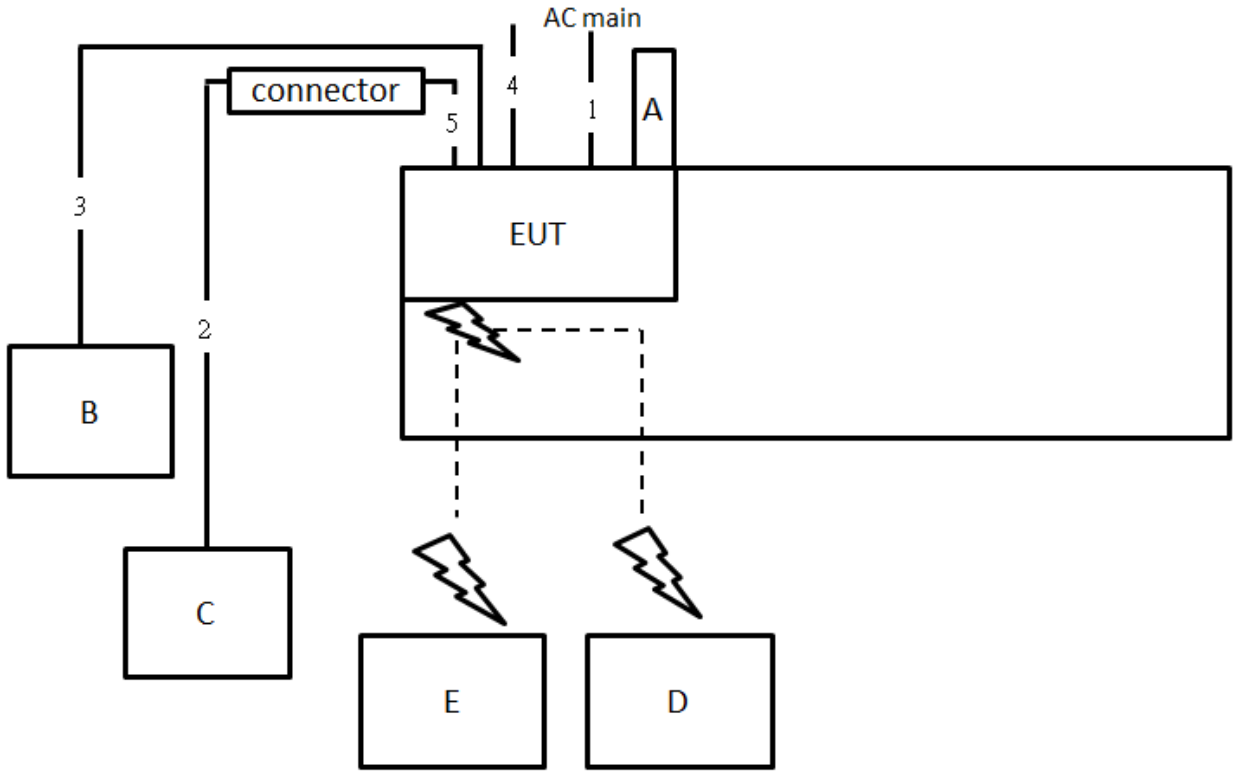
| Support Equipment | | | | |
|---|---|---|---|---|
| **No.** | **Equipment** | **Brand Name** | **Model Name** | **FCC ID** |
| A | NB | DELL | E4300 | N/A |
| B | Client | LINKSYS | EA7500 V3 | Q87-03459 |
| C | NB | DELL | E4300 | N/A |

**For RF Conducted:**

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

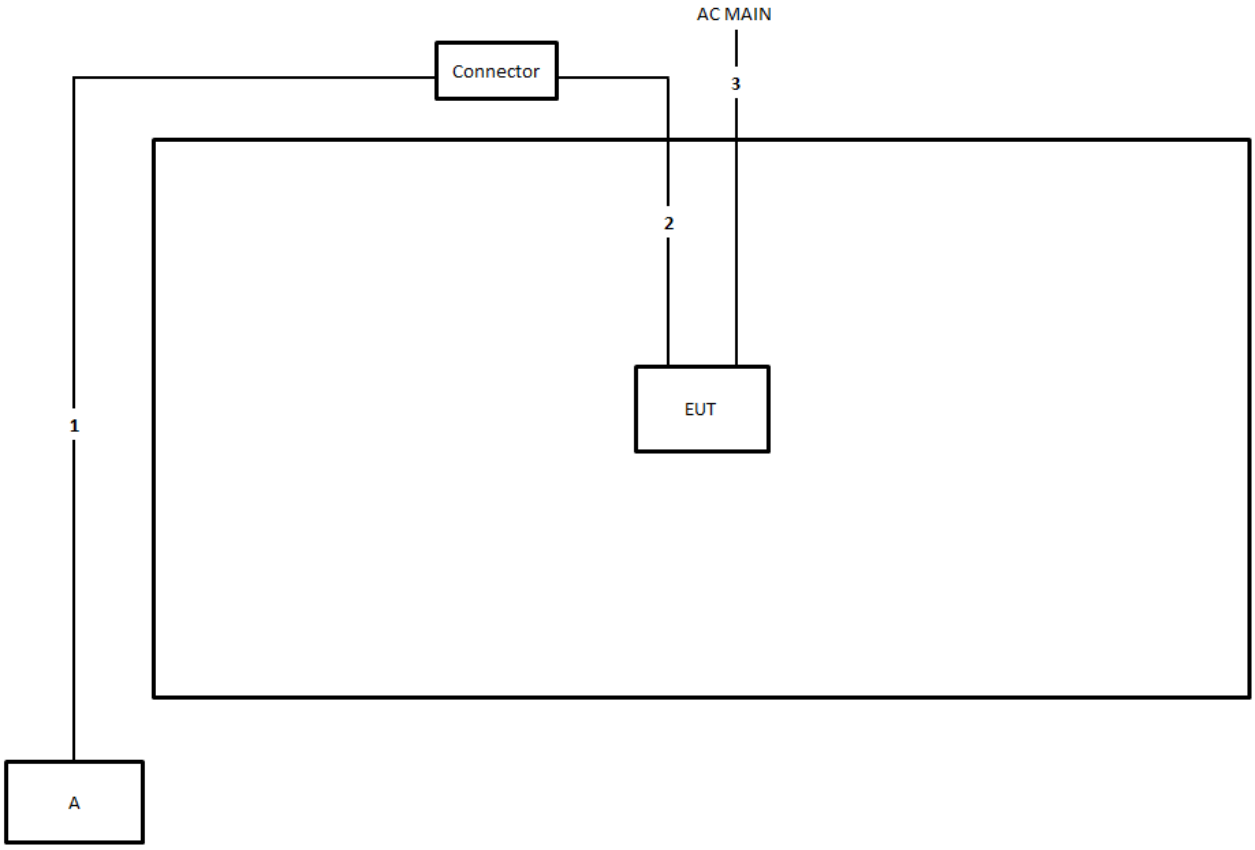
## 2.6 Test Setup Diagram

**Test Setup Diagram – AC Line Conducted Emission Test**



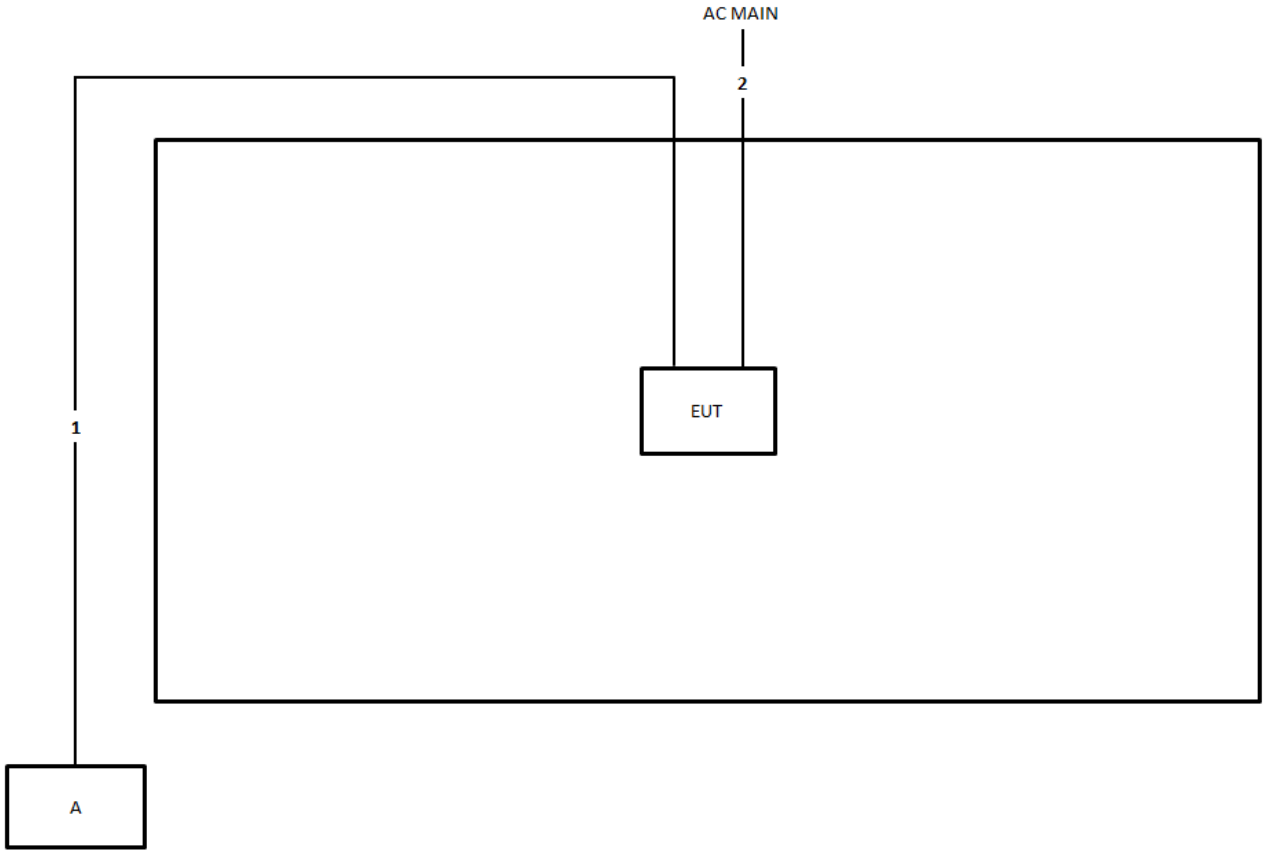

| Item | Connection | Shielded | Length |
|---|---|---|---|
| 1 | Power cable | No | 1.5m |
| 2 | RJ-45 cable | No | 10m |
| 3 | RJ-45 cable | No | 10m |
| 4 | RJ-45 cable*3 | No | 1.5m |
| 5 | RJ-45 cable | No | 0.9m |

## Test Setup Diagram - Radiated Test < 1GHz



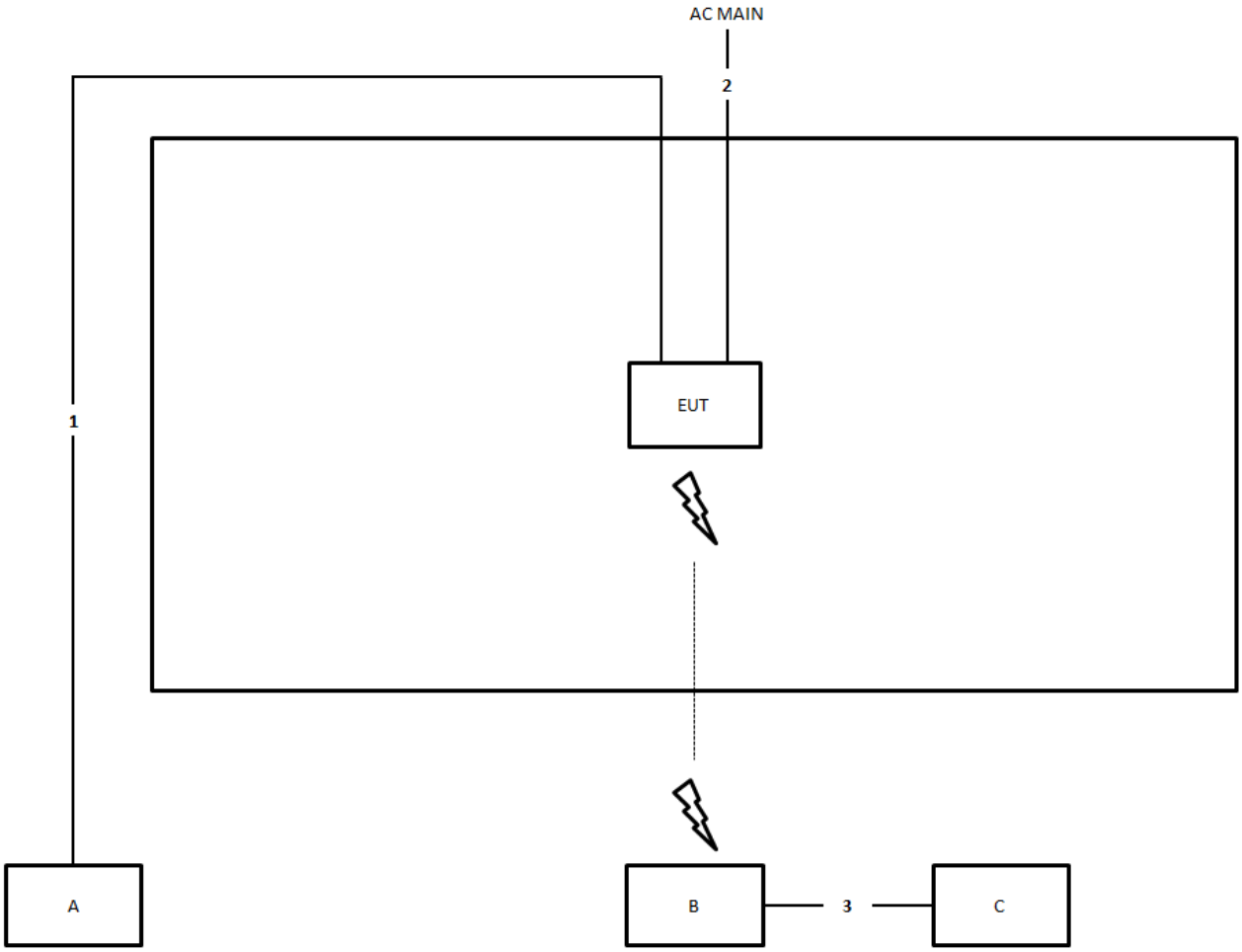

| Item | Connection | Shielded | Length |
|---|---|---|---|
| 1 | RJ-45 cable | No | 10m |
| 2 | RJ-45 cable | No | 0.9m |
| 3 | Power cable | No | 1.5m |

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




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

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




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

# 3 Transmitter Test Result

## 3.1 AC Power-line Conducted Emissions

### 3.1.1 AC Power-line Conducted Emissions Limit

| AC Power-line Conducted Emissions Limit | | |
|---|---|---|
| **Frequency Emission (MHz)** | **Quasi-Peak** | **Average** |
| 0.15-0.5 | 66 - 56 * | 56 - 46 * |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |
| Note 1: * Decreases with the logarithm of the frequency. | | |

### 3.1.2 Measuring Instruments

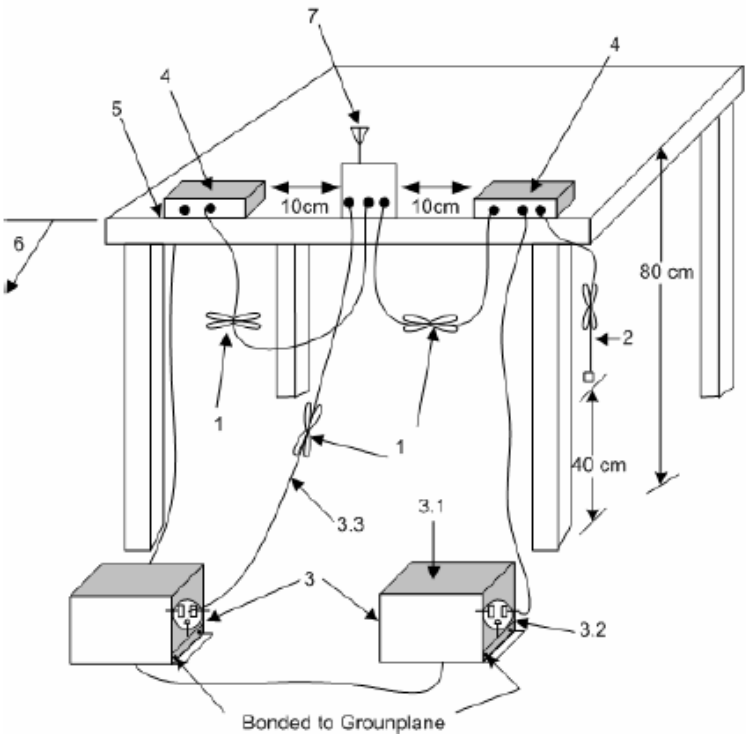
Refer a test equipment and calibration data table in this test report.

### 3.1.3 Test Procedures

| Test Method |
|---|
| ☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions. |

### 3.1.4 Test Setup

**AC Power-line Conducted Emissions**




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

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

Refer as Appendix A

# 3.2 Emission Bandwidth

## 3.2.1 Emission Bandwidth Limit

| Emission Bandwidth Limit | |
|---|---|
| **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. |

## 3.2.2 Measuring Instruments

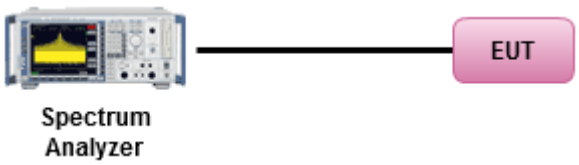
Refer a test equipment and calibration data table in this test report.

## 3.2.3 Test Procedures

| Test Method | |
|---|---|
| ▪ | For the emission bandwidth shall be measured using one of the options below: |
| ☒ | 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. |

## 3.2.4 Test Setup

**Emission Bandwidth**




## 3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

## 3.3 Maximum Conducted Output Power

### 3.3.1 Maximum Conducted Output Power Limit

| Maximum Conducted Output Power Limit | |
|---|---|
| **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. | |

### 3.3.2 Measuring Instruments

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

### 3.3.3 Test Procedures

| Test Method | |
|---|---|
| ▪ Maximum Conducted Output Power | |
| | Average over on/off periods with duty factor |
| | ☐ 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>$EIRP_{total} = P_{total} + DG$ |

### 3.3.4 Test Setup

| RF Output Power (Power Meter) |
|---|
|  |

### 3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

## 3.4 Peak Power Spectral Density

### 3.4.1 Peak Power Spectral Density Limit

| Peak Power Spectral Density Limit | |
|---|---|
| **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. | |

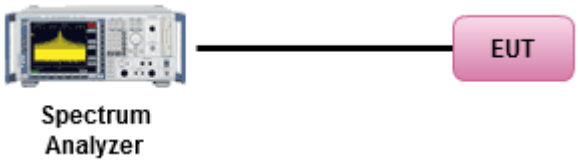
### 3.4.2 Measuring Instruments

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

### 3.4.3 Test Procedures

| Test Method | | |
|---|---|---|
| ▪ Peak power spectral density procedures that the same method as used to determine the conducted output power 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>$EIRP_{total} = PPSD_{total} + DG$ |

### 3.4.4 Test Setup

| Power Spectral Density |
| --- |
|  |

### 3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

## 3.5 Unwanted Emissions

### 3.5.1 Transmitter Unwanted Emissions Limit

| Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit | | | |
|---|---|---|---|
| **Frequency Range (MHz)** | **Field Strength (uV/m)** | **Field Strength (dBuV/m)** | **Measure Distance (m)** |
| 0.009~0.490 | 2400/F(kHz) | 48.5 - 13.8 | 300 |
| 0.490~1.705 | 24000/F(kHz) | 33.8 - 23 | 30 |
| 1.705~30.0 | 30 | 29 | 30 |
| 30~88 | 100 | 40 | 3 |
| 88~216 | 150 | 43.5 | 3 |
| 216~960 | 200 | 46 | 3 |
| Above 960 | 500 | 54 | 3 |

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

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

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

| Un-restricted band emissions above 1GHz Limit | |
|---|---|
| **Operating Band** | **Limit** |
| ☒ 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). |

### 3.5.2 Measuring Instruments

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

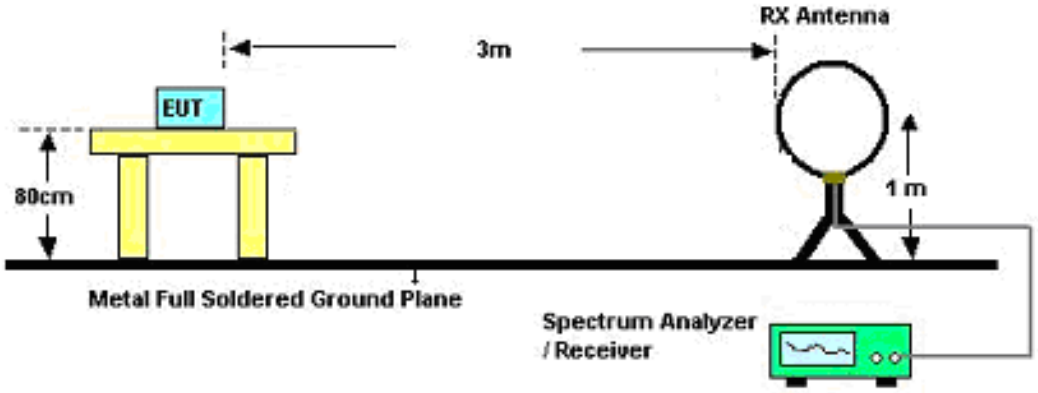
### 3.5.3 Test Procedures

| Test Method | | |
|---|---|---|
| ▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements). | | |
| ▪ The average emission levels shall be measured in [duty cycle ≥ 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. | | |

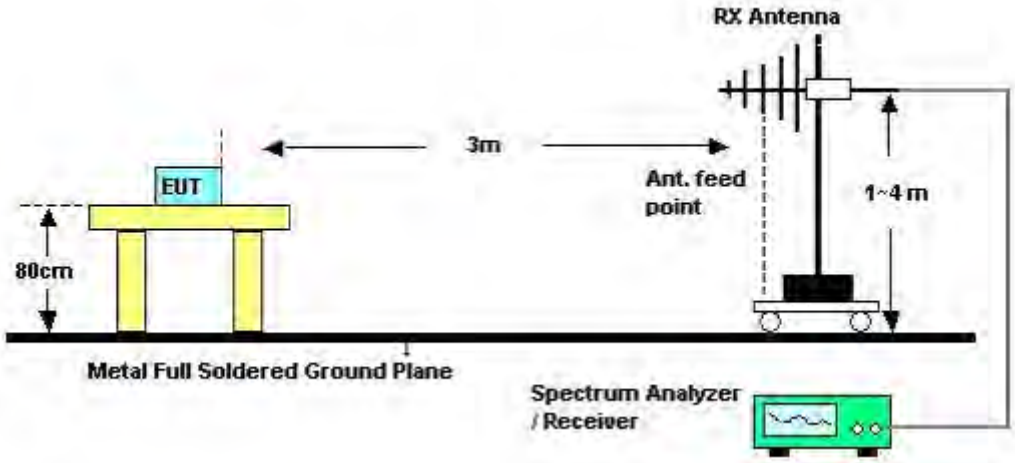
### 3.5.4 Test Setup

**Transmitter Radiated Unwanted Emissions**

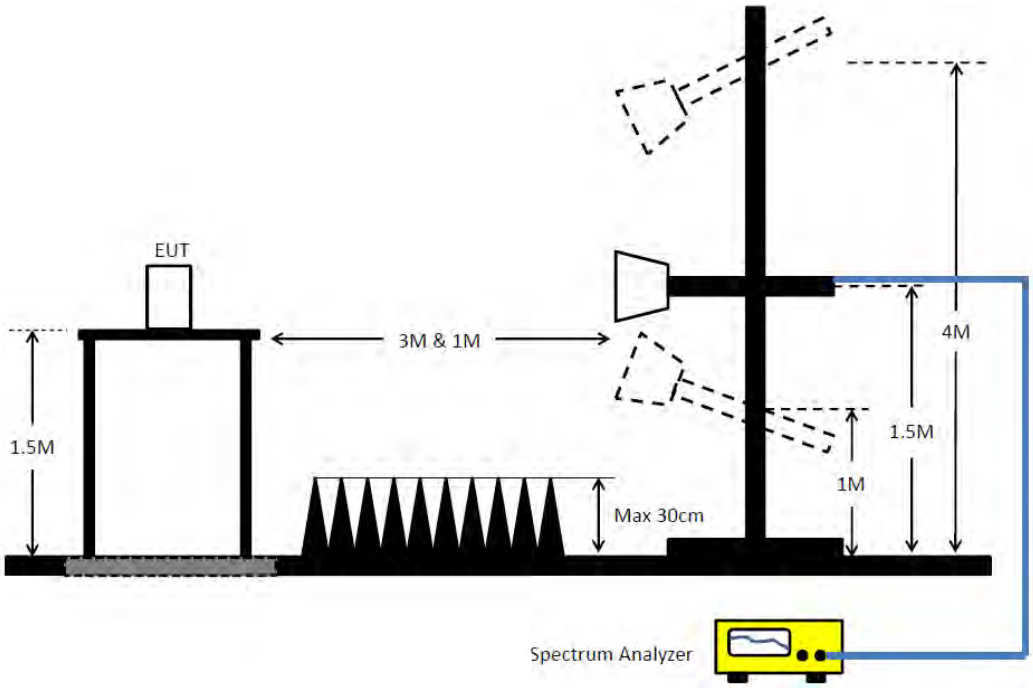
**9kHz ~30MHz**




**30MHz~1GHz**



**Above 1GHz**




### 3.5.5 Measurement Results Calculation

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

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

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

### 3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

# 4 Test Equipment and Calibration Data

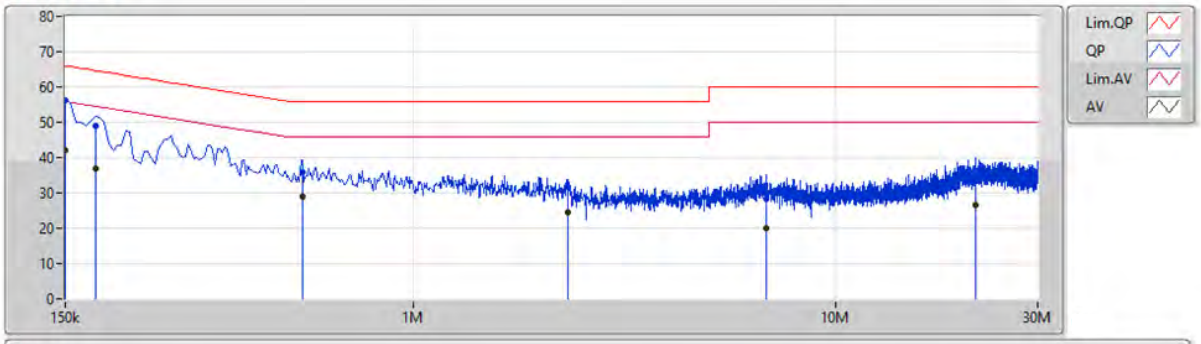
| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Calibration Due Date | Remark |
|---|---|---|---|---|---|---|---|
| EMI Receiver | Agilent | N9038A | My52260123 | 9kHz ~ 8.45GHz | Jan. 28, 2019 | Jan. 29, 2020 | Conduction (CO01-CB) |
| LISN | F.C.C. | FCC-LISN-50-16-2 | 04083 | 150kHz ~ 100MHz | Dec. 24, 2018 | Dec. 23, 2019 | Conduction (CO01-CB) |
| LISN | Schwarzbeck | NSLK 8127 | 8127647 | 9kHz ~ 30MHz | Jan. 11, 2019 | Jan. 10, 2020 | Conduction (CO01-CB) |
| COND Cable | Woken | Cable | Low cable-CO01 | 9kHz ~ 30MHz | May 21, 2019 | May 20, 2020 | Conduction (CO01-CB) |
| Software | Audix | E3 | 6.120210n | - | N.C.R. | N.C.R. | Conduction (CO01-CB) |
| Bilog Antenna with 6 dB attenuator | Schaffner | CBL6112B & N-6-06 | 2928 & AT-N0607 | 20MHz ~ 2GHz | Jan. 02, 2019 | Jan. 01, 2020 | Radiation (03CH06-CB) |
| Loop Antenna | Teseq | HLA 6120 | 24155 | 9kHz - 30 MHz | Mar. 29, 2019 | Mar. 28, 2020 | Radiation (03CH06-CB) |
| Pre-Amplifier | Agilent | 310N | 187290 | 0.1MHz ~ 1GHz | May 07, 2019 | May 06, 2020 | Radiation (03CH06-CB) |
| Spectrum analyzer | R&S | FSP40 | 100080 | 9kHz~40GHz | Oct. 03, 2018 | Oct. 02, 2019 | Radiation (03CH06-CB) |
| EMI Test Receiver | R&S | ESCS | 826547/017 | 9kHz ~ 2.75GHz | May 15, 2019 | May 14, 2020 | Radiation (03CH06-CB) |
| RF Cable-low | HUBER+SUHNER | RG402 | Low Cable-05+24 | 30MHz~1GHz | Oct. 08, 2018 | Oct. 07, 2019 | Radiation (03CH06-CB) |
| Horn Antenna | ETS‧Lindgren | 3115 | 00143147 | 750MHz~18GHz | Oct. 26, 2018 | Oct. 25, 2019 | Radiation (03CH04-CB) |
| Horn Antenna | SCHWARZBECK | BBHA 9170 | BBHA9170507 | 15GHz ~ 40GHz | Jun. 12, 2019 | Jun. 11, 2020 | Radiation (03CH04-CB) |
| Pre-Amplifier | Agilent | 83017A | MY53270063 | 0.5GHz ~ 26.5GHz | Mar. 19, 2019 | Mar. 18, 2020 | Radiation (03CH04-CB) |
| Pre-Amplifier | MITEQ | TTA1840-35-HG | 1864479 | 18GHz ~ 40GHz | Jul. 03, 2019 | Jul. 02, 2020 | Radiation (03CH04-CB) |
| Spectrum Analyzer | R&S | FSP40 | 100142 | 9kHz~40GHz | Dec. 26, 2018 | Dec. 25, 2019 | Radiation (03CH04-CB |
| RF Cable-high | Woken | RG402 | High Cable-21 | 1GHz - 18GHz | Oct. 08, 2018 | Oct. 07, 2019 | Radiation (03CH04-CB) |
| RF Cable-high | Woken | RG402 | High Cable-21+22 | 1GHz - 18GHz | Oct. 08, 2018 | Oct. 07, 2019 | Radiation (03CH04-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#1 | 18GHz ~ 40 GHz | Jul. 27, 2018 | Jul. 26, 2019 | Radiation (03CH04-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#1 | 18GHz ~ 40 GHz | Jul. 24, 2019 | Jul. 23, 2020 | Radiation (03CH04-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#2 | 18GHz ~ 40 GHz | Jul. 27, 2018 | Jul. 26, 2019 | Radiation (03CH04-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#2 | 18GHz ~ 40 GHz | Jul. 24, 2019 | Jul. 23, 2020 | Radiation (03CH04-CB) |

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Calibration Due Date | Remark |
|---|---|---|---|---|---|---|---|
| Spectrum analyzer | R&S | FSV40 | 100979 | 9kHz~40GHz | Feb. 25, 2019 | Feb. 24, 2020 | Conducted (TH01-CB) |
| Temp. and Humidity Chamber | Ten Billion | TTH-D3SP | TBN-931011 | -30~100 degree | May 30, 2019 | May 29, 2020 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-06 | 1 GHz – 26.5 GHz | Oct. 08, 2018 | Oct. 07, 2019 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-07 | 1 GHz –26.5 GHz | Oct. 08, 2018 | Oct. 07, 2019 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-08 | 1 GHz –26.5 GHz | Oct. 08, 2018 | Oct. 07, 2019 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-09 | 1 GHz –26.5 GHz | Oct. 08, 2018 | Oct. 07, 2019 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-10 | 1 GHz –26.5 GHz | Oct. 08, 2018 | Oct. 07, 2019 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-28 | 1 GHz –26.5 GHz | Nov. 19, 2018 | Nov. 18, 2019 | Conducted (TH01-CB) |
| Power Sensor | Agilent | E9327A | US40442088 | 50MHz~18GHz | Jan. 15, 2019 | Jan. 14, 2020 | Conducted (TH01-CB) |
| Power Meter | Agilent | E4416A | GB41291199 | 50MHz~18GHz | Jan. 15, 2019 | Jan. 14, 2020 | Conducted (TH01-CB) |

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

N.C.R. means Non-Calibration required.

