

TEST REPORT ADDENDUM - RADIATED

FROM



Test of: Aruba Networks, Inc. APIN0334, APIN0335

to

To: FCC Subpart C 15.247 (DTS), IC RSS-247

Test Report Serial No.: ARUB196-U3_Radiated Rev A

Issue Date: 6th May 2016

Master Document Number	Addendum Reports
ARUB196-U3_Master	ARUB196-U3_Conducted
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	ARUB196-U26 (FCC Part 15B & ICES-003)



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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 (Restricted Bands)			
Standard:	FCC CFR 47 Part 15 Subpart C 15.247 (DTS)	Ambient Temp. (°C):	20.0 - 24.5
Test Heading:	Radiated Spurious and Band-Edge Emissions	Rel. Humidity (%):	32 - 45
Standard Section(s):	15.205, 15.209	Pressure (mBars):	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for Radiated Spurious and Band-Edge Emissions (Restricted Bands)

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 Radiated Spurious and Band-Edge Measurement were per the Radiated Test Set-up specified in this document.

Limits for [Restricted Bands](#)

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:

Given receiver input reading of 51.5 dBmV; Antenna Factor of 8.5 dB; Cable Loss of 1.3 dB; Falloff Factor of 0 dB, an Amplifier Gain of 26 dB and Notch Filter Loss of 1 dB. The Field Strength (FS) of the measured emission is:

$$FS = 51.5 + 8.5 + 1.3 - 26.0 + 1 = 36.3 \text{ dBmV/m}$$

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

$$\text{Level (dBmV/m)} = 20 * \text{Log (level (mV/m))}$$

$$40 \text{ dBmV/m} = 100 \text{ mV/m}$$

$$48 \text{ dBmV/m} = 250 \text{ mV/m}$$

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:



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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
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.

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(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

Antenna:	AP-ANT-13B	Variant:	802.11b
Antenna Gain (dBi):	4.40	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	JMH

Test Measurement Results

Num	Frequency MHz	Raw dB μ V	Cable Loss	AF dB	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
#1	2411.05	56.13	2.69	-11.80	47.02	Fundamental	Horizontal	151	97	--	--	
#2	9648.06	48.73	5.29	-6.08	47.94	Peak (NRB)	Vertical	151	47	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-13B	Variant:	802.11b
Antenna Gain (dBi):	4.40	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2437.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2441.00	57.30	2.72	-11.72	48.30	Fundamental	Horizontal	101	1	--	--	
#2	2441.00	57.30	2.72	-11.72	48.30	Peak (NRB)	Horizontal	101	1	--	--	Pass
#3	9747.81	46.98	5.29	-6.23	46.04	Peak (NRB)	Vertical	182	0	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-13B	Variant:	802.11b
Antenna Gain (dBi):	4.40	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2457.95	56.83	2.73	-11.68	47.88	Fundamental	Horizontal	101	1	--	--	
#2	2457.95	56.84	2.73	-11.68	47.89	Peak (NRB)	Horizontal	101	1	--	--	Pass
#3	9847.82	43.86	5.39	-5.94	43.31	Peak (NRB)	Vertical	101	1	--	--	Pass

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

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2.1.2. AP-ANT-19

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-19	Variant:	802.11b
Antenna Gain (dBi):	3.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	JMH

Test Measurement Results

Num	Frequency MHz	Raw dB μ V	Cable Loss	AF dB	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
#1	2410.04	56.15	2.69	-11.80	47.04	Fundamental	Vertical	151	29	--	--	
#2	4823.95	52.37	3.54	-11.15	44.76	Max Avg	Vertical	172	102	54.0	-9.2	Pass
#3	4823.95	57.35	3.54	-11.15	49.74	Max Peak	Vertical	172	102	74.0	-24.3	Pass
#4	9648.01	55.22	5.29	-6.08	54.43	Peak (NRB)	Vertical	151	76	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-19	Variant:	802.11b
Antenna Gain (dBi):	3.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2437.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2435.53	62.45	2.72	-11.73	53.44	Fundamental	Vertical	151	1	--	--	
#2	9748.03	54.61	5.29	-6.23	53.67	Peak (NRB)	Vertical	151	66	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-19	Variant:	802.11b
Antenna Gain (dBi):	3.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2461.04	67.12	2.74	-11.68	58.18	Fundamental	Vertical	151	0	--	--	
#2	9847.98	55.24	5.39	-5.94	54.69	Peak (NRB)	Vertical	151	17	--	--	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

Antenna:	AP-ANT-1W	Variant:	802.11b
Antenna Gain (dBi):	3.80	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	JMH

Test Measurement Results

Num	Frequency MHz	Raw dB μ V	Cable Loss	AF dB	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
#1	2410.46	54.64	2.69	-11.80	45.53	Fundamental	Horizontal	101	98	--	--	
#2	7234.49	48.52	4.26	-7.34	45.44	Peak (NRB)	Horizontal	101	98	--	--	Pass
#3	9647.98	51.18	5.29	-6.08	50.39	Peak (NRB)	Horizontal	101	98	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-1W	Variant:	802.11b
Antenna Gain (dBi):	3.80	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2437.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2438.03	57.97	2.72	-11.73	48.96	Fundamental	Horizontal	101	1	--	--	
#2	7309.98	46.05	4.23	-7.29	42.99	Max Avg	Horizontal	151	10	54.0	-11.0	Pass
#3	7309.98	55.10	4.23	-7.29	52.04	Max Peak	Horizontal	151	10	74.0	-22.0	Pass
#4	9747.93	51.83	5.29	-6.23	50.89	Peak (NRB)	Horizontal	101	341	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-1W	Variant:	802.11b
Antenna Gain (dBi):	3.80	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2463.46	62.11	2.74	-11.67	53.18	Fundamental	Horizontal	101	1	--	--	
#2	9848.05	49.94	5.39	-5.94	49.39	Peak (NRB)	Horizontal	101	25	--	--	Pass

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

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2.1.4. AP-ANT-20W

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-20W	Variant:	802.11b
Antenna Gain (dBi):	2.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2413.56	47.00	2.70	-11.79	37.91	Fundamental	Horizontal	101	1	--	--	
#2	2413.56	47.00	2.70	-11.79	37.91	Peak (NRB)	Horizontal	101	1	--	--	Pass

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-20W	Variant:	802.11b
Antenna Gain (dBi):	2.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2437.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2436.03	53.33	2.72	-11.73	44.32	Fundamental	Horizontal	101	1	--	--	
#2	2436.03	53.33	2.72	-11.73	44.32	Peak (NRB)	Horizontal	101	1	--	--	Pass
#3	9748.02	46.72	5.29	-6.23	45.78	Peak (NRB)	Horizontal	101	29	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-20W	Variant:	802.11b
Antenna Gain (dBi):	2.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2461.08	56.24	2.74	-11.68	47.30	Fundamental	Horizontal	101	1	--	--	
#2	2461.08	56.24	2.74	-11.68	47.30	Peak (NRB)	Horizontal	101	1	--	--	Pass
#3	9848.18	43.96	5.39	-5.94	43.41	Peak (NRB)	Horizontal	101	19	--	--	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

Antenna:	AP-ANT-40	Variant:	802.11b
Antenna Gain (dBi):	3.90	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	JMH

Test Measurement Results

Num	Frequency MHz	Raw dB μ V	Cable Loss	AF dB	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
#1	2413.12	54.21	2.70	-11.79	45.12	Fundamental	Vertical	151	11	--	--	
#2	9647.94	52.51	5.29	-6.08	51.72	Peak (NRB)	Vertical	151	52	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-40	Variant:	802.11b
Antenna Gain (dBi):	3.90	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2437.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2437.87	61.26	2.72	-11.73	52.25	Fundamental	Vertical	101	1	--	--	
#2	9747.86	52.85	5.29	-6.23	51.91	Peak (NRB)	Vertical	151	51	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-40	Variant:	802.11b
Antenna Gain (dBi):	3.90	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2463.93	60.90	2.73	-11.67	51.96	Fundamental	Vertical	100	24	--	--	
#2	9847.90	55.22	5.39	-5.94	54.67	Peak (NRB)	Vertical	151	65	--	--	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

Antenna:	AP-ANT-45	Variant:	802.11b
Antenna Gain (dBi):	5.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2410.64	56.62	2.69	-11.80	47.51	Fundamental	Horizontal	151	1	--	--	
#2	7237.97	51.34	4.25	-7.34	48.25	Peak (NRB)	Horizontal	151	0	--	--	Pass
#3	9647.99	53.22	5.29	-6.08	52.43	Peak (NRB)	Vertical	151	57	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-45	Variant:	802.11b
Antenna Gain (dBi):	5.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2437.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2436.03	64.13	2.72	-11.73	55.12	Fundamental	Horizontal	101	1	--	--	
#2	7311.88	47.07	4.24	-7.29	44.02	Max Avg	Horizontal	188	52	54.0	-10.0	Pass
#3	7311.88	55.35	4.24	-7.29	52.30	Max Peak	Horizontal	188	52	74.0	-21.7	Pass
#4	9748.00	58.10	5.29	-6.23	57.16	Peak (NRB)	Vertical	151	67	--	--	Pass

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

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-45	Variant:	802.11b
Antenna Gain (dBi):	5.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2460.96	65.28	2.74	-11.68	56.34	Fundamental	Horizontal	101	0	--	--	
#2	7387.36	45.62	4.29	-7.17	42.74	Max Avg	Horizontal	177	57	54.0	-11.3	Pass
#3	7387.36	54.07	4.29	-7.17	51.19	Max Peak	Horizontal	177	57	74.0	-22.8	Pass
#4	9847.98	52.90	5.39	-5.94	52.35	Peak (NRB)	Vertical	151	58	--	--	Pass

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

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2.1.7. AP-ANT-48

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-48	Variant:	802.11b
Antenna Gain (dBi):	8.50	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	SB

Test Measurement Results

Num	Frequency MHz	Raw dB μ V	Cable Loss	AF dB	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
#1	2411.06	64.70	2.69	-11.80	55.59	Fundamental	Vertical	101	1	--	--	
#2	2411.06	64.70	2.69	-11.80	55.59	Peak (NRB)	Vertical	101	1	--	--	Pass
#3	9648.38	45.54	5.29	-6.08	44.75	Peak (NRB)	Vertical	101	51	--	--	Pass

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-48	Variant:	802.11b
Antenna Gain (dBi):	8.50	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2437.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2438.03	64.68	2.72	-11.73	55.67	Fundamental	Vertical	101	1	--	--	
#2	2438.03	64.72	2.72	-11.73	55.71	Peak (NRB)	Vertical	101	1	--	--	Pass
#3	9748.18	45.77	5.29	-6.23	44.83	Peak (NRB)	Vertical	101	12	--	--	Pass

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	AP-ANT-48	Variant:	802.11b
Antenna Gain (dBi):	8.50	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2461.04	64.70	2.74	-11.68	55.76	Fundamental	Vertical	101	0	--	--	
#2	2461.04	64.70	2.74	-11.68	55.76	Peak (NRB)	Vertical	101	0	--	--	Pass
#3	9848.14	44.74	5.39	-5.94	44.19	Peak (NRB)	Vertical	101	11	--	--	Pass

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2.1.8. Metal Sheet

Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	Metal Sheet	Variant:	802.11b
Antenna Gain (dBi):	2.60	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2412.90	56.63	2.70	-11.79	47.54	Fundamental	Vertical	101	1	--	--	
#2	2412.90	56.70	2.70	-11.79	47.61	Peak (NRB)	Vertical	101	1	--	--	Pass
#3	9648.06	46.15	5.29	-6.08	45.36	Peak (NRB)	Vertical	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

Antenna:	Metal Sheet	Variant:	802.11b
Antenna Gain (dBi):	2.60	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2437.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2435.99	65.01	2.72	-11.73	56.00	Fundamental	Horizontal	151	1	--	--	
#2	2435.99	65.01	2.72	-11.73	56.00	Peak (NRB)	Horizontal	151	1	--	--	Pass
#3	9747.97	51.44	5.29	-6.23	50.50	Peak (NRB)	Vertical	148	195	--	--	Pass

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Equipment Configuration for Radiated Spurious - Restricted Band Emissions

Antenna:	Metal Sheet	Variant:	802.11b
Antenna Gain (dBi):	2.60	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2464.08	66.88	2.73	-11.67	57.94	Fundamental	Horizontal	151	130	--	--	
#2	2464.08	66.88	2.73	-11.67	57.94	Peak (NRB)	Horizontal	151	130	--	--	Pass
#3	2464.08	66.88	2.73	-11.67	57.94	Peak (NRB)	Horizontal	151	130	--	--	Pass
#4	9847.96	55.67	5.39	-5.94	55.12	Peak (NRB)	Vertical	151	130	--	--	Pass

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2.2. Restricted Band-Edge Emissions

2.2.1. AP-ANT-13B

AP-ANT-13B		Band-Edge Freq	Limit 54.0dB μ V/m	Limit 74.0dB μ V/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dB μ V/m	dB μ V/m	
802.11b	2412.00	2390.00	47.60	59.52	18.0
802.11b	2462.00	2483.50	48.36	60.91	18.0
802.11g	2412.00	2390.00	53.02	69.33	16.5
802.11g	2462.00	2483.50	53.82	68.88	17.0
802.11n HT-20	2412.00	2390.00	53.83	68.46	16.5
802.11n HT-20	2462.00	2483.50	52.60	66.99	17.0
802.11n HT-40	2422.00	2390.00	52.84	66.86	12.0
802.11n HT-40	2452.00	2483.50	53.69	69.02	16.0

