# FCC RADIO TEST REPORT

| | | |
|---|---|---|
| FCC ID | : | PPQ-WP838 |
| Equipment | : | Access Point |
| Brand Name | : | LITE-ON |
| Model Name | : | WP838I, WP838I-BT, WP838E |
| Applicant | : | LITE-ON Technology Corp.<br>Bldg. C, 90, Chien 1 Rd., Chung-Ho, New Taipei City, 23585 Taiwan |
| Manufacturer | : | Lite-On Network Communication (Dongguan) Limited<br>30#Keji Rd.,Yin Hu Industrial Area,Qingxi Town,DongGuan City,Guangdong,China |
| Standard | : | 47 CFR FCC Part 15.407 |

The product was received on Jan. 10, 2014, and testing was started from May 04, 2017 and completed on Jan. 18, 2017. 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 |
|---|---|---|---|
| FR411023-11AB | 01 | Initial issue of report | May 28, 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 | Note1 |
| 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 | - |

Note1:
For PoE mode, the PoE is for measurement only, would not be marketed. It's not necessary to apply to AC Power Port Conducted emission test.
Note2:
From Sporton Project No.: 411023-06、411023-08 and 411023-10

**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: Vicky 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 | 1TX |
| 5.15-5.25GHz | 802.11n HT20 | 20 | 3TX |
| 5.15-5.25GHz | 802.11ac VHT20 | 20 | 3TX |
| 5.15-5.25GHz | 802.11n HT40 | 40 | 3TX |
| 5.15-5.25GHz | 802.11ac VHT40 | 40 | 3TX |
| 5.15-5.25GHz | 802.11ac VHT80 | 80 | 3TX |
| 5.725-5.85GHz | 802.11a | 20 | 1TX |
| 5.725-5.85GHz | 802.11n HT20 | 20 | 3TX |
| 5.725-5.85GHz | 802.11ac VHT20 | 20 | 3TX |
| 5.725-5.85GHz | 802.11n HT40 | 40 | 3TX |
| 5.725-5.85GHz | 802.11ac VHT40 | 40 | 3TX |
| 5.725-5.85GHz | 802.11ac VHT80 | 80 | 3TX |

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

**Internal antenna:**
**Model Name: WP838I, WP838I-BT / Type 1 Internal antenna (low gain)**

| Ant. | Brand | Model No. | Type | Connector | Antenna Gain | | Cable Loss | | True Gain (dBi) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2.4GHz | 5GHz | 2.4GHz | 5GHz | 2.4GHz | 5GHz |
| 1 | LITEON | WP838 AP | PCB | I-PEX | 3.5 | 6.5 | 0.2 | - | 3.3 | 6.5 |
| 2 | LITEON | WP838 AP | PCB | I-PEX | 6 | 5.8 | - | - | 6 | 5.8 |
| 3 | LITEON | WP838 AP | PCB | I-PEX | 5.4 | 6.6 | - | - | 5.4 | 6.6 |

**Model Name: WP838I, WP838I-BT / Type 2 Internal antenna (higher gain)**

| Ant. | Brand | P/N | Type | Connector | Gain (dBi) | |
|---|---|---|---|---|---|---|
| | | | | | 2.4GHz | 5GHz |
| 1 | Galtronics | 001174B2AD5F | Dipole | I-PEX | 6.36 | 6.31 |
| 2 | Galtronics | 001174B2AD5F | Dipole | I-PEX | 6.69 | 6.64 |
| 3 | Galtronics | 001174B2AD5F | Dipole | I-PEX | 4.78 | 6.04 |

**External antenna:**
**Model Name: WP838E / External antenna**

| Ant. | Brand | P/N | Type | Connector | Gain (dBi) | |
|---|---|---|---|---|---|---|
| | | | | | 2.4GHz | 5GHz |
| 1 | MAG.LAYERS | EDA-1713-25GR2-A7 | Dipole | SMA Male RP | 5 | 5 |
| 2 | MAG.LAYERS | EDA-1713-25GR2-A7 | Dipole | SMA Male RP | 5 | 5 |
| 3 | MAG.LAYERS | EDA-1713-25GR2-A7 | Dipole | SMA Male RP | 5 | 5 |

Note: The above information was declared by manufacturer.

**<For 2.4GHz Band>**
**For IEEE 802.11b/g mode (1TX/1RX):**
Only Ant. 1 could transmit/receive simultaneously.
**For IEEE 802.11n mode (3TX/3RX):**
Ant. 1, Ant. 2 and Ant. 3 could transmit/receive simultaneously.
**<For 5GHz Band>**
**For IEEE 802.11a mode (1TX/1RX):**
Only Ant. 1 could transmit/receive simultaneously.
**For IEEE 802.11n/ac mode (3TX/3RX):**
Ant. 1, Ant. 2 and Ant. 3 could transmit/receive simultaneously.

### 1.1.3 Mode Test Duty Cycle

**For Mode 1:**

| Mode | On Time (ms) | On+Off Time (ms) | Duty Cycle (%) | Duty Factor (dB) | 1/T Minimum VBW (kHz) |
|---|---|---|---|---|---|
| 802.11a | 2.015 | 2.116 | 95.21 | 0.21 | 0.50 |
| 802.11ac VHT20 | 1.890 | 2.030 | 93.10 | 0.31 | 0.53 |
| 802.11ac VHT40 | 0.927 | 1.000 | 92.70 | 0.33 | 1.08 |
| 802.11ac VHT80 | 0.449 | 0.515 | 87.18 | 0.60 | 2.23 |

**For Mode 2:**

| Mode | On Time (ms) | On+Off Time (ms) | Duty Cycle (%) | Duty Factor (dB) | 1/T Minimum VBW (kHz) |
|---|---|---|---|---|---|
| 802.11a | 2.010 | 2.030 | 99.01% | 0.04 | 0.01 |
| 802.11ac VHT20 | 1.904 | 2.040 | 93.33% | 0.30 | 0.53 |
| 802.11ac VHT40 | 0.930 | 1.009 | 92.17% | 0.35 | 1.08 |
| 802.11ac VHT80 | 0.440 | 0.499 | 88.18% | 0.55 | 2.27 |

**For Mode 3:**

| Mode | On Time (ms) | On+Off Time (ms) | Duty Cycle (%) | Duty Factor (dB) | 1/T Minimum VBW (kHz) |
|---|---|---|---|---|---|
| 802.11a | 2.015 | 2.116 | 95.21 | 0.21 | 0.50 |
| 802.11ac VHT20 | 1.890 | 2.030 | 93.10 | 0.31 | 0.53 |
| 802.11ac VHT40 | 0.927 | 1.000 | 92.70 | 0.33 | 1.08 |
| 802.11ac VHT80 | 0.449 | 0.515 | 87.18 | 0.60 | 2.23 |

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

### 1.1.4 EUT Operational Condition

| | | | | |
|---|---|---|---|---|
| **EUT Power Type** | From adapter or PoE | | | |
| **Beamforming Function** | ☐ | With beamforming | ☒ | Without beamforming |
| **Function** | ☐ | Outdoor P2M | ☒ | Indoor P2M |
| | ☐ | Fixed P2P | ☐ | Client |
| **Test Software Version** | ART2-GUI Version 2.3 | | | |

Note: The above information was declared by manufacturer.

### 1.1.5 Table for Multiple Listing

The EUT has three model numbers which are identical to each other in all aspects except for the following table:

| EUT | Model Name | Antenna | Description |
|---|---|---|---|
| 1 | WP838I | Internal antenna | All the models are identical; different models serve as marketing strategy. |
| 3 | WP838I-BT | | |
| 2 | WP838E | External antenna | - |

From the above models, WP838I and WP838E were selected as representative model for the test and their data was recorded in this report.

## 1.2 Testing Applied Standards

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

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

## 1.3 Testing Location Information

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

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

## 1.4 Measurement Uncertainty

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

| Test Items | Uncertainty | Remark |
|---|---|---|
| Conducted Emission (150kHz ~ 30MHz) | 3.2 dB | Confidence levels of 95% |
| Radiated Emission (30MHz ~ 1,000MHz) | 3.6 dB | Confidence levels of 95% |
| Radiated Emission (1GHz ~ 18GHz) | 3.7 dB | Confidence levels of 95% |
| Radiated Emission (18GHz ~ 40GHz) | 3.5 dB | Confidence levels of 95% |
| Conducted Emission | 1.7 dB | Confidence levels of 95% |

# 2 Test Configuration of EUT

## 2.1 Test Channel Mode

**For Mode 1:**

| Mode | Power Setting |
|---|---|
| 802.11a_(6Mbps)_1TX | - |
| 5180MHz | 20.5 |
| 5200MHz | 24.5 |
| 5240MHz | 25 |
| 5745MHz | 25 |
| 5785MHz | 25 |
| 5825MHz | 25 |
| 802.11ac VHT20_Nss1,(MCS0)_3TX | - |
| 5180MHz | 18 |
| 5200MHz | 20.5 |
| 5240MHz | 20 |
| 5745MHz | 25 |
| 5785MHz | 25 |
| 5825MHz | 25 |
| 802.11ac VHT40_Nss1,(MCS0)_3TX | - |
| 5190MHz | 15.5 |
| 5230MHz | 21.5 |
| 5755MHz | 25 |
| 5795MHz | 25 |
| 802.11ac VHT80_Nss1,(MCS0)_3TX | - |
| 5210MHz | 12 |
| 5775MHz | 23 |

**For Mode 2:**

| Mode | Power Setting |
|---|---|
| 802.11a_(6Mbps)_1TX | - |
| 5180MHz | 16 |
| 5200MHz | 22.5 |
| 5240MHz | 21.5 |
| 5745MHz | 21 |
| 5785MHz | 20.5 |
| 5825MHz | 20.5 |
| 802.11ac VHT20_Nss1,(MCS0)_3TX | - |
| 5180MHz | 16.5 |
| 5200MHz | 19 |
| 5240MHz | 19 |
| 5745MHz | 22 |
| 5785MHz | 21.5 |
| 5825MHz | 21.5 |
| 802.11ac VHT40_Nss1,(MCS0)_3TX | - |
| 5190MHz | 13.5 |
| 5230MHz | 19.5 |
| 5755MHz | 21 |
| 5795MHz | 21 |
| 802.11ac VHT80_Nss1,(MCS0)_3TX | - |
| 5210MHz | 10.5 |
| 5775MHz | 19.5 |

**For Mode 3:**

| Mode | Power Setting |
|---|---|
| 802.11a_(6Mbps)_1TX | - |
| 5180MHz | 19.5 |
| 5200MHz | 23.5 |
| 5240MHz | 25 |
| 5745MHz | 25 |
| 5785MHz | 25 |
| 5825MHz | 25 |
| 802.11ac VHT20_Nss1,(MCS0)_3TX | - |
| 5180MHz | 19 |
| 5200MHz | 22 |
| 5240MHz | 23 |
| 5745MHz | 25 |
| 5785MHz | 25 |
| 5825MHz | 25 |
| 802.11ac VHT40_Nss1,(MCS0)_3TX | - |
| 5190MHz | 16.5 |
| 5230MHz | 21 |
| 5755MHz | 25 |
| 5795MHz | 25 |
| 802.11ac VHT80_Nss1,(MCS0)_3TX | - |
| 5210MHz | 13 |
| 5775MHz | 21 |

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.

## 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 | EUT 1 + Type 1 antenna + Adapter |
| 2 | EUT 1 + Type 2 antenna + Adapter |
| 3 | EUT 2 + Adapter |
| For operating mode 2 is the worst case and it was record in this test report. | |

| The Worst Case Mode for Following Conformance Tests | |
|---|---|
| **Tests Item** | Maximum Conducted Output Power<br>Peak Power Spectral Density |
| **Test Condition** | Conducted measurement at transmit chains |
| **Operating Mode** | CTX |
| 1 | EUT 1 + Type 1 antenna |
| 2 | EUT 1 + Type 2 antenna |
| 3 | EUT 2 |

| The Worst Case Mode for Following Conformance Tests | |
|---|---|
| **Tests Item** | Emission Bandwidth<br>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. |
| 1 | EUT 1 in Z axis + Type 1 antenna + Adapter |
| 2 | EUT 1 in Y axis + Type 1 antenna + Adapter |
| Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode. | |
| 3 | EUT 1 in Z axis + Type 1 antenna + PoE |
| Mode 3 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4~5 will follow this same test mode. | |
| 4 | EUT 1 in Z axis + Type 2 antenna + PoE |
| 5 | EUT 2 in Z axis + PoE |
| For operating mode 5 is the worst case and it was record in this test report. | |

| Operating Mode > 1GHz | CTX |
|---|---|
| The EUT can be placed in Y-axis and Z-axis. After evaluating, Y-axis was the worst case, so it's recorded in this report. | |
| 1 | EUT 1 in Y axis + Type 1 antenna |
| 2 | EUT 1 in Y axis + Type 2 antenna |
| 3 | EUT 2 in Y axis |

| The Worst Case Mode for Following Conformance Tests | |
|---|---|
| **Tests Item** | Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation |
| **Operating Mode** | |
| 1 | EUT 1 + Type 1 antenna-WLAN 2.4GHz+WLAN 5GHz |
| 2 | EUT 1 + Type 2 antenna-WLAN 2.4GHz+WLAN 5GHz |
| 3 | EUT 2-WLAN 2.4GHz+WLAN 5GHz |
| Refer to Sporton Test Report No.: FA411023-11 for Co-location RF Exposure Evaluation. | |

Note: The PoE below is for measurement only, would not be marketed.

| Support Unit | Brand | Model | FCC ID |
|---|---|---|---|
| PoE | LITEON | LGS528P | DoC |

## 2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

## 2.4 Accessories

| Accessories | | | |
|---|---|---|---|
| **Equipment Name** | **Brand Name** | **Model Name** | **Rating** |
| Adapter | APD | WA-24Q12R | Input: 100-240Vac, 50-60Hz, 0.7AMax.<br>Output: 12Vdc, 2A |
| **Other** | | | |
| Plug*1 | | | |

## 2.5 Support Equipment

**For AC Conduction:**

| Support Equipment | | | | |
|---|---|---|---|---|
| **No.** | **Equipment** | **Brand Name** | **Model Name** | **FCC ID** |
| A | NB | DELL | E6430 | DoC |
| B | NB | DELL | E6430 | DoC |
| C | NB | DELL | E6430 | DoC |
| D | NB | DELL | E6430 | DoC |
| E | Flash disk3.0 | Transcend | 639205 7755 | DoC |

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

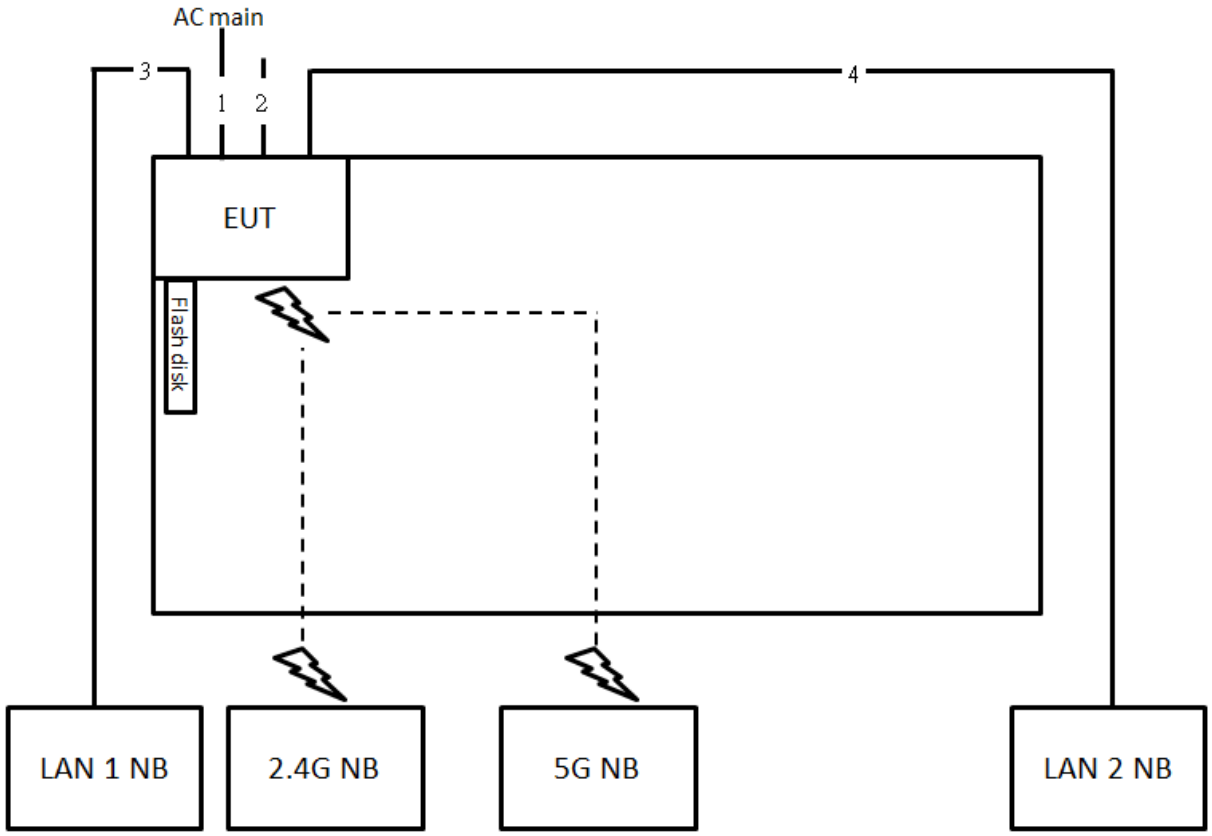
| Support Equipment | | | | |
|---|---|---|---|---|
| **No.** | **Equipment** | **Brand Name** | **Model Name** | **FCC ID** |
| A | NB | DELL | E4300 | DoC |
| B | NB | DELL | E4300 | DoC |
| C | NB | Apple | Mac Book | DoC |
| D | NB | Apple | Mac Book | DoC |
| E | Flash disk | Silicon Power | Touch 835 | DoC |
| F | PoE | LITEON | LGS528P | DoC |

**For Radiated (above 1GHz) and RF Conducted:**

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

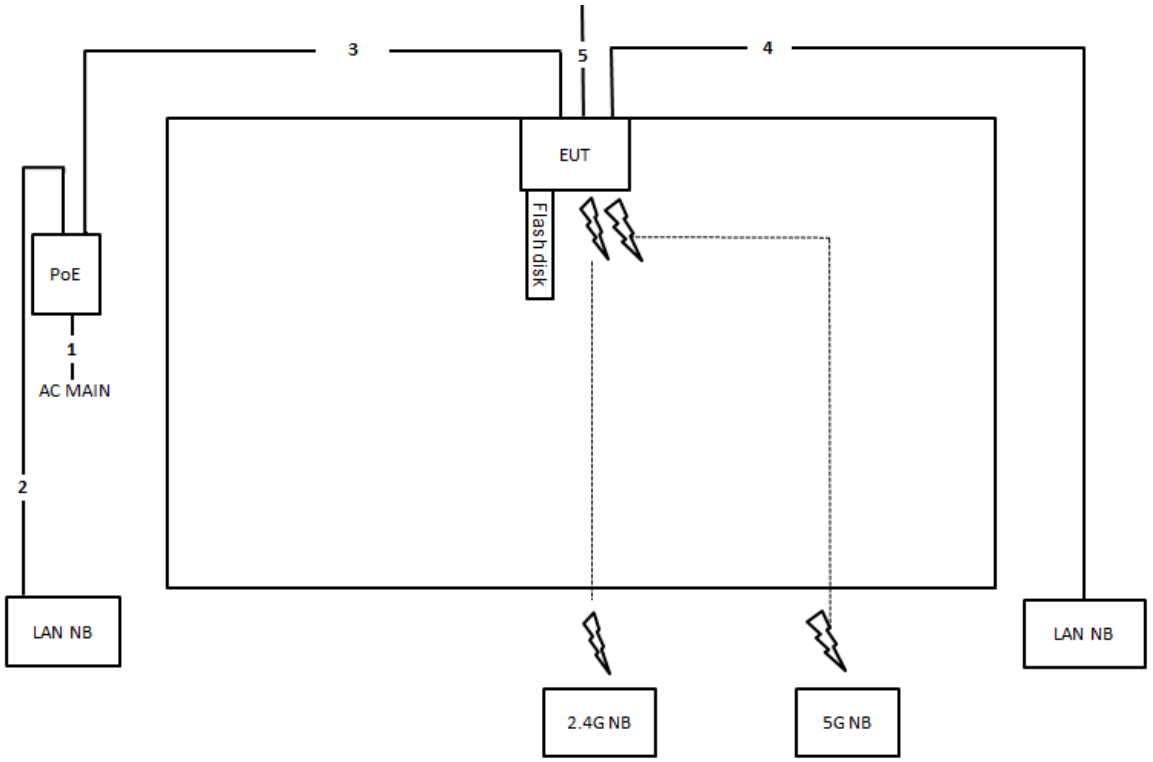
## 2.6 Test Setup Diagram

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




| Item | Connection | Shielded | Length |
|---|---|---|---|
| 1 | Power cable | No | 1.5m |
| 2 | Console cable | Yes | 1.5m |
| 3 | RJ-45 cable | No | 10m |
| 4 | RJ-45 cable | No | 10m |

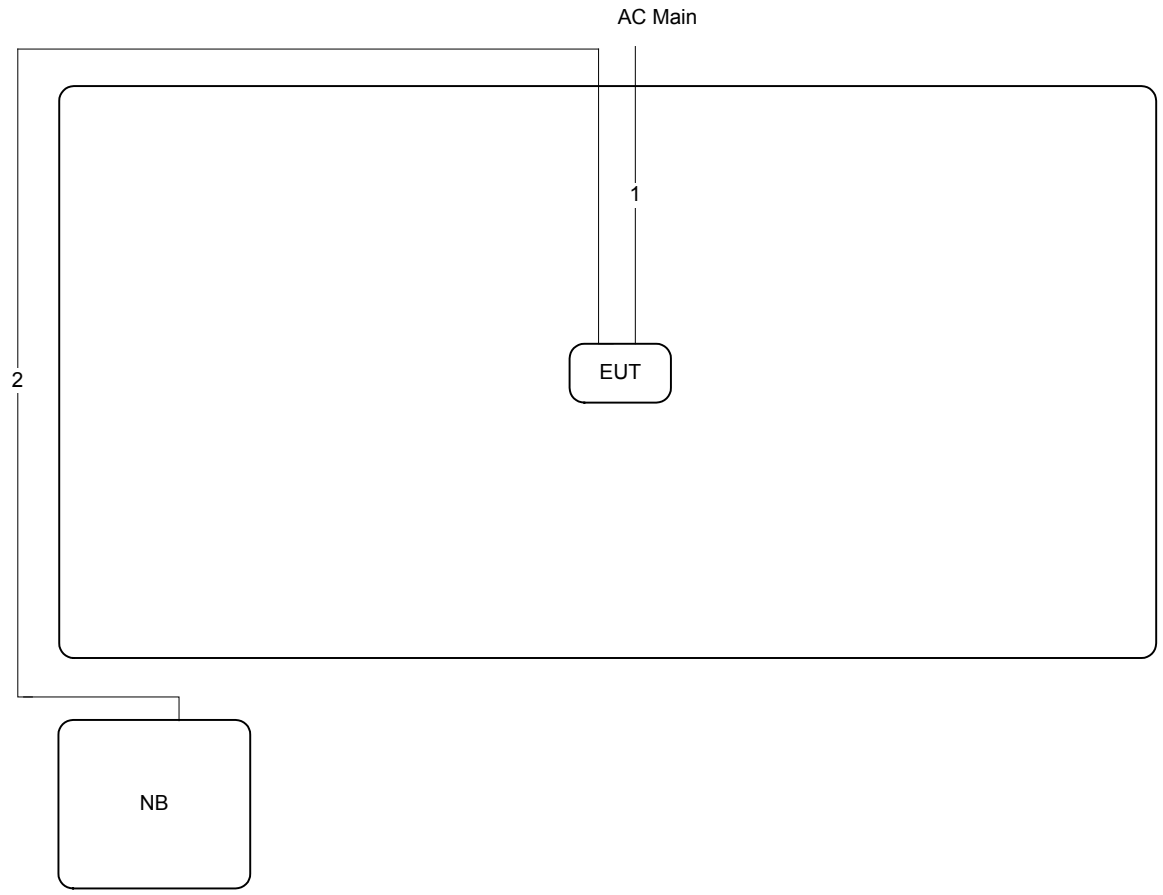
## Test Setup Diagram - Radiated Test < 1GHz




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

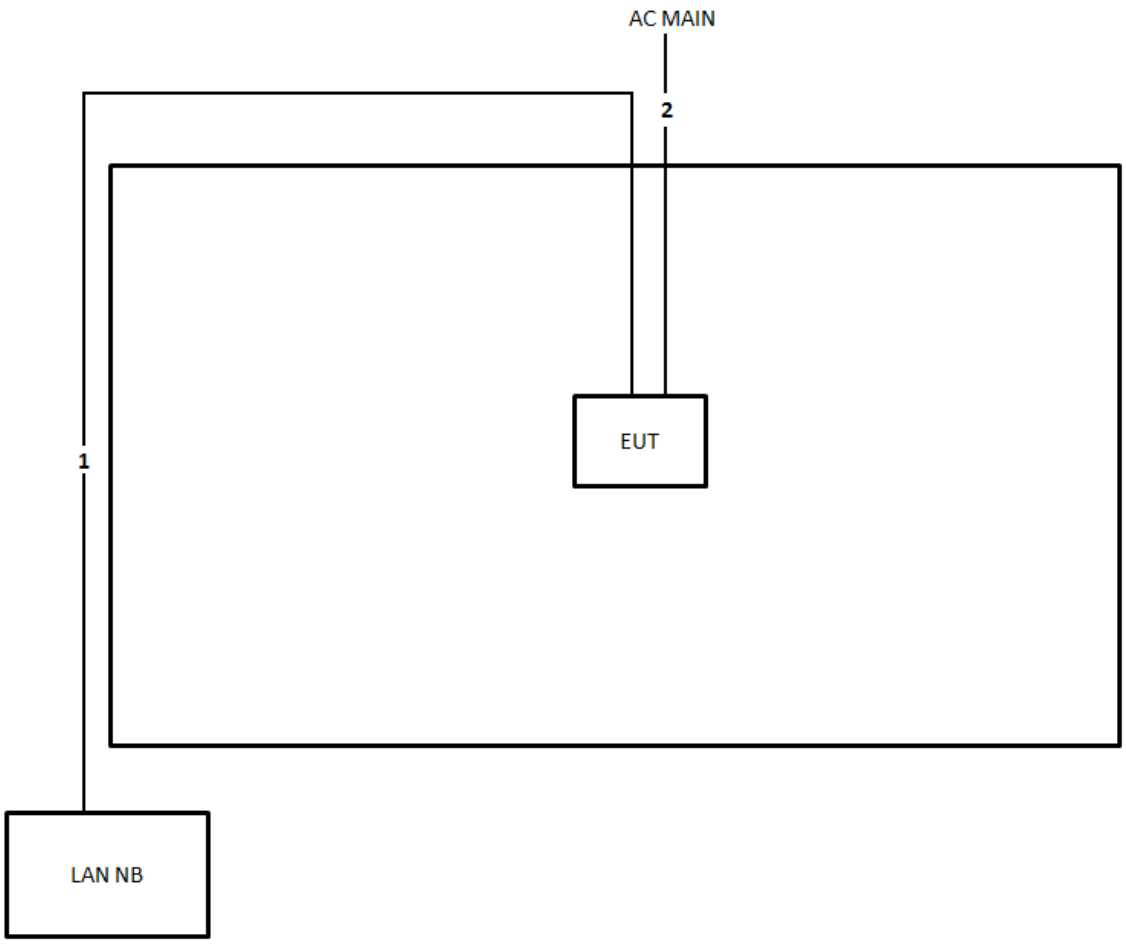
**Test Setup Diagram - Radiated Test > 1GHz**

**For Mode 1 and Mode 3:**




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

**For Mode 2:**




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

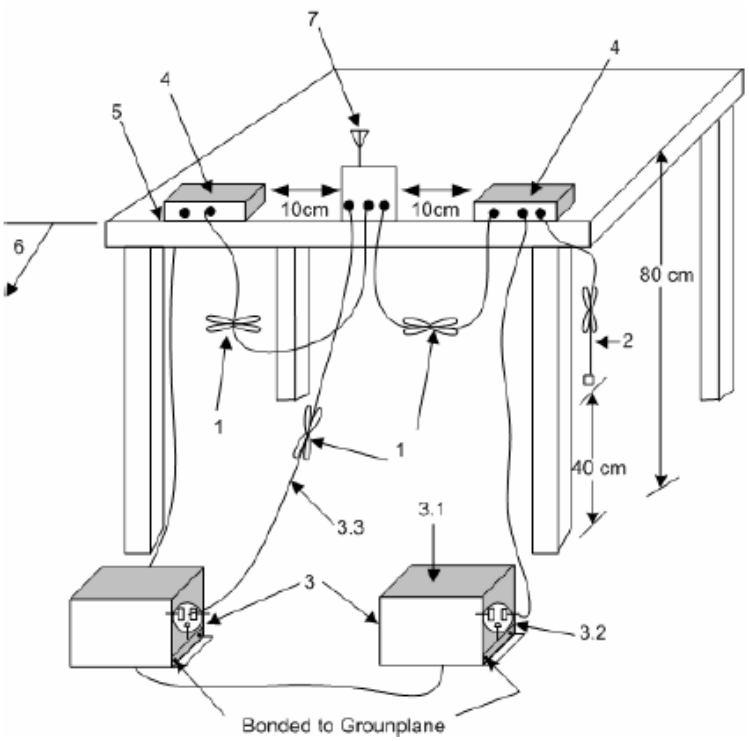
Refer a test equipment and calibration data table in this test report.

### 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

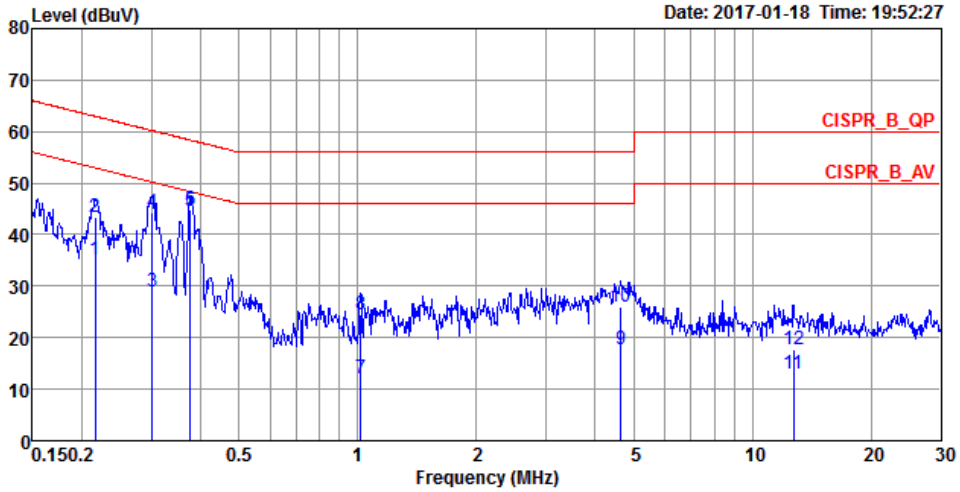
**AC Power-line Conducted Emissions**




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.

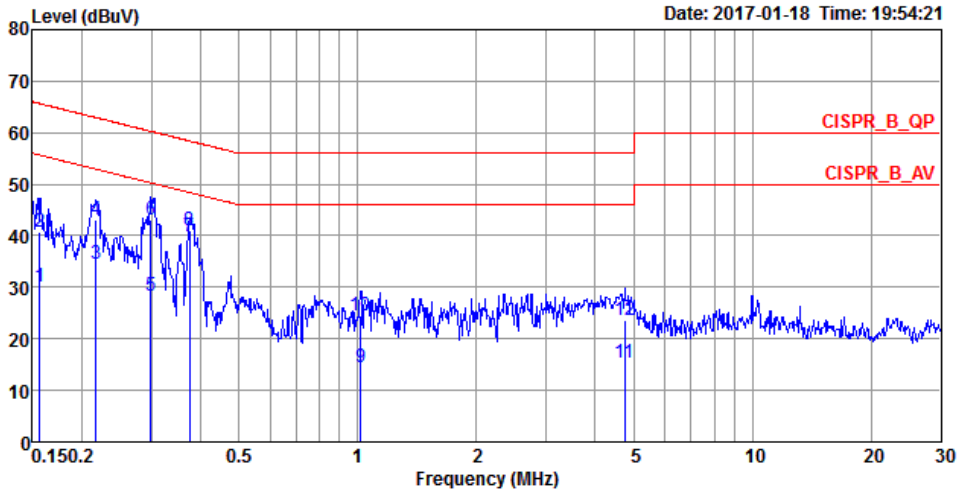
### 3.1.5 Test Result of AC Power-line Conducted Emissions

| Temperature | 23℃ | Humidity | 56% |
|---|---|---|---|
| Test Engineer | Hank Yang | Phase | Line |
| Configuration | Normal Link | Test Mode | Mode 2 |




| | Freq | Level | Over Limit | Limit Line | Read Level | LISN Factor | Cable Loss | Pol/Phase | Remark |
|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | dB | | |
| 1 | 0.2162 | 35.22 | -17.74 | 52.96 | 25.13 | 9.92 | 0.17 | LINE | Average |
| 2 | 0.2162 | 43.54 | -19.42 | 62.96 | 33.45 | 9.92 | 0.17 | LINE | QP |
| 3 | 0.3019 | 28.81 | -21.38 | 50.19 | 18.81 | 9.92 | 0.08 | LINE | Average |
| 4 | 0.3019 | 44.17 | -16.02 | 60.19 | 34.17 | 9.92 | 0.08 | LINE | QP |
| 5 | 0.3771 | 44.51 | -3.83 | 48.34 | 34.56 | 9.92 | 0.03 | LINE | Average |
| 6 | 0.3771 | 45.01 | -13.33 | 58.34 | 35.06 | 9.92 | 0.03 | LINE | QP |
| 7 | 1.0157 | 12.13 | -33.87 | 46.00 | 1.47 | 9.94 | 0.72 | LINE | Average |
| 8 | 1.0157 | 24.46 | -31.54 | 56.00 | 13.80 | 9.94 | 0.72 | LINE | QP |
| 9 | 4.6469 | 17.86 | -28.14 | 46.00 | 7.75 | 10.01 | 0.10 | LINE | Average |
| 10 | 4.6469 | 25.95 | -30.05 | 56.00 | 15.84 | 10.01 | 0.10 | LINE | QP |
| 11 | 12.7161 | 13.00 | -37.00 | 50.00 | 2.62 | 10.19 | 0.19 | LINE | Average |
| 12 | 12.7161 | 17.79 | -42.21 | 60.00 | 7.41 | 10.19 | 0.19 | LINE | QP |

| Temperature | 23℃ | Humidity | 56% |
|---|---|---|---|
| Test Engineer | Hank Yang | Phase | Neutral |
| Configuration | Normal Link | Test Mode | Mode 2 |




| | Freq | Level | Over Limit | Limit Line | Read Level | LISN Factor | Cable Loss | Pol/Phase | Remark |
|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | dB | | |
| 1 | 0.1565 | 30.03 | -25.62 | 55.65 | 19.84 | 10.02 | 0.17 | NEUTRAL | Average |
| 2 | 0.1565 | 40.85 | -24.80 | 65.65 | 30.66 | 10.02 | 0.17 | NEUTRAL | QP |
| 3 | 0.2174 | 34.62 | -18.30 | 52.92 | 24.53 | 9.92 | 0.17 | NEUTRAL | Average |
| 4 | 0.2174 | 43.23 | -19.69 | 62.92 | 33.14 | 9.92 | 0.17 | NEUTRAL | QP |
| 5 | 0.2987 | 28.48 | -21.80 | 50.28 | 18.47 | 9.92 | 0.09 | NEUTRAL | Average |
| 6 | 0.2987 | 43.20 | -17.08 | 60.28 | 33.19 | 9.92 | 0.09 | NEUTRAL | QP |
| 7 | 0.3751 | 39.80 | -8.59 | 48.39 | 29.85 | 9.92 | 0.03 | NEUTRAL | Average |
| 8 | 0.3751 | 41.09 | -17.30 | 58.39 | 31.14 | 9.92 | 0.03 | NEUTRAL | QP |
| 9 | 1.0157 | 14.52 | -31.48 | 46.00 | 3.86 | 9.94 | 0.72 | NEUTRAL | Average |
| 10 | 1.0157 | 24.48 | -31.52 | 56.00 | 13.82 | 9.94 | 0.72 | NEUTRAL | QP |
| 11 | 4.7464 | 15.48 | -30.52 | 46.00 | 5.37 | 10.01 | 0.10 | NEUTRAL | Average |
| 12 | 4.7464 | 23.64 | -32.36 | 56.00 | 13.53 | 10.01 | 0.10 | NEUTRAL | QP |

Note:
Level = Read Level + LISN Factor + Cable Loss.

# 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

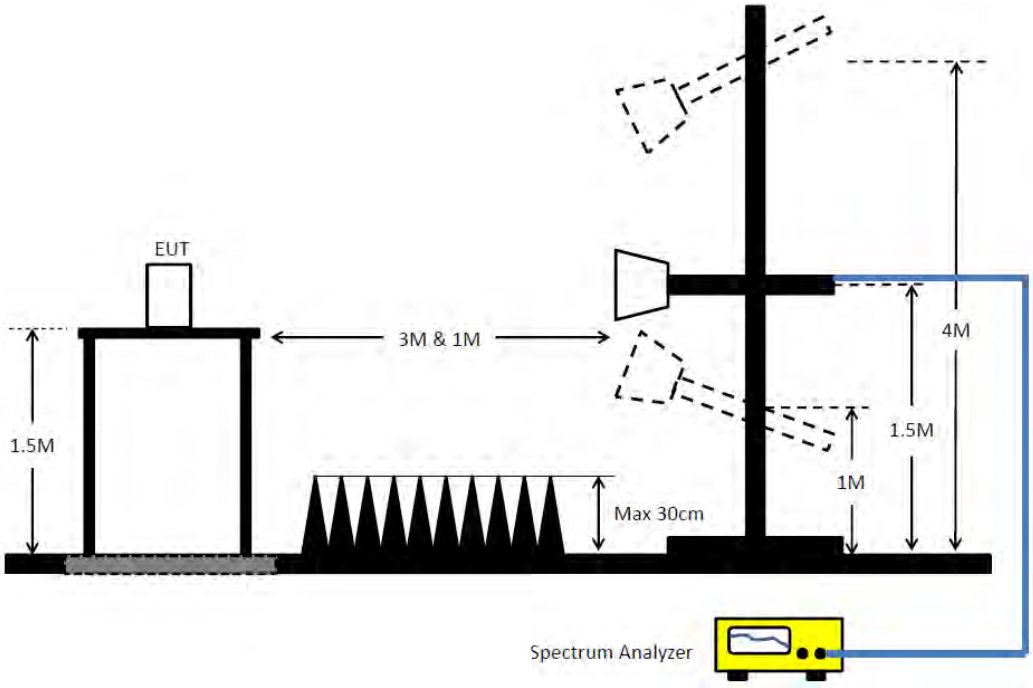
Refer a test equipment and calibration data table in this test report.

