

## 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: 31<sup>th</sup> May 2016

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



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**To:** FCC CFR 47 Part 15 Subpart E 15.407  
**Serial #:** ARUB196-U7 Rev B  
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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.

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## 2. RADIATED EMISSIONS

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

$$FS = R + AF + CORR - FO$$



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 (eirr) to field strength (dBμV/m);

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

where P is the EIRP in Watts

Therefore: -27 dBm/MHz equates to 68.23 dBuV/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).

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## 2.1. Restricted Band Emissions

### 2.1.1. AP-ANT-13B

#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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

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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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

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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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### 2.1.2. AP-ANT-19

#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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

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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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### 2.1.3. AP-ANT-1W

#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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

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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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

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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

<b>Antenna:</b>	AP-ANT-1W	<b>Variant:</b>	802.11a
<b>Antenna Gain (dBi):</b>	5.8	<b>Modulation:</b>	OFDM
<b>Beam Forming Gain (Y):</b>	6.0	<b>Duty Cycle (%):</b>	100
<b>Channel Frequency (MHz):</b>	5745.00	<b>Data Rate:</b>	6.00 MBit/s
<b>Power Setting:</b>	21	<b>Tested By:</b>	SB

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### 2.1.4. AP-ANT-20W

##### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

##### Test Measurement Results

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	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

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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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

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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	5236.79	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

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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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

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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### 2.1.5. AP-ANT-40

##### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

##### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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## 2.1.6. AP-ANT-45

### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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### 2.1.7. AP-ANT-48

#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	5791.10	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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### 2.1.8. Metal Sheet (Integral)

#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Radiated Spurious - Restricted Band Emissions

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

#### Test Measurement Results

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	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 54.0dBμV/m	Limit 74.0dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 68.2dBμV/m	Limit 78.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 78.2dBμV/m	Limit 68.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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.



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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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
#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 54.0dBμV/m	Limit 74.0dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 68.2dBμV/m	Limit 78.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 78.2dBμV/m	Limit 68.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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.



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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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	--	--	

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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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
#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 54.0dBµV/m	Limit 74.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/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 68.2dBµV/m	Limit 78.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/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 78.2dBµV/m	Limit 68.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/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.



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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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
#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 54.0dBμV/m	Limit 74.0dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 68.2dBμV/m	Limit 78.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 78.2dBμV/m	Limit 68.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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.



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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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	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 54.0dBμV/m	Limit 74.0dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 68.2dBμV/m	Limit 78.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 78.2dBμV/m	Limit 68.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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

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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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
#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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## 2.2.6. AP-ANT-45

### RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

#### 5150 - 5250 MHz

AP-ANT-45		Band-Edge Freq	Limit 54.0dBμV/m	Limit 74.0dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 68.2dBμV/m	Limit 78.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 78.2dBμV/m	Limit 68.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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	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 54.0dBμV/m	Limit 74.0dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 68.2dBμV/m	Limit 78.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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 78.2dBμV/m	Limit 68.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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

Click on the links to view the data.



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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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	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 54.0dBµV/m	Limit 74.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/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 68.2dBµV/m	Limit 78.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/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 78.2dBµV/m	Limit 68.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/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.

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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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	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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#### Equipment Configuration for Restricted Lower Band-Edge Emissions

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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

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

#### Test Measurement Results

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	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 simulataneously 5210 and 5775 MHz

5150 - 5250 and 5725 - 5850 MHz

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

AP-ANT-20W		Band-Edge Freq	Limit 78.2dBμV/m	Limit 68.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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.



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### 2.2.9.2 AP-ANT-48

5150 - 5250 and 5725 - 5850 MHz

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

AP-ANT-48		Band-Edge Freq	Limit 78.2dBμV/m	Limit 68.2dBμV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBμV/m	dBμV/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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## **APPENDIX A - GRAPHICAL IMAGES**

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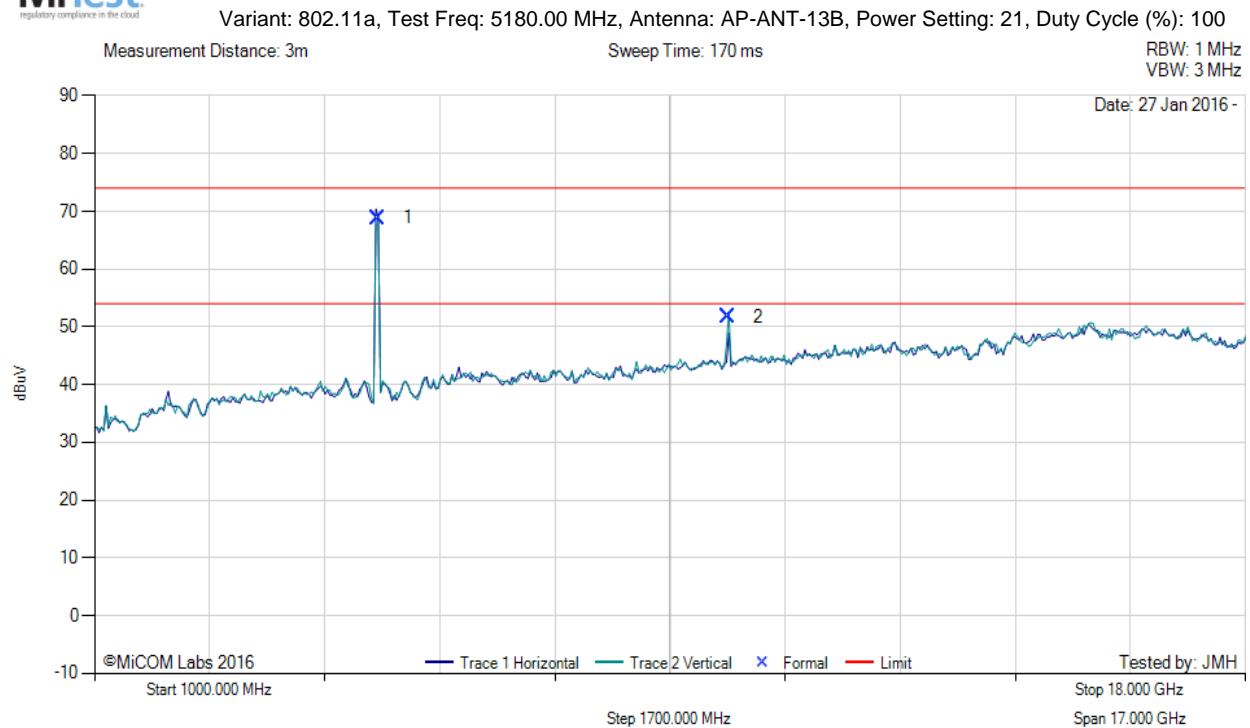
## A.1. Radiated Emissions

### A.1.1. Restricted Band Emissions

#### A.1.1.1. AP-ANT-13B



#### 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	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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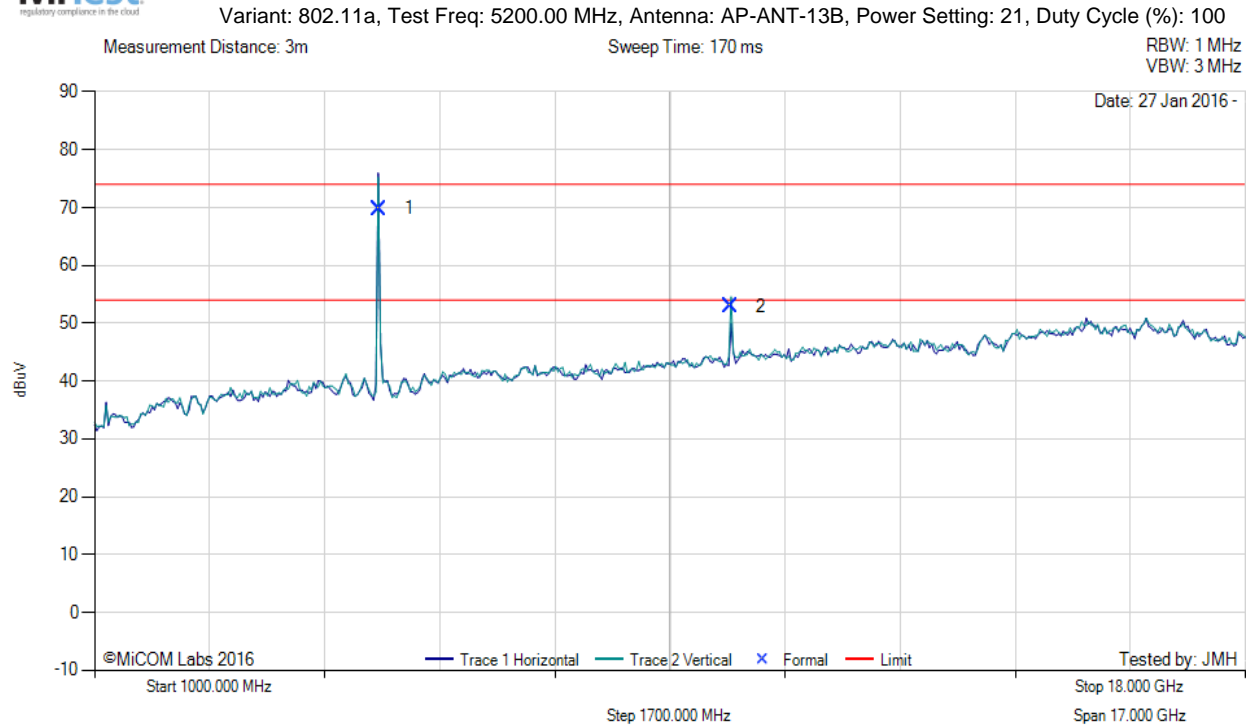
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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



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	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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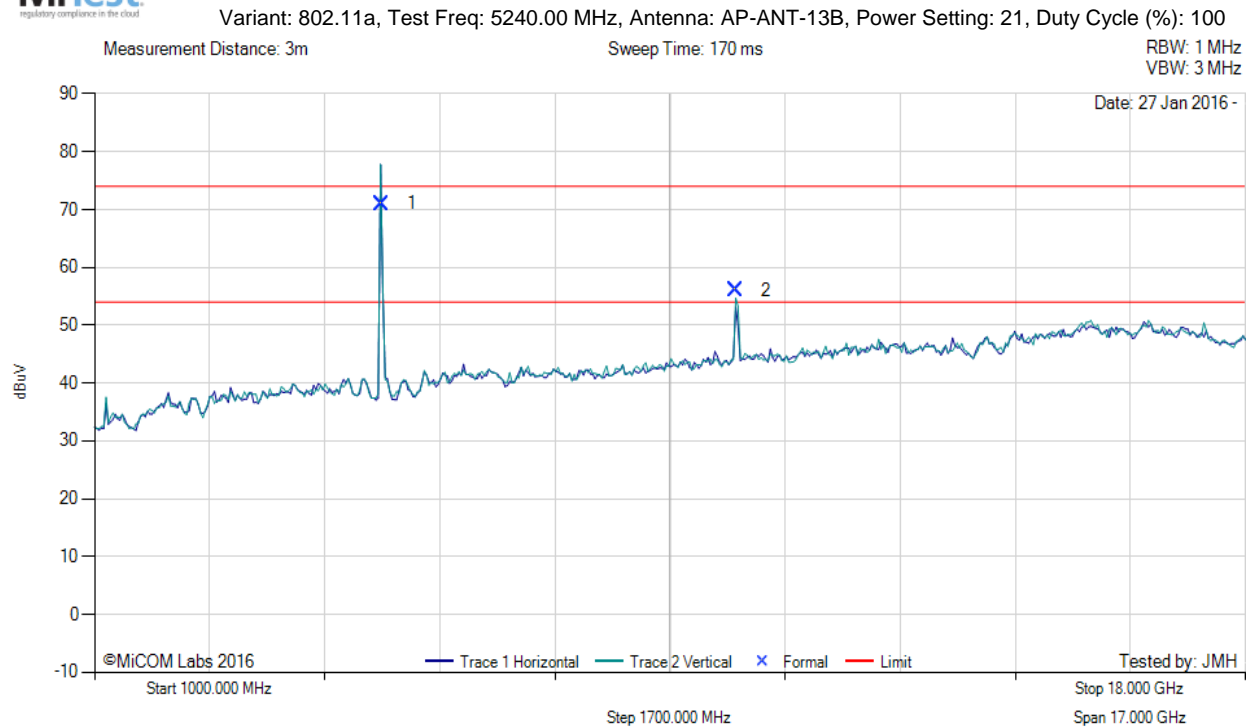
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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