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-13B	Variant:	802.11b
Antenna Gain (dBi):	4.40	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	18	Tested By:	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	2367.94	13.04	2.71	31.85	47.60	Max Avg	Vertical	135	361	54.0	-6.4	Pass
#2	2381.19	24.87	2.69	31.96	59.52	Max Peak	Vertical	135	361	74.0	-14.5	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-13B	Variant:	802.11g
Antenna Gain (dBi):	4.40	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.00 MBit/s
Power Setting:	16.5	Tested By:	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	2390.00	18.29	2.69	32.04	53.02	Max Avg	Vertical	135	361	54.0	-0.98	Pass
#2	2390.00	34.60	2.69	32.04	69.33	Max Peak	Vertical	135	361	74.0	-4.7	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-13B	Variant:	802.11n HT-20
Antenna Gain (dBi):	4.40	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.50 MBit/s
Power Setting:	16.5	Tested By:	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	2387.84	33.75	2.68	32.03	68.46	Max Peak	Vertical	135	361	74.0	-5.5	Pass
#2	2389.64	19.10	2.69	32.04	53.83	Max Avg	Vertical	135	361	54.0	-0.2	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-13B	Variant:	802.11n HT-40
Antenna Gain (dBi):	4.40	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2422.00	Data Rate:	13.50 MBit/s
Power Setting:	12	Tested By:	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	2383.94	18.17	2.68	31.99	52.84	Max Avg	Vertical	135	361	54.0	-1.2	Pass
#2	2385.29	32.18	2.68	32.00	66.86	Max Peak	Vertical	135	361	74.0	-7.1	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-13B	Variant:	802.11b
Antenna Gain (dBi):	4.40	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	18	Tested By:	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	2483.50	25.81	2.73	32.37	60.91	Max Peak	Vertical	135	361	74.0	-13.1	Pass
#2	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--
#3	2505.90	13.23	2.72	32.41	48.36	Max Avg	Vertical	135	361	54.0	-5.6	Pass

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-13B	Variant:	802.11g
Antenna Gain (dBi):	4.40	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.00 MBit/s
Power Setting:	17	Tested By:	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	2483.50	18.72	2.73	32.37	53.82	Max Avg	Vertical	135	361	54.0	-0.2	Pass
#2	2483.50	33.78	2.73	32.37	68.88	Max Peak	Vertical	135	361	74.0	-5.1	Pass
#3	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-13B	Variant:	802.11n HT-20
Antenna Gain (dBi):	4.40	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.50 MBit/s
Power Setting:	17	Tested By:	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	2483.50	17.50	2.73	32.37	52.60	Max Avg	Vertical	135	361	54.0	-1.4	Pass
#2	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--
#3	2484.03	31.89	2.73	32.37	66.99	Max Peak	Vertical	135	361	74.0	-7.0	Pass

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-13B	Variant:	802.11n HT-40
Antenna Gain (dBi):	4.40	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2452.00	Data Rate:	13.50 MBit/s
Power Setting:	16	Tested By:	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	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--
#2	2487.19	33.92	2.73	32.37	69.02	Max Peak	Vertical	135	361	74.0	-5.0	Pass
#3	2487.68	18.58	2.73	32.38	53.69	Max Avg	Vertical	135	361	54.0	-0.3	Pass

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2.2.2. AP-ANT-19

AP-ANT-19		Band-Edge Freq	Limit 54.0dB μ V/m	Limit 74.0dB μ V/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dB μ V/m	dB μ V/m	
802.11b	2412.00	2390.00	45.18	55.27	18.0
802.11b	2462.00	2483.50	49.07	63.34	18.0
802.11g	2412.00	2390.00	53.10	66.29	15.5
802.11g	2462.00	2483.50	51.96	64.72	17.0
802.11n HT-20	2412.00	2390.00	53.37	66.78	15.5
802.11n HT-20	2462.00	2483.50	51.00	64.39	16.5
802.11n HT-40	2422.00	2390.00	52.74	67.32	14.0
802.11n HT-40	2452.00	2483.50	53.95	67.63	13.0

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-19	Variant:	802.11b
Antenna Gain (dBi):	3.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	18	Tested By:	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	2374.74	10.57	2.70	31.91	45.18	Max Avg	Vertical	148	37	54.0	-8.8	Pass
#2	2374.96	20.66	2.70	31.91	55.27	Max Peak	Vertical	148	37	74.0	-18.7	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-19	Variant:	802.11g
Antenna Gain (dBi):	3.00	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.00 MBit/s
Power Setting:	15.5	Tested By:	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	2390.00	18.37	2.69	32.04	53.10	Max Avg	Vertical	148	37	54.0	-0.9	Pass
#2	2390.00	31.56	2.69	32.04	66.29	Max Peak	Vertical	148	37	74.0	-7.7	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-19	Variant:	802.11n HT-20
Antenna Gain (dBi):	3.00	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.50 MBit/s
Power Setting:	15.5	Tested By:	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	2390.00	18.64	2.69	32.04	53.37	Max Avg	Vertical	148	37	54.0	-0.6	Pass
#2	2390.00	32.05	2.69	32.04	66.78	Max Peak	Vertical	148	37	74.0	-7.2	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-19	Variant:	802.11n HT-40
Antenna Gain (dBi):	3.00	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2422.00	Data Rate:	13.50 MBit/s
Power Setting:	14	Tested By:	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	2381.02	32.67	2.69	31.96	67.32	Max Peak	Vertical	148	37	74.0	-6.7	Pass
#2	2390.00	18.01	2.69	32.04	52.74	Max Avg	Vertical	148	37	54.0	-1.3	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-19	Variant:	802.11b
Antenna Gain (dBi):	3.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	18	Tested By:	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	2484.21	28.24	2.73	32.37	63.34	Max Peak	Vertical	148	37	74.0	-10.7	Pass
#2	2502.55	13.94	2.73	32.40	49.07	Max Avg	Vertical	148	37	54.0	-4.9	Pass
#3	24835.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-19	Variant:	802.11g
Antenna Gain (dBi):	3.00	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.00 MBit/s
Power Setting:	17	Tested By:	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	2483.50	16.86	2.73	32.37	51.96	Max Avg	Vertical	148	37	54.0	-2.0	Pass
#2	2483.50	29.62	2.73	32.37	64.72	Max Peak	Vertical	148	37	74.0	-9.3	Pass
#3	24835.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-19	Variant:	802.11n HT-20
Antenna Gain (dBi):	3.00	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.50 MBit/s
Power Setting:	16.5	Tested By:	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	2483.50	15.90	2.73	32.37	51.00	Max Avg	Vertical	148	37	54.0	-3.0	Pass
#2	2483.50	29.29	2.73	32.37	64.39	Max Peak	Vertical	148	37	74.0	-9.6	Pass
#3	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-19	Variant:	802.11n HT-40
Antenna Gain (dBi):	3.00	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2452.00	Data Rate:	13.50 MBit/s
Power Setting:	13	Tested By:	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	2483.50	18.85	2.73	32.37	53.95	Max Avg	Vertical	148	37	54.0	-0.1	Pass
#2	2483.50	32.53	2.73	32.37	67.63	Max Peak	Vertical	148	37	74.0	-6.4	Pass
#3	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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2.2.3 AP-ANT-1W

AP-ANT-1W		Band-Edge Freq	Limit 54.0dB μ V/m	Limit 74.0dB μ V/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dB μ V/m	dB μ V/m	
802.11b	2412.00	2390.00	46.43	57.97	18.0
802.11b	2462.00	2483.50	46.85	59.11	18.0
802.11g	2412.00	2390.00	53.10	66.88	17.0
802.11g	2462.00	2483.50	51.80	63.92	18.0
802.11n HT-20	2412.00	2390.00	51.50	65.28	18.0
802.11n HT-20	2462.00	2483.50	49.06	63.18	18.0
802.11n HT-40	2422.00	2390.00	53.75	67.81	14.0
802.11n HT-40	2452.00	2483.50	50.23	64.00	14.0

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-1W	Variant:	802.11b
Antenna Gain (dBi):	3.80	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	18	Tested By:	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	2390.00	11.70	2.69	32.04	46.43	Max Avg	Vertical	142	341	54.0	-7.6	Pass
#2	2390.00	23.24	2.69	32.04	57.97	Max Peak	Vertical	142	341	74.0	-16.0	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-1W	Variant:	802.11g
Antenna Gain (dBi):	3.80	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.00 MBit/s
Power Setting:	17	Tested By:	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	2390.00	18.37	2.69	32.04	53.10	Max Avg	Vertical	142	341	54.0	-0.9	Pass
#2	2390.00	32.15	2.69	32.04	66.88	Max Peak	Vertical	142	341	74.0	-7.1	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-1W	Variant:	802.11n HT-20
Antenna Gain (dBi):	3.80	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.50 MBit/s
Power Setting:	18	Tested By:	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	2390.00	16.77	2.69	32.04	51.50	Max Avg	Vertical	142	341	54.0	-2.5	Pass
#2	2390.00	30.55	2.69	32.04	65.28	Max Peak	Vertical	142	341	74.0	-8.7	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-1W	Variant:	802.11n HT-40
Antenna Gain (dBi):	3.80	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2422.00	Data Rate:	13.50 MBit/s
Power Setting:	14	Tested By:	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	2387.76	19.04	2.68	32.03	53.75	Max Avg	Vertical	142	341	54.0	-0.3	Pass
#2	2387.76	33.10	2.68	32.03	67.81	Max Peak	Vertical	142	341	74.0	-6.2	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-1W	Variant:	802.11b
Antenna Gain (dBi):	3.80	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	18	Tested By:	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	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--
#2	2483.68	24.01	2.73	32.37	59.11	Max Peak	Vertical	142	341	74.0	-14.9	Pass
#3	2505.90	11.72	2.72	32.41	46.85	Max Avg	Vertical	142	341	54.0	-7.2	Pass

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-1W	Variant:	802.11g
Antenna Gain (dBi):	3.80	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.00 MBit/s
Power Setting:	18	Tested By:	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	2483.50	16.70	2.73	32.37	51.80	Max Avg	Vertical	142	341	54.0	-2.2	Pass
#2	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--
#3	2492.39	28.80	2.74	32.38	63.92	Max Peak	Vertical	142	341	74.0	-10.1	Pass

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-1W	Variant:	802.11n HT-20
Antenna Gain (dBi):	3.80	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.50 MBit/s
Power Setting:	18	Tested By:	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	2493.76	28.05	2.74	32.39	63.18	Max Peak	Vertical	142	341	74.0	-10.8	Pass
#3	2494.11	13.93	2.74	32.39	49.06	Max Avg	Vertical	142	341	54.0	-4.9	Pass
#1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-1W	Variant:	802.11n HT-40
Antenna Gain (dBi):	3.80	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2452.00	Data Rate:	13.50 MBit/s
Power Setting:	14	Tested By:	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	2483.68	15.13	2.73	32.37	50.23	Max Avg	Vertical	142	341	54.0	-3.8	Pass
#3	2484.03	28.90	2.73	32.37	64.00	Max Peak	Vertical	142	341	74.0	-10.0	Pass
#1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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2.2.4 AP-ANT-20W

AP-ANT-20W		Band-Edge Freq	Limit 54.0dB μ V/m	Limit 74.0dB μ V/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dB μ V/m	dB μ V/m	
802.11b	2412.00	2390.00	50.59	58.14	20.0
802.11b	2462.00	2483.50	41.67	52.48	21.0
802.11g	2412.00	2390.00	48.43	62.12	18.0
802.11g	2462.00	2483.50	52.83	68.14	20.0
802.11n HT-20	2412.00	2390.00	53.37	66.22	16.0
802.11n HT-20	2462.00	2483.50	50.53	64.79	17.0
802.11n HT-40	2422.00	2390.00	53.02	67.16	13.0
802.11n HT-40	2452.00	2483.50	52.92	68.18	15.0

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-20W	Variant:	802.11b
Antenna Gain (dBi):	2.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	20	Tested By:	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	2386.10	23.45	2.68	32.01	58.14	Max Peak	Horizontal	166	320	74.0	-15.9	Pass
#2	2386.44	15.90	2.68	32.01	50.59	Max Avg	Horizontal	166	320	54.0	-3.4	Pass
#3	23900.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-20W	Variant:	802.11g
Antenna Gain (dBi):	2.00	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.00 MBit/s
Power Setting:	18	Tested By:	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	2390.00	13.70	2.69	32.04	48.43	Max Avg	Horizontal	166	320	54.0	-5.6	Pass
#2	2390.00	27.39	2.69	32.04	62.12	Max Peak	Horizontal	166	320	74.0	-11.9	Pass
#3	23900.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-20W	Variant:	802.11n HT-20
Antenna Gain (dBi):	2.00	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.50 MBit/s
Power Setting:	16	Tested By:	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	2390.00	18.64	2.69	32.04	53.37	Max Avg	Horizontal	142	318	54.0	-0.6	Pass
#2	2390.00	31.49	2.69	32.04	66.22	Max Peak	Horizontal	142	318	74.0	-7.8	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-20W	Variant:	802.11n HT-40
Antenna Gain (dBi):	2.00	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2422.00	Data Rate:	13.50 MBit/s
Power Setting:	13	Tested By:	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	2382.59	32.50	2.68	31.98	67.16	Max Peak	Horizontal	142	318	74.0	-6.8	Pass
#2	2388.88	18.30	2.68	32.04	53.02	Max Avg	Horizontal	142	318	54.0	-1.0	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-20W	Variant:	802.11b
Antenna Gain (dBi):	2.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	21	Tested By:	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	2501.32	6.54	2.73	32.40	41.67	Max Avg	Horizontal	159	58	54.0	-12.3	Pass
#2	2501.50	17.35	2.73	32.40	52.48	Max Peak	Horizontal	159	58	74.0	-21.5	Pass
#3	24835.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-20W	Variant:	802.11g
Antenna Gain (dBi):	2.00	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.00 MBit/s
Power Setting:	20	Tested By:	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	2483.50	33.04	2.73	32.37	68.14	Max Peak	Horizontal	159	58	74.0	-5.9	Pass
#2	2483.77	17.73	2.73	32.37	52.83	Max Avg	Horizontal	159	58	54.0	-1.2	Pass
#3	24835.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-20W	Variant:	802.11n HT-20
Antenna Gain (dBi):	2.00	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.50 MBit/s
Power Setting:	17	Tested By:	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	2483.50	15.43	2.73	32.37	50.53	Max Avg	Horizontal	142	318	54.0	-3.5	Pass
#2	2483.50	29.69	2.73	32.37	64.79	Max Peak	Horizontal	142	318	74.0	-9.2	Pass
#3	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-20W	Variant:	802.11n HT-40
Antenna Gain (dBi):	2.00	Modulation:	OFDM
Beam Forming Gain (Y):	6.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2452.00	Data Rate:	13.50 MBit/s
Power Setting:	15	Tested By:	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	2491.68	33.06	2.74	32.38	68.18	Max Peak	Horizontal	142	318	74.0	-5.8	Pass
#3	2492.35	17.80	2.74	32.38	52.92	Max Avg	Horizontal	142	318	54.0	-1.1	Pass
#1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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2.2.5 AP-ANT-40

