

TEST REPORT ADDENDUM - RADIATED

FROM



Test of: Aruba Networks, Inc. APIN0334, APIN0335

to

To: FCC CFR 47 Part 15 Subpart E 15.407 (non-DFS)

Test Report Serial No.: ARUB196-U7_Radiated Rev B

Issue Date: 31th May 2016

| Master Document Number | Addendum Reports |
|------------------------|---------------------------------------|
| ARUB196-U7_Master | ARUB196-U7_Conducted |
| | ARUB196-U7_Radiated |
| | ARUB196-U26 (FCC Part 15B & ICES-003) |

Table of Contents

| | |
|---|------------|
| 1. MEASUREMENT AND PRESENTATION OF TEST DATA | 3 |
| 2. RADIATED EMISSIONS..... | 4 |
| 2.1.1. <i>Restricted Band Emissions</i> | 7 |
| 2.1.1.1. AP-ANT-13B..... | 7 |
| 2.1.1.2. AP-ANT-19 | 13 |
| 2.1.1.3. AP-ANT-1W..... | 19 |
| 2.1.1.4. AP-ANT-20W..... | 25 |
| 2.1.1.5. AP-ANT-40 | 31 |
| 2.1.1.6. AP-ANT-45 | 37 |
| 2.1.1.7. AP-ANT-48 | 43 |
| 2.1.1.8. Metal Sheet | 49 |
| 2.1.2. <i>Restricted Band-Edge Emissions</i> | 55 |
| 2.1.2.9. AP-ANT-13B..... | 55 |
| 2.1.2.10. AP-ANT-19 | 68 |
| 2.1.2.11. AP-ANT-1W | 81 |
| 2.1.2.12. AP-ANT-20W..... | 94 |
| 2.1.2.13. AP-ANT-40 | 110 |
| 2.1.2.14. AP-ANT-45 | 123 |
| 2.1.2.15. AP-ANT-48 | 136 |
| 2.1.2.16. Metal Sheet | 152 |
| A. APPENDIX - GRAPHICAL IMAGES | 167 |
| A.1. Radiated Emissions..... | 168 |
| A.1.1. <i>Restricted Band Emissions</i> | 168 |
| A.1.1.1. AP-ANT-13B | 168 |
| A.1.1.2. AP-ANT-19 | 174 |
| A.1.1.3. AP-ANT-1W | 180 |
| A.1.1.4. AP-ANT-20W | 189 |
| A.1.1.5. AP-ANT-40 | 201 |
| A.1.1.6. AP-ANT-45 | 213 |
| A.1.1.7. AP-ANT-48 | 225 |
| A.1.1.8. Metal Sheet | 236 |
| A.1.2. <i>Restricted Band-Edge Emissions</i> | 248 |
| A.1.2.9. AP-ANT-13B | 248 |
| A.1.2.10. AP-ANT-19 | 260 |
| A.1.2.11. AP-ANT-1W | 272 |
| A.1.2.12. AP-ANT-20W | 284 |
| A.1.2.13. AP-ANT-40 | 296 |
| A.1.2.14. AP-ANT-45 | 308 |
| A.1.2.15. AP-ANT-48 | 320 |
| A.1.2.16. Metal Sheet | 332 |
| A.1.2.17. AP-ANT-48/20W AC80+80 | 344 |

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1. MEASUREMENT AND PRESENTATION OF TEST DATA

The measurement and graphical data presented in this test report was generated automatically using state-of-the-art technology creating an easy to read report structure. Numerical measurement data is separated from supporting graphical data (plots) through hyperlinks. Numerical measurement data can be reviewed without scrolling through numerous graphical pages to arrive at the next data matrix.

Plots have been relegated into the Appendix 'Graphical Data' Section of this report

Testing and report automation was performed by [MiTest](#). [MiTest](#) is an automated test system developed by MiCOM Labs. [MiTest](#) is the first cloud based modular test system enabling end-to-end automation of regulatory compliance testing for regulatory compliance.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 4 of 350

2. RADIATED EMISSIONS

| Radiated Test Conditions for Radiated Spurious and Band-Edge Emissions | | | |
|--|---|----------------------------|-------------|
| Standard: | FCC CFR 47:15.407 | Ambient Temp. (°C): | 20.0 - 24.5 |
| Test Heading: | Radiated Spurious and Band-Edge Emissions | Rel. Humidity (%): | 32 - 45 |
| Standard Section(s): | 15.407 (b), 15.205, 15.209 | Pressure (mBars): | 999 - 1001 |
| Reference Document(s): | See Normative References | | |

Test Procedure for Radiated Spurious and Band-Edge Emissions

Radiated emissions for restricted bands above 1 GHz are measured in the anechoic chamber at a 3-meter distance on every azimuth in both horizontal and vertical polarities. The emissions are recorded and maximized as a function of azimuth by rotation through 360° with a spectrum analyzer in peak hold mode. Depending on the frequency band spanned a notch filter and waveguide filter was used to remove the fundamental frequency. The highest emissions relative to the limit are listed for each frequency spanned. Measurements on any restricted band frequency or frequencies above 1 GHz are based on the use of measurement instrumentation employing peak and average detectors. All measurements were performed using a resolution bandwidth of 1 MHz.

Test configuration and setup for Undesirable Measurement were per the Radiated Test Set-up specified in this document.

15.407 (b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
- (7) The provisions of §15.205 apply to intentional radiators operating under this section.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

Limits for Restricted Bands (15.205, 15.209)

Peak emission: 74 dBuV/m

Average emission: 54 dBuV/m

Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Loss, and subtracting Amplifier Gain from the measured reading. All factors are included in the reported data.

FS = R + AF + CORR - FO

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where:

FS = Field Strength

R = Measured Spectrum analyzer Input Amplitude

AF = Antenna Factor

CORR = Correction Factor = CL – AG + NFL

CL = Cable Loss

AG = Amplifier Gain

FO = Distance Falloff Factor

NFL = Notch Filter Loss or Waveguide Loss

Example:

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength (dB μ V/m);

$$E = \frac{1000000 \times \sqrt{30P}}{3} \mu\text{V/m}$$

where P is the EIRP in Watts

Therefore: -27 dBm/MHz equates to 68.23 dB μ V/m

Conversion between dBmV/m (or dBmV) and mV/m (or mV) are as follows:

Level (dBmV/m) = 20 * Log (level (mV/m))

40 dBmV/m = 100 mV/m

48 dBmV/m = 250 mV/m

Restricted Bands of Operation (15.205)

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

| Frequency Band | | | |
|-------------------|---------------------|---------------|-------------|
| MHz | MHz | MHz | GHz |
| 0.090-0.110 | 16.42-16.423 | 399.9-410 | 4.5-5.15 |
| 0.495-0.505 | 16.69475-16.69525 | 608-614 | 5.35-5.46 |
| 2.1735-2.1905 | 16.80425-16.80475 | 960-1240 | 7.25-7.75 |
| 4.125-4.128 | 25.5-25.67 | 1300-1427 | 8.025-8.5 |
| 4.17725-4.17775 | 37.5-38.25 | 1435-1626.5 | 9.0-9.2 |
| 4.20725-4.20775 | 73-74.6 | 1645.5-1646.5 | 9.3-9.5 |
| 6.215-6.218 | 74.8-75.2 | 1660-1710 | 10.6-12.7 |
| 6.26775-6.26825 | 108-121.94 | 1718.8-1722.2 | 13.25-13.4 |
| 6.31175-6.31225 | 123-138 | 2200-2300 | 14.47-14.5 |
| 8.291-8.294 | 149.9-150.05 | 2310-2390 | 15.35-16.2 |
| 8.362-8.366 | 156.52475-156.52525 | 2483.5-2500 | 17.7-21.4 |
| 8.37625-8.38675 | 156.7-156.9 | 2690-2900 | 22.01-23.12 |
| 8.41425-8.41475 | 162.0125-167.17 | 3260-3267 | 23.6-24.0 |
| 12.29-12.293 | 167.72-173.2 | 3332-3339 | 31.2-31.8 |
| 12.51975-12.52025 | 240-285 | 3345.8-3358 | 36.43-36.5 |

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| | | | |
|-------------------|-----------|-----------|------------|
| 12.57675-12.57725 | 322-335.4 | 3600-4400 | Above 38.6 |
| 13.36-13.41 | | | |

(b) Except as provided in paragraphs (d) and (e) of this section, the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

(c) Except as provided in paragraphs (d) and (e) of this section, regardless of the field strength limits specified elsewhere in this subpart, the provisions of this section apply to emissions from any intentional radiator.

(d) The following devices are exempt from the requirements of this section:

(1) Swept frequency field disturbance sensors operating between 1.705 and 37 MHz provided their emissions only sweep through the bands listed in paragraph (a) of this section, the sweep is never stopped with the fundamental emission within the bands listed in paragraph (a) of this section, and the fundamental emission is outside of the bands listed in paragraph (a) of this section more than 99% of the time the device is actively transmitting, without compensation for duty cycle.

(2) Transmitters used to detect buried electronic markers at 101.4 kHz which are employed by telephone companies.

(3) Cable locating equipment operated pursuant to §15.213.

(4) Any equipment operated under the provisions of §15.253, 15.255, and 15.256 in the frequency band 75-85 GHz, or §15.257 of this part.

(5) Biomedical telemetry devices operating under the provisions of §15.242 of this part are not subject to the restricted band 608-614 MHz but are subject to compliance within the other restricted bands.

(6) Transmitters operating under the provisions of subparts D or F of this part.

(7) Devices operated pursuant to §15.225 are exempt from complying with this section for the 13.36-13.41 MHz band only.

(8) Devices operated in the 24.075-24.175 GHz band under §15.245 are exempt from complying with the requirements of this section for the 48.15-48.35 GHz and 72.225-72.525 GHz bands only, and shall not exceed the limits specified in §15.245(b).

(9) Devices operated in the 24.0-24.25 GHz band under §15.249 are exempt from complying with the requirements of this section for the 48.0-48.5 GHz and 72.0-72.75 GHz bands only, and shall not exceed the limits specified in §15.249(a).

(e) Harmonic emissions appearing in the restricted bands above 17.7 GHz from field disturbance sensors operating under the provisions of §15.245 shall not exceed the limits specified in §15.245(b).



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 7 of 350

2.1. Restricted Band Emissions

2.1.1. AP-ANT-13B

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11a |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5187.57 | 76.69 | 3.68 | -11.49 | 68.88 | Fundamental | Horizontal | 101 | 0 | -- | -- | |
| #2 | 10360.68 | 51.41 | 5.57 | -5.26 | 51.72 | Peak (NRB) | Vertical | 101 | 81 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 8 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11a |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5200.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5196.99 | 77.62 | 3.66 | -11.47 | 69.81 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 10397.32 | 52.67 | 5.37 | -5.05 | 52.99 | Peak (NRB) | Vertical | 101 | 88 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 9 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11a |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5240.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5237.08 | 78.77 | 3.63 | -11.37 | 71.03 | Fundamental | Horizontal | 200 | 0 | -- | -- | |
| #2 | 10470.82 | 55.09 | 5.49 | -4.52 | 56.06 | Peak (NRB) | Vertical | 200 | 0 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 10 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11a |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 15 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5748.66 | 52.69 | 3.85 | -10.63 | 45.91 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 11481.81 | 52.08 | 5.47 | -4.86 | 52.69 | Max Avg | Vertical | 181 | 249 | 54.0 | -1.3 | Pass |
| #3 | 11481.81 | 66.65 | 5.47 | -4.86 | 67.26 | Max Peak | Vertical | 181 | 249 | 74.0 | -6.7 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR. Power reduced to 15 due to 11.5 GHz harmonic

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 11 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11a |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5785.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 15 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5791.02 | 64.73 | 3.79 | -10.41 | 58.11 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 11561.92 | 52.90 | 5.62 | -4.67 | 53.85 | Max Avg | Vertical | 192 | 250 | 54.0 | -0.2 | Pass |
| #3 | 11561.92 | 67.49 | 5.62 | -4.67 | 68.44 | Max Peak | Vertical | 192 | 250 | 74.0 | -5.6 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR. Power reduced to 15 due to 11.5 GHz harmonic

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 12 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11a |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 14 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5828.42 | 68.01 | 3.84 | -10.24 | 61.61 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 11650.42 | 52.01 | 5.44 | -4.47 | 52.98 | Max Avg | Vertical | 169 | 282 | 54.0 | -1.0 | Pass |
| #3 | 11650.42 | 67.82 | 5.44 | -4.47 | 68.79 | Max Peak | Vertical | 169 | 282 | 74.0 | -5.2 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR. Power reduced to 14 due to 11.6 GHz harmonic

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 13 of 350

2.1.2. AP-ANT-19

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11a |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5187.57 | 77.87 | 3.68 | -11.49 | 70.06 | Fundamental | Vertical | 101 | 0 | -- | -- | |
| #2 | 5187.57 | 77.87 | 3.68 | -11.49 | 70.06 | Peak (NRB) | Vertical | 101 | 0 | -- | -- | Pass |
| #3 | 10355.11 | 43.94 | 5.53 | -5.30 | 44.17 | Max Avg | Vertical | 128 | 246 | 54.0 | -9.8 | Pass |
| #4 | 10355.11 | 58.18 | 5.53 | -5.30 | 58.41 | Max Peak | Vertical | 128 | 246 | 74.0 | -15.6 | Pass |
| #5 | 10355.11 | 49.81 | 5.53 | -5.30 | 50.04 | Peak (NRB) | Vertical | 101 | 81 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 14 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11a |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5200.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5187.57 | 77.44 | 3.68 | -11.49 | 69.63 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 5187.57 | 77.44 | 3.68 | -11.49 | 69.63 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| #3 | 10355.99 | 45.28 | 5.54 | -5.28 | 45.54 | Max Avg | Vertical | 173 | 247 | 54.0 | -8.5 | Pass |
| #4 | 10355.99 | 59.05 | 5.54 | -5.28 | 59.31 | Max Peak | Vertical | 173 | 247 | 74.0 | -14.7 | Pass |
| #5 | 10355.99 | 51.35 | 5.54 | -5.28 | 51.61 | Peak (NRB) | Vertical | 101 | 97 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 15 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11a |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5240.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5207.17 | 79.84 | 3.65 | -11.44 | 72.05 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 5207.17 | 79.84 | 3.65 | -11.44 | 72.05 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| #3 | 10397.88 | 47.08 | 5.38 | -5.05 | 47.41 | Max Avg | Vertical | 159 | 247 | 54.0 | -6.6 | Pass |
| #4 | 10397.88 | 60.80 | 5.38 | -5.05 | 61.13 | Max Peak | Vertical | 159 | 247 | 74.0 | -12.9 | Pass |
| #5 | 10397.88 | 49.54 | 5.38 | -5.05 | 49.87 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 16 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11a |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 17 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5747.65 | 57.02 | 3.85 | -10.63 | 50.24 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 5747.65 | 57.02 | 3.85 | -10.63 | 50.24 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| #3 | 11482.81 | 52.45 | 5.47 | -4.86 | 53.06 | Max Avg | Vertical | 105 | 62 | 54.0 | -0.9 | Pass |
| #4 | 11482.81 | 67.02 | 5.47 | -4.86 | 67.63 | Max Peak | Vertical | 105 | 62 | 74.0 | -6.4 | Pass |
| #5 | 11482.81 | 49.07 | 5.47 | -4.86 | 49.68 | Max Avg | Horizontal | 109 | 249 | 54.0 | -4.3 | Pass |
| #6 | 11482.81 | 63.57 | 5.47 | -4.86 | 64.18 | Max Peak | Horizontal | 109 | 249 | 74.0 | -9.8 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 17 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11a |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5785.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 17 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5786.85 | 64.41 | 3.79 | -10.43 | 57.77 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 5786.85 | 64.41 | 3.79 | -10.43 | 57.77 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| #3 | 11567.25 | 50.81 | 5.52 | -4.65 | 51.68 | Max Avg | Vertical | 100 | 285 | 54.0 | -2.3 | Pass |
| #4 | 11567.25 | 64.22 | 5.52 | -4.65 | 65.09 | Max Peak | Vertical | 100 | 285 | 74.0 | -8.9 | Pass |
| #5 | 11567.25 | 52.35 | 5.52 | -4.65 | 53.22 | Max Avg | Horizontal | 154 | 246 | 54.0 | -0.8 | Pass |
| #6 | 11567.25 | 68.87 | 5.52 | -4.65 | 69.74 | Max Peak | Horizontal | 154 | 246 | 74.0 | -4.3 | Pass |
| #7 | 11567.26 | 53.09 | 5.52 | -4.65 | 53.96 | Max Avg | Horizontal | 146 | 247 | 54.0 | 0.0 | Pass |
| #8 | 11567.26 | 66.79 | 5.52 | -4.65 | 67.66 | Max Peak | Horizontal | 146 | 247 | 74.0 | -6.3 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 18 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11a |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5826.94 | 72.74 | 3.84 | -10.24 | 66.34 | Fundamental | Vertical | 101 | 0 | -- | -- | |
| #2 | 5826.94 | 72.74 | 3.84 | -10.24 | 66.34 | Peak (NRB) | Vertical | 101 | 0 | -- | -- | Pass |
| #3 | 11658.24 | 48.82 | 5.59 | -4.45 | 49.96 | Max Avg | Vertical | 115 | 240 | 54.0 | -4.0 | Pass |
| #4 | 11658.24 | 63.78 | 5.59 | -4.45 | 64.92 | Max Peak | Vertical | 115 | 240 | 74.0 | -9.1 | Pass |
| #5 | 11658.24 | 49.73 | 5.59 | -4.45 | 50.87 | Max Avg | Horizontal | 116 | 252 | 54.0 | -3.1 | Pass |
| #6 | 11658.24 | 64.43 | 5.59 | -4.45 | 65.57 | Max Peak | Horizontal | 116 | 252 | 74.0 | -8.4 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 19 of 350

2.1.3. AP-ANT-1W

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-1W | Variant: | |
| Antenna Gain (dBi): | 5.8 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.0 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 20 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5574.59 | 71.58 | 3.81 | -11.21 | 64.18 | Peak (NRB) | Horizontal | 200 | 1 | -- | -- | Pass |
| #4 | 11161.84 | 51.60 | 5.76 | -4.06 | 53.30 | Max Avg | Horizontal | 134 | 252 | 54.0 | -0.7 | Pass |
| #5 | 11161.84 | 65.72 | 5.76 | -4.06 | 67.42 | Max Peak | Horizontal | 134 | 252 | 74.0 | -6.6 | Pass |
| #6 | 11161.84 | 49.19 | 5.76 | -4.06 | 50.89 | Max Avg | Vertical | 161 | 256 | 54.0 | -3.1 | Pass |
| #7 | 11161.84 | 63.51 | 5.76 | -4.06 | 65.21 | Max Peak | Vertical | 161 | 256 | 74.0 | -8.8 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 20 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|---------|------------------------|---------|
| Antenna: | 1W | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.8 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.0 | Duty Cycle (%): | 99 |
| Channel Frequency (MHz): | 5200.00 | Data Rate: | 6Mbit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5196.75 | 81.03 | 3.66 | -11.47 | 73.22 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 10394.51 | 53.56 | 5.36 | -5.06 | 53.86 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 21 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|---------|------------------------|---------|
| Antenna: | 1W | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.8 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.0 | Duty Cycle (%): | 99 |
| Channel Frequency (MHz): | 5240.00 | Data Rate: | 6Mbit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5236.51 | 81.21 | 3.63 | -11.37 | 73.47 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 10475.23 | 54.83 | 5.46 | -4.49 | 55.80 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 22 of 350

| | | | |
|--|-----------|------------------------|-------------|
| Equipment Configuration for Radiated Spurious - Restricted Band Emissions | | | |
| Antenna: | AP-ANT-1W | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.8 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.0 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

| Test Measurement Results | | | | | | | | | | | | |
|---------------------------------|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| Num | Frequency MHz | Raw dB _µ V | Cable Loss | AF dB | Level dB _µ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _µ V/m | Margin dB | Pass /Fail |
| #1 | 5749.46 | 56.75 | 3.85 | -10.63 | 49.97 | Fundamental | Horizontal | 100 | 1 | -- | -- | |
| #2 | 5749.46 | 56.75 | 3.85 | -10.63 | 49.97 | Peak (NRB) | Horizontal | 100 | 1 | -- | -- | Pass |
| #13 | 11501.37 | 52.32 | 5.47 | -4.82 | 52.97 | Max Avg | Vertical | 195 | 266 | 54.0 | -0.03 | Pass |
| #14 | 11501.37 | 69.77 | 5.47 | -4.82 | 70.42 | Max Peak | Vertical | 195 | 266 | 74.0 | -3.6 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 23 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.8 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.0 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5785.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5788.86 | 55.80 | 3.79 | -10.42 | 49.17 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 5788.86 | 55.80 | 3.79 | -10.42 | 49.17 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| #3 | 11561.20 | 53.02 | 5.64 | -4.67 | 53.99 | Max Avg | Vertical | 197 | 260 | 54.0 | 0.0 | Pass |
| #4 | 11561.20 | 67.36 | 5.64 | -4.67 | 68.33 | Max Peak | Vertical | 197 | 260 | 74.0 | -5.7 | Pass |
| #5 | 11561.20 | 49.69 | 5.64 | -4.67 | 50.66 | Max Avg | Horizontal | 153 | 253 | 54.0 | -3.3 | Pass |
| #6 | 11561.20 | 64.98 | 5.64 | -4.67 | 65.95 | Max Peak | Horizontal | 153 | 253 | 74.0 | -8.1 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 24 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.8 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.0 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5831.19 | 59.46 | 3.84 | -10.22 | 53.08 | Fundamental | Horizontal | 151 | 0 | -- | -- | |
| #2 | 5831.19 | 59.46 | 3.84 | -10.22 | 53.08 | Peak (NRB) | Horizontal | 151 | 0 | -- | -- | Pass |
| #5 | 11652.43 | 49.18 | 5.48 | -4.46 | 50.20 | Max Avg | Vertical | 100 | 354 | 54.0 | -3.8 | Pass |
| #6 | 11652.43 | 62.87 | 5.48 | -4.46 | 63.89 | Max Peak | Vertical | 100 | 354 | 74.0 | -10.1 | Pass |
| #7 | 11654.95 | 52.58 | 5.53 | -4.46 | 53.65 | Max Avg | Horizontal | 176 | 285 | 54.0 | -0.4 | Pass |
| #8 | 11654.95 | 66.91 | 5.53 | -4.46 | 67.98 | Max Peak | Horizontal | 176 | 285 | 74.0 | -6.0 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 25 of 350

2.1.4. AP-ANT-20W

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5174.99 | 69.68 | 3.70 | -11.52 | 61.86 | Fundamental | Horizontal | 200 | 0 | -- | -- | |
| #2 | 5174.99 | 69.68 | 3.70 | -11.52 | 61.86 | Peak (NRB) | Horizontal | 200 | 0 | -- | -- | Pass |
| #3 | 10351.51 | 52.34 | 5.50 | -5.30 | 52.54 | Peak (NRB) | Vertical | 158 | 29 | -- | -- | Pass |
| #4 | 10351.51 | 41.36 | 5.50 | -5.30 | 41.56 | Max Avg | Vertical | 142 | 4 | 54.0 | -12.4 | Pass |
| #5 | 10351.51 | 55.79 | 5.50 | -5.30 | 55.99 | Max Peak | Vertical | 142 | 4 | 74.0 | -18.0 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 26 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5200.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5203.41 | 75.77 | 3.65 | -11.45 | 67.97 | Fundamental | Horizontal | 101 | 0 | -- | -- | |
| #2 | 5203.41 | 75.77 | 3.65 | -11.45 | 67.97 | Peak (NRB) | Horizontal | 101 | 0 | -- | -- | Pass |
| #3 | 10407.38 | 48.25 | 5.46 | -4.99 | 48.72 | Peak (NRB) | Horizontal | 200 | 0 | -- | -- | Pass |
| #4 | 10407.38 | 39.73 | 5.46 | -4.99 | 40.20 | Max Avg | Horizontal | 195 | 354 | 54.0 | -13.8 | Pass |
| #5 | 10407.38 | 54.94 | 5.46 | -4.99 | 55.41 | Max Peak | Horizontal | 195 | 354 | 74.0 | -18.6 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 27 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5240.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5236.79 | 75.47 | 3.63 | -11.37 | 67.73 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 5236.79 | 75.47 | 3.63 | -11.37 | 67.73 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #3 | 10475.51 | 52.62 | 5.45 | -4.49 | 53.58 | Peak (NRB) | Horizontal | 101 | 42 | -- | -- | Pass |
| #4 | 10475.51 | 42.49 | 5.45 | -4.49 | 43.45 | Max Avg | Horizontal | 105 | 272 | 54.0 | -10.6 | Pass |
| #5 | 10475.51 | 56.77 | 5.45 | -4.49 | 57.73 | Max Peak | Horizontal | 105 | 272 | 74.0 | -16.3 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 28 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5749.86 | 62.44 | 3.85 | -10.63 | 55.66 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 5749.86 | 62.44 | 3.85 | -10.63 | 55.66 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #3 | 11498.40 | 52.74 | 5.46 | -4.82 | 53.38 | Max Avg | Horizontal | 160 | 291 | 54.0 | -0.6 | Pass |
| #4 | 11498.40 | 67.34 | 5.46 | -4.82 | 67.98 | Max Peak | Horizontal | 160 | 291 | 74.0 | -6.0 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 29 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5785.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5792.63 | 64.72 | 3.78 | -10.40 | 58.10 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 5792.63 | 64.72 | 3.78 | -10.40 | 58.10 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #3 | 11561.44 | 51.82 | 5.64 | -4.67 | 52.79 | Max Avg | Horizontal | 114 | 73 | 54.0 | -1.2 | Pass |
| #4 | 11561.44 | 66.50 | 5.64 | -4.67 | 67.47 | Max Peak | Horizontal | 114 | 73 | 74.0 | -6.5 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 30 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5829.82 | 64.87 | 3.84 | -10.22 | 58.49 | Fundamental | Horizontal | 101 | 0 | -- | -- | |
| #2 | 5829.82 | 64.87 | 3.84 | -10.22 | 58.49 | Peak (NRB) | Horizontal | 101 | 0 | -- | -- | Pass |
| #5 | 11655.96 | 50.97 | 5.55 | -4.46 | 53.06 | Max Avg | Horizontal | 166 | 287 | 54.0 | -0.94 | Pass |
| #6 | 11655.96 | 69.96 | 5.55 | -4.46 | 71.05 | Max Peak | Horizontal | 166 | 287 | 74.0 | -3.0 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 31 of 350

2.1.5. AP-ANT-40

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11a |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5185.01 | 67.26 | 3.68 | -11.49 | 59.45 | Fundamental | Horizontal | 200 | 0 | -- | -- | |
| #2 | 5185.01 | 67.26 | 3.68 | -11.49 | 59.45 | Peak (NRB) | Horizontal | 200 | 0 | -- | -- | Pass |
| #3 | 10361.29 | 52.75 | 5.57 | -5.26 | 53.06 | Peak (NRB) | Vertical | 198 | 54 | -- | -- | Pass |
| #4 | 10361.29 | 43.67 | 5.57 | -5.26 | 43.98 | Max Avg | Vertical | 178 | 225 | 54.0 | -10.0 | Pass |
| #5 | 10361.29 | 56.64 | 5.57 | -5.26 | 56.95 | Max Peak | Vertical | 178 | 225 | 74.0 | -17.1 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 32 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11a |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5200.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5205.17 | 71.02 | 3.65 | -11.45 | 63.22 | Fundamental | Horizontal | 200 | 0 | -- | -- | |
| #2 | 5205.17 | 71.02 | 3.65 | -11.45 | 63.22 | Peak (NRB) | Horizontal | 200 | 0 | -- | -- | Pass |
| #3 | 10397.24 | 45.93 | 5.37 | -5.05 | 46.25 | Peak (NRB) | Vertical | 198 | 0 | -- | -- | Pass |
| #4 | 10397.24 | 45.78 | 5.37 | -5.05 | 46.10 | Max Avg | Vertical | 195 | 245 | 54.0 | -7.9 | Pass |
| #5 | 10397.24 | 58.82 | 5.37 | -5.05 | 59.14 | Max Peak | Vertical | 195 | 245 | 74.0 | -14.9 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 33 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11a |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5240.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5232.47 | 80.18 | 3.63 | -11.39 | 72.42 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 5232.47 | 80.18 | 3.63 | -11.39 | 72.42 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #3 | 10480.92 | 50.27 | 5.41 | -4.45 | 51.23 | Peak (NRB) | Vertical | 101 | 77 | -- | -- | Pass |
| #4 | 10480.92 | 43.93 | 5.41 | -4.45 | 44.89 | Max Avg | Vertical | 124 | 230 | 54.0 | -9.1 | Pass |
| #5 | 10480.92 | 57.94 | 5.41 | -4.45 | 58.90 | Max Peak | Vertical | 124 | 230 | 74.0 | -15.1 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 34 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11a |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5737.71 | 51.82 | 3.82 | -10.67 | 44.97 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 5737.71 | 51.82 | 3.82 | -10.67 | 44.97 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #7 | 11481.81 | 51.38 | 5.47 | -4.86 | 51.99 | Max Avg | Horizontal | 124 | 227 | 54.0 | -2.0 | Pass |
| #8 | 11481.81 | 66.65 | 5.47 | -4.86 | 67.26 | Max Peak | Horizontal | 124 | 227 | 74.0 | -6.7 | Pass |
| #9 | 11481.82 | 52.57 | 5.47 | -4.86 | 53.18 | Max Avg | Vertical | 188 | 248 | 54.0 | -0.8 | Pass |
| #10 | 11481.82 | 67.02 | 5.47 | -4.86 | 67.63 | Max Peak | Vertical | 188 | 248 | 74.0 | -6.4 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 35 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11a |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5785.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5792.63 | 51.77 | 3.78 | -10.40 | 45.15 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #4 | 11561.76 | 47.66 | 5.62 | -4.67 | 48.61 | Max Avg | Horizontal | 109 | 242 | 54.0 | -5.4 | Pass |
| #5 | 11561.76 | 62.01 | 5.62 | -4.67 | 62.96 | Max Peak | Horizontal | 109 | 242 | 74.0 | -11.0 | Pass |
| #6 | 11561.77 | 51.11 | 5.62 | -4.67 | 52.06 | Max Avg | Vertical | 179 | 247 | 54.0 | -1.9 | Pass |
| #7 | 11561.77 | 65.51 | 5.62 | -4.67 | 66.46 | Max Peak | Vertical | 179 | 247 | 74.0 | -7.5 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 36 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11a |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5818.80 | 59.83 | 3.82 | -10.28 | 53.37 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #2 | 5831.10 | 58.52 | 3.84 | -10.22 | 52.14 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #3 | 5831.10 | 58.52 | 3.84 | -10.22 | 52.14 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #6 | 11645.06 | 51.99 | 5.46 | -4.47 | 52.98 | Max Avg | Vertical | 193 | 245 | 54.0 | -1.0 | Pass |
| #7 | 11645.06 | 66.46 | 5.46 | -4.47 | 67.45 | Max Peak | Vertical | 193 | 245 | 74.0 | -6.6 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 37 of 350