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	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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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5745.00 MHz, Antenna: AP-ANT-13B, Power Setting: 15, Duty Cycle (%): 100

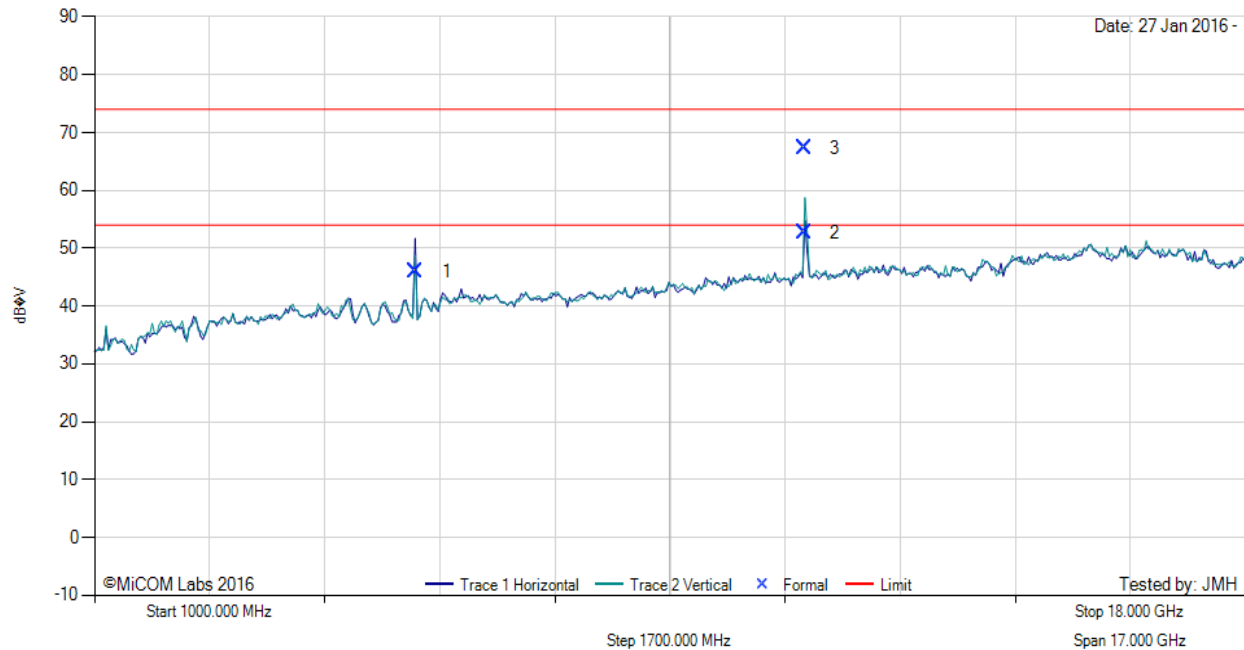
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 27 Jan 2016 -



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	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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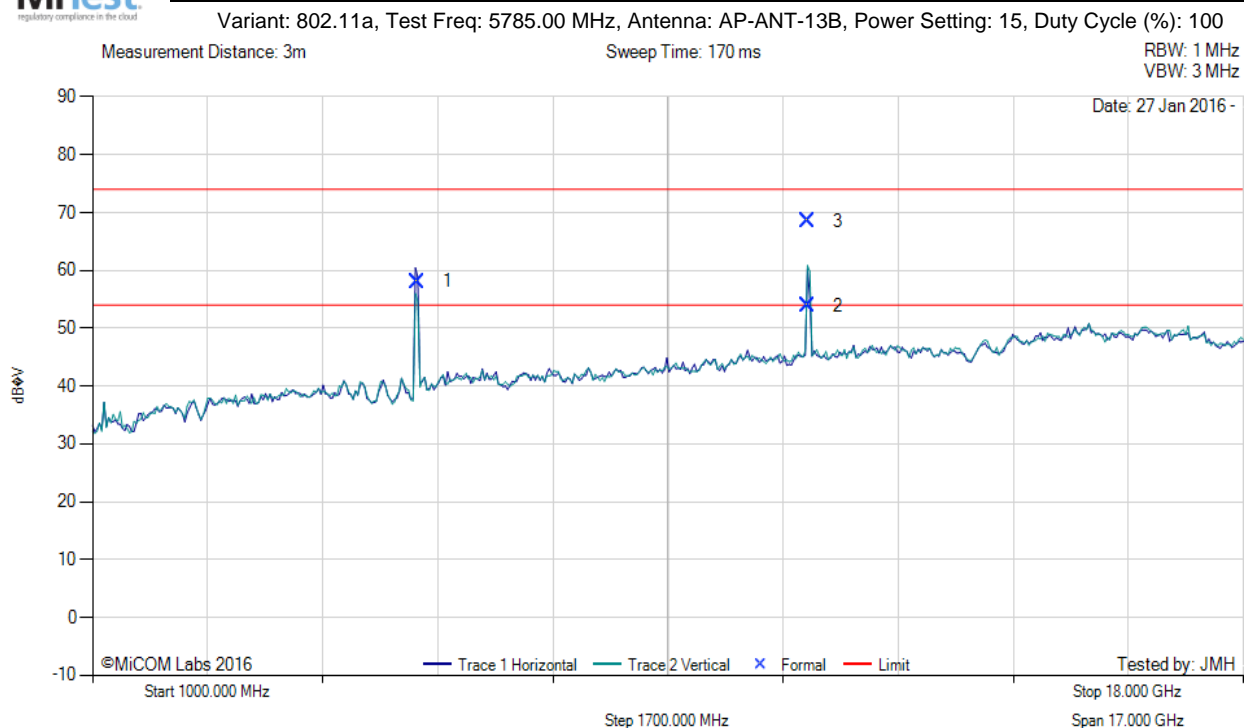
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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



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	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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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5825.00 MHz, Antenna: AP-ANT-13B, Power Setting: 14, Duty Cycle (%): 100

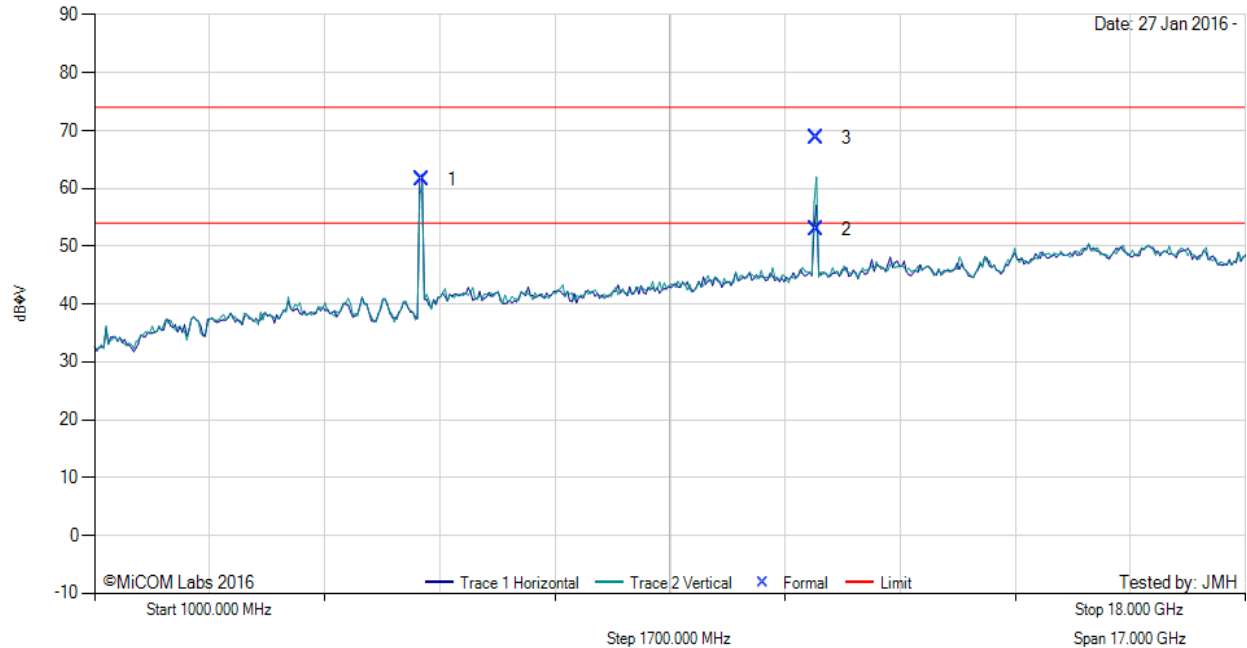
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 27 Jan 2016 -



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	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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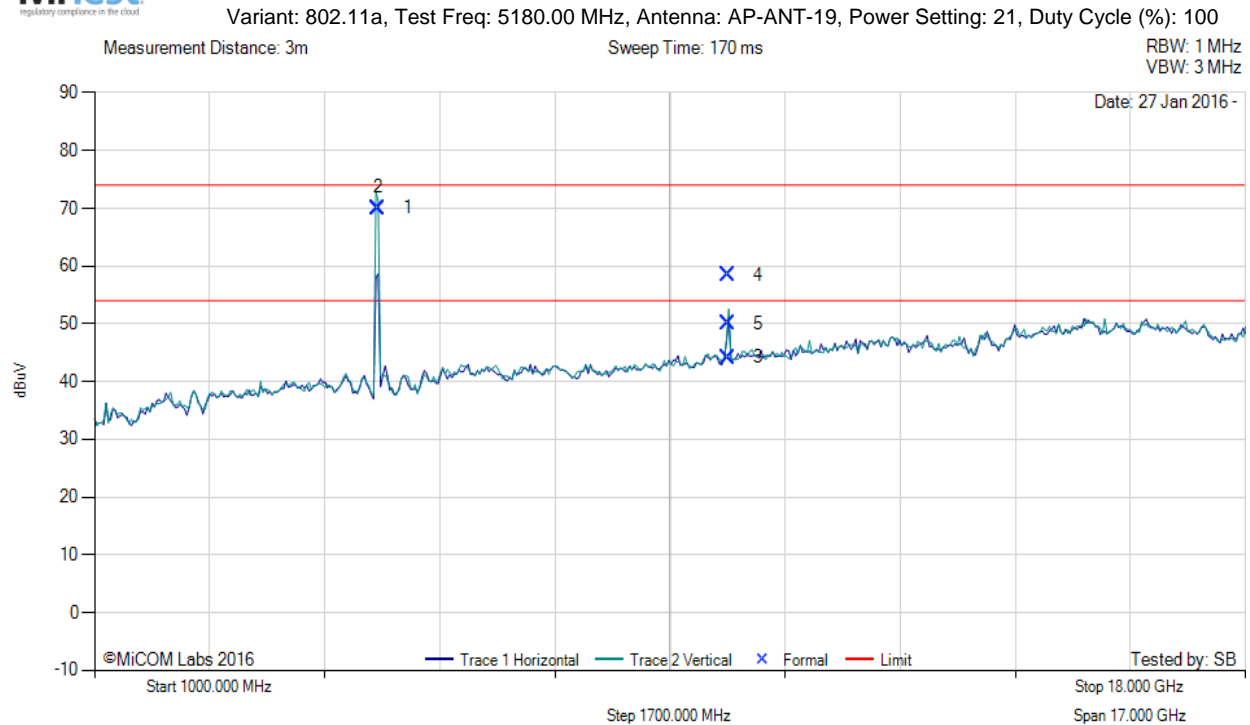