## 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

| Temperature | 24℃ | Humidity | 60% |
|---|---|---|---|
| Test Engineer | Clemens Fang | Test Mode | Mode 1 |

| Mode | Frequency | 26dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) |
|---|---|---|---|
| 802.11a | 5180 MHz | 20.78 | 16.50 |
| | 5200 MHz | 35.91 | 20.67 |
| | 5240 MHz | 32.26 | 18.76 |
| | 5745 MHz | 33.30 | 24.23 |
| | 5785 MHz | 33.30 | 23.01 |
| | 5825 MHz | 33.13 | 18.41 |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz | 22.00 | 18.15 |
| | 5200 MHz | 23.30 | 17.97 |
| | 5240 MHz | 21.48 | 17.71 |
| | 5745 MHz | 42.96 | 26.83 |
| | 5785 MHz | 42.78 | 26.14 |
| | 5825 MHz | 31.83 | 18.32 |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz | 42.46 | 36.18 |
| | 5230 MHz | 46.81 | 36.76 |
| | 5755 MHz | 75.22 | 43.56 |
| | 5795 MHz | 67.25 | 38.93 |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz | 84.93 | 75.25 |
| | 5775 MHz | 121.16 | 75.54 |

| Mode | Frequency | 6dB Bandwidth (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 802.11a | 5745 MHz | 15.54 | 500 | **Complies** |
| | 5785 MHz | 12.64 | 500 | **Complies** |
| | 5825 MHz | 14.78 | 500 | **Complies** |
| 802.11ac MCS0/Nss1 VHT20 | 5745 MHz | 14.44 | 500 | **Complies** |
| | 5785 MHz | 16.41 | 500 | **Complies** |
| | 5825 MHz | 15.71 | 500 | **Complies** |
| 802.11ac MCS0/Nss1 VHT40 | 5755 MHz | 34.44 | 500 | **Complies** |
| | 5795 MHz | 30.49 | 500 | **Complies** |
| 802.11ac MCS0/Nss1 VHT80 | 5775 MHz | 70.15 | 500 | **Complies** |

| Temperature | 24℃ | Humidity | 60% |
|---|---|---|---|
| Test Engineer | Serway Li | Test Mode | Mode 2 |

| Mode | Frequency | 26dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) |
|---|---|---|---|
| 802.11a | 5180 MHz | 22.09 | 16.76 |
| | 5200 MHz | 38.70 | 21.53 |
| | 5240 MHz | 35.74 | 18.67 |
| | 5745 MHz | 37.48 | 20.67 |
| | 5785 MHz | 37.04 | 20.06 |
| | 5825 MHz | 27.91 | 17.11 |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz | 21.22 | 17.71 |
| | 5200 MHz | 24.00 | 18.41 |
| | 5240 MHz | 24.78 | 18.50 |
| | 5745 MHz | 28.35 | 21.36 |
| | 5785 MHz | 27.57 | 20.67 |
| | 5825 MHz | 26.44 | 18.67 |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz | 41.30 | 36.04 |
| | 5230 MHz | 42.32 | 36.04 |
| | 5755 MHz | 67.25 | 38.64 |
| | 5795 MHz | 61.30 | 38.21 |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz | 88.12 | 74.39 |
| | 5775 MHz | 92.46 | 76.12 |

| Mode | Frequency | 6dB Bandwidth (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 802.11a | 5745 MHz | 15.54 | 500 | **Complies** |
| | 5785 MHz | 12.64 | 500 | **Complies** |
| | 5825 MHz | 14.78 | 500 | **Complies** |
| 802.11ac MCS0/Nss1 VHT20 | 5745 MHz | 14.44 | 500 | **Complies** |
| | 5785 MHz | 16.41 | 500 | **Complies** |
| | 5825 MHz | 15.71 | 500 | **Complies** |
| 802.11ac MCS0/Nss1 VHT40 | 5755 MHz | 34.44 | 500 | **Complies** |
| | 5795 MHz | 30.49 | 500 | **Complies** |
| 802.11ac MCS0/Nss1 VHT80 | 5775 MHz | 70.15 | 500 | **Complies** |

| Temperature | 24℃ | Humidity | 60% |
|---|---|---|---|
| Test Engineer | Clemens Fang | Test Mode | Mode 3 |

| Mode | Frequency | 26dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) |
|---|---|---|---|
| 802.11a | 5180 MHz | 19.57 | 16.67 |
| | 5200 MHz | 32.52 | 17.97 |
| | 5240 MHz | 32.78 | 19.54 |
| | 5745 MHz | 36.61 | 25.18 |
| | 5785 MHz | 33.30 | 23.36 |
| | 5825 MHz | 32.96 | 18.32 |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz | 22.09 | 18.15 |
| | 5200 MHz | 30.78 | 18.32 |
| | 5240 MHz | 40.44 | 19.54 |
| | 5745 MHz | 42.09 | 26.48 |
| | 5785 MHz | 41.57 | 24.40 |
| | 5825 MHz | 32.35 | 17.89 |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz | 41.74 | 36.32 |
| | 5230 MHz | 45.51 | 37.19 |
| | 5755 MHz | 82.17 | 44.43 |
| | 5795 MHz | 81.74 | 41.97 |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz | 83.19 | 74.96 |
| | 5775 MHz | 87.83 | 75.25 |

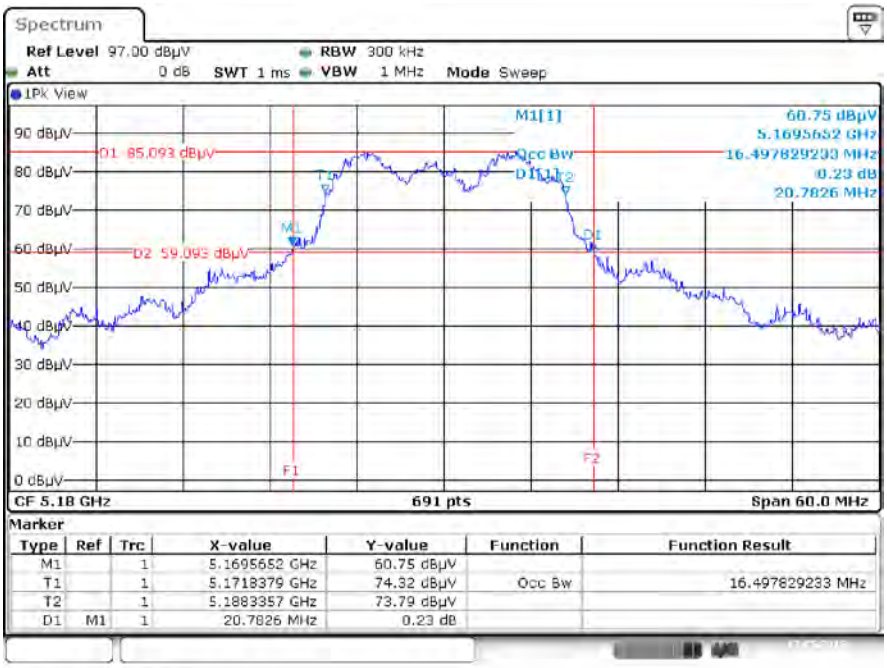
| Mode | Frequency | 6dB Bandwidth (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 802.11a | 5745 MHz | 11.42 | 500 | **Complies** |
| | 5785 MHz | 14.67 | 500 | **Complies** |
| | 5825 MHz | 14.55 | 500 | **Complies** |
| 802.11ac MCS0/Nss1 VHT20 | 5745 MHz | 5.10 | 500 | **Complies** |
| | 5785 MHz | 16.41 | 500 | **Complies** |
| | 5825 MHz | 14.90 | 500 | **Complies** |
| 802.11ac MCS0/Nss1 VHT40 | 5755 MHz | 34.44 | 500 | **Complies** |
| | 5795 MHz | 32.70 | 500 | **Complies** |
| 802.11ac MCS0/Nss1 VHT80 | 5775 MHz | 70.73 | 500 | **Complies** |

Note: All the test values were listed in the report.

For plots, only the channel with worse result was shown.

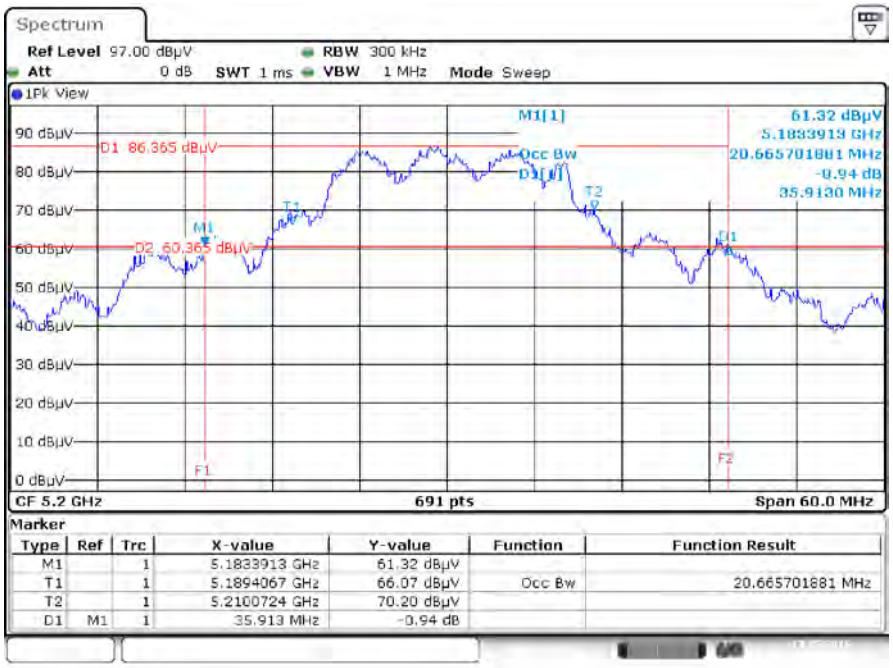
**For Mode 1:**

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5180 MHz**



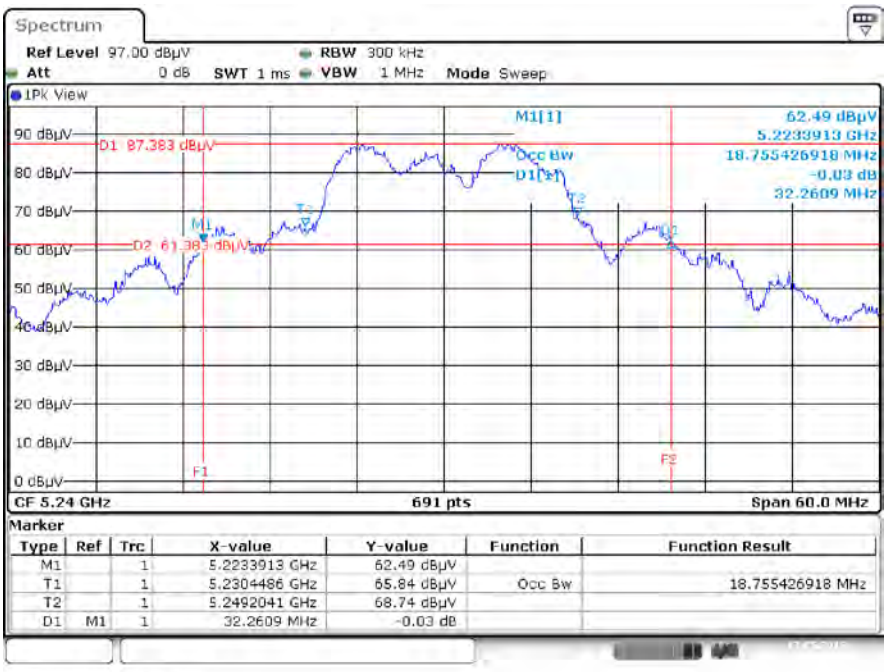

Date: 17.MAY.2016 19:19:56

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5200 MHz**



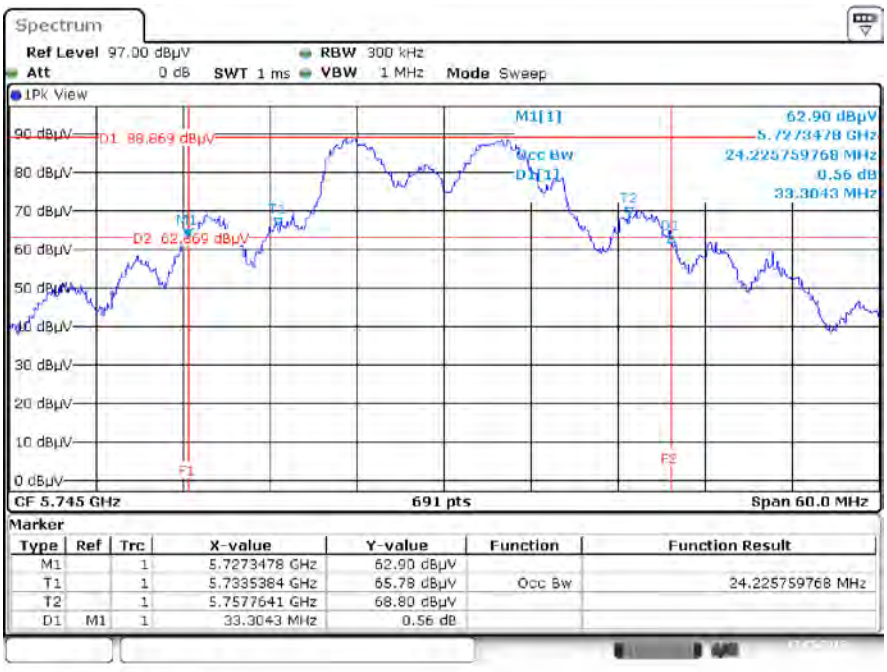

Date: 17.MAY.2016 19:26:35

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5240 MHz**



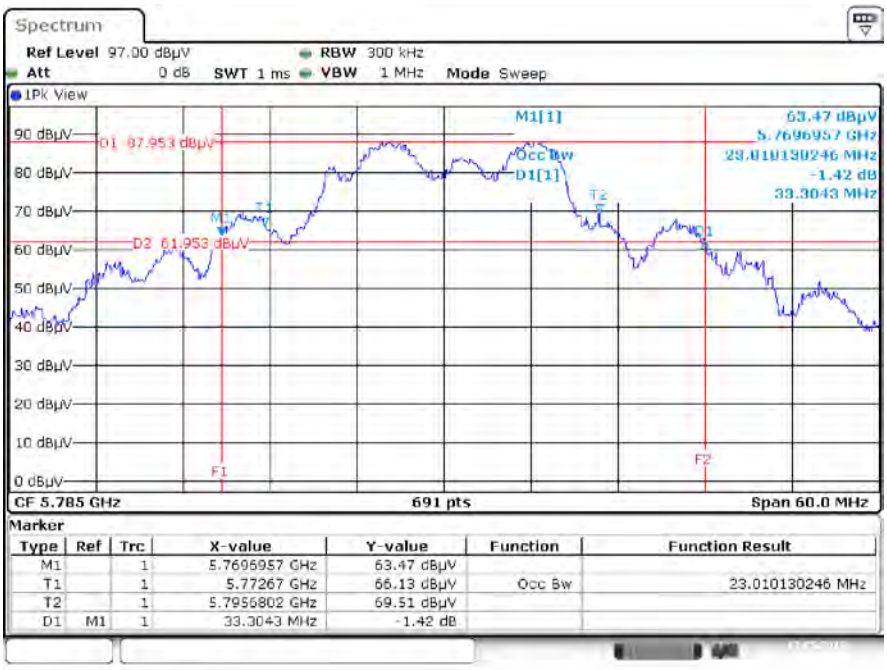

Date: 17.MAY.2016 19:25:51

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5745 MHz**



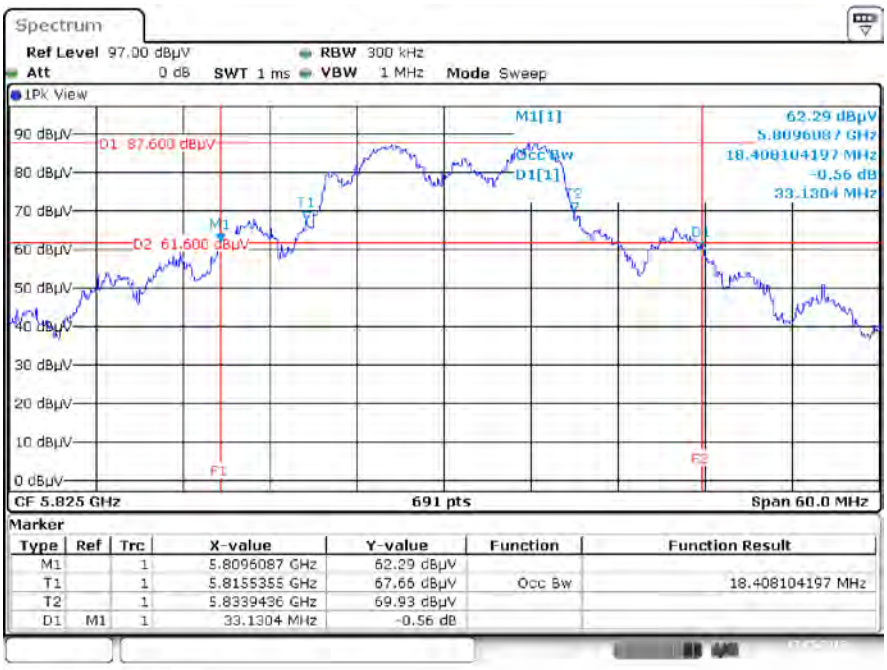

Date: 17.MAY.2016 19:27:51

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5785 MHz**




Date: 17.MAY.2016 19:28:34

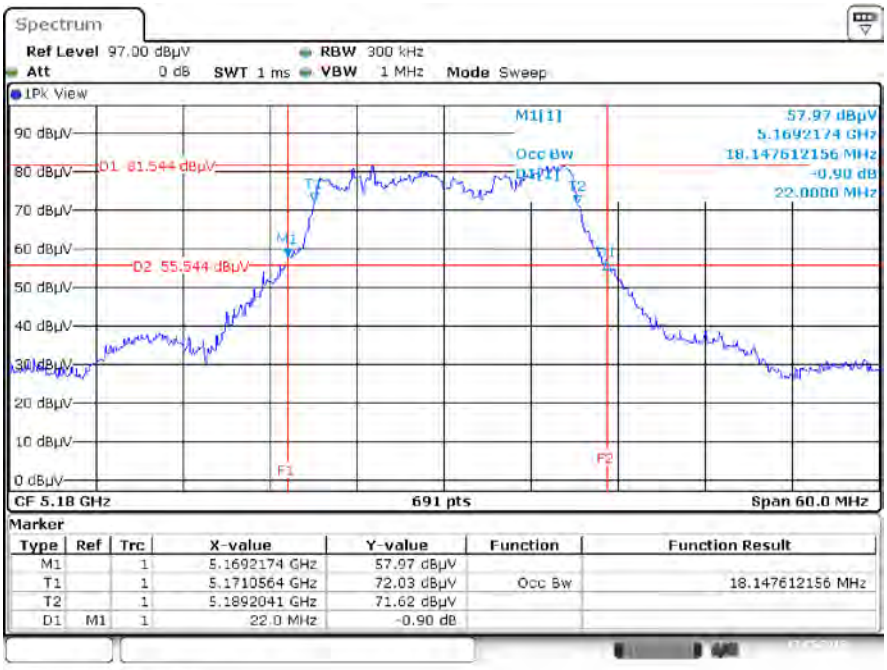
**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5825 MHz**




Date: 17.MAY.2016 19:29:04

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

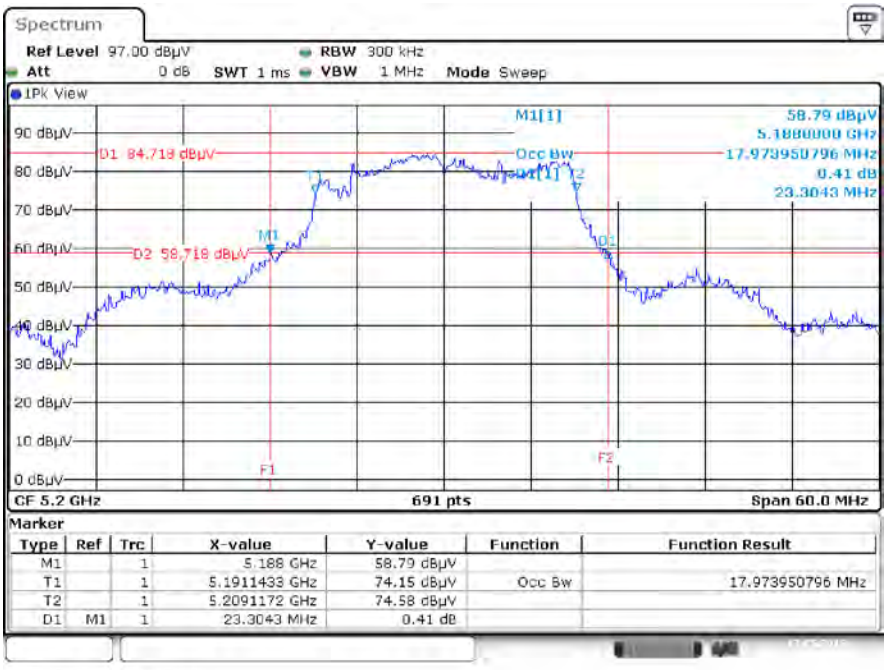
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5180 MHz**




Date: 17.MAY.2016 19:30:03

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

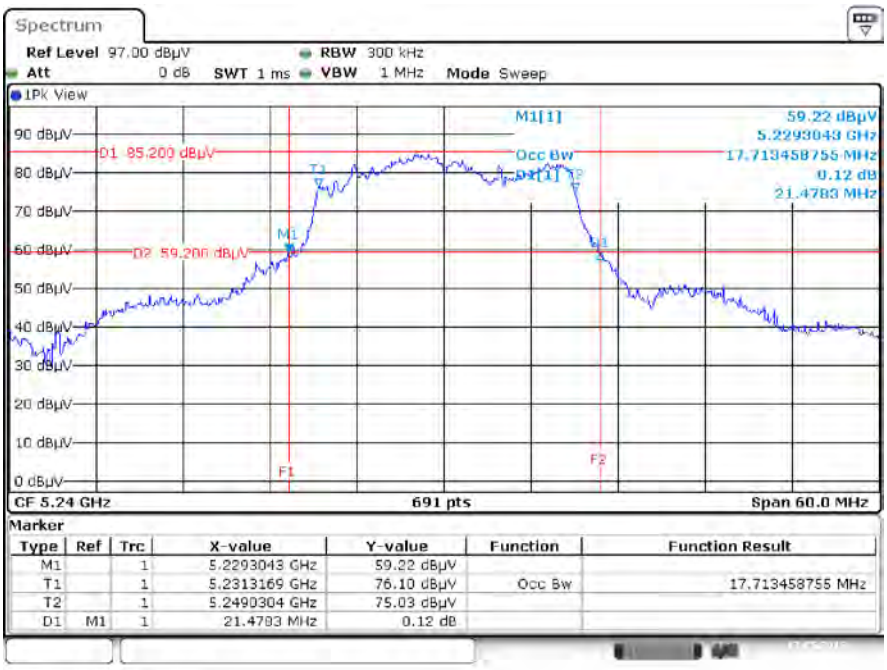
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5200 MHz**




Date: 17.MAY.2016 19:31:10

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

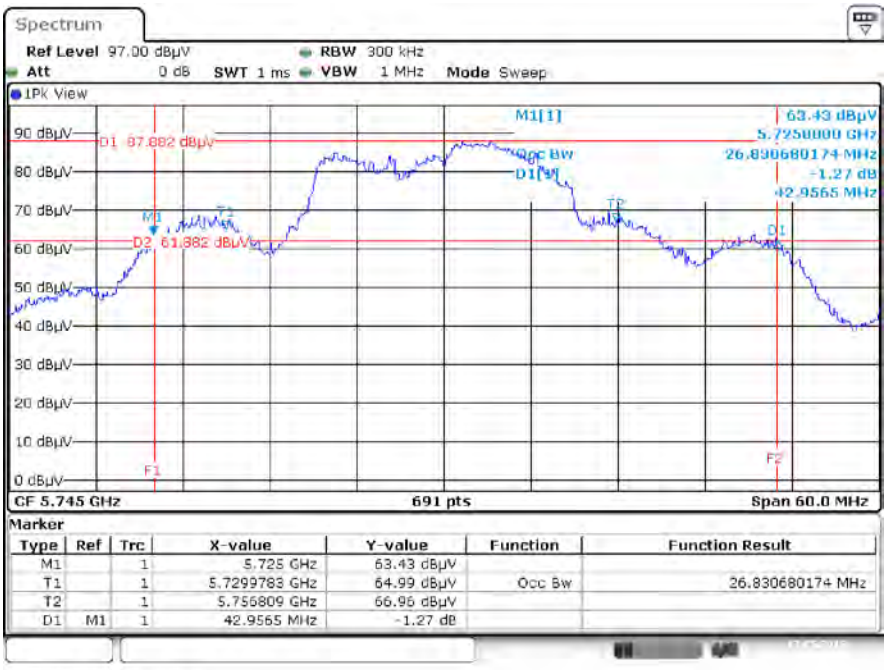
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5240 MHz**




Date: 17.MAY.2016 19:32:07

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

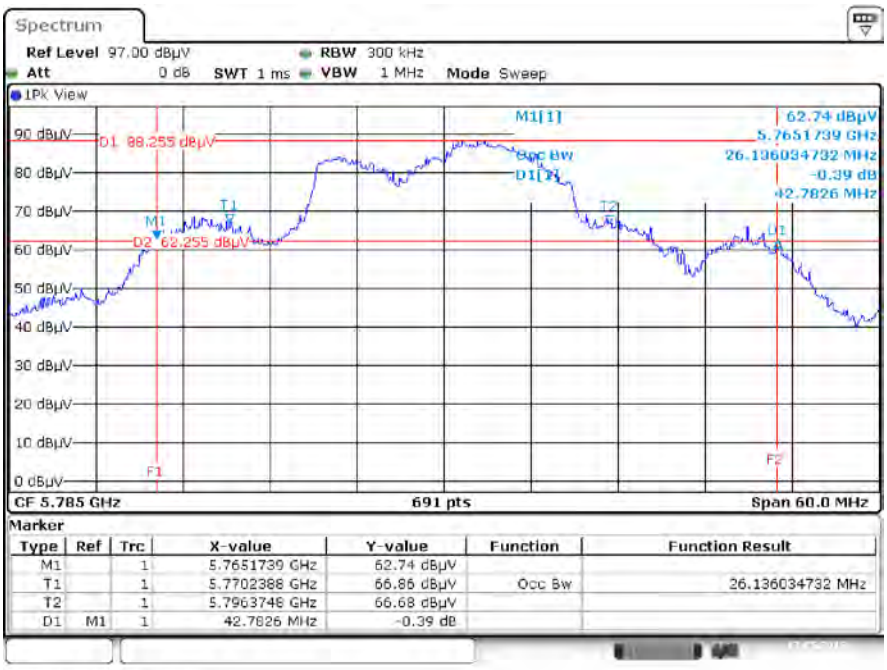
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5745 MHz**




Date: 17.MAY.2016 19:32:49

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

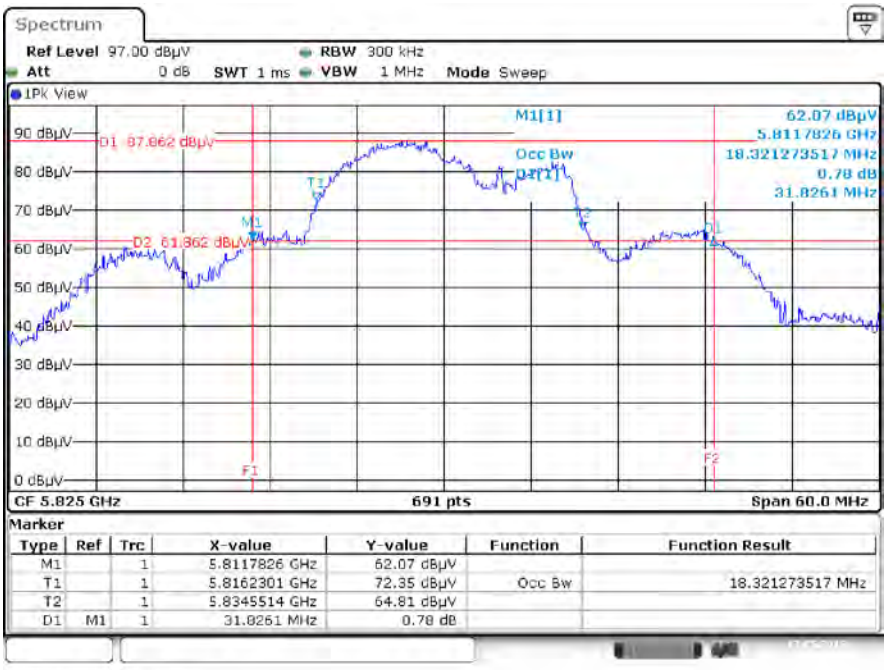
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5785 MHz**




Date: 17.MAY.2016 19:33:24

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

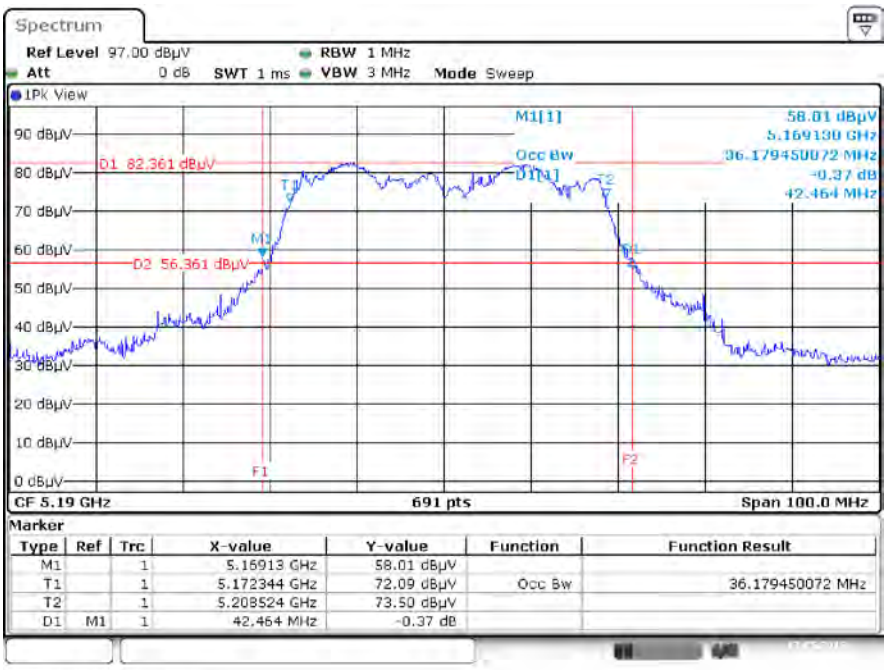
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5825 MHz**




Date: 17.MAY.2016 19:33:56

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

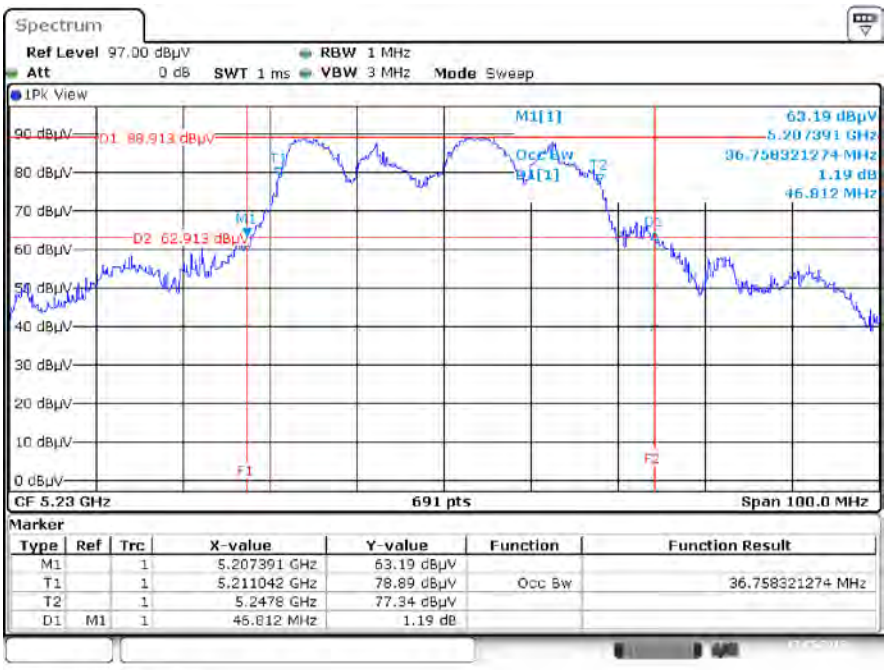
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5190 MHz**




Date: 17.MAY.2016 19:34:37

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

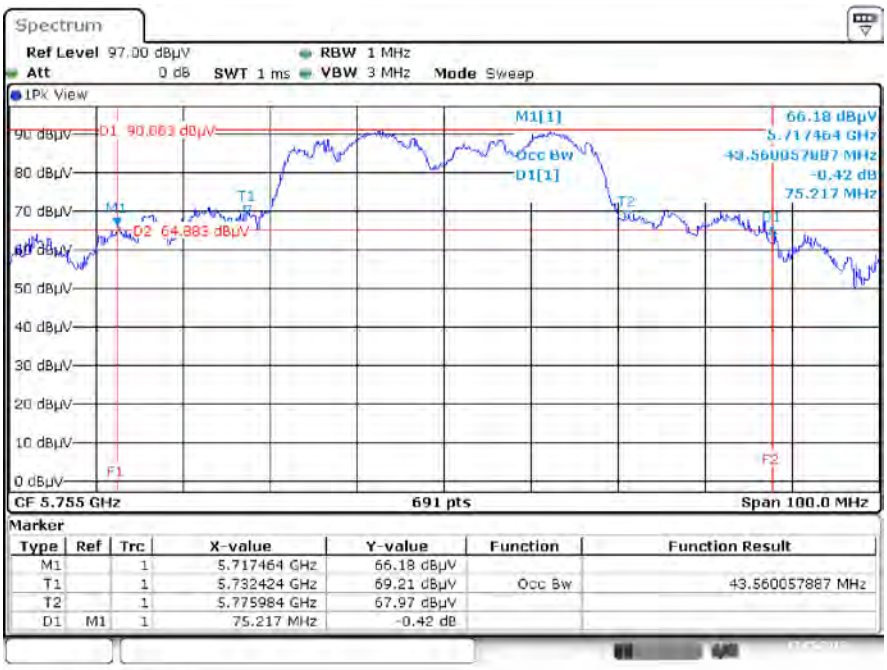
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5230 MHz**




Date: 17.MAY.2016 19:35:07

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

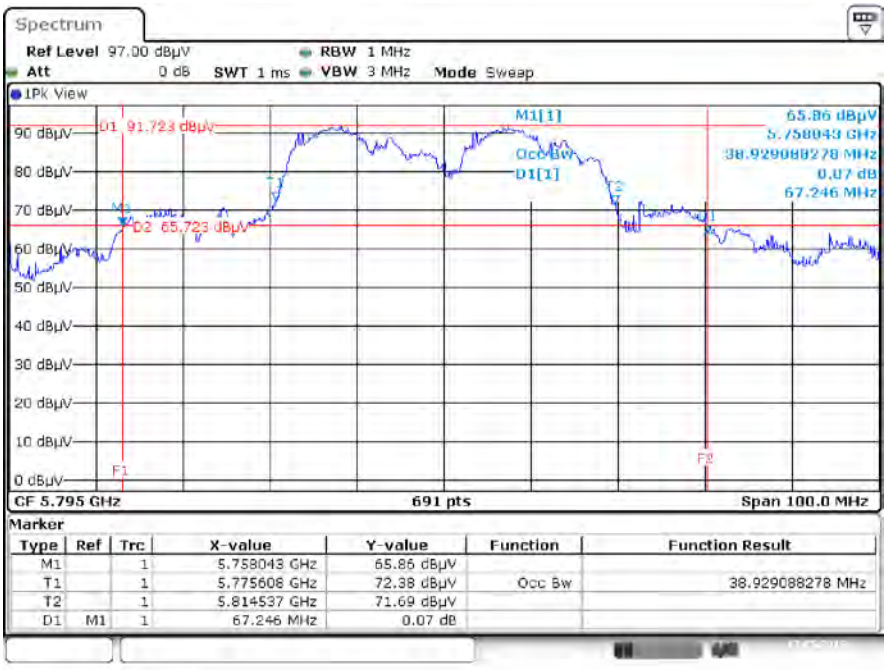
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5755 MHz**




Date: 17.MAY.2016 19:37:10

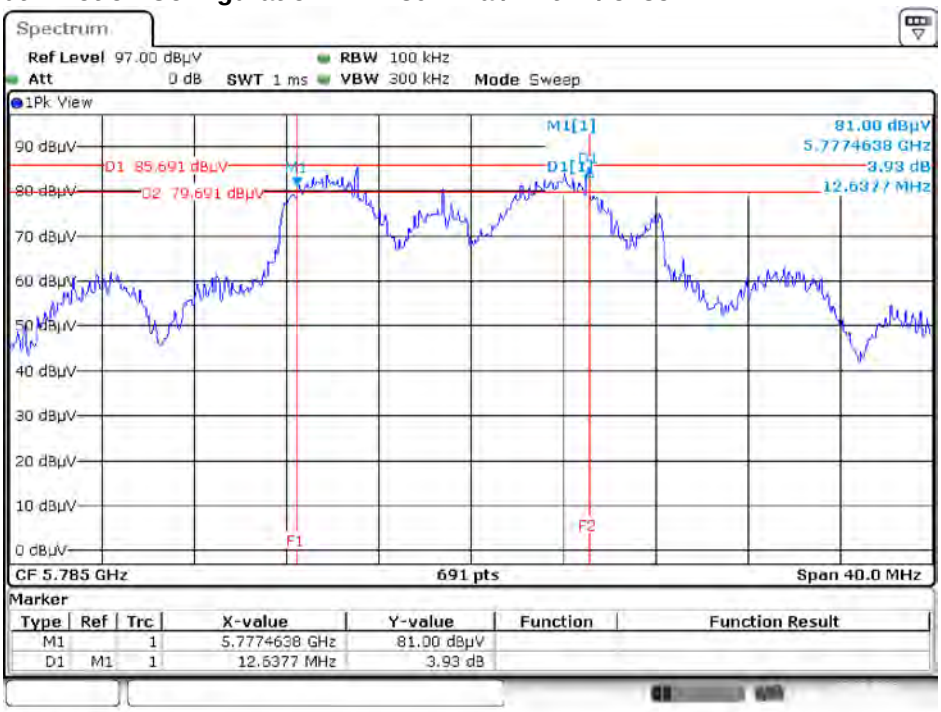
**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5795 MHz**



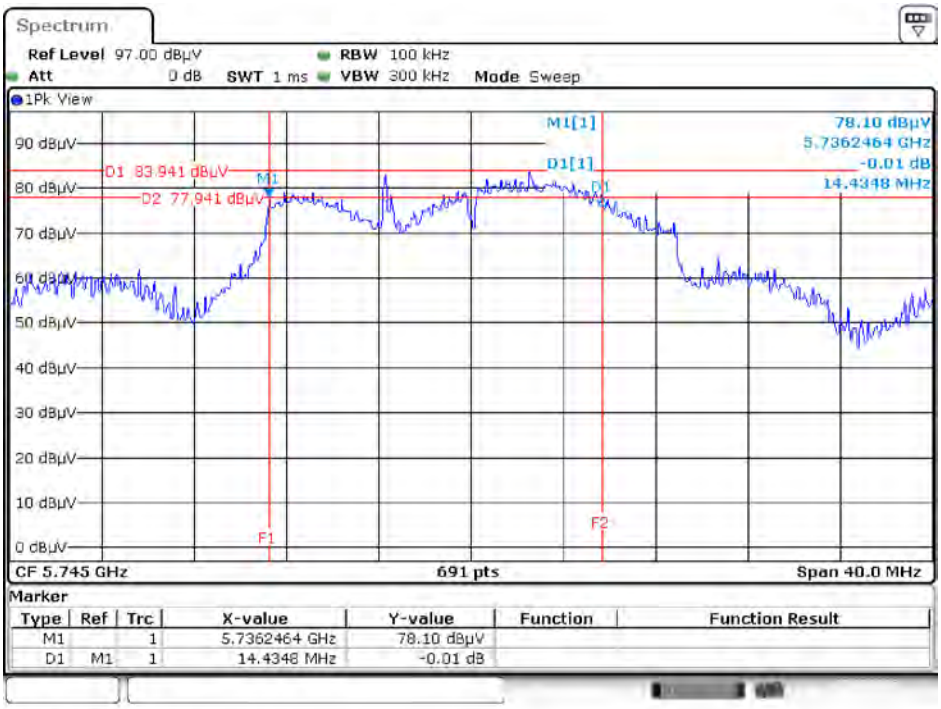

Date: 17.MAY.2016 19:36:15

**6 dB Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5785 MHz**



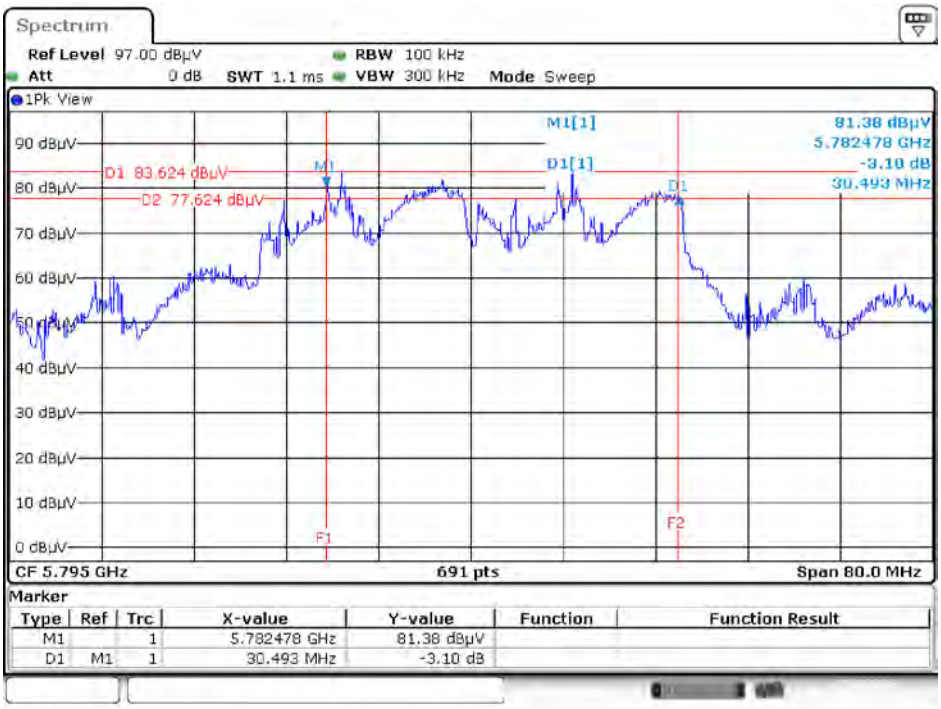

Date: 17.MAY.2016 20:08:50

**6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5745 MHz**



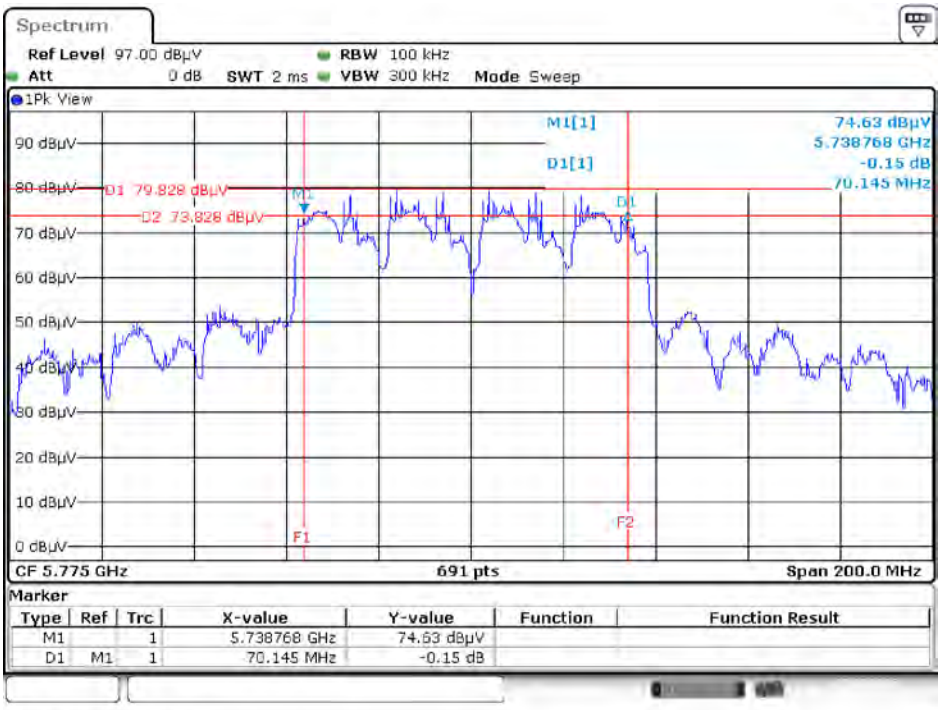

Date: 17.MAY.2016 20:06:56

**6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5795 MHz**




Date: 17.MAY.2016 20:06:27

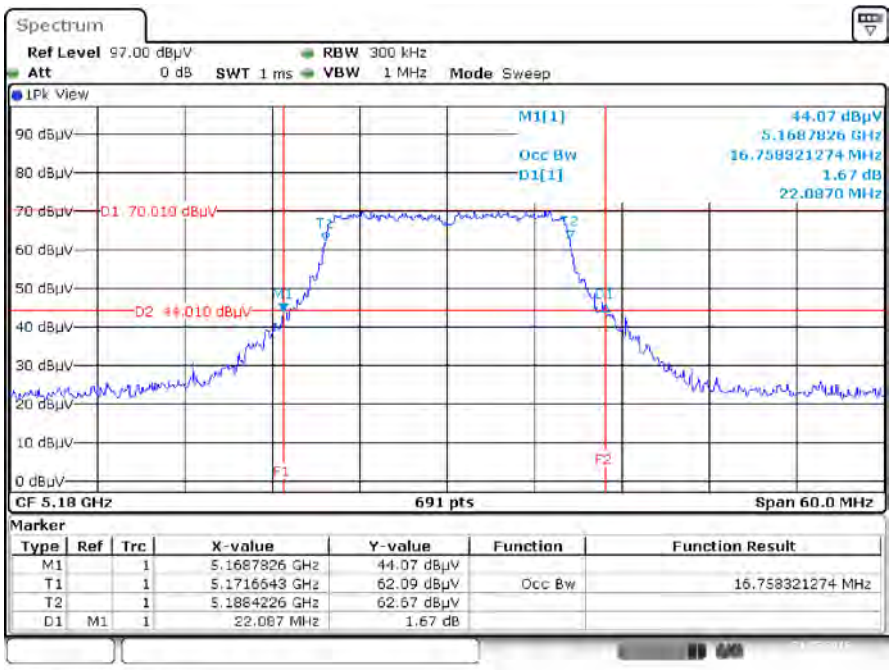
**6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5775 MHz**