2.1.6. AP-ANT-45

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5175.19 | 77.39 | 3.70 | -11.52 | 69.57 | Fundamental | Vertical | 101 | 0 | -- | -- | |
| #2 | 10359.28 | 52.45 | 5.56 | -5.27 | 52.74 | Peak (NRB) | Vertical | 101 | 207 | -- | -- | Pass |
| #3 | 15530.54 | 40.25 | 5.87 | -0.62 | 45.50 | Max Avg | Vertical | 167 | 13 | 54.0 | -8.5 | Pass |
| #4 | 15530.54 | 55.15 | 5.87 | -0.62 | 60.40 | Max Peak | Vertical | 167 | 13 | 74.0 | -13.6 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 38 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5200.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5202.68 | 84.07 | 3.65 | -11.45 | 76.27 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 10390.10 | 50.14 | 5.39 | -5.09 | 50.44 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| #3 | 15591.38 | 36.01 | 5.98 | -0.30 | 41.69 | Max Avg | Horizontal | 100 | 12 | 54.0 | -12.3 | Pass |
| #4 | 15591.38 | 49.69 | 5.98 | -0.30 | 55.37 | Max Peak | Horizontal | 100 | 12 | 74.0 | -18.6 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 39 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5240.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5243.25 | 87.13 | 3.63 | -11.36 | 79.40 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 10483.85 | 52.29 | 5.41 | -4.44 | 53.26 | Peak (NRB) | Vertical | 101 | 41 | -- | -- | Pass |
| #3 | 15712.42 | 40.38 | 5.96 | 0.18 | 46.52 | Max Avg | Horizontal | 158 | 22 | 54.0 | -7.5 | Pass |
| #4 | 15712.42 | 56.22 | 5.96 | 0.18 | 62.36 | Max Peak | Horizontal | 158 | 22 | 74.0 | -11.6 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 40 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5737.43 | 65.54 | 3.82 | -10.67 | 58.69 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 11485.17 | 52.16 | 5.46 | -4.86 | 52.76 | Max Avg | Vertical | 156 | 219 | 54.0 | -1.2 | Pass |
| #3 | 11485.17 | 66.04 | 5.46 | -4.86 | 66.64 | Max Peak | Vertical | 156 | 219 | 74.0 | -7.4 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR. Power reduced to 18 due to 11.5 GHz harmonic

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 41 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5785.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 15 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5786.41 | 66.27 | 3.79 | -10.44 | 59.62 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 11561.68 | 52.09 | 5.62 | -4.67 | 53.04 | Max Avg | Vertical | 190 | 249 | 54.0 | -1.0 | Pass |
| #3 | 11561.68 | 66.03 | 5.62 | -4.67 | 66.98 | Max Peak | Vertical | 190 | 249 | 74.0 | -7.0 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR. Power reduced to 15 due to 11.56 GHz harmonic

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 42 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5823.21 | 71.59 | 3.83 | -10.25 | 65.17 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 11658.12 | 52.31 | 5.59 | -4.45 | 53.45 | Max Avg | Vertical | 180 | 302 | 54.0 | -0.6 | Pass |
| #3 | 11658.12 | 66.97 | 5.59 | -4.45 | 68.11 | Max Peak | Vertical | 180 | 302 | 74.0 | -5.9 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR. Power reduced to 18 due to 11.6 GHz harmonic

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 43 of 350

2.1.7. AP-ANT-48

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11a |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5181.80 | 82.36 | 3.69 | -11.50 | 74.55 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 10355.71 | 55.31 | 5.54 | -5.28 | 55.57 | Peak (NRB) | Vertical | 101 | 275 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR.

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 44 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11a |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5200.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5201.80 | 82.63 | 3.66 | -11.46 | 74.83 | Fundamental | Vertical | 151 | 0 | -- | -- | |
| #2 | 10395.72 | 55.91 | 5.37 | -5.06 | 56.22 | Peak (NRB) | Vertical | 151 | 158 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR.

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 45 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11a |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5240.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5242.53 | 92.76 | 3.63 | -11.36 | 85.03 | Fundamental | Vertical | 151 | 1 | -- | -- | |
| #2 | 10485.17 | 56.63 | 5.41 | -4.42 | 57.62 | Peak (NRB) | Vertical | 151 | 1 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR.

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 46 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11a |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 15 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5749.14 | 91.39 | 3.85 | -10.63 | 84.61 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 11480.36 | 52.59 | 5.49 | -4.87 | 53.21 | Max Avg | Vertical | 193 | 284 | 54.0 | -0.8 | Pass |
| #3 | 11480.36 | 68.85 | 5.49 | -4.87 | 69.47 | Max Peak | Vertical | 193 | 284 | 74.0 | -4.5 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR. Power reduced to 15 due to 11.4 GHz Harmonic

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 47 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11a |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5785.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5791.10 | 90.93 | 3.79 | -10.41 | 84.31 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 5791.10 | 90.93 | 3.79 | -10.41 | 84.31 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #3 | 11564.73 | 52.84 | 5.56 | -4.65 | 53.75 | Max Avg | Vertical | 141 | 260 | 54.0 | -0.3 | Pass |
| #4 | 11564.73 | 67.14 | 5.56 | -4.65 | 68.05 | Max Peak | Vertical | 141 | 260 | 74.0 | -6.0 | Pass |
| #5 | 11564.73 | 48.69 | 5.56 | -4.65 | 49.60 | Max Avg | Horizontal | 114 | 255 | 54.0 | -4.4 | Pass |
| #6 | 11564.73 | 63.32 | 5.56 | -4.65 | 64.23 | Max Peak | Horizontal | 114 | 255 | 74.0 | -9.8 | Pass |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 48 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11a |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5823.73 | 89.40 | 3.83 | -10.25 | 82.98 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 5823.73 | 89.43 | 3.83 | -10.25 | 83.01 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #3 | 11658.04 | 51.70 | 5.59 | -4.45 | 52.84 | Max Avg | Vertical | 119 | 296 | 54.0 | -1.2 | Pass |
| #4 | 11658.04 | 66.11 | 5.59 | -4.45 | 67.25 | Max Peak | Vertical | 119 | 296 | 74.0 | -6.8 | Pass |
| #5 | 11658.04 | 48.41 | 5.59 | -4.45 | 49.55 | Max Avg | Horizontal | 103 | 261 | 54.0 | -4.5 | Pass |
| #6 | 11658.04 | 63.02 | 5.59 | -4.45 | 64.16 | Max Peak | Horizontal | 103 | 261 | 74.0 | -9.8 | Pass |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 49 of 350

2.1.8. Metal Sheet (Integral)

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-------------|------------------------|-------------|
| Antenna: | Metal Sheet | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5186.57 | 78.04 | 3.68 | -11.49 | 70.23 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 5186.57 | 78.04 | 3.68 | -11.49 | 70.23 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| #3 | 10366.38 | 46.80 | 5.59 | -5.23 | 47.16 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |

Test Notes: EUT on 150cm table powered by PDSine 9001GR POE

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 50 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-------------|------------------------|-------------|
| Antenna: | Metal Sheet | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5200.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5203.81 | 79.18 | 3.65 | -11.45 | 71.38 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| #2 | 5203.81 | 79.18 | 3.65 | -11.45 | 71.38 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| #3 | 10407.70 | 46.02 | 5.47 | -4.98 | 46.51 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |

Test Notes: EUT on 150cm table powered by PDSine 9001GR POE

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 51 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-------------|------------------------|-------------|
| Antenna: | Metal Sheet | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5240.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5247.22 | 86.02 | 3.63 | -11.35 | 78.30 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 5247.22 | 86.02 | 3.63 | -11.35 | 78.30 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| #3 | 10480.16 | 47.00 | 5.42 | -4.46 | 47.96 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |

Test Notes: EUT on 150cm table powered by PDSine 9001GR POE

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 52 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-------------|------------------------|-------------|
| Antenna: | Metal Sheet | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5739.92 | 84.79 | 3.83 | -10.67 | 77.95 | Fundamental | Horizontal | 101 | 0 | -- | -- | |
| #2 | 11489.10 | 52.66 | 5.45 | -4.85 | 53.26 | Max Avg | Horizontal | 195 | 67 | 54.0 | -0.7 | Pass |
| #3 | 11489.10 | 66.66 | 5.45 | -4.85 | 67.26 | Max Peak | Horizontal | 195 | 67 | 74.0 | -6.7 | Pass |

Test Notes: EUT on 150cm table powered by PDSine 9001GR POE

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 53 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-------------|------------------------|-------------|
| Antenna: | Metal Sheet | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5785.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 17 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5781.72 | 80.12 | 3.80 | -10.46 | 73.46 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| #2 | 11568.98 | 52.87 | 5.48 | -4.65 | 53.70 | Max Avg | Horizontal | 195 | 68 | 54.0 | -0.3 | Pass |
| #3 | 11568.98 | 67.17 | 5.48 | -4.65 | 68.00 | Max Peak | Horizontal | 195 | 68 | 74.0 | -6.0 | Pass |

Test Notes: EUT on 150cm table powered by PDSine 9001GR POE

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 54 of 350

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

| | | | |
|---------------------------------|-------------|------------------------|-------------|
| Antenna: | Metal Sheet | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 16 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5823.13 | 83.98 | 3.83 | -10.25 | 77.56 | Fundamental | Vertical | 199 | 1 | -- | -- | |
| #2 | 11650.62 | 51.71 | 5.46 | -4.47 | 52.70 | Max Avg | Horizontal | 190 | 67 | 54.0 | -1.3 | Pass |
| #3 | 11650.62 | 66.73 | 5.46 | -4.47 | 67.72 | Max Peak | Horizontal | 190 | 67 | 74.0 | -6.3 | Pass |

Test Notes: EUT on 150cm table powered by PDSine 9001GR POE

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2.2. Restricted Band-Edge Emissions

2.2.1. AP-ANT-13B

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5150 - 5250 MHz

| AP-ANT-13B | | Band-Edge Freq | Limit 54.0dB μ V/m | Limit 74.0dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5180.00 | 5150.00 | 46.08 | 58.82 | 18.00 |
| 802.11ac-80 | 5210.00 | 5150.00 | 53.54 | 69.04 | 15.50 |
| 802.11n HT-20 | 5180.00 | 5150.00 | 45.86 | 59.61 | 18.00 |
| 802.11n HT-40 | 5190.00 | 5150.00 | 64.50 | 51.41 | 17.50 |

5725 - 5850 MHz

| AP-ANT-13B | | Band-Edge Freq | Limit 68.2dB μ V/m | Limit 78.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5745.00 | 5725.00 | 54.67 | 62.46 | 18.00 |
| 802.11ac-80 | 5775.00 | 5725.00 | 66.08 | 69.22 | 18.00 |
| 802.11n HT-20 | 5745.00 | 5725.00 | 54.18 | 59.96 | 18.00 |
| 802.11n HT-40 | 5755.00 | 5725.00 | 61.39 | 65.83 | 18.00 |

| AP-ANT-13B | | Band-Edge Freq | Limit 78.2dB μ V/m | Limit 68.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5825.00 | 5850.00 | 58.21 | 53.47 | 18.00 |
| 802.11ac-80 | 5775.00 | 5850.00 | 64.89 | 65.65 | 18.00 |
| 802.11n HT-20 | 5825.00 | 5850.00 | 56.76 | 53.46 | 18.00 |
| 802.11n HT-40 | 5795.00 | 5850.00 | 56.38 | 55.04 | 18.00 |

Click on the links to view the data.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 56 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11a |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5146.99 | 8.29 | 3.68 | 34.11 | 46.08 | Max Avg | Vertical | 155 | 6 | 54.0 | -7.9 | Pass |
| #2 | 5148.06 | 21.03 | 3.68 | 34.11 | 58.82 | Max Peak | Vertical | 155 | 6 | 74.0 | -15.2 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 57 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|--------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5210.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 15.5 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5148.70 | 15.76 | 3.67 | 34.11 | 53.54 | Max Avg | Vertical | 155 | 6 | 54.0 | -0.5 | Pass |
| #2 | 5150.00 | 31.26 | 3.67 | 34.11 | 69.04 | Max Peak | Vertical | 155 | 6 | 74.0 | -5.0 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 58 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|---------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5147.15 | 8.07 | 3.68 | 34.11 | 45.86 | Max Avg | Vertical | 155 | 6 | 54.0 | -8.1 | Pass |
| #2 | 5148.58 | 21.83 | 3.67 | 34.11 | 59.61 | Max Peak | Vertical | 155 | 6 | 74.0 | -14.4 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 59 of 350

| | | | |
|---|------------|------------------------|---------------|
| Equipment Configuration for Restricted Lower Band-Edge Emissions | | | |
| Antenna: | AP-ANT-13B | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5190.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 17.5 | Tested By: | SB |

| **Antenna:** | AP-ANT-13B | **Variant:** | 802.11n HT-40 |
| **Antenna Gain (dBi):** | 3.30 | **Modulation:** | OFDM |
| **Beam Forming Gain (Y):** | 6.00 | **Duty Cycle (%):** | 100 |
| **Channel Frequency (MHz):** | 5190.00 | **Data Rate:** | 13.50 MBit/s |
| **Power Setting:** | 17.5 | **Tested By:** | SB |

| Test Measurement Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------|----------------|----------------|------------|--------------------|--------------------|------------------|--------|---------|--------------------|--------------------|------------|------------|----|---------|-------|------|-------|-------|----------|----------|-----|---|------|------|------|----|---------|-------|------|-------|-------|---------|----------|-----|---|------|------|------|----|---------|------|------|------|----|-----------|--|---|---|----|----|--|
| <table border="1"><thead><tr><th>Num</th><th>Frequency MHz</th><th>Raw dBμV</th><th>Cable Loss</th><th>AF dB</th><th>Level dBμV/m</th><th>Measurement Type</th><th>Pol</th><th>Hgt cm</th><th>Azt Deg</th><th>Limit dBμV/m</th><th>Margin dB</th><th>Pass /Fail</th></tr></thead><tbody><tr><td>#1</td><td>5147.39</td><td>26.71</td><td>3.68</td><td>34.11</td><td>64.50</td><td>Max Peak</td><td>Vertical</td><td>155</td><td>6</td><td>74.0</td><td>-9.5</td><td>Pass</td></tr><tr><td>#2</td><td>5150.00</td><td>13.63</td><td>3.67</td><td>34.11</td><td>51.41</td><td>Max Avg</td><td>Vertical</td><td>155</td><td>6</td><td>54.0</td><td>-2.6</td><td>Pass</td></tr><tr><td>#3</td><td>5150.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>--</td><td>Band-Edge</td><td></td><td>0</td><td>0</td><td>--</td><td>--</td><td></td></tr></tbody></table> | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | #1 | 5147.39 | 26.71 | 3.68 | 34.11 | 64.50 | Max Peak | Vertical | 155 | 6 | 74.0 | -9.5 | Pass | #2 | 5150.00 | 13.63 | 3.67 | 34.11 | 51.41 | Max Avg | Vertical | 155 | 6 | 54.0 | -2.6 | Pass | #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #1 | 5147.39 | 26.71 | 3.68 | 34.11 | 64.50 | Max Peak | Vertical | 155 | 6 | 74.0 | -9.5 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #2 | 5150.00 | 13.63 | 3.67 | 34.11 | 51.41 | Max Avg | Vertical | 155 | 6 | 54.0 | -2.6 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| **Test Measurement Results** |
| | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | |-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------| | #1 | 5147.39 | 26.71 | 3.68 | 34.11 | 64.50 | Max Peak | Vertical | 155 | 6 | 74.0 | -9.5 | Pass | | #2 | 5150.00 | 13.63 | 3.67 | 34.11 | 51.41 | Max Avg | Vertical | 155 | 6 | 54.0 | -2.6 | Pass | | #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 60 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11a |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5707.73 | 16.48 | 3.85 | 34.34 | 54.67 | Marker | Vertical | 147 | -1 | 68.2 | -13.6 | Pass |
| #2 | 5725.00 | 24.32 | 3.79 | 34.35 | 62.46 | Marker | Vertical | 147 | -1 | 78.2 | -15.8 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 61 of 350

| | | | |
|--|------------|------------------------|--------------|
| Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions | | | |
| Antenna: | AP-ANT-13B | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| **Antenna:** | AP-ANT-13B | **Variant:** | 802.11ac-80 |
| **Antenna Gain (dBi):** | 3.30 | **Modulation:** | OFDM |
| **Beam Forming Gain (Y):** | 6.00 | **Duty Cycle (%):** | 100 |
| **Channel Frequency (MHz):** | 5775.00 | **Data Rate:** | 29.30 MBit/s |
| **Power Setting:** | 18 | **Tested By:** | SB |

| Test Measurement Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------|----------------|----------------|------------|--------------------|--------------------|------------------|--------|---------|--------------------|--------------------|------------|------------|----|---------|-------|------|-------|-------|--------|----------|-----|----|------|------|------|----|---------|-------|------|-------|-------|--------|----------|-----|----|------|------|------|----|---------|----|----|----|----|-----------|----|----|----|----|----|----|
| <table border="1"><thead><tr><th>Num</th><th>Frequency MHz</th><th>Raw dBμV</th><th>Cable Loss</th><th>AF dB</th><th>Level dBμV/m</th><th>Measurement Type</th><th>Pol</th><th>Hgt cm</th><th>Azt Deg</th><th>Limit dBμV/m</th><th>Margin dB</th><th>Pass /Fail</th></tr></thead><tbody><tr><td>#1</td><td>5698.27</td><td>27.90</td><td>3.86</td><td>34.32</td><td>66.08</td><td>Marker</td><td>Vertical</td><td>147</td><td>-1</td><td>68.2</td><td>-2.2</td><td>Pass</td></tr><tr><td>#2</td><td>5717.73</td><td>31.07</td><td>3.81</td><td>34.34</td><td>69.22</td><td>Marker</td><td>Vertical</td><td>147</td><td>-1</td><td>78.2</td><td>-9.0</td><td>Pass</td></tr><tr><td>#3</td><td>5725.00</td><td>--</td><td>--</td><td>--</td><td>--</td><td>Band-Edge</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td></tr></tbody></table> | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | #1 | 5698.27 | 27.90 | 3.86 | 34.32 | 66.08 | Marker | Vertical | 147 | -1 | 68.2 | -2.2 | Pass | #2 | 5717.73 | 31.07 | 3.81 | 34.34 | 69.22 | Marker | Vertical | 147 | -1 | 78.2 | -9.0 | Pass | #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #1 | 5698.27 | 27.90 | 3.86 | 34.32 | 66.08 | Marker | Vertical | 147 | -1 | 68.2 | -2.2 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #2 | 5717.73 | 31.07 | 3.81 | 34.34 | 69.22 | Marker | Vertical | 147 | -1 | 78.2 | -9.0 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| **Test Measurement Results** |
| | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | |-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------| | #1 | 5698.27 | 27.90 | 3.86 | 34.32 | 66.08 | Marker | Vertical | 147 | -1 | 68.2 | -2.2 | Pass | | #2 | 5717.73 | 31.07 | 3.81 | 34.34 | 69.22 | Marker | Vertical | 147 | -1 | 78.2 | -9.0 | Pass | | #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 62 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|---------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5713.06 | 16.02 | 3.82 | 34.34 | 54.18 | Marker | Vertical | 147 | -1 | 68.2 | -14.1 | Pass |
| #2 | 5725.00 | 21.82 | 3.79 | 34.35 | 59.96 | Marker | Vertical | 147 | -1 | 78.2 | -18.3 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 63 of 350

| | |
|--|--|
| Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions | |
|--|--|

| | | | |
|---------------------------------|------------|------------------------|---------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5755.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| |
|---------------------------------|
| Test Measurement Results |
|---------------------------------|

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5715.00 | 23.24 | 3.81 | 34.34 | 61.39 | Marker | Vertical | 147 | -1 | 68.2 | -6.8 | Pass |
| #2 | 5718.45 | 27.68 | 3.81 | 34.34 | 65.83 | Marker | Vertical | 147 | -1 | 78.2 | -12.4 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 64 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11a |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 19.77 | 3.81 | 34.63 | 58.21 | Marker | Vertical | 147 | -1 | 78.2 | -20.0 | Pass |
| #3 | 5866.94 | 14.97 | 3.83 | 34.67 | 53.47 | Marker | Vertical | 147 | -1 | 68.2 | -14.8 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 65 of 350

| | | | |
|--|------------|------------------------|--------------|
| Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions | | | |
| Antenna: | AP-ANT-13B | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| **Antenna:** | AP-ANT-13B | **Variant:** | 802.11ac-80 |
| **Antenna Gain (dBi):** | 3.30 | **Modulation:** | OFDM |
| **Beam Forming Gain (Y):** | 6.00 | **Duty Cycle (%):** | 100 |
| **Channel Frequency (MHz):** | 5775.00 | **Data Rate:** | 29.30 MBit/s |
| **Power Setting:** | 18 | **Tested By:** | SB |

| Test Measurement Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------|----------------|----------------|------------|--------------------|--------------------|------------------|--------|---------|--------------------|--------------------|------------|------------|----|---------|-------|------|-------|-------|--------|----------|-----|----|------|-------|------|----|---------|-------|------|-------|-------|--------|----------|-----|----|------|------|------|----|---------|----|----|----|----|-----------|----|----|----|----|----|----|
| <table border="1"><thead><tr><th>Num</th><th>Frequency MHz</th><th>Raw dBμV</th><th>Cable Loss</th><th>AF dB</th><th>Level dBμV/m</th><th>Measurement Type</th><th>Pol</th><th>Hgt cm</th><th>Azt Deg</th><th>Limit dBμV/m</th><th>Margin dB</th><th>Pass /Fail</th></tr></thead><tbody><tr><td>#2</td><td>5856.52</td><td>26.40</td><td>3.84</td><td>34.65</td><td>64.89</td><td>Marker</td><td>Vertical</td><td>147</td><td>-1</td><td>78.2</td><td>-13.3</td><td>Pass</td></tr><tr><td>#3</td><td>5863.79</td><td>27.15</td><td>3.84</td><td>34.66</td><td>65.65</td><td>Marker</td><td>Vertical</td><td>147</td><td>-1</td><td>68.2</td><td>-2.6</td><td>Pass</td></tr><tr><td>#1</td><td>5850.00</td><td>--</td><td>--</td><td>--</td><td>--</td><td>Band-Edge</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td></tr></tbody></table> | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | #2 | 5856.52 | 26.40 | 3.84 | 34.65 | 64.89 | Marker | Vertical | 147 | -1 | 78.2 | -13.3 | Pass | #3 | 5863.79 | 27.15 | 3.84 | 34.66 | 65.65 | Marker | Vertical | 147 | -1 | 68.2 | -2.6 | Pass | #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #2 | 5856.52 | 26.40 | 3.84 | 34.65 | 64.89 | Marker | Vertical | 147 | -1 | 78.2 | -13.3 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #3 | 5863.79 | 27.15 | 3.84 | 34.66 | 65.65 | Marker | Vertical | 147 | -1 | 68.2 | -2.6 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| **Test Measurement Results** |
| | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | |-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------| | #2 | 5856.52 | 26.40 | 3.84 | 34.65 | 64.89 | Marker | Vertical | 147 | -1 | 78.2 | -13.3 | Pass | | #3 | 5863.79 | 27.15 | 3.84 | 34.66 | 65.65 | Marker | Vertical | 147 | -1 | 68.2 | -2.6 | Pass | | #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 66 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|---------------|
| Antenna: | AP-ANT-13B | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 18.32 | 3.81 | 34.63 | 56.76 | Marker | Vertical | 147 | -1 | 78.2 | -21.5 | Pass |
| #3 | 5860.00 | 14.95 | 3.86 | 34.65 | 53.46 | Marker | Vertical | 147 | -1 | 78.2 | -24.8 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 67 of 350

| | | | |
|--|------------|------------------------|---------------|
| Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions | | | |
| Antenna: | AP-ANT-13B | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 3.30 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5795.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| **Antenna:** | AP-ANT-13B | **Variant:** | 802.11n HT-40 |
| **Antenna Gain (dBi):** | 3.30 | **Modulation:** | OFDM |
| **Beam Forming Gain (Y):** | 6.00 | **Duty Cycle (%):** | 100 |
| **Channel Frequency (MHz):** | 5795.00 | **Data Rate:** | 13.50 MBit/s |
| **Power Setting:** | 18 | **Tested By:** | SB |

| Test Measurement Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------|----------------|----------------|------------|--------------------|--------------------|------------------|--------|---------|--------------------|--------------------|------------|------------|----|---------|-------|------|-------|-------|--------|----------|-----|----|------|-------|------|----|---------|-------|------|-------|-------|--------|----------|-----|----|------|-------|------|----|---------|----|----|----|----|-----------|----|----|----|----|----|----|
| <table border="1"><thead><tr><th>Num</th><th>Frequency MHz</th><th>Raw dBμV</th><th>Cable Loss</th><th>AF dB</th><th>Level dBμV/m</th><th>Measurement Type</th><th>Pol</th><th>Hgt cm</th><th>Azt Deg</th><th>Limit dBμV/m</th><th>Margin dB</th><th>Pass /Fail</th></tr></thead><tbody><tr><td>#2</td><td>5856.73</td><td>17.89</td><td>3.84</td><td>34.65</td><td>56.38</td><td>Marker</td><td>Vertical</td><td>147</td><td>-1</td><td>78.2</td><td>-21.9</td><td>Pass</td></tr><tr><td>#3</td><td>5860.00</td><td>16.53</td><td>3.86</td><td>34.65</td><td>55.04</td><td>Marker</td><td>Vertical</td><td>147</td><td>-1</td><td>78.2</td><td>-23.2</td><td>Pass</td></tr><tr><td>#1</td><td>5850.00</td><td>--</td><td>--</td><td>--</td><td>--</td><td>Band-Edge</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td></tr></tbody></table> | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | #2 | 5856.73 | 17.89 | 3.84 | 34.65 | 56.38 | Marker | Vertical | 147 | -1 | 78.2 | -21.9 | Pass | #3 | 5860.00 | 16.53 | 3.86 | 34.65 | 55.04 | Marker | Vertical | 147 | -1 | 78.2 | -23.2 | Pass | #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #2 | 5856.73 | 17.89 | 3.84 | 34.65 | 56.38 | Marker | Vertical | 147 | -1 | 78.2 | -21.9 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #3 | 5860.00 | 16.53 | 3.86 | 34.65 | 55.04 | Marker | Vertical | 147 | -1 | 78.2 | -23.2 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| **Test Measurement Results** |
| | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | |-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------| | #2 | 5856.73 | 17.89 | 3.84 | 34.65 | 56.38 | Marker | Vertical | 147 | -1 | 78.2 | -21.9 | Pass | | #3 | 5860.00 | 16.53 | 3.86 | 34.65 | 55.04 | Marker | Vertical | 147 | -1 | 78.2 | -23.2 | Pass | | #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | |

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2.2.2. AP-ANT-19

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5150 - 5250 MHz

| AP-ANT-19 | | Band-Edge Freq | Limit 54.0dB μ V/m | Limit 74.0dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5180.00 | 5150.00 | 48.07 | 61.87 | 18.00 |
| 802.11ac-80 | 5210.00 | 5150.00 | 52.43 | 69.24 | 14.00 |
| 802.11n HT-20 | 5180.00 | 5150.00 | 60.14 | 47.88 | 18.00 |
| 802.11n HT-40 | 5190.00 | 5150.00 | 52.95 | 67.67 | 17.00 |

5725 - 5850 MHz

| AP-ANT-19 | | Band-Edge Freq | Limit 68.2dB μ V/m | Limit 78.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5745.00 | 5725.00 | 55.59 | 59.68 | 18.00 |
| 802.11ac-80 | 5775.00 | 5725.00 | 61.39 | 61.39 | 16.00 |
| 802.11n HT-20 | 5745.00 | 5725.00 | 55.14 | 62.65 | 18.00 |
| 802.11n HT-40 | 5755.00 | 5725.00 | 59.11 | 60.70 | 18.00 |

| AP-ANT-19 | | Band-Edge Freq | Limit 78.2dB μ V/m | Limit 68.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5825.00 | 5850.00 | 56.37 | 54.03 | 18.00 |
| 802.11ac-80 | 5775.00 | 5850.00 | 57.53 | 57.18 | 16.00 |
| 802.11n HT-20 | 5825.00 | 5850.00 | 55.95 | 54.03 | 18.00 |
| 802.11n HT-40 | 5795.00 | 5850.00 | 58.22 | 55.05 | 18.00 |