AP-ANT-40		Band-Edge Freq	Limit 54.0dB μ V/m	Limit 74.0dB μ V/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dB μ V/m	dB μ V/m	
802.11b	2412.00	2390.00	45.83	57.18	19.0
802.11b	2462.00	2483.50	42.70	52.06	18.0
802.11g	2412.00	2390.00	52.45	67.40	17.0
802.11g	2462.00	2483.50	48.44	60.91	18.0
802.11n HT-20	2412.00	2390.00	52.07	65.42	17.0
802.11n HT-20	2462.00	2483.50	47.82	63.11	18.0
802.11n HT-40	2422.00	2390.00	52.73	66.86	17.0
802.11n HT-40	2452.00	2483.50	53.34	68.54	17.0

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-40	Variant:	802.11b
Antenna Gain (dBi):	3.90	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	19	Tested By:	SB

Test Measurement Results

Num	Frequency MHz	Raw dB μ V	Cable Loss	AF dB	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
#1	2374.74	11.22	2.70	31.91	45.83	Max Avg	Horizontal	148	48	54.0	-8.2	Pass
#2	2390.00	22.45	2.69	32.04	57.18	Max Peak	Horizontal	148	48	74.0	-16.8	Pass
#3	23900.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-40	Variant:	802.11g
Antenna Gain (dBi):	3.90	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.00 MBit/s
Power Setting:	17	Tested By:	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	2390.00	17.72	2.69	32.04	52.45	Max Avg	Horizontal	148	48	54.0	-1.6	Pass
#2	2390.00	32.67	2.69	32.04	67.40	Max Peak	Horizontal	148	48	74.0	-6.6	Pass
#3	23900.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-40	Variant:	802.11n HT-20
Antenna Gain (dBi):	3.90	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.50 MBit/s
Power Setting:	17	Tested By:	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	2389.10	30.70	2.68	32.04	65.42	Max Peak	Horizontal	148	48	74.0	-8.6	Pass
#2	2390.00	17.34	2.69	32.04	52.07	Max Avg	Horizontal	148	48	54.0	-1.9	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-40	Variant:	802.11n HT-40
Antenna Gain (dBi):	3.90	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2422.00	Data Rate:	13.50 MBit/s
Power Setting:	17	Tested By:	SB

Test Measurement Results

Num	Frequency MHz	Raw dB μ V	Cable Loss	AF dB	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
#1	2380.13	18.08	2.69	31.96	52.73	Max Avg	Horizontal	148	48	54.0	-1.3	Pass
#2	2380.53	32.21	2.69	31.96	66.86	Max Peak	Horizontal	148	48	74.0	-7.1	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-40	Variant:	802.11b
Antenna Gain (dBi):	3.90	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	18	Tested By:	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	2488.97	16.95	2.73	32.38	52.06	Max Peak	Horizontal	148	48	74.0	-21.9	Pass
#2	2502.72	7.57	2.73	32.40	42.70	Max Avg	Horizontal	148	48	54.0	-11.3	Pass
#3	24835.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-40	Variant:	802.11g
Antenna Gain (dBi):	3.90	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.00 MBit/s
Power Setting:	18	Tested By:	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	2483.50	13.34	2.73	32.37	48.44	Max Avg	Horizontal	148	48	54.0	-5.6	Pass
#2	2483.50	25.81	2.73	32.37	60.91	Max Peak	Horizontal	148	48	74.0	-13.1	Pass
#3	24835.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-40	Variant:	802.11n HT-20
Antenna Gain (dBi):	3.90	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.50 MBit/s
Power Setting:	18	Tested By:	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	2492.32	27.99	2.74	32.38	63.11	Max Peak	Horizontal	148	48	74.0	-10.9	Pass
#3	2493.38	12.70	2.74	32.38	47.82	Max Avg	Horizontal	148	48	54.0	-6.2	Pass
#1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-40	Variant:	802.11n HT-40
Antenna Gain (dBi):	3.90	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2452.00	Data Rate:	13.50 MBit/s
Power Setting:	17	Tested By:	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	2483.50	18.24	2.73	32.37	53.34	Max Avg	Horizontal	148	48	54.0	-0.7	Pass
#3	2490.38	33.42	2.74	32.38	68.54	Max Peak	Horizontal	148	48	74.0	-5.5	Pass
#2	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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2.2.6 AP-ANT-45

AP-ANT-45		Band-Edge Freq	Limit 54.0dB μ V/m	Limit 74.0dB μ V/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dB μ V/m	dB μ V/m	
802.11b	2412.00	2390.00	53.54	62.68	20.0
802.11b	2462.00	2483.50	53.14	66.67	20.0
802.11g	2412.00	2390.00	52.45	66.35	15.0
802.11g	2462.00	2483.50	52.84	66.25	18.0
802.11n HT-20	2412.00	2390.00	51.58	65.93	17.0
802.11n HT-20	2462.00	2483.50	50.84	66.64	18.0
802.11n HT-40	2422.00	2390.00	53.03	64.96	14.0
802.11n HT-40	2452.00	2483.50	53.95	67.44	13.0

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-45	Variant:	802.11b
Antenna Gain (dBi):	5.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	20	Tested By:	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	2386.18	18.85	2.68	32.01	53.54	Max Avg	Horizontal	163	374	54.0	-0.5	Pass
#2	2386.41	27.99	2.68	32.01	62.68	Max Peak	Horizontal	163	374	74.0	-11.3	Pass
#3	23900.00	--	--	--	--	Band-Edge		--	--	--	--	

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-45	Variant:	802.11g
Antenna Gain (dBi):	5.00	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.00 MBit/s
Power Setting:	15	Tested By:	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	2390.00	17.72	2.69	32.04	52.45	Max Avg	Horizontal	163	374	54.0	-1.6	Pass
#2	2390.00	31.62	2.69	32.04	66.35	Max Peak	Horizontal	163	374	74.0	-7.7	Pass
#3	23900.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-45	Variant:	802.11n HT-20
Antenna Gain (dBi):	5.00	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.50 MBit/s
Power Setting:	17	Tested By:	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	2386.86	31.23	2.68	32.02	65.93	Max Peak	Vertical	163	374	74.0	-8.1	Pass
#2	2390.00	16.85	2.69	32.04	51.58	Max Avg	Vertical	163	374	54.0	-2.4	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-45	Variant:	802.11n HT-40
Antenna Gain (dBi):	5.00	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2422.00	Data Rate:	13.50 MBit/s
Power Setting:	14	Tested By:	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	2390.00	18.30	2.69	32.04	53.03	Max Avg	Vertical	163	374	54.0	-1.0	Pass
#2	2390.00	30.23	2.69	32.04	64.96	Max Peak	Vertical	163	374	74.0	-9.0	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-45	Variant:	802.11b
Antenna Gain (dBi):	5.00	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	20	Tested By:	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	2483.50	31.57	2.73	32.37	66.67	Max Peak	Horizontal	163	374	74.0	-7.3	Pass
#2	2490.39	18.02	2.74	32.38	53.14	Max Avg	Horizontal	163	374	54.0	-0.9	Pass
#3	248350.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-45	Variant:	802.11g
Antenna Gain (dBi):	5.00	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.00 MBit/s
Power Setting:	18	Tested By:	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	2484.21	31.15	2.73	32.37	66.25	Max Peak	Horizontal	163	374	74.0	-7.8	Pass
#2	2490.34	17.72	2.74	32.38	52.84	Max Avg	Horizontal	163	374	54.0	-1.2	Pass
#3	248350.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-45	Variant:	802.11n HT-20
Antenna Gain (dBi):	5.00	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.50 MBit/s
Power Setting:	18	Tested By:	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	2484.03	31.54	2.73	32.37	66.64	Max Peak	Vertical	163	374	74.0	-7.4	Pass
#3	2498.58	15.71	2.73	32.40	50.84	Max Avg	Vertical	163	374	54.0	-3.2	Pass
#1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-45	Variant:	802.11n HT-40
Antenna Gain (dBi):	5.00	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2452.00	Data Rate:	13.50 MBit/s
Power Setting:	13	Tested By:	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	2484.21	32.34	2.73	32.37	67.44	Max Peak	Vertical	163	374	74.0	-6.6	Pass
#3	2484.38	18.85	2.73	32.37	53.95	Max Avg	Vertical	163	374	54.0	-0.1	Pass
#1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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2.2.7 AP-ANT-48

AP-ANT-48		Band-Edge Freq	Limit 54.0dB μ V/m	Limit 74.0dB μ V/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dB μ V/m	dB μ V/m	
802.11b	2412.00	2390.00	48.19	58.87	19.0
802.11b	2462.00	2483.50	48.84	59.87	18.0
802.11g	2412.00	2390.00	52.33	67.13	16.0
802.11g	2462.00	2483.50	50.81	64.54	17.0
802.11n HT-20	2462.00	2483.50	51.36	63.27	15.5
802.11n HT-20	2412.00	2390.00	53.17	66.34	15.5
802.11n HT-40	2452.00	2483.50	52.54	67.54	15.0
802.11n HT-40	2422.00	2390.00	52.61	66.71	13.0

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-48	Variant:	802.11b
Antenna Gain (dBi):	8.50	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	19	Tested By:	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	2390.00	13.46	2.69	32.04	48.19	Max Avg	Vertical	162	362	54.0	-5.8	Pass
#2	2390.00	24.14	2.69	32.04	58.87	Max Peak	Vertical	162	362	74.0	-15.1	Pass
#3	239000.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-48	Variant:	802.11g
Antenna Gain (dBi):	8.50	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.00 MBit/s
Power Setting:	16	Tested By:	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	2384.34	32.46	2.68	31.99	67.13	Max Peak	Vertical	162	362	74.0	-6.9	Pass
#2	2384.97	17.65	2.68	32.00	52.33	Max Avg	Vertical	162	362	54.0	-1.7	Pass
#3	239000.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-48	Variant:	802.11n HT-20
Antenna Gain (dBi):	8.50	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.50 MBit/s
Power Setting:	15.5	Tested By:	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	2390.00	18.44	2.69	32.04	53.17	Max Avg	Horizontal	167	78	54.0	-0.8	Pass
#2	2390.00	31.61	2.69	32.04	66.34	Max Peak	Horizontal	167	78	74.0	-7.7	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	AP-ANT-48	Variant:	802.11n HT-40
Antenna Gain (dBi):	8.50	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2422.00	Data Rate:	13.50 MBit/s
Power Setting:	13	Tested By:	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	2382.82	17.95	2.68	31.98	52.61	Max Avg	Horizontal	167	78	54.0	-1.4	Pass
#2	2383.04	32.05	2.68	31.98	66.71	Max Peak	Horizontal	167	78	74.0	-7.3	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-48	Variant:	802.11b
Antenna Gain (dBi):	8.50	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	18	Tested By:	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	2483.50	24.77	2.73	32.37	59.87	Max Peak	Vertical	162	362	74.0	-14.1	Pass
#2	2502.72	13.71	2.73	32.40	48.84	Max Avg	Vertical	162	362	54.0	-5.2	Pass
#3	248350.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-48	Variant:	802.11g
Antenna Gain (dBi):	8.50	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.00 MBit/s
Power Setting:	17	Tested By:	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	2483.50	15.71	2.73	32.37	50.81	Max Avg	Vertical	162	362	54.0	-3.2	Pass
#2	2483.50	29.44	2.73	32.37	64.54	Max Peak	Vertical	162	362	74.0	-9.5	Pass
#3	248350.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-48	Variant:	802.11n HT-20
Antenna Gain (dBi):	8.50	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.50 MBit/s
Power Setting:	15.5	Tested By:	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	2483.50	16.26	2.73	32.37	51.36	Max Avg	Horizontal	167	78	54.0	-2.6	Pass
#2	2483.50	28.17	2.73	32.37	63.27	Max Peak	Horizontal	167	78	74.0	-10.7	Pass
#3	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	AP-ANT-48	Variant:	802.11n HT-40
Antenna Gain (dBi):	8.50	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2452.00	Data Rate:	13.50 MBit/s
Power Setting:	15	Tested By:	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	2491.44	32.42	2.74	32.38	67.54	Max Peak	Horizontal	167	78	74.0	-6.5	Pass
#3	2491.79	17.42	2.74	32.38	52.54	Max Avg	Horizontal	167	78	54.0	-1.5	Pass
#1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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2.2.8 Metal Sheet