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#### A.1.1.2. AP-ANT-19



#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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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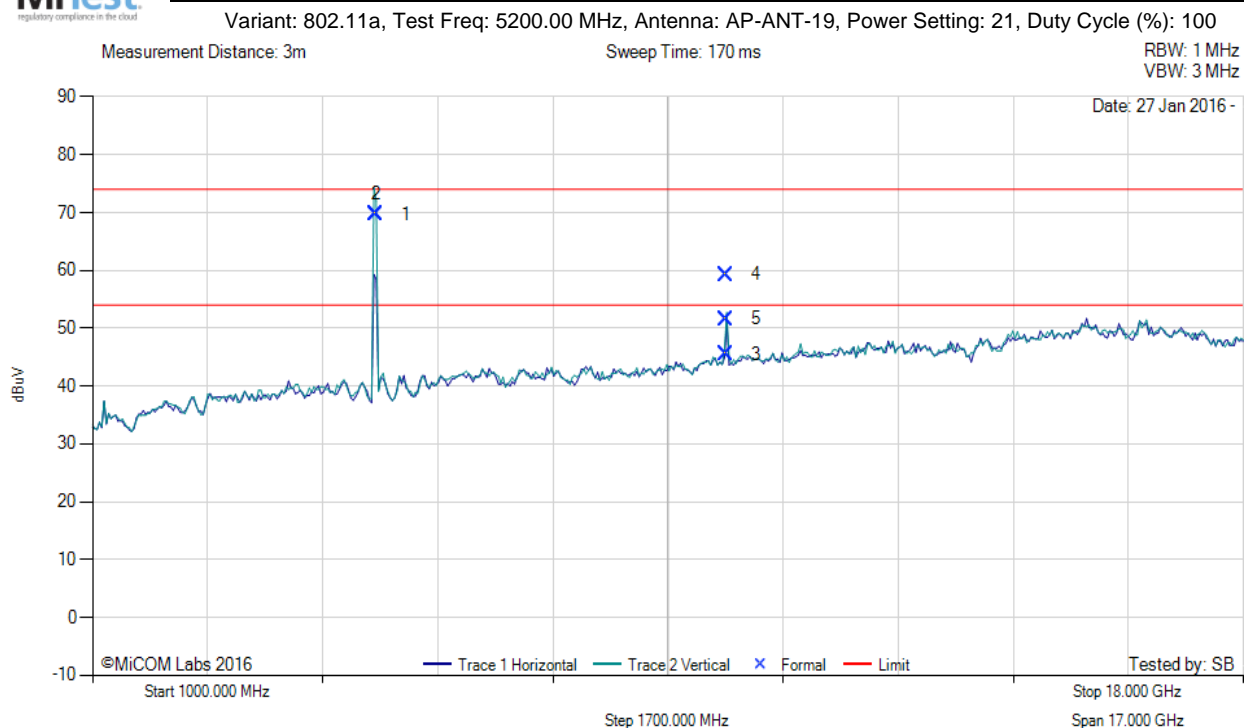
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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5240.00 MHz, Antenna: AP-ANT-19, Power Setting: 21, Duty Cycle (%): 100

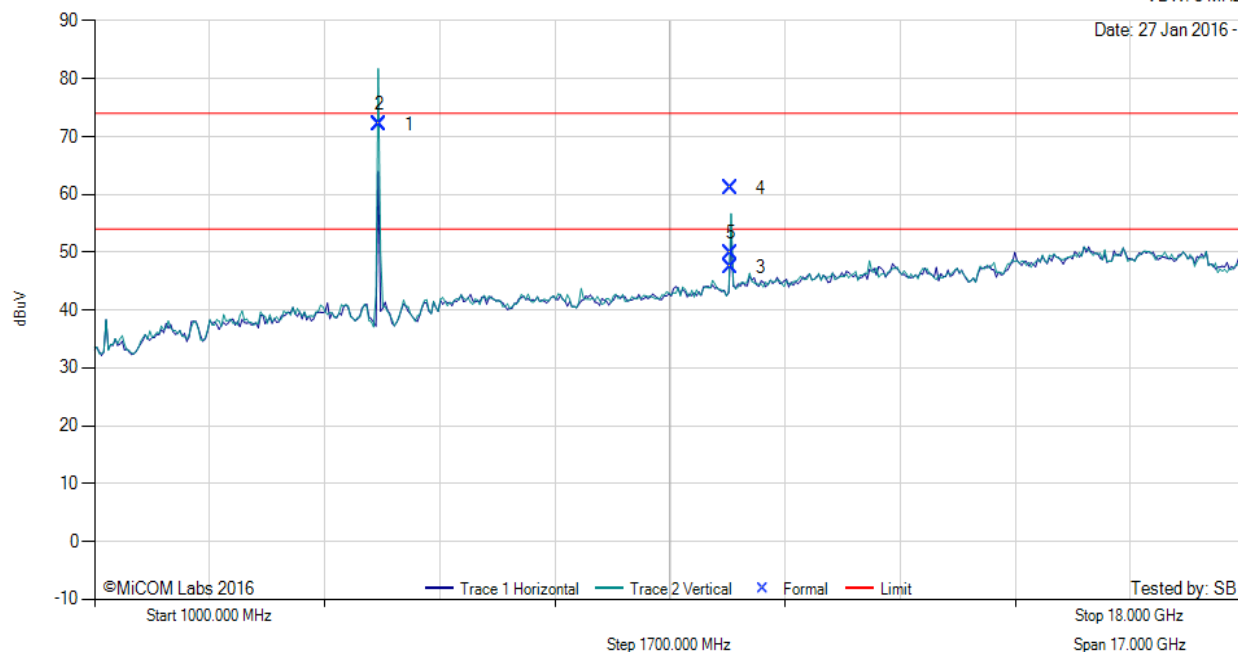
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 27 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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  
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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5745.00 MHz, Antenna: AP-ANT-19, Power Setting: 17, Duty Cycle (%): 100

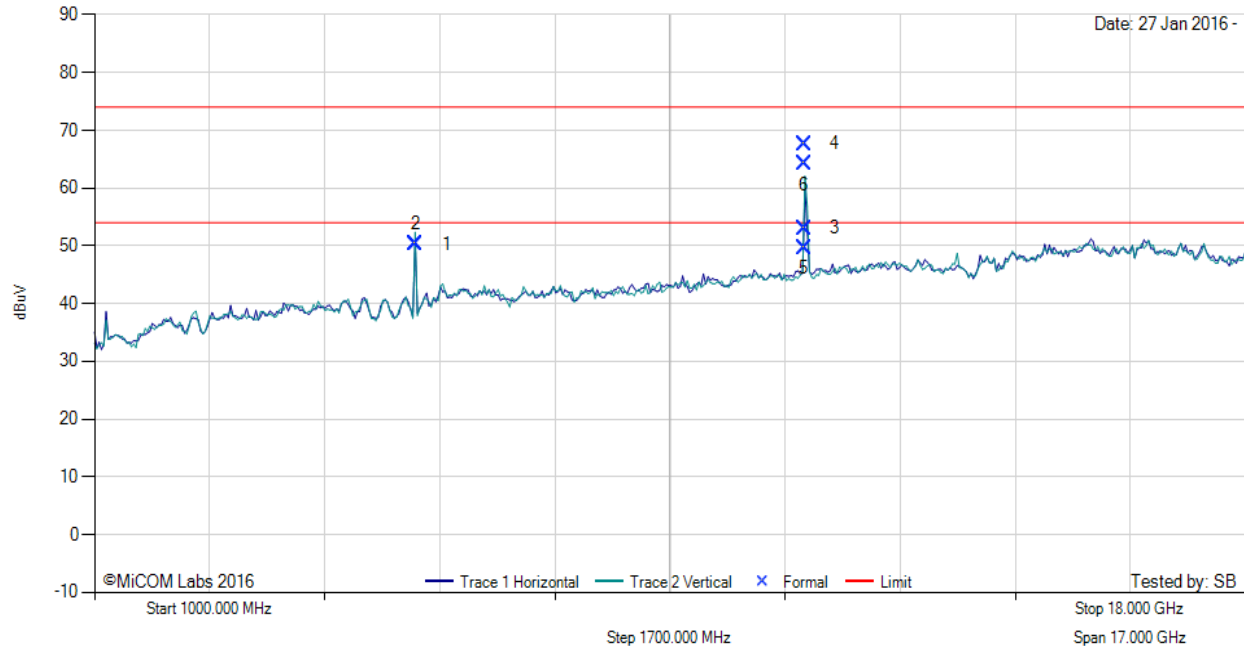
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 27 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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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# RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5785.00 MHz, Antenna: AP-ANT-19, Power Setting: 17, Duty Cycle (%): 100

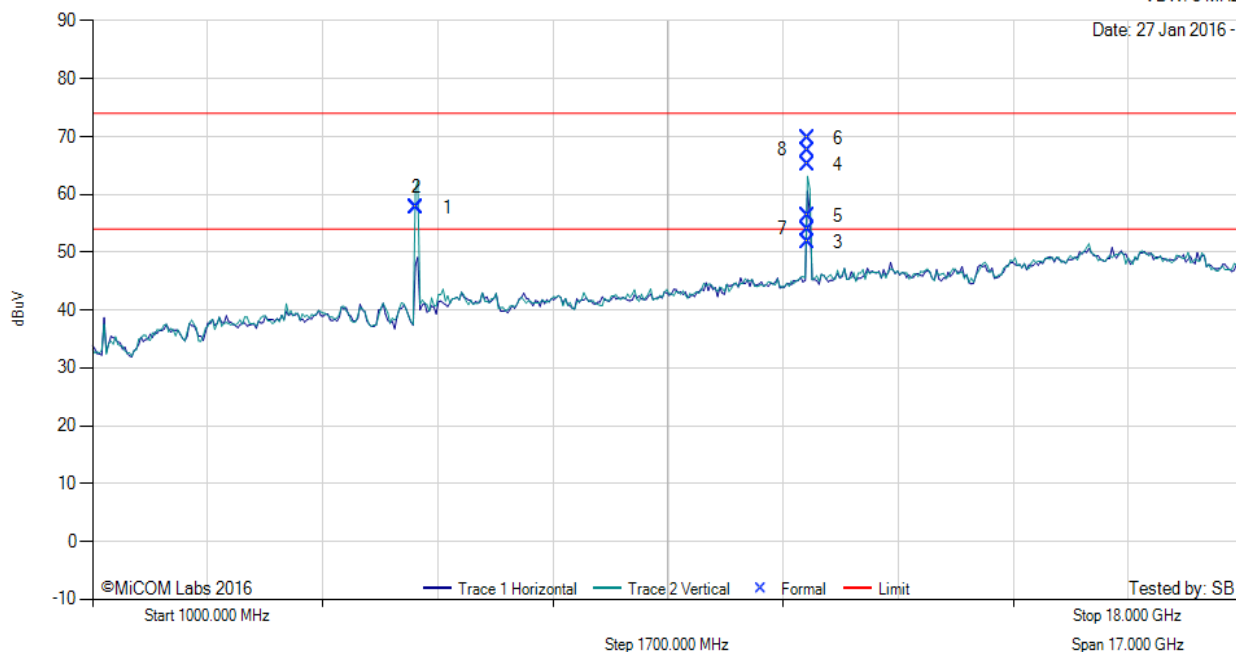
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 27 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5825.00 MHz, Antenna: AP-ANT-19, Power Setting: 16, Duty Cycle (%): 100