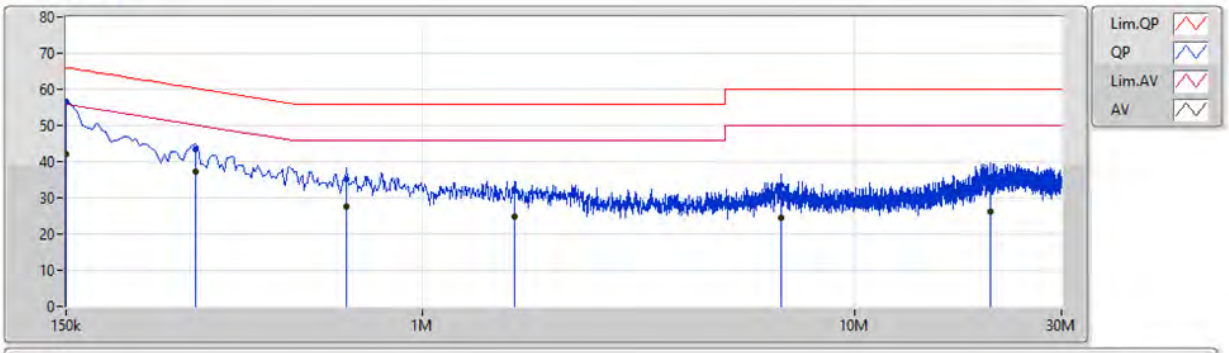
| AC Power-line Conducted Emissions Result | | | |
|---|---|---|---|
| **Operating Mode** | 3 | **Power Phase** | Line |
| **Operating Function** | Normal Link | | |




| Type | Freq | Level | Limit | Margin | Factor | Condition | Comment | Raw | AF | CL | AT |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV) | (dBuV) | (dB) | (dB) | | | (dBuV) | (dB) | (dB) | (dB) |
| QP | 150k | 56.31 | 66.00 | -9.69 | 9.90 | Line | "Worst" | 46.41 | 0.05 | 0.06 | 9.79 |
| AV | 150k | 42.09 | 56.00 | -13.91 | 9.90 | Line | - | 32.19 | 0.05 | 0.06 | 9.79 |
| QP | 177k | 48.88 | 64.62 | -15.74 | 9.91 | Line | - | 38.97 | 0.06 | 0.06 | 9.79 |
| AV | 177k | 37.06 | 54.62 | -17.56 | 9.91 | Line | - | 27.15 | 0.06 | 0.06 | 9.79 |
| QP | 546k | 35.81 | 56.00 | -20.19 | 9.94 | Line | - | 25.87 | 0.06 | 0.07 | 9.81 |
| AV | 546k | 28.92 | 46.00 | -17.08 | 9.94 | Line | - | 18.98 | 0.06 | 0.07 | 9.81 |
| QP | 2.324M | 31.68 | 56.00 | -24.32 | 10.06 | Line | - | 21.62 | 0.10 | 0.13 | 9.83 |
| AV | 2.324M | 24.55 | 46.00 | -21.45 | 10.06 | Line | - | 14.49 | 0.10 | 0.13 | 9.83 |
| QP | 6.833M | 28.23 | 60.00 | -31.77 | 10.25 | Line | - | 17.98 | 0.17 | 0.21 | 9.87 |
| AV | 6.833M | 19.86 | 50.00 | -30.14 | 10.25 | Line | - | 9.61 | 0.17 | 0.21 | 9.87 |
| QP | 21.368M | 33.52 | 60.00 | -26.48 | 10.58 | Line | - | 22.94 | 0.30 | 0.28 | 10.00 |
| AV | 21.368M | 26.57 | 50.00 | -23.43 | 10.58 | Line | - | 15.99 | 0.30 | 0.28 | 10.00 |

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

| AC Power-line Conducted Emissions Result | | | |
|---|---|---|---|
| **Operating Mode** | 3 | **Power Phase** | Neutral |
| **Operating Function** | Normal Link | | |




| Type | Freq | Level | Limit | Margin | Factor | Condition | Comment | Raw | AF | CL | AT |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV) | (dBuV) | (dB) | (dB) | | | (dBuV) | (dB) | (dB) | (dB) |
| QP | 150k | 56.56 | 66.00 | -9.44 | 9.89 | Neutral | "Worst" | 46.67 | 0.04 | 0.06 | 9.79 |
| AV | 150k | 42.04 | 56.00 | -13.96 | 9.89 | Neutral | - | 32.15 | 0.04 | 0.06 | 9.79 |
| QP | 298.5k | 43.54 | 60.28 | -16.74 | 9.90 | Neutral | - | 33.64 | 0.04 | 0.06 | 9.80 |
| AV | 298.5k | 37.20 | 50.28 | -13.08 | 9.90 | Neutral | - | 27.30 | 0.04 | 0.06 | 9.80 |
| QP | 667.5k | 35.26 | 56.00 | -20.74 | 9.95 | Neutral | - | 25.31 | 0.05 | 0.08 | 9.82 |
| AV | 667.5k | 27.67 | 46.00 | -18.33 | 9.95 | Neutral | - | 17.72 | 0.05 | 0.08 | 9.82 |
| QP | 1.635M | 32.05 | 56.00 | -23.95 | 10.01 | Neutral | - | 22.04 | 0.07 | 0.11 | 9.83 |
| AV | 1.635M | 24.95 | 46.00 | -21.05 | 10.01 | Neutral | - | 14.94 | 0.07 | 0.11 | 9.83 |
| QP | 6.761M | 33.35 | 60.00 | -26.65 | 10.22 | Neutral | - | 23.13 | 0.15 | 0.20 | 9.87 |
| AV | 6.761M | 24.39 | 50.00 | -25.61 | 10.22 | Neutral | - | 14.17 | 0.15 | 0.20 | 9.87 |
| QP | 20.544M | 33.37 | 60.00 | -26.63 | 10.51 | Neutral | - | 22.86 | 0.26 | 0.26 | 9.99 |
| AV | 20.544M | 26.29 | 50.00 | -23.71 | 10.51 | Neutral | - | 15.78 | 0.26 | 0.26 | 9.99 |

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

## Summary

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| 5.15-5.25GHz | - | - | - | - | - |
| 802.11a_Nss1,(6Mbps)_3TX | 38.75M | 19.865M | 19M9D1D | 19.875M | 16.417M |
| 802.11ac VHT20-BF_Nss1,(MCS0)_3TX | 41.475M | 18.666M | 18M7D1D | 19.85M | 17.541M |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | 71.15M | 36.182M | 36M2D1D | 39.85M | 35.932M |
| 802.11ac VHT80-BF_Nss1,(MCS0)_3TX | 81.3M | 75.162M | 75M2D1D | 79.8M | 74.863M |
| 5.725-5.85GHz | - | - | - | - | - |
| 802.11a_Nss1,(6Mbps)_3TX | 15.9M | 33.533M | 33M5D1D | 14.15M | 16.667M |
| 802.11ac VHT20-BF_Nss1,(MCS0)_3TX | 16.475M | 30.21M | 30M2D1D | 13.8M | 20.565M |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | 35.05M | 57.771M | 57M8D1D | 30.7M | 36.782M |
| 802.11ac VHT80-BF_Nss1,(MCS0)_3TX | 75M | 75.362M | 75M4D1D | 72.5M | 75.062M |

**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

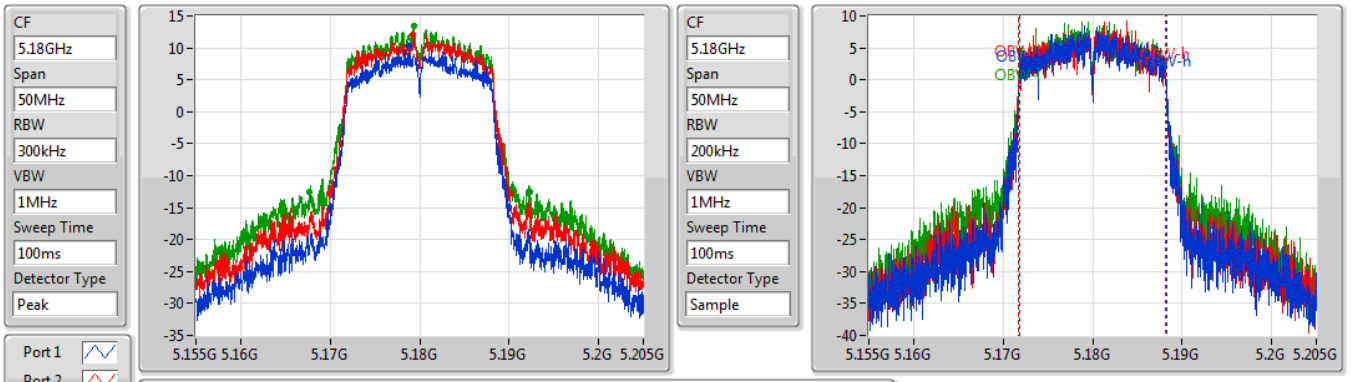
| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) | Port 2-N dB (Hz) | Port 2-OBW (Hz) | Port 3-N dB (Hz) | Port 3-OBW (Hz) |
|---|---|---|---|---|---|---|---|---|
| 802.11a_Nss1,(6Mbps)_3TX | - | - | - | - | - | - | - | - |
| 5180MHz | Pass | Inf | 19.875M | 16.417M | 20.15M | 16.417M | 24.75M | 16.517M |
| 5200MHz | Pass | Inf | 35.8M | 16.967M | 36.3M | 17.191M | 38.75M | 19.865M |
| 5240MHz | Pass | Inf | 36.05M | 17.016M | 34.875M | 17.391M | 37.6M | 19.04M |
| 5745MHz | Pass | 500k | 15.075M | 24.688M | 15.6M | 33.108M | 14.725M | 32.984M |
| 5785MHz | Pass | 500k | 14.15M | 25.637M | 15.9M | 32.084M | 15M | 33.533M |
| 5825MHz | Pass | 500k | 15.075M | 16.667M | 15M | 18.341M | 14.45M | 19.215M |
| 802.11ac VHT20-BF_Nss1,(MCS0)_3TX | - | - | - | - | - | - | - | - |
| 5180MHz | Pass | Inf | 20.575M | 17.541M | 19.85M | 17.591M | 26.325M | 17.616M |
| 5200MHz | Pass | Inf | 39.525M | 17.741M | 38.8M | 17.866M | 41.475M | 18.666M |
| 5240MHz | Pass | Inf | 37.95M | 17.791M | 37.9M | 18.016M | 41.375M | 18.566M |
| 5745MHz | Pass | 500k | 15.05M | 20.565M | 15.05M | 27.211M | 16.475M | 27.386M |
| 5785MHz | Pass | 500k | 15.075M | 21.039M | 15.05M | 27.411M | 15M | 28.411M |
| 5825MHz | Pass | 500k | 13.8M | 20.765M | 14.325M | 29.485M | 15.9M | 30.21M |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | - | - | - | - | - | - | - | - |
| 5190MHz | Pass | Inf | 40.65M | 35.932M | 39.85M | 35.932M | 40.6M | 35.932M |
| 5230MHz | Pass | Inf | 44.65M | 36.032M | 42.65M | 36.082M | 71.15M | 36.182M |
| 5755MHz | Pass | 500k | 30.7M | 36.782M | 35.05M | 48.676M | 32.5M | 50.525M |
| 5795MHz | Pass | 500k | 33.85M | 37.881M | 35M | 54.923M | 33.1M | 57.771M |
| 802.11ac VHT80-BF_Nss1,(MCS0)_3TX | - | - | - | - | - | - | - | - |
| 5210MHz | Pass | Inf | 81.3M | 75.162M | 79.8M | 74.863M | 80.2M | 75.162M |
| 5775MHz | Pass | 500k | 72.5M | 75.162M | 75M | 75.062M | 73.8M | 75.362M |

**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)_3TX EBW

### 5180MHz

11/07/2019

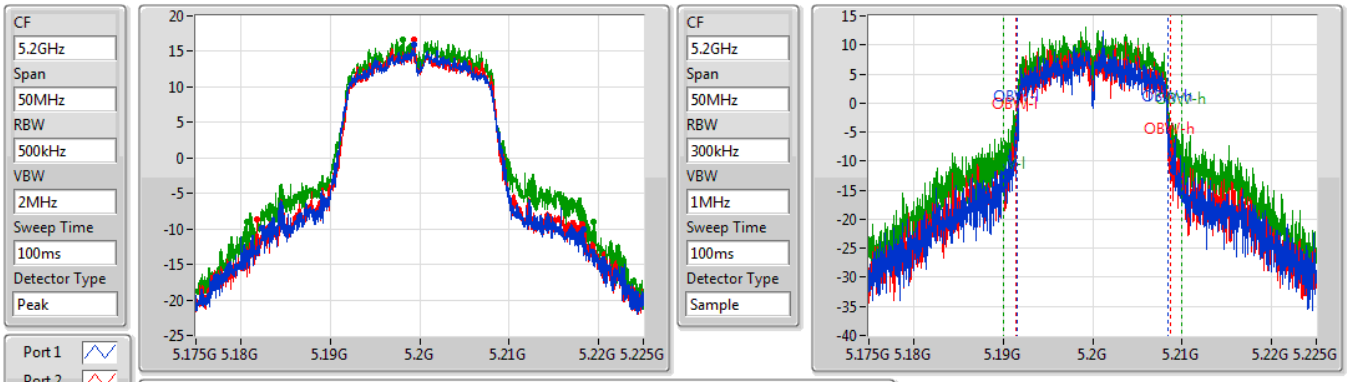



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 19.875M | 5.170025G | 5.1899G | 16.417M | 5.171804G | 5.188221G | Inf | 1 |
| 20.15M | 5.16995G | 5.1901G | 16.417M | 5.171779G | 5.188196G | Inf | 2 |
| 24.75M | 5.167625G | 5.192375G | 16.517M | 5.171729G | 5.188246G | Inf | 3 |

## 802.11a_Nss1,(6Mbps)_3TX EBW

### 5200MHz

11/07/2019

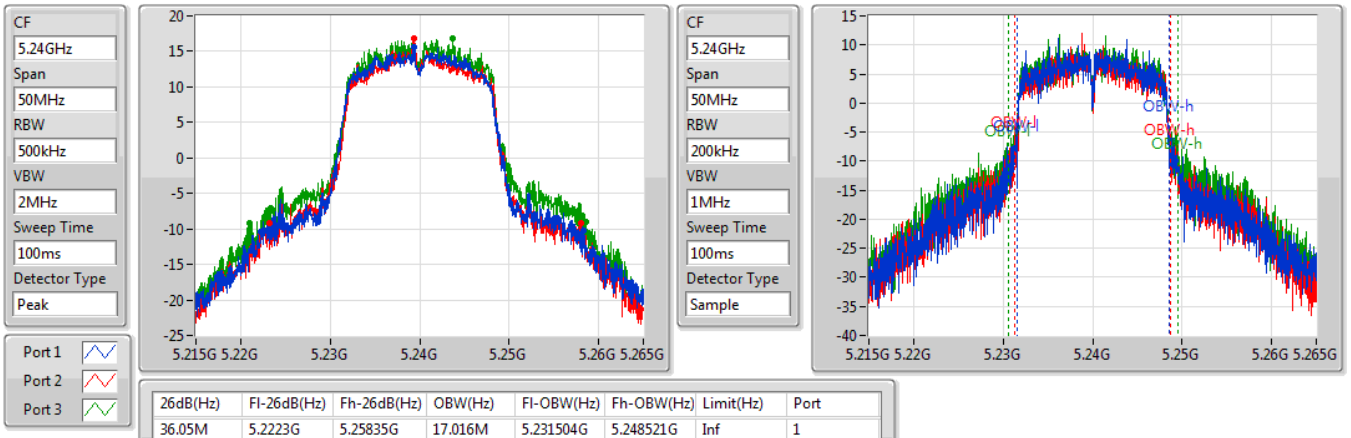



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 35.8M | 5.18245G | 5.21825G | 16.967M | 5.191504G | 5.208471G | Inf | 1 |
| 36.3M | 5.181875G | 5.218175G | 17.191M | 5.191454G | 5.208646G | Inf | 2 |
| 38.75M | 5.18065G | 5.2194G | 19.865M | 5.190055G | 5.20992G | Inf | 3 |

## 802.11a_Nss1,(6Mbps)_3TX EBW

### 5240MHz

11/07/2019

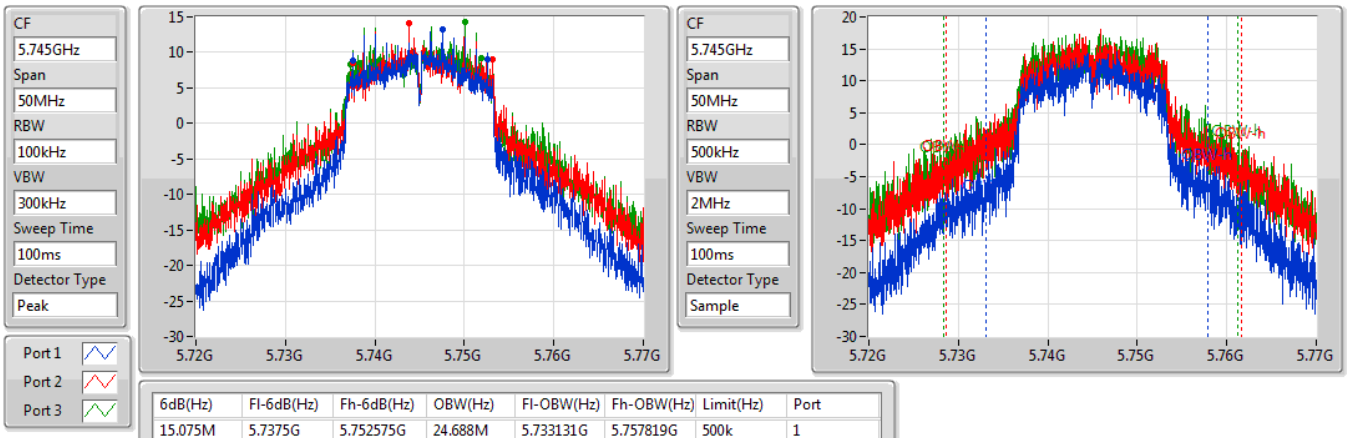



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 36.05M | 5.2223G | 5.25835G | 17.016M | 5.231504G | 5.248521G | Inf | 1 |
| 34.875M | 5.2232G | 5.258075G | 17.391M | 5.231279G | 5.248671G | Inf | 2 |
| 37.6M | 5.220975G | 5.258575G | 19.04M | 5.23053G | 5.24957G | Inf | 3 |

## 802.11a_Nss1,(6Mbps)_3TX EBW

### 5745MHz

11/07/2019



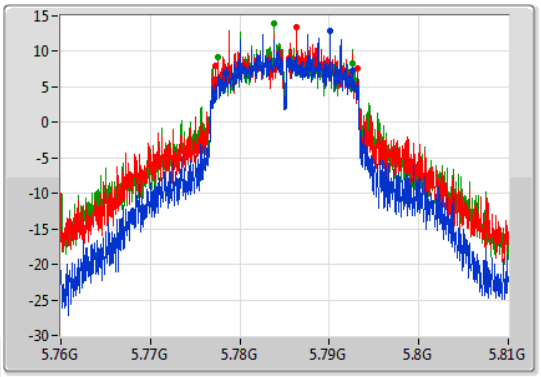

| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 15.075M | 5.7375G | 5.752575G | 24.688M | 5.733131G | 5.757819G | 500k | 1 |
| 15.6M | 5.737575G | 5.753175G | 33.108M | 5.728583G | 5.761692G | 500k | 2 |
| 14.725M | 5.737225G | 5.75195G | 32.984M | 5.728308G | 5.761292G | 500k | 3 |

## 802.11a_Nss1,(6Mbps)_3TX EBW

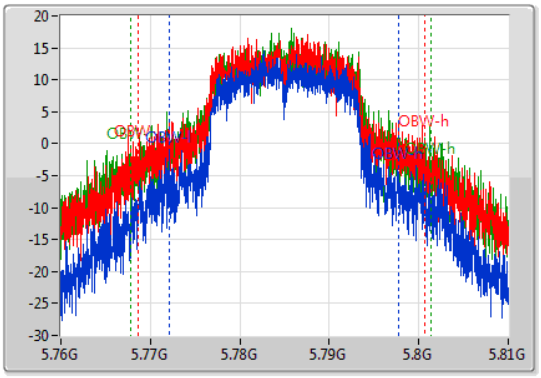
### 5785MHz

11/07/2019

| | |
|---|---|
| CF | 5.785GHz |
| Span | 50MHz |
| RBW | 100kHz |
| VBW | 300kHz |
| Sweep Time | 100ms |
| Detector Type | Peak |




| | |
|---|---|
| CF | 5.785GHz |
| Span | 50MHz |
| RBW | 500kHz |
| VBW | 2MHz |
| Sweep Time | 100ms |
| Detector Type | Sample |




Port 1
Port 2
Port 3

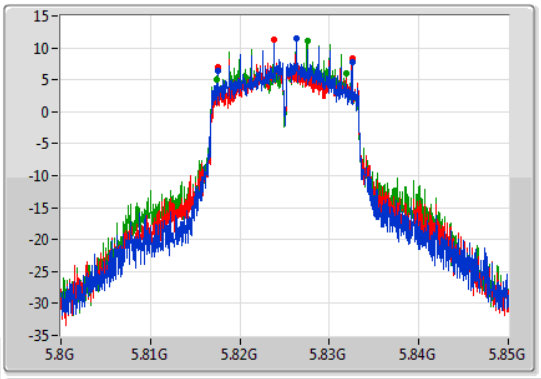
| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 14.15M | 5.778425G | 5.792575G | 25.637M | 5.772131G | 5.797769G | 500k | 1 |
| 15.9M | 5.7773G | 5.7932G | 32.084M | 5.768608G | 5.800692G | 500k | 2 |
| 15M | 5.777575G | 5.792575G | 33.533M | 5.767834G | 5.801367G | 500k | 3 |

## 802.11a_Nss1,(6Mbps)_3TX EBW

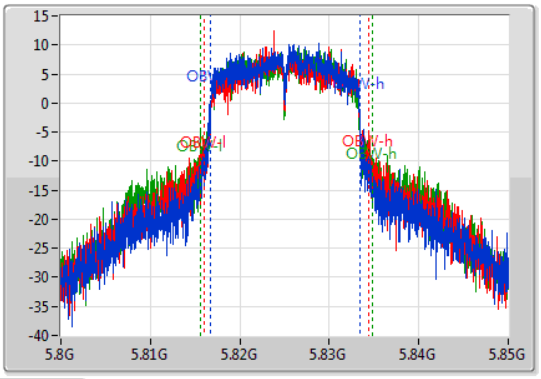
### 5825MHz

11/07/2019

| | |
|---|---|
| CF | 5.825GHz |
| Span | 50MHz |
| RBW | 100kHz |
| VBW | 300kHz |
| Sweep Time | 100ms |
| Detector Type | Peak |




| | |
|---|---|
| CF | 5.825GHz |
| Span | 50MHz |
| RBW | 200kHz |
| VBW | 1MHz |
| Sweep Time | 100ms |
| Detector Type | Sample |



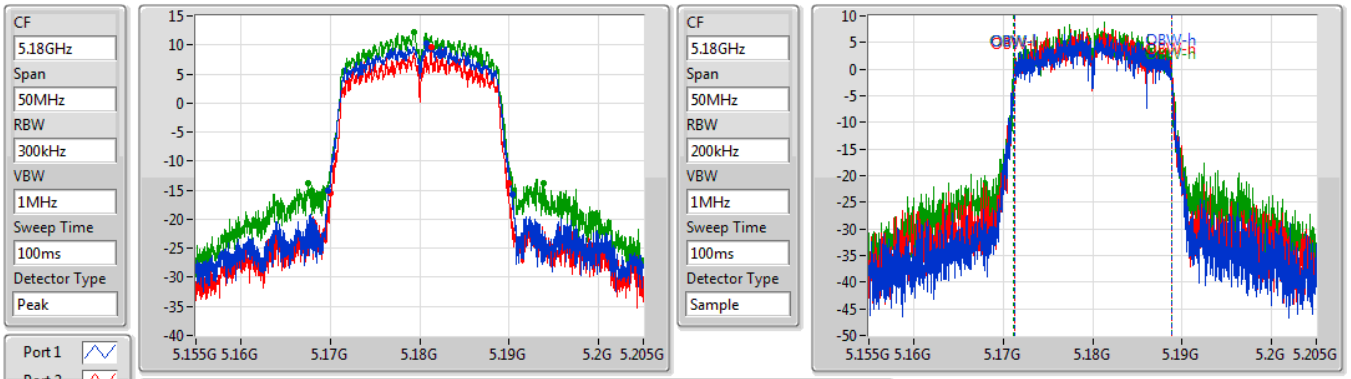

Port 1
Port 2
Port 3

| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 15.075M | 5.8175G | 5.832575G | 16.667M | 5.816704G | 5.833371G | 500k | 1 |
| 15M | 5.81755G | 5.83255G | 18.341M | 5.816004G | 5.834345G | 500k | 2 |
| 14.45M | 5.817475G | 5.831925G | 19.215M | 5.81558G | 5.834795G | 500k | 3 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX EBW

### 5180MHz

11/07/2019

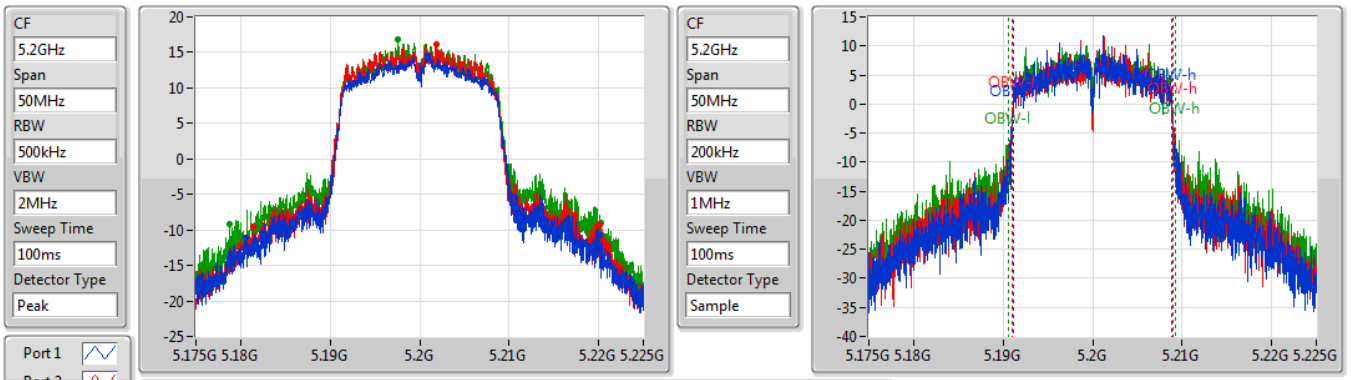



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 20.575M | 5.1698G | 5.190375G | 17.541M | 5.171254G | 5.188796G | Inf | 1 |
| 19.85M | 5.170075G | 5.189925G | 17.591M | 5.171229G | 5.188821G | Inf | 2 |
| 26.325M | 5.167475G | 5.1938G | 17.616M | 5.171204G | 5.188821G | Inf | 3 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX EBW