Click on the links to view the data.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 69 of 350

| | | | |
|---|-----------|------------------------|-------------|
| Equipment Configuration for Restricted Lower Band-Edge Emissions | | | |
| Antenna: | AP-ANT-19 | Variant: | 802.11a |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| Test Measurement Results | | | | | | | | | | | | |
|---------------------------------|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
| #1 | 5147.15 | 10.28 | 3.68 | 34.11 | 48.07 | Max Avg | Vertical | 166 | 102 | 54.0 | -5.9 | Pass |
| #2 | 5148.58 | 24.09 | 3.67 | 34.11 | 61.87 | Max Peak | Vertical | 166 | 102 | 74.0 | -12.1 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 70 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5210.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 14 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5144.31 | 14.61 | 3.70 | 34.12 | 52.43 | Max Avg | Vertical | 166 | 102 | 54.0 | -1.6 | Pass |
| #2 | 5146.21 | 31.44 | 3.69 | 34.11 | 69.24 | Max Peak | Vertical | 166 | 102 | 74.0 | -4.8 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 71 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5141.44 | 22.32 | 3.70 | 34.12 | 60.14 | Max Peak | Vertical | 166 | 102 | 74.0 | -13.9 | Pass |
| #2 | 5142.16 | 10.06 | 3.70 | 34.12 | 47.88 | Max Avg | Vertical | 166 | 102 | 54.0 | -6.1 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 72 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5190.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 17 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5150.00 | 15.17 | 3.67 | 34.11 | 52.95 | Max Avg | Vertical | 166 | 102 | 54.0 | -1.1 | Pass |
| #2 | 5150.00 | 29.89 | 3.67 | 34.11 | 67.67 | Max Peak | Vertical | 166 | 102 | 74.0 | -6.3 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 73 of 350

| | | | |
|--|-----------|------------------------|-------------|
| Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions | | | |
| Antenna: | AP-ANT-19 | Variant: | 802.11a |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| Test Measurement Results | | | | | | | | | | | | | | |
|---------------------------------|---------------|-----------------------|------------|-------|---------------------------|------------------|-----|--------|---------|---------------------------|-----------|------------|--|--|
| Num | Frequency MHz | Raw dB _µ V | Cable Loss | AF dB | Level dB _µ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _µ V/m | Margin dB | Pass /Fail | | |

| Num | Frequency MHz | Raw dB _µ V | Cable Loss | AF dB | Level dB _µ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _µ V/m | Margin dB | Pass /Fail | |
|-----|---------------|-----------------------|------------|-------|---------------------------|------------------|----------|--------|---------|---------------------------|-----------|------------|----|
| #1 | 5715.00 | 17.44 | 3.81 | 34.34 | 55.59 | Marker | Vertical | 166 | 118 | 68.2 | -12.6 | Pass | |
| #2 | 5721.61 | 21.53 | 3.80 | 34.35 | 59.68 | Marker | Vertical | 166 | 118 | 78.2 | -18.6 | Pass | |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 74 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5709.67 | 23.21 | 3.84 | 34.34 | 61.39 | Marker | Vertical | 174 | 69 | 68.2 | -6.8 | Pass |
| #2 | 5716.51 | 23.24 | 3.81 | 34.34 | 61.39 | Marker | Vertical | 174 | 69 | 78.2 | -16.8 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 75 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5707.24 | 16.95 | 3.85 | 34.34 | 55.14 | Marker | Vertical | 174 | 69 | 68.2 | -13.1 | Pass |
| #2 | 5725.00 | 24.51 | 3.79 | 34.35 | 62.65 | Marker | Vertical | 174 | 69 | 78.2 | -15.6 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 76 of 350

| | | | |
|--|-----------|------------------------|---------------|
| Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions | | | |
| Antenna: | AP-ANT-19 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5755.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| **Antenna:** | AP-ANT-19 | **Variant:** | 802.11n HT-40 |
| **Antenna Gain (dBi):** | 6.00 | **Modulation:** | OFDM |
| **Beam Forming Gain (Y):** | 6.00 | **Duty Cycle (%):** | 100 |
| **Channel Frequency (MHz):** | 5755.00 | **Data Rate:** | 13.50 MBit/s |
| **Power Setting:** | 18 | **Tested By:** | SB |

| Test Measurement Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------|----------------|----------------|------------|--------------------|--------------------|------------------|--------|---------|--------------------|--------------------|------------|------------|----|---------|-------|------|-------|-------|--------|----------|-----|----|------|------|------|----|---------|-------|------|-------|-------|--------|----------|-----|----|------|-------|------|----|---------|----|----|----|----|-----------|----|----|----|----|----|----|
| <table border="1"><thead><tr><th>Num</th><th>Frequency MHz</th><th>Raw dBμV</th><th>Cable Loss</th><th>AF dB</th><th>Level dBμV/m</th><th>Measurement Type</th><th>Pol</th><th>Hgt cm</th><th>Azt Deg</th><th>Limit dBμV/m</th><th>Margin dB</th><th>Pass /Fail</th></tr></thead><tbody><tr><td>#1</td><td>5709.91</td><td>20.93</td><td>3.84</td><td>34.34</td><td>59.11</td><td>Marker</td><td>Vertical</td><td>174</td><td>69</td><td>68.2</td><td>-9.1</td><td>Pass</td></tr><tr><td>#2</td><td>5716.51</td><td>22.55</td><td>3.81</td><td>34.34</td><td>60.70</td><td>Marker</td><td>Vertical</td><td>174</td><td>69</td><td>78.2</td><td>-17.5</td><td>Pass</td></tr><tr><td>#3</td><td>5725.00</td><td>--</td><td>--</td><td>--</td><td>--</td><td>Band-Edge</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td></tr></tbody></table> | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | #1 | 5709.91 | 20.93 | 3.84 | 34.34 | 59.11 | Marker | Vertical | 174 | 69 | 68.2 | -9.1 | Pass | #2 | 5716.51 | 22.55 | 3.81 | 34.34 | 60.70 | Marker | Vertical | 174 | 69 | 78.2 | -17.5 | Pass | #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #1 | 5709.91 | 20.93 | 3.84 | 34.34 | 59.11 | Marker | Vertical | 174 | 69 | 68.2 | -9.1 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #2 | 5716.51 | 22.55 | 3.81 | 34.34 | 60.70 | Marker | Vertical | 174 | 69 | 78.2 | -17.5 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| **Test Measurement Results** |
| | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | |-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------| | #1 | 5709.91 | 20.93 | 3.84 | 34.34 | 59.11 | Marker | Vertical | 174 | 69 | 68.2 | -9.1 | Pass | | #2 | 5716.51 | 22.55 | 3.81 | 34.34 | 60.70 | Marker | Vertical | 174 | 69 | 78.2 | -17.5 | Pass | | #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 77 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11a |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #2 | 5854.63 | 17.90 | 3.83 | 34.64 | 56.37 | Marker | Vertical | 149 | 95 | 78.2 | -21.9 | Pass |
| #3 | 5862.31 | 15.52 | 3.85 | 34.66 | 54.03 | Marker | Vertical | 149 | 95 | 68.2 | -14.2 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 78 of 350

| | | | |
|--|-----------|------------------------|--------------|
| Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions | | | |
| Antenna: | AP-ANT-19 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

| **Antenna:** | AP-ANT-19 | **Variant:** | 802.11ac-80 |
| **Antenna Gain (dBi):** | 6.00 | **Modulation:** | OFDM |
| **Beam Forming Gain (Y):** | 6.00 | **Duty Cycle (%):** | 100 |
| **Channel Frequency (MHz):** | 5775.00 | **Data Rate:** | 29.30 MBit/s |
| **Power Setting:** | 16 | **Tested By:** | SB |

| Test Measurement Results | | | | | | | | | | | | |
|---------------------------------|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
| #2 | 5852.74 | 19.08 | 3.82 | 34.63 | 57.53 | Marker | Vertical | 149 | 95 | 78.2 | -20.7 | Pass |
| #3 | 5865.68 | 18.68 | 3.83 | 34.67 | 57.18 | Marker | Vertical | 149 | 95 | 68.2 | -11.1 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

| **Test Measurement Results** |
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
| #2 | 5852.74 | 19.08 | 3.82 | 34.63 | 57.53 | Marker | Vertical | 149 | 95 | 78.2 | -20.7 | Pass |
| #3 | 5865.68 | 18.68 | 3.83 | 34.67 | 57.18 | Marker | Vertical | 149 | 95 | 68.2 | -11.1 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 79 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #2 | 5855.05 | 17.48 | 3.83 | 34.64 | 55.95 | Marker | Vertical | 149 | 95 | 78.2 | -22.3 | Pass |
| #3 | 5863.16 | 15.52 | 3.85 | 34.66 | 54.03 | Marker | Vertical | 149 | 95 | 68.2 | -14.2 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 80 of 350

| | |
|--|--|
| Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions | |
|--|--|

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-19 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 6.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5795.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| |
|---------------------------------|
| Test Measurement Results |
|---------------------------------|

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #2 | 5852.53 | 19.77 | 3.82 | 34.63 | 58.22 | Marker | Vertical | 149 | 95 | 78.2 | -20.0 | Pass |
| #3 | 5864.84 | 16.54 | 3.84 | 34.67 | 55.05 | Marker | Vertical | 149 | 95 | 68.2 | -13.2 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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2.2.3. AP-ANT-1W

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5150 - 5250 MHz

| AP-ANT-1W | | Band-Edge Freq | Limit 54.0dB μ V/m | Limit 74.0dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5180.00 | 5150.00 | 44.89 | 56.94 | 18.00 |
| 802.11ac-80 | 5210.00 | 5150.00 | 52.09 | 68.23 | 18.00 |
| 802.11n HT-20 | 5180.00 | 5150.00 | 44.37 | 57.37 | 18.00 |
| 802.11n HT-40 | 5190.00 | 5150.00 | 61.64 | 47.69 | 18.00 |

5725 - 5850 MHz

| AP-ANT-1W | | Band-Edge Freq | Limit 68.2dB μ V/m | Limit 78.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5745.00 | 5725.00 | 54.18 | 59.13 | 18.00 |
| 802.11ac-80 | 5775.00 | 5725.00 | 64.68 | 65.15 | 18.00 |
| 802.11n HT-20 | 5745.00 | 5725.00 | 54.18 | 58.53 | 18.00 |
| 802.11n HT-40 | 5755.00 | 5725.00 | 57.86 | 61.84 | 18.00 |

| AP-ANT-1W | | Band-Edge Freq | Limit 78.2dB μ V/m | Limit 68.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5825.00 | 5850.00 | 54.02 | 53.47 | 18.00 |
| 802.11ac-80 | 5775.00 | 5850.00 | 65.04 | 61.78 | 18.00 |
| 802.11n HT-20 | 5825.00 | 5850.00 | 54.01 | 53.47 | 18.00 |
| 802.11n HT-40 | 5795.00 | 5850.00 | 57.16 | 54.03 | 18.00 |

Click on the links to view the data.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 82 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5150.00 | 7.11 | 3.67 | 34.11 | 44.89 | Max Avg | Vertical | 150 | 54 | 54.0 | -9.1 | Pass |
| #2 | 5150.00 | 19.16 | 3.67 | 34.11 | 56.94 | Max Peak | Vertical | 150 | 54 | 74.0 | -17.1 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 83 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5210.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5140.06 | 14.27 | 3.70 | 34.12 | 52.09 | Max Avg | Vertical | 150 | 54 | 54.0 | -1.9 | Pass |
| #2 | 5141.72 | 30.41 | 3.70 | 34.12 | 68.23 | Max Peak | Vertical | 150 | 54 | 74.0 | -5.8 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 84 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5150.00 | 6.59 | 3.67 | 34.11 | 44.37 | Max Avg | Vertical | 150 | 54 | 54.0 | -9.6 | Pass |
| #2 | 5150.00 | 19.59 | 3.67 | 34.11 | 57.37 | Max Peak | Vertical | 150 | 54 | 74.0 | -16.6 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 85 of 350

| | | | |
|---|-----------|------------------------|---------------|
| Equipment Configuration for Restricted Lower Band-Edge Emissions | | | |
| Antenna: | AP-ANT-1W | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5190.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| **Antenna:** | AP-ANT-1W | **Variant:** | 802.11n HT-40 |
| **Antenna Gain (dBi):** | 5.80 | **Modulation:** | OFDM |
| **Beam Forming Gain (Y):** | 6.00 | **Duty Cycle (%):** | 100 |
| **Channel Frequency (MHz):** | 5190.00 | **Data Rate:** | 13.50 MBit/s |
| **Power Setting:** | 18 | **Tested By:** | SB |

| Test Measurement Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------|----------------|----------------|------------|--------------------|--------------------|------------------|--------|---------|--------------------|--------------------|------------|------------|----|---------|-------|------|-------|-------|----------|----------|-----|----|------|-------|------|----|---------|------|------|-------|-------|---------|----------|-----|----|------|------|------|----|---------|------|------|------|----|-----------|--|---|---|----|----|--|
| <table border="1"><thead><tr><th>Num</th><th>Frequency MHz</th><th>Raw dBμV</th><th>Cable Loss</th><th>AF dB</th><th>Level dBμV/m</th><th>Measurement Type</th><th>Pol</th><th>Hgt cm</th><th>Azt Deg</th><th>Limit dBμV/m</th><th>Margin dB</th><th>Pass /Fail</th></tr></thead><tbody><tr><td>#1</td><td>5140.64</td><td>23.82</td><td>3.70</td><td>34.12</td><td>61.64</td><td>Max Peak</td><td>Vertical</td><td>150</td><td>54</td><td>74.0</td><td>-12.4</td><td>Pass</td></tr><tr><td>#2</td><td>5140.88</td><td>9.87</td><td>3.70</td><td>34.12</td><td>47.69</td><td>Max Avg</td><td>Vertical</td><td>150</td><td>54</td><td>54.0</td><td>-6.3</td><td>Pass</td></tr><tr><td>#3</td><td>5150.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>--</td><td>Band-Edge</td><td></td><td>0</td><td>0</td><td>--</td><td>--</td><td></td></tr></tbody></table> | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | #1 | 5140.64 | 23.82 | 3.70 | 34.12 | 61.64 | Max Peak | Vertical | 150 | 54 | 74.0 | -12.4 | Pass | #2 | 5140.88 | 9.87 | 3.70 | 34.12 | 47.69 | Max Avg | Vertical | 150 | 54 | 54.0 | -6.3 | Pass | #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #1 | 5140.64 | 23.82 | 3.70 | 34.12 | 61.64 | Max Peak | Vertical | 150 | 54 | 74.0 | -12.4 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #2 | 5140.88 | 9.87 | 3.70 | 34.12 | 47.69 | Max Avg | Vertical | 150 | 54 | 54.0 | -6.3 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| **Test Measurement Results** |
| | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | |-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------| | #1 | 5140.64 | 23.82 | 3.70 | 34.12 | 61.64 | Max Peak | Vertical | 150 | 54 | 74.0 | -12.4 | Pass | | #2 | 5140.88 | 9.87 | 3.70 | 34.12 | 47.69 | Max Avg | Vertical | 150 | 54 | 54.0 | -6.3 | Pass | | #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 86 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5715.00 | 16.03 | 3.81 | 34.34 | 54.18 | Marker | Vertical | 149 | 50 | 68.2 | -14.1 | Pass |
| #2 | 5725.00 | 20.99 | 3.79 | 34.35 | 59.13 | Marker | Vertical | 149 | 50 | 78.2 | -19.1 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 87 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5705.54 | 26.49 | 3.86 | 34.33 | 64.68 | Marker | Vertical | 149 | 50 | 68.2 | -3.6 | Pass |
| #2 | 5725.00 | 27.01 | 3.79 | 34.35 | 65.15 | Marker | Vertical | 149 | 50 | 78.2 | -13.1 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 88 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5715.00 | 16.03 | 3.81 | 34.34 | 54.18 | Marker | Vertical | 149 | 50 | 68.2 | -14.1 | Pass |
| #2 | 5725.00 | 20.39 | 3.79 | 34.35 | 58.53 | Marker | Vertical | 149 | 50 | 78.2 | -19.7 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 89 of 350

| | |
|--|--|
| Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions | |
|--|--|

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5755.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

| |
|---------------------------------|
| Test Measurement Results |
|---------------------------------|

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5707.00 | 19.67 | 3.85 | 34.34 | 57.86 | Marker | Vertical | 149 | 50 | 68.2 | -10.4 | Pass |
| #2 | 5725.00 | 23.70 | 3.79 | 34.35 | 61.84 | Marker | Vertical | 149 | 50 | 78.2 | -16.4 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 90 of 350

| | |
|--|--|
| Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions | |
|--|--|

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

| |
|---------------------------------|
| Test Measurement Results |
|---------------------------------|

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #2 | 5857.36 | 15.53 | 3.84 | 34.65 | 54.02 | Marker | Vertical | 149 | 51 | 78.2 | -24.2 | Pass |
| #3 | 5862.95 | 14.96 | 3.85 | 34.66 | 53.47 | Marker | Vertical | 149 | 51 | 68.2 | -14.8 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 91 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #2 | 5852.95 | 26.59 | 3.82 | 34.63 | 65.04 | Marker | Vertical | 149 | 50 | 78.2 | -13.2 | Pass |
| #3 | 5872.41 | 23.29 | 3.80 | 34.69 | 61.78 | Marker | Vertical | 149 | 50 | 68.2 | -6.5 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 92 of 350

| | | | |
|--|-----------|------------------------|---------------|
| Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions | | | |
| Antenna: | AP-ANT-1W | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

| **Antenna:** | AP-ANT-1W | **Variant:** | 802.11n HT-20 |
| **Antenna Gain (dBi):** | 5.80 | **Modulation:** | OFDM |
| **Beam Forming Gain (Y):** | 6.00 | **Duty Cycle (%):** | 100 |
| **Channel Frequency (MHz):** | 5825.00 | **Data Rate:** | 6.50 MBit/s |
| **Power Setting:** | 18 | **Tested By:** | JMH |

| Test Measurement Results | | | | | | | | | | | | |
|---------------------------------|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
| #2 | 5856.52 | 15.52 | 3.84 | 34.65 | 54.01 | Marker | Vertical | 149 | 51 | 78.2 | -24.2 | Pass |
| #3 | 5863.79 | 14.97 | 3.84 | 34.66 | 53.47 | Marker | Vertical | 149 | 51 | 68.2 | -14.8 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

| **Test Measurement Results** |
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
| #2 | 5856.52 | 15.52 | 3.84 | 34.65 | 54.01 | Marker | Vertical | 149 | 51 | 78.2 | -24.2 | Pass |
| #3 | 5863.79 | 14.97 | 3.84 | 34.66 | 53.47 | Marker | Vertical | 149 | 51 | 68.2 | -14.8 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 93 of 350

| | |
|--|--|
| Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions | |
|--|--|

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-1W | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 5.80 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5795.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

| |
|---------------------------------|
| Test Measurement Results |
|---------------------------------|

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #2 | 5852.95 | 18.71 | 3.82 | 34.63 | 57.16 | Marker | Vertical | 149 | 51 | 78.2 | -21.1 | Pass |
| #3 | 5866.94 | 15.53 | 3.83 | 34.67 | 54.03 | Marker | Vertical | 149 | 51 | 68.2 | -14.2 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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2.2.4. AP-ANT-20W

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5150 - 5250 MHz

| AP-ANT-20W | | Band-Edge Freq | Limit 54.0dB μ V/m | Limit 74.0dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5180.00 | 5150.00 | 62.86 | 46.08 | 18.00 |
| 802.11ac-80 | 5210.00 | 5150.00 | 70.06 | 53.81 | 16.00 |
| 802.11n HT-20 | 5180.00 | 5150.00 | 47.13 | 60.62 | 18.00 |
| 802.11n HT-40 | 5190.00 | 5150.00 | 51.76 | 66.85 | 18.00 |

5725 - 5850 MHz

| AP-ANT-20W | | Band-Edge Freq | Limit 68.2dB μ V/m | Limit 78.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5745.00 | 5725.00 | 56.80 | 74.25 | 20.00 |
| 802.11ac-80 | 5775.00 | 5725.00 | 63.88 | 65.57 | 18.00 |
| 802.11n HT-20 | 5745.00 | 5725.00 | 57.17 | 73.56 | 20.00 |
| 802.11n HT-40 | 5755.00 | 5725.00 | 62.44 | 62.83 | 18.00 |

| AP-ANT-20W | | Band-Edge Freq | Limit 78.2dB μ V/m | Limit 68.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5825.00 | 5850.00 | 65.91 | 62.40 | 21.00 |
| 802.11ac-80 | 5775.00 | 5850.00 | 62.78 | 62.41 | 18.00 |
| 802.11n HT-20 | 5825.00 | 5850.00 | 67.06 | 63.00 | 21.00 |
| 802.11n HT-40 | 5795.00 | 5850.00 | 66.04 | 63.40 | 21.00 |

Click on the links to view the data.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 95 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|----------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11ac-80+80 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5210.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB _µ V | Cable Loss | AF dB | Level dB _µ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _µ V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|-------|---------------------------|------------------|----------|--------|---------|---------------------------|-----------|------------|
| #1 | 5150.00 | 13.39 | 3.67 | 34.11 | 51.17 | Max Avg | Vertical | 160 | 0 | 54.0 | -2.8 | Pass |
| #2 | 5150.00 | 28.30 | 3.67 | 34.11 | 66.08 | Max Peak | Vertical | 160 | 0 | 74.0 | -7.9 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 96 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|----------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11ac-80+80 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB _μ V | Cable Loss | AF dB | Level dB _μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _μ V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|-------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| #1 | 5715.00 | 27.54 | 3.81 | 34.34 | 65.69 | Marker | Horizontal | 162 | 365 | 68.2 | -2.5 | Pass |
| #2 | 5716.51 | 27.94 | 3.81 | 34.34 | 66.09 | Marker | Horizontal | 162 | 365 | 78.2 | -12.1 | Pass |
| #3 | 5725.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 97 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|----------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11ac-80+80 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 19 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |
| #2 | 5856.52 | 29.82 | 3.84 | 34.65 | 68.31 | Marker | Horizontal | 162 | 365 | 78.2 | -9.9 | Pass |
| #3 | 5860.00 | 28.45 | 3.86 | 34.65 | 66.96 | Marker | Horizontal | 162 | 365 | 78.2 | -11.3 | Pass |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 98 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5147.39 | 25.07 | 3.68 | 34.11 | 62.86 | Max Peak | Horizontal | 141 | 297 | 74.0 | -11.1 | Pass |
| #2 | 5150.00 | 8.30 | 3.67 | 34.11 | 46.08 | Max Avg | Horizontal | 141 | 297 | 54.0 | -7.9 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 99 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|--------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5210.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5142.55 | 32.24 | 3.70 | 34.12 | 70.06 | Max Peak | Horizontal | 141 | 298 | 74.0 | -3.9 | Pass |
| #2 | 5145.15 | 16.01 | 3.69 | 34.11 | 53.81 | Max Avg | Horizontal | 141 | 298 | 54.0 | -0.2 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 100 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|---------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5145.99 | 9.33 | 3.69 | 34.11 | 47.13 | Max Avg | Horizontal | 141 | 297 | 54.0 | -6.9 | Pass |
| #2 | 5147.39 | 22.83 | 3.68 | 34.11 | 60.62 | Max Peak | Horizontal | 141 | 297 | 74.0 | -13.4 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 101 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|---------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5190.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5150.00 | 13.98 | 3.67 | 34.11 | 51.76 | Max Avg | Horizontal | 141 | 297 | 54.0 | -2.2 | Pass |
| #2 | 5150.00 | 29.07 | 3.67 | 34.11 | 66.85 | Max Peak | Horizontal | 141 | 297 | 74.0 | -7.2 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 102 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 20 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5715.00 | 18.65 | 3.81 | 34.34 | 56.80 | Marker | Horizontal | 146 | 18 | 68.2 | -11.4 | Pass |
| #2 | 5725.00 | 36.11 | 3.79 | 34.35 | 74.25 | Marker | Horizontal | 146 | 18 | 78.2 | -4.0 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 103 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|--------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5702.63 | 25.68 | 3.87 | 34.33 | 63.88 | Marker | Horizontal | 141 | 298 | 68.2 | -4.4 | Pass |
| #2 | 5722.82 | 27.42 | 3.80 | 34.35 | 65.57 | Marker | Horizontal | 141 | 298 | 78.2 | -12.7 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 104 of 350

| | | | |
|--|------------|------------------------|---------------|
| Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions | | | |
| Antenna: | AP-ANT-20W | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 20 | Tested By: | JMH |

| **Antenna:** | AP-ANT-20W | **Variant:** | 802.11n HT-20 |
| **Antenna Gain (dBi):** | 2.00 | **Modulation:** | OFDM |
| **Beam Forming Gain (Y):** | 6.00 | **Duty Cycle (%):** | 100 |
| **Channel Frequency (MHz):** | 5745.00 | **Data Rate:** | 6.50 MBit/s |
| **Power Setting:** | 20 | **Tested By:** | JMH |

| Test Measurement Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------|----------------|----------------|------------|--------------------|--------------------|------------------|--------|---------|--------------------|--------------------|------------|------------|----|---------|-------|------|-------|-------|--------|------------|-----|----|------|-------|------|----|---------|-------|------|-------|-------|--------|------------|-----|----|------|------|------|----|---------|----|----|----|----|-----------|----|----|----|----|----|----|
| <table border="1"><thead><tr><th>Num</th><th>Frequency MHz</th><th>Raw dBμV</th><th>Cable Loss</th><th>AF dB</th><th>Level dBμV/m</th><th>Measurement Type</th><th>Pol</th><th>Hgt cm</th><th>Azt Deg</th><th>Limit dBμV/m</th><th>Margin dB</th><th>Pass /Fail</th></tr></thead><tbody><tr><td>#1</td><td>5704.82</td><td>18.98</td><td>3.86</td><td>34.33</td><td>57.17</td><td>Marker</td><td>Horizontal</td><td>146</td><td>18</td><td>68.2</td><td>-11.1</td><td>Pass</td></tr><tr><td>#2</td><td>5725.00</td><td>35.42</td><td>3.79</td><td>34.35</td><td>73.56</td><td>Marker</td><td>Horizontal</td><td>146</td><td>18</td><td>78.2</td><td>-4.7</td><td>Pass</td></tr><tr><td>#3</td><td>5725.00</td><td>--</td><td>--</td><td>--</td><td>--</td><td>Band-Edge</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td></tr></tbody></table> | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | #1 | 5704.82 | 18.98 | 3.86 | 34.33 | 57.17 | Marker | Horizontal | 146 | 18 | 68.2 | -11.1 | Pass | #2 | 5725.00 | 35.42 | 3.79 | 34.35 | 73.56 | Marker | Horizontal | 146 | 18 | 78.2 | -4.7 | Pass | #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #1 | 5704.82 | 18.98 | 3.86 | 34.33 | 57.17 | Marker | Horizontal | 146 | 18 | 68.2 | -11.1 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #2 | 5725.00 | 35.42 | 3.79 | 34.35 | 73.56 | Marker | Horizontal | 146 | 18 | 78.2 | -4.7 | Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| **Test Measurement Results** |
| | Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail | |-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------| | #1 | 5704.82 | 18.98 | 3.86 | 34.33 | 57.17 | Marker | Horizontal | 146 | 18 | 68.2 | -11.1 | Pass | | #2 | 5725.00 | 35.42 | 3.79 | 34.35 | 73.56 | Marker | Horizontal | 146 | 18 | 78.2 | -4.7 | Pass | | #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 105 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|---------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5755.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5715.00 | 24.29 | 3.81 | 34.34 | 62.44 | Marker | Horizontal | 146 | 18 | 68.2 | -5.8 | Pass |
| #2 | 5716.27 | 24.68 | 3.81 | 34.34 | 62.83 | Marker | Horizontal | 146 | 18 | 78.2 | -15.4 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 106 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|-------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #2 | 5852.31 | 27.46 | 3.82 | 34.63 | 65.91 | Marker | Horizontal | 147 | 357 | 78.2 | -12.3 | Pass |
| #3 | 5860.00 | 23.89 | 3.86 | 34.65 | 62.40 | Marker | Horizontal | 147 | 357 | 78.2 | -15.8 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 107 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|--------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #2 | 5850.84 | 24.34 | 3.81 | 34.63 | 62.78 | Marker | Horizontal | 141 | 298 | 78.2 | -15.5 | Pass |
| #3 | 5863.37 | 23.90 | 3.85 | 34.66 | 62.41 | Marker | Horizontal | 141 | 298 | 68.2 | -5.8 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 108 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|---------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 28.62 | 3.81 | 34.63 | 67.06 | Marker | Horizontal | 147 | 357 | 78.2 | -11.2 | Pass |
| #3 | 5860.00 | 24.49 | 3.86 | 34.65 | 63.00 | Marker | Horizontal | 147 | 357 | 78.2 | -15.2 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 109 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|------------|------------------------|---------------|
| Antenna: | AP-ANT-20W | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 2.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 6.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5795.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 21 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 27.60 | 3.81 | 34.63 | 66.04 | Marker | Horizontal | 147 | 357 | 78.2 | -12.2 | Pass |
| #3 | 5869.05 | 24.90 | 3.82 | 34.68 | 63.40 | Marker | Horizontal | 147 | 357 | 68.2 | -4.8 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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2.2.5. AP-ANT-40

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5150 - 5250 MHz

| AP-ANT-40 | | Band-Edge Freq | Limit 54.0dB μ V/m | Limit 74.0dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5180.00 | 5150.00 | 57.76 | 45.37 | 18.00 |
| 802.11ac-80 | 5210.00 | 5150.00 | 53.53 | 69.59 | 15.50 |
| 802.11n HT-20 | 5180.00 | 5150.00 | 45.61 | 58.54 | 18.00 |
| 802.11n HT-40 | 5190.00 | 5150.00 | 67.94 | 53.25 | 18.00 |

5725 - 5850 MHz

| AP-ANT-40 | | Band-Edge Freq | Limit 68.2dB μ V/m | Limit 78.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5745.00 | 5725.00 | 55.14 | 59.95 | 18.00 |
| 802.11ac-80 | 5775.00 | 5725.00 | 66.34 | 65.84 | 17.50 |
| 802.11n HT-20 | 5745.00 | 5725.00 | 55.59 | 59.41 | 18.00 |
| 802.11n HT-40 | 5755.00 | 5725.00 | 63.01 | 62.25 | 18.00 |

| AP-ANT-40 | | Band-Edge Freq | Limit 78.2dB μ V/m | Limit 68.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5825.00 | 5850.00 | 55.50 | 54.55 | 18.00 |
| 802.11ac-80 | 5775.00 | 5850.00 | 66.82 | 64.11 | 17.50 |
| 802.11n HT-20 | 5825.00 | 5850.00 | 55.03 | 54.55 | 18.00 |
| 802.11n HT-40 | 5795.00 | 5850.00 | 60.02 | 54.57 | 18.00 |