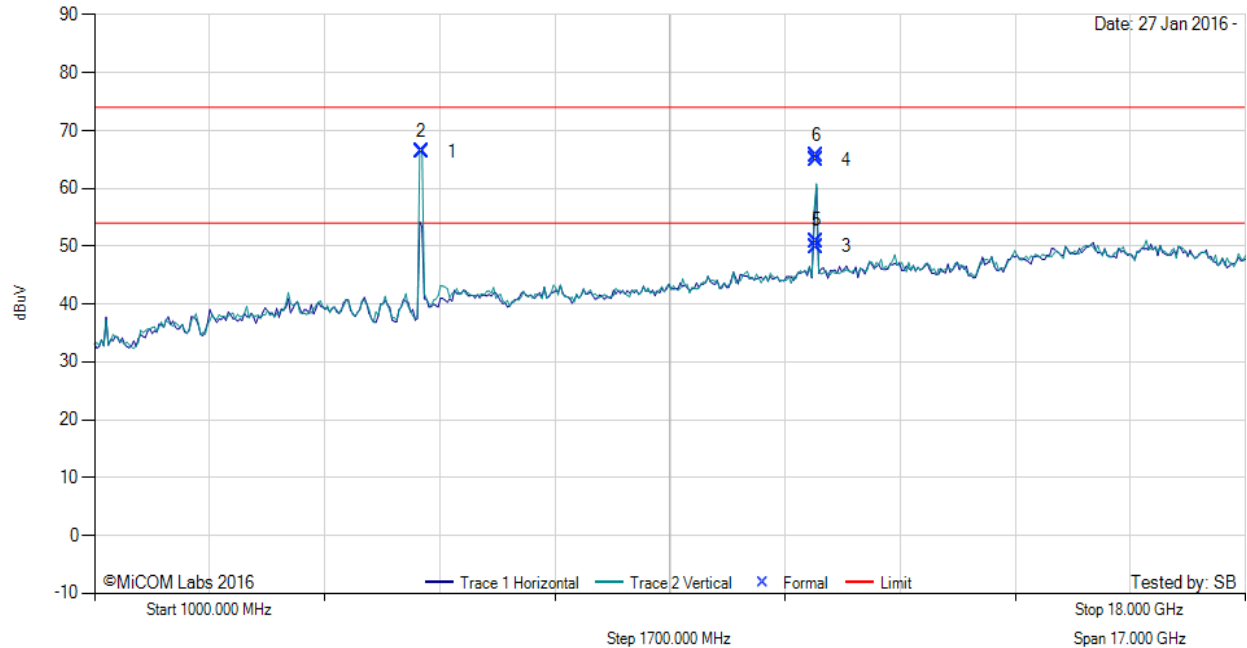
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 27 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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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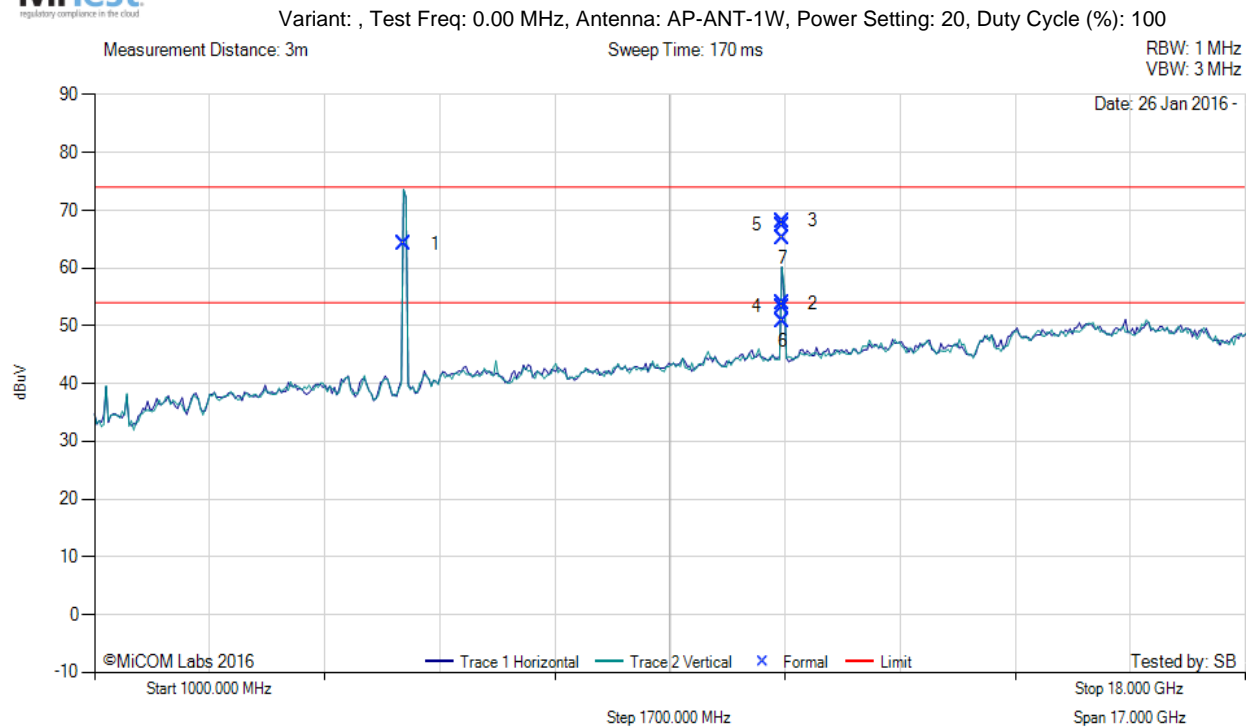


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**To:** FCC CFR 47 Part 15 Subpart E 15.407  
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### A.1.1.3. AP-ANT-1W



#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5500.00 MHz, Antenna: AP-ANT-1W, Power Setting: 21, Duty Cycle (%): 100

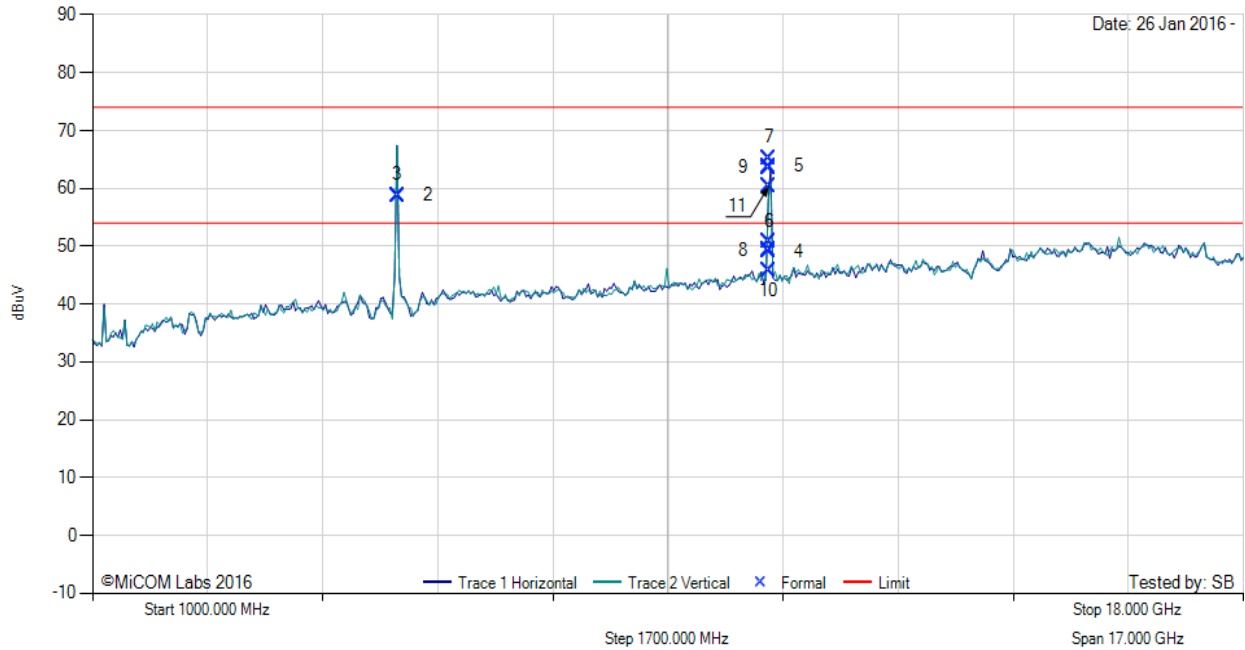
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 26 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

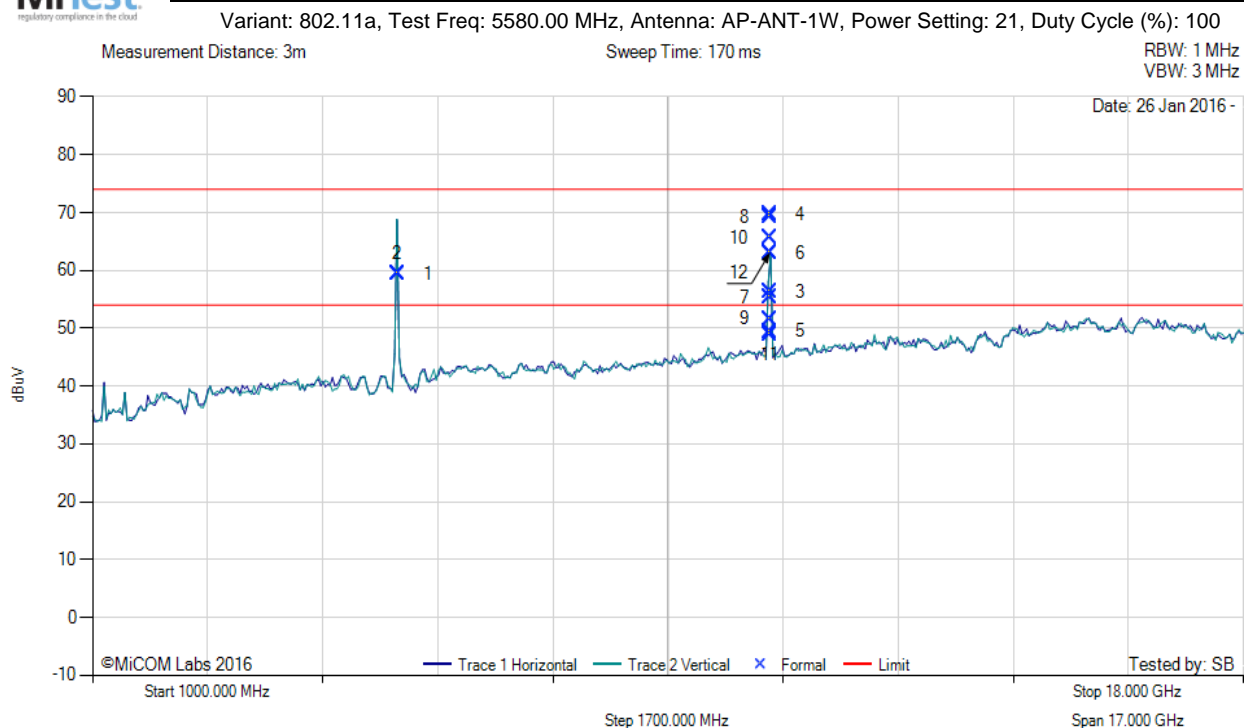
**Test Notes:** EUT on 150cm Table powered by PDSine 9001GR

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### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5720.00 MHz, Antenna: AP-ANT-1W, Power Setting: 20, Duty Cycle (%): 100

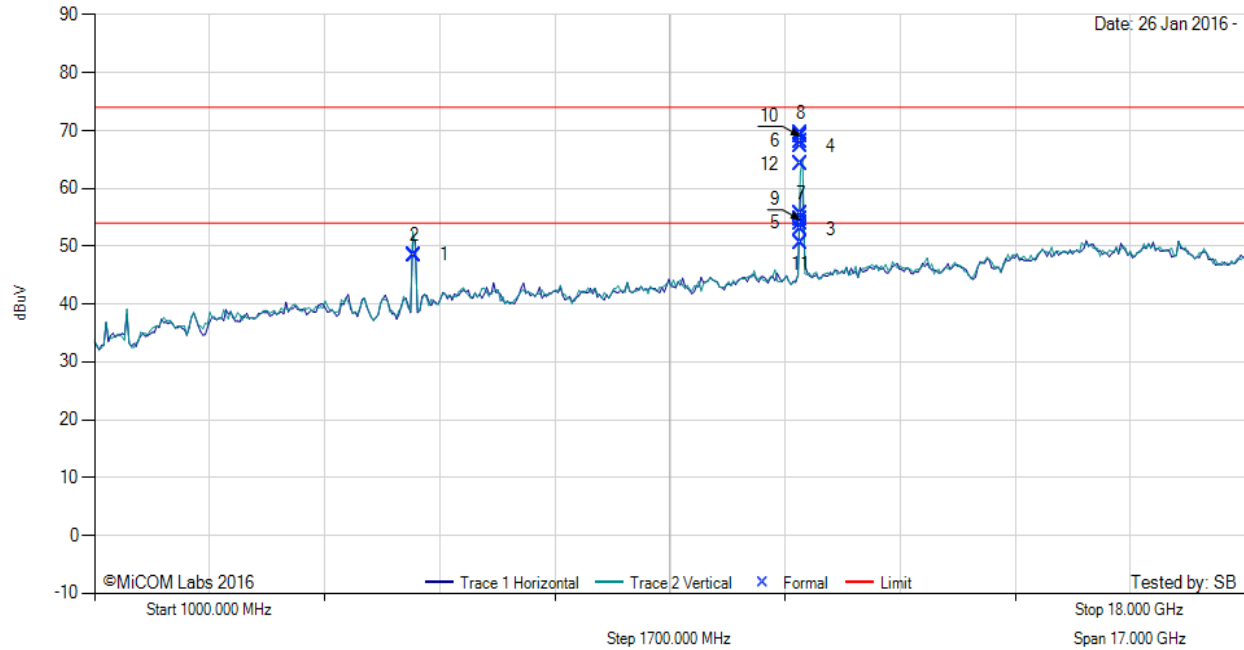
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 26 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