Metal Sheet		Band-Edge Freq	Limit 54.0dB μ V/m	Limit 74.0dB μ V/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dB μ V/m	dB μ V/m	
802.11b	2412.00	2390.00	49.74	63.33	19.0
802.11b	2462.00	2483.50	50.56	64.70	19.0
802.11g	2412.00	2390.00	52.67	66.75	15.5
802.11g	2462.00	2483.50	52.29	66.35	15.5
802.11n HT-20	2412.00	2390.00	53.57	66.97	15.5
802.11n HT-20	2462.00	2483.50	52.31	66.55	17.0
802.11n HT-40	2452.00	2483.50	53.14	68.36	13.0
802.11n HT-40	2422.00	2390.00	53.65	68.37	12.0

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	Metal Sheet	Variant:	802.11b
Antenna Gain (dBi):	2.60	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	1.00 MBit/s
Power Setting:	19	Tested By:	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	2343.48	28.96	2.68	31.69	63.33	Max Peak	Horizontal	155	323	74.0	-10.7	Pass
#2	2389.31	15.02	2.68	32.04	49.74	Max Avg	Horizontal	155	323	54.0	-4.3	Pass
#3	239000.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	Metal Sheet	Variant:	802.11g
Antenna Gain (dBi):	2.60	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.00 MBit/s
Power Setting:	15.5	Tested By:	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	2389.78	32.02	2.69	32.04	66.75	Max Peak	Horizontal	155	323	74.0	-7.3	Pass
#2	2390.00	17.94	2.69	32.04	52.67	Max Avg	Horizontal	155	323	54.0	-1.3	Pass
#3	239000.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Title: Aruba Networks, Inc APIN0334, APIN0335
To: FCC Subpart C 15.247 (DTS), IC RSS-247
Serial #: ARUB196-U3_Radiated Rev A
Issue Date: 6th May 2016
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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	Metal Sheet	Variant:	802.11n HT-20
Antenna Gain (dBi):	2.60	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2412.00	Data Rate:	6.50 MBit/s
Power Setting:	15.5	Tested By:	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	2390.00	18.84	2.69	32.04	53.57	Max Avg	Horizontal	155	323	54.0	-0.4	Pass
#2	2390.00	32.24	2.69	32.04	66.97	Max Peak	Horizontal	155	323	74.0	-7.0	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Title: Aruba Networks, Inc APIN0334, APIN0335
To: FCC Subpart C 15.247 (DTS), IC RSS-247
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Equipment Configuration for Radiated - Lower Restricted Band-Edge Emissions

Antenna:	Metal Sheet	Variant:	802.11n HT-40
Antenna Gain (dBi):	2.60	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2422.00	Data Rate:	13.50 MBit/s
Power Setting:	12	Tested By:	SB

Test Measurement Results

Num	Frequency MHz	Raw dB μ V	Cable Loss	AF dB	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
#1	2383.94	18.98	2.68	31.99	53.65	Max Avg	Horizontal	155	323	54.0	-0.4	Pass
#2	2383.94	33.70	2.68	31.99	68.37	Max Peak	Horizontal	155	323	74.0	-5.6	Pass
#3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Title: Aruba Networks, Inc APIN0334, APIN0335
To: FCC Subpart C 15.247 (DTS), IC RSS-247
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Issue Date: 6th May 2016
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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	Metal Sheet	Variant:	802.11b
Antenna Gain (dBi):	2.60	Modulation:	CCK
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	1.00 MBit/s
Power Setting:	19	Tested By:	SB

Test Measurement Results

Num	Frequency MHz	Raw dB μ V	Cable Loss	AF dB	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
#1	2486.57	29.60	2.73	32.37	64.70	Max Peak	Horizontal	155	323	74.0	-9.3	Pass
#2	2503.89	15.42	2.73	32.41	50.56	Max Avg	Horizontal	155	323	54.0	-3.4	Pass
#3	248350.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Title: Aruba Networks, Inc APIN0334, APIN0335
To: FCC Subpart C 15.247 (DTS), IC RSS-247
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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	Metal Sheet	Variant:	802.11g
Antenna Gain (dBi):	2.60	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.00 MBit/s
Power Setting:	15.5	Tested By:	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	2483.50	17.19	2.73	32.37	52.29	Max Avg	Horizontal	155	323	54.0	-1.7	Pass
#2	2483.85	31.25	2.73	32.37	66.35	Max Peak	Horizontal	155	323	74.0	-7.7	Pass
#3	248350.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Title: Aruba Networks, Inc APIN0334, APIN0335
To: FCC Subpart C 15.247 (DTS), IC RSS-247
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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	Metal Sheet	Variant:	802.11n HT-20
Antenna Gain (dBi):	2.60	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2462.00	Data Rate:	6.50 MBit/s
Power Setting:	17	Tested By:	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	2490.55	31.43	2.74	32.38	66.55	Max Peak	Horizontal	155	323	74.0	-7.5	Pass
#3	2493.65	17.18	2.74	32.39	52.31	Max Avg	Horizontal	155	323	54.0	-1.7	Pass
#1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Title: Aruba Networks, Inc APIN0334, APIN0335
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Issue Date: 6th May 2016
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Equipment Configuration for Radiated - Upper Restricted Band-Edge Emissions

Antenna:	Metal Sheet	Variant:	802.11n HT-40
Antenna Gain (dBi):	2.60	Modulation:	OFDM
Beam Forming Gain (Y):	3.00	Duty Cycle (%):	100
Channel Frequency (MHz):	2452.00	Data Rate:	13.50 MBit/s
Power Setting:	13	Tested By:	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	2492.78	33.24	2.74	32.38	68.36	Max Peak	Horizontal	155	323	74.0	-5.6	Pass
#3	2493.34	18.02	2.74	32.38	53.14	Max Avg	Horizontal	155	323	54.0	-0.9	Pass
#1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Title: Aruba Networks, Inc APIN0334, APIN0335
To: FCC Subpart C 15.247 (DTS), IC RSS-247
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APPENDIX A - GRAPHICAL IMAGES

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A.1. Radiated Emissions

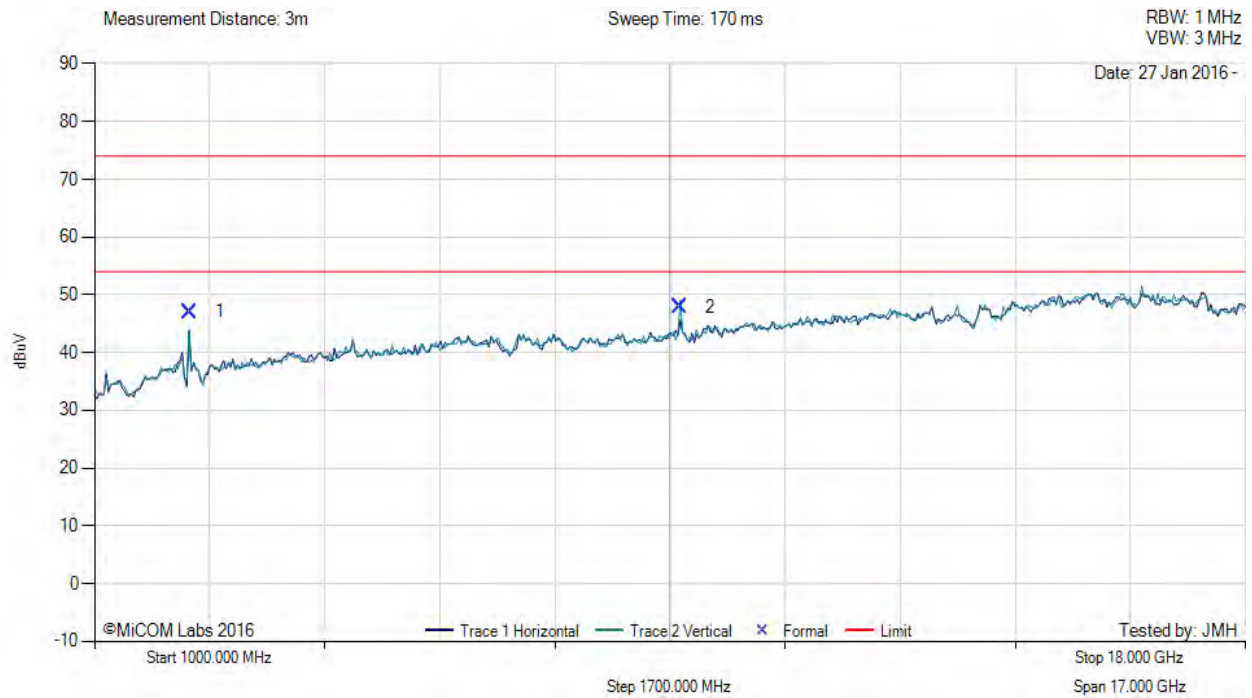
A.1.1. Restricted Band Emissions

A.1.1.1. AP-ANT-13B



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-13B, Power Setting: 21



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	2411.05	56.13	2.69	-11.80	47.02	Fundamental	Horizontal	151	97	--	--	
2	9648.06	48.73	5.29	-6.08	47.94	Peak (NRB)	Vertical	151	47	--	--	Pass

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

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

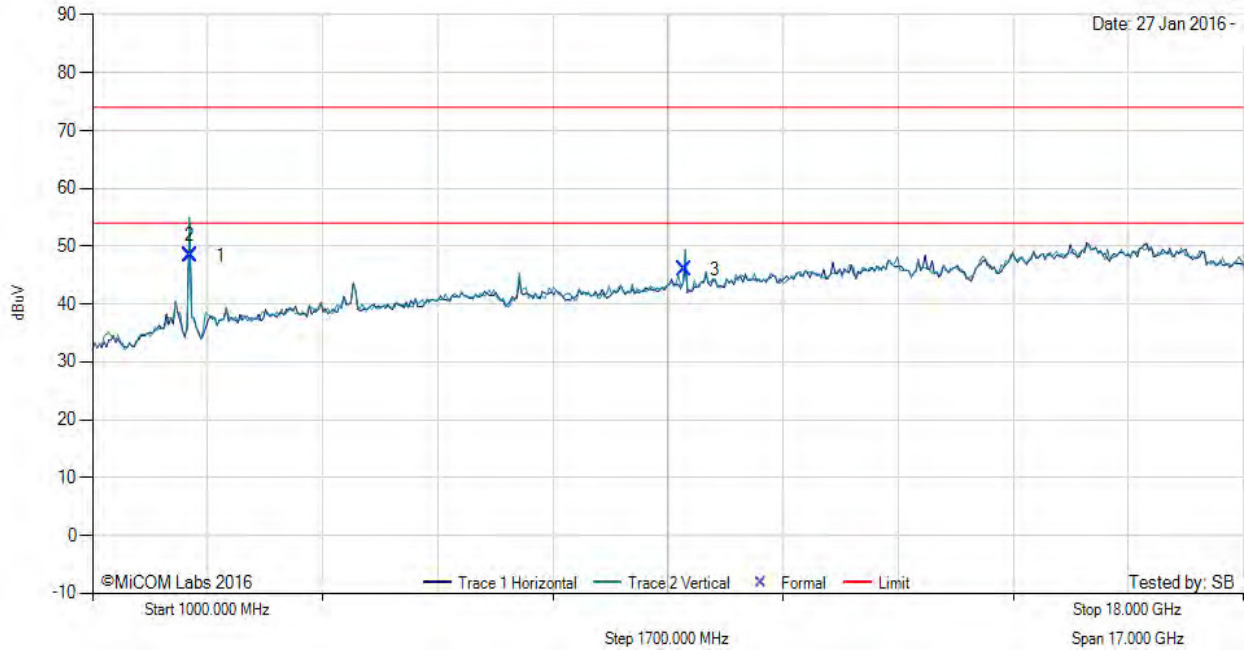
Variant: 802.11b, Test Freq: 2437.00 MHz, Antenna: AP-ANT-13B, Power Setting: 21

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	2441.00	57.30	2.72	-11.72	48.30	Fundamental	Horizontal	101	1	--	--	
2	2441.00	57.30	2.72	-11.72	48.30	Peak (NRB)	Horizontal	101	1	--	--	Pass
3	9747.81	46.98	5.29	-6.23	46.04	Peak (NRB)	Vertical	182	0	--	--	Pass

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

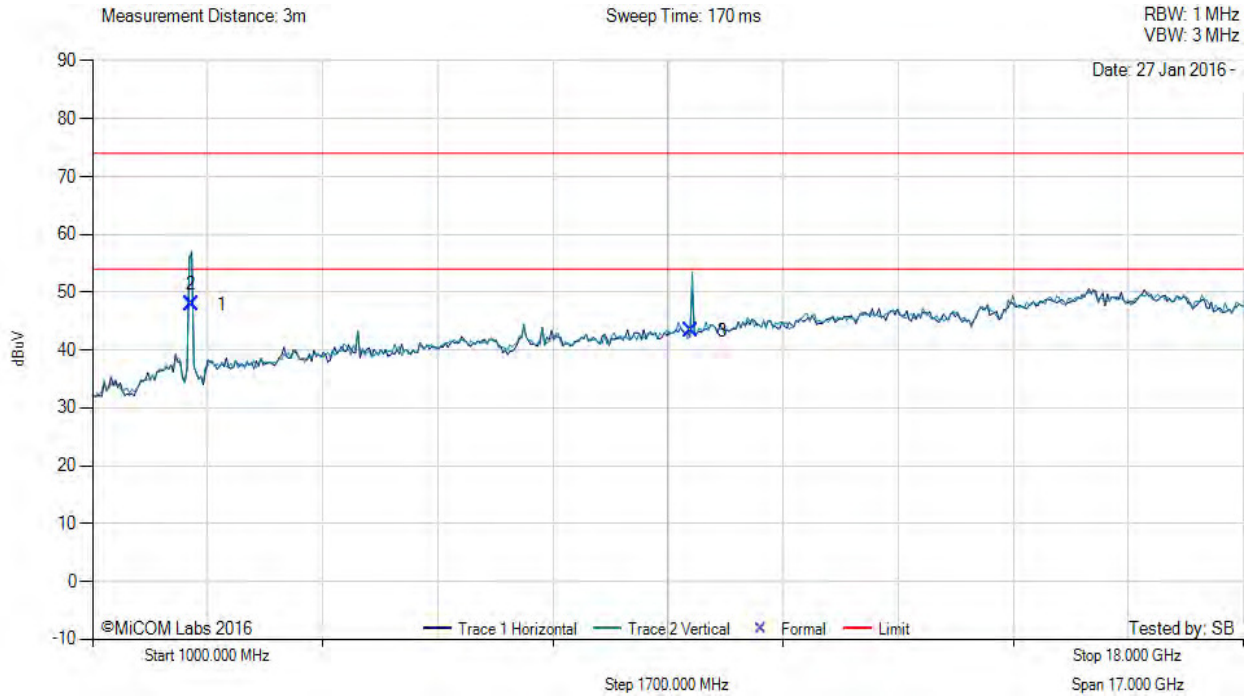
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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-13B, Power Setting: 21