### 5200MHz

11/07/2019

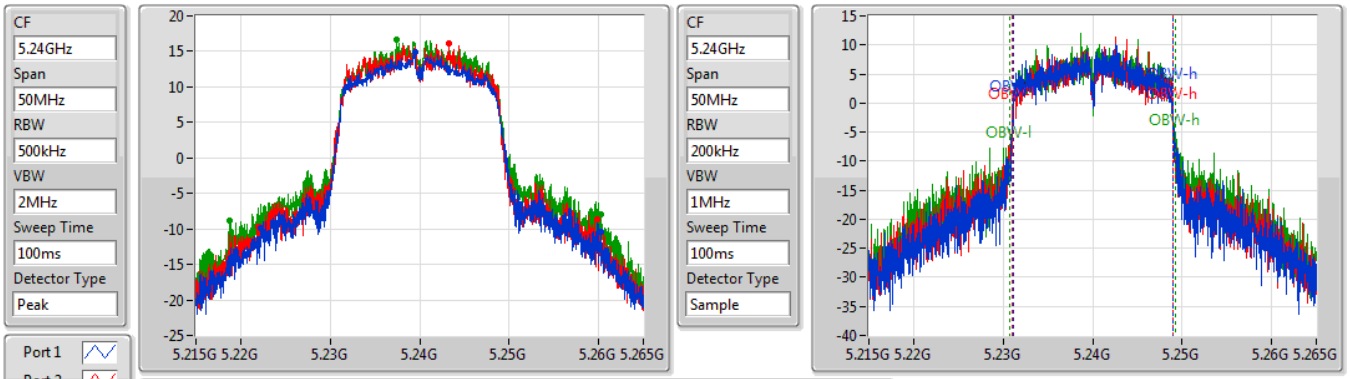



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 39.525M | 5.180575G | 5.2201G | 17.741M | 5.191104G | 5.208846G | Inf | 1 |
| 38.8M | 5.181375G | 5.220175G | 17.866M | 5.191054G | 5.208921G | Inf | 2 |
| 41.475M | 5.1788G | 5.220275G | 18.666M | 5.190655G | 5.20932G | Inf | 3 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX EBW

### 5240MHz

11/07/2019

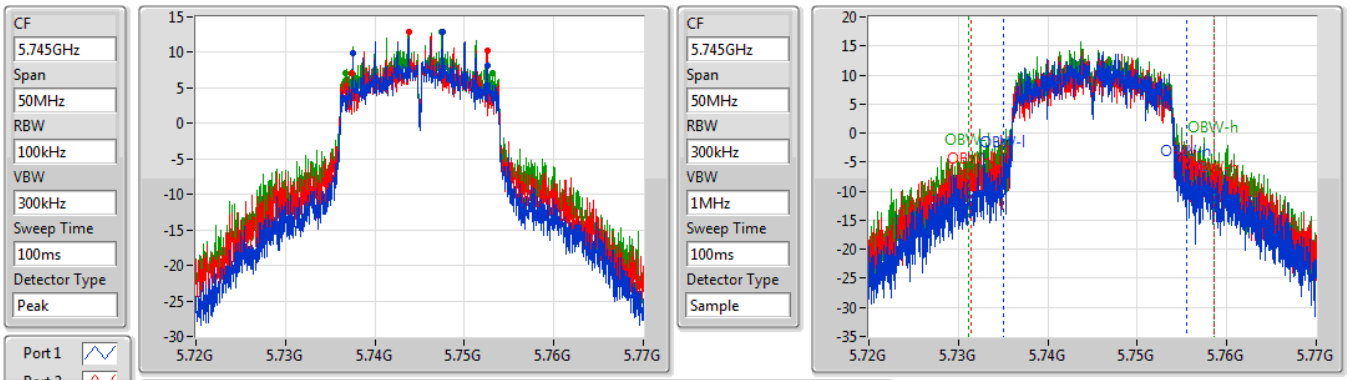



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 37.95M | 5.222275G | 5.260225G | 17.791M | 5.231129G | 5.248921G | Inf | 1 |
| 37.9M | 5.221975G | 5.259875G | 18.016M | 5.23098G | 5.248996G | Inf | 2 |
| 41.375M | 5.218825G | 5.2602G | 18.566M | 5.230755G | 5.24932G | Inf | 3 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX EBW

### 5745MHz

13/08/2019

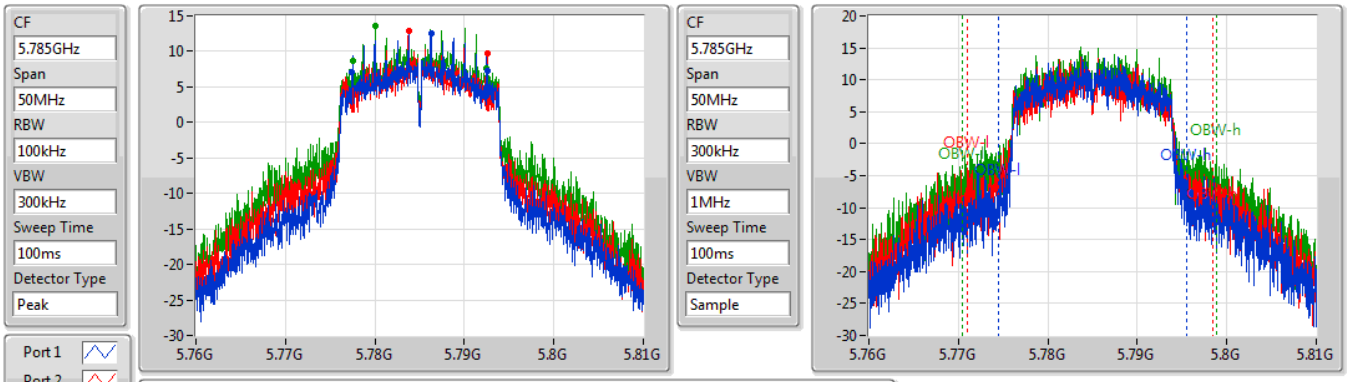



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 15.05M | 5.737525G | 5.752575G | 20.565M | 5.73498G | 5.755545G | 500k | 1 |
| 15.05M | 5.737475G | 5.752525G | 27.211M | 5.731432G | 5.758643G | 500k | 2 |
| 16.475M | 5.73665G | 5.753125G | 27.386M | 5.731207G | 5.758593G | 500k | 3 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX EBW

### 5785MHz

13/08/2019

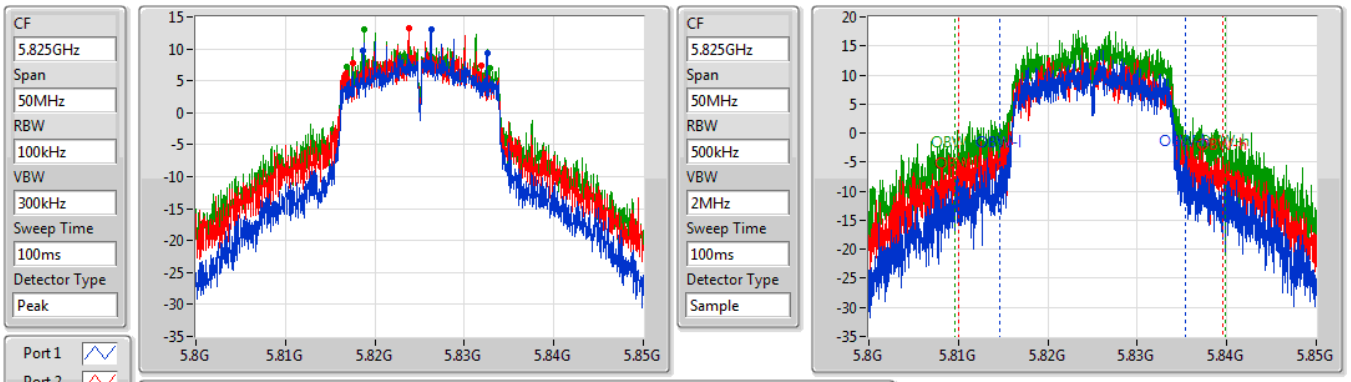



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 15.075M | 5.77745G | 5.792525G | 21.039M | 5.774455G | 5.795495G | 500k | 1 |
| 15.05M | 5.777475G | 5.792525G | 27.411M | 5.771007G | 5.798418G | 500k | 2 |
| 15M | 5.7775G | 5.7925G | 28.411M | 5.770507G | 5.798918G | 500k | 3 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX EBW

### 5825MHz

13/08/2019



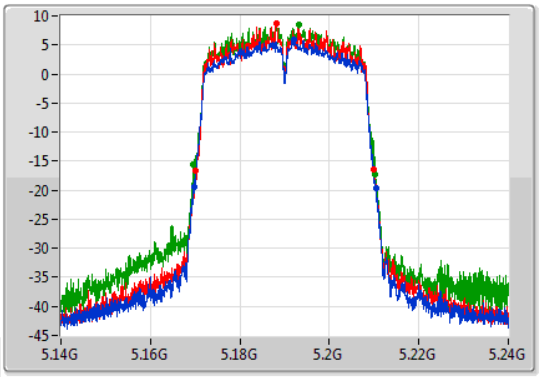

| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 13.8M | 5.818725G | 5.832525G | 20.765M | 5.814605G | 5.83537G | 500k | 1 |
| 14.325M | 5.817575G | 5.8319G | 29.485M | 5.810032G | 5.839518G | 500k | 2 |
| 15.9M | 5.8169G | 5.8328G | 30.21M | 5.809583G | 5.839793G | 500k | 3 |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX EBW

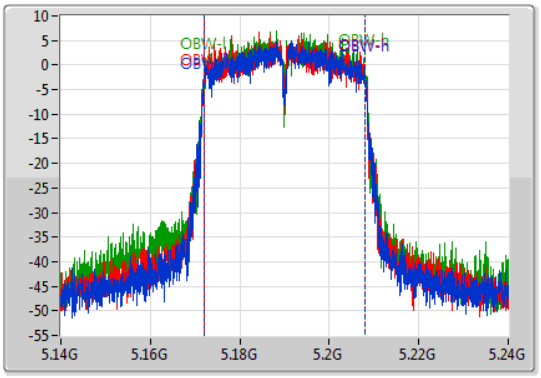
### 5190MHz

11/07/2019

| | |
|---|---|
| CF | 5.19GHz |
| Span | 100MHz |
| RBW | 500kHz |
| VBW | 2MHz |
| Sweep Time | 100ms |
| Detector Type | Peak |




| | |
|---|---|
| CF | 5.19GHz |
| Span | 100MHz |
| RBW | 500kHz |
| VBW | 2MHz |
| Sweep Time | 100ms |
| Detector Type | Sample |




Port 1
Port 2
Port 3

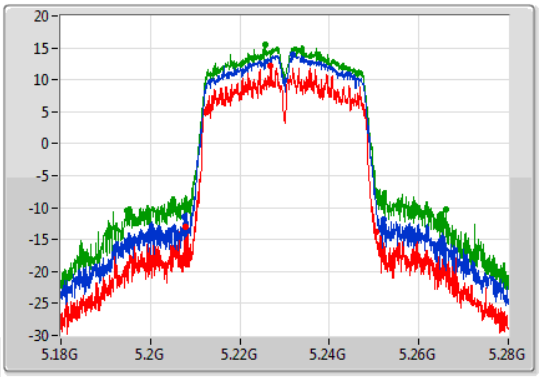
| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 40.65M | 5.1697G | 5.21035G | 35.932M | 5.172009G | 5.207941G | Inf | 1 |
| 39.85M | 5.17005G | 5.2099G | 35.932M | 5.172059G | 5.207991G | Inf | 2 |
| 40.6M | 5.16965G | 5.21025G | 35.932M | 5.172009G | 5.207941G | Inf | 3 |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX EBW

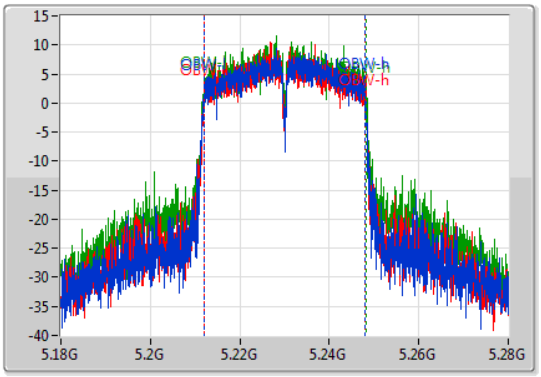
### 5230MHz

11/07/2019

| | |
|---|---|
| CF | 5.23GHz |
| Span | 100MHz |
| RBW | 1MHz |
| VBW | 3MHz |
| Sweep Time | 100ms |
| Detector Type | Peak |




| | |
|---|---|
| CF | 5.23GHz |
| Span | 100MHz |
| RBW | 500kHz |
| VBW | 2MHz |
| Sweep Time | 100ms |
| Detector Type | Sample |



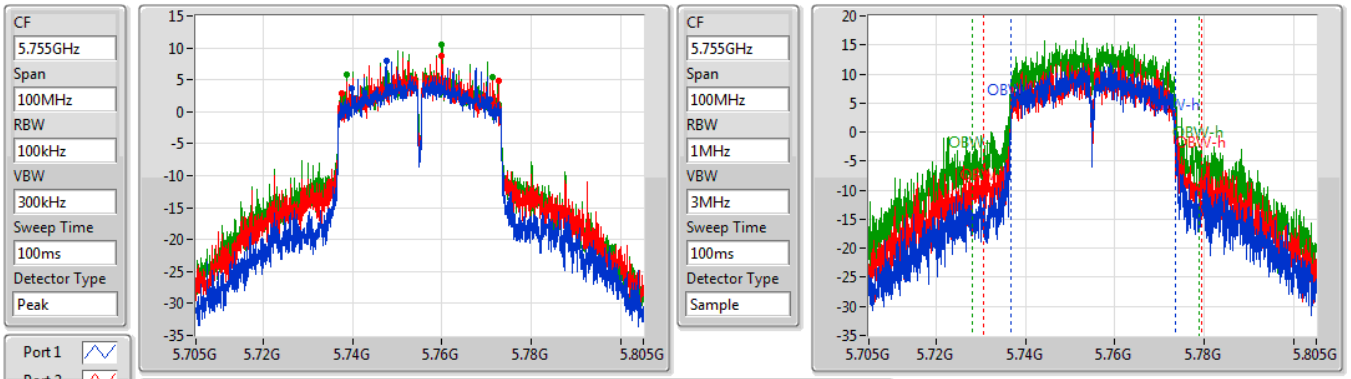

Port 1
Port 2
Port 3

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 44.65M | 5.20755G | 5.2522G | 36.032M | 5.211959G | 5.247991G | Inf | 1 |
| 42.65M | 5.2079G | 5.25055G | 36.082M | 5.211959G | 5.248041G | Inf | 2 |
| 71.15M | 5.19485G | 5.266G | 36.182M | 5.211959G | 5.248141G | Inf | 3 |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX EBW

### 5755MHz

11/07/2019

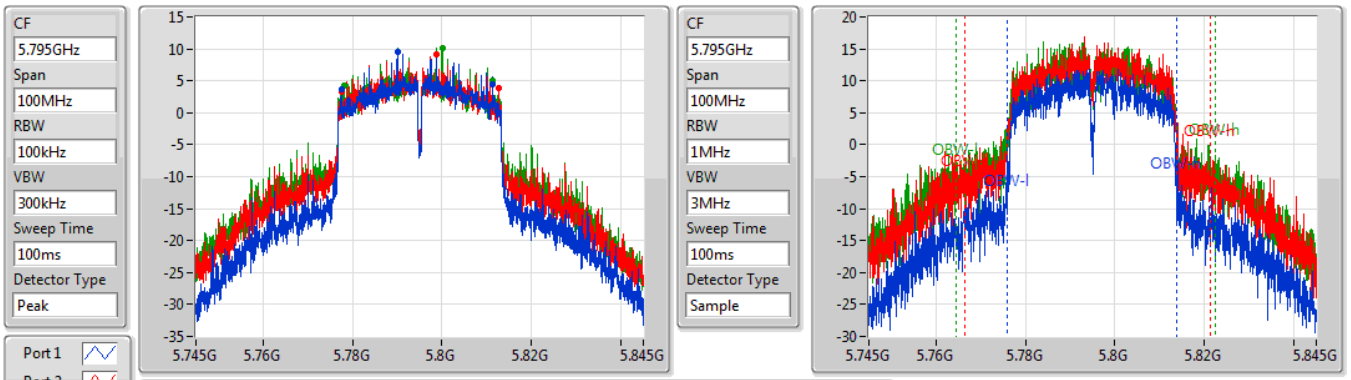



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 30.7M | 5.73995G | 5.77065G | 36.782M | 5.736759G | 5.773541G | 500k | 1 |
| 35.05M | 5.7375G | 5.77255G | 48.676M | 5.730662G | 5.779338G | 500k | 2 |
| 32.5M | 5.73875G | 5.77125G | 50.525M | 5.728213G | 5.778738G | 500k | 3 |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX EBW

### 5795MHz

11/07/2019

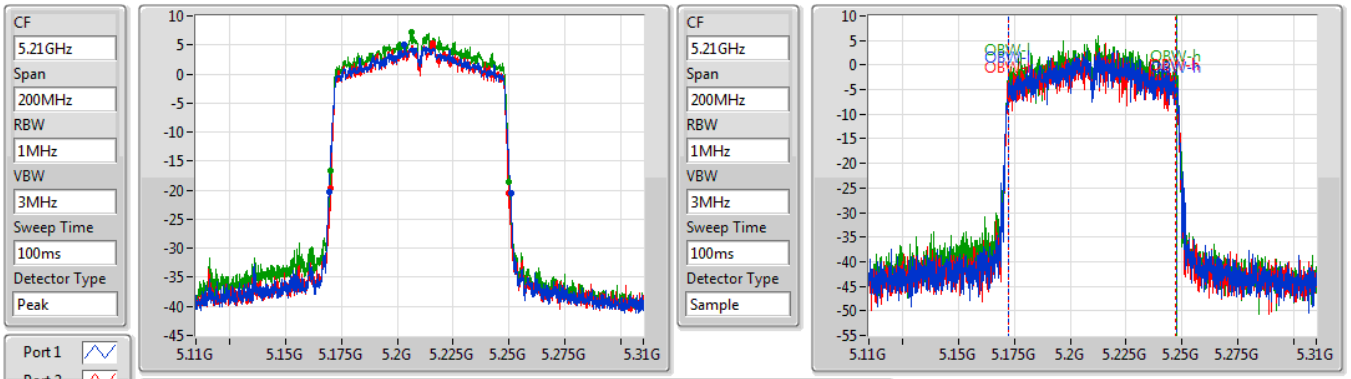



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 33.85M | 5.7775G | 5.81135G | 37.881M | 5.77591G | 5.813791G | 500k | 1 |
| 35M | 5.77755G | 5.81255G | 54.923M | 5.766364G | 5.821287G | 500k | 2 |
| 33.1M | 5.7782G | 5.8113G | 57.771M | 5.764615G | 5.822386G | 500k | 3 |

## 802.11ac VHT80-BF_Nss1,(MCS0)_3TX EBW

### 5210MHz

11/07/2019

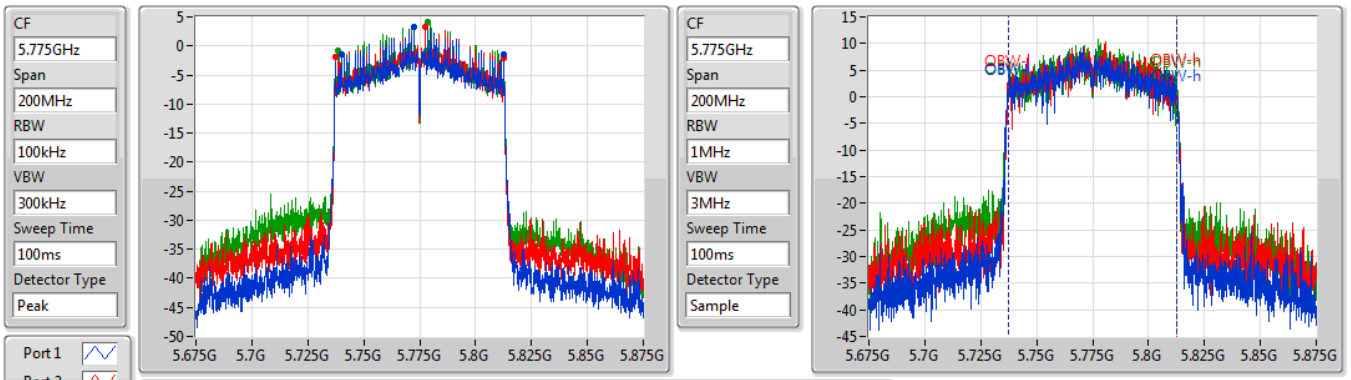



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 81.3M | 5.1694G | 5.2507G | 75.162M | 5.172419G | 5.247581G | Inf | 1 |
| 79.8M | 5.1703G | 5.2501G | 74.863M | 5.172419G | 5.247281G | Inf | 2 |
| 80.2M | 5.1699G | 5.2501G | 75.162M | 5.172419G | 5.247581G | Inf | 3 |

## 802.11ac VHT80-BF_Nss1,(MCS0)_3TX EBW

### 5775MHz

11/07/2019




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 72.5M | 5.74G | 5.8125G | 75.162M | 5.737319G | 5.812481G | 500k | 1 |
| 75M | 5.7375G | 5.8125G | 75.062M | 5.737419G | 5.812481G | 500k | 2 |
| 73.8M | 5.7387G | 5.8125G | 75.362M | 5.737219G | 5.812581G | 500k | 3 |

**Summary**

| Mode | Total Power (dBm) | Total Power (W) |
|---|---|---|
| 5.15-5.25GHz | - | - |
| 802.11a_Nss1,(6Mbps)_3TX | 26.03 | 0.40087 |
| 802.11ac VHT20-BF_Nss1,(MCS0)_3TX | 25.32 | 0.34041 |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | 24.34 | 0.27164 |
| 802.11ac VHT80-BF_Nss1,(MCS0)_3TX | 17.90 | 0.06166 |
| 5.725-5.85GHz | - | - |
| 802.11a_Nss1,(6Mbps)_3TX | 28.18 | 0.65766 |
| 802.11ac VHT20-BF_Nss1,(MCS0)_3TX | 28.23 | 0.66527 |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | 27.11 | 0.51404 |
| 802.11ac VHT80-BF_Nss1,(MCS0)_3TX | 22.83 | 0.19187 |

## Result

| Mode | Result | DG (dBi) | Port 1 (dBm) | Port 2 (dBm) | Port 3 (dBm) | Total Power (dBm) | Power Limit (dBm) |
|---|---|---|---|---|---|---|---|
| 802.11a_Nss1,(6Mbps)_3TX | - | - | - | - | - | - | - |
| 5180MHz | Pass | 3.22 | 19.17 | 19.11 | 20.24 | 24.31 | 30.00 |
| 5200MHz | Pass | 3.22 | 21.13 | 21.03 | 21.60 | 26.03 | 30.00 |
| 5240MHz | Pass | 3.22 | 20.65 | 20.47 | 21.53 | 25.68 | 30.00 |
| 5745MHz | Pass | 3.06 | 23.00 | 23.24 | 23.93 | 28.18 | 30.00 |
| 5785MHz | Pass | 3.06 | 22.58 | 22.42 | 23.01 | 27.45 | 30.00 |
| 5825MHz | Pass | 3.06 | 21.54 | 21.02 | 21.37 | 26.09 | 30.00 |
| 802.11ac VHT20-BF_Nss1,(MCS0)_3TX | - | - | - | - | - | - | - |
| 5180MHz | Pass | 7.86 | 18.25 | 18.45 | 19.38 | 23.49 | 28.14 |
| 5200MHz | Pass | 7.86 | 20.23 | 20.31 | 21.06 | 25.32 | 28.14 |
| 5240MHz | Pass | 7.86 | 20.27 | 20.22 | 21.11 | 25.32 | 28.14 |
| 5745MHz | Pass | 7.67 | 22.93 | 22.84 | 24.01 | 28.06 | 28.33 |
| 5785MHz | Pass | 7.67 | 23.16 | 22.95 | 24.16 | 28.23 | 28.33 |
| 5825MHz | Pass | 7.67 | 22.97 | 23.27 | 24.01 | 28.21 | 28.33 |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | - | - | - | - | - | - | - |
| 5190MHz | Pass | 7.86 | 16.55 | 16.41 | 16.42 | 21.23 | 28.14 |
| 5230MHz | Pass | 7.86 | 19.37 | 19.31 | 19.98 | 24.34 | 28.14 |
| 5755MHz | Pass | 7.67 | 21.64 | 21.91 | 22.53 | 26.81 | 28.33 |
| 5795MHz | Pass | 7.67 | 22.20 | 22.31 | 22.51 | 27.11 | 28.33 |
| 802.11ac VHT80-BF_Nss1,(MCS0)_3TX | - | - | - | - | - | - | - |
| 5210MHz | Pass | 7.86 | 13.22 | 13.12 | 13.04 | 17.90 | 28.14 |
| 5775MHz | Pass | 7.67 | 17.74 | 17.96 | 18.45 | 22.83 | 28.33 |

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

## Summary

| Mode | PD (dBm/RBW) |
|---|---|
| 5.15-5.25GHz | - |
| 802.11a_Nss1,(6Mbps)_3TX | 14.22 |
| 802.11ac VHT20-BF_Nss1,(MCS0)_3TX | 13.77 |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | 9.57 |
| 802.11ac VHT80-BF_Nss1,(MCS0)_3TX | 0.70 |
| 5.725-5.85GHz | - |
| 802.11a_Nss1,(6Mbps)_3TX | 14.93 |
| 802.11ac VHT20-BF_Nss1,(MCS0)_3TX | 14.05 |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | 10.63 |
| 802.11ac VHT80-BF_Nss1,(MCS0)_3TX | 3.83 |

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

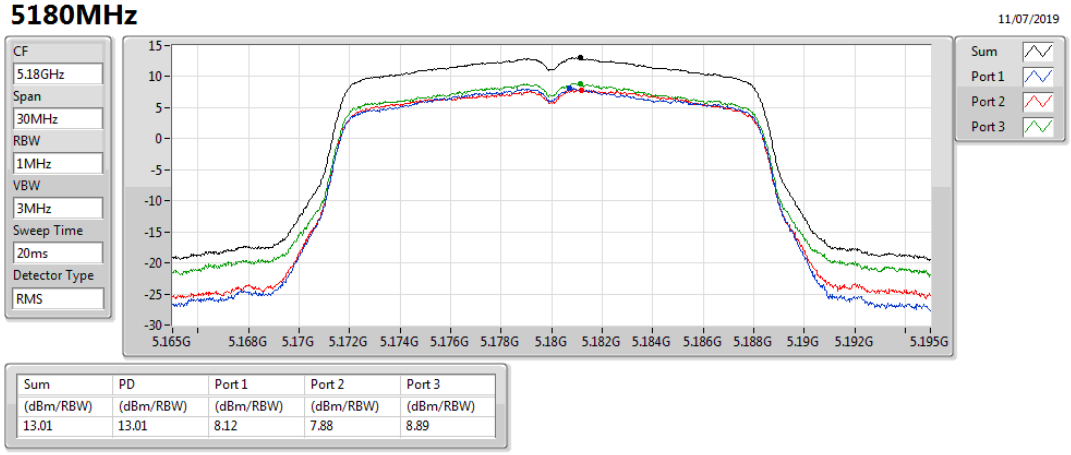
## Result

| Mode | Result | DG (dBi) | Port 1 (dBm/RBW) | Port 2 (dBm/RBW) | Port 3 (dBm/RBW) | PD (dBm/RBW) | PD Limit (dBm/RBW) |
|---|---|---|---|---|---|---|---|
| 802.11a_Nss1,(6Mbps)_3TX | - | - | - | - | - | - | - |
| 5180MHz | Pass | 7.86 | 8.12 | 7.88 | 8.89 | 13.01 | 15.14 |
| 5200MHz | Pass | 7.86 | 9.50 | 9.20 | 9.78 | 14.22 | 15.14 |
| 5240MHz | Pass | 7.86 | 9.48 | 9.32 | 9.85 | 14.14 | 15.14 |
| 5745MHz | Pass | 7.67 | 10.58 | 10.41 | 10.30 | 14.93 | 28.33 |
| 5785MHz | Pass | 7.67 | 8.84 | 9.71 | 9.42 | 13.99 | 28.33 |
| 5825MHz | Pass | 7.67 | 8.26 | 7.92 | 8.32 | 12.81 | 28.33 |
| 802.11ac VHT20-BF_Nss1,(MCS0)_3TX | - | - | - | - | - | - | - |
| 5180MHz | Pass | 7.86 | 6.44 | 6.97 | 7.83 | 11.84 | 15.14 |
| 5200MHz | Pass | 7.86 | 8.78 | 8.81 | 9.37 | 13.72 | 15.14 |
| 5240MHz | Pass | 7.86 | 8.69 | 8.80 | 9.52 | 13.77 | 15.14 |
| 5745MHz | Pass | 7.67 | 9.12 | 9.17 | 10.03 | 14.02 | 28.33 |
| 5785MHz | Pass | 7.67 | 9.20 | 9.08 | 10.18 | 14.02 | 28.33 |
| 5825MHz | Pass | 7.67 | 9.06 | 9.46 | 9.95 | 14.05 | 28.33 |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | - | - | - | - | - | - | - |
| 5190MHz | Pass | 7.86 | 1.89 | 1.76 | 1.61 | 6.40 | 15.14 |
| 5230MHz | Pass | 7.86 | 4.90 | 4.59 | 5.27 | 9.57 | 15.14 |
| 5755MHz | Pass | 7.67 | 5.81 | 5.87 | 6.78 | 10.63 | 28.33 |
| 5795MHz | Pass | 7.67 | 6.00 | 6.23 | 6.58 | 10.55 | 28.33 |
| 802.11ac VHT80-BF_Nss1,(MCS0)_3TX | - | - | - | - | - | - | - |
| 5210MHz | Pass | 7.86 | -3.68 | -3.86 | -4.06 | 0.70 | 15.14 |
| 5775MHz | Pass | 7.67 | -1.20 | -0.64 | -0.05 | 3.83 | 28.33 |

**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)_3TX PSD

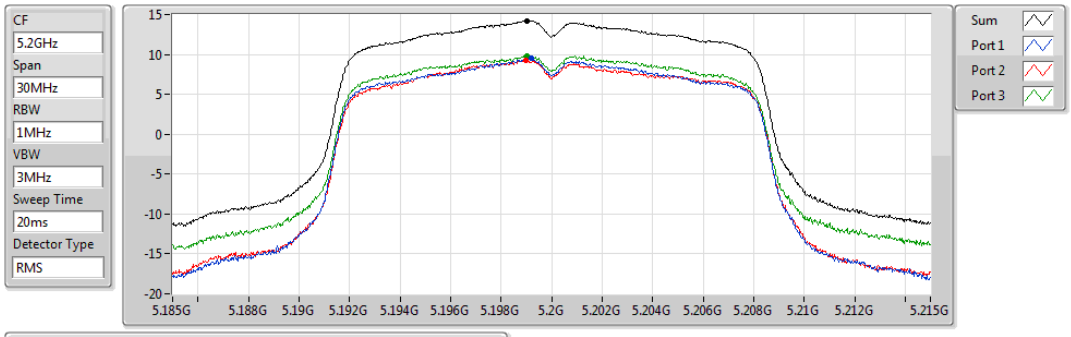
### 5180MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 13.01 | 13.01 | 8.12 | 7.88 | 8.89 |