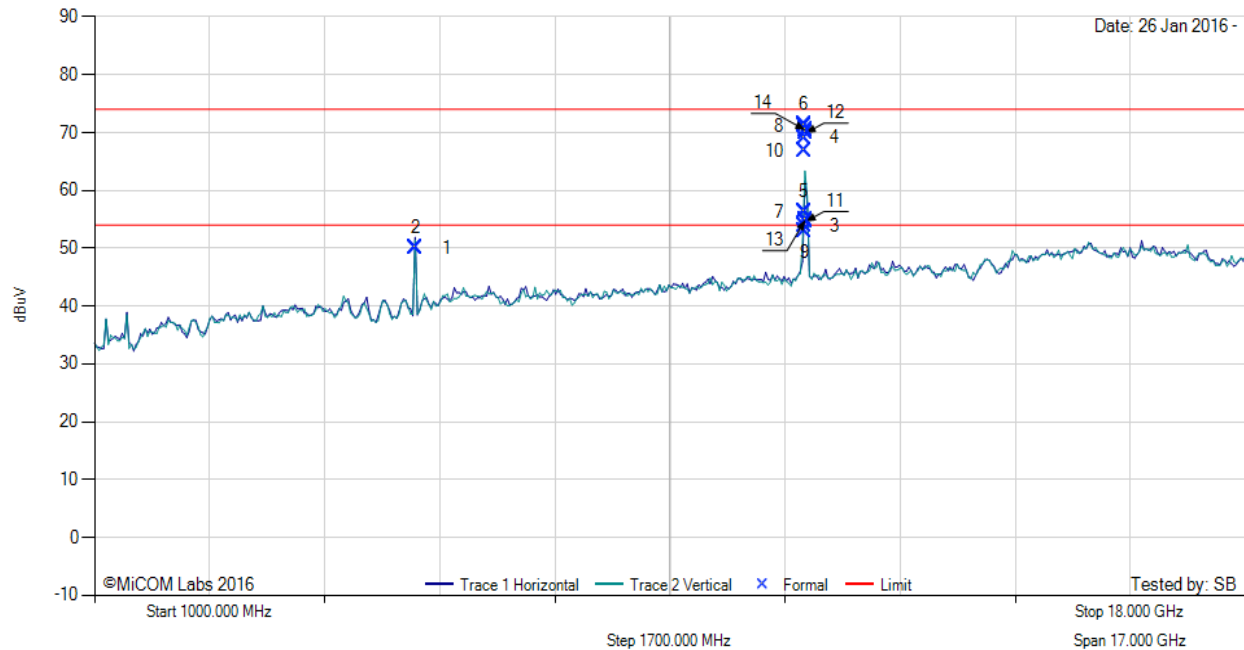
Variant: 802.11a, Test Freq: 5745.00 MHz, Antenna: AP-ANT-1W, Power Setting: 21, Duty Cycle (%): 100

Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz  
VBW: 3 MHz

Date: 26 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

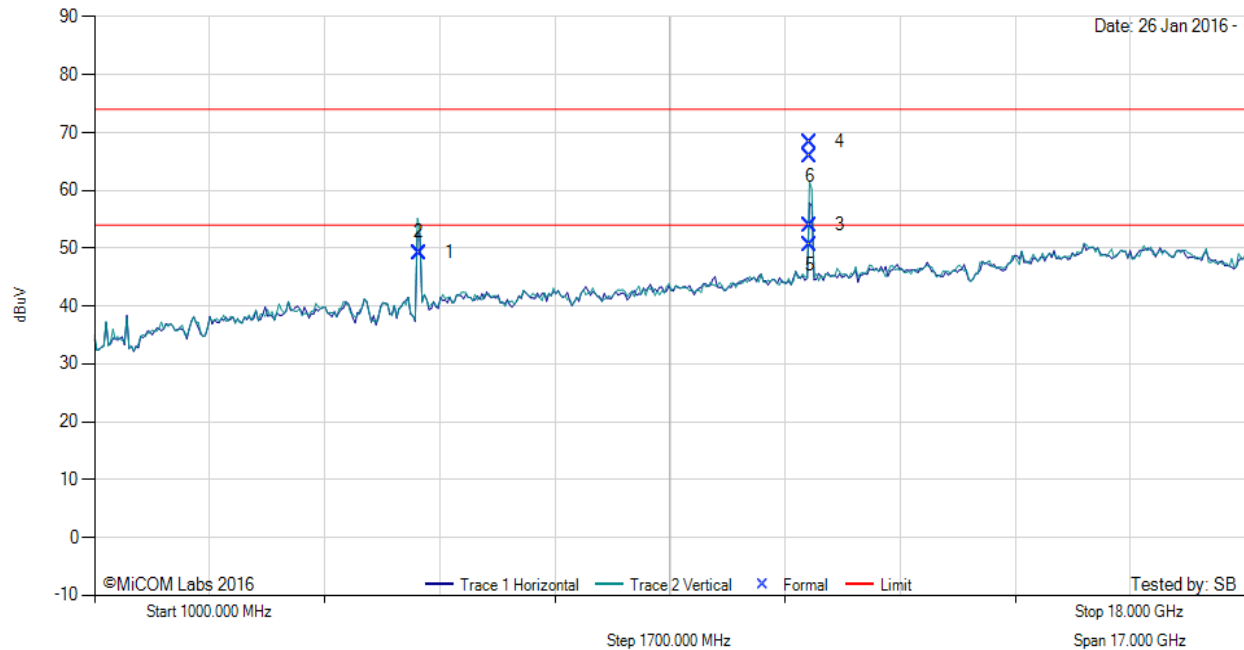
Variant: 802.11a, Test Freq: 5785.00 MHz, Antenna: AP-ANT-1W, Power Setting: 16, Duty Cycle (%): 100

Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz  
VBW: 3 MHz

Date: 26 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5825.00 MHz, Antenna: AP-ANT-1W, Power Setting: 16, Duty Cycle (%): 100

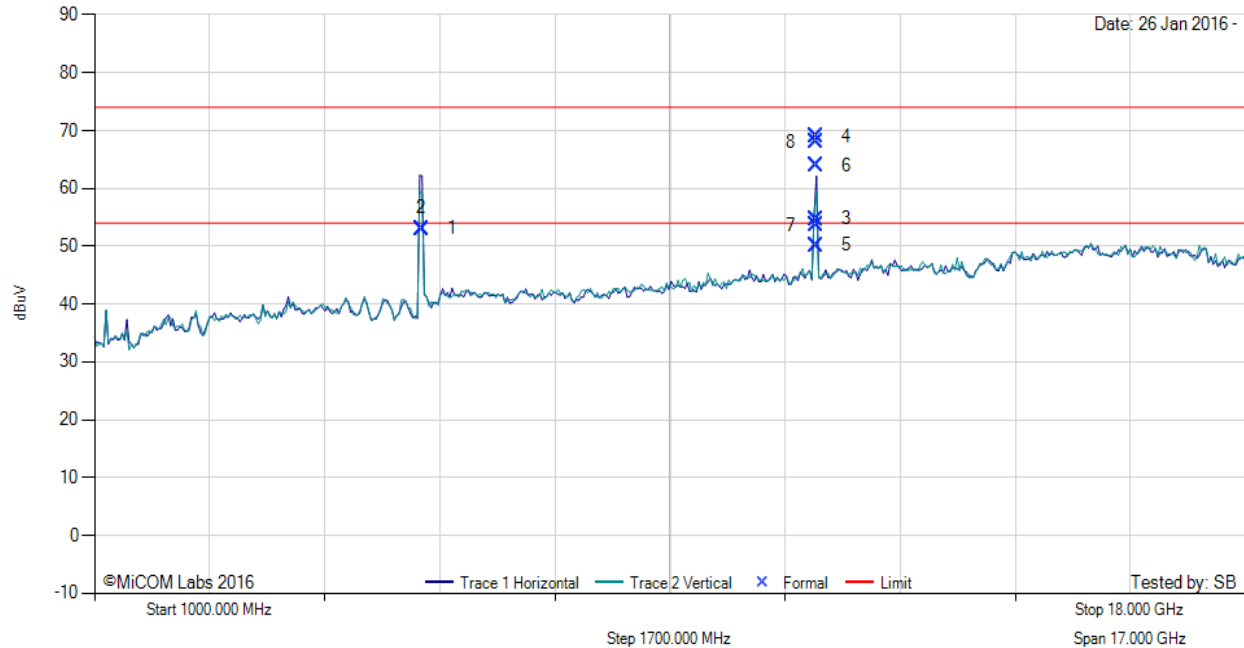
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 26 Jan 2016 -



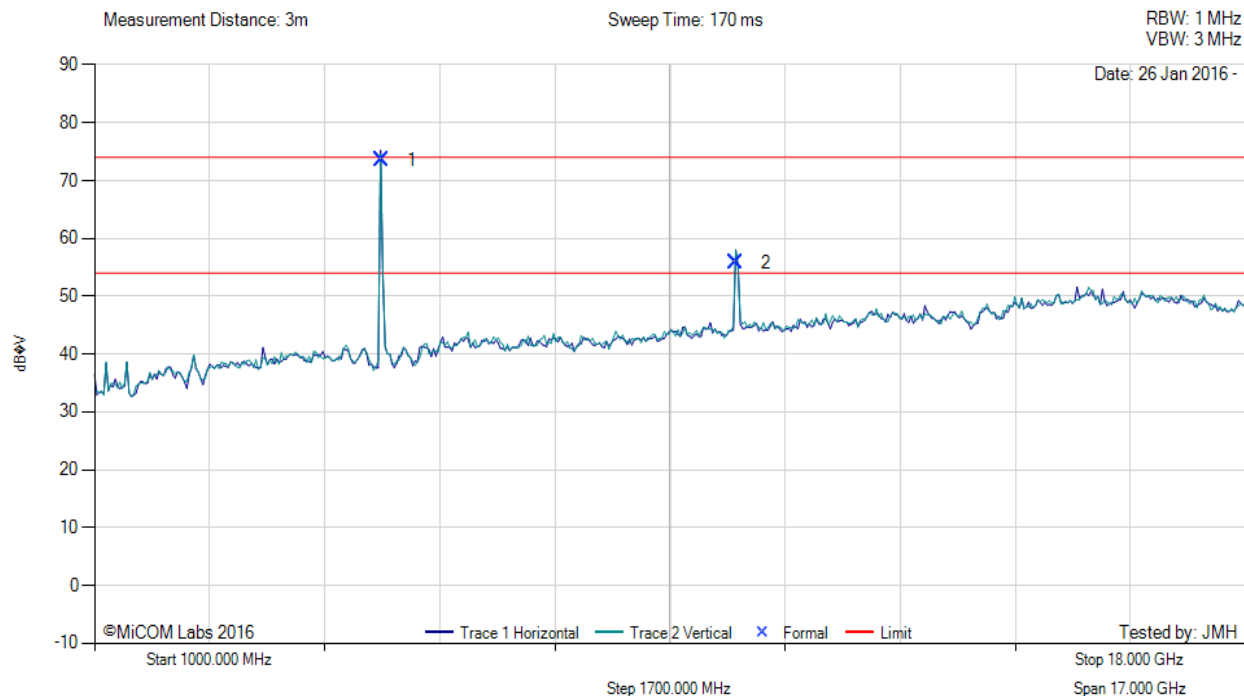
Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1	5831.19	59.46	3.84	-10.22	53.08	Fundamental	Horizontal	151	0	--	--	
2	5831.19	59.46	3.84	-10.22	53.08	Peak (NRB)	Horizontal	151	0	--	--	Pass
5	11652.43	49.18	5.48	-4.46	50.20	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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Variant: 802.11a, Test Freq: 5240.00 MHz, Antenna: 1W, Power Setting: 21, Duty Cycle (%): 100