Date: 17.MAY.2016 20:04:39

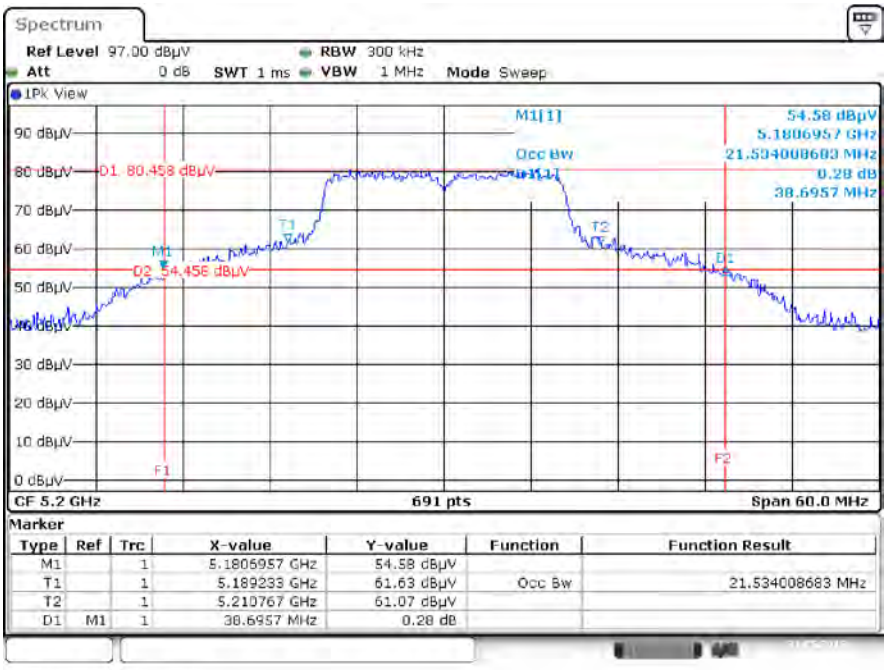
**For Mode 2:**

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5180 MHz**



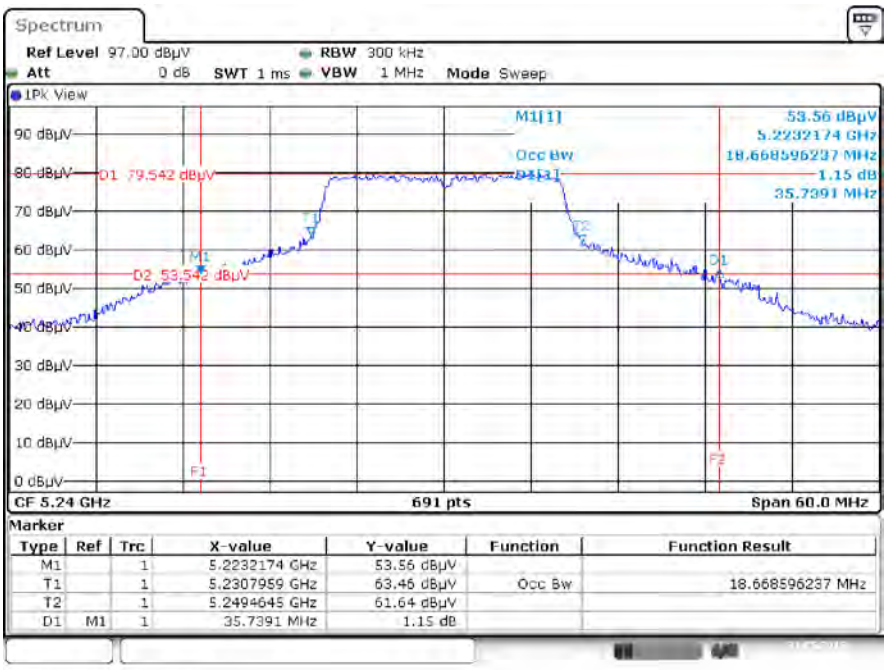

Date: 31.MAY.2016 11:50:35

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5200 MHz**



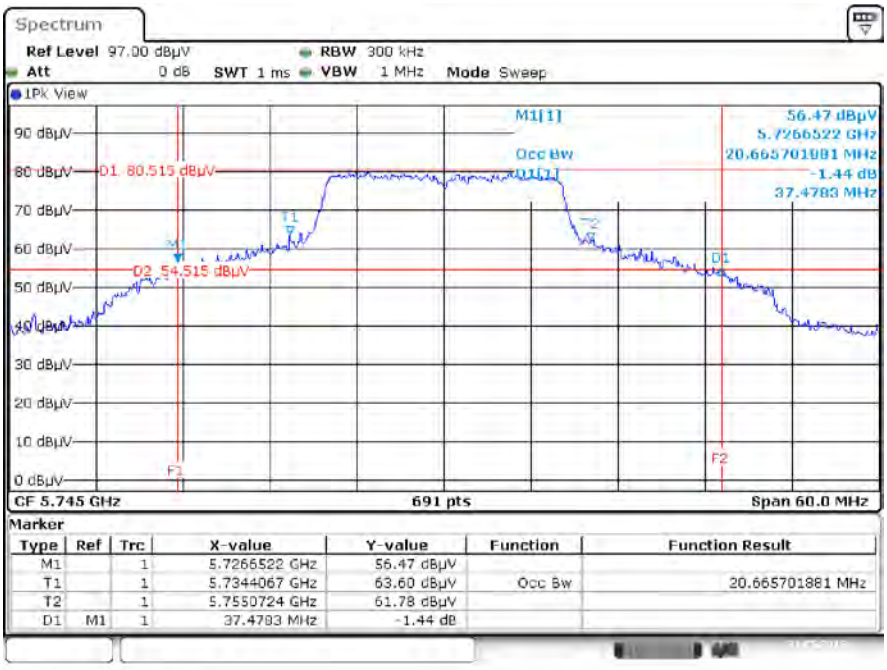

Date: 31.MAY.2016 11:53:13

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5240 MHz**



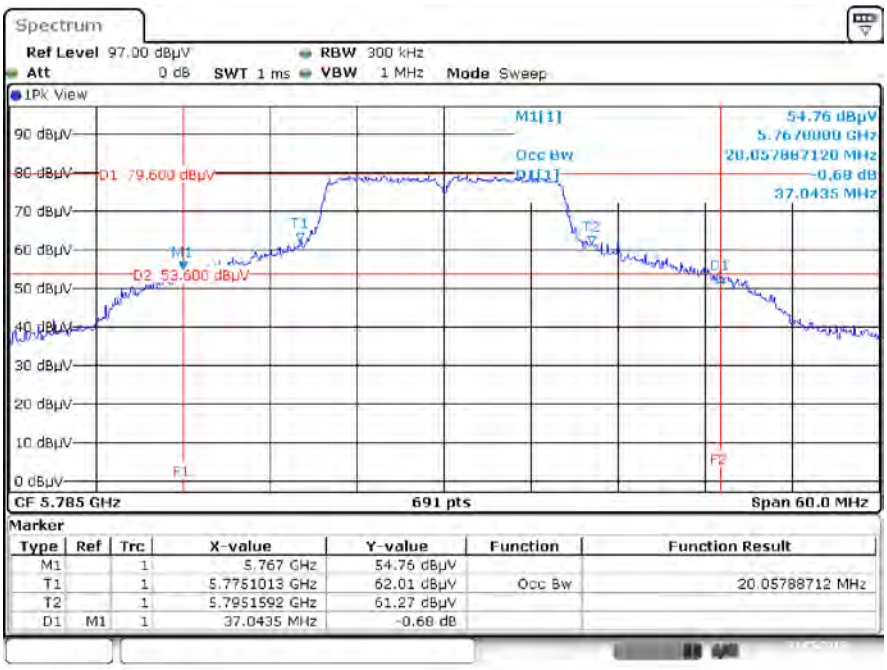

Date: 31.MAY.2016 11:53:44

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5745 MHz**



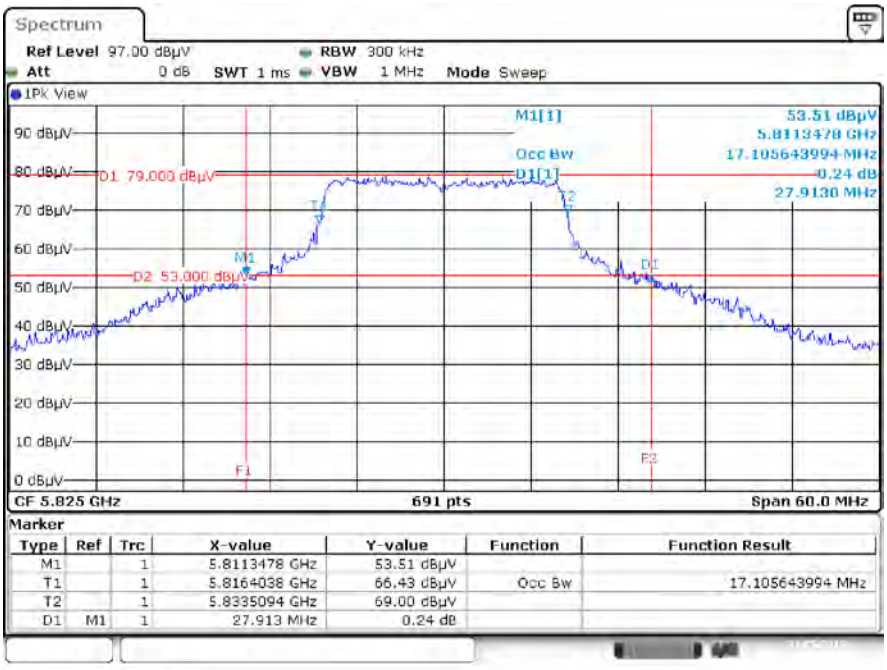

Date: 31.MAY.2016 13:40:21

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5785 MHz**




Date: 31.MAY.2016 13:43:23

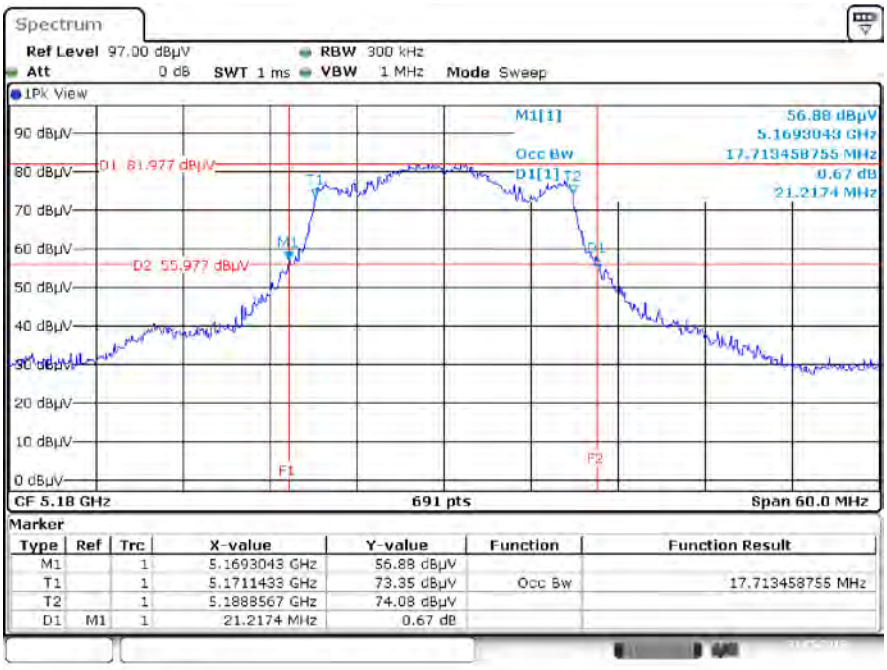
**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5825 MHz**




Date: 31.MAY.2016 13:43:54

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

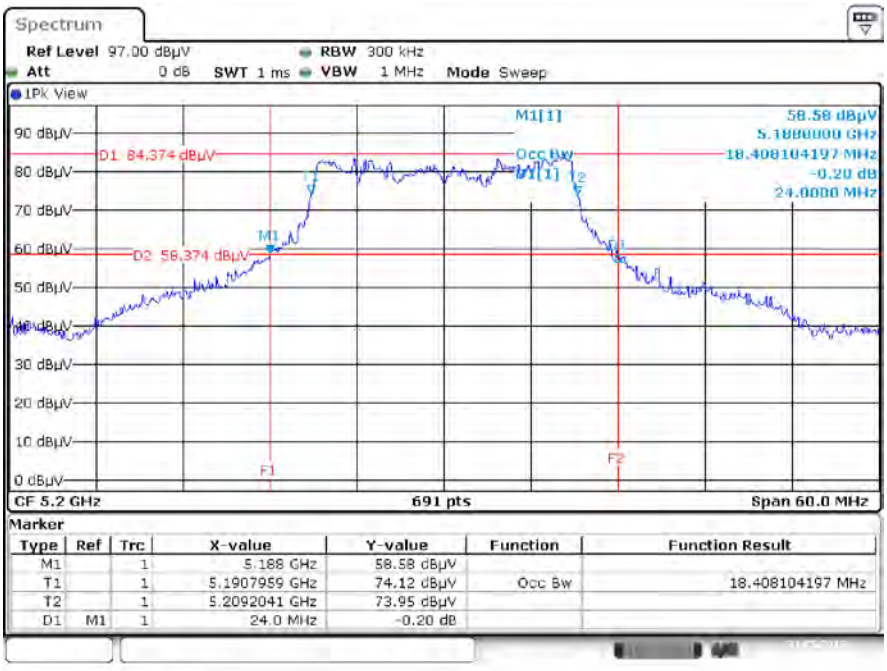
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5180 MHz**




Date: 31.MAY.2016 13:45:28

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

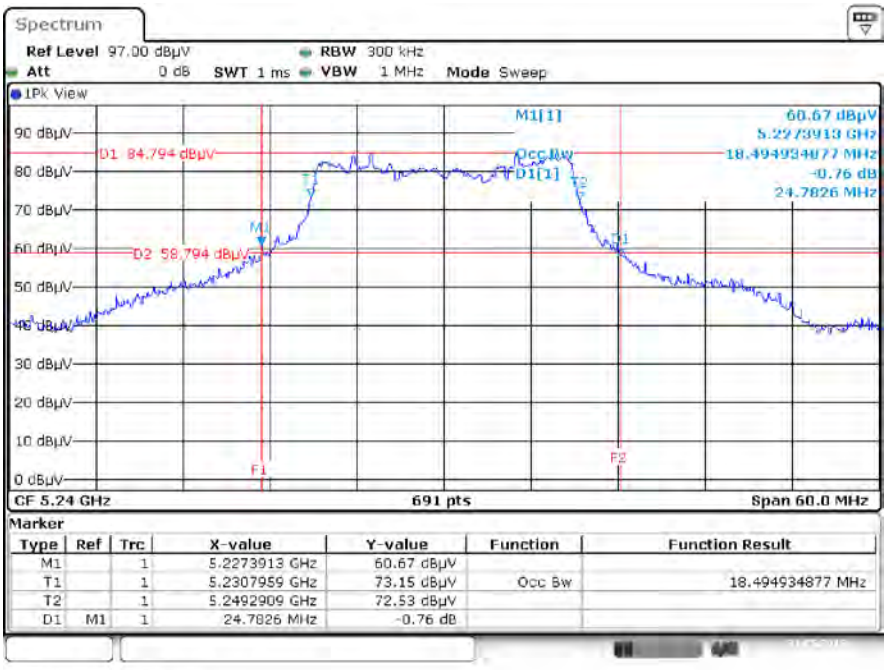
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5200 MHz**




Date: 31.MAY.2016 13:46:12

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

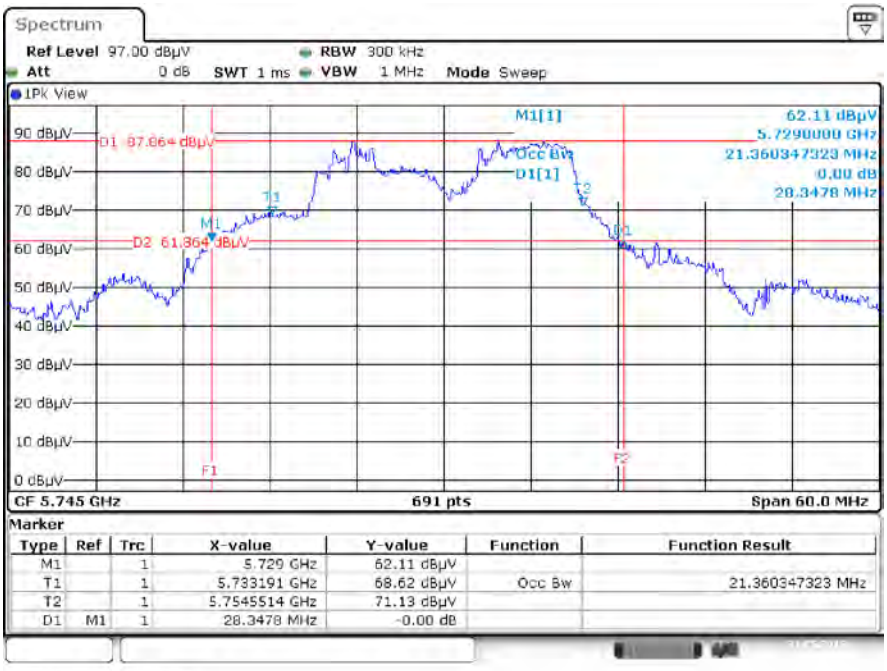
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5240 MHz**




Date: 31.MAY.2016 13:47:21

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

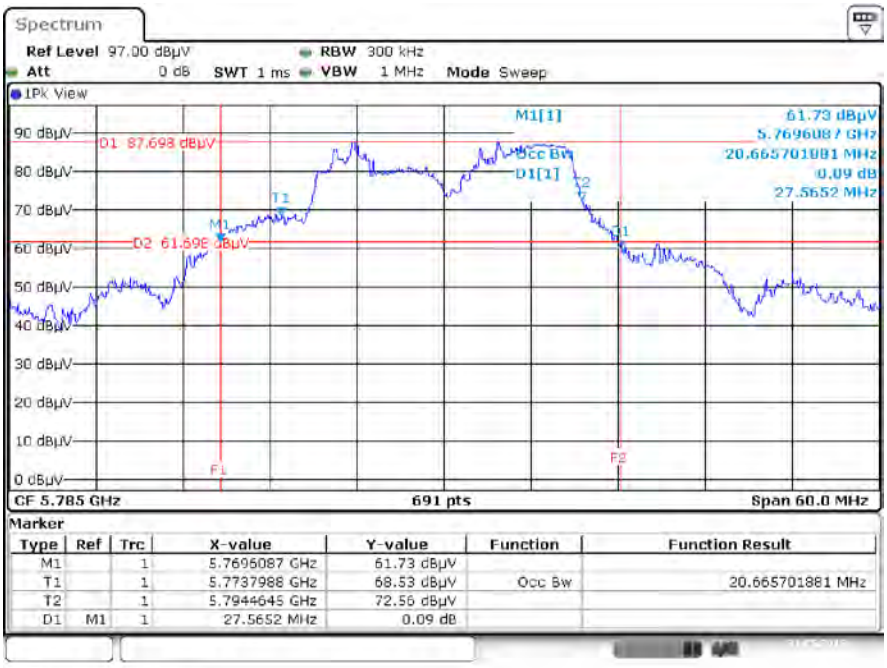
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5745 MHz**




Date: 31.MAY.2016 14:02:18

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

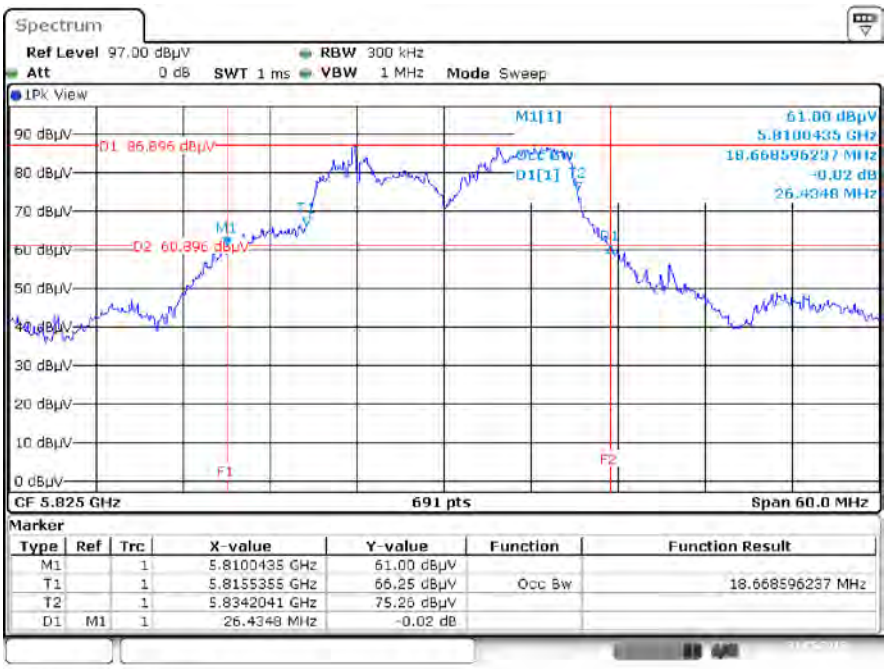
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5785 MHz**




Date: 31.MAY.2016 14:02:57

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

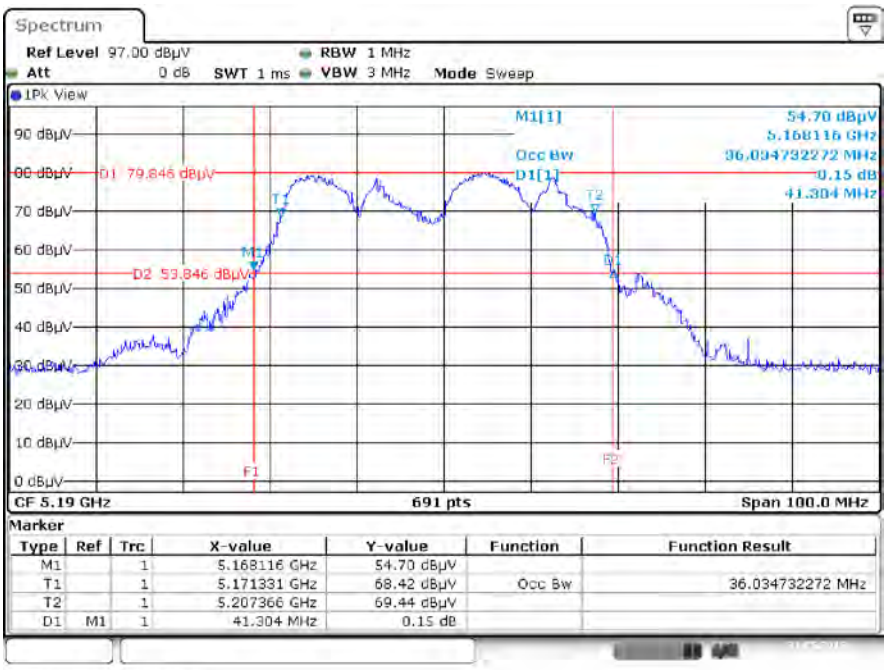
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5825 MHz**




Date: 31.MAY.2016 14:03:39

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

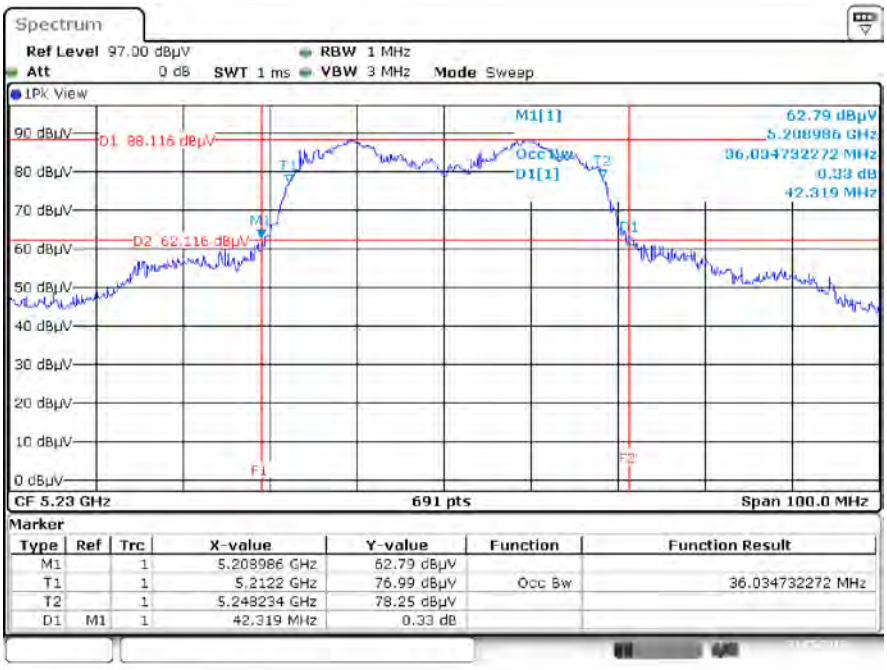
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5190 MHz**




Date: 31.MAY.2016 14:04:46

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

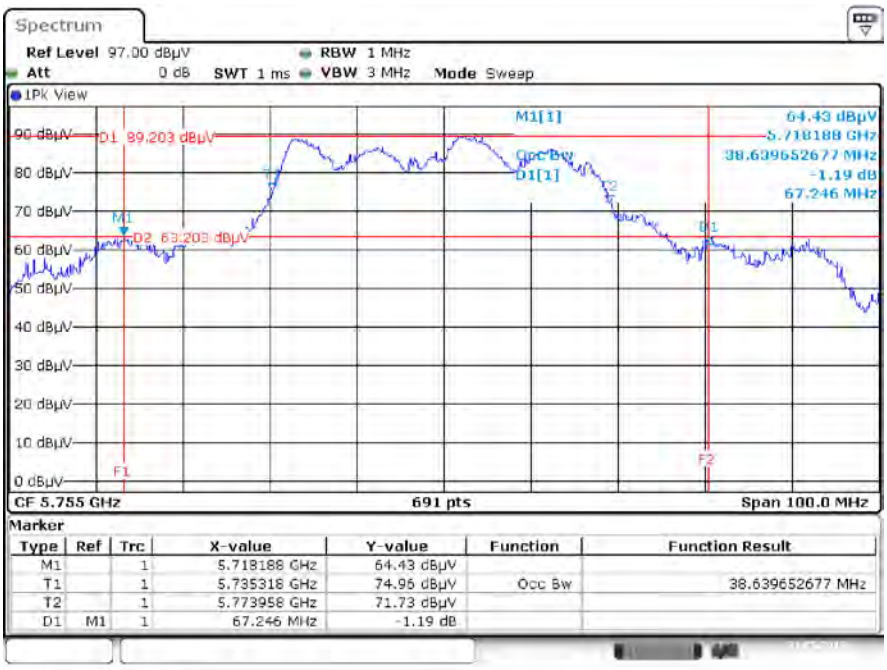
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5230 MHz**




Date: 31.MAY.2016 14:05:10

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

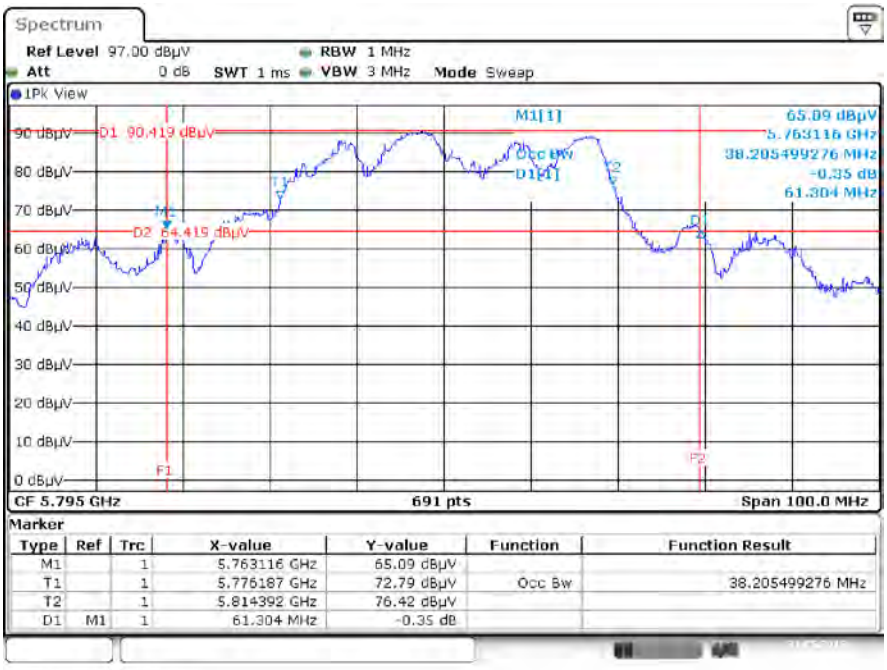
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5755 MHz**




Date: 31.MAY.2016 14:09:05

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

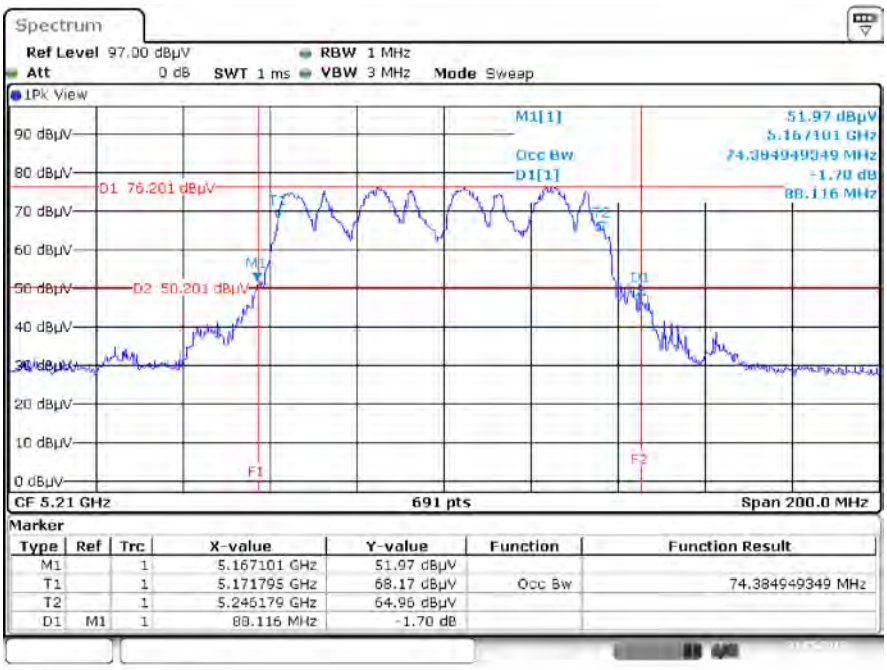
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5795 MHz**




Date: 31.MAY.2016 14:09:28

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

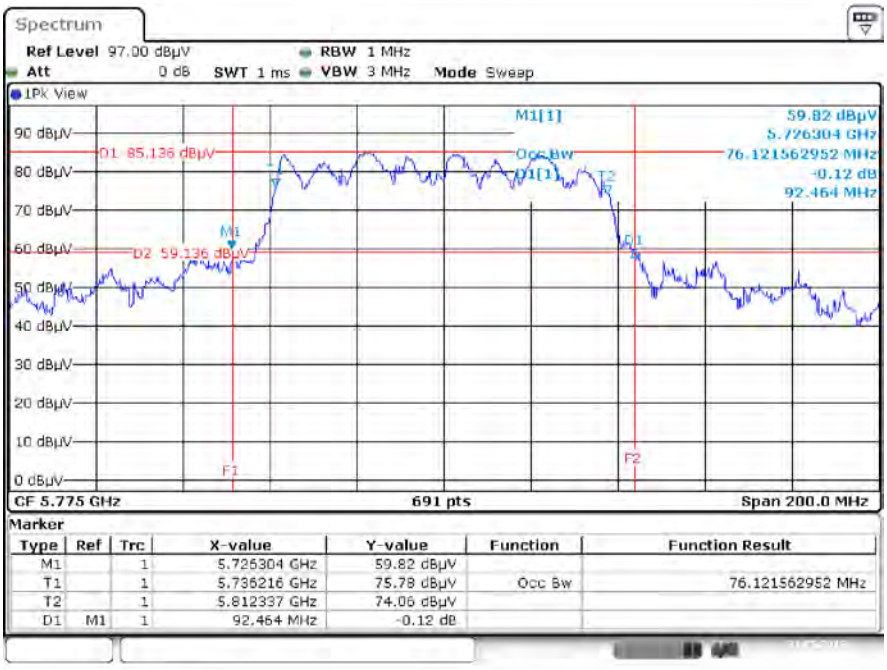
**VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5210 MHz**




Date: 31.MAY.2016 14:10:35

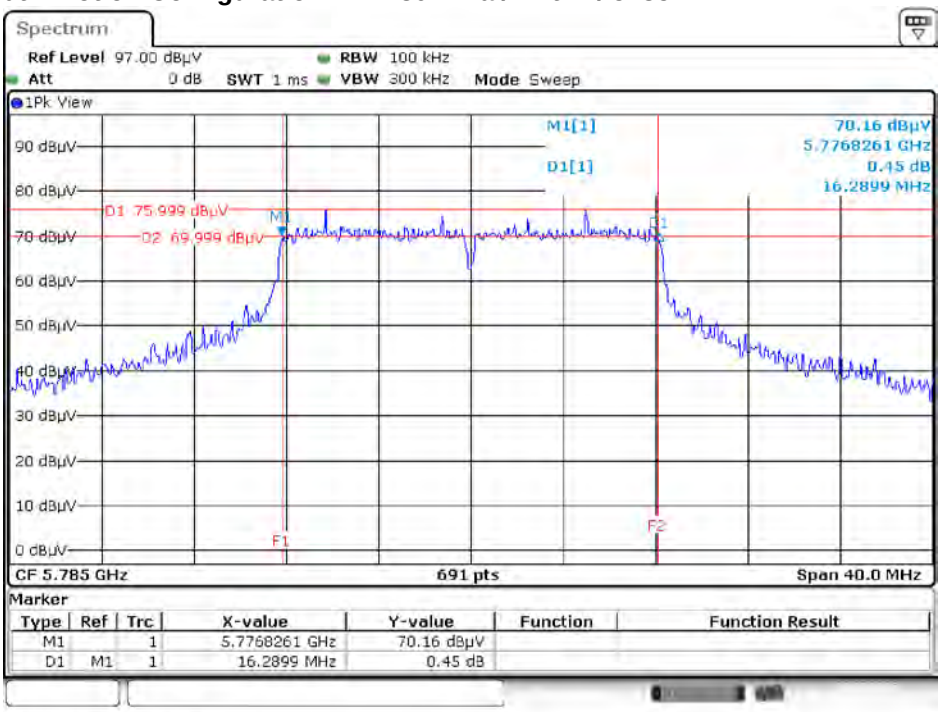
**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

**VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5775 MHz**



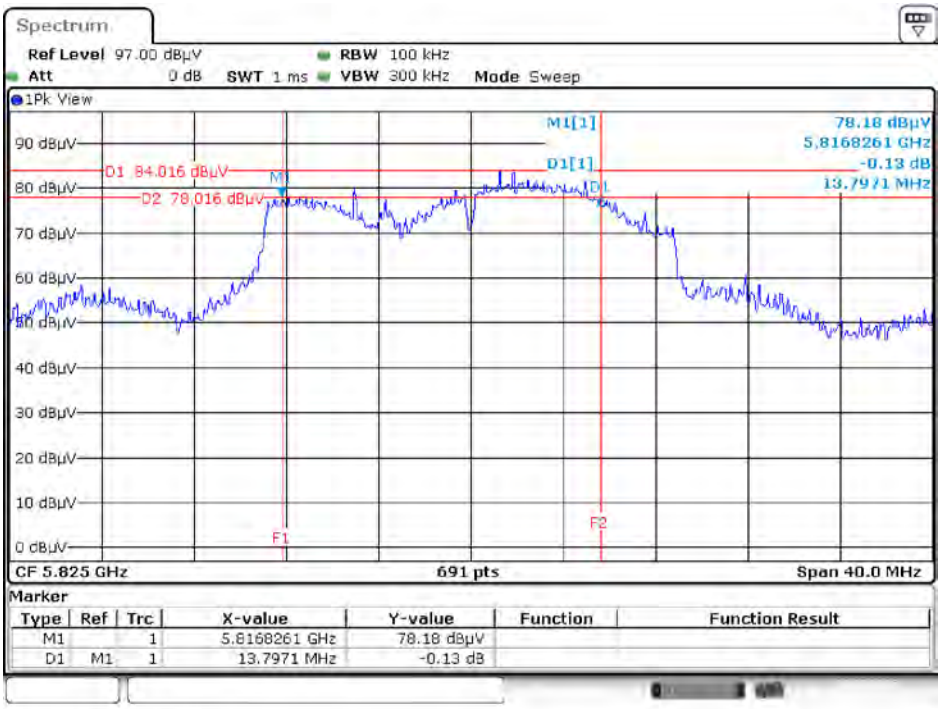

Date: 31.MAY.2016 14:12:07

**6 dB Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5785 MHz**



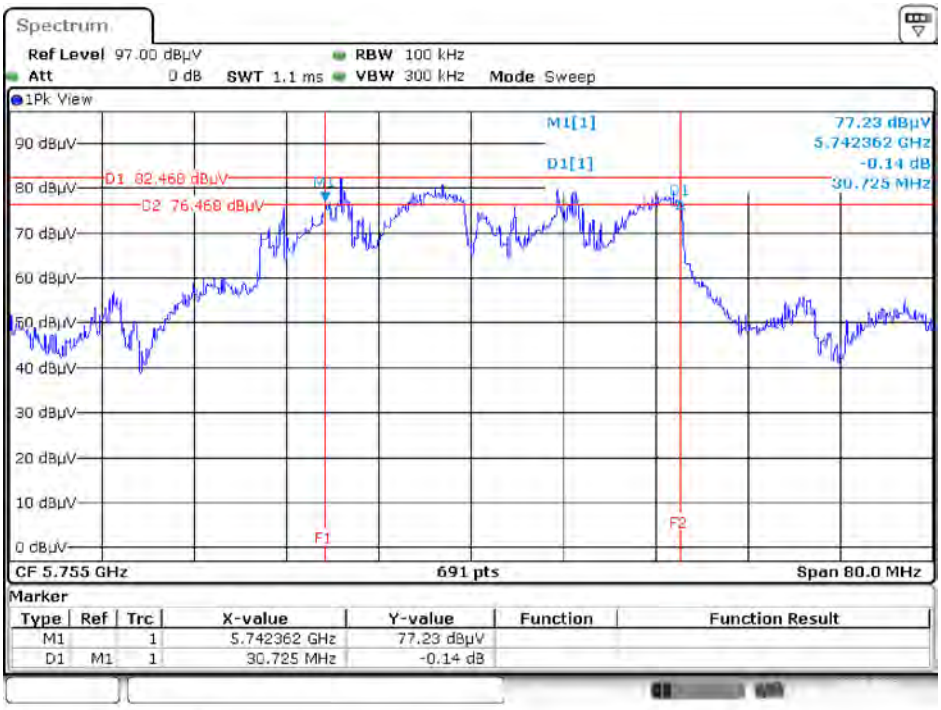

Date: 31.MAY.2016 14:34:03

**6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5825 MHz**



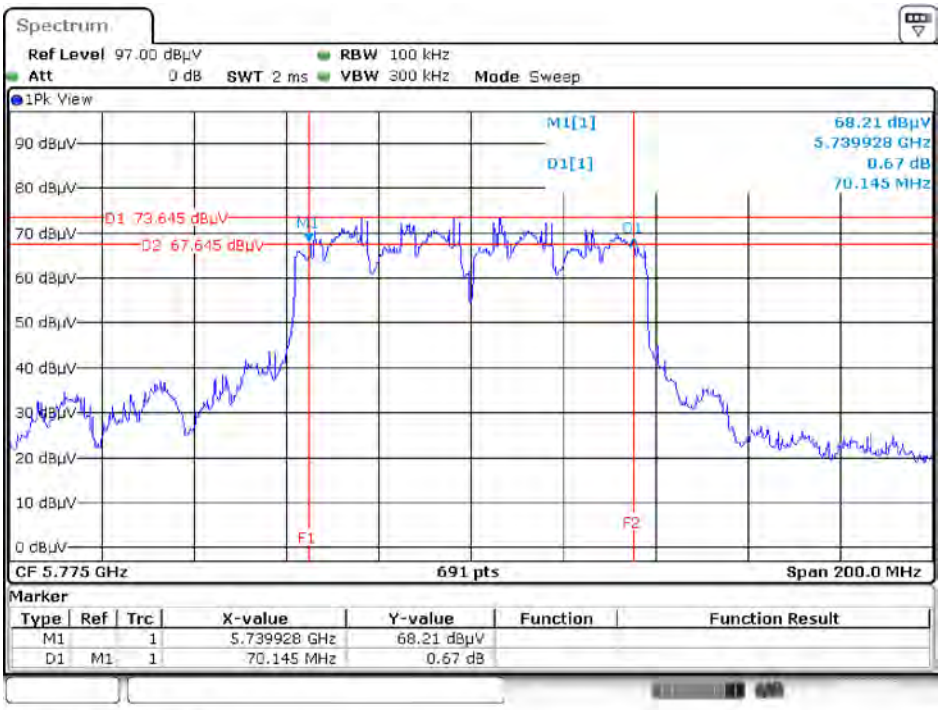

Date: 31.MAY.2016 14:48:04

**6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5755MHz**




Date: 31.MAY.2016 14:49:13

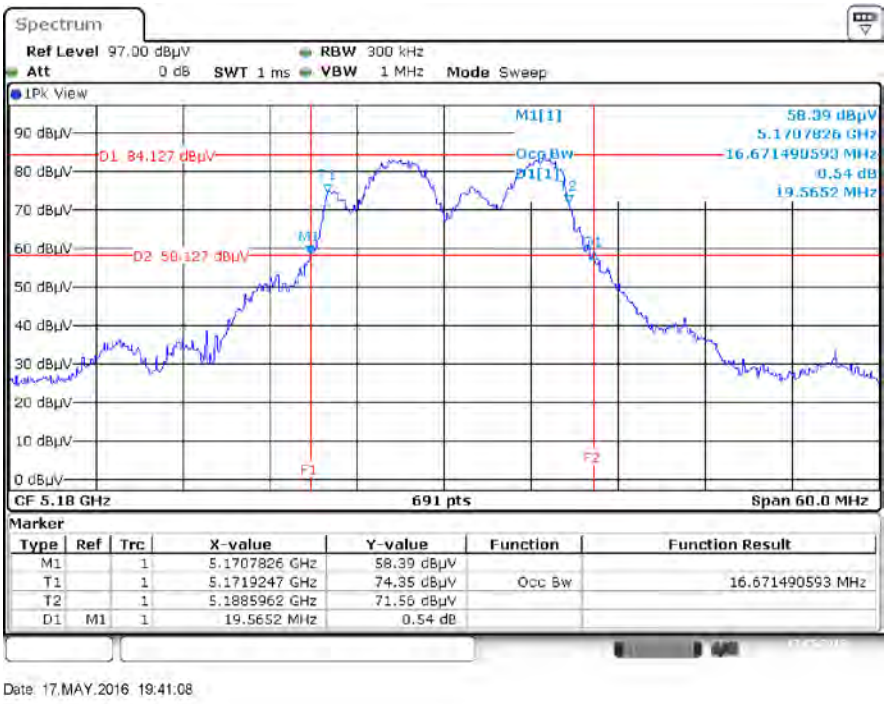
**6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5775 MHz**