## 802.11a_Nss1,(6Mbps)_3TX PSD

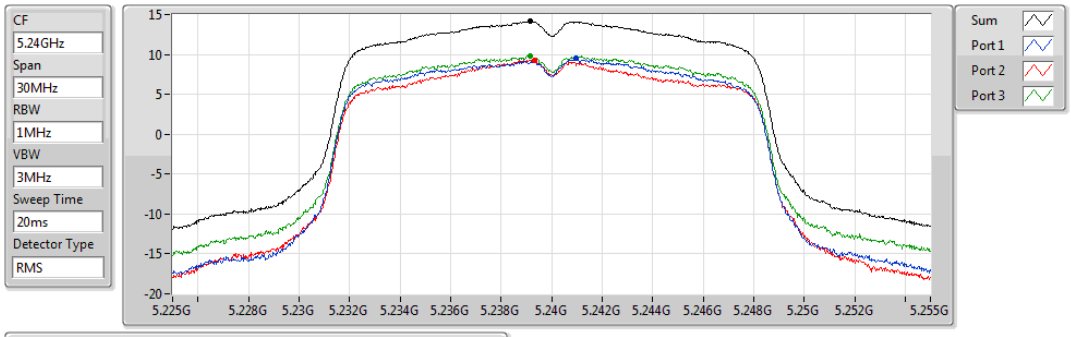
### 5200MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 14.22 | 14.22 | 9.50 | 9.20 | 9.78 |

## 802.11a_Nss1,(6Mbps)_3TX PSD

### 5240MHz

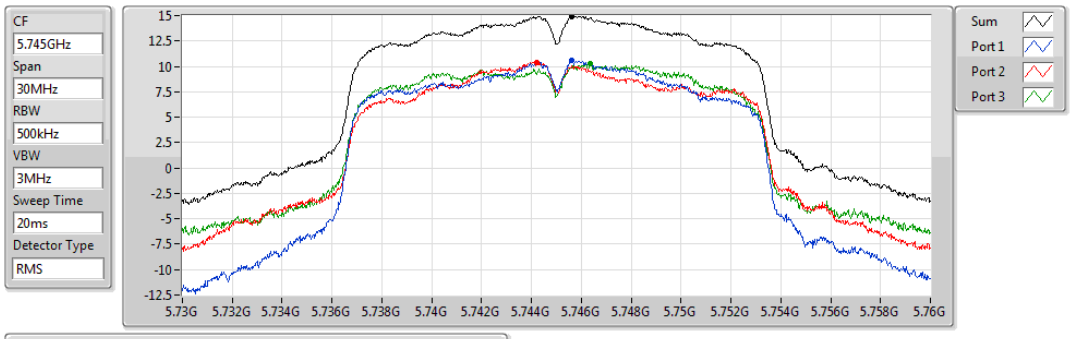



| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 14.14 | 14.14 | 9.48 | 9.32 | 9.85 |

## 802.11a_Nss1,(6Mbps)_3TX PSD

### 5745MHz

11/07/2019

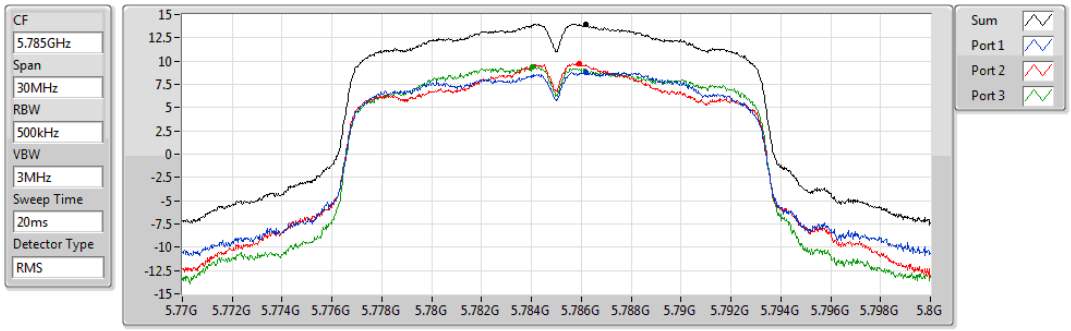



| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 14.93 | 14.93 | 10.58 | 10.41 | 10.30 |

## 802.11a_Nss1,(6Mbps)_3TX PSD

### 5785MHz

06/08/2019

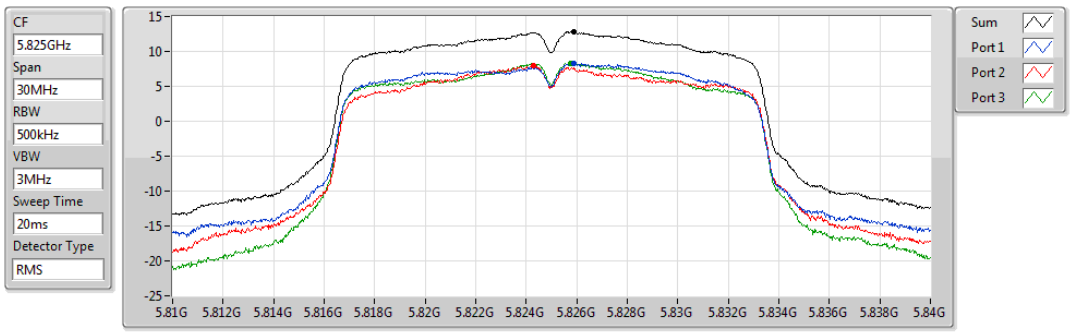



| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 13.99 | 13.99 | 8.84 | 9.71 | 9.42 |

## 802.11a_Nss1,(6Mbps)_3TX PSD

### 5825MHz

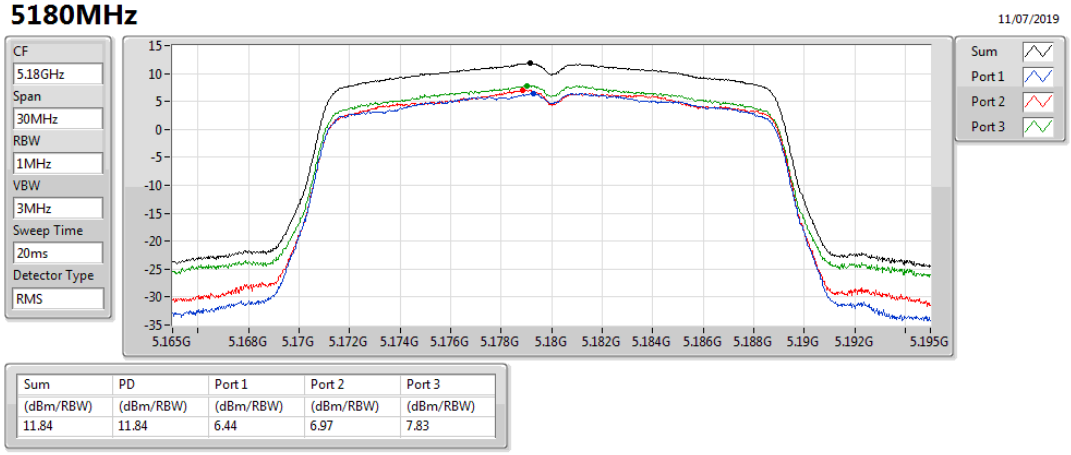
06/08/2019




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 12.81 | 12.81 | 8.26 | 7.92 | 8.32 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX PSD

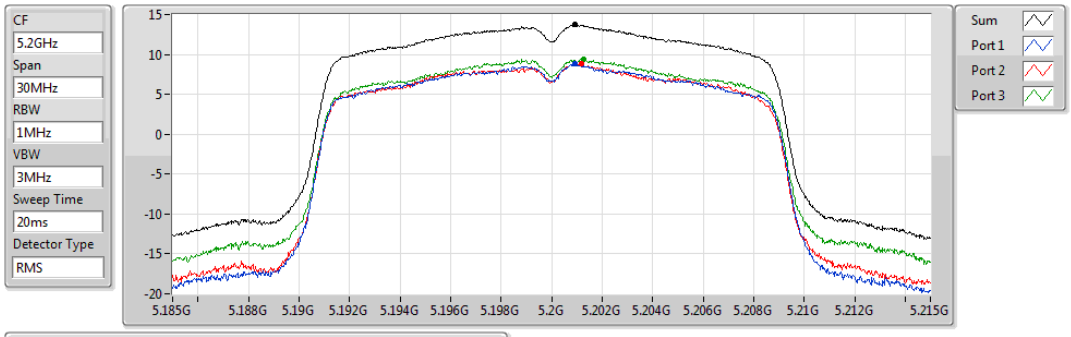
### 5180MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 11.84 | 11.84 | 6.44 | 6.97 | 7.83 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX PSD

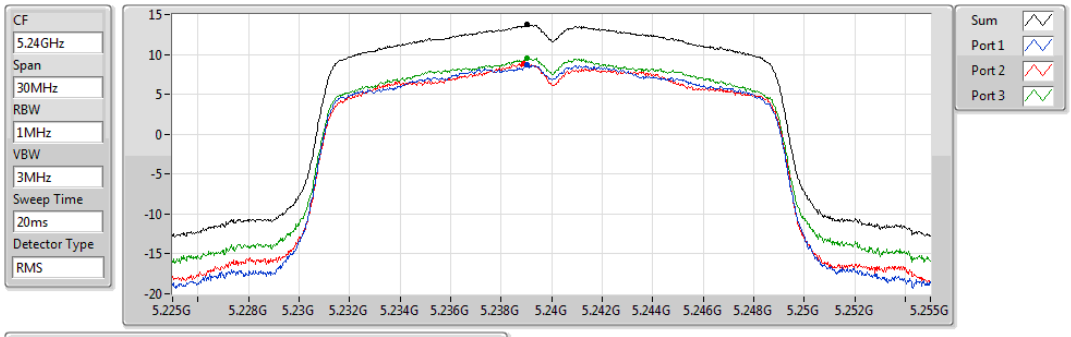
### 5200MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 13.72 | 13.72 | 8.78 | 8.81 | 9.37 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX PSD

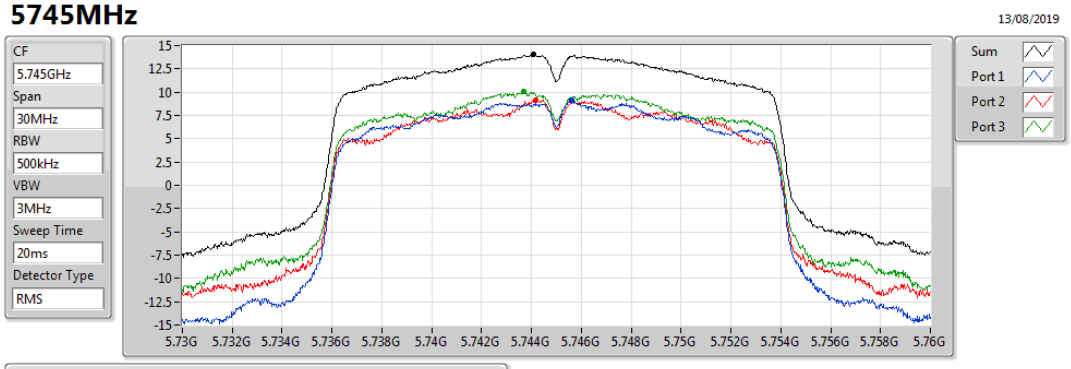
### 5240MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 13.77 | 13.77 | 8.69 | 8.80 | 9.52 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX PSD

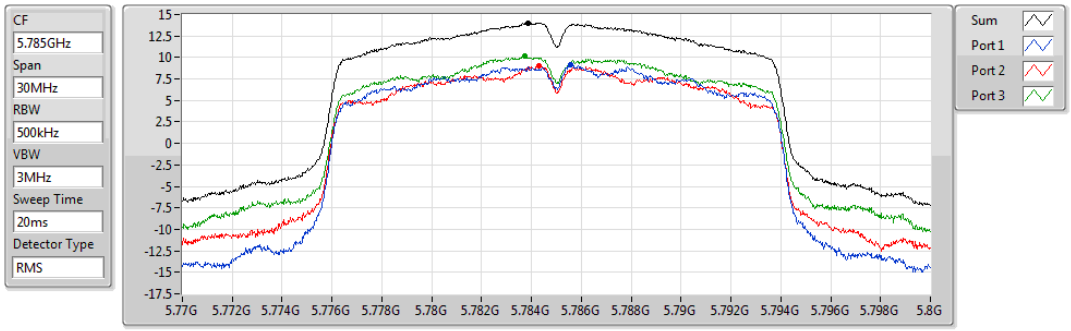
### 5745MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 14.02 | 14.02 | 9.12 | 9.17 | 10.03 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX PSD

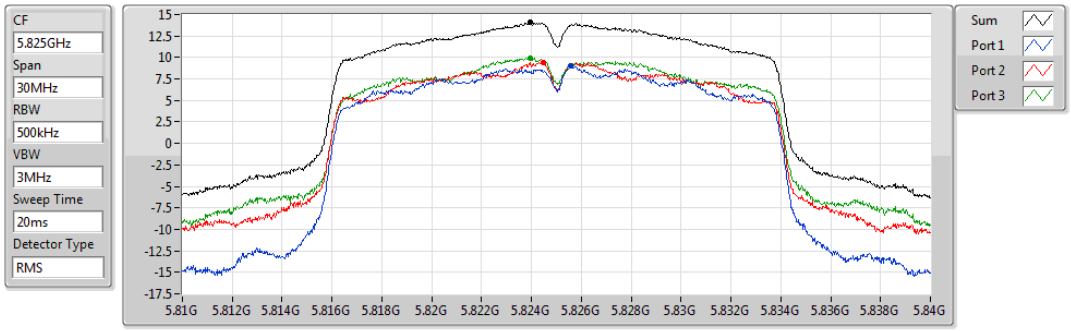
### 5785MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 14.02 | 14.02 | 9.20 | 9.08 | 10.18 |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX PSD

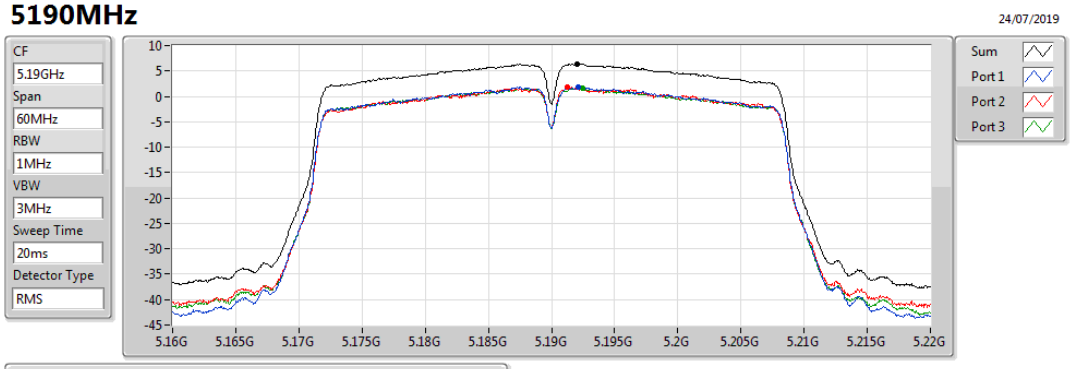
### 5825MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 14.05 | 14.05 | 9.06 | 9.46 | 9.95 |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX PSD

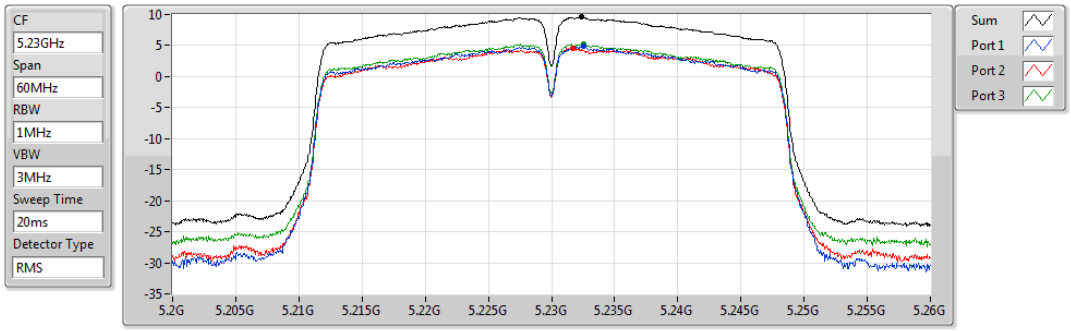
### 5190MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 6.40 | 6.40 | 1.89 | 1.76 | 1.61 |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX PSD

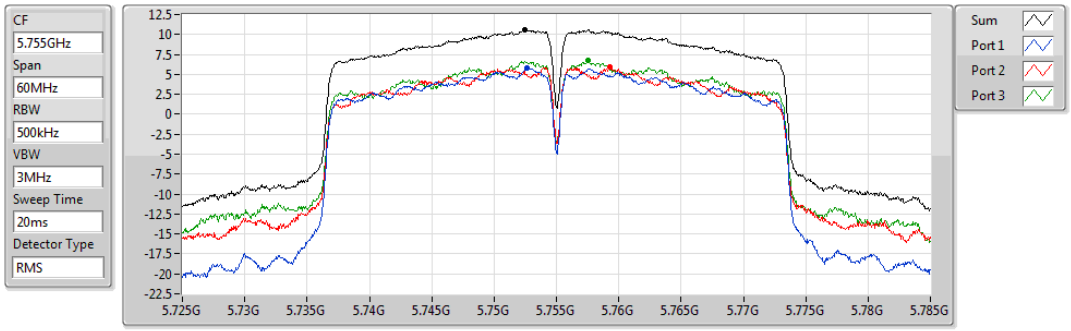
### 5230MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 9.57 | 9.57 | 4.90 | 4.59 | 5.27 |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX PSD

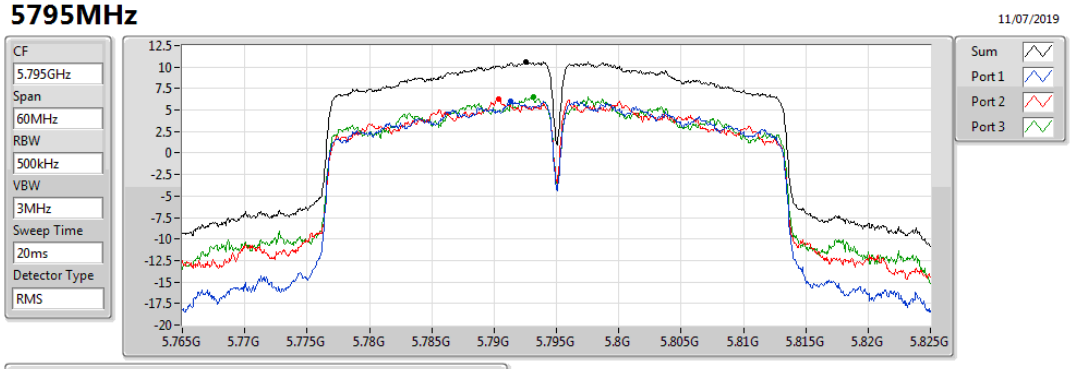
### 5755MHz




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.63 | 10.63 | 5.81 | 5.87 | 6.78 |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX PSD

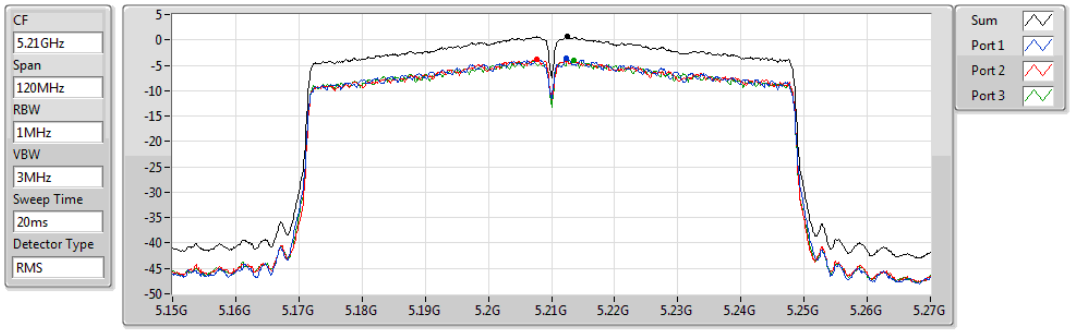
**5795MHz**




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 10.55 | 10.55 | 6.00 | 6.23 | 6.58 |

## 802.11ac VHT80-BF_Nss1,(MCS0)_3TX PSD

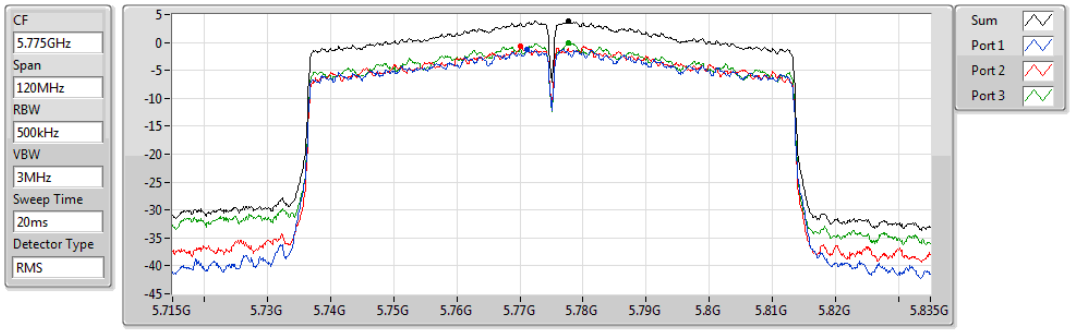
**5210MHz**




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 0.70 | 0.70 | -3.68 | -3.86 | -4.06 |

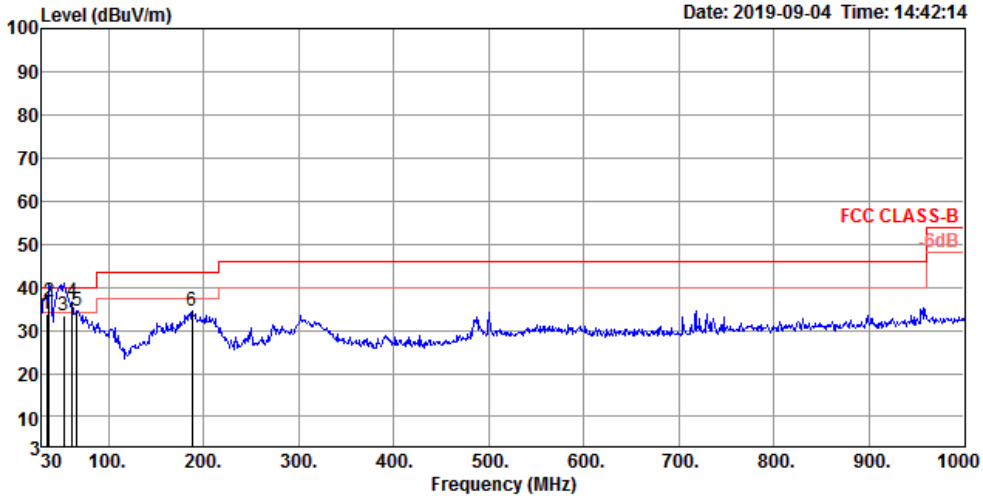
## 802.11ac VHT80-BF_Nss1,(MCS0)_3TX PSD

**5775MHz**




| Sum | PD | Port 1 | Port 2 | Port 3 |
|---|---|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| 3.83 | 3.83 | -1.20 | -0.64 | -0.05 |

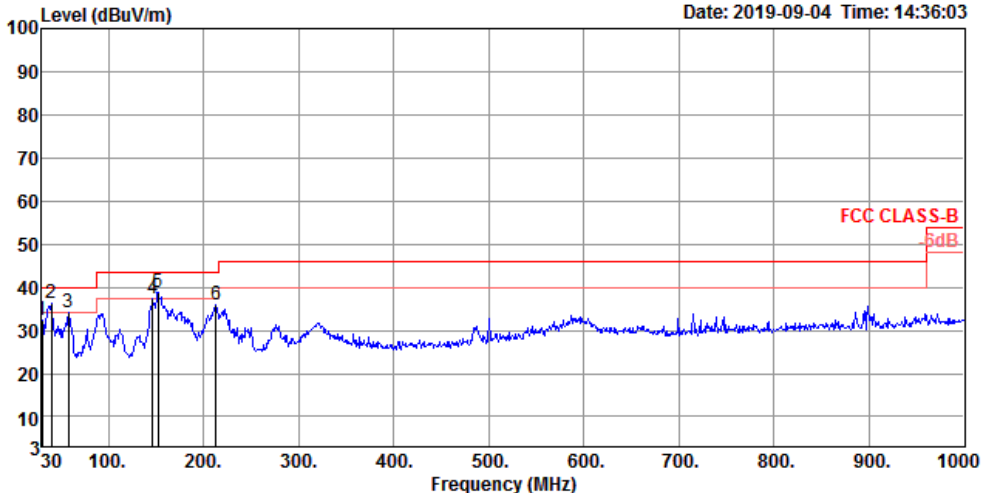
| RSE below 1GHz Result | | | |
|---|---|---|---|
| **Operating Mode** | 4 | **Polarization** | Vertical |
| **Operating Function** | CTX | | |




| | Freq | Level | Limit Line | Over Limit | Read Level | Cable Loss | Antenna Factor | Preamp Factor | A/Pos | T/Pos | Remark | Pol/Phase |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | dB/m | dB | cm | deg | | |
| 1 | 34.85 | 33.96 | 40.00 | -6.04 | 39.96 | 0.69 | 21.88 | 28.57 | 100 | 330 | QP | VERTICAL |
| 2 | 37.76 | 36.68 | 40.00 | -3.32 | 44.25 | 0.72 | 20.28 | 28.57 | 100 | 347 | QP | VERTICAL |
| 3 | 53.28 | 33.49 | 40.00 | -6.51 | 48.14 | 0.85 | 13.05 | 28.55 | 100 | 360 | QP | VERTICAL |
| 4 | 62.01 | 36.81 | 40.00 | -3.19 | 52.36 | 0.92 | 12.06 | 28.53 | 200 | 280 | Peak | VERTICAL |
| 5 | 66.86 | 34.56 | 40.00 | -5.44 | 50.02 | 0.95 | 12.11 | 28.52 | 150 | 330 | Peak | VERTICAL |
| 6 | 188.11 | 34.39 | 43.50 | -9.11 | 46.08 | 1.60 | 14.82 | 28.11 | 100 | 93 | Peak | VERTICAL |

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

| RSE below 1GHz Result | | | |
|---|---|---|---|
| **Operating Mode** | 4 | **Polarization** | Horizontal |
| **Operating Function** | CTX | | |




| | Freq | Level | Limit Line | Over Limit | Read Level | Cable Loss | Antenna Factor | Preamp Factor | A/Pos | T/Pos | Remark | Pol/Phase |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | dB/m | dB | cm | deg | | |
| 1 | 30.00 | 32.42 | 40.00 | -7.58 | 35.95 | 0.64 | 24.40 | 28.57 | 300 | 113 | Peak | HORIZONTAL |
| 2 | 39.70 | 36.18 | 40.00 | -3.82 | 44.87 | 0.74 | 19.13 | 28.56 | 150 | 121 | Peak | HORIZONTAL |
| 3 | 58.13 | 33.96 | 40.00 | -6.04 | 49.42 | 0.89 | 12.19 | 28.54 | 300 | 313 | Peak | HORIZONTAL |
| 4 | 146.40 | 37.36 | 43.50 | -6.14 | 47.54 | 1.40 | 16.69 | 28.27 | 200 | 278 | Peak | HORIZONTAL |
| 5 | 152.22 | 38.73 | 43.50 | -4.77 | 49.32 | 1.43 | 16.23 | 28.25 | 200 | 139 | Peak | HORIZONTAL |
| 6 | 213.33 | 36.00 | 43.50 | -7.50 | 47.37 | 1.71 | 14.96 | 28.04 | 100 | 140 | Peak | HORIZONTAL |

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

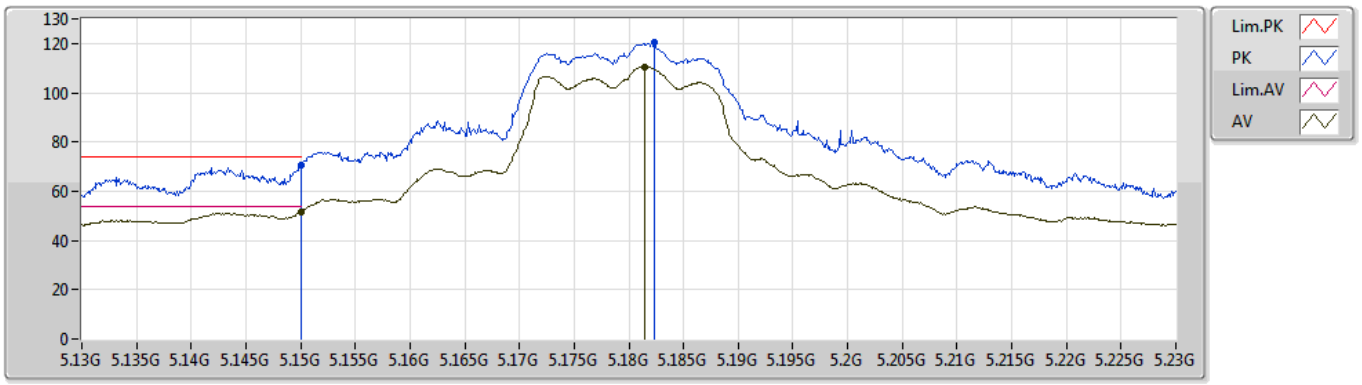
## Summary

| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.725-5.85GHz | - | - | - | - | - | - | - | - | - | - | - | - |
| 802.11ac VHT40-BF_Nss1,(MCS0)_3TX | Pass | PK | 5.636G | 67.18 | 68.20 | -1.02 | 7.63 | 3 | Vertical | 356 | 1.74 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5180MHz_TX