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

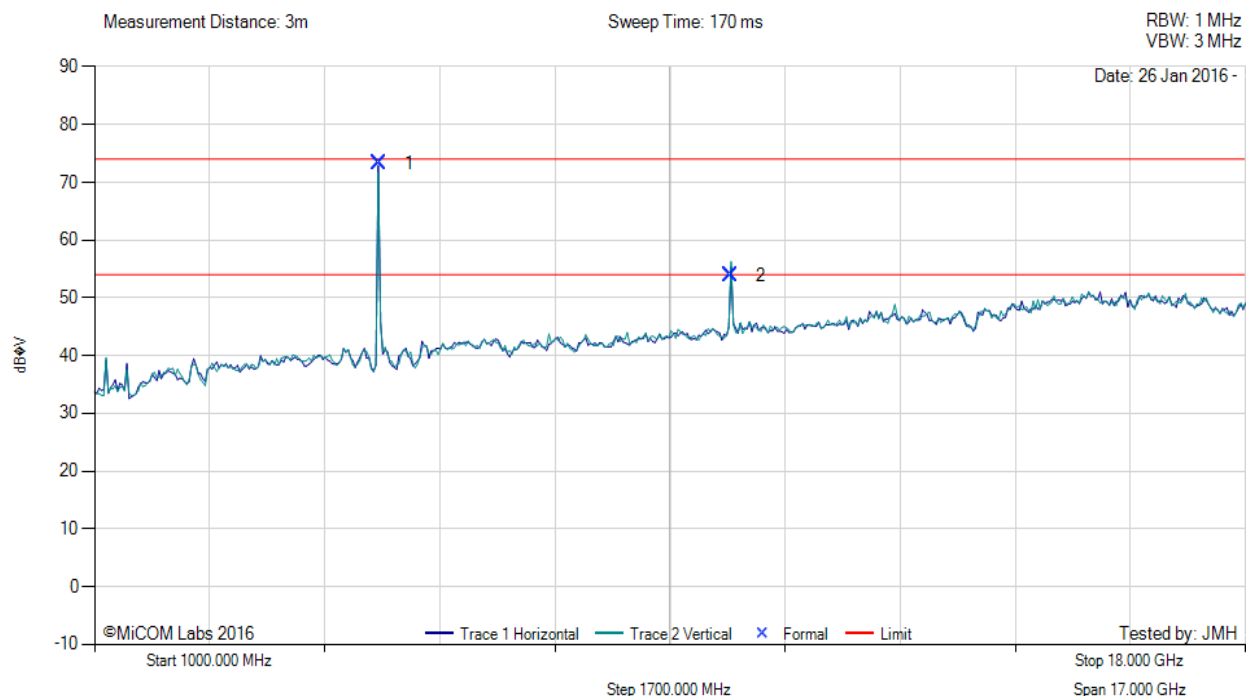
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Variant: 802.11a, Test Freq: 5200.00 MHz, Antenna: 1W, Power Setting: 21, Duty Cycle (%): 100



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	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

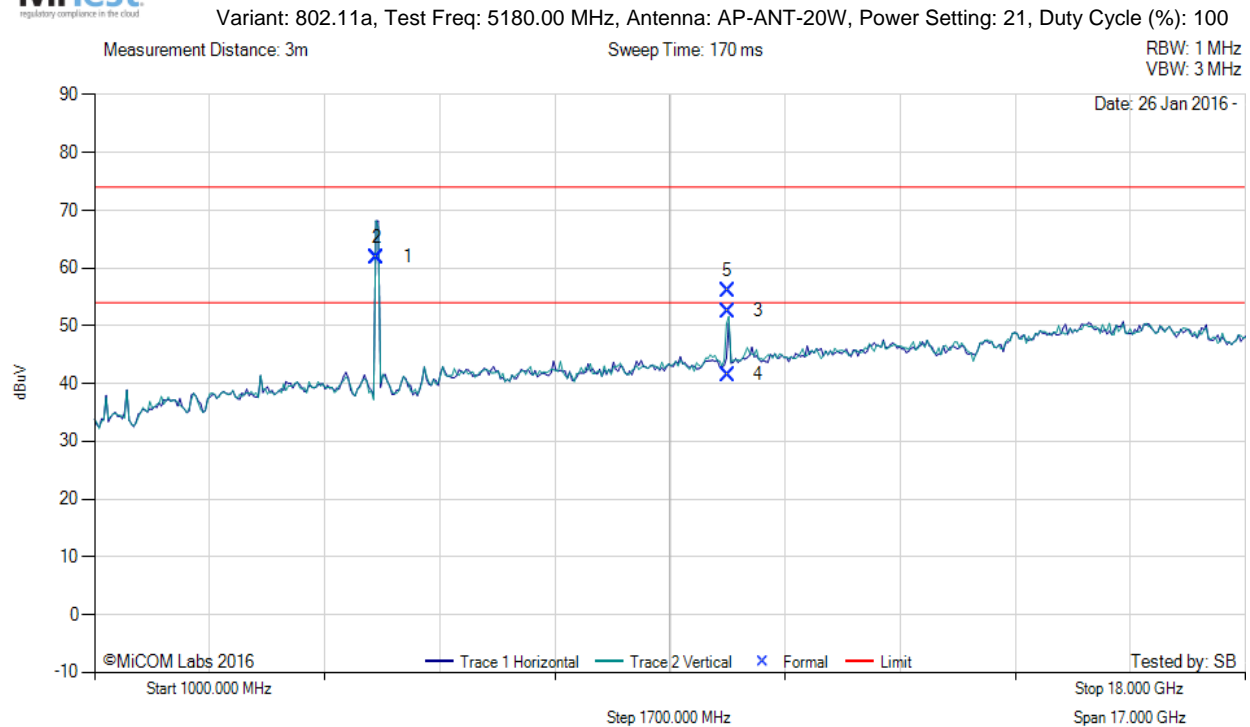
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#### A.1.1.4. AP-ANT-20W



#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

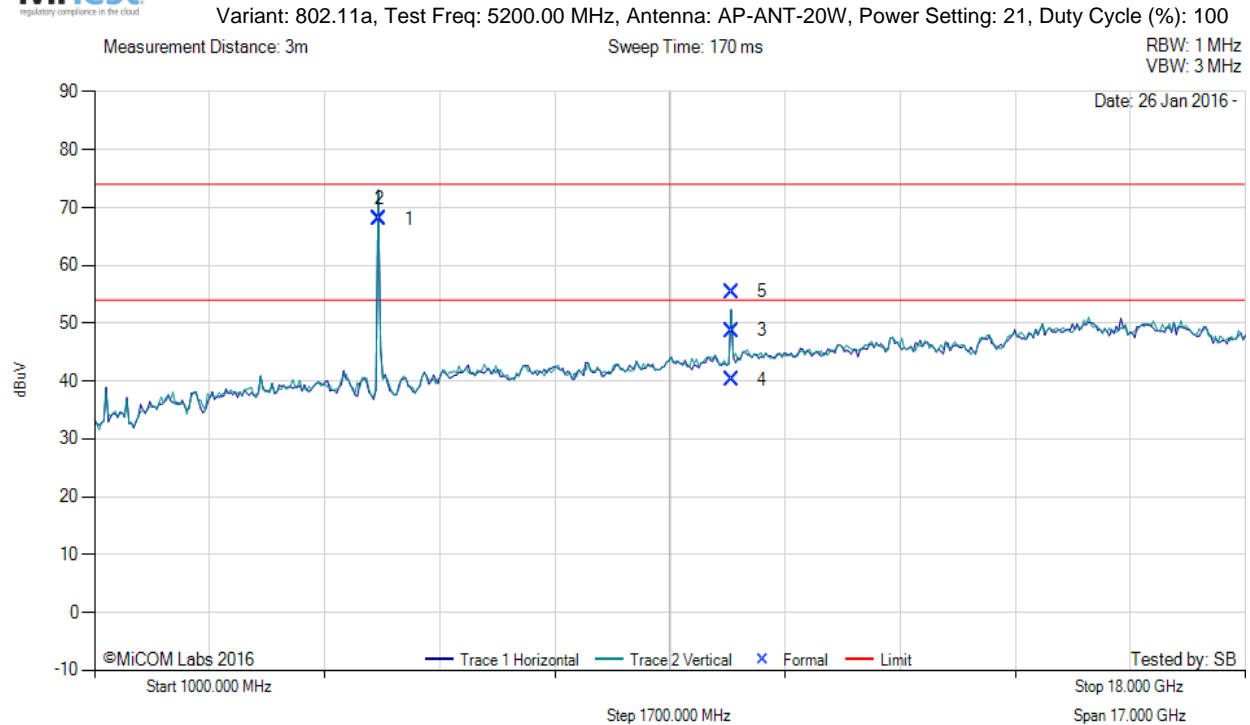
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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5240.00 MHz, Antenna: AP-ANT-20W, Power Setting: 21, Duty Cycle (%): 100

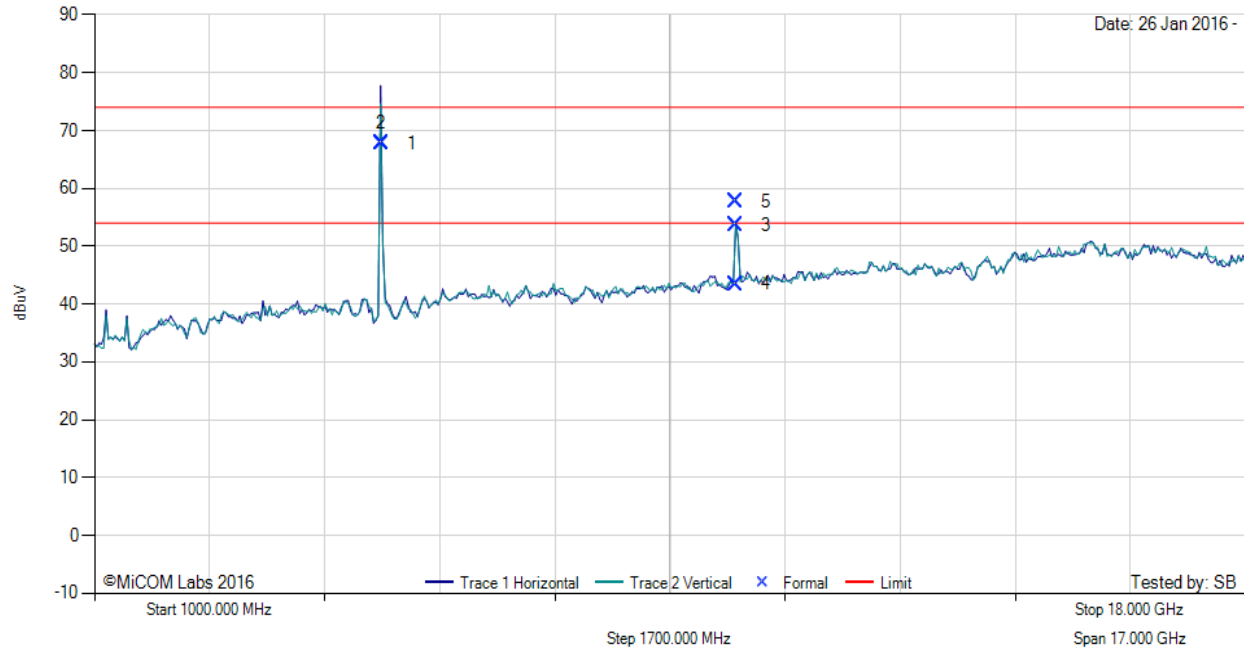
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 26 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

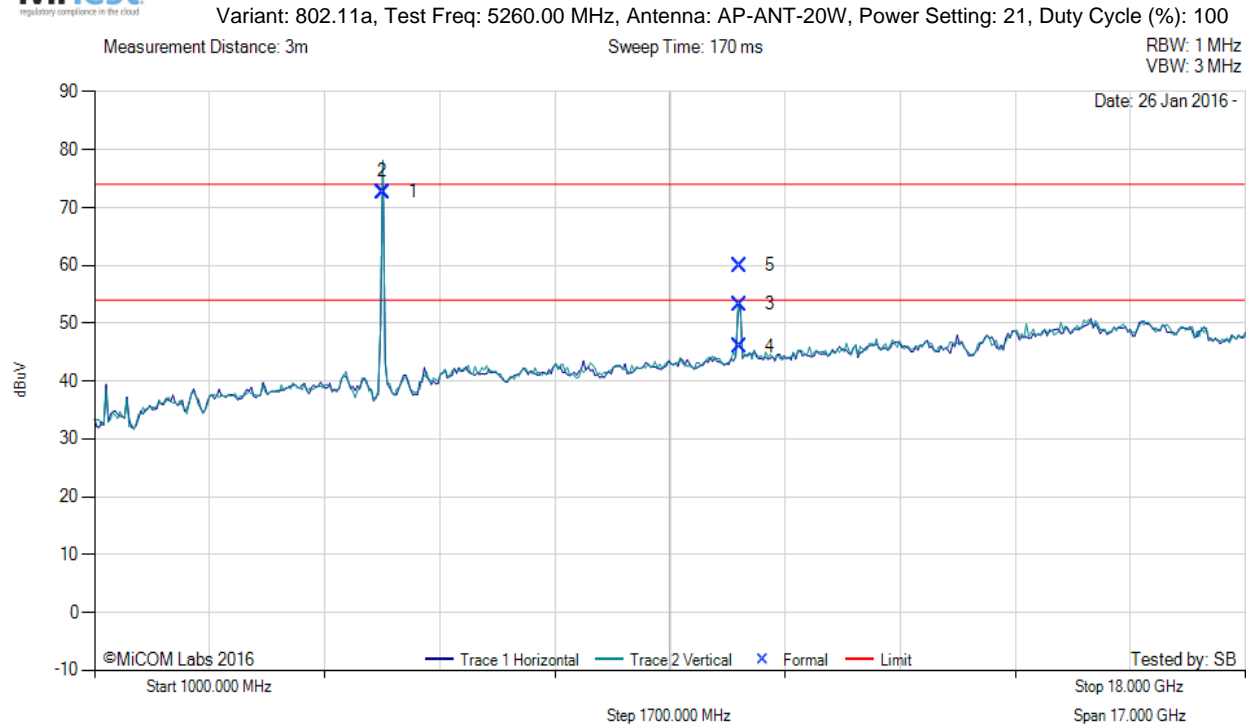
**Test Notes:** EUT on 150cm Table powered by PDSine 9001GR