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	2457.95	56.83	2.73	-11.68	47.88	Fundamental	Horizontal	101	1	--	--	
2	2457.95	56.84	2.73	-11.68	47.89	Peak (NRB)	Horizontal	101	1	--	--	Pass
3	9847.82	43.86	5.39	-5.94	43.31	Peak (NRB)	Vertical	101	1	--	--	Pass

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

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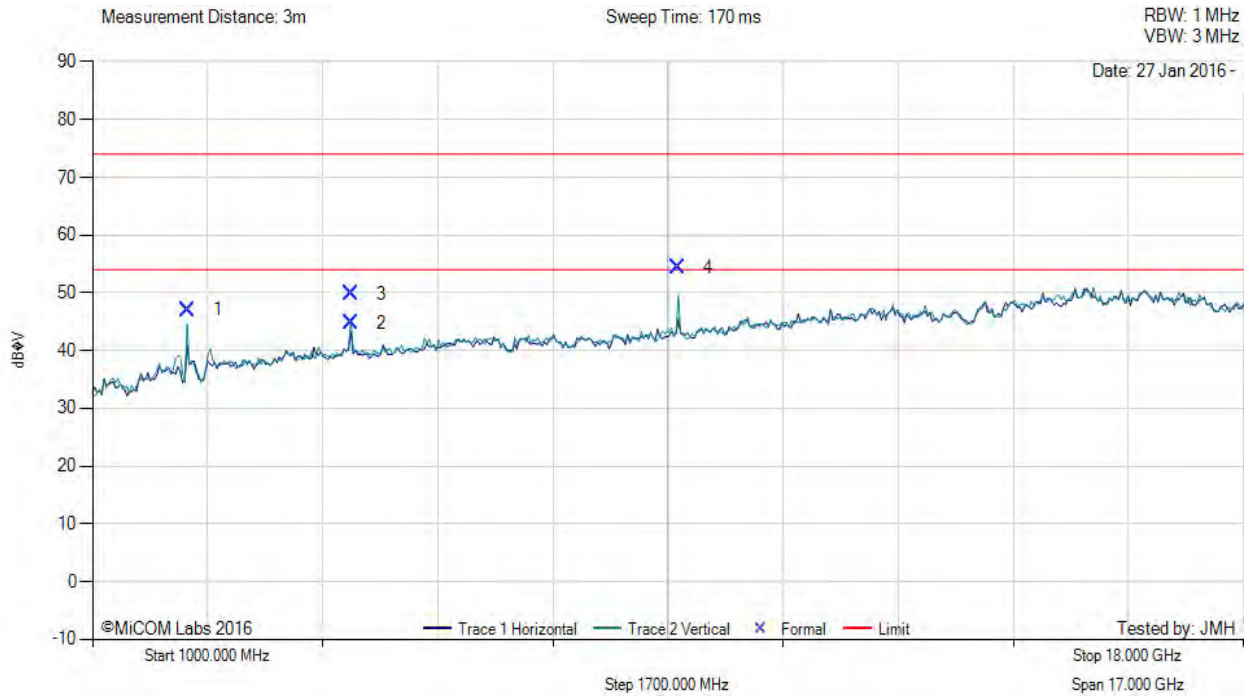


A.1.1.2. AP-ANT-19



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-19, Power Setting: 21



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	2410.04	56.15	2.69	-11.80	47.04	Fundamental	Vertical	151	29	--	--	
2	4823.95	52.37	3.54	-11.15	44.76	Max Avg	Vertical	172	102	54.0	-9.2	Pass
3	4823.95	57.35	3.54	-11.15	49.74	Max Peak	Vertical	172	102	74.0	-24.3	Pass
4	9648.01	55.22	5.29	-6.08	54.43	Peak (NRB)	Vertical	151	76	--	--	Pass

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

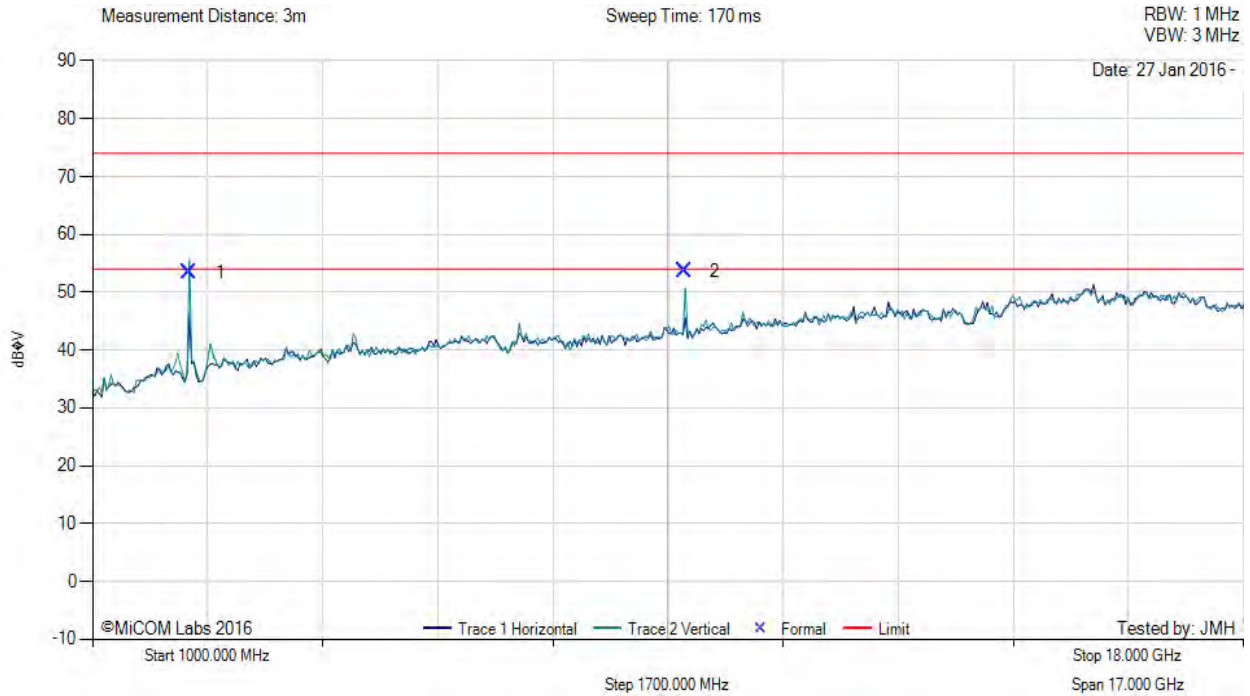
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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2437.00 MHz, Antenna: AP-ANT-19, Power Setting: 21



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	2435.53	62.45	2.72	-11.73	53.44	Fundamental	Vertical	151	1	--	--	
2	9748.03	54.61	5.29	-6.23	53.67	Peak (NRB)	Vertical	151	66	--	--	Pass

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

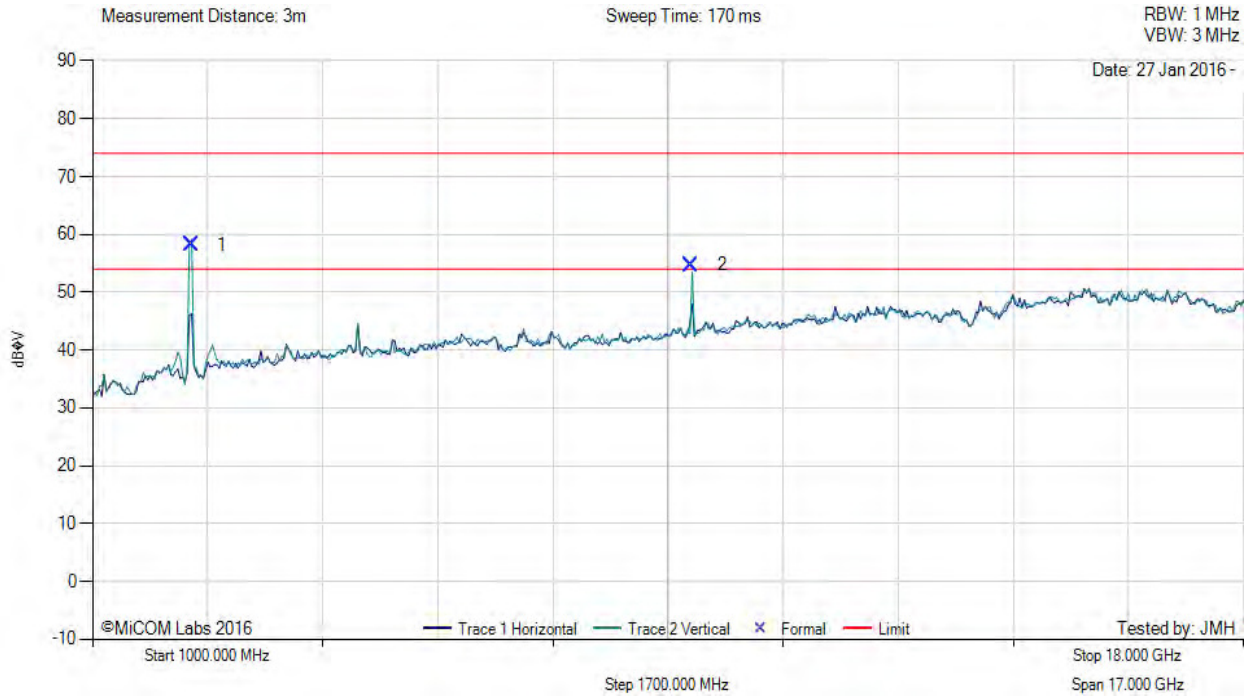
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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-19, Power Setting: 21



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	2461.04	67.12	2.74	-11.68	58.18	Fundamental	Vertical	151	0	--	--	
2	9847.98	55.24	5.39	-5.94	54.69	Peak (NRB)	Vertical	151	17	--	--	Pass

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

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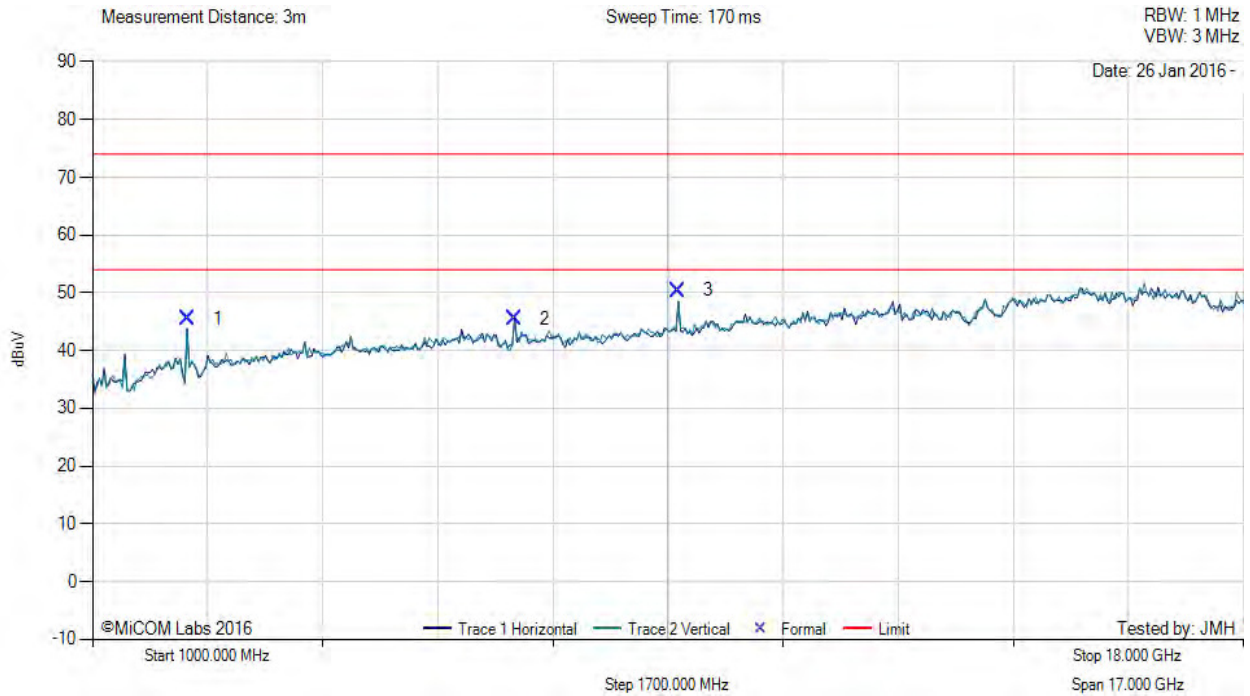