Date: 31.MAY.2016 14:51:12

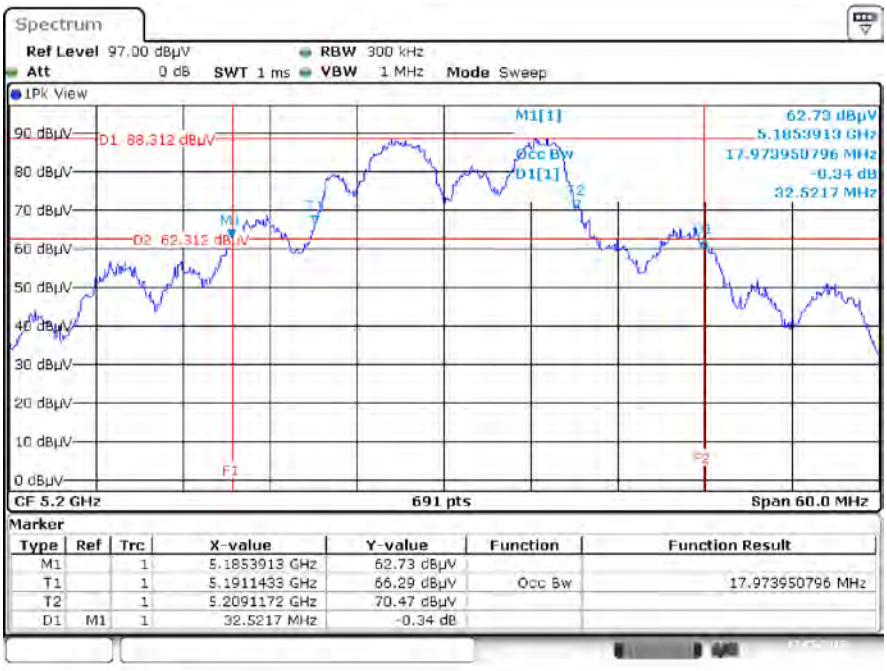
**For Mode 3:**

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5180 MHz**



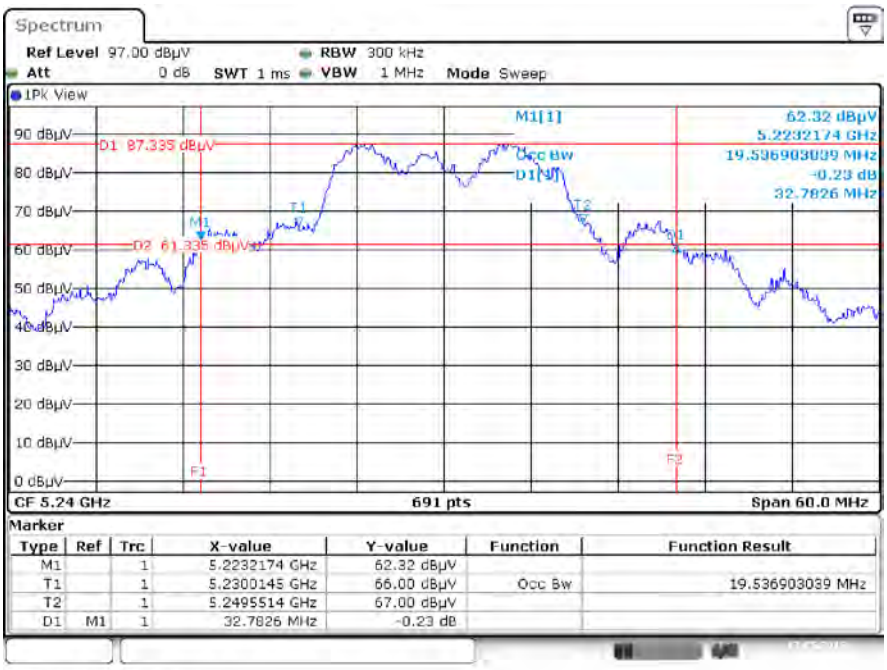

Date: 17.MAY.2016 19:41:08

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5200 MHz**



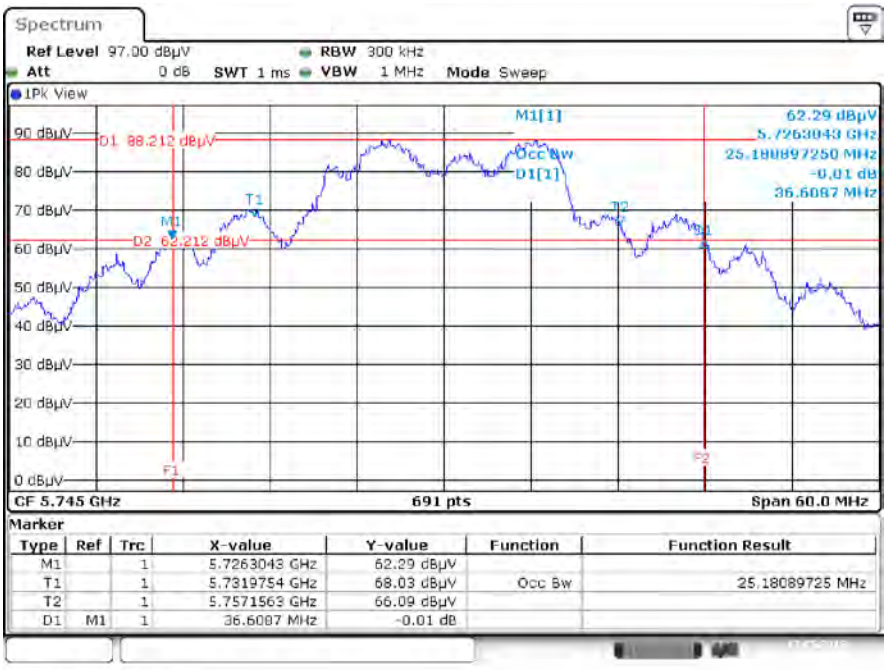

Date: 17.MAY.2016 19:41:56

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5240 MHz**



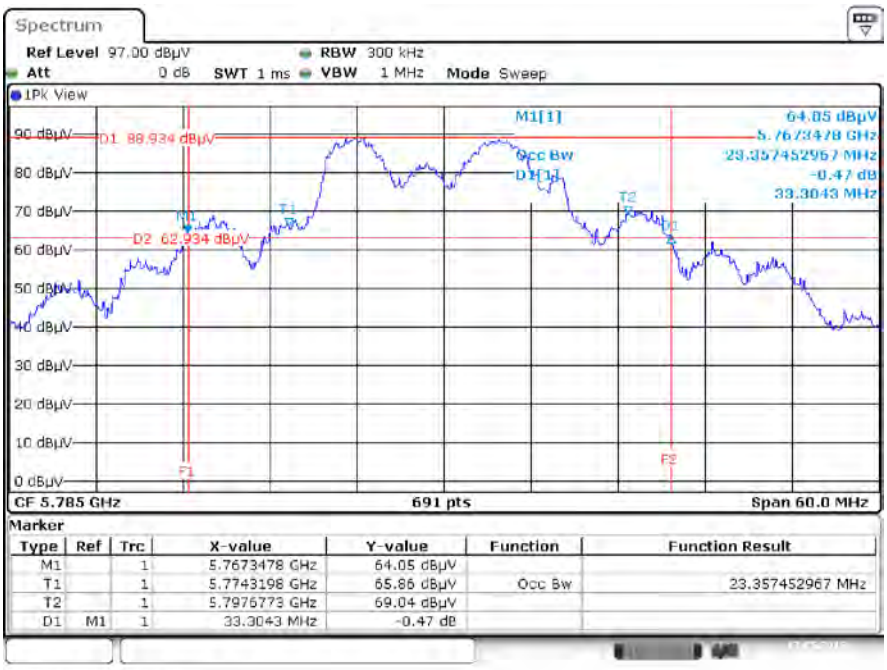

Date: 17.MAY.2016 19:43:06

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5745 MHz**



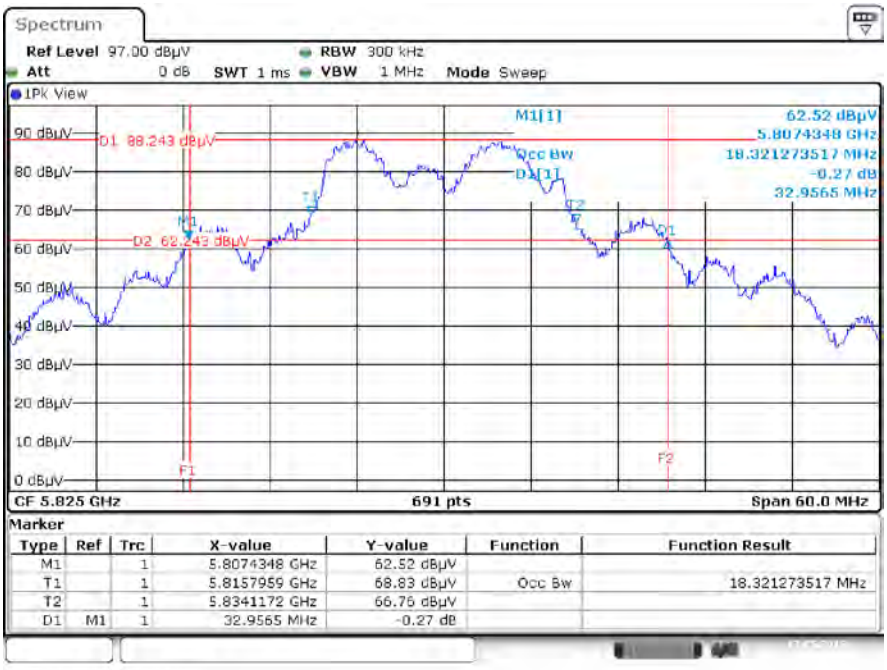

Date: 17.MAY.2016 19:43:41

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5785 MHz**




Date: 17.MAY.2016 19:44:08

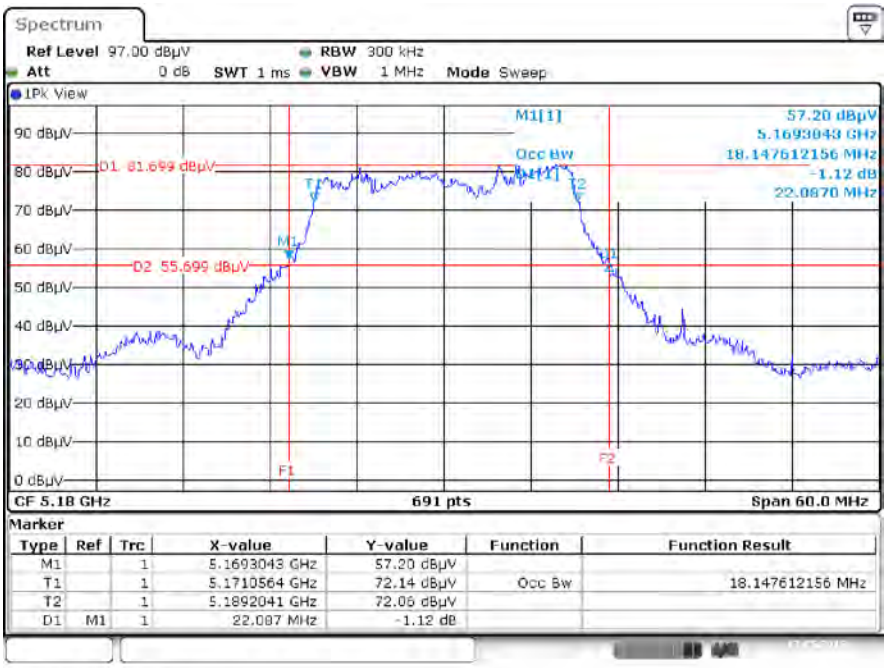
**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5825 MHz**




Date: 17.MAY.2016 19:44:48

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

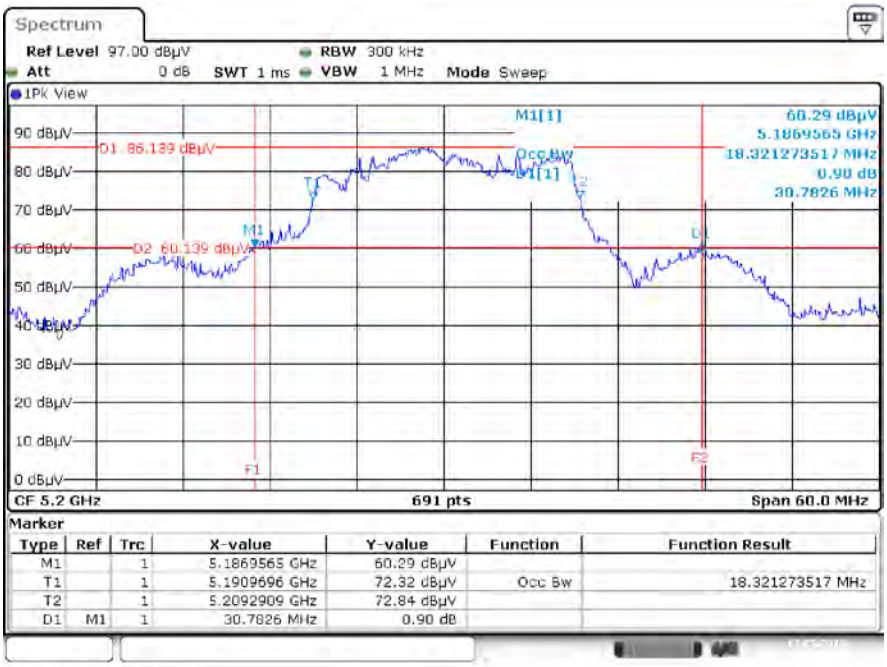
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5180 MHz**




Date: 17.MAY.2016 19:45:38

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

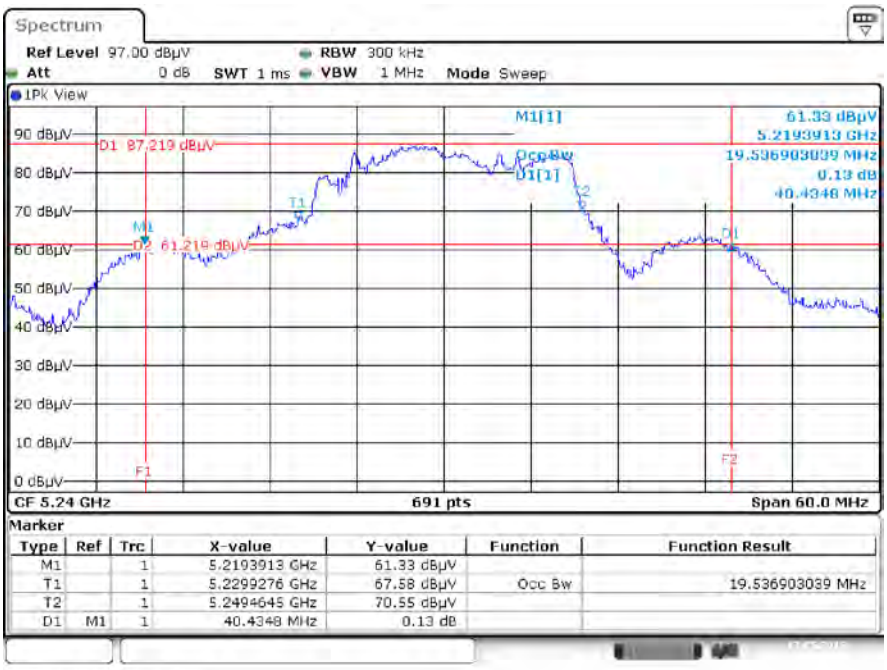
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5200 MHz**




Date: 17.MAY.2016 19:47:33

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

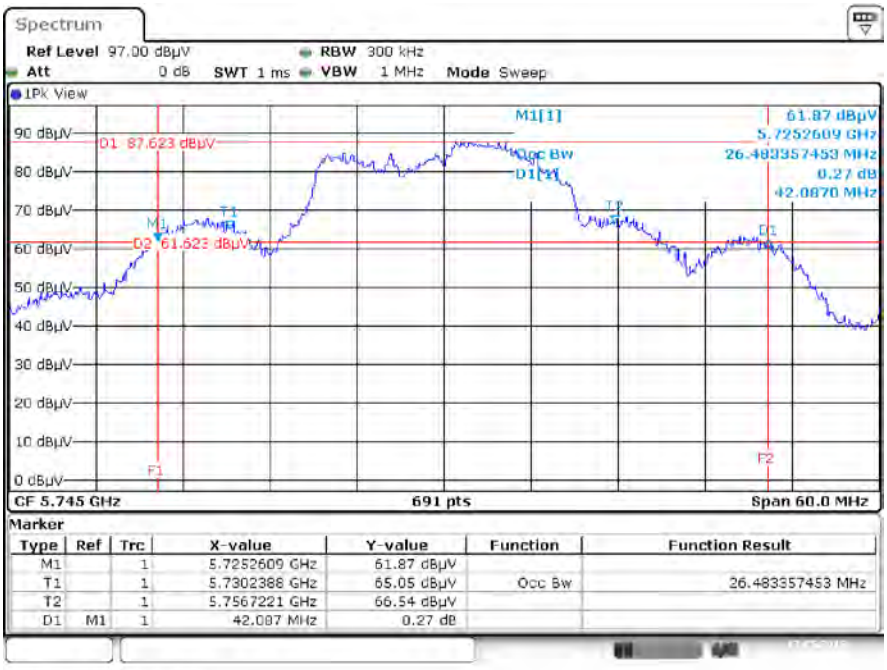
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5240 MHz**




Date: 17.MAY.2016 19:48:02

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

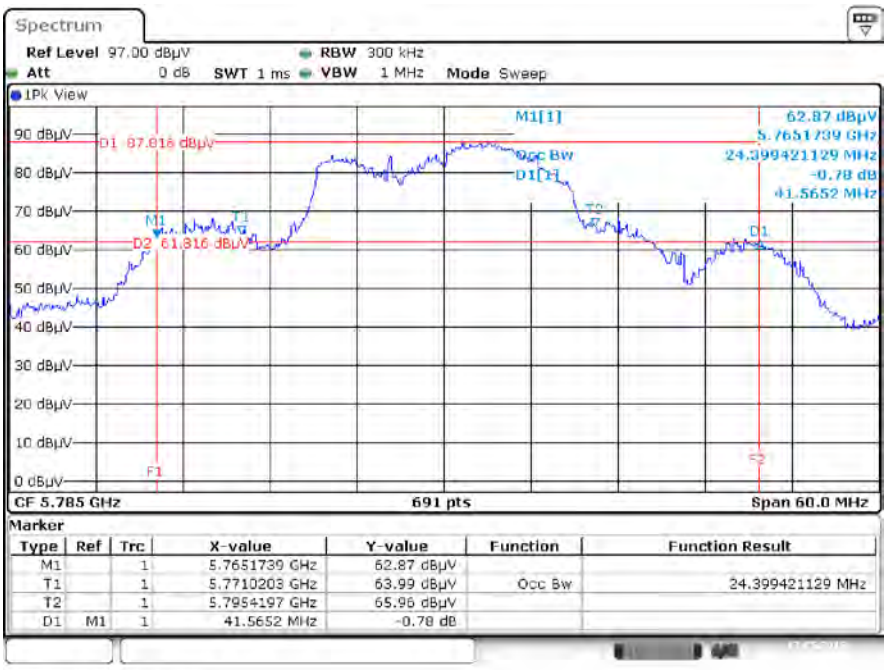
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5745 MHz**




Date: 17.MAY.2016 19:48:42

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

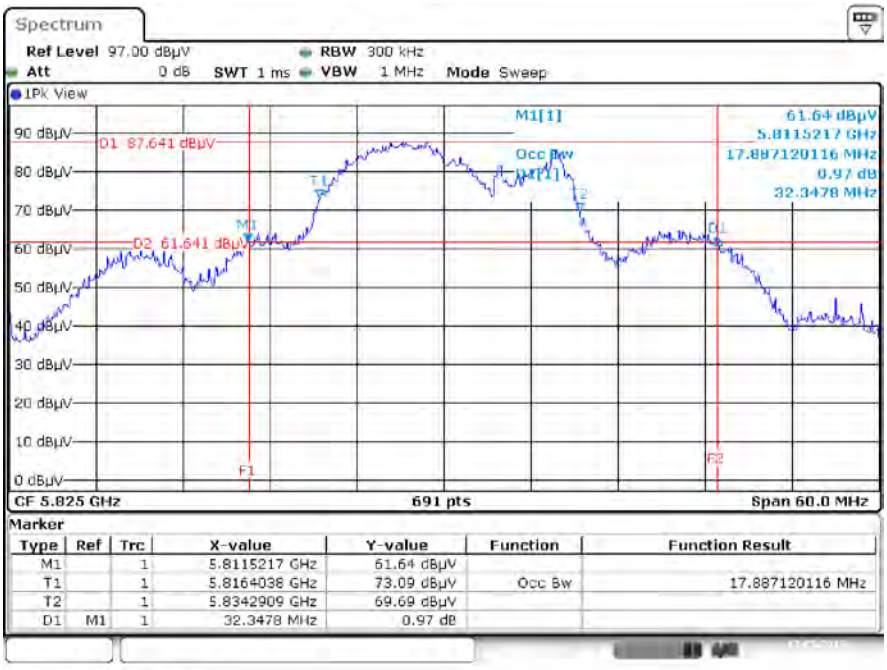
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5785 MHz**




Date: 17.MAY.2016 19:49:12

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

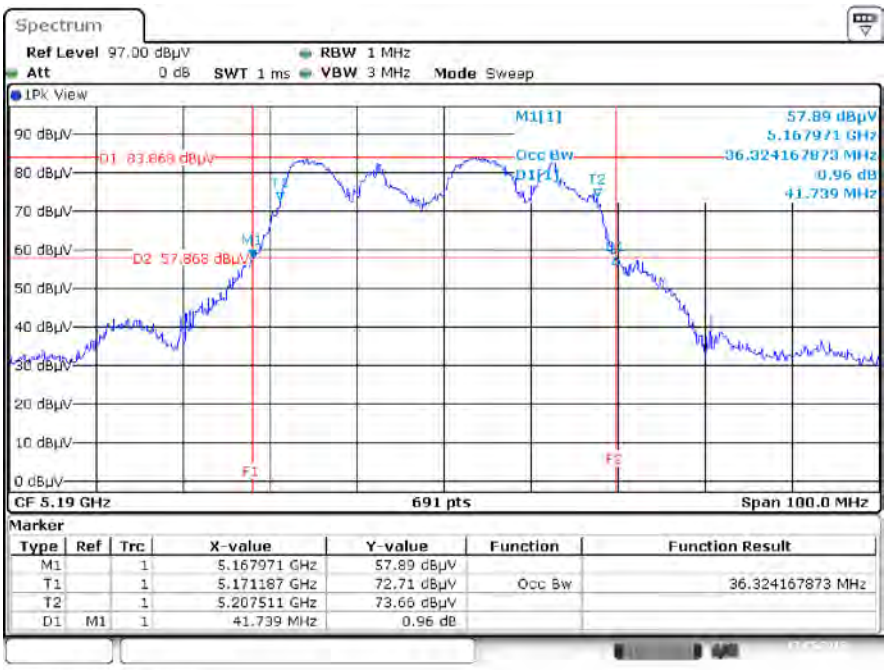
**VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5825 MHz**




Date: 17.MAY.2016 19:50:45

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

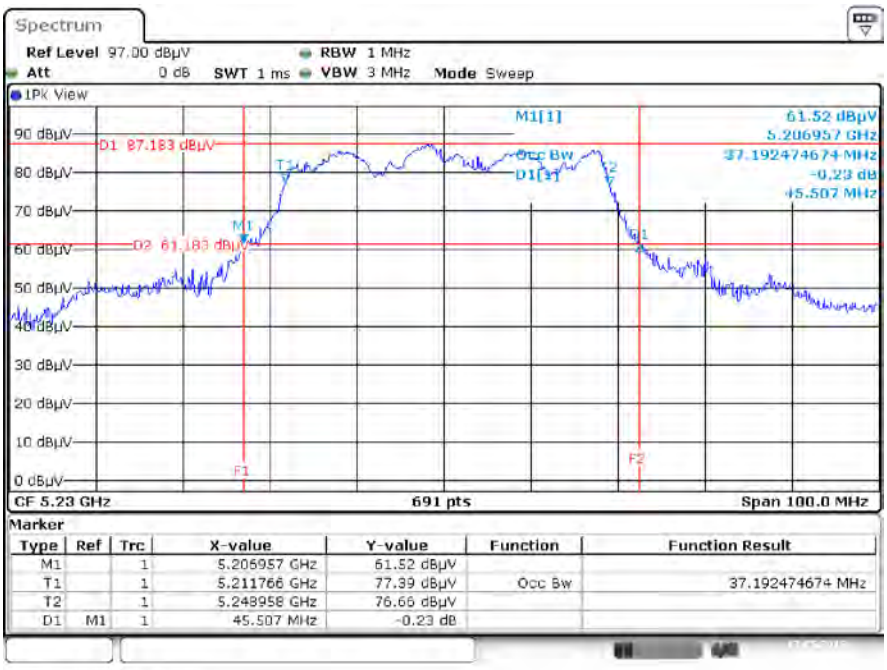
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5190 MHz**




Date: 17.MAY.2016 19:51:43

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

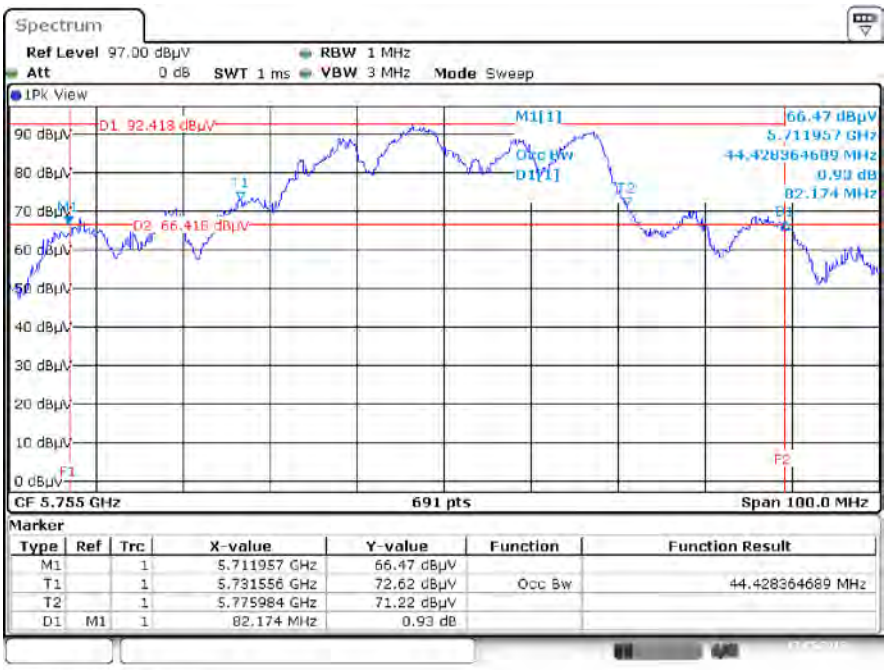
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5230 MHz**




Date: 17.MAY.2016 19:52:21

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

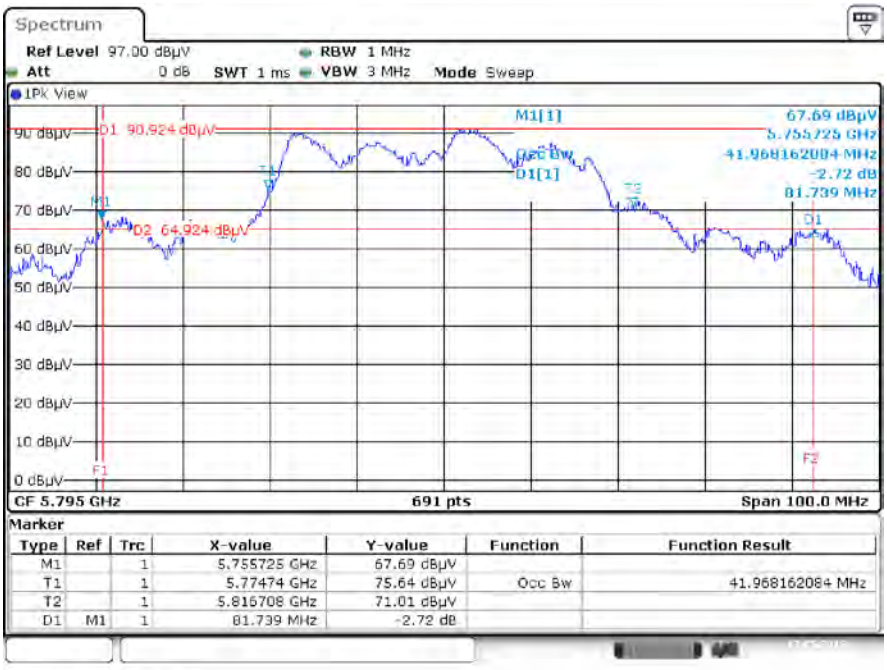
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5755 MHz**




Date: 17.MAY.2016 19:53:37

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

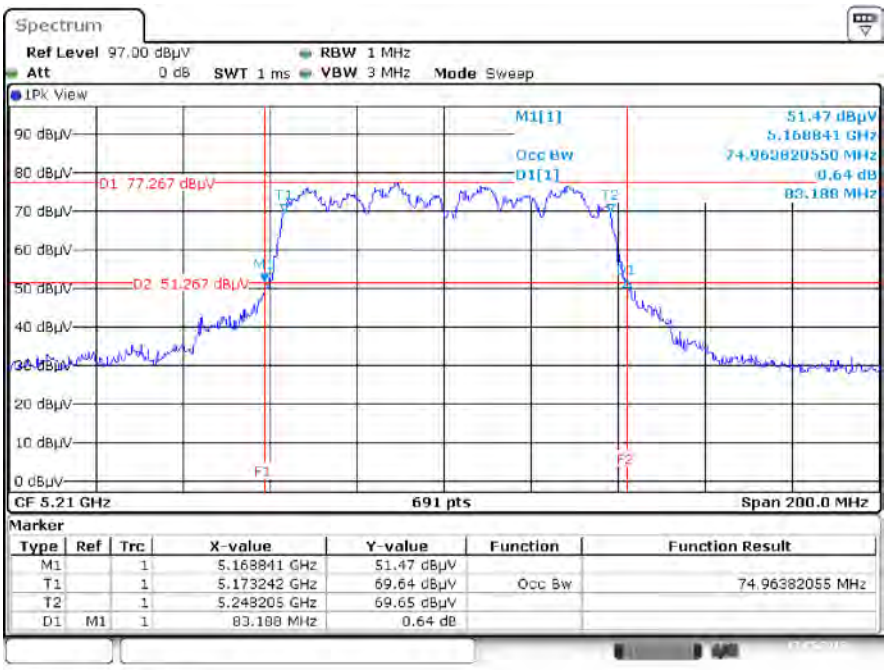
**VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5795 MHz**




Date: 17.MAY.2016 19:54:05

**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

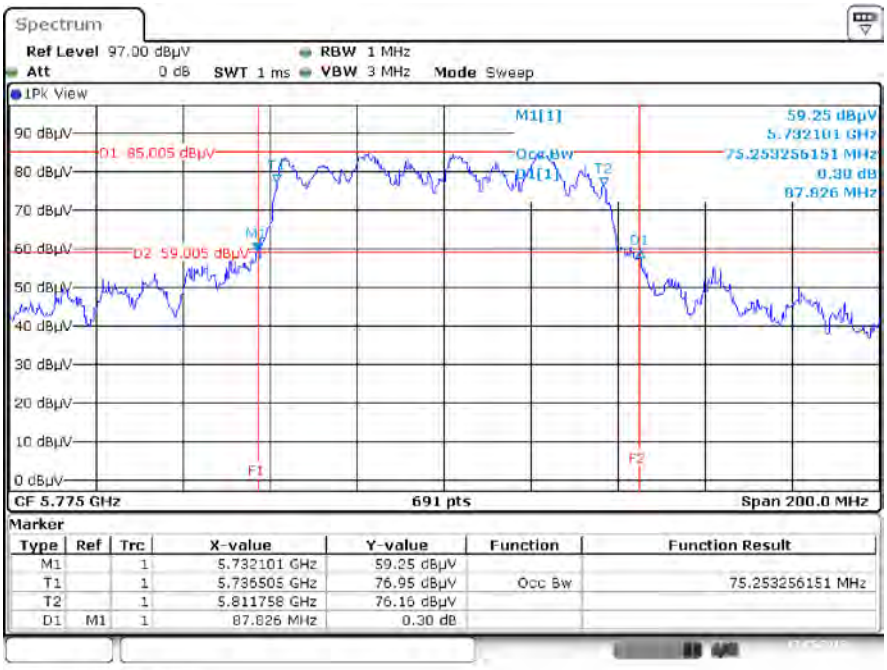
**VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5210 MHz**




Date: 17.MAY.2016 19:54:52

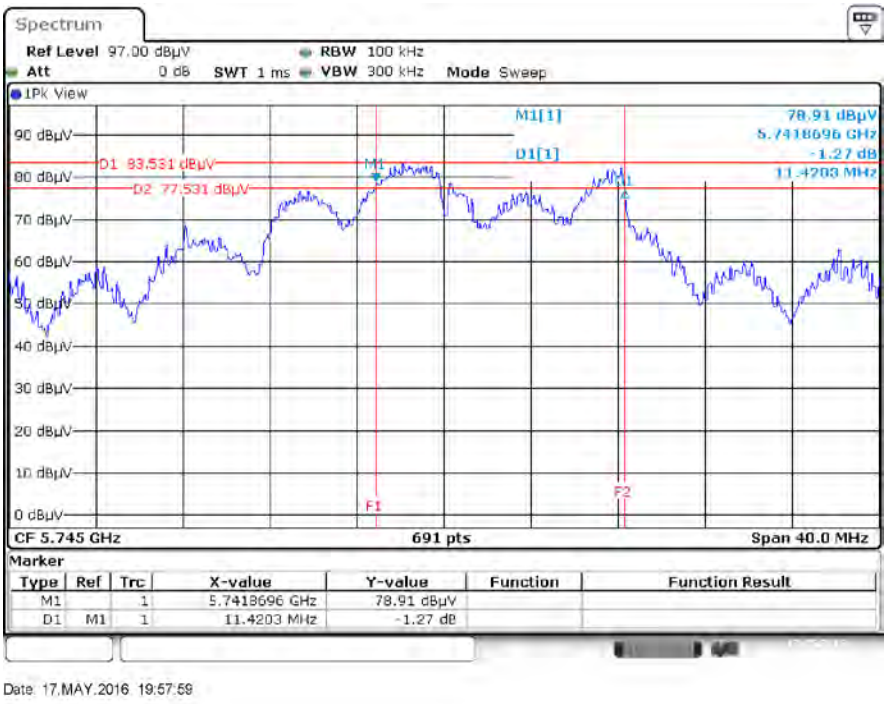
**26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1**

**VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5775 MHz**

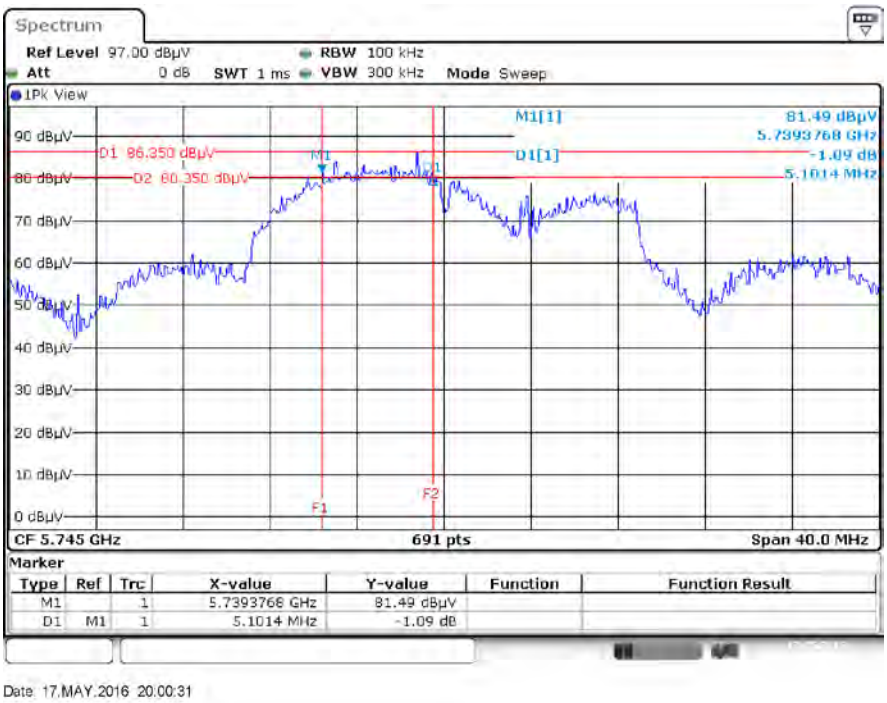



Date: 17.MAY.2016 19:55:32

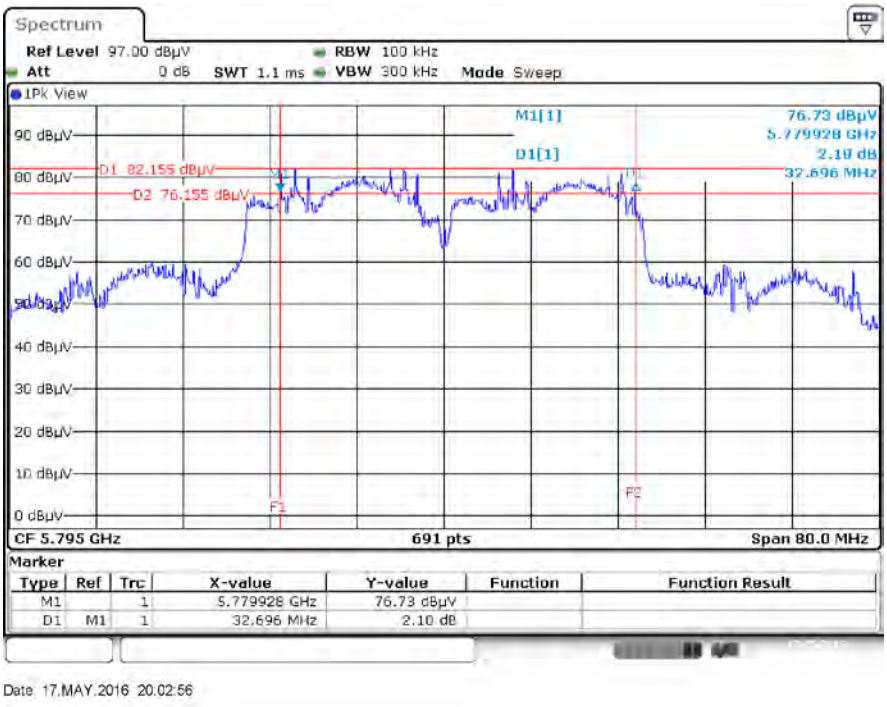
**6 dB Bandwidth Plot on Configuration IEEE 802.11a / Ant. 1 / 5745 MHz**