Click on the links to view the data.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 111 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11a |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5132.53 | 19.95 | 3.69 | 34.12 | 57.76 | Max Peak | Horizontal | 154 | -6 | 74.0 | -16.2 | Pass |
| #2 | 5134.35 | 7.56 | 3.69 | 34.12 | 45.37 | Max Avg | Horizontal | 154 | -6 | 54.0 | -8.6 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 112 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5210.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 15.5 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5144.79 | 15.73 | 3.69 | 34.11 | 53.53 | Max Avg | Horizontal | 154 | -6 | 54.0 | -0.5 | Pass |
| #2 | 5146.09 | 31.79 | 3.69 | 34.11 | 69.59 | Max Peak | Horizontal | 154 | -6 | 74.0 | -4.4 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 113 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5134.13 | 7.80 | 3.69 | 34.12 | 45.61 | Max Avg | Horizontal | 154 | -6 | 54.0 | -8.4 | Pass |
| #2 | 5134.37 | 20.73 | 3.69 | 34.12 | 58.54 | Max Peak | Horizontal | 154 | -6 | 74.0 | -15.5 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 114 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5190.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5144.67 | 30.14 | 3.69 | 34.11 | 67.94 | Max Peak | Horizontal | 154 | -6 | 74.0 | -6.1 | Pass |
| #2 | 5146.09 | 15.45 | 3.69 | 34.11 | 53.25 | Max Avg | Horizontal | 154 | -6 | 54.0 | -0.8 | Pass |
| #3 | 51500.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 115 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11a |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5713.06 | 16.98 | 3.82 | 34.34 | 55.14 | Marker | Horizontal | 153 | 330 | 68.2 | -13.1 | Pass |
| #2 | 5721.12 | 21.80 | 3.80 | 34.35 | 59.95 | Marker | Horizontal | 153 | 330 | 78.2 | -18.3 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 116 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 17.5 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5710.64 | 28.17 | 3.83 | 34.34 | 66.34 | Marker | Horizontal | 153 | 330 | 68.2 | -1.9 | Pass |
| #2 | 5723.79 | 27.70 | 3.79 | 34.35 | 65.84 | Marker | Horizontal | 153 | 330 | 78.2 | -12.4 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 117 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5713.79 | 17.43 | 3.82 | 34.34 | 55.59 | Marker | Horizontal | 153 | 330 | 68.2 | -12.6 | Pass |
| #2 | 5721.36 | 21.26 | 3.80 | 34.35 | 59.41 | Marker | Horizontal | 153 | 330 | 78.2 | -18.8 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 118 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5755.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5710.15 | 24.83 | 3.84 | 34.34 | 63.01 | Marker | Horizontal | 153 | 330 | 68.2 | -5.2 | Pass |
| #2 | 5722.58 | 24.10 | 3.80 | 34.35 | 62.25 | Marker | Horizontal | 153 | 330 | 78.2 | -16.0 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 119 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11a |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #2 | 5854.63 | 17.03 | 3.83 | 34.64 | 55.50 | Marker | Horizontal | 153 | 330 | 78.2 | -22.7 | Pass |
| #3 | 5860.00 | 16.04 | 3.86 | 34.65 | 54.55 | Marker | Horizontal | 153 | 330 | 78.2 | -23.7 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 120 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 17.5 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #2 | 5851.05 | 28.38 | 3.81 | 34.63 | 66.82 | Marker | Horizontal | 153 | 330 | 78.2 | -11.4 | Pass |
| #3 | 5871.36 | 25.62 | 3.81 | 34.68 | 64.11 | Marker | Horizontal | 153 | 330 | 68.2 | -4.1 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 121 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #2 | 5854.21 | 16.56 | 3.83 | 34.64 | 55.03 | Marker | Horizontal | 153 | 330 | 78.2 | -23.2 | Pass |
| #3 | 5860.00 | 16.04 | 3.86 | 34.65 | 54.55 | Marker | Horizontal | 153 | 330 | 78.2 | -23.7 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 122 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-40 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 4.70 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5795.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #2 | 5851.47 | 21.58 | 3.81 | 34.63 | 60.02 | Marker | Horizontal | 153 | 330 | 78.2 | -18.2 | Pass |
| #3 | 5870.52 | 16.08 | 3.81 | 34.68 | 54.57 | Marker | Horizontal | 153 | 330 | 68.2 | -13.7 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 123 of 350

2.2.6. AP-ANT-45

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5150 - 5250 MHz

| AP-ANT-45 | | Band-Edge Freq | Limit 54.0dB μ V/m | Limit 74.0dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5180.00 | 5150.00 | 50.91 | 64.06 | 18.00 |
| 802.11ac-80 | 5210.00 | 5150.00 | 53.14 | 69.87 | 12.50 |
| 802.11n HT-20 | 5180.00 | 5150.00 | 51.29 | 64.26 | 18.00 |
| 802.11n HT-40 | 5190.00 | 5150.00 | 67.58 | 53.05 | 17.00 |

5725 - 5850 MHz

| AP-ANT-45 | | Band-Edge Freq | Limit 68.2dB μ V/m | Limit 78.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5745.00 | 5725.00 | 56.01 | 66.61 | 18.00 |
| 802.11ac-80 | 5775.00 | 5725.00 | 67.51 | 68.86 | 18.00 |
| 802.11n HT-20 | 5745.00 | 5725.00 | 55.59 | 58.83 | 18.00 |
| 802.11n HT-40 | 5755.00 | 5725.00 | 60.93 | 65.98 | 18.00 |

| AP-ANT-45 | | Band-Edge Freq | Limit 78.2dB μ V/m | Limit 68.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5825.00 | 5850.00 | 56.76 | 55.51 | 18.00 |
| 802.11ac-80 | 5775.00 | 5850.00 | 68.62 | 65.53 | 18.00 |
| 802.11n HT-20 | 5825.00 | 5850.00 | 56.36 | 55.51 | 18.00 |
| 802.11n HT-40 | 5795.00 | 5850.00 | 58.86 | 54.56 | 18.00 |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 124 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5150.00 | 13.13 | 3.67 | 34.11 | 50.91 | Max Avg | Vertical | 161 | 6 | 54.0 | -3.1 | Pass |
| #2 | 5150.00 | 26.28 | 3.67 | 34.11 | 64.06 | Max Peak | Vertical | 161 | 6 | 74.0 | -9.9 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 125 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5210.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 12.5 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5140.98 | 15.32 | 3.70 | 34.12 | 53.14 | Max Avg | Vertical | 161 | 6 | 54.0 | -0.9 | Pass |
| #2 | 5140.98 | 32.05 | 3.70 | 34.12 | 69.87 | Max Peak | Vertical | 161 | 6 | 74.0 | -4.1 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 126 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5150.00 | 13.51 | 3.67 | 34.11 | 51.29 | Max Avg | Vertical | 161 | 6 | 54.0 | -2.7 | Pass |
| #2 | 5150.00 | 26.48 | 3.67 | 34.11 | 64.26 | Max Peak | Vertical | 161 | 6 | 74.0 | -9.7 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 127 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5190.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 17 | Tested By: | JMH |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5139.68 | 29.76 | 3.70 | 34.12 | 67.58 | Max Peak | Vertical | 161 | 6 | 74.0 | -6.4 | Pass |
| #2 | 5150.00 | 15.27 | 3.67 | 34.11 | 53.05 | Max Avg | Vertical | 161 | 6 | 54.0 | -1.0 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 128 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5706.27 | 17.82 | 3.86 | 34.33 | 56.01 | Marker | Horizontal | 160 | 40 | 68.2 | -12.2 | Pass |
| #2 | 5725.00 | 28.47 | 3.79 | 34.35 | 66.61 | Marker | Horizontal | 160 | 40 | 78.2 | -11.6 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 129 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5705.54 | 29.32 | 3.86 | 34.33 | 67.51 | Marker | Vertical | 160 | 40 | 68.2 | -0.7 | Pass |
| #2 | 5725.00 | 30.72 | 3.79 | 34.35 | 68.86 | Marker | Vertical | 160 | 40 | 78.2 | -9.4 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 130 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5715.00 | 17.44 | 3.81 | 34.34 | 55.59 | Marker | Vertical | 160 | 40 | 68.2 | -12.6 | Pass |
| #2 | 5725.00 | 20.69 | 3.79 | 34.35 | 58.83 | Marker | Vertical | 160 | 40 | 78.2 | -19.4 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 131 of 350

| | |
|--|--|
| Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions | |
|--|--|

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5755.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| |
|---------------------------------|
| Test Measurement Results |
|---------------------------------|

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5705.54 | 22.74 | 3.86 | 34.33 | 60.93 | Marker | Vertical | 160 | 40 | 68.2 | -7.3 | Pass |
| #2 | 5725.00 | 27.84 | 3.79 | 34.35 | 65.98 | Marker | Vertical | 160 | 40 | 78.2 | -12.3 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 132 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11a |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 18.32 | 3.81 | 34.63 | 56.76 | Marker | Horizontal | 160 | 31 | 78.2 | -21.5 | Pass |
| #3 | 5860.00 | 17.00 | 3.86 | 34.65 | 55.51 | Marker | Horizontal | 160 | 31 | 78.2 | -22.7 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 133 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #2 | 5855.89 | 30.14 | 3.84 | 34.64 | 68.62 | Marker | Horizontal | 160 | 31 | 78.2 | -9.6 | Pass |
| #3 | 5876.20 | 27.02 | 3.81 | 34.70 | 65.53 | Marker | Horizontal | 160 | 31 | 68.2 | -2.7 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 134 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 17.92 | 3.81 | 34.63 | 56.36 | Marker | Horizontal | 160 | 31 | 78.2 | -21.9 | Pass |
| #3 | 5860.00 | 17.00 | 3.86 | 34.65 | 55.51 | Marker | Horizontal | 160 | 31 | 78.2 | -22.7 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 135 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-45 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 5.00 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5795.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 20.42 | 3.81 | 34.63 | 58.86 | Marker | Horizontal | 160 | 31 | 78.2 | -19.4 | Pass |
| #3 | 5868.21 | 16.06 | 3.82 | 34.68 | 54.56 | Marker | Horizontal | 160 | 31 | 68.2 | -13.7 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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2.2.7. AP-ANT-48

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5150 - 5250 MHz

| AP-ANT-48 | | Band-Edge Freq | Limit 54.0dB μ V/m | Limit 74.0dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5180.00 | 5150.00 | 53.99 | 66.76 | 18.00 |
| 802.11ac-80 | 5210.00 | 5150.00 | 52.85 | 68.66 | 10.00 |
| 802.11n HT-20 | 5180.00 | 5150.00 | 53.90 | 65.31 | 17.50 |
| 802.11n HT-40 | 5190.00 | 5150.00 | 67.35 | 53.25 | 15.00 |

5725 - 5850 MHz

| AP-ANT-48 | | Band-Edge Freq | Limit 68.2dB μ V/m | Limit 78.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5745.00 | 5725.00 | 54.17 | 55.16 | 18.00 |
| 802.11ac-80 | 5775.00 | 5725.00 | 64.68 | 67.74 | 16.00 |
| 802.11n HT-20 | 5745.00 | 5725.00 | 56.01 | 63.57 | 18.00 |
| 802.11n HT-40 | 5755.00 | 5725.00 | 64.05 | 67.31 | 18.00 |

| AP-ANT-48 | | Band-Edge Freq | Limit 78.2dB μ V/m | Limit 68.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5825.00 | 5850.00 | 55.49 | 53.46 | 16.00 |
| 802.11ac-80 | 5775.00 | 5850.00 | 64.25 | 61.09 | 16.00 |
| 802.11n HT-20 | 5825.00 | 5850.00 | 55.02 | 54.04 | 16.00 |
| 802.11n HT-40 | 5795.00 | 5850.00 | 55.02 | 56.38 | 16.00 |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 137 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|----------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11ac-80+80 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5210.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB _µ V | Cable Loss | AF dB | Level dB _µ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _µ V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|-------|---------------------------|------------------|----------|--------|---------|---------------------------|-----------|------------|
| #1 | 5147.19 | 32.02 | 3.68 | 34.11 | 69.81 | Max Peak | Vertical | 162 | 362 | 74.0 | -4.2 | Pass |
| #2 | 5150.00 | 15.47 | 3.67 | 34.11 | 53.25 | Max Avg | Vertical | 162 | 362 | 54.0 | -0.8 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 138 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|----------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11ac-80+80 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5715.00 | 17.44 | 3.81 | 34.34 | 55.59 | Marker | Vertical | 162 | 362 | 68.2 | -12.6 | Pass |
| #2 | 5721.12 | 18.28 | 3.80 | 34.35 | 56.43 | Marker | Vertical | 162 | 362 | 78.2 | -21.8 | Pass |
| #3 | 5725.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 139 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|----------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11ac-80+80 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |
| #2 | 5856.41 | 16.56 | 3.84 | 34.64 | 55.04 | Marker | Vertical | 162 | 362 | 78.2 | -23.2 | Pass |
| #3 | 5860.00 | 16.53 | 3.86 | 34.65 | 55.04 | Marker | Vertical | 162 | 362 | 78.2 | -23.2 | Pass |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 140 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11a |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5140.68 | 16.17 | 3.70 | 34.12 | 53.99 | Max Avg | Vertical | 153 | 360 | 54.0 | 0.0 | Pass |
| #2 | 5141.38 | 28.94 | 3.70 | 34.12 | 66.76 | Max Peak | Vertical | 153 | 360 | 74.0 | -7.2 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 141 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5210.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 10 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5144.31 | 15.03 | 3.70 | 34.12 | 52.85 | Max Avg | Horizontal | 149 | 368 | 54.0 | -1.2 | Pass |
| #2 | 5144.79 | 30.86 | 3.69 | 34.11 | 68.66 | Max Peak | Horizontal | 149 | 368 | 74.0 | -5.3 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 142 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 17.5 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5140.58 | 16.08 | 3.70 | 34.12 | 53.90 | Max Avg | Vertical | 153 | 360 | 54.0 | -0.1 | Pass |
| #2 | 5140.88 | 27.49 | 3.70 | 34.12 | 65.31 | Max Peak | Vertical | 153 | 360 | 74.0 | -8.7 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 143 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5190.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 15 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5148.00 | 29.56 | 3.68 | 34.11 | 67.35 | Max Peak | Vertical | 153 | 360 | 74.0 | -6.7 | Pass |
| #2 | 5148.60 | 15.47 | 3.67 | 34.11 | 53.25 | Max Avg | Vertical | 153 | 360 | 54.0 | -0.8 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 144 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11a |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5710.64 | 16.00 | 3.83 | 34.34 | 54.17 | Marker | Vertical | 162 | 362 | 68.2 | -14.1 | Pass |
| #2 | 5725.00 | 17.02 | 3.79 | 34.35 | 55.16 | Marker | Vertical | 162 | 362 | 78.2 | -23.1 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 145 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #1 | 5697.54 | 26.50 | 3.86 | 34.32 | 64.68 | Marker | Horizontal | 151 | 20 | 68.2 | -3.6 | Pass |
| #2 | 5717.73 | 29.59 | 3.81 | 34.34 | 67.74 | Marker | Horizontal | 151 | 20 | 78.2 | -10.5 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 146 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5711.61 | 17.84 | 3.83 | 34.34 | 56.01 | Marker | Vertical | 162 | 362 | 68.2 | -12.2 | Pass |
| #2 | 5725.00 | 25.43 | 3.79 | 34.35 | 63.57 | Marker | Vertical | 162 | 362 | 78.2 | -14.7 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 147 of 350

| | |
|--|--|
| Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions | |
|--|--|

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5755.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

| |
|---------------------------------|
| Test Measurement Results |
|---------------------------------|

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5715.00 | 25.90 | 3.81 | 34.34 | 64.05 | Marker | Vertical | 162 | 362 | 68.2 | -4.2 | Pass |
| #2 | 5721.36 | 29.16 | 3.80 | 34.35 | 67.31 | Marker | Vertical | 162 | 362 | 78.2 | -10.9 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 148 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|-------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11a |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 17.05 | 3.81 | 34.63 | 55.49 | Marker | Vertical | 162 | 362 | 78.2 | -22.7 | Pass |
| #3 | 5860.00 | 14.95 | 3.86 | 34.65 | 53.46 | Marker | Vertical | 162 | 362 | 78.2 | -24.8 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 149 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|--------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| #2 | 5856.73 | 25.76 | 3.84 | 34.65 | 64.25 | Marker | Horizontal | 151 | 20 | 78.2 | -14.0 | Pass |
| #3 | 5877.04 | 22.58 | 3.81 | 34.70 | 61.09 | Marker | Horizontal | 151 | 20 | 68.2 | -7.1 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 150 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #2 | 5850.69 | 16.58 | 3.81 | 34.63 | 55.02 | Marker | Vertical | 162 | 362 | 78.2 | -23.2 | Pass |
| #3 | 5871.52 | 15.55 | 3.80 | 34.69 | 54.04 | Marker | Vertical | 162 | 362 | 68.2 | -14.2 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 151 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-----------|------------------------|---------------|
| Antenna: | AP-ANT-48 | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 8.50 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 3.00 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5795.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 16.58 | 3.81 | 34.63 | 55.02 | Marker | Vertical | 162 | 362 | 78.2 | -23.2 | Pass |
| #3 | 5860.21 | 17.87 | 3.86 | 34.65 | 56.38 | Marker | Vertical | 162 | 362 | 78.2 | -21.9 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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2.2.8. Metal Sheet (Integral)

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5150 - 5250 MHz

| Metal Sheet | | Band-Edge Freq | Limit 54.0dB μ V/m | Limit 74.0dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5180.00 | 5150.00 | 51.16 | 65.53 | 19.00 |
| 802.11ac-80 | 5210.00 | 5150.00 | 54.36 | 42.92 | 16.00 |
| 802.11n HT-20 | 5180.00 | 5150.00 | 51.65 | 66.85 | 19.00 |
| 802.11n HT-40 | 5190.00 | 5150.00 | 52.85 | 66.79 | 17.00 |

5725 - 5850 MHz

| Metal Sheet | | Band-Edge Freq | Limit 68.2dB μ V/m | Limit 78.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5745.00 | 5725.00 | 55.59 | 58.52 | 18.00 |
| 802.11ac-80 | 5775.00 | 5725.00 | 66.59 | 67.20 | 18.00 |
| 802.11n HT-20 | 5745.00 | 5725.00 | 55.14 | 57.54 | 18.00 |
| 802.11n HT-40 | 5755.00 | 5725.00 | 61.16 | 63.39 | 18.00 |

| Metal Sheet | | Band-Edge Freq | Limit 78.2dB μ V/m | Limit 68.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11a | 5825.00 | 5850.00 | 54.00 | 54.02 | 16.00 |
| 802.11ac-80 | 5775.00 | 5850.00 | 65.18 | 62.42 | 16.00 |
| 802.11n HT-20 | 5825.00 | 5850.00 | 54.00 | 54.02 | 16.00 |
| 802.11n HT-40 | 5795.00 | 5850.00 | 57.87 | 55.04 | 16.00 |

Click on the links to view the data.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 153 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|-------------|
| Antenna: | Metal Sheet | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 19 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5148.60 | 13.38 | 3.67 | 34.11 | 51.16 | Max Avg | Vertical | 176 | 336 | 54.0 | -2.8 | Pass |
| #2 | 5150.00 | 27.75 | 3.67 | 34.11 | 65.53 | Max Peak | Vertical | 176 | 336 | 74.0 | -8.5 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

Test Notes: reduced power setting from 21 to 19

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 154 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|--------------|
| Antenna: | Metal Sheet | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5210.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 4920.74 | 16.44 | 3.57 | 34.35 | 54.36 | Max Peak | Vertical | 173 | 329 | 74.0 | -19.6 | Pass |
| #2 | 5047.09 | 5.07 | 3.65 | 34.20 | 42.92 | Max Avg | Vertical | 173 | 329 | 54.0 | -11.1 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 155 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|---------------|
| Antenna: | Metal Sheet | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5180.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 19 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5148.70 | 13.87 | 3.67 | 34.11 | 51.65 | Max Avg | Vertical | 176 | 336 | 54.0 | -2.4 | Pass |
| #2 | 5148.70 | 29.07 | 3.67 | 34.11 | 66.85 | Max Peak | Vertical | 176 | 336 | 74.0 | -7.2 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

Test Notes: reduced power setting from 21 to 19

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 156 of 350

Equipment Configuration for Restricted Lower Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|---------------|
| Antenna: | Metal Sheet | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5190.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 17 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5144.69 | 15.05 | 3.69 | 34.11 | 52.85 | Max Avg | Vertical | 176 | 336 | 54.0 | -1.2 | Pass |
| #2 | 5146.29 | 28.99 | 3.69 | 34.11 | 66.79 | Max Peak | Vertical | 176 | 336 | 74.0 | -7.2 | Pass |
| #3 | 5150.00 | 0.00 | 0.00 | 0.00 | -- | Band-Edge | | 0 | 0 | -- | -- | |

Test Notes: reduced power setting from 21 to 17

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 157 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|-------------|
| Antenna: | Metal Sheet | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5714.20 | 17.43 | 3.82 | 34.34 | 55.59 | Marker | Vertical | 172 | 342 | 68.2 | -12.6 | Pass |
| #2 | 5721.85 | 20.37 | 3.80 | 34.35 | 58.52 | Marker | Vertical | 172 | 342 | 78.2 | -19.7 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 158 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|--------------|
| Antenna: | Metal Sheet | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5711.12 | 28.42 | 3.83 | 34.34 | 66.59 | Marker | Vertical | 172 | 342 | 68.2 | -1.6 | Pass |
| #2 | 5723.06 | 29.05 | 3.80 | 34.35 | 67.20 | Marker | Vertical | 172 | 342 | 78.2 | -11.0 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 159 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|---------------|
| Antenna: | Metal Sheet | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5745.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5713.55 | 16.98 | 3.82 | 34.34 | 55.14 | Marker | Vertical | 172 | 342 | 68.2 | -13.1 | Pass |
| #2 | 5722.33 | 19.39 | 3.80 | 34.35 | 57.54 | Marker | Vertical | 172 | 342 | 78.2 | -20.7 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 160 of 350

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|---------------|
| Antenna: | Metal Sheet | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5755.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 18 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5711.85 | 22.99 | 3.83 | 34.34 | 61.16 | Marker | Vertical | 172 | 342 | 68.2 | -7.1 | Pass |
| #2 | 5723.30 | 25.24 | 3.80 | 34.35 | 63.39 | Marker | Vertical | 172 | 342 | 78.2 | -14.8 | Pass |
| #3 | 5725.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 161 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|-------------|
| Antenna: | Metal Sheet | Variant: | 802.11a |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.00 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #2 | 5852.08 | 15.55 | 3.82 | 34.63 | 54.00 | Marker | Vertical | 172 | 298 | 78.2 | -24.2 | Pass |
| #3 | 5860.00 | 15.51 | 3.86 | 34.65 | 54.02 | Marker | Vertical | 172 | 298 | 78.2 | -24.2 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 162 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|--------------|
| Antenna: | Metal Sheet | Variant: | 802.11ac-80 |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5775.00 | Data Rate: | 29.30 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 26.74 | 3.81 | 34.63 | 65.18 | Marker | Vertical | 172 | 298 | 78.2 | -13.1 | Pass |
| #3 | 5869.89 | 23.93 | 3.81 | 34.68 | 62.42 | Marker | Vertical | 172 | 298 | 68.2 | -5.8 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 163 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|---------------|
| Antenna: | Metal Sheet | Variant: | 802.11n HT-20 |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5825.00 | Data Rate: | 6.50 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #2 | 5852.51 | 15.55 | 3.82 | 34.63 | 54.00 | Marker | Vertical | 172 | 298 | 78.2 | -24.2 | Pass |
| #3 | 5860.00 | 15.51 | 3.86 | 34.65 | 54.02 | Marker | Vertical | 172 | 298 | 78.2 | -24.2 | Pass |
| #1 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 164 of 350

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

| | | | |
|---------------------------------|-------------|------------------------|---------------|
| Antenna: | Metal Sheet | Variant: | 802.11n HT-40 |
| Antenna Gain (dBi): | 2.10 | Modulation: | OFDM |
| Beam Forming Gain (Y): | 5.10 | Duty Cycle (%): | 100 |
| Channel Frequency (MHz): | 5795.00 | Data Rate: | 13.50 MBit/s |
| Power Setting: | 16 | Tested By: | SB |

Test Measurement Results

| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|-------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| #1 | 5850.00 | 19.43 | 3.81 | 34.63 | 57.87 | Marker | Vertical | 172 | 298 | 78.2 | -20.4 | Pass |
| #3 | 5860.00 | 16.53 | 3.86 | 34.65 | 55.04 | Marker | Vertical | 172 | 298 | 78.2 | -23.2 | Pass |
| #2 | 5850.00 | -- | -- | -- | -- | Band-Edge | -- | -- | -- | -- | -- | -- |

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2.2.9. ac80+80 Operation

The following measurements were made with the unit operating in ac80+80 mode. As this report is for non-DFS operation only two 80+80 channel frequencies were applicable 5210 and 5775 MHz. Further only the lowest gain and highest gain antennas were tested AP-ANT-48 (highest) and AP-ANT-20W (lowest).

The Restricted Band-Edges were subsequently measured and reported

2.2.9.1 AP-ANT-20W

The following ac80 channels were operating simultaneously 5210 and 5775 MHz

5150 - 5250 and 5725 - 5850 MHz

| AP-ANT-20W | | Band-Edge Freq | Limit 54.0dB μ V/m | Limit 74.0dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11ac-80+80 | 5210.00 | 5150.00 | 51.17 | 66.08 | 18.00 |

| AP-ANT-20W | | Band-Edge Freq | Limit 78.2dB μ V/m | Limit 68.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11ac-80+80 | 5775.00 | 5725.00 | 65.69 | 66.09 | 18.00 |
| 802.11ac-80+80 | 5775.00 | 5850.00 | 68.31 | 66.96 | 19.00 |

Click on the links to view the data.



Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 166 of 350

2.2.9.2 AP-ANT-48

5150 - 5250 and 5725 - 5850 MHz

| AP-ANT-48 | | Band-Edge Freq | Limit 74.0dB μ V/m | Limit 54.0dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11ac-80+80 | 5210.00 | 5150.00 | 69.81 | 53.25 | 16.00 |

| AP-ANT-48 | | Band-Edge Freq | Limit 78.2dB μ V/m | Limit 68.2dB μ V/m | Power Setting |
|------------------|---------------------------|----------------|------------------------|------------------------|---------------|
| Operational Mode | Operating Frequency (MHz) | MHz | dB μ V/m | dB μ V/m | |
| 802.11ac-80+80 | 5775.00 | 5725.00 | 55.59 | 56.43 | 16.00 |
| 802.11ac-80+80 | 5775.00 | 5850.00 | 55.04 | 55.04 | 16.00 |

Click on the links to view the data.