A.1.1.3. AP-ANT-1W



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-1W, Power Setting: 21



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	2410.46	54.64	2.69	-11.80	45.53	Fundamental	Horizontal	101	98	--	--	
2	7234.49	48.52	4.26	-7.34	45.44	Peak (NRB)	Horizontal	101	98	--	--	Pass
3	9647.98	51.18	5.29	-6.08	50.39	Peak (NRB)	Horizontal	101	98	--	--	Pass

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

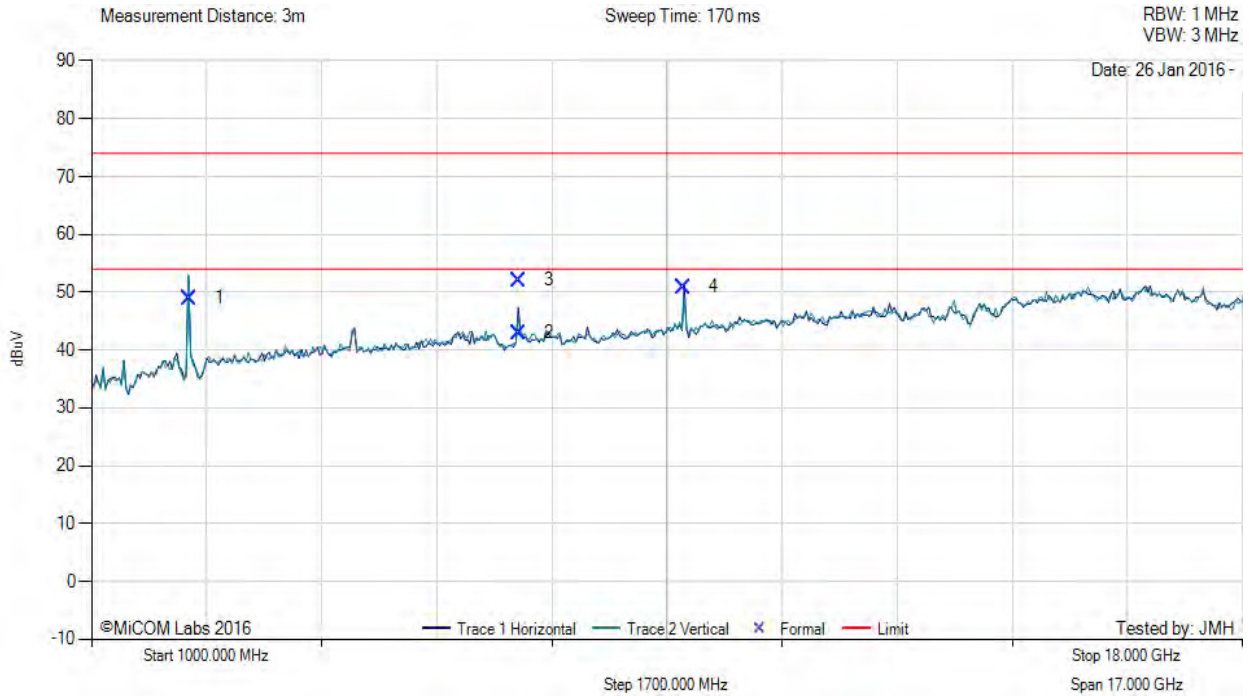
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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2437.00 MHz, Antenna: AP-ANT-1W, Power Setting: 21



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	2438.03	57.97	2.72	-11.73	48.96	Fundamental	Horizontal	101	1	--	--	
2	7309.98	46.05	4.23	-7.29	42.99	Max Avg	Horizontal	151	10	54.0	-11.0	Pass
3	7309.98	55.10	4.23	-7.29	52.04	Max Peak	Horizontal	151	10	74.0	-22.0	Pass
4	9747.93	51.83	5.29	-6.23	50.89	Peak (NRB)	Horizontal	101	341	--	--	Pass

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

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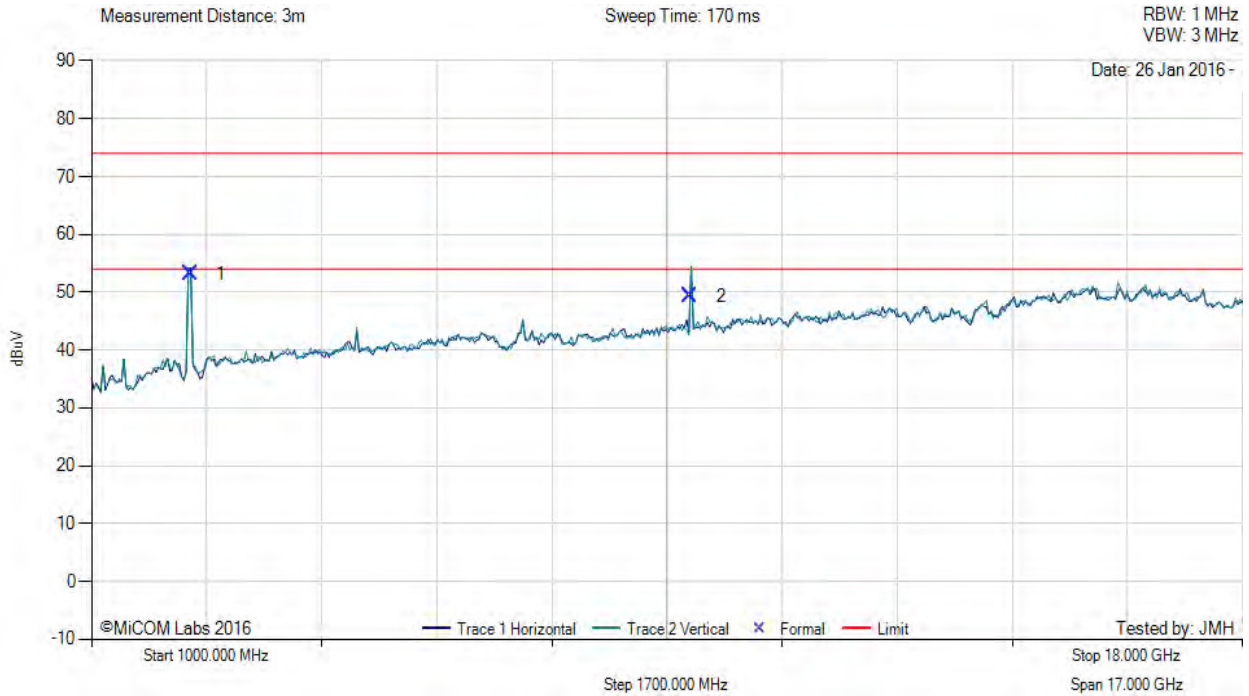


Title: Aruba Networks, Inc APIN0334, APIN0335
To: FCC Subpart C 15.247 (DTS), IC RSS-247
Serial #: ARUB196-U3_Radiated Rev A
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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-1W, Power Setting: 21



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	2463.46	62.11	2.74	-11.67	53.18	Fundamental	Horizontal	101	1	--	--	
2	9848.05	49.94	5.39	-5.94	49.39	Peak (NRB)	Horizontal	101	25	--	--	Pass

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

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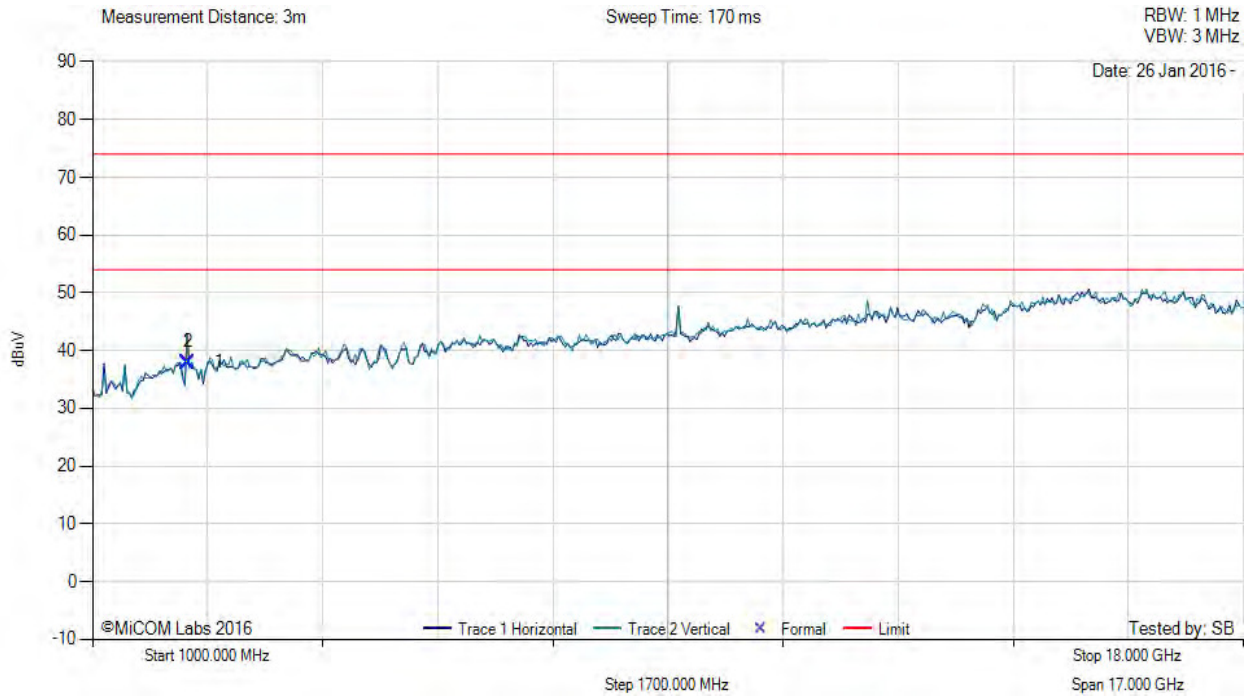


A.1.1.4. AP-ANT-20W



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-20W, Power Setting: 21



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	2413.56	47.00	2.70	-11.79	37.91	Fundamental	Horizontal	101	1	--	--	
2	2413.56	47.00	2.70	-11.79	37.91	Peak (NRB)	Horizontal	101	1	--	--	Pass

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

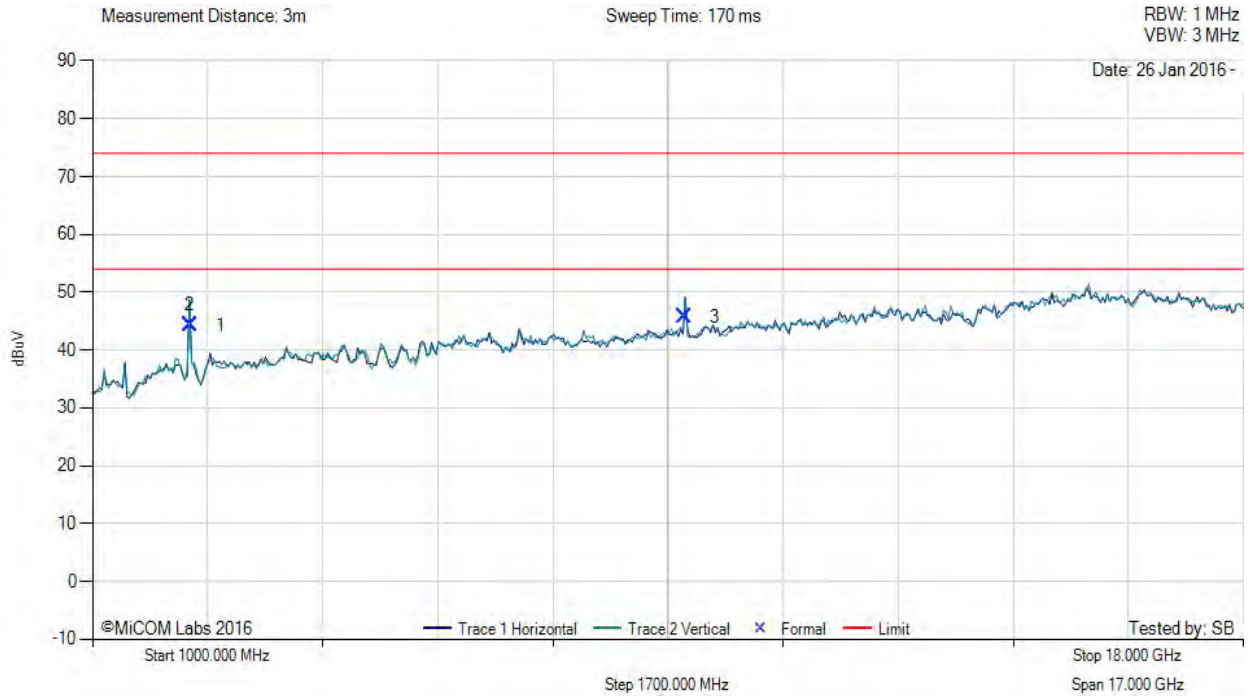
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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2437.00 MHz, Antenna: AP-ANT-20W, Power Setting: 21



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	2436.03	53.33	2.72	-11.73	44.32	Fundamental	Horizontal	101	1	--	--	
2	2436.03	53.33	2.72	-11.73	44.32	Peak (NRB)	Horizontal	101	1	--	--	Pass
3	9748.02	46.72	5.29	-6.23	45.78	Peak (NRB)	Horizontal	101	29	--	--	Pass