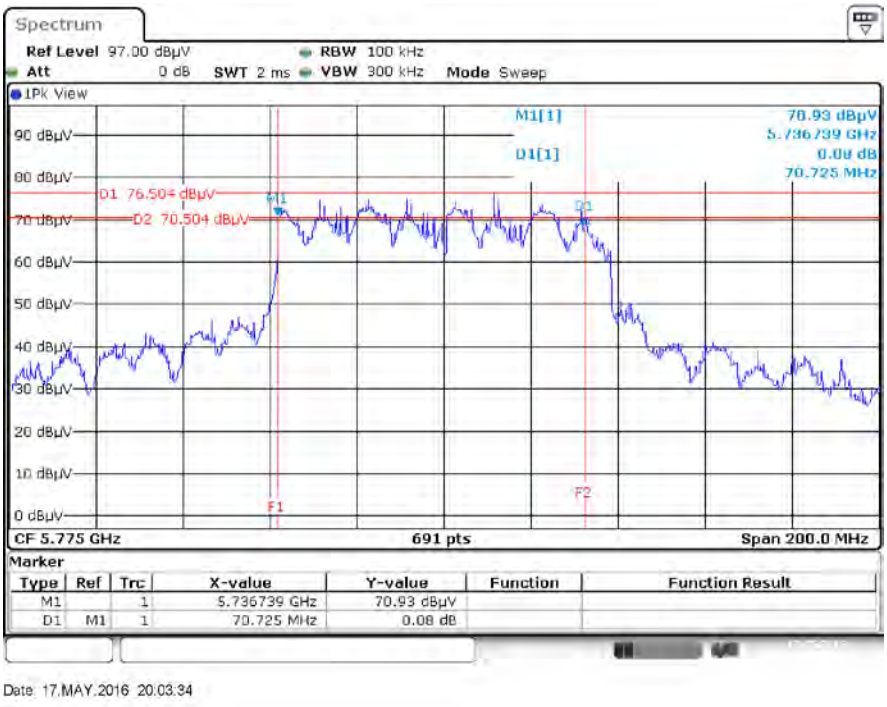

**6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5745 MHz**



**6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5795 MHz**




**6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5775 MHz**



## 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

| Temperature | 24℃ | Humidity | 60% |
|---|---|---|---|
| Test Engineer | Clemens Fang | Test Mode | Mode 1 |
| Test Date | May 15, 2016~May 17, 2016 | | |

| Mode | Frequency | Conducted Power (dBm) | Max. Limit (dBm) | Result |
|---|---|---|---|---|
| | | Ant. 1 | | |
| 802.11a | 5180 MHz | 17.23 | 29.50 | **Complies** |
| | 5200 MHz | 23.50 | 29.50 | **Complies** |
| | 5240 MHz | 23.42 | 29.50 | **Complies** |
| | 5745 MHz | 22.05 | 29.50 | **Complies** |
| | 5785 MHz | 22.08 | 29.50 | **Complies** |
| | 5825 MHz | 22.12 | 29.50 | **Complies** |

Note: Antenna true gain=6.50dBi>6dBi, so power limit=30-(6.50-6)=29.50dBm.

| Mode | Frequency | Conducted Power (dBm) | | | | Max. Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|
| | | Ant. 1 | Ant. 2 | Ant. 3 | Total | | |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz | 16.38 | 17.68 | 18.17 | 22.24 | 29.40 | **Complies** |
| | 5200 MHz | 19.24 | 20.06 | 20.56 | 24.76 | 29.40 | **Complies** |
| | 5240 MHz | 19.59 | 19.87 | 19.91 | 24.56 | 29.40 | **Complies** |
| | 5745 MHz | 21.35 | 21.46 | 22.23 | 26.47 | 29.40 | **Complies** |
| | 5785 MHz | 21.65 | 21.35 | 21.68 | 26.33 | 29.40 | **Complies** |
| | 5825 MHz | 21.12 | 21.30 | 21.25 | 26.00 | 29.40 | **Complies** |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz | 13.66 | 14.46 | 14.61 | 19.03 | 29.40 | **Complies** |
| | 5230 MHz | 20.18 | 20.20 | 20.44 | 25.05 | 29.40 | **Complies** |
| | 5755 MHz | 21.13 | 21.32 | 21.92 | 26.24 | 29.40 | **Complies** |
| | 5795 MHz | 21.02 | 21.14 | 21.88 | 26.13 | 29.40 | **Complies** |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz | 10.54 | 10.96 | 11.20 | 15.68 | 29.40 | **Complies** |
| | 5775 MHz | 19.85 | 19.73 | 20.38 | 24.77 | 29.40 | **Complies** |

Note: Max. antenna true gain=6.60dBi>6dBi, so power limit=30-(6.60-6)=29.40dBm.

| Temperature | 24℃ | Humidity | 60% |
|---|---|---|---|
| Test Engineer | Serway Li | Test Mode | Mode 2 |
| Test Date | May 31, 2016 | | |

| Mode | Frequency | Conducted Power (dBm) | Max. Limit (dBm) | Result |
|---|---|---|---|---|
| | | Ant. 1 | | |
| 802.11a | 5180 MHz | 17.23 | 29.69 | **Complies** |
| | 5200 MHz | 23.50 | 29.69 | **Complies** |
| | 5240 MHz | 22.42 | 29.69 | **Complies** |
| | 5745 MHz | 22.05 | 29.69 | **Complies** |
| | 5785 MHz | 22.08 | 29.69 | **Complies** |
| | 5825 MHz | 22.12 | 29.69 | **Complies** |

Note: Antenna true gain=6.31dBi>6dBi, so power limit=30-(6.31-6)=29.69dBm.

| Mode | Frequency | Conducted Power (dBm) | | | | Max. Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|
| | | Ant. 1 | Ant. 2 | Ant. 3 | Total | | |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz | 16.38 | 17.68 | 18.17 | 22.24 | 29.40 | **Complies** |
| | 5200 MHz | 19.24 | 20.06 | 20.56 | 24.76 | 29.40 | **Complies** |
| | 5240 MHz | 19.59 | 19.87 | 19.91 | 24.56 | 29.40 | **Complies** |
| | 5745 MHz | 21.35 | 21.46 | 22.23 | 26.47 | 29.40 | **Complies** |
| | 5785 MHz | 21.65 | 21.35 | 21.68 | 26.33 | 29.40 | **Complies** |
| | 5825 MHz | 21.12 | 21.30 | 21.25 | 26.00 | 29.40 | **Complies** |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz | 13.66 | 14.46 | 14.61 | 19.03 | 29.40 | **Complies** |
| | 5230 MHz | 20.18 | 20.20 | 20.44 | 25.05 | 29.40 | **Complies** |
| | 5755 MHz | 21.13 | 21.32 | 21.92 | 26.24 | 29.40 | **Complies** |
| | 5795 MHz | 21.02 | 21.14 | 21.88 | 26.13 | 29.40 | **Complies** |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz | 10.54 | 10.96 | 11.20 | 15.68 | 29.40 | **Complies** |
| | 5775 MHz | 19.85 | 19.73 | 20.38 | 24.77 | 29.40 | **Complies** |

Note: Max. antenna true gain=6.64dBi>6dBi, so power limit=30-(6.64-6)=29.36dBm.

| Temperature | 24℃ | Humidity | 60% |
|---|---|---|---|
| Test Engineer | Clemens Fang | Test Mode | Mode 3 |
| Test Date | May 15, 2016~May 17, 2016 | | |

| Mode | Frequency | Conducted Power (dBm) | Max. Limit (dBm) | Result |
|---|---|---|---|---|
| | | Ant. 1 | | |
| 802.11a | 5180 MHz | 18.13 | 30.00 | Complies |
| | 5200 MHz | 21.61 | 30.00 | Complies |
| | 5240 MHz | 22.26 | 30.00 | Complies |
| | 5745 MHz | 21.84 | 30.00 | Complies |
| | 5785 MHz | 21.71 | 30.00 | Complies |
| | 5825 MHz | 21.27 | 30.00 | Complies |

| Mode | Frequency | Conducted Power (dBm) | | | | Max. Limit (dBm) | Result |
|---|---|---|---|---|---|---|---|
| | | Ant. 1 | Ant. 2 | Ant. 3 | Total | | |
| 802.11ac MCS0/Nss1 VHT20 | 5180 MHz | 15.86 | 15.91 | 15.79 | 20.62 | 30.00 | Complies |
| | 5200 MHz | 20.74 | 19.52 | 19.70 | 24.79 | 30.00 | Complies |
| | 5240 MHz | 21.24 | 19.92 | 20.21 | 25.27 | 30.00 | Complies |
| | 5745 MHz | 20.36 | 19.21 | 20.59 | 24.87 | 30.00 | Complies |
| | 5785 MHz | 20.32 | 19.52 | 19.73 | 24.64 | 30.00 | Complies |
| | 5825 MHz | 20.23 | 19.60 | 19.88 | 24.68 | 30.00 | Complies |
| 802.11ac MCS0/Nss1 VHT40 | 5190 MHz | 15.33 | 14.54 | 14.23 | 19.50 | 30.00 | Complies |
| | 5230 MHz | 19.11 | 17.78 | 17.48 | 22.95 | 30.00 | Complies |
| | 5755 MHz | 20.62 | 19.38 | 20.43 | 24.95 | 30.00 | Complies |
| | 5795 MHz | 20.25 | 19.53 | 20.05 | 24.73 | 30.00 | Complies |
| 802.11ac MCS0/Nss1 VHT80 | 5210 MHz | 14.66 | 13.67 | 13.25 | 18.67 | 30.00 | Complies |
| | 5775 MHz | 18.29 | 16.58 | 17.43 | 22.26 | 30.00 | Complies |

## 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. | |

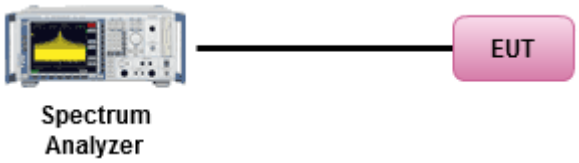
### 3.4.2 Measuring Instruments

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 |
| --- |
|   Spectrum Analyzer |

### 3.4.5 Test Result of Peak Power Spectral Density

| Temperature | 24℃ | Humidity | 60% |
|---|---|---|---|
| Test Engineer | Clemens Fang | Test Mode | Mode 1 |
| Test Date | May 15, 2016~May 17, 2016 | | |

**Configuration IEEE 802.11a / Ant. 1**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 36 | 5180 MHz | 4.08 | 16.50 | **Complies** |
| 40 | 5200 MHz | 10.37 | 16.50 | **Complies** |
| 48 | 5240 MHz | 10.30 | 16.50 | **Complies** |

Note: Antenna true gain=6.50dBi>6dBi, so power limit=17-(6.50-6)=16.50dBm/MHz

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 149 | 5745 MHz | 8.89 | -3.01 | 5.88 | 29.50 | **Complies** |
| 157 | 5785 MHz | 8.93 | -3.01 | 5.92 | 29.50 | **Complies** |
| 165 | 5825 MHz | 8.95 | -3.01 | 5.94 | 29.50 | **Complies** |

Note: Antenna true gain=6.50dBi>6dBi, so power limit=30-(6.50-6)=29.50 dBm/500kHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 36 | 5180 MHz | 8.92 | 11.92 | **Complies** |
| 40 | 5200 MHz | 11.57 | 11.92 | **Complies** |
| 48 | 5240 MHz | 11.43 | 11.92 | **Complies** |

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.08dBi >6dBi, so limit=17 – (11.08 – 6)=11.92 dBm/MHz.

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 149 | 5745 MHz | 13.28 | -3.01 | 10.27 | 24.92 | **Complies** |
| 157 | 5785 MHz | 13.10 | -3.01 | 10.09 | 24.92 | **Complies** |
| 165 | 5825 MHz | 12.85 | -3.01 | 9.84 | 24.92 | **Complies** |

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.08dBi >6dBi, so limit=30 – (11.08 – 6)=24.92 dBm/500kHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 38 | 5190 MHz | 2.89 | 11.92 | **Complies** |
| 46 | 5230 MHz | 8.89 | 11.92 | **Complies** |

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.08dBi >6dBi, so limit=17 – (11.08 – 6)=11.92dBm/MHz.

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 151 | 5755 MHz | 10.05 | -3.01 | 7.04 | 24.92 | **Complies** |
| 159 | 5795 MHz | 9.91 | -3.01 | 6.90 | 24.92 | **Complies** |

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.08dBi >6dBi, so limit=30 – (11.08 – 6)=24.92dBm/500kHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 42 | 5210 MHz | -3.47 | 11.92 | **Complies** |

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.08dBi >6dBi, so limit=17 – (11.08 – 6)=11.92dBm/MHz.

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 155 | 5775 MHz | 5.64 | -3.01 | 2.63 | 24.92 | **Complies** |

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.08dBi >6dBi, so limit=30 – (11.08 – 6)=24.92dBm/500kHz.

| Temperature | 24℃ | Humidity | 60% |
|---|---|---|---|
| Test Engineer | Serway Li | Test Mode | Mode 2 |
| Test Date | May 31, 2016 | | |

**Configuration IEEE 802.11a / Ant. 1**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 36 | 5180 MHz | 3.90 | 16.69 | **Complies** |
| 40 | 5200 MHz | 10.23 | 16.69 | **Complies** |
| 48 | 5240 MHz | 9.16 | 16.69 | **Complies** |

Note: Antenna true gain=6.31dBi>6dBi, so power limit=17-(6.31-6)=16.69dBm/MHz.

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 149 | 5745 MHz | 8.88 | -3.01 | 5.87 | 29.69 | **Complies** |
| 157 | 5785 MHz | 8.94 | -3.01 | 5.93 | 29.69 | **Complies** |
| 165 | 5825 MHz | 8.99 | -3.01 | 5.98 | 29.69 | **Complies** |

Note: Antenna true gain=6.31dBi>6dBi, so power limit=30-(6.31-6)=26.69 dBm/500kHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 36 | 5180 MHz | 9.04 | 11.90 | **Complies** |
| 40 | 5200 MHz | 11.58 | 11.90 | **Complies** |
| 48 | 5240 MHz | 11.40 | 11.90 | **Complies** |

Note: $Directional\ Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.10dBi >6dBi, so limit=17 – (11.10 – 6)=11.90 dBm/MHz.

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 149 | 5745 MHz | 13.10 | -3.01 | 10.09 | 24.90 | **Complies** |
| 157 | 5785 MHz | 12.98 | -3.01 | 9.97 | 24.90 | **Complies** |
| 165 | 5825 MHz | 12.69 | -3.01 | 9.68 | 24.90 | **Complies** |

Note: $Directional\ Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.10dBi >6dBi, so limit=30 – (11.10 – 6)=24.90 dBm/500kHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 38 | 5190 MHz | 2.74 | 11.90 | **Complies** |
| 46 | 5230 MHz | 8.81 | 11.90 | **Complies** |

Note: $Directional\ Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.10dBi >6dBi, so limit=17 – (11.10 – 6)=11.90dBm/MHz.

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 151 | 5755 MHz | 10.06 | -3.01 | 7.05 | 24.90 | **Complies** |
| 159 | 5795 MHz | 9.98 | -3.01 | 6.97 | 24.90 | **Complies** |

Note: $Directional\ Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.10dBi >6dBi, so limit=30 – (11.10 – 6)=24.90dBm/500kHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 42 | 5210 MHz | -3.44 | 11.90 | **Complies** |

Note: $Directional\ Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.10dBi >6dBi, so limit=17 – (11.10 – 6)=11.90dBm/MHz.

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 155 | 5775 MHz | 5.63 | -3.01 | 2.62 | 24.90 | **Complies** |

Note: $Directional\ Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =11.10dBi >6dBi, so limit=30 – (11.10 – 6)=24.90dBm/500kHz.

| Temperature | 24℃ | Humidity | 60% |
|---|---|---|---|
| Test Engineer | Clemens Fang | Test Mode | Mode 3 |
| Test Date | May 15, 2016~May 17, 2016 | | |

**Configuration IEEE 802.11a / Ant. 1**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 36 | 5180 MHz | 4.97 | 17.00 | **Complies** |
| 40 | 5200 MHz | 8.49 | 17.00 | **Complies** |
| 48 | 5240 MHz | 9.01 | 17.00 | **Complies** |

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 149 | 5745 MHz | 8.57 | -3.01 | 5.56 | 30.00 | **Complies** |
| 157 | 5785 MHz | 8.43 | -3.01 | 5.42 | 30.00 | **Complies** |
| 165 | 5825 MHz | 8.07 | -3.01 | 5.06 | 30.00 | **Complies** |

**Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 36 | 5180 MHz | 7.42 | 13.23 | **Complies** |
| 40 | 5200 MHz | 11.63 | 13.23 | **Complies** |
| 48 | 5240 MHz | 12.06 | 13.23 | **Complies** |

Note: $Directional\ Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =9.77dBi >6dBi, so limit=17 – (9.77 – 6)=13.23 dBm/MHz.

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 149 | 5745 MHz | 11.69 | -3.01 | 8.68 | 26.23 | **Complies** |
| 157 | 5785 MHz | 11.47 | -3.01 | 8.46 | 26.23 | **Complies** |
| 165 | 5825 MHz | 11.49 | -3.01 | 8.48 | 26.23 | **Complies** |

Note: $Directional\ Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =9.77dBi >6dBi, so limit=30 – (9.77 – 6)=26.23 dBm/500kHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 38 | 5190 MHz | 3.33 | 13.23 | **Complies** |
| 46 | 5230 MHz | 6.70 | 13.23 | **Complies** |

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =9.77dBi >6dBi, so limit=17 – (9.77 – 6)=13.23dBm/MHz.

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 151 | 5755 MHz | 8.78 | -3.01 | 5.77 | 26.23 | **Complies** |
| 159 | 5795 MHz | 8.46 | -3.01 | 5.45 | 26.23 | **Complies** |

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =19.77dBi >6dBi, so limit=30 – (9.77 – 6)=26.23dBm/500kHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3**

| Channel | Frequency | Power Density (dBm/MHz) | Max. Limit (dBm/MHz) | Result |
|---|---|---|---|---|
| 42 | 5210 MHz | -0.49 | 13.23 | **Complies** |

Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =9.77dBi >6dBi, so limit=17 – (9.77 – 6)=13.23dBm/MHz.

| Channel | Frequency | Power Density (dBm/MHz) | 10log (500kHz/RBW) Factor (dB) | Power Density (dBm/500kHz) | Power Density Limit (dBm/500kHz) | Result |
|---|---|---|---|---|---|---|
| 155 | 5775 MHz | 3.08 | -3.01 | 0.07 | 26.23 | **Complies** |

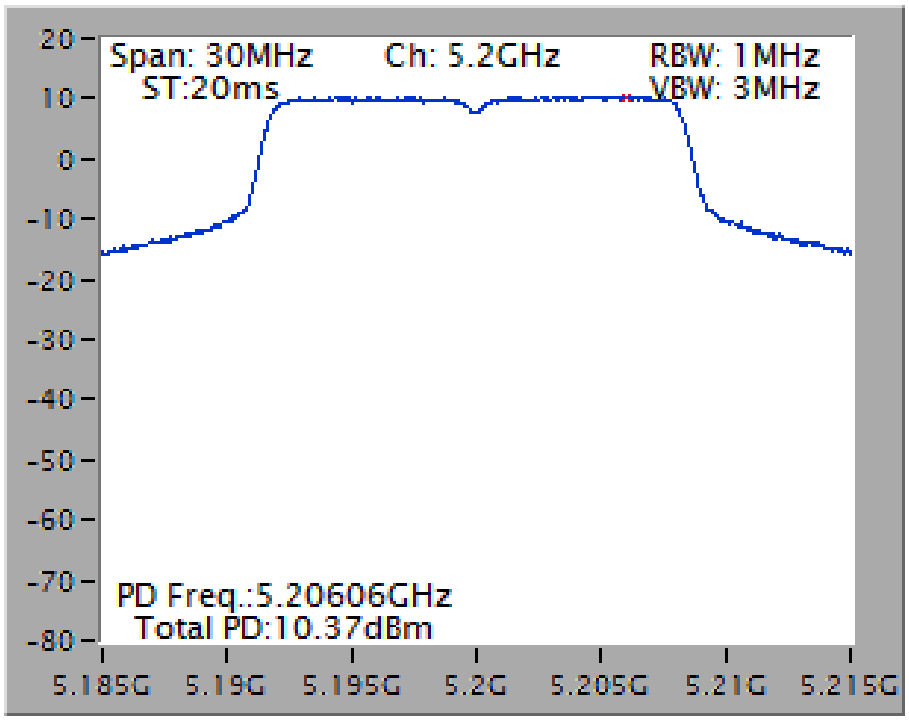
Note: $Directional\,Gain = 10\log\left[\frac{\sum_{j=1}^{Nss}\left\{\sum_{K=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =9.77dBi >6dBi, so limit=30 – (9.77 – 6)=26.23dBm/500kHz.

Note: All the test values were listed in the report.

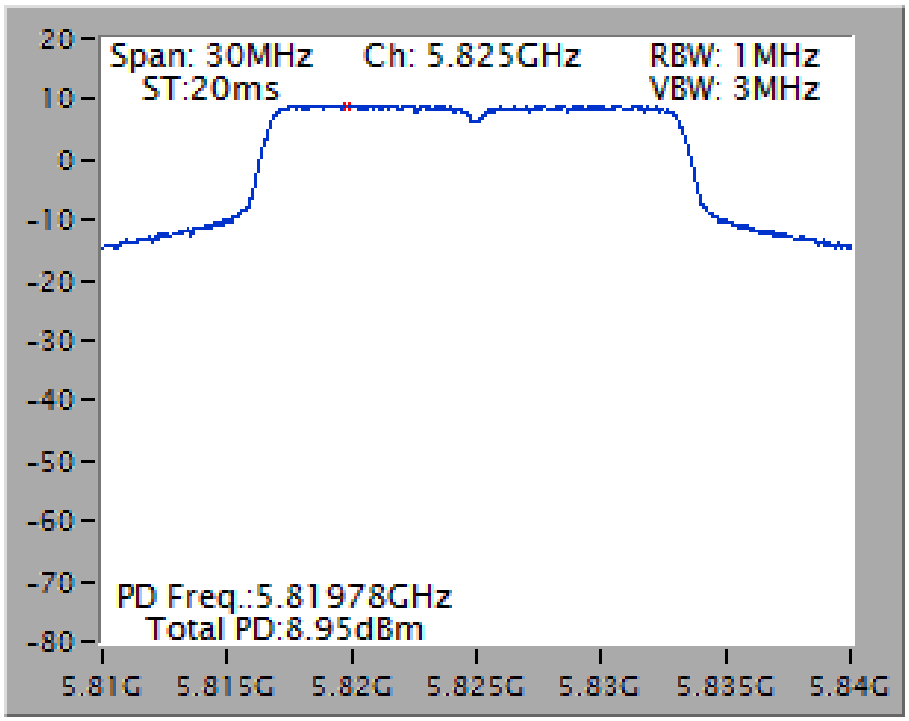
For plots, only the channel with worse result was shown.

**For Mode 1:**

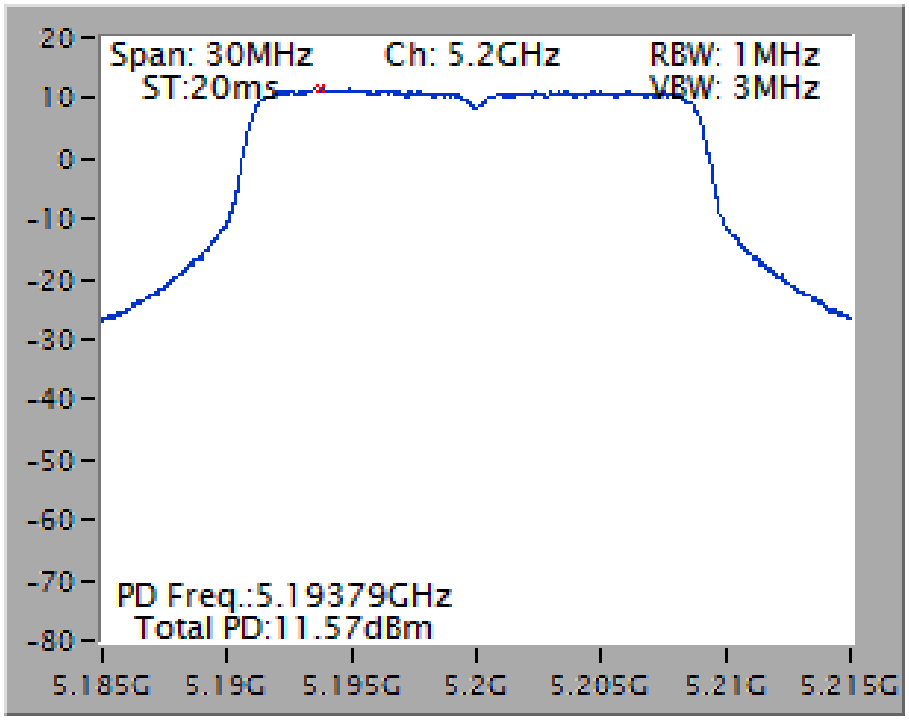
**Power Density Plot on Configuration IEEE 802.11a / Ant. 1 / 5200 MHz**



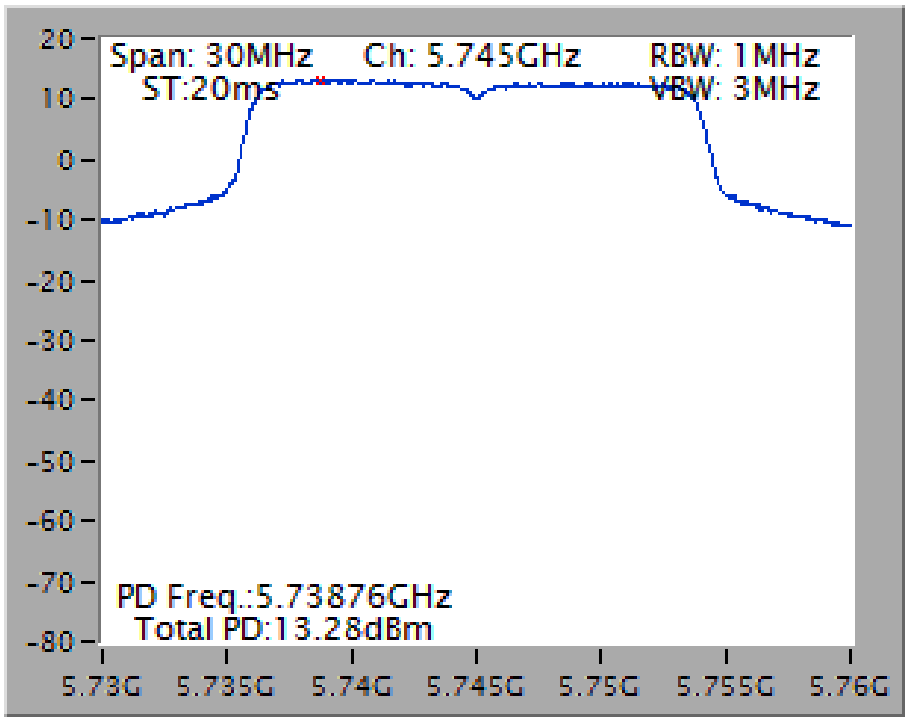

**Power Density Plot on Configuration IEEE 802.11a / Ant. 1 / 5825 MHz**



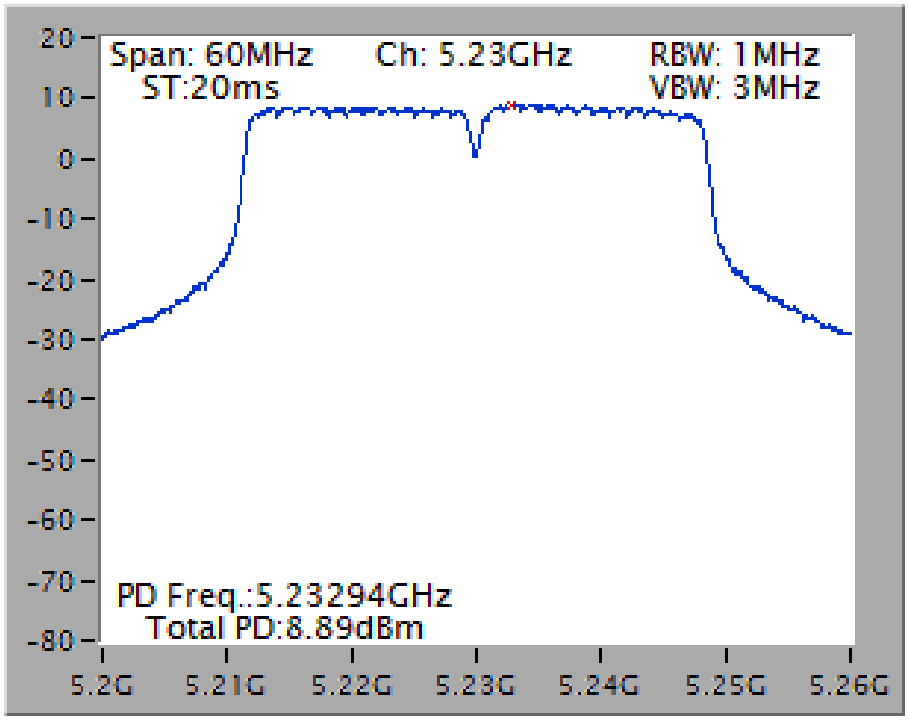
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5200 MHz**



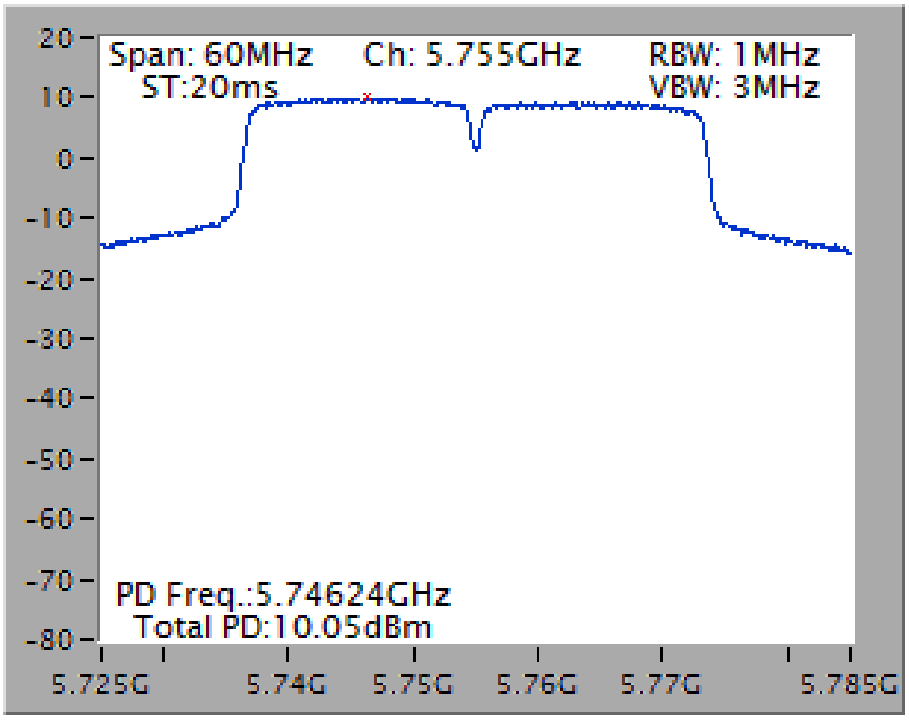

**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5745 MHz**



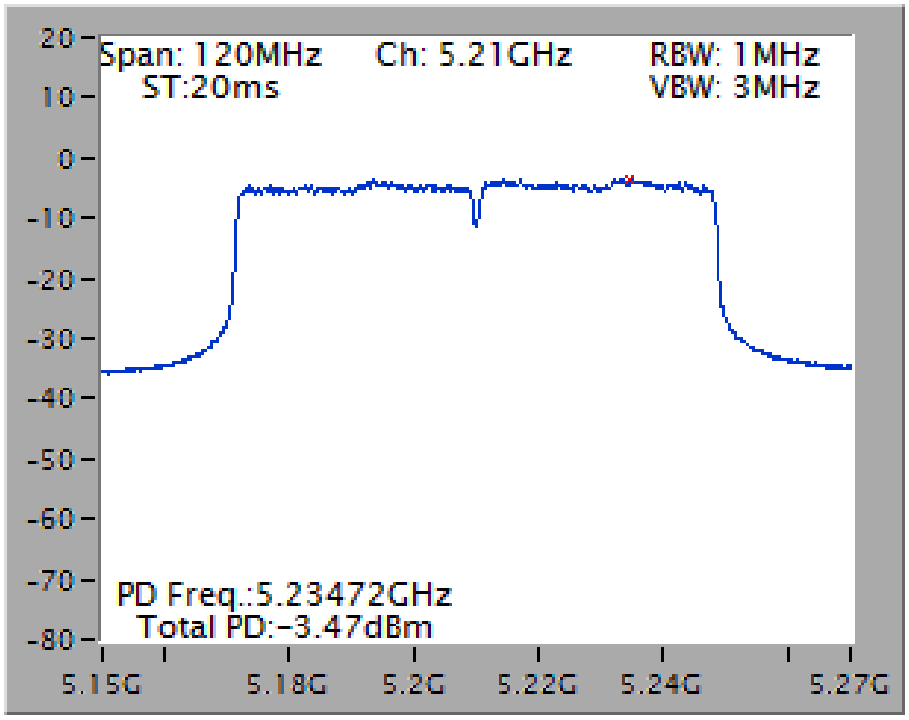
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5230 MHz**



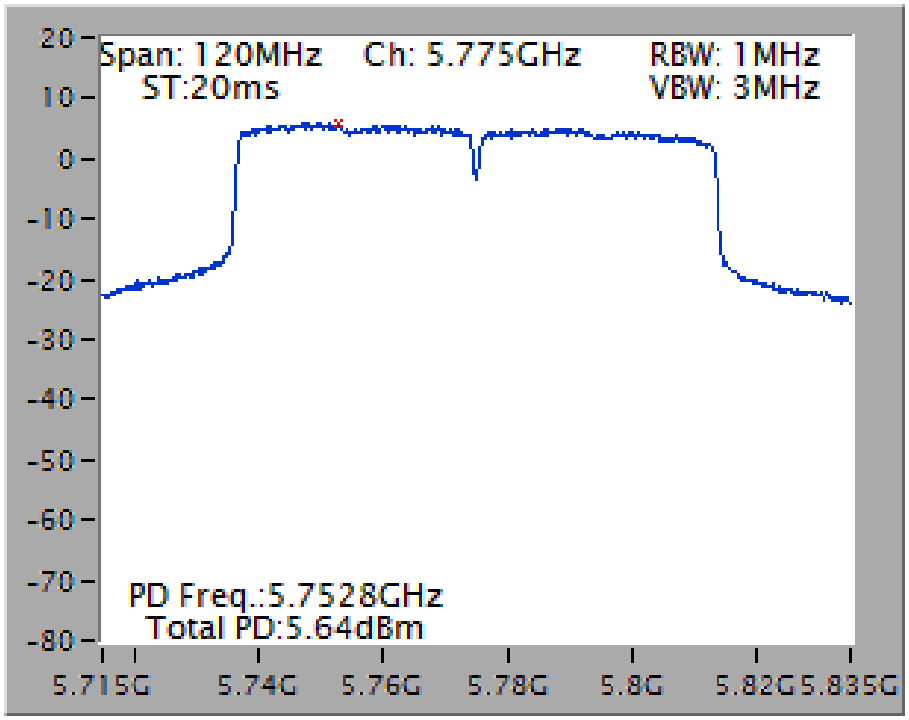

**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5755 MHz**



**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5210 MHz**

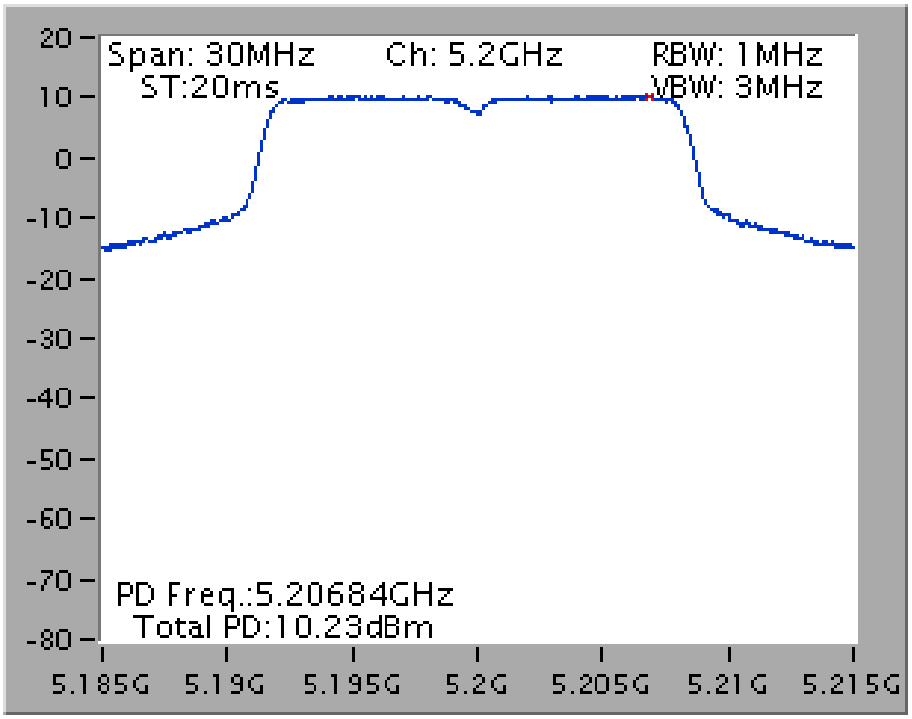



**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5775 MHz**

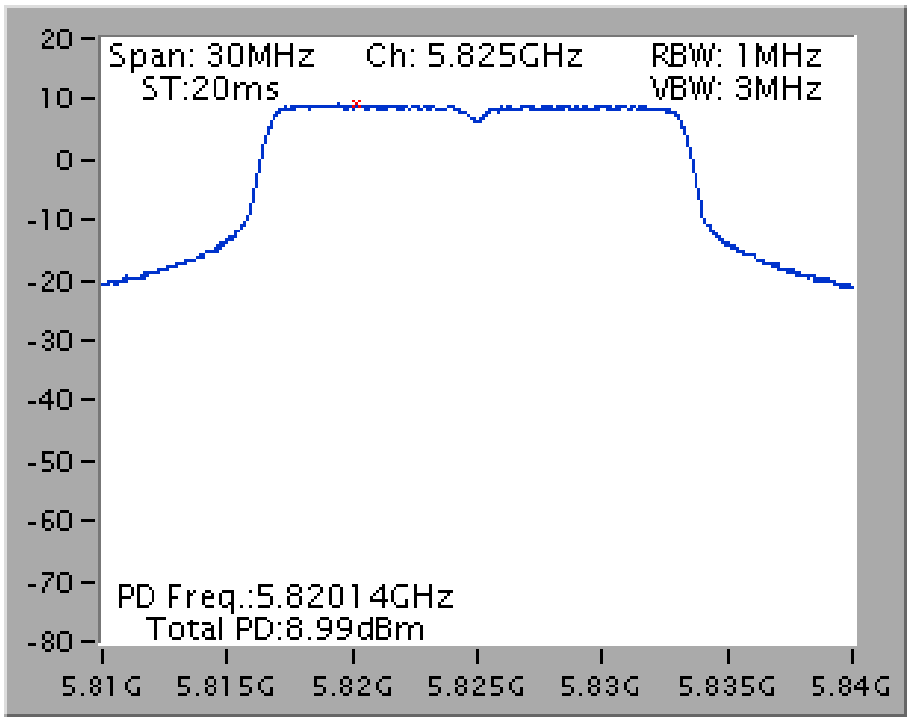


**For Mode 2:**

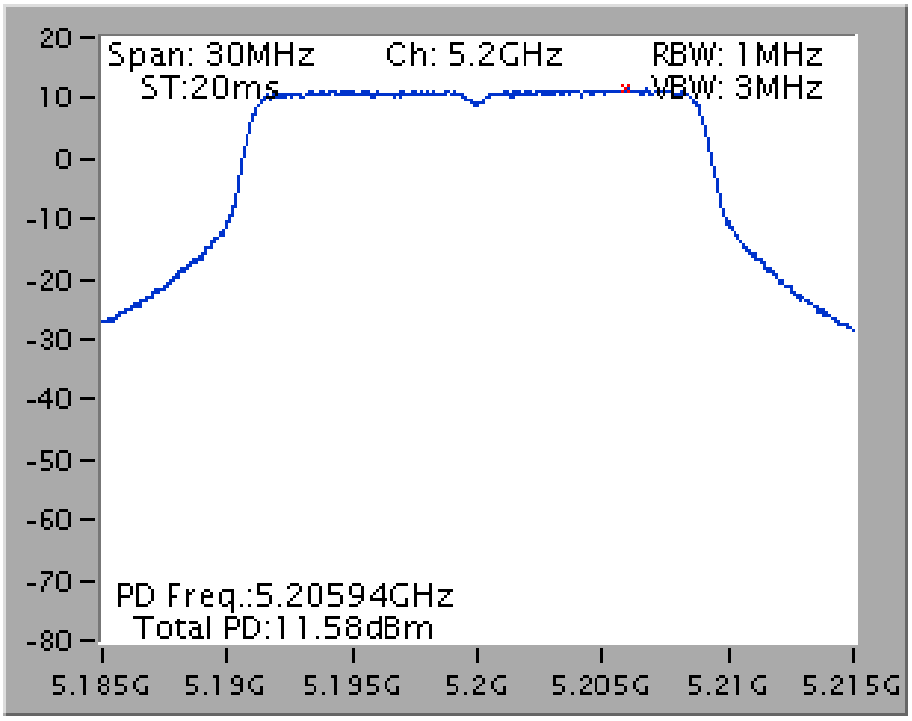
**Power Density Plot on Configuration IEEE 802.11a / Ant. 1 / 5200 MHz**