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### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

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**Title:** Aruba Networks, Inc. APIN0334, APIN0335  
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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5300.00 MHz, Antenna: AP-ANT-20W, Power Setting: 21, Duty Cycle (%): 100

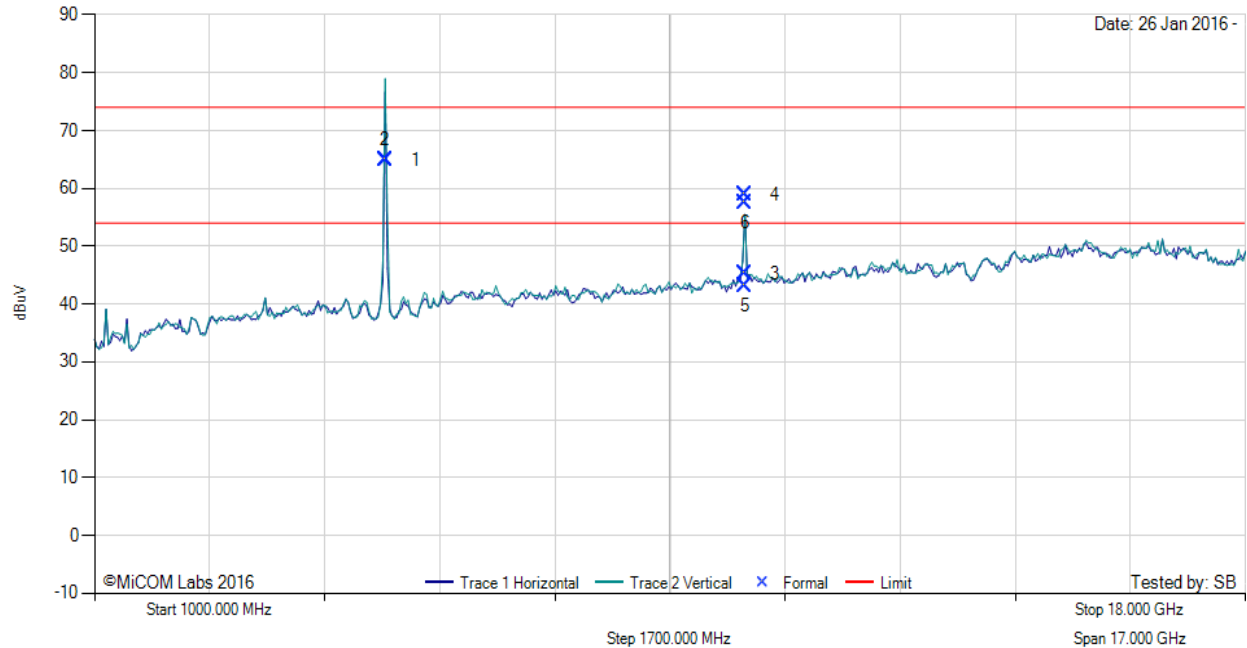
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 26 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5320.00 MHz, Antenna: AP-ANT-20W, Power Setting: 21, Duty Cycle (%): 100

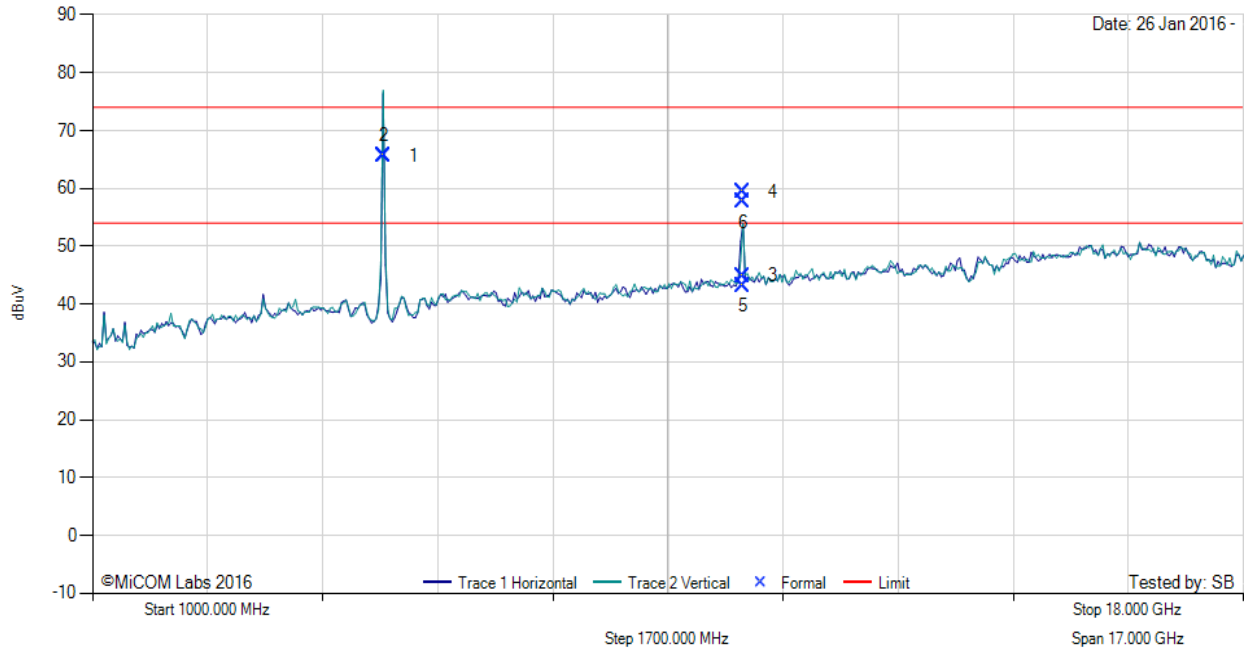
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 26 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5500.00 MHz, Antenna: AP-ANT-20W, Power Setting: 21, Duty Cycle (%): 100

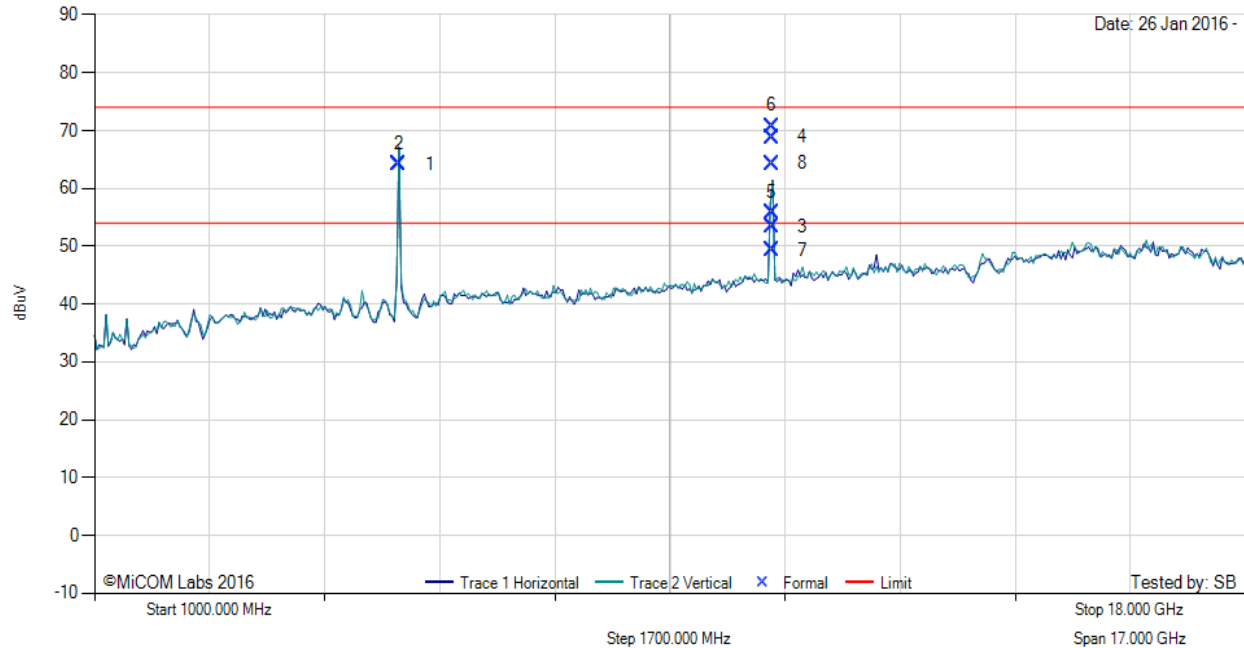
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 26 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

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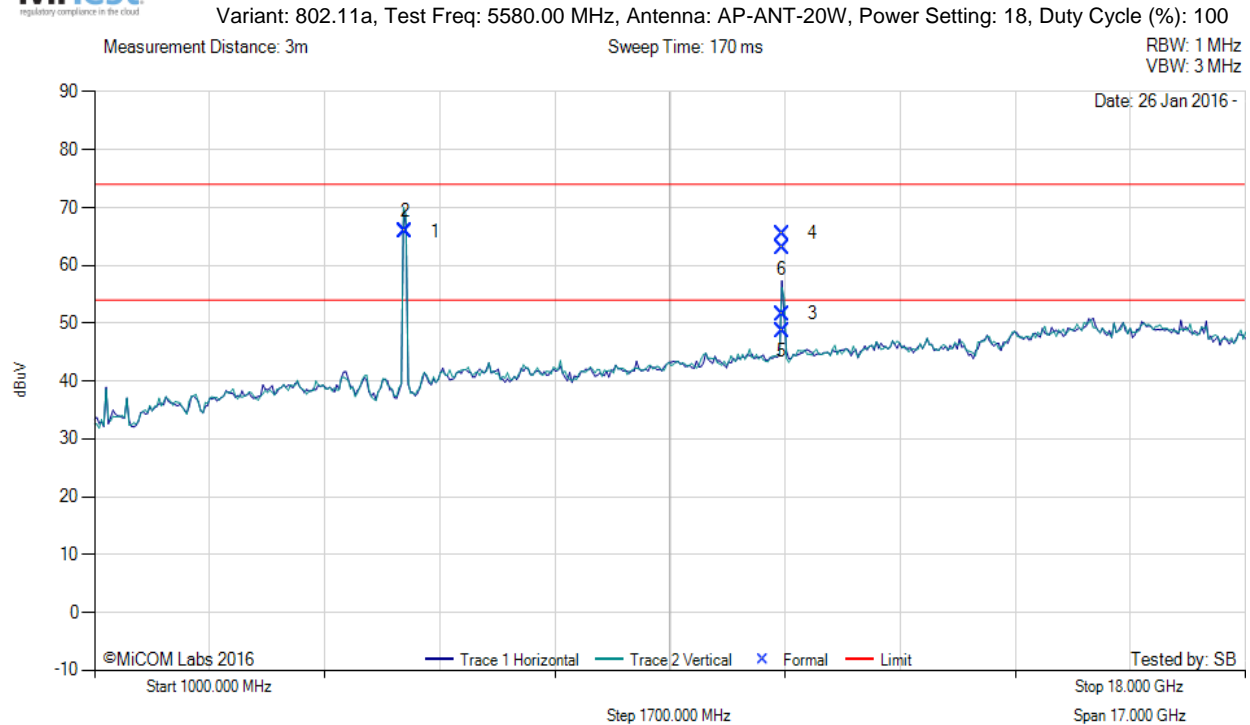
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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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