23/07/2019



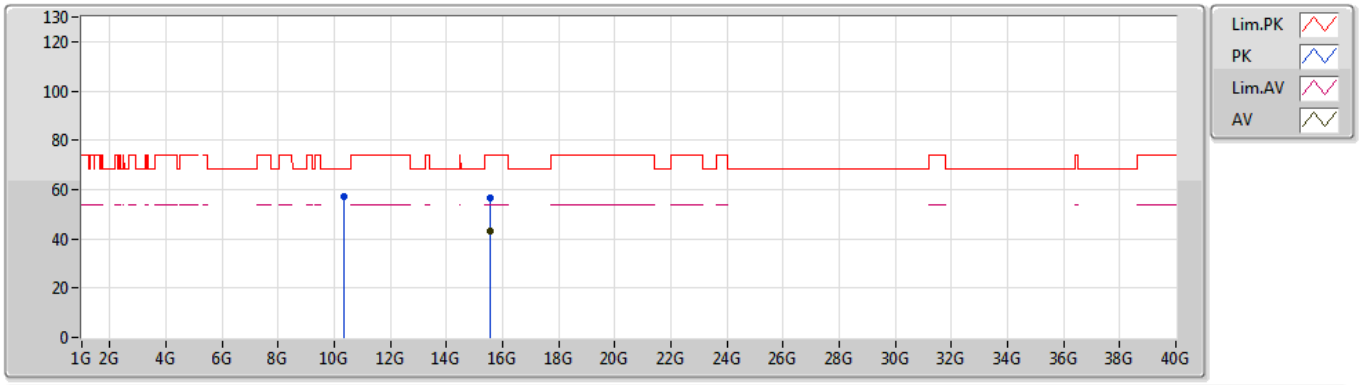

EUT Z_3TX
Setting 22
04-W-3-10
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.15G | 70.78 | 74.00 | -3.22 | 3.36 | 3 | Vertical | 1 | 1.86 | - |
| AV | 5.15G | 51.44 | 54.00 | -2.56 | 3.36 | 3 | Vertical | 1 | 1.86 | - |
| PK | 5.1823G | 120.38 | Inf | -Inf | 3.39 | 3 | Vertical | 1 | 1.86 | - |
| AV | 5.1815G | 110.45 | Inf | -Inf | 3.39 | 3 | Vertical | 1 | 1.86 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5180MHz_TX

16/07/2019



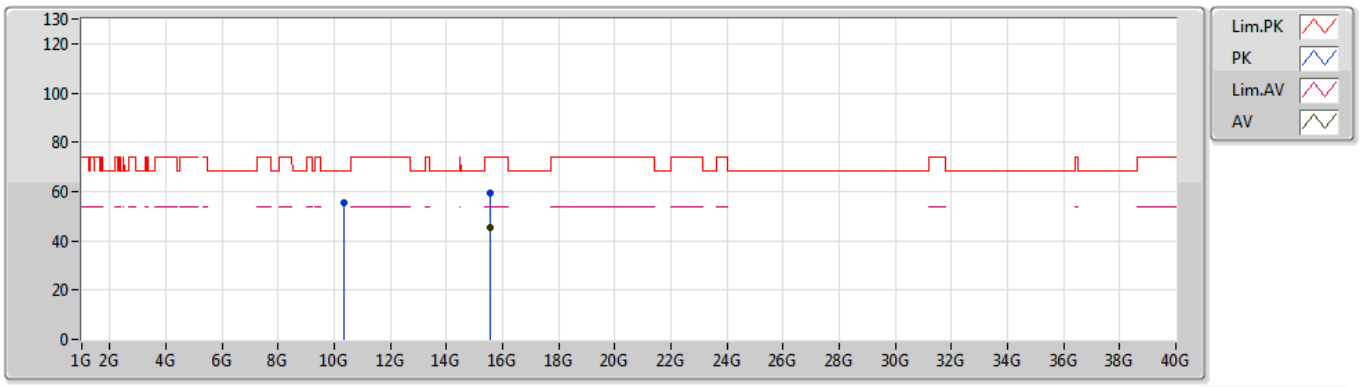

EUT Y_3TX
Setting 22
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.36348G | 57.36 | 68.20 | -10.84 | 10.67 | 3 | Vertical | 196 | 1.96 | - |
| PK | 15.5484G | 56.84 | 74.00 | -17.16 | 10.79 | 3 | Vertical | 346 | 1.50 | - |
| AV | 15.5506G | 43.42 | 54.00 | -10.58 | 10.79 | 3 | Vertical | 346 | 1.50 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5180MHz_TX

16/07/2019



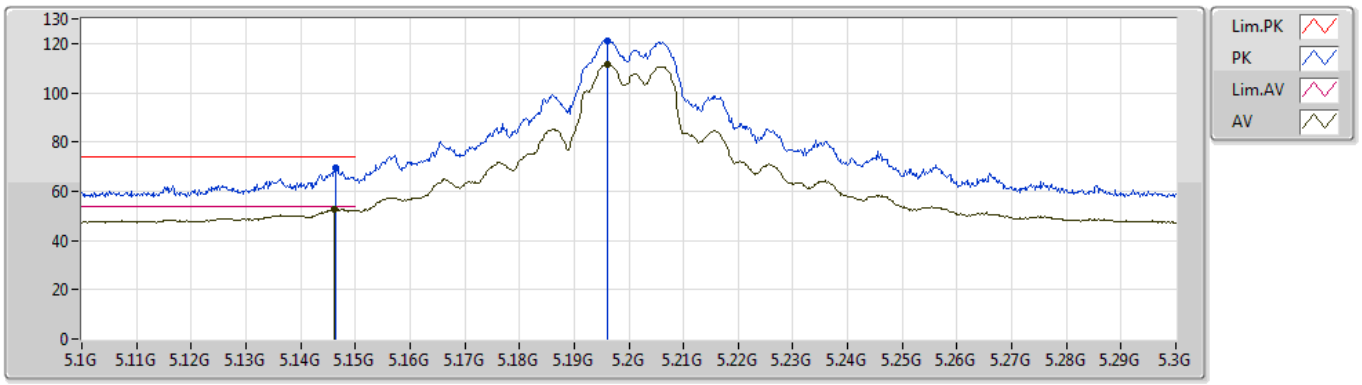

EUT Y_3TX
Setting 22
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.36372G | 55.24 | 68.20 | -12.96 | 10.67 | 3 | Horizontal | 211 | 1.78 | - |
| PK | 15.54384G | 59.43 | 74.00 | -14.57 | 10.79 | 3 | Horizontal | 130 | 1.83 | - |
| AV | 15.53876G | 45.56 | 54.00 | -8.44 | 10.80 | 3 | Horizontal | 130 | 1.83 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5200MHz_TX

09/07/2019



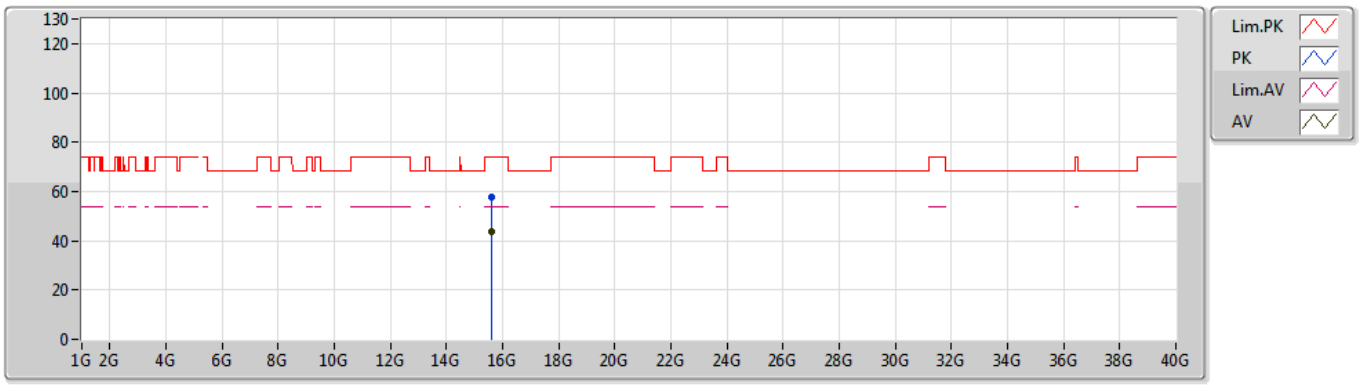

EUT Z_3TX
Setting 26
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1464G | 69.51 | 74.00 | -4.49 | 7.32 | 3 | Vertical | 346 | 1.94 | - |
| AV | 5.1462G | 52.77 | 54.00 | -1.23 | 7.32 | 3 | Vertical | 346 | 1.94 | - |
| PK | 5.196G | 121.19 | Inf | -Inf | 7.37 | 3 | Vertical | 346 | 1.94 | - |
| AV | 5.1962G | 111.37 | Inf | -Inf | 7.37 | 3 | Vertical | 346 | 1.94 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5200MHz_TX

16/07/2019



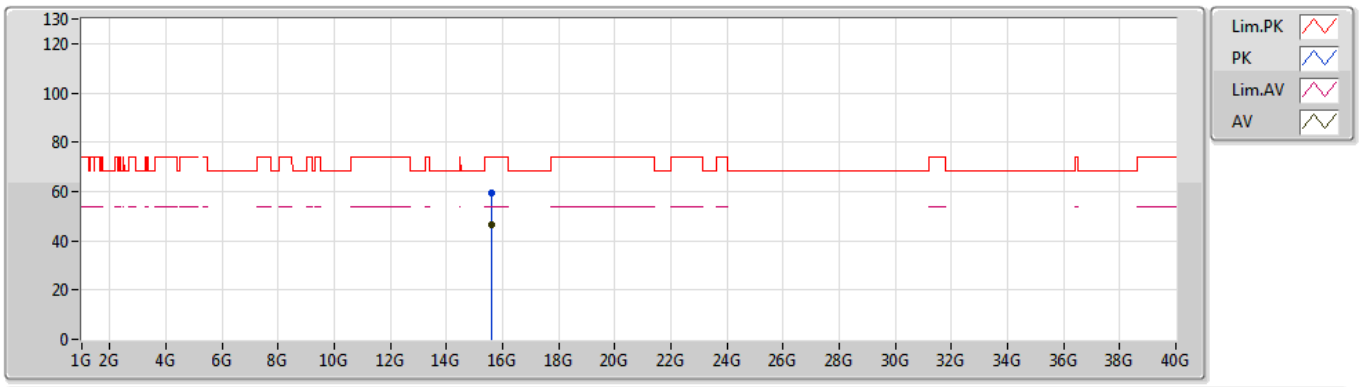

EUT Y_3TX
Setting 26
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.59436G | 57.64 | 74.00 | -16.36 | 10.75 | 3 | Vertical | 219 | 2.59 | - |
| AV | 15.59562G | 43.86 | 54.00 | -10.14 | 10.75 | 3 | Vertical | 219 | 2.59 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5200MHz_TX

16/07/2019



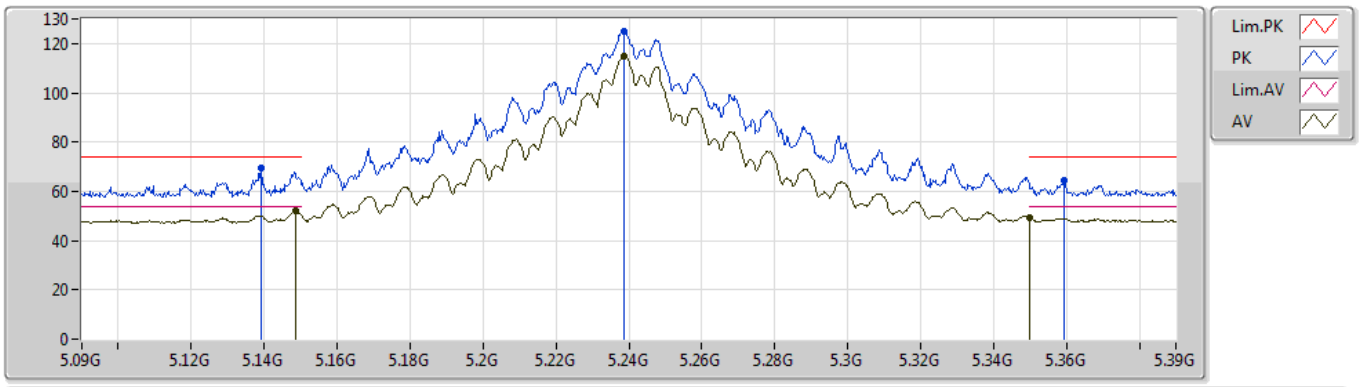

EUT Y_3TX
Setting 26
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 15.59838G | 59.50 | 74.00 | -14.50 | 10.74 | 3 | Horizontal | 114 | 1.85 | - |
| AV | 15.59829G | 46.75 | 54.00 | -7.25 | 10.74 | 3 | Horizontal | 114 | 1.85 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5240MHz_TX

09/07/2019



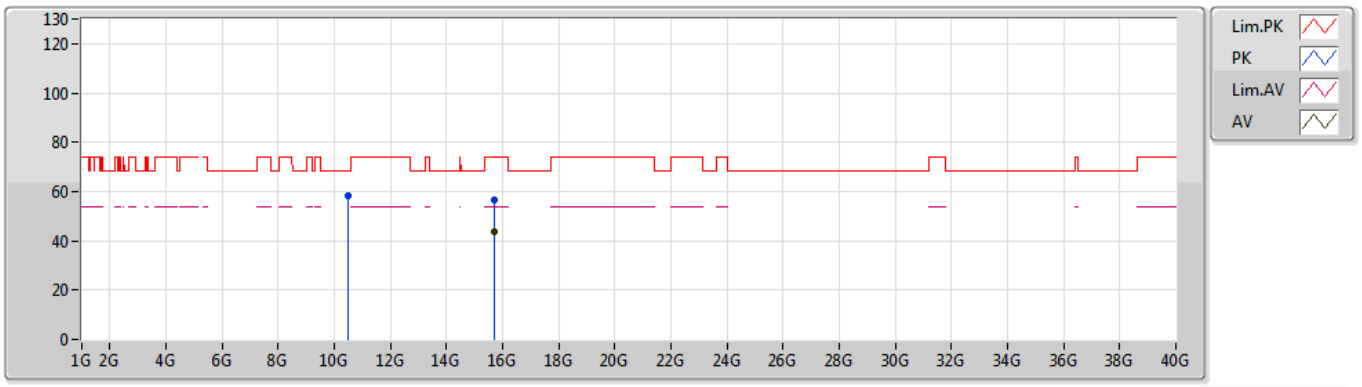

EUT Z_3TX
Setting 2C
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1392G | 69.64 | 74.00 | -4.36 | 7.31 | 3 | Vertical | 345 | 1.82 | - |
| AV | 5.1485G | 51.99 | 54.00 | -2.01 | 7.32 | 3 | Vertical | 345 | 1.82 | - |
| PK | 5.2385G | 124.84 | Inf | -Inf | 7.39 | 3 | Vertical | 345 | 1.82 | - |
| AV | 5.2388G | 114.64 | Inf | -Inf | 7.39 | 3 | Vertical | 345 | 1.82 | - |
| PK | 5.3594G | 64.31 | 74.00 | -9.69 | 7.49 | 3 | Vertical | 345 | 1.82 | - |
| AV | 5.35G | 49.15 | 54.00 | -4.85 | 7.47 | 3 | Vertical | 345 | 1.82 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5240MHz_TX

16/07/2019



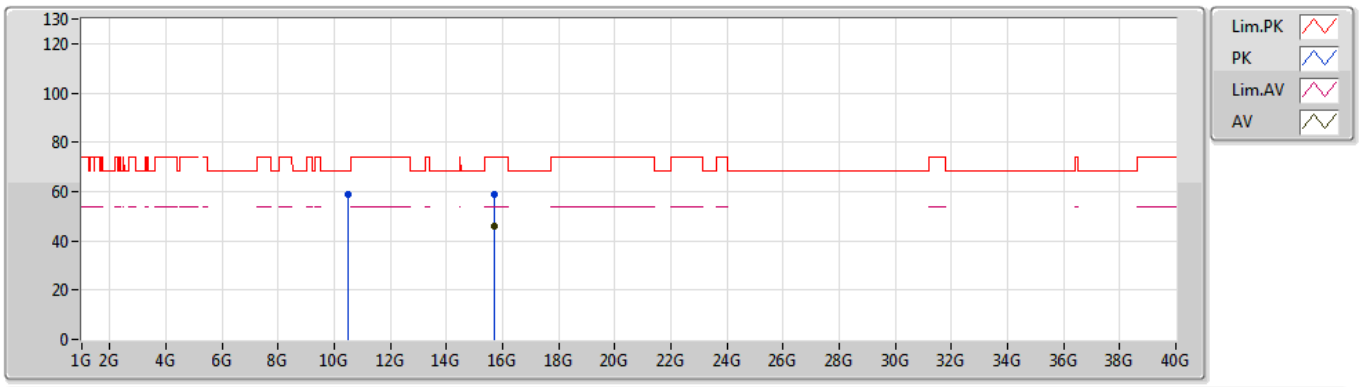

EUT Y_3TX
Setting 2C
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.48476G | 58.45 | 68.20 | -9.75 | 10.73 | 3 | Vertical | 167 | 1.21 | - |
| PK | 15.72708G | 56.71 | 74.00 | -17.29 | 10.63 | 3 | Vertical | 214 | 2.81 | - |
| AV | 15.71632G | 43.54 | 54.00 | -10.46 | 10.64 | 3 | Vertical | 214 | 2.81 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5240MHz_TX

16/07/2019



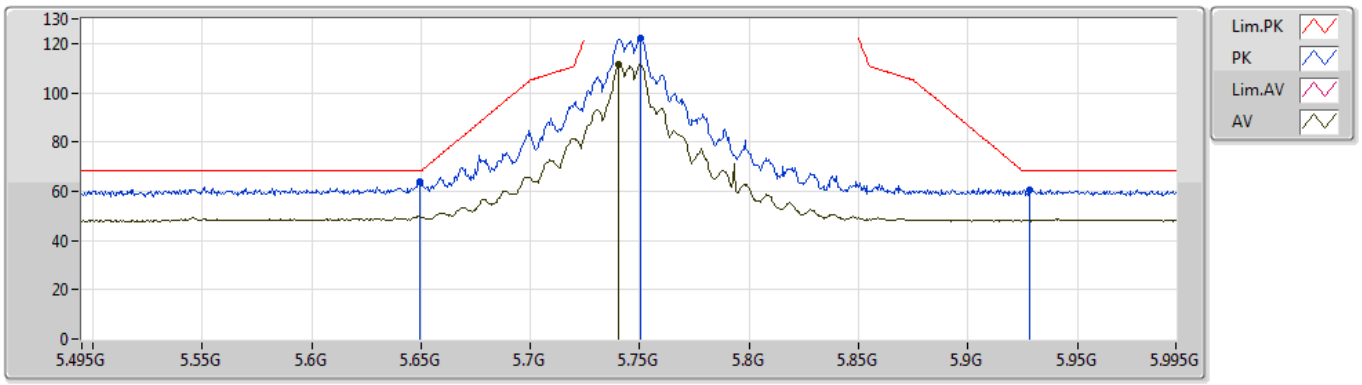

EUT Y_3TX
Setting 2C
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.47469G | 58.75 | 68.20 | -9.45 | 10.71 | 3 | Horizontal | 208 | 2.03 | - |
| PK | 15.71931G | 58.81 | 74.00 | -15.19 | 10.63 | 3 | Horizontal | 121 | 1.88 | - |
| AV | 15.71925G | 45.68 | 54.00 | -8.32 | 10.63 | 3 | Horizontal | 121 | 1.88 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5745MHz_TX

10/07/2019



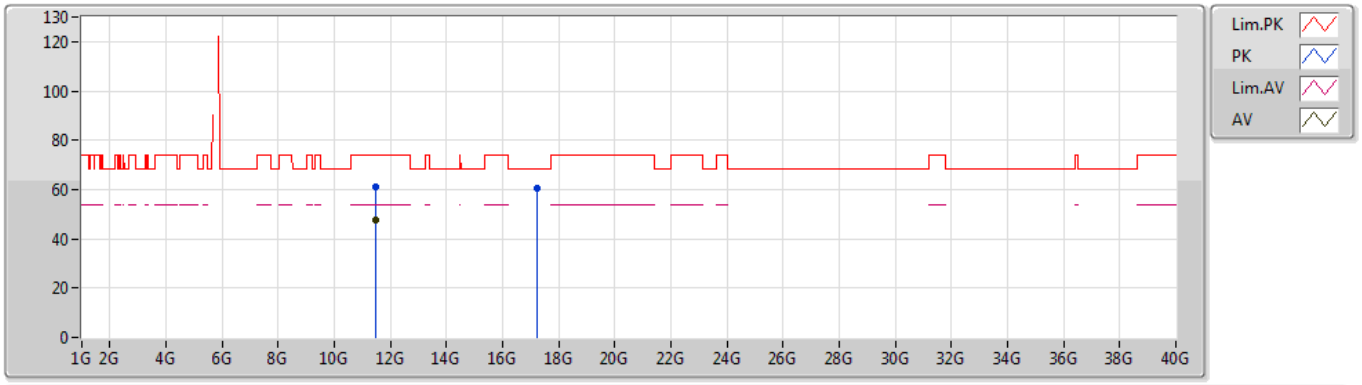

EUT Z_3TX
Setting 2C
06-K-3-10
FSP(100142)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.6495G | 63.62 | 68.20 | -4.58 | 7.65 | 3 | Vertical | 7 | 1.76 | - |
| PK | 5.7505G | 122.25 | Inf | -Inf | 7.86 | 3 | Vertical | 7 | 1.76 | - |
| AV | 5.7405G | 111.74 | Inf | -Inf | 7.84 | 3 | Vertical | 7 | 1.76 | - |
| PK | 5.928G | 60.76 | 68.20 | -7.44 | 8.23 | 3 | Vertical | 7 | 1.76 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5745MHz_TX

03/08/2019



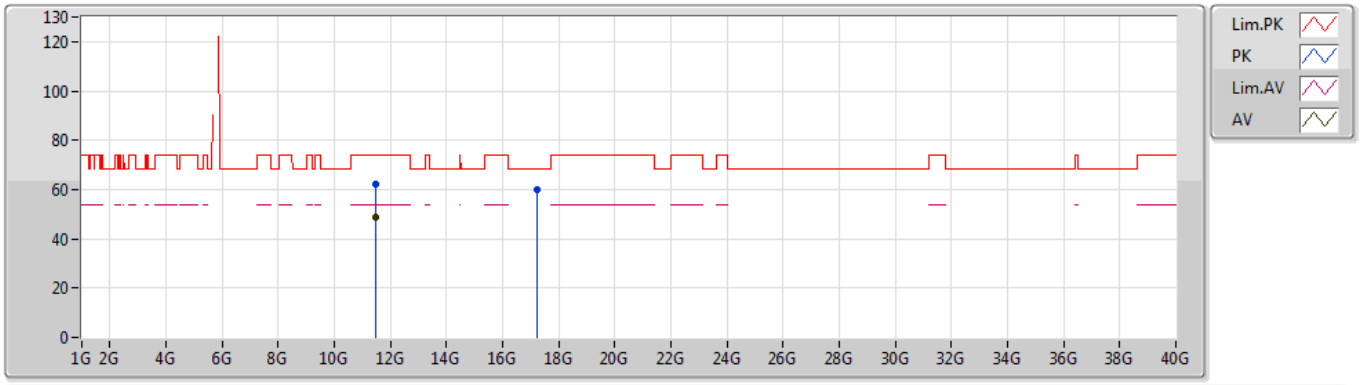

EUT Y_3TX
Setting 2C
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.4878G | 61.25 | 74.00 | -12.75 | 10.50 | 3 | Vertical | 119 | 1.69 | - |
| AV | 11.48792G | 47.77 | 54.00 | -6.23 | 10.50 | 3 | Vertical | 119 | 1.69 | - |
| PK | 17.23456G | 60.43 | 68.20 | -7.77 | 13.62 | 3 | Vertical | 57 | 1.99 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5745MHz_TX

03/08/2019



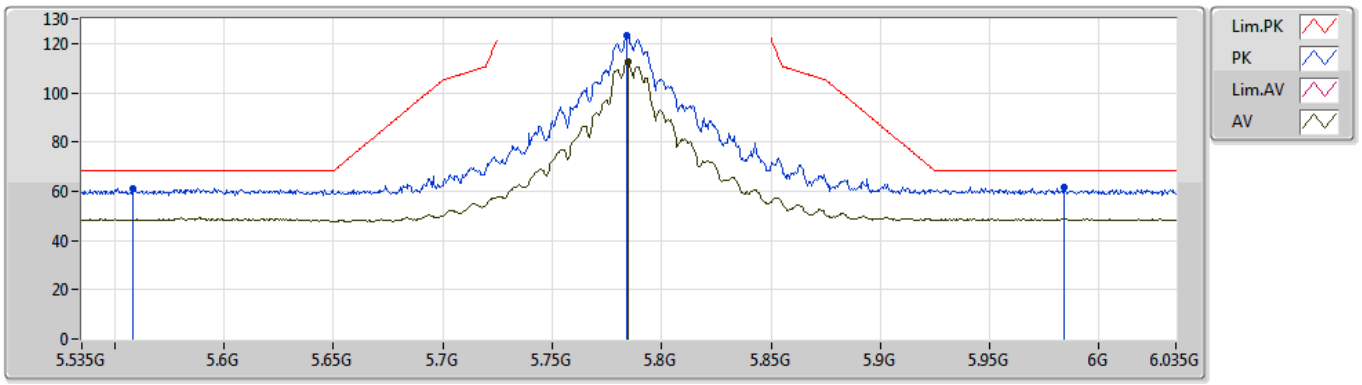

EUT Y_3TX
Setting 2C
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.48856G | 62.00 | 74.00 | -12.00 | 10.50 | 3 | Horizontal | 115 | 1.93 | - |
| AV | 11.48812G | 48.88 | 54.00 | -5.12 | 10.50 | 3 | Horizontal | 115 | 1.93 | - |
| PK | 17.23472G | 59.85 | 68.20 | -8.35 | 13.62 | 3 | Horizontal | 58 | 1.97 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5785MHz_TX

23/07/2019



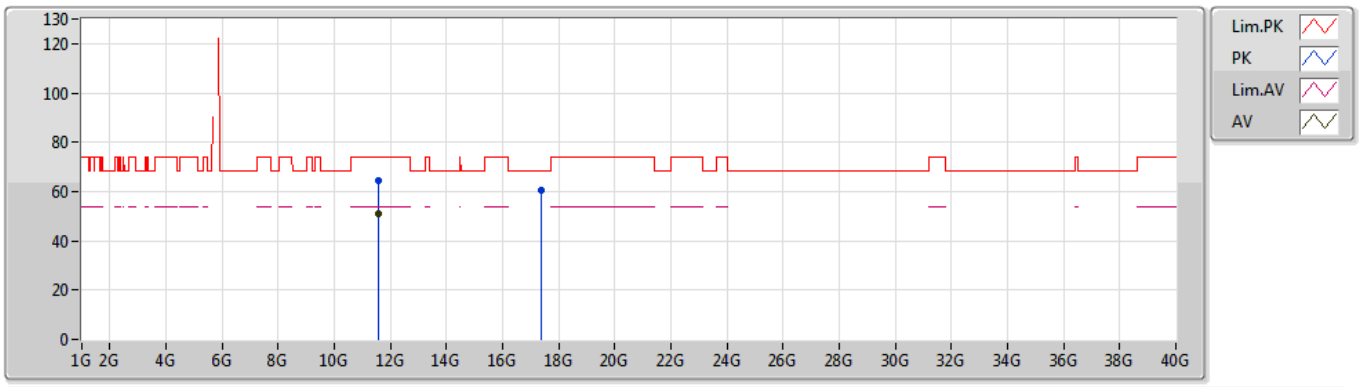

EUT Z_3TX
Setting 2B
06-K-3-10
FSP(100142)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.5585G | 61.35 | 68.20 | -6.85 | 7.57 | 3 | Vertical | 352 | 1.78 | - |
| PK | 5.784G | 123.12 | Inf | -Inf | 7.94 | 3 | Vertical | 352 | 1.78 | - |
| AV | 5.7845G | 112.81 | Inf | -Inf | 7.94 | 3 | Vertical | 352 | 1.78 | - |
| PK | 5.984G | 61.57 | 68.20 | -6.63 | 8.39 | 3 | Vertical | 352 | 1.78 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5785MHz_TX

16/07/2019



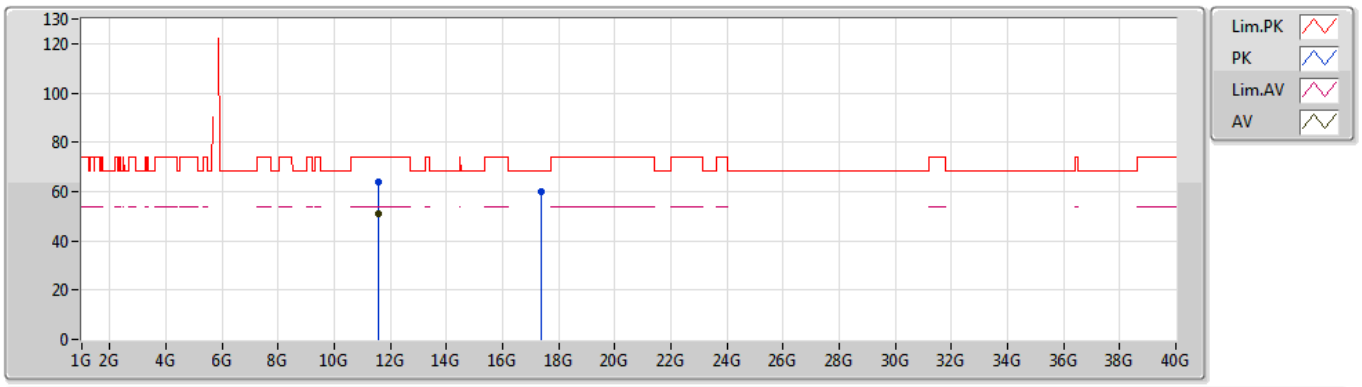

EUT Y_3TX
Setting 2B
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.56672G | 64.52 | 74.00 | -9.48 | 10.43 | 3 | Vertical | 123 | 1.67 | - |
| AV | 11.56772G | 51.00 | 54.00 | -3.00 | 10.43 | 3 | Vertical | 123 | 1.67 | - |
| PK | 17.36312G | 60.70 | 68.20 | -7.50 | 13.88 | 3 | Vertical | 128 | 2.85 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5785MHz_TX