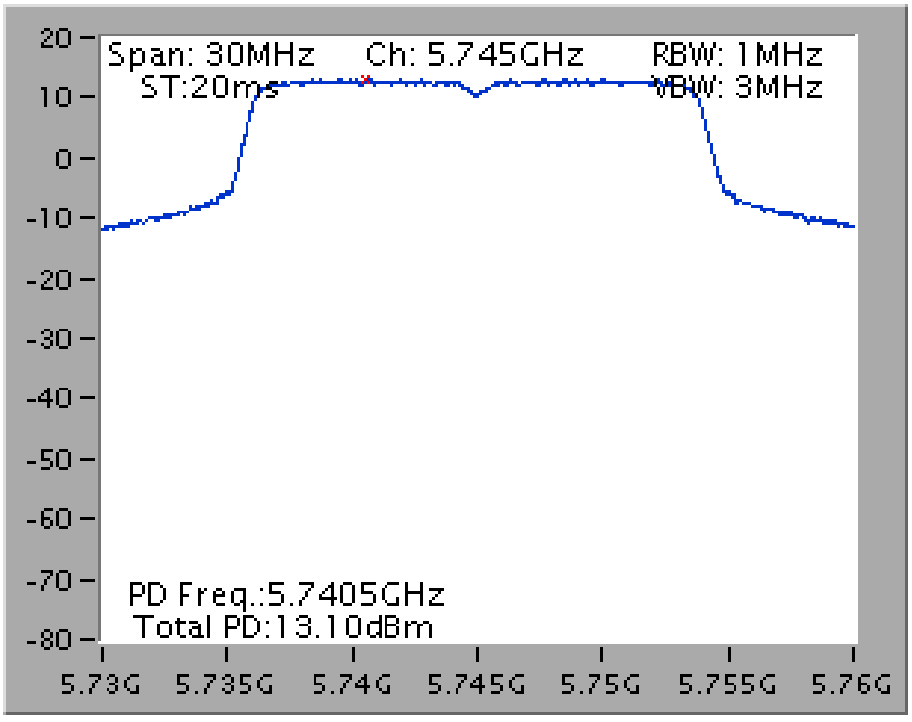

**Power Density Plot on Configuration IEEE 802.11a / Ant. 1 / 5825 MHz**



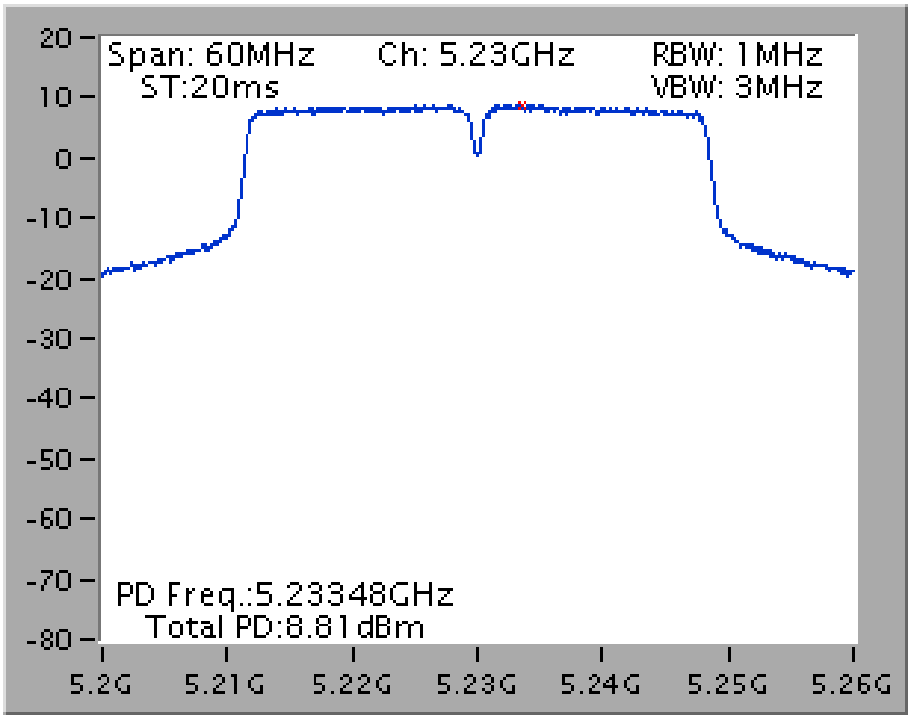
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5200MHz**



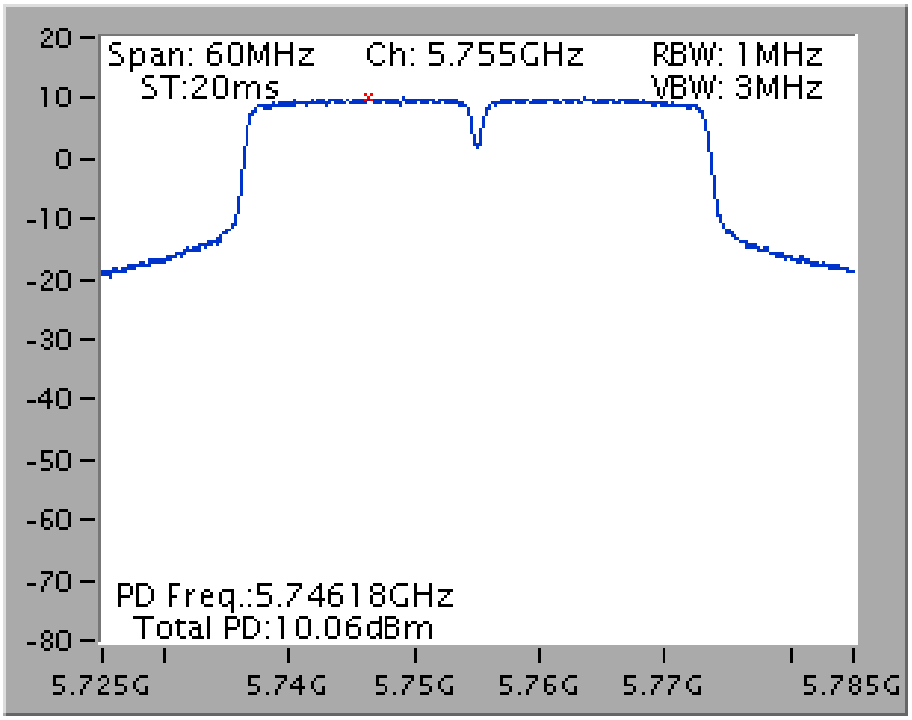

**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5745 MHz**



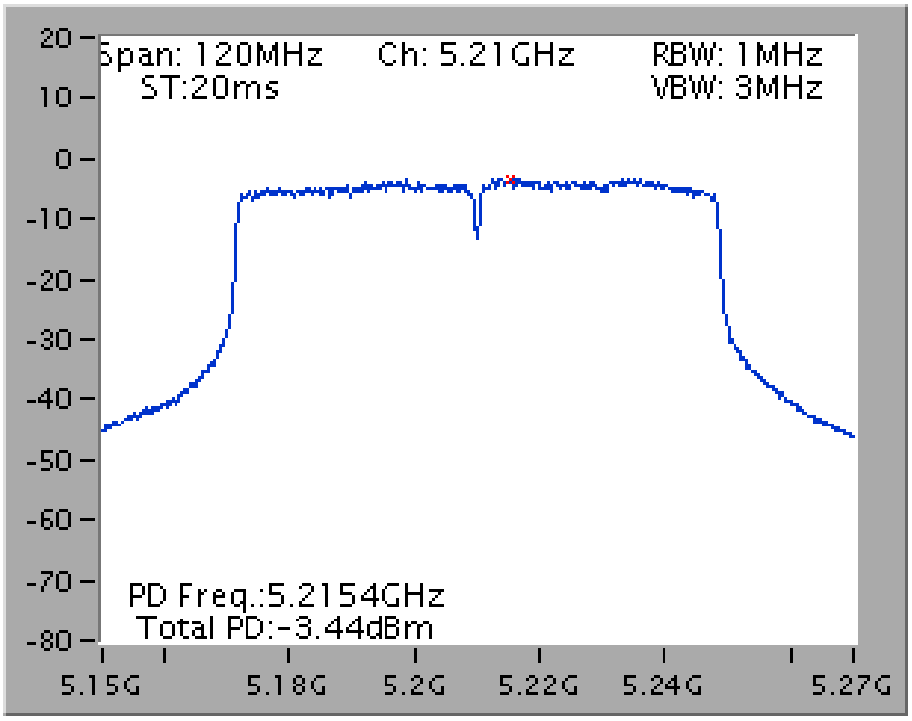
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5230 MHz**



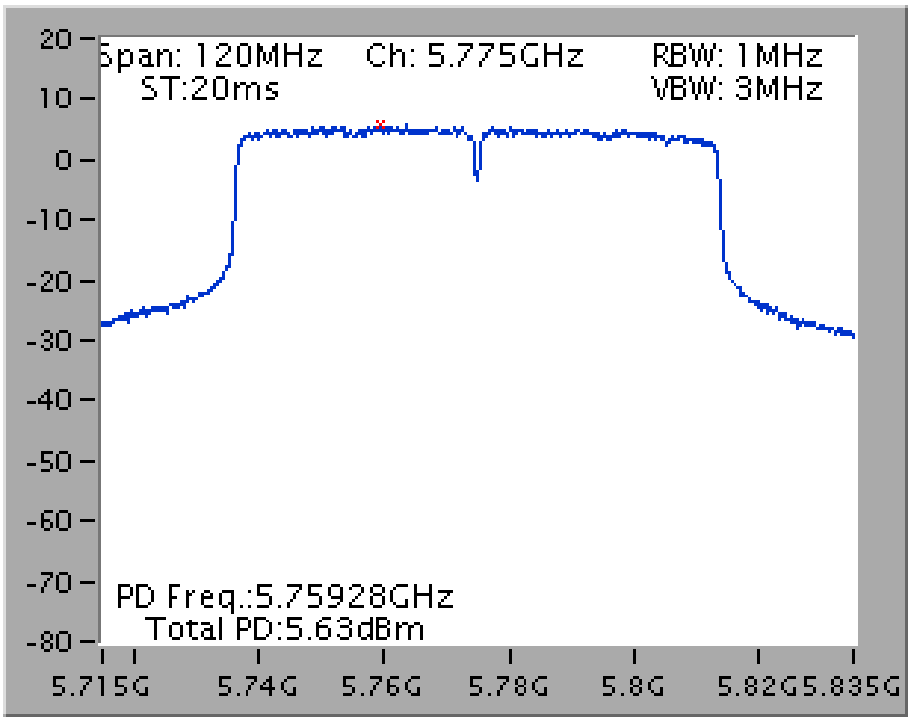

**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5755 MHz**



**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5210 MHz**

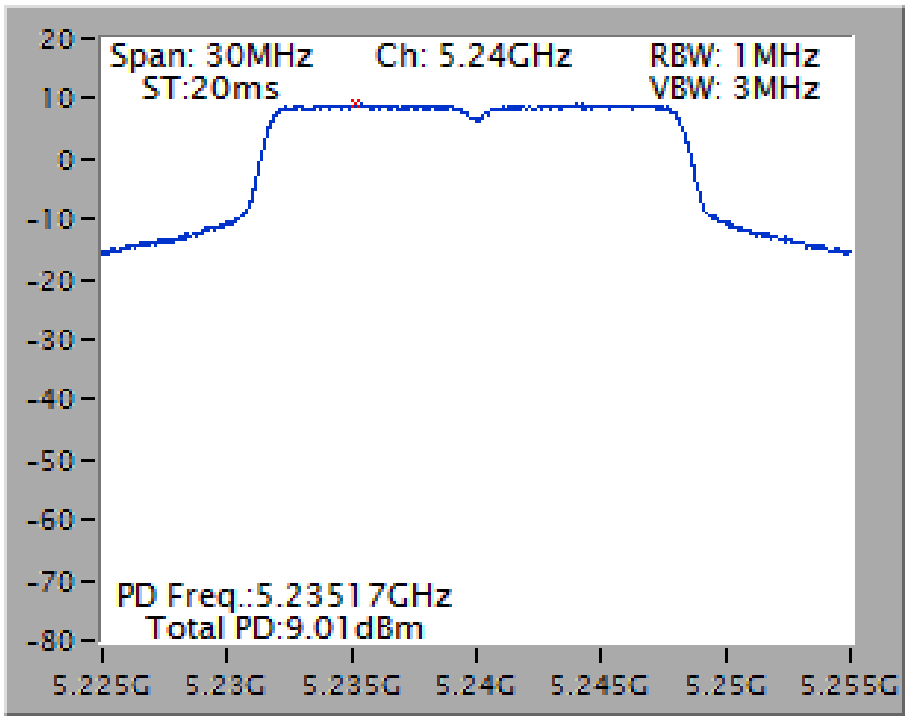



**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5775 MHz**

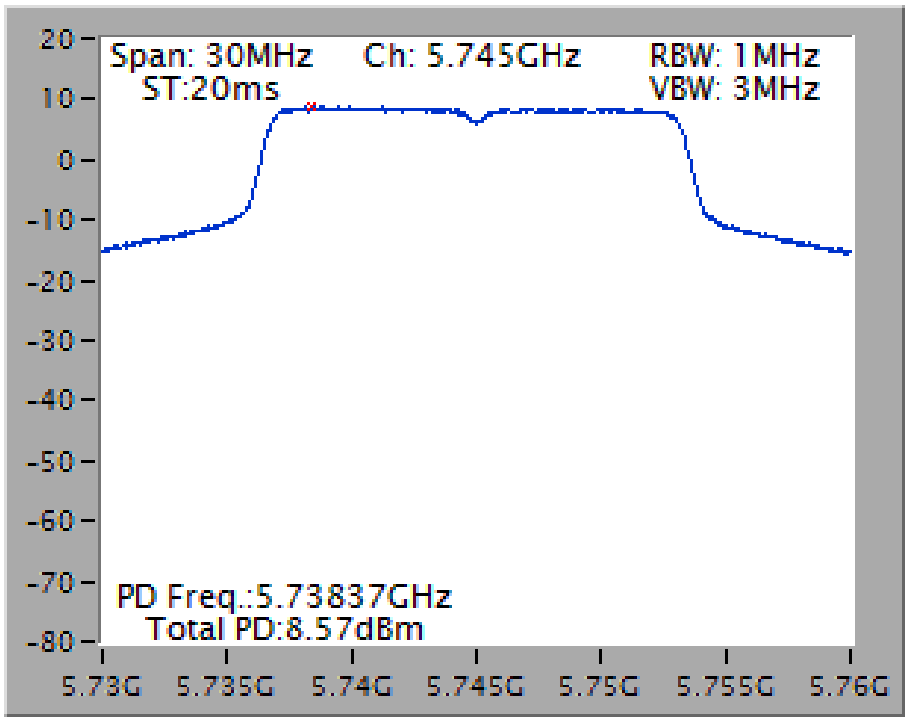


**For Mode 3:**

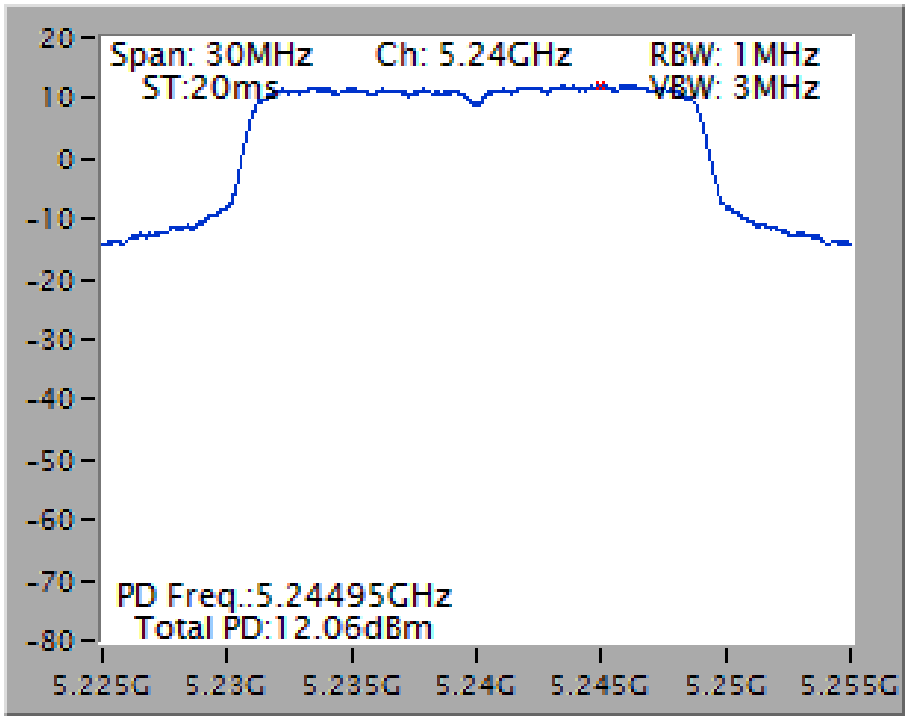
**Power Density Plot on Configuration IEEE 802.11a / Ant. 1 / 5240 MHz**



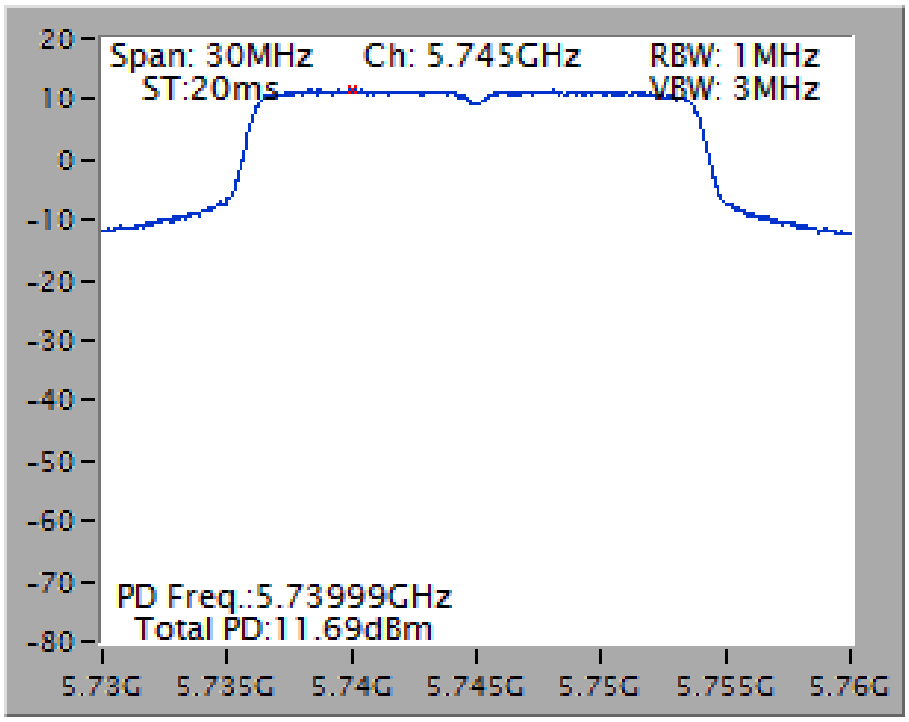

**Power Density Plot on Configuration IEEE 802.11a / Ant. 1 / 5745 MHz**



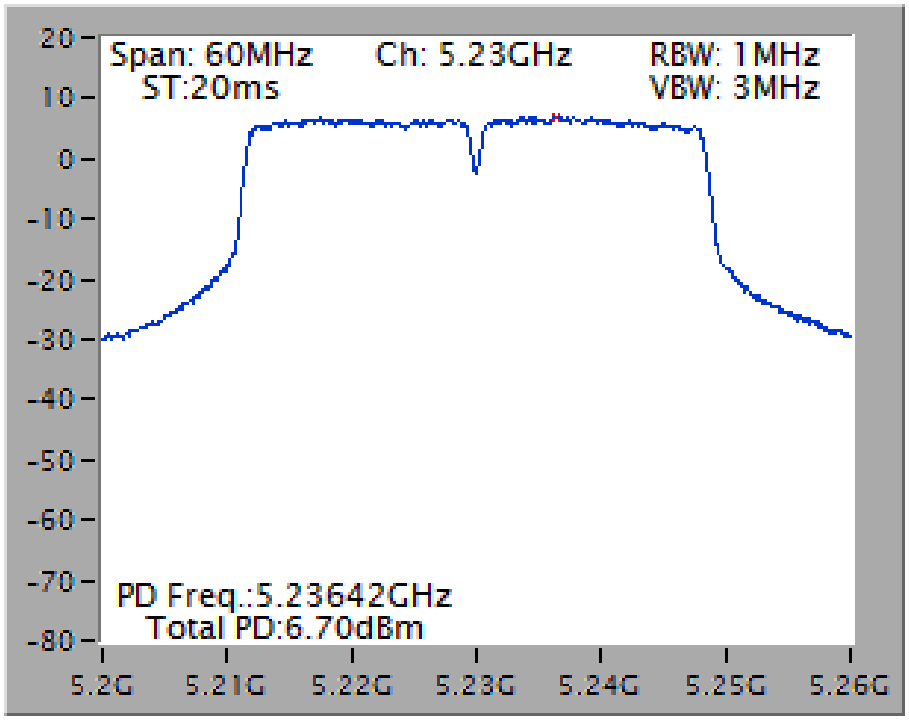
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5240 MHz**



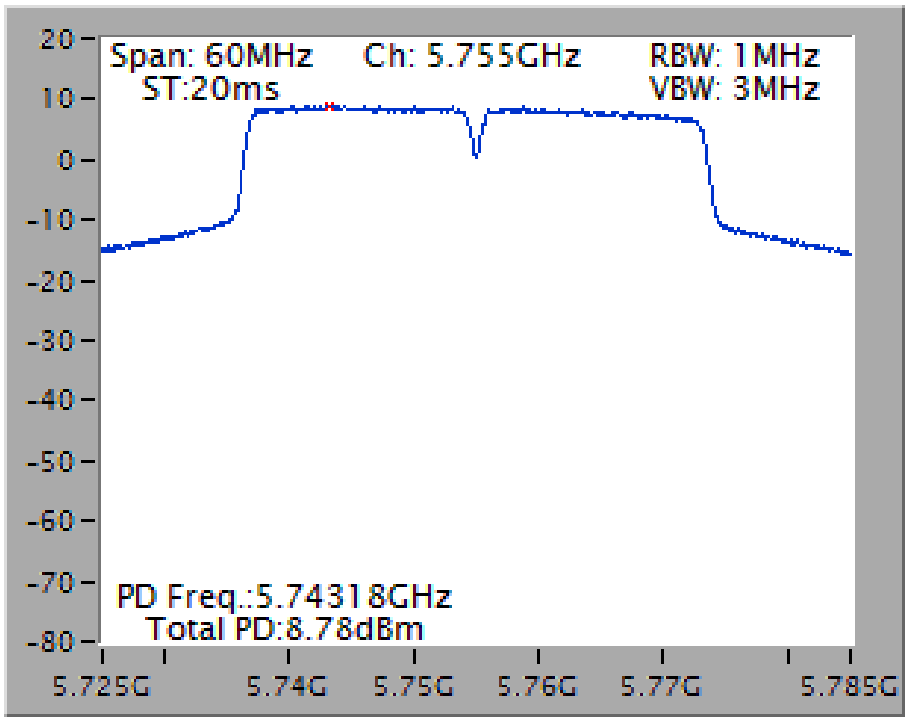

**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Ant. 1 + Ant. 2 + Ant. 3 / 5745 MHz**



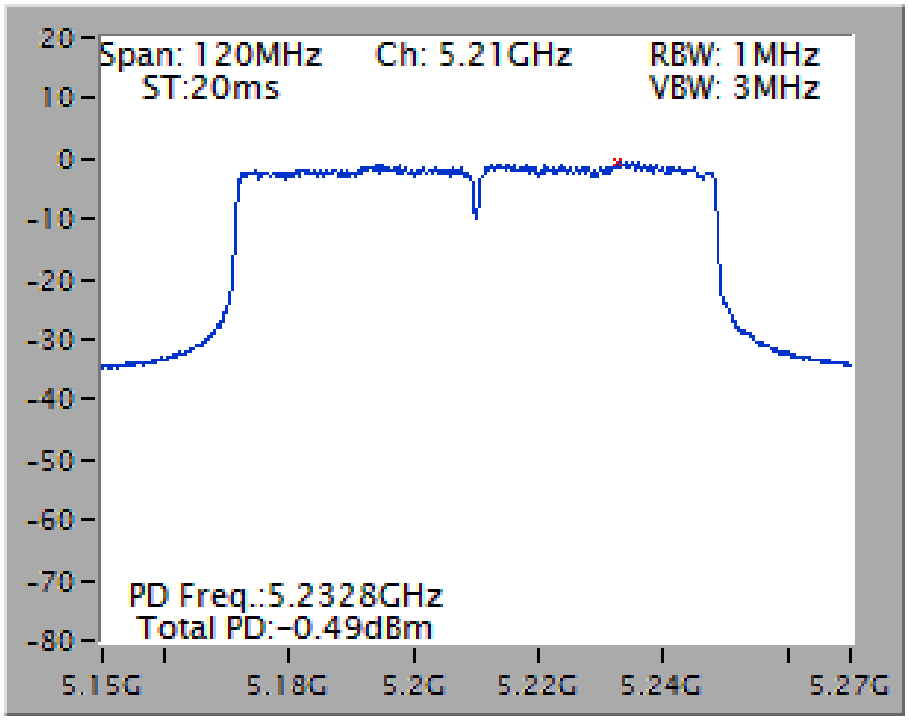
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5230 MHz**



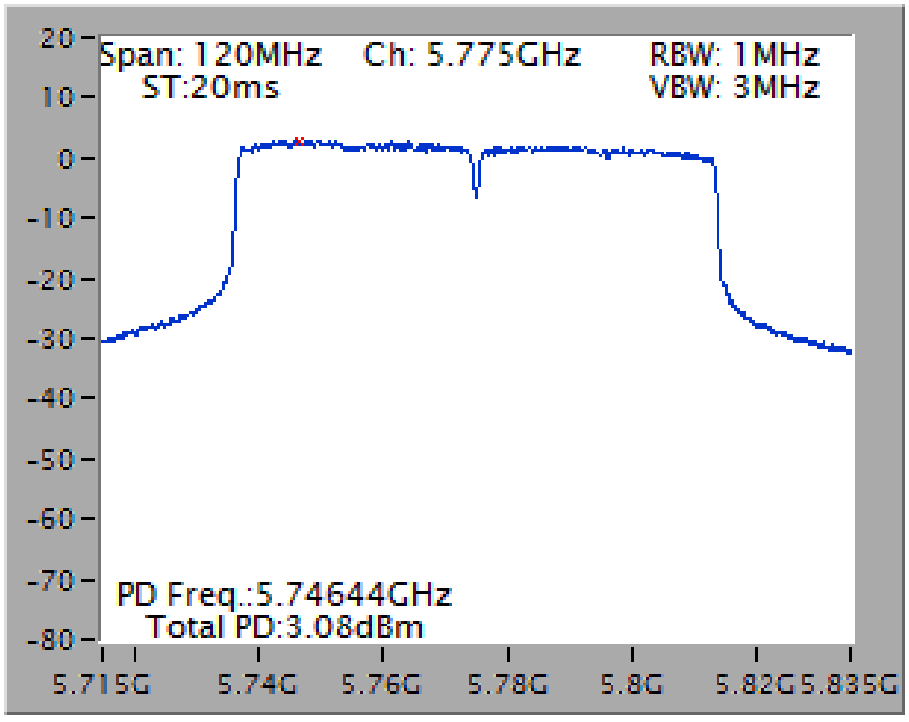

**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Ant. 1 + Ant. 2 + Ant. 3 / 5755 MHz**



**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5210 MHz**




**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Ant. 1 + Ant. 2 + Ant. 3 / 5775 MHz**



## 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.

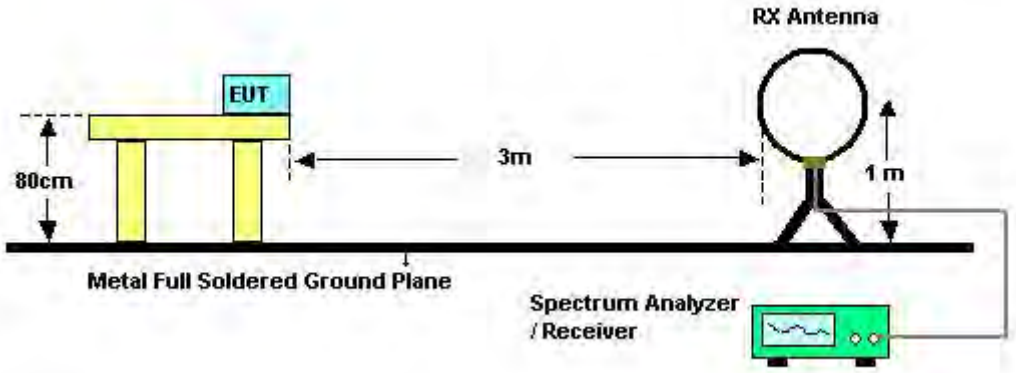
### 3.5.3 Test Procedures

| 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. | | | |

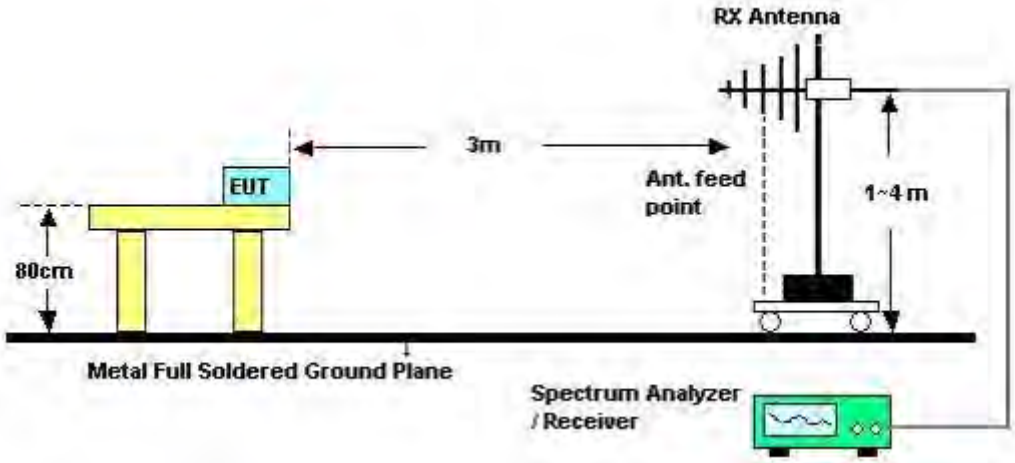
### 3.5.4 Test Setup

**Transmitter Radiated Unwanted Emissions**

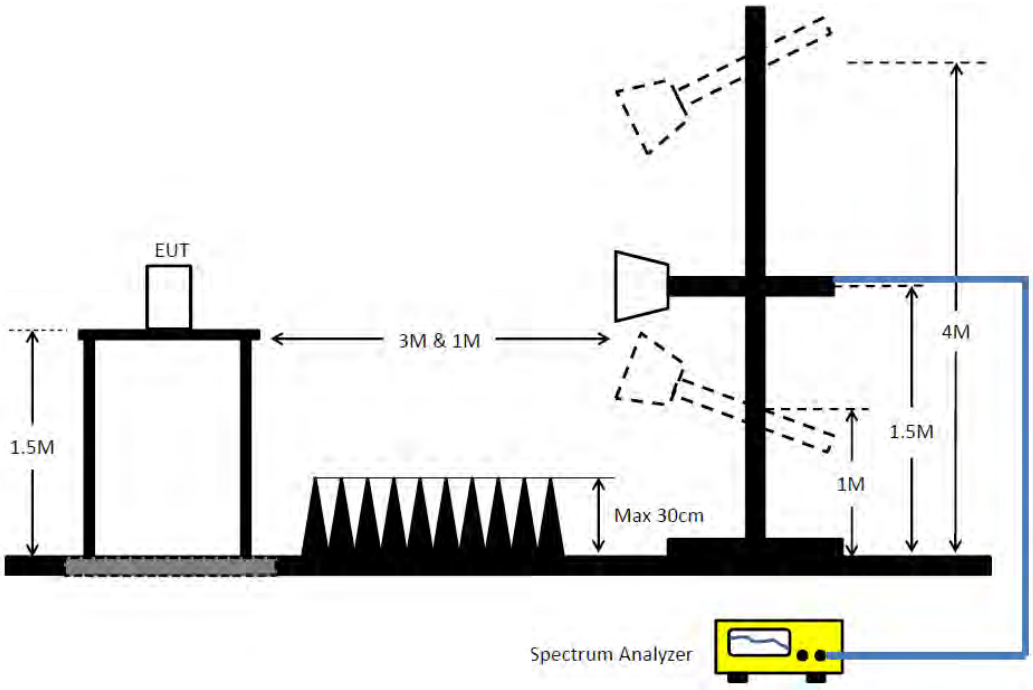
**9kHz ~30MHz**




**30MHz~1GHz**



**Above 1GHz**



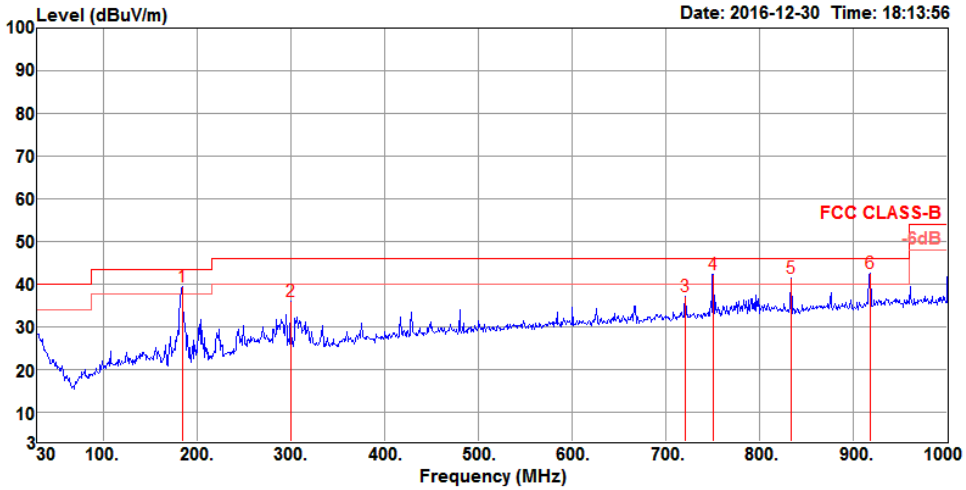

### 3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

### 3.5.6 Test Result of Transmitter Unwanted Emissions (30MHz~1GHz)

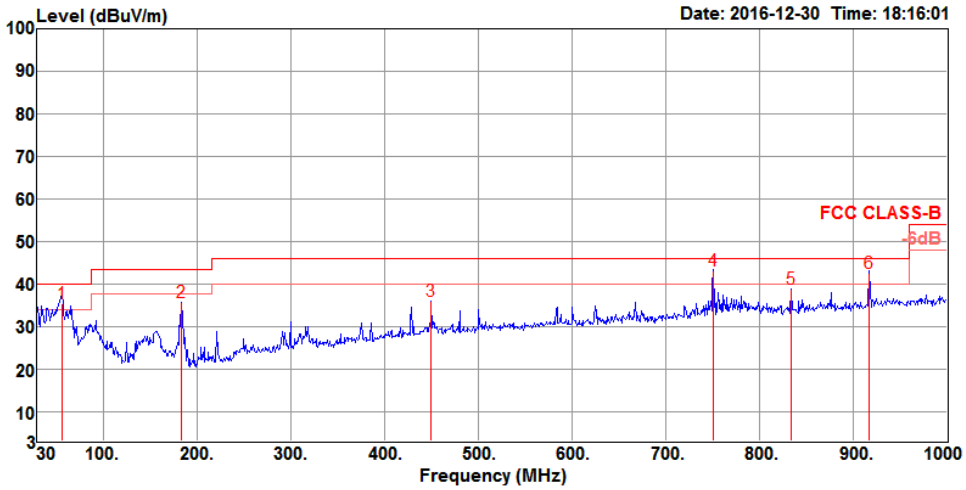
| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Steven Liang | Configurations | Normal Link |
| Test Date | Dec. 30, 2016~Jan. 17, 2017 | Test Mode | Mode 5 |

**Horizontal**




| | 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 | 184.23 | 39.23 | 43.50 | -4.27 | 53.68 | 2.34 | 15.55 | 32.34 | 150 | 228 | Peak | HORIZONTAL |
| 2 | 299.66 | 35.78 | 46.00 | -10.22 | 45.38 | 3.00 | 19.68 | 32.28 | 150 | 209 | Peak | HORIZONTAL |
| 3 | 720.64 | 37.18 | 46.00 | -8.82 | 38.88 | 4.78 | 25.83 | 32.31 | 300 | 239 | Peak | HORIZONTAL |
| 4 | 750.71 | 42.33 | 46.00 | -3.67 | 43.63 | 4.87 | 26.10 | 32.27 | 150 | 212 | Peak | HORIZONTAL |
| 5 | 833.16 | 41.45 | 46.00 | -4.55 | 41.47 | 5.14 | 26.87 | 32.03 | 100 | 187 | Peak | HORIZONTAL |
| 6 | 917.55 | 42.45 | 46.00 | -3.55 | 41.02 | 5.45 | 27.50 | 31.52 | 100 | 97 | Peak | HORIZONTAL |

**Vertical**




| | 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 | 56.19 | 35.24 | 40.00 | -4.76 | 53.04 | 1.24 | 13.34 | 32.38 | 150 | 255 | QP | VERTICAL |
| 2 | 183.26 | 35.50 | 43.50 | -8.00 | 49.94 | 2.33 | 15.57 | 32.34 | 100 | 118 | Peak | VERTICAL |
| 3 | 450.01 | 35.83 | 46.00 | -10.17 | 41.41 | 3.73 | 23.00 | 32.31 | 150 | 349 | Peak | VERTICAL |
| 4 | 750.71 | 42.94 | 46.00 | -3.06 | 44.24 | 4.87 | 26.10 | 32.27 | 150 | 201 | QP | VERTICAL |
| 5 | 833.16 | 38.85 | 46.00 | -7.15 | 38.87 | 5.14 | 26.87 | 32.03 | 100 | 166 | Peak | VERTICAL |
| 6 | 916.58 | 42.46 | 46.00 | -3.54 | 41.03 | 5.45 | 27.50 | 31.52 | 100 | 111 | QP | VERTICAL |

Note:
The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

### 3.5.7 Test Result of Transmitter Unwanted Emissions (1GHz~10th Harmonic)

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 36 / Ant. 1 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 15531.32 | 59.48 | 74.00 | -14.52 | 43.32 | 13.26 | 38.25 | 35.35 | 138 | 55 | Peak | HORIZONTAL |
| 2 | 15541.08 | 48.73 | 54.00 | -5.27 | 32.57 | 13.26 | 38.25 | 35.35 | 138 | 55 | Average | HORIZONTAL |

Vertical

| | 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 | 15539.76 | 59.80 | 74.00 | -14.20 | 43.64 | 13.26 | 38.25 | 35.35 | 155 | 12 | Peak | VERTICAL |
| 2 | 15546.17 | 48.54 | 54.00 | -5.46 | 32.38 | 13.26 | 38.25 | 35.35 | 155 | 12 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 40 / Ant. 1 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 15585.57 | 60.19 | 74.00 | -13.81 | 44.08 | 13.28 | 38.19 | 35.36 | 150 | 220 | Peak | HORIZONTAL |
| 2 | 15603.89 | 48.27 | 54.00 | -5.73 | 32.18 | 13.31 | 38.14 | 35.36 | 150 | 220 | Average | HORIZONTAL |

Vertical

| | 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 | 15591.68 | 60.15 | 74.00 | -13.85 | 44.04 | 13.28 | 38.19 | 35.36 | 116 | 177 | Peak | VERTICAL |
| 2 | 15602.63 | 48.12 | 54.00 | -5.88 | 32.03 | 13.31 | 38.14 | 35.36 | 116 | 177 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 48 / Ant. 1 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 15716.05 | 58.51 | 74.00 | -15.49 | 42.51 | 13.35 | 38.03 | 35.38 | 143 | 40 | Peak | HORIZONTAL |
| 2 | 15719.28 | 47.99 | 54.00 | -6.01 | 31.99 | 13.35 | 38.03 | 35.38 | 143 | 40 | Average | HORIZONTAL |

Vertical

| | 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 | 15711.08 | 47.30 | 54.00 | -6.70 | 31.29 | 13.35 | 38.03 | 35.37 | 125 | 95 | Average | VERTICAL |
| 2 | 15713.83 | 58.62 | 74.00 | -15.38 | 42.62 | 13.35 | 38.03 | 35.38 | 125 | 95 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 149 / Ant. 1 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 11487.13 | 64.14 | 74.00 | -9.86 | 47.77 | 11.60 | 40.00 | 35.23 | 144 | 105 | Peak | HORIZONTAL |
| 2 | 11487.90 | 48.14 | 54.00 | -5.86 | 31.77 | 11.60 | 40.00 | 35.23 | 144 | 105 | Average | HORIZONTAL |