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

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

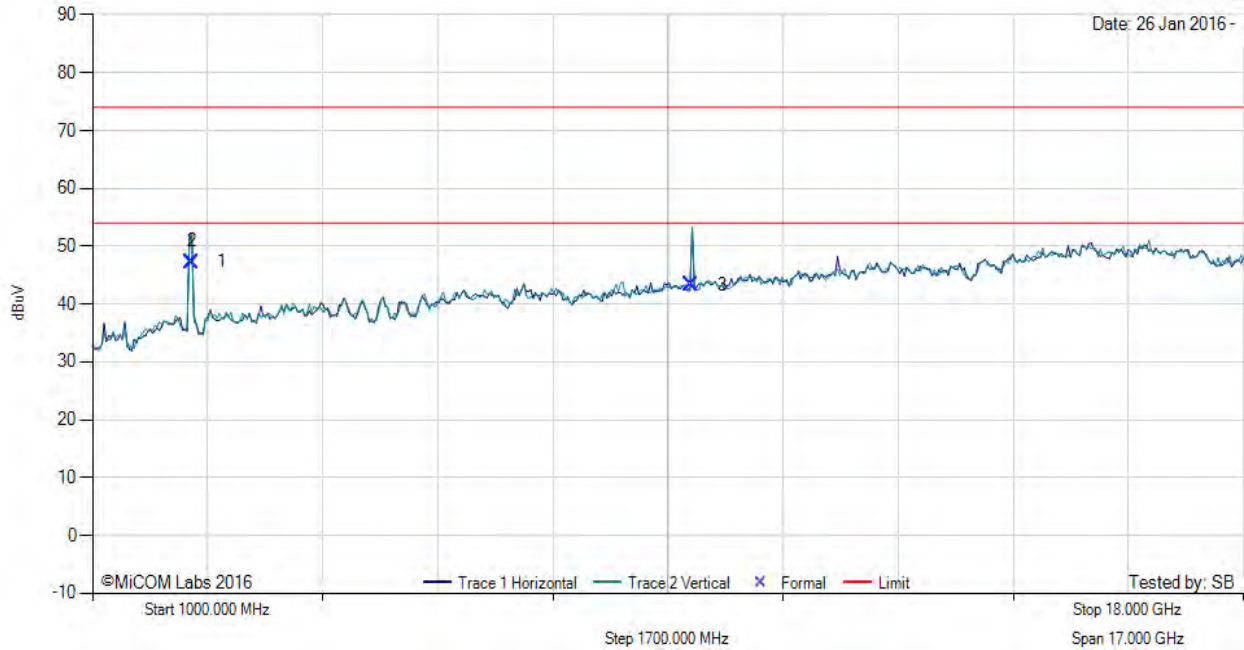
Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-20W, Power Setting: 21

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	2461.08	56.24	2.74	-11.68	47.30	Fundamental	Horizontal	101	1	--	--	
2	2461.08	56.24	2.74	-11.68	47.30	Peak (NRB)	Horizontal	101	1	--	--	Pass
3	9848.18	43.96	5.39	-5.94	43.41	Peak (NRB)	Horizontal	101	19	--	--	Pass

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

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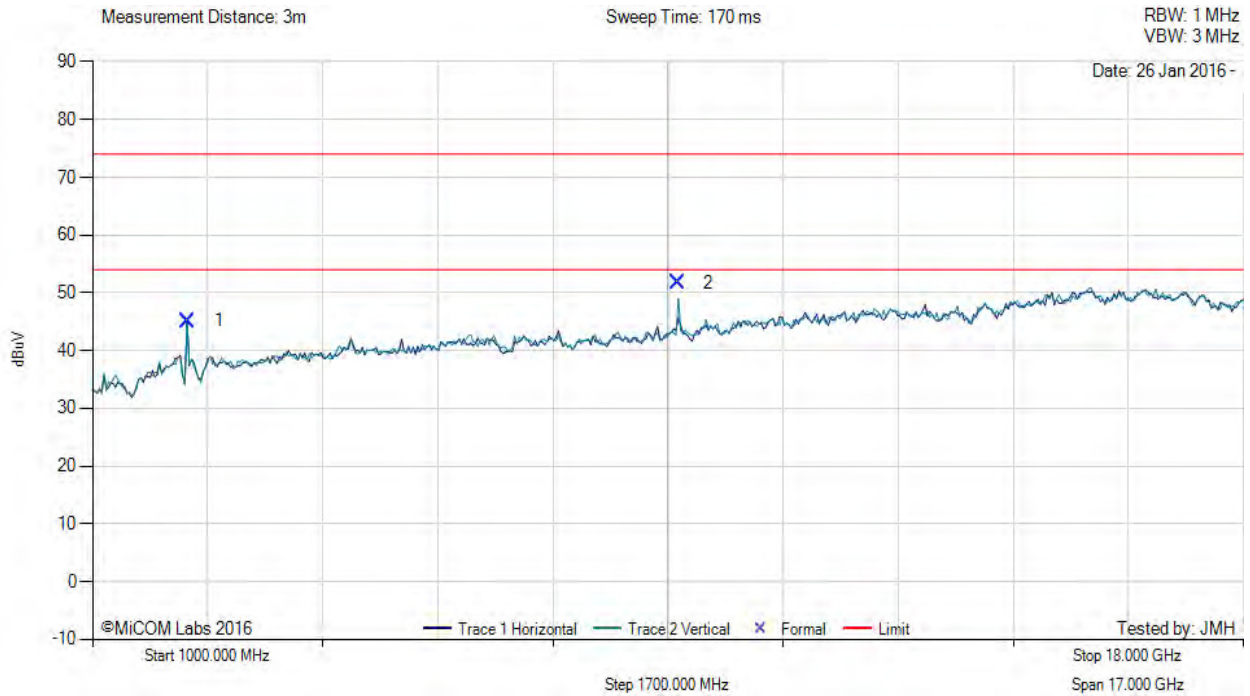


A.1.1.5. AP-ANT-40



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-40, Power Setting: 21



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	2413.12	54.21	2.70	-11.79	45.12	Fundamental	Vertical	151	11	--	--	
2	9647.94	52.51	5.29	-6.08	51.72	Peak (NRB)	Vertical	151	52	--	--	Pass

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

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

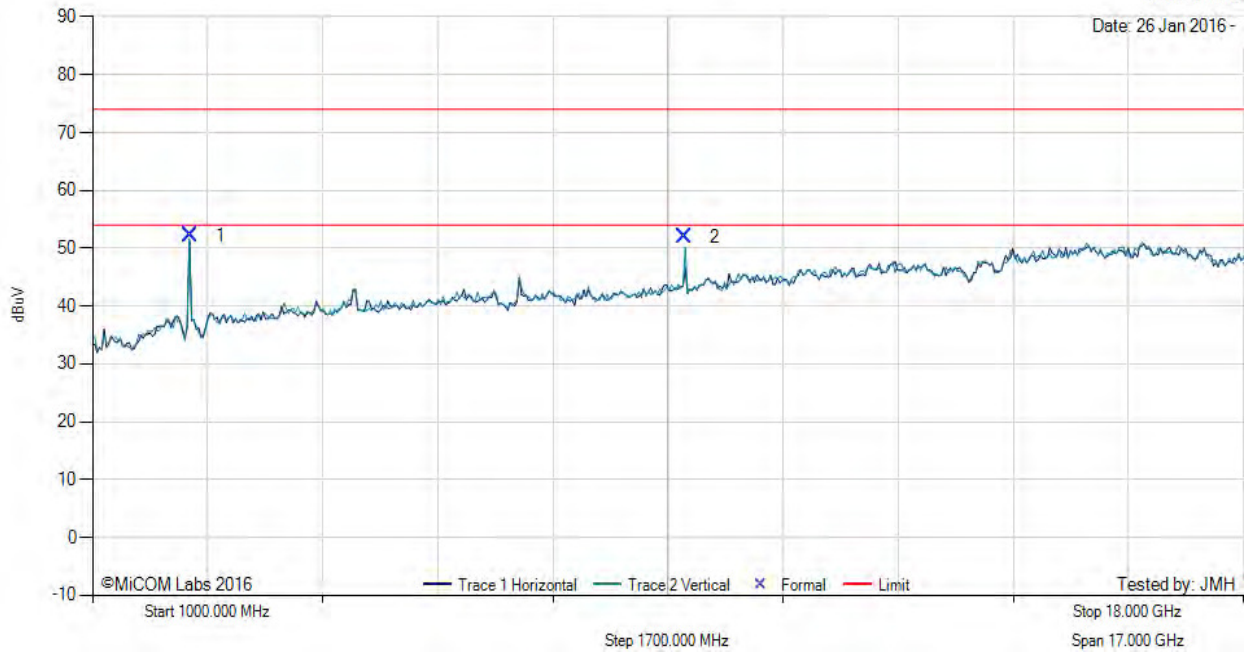
Variant: 802.11b, Test Freq: 2437.00 MHz, Antenna: AP-ANT-40, Power Setting: 21

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	2437.87	61.26	2.72	-11.73	52.25	Fundamental	Vertical	101	1	--	--	
2	9747.86	52.85	5.29	-6.23	51.91	Peak (NRB)	Vertical	151	51	--	--	Pass

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

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

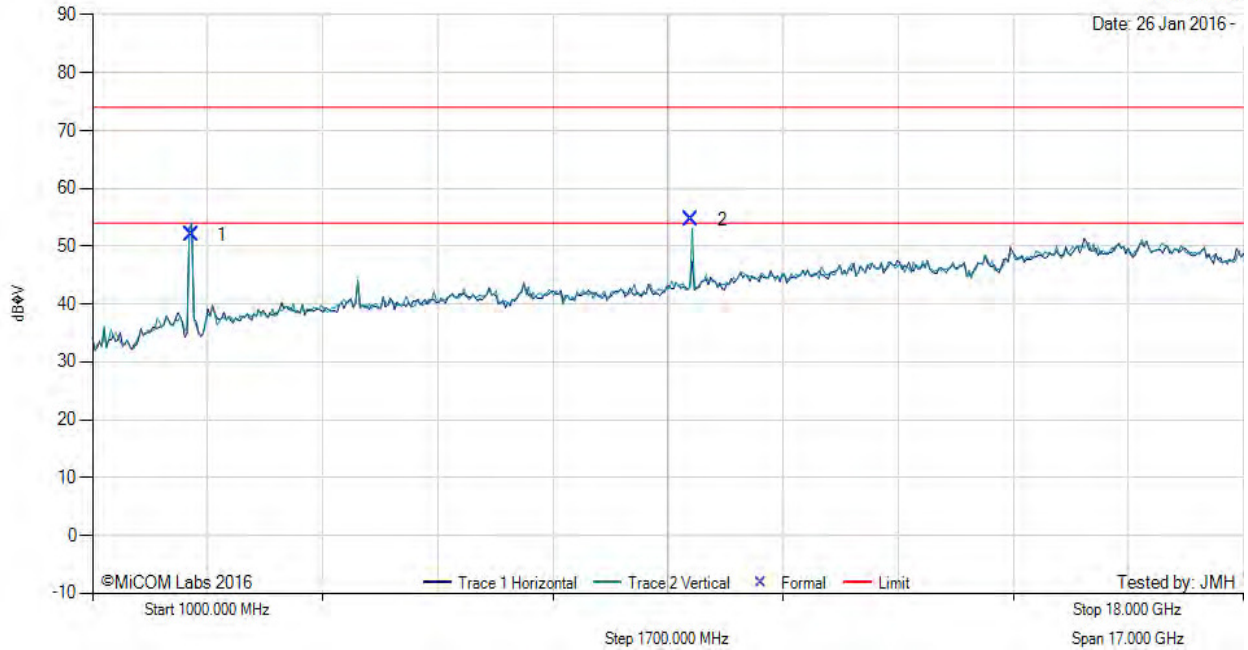
Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-40, Power Setting: 21

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	2463.93	60.90	2.73	-11.67	51.96	Fundamental	Vertical	100	24	--	--	
2	9847.90	55.22	5.39	-5.94	54.67	Peak (NRB)	Vertical	151	65	--	--	Pass

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

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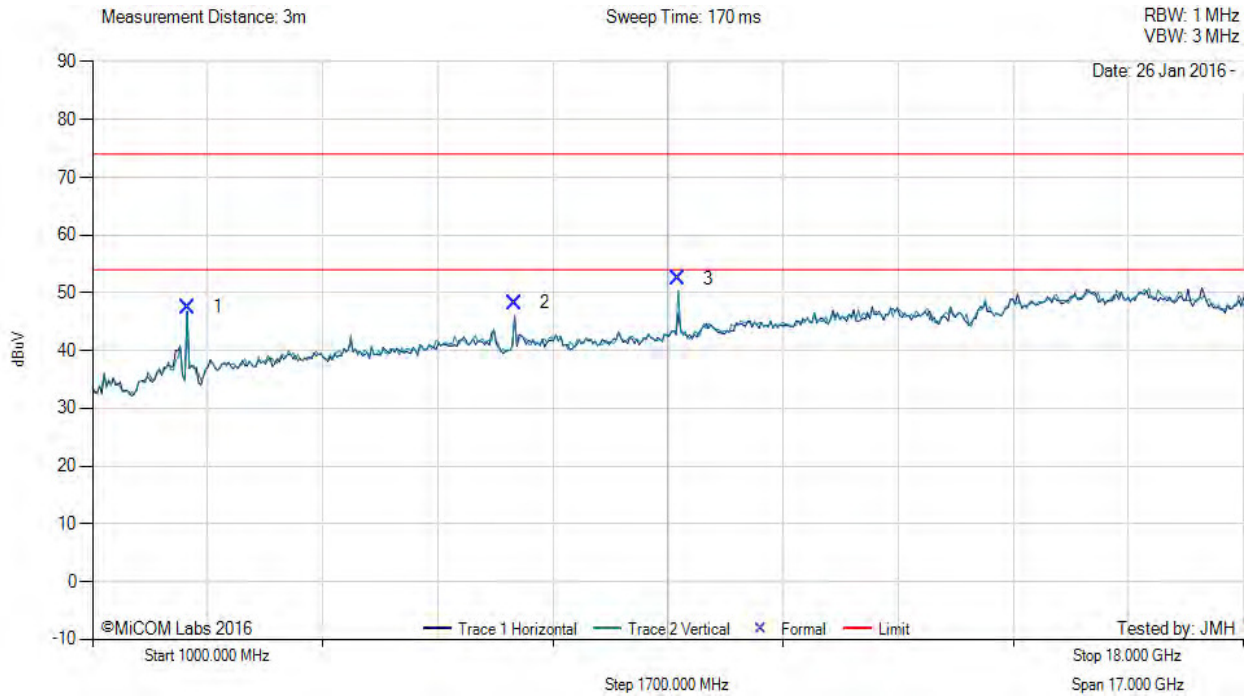