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Title: Aruba Networks, Inc. APIN0334, APIN0335
To: FCC CFR 47 Part 15 Subpart E 15.407
Serial #: ARUB196-U7 Rev B
Issue Date: 31th May 2016
Page: 167 of 350

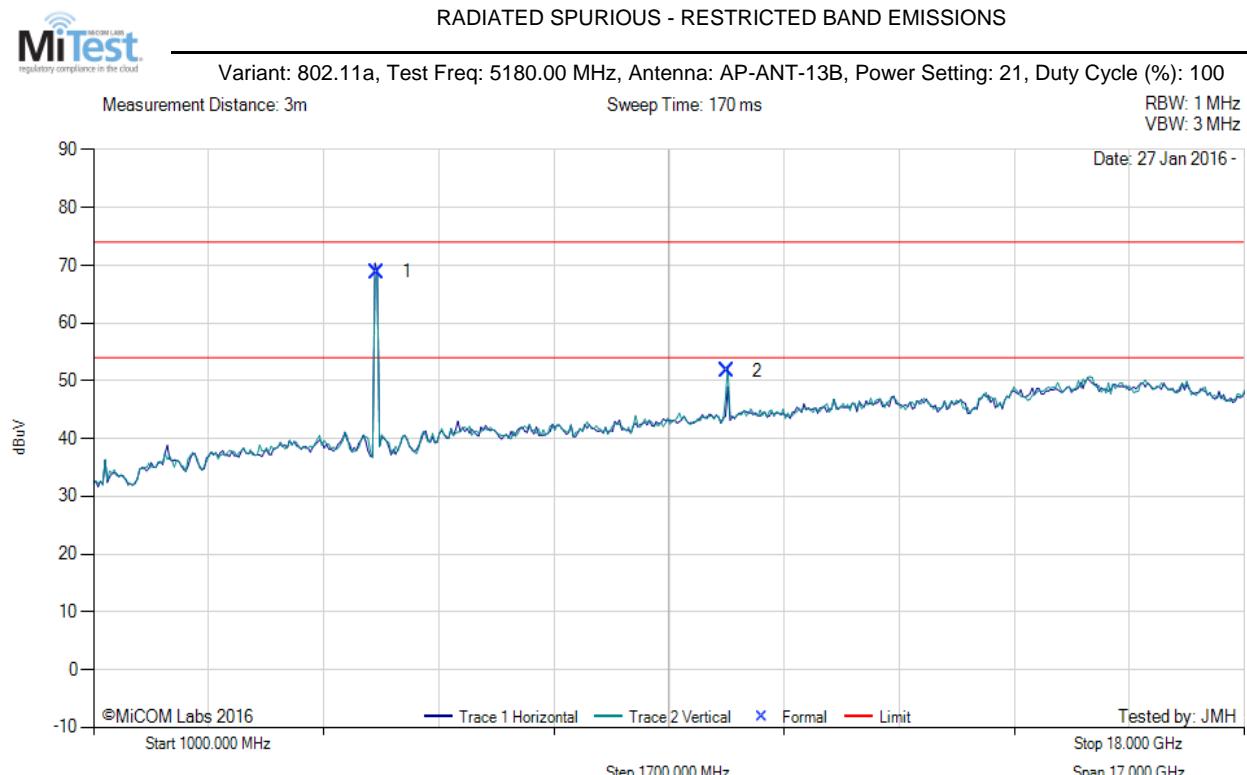
APPENDIX A - GRAPHICAL IMAGES

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A.1. Radiated Emissions

A.1.1. Restricted Band Emissions

A.1.1.1. AP-ANT-13B



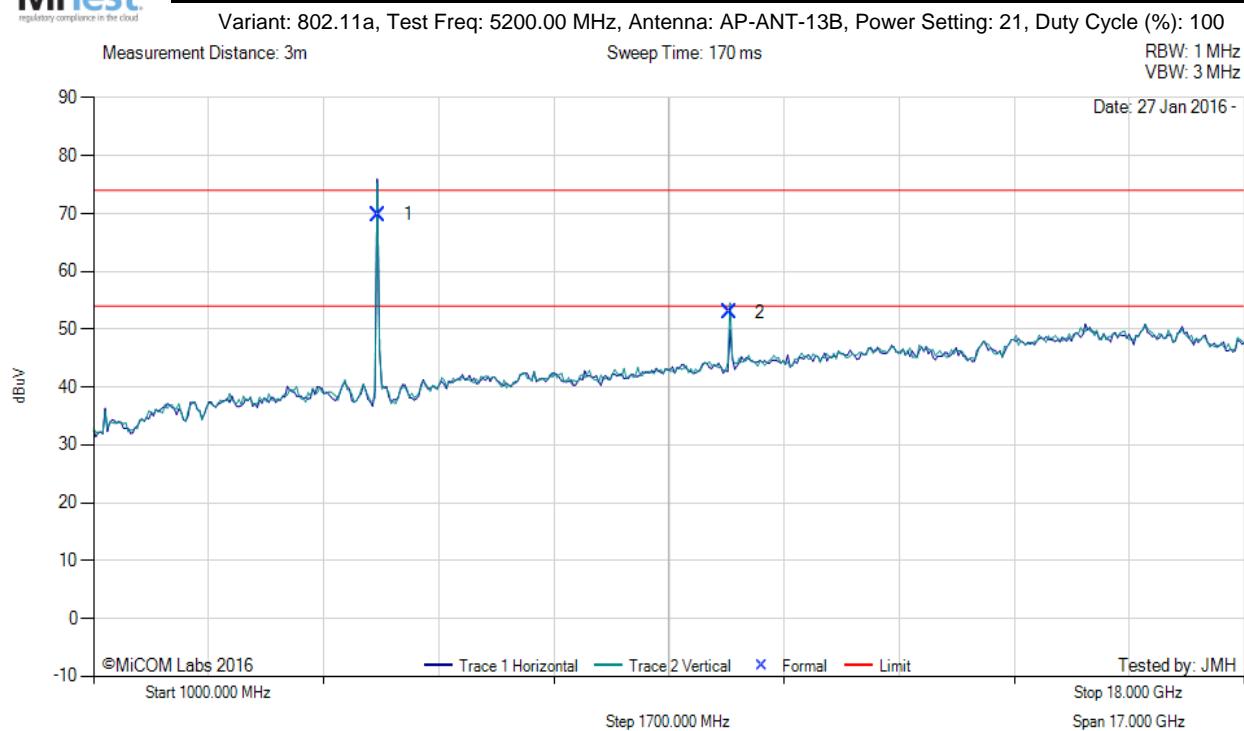
| Num | Frequency MHz | Raw dBµV | Cable Loss | AF dB | Level dBµV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBµV/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------|------------------|------------|--------|---------|--------------|-----------|------------|
| 1 | 5187.57 | 76.69 | 3.68 | -11.49 | 68.88 | Fundamental | Horizontal | 101 | 0 | -- | -- | |
| 2 | 10360.68 | 51.41 | 5.57 | -5.26 | 51.72 | Peak (NRB) | Vertical | 101 | 81 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5196.99 | 77.62 | 3.66 | -11.47 | 69.81 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 10397.32 | 52.67 | 5.37 | -5.05 | 52.99 | Peak (NRB) | Vertical | 101 | 88 | -- | -- | Pass |

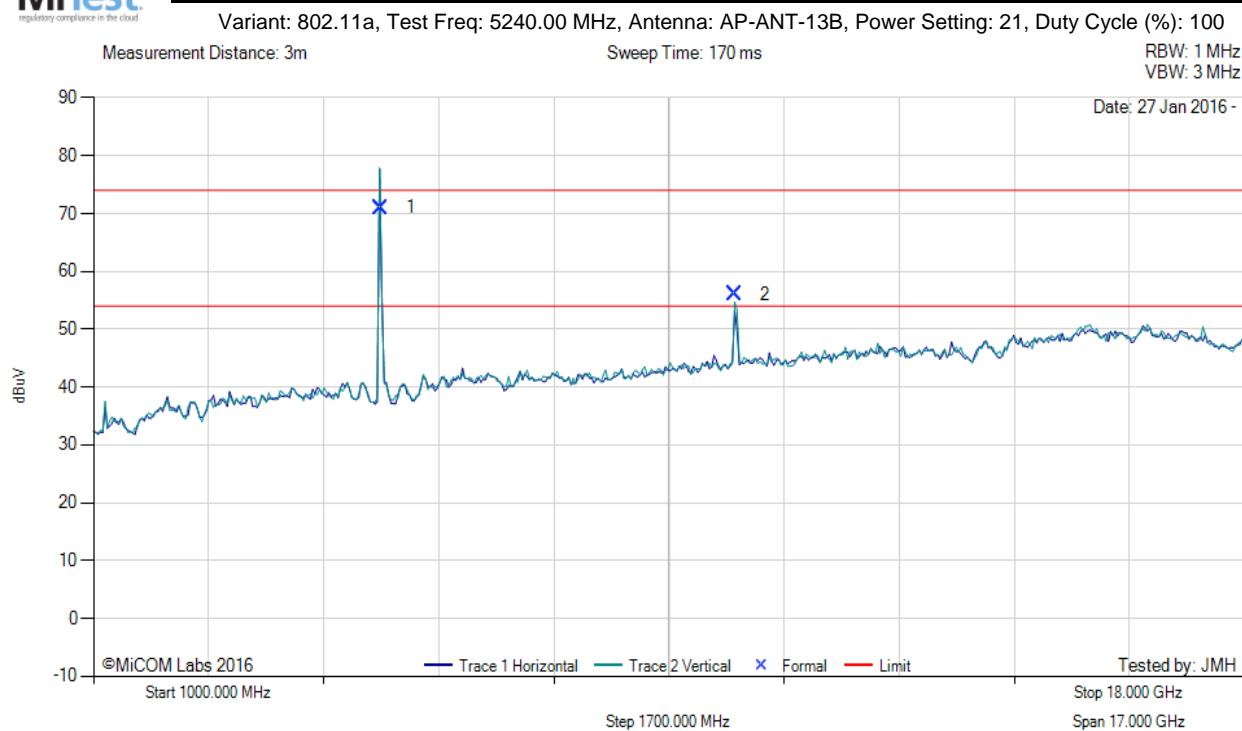
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5237.08 | 78.77 | 3.63 | -11.37 | 71.03 | Fundamental | Horizontal | 200 | 0 | -- | -- | |
| 2 | 10470.82 | 55.09 | 5.49 | -4.52 | 56.06 | Peak (NRB) | Vertical | 200 | 0 | -- | -- | Pass |

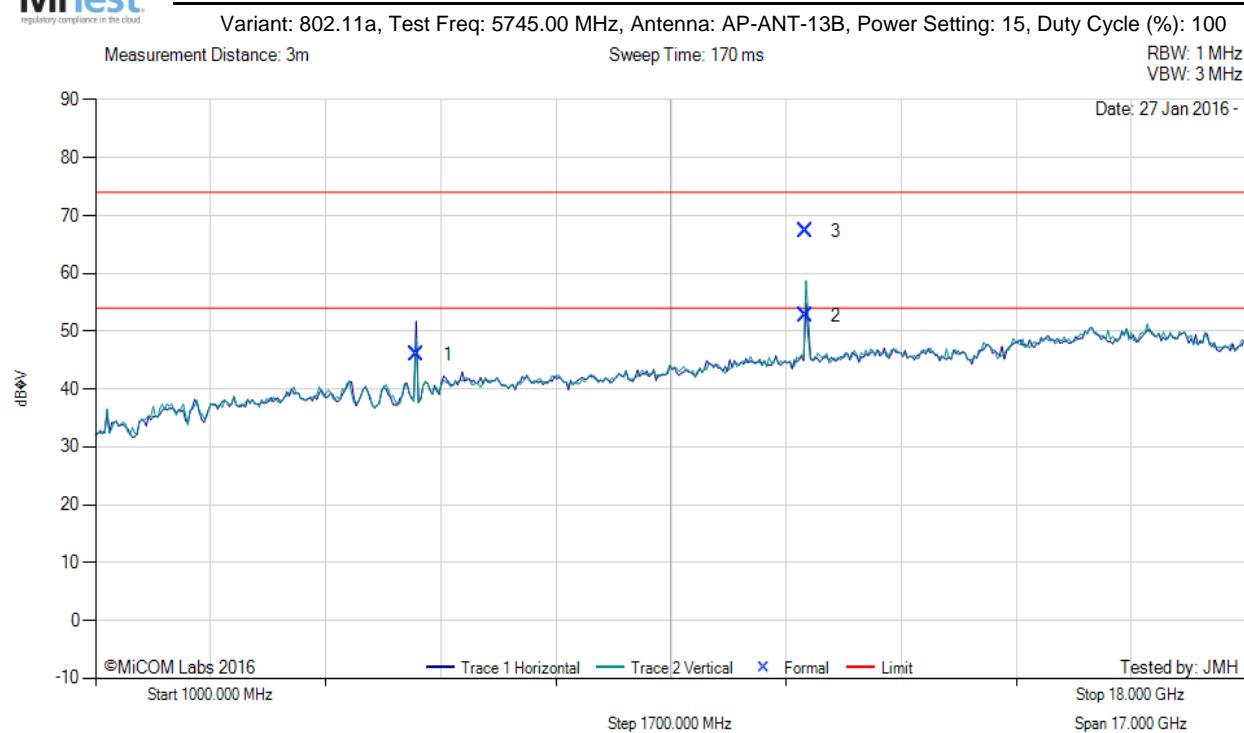
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



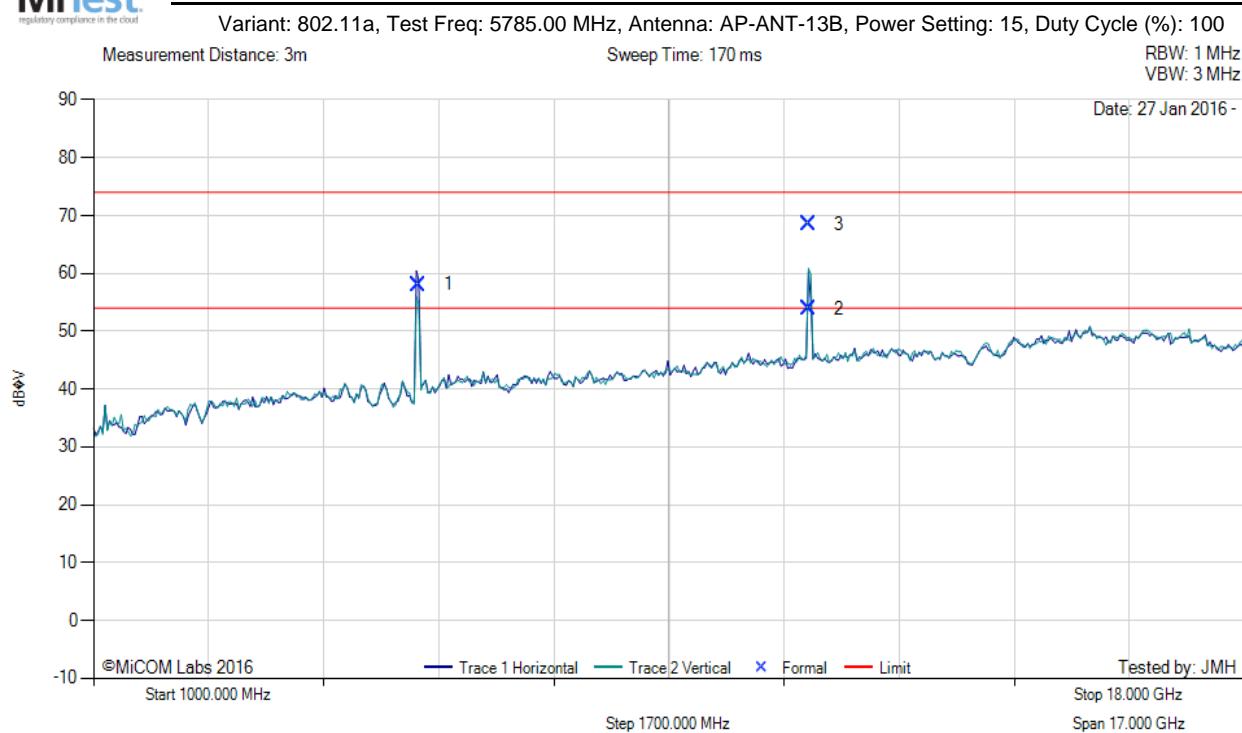
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5748.66 | 52.69 | 3.85 | -10.63 | 45.91 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 11481.81 | 52.08 | 5.47 | -4.86 | 52.69 | Max Avg | Vertical | 181 | 249 | 54.0 | -1.3 | Pass |
| 3 | 11481.81 | 66.65 | 5.47 | -4.86 | 67.26 | Max Peak | Vertical | 181 | 249 | 74.0 | -6.7 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR. Power reduced to 15 due to 11.5 GHz harmonic

[back to matrix](#)



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



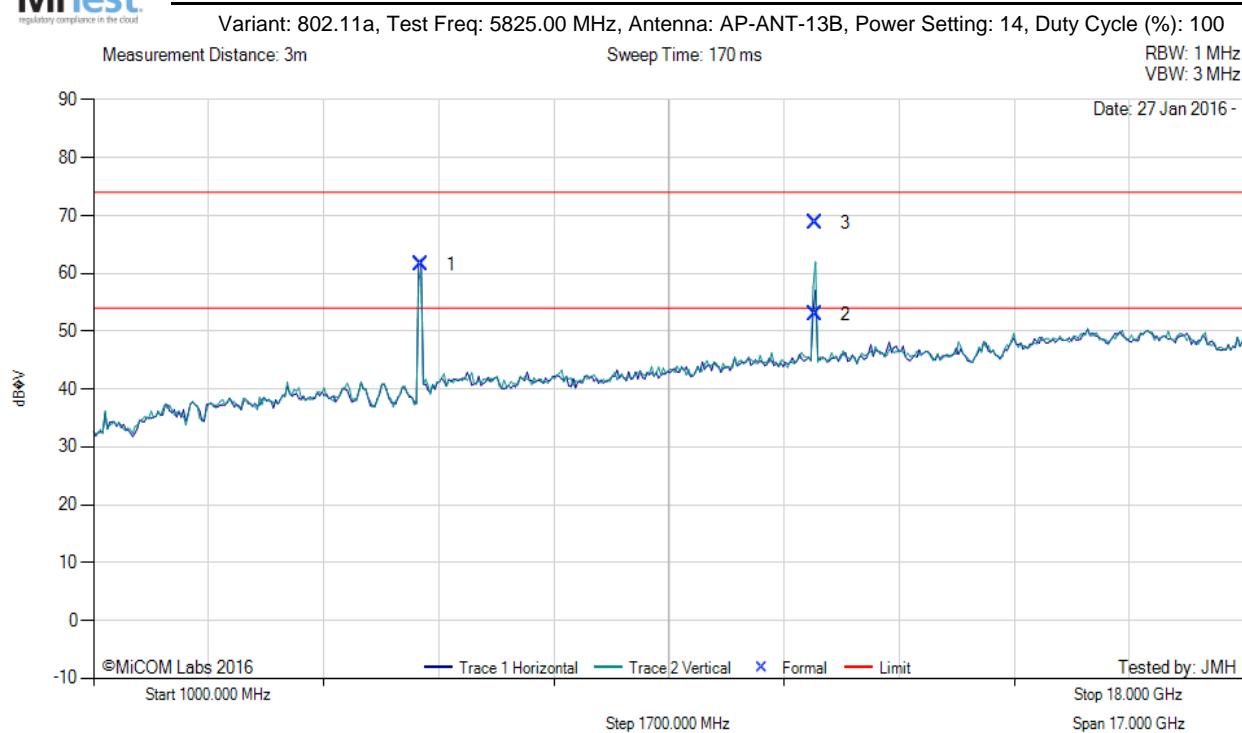
| Num | Frequency MHz | Raw dBµV | Cable Loss | AF dB | Level dBµV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBµV/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------|------------------|------------|--------|---------|--------------|-----------|------------|
| 1 | 5791.02 | 64.73 | 3.79 | -10.41 | 58.11 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 11561.92 | 52.90 | 5.62 | -4.67 | 53.85 | Max Avg | Vertical | 192 | 250 | 54.0 | -0.2 | Pass |
| 3 | 11561.92 | 67.49 | 5.62 | -4.67 | 68.44 | Max Peak | Vertical | 192 | 250 | 74.0 | -5.6 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR. Power reduced to 15 due to 11.5 GHz harmonic

[back to matrix](#)



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB _μ V | Cable Loss | AF dB | Level dB _μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _μ V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5828.42 | 68.01 | 3.84 | -10.24 | 61.61 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 11650.42 | 52.01 | 5.44 | -4.47 | 52.98 | Max Avg | Vertical | 169 | 282 | 54.0 | -1.0 | Pass |
| 3 | 11650.42 | 67.82 | 5.44 | -4.47 | 68.79 | Max Peak | Vertical | 169 | 282 | 74.0 | -5.2 | Pass |

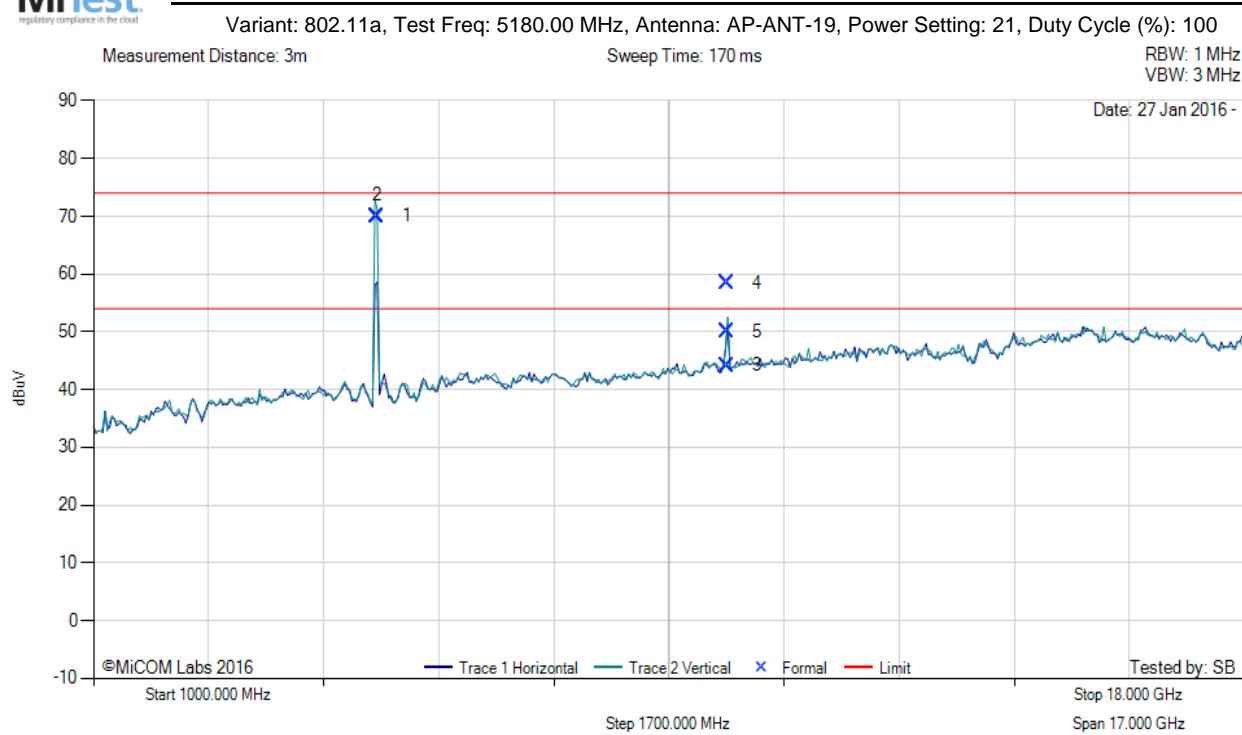
Test Notes: EUT on 150cm Table powered by PDSine 9001GR. Power reduced to 14 due to 11.6 GHz harmonic

[back to matrix](#)

A.1.1.2. AP-ANT-19



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| 1 | 5187.57 | 77.87 | 3.68 | -11.49 | 70.06 | Fundamental | Vertical | 101 | 0 | -- | -- | |
| 2 | 5187.57 | 77.87 | 3.68 | -11.49 | 70.06 | Peak (NRB) | Vertical | 101 | 0 | -- | -- | Pass |
| 3 | 10355.11 | 43.94 | 5.53 | -5.30 | 44.17 | Max Avg | Vertical | 128 | 246 | 54.0 | -9.8 | Pass |
| 4 | 10355.11 | 58.18 | 5.53 | -5.30 | 58.41 | Max Peak | Vertical | 128 | 246 | 74.0 | -15.6 | Pass |
| 5 | 10355.11 | 49.81 | 5.53 | -5.30 | 50.04 | Peak (NRB) | Vertical | 101 | 81 | -- | -- | Pass |

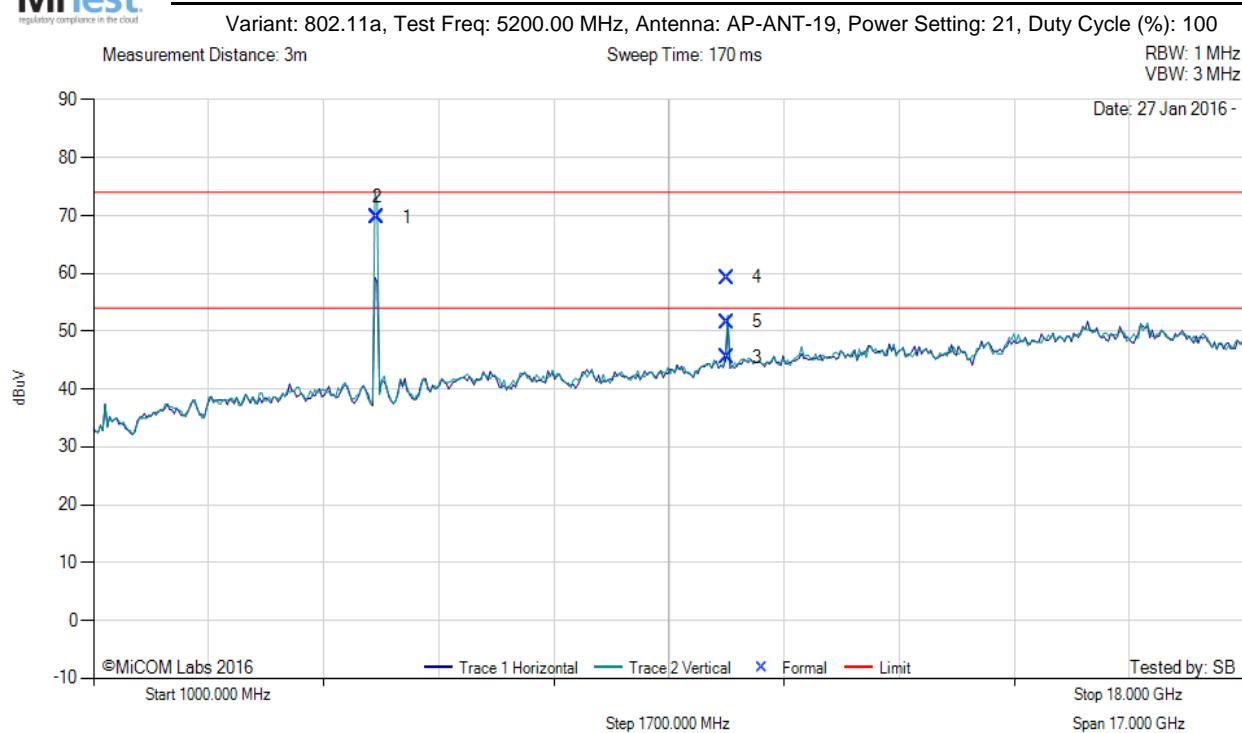
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| 1 | 5187.57 | 77.44 | 3.68 | -11.49 | 69.63 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| 2 | 5187.57 | 77.44 | 3.68 | -11.49 | 69.63 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| 3 | 10355.99 | 45.28 | 5.54 | -5.28 | 45.54 | Max Avg | Vertical | 173 | 247 | 54.0 | -8.5 | Pass |
| 4 | 10355.99 | 59.05 | 5.54 | -5.28 | 59.31 | Max Peak | Vertical | 173 | 247 | 74.0 | -14.7 | Pass |
| 5 | 10355.99 | 51.35 | 5.54 | -5.28 | 51.61 | Peak (NRB) | Vertical | 101 | 97 | -- | -- | Pass |

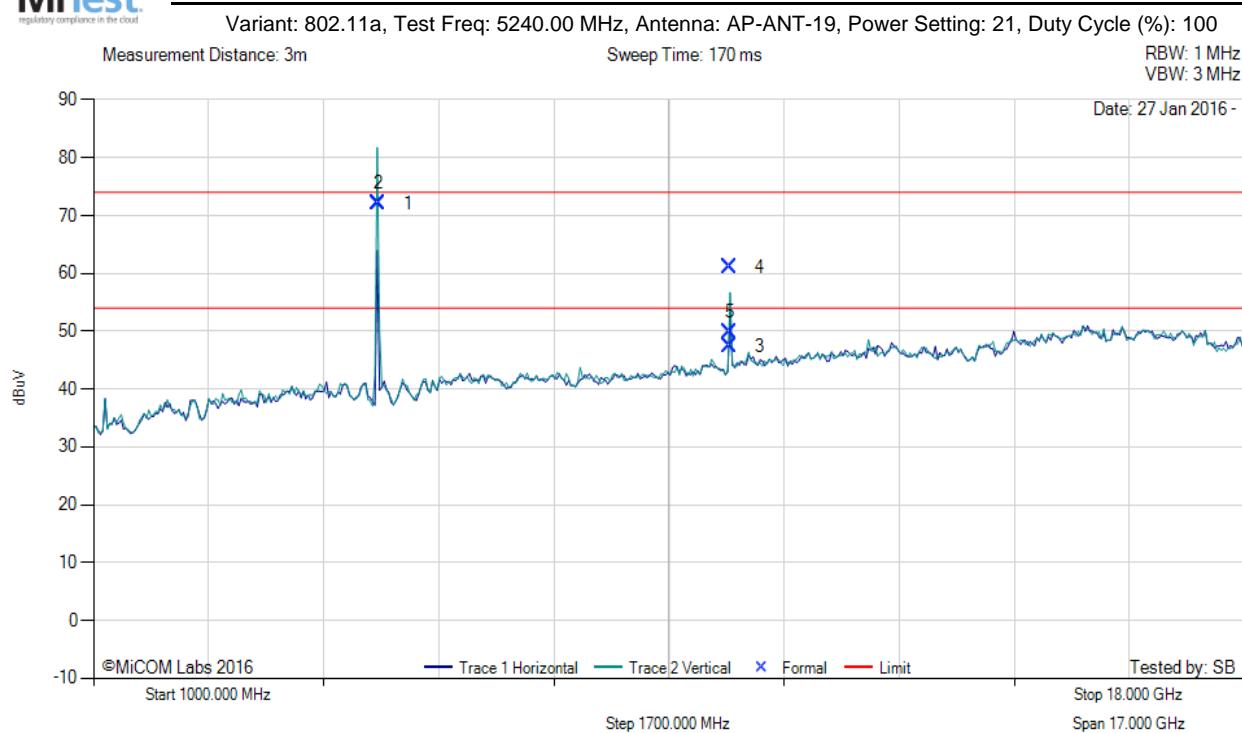
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|----------|--------|---------|--------------------|-----------|------------|
| 1 | 5207.17 | 79.84 | 3.65 | -11.44 | 72.05 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| 2 | 5207.17 | 79.84 | 3.65 | -11.44 | 72.05 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| 3 | 10397.88 | 47.08 | 5.38 | -5.05 | 47.41 | Max Avg | Vertical | 159 | 247 | 54.0 | -6.6 | Pass |
| 4 | 10397.88 | 60.80 | 5.38 | -5.05 | 61.13 | Max Peak | Vertical | 159 | 247 | 74.0 | -12.9 | Pass |
| 5 | 10397.88 | 49.54 | 5.38 | -5.05 | 49.87 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |

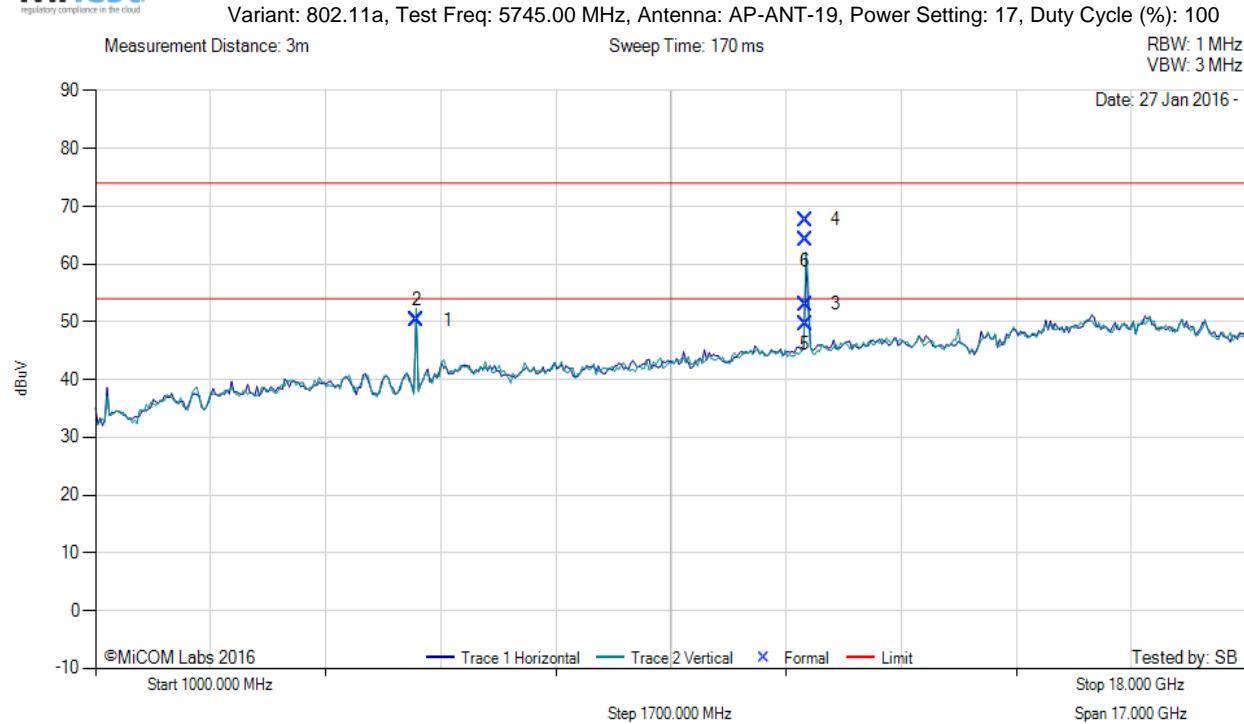
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dBµV | Cable Loss | AF dB | Level dBµV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBµV/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------|------------------|------------|--------|---------|--------------|-----------|------------|
| 1 | 5747.65 | 57.02 | 3.85 | -10.63 | 50.24 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| 2 | 5747.65 | 57.02 | 3.85 | -10.63 | 50.24 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| 3 | 11482.81 | 52.45 | 5.47 | -4.86 | 53.06 | Max Avg | Vertical | 105 | 62 | 54.0 | -0.9 | Pass |
| 4 | 11482.81 | 67.02 | 5.47 | -4.86 | 67.63 | Max Peak | Vertical | 105 | 62 | 74.0 | -6.4 | Pass |
| 5 | 11482.81 | 49.07 | 5.47 | -4.86 | 49.68 | Max Avg | Horizontal | 109 | 249 | 54.0 | -4.3 | Pass |
| 6 | 11482.81 | 63.57 | 5.47 | -4.86 | 64.18 | Max Peak | Horizontal | 109 | 249 | 74.0 | -9.8 | Pass |

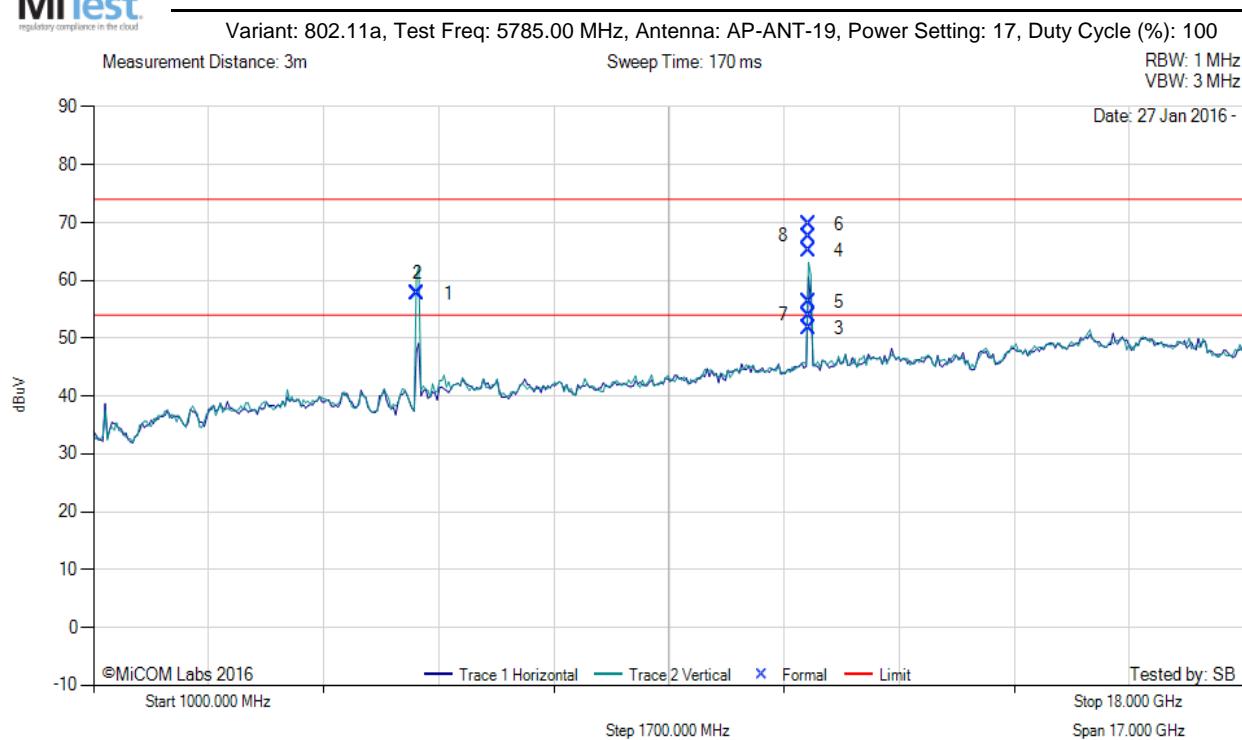
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB _u V | Cable Loss | AF dB | Level dB _u V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _u V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5786.85 | 64.41 | 3.79 | -10.43 | 57.77 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| 2 | 5786.85 | 64.41 | 3.79 | -10.43 | 57.77 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| 3 | 11567.25 | 50.81 | 5.52 | -4.65 | 51.68 | Max Avg | Vertical | 100 | 285 | 54.0 | -2.3 | Pass |
| 4 | 11567.25 | 64.22 | 5.52 | -4.65 | 65.09 | Max Peak | Vertical | 100 | 285 | 74.0 | -8.9 | Pass |
| 5 | 11567.25 | 52.35 | 5.52 | -4.65 | 53.22 | Max Avg | Horizontal | 154 | 246 | 54.0 | -0.8 | Pass |
| 6 | 11567.25 | 68.87 | 5.52 | -4.65 | 69.74 | Max Peak | Horizontal | 154 | 246 | 74.0 | -4.3 | Pass |
| 7 | 11567.26 | 53.09 | 5.52 | -4.65 | 53.96 | Max Avg | Horizontal | 146 | 247 | 54.0 | 0.0 | Pass |
| 8 | 11567.26 | 66.79 | 5.52 | -4.65 | 67.66 | Max Peak | Horizontal | 146 | 247 | 74.0 | -6.3 | Pass |

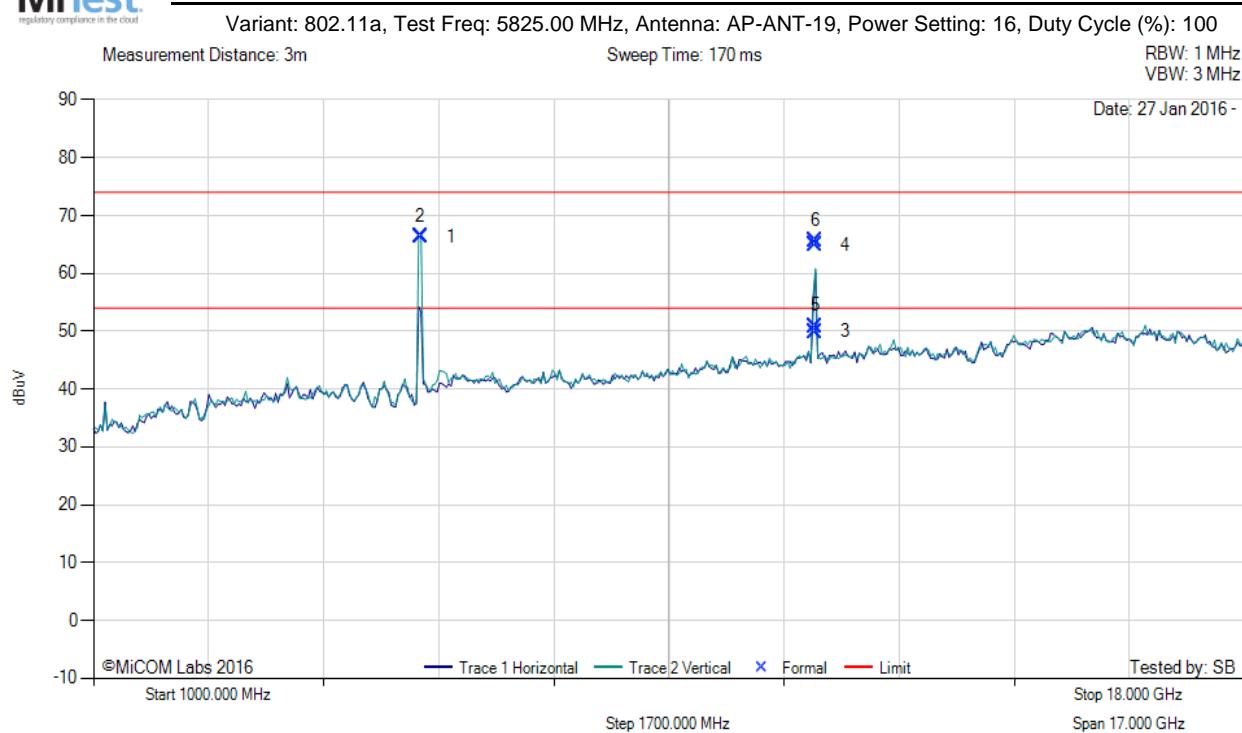
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB _µ V | Cable Loss | AF dB | Level dB _µ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _µ V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5826.94 | 72.74 | 3.84 | -10.24 | 66.34 | Fundamental | Vertical | 101 | 0 | -- | -- | |
| 2 | 5826.94 | 72.74 | 3.84 | -10.24 | 66.34 | Peak (NRB) | Vertical | 101 | 0 | -- | -- | Pass |
| 3 | 11658.24 | 48.82 | 5.59 | -4.45 | 49.96 | Max Avg | Vertical | 115 | 240 | 54.0 | -4.0 | Pass |
| 4 | 11658.24 | 63.78 | 5.59 | -4.45 | 64.92 | Max Peak | Vertical | 115 | 240 | 74.0 | -9.1 | Pass |
| 5 | 11658.24 | 49.73 | 5.59 | -4.45 | 50.87 | Max Avg | Horizontal | 116 | 252 | 54.0 | -3.1 | Pass |
| 6 | 11658.24 | 64.43 | 5.59 | -4.45 | 65.57 | Max Peak | Horizontal | 116 | 252 | 74.0 | -8.4 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

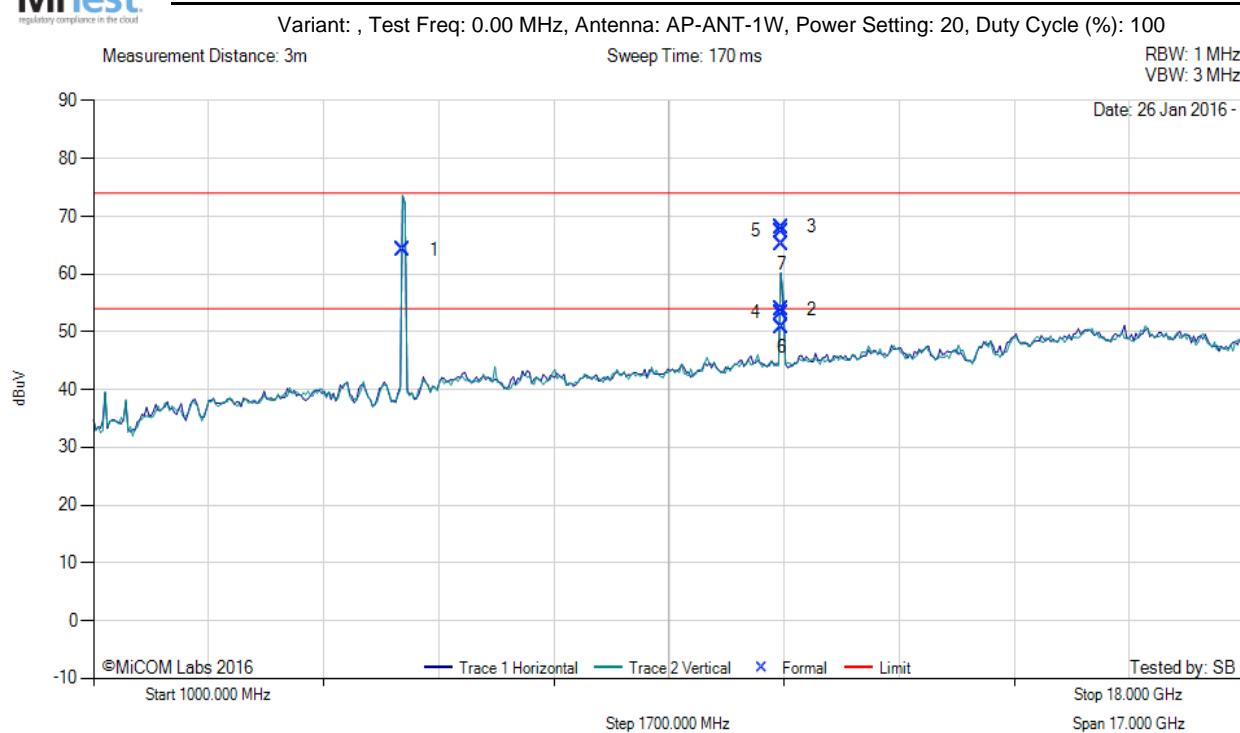
[back to matrix](#)

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A.1.1.3. AP-ANT-1W



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



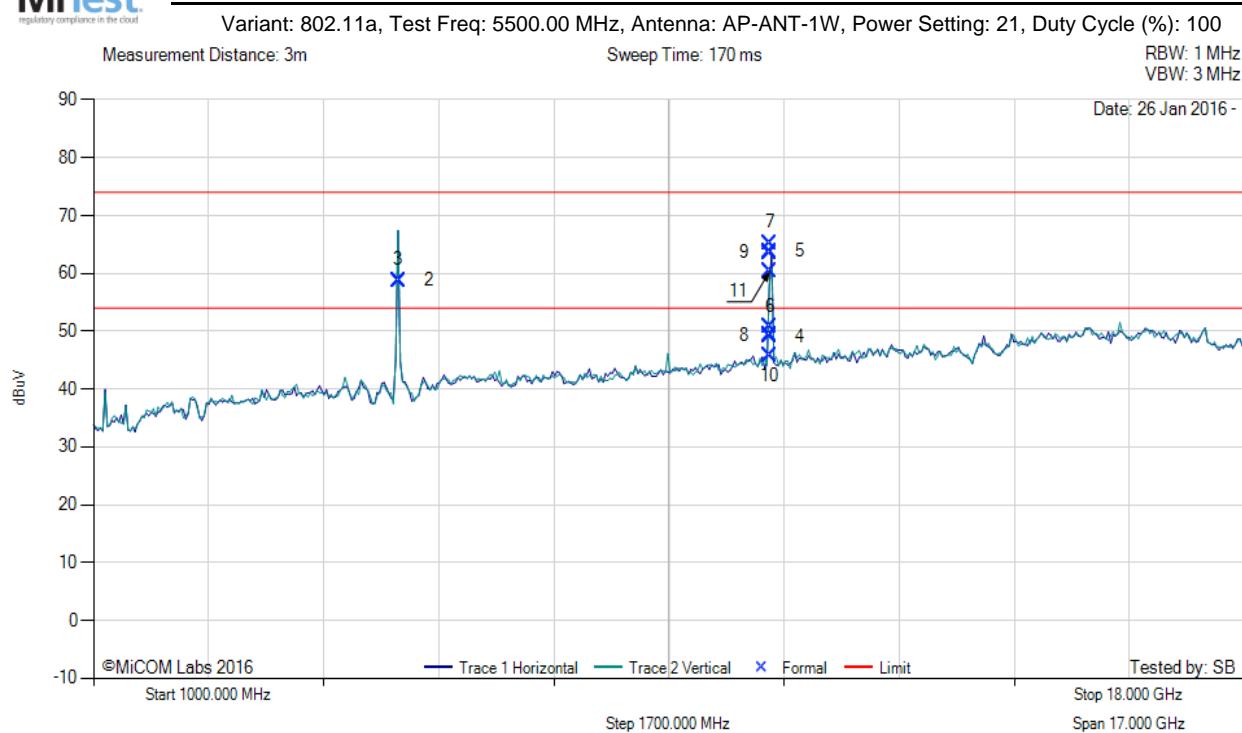
| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5574.59 | 71.58 | 3.81 | -11.21 | 64.18 | Peak (NRB) | Horizontal | 200 | 1 | -- | -- | Pass |
| 4 | 11161.84 | 51.60 | 5.76 | -4.06 | 53.30 | Max Avg | Horizontal | 134 | 252 | 54.0 | -0.7 | Pass |
| 5 | 11161.84 | 65.72 | 5.76 | -4.06 | 67.42 | Max Peak | Horizontal | 134 | 252 | 74.0 | -6.6 | Pass |
| 6 | 11161.84 | 49.19 | 5.76 | -4.06 | 50.89 | Max Avg | Vertical | 161 | 256 | 54.0 | -3.1 | Pass |
| 7 | 11161.84 | 63.51 | 5.76 | -4.06 | 65.21 | Max Peak | Vertical | 161 | 256 | 74.0 | -8.8 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 0.00 | 60.90 | 0.00 | 0.00 | 60.90 | Peak (NRB) | Vertical | 138 | 336 | -- | -- | Pass |
| 2 | 5503.92 | 66.24 | 3.75 | -11.18 | 58.81 | Fundamental | Horizontal | 200 | 0 | -- | -- | |
| 3 | 5503.92 | 66.24 | 3.75 | -11.18 | 58.81 | Peak (NRB) | Horizontal | 200 | 0 | -- | -- | Pass |
| 8 | 10991.43 | 47.93 | 5.61 | -4.27 | 49.27 | Max Avg | Horizontal | 141 | 38 | 54.0 | -4.7 | Pass |
| 9 | 10991.43 | 62.22 | 5.61 | -4.27 | 63.56 | Max Peak | Horizontal | 141 | 38 | 74.0 | -10.4 | Pass |
| 10 | 10991.43 | 44.47 | 5.61 | -4.27 | 45.81 | Max Avg | Vertical | 110 | 333 | 54.0 | -8.2 | Pass |
| 11 | 10991.43 | 59.12 | 5.61 | -4.27 | 60.46 | Max Peak | Vertical | 110 | 333 | 74.0 | -13.5 | Pass |

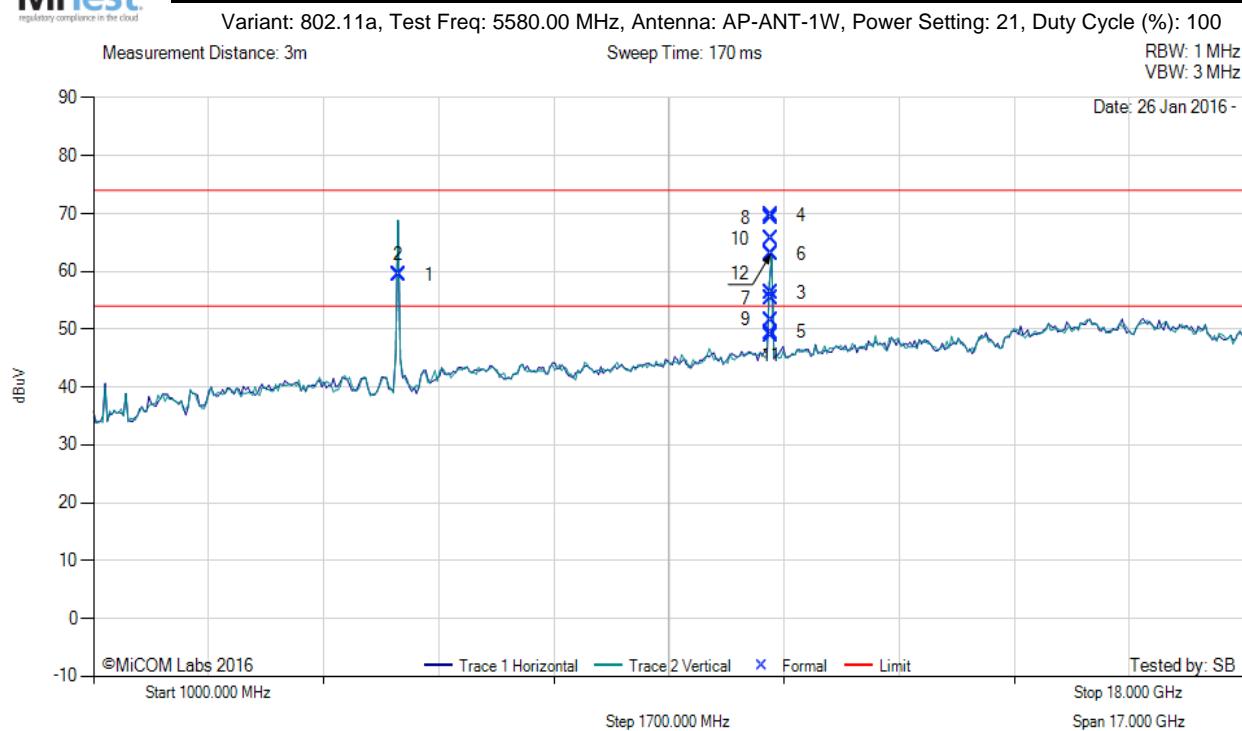
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB _µ V | Cable Loss | AF dB | Level dB _µ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _µ V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5502.88 | 66.84 | 3.75 | -11.17 | 59.42 | Fundamental | Horizontal | 200 | 1 | -- | -- | |
| 2 | 5502.88 | 66.84 | 3.75 | -11.17 | 59.42 | Peak (NRB) | Horizontal | 200 | 1 | -- | -- | Pass |
| 9 | 11005.09 | 50.29 | 5.58 | -4.23 | 51.64 | Max Avg | Vertical | 105 | 328 | 54.0 | -2.4 | Pass |
| 10 | 11005.09 | 64.23 | 5.58 | -4.23 | 65.58 | Max Peak | Vertical | 105 | 328 | 74.0 | -8.4 | Pass |
| 11 | 11009.22 | 47.57 | 5.57 | -4.22 | 48.92 | Max Avg | Horizontal | 198 | 284 | 54.0 | -5.1 | Pass |
| 12 | 11009.22 | 61.79 | 5.57 | -4.22 | 63.14 | Max Peak | Horizontal | 198 | 284 | 74.0 | -10.9 | Pass |

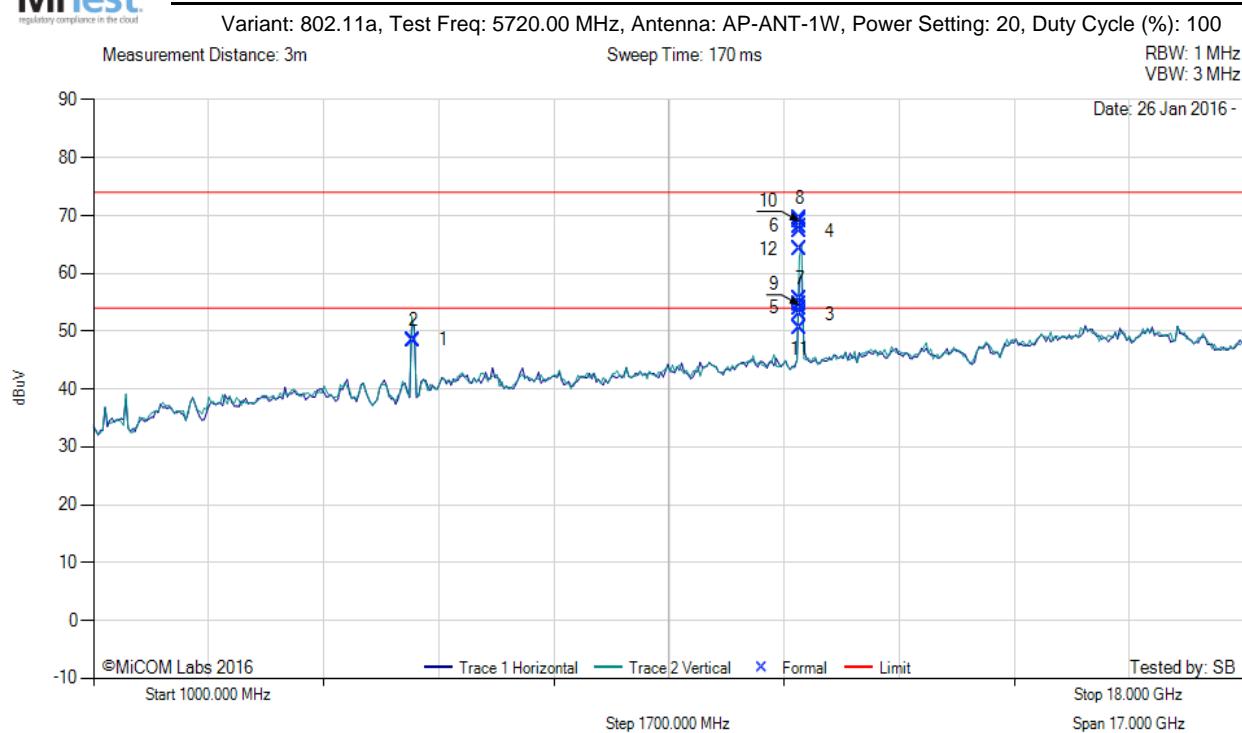
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB _u V | Cable Loss | AF dB | Level dB _u V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _u V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5723.93 | 55.38 | 3.79 | -10.72 | 48.45 | Fundamental | Horizontal | 200 | 1 | -- | -- | |
| 2 | 5723.93 | 55.38 | 3.79 | -10.72 | 48.45 | Peak (NRB) | Horizontal | 200 | 1 | -- | -- | Pass |
| 9 | 11434.07 | 52.05 | 5.41 | -4.92 | 52.54 | Max Avg | Vertical | 194 | 259 | 54.0 | -1.46 | Pass |
| 10 | 11434.07 | 68.48 | 5.41 | -4.92 | 68.97 | Max Peak | Vertical | 194 | 259 | 74.0 | -5.0 | Pass |
| 11 | 11434.07 | 50.09 | 5.41 | -4.92 | 50.58 | Max Avg | Horizontal | 137 | 252 | 54.0 | -3.4 | Pass |
| 12 | 11434.07 | 63.70 | 5.41 | -4.92 | 64.19 | Max Peak | Horizontal | 137 | 252 | 74.0 | -9.8 | Pass |

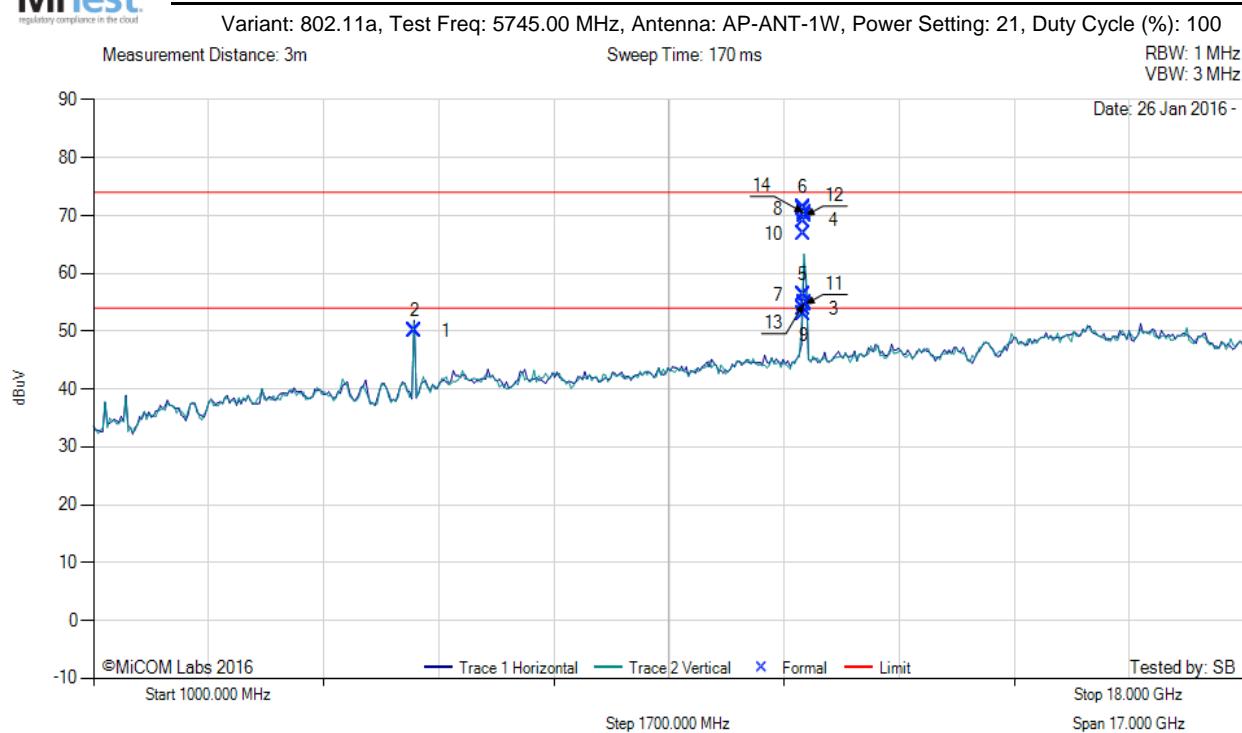
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB _u V | Cable Loss | AF dB | Level dB _u V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _u V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5749.46 | 56.75 | 3.85 | -10.63 | 49.97 | Fundamental | Horizontal | 100 | 1 | -- | -- | |
| 2 | 5749.46 | 56.75 | 3.85 | -10.63 | 49.97 | Peak (NRB) | Horizontal | 100 | 1 | -- | -- | Pass |
| 13 | 11501.37 | 52.32 | 5.47 | -4.82 | 52.97 | Max Avg | Vertical | 195 | 266 | 54.0 | -0.03 | Pass |
| 14 | 11501.37 | 69.77 | 5.47 | -4.82 | 70.42 | Max Peak | Vertical | 195 | 266 | 74.0 | -3.6 | Pass |