Vertical

| | 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 | 11493.71 | 47.52 | 54.00 | -6.48 | 31.15 | 11.60 | 40.00 | 35.23 | 129 | 264 | Average | VERTICAL |
| 2 | 11500.84 | 58.29 | 74.00 | -15.71 | 41.92 | 11.60 | 40.00 | 35.23 | 129 | 264 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 157 / Ant. 1 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 11567.72 | 47.14 | 54.00 | -6.86 | 30.86 | 11.64 | 39.87 | 35.23 | 142 | 110 | Average | HORIZONTAL |
| 2 | 11571.62 | 62.41 | 74.00 | -11.59 | 46.13 | 11.64 | 39.87 | 35.23 | 142 | 110 | Peak | HORIZONTAL |

Vertical

| | 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 | 11561.02 | 57.55 | 74.00 | -16.45 | 41.27 | 11.64 | 39.87 | 35.23 | 131 | 57 | Peak | VERTICAL |
| 2 | 11573.47 | 46.94 | 54.00 | -7.06 | 30.66 | 11.64 | 39.87 | 35.23 | 131 | 57 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 165 / Ant. 1 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 11639.46 | 58.58 | 74.00 | -15.42 | 42.38 | 11.69 | 39.73 | 35.22 | 153 | 206 | Peak | HORIZONTAL |
| 2 | 11651.02 | 47.31 | 54.00 | -6.69 | 31.15 | 11.71 | 39.67 | 35.22 | 153 | 206 | Average | HORIZONTAL |

Vertical

| | 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 | 11648.50 | 47.23 | 54.00 | -6.77 | 31.03 | 11.69 | 39.73 | 35.22 | 128 | 155 | Average | VERTICAL |
| 2 | 11657.61 | 58.98 | 74.00 | -15.02 | 42.82 | 11.71 | 39.67 | 35.22 | 128 | 155 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 36 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 15534.13 | 48.70 | 54.00 | -5.30 | 32.54 | 13.26 | 38.25 | 35.35 | 125 | 207 | Average | HORIZONTAL |
| 2 | 15543.11 | 60.60 | 74.00 | -13.40 | 44.44 | 13.26 | 38.25 | 35.35 | 125 | 207 | Peak | HORIZONTAL |

Vertical

| | 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 | 15537.17 | 48.49 | 54.00 | -5.51 | 32.33 | 13.26 | 38.25 | 35.35 | 109 | 151 | Average | VERTICAL |
| 2 | 15540.52 | 60.31 | 74.00 | -13.69 | 44.15 | 13.26 | 38.25 | 35.35 | 109 | 151 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 40 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 15591.02 | 60.30 | 74.00 | -13.70 | 44.19 | 13.28 | 38.19 | 35.36 | 142 | 144 | Peak | HORIZONTAL |
| 2 | 15592.62 | 48.85 | 54.00 | -5.15 | 32.74 | 13.28 | 38.19 | 35.36 | 142 | 144 | Average | HORIZONTAL |

Vertical

| | 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 | 15592.14 | 48.92 | 54.00 | -5.08 | 32.81 | 13.28 | 38.19 | 35.36 | 127 | 187 | Average | VERTICAL |
| 2 | 15600.64 | 59.88 | 74.00 | -14.12 | 43.79 | 13.31 | 38.14 | 35.36 | 127 | 187 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 48 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 15710.06 | 58.90 | 74.00 | -15.10 | 42.89 | 13.35 | 38.03 | 35.37 | 131 | 103 | Peak | HORIZONTAL |
| 2 | 15724.87 | 48.26 | 54.00 | -5.74 | 32.26 | 13.35 | 38.03 | 35.38 | 131 | 103 | Average | HORIZONTAL |

Vertical

| | 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 | 15721.72 | 48.05 | 54.00 | -5.95 | 32.05 | 13.35 | 38.03 | 35.38 | 127 | 149 | Average | VERTICAL |
| 2 | 15722.16 | 59.52 | 74.00 | -14.48 | 43.52 | 13.35 | 38.03 | 35.38 | 127 | 149 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 149 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 11485.57 | 62.91 | 74.00 | -11.09 | 46.54 | 11.60 | 40.00 | 35.23 | 148 | 106 | Peak | HORIZONTAL |
| 2 | 11486.11 | 52.35 | 54.00 | -1.65 | 35.98 | 11.60 | 40.00 | 35.23 | 148 | 106 | Average | HORIZONTAL |

Vertical

| | 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 | 11480.78 | 59.54 | 74.00 | -14.46 | 43.19 | 11.57 | 40.01 | 35.23 | 176 | 202 | Peak | VERTICAL |
| 2 | 11493.29 | 48.66 | 54.00 | -5.34 | 32.29 | 11.60 | 40.00 | 35.23 | 176 | 202 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 157 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 11565.99 | 50.69 | 54.00 | -3.31 | 34.41 | 11.64 | 39.87 | 35.23 | 149 | 107 | Average | HORIZONTAL |
| 2 | 11573.47 | 61.58 | 74.00 | -12.42 | 45.30 | 11.64 | 39.87 | 35.23 | 149 | 107 | Peak | HORIZONTAL |

Vertical

| | 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 | 11566.59 | 57.62 | 74.00 | -16.38 | 41.34 | 11.64 | 39.87 | 35.23 | 143 | 29 | Peak | VERTICAL |
| 2 | 11573.47 | 48.01 | 54.00 | -5.99 | 31.73 | 11.64 | 39.87 | 35.23 | 143 | 29 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 165 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 11645.09 | 50.55 | 54.00 | -3.45 | 34.35 | 11.69 | 39.73 | 35.22 | 154 | 110 | Average | HORIZONTAL |
| 2 | 11646.47 | 61.68 | 74.00 | -12.32 | 45.48 | 11.69 | 39.73 | 35.22 | 154 | 110 | Peak | HORIZONTAL |

Vertical

| | 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 | 11642.39 | 58.74 | 74.00 | -15.26 | 42.54 | 11.69 | 39.73 | 35.22 | 126 | 48 | Peak | VERTICAL |
| 2 | 11652.33 | 48.76 | 54.00 | -5.24 | 32.60 | 11.71 | 39.67 | 35.22 | 126 | 48 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 38 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 15561.94 | 59.34 | 74.00 | -14.66 | 43.23 | 13.28 | 38.19 | 35.36 | 109 | 93 | Peak | HORIZONTAL |
| 2 | 15572.00 | 48.80 | 54.00 | -5.20 | 32.69 | 13.28 | 38.19 | 35.36 | 109 | 93 | Average | HORIZONTAL |

Vertical

| | 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 | 15568.88 | 60.43 | 74.00 | -13.57 | 44.32 | 13.28 | 38.19 | 35.36 | 142 | 159 | Peak | VERTICAL |
| 2 | 15575.07 | 48.76 | 54.00 | -5.24 | 32.65 | 13.28 | 38.19 | 35.36 | 142 | 159 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 46 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 15687.17 | 46.96 | 54.00 | -7.04 | 30.92 | 13.33 | 38.08 | 35.37 | 152 | 81 | Average | HORIZONTAL |
| 2 | 15694.83 | 60.40 | 74.00 | -13.60 | 44.39 | 13.35 | 38.03 | 35.37 | 152 | 81 | Peak | HORIZONTAL |

Vertical

| | 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 | 15682.89 | 47.96 | 54.00 | -6.04 | 31.92 | 13.33 | 38.08 | 35.37 | 111 | 33 | Average | VERTICAL |
| 2 | 15691.84 | 59.51 | 74.00 | -14.49 | 43.50 | 13.35 | 38.03 | 35.37 | 111 | 33 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 151 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 11504.37 | 47.98 | 54.00 | -6.02 | 31.61 | 11.60 | 40.00 | 35.23 | 129 | 23 | Average | HORIZONTAL |
| 2 | 11504.73 | 57.99 | 74.00 | -16.01 | 41.62 | 11.60 | 40.00 | 35.23 | 129 | 23 | Peak | HORIZONTAL |

Vertical

| | 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 | 11501.86 | 60.09 | 74.00 | -13.91 | 43.72 | 11.60 | 40.00 | 35.23 | 153 | 161 | Peak | VERTICAL |
| 2 | 11505.25 | 50.00 | 54.00 | -4.00 | 33.63 | 11.60 | 40.00 | 35.23 | 153 | 161 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 159 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 11584.81 | 48.64 | 54.00 | -5.36 | 32.39 | 11.67 | 39.80 | 35.22 | 129 | 111 | Average | HORIZONTAL |
| 2 | 11585.01 | 60.09 | 74.00 | -13.91 | 43.84 | 11.67 | 39.80 | 35.22 | 129 | 111 | Peak | HORIZONTAL |

Vertical

| | 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 | 11587.13 | 48.27 | 54.00 | -5.73 | 32.02 | 11.67 | 39.80 | 35.22 | 142 | 146 | Average | VERTICAL |
| 2 | 11588.32 | 60.41 | 74.00 | -13.59 | 44.16 | 11.67 | 39.80 | 35.22 | 142 | 146 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT80 CH 42 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 15623.85 | 59.34 | 74.00 | -14.66 | 43.25 | 13.31 | 38.14 | 35.36 | 111 | 294 | Peak | HORIZONTAL |
| 2 | 15634.71 | 48.87 | 54.00 | -5.13 | 32.78 | 13.31 | 38.14 | 35.36 | 111 | 294 | Average | HORIZONTAL |

Vertical

| | 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 | 15620.02 | 49.18 | 54.00 | -4.82 | 33.09 | 13.31 | 38.14 | 35.36 | 124 | 154 | Average | VERTICAL |
| 2 | 15637.58 | 59.63 | 74.00 | -14.37 | 43.54 | 13.31 | 38.14 | 35.36 | 124 | 154 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT80 CH 155 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Horizontal

| | 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 | 11546.09 | 60.67 | 74.00 | -13.33 | 44.35 | 11.62 | 39.93 | 35.23 | 133 | 49 | Peak | HORIZONTAL |
| 2 | 11556.55 | 49.66 | 54.00 | -4.34 | 33.38 | 11.64 | 39.87 | 35.23 | 133 | 48 | Average | HORIZONTAL |

Vertical

| | 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 | 11545.45 | 49.41 | 54.00 | -4.59 | 33.09 | 11.62 | 39.93 | 35.23 | 122 | 64 | Average | VERTICAL |
| 2 | 11546.65 | 60.94 | 74.00 | -13.06 | 44.62 | 11.62 | 39.93 | 35.23 | 122 | 64 | Peak | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11a CH 36 / Ant. 1 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 15541.28 | 61.12 | 74.00 | -12.88 | 44.96 | 13.26 | 38.25 | 35.35 | 105 | 49 | Peak | HORIZONTAL |
| 2 | 15541.72 | 47.98 | 54.00 | -6.02 | 31.82 | 13.26 | 38.25 | 35.35 | 105 | 49 | Average | HORIZONTAL |

Vertical

| | 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 | 15537.56 | 47.93 | 54.00 | -6.07 | 31.77 | 13.26 | 38.25 | 35.35 | 100 | 0 | Average | VERTICAL |
| 2 | 15541.62 | 60.58 | 74.00 | -13.42 | 44.42 | 13.26 | 38.25 | 35.35 | 100 | 0 | Peak | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11a CH 40 / Ant. 1 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 15597.20 | 60.24 | 74.00 | -13.76 | 44.13 | 13.28 | 38.19 | 35.36 | 110 | 285 | Peak | HORIZONTAL |
| 2 | 15599.00 | 48.08 | 54.00 | -5.92 | 31.97 | 13.28 | 38.19 | 35.36 | 110 | 285 | Average | HORIZONTAL |

Vertical

| | 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 | 15599.00 | 60.58 | 74.00 | -13.42 | 44.47 | 13.28 | 38.19 | 35.36 | 112 | 50 | Peak | VERTICAL |
| 2 | 15599.64 | 50.53 | 54.00 | -3.47 | 34.42 | 13.28 | 38.19 | 35.36 | 112 | 50 | Average | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11a CH 48 / Ant. 1 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 15719.86 | 47.67 | 54.00 | -6.33 | 31.67 | 13.35 | 38.03 | 35.38 | 112 | 192 | Average | HORIZONTAL |
| 2 | 15719.88 | 59.96 | 74.00 | -14.04 | 43.96 | 13.35 | 38.03 | 35.38 | 112 | 192 | Peak | HORIZONTAL |

Vertical

| | 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 | 15719.30 | 49.89 | 54.00 | -4.11 | 33.89 | 13.35 | 38.03 | 35.38 | 105 | 3 | Average | VERTICAL |
| 2 | 15719.96 | 60.57 | 74.00 | -13.43 | 44.57 | 13.35 | 38.03 | 35.38 | 105 | 3 | Peak | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11a CH 149 / Ant. 1 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 11490.36 | 45.03 | 54.00 | -8.97 | 28.66 | 11.60 | 40.00 | 35.23 | 116 | 323 | Average | HORIZONTAL |
| 2 | 11491.92 | 57.87 | 74.00 | -16.13 | 41.50 | 11.60 | 40.00 | 35.23 | 116 | 323 | Peak | HORIZONTAL |

Vertical

| | 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 | 11485.08 | 58.09 | 74.00 | -15.91 | 41.72 | 11.60 | 40.00 | 35.23 | 116 | 155 | Peak | VERTICAL |
| 2 | 11485.62 | 45.18 | 54.00 | -8.82 | 28.81 | 11.60 | 40.00 | 35.23 | 116 | 155 | Average | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11a CH 157 / Ant. 1 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 11571.24 | 58.47 | 74.00 | -15.53 | 42.19 | 11.64 | 39.87 | 35.23 | 114 | 214 | Peak | HORIZONTAL |
| 2 | 11574.00 | 45.80 | 54.00 | -8.20 | 29.52 | 11.64 | 39.87 | 35.23 | 114 | 214 | Average | HORIZONTAL |

Vertical

| | 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 | 11567.30 | 58.44 | 74.00 | -15.56 | 42.16 | 11.64 | 39.87 | 35.23 | 111 | 337 | Peak | VERTICAL |
| 2 | 11573.10 | 45.75 | 54.00 | -8.25 | 29.47 | 11.64 | 39.87 | 35.23 | 111 | 337 | Average | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11a CH 165 / Ant. 1 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 11648.66 | 46.52 | 54.00 | -7.48 | 30.32 | 11.69 | 39.73 | 35.22 | 120 | 104 | Average | HORIZONTAL |
| 2 | 11648.82 | 59.49 | 74.00 | -14.51 | 43.29 | 11.69 | 39.73 | 35.22 | 120 | 104 | Peak | HORIZONTAL |

Vertical

| | 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 | 11645.54 | 46.30 | 54.00 | -7.70 | 30.10 | 11.69 | 39.73 | 35.22 | 125 | 181 | Average | VERTICAL |
| 2 | 11648.96 | 58.94 | 74.00 | -15.06 | 42.74 | 11.69 | 39.73 | 35.22 | 125 | 181 | Peak | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 36 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 15538.78 | 47.87 | 54.00 | -6.13 | 31.71 | 13.26 | 38.25 | 35.35 | 124 | 108 | Average | HORIZONTAL |
| 2 | 15544.04 | 60.62 | 74.00 | -13.38 | 44.46 | 13.26 | 38.25 | 35.35 | 124 | 108 | Peak | HORIZONTAL |

Vertical

| | 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 | 15540.94 | 61.58 | 74.00 | -12.42 | 45.42 | 13.26 | 38.25 | 35.35 | 123 | 3 | Peak | VERTICAL |
| 2 | 15541.16 | 47.82 | 54.00 | -6.18 | 31.66 | 13.26 | 38.25 | 35.35 | 123 | 3 | Average | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 40 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 15602.46 | 60.78 | 74.00 | -13.22 | 44.69 | 13.31 | 38.14 | 35.36 | 126 | 290 | Peak | HORIZONTAL |
| 2 | 15604.38 | 47.44 | 54.00 | -6.56 | 31.35 | 13.31 | 38.14 | 35.36 | 126 | 290 | Average | HORIZONTAL |

Vertical

| | 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 | 15597.62 | 47.34 | 54.00 | -6.66 | 31.23 | 13.28 | 38.19 | 35.36 | 125 | 193 | Average | VERTICAL |
| 2 | 15599.94 | 60.15 | 74.00 | -13.85 | 44.04 | 13.28 | 38.19 | 35.36 | 125 | 193 | Peak | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 48 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 15716.08 | 46.85 | 54.00 | -7.15 | 30.85 | 13.35 | 38.03 | 35.38 | 124 | 262 | Average | HORIZONTAL |
| 2 | 15719.40 | 59.72 | 74.00 | -14.28 | 43.72 | 13.35 | 38.03 | 35.38 | 124 | 262 | Peak | HORIZONTAL |

Vertical

| | 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 | 15715.80 | 60.46 | 74.00 | -13.54 | 44.46 | 13.35 | 38.03 | 35.38 | 123 | 70 | Peak | VERTICAL |
| 2 | 15720.50 | 47.75 | 54.00 | -6.25 | 31.75 | 13.35 | 38.03 | 35.38 | 123 | 70 | Average | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 149 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 11490.76 | 57.21 | 74.00 | -16.79 | 40.84 | 11.60 | 40.00 | 35.23 | 128 | 309 | Peak | HORIZONTAL |
| 2 | 11493.06 | 44.93 | 54.00 | -9.07 | 28.56 | 11.60 | 40.00 | 35.23 | 128 | 309 | Average | HORIZONTAL |

Vertical

| | 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 | 11486.32 | 44.78 | 54.00 | -9.22 | 28.41 | 11.60 | 40.00 | 35.23 | 139 | 276 | Average | VERTICAL |
| 2 | 11493.72 | 57.08 | 74.00 | -16.92 | 40.71 | 11.60 | 40.00 | 35.23 | 139 | 276 | Peak | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 157 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 11567.54 | 45.60 | 54.00 | -8.40 | 29.32 | 11.64 | 39.87 | 35.23 | 144 | 271 | Average | HORIZONTAL |
| 2 | 11567.92 | 58.46 | 74.00 | -15.54 | 42.18 | 11.64 | 39.87 | 35.23 | 144 | 271 | Peak | HORIZONTAL |

Vertical

| | 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 | 11569.60 | 45.56 | 54.00 | -8.44 | 29.28 | 11.64 | 39.87 | 35.23 | 142 | 357 | Average | VERTICAL |
| 2 | 11570.82 | 58.24 | 74.00 | -15.76 | 41.96 | 11.64 | 39.87 | 35.23 | 142 | 357 | Peak | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 165 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 11646.28 | 45.98 | 54.00 | -8.02 | 29.78 | 11.69 | 39.73 | 35.22 | 140 | 253 | Average | HORIZONTAL |
| 2 | 11648.62 | 59.09 | 74.00 | -14.91 | 42.89 | 11.69 | 39.73 | 35.22 | 140 | 253 | Peak | HORIZONTAL |

Vertical

| | 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 | 11648.68 | 46.99 | 54.00 | -7.01 | 30.79 | 11.69 | 39.73 | 35.22 | 140 | 227 | Average | VERTICAL |
| 2 | 11654.24 | 58.56 | 74.00 | -15.44 | 42.40 | 11.71 | 39.67 | 35.22 | 140 | 227 | Peak | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 38 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 15565.94 | 60.34 | 74.00 | -13.66 | 44.23 | 13.28 | 38.19 | 35.36 | 130 | 148 | Peak | HORIZONTAL |
| 2 | 15573.40 | 47.33 | 54.00 | -6.67 | 31.22 | 13.28 | 38.19 | 35.36 | 130 | 148 | Average | HORIZONTAL |

Vertical

| | 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 | 15568.86 | 60.12 | 74.00 | -13.88 | 44.01 | 13.28 | 38.19 | 35.36 | 136 | 11 | Peak | VERTICAL |
| 2 | 15570.18 | 47.27 | 54.00 | -6.73 | 31.16 | 13.28 | 38.19 | 35.36 | 136 | 11 | Average | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 46 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 15690.34 | 46.78 | 54.00 | -7.22 | 30.74 | 13.33 | 38.08 | 35.37 | 114 | 116 | Average | HORIZONTAL |
| 2 | 15693.36 | 60.41 | 74.00 | -13.59 | 44.40 | 13.35 | 38.03 | 35.37 | 114 | 116 | Peak | HORIZONTAL |

Vertical

| | 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 | 15688.68 | 47.03 | 54.00 | -6.97 | 30.99 | 13.33 | 38.08 | 35.37 | 138 | 223 | Average | VERTICAL |
| 2 | 15689.02 | 59.82 | 74.00 | -14.18 | 43.78 | 13.33 | 38.08 | 35.37 | 138 | 223 | Peak | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 151 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 11505.48 | 44.99 | 54.00 | -9.01 | 28.62 | 11.60 | 40.00 | 35.23 | 133 | 152 | Average | HORIZONTAL |
| 2 | 11514.26 | 58.06 | 74.00 | -15.94 | 41.69 | 11.60 | 40.00 | 35.23 | 133 | 152 | Peak | HORIZONTAL |

Vertical

| | 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 | 11510.02 | 58.11 | 74.00 | -15.89 | 41.74 | 11.60 | 40.00 | 35.23 | 133 | 70 | Peak | VERTICAL |
| 2 | 11514.84 | 46.07 | 54.00 | -7.93 | 29.70 | 11.60 | 40.00 | 35.23 | 133 | 70 | Average | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 159 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 11588.14 | 58.87 | 74.00 | -15.13 | 42.62 | 11.67 | 39.80 | 35.22 | 161 | 38 | Peak | HORIZONTAL |
| 2 | 11593.26 | 45.71 | 54.00 | -8.29 | 29.46 | 11.67 | 39.80 | 35.22 | 161 | 38 | Average | HORIZONTAL |

Vertical

| | 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 | 11586.94 | 57.85 | 74.00 | -16.15 | 41.60 | 11.67 | 39.80 | 35.22 | 136 | 182 | Peak | VERTICAL |
| 2 | 11587.22 | 46.85 | 54.00 | -7.15 | 30.60 | 11.67 | 39.80 | 35.22 | 136 | 182 | Average | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT80 CH 42 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 15627.48 | 46.79 | 54.00 | -7.21 | 30.70 | 13.31 | 38.14 | 35.36 | 150 | 174 | Average | HORIZONTAL |
| 2 | 15633.04 | 59.84 | 74.00 | -14.16 | 43.75 | 13.31 | 38.14 | 35.36 | 150 | 174 | Peak | HORIZONTAL |

Vertical

| | 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 | 15628.96 | 46.87 | 54.00 | -7.13 | 30.78 | 13.31 | 38.14 | 35.36 | 126 | 37 | Average | VERTICAL |
| 2 | 15631.98 | 59.55 | 74.00 | -14.45 | 43.46 | 13.31 | 38.14 | 35.36 | 126 | 37 | Peak | VERTICAL |

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT80 CH 155 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Horizontal

| | 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 | 11545.30 | 45.63 | 54.00 | -8.37 | 29.31 | 11.62 | 39.93 | 35.23 | 145 | 319 | Average | HORIZONTAL |
| 2 | 11546.92 | 57.90 | 74.00 | -16.10 | 41.58 | 11.62 | 39.93 | 35.23 | 145 | 319 | Peak | HORIZONTAL |

Vertical

| | 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 | 11545.60 | 46.57 | 54.00 | -7.43 | 30.25 | 11.62 | 39.93 | 35.23 | 107 | 219 | Average | VERTICAL |
| 2 | 11550.02 | 58.22 | 74.00 | -15.78 | 41.90 | 11.62 | 39.93 | 35.23 | 107 | 219 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 36 / Ant. 1 |
| Test Date | May 05, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 15539.39 | 61.42 | 74.00 | -12.58 | 45.26 | 13.26 | 38.25 | 35.35 | 217 | 275 | Peak | HORIZONTAL |
| 2 | 15544.51 | 48.68 | 54.00 | -5.32 | 32.52 | 13.26 | 38.25 | 35.35 | 217 | 275 | Average | HORIZONTAL |

Vertical

| | 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 | 15540.35 | 48.76 | 54.00 | -5.24 | 32.60 | 13.26 | 38.25 | 35.35 | 180 | 202 | Average | VERTICAL |
| 2 | 15543.83 | 61.13 | 74.00 | -12.87 | 44.97 | 13.26 | 38.25 | 35.35 | 180 | 202 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 40 / Ant. 1 |
| Test Date | May 05, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 15608.34 | 48.68 | 54.00 | -5.32 | 32.59 | 13.31 | 38.14 | 35.36 | 215 | 293 | Average | HORIZONTAL |
| 2 | 15615.21 | 61.86 | 74.00 | -12.14 | 45.77 | 13.31 | 38.14 | 35.36 | 215 | 293 | Peak | HORIZONTAL |

Vertical

| | 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 | 15602.53 | 61.26 | 74.00 | -12.74 | 45.17 | 13.31 | 38.14 | 35.36 | 193 | 321 | Peak | VERTICAL |
| 2 | 15612.10 | 48.80 | 54.00 | -5.20 | 32.71 | 13.31 | 38.14 | 35.36 | 193 | 321 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 48 / Ant. 1 |
| Test Date | May 05, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 15715.93 | 60.86 | 74.00 | -13.14 | 44.86 | 13.35 | 38.03 | 35.38 | 224 | 54 | Peak | HORIZONTAL |
| 2 | 15716.09 | 48.29 | 54.00 | -5.71 | 32.29 | 13.35 | 38.03 | 35.38 | 224 | 54 | Average | HORIZONTAL |

Vertical

| | 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 | 15720.10 | 61.99 | 74.00 | -12.01 | 45.99 | 13.35 | 38.03 | 35.38 | 187 | 172 | Peak | VERTICAL |
| 2 | 15720.61 | 48.88 | 54.00 | -5.12 | 32.88 | 13.35 | 38.03 | 35.38 | 187 | 172 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 149 / Ant. 1 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 11492.40 | 60.91 | 74.00 | -13.09 | 44.54 | 11.60 | 40.00 | 35.23 | 188 | 346 | Peak | HORIZONTAL |
| 2 | 11499.99 | 47.32 | 54.00 | -6.68 | 30.95 | 11.60 | 40.00 | 35.23 | 188 | 346 | Average | HORIZONTAL |

Vertical

| | 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 | 11490.78 | 60.71 | 74.00 | -13.29 | 44.34 | 11.60 | 40.00 | 35.23 | 195 | 190 | Peak | VERTICAL |
| 2 | 11497.44 | 47.44 | 54.00 | -6.56 | 31.07 | 11.60 | 40.00 | 35.23 | 195 | 190 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 157 / Ant. 1 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 11567.92 | 61.32 | 74.00 | -12.68 | 45.04 | 11.64 | 39.87 | 35.23 | 200 | 195 | Peak | HORIZONTAL |
| 2 | 11573.53 | 48.51 | 54.00 | -5.49 | 32.23 | 11.64 | 39.87 | 35.23 | 200 | 195 | Average | HORIZONTAL |

Vertical

| | 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 | 11576.60 | 48.57 | 54.00 | -5.43 | 32.29 | 11.64 | 39.87 | 35.23 | 184 | 168 | Average | VERTICAL |
| 2 | 11577.35 | 61.26 | 74.00 | -12.74 | 44.98 | 11.64 | 39.87 | 35.23 | 184 | 168 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 165 / Ant. 1 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 11643.69 | 61.43 | 74.00 | -12.57 | 45.23 | 11.69 | 39.73 | 35.22 | 219 | 136 | Peak | HORIZONTAL |
| 2 | 11646.35 | 48.76 | 54.00 | -5.24 | 32.56 | 11.69 | 39.73 | 35.22 | 219 | 136 | Average | HORIZONTAL |

Vertical

| | 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 | 11656.45 | 48.74 | 54.00 | -5.26 | 32.58 | 11.71 | 39.67 | 35.22 | 181 | 172 | Average | VERTICAL |
| 2 | 11659.03 | 61.69 | 74.00 | -12.31 | 45.53 | 11.71 | 39.67 | 35.22 | 181 | 172 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 36 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 15543.91 | 61.38 | 74.00 | -12.62 | 45.22 | 13.26 | 38.25 | 35.35 | 169 | 255 | Peak | HORIZONTAL |
| 2 | 15548.94 | 48.74 | 54.00 | -5.26 | 32.58 | 13.26 | 38.25 | 35.35 | 169 | 255 | Average | HORIZONTAL |

Vertical

| | 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 | 15538.44 | 61.57 | 74.00 | -12.43 | 45.41 | 13.26 | 38.25 | 35.35 | 178 | 245 | Peak | VERTICAL |
| 2 | 15542.34 | 48.53 | 54.00 | -5.47 | 32.37 | 13.26 | 38.25 | 35.35 | 178 | 245 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 40 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 15596.41 | 62.88 | 74.00 | -11.12 | 46.77 | 13.28 | 38.19 | 35.36 | 155 | 326 | Peak | HORIZONTAL |
| 2 | 15604.57 | 48.45 | 54.00 | -5.55 | 32.36 | 13.31 | 38.14 | 35.36 | 155 | 326 | Average | HORIZONTAL |

Vertical

| | 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 | 15590.33 | 48.23 | 54.00 | -5.77 | 32.12 | 13.28 | 38.19 | 35.36 | 186 | 321 | Average | VERTICAL |
| 2 | 15601.42 | 60.72 | 74.00 | -13.28 | 44.63 | 13.31 | 38.14 | 35.36 | 186 | 321 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 48 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 15722.52 | 61.87 | 74.00 | -12.13 | 45.87 | 13.35 | 38.03 | 35.38 | 176 | 296 | Peak | HORIZONTAL |
| 2 | 15728.22 | 48.67 | 54.00 | -5.33 | 32.67 | 13.35 | 38.03 | 35.38 | 176 | 296 | Average | HORIZONTAL |

Vertical

| | 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 | 15712.71 | 48.73 | 54.00 | -5.27 | 32.73 | 13.35 | 38.03 | 35.38 | 207 | 262 | Average | VERTICAL |
| 2 | 15716.67 | 61.97 | 74.00 | -12.03 | 45.97 | 13.35 | 38.03 | 35.38 | 207 | 262 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 149 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 11496.05 | 60.04 | 74.00 | -13.96 | 43.67 | 11.60 | 40.00 | 35.23 | 203 | 183 | Peak | HORIZONTAL |
| 2 | 11496.22 | 46.86 | 54.00 | -7.14 | 30.49 | 11.60 | 40.00 | 35.23 | 203 | 183 | Average | HORIZONTAL |

Vertical

| | 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 | 11486.01 | 59.41 | 74.00 | -14.59 | 43.04 | 11.60 | 40.00 | 35.23 | 227 | 225 | Peak | VERTICAL |
| 2 | 11499.96 | 46.98 | 54.00 | -7.02 | 30.61 | 11.60 | 40.00 | 35.23 | 227 | 225 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 157 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 11640.42 | 61.36 | 74.00 | -12.64 | 45.16 | 11.69 | 39.73 | 35.22 | 192 | 152 | Peak | HORIZONTAL |
| 2 | 11653.27 | 48.37 | 54.00 | -5.63 | 32.21 | 11.71 | 39.67 | 35.22 | 192 | 152 | Average | HORIZONTAL |

Vertical

| | 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 | 11648.29 | 61.58 | 74.00 | -12.42 | 45.38 | 11.69 | 39.73 | 35.22 | 220 | 170 | Peak | VERTICAL |
| 2 | 11655.44 | 48.30 | 54.00 | -5.70 | 32.14 | 11.71 | 39.67 | 35.22 | 220 | 170 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 165 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 11652.78 | 61.33 | 74.00 | -12.67 | 45.17 | 11.71 | 39.67 | 35.22 | 151 | 170 | Peak | HORIZONTAL |
| 2 | 11653.33 | 48.46 | 54.00 | -5.54 | 32.30 | 11.71 | 39.67 | 35.22 | 151 | 170 | Average | HORIZONTAL |

Vertical

| | 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 | 11650.72 | 61.14 | 74.00 | -12.86 | 44.94 | 11.69 | 39.73 | 35.22 | 201 | 118 | Peak | VERTICAL |
| 2 | 11655.15 | 48.38 | 54.00 | -5.62 | 32.22 | 11.71 | 39.67 | 35.22 | 201 | 118 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 38 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 15566.38 | 61.03 | 74.00 | -12.97 | 44.92 | 13.28 | 38.19 | 35.36 | 167 | 187 | Peak | HORIZONTAL |
| 2 | 15566.67 | 48.32 | 54.00 | -5.68 | 32.21 | 13.28 | 38.19 | 35.36 | 167 | 187 | Average | HORIZONTAL |

Vertical

| | 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 | 15561.92 | 60.91 | 74.00 | -13.09 | 44.80 | 13.28 | 38.19 | 35.36 | 184 | 211 | Peak | VERTICAL |
| 2 | 15566.73 | 48.22 | 54.00 | -5.78 | 32.11 | 13.28 | 38.19 | 35.36 | 184 | 211 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 46 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 15681.84 | 61.30 | 74.00 | -12.70 | 45.26 | 13.33 | 38.08 | 35.37 | 216 | 196 | Peak | HORIZONTAL |
| 2 | 15694.02 | 48.43 | 54.00 | -5.57 | 32.42 | 13.35 | 38.03 | 35.37 | 216 | 196 | Average | HORIZONTAL |

Vertical

| | 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 | 15691.39 | 48.47 | 54.00 | -5.53 | 32.46 | 13.35 | 38.03 | 35.37 | 203 | 262 | Average | VERTICAL |
| 2 | 15691.65 | 61.14 | 74.00 | -12.86 | 45.13 | 13.35 | 38.03 | 35.37 | 203 | 262 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 151 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 11514.31 | 60.18 | 74.00 | -13.82 | 43.81 | 11.60 | 40.00 | 35.23 | 195 | 216 | Peak | HORIZONTAL |
| 2 | 11514.72 | 47.31 | 54.00 | -6.69 | 30.94 | 11.60 | 40.00 | 35.23 | 195 | 216 | Average | HORIZONTAL |

Vertical

| | 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 | 11512.98 | 60.75 | 74.00 | -13.25 | 44.38 | 11.60 | 40.00 | 35.23 | 204 | 245 | Peak | VERTICAL |
| 2 | 11516.25 | 47.21 | 54.00 | -6.79 | 30.84 | 11.60 | 40.00 | 35.23 | 204 | 245 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 159 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 11585.34 | 60.97 | 74.00 | -13.03 | 44.72 | 11.67 | 39.80 | 35.22 | 180 | 254 | Peak | HORIZONTAL |
| 2 | 11589.91 | 48.11 | 54.00 | -5.89 | 31.86 | 11.67 | 39.80 | 35.22 | 180 | 254 | Average | HORIZONTAL |

Vertical

| | 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 | 11591.77 | 60.83 | 74.00 | -13.17 | 44.58 | 11.67 | 39.80 | 35.22 | 150 | 157 | Peak | VERTICAL |
| 2 | 11593.44 | 47.99 | 54.00 | -6.01 | 31.74 | 11.67 | 39.80 | 35.22 | 150 | 157 | Average | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT80 CH 42 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 15621.35 | 60.66 | 74.00 | -13.34 | 44.57 | 13.31 | 38.14 | 35.36 | 204 | 240 | Peak | HORIZONTAL |
| 2 | 15636.40 | 48.05 | 54.00 | -5.95 | 31.96 | 13.31 | 38.14 | 35.36 | 204 | 240 | Average | HORIZONTAL |

Vertical

| | 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 | 15621.20 | 47.96 | 54.00 | -6.04 | 31.87 | 13.31 | 38.14 | 35.36 | 231 | 268 | Average | VERTICAL |
| 2 | 15635.24 | 60.76 | 74.00 | -13.24 | 44.67 | 13.31 | 38.14 | 35.36 | 231 | 268 | Peak | VERTICAL |

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT80 CH 155 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 06, 2016 | Test Mode | Mode 3 |

Horizontal

| | 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 | 11557.06 | 60.16 | 74.00 | -13.84 | 43.88 | 11.64 | 39.87 | 35.23 | 194 | 208 | Peak | HORIZONTAL |
| 2 | 11559.26 | 47.70 | 54.00 | -6.30 | 31.42 | 11.64 | 39.87 | 35.23 | 194 | 208 | Average | HORIZONTAL |

Vertical

| | 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 | 11556.08 | 47.74 | 54.00 | -6.26 | 31.46 | 11.64 | 39.87 | 35.23 | 218 | 231 | Average | VERTICAL |
| 2 | 11559.96 | 60.99 | 74.00 | -13.01 | 44.71 | 11.64 | 39.87 | 35.23 | 218 | 231 | Peak | VERTICAL |

Note:

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

Emission level (dBuV/m) = 20 log Emission level (uV/m).

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

### 3.5.8 Test Result of Transmitter Unwanted Emissions (Band Edge)

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 36, 40, 48 / Ant. 1 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Channel 36

| | 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 | 5149.26 | 66.20 | 74.00 | -7.80 | 60.39 | 7.23 | 31.52 | 32.94 | 189 | 324 | Peak | VERTICAL |
| 2 | 5149.66 | 53.42 | 54.00 | -0.58 | 47.61 | 7.23 | 31.52 | 32.94 | 189 | 324 | Average | VERTICAL |
| 3 0 | 5178.00 | 112.93 | 74.00 | | | 7.26 | 31.55 | 32.94 | 189 | 324 | Peak | VERTICAL |
| 4 0 | 5185.79 | 104.74 | 54.00 | | | 7.26 | 31.55 | 32.94 | 189 | 324 | Average | VERTICAL |

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 40

| | 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 | 5149.30 | 66.84 | 74.00 | -7.16 | 61.03 | 7.23 | 31.52 | 32.94 | 179 | 326 | Peak | VERTICAL |
| 2 | 5150.00 | 53.74 | 54.00 | -0.26 | 47.93 | 7.23 | 31.52 | 32.94 | 179 | 326 | Average | VERTICAL |
| 3 0 | 5204.39 | 116.13 | 74.00 | | | 7.29 | 31.57 | 32.94 | 179 | 326 | Peak | VERTICAL |
| 4 0 | 5205.59 | 108.32 | 54.00 | | | 7.29 | 31.57 | 32.94 | 179 | 326 | Average | VERTICAL |

Item 3, 4 are the fundamental frequency at 5200 MHz.

Channel 48

| | 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 | 5150.00 | 49.67 | 54.00 | -4.33 | 43.86 | 7.23 | 31.52 | 32.94 | 185 | 325 | Average | VERTICAL |
| 2 | 5150.00 | 59.18 | 74.00 | -14.82 | 53.37 | 7.23 | 31.52 | 32.94 | 185 | 325 | Peak | VERTICAL |
| 3 0 | 5244.79 | 117.37 | 74.00 | | | 7.31 | 31.59 | 32.93 | 185 | 325 | Peak | VERTICAL |
| 4 0 | 5245.99 | 108.96 | 54.00 | | | 7.31 | 31.59 | 32.93 | 185 | 325 | Average | VERTICAL |
| 5 | 5350.00 | 50.56 | 54.00 | -3.44 | 44.44 | 7.37 | 31.68 | 32.93 | 185 | 325 | Average | VERTICAL |
| 6 | 5350.00 | 60.22 | 74.00 | -13.78 | 54.10 | 7.37 | 31.68 | 32.93 | 185 | 325 | Peak | VERTICAL |

Item 3, 4 are the fundamental frequency at 5240 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 149, 157, 165 / Ant. 1 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Channel 149

| | 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 | 5516.00 | 62.55 | 68.20 | -5.65 | 56.14 | 7.52 | 31.82 | 32.93 | 170 | 326 | Peak | VERTICAL |
| 2 | 5740.00 | 114.65 | 122.20 | | | 7.73 | 32.10 | 33.01 | 170 | 326 | Peak | VERTICAL |
| 3 | 5750.80 | 105.95 | 122.20 | | | 7.73 | 32.10 | 33.02 | 170 | 326 | Average | VERTICAL |
| 4 | 5981.00 | 61.45 | 68.20 | -6.75 | 54.34 | 7.83 | 32.38 | 33.10 | 170 | 326 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5745 MHz.

Channel 157

| | 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 | 5641.00 | 62.90 | 68.20 | -5.30 | 56.26 | 7.64 | 31.98 | 32.98 | 177 | 333 | Peak | VERTICAL |
| 2 | 5778.30 | 105.64 | 122.20 | | | 7.76 | 32.14 | 33.03 | 177 | 333 | Average | VERTICAL |
| 3 | 5781.00 | 114.09 | 122.20 | | | 7.76 | 32.14 | 33.03 | 177 | 333 | Peak | VERTICAL |
| 4 | 5971.00 | 62.11 | 68.20 | -6.09 | 55.02 | 7.83 | 32.36 | 33.10 | 177 | 333 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5785 MHz.

Channel 165

| | 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 | 5642.00 | 61.55 | 68.20 | -6.65 | 54.91 | 7.64 | 31.98 | 32.98 | 179 | 358 | Peak | VERTICAL |
| 2 | 5818.70 | 107.12 | 122.20 | | | 7.78 | 32.18 | 33.04 | 179 | 358 | Average | VERTICAL |
| 3 | 5822.00 | 116.03 | 122.20 | | | 7.78 | 32.18 | 33.05 | 179 | 358 | Peak | VERTICAL |
| 4 | 5998.00 | 61.82 | 68.20 | -6.38 | 54.69 | 7.84 | 32.40 | 33.11 | 179 | 358 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5825 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Channel 36

| | 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 | 5149.66 | 65.30 | 74.00 | -8.70 | 59.49 | 7.23 | 31.52 | 32.94 | 188 | 328 | Peak | VERTICAL |
| 2 | 5150.00 | 53.63 | 54.00 | -0.37 | 47.82 | 7.23 | 31.52 | 32.94 | 188 | 328 | Average | VERTICAL |
| 3 0 | 5185.99 | 107.28 | 54.00 | | | 7.26 | 31.55 | 32.94 | 188 | 328 | Average | VERTICAL |
| 4 0 | 5187.19 | 115.13 | 74.00 | | | 7.28 | 31.56 | 32.94 | 188 | 328 | Peak | VERTICAL |

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 40

| | 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 | 5148.50 | 63.76 | 74.00 | -10.24 | 57.95 | 7.23 | 31.52 | 32.94 | 184 | 328 | Peak | VERTICAL |
| 2 | 5150.00 | 53.74 | 54.00 | -0.26 | 47.93 | 7.23 | 31.52 | 32.94 | 184 | 328 | Average | VERTICAL |
| 3 0 | 5205.99 | 119.60 | 74.00 | | | 7.29 | 31.57 | 32.94 | 184 | 328 | Peak | VERTICAL |
| 4 0 | 5206.59 | 111.28 | 54.00 | | | 7.29 | 31.57 | 32.94 | 184 | 328 | Average | VERTICAL |

Item 3, 4 are the fundamental frequency at 5200 MHz.