16/07/2019



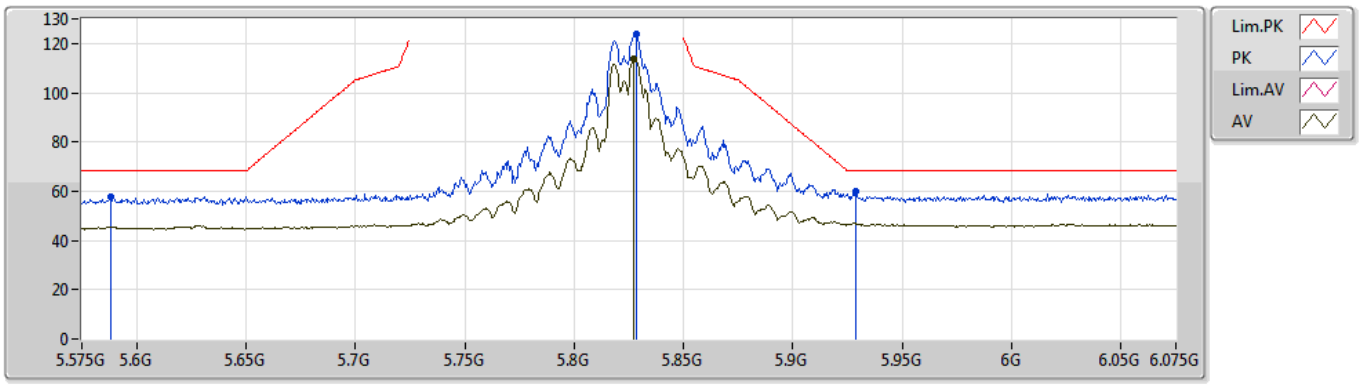

EUT Y_3TX
Setting 2B
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.56672G | 63.73 | 74.00 | -10.27 | 10.43 | 3 | Horizontal | 122 | 1.72 | - |
| AV | 11.56768G | 51.00 | 54.00 | -3.00 | 10.43 | 3 | Horizontal | 122 | 1.72 | - |
| PK | 17.3542G | 59.75 | 68.20 | -8.45 | 13.86 | 3 | Horizontal | 47 | 1.98 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5825MHz_TX

23/07/2019



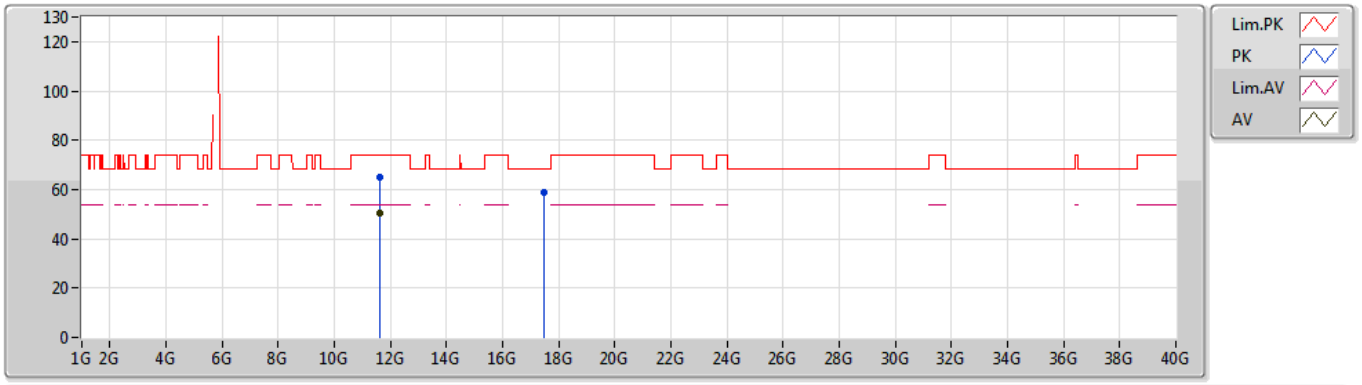

EUT Z_3TX
Setting 28
04-W-3-10
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.5885G | 57.72 | 68.20 | -10.48 | 4.67 | 3 | Vertical | 325 | 2.14 | - |
| PK | 5.8285G | 123.81 | Inf | -Inf | 5.15 | 3 | Vertical | 325 | 2.14 | - |
| AV | 5.8275G | 113.83 | Inf | -Inf | 5.15 | 3 | Vertical | 325 | 2.14 | - |
| PK | 5.929G | 59.76 | 68.20 | -8.44 | 5.72 | 3 | Vertical | 325 | 2.14 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5825MHz_TX

23/07/2019



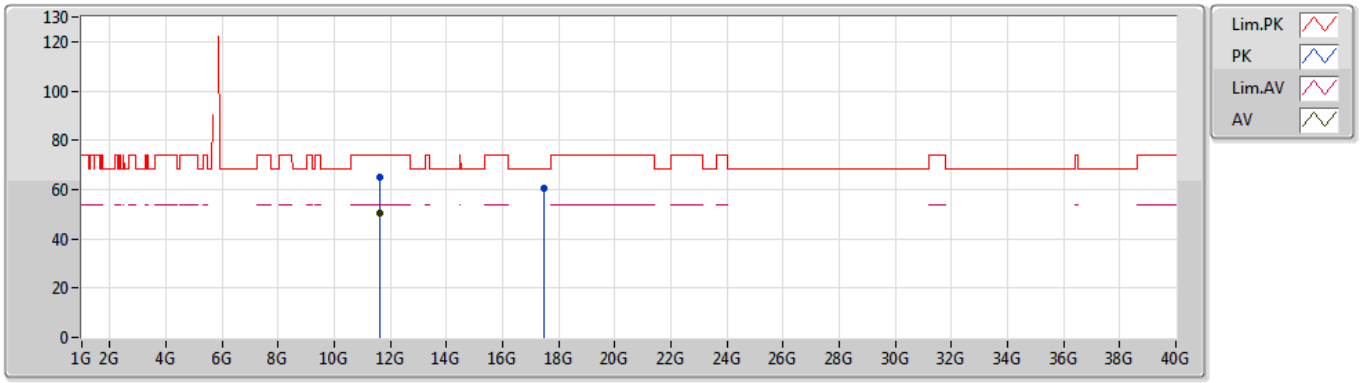

EUT Y_3TX
Setting 28
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.64644G | 64.74 | 74.00 | -9.26 | 10.36 | 3 | Vertical | 358 | 2.05 | - |
| AV | 11.64596G | 50.33 | 54.00 | -3.67 | 10.36 | 3 | Vertical | 358 | 2.05 | - |
| PK | 17.47372G | 58.92 | 68.20 | -9.28 | 14.10 | 3 | Vertical | 47 | 2.52 | - |

## 802.11a_Nss1,(6Mbps)_3TX

## 5825MHz_TX

23/07/2019



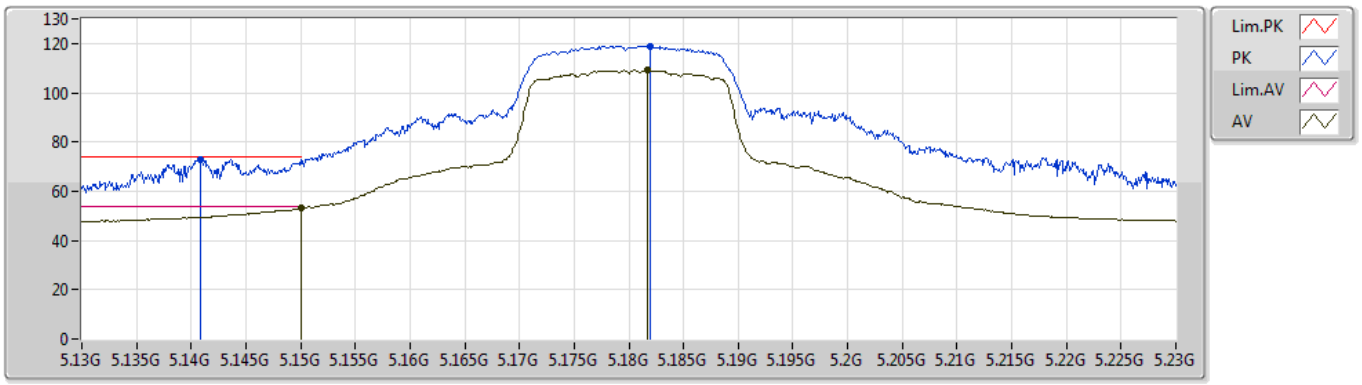

EUT Y_3TX
Setting 28
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.64636G | 65.25 | 74.00 | -8.75 | 10.36 | 3 | Horizontal | 133 | 1.96 | - |
| AV | 11.64592G | 50.51 | 54.00 | -3.49 | 10.36 | 3 | Horizontal | 133 | 1.96 | - |
| PK | 17.47278G | 60.41 | 68.20 | -7.79 | 14.09 | 3 | Horizontal | 55 | 1.56 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

09/07/2019

## 5180MHz_TX



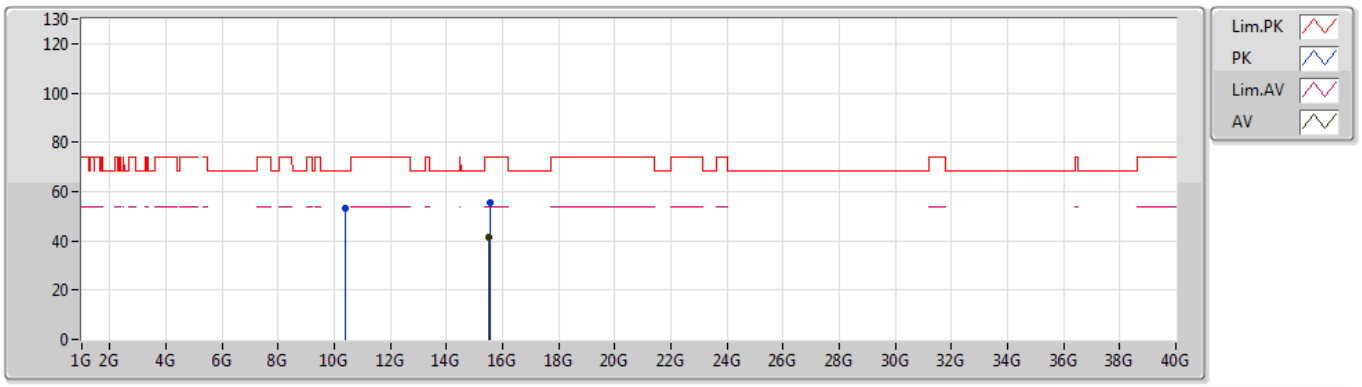

EUT Z_3TX
Setting 34
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1408G | 72.96 | 74.00 | -1.04 | 7.31 | 3 | Vertical | 309 | 1.93 | - |
| AV | 5.15G | 52.96 | 54.00 | -1.04 | 7.32 | 3 | Vertical | 309 | 1.93 | - |
| PK | 5.182G | 119.05 | Inf | -Inf | 7.35 | 3 | Vertical | 309 | 1.93 | - |
| AV | 5.1817G | 109.26 | Inf | -Inf | 7.35 | 3 | Vertical | 309 | 1.93 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5180MHz_TX

02/08/2019



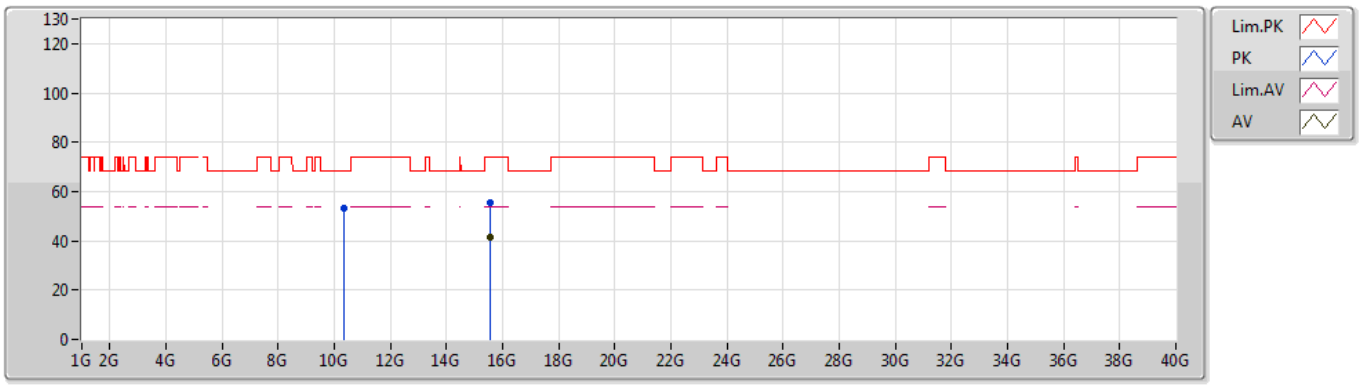

EUT Y_3TX
Setting 34
02-C-4
FSU

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.37104G | 52.97 | 68.20 | -15.23 | 14.66 | 3 | Vertical | 295 | 1.53 | - |
| PK | 15.53442G | 55.48 | 74.00 | -18.52 | 16.09 | 3 | Vertical | 65 | 1.46 | - |
| AV | 15.53043G | 41.29 | 54.00 | -12.71 | 16.10 | 3 | Vertical | 65 | 1.46 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5180MHz_TX

02/08/2019



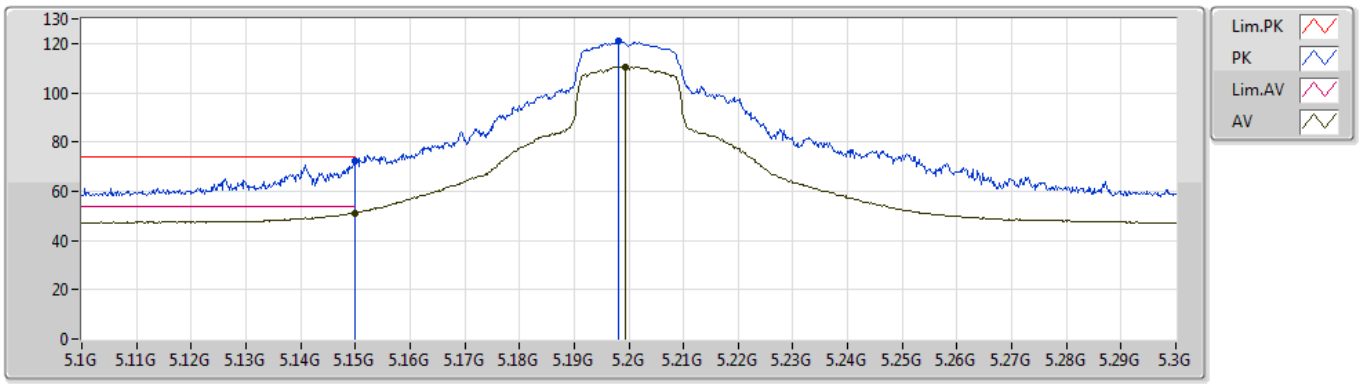

EUT Y_3TX
Setting 34
02-C-4
FSU

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.35142G | 53.23 | 68.20 | -14.97 | 14.67 | 3 | Horizontal | 132 | 1.44 | - |
| PK | 15.54453G | 55.23 | 74.00 | -18.77 | 16.06 | 3 | Horizontal | 277 | 1.53 | - |
| AV | 15.54351G | 41.33 | 54.00 | -12.67 | 16.06 | 3 | Horizontal | 277 | 1.53 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5200MHz_TX

09/07/2019



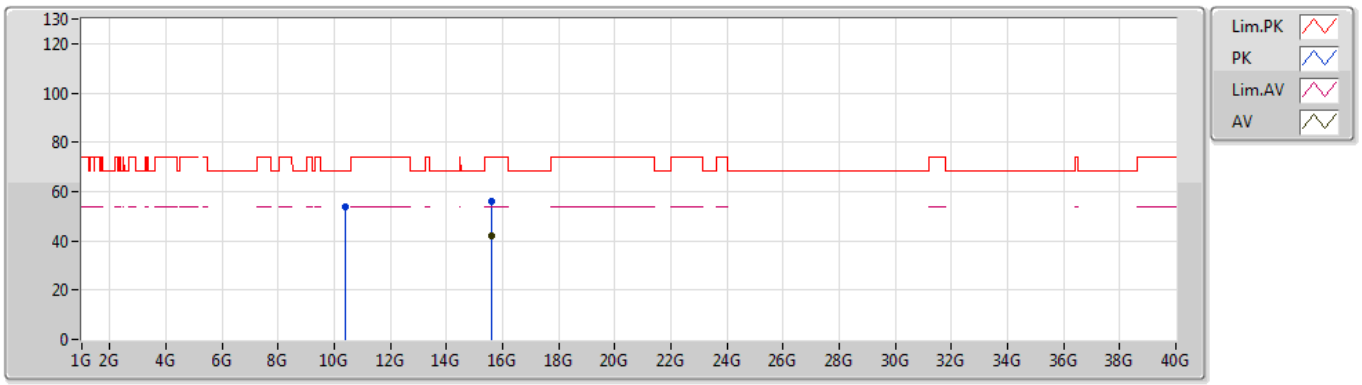

EUT Z_3TX
Setting 39
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.15G | 72.30 | 74.00 | -1.70 | 7.32 | 3 | Vertical | 355 | 1.50 | - |
| AV | 5.15G | 51.13 | 54.00 | -2.87 | 7.32 | 3 | Vertical | 355 | 1.50 | - |
| PK | 5.1982G | 120.83 | Inf | -Inf | 7.37 | 3 | Vertical | 355 | 1.50 | - |
| AV | 5.1994G | 110.58 | Inf | -Inf | 7.37 | 3 | Vertical | 355 | 1.50 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5200MHz_TX

02/08/2019



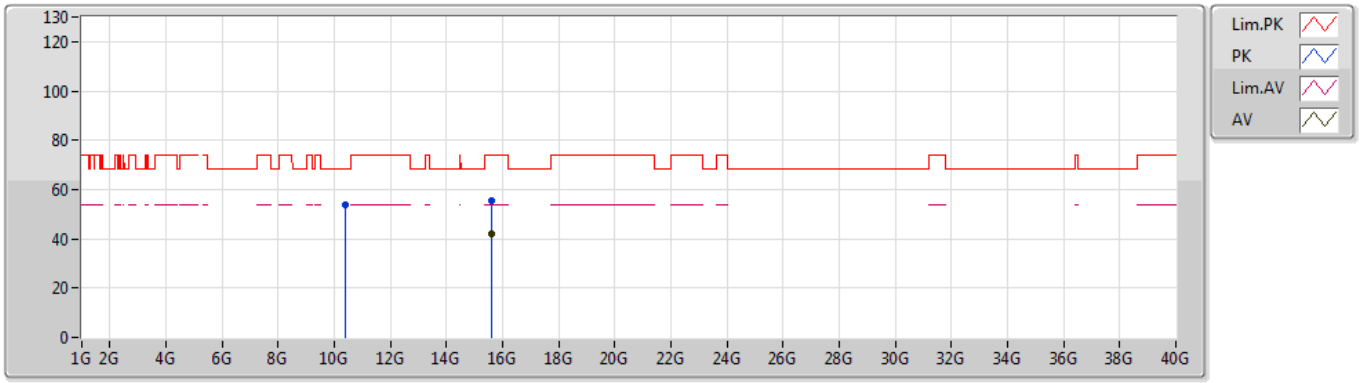

EUT Y_3TX
Setting 39
02-C-4
FSU

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.40807G | 53.76 | 68.20 | -14.44 | 14.63 | 3 | Vertical | 21 | 1.74 | - |
| PK | 15.59406G | 55.85 | 74.00 | -18.15 | 15.93 | 3 | Vertical | 131 | 1.57 | - |
| AV | 15.60177G | 41.81 | 54.00 | -12.19 | 15.90 | 3 | Vertical | 131 | 1.57 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5200MHz_TX

02/08/2019



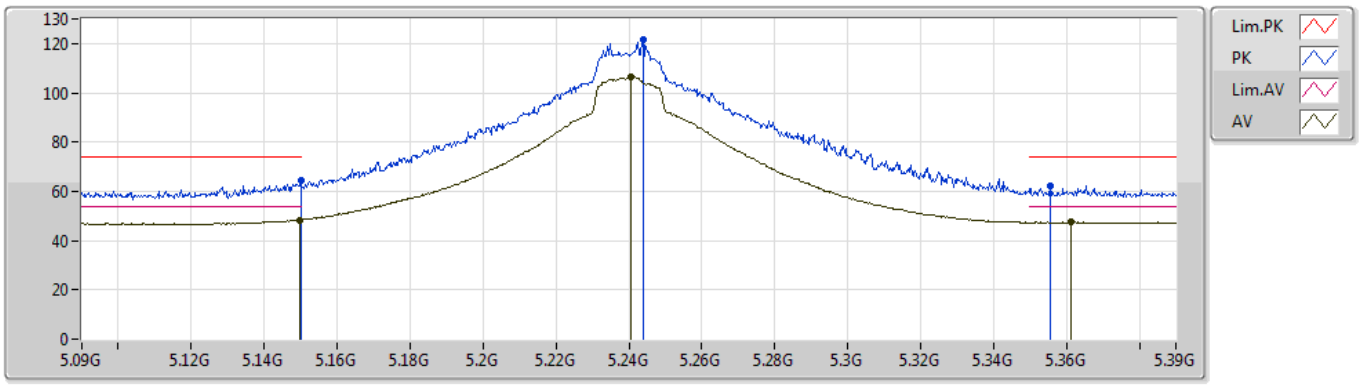

EUT Y_3TX
Setting 39
02-C-4
FSU

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.39991G | 53.68 | 68.20 | -14.52 | 14.64 | 3 | Horizontal | 184 | 2.07 | - |
| PK | 15.59964G | 55.66 | 74.00 | -18.34 | 15.91 | 3 | Horizontal | 273 | 1.86 | - |
| AV | 15.60156G | 41.99 | 54.00 | -12.01 | 15.91 | 3 | Horizontal | 273 | 1.86 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

09/07/2019

## 5240MHz_TX



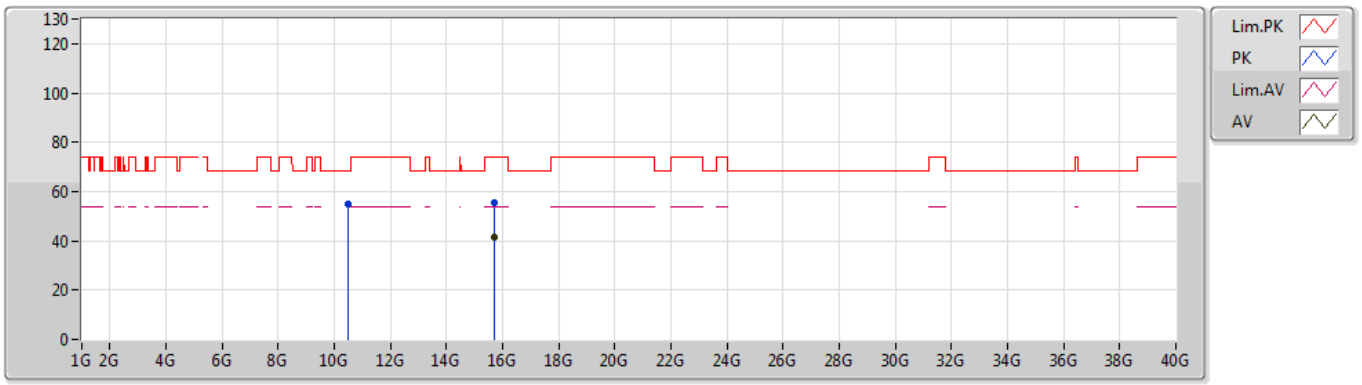

EUT Z_3TX
Setting 46
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.15G | 64.45 | 74.00 | -9.55 | 7.32 | 3 | Vertical | 355 | 1.94 | - |
| AV | 5.1497G | 48.39 | 54.00 | -5.61 | 7.32 | 3 | Vertical | 355 | 1.94 | - |
| PK | 5.2439G | 121.61 | Inf | -Inf | 7.41 | 3 | Vertical | 355 | 1.94 | - |
| AV | 5.2406G | 106.25 | Inf | -Inf | 7.39 | 3 | Vertical | 355 | 1.94 | - |
| PK | 5.3555G | 62.47 | 74.00 | -11.53 | 7.47 | 3 | Vertical | 355 | 1.94 | - |
| AV | 5.3612G | 47.46 | 54.00 | -6.54 | 7.49 | 3 | Vertical | 355 | 1.94 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5240MHz_TX

02/08/2019



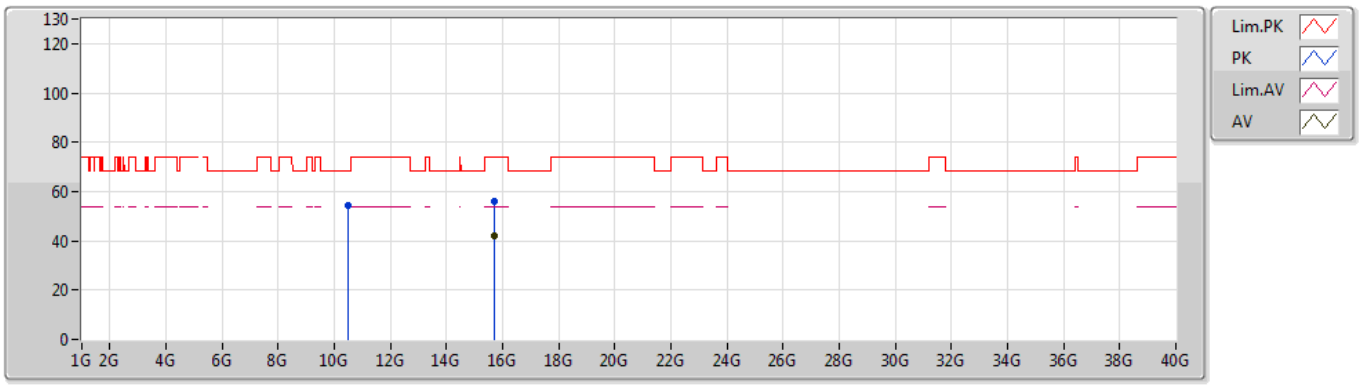

EUT Y_3TX
Setting 46
02-C-4
FSU

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.48465G | 54.72 | 68.20 | -13.48 | 14.59 | 3 | Vertical | 162 | 1.66 | - |
| PK | 15.72426G | 55.25 | 74.00 | -18.75 | 15.59 | 3 | Vertical | 60 | 1.40 | - |
| AV | 15.71589G | 41.42 | 54.00 | -12.58 | 15.61 | 3 | Vertical | 60 | 1.40 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5240MHz_TX

02/08/2019



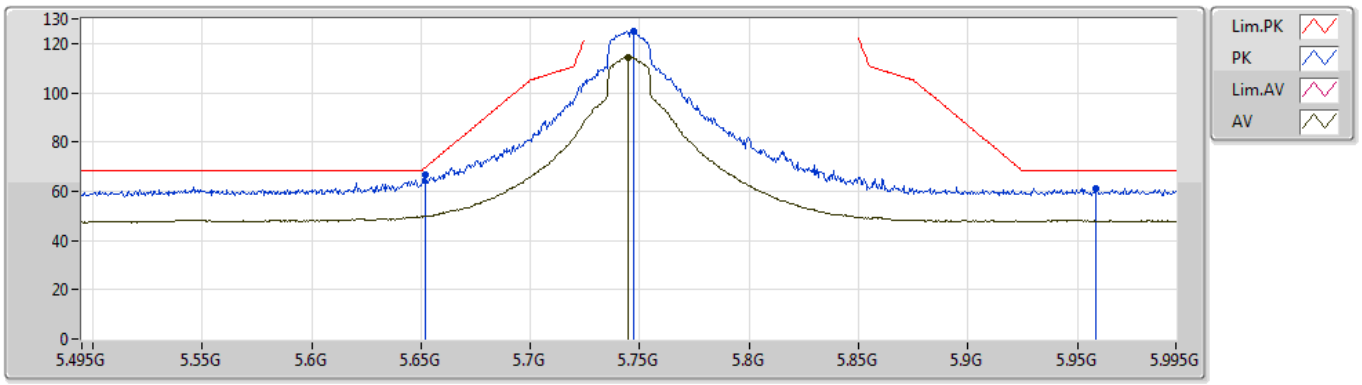

EUT Y_3TX
Setting 46
02-C-4
FSU

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.4848G | 54.38 | 68.20 | -13.82 | 14.59 | 3 | Horizontal | 139 | 1.61 | - |
| PK | 15.71583G | 56.17 | 74.00 | -17.83 | 15.61 | 3 | Horizontal | 215 | 1.72 | - |
| AV | 15.72024G | 41.93 | 54.00 | -12.07 | 15.60 | 3 | Horizontal | 215 | 1.72 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5745MHz_TX

10/07/2019



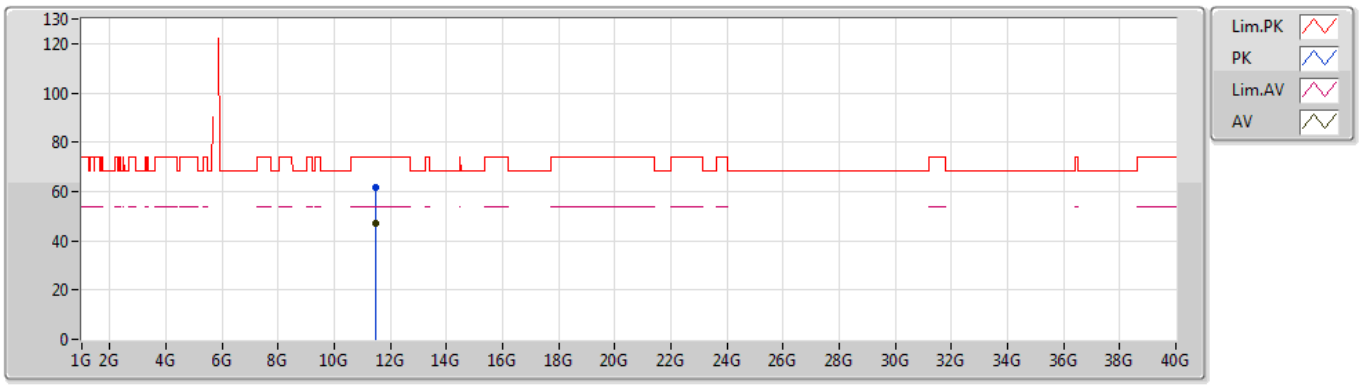

EUT Z_3TX
Setting 46
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.652G | 66.61 | 69.68 | -3.07 | 7.66 | 3 | Vertical | 335 | 2.01 | - |
| PK | 5.747G | 125.08 | Inf | -Inf | 7.86 | 3 | Vertical | 335 | 2.01 | - |
| AV | 5.7445G | 114.37 | Inf | -Inf | 7.86 | 3 | Vertical | 335 | 2.01 | - |
| PK | 5.9585G | 61.17 | 68.20 | -7.03 | 8.32 | 3 | Vertical | 335 | 2.01 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5745MHz_TX