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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5720.00 MHz, Antenna: AP-ANT-20W, Power Setting: 18, Duty Cycle (%): 100

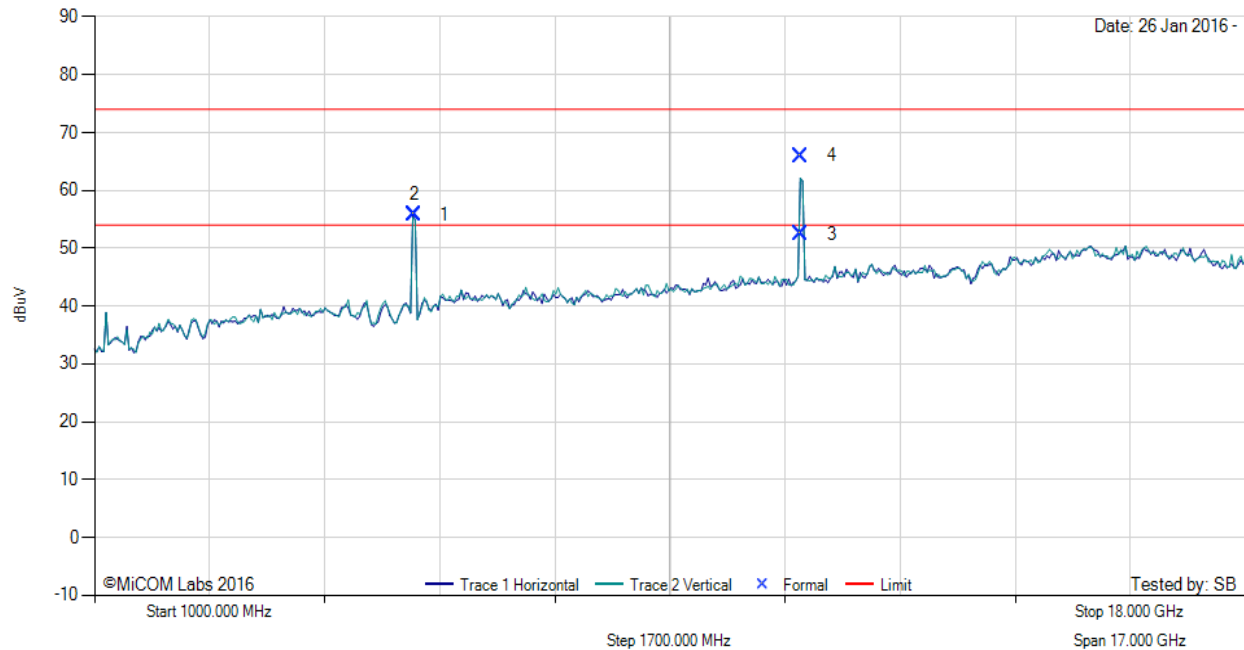
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 26 Jan 2016 -



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	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

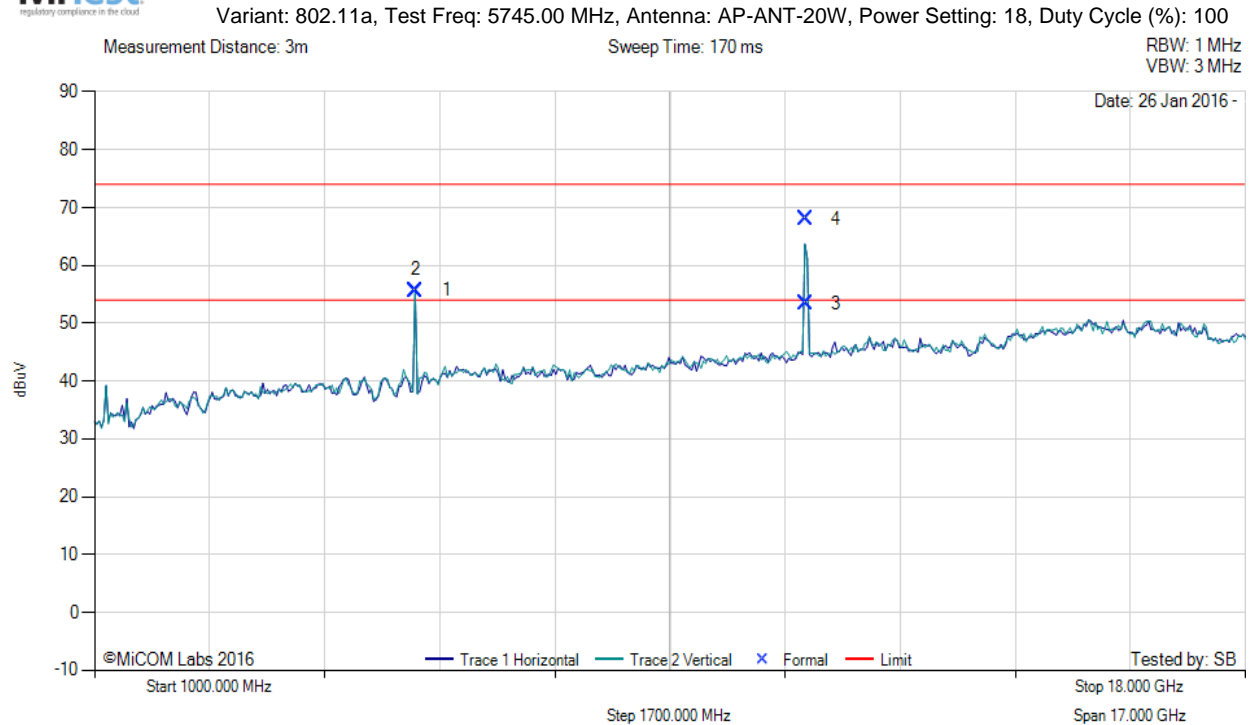
**Test Notes:** EUT on 150cm Table powered by PDSine 9001GR

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### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

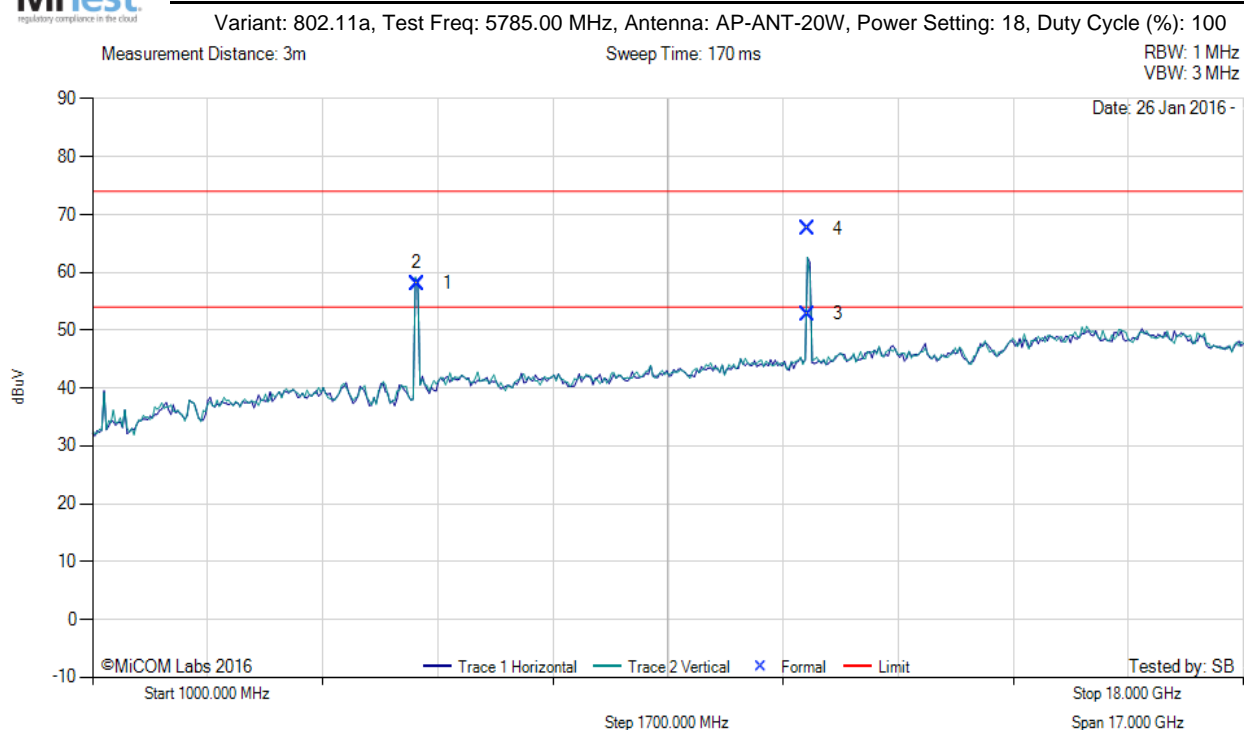


Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1	5749.86	62.44	3.85	-10.63	55.66	Fundamental	Horizontal	101	1	--	--	
2	5749.86	62.44	3.85	-10.63	55.66	Peak (NRB)	Horizontal	101	1	--	--	Pass
3	11498.40	52.74	5.46	-4.82	53.38	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

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# RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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  
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#### RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11a, Test Freq: 5825.00 MHz, Antenna: AP-ANT-20W, Power Setting: 18, Duty Cycle (%): 100

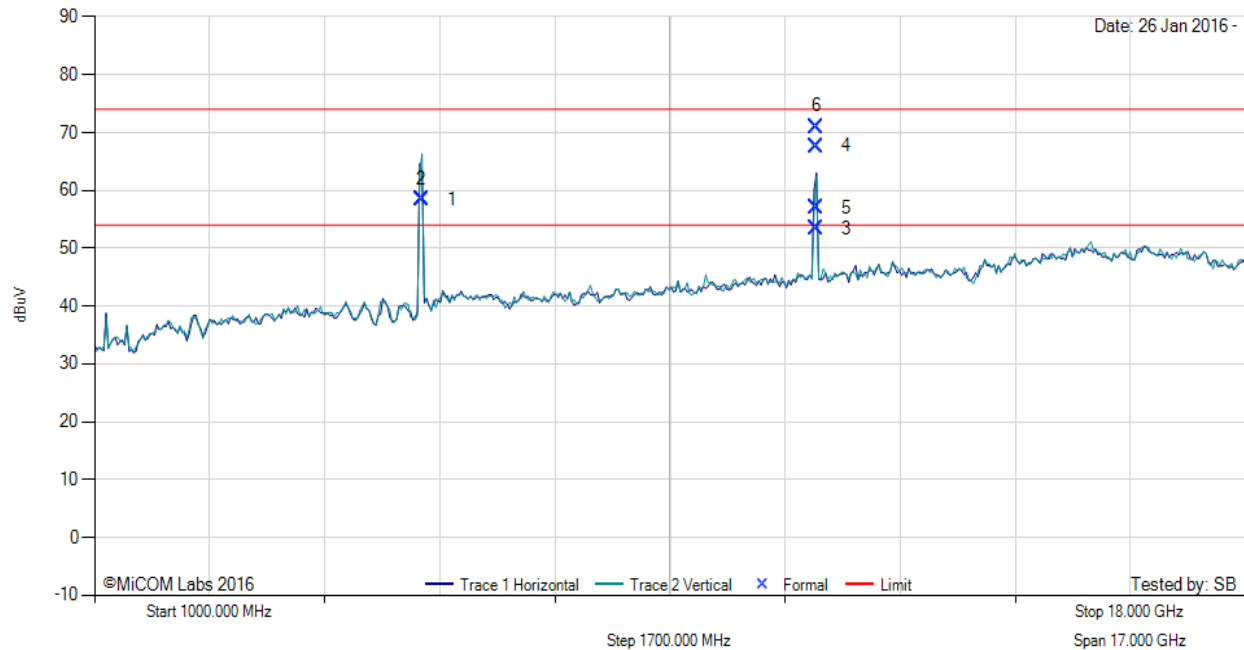
Measurement Distance: 3m

Sweep Time: 170 ms

RBW: 1 MHz

VBW: 3 MHz

Date: 26 Jan 2016 -



Num	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/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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