Channel 48

| | 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 | 5128.02 | 50.46 | 54.00 | -3.54 | 44.67 | 7.22 | 31.51 | 32.94 | 185 | 327 | Average | VERTICAL |
| 2 | 5141.80 | 60.89 | 74.00 | -13.11 | 55.08 | 7.23 | 31.52 | 32.94 | 185 | 327 | Peak | VERTICAL |
| 3 0 | 5245.39 | 113.25 | 54.00 | | | 7.31 | 31.59 | 32.93 | 185 | 327 | Average | VERTICAL |
| 4 0 | 5245.39 | 121.19 | 74.00 | | | 7.31 | 31.59 | 32.93 | 185 | 327 | Peak | VERTICAL |
| 5 | 5350.00 | 50.86 | 54.00 | -3.14 | 44.74 | 7.37 | 31.68 | 32.93 | 185 | 327 | Average | VERTICAL |
| 6 | 5350.00 | 60.86 | 74.00 | -13.14 | 54.74 | 7.37 | 31.68 | 32.93 | 185 | 327 | Peak | VERTICAL |

Item 3, 4 are the fundamental frequency at 5240 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Channel 149

| | 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 | 5501.00 | 61.93 | 68.20 | -6.27 | 55.54 | 7.51 | 31.80 | 32.92 | 175 | 313 | Peak | VERTICAL |
| 2 | 5738.00 | 119.53 | 122.20 | | | 7.71 | 32.08 | 33.01 | 175 | 313 | Peak | VERTICAL |
| 3 | 5739.50 | 111.85 | 122.20 | | | 7.73 | 32.10 | 33.01 | 175 | 313 | Average | VERTICAL |
| 4 | 5990.00 | 60.17 | 68.20 | -8.03 | 53.06 | 7.83 | 32.38 | 33.10 | 175 | 313 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5745 MHz.

Channel 157

| | 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 | 5606.00 | 62.33 | 68.20 | -5.87 | 55.77 | 7.60 | 31.92 | 32.96 | 181 | 314 | Peak | VERTICAL |
| 2 | 5779.00 | 120.10 | 122.20 | | | 7.76 | 32.14 | 33.03 | 181 | 314 | Peak | VERTICAL |
| 3 | 5780.00 | 111.88 | 122.20 | | | 7.76 | 32.14 | 33.03 | 181 | 314 | Average | VERTICAL |
| 4 | 5983.00 | 62.38 | 68.20 | -5.82 | 55.27 | 7.83 | 32.38 | 33.10 | 181 | 314 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5785 MHz.

Channel 165

| | 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 | 5616.00 | 61.85 | 68.20 | -6.35 | 55.27 | 7.61 | 31.94 | 32.97 | 189 | 350 | Peak | VERTICAL |
| 2 | 5822.80 | 110.70 | 122.20 | | | 7.78 | 32.20 | 33.05 | 189 | 350 | Average | VERTICAL |
| 3 | 5823.00 | 118.13 | 122.20 | | | 7.78 | 32.20 | 33.05 | 189 | 350 | Peak | VERTICAL |
| 4 | 6015.00 | 61.11 | 68.20 | -7.09 | 53.91 | 7.86 | 32.46 | 33.12 | 189 | 350 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5825 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Channel 38

| | 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 | 5145.09 | 53.61 | 54.00 | -0.39 | 47.80 | 7.23 | 31.52 | 32.94 | 193 | 313 | Average | VERTICAL |
| 2 | 5145.69 | 64.57 | 74.00 | -9.43 | 58.76 | 7.23 | 31.52 | 32.94 | 193 | 313 | Peak | VERTICAL |
| 3 0 | 5184.01 | 99.75 | 54.00 | | | 7.26 | 31.55 | 32.94 | 193 | 313 | Average | VERTICAL |
| 4 0 | 5185.21 | 107.58 | 74.00 | | | 7.26 | 31.55 | 32.94 | 193 | 313 | Peak | VERTICAL |

Item 3, 4 are the fundamental frequency at 5190 MHz.

Channel 46

| | 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 | 5149.16 | 64.36 | 74.00 | -9.64 | 58.55 | 7.23 | 31.52 | 32.94 | 189 | 319 | Peak | VERTICAL |
| 2 | 5150.00 | 53.20 | 54.00 | -0.80 | 47.39 | 7.23 | 31.52 | 32.94 | 189 | 319 | Average | VERTICAL |
| 3 0 | 5228.80 | 107.39 | 54.00 | | | 7.30 | 31.58 | 32.94 | 189 | 319 | Average | VERTICAL |
| 4 0 | 5239.58 | 115.65 | 74.00 | | | 7.31 | 31.59 | 32.94 | 189 | 319 | Peak | VERTICAL |

Item 3, 4 are the fundamental frequency at 5230 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Channel 151

| | 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 | 5651.00 | 65.44 | 68.94 | -3.50 | 58.80 | 7.64 | 31.98 | 32.98 | 179 | 325 | Peak | VERTICAL |
| 2 | 5742.00 | 108.53 | 122.20 | | | 7.73 | 32.10 | 33.01 | 179 | 325 | Average | VERTICAL |
| 3 | 5742.00 | 116.17 | 122.20 | | | 7.73 | 32.10 | 33.01 | 179 | 325 | Peak | VERTICAL |
| 4 | 5955.00 | 62.14 | 68.20 | -6.06 | 55.07 | 7.82 | 32.34 | 33.09 | 179 | 325 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5755 MHz.

Channel 159

| | 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 | 5595.00 | 61.52 | 68.20 | -6.68 | 54.96 | 7.60 | 31.92 | 32.96 | 175 | 326 | Peak | VERTICAL |
| 2 | 5787.00 | 107.36 | 122.20 | | | 7.76 | 32.14 | 33.03 | 175 | 326 | Average | VERTICAL |
| 3 | 5787.00 | 115.42 | 122.20 | | | 7.76 | 32.14 | 33.03 | 175 | 326 | Peak | VERTICAL |
| 4 | 5980.00 | 60.86 | 68.20 | -7.34 | 53.75 | 7.83 | 32.38 | 33.10 | 175 | 326 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5795 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 1 |

Channel 42

| | 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 | 5150.00 | 53.31 | 54.00 | -0.69 | 47.50 | 7.23 | 31.52 | 32.94 | 186 | 320 | Average | VERTICAL |
| 2 | 5150.00 | 62.44 | 74.00 | -11.56 | 56.63 | 7.23 | 31.52 | 32.94 | 186 | 320 | Peak | VERTICAL |
| 3 0 | 5199.00 | 103.45 | 74.00 | | | 7.28 | 31.56 | 32.94 | 186 | 320 | Peak | VERTICAL |
| 4 0 | 5230.00 | 94.55 | 54.00 | | | 7.30 | 31.58 | 32.94 | 186 | 320 | Average | VERTICAL |
| 5 | 5350.00 | 49.06 | 54.00 | -4.94 | 42.94 | 7.37 | 31.68 | 32.93 | 186 | 320 | Average | VERTICAL |
| 6 | 5350.00 | 58.78 | 74.00 | -15.22 | 52.66 | 7.37 | 31.68 | 32.93 | 186 | 320 | Peak | VERTICAL |

Item 3, 4 are the fundamental frequency at 5210 MHz.

Channel 155

| | 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 | 5652.00 | 68.00 | 69.69 | -1.69 | 61.36 | 7.64 | 31.98 | 32.98 | 177 | 321 | Peak | VERTICAL |
| 2 | 5761.00 | 103.76 | 122.20 | | | 7.74 | 32.12 | 33.02 | 177 | 321 | Average | VERTICAL |
| 3 | 5764.00 | 112.21 | 122.20 | | | 7.74 | 32.12 | 33.02 | 177 | 321 | Peak | VERTICAL |
| 4 | 5941.00 | 62.38 | 68.20 | -5.82 | 55.33 | 7.82 | 32.32 | 33.09 | 177 | 321 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5775 MHz.

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11a CH 36, 40, 48 / Ant. 1 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Channel 36

| | 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 | 5144.80 | 58.36 | 74.00 | -15.64 | 52.55 | 7.23 | 31.52 | 32.94 | 184 | 45 | Peak | VERTICAL |
| 2 | 5149.40 | 46.27 | 54.00 | -7.73 | 40.46 | 7.23 | 31.52 | 32.94 | 184 | 45 | Average | VERTICAL |
| 3 0 | 5185.80 | 99.02 | 54.00 | | | 7.26 | 31.55 | 32.94 | 184 | 45 | Average | VERTICAL |
| 4 0 | 5185.80 | 108.77 | 74.00 | | | 7.26 | 31.55 | 32.94 | 184 | 45 | Peak | VERTICAL |

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 40

| | 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 | 5148.00 | 64.75 | 74.00 | -9.25 | 58.94 | 7.23 | 31.52 | 32.94 | 180 | 46 | Peak | VERTICAL |
| 2 | 5150.00 | 49.96 | 54.00 | -4.04 | 44.15 | 7.23 | 31.52 | 32.94 | 180 | 46 | Average | VERTICAL |
| 3 0 | 5203.20 | 114.24 | 74.00 | | | 7.29 | 31.57 | 32.94 | 180 | 46 | Peak | VERTICAL |
| 4 0 | 5204.40 | 103.55 | 54.00 | | | 7.29 | 31.57 | 32.94 | 180 | 46 | Average | VERTICAL |

Item 3, 4 are the fundamental frequency at 5200 MHz.

Channel 48

| | 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 | 5144.60 | 59.11 | 74.00 | -14.89 | 53.30 | 7.23 | 31.52 | 32.94 | 180 | 44 | Peak | VERTICAL |
| 2 | 5150.00 | 47.45 | 54.00 | -6.55 | 41.64 | 7.23 | 31.52 | 32.94 | 180 | 44 | Average | VERTICAL |
| 3 0 | 5234.60 | 114.45 | 74.00 | | | 7.31 | 31.59 | 32.94 | 180 | 44 | Peak | VERTICAL |
| 4 0 | 5243.00 | 104.66 | 54.00 | | | 7.31 | 31.59 | 32.93 | 180 | 44 | Average | VERTICAL |
| 5 | 5350.00 | 48.66 | 54.00 | -5.34 | 42.54 | 7.37 | 31.68 | 32.93 | 180 | 44 | Average | VERTICAL |
| 6 | 5375.60 | 61.36 | 74.00 | -12.64 | 55.20 | 7.39 | 31.70 | 32.93 | 180 | 44 | Peak | VERTICAL |

Item 3, 4 are the fundamental frequency at 5240 MHz.

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11a CH 149, 157, 165 / Ant. 1 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Channel 149

| | 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 | 5553.00 | 60.86 | 68.20 | -7.34 | 54.39 | 7.55 | 31.86 | 32.94 | 174 | 72 | Peak | VERTICAL |
| 2 | 5739.00 | 102.99 | 122.20 | | | 7.73 | 32.10 | 33.01 | 174 | 72 | Average | VERTICAL |
| 3 | 5739.00 | 112.92 | 122.20 | | | 7.73 | 32.10 | 33.01 | 174 | 72 | Peak | VERTICAL |
| 4 | 5994.00 | 59.15 | 68.20 | -9.05 | 52.01 | 7.84 | 32.40 | 33.10 | 174 | 72 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5745 MHz.

Channel 157

| | 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 | 5580.00 | 61.10 | 68.20 | -7.10 | 54.58 | 7.58 | 31.90 | 32.96 | 189 | 70 | Peak | VERTICAL |
| 2 | 5780.00 | 102.59 | 122.20 | | | 7.76 | 32.14 | 33.03 | 189 | 70 | Average | VERTICAL |
| 3 | 5782.00 | 112.62 | 122.20 | | | 7.76 | 32.14 | 33.03 | 189 | 70 | Peak | VERTICAL |
| 4 | 6033.00 | 59.47 | 68.20 | -8.73 | 52.19 | 7.88 | 32.52 | 33.12 | 189 | 70 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5785 MHz.

Channel 165

| | 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 | 5612.00 | 61.02 | 68.20 | -7.18 | 54.43 | 7.61 | 31.94 | 32.96 | 178 | 61 | Peak | VERTICAL |
| 2 | 5820.00 | 101.98 | 122.20 | | | 7.78 | 32.18 | 33.04 | 178 | 61 | Average | VERTICAL |
| 3 | 5820.00 | 111.66 | 122.20 | | | 7.78 | 32.18 | 33.04 | 178 | 61 | Peak | VERTICAL |
| 4 | 5959.00 | 59.27 | 68.20 | -8.93 | 52.18 | 7.83 | 32.36 | 33.10 | 178 | 61 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5825 MHz.

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Channel 36

| | 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 | 5149.60 | 63.75 | 74.00 | -10.25 | 57.94 | 7.23 | 31.52 | 32.94 | 188 | 340 | Peak | VERTICAL |
| 2 | 5150.00 | 49.96 | 54.00 | -4.04 | 44.15 | 7.23 | 31.52 | 32.94 | 188 | 340 | Average | VERTICAL |
| 3 0 | 5188.00 | 103.38 | 54.00 | | | 7.28 | 31.56 | 32.94 | 188 | 340 | Average | VERTICAL |
| 4 0 | 5188.00 | 112.52 | 74.00 | | | 7.28 | 31.56 | 32.94 | 188 | 340 | Peak | VERTICAL |

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 40

| | 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 | 5150.00 | 47.70 | 54.00 | -6.30 | 41.89 | 7.23 | 31.52 | 32.94 | 176 | 352 | Average | HORIZONTAL |
| 2 | 5150.00 | 61.01 | 74.00 | -12.99 | 55.20 | 7.23 | 31.52 | 32.94 | 176 | 352 | Peak | HORIZONTAL |
| 3 0 | 5204.80 | 113.46 | 74.00 | | | 7.29 | 31.57 | 32.94 | 176 | 352 | Peak | HORIZONTAL |
| 4 0 | 5206.00 | 103.92 | 54.00 | | | 7.29 | 31.57 | 32.94 | 176 | 352 | Average | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5200 MHz.

Channel 48

| | 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 | 5133.20 | 58.63 | 74.00 | -15.37 | 52.84 | 7.22 | 31.51 | 32.94 | 198 | 16 | Peak | VERTICAL |
| 2 | 5150.00 | 46.47 | 54.00 | -7.53 | 40.66 | 7.23 | 31.52 | 32.94 | 198 | 16 | Average | VERTICAL |
| 3 0 | 5245.40 | 106.35 | 54.00 | | | 7.31 | 31.59 | 32.93 | 198 | 16 | Average | VERTICAL |
| 4 0 | 5246.00 | 116.39 | 74.00 | | | 7.31 | 31.59 | 32.93 | 198 | 16 | Peak | VERTICAL |
| 5 | 5350.00 | 47.73 | 54.00 | -6.27 | 41.61 | 7.37 | 31.68 | 32.93 | 198 | 16 | Average | VERTICAL |
| 6 | 5381.00 | 60.09 | 74.00 | -13.91 | 53.93 | 7.39 | 31.70 | 32.93 | 198 | 16 | Peak | VERTICAL |

Item 3, 4 are the fundamental frequency at 5240 MHz.

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Channel 149

| | 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 | 5631.00 | 59.59 | 68.20 | -8.61 | 52.97 | 7.63 | 31.96 | 32.97 | 188 | 359 | Peak | VERTICAL |
| 2 | 5753.00 | 106.15 | 122.20 | | | 7.73 | 32.10 | 33.02 | 188 | 359 | Average | VERTICAL |
| 3 | 5753.00 | 115.50 | 122.20 | | | 7.73 | 32.10 | 33.02 | 188 | 359 | Peak | VERTICAL |
| 4 | 5948.00 | 58.47 | 68.20 | -9.73 | 51.40 | 7.82 | 32.34 | 33.09 | 188 | 359 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5745 MHz.

Channel 157

| | 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 | 5596.00 | 59.96 | 68.20 | -8.24 | 53.40 | 7.60 | 31.92 | 32.96 | 199 | 73 | Peak | VERTICAL |
| 2 | 5791.00 | 116.88 | 122.20 | | | 7.77 | 32.16 | 33.03 | 199 | 73 | Peak | VERTICAL |
| 3 | 5792.00 | 106.80 | 122.20 | | | 7.77 | 32.16 | 33.03 | 199 | 73 | Average | VERTICAL |
| 4 | 6002.00 | 59.29 | 68.20 | -8.91 | 52.16 | 7.84 | 32.40 | 33.11 | 199 | 73 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5785 MHz.

Channel 165

| | 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 | 5641.00 | 60.05 | 68.20 | -8.15 | 53.41 | 7.64 | 31.98 | 32.98 | 165 | 0 | Peak | VERTICAL |
| 2 | 5818.00 | 105.82 | 122.20 | | | 7.78 | 32.18 | 33.04 | 165 | 0 | Average | VERTICAL |
| 3 | 5819.00 | 115.65 | 122.20 | | | 7.78 | 32.18 | 33.04 | 165 | 0 | Peak | VERTICAL |
| 4 | 6054.00 | 58.65 | 68.20 | -9.55 | 51.31 | 7.89 | 32.58 | 33.13 | 165 | 0 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5825 MHz.

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Channel 38

| | 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 | 5148.40 | 62.36 | 74.00 | -11.64 | 56.55 | 7.23 | 31.52 | 32.94 | 177 | 1 | Peak | HORIZONTAL |
| 2 | 5150.00 | 50.24 | 54.00 | -3.76 | 44.43 | 7.23 | 31.52 | 32.94 | 177 | 1 | Average | HORIZONTAL |
| 3 0 | 5188.00 | 95.37 | 54.00 | | | 7.28 | 31.56 | 32.94 | 177 | 1 | Average | HORIZONTAL |
| 4 0 | 5192.00 | 105.09 | 74.00 | | | 7.28 | 31.56 | 32.94 | 177 | 1 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5190 MHz.

Channel 46

| | 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 | 5150.00 | 51.88 | 54.00 | -2.12 | 46.07 | 7.23 | 31.52 | 32.94 | 155 | 0 | Average | HORIZONTAL |
| 2 | 5150.00 | 66.11 | 74.00 | -7.89 | 60.30 | 7.23 | 31.52 | 32.94 | 155 | 0 | Peak | HORIZONTAL |
| 3 0 | 5238.40 | 101.77 | 54.00 | | | 7.31 | 31.59 | 32.94 | 155 | 0 | Average | HORIZONTAL |
| 4 0 | 5240.80 | 112.22 | 74.00 | | | 7.31 | 31.59 | 32.94 | 155 | 0 | Peak | HORIZONTAL |
| 5 | 5350.00 | 47.70 | 54.00 | -6.30 | 41.58 | 7.37 | 31.68 | 32.93 | 155 | 0 | Average | HORIZONTAL |
| 6 | 5350.60 | 59.43 | 74.00 | -14.57 | 53.31 | 7.37 | 31.68 | 32.93 | 155 | 0 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5230 MHz.

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40<br>CH 151, 159 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Channel 151

| | 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 | 5645.00 | 61.03 | 68.20 | -7.17 | 54.39 | 7.64 | 31.98 | 32.98 | 168 | 360 | Peak | VERTICAL |
| 2 | 5743.00 | 103.92 | 122.20 | | | 7.73 | 32.10 | 33.01 | 168 | 360 | Average | VERTICAL |
| 3 | 5764.00 | 113.63 | 122.20 | | | 7.74 | 32.12 | 33.02 | 168 | 360 | Peak | VERTICAL |
| 4 | 5966.00 | 60.04 | 68.20 | -8.16 | 52.95 | 7.83 | 32.36 | 33.10 | 168 | 360 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5755 MHz.

Channel 159

| | 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 | 5632.00 | 60.71 | 68.20 | -7.49 | 54.09 | 7.63 | 31.96 | 32.97 | 215 | 71 | Peak | VERTICAL |
| 2 | 5782.00 | 104.43 | 122.20 | | | 7.76 | 32.14 | 33.03 | 215 | 71 | Average | VERTICAL |
| 3 | 5802.00 | 113.99 | 122.20 | | | 7.77 | 32.16 | 33.04 | 215 | 71 | Peak | VERTICAL |
| 4 | 5932.00 | 59.71 | 68.20 | -8.49 | 52.65 | 7.82 | 32.32 | 33.08 | 215 | 71 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5795 MHz.

| Temperature | 23℃ | Humidity | 63% |
|---|---|---|---|
| Test Engineer | Eddie Weng / Stim Song / Paul Chen | Configurations | IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 21, 2016 | Test Mode | Mode 2 |

Channel 42

| | 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 | 5147.00 | 60.14 | 74.00 | -13.86 | 54.33 | 7.23 | 31.52 | 32.94 | 173 | 2 | Peak | HORIZONTAL |
| 2 | 5150.00 | 50.52 | 54.00 | -3.48 | 44.71 | 7.23 | 31.52 | 32.94 | 173 | 2 | Average | HORIZONTAL |
| 3 0 | 5189.00 | 89.88 | 54.00 | | | 7.28 | 31.56 | 32.94 | 173 | 2 | Average | HORIZONTAL |
| 4 0 | 5219.00 | 101.13 | 74.00 | | | 7.30 | 31.58 | 32.94 | 173 | 2 | Peak | HORIZONTAL |
| 5 | 5350.00 | 46.86 | 54.00 | -7.14 | 40.74 | 7.37 | 31.68 | 32.93 | 173 | 2 | Average | HORIZONTAL |
| 6 | 5382.00 | 57.80 | 74.00 | -16.20 | 51.64 | 7.39 | 31.70 | 32.93 | 173 | 2 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5210 MHz.

Channel 155

| | 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 | 5645.00 | 67.22 | 68.20 | -0.98 | 60.58 | 7.64 | 31.98 | 32.98 | 172 | 1 | Peak | VERTICAL |
| 2 | 5763.00 | 109.08 | 122.20 | | | 7.74 | 32.12 | 33.02 | 172 | 1 | Peak | VERTICAL |
| 3 | 5764.00 | 99.99 | 122.20 | | | 7.74 | 32.12 | 33.02 | 172 | 1 | Average | VERTICAL |
| 4 | 5930.00 | 60.12 | 68.20 | -8.08 | 53.06 | 7.82 | 32.32 | 33.08 | 172 | 1 | Peak | VERTICAL |

Item 2, 3 are the fundamental frequency at 5775 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 36, 40, 48 / Ant. 1 |
| Test Date | May 04, 2016 | Test Mode | Mode 3 |

Channel 36

| | 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 | 5147.80 | 68.56 | 74.00 | -5.44 | 62.75 | 7.23 | 31.52 | 32.94 | 200 | 193 | Peak | HORIZONTAL |
| 2 | 5149.80 | 53.84 | 54.00 | -0.16 | 48.03 | 7.23 | 31.52 | 32.94 | 200 | 193 | Average | HORIZONTAL |
| 3 0 | 5184.59 | 105.26 | 54.00 | | | 7.26 | 31.55 | 32.94 | 200 | 193 | Average | HORIZONTAL |
| 4 0 | 5185.19 | 113.52 | 74.00 | | | 7.26 | 31.55 | 32.94 | 200 | 193 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 40

| | 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 | 5150.00 | 53.42 | 54.00 | -0.58 | 47.61 | 7.23 | 31.52 | 32.94 | 181 | 354 | Average | HORIZONTAL |
| 2 | 5150.00 | 67.40 | 74.00 | -6.60 | 61.59 | 7.23 | 31.52 | 32.94 | 181 | 354 | Peak | HORIZONTAL |
| 3 0 | 5203.99 | 107.59 | 54.00 | | | 7.29 | 31.57 | 32.94 | 181 | 354 | Average | HORIZONTAL |
| 4 0 | 5204.39 | 116.09 | 74.00 | | | 7.29 | 31.57 | 32.94 | 181 | 354 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5200 MHz.

Channel 48

| | 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 | 5141.02 | 60.60 | 74.00 | -13.40 | 54.81 | 7.22 | 31.51 | 32.94 | 195 | 195 | Peak | HORIZONTAL |
| 2 | 5150.00 | 49.84 | 54.00 | -4.16 | 44.03 | 7.23 | 31.52 | 32.94 | 195 | 195 | Average | HORIZONTAL |
| 3 0 | 5244.79 | 117.05 | 74.00 | | | 7.31 | 31.59 | 32.93 | 195 | 195 | Peak | HORIZONTAL |
| 4 0 | 5245.99 | 108.88 | 54.00 | | | 7.31 | 31.59 | 32.93 | 195 | 195 | Average | HORIZONTAL |
| 5 | 5350.00 | 50.56 | 54.00 | -3.44 | 44.44 | 7.37 | 31.68 | 32.93 | 195 | 195 | Average | HORIZONTAL |
| 6 | 5352.99 | 60.69 | 74.00 | -13.31 | 54.57 | 7.37 | 31.68 | 32.93 | 195 | 195 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5240 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11a CH 149, 157, 165 / Ant. 1 |
| Test Date | May 04, 2016 | Test Mode | Mode 3 |

Channel 149

| | 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 | 5635.20 | 60.68 | 68.20 | -7.52 | 54.07 | 7.63 | 31.96 | 32.98 | 300 | 180 | Peak | HORIZONTAL |
| 2 | 5653.80 | 61.20 | 71.02 | -9.82 | 54.56 | 7.64 | 31.98 | 32.98 | 300 | 180 | Peak | HORIZONTAL |
| 3 | 5740.21 | 105.14 | 122.20 | | | 7.73 | 32.10 | 33.01 | 300 | 180 | Average | HORIZONTAL |
| 4 | 5741.41 | 113.70 | 122.20 | | | 7.73 | 32.10 | 33.01 | 300 | 180 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

| | 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 | 5623.00 | 60.75 | 68.20 | -7.45 | 54.17 | 7.61 | 31.94 | 32.97 | 187 | 360 | Peak | HORIZONTAL |
| 2 | 5779.00 | 104.93 | 122.20 | | | 7.76 | 32.14 | 33.03 | 187 | 360 | Average | HORIZONTAL |
| 3 | 5779.00 | 112.67 | 122.20 | | | 7.76 | 32.14 | 33.03 | 187 | 360 | Peak | HORIZONTAL |
| 4 | 5968.00 | 61.25 | 68.20 | -6.95 | 54.16 | 7.83 | 32.36 | 33.10 | 187 | 360 | Peak | HORIZONTAL |

Item 2, 3 are the fundamental frequency at 5785 MHz.

Channel 165

| | 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 | 5609.00 | 62.05 | 68.20 | -6.15 | 55.46 | 7.61 | 31.94 | 32.96 | 192 | 181 | Peak | HORIZONTAL |
| 2 | 5820.00 | 106.38 | 122.20 | | | 7.78 | 32.18 | 33.04 | 192 | 181 | Average | HORIZONTAL |
| 3 | 5823.00 | 114.33 | 122.20 | | | 7.78 | 32.20 | 33.05 | 192 | 181 | Peak | HORIZONTAL |
| 4 | 5952.00 | 62.13 | 68.20 | -6.07 | 55.06 | 7.82 | 32.34 | 33.09 | 192 | 181 | Peak | HORIZONTAL |

Item 2, 3 are the fundamental frequency at 5825 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 3 |

Channel 36

| | 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 | 5149.40 | 66.53 | 74.00 | -7.47 | 60.72 | 7.23 | 31.52 | 32.94 | 169 | 12 | Peak | HORIZONTAL |
| 2 | 5150.00 | 53.94 | 54.00 | -0.06 | 48.13 | 7.23 | 31.52 | 32.94 | 169 | 12 | Average | HORIZONTAL |
| 3 0 | 5180.80 | 106.18 | 54.00 | | | 7.26 | 31.55 | 32.94 | 169 | 12 | Average | HORIZONTAL |
| 4 0 | 5181.80 | 115.18 | 74.00 | | | 7.26 | 31.55 | 32.94 | 169 | 12 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 40

| | 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 | 5149.60 | 53.63 | 54.00 | -0.37 | 47.82 | 7.23 | 31.52 | 32.94 | 164 | 12 | Average | HORIZONTAL |
| 2 | 5149.60 | 64.50 | 74.00 | -9.50 | 58.69 | 7.23 | 31.52 | 32.94 | 164 | 12 | Peak | HORIZONTAL |
| 3 0 | 5199.20 | 109.43 | 54.00 | | | 7.28 | 31.56 | 32.94 | 164 | 12 | Average | HORIZONTAL |
| 4 0 | 5200.80 | 117.14 | 74.00 | | | 7.28 | 31.56 | 32.94 | 164 | 12 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5200 MHz.

Channel 48

| | 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 | 5147.60 | 60.87 | 74.00 | -13.13 | 55.06 | 7.23 | 31.52 | 32.94 | 197 | 193 | Peak | HORIZONTAL |
| 2 | 5150.00 | 50.47 | 54.00 | -3.53 | 44.66 | 7.23 | 31.52 | 32.94 | 197 | 193 | Average | HORIZONTAL |
| 3 0 | 5237.60 | 111.14 | 54.00 | | | 7.31 | 31.59 | 32.94 | 197 | 193 | Average | HORIZONTAL |
| 4 0 | 5237.60 | 118.41 | 74.00 | | | 7.31 | 31.59 | 32.94 | 197 | 193 | Peak | HORIZONTAL |
| 5 | 5350.00 | 50.71 | 54.00 | -3.29 | 44.59 | 7.37 | 31.68 | 32.93 | 197 | 193 | Average | HORIZONTAL |
| 6 | 5351.80 | 62.18 | 74.00 | -11.82 | 56.06 | 7.37 | 31.68 | 32.93 | 197 | 193 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5240 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 04, 2016 | Test Mode | Mode 3 |

Channel 149

| | 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 | 5586.00 | 61.41 | 68.20 | -6.79 | 54.89 | 7.58 | 31.90 | 32.96 | 174 | 190 | Peak | HORIZONTAL |
| 2 | 5744.00 | 112.52 | 122.20 | | | 7.73 | 32.10 | 33.01 | 174 | 190 | Average | HORIZONTAL |
| 3 | 5744.00 | 120.25 | 122.20 | | | 7.73 | 32.10 | 33.01 | 174 | 190 | Peak | HORIZONTAL |
| 4 | 5924.00 | 60.95 | 68.94 | -7.99 | 53.92 | 7.81 | 32.30 | 33.08 | 174 | 190 | Peak | HORIZONTAL |

Item 2, 3 are the fundamental frequency at 5745 MHz.

Channel 157

| | 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 | 5627.00 | 62.14 | 68.20 | -6.06 | 55.52 | 7.63 | 31.96 | 32.97 | 162 | 187 | Peak | HORIZONTAL |
| 2 | 5792.00 | 111.57 | 122.20 | | | 7.77 | 32.16 | 33.03 | 162 | 187 | Average | HORIZONTAL |
| 3 | 5793.00 | 119.45 | 122.20 | | | 7.77 | 32.16 | 33.03 | 162 | 187 | Peak | HORIZONTAL |
| 4 | 5996.00 | 61.14 | 68.20 | -7.06 | 54.01 | 7.84 | 32.40 | 33.11 | 162 | 187 | Peak | HORIZONTAL |

Item 2, 3 are the fundamental frequency at 5785 MHz.

Channel 165

| | 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 | 5628.00 | 62.64 | 68.20 | -5.56 | 56.02 | 7.63 | 31.96 | 32.97 | 158 | 186 | Peak | HORIZONTAL |
| 2 | 5832.00 | 110.51 | 122.20 | | | 7.78 | 32.20 | 33.05 | 158 | 186 | Average | HORIZONTAL |
| 3 | 5832.00 | 118.38 | 122.20 | | | 7.78 | 32.20 | 33.05 | 158 | 186 | Peak | HORIZONTAL |
| 4 | 6053.00 | 61.07 | 68.20 | -7.13 | 53.73 | 7.89 | 32.58 | 33.13 | 158 | 186 | Peak | HORIZONTAL |

Item 2, 3 are the fundamental frequency at 5825 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 05, 2016 | Test Mode | Mode 3 |

Channel 38

| | 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 | 5146.01 | 53.64 | 54.00 | -0.36 | 47.83 | 7.23 | 31.52 | 32.94 | 155 | 6 | Average | HORIZONTAL |
| 2 | 5147.45 | 66.31 | 74.00 | -7.69 | 60.50 | 7.23 | 31.52 | 32.94 | 155 | 6 | Peak | HORIZONTAL |
| 3 0 | 5184.50 | 111.12 | 74.00 | | | 7.26 | 31.55 | 32.94 | 155 | 6 | Peak | HORIZONTAL |
| 4 0 | 5185.37 | 100.95 | 54.00 | | | 7.26 | 31.55 | 32.94 | 155 | 6 | Average | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5190 MHz.

Channel 46

| | 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 | 5143.17 | 50.60 | 54.00 | -3.40 | 44.79 | 7.23 | 31.52 | 32.94 | 166 | 13 | Average | HORIZONTAL |
| 2 | 5146.35 | 62.92 | 74.00 | -11.08 | 57.11 | 7.23 | 31.52 | 32.94 | 166 | 13 | Peak | HORIZONTAL |
| 3 0 | 5244.47 | 113.87 | 74.00 | | | 7.31 | 31.59 | 32.93 | 166 | 13 | Peak | HORIZONTAL |
| 4 0 | 5245.92 | 104.13 | 54.00 | | | 7.31 | 31.59 | 32.93 | 166 | 13 | Average | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5230 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 05, 2016 | Test Mode | Mode 3 |

Channel 151

| | 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 | 5653.50 | 67.62 | 70.80 | -3.18 | 60.98 | 7.64 | 31.98 | 32.98 | 158 | 358 | Peak | HORIZONTAL |
| 2 | 5743.50 | 117.83 | 122.20 | | | 7.73 | 32.10 | 33.01 | 158 | 358 | Peak | HORIZONTAL |
| 3 | 5762.24 | 107.91 | 122.20 | | | 7.74 | 32.12 | 33.02 | 158 | 358 | Average | HORIZONTAL |
| 4 | 5953.50 | 63.83 | 68.20 | -4.37 | 56.76 | 7.82 | 32.34 | 33.09 | 158 | 358 | Peak | HORIZONTAL |

Item 2, 3 are the fundamental frequency at 5755 MHz.

Channel 159

| | 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 | 5618.00 | 65.75 | 68.20 | -2.45 | 59.17 | 7.61 | 31.94 | 32.97 | 143 | 353 | Peak | HORIZONTAL |
| 2 | 5790.50 | 117.83 | 122.20 | | | 7.77 | 32.16 | 33.03 | 143 | 353 | Peak | HORIZONTAL |
| 3 | 5790.66 | 106.82 | 122.20 | | | 7.77 | 32.16 | 33.03 | 143 | 353 | Average | HORIZONTAL |
| 4 | 5972.50 | 65.18 | 68.20 | -3.02 | 58.09 | 7.83 | 32.36 | 33.10 | 143 | 353 | Peak | HORIZONTAL |

Item 2, 3 are the fundamental frequency at 5795 MHz.

| Temperature | 24℃ | Humidity | 65% |
|---|---|---|---|
| Test Engineer | Andy Tsai | Configurations | IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Ant. 1 + Ant. 2 + Ant. 3 |
| Test Date | May 05, 2016 | Test Mode | Mode 3 |

Channel 42

| | 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 | 5135.47 | 51.78 | 54.00 | -2.22 | 45.99 | 7.22 | 31.51 | 32.94 | 170 | 360 | Average | HORIZONTAL |
| 2 | 5136.19 | 63.35 | 74.00 | -10.65 | 57.56 | 7.22 | 31.51 | 32.94 | 170 | 360 | Peak | HORIZONTAL |
| 3 0 | 5235.33 | 93.91 | 54.00 | | | 7.31 | 31.59 | 32.94 | 170 | 360 | Average | HORIZONTAL |
| 4 0 | 5236.05 | 103.49 | 74.00 | | | 7.31 | 31.59 | 32.94 | 170 | 360 | Peak | HORIZONTAL |
| 5 | 5350.00 | 50.68 | 54.00 | -3.32 | 44.56 | 7.37 | 31.68 | 32.93 | 170 | 360 | Average | HORIZONTAL |
| 6 | 5358.68 | 62.36 | 74.00 | -11.64 | 56.22 | 7.38 | 31.69 | 32.93 | 170 | 360 | Peak | HORIZONTAL |

Item 3, 4 are the fundamental frequency at 5210 MHz.

Channel 155

| | 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 | 5652.00 | 68.24 | 69.69 | -1.45 | 61.60 | 7.64 | 31.98 | 32.98 | 159 | 358 | Peak | HORIZONTAL |
| 2 | 5752.57 | 101.64 | 122.20 | | | 7.73 | 32.10 | 33.02 | 159 | 358 | Average | HORIZONTAL |
| 3 | 5764.00 | 114.87 | 122.20 | | | 7.74 | 32.12 | 33.02 | 159 | 358 | Peak | HORIZONTAL |
| 4 | 5957.50 | 63.55 | 68.20 | -4.65 | 56.49 | 7.82 | 32.34 | 33.10 | 159 | 358 | Peak | HORIZONTAL |

Item 2, 3 are the fundamental frequency at 5775 MHz.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m)

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

# 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. 27, 2016 | Jan. 26, 2017 | Conduction (CO01-CB) |
| LISN | F.C.C. | FCC-LISN-50-16-2 | 04083 | 150kHz ~ 100MHz | Dec. 14, 2016 | Dec. 13, 2017 | Conduction (CO01-CB) |
| LISN | Schwarzbeck | NSLK 8127 | 8127647 | 9kHz~30MHz | Dec. 23, 2015 | Dec. 22, 2016 | Conduction (CO01-CB) |
| LISN | Schwarzbeck | NSLK 8127 | 8127647 | 9kHz~30MHz | Dec. 21, 2016 | Dec. 20, 2017 | Conduction (CO01-CB) |
| COND Cable | Woken | Cable | 01 | 150kHz~ 30MHz | May 24, 2016 | May 23, 2017 | Conduction (CO01-CB) |
| Software | Audix | E3 | 6.120210n | - | N.C.R. | N.C.R. | Conduction (CO01-CB) |
| BILOG ANTENNA with 6dB Attenator | TESEQ & EMCI | CBL6112D & N-6-06 | 37880 & AT-N0609 | 20MHz ~ 2GHz | Aug. 30, 2016 | Aug. 29, 2017 | Radiation (03CH01-CB) |
| Loop Antenna | Teseq | HLA 6120 | 24155 | 9kHz - 30 MHz | Mar. 16, 2016* | Mar. 15, 2018 | Radiation (03CH01-CB) |
| Horn Antenna | EMCO | 3115 | 00075790 | 750MHz ~ 18GHz | Oct. 22, 2015 | Oct. 21, 2016 | Radiation (03CH01-CB) |
| Horn Antenna | Schwarzbeck | BBHA 9170 | BBHA9170252 | 15GHz ~ 40GHz | Jul. 21, 2015 | Jul. 20, 2016 | Radiation (03CH01-CB) |
| Pre-Amplifier | Agilent | 8447D | 2944A10991 | 0.1MHz ~ 1.3GHz | Mar. 15, 2016 | Mar. 14, 2017 | Radiation (03CH01-CB) |
| Pre-Amplifier | Agilent | 8449B | 3008A02310 | 1GHz ~ 26.5GHz | Jan. 18, 2016 | Jan. 17, 2017 | Radiation (03CH01-CB) |
| Pre-Amplifier | WM | TF-130N-R1 | 923365 | 26GHz ~ 40GHz | Nov. 13, 2015 | Nov. 12, 2016 | Radiation (03CH01-CB) |
| Spectrum Analyzer | R&S | FSP40 | 100056 | 9kHz ~ 40GHz | Oct. 27, 2015 | Oct. 26, 2016 | Radiation (03CH01-CB) |
| EMI Test | R&S | ESCS | 100355 | 9kHz ~ 2.75GHz | May 16, 2016 | May 15, 2017 | Radiation (03CH01-CB) |
| RF Cable-low | Woken | Low Cable-16+17 | N/A | 30 MHz ~ 1 GHz | Oct. 24, 2016 | Oct. 23, 2017 | Radiation (03CH01-CB) |
| RF Cable-high | Woken | High Cable-16 | N/A | 1 GHz ~ 18 GHz | Nov. 02, 2015 | Nov. 01, 2016 | Radiation (03CH01-CB) |
| RF Cable-high | Woken | High Cable-17 | N/A | 1 GHz ~ 18 GHz | Nov. 02, 2015 | Nov. 01, 2016 | Radiation (03CH01-CB) |

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Calibration Due Date | Remark |
|---|---|---|---|---|---|---|---|
| RF Cable-high | Woken | High Cable-40G-1 | N/A | 18GHz ~ 40 GHz | Nov. 02, 2015 | Nov. 01, 2016 | Radiation (03CH01-CB) |
| Test Software | Audix | E3 | 6.2009-l0-7 | N/A | N/A | N/A | Radiation (03CH01-CB) |
| Spectrum analyzer | R&S | FSV40 | 100979 | 9kHz~40GHz | Dec. 09, 2015 | Dec. 08, 2016 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-6 | 1 GHz – 26.5 GHz | Nov. 02, 2015 | Nov. 01, 2016 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-7 | 1 GHz – 26.5 GHz | Nov. 02, 2015 | Nov. 01, 2016 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-8 | 1 GHz – 26.5 GHz | Nov. 02, 2015 | Nov. 01, 2016 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-9 | 1 GHz – 26.5 GHz | Nov. 02, 2015 | Nov. 01, 2016 | Conducted (TH01-CB) |
| RF Cable-high | Woken | RG402 | High Cable-10 | 1 GHz – 26.5 GHz | Nov. 02, 2015 | Nov. 01, 2016 | Conducted (TH01-CB) |
| Power Sensor | Agilent | U2021XA | MY53410001 | 50MHz~18GHz | Nov. 02, 2015 | Nov. 01, 2016 | Conducted (TH01-CB) |

Note: Calibration Interval of instruments listed above is one year.
"*" Calibration Interval of instruments listed above is two years.
NCR means Non-Calibration required.