03/08/2019



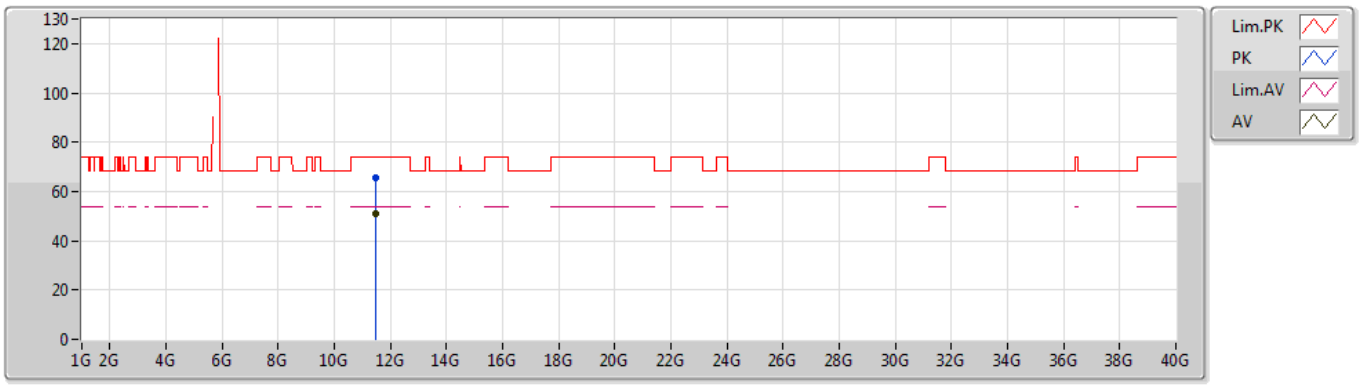

EUT Y_3TX
Setting 46
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.49085G | 61.63 | 74.00 | -12.37 | 16.62 | 3 | Vertical | 202 | 1.53 | - |
| AV | 11.4919G | 47.13 | 54.00 | -6.87 | 16.62 | 3 | Vertical | 202 | 1.53 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5745MHz_TX

03/08/2019



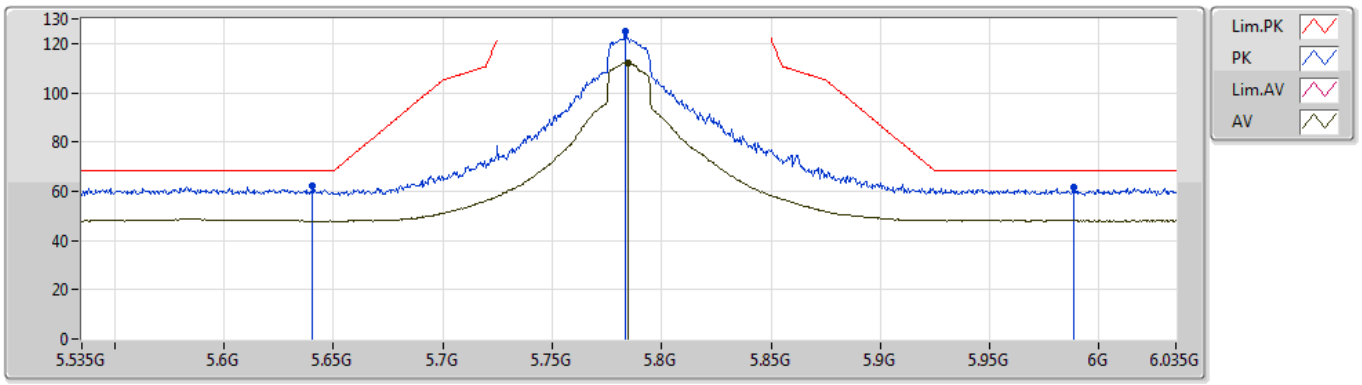

EUT Y_3TX
Setting 46
06-K-3
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.4932G | 65.53 | 74.00 | -8.47 | 16.62 | 3 | Horizontal | 170 | 1.86 | - |
| AV | 11.4945G | 50.91 | 54.00 | -3.09 | 16.62 | 3 | Horizontal | 170 | 1.86 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5785MHz_TX

10/07/2019



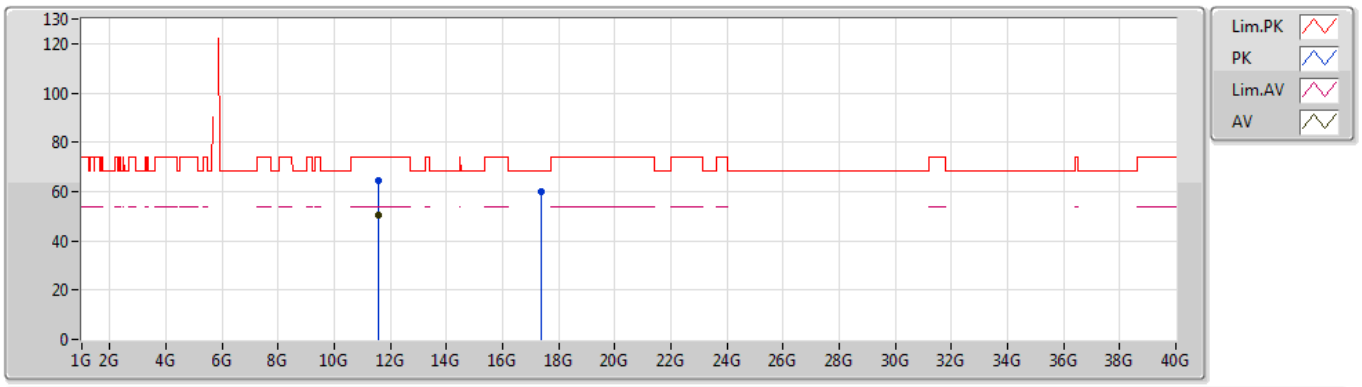

EUT Z_3TX
Setting 46
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.6405G | 62.08 | 68.20 | -6.12 | 7.63 | 3 | Vertical | 2 | 1.76 | - |
| PK | 5.7835G | 124.74 | Inf | -Inf | 7.94 | 3 | Vertical | 2 | 1.76 | - |
| AV | 5.7845G | 112.14 | Inf | -Inf | 7.94 | 3 | Vertical | 2 | 1.76 | - |
| PK | 5.9885G | 61.59 | 68.20 | -6.61 | 8.40 | 3 | Vertical | 2 | 1.76 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5785MHz_TX

03/08/2019



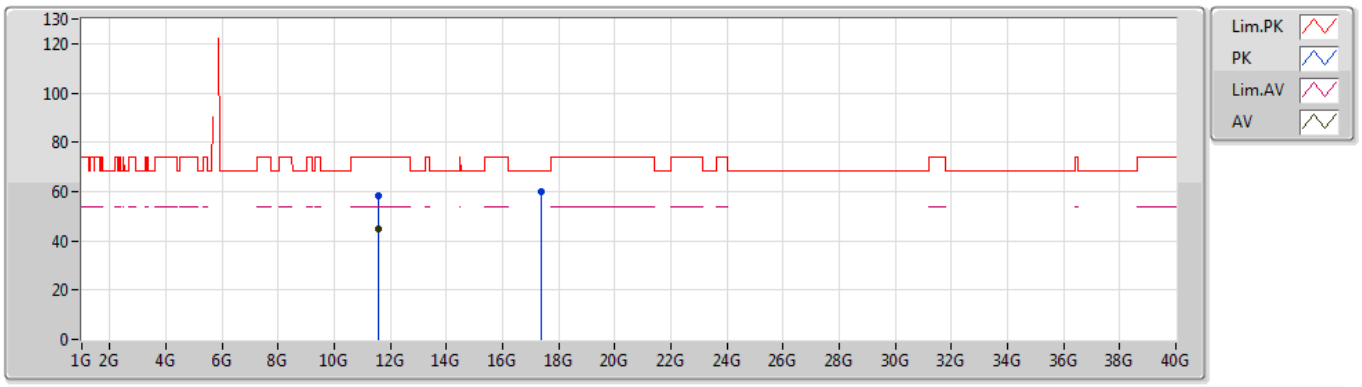

EUT Y_3TX
Setting 46
02-C-4
FSU

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.57855G | 64.34 | 74.00 | -9.66 | 15.01 | 3 | Vertical | 2 | 2.19 | - |
| AV | 11.57012G | 50.62 | 54.00 | -3.38 | 15.00 | 3 | Vertical | 2 | 2.19 | - |
| PK | 17.35473G | 60.01 | 68.20 | -8.19 | 21.42 | 3 | Vertical | 81 | 1.75 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5785MHz_TX

03/08/2019



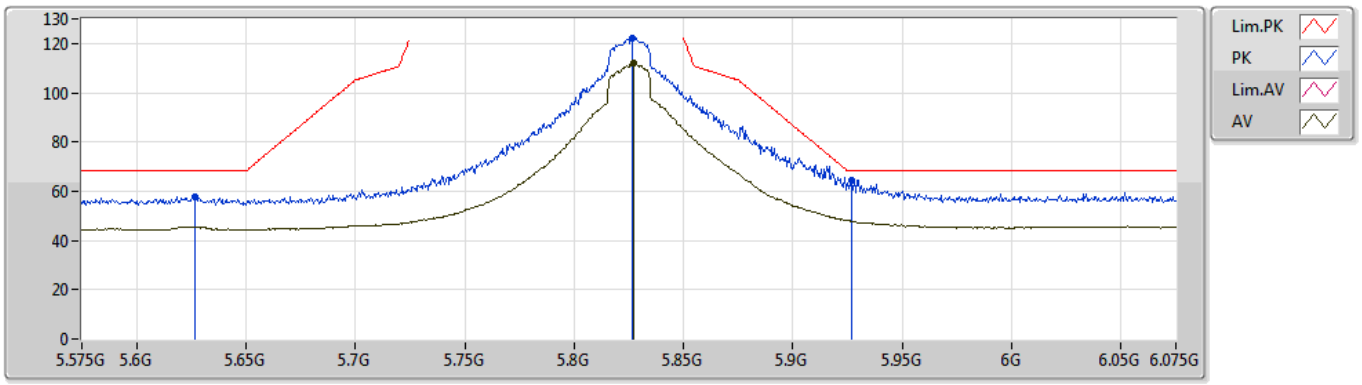

EUT Y_3TX
Setting 46
02-C-4
FSU

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.57342G | 58.54 | 74.00 | -15.46 | 15.00 | 3 | Horizontal | 320 | 2.15 | - |
| AV | 11.57597G | 44.63 | 54.00 | -9.37 | 15.01 | 3 | Horizontal | 320 | 2.15 | - |
| PK | 17.36739G | 60.23 | 68.20 | -7.97 | 21.50 | 3 | Horizontal | 199 | 1.80 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5825MHz_TX

08/07/2019



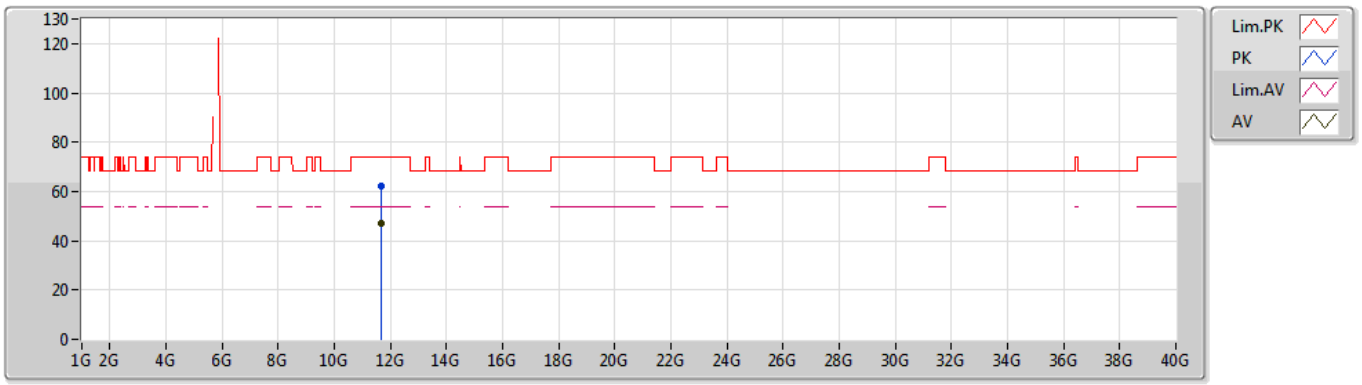

EUT Z_3TX
Setting 50
04-W-3-10
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.627G | 57.52 | 68.20 | -10.68 | 4.72 | 3 | Vertical | 346 | 2.07 | - |
| PK | 5.8265G | 122.30 | Inf | -Inf | 5.14 | 3 | Vertical | 346 | 2.07 | - |
| AV | 5.827G | 111.96 | Inf | -Inf | 5.14 | 3 | Vertical | 346 | 2.07 | - |
| PK | 5.927G | 64.56 | 68.20 | -3.64 | 5.70 | 3 | Vertical | 346 | 2.07 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5825MHz_TX

08/07/2019



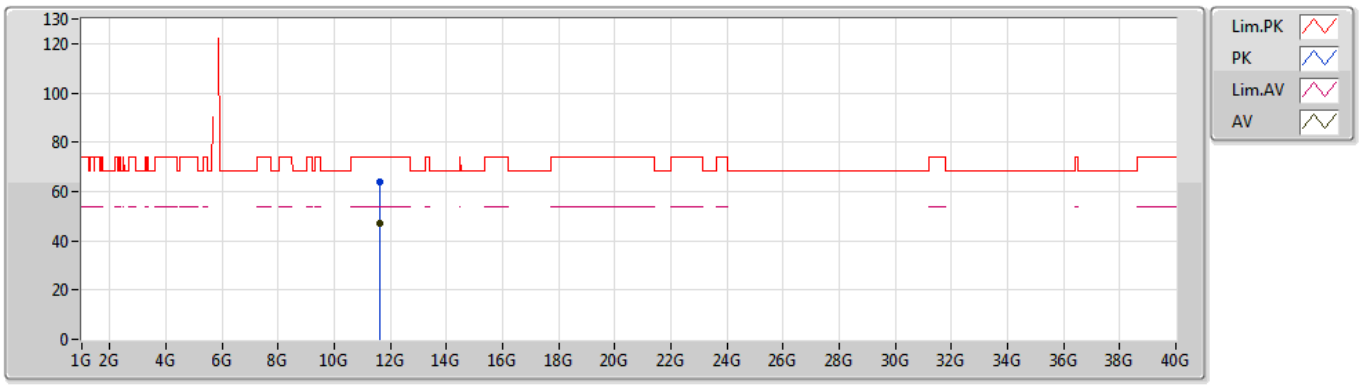

EUT Y_3TX
Setting 50
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.65672G | 62.47 | 74.00 | -11.53 | 10.36 | 3 | Vertical | 163 | 1.87 | - |
| AV | 11.64826G | 47.26 | 54.00 | -6.74 | 10.37 | 3 | Vertical | 163 | 1.87 | - |

## 802.11ac VHT20-BF_Nss1,(MCS0)_3TX

## 5825MHz_TX

08/07/2019



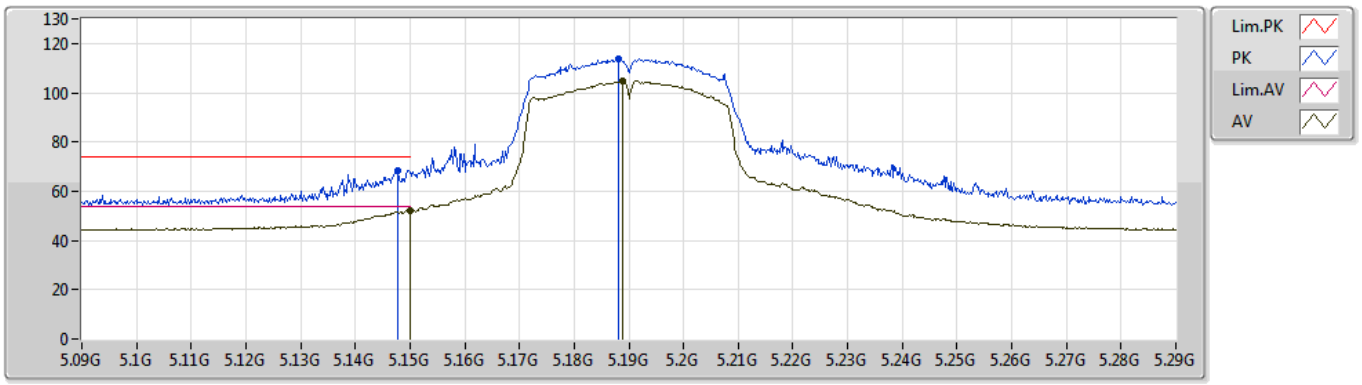

EUT Y_3TX
Setting 50
04-W-3
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.64478G | 63.73 | 74.00 | -10.27 | 10.36 | 3 | Horizontal | 168 | 1.76 | - |
| AV | 11.64487G | 47.25 | 54.00 | -6.75 | 10.36 | 3 | Horizontal | 168 | 1.76 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

16/07/2019

## 5190MHz_TX



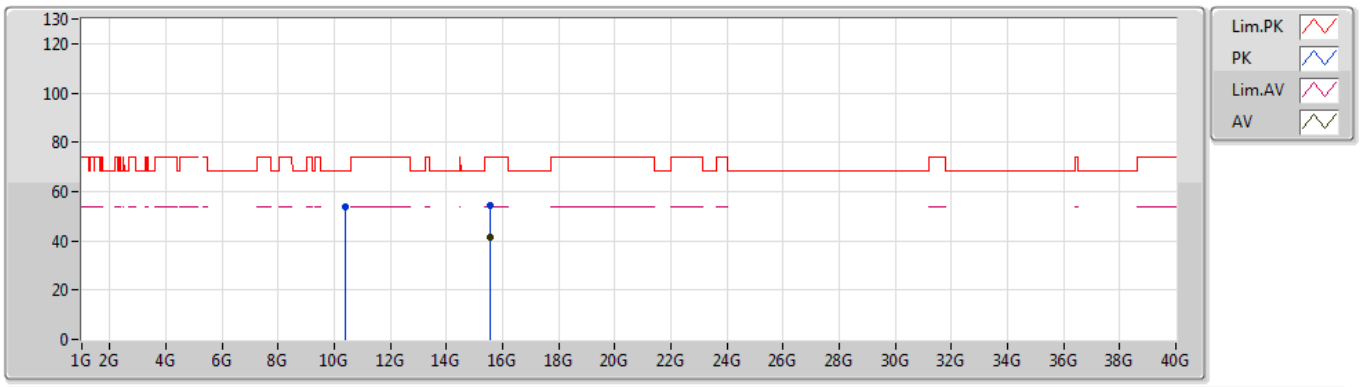

EUT Z_3TX
Setting 30
04-W-3-10
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1478G | 68.56 | 74.00 | -5.44 | 3.36 | 3 | Vertical | 4 | 2.03 | - |
| AV | 5.15G | 52.21 | 54.00 | -1.79 | 3.36 | 3 | Vertical | 4 | 2.03 | - |
| PK | 5.1882G | 113.69 | Inf | -Inf | 3.40 | 3 | Vertical | 4 | 2.03 | - |
| AV | 5.1888G | 104.71 | Inf | -Inf | 3.40 | 3 | Vertical | 4 | 2.03 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5190MHz_TX

03/08/2019



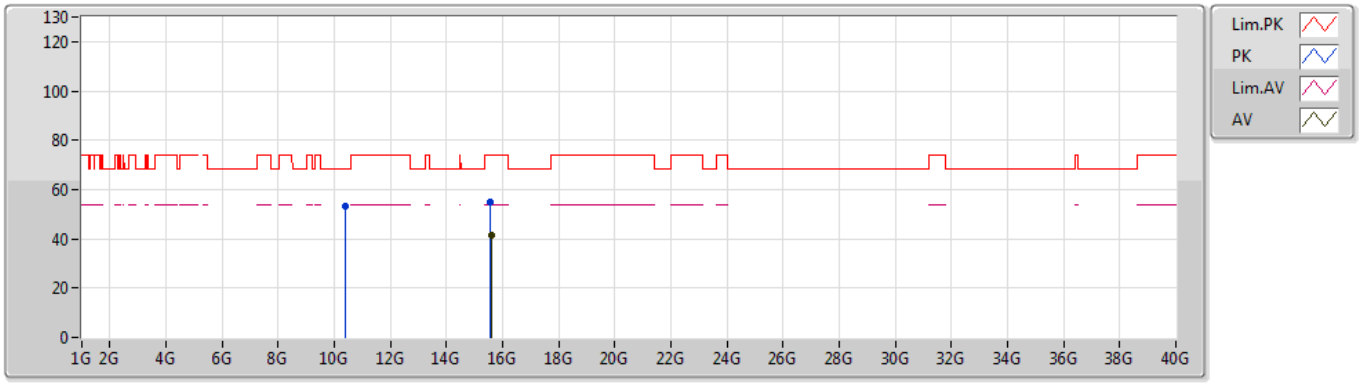

EUT Y_3TX
Setting 30
02-C-4
FSU(100015)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.38801G | 53.54 | 68.20 | -14.66 | 14.65 | 3 | Vertical | 228 | 1.39 | - |
| PK | 15.57174G | 54.53 | 74.00 | -19.47 | 15.99 | 3 | Vertical | 304 | 1.47 | - |
| AV | 15.56004G | 41.25 | 54.00 | -12.75 | 16.02 | 3 | Vertical | 304 | 1.47 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5190MHz_TX

03/08/2019



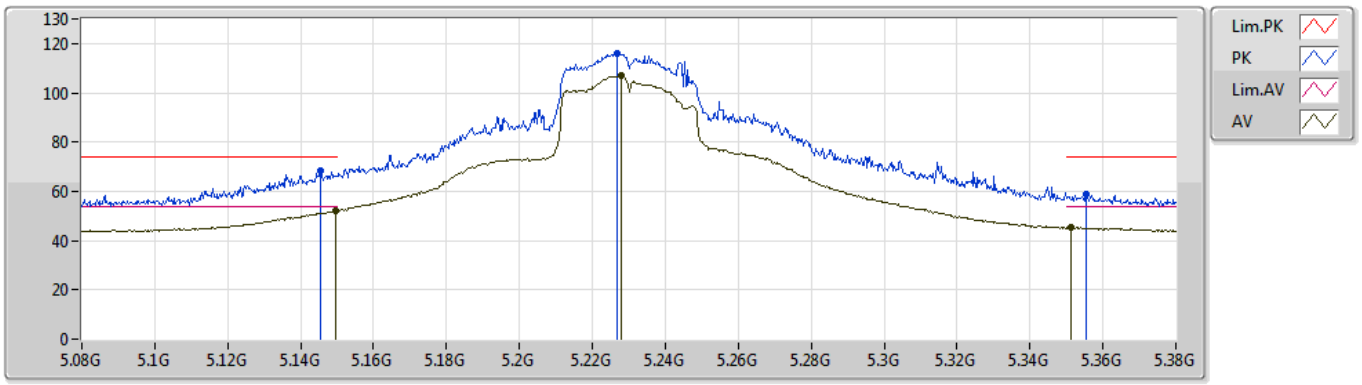

EUT Y_3TX
Setting 30
02-C-4
FSU(100015)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.38591G | 53.10 | 68.20 | -15.10 | 14.65 | 3 | Horizontal | 87 | 2.01 | - |
| PK | 15.58104G | 54.89 | 74.00 | -19.11 | 15.96 | 3 | Horizontal | 183 | 1.81 | - |
| AV | 15.58341G | 41.66 | 54.00 | -12.34 | 15.95 | 3 | Horizontal | 183 | 1.81 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5230MHz_TX

16/07/2019



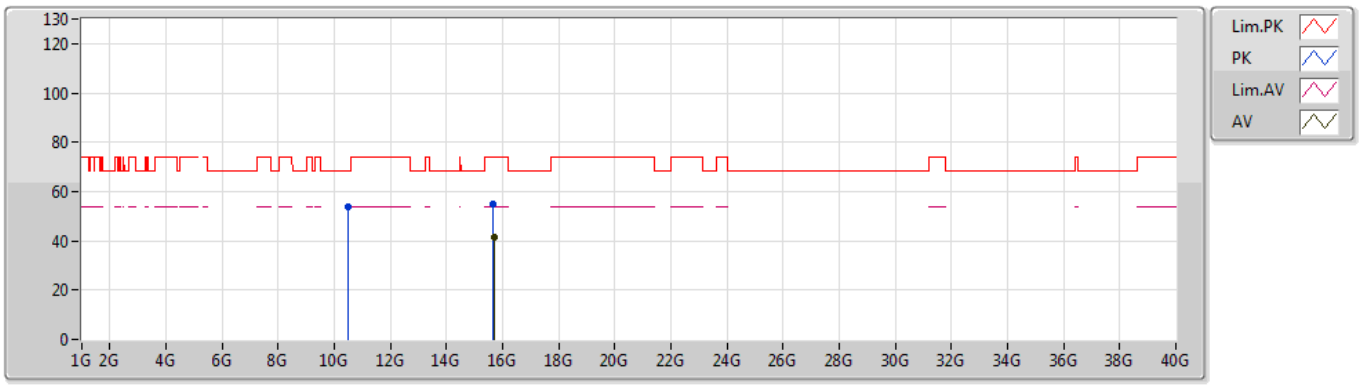

EUT Z_3TX
Setting 36
04-W-3-10
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.1454G | 68.11 | 74.00 | -5.89 | 3.36 | 3 | Vertical | 42 | 1.96 | - |
| AV | 5.1496G | 51.96 | 54.00 | -2.04 | 3.36 | 3 | Vertical | 42 | 1.96 | - |
| PK | 5.2267G | 116.01 | Inf | -Inf | 3.49 | 3 | Vertical | 42 | 1.96 | - |
| AV | 5.2279G | 106.77 | Inf | -Inf | 3.51 | 3 | Vertical | 42 | 1.96 | - |
| PK | 5.3554G | 58.72 | 74.00 | -15.28 | 3.96 | 3 | Vertical | 42 | 1.96 | - |
| AV | 5.3512G | 45.26 | 54.00 | -8.74 | 3.94 | 3 | Vertical | 42 | 1.96 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5230MHz_TX

03/08/2019



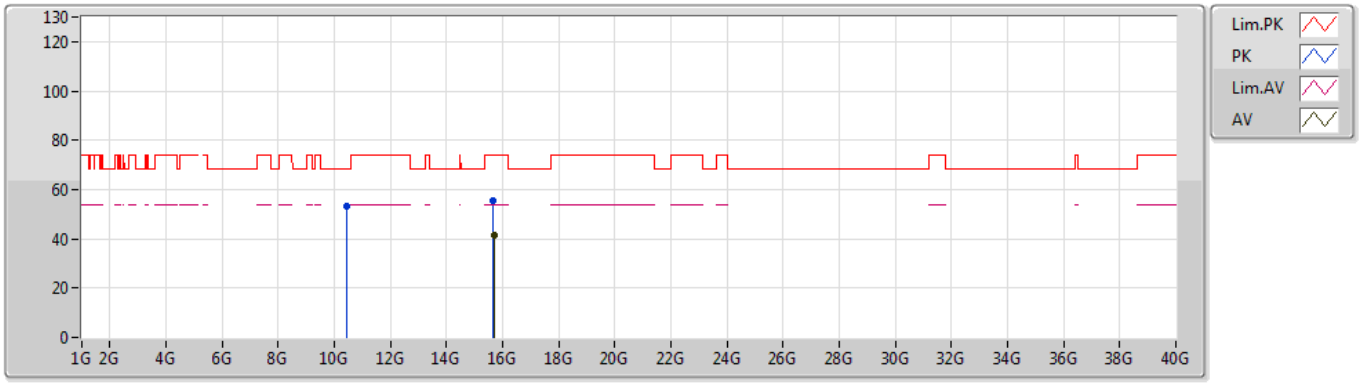

EUT Y_3TX
Setting 36
02-C-4
FSU(100015)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.46927G | 53.81 | 68.20 | -14.39 | 14.60 | 3 | Vertical | 163 | 1.78 | - |
| PK | 15.6753G | 55.11 | 74.00 | -18.89 | 15.71 | 3 | Vertical | 70 | 1.55 | - |
| AV | 15.68037G | 41.35 | 54.00 | -12.65 | 15.70 | 3 | Vertical | 70 | 1.55 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5230MHz_TX

03/08/2019



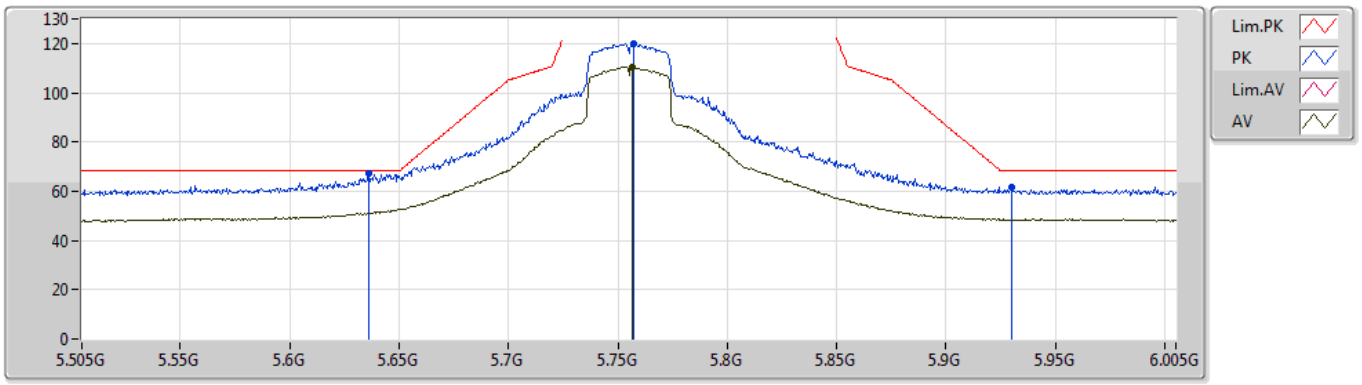

EUT Y_3TX
Setting 36
02-C-4
FSU(100015)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.46237G | 53.31 | 68.20 | -14.89 | 14.60 | 3 | Horizontal | 85 | 1.64 | - |
| PK | 15.67869G | 55.54 | 74.00 | -18.46 | 15.70 | 3 | Horizontal | 156 | 1.34 | - |
| AV | 15.69111G | 41.31 | 54.00 | -12.69 | 15.68 | 3 | Horizontal | 156 | 1.34 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5755MHz_TX