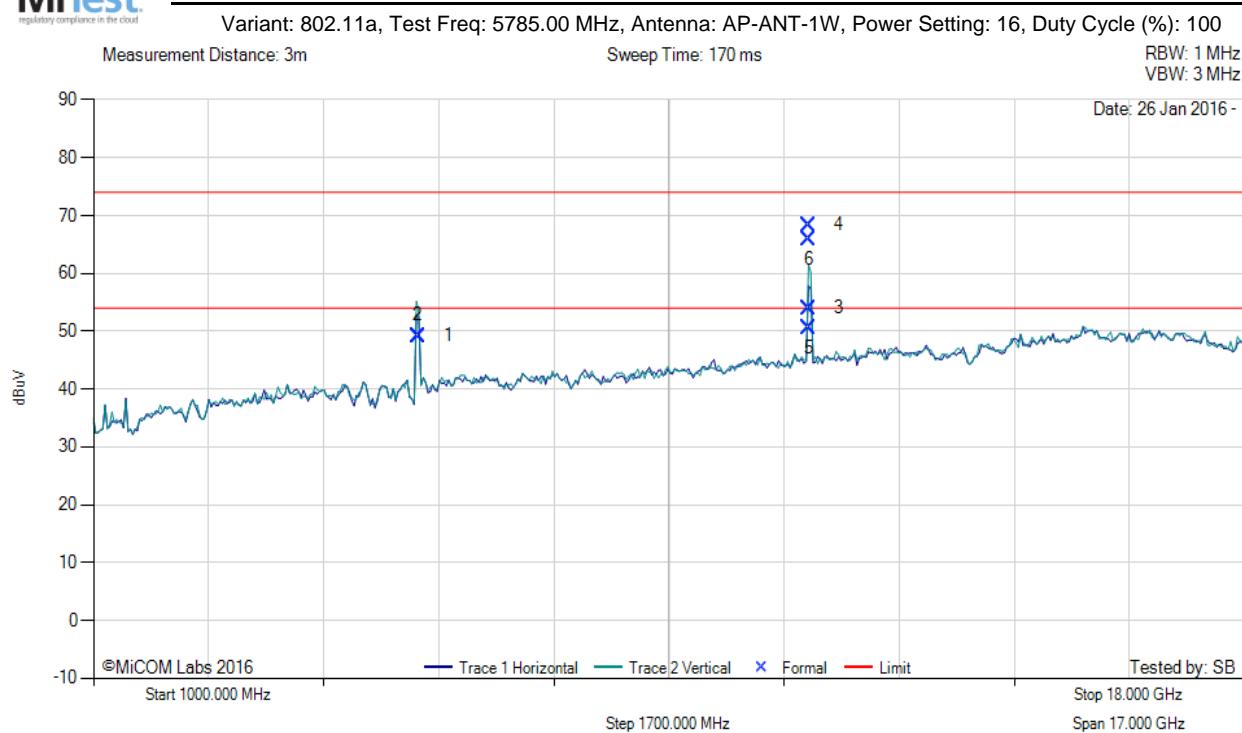
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB _u V | Cable Loss | AF dB | Level dB _u V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _u V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5788.86 | 55.80 | 3.79 | -10.42 | 49.17 | Fundamental | Vertical | 101 | 1 | -- | -- | |
| 2 | 5788.86 | 55.80 | 3.79 | -10.42 | 49.17 | Peak (NRB) | Vertical | 101 | 1 | -- | -- | Pass |
| 3 | 11561.20 | 53.02 | 5.64 | -4.67 | 53.99 | Max Avg | Vertical | 197 | 260 | 54.0 | 0.0 | Pass |
| 4 | 11561.20 | 67.36 | 5.64 | -4.67 | 68.33 | Max Peak | Vertical | 197 | 260 | 74.0 | -5.7 | Pass |
| 5 | 11561.20 | 49.69 | 5.64 | -4.67 | 50.66 | Max Avg | Horizontal | 153 | 253 | 54.0 | -3.3 | Pass |
| 6 | 11561.20 | 64.98 | 5.64 | -4.67 | 65.95 | Max Peak | Horizontal | 153 | 253 | 74.0 | -8.1 | Pass |

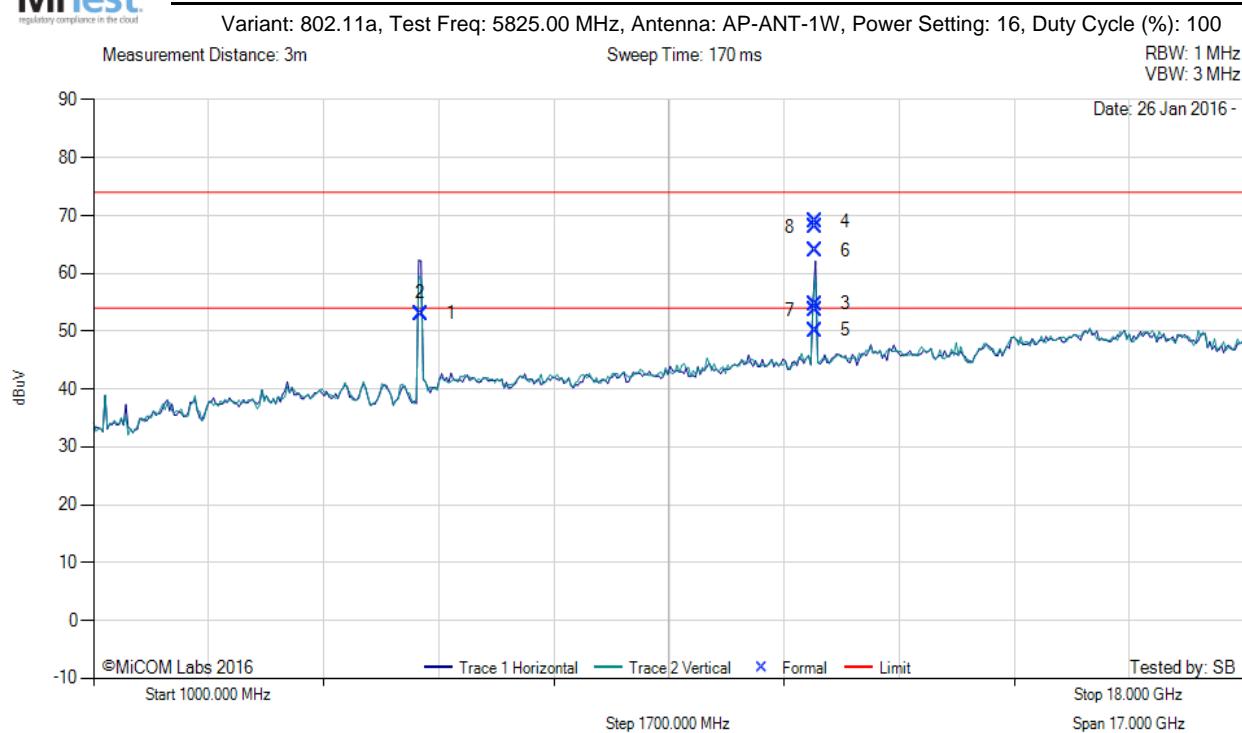
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

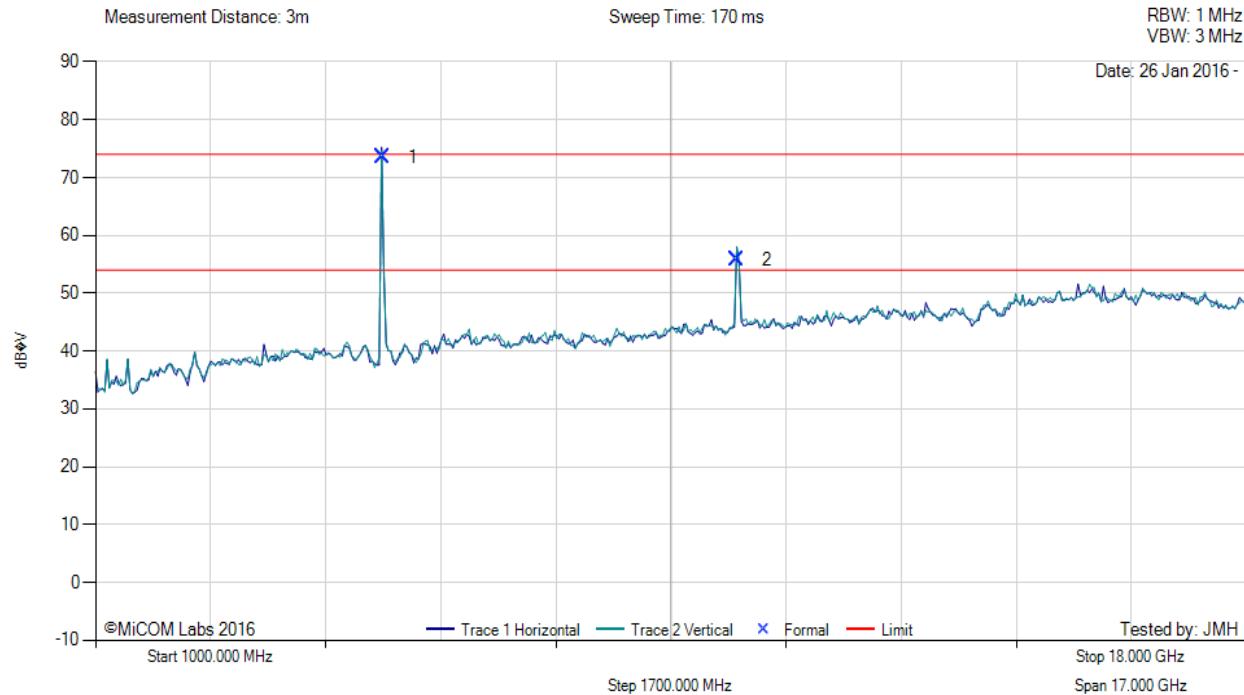


| Num | Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5831.19 | 59.46 | 3.84 | -10.22 | 53.08 | Fundamental | Horizontal | 151 | 0 | -- | -- | |
| 2 | 5831.19 | 59.46 | 3.84 | -10.22 | 53.08 | Peak (NRB) | Horizontal | 151 | 0 | -- | -- | Pass |
| 5 | 11652.43 | 49.18 | 5.48 | -4.46 | 50.20 | Max Avg | Vertical | 100 | 354 | 54.0 | -3.8 | Pass |
| 6 | 11652.43 | 62.87 | 5.48 | -4.46 | 63.89 | Max Peak | Vertical | 100 | 354 | 74.0 | -10.1 | Pass |
| 7 | 11654.95 | 52.58 | 5.53 | -4.46 | 53.65 | Max Avg | Horizontal | 176 | 285 | 54.0 | -0.4 | Pass |
| 8 | 11654.95 | 66.91 | 5.53 | -4.46 | 67.98 | Max Peak | Horizontal | 176 | 285 | 74.0 | -6.0 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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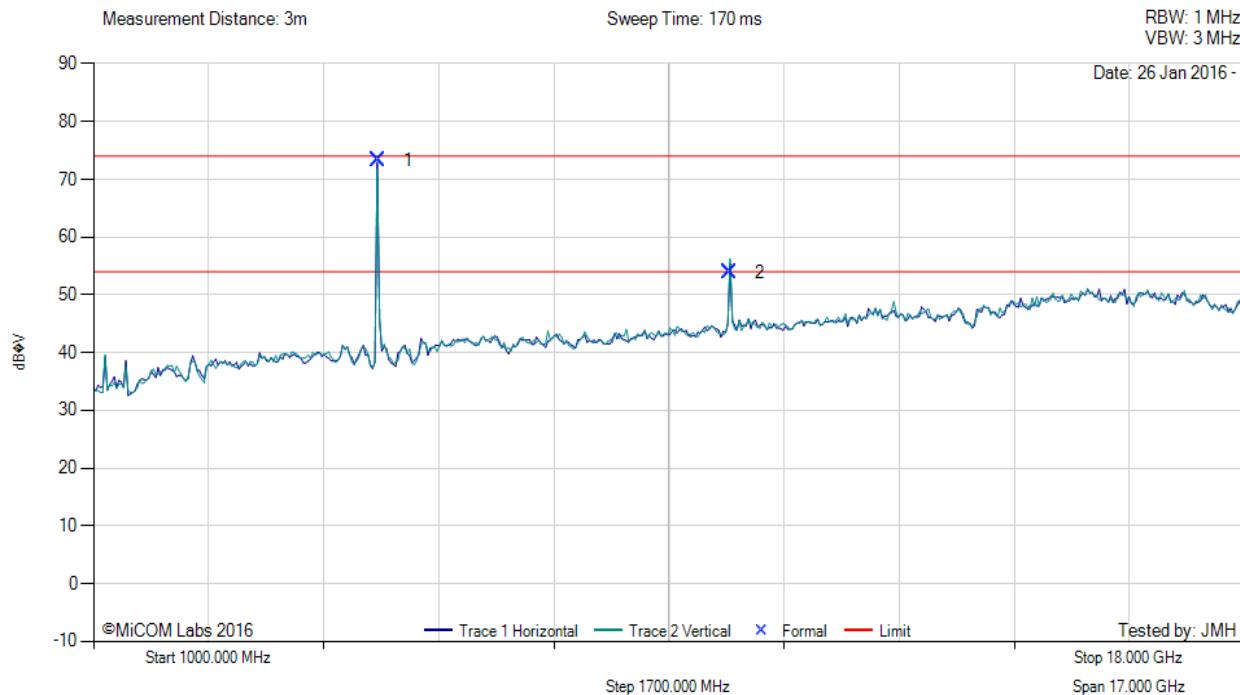


| Num | Frequency MHz | Raw dBµV | Cable Loss | AF dB | Level dBµV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBµV/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------|------------------|------------|--------|---------|--------------|-----------|------------|
| 1 | 5236.51 | 81.21 | 3.63 | -11.37 | 73.47 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 10475.23 | 54.83 | 5.46 | -4.49 | 55.80 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

Variant: 802.11a, Test Freq: 5200.00 MHz, Antenna: 1W, Power Setting: 21, Duty Cycle (%): 100



| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5196.75 | 81.03 | 3.66 | -11.47 | 73.22 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 10394.51 | 53.56 | 5.36 | -5.06 | 53.86 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

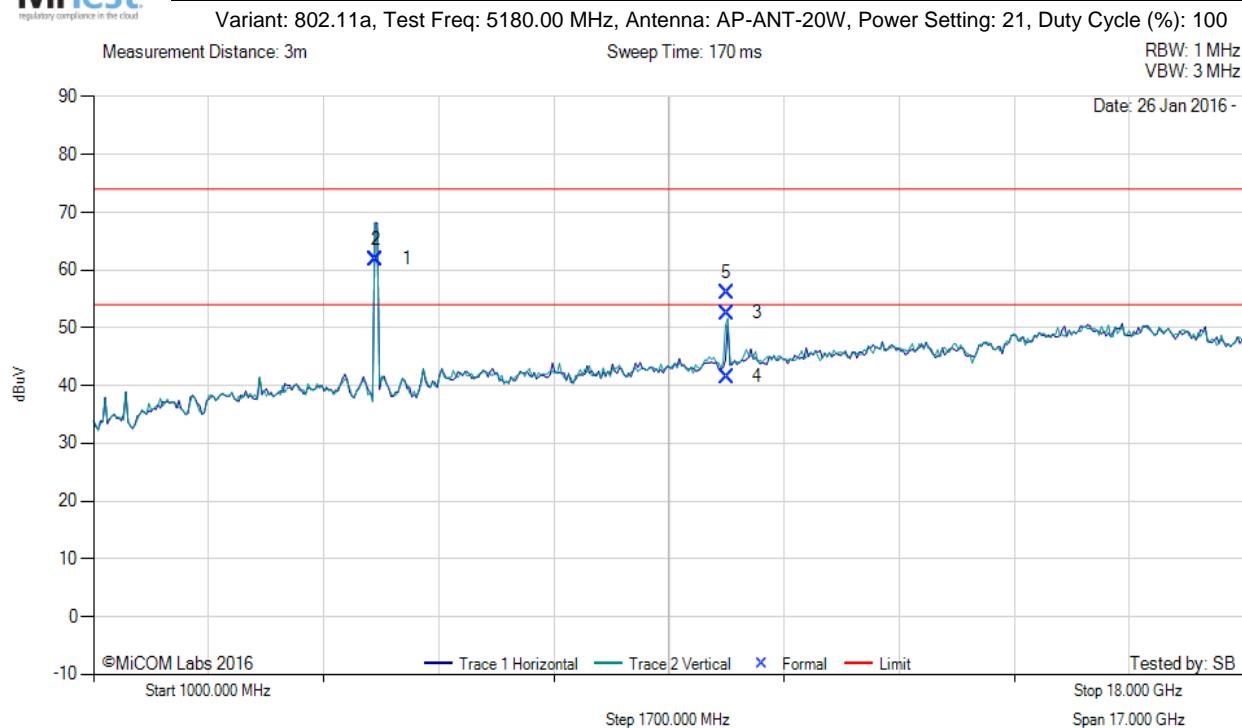
[back to matrix](#)

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A.1.1.4. AP-ANT-20W



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB μ V | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5174.99 | 69.68 | 3.70 | -11.52 | 61.86 | Fundamental | Horizontal | 200 | 0 | -- | -- | |
| 2 | 5174.99 | 69.68 | 3.70 | -11.52 | 61.86 | Peak (NRB) | Horizontal | 200 | 0 | -- | -- | Pass |
| 3 | 10351.51 | 52.34 | 5.50 | -5.30 | 52.54 | Peak (NRB) | Vertical | 158 | 29 | -- | -- | Pass |
| 4 | 10351.51 | 41.36 | 5.50 | -5.30 | 41.56 | Max Avg | Vertical | 142 | 4 | 54.0 | -12.4 | Pass |
| 5 | 10351.51 | 55.79 | 5.50 | -5.30 | 55.99 | Max Peak | Vertical | 142 | 4 | 74.0 | -18.0 | Pass |

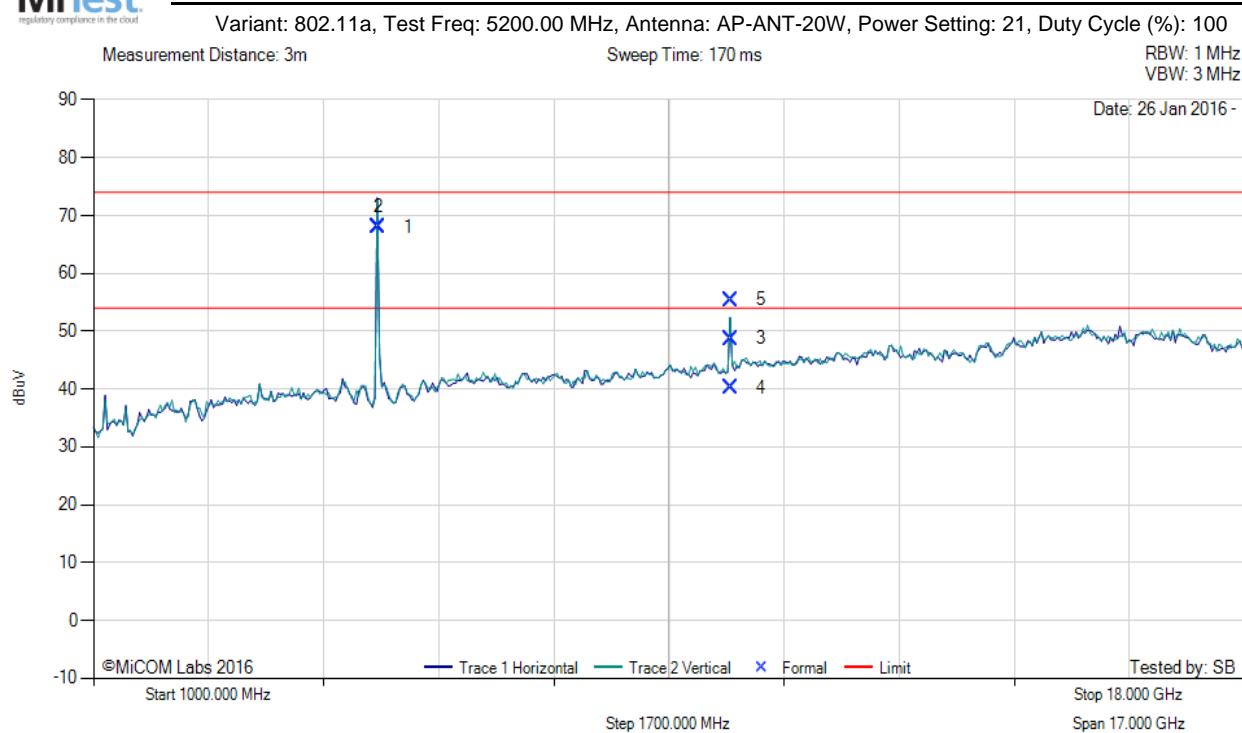
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB _μ V | Cable Loss | AF dB | Level dB _μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _μ V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5203.41 | 75.77 | 3.65 | -11.45 | 67.97 | Fundamental | Horizontal | 101 | 0 | -- | -- | |
| 2 | 5203.41 | 75.77 | 3.65 | -11.45 | 67.97 | Peak (NRB) | Horizontal | 101 | 0 | -- | -- | Pass |
| 3 | 10407.38 | 48.25 | 5.46 | -4.99 | 48.72 | Peak (NRB) | Horizontal | 200 | 0 | -- | -- | Pass |
| 4 | 10407.38 | 39.73 | 5.46 | -4.99 | 40.20 | Max Avg | Horizontal | 195 | 354 | 54.0 | -13.8 | Pass |
| 5 | 10407.38 | 54.94 | 5.46 | -4.99 | 55.41 | Max Peak | Horizontal | 195 | 354 | 74.0 | -18.6 | Pass |

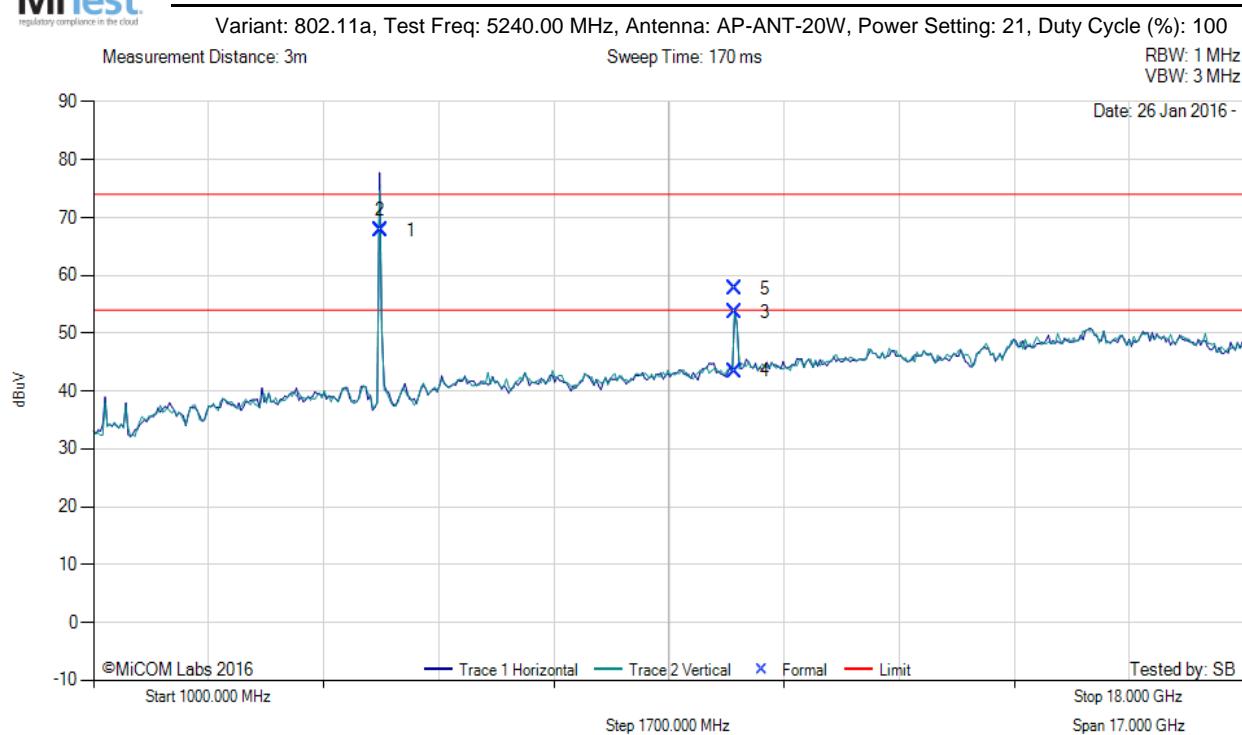
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5236.79 | 75.47 | 3.63 | -11.37 | 67.73 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 5236.79 | 75.47 | 3.63 | -11.37 | 67.73 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| 3 | 10475.51 | 52.62 | 5.45 | -4.49 | 53.58 | Peak (NRB) | Horizontal | 101 | 42 | -- | -- | Pass |
| 4 | 10475.51 | 42.49 | 5.45 | -4.49 | 43.45 | Max Avg | Horizontal | 105 | 272 | 54.0 | -10.6 | Pass |
| 5 | 10475.51 | 56.77 | 5.45 | -4.49 | 57.73 | Max Peak | Horizontal | 105 | 272 | 74.0 | -16.3 | Pass |

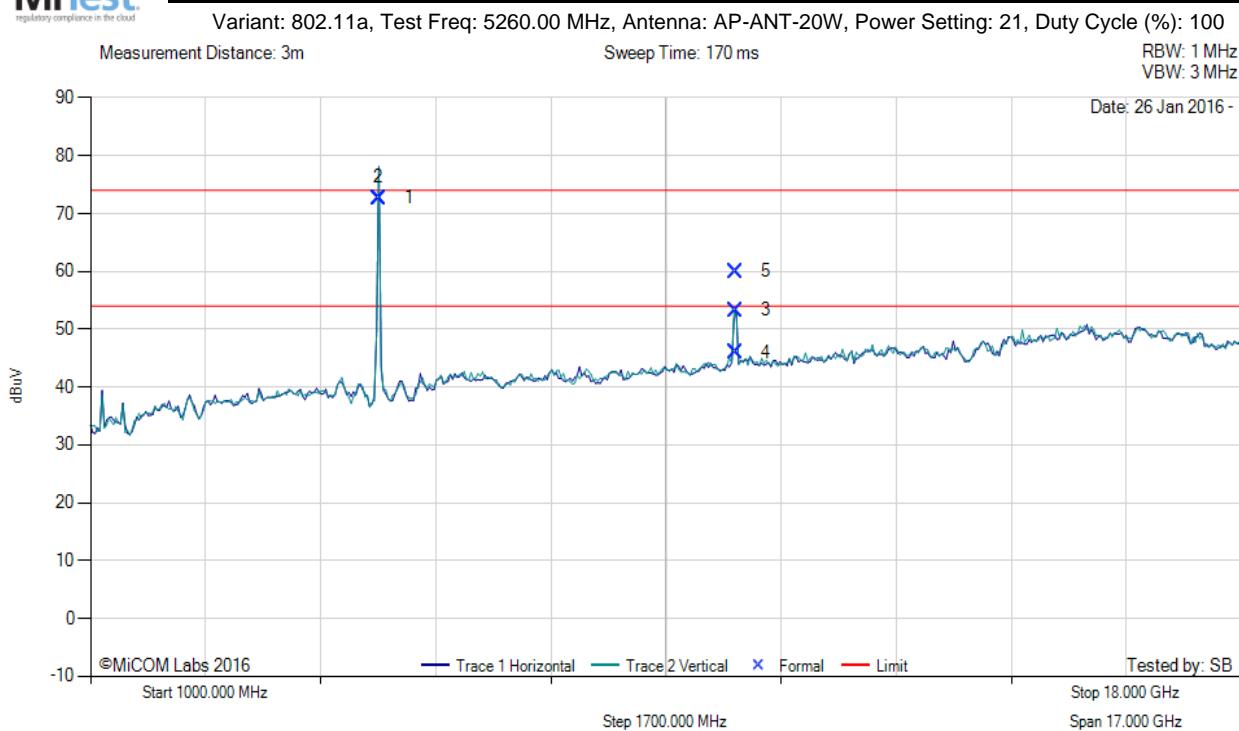
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB _u V | Cable Loss | AF dB | Level dB _u V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _u V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5255.35 | 80.33 | 3.64 | -11.32 | 72.65 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 5255.35 | 80.33 | 3.64 | -11.32 | 72.65 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| 3 | 10524.01 | 52.01 | 5.43 | -4.19 | 53.25 | Peak (NRB) | Horizontal | 100 | 29 | -- | -- | Pass |
| 4 | 10524.01 | 44.77 | 5.43 | -4.19 | 46.01 | Max Avg | Horizontal | 104 | 277 | 54.0 | -8.0 | Pass |
| 5 | 10524.01 | 58.71 | 5.43 | -4.19 | 59.95 | Max Peak | Horizontal | 104 | 277 | 74.0 | -14.1 | Pass |