10/07/2019



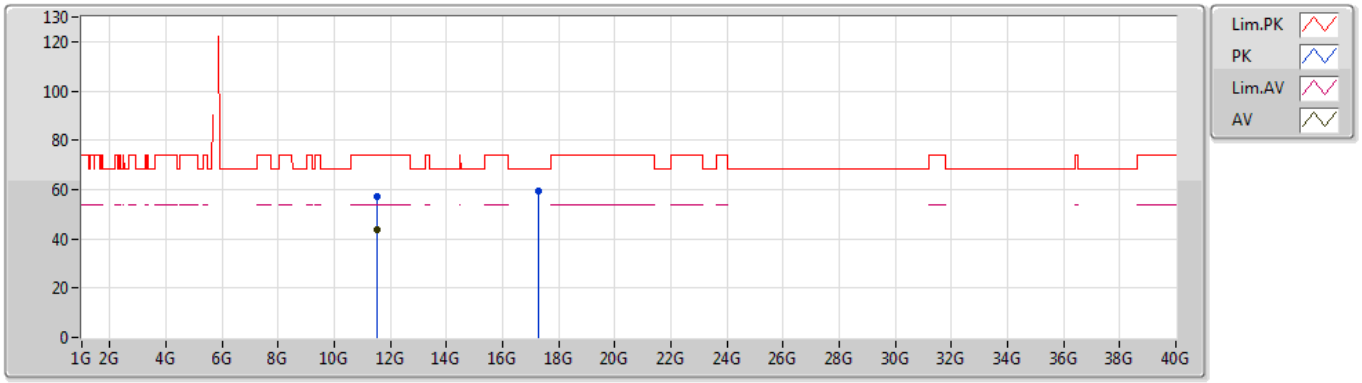

EUT Z_3TX
Setting 41
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.636G | 67.18 | 68.20 | -1.02 | 7.63 | 3 | Vertical | 356 | 1.74 | - |
| PK | 5.757G | 119.82 | Inf | -Inf | 7.87 | 3 | Vertical | 356 | 1.74 | - |
| AV | 5.7565G | 110.60 | Inf | -Inf | 7.87 | 3 | Vertical | 356 | 1.74 | - |
| PK | 5.93G | 61.49 | 68.20 | -6.71 | 8.24 | 3 | Vertical | 356 | 1.74 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5755MHz_TX

03/08/2019



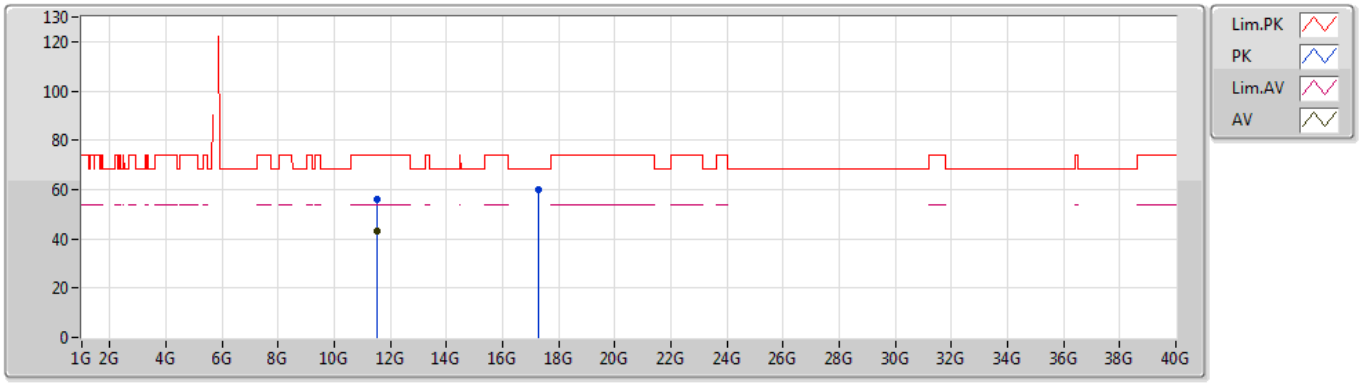

EUT Y_3TX
Setting 41
02-C-4
FSU

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.51129G | 56.89 | 74.00 | -17.11 | 14.92 | 3 | Vertical | 359 | 2.26 | - |
| AV | 11.52188G | 43.68 | 54.00 | -10.32 | 14.94 | 3 | Vertical | 359 | 2.26 | - |
| PK | 17.26356G | 59.21 | 68.20 | -8.99 | 20.88 | 3 | Vertical | 228 | 1.86 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5755MHz_TX

03/08/2019



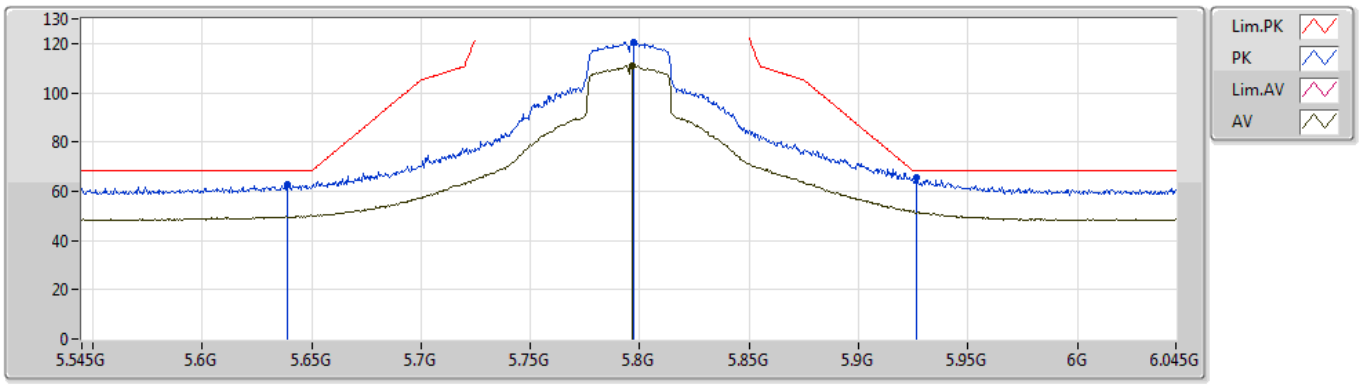

EUT Y_3TX
Setting 41
02-C-4
FSU

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.51801G | 55.99 | 74.00 | -18.01 | 14.92 | 3 | Horizontal | 113 | 2.00 | - |
| AV | 11.51528G | 42.95 | 54.00 | -11.05 | 14.92 | 3 | Horizontal | 113 | 2.00 | - |
| PK | 17.27925G | 59.73 | 68.20 | -8.47 | 20.97 | 3 | Horizontal | 176 | 1.61 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5795MHz_TX

10/07/2019



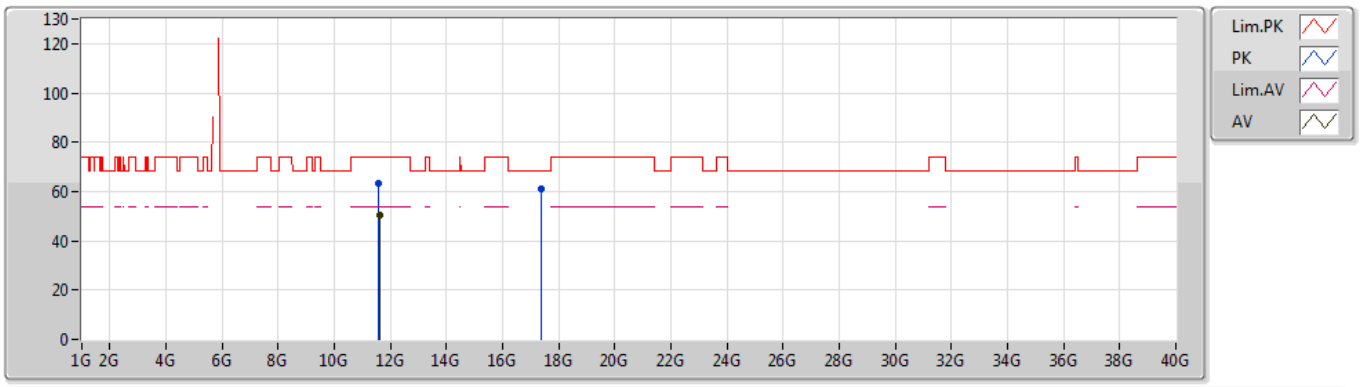

EUT Z_3TX
Setting 42
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.639G | 62.56 | 68.20 | -5.64 | 7.63 | 3 | Vertical | 354 | 1.85 | - |
| PK | 5.797G | 120.58 | Inf | -Inf | 7.96 | 3 | Vertical | 354 | 1.85 | - |
| AV | 5.7965G | 111.20 | Inf | -Inf | 7.96 | 3 | Vertical | 354 | 1.85 | - |
| PK | 5.9265G | 65.81 | 68.20 | -2.39 | 8.22 | 3 | Vertical | 354 | 1.85 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5795MHz_TX

03/08/2019



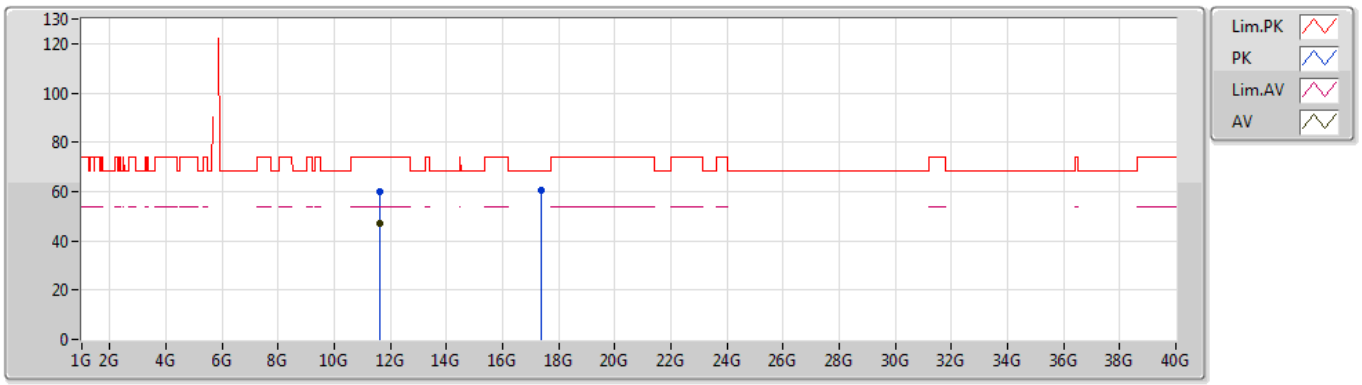

EUT Y_3TX
Setting 42
02-C-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.59621G | 63.44 | 74.00 | -10.56 | 15.04 | 3 | Vertical | 351 | 2.26 | - |
| AV | 11.5993G | 50.31 | 54.00 | -3.69 | 15.04 | 3 | Vertical | 351 | 2.26 | - |
| PK | 17.39139G | 60.85 | 68.20 | -7.35 | 21.63 | 3 | Vertical | 199 | 1.87 | - |

## 802.11ac VHT40-BF_Nss1,(MCS0)_3TX

## 5795MHz_TX

03/08/2019



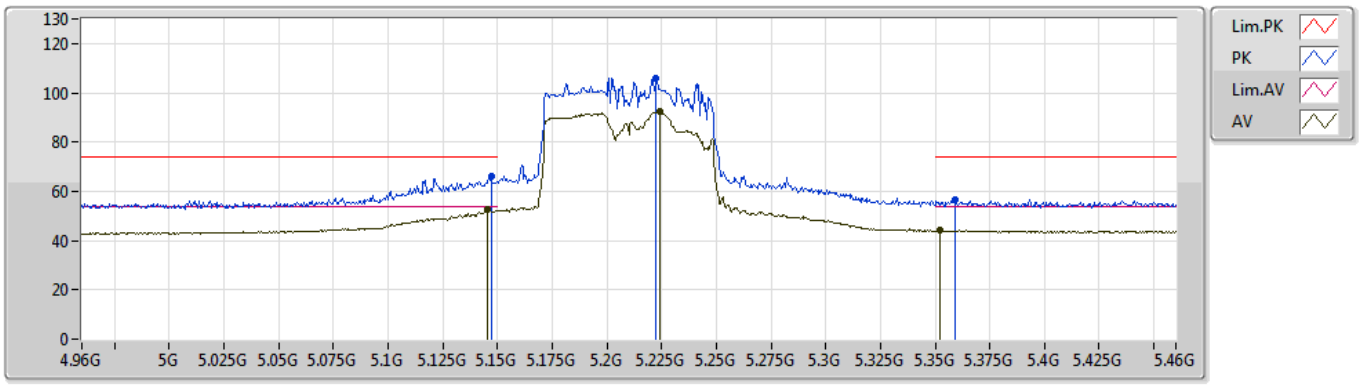

EUT Y_3TX
Setting 42
02-C-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.59936G | 59.99 | 74.00 | -14.01 | 15.04 | 3 | Horizontal | 125 | 1.79 | - |
| AV | 11.60149G | 47.02 | 54.00 | -6.98 | 15.04 | 3 | Horizontal | 125 | 1.79 | - |
| PK | 17.38827G | 60.73 | 68.20 | -7.47 | 21.62 | 3 | Horizontal | 194 | 1.42 | - |

## 802.11ac VHT80-BF_Nss1,(MCS0)_3TX

16/07/2019

## 5210MHz_TX



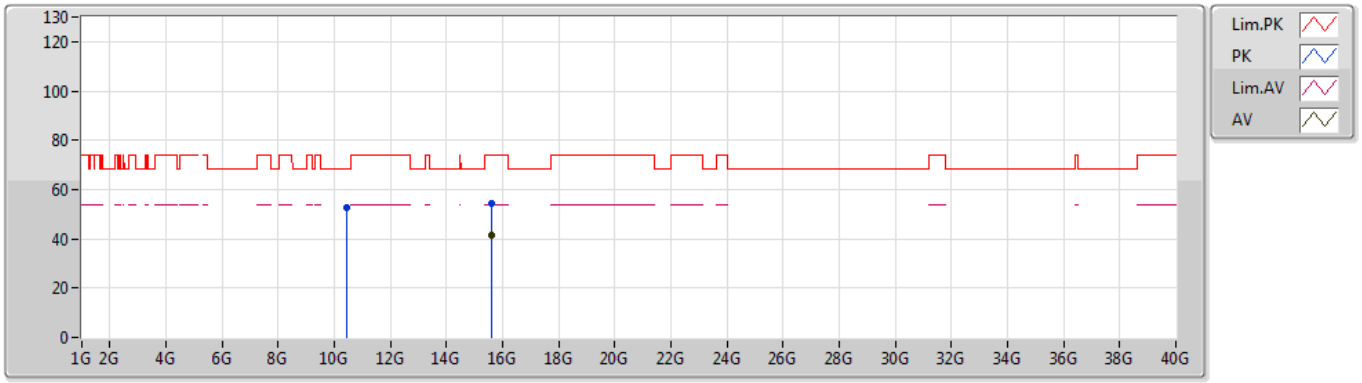

EUT Z_3TX
Setting 24
04-W-3-10
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.147G | 65.86 | 74.00 | -8.14 | 3.36 | 3 | Vertical | 352 | 2.05 | - |
| AV | 5.1455G | 52.42 | 54.00 | -1.58 | 3.36 | 3 | Vertical | 352 | 2.05 | - |
| PK | 5.2225G | 105.99 | Inf | -Inf | 3.49 | 3 | Vertical | 352 | 2.05 | - |
| AV | 5.224G | 92.32 | Inf | -Inf | 3.49 | 3 | Vertical | 352 | 2.05 | - |
| PK | 5.359G | 56.64 | 74.00 | -17.36 | 3.97 | 3 | Vertical | 352 | 2.05 | - |
| AV | 5.352G | 44.21 | 54.00 | -9.79 | 3.95 | 3 | Vertical | 352 | 2.05 | - |

## 802.11ac VHT80-BF_Nss1,(MCS0)_3TX

## 5210MHz_TX

03/08/2019



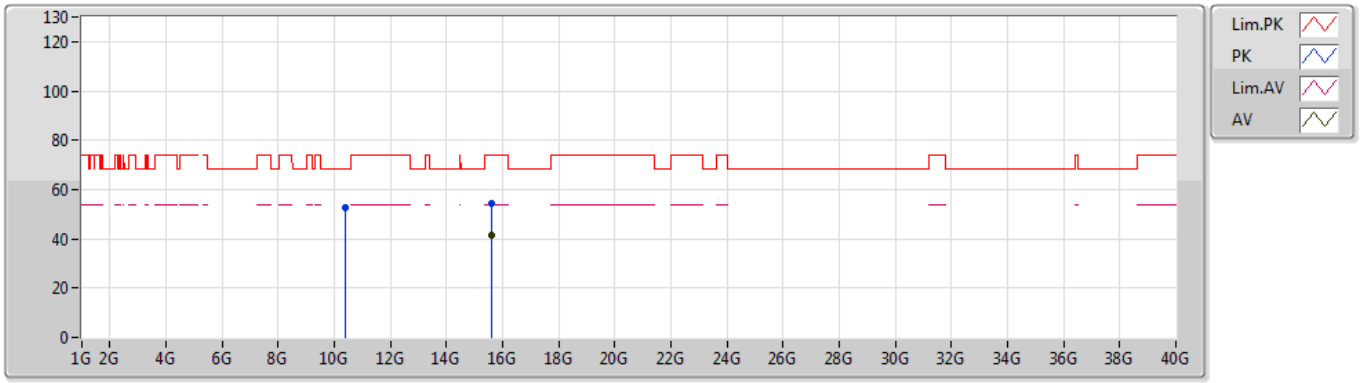

EUT Y_3TX
Setting 24
02-C-4
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.42696G | 52.72 | 68.20 | -15.48 | 14.62 | 3 | Vertical | 114 | 1.46 | - |
| PK | 15.61773G | 54.23 | 74.00 | -19.77 | 15.86 | 3 | Vertical | 172 | 1.68 | - |
| AV | 15.61755G | 41.25 | 54.00 | -12.75 | 15.86 | 3 | Vertical | 172 | 1.68 | - |

## 802.11ac VHT80-BF_Nss1,(MCS0)_3TX

## 5210MHz_TX

03/08/2019



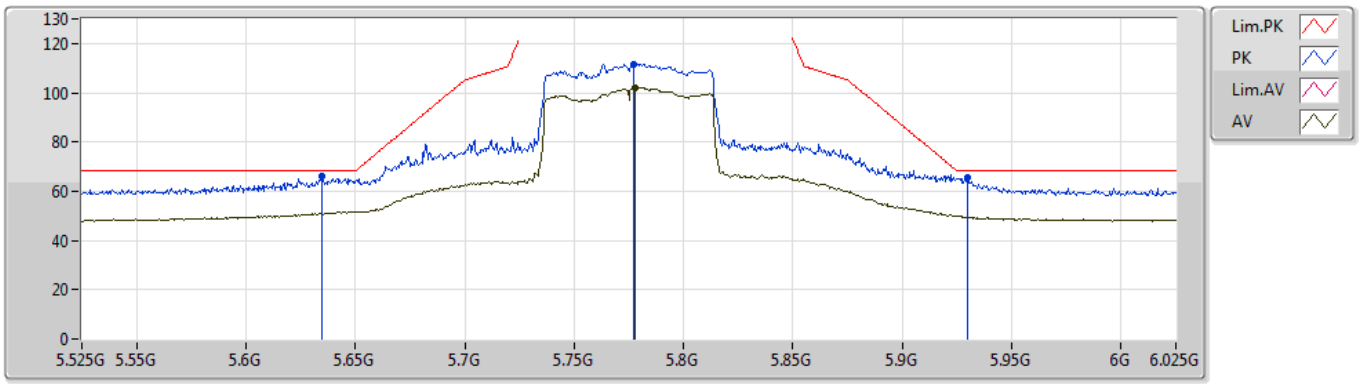

EUT Y_3TX
Setting 24
02-C-4
FSP(100019)

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 10.41154G | 52.53 | 68.20 | -15.67 | 14.63 | 3 | Horizontal | 151 | 1.34 | - |
| PK | 15.63066G | 54.52 | 74.00 | -19.48 | 15.83 | 3 | Horizontal | 71 | 1.53 | - |
| AV | 15.61611G | 41.19 | 54.00 | -12.81 | 15.86 | 3 | Horizontal | 71 | 1.53 | - |

## 802.11ac VHT80-BF_Nss1,(MCS0)_3TX

## 5775MHz_TX

10/07/2019



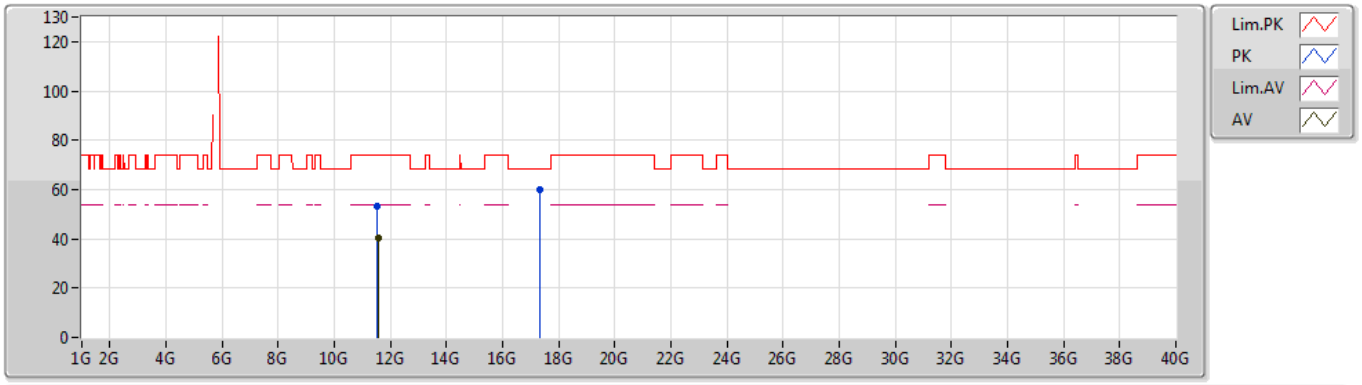

EUT Z_3TX
Setting 33
06-K-3-10
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 5.6345G | 66.20 | 68.20 | -2.00 | 7.63 | 3 | Vertical | 4 | 1.90 | - |
| PK | 5.777G | 111.62 | Inf | -Inf | 7.92 | 3 | Vertical | 4 | 1.90 | - |
| AV | 5.778G | 102.02 | Inf | -Inf | 7.93 | 3 | Vertical | 4 | 1.90 | - |
| PK | 5.93G | 65.38 | 68.20 | -2.82 | 8.24 | 3 | Vertical | 4 | 1.90 | - |

## 802.11ac VHT80-BF_Nss1,(MCS0)_3TX

## 5775MHz_TX

03/08/2019



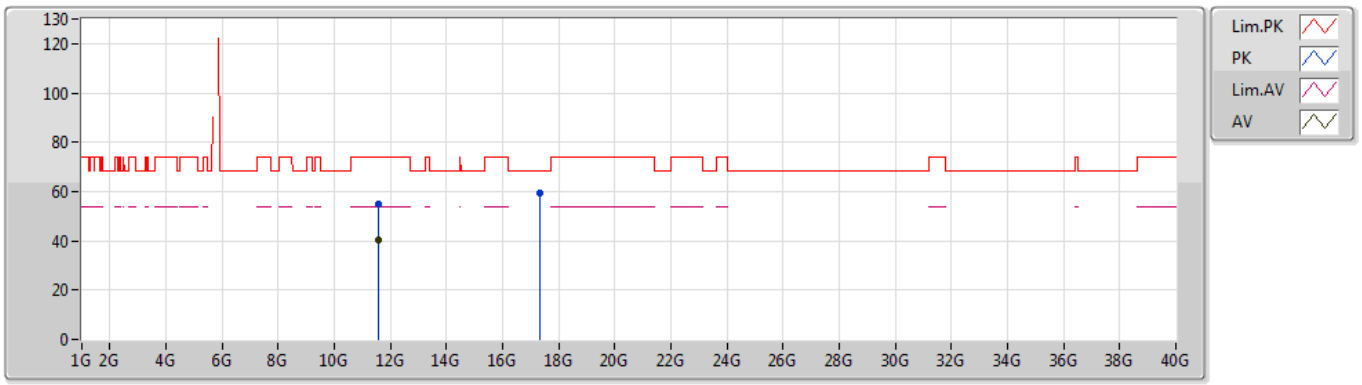

EUT Y_3TX
Setting 33
02-C-4
FSP

| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.54682G | 53.31 | 74.00 | -20.69 | 14.97 | 3 | Vertical | 312 | 1.20 | - |
| AV | 11.55282G | 40.29 | 54.00 | -13.71 | 14.97 | 3 | Vertical | 312 | 1.20 | - |
| PK | 17.31648G | 60.22 | 68.20 | -7.98 | 21.20 | 3 | Vertical | 153 | 1.58 | - |

## 802.11ac VHT80-BF_Nss1,(MCS0)_3TX

## 5775MHz_TX

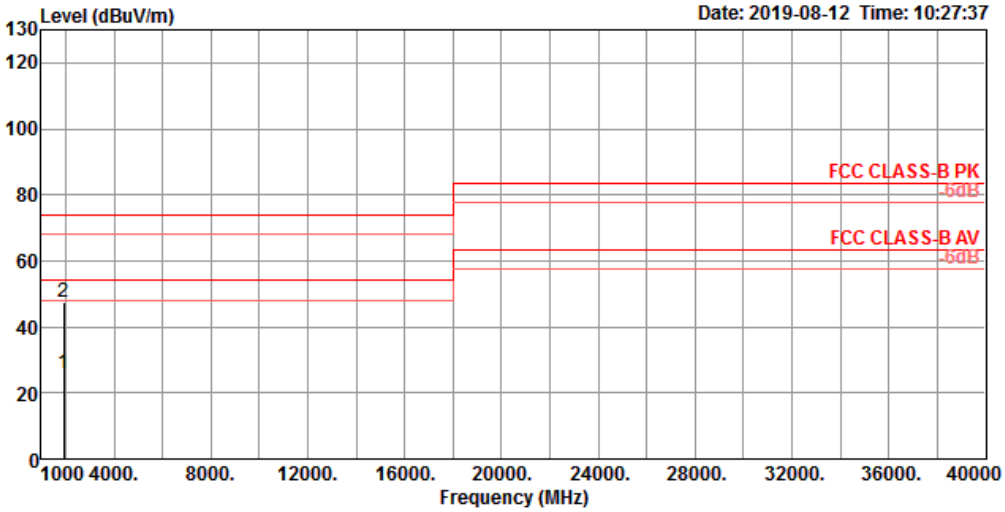
03/08/2019




EUT Y_3TX
Setting 33
02-C-4
FSP

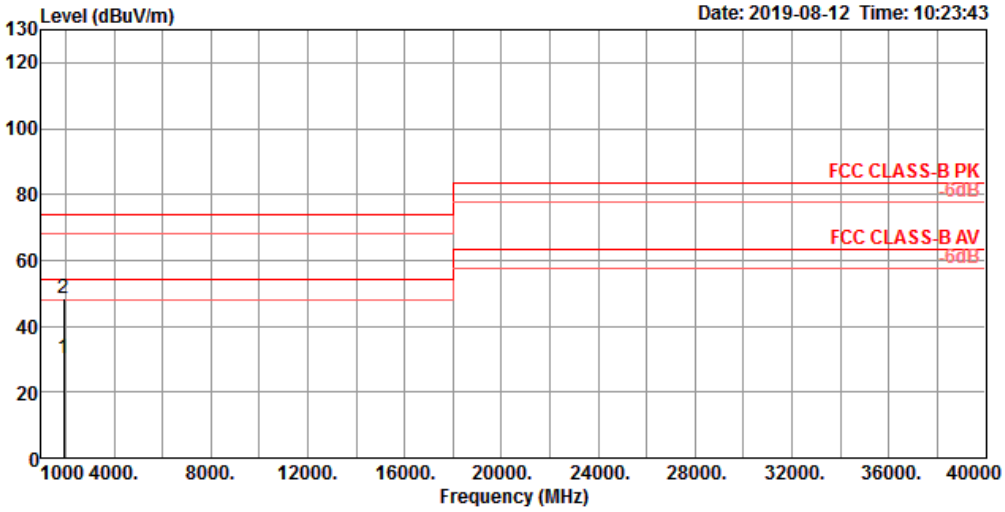
| Type | Freq | Level | Limit | Margin | Factor | Dist | Condition | Azimuth | Height | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dB) | (m) | | (°) | (m) | |
| PK | 11.55594G | 54.72 | 74.00 | -19.28 | 14.97 | 3 | Horizontal | 23 | 1.34 | - |
| AV | 11.55135G | 40.16 | 54.00 | -13.84 | 14.97 | 3 | Horizontal | 23 | 1.34 | - |
| PK | 17.32125G | 59.62 | 68.20 | -8.58 | 21.22 | 3 | Horizontal | 133 | 1.67 | - |

| RSE Co-location Result | | | |
|---|---|---|---|
| **Operating Mode** | 1 | **Polarization** | Horizontal |
| **Operating Function** | Normal Link | | |




| | Freq | Level | Limit Line | Over Limit | Read Level | Cable Loss | Antenna Factor | Preamp Factor | A/Pos | T/Pos | Remark | Pol/Phase |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | dB/m | dB | cm | deg | | |
| 1 | 1937.60 | 25.93 | 54.00 | -28.07 | 30.86 | 3.04 | 25.63 | 33.60 | 123 | 158 | Average | HORIZONTAL |
| 2 | 1937.63 | 47.62 | 74.00 | -26.38 | 52.55 | 3.04 | 25.63 | 33.60 | 123 | 158 | Peak | HORIZONTAL |

| RSE Co-location Result | | | |
|---|---|---|---|
| **Operating Mode** | 1 | **Polarization** | Vertical |
| **Operating Function** | Normal Link | | |




| | Freq | Level | Limit Line | Over Limit | Read Level | Cable Loss | Antenna Factor | Preamp Factor | A/Pos | T/Pos | Remark | Pol/Phase |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | dB/m | dB | cm | deg | | |
| 1 | 1937.58 | 30.07 | 54.00 | -23.93 | 35.00 | 3.04 | 25.63 | 33.60 | 127 | 192 | Average | VERTICAL |
| 2 | 1937.60 | 48.31 | 74.00 | -25.69 | 53.24 | 3.04 | 25.63 | 33.60 | 127 | 192 | Peak | VERTICAL |