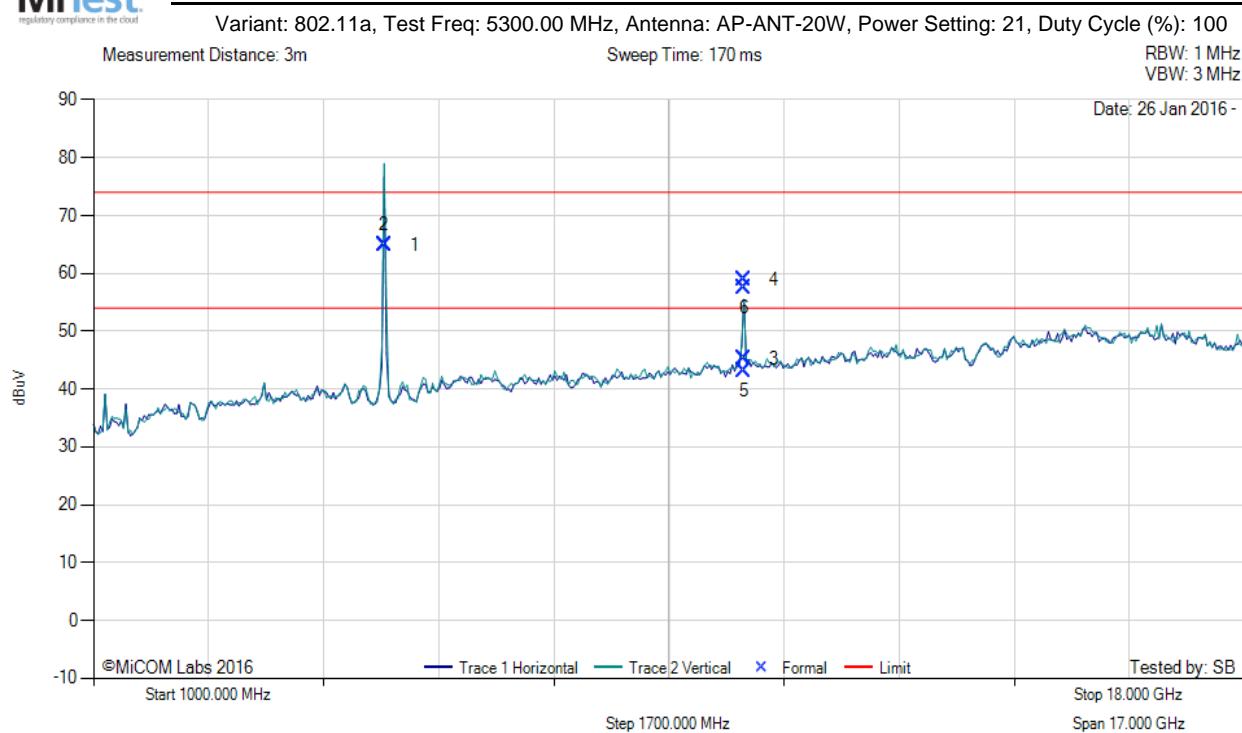
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5292.87 | 72.21 | 3.77 | -11.13 | 64.85 | Fundamental | Vertical | 200 | 1 | -- | -- | |
| 2 | 5292.87 | 72.21 | 3.77 | -11.13 | 64.85 | Peak (NRB) | Vertical | 200 | 1 | -- | -- | Pass |
| 3 | 10603.44 | 43.60 | 5.57 | -3.93 | 45.24 | Max Avg | Horizontal | 196 | 296 | 54.0 | -8.8 | Pass |
| 4 | 10603.44 | 57.23 | 5.57 | -3.93 | 58.87 | Max Peak | Horizontal | 196 | 296 | 74.0 | -15.1 | Pass |
| 5 | 10603.44 | 41.62 | 5.57 | -3.93 | 43.26 | Max Avg | Vertical | 119 | 340 | 54.0 | -10.7 | Pass |
| 6 | 10603.44 | 55.97 | 5.57 | -3.93 | 57.61 | Max Peak | Vertical | 119 | 340 | 74.0 | -16.4 | Pass |

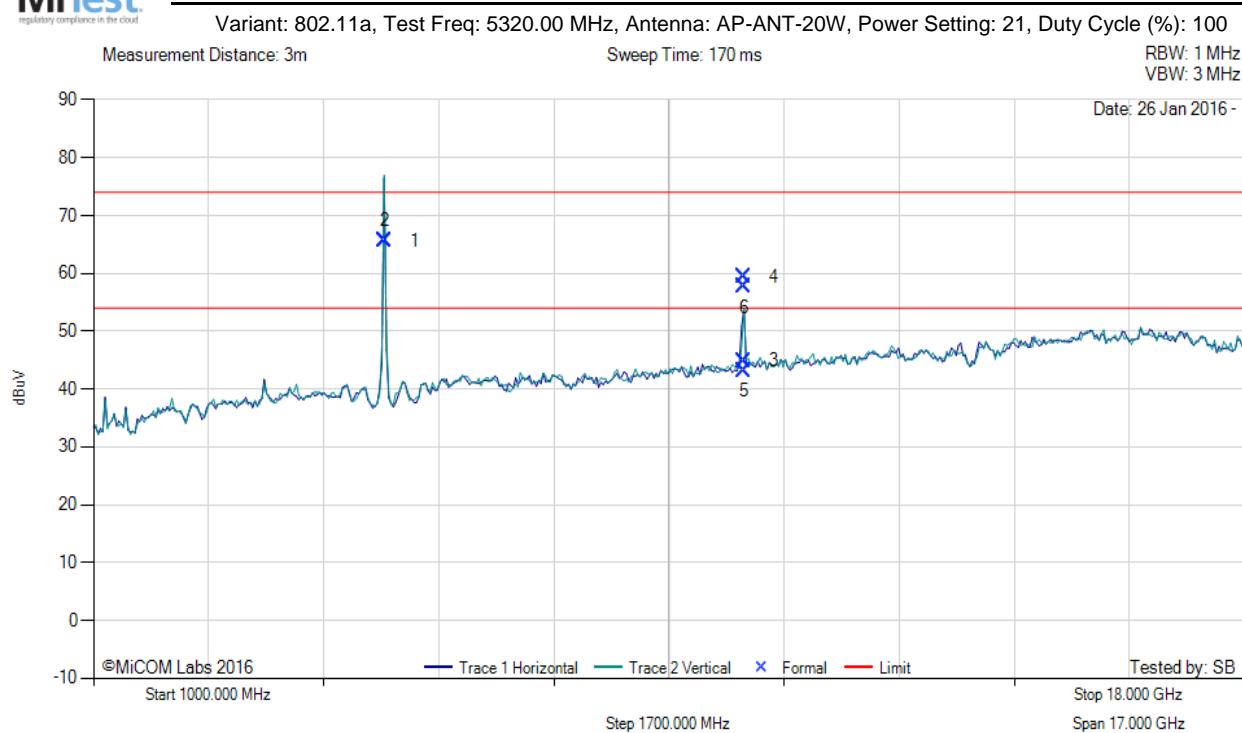
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5301.21 | 72.91 | 3.81 | -11.09 | 65.63 | Fundamental | Horizontal | 200 | 1 | -- | -- | |
| 2 | 5301.21 | 72.91 | 3.81 | -11.09 | 65.63 | Peak (NRB) | Horizontal | 200 | 1 | -- | -- | Pass |
| 3 | 10605.69 | 43.23 | 5.55 | -3.92 | 44.86 | Max Avg | Horizontal | 162 | 280 | 54.0 | -9.1 | Pass |
| 4 | 10605.69 | 57.74 | 5.55 | -3.92 | 59.37 | Max Peak | Horizontal | 162 | 280 | 74.0 | -14.6 | Pass |
| 5 | 10605.69 | 41.61 | 5.55 | -3.92 | 43.24 | Max Avg | Vertical | 117 | 340 | 54.0 | -10.8 | Pass |
| 6 | 10605.69 | 56.10 | 5.55 | -3.92 | 57.73 | Max Peak | Vertical | 117 | 340 | 74.0 | -16.3 | Pass |

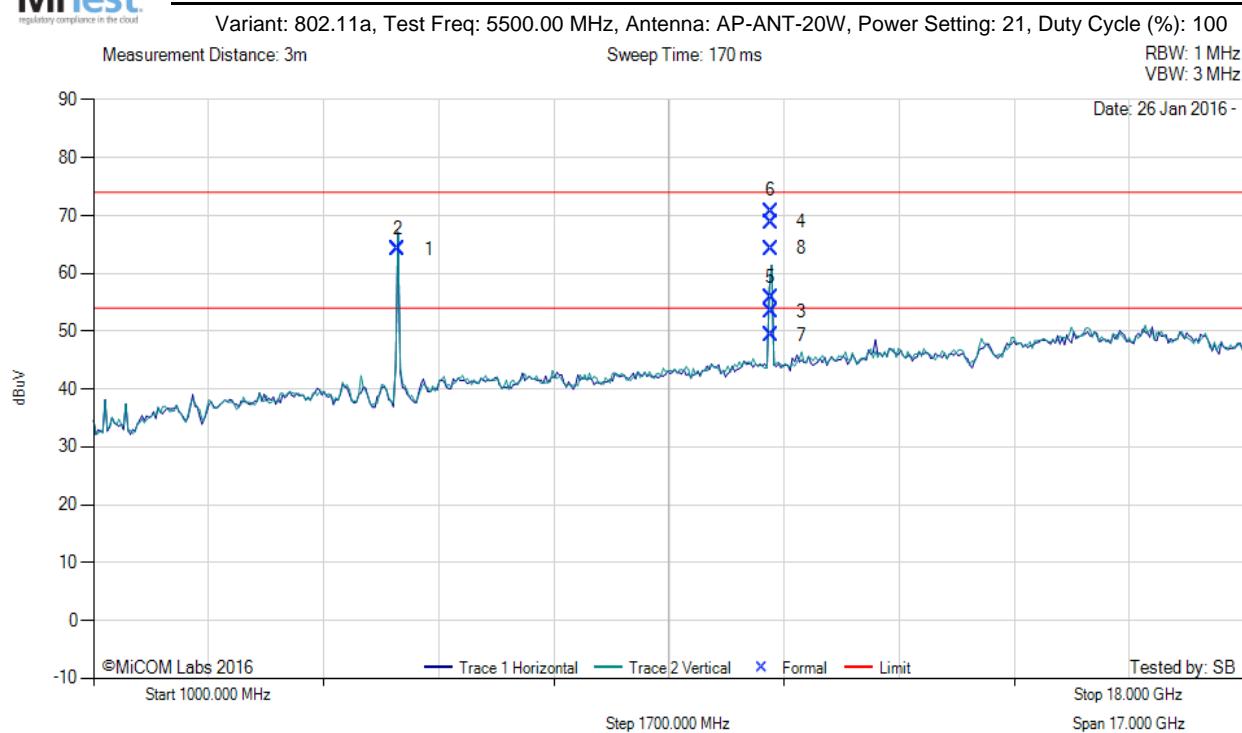
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5497.99 | 71.68 | 3.74 | -11.17 | 64.25 | Fundamental | Horizontal | 101 | 0 | -- | -- | |
| 2 | 5497.99 | 71.68 | 3.74 | -11.17 | 64.25 | Peak (NRB) | Horizontal | 101 | 0 | -- | -- | Pass |
| 5 | 11000.32 | 52.47 | 5.59 | -4.24 | 53.82 | Max Avg | Horizontal | 116 | 300 | 54.0 | -0.18 | Pass |
| 6 | 11000.32 | 69.39 | 5.59 | -4.24 | 70.74 | Max Peak | Horizontal | 116 | 300 | 74.0 | -3.3 | Pass |
| 7 | 11000.32 | 47.92 | 5.59 | -4.24 | 49.27 | Max Avg | Vertical | 120 | 315 | 54.0 | -4.7 | Pass |
| 8 | 11000.32 | 62.92 | 5.59 | -4.24 | 64.27 | Max Peak | Vertical | 120 | 315 | 74.0 | -9.7 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

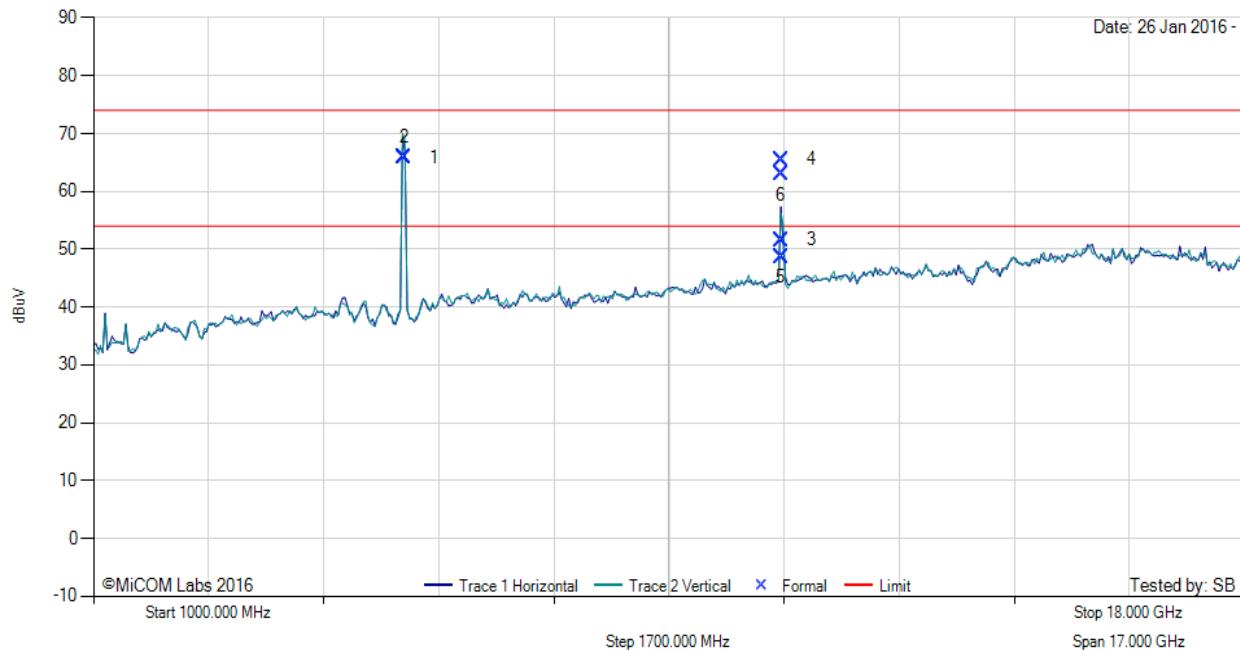


Variant: 802.11a, Test Freq: 5580.00 MHz, Antenna: AP-ANT-20W, Power Setting: 18, Duty Cycle (%): 100

Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz
VBW: 3 MHz



| Num | Frequency MHz | Raw dB _µ V | Cable Loss | AF dB | Level dB _µ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _µ V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5584.29 | 73.26 | 3.79 | -11.19 | 65.86 | Fundamental | Horizontal | 101 | 0 | -- | -- | |
| 2 | 5584.29 | 73.26 | 3.79 | -11.19 | 65.86 | Peak (NRB) | Horizontal | 101 | 0 | -- | -- | Pass |
| 3 | 11156.07 | 49.68 | 5.96 | -4.05 | 51.59 | Max Avg | Horizontal | 115 | 298 | 54.0 | -2.4 | Pass |
| 4 | 11156.07 | 63.55 | 5.96 | -4.05 | 65.46 | Max Peak | Horizontal | 115 | 298 | 74.0 | -8.5 | Pass |
| 5 | 11156.07 | 46.78 | 5.96 | -4.05 | 48.69 | Max Avg | Vertical | 115 | 26 | 54.0 | -5.3 | Pass |
| 6 | 11156.07 | 61.07 | 5.96 | -4.05 | 62.98 | Max Peak | Vertical | 115 | 26 | 74.0 | -11.0 | Pass |

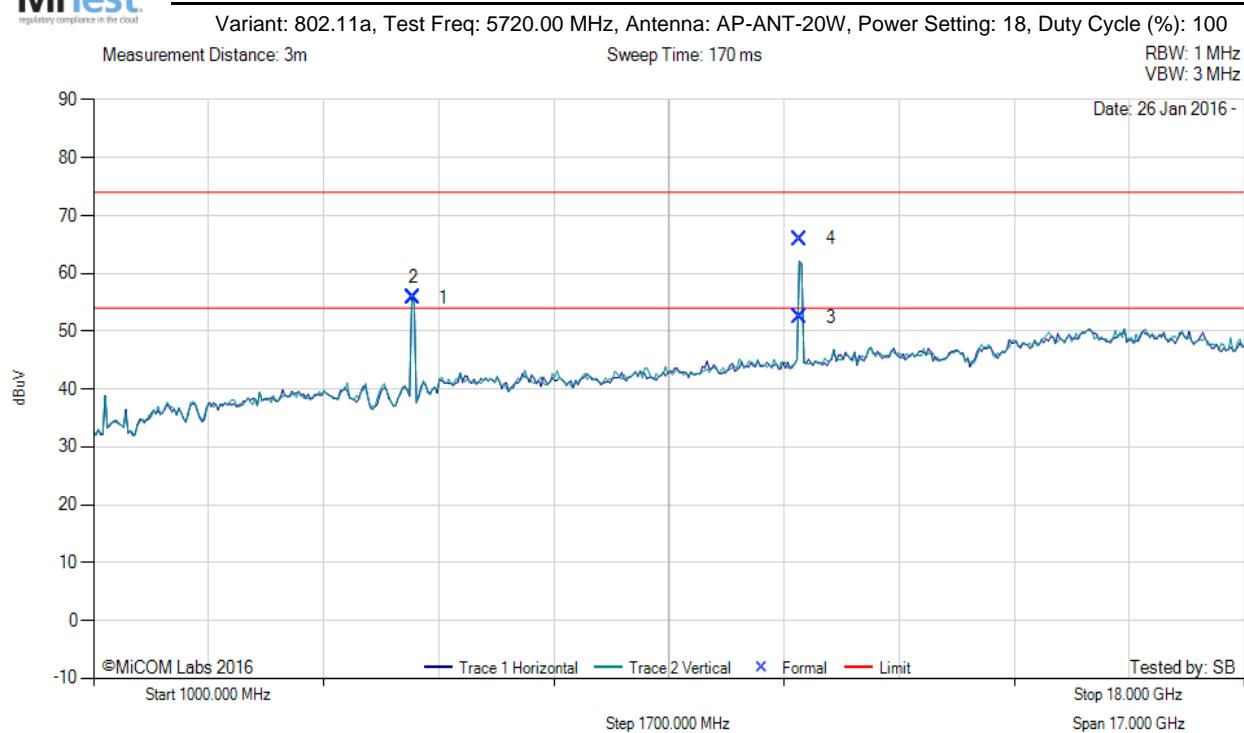
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



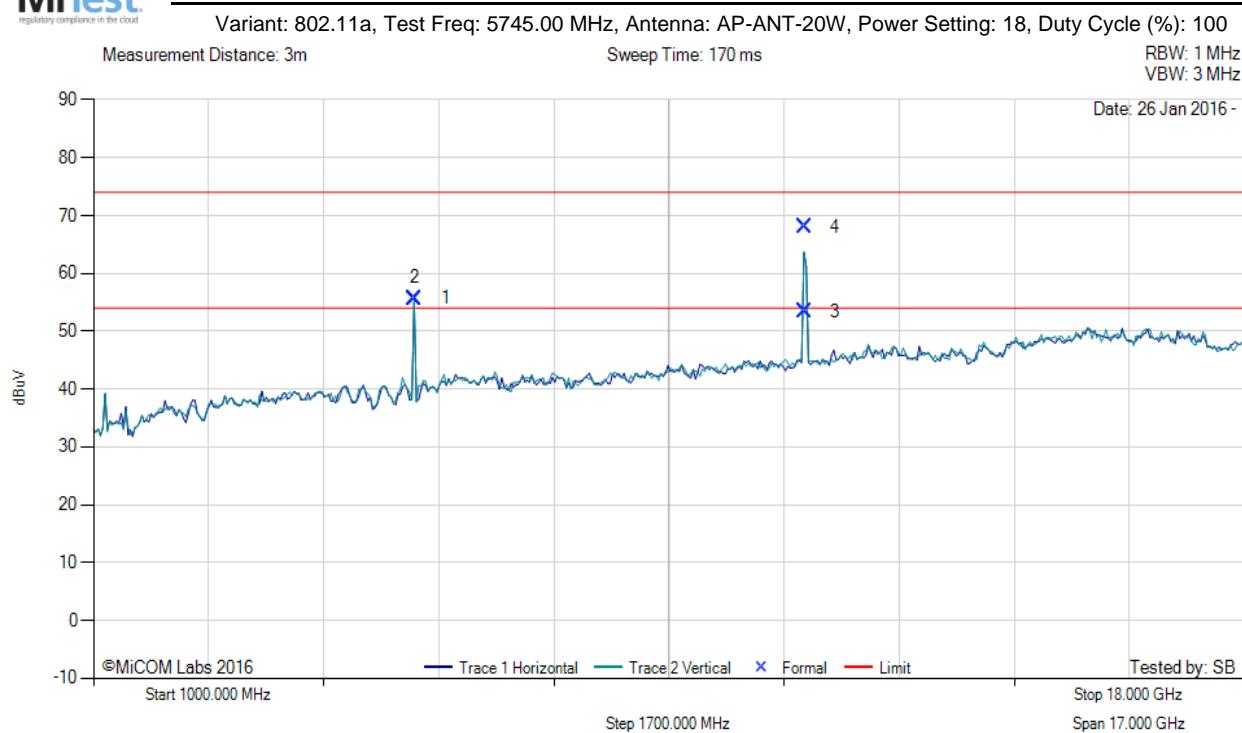
| Num | Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5726.09 | 62.72 | 3.79 | -10.72 | 55.79 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 5726.09 | 62.72 | 3.79 | -10.72 | 55.79 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| 3 | 11437.52 | 52.09 | 5.34 | -4.92 | 52.51 | Max Avg | Horizontal | 114 | 267 | 54.0 | -1.5 | Pass |
| 4 | 11437.52 | 65.54 | 5.34 | -4.92 | 65.96 | Max Peak | Horizontal | 114 | 267 | 74.0 | -8.0 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



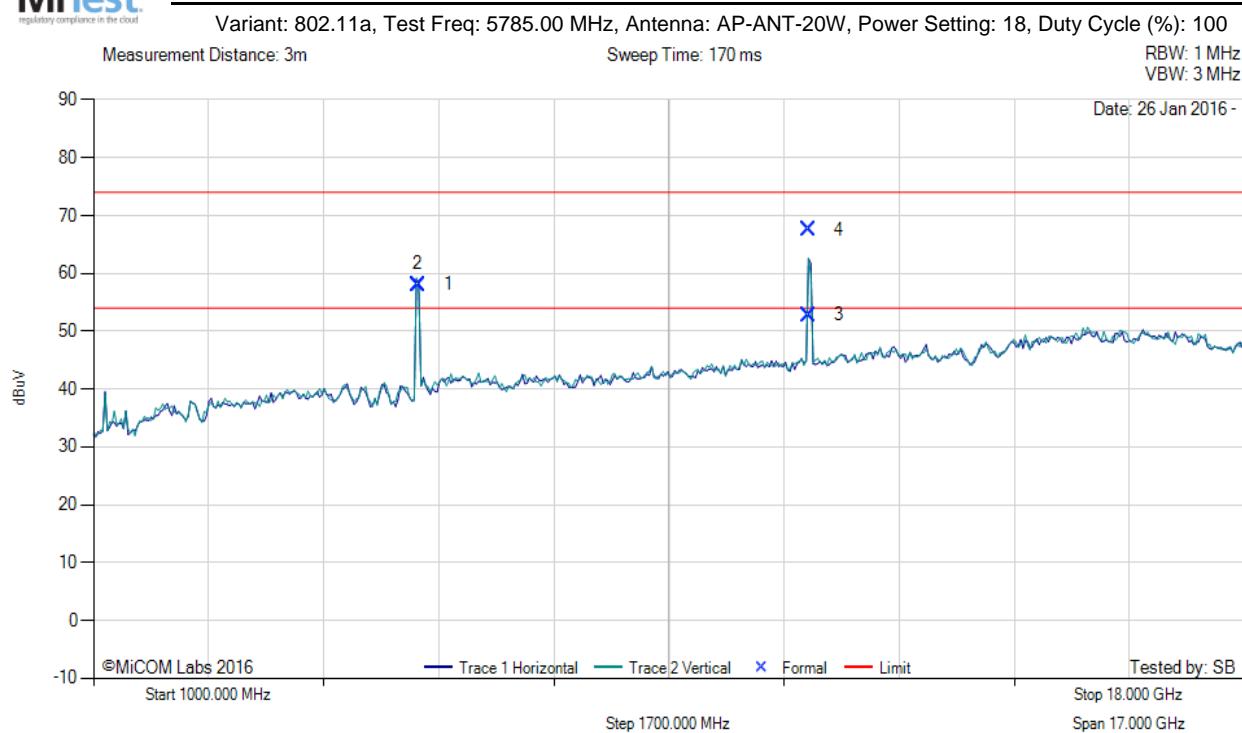
| Num | Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5749.86 | 62.44 | 3.85 | -10.63 | 55.66 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 5749.86 | 62.44 | 3.85 | -10.63 | 55.66 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| 3 | 11498.40 | 52.74 | 5.46 | -4.82 | 53.38 | Max Avg | Horizontal | 160 | 291 | 54.0 | -0.6 | Pass |
| 4 | 11498.40 | 67.34 | 5.46 | -4.82 | 67.98 | Max Peak | Horizontal | 160 | 291 | 74.0 | -6.0 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dB μ V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB μ V/m | Margin dB | Pass /Fail |
|-----|---------------|----------|------------|--------|--------------------|------------------|------------|--------|---------|--------------------|-----------|------------|
| 1 | 5792.63 | 64.72 | 3.78 | -10.40 | 58.10 | Fundamental | Horizontal | 101 | 1 | -- | -- | |
| 2 | 5792.63 | 64.72 | 3.78 | -10.40 | 58.10 | Peak (NRB) | Horizontal | 101 | 1 | -- | -- | Pass |
| 3 | 11561.44 | 51.82 | 5.64 | -4.67 | 52.79 | Max Avg | Horizontal | 114 | 73 | 54.0 | -1.2 | Pass |
| 4 | 11561.44 | 66.50 | 5.64 | -4.67 | 67.47 | Max Peak | Horizontal | 114 | 73 | 74.0 | -6.5 | Pass |

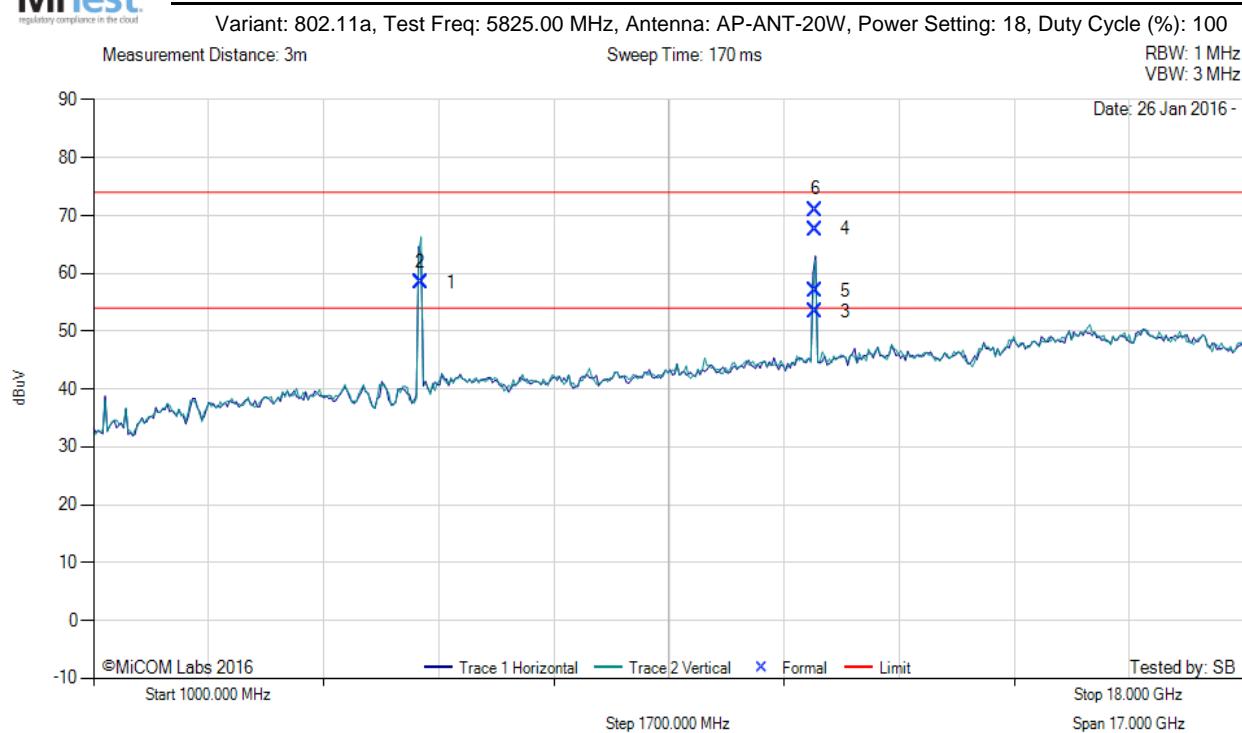
Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



| Num | Frequency MHz | Raw dB _u V | Cable Loss | AF dB | Level dB _u V/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dB _u V/m | Margin dB | Pass /Fail |
|-----|---------------|-----------------------|------------|--------|---------------------------|------------------|------------|--------|---------|---------------------------|-----------|------------|
| 1 | 5829.82 | 64.87 | 3.84 | -10.22 | 58.49 | Fundamental | Horizontal | 101 | 0 | -- | -- | |
| 2 | 5829.82 | 64.87 | 3.84 | -10.22 | 58.49 | Peak (NRB) | Horizontal | 101 | 0 | -- | -- | Pass |
| 5 | 11655.96 | 50.97 | 5.55 | -4.46 | 53.06 | Max Avg | Horizontal | 166 | 287 | 54.0 | -0.94 | Pass |
| 6 | 11655.96 | 69.96 | 5.55 | -4.46 | 71.05 | Max Peak | Horizontal | 166 | 287 | 74.0 | -3.0 | Pass |

Test Notes: EUT on 150cm Table powered by PDSine 9001GR

[back to matrix](#)

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