A.1.1.6. AP-ANT-45



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-45, Power Setting: 21



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	2410.64	56.62	2.69	-11.80	47.51	Fundamental	Horizontal	151	1	--	--	
2	7237.97	51.34	4.25	-7.34	48.25	Peak (NRB)	Horizontal	151	0	--	--	Pass
3	9647.99	53.22	5.29	-6.08	52.43	Peak (NRB)	Vertical	151	57	--	--	Pass

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

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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

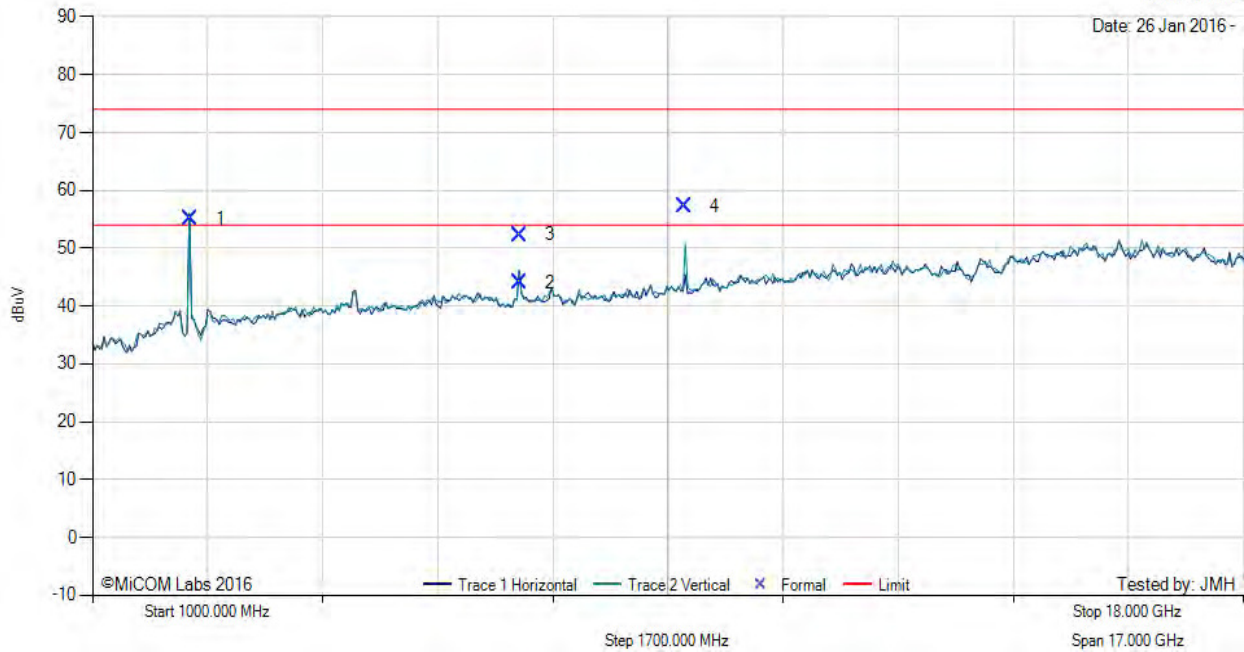
Variant: 802.11b, Test Freq: 2437.00 MHz, Antenna: AP-ANT-45, Power Setting: 21

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	2436.03	64.13	2.72	-11.73	55.12	Fundamental	Horizontal	101	1	--	--	
2	7311.88	47.07	4.24	-7.29	44.02	Max Avg	Horizontal	188	52	54.0	-10.0	Pass
3	7311.88	55.35	4.24	-7.29	52.30	Max Peak	Horizontal	188	52	74.0	-21.7	Pass
4	9748.00	58.10	5.29	-6.23	57.16	Peak (NRB)	Vertical	151	67	--	--	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

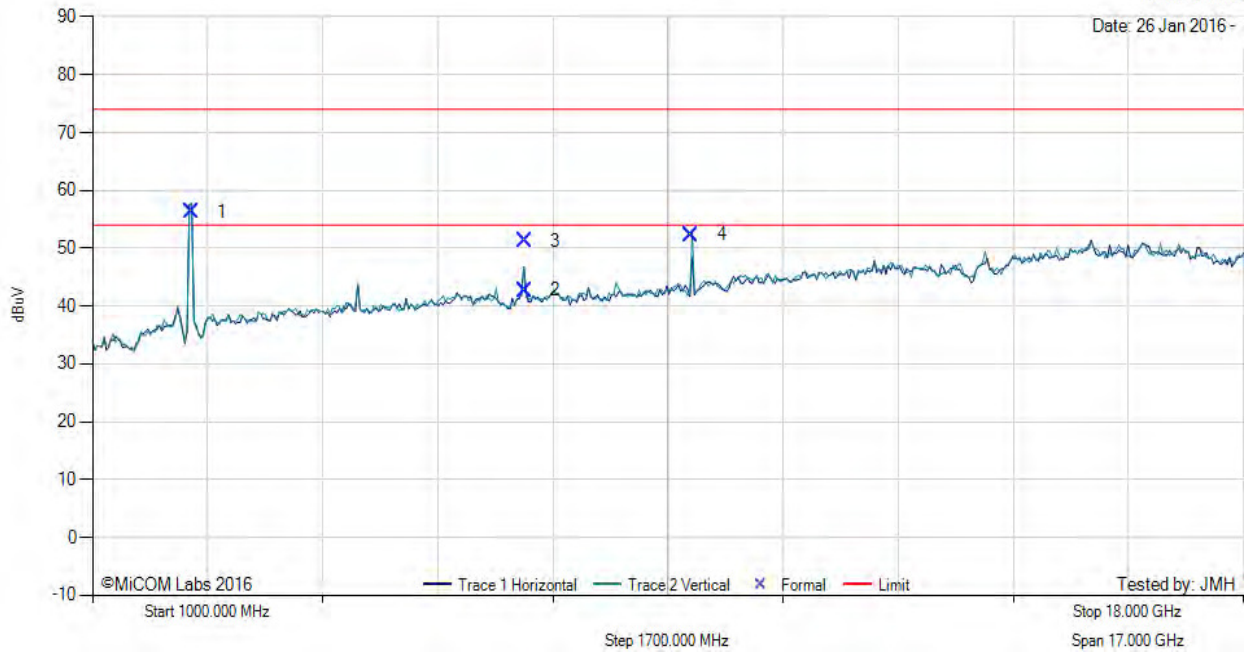
Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-45, Power Setting: 21

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	2460.96	65.28	2.74	-11.68	56.34	Fundamental	Horizontal	101	0	--	--	
2	7387.36	45.62	4.29	-7.17	42.74	Max Avg	Horizontal	177	57	54.0	-11.3	Pass
3	7387.36	54.07	4.29	-7.17	51.19	Max Peak	Horizontal	177	57	74.0	-22.8	Pass
4	9847.98	52.90	5.39	-5.94	52.35	Peak (NRB)	Vertical	151	58	--	--	Pass

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

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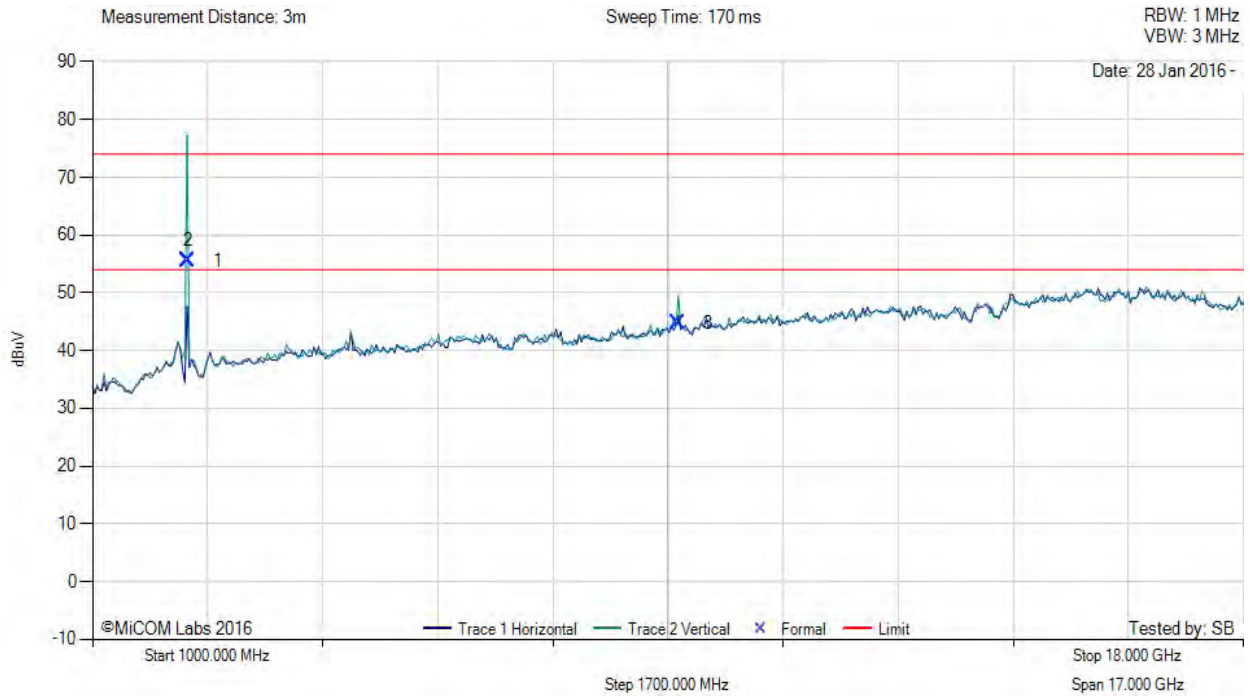


A.1.1.7. AP-ANT-48



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-48, Power Setting: 21



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	2411.06	64.70	2.69	-11.80	55.59	Fundamental	Vertical	101	1	--	--	
2	2411.06	64.70	2.69	-11.80	55.59	Peak (NRB)	Vertical	101	1	--	--	Pass
3	9648.38	45.54	5.29	-6.08	44.75	Peak (NRB)	Vertical	101	51	--	--	Pass

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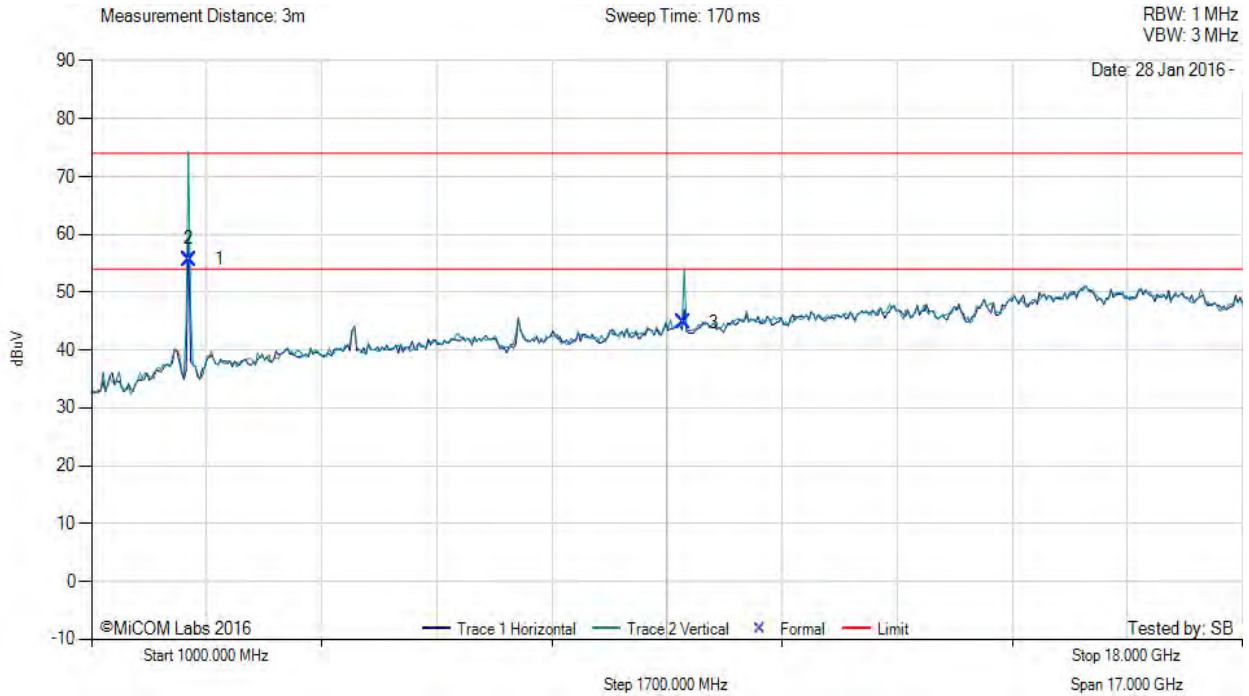


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2437.00 MHz, Antenna: AP-ANT-48, Power Setting: 21



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	2438.03	64.68	2.72	-11.73	55.67	Fundamental	Vertical	101	1	--	--	
2	2438.03	64.72	2.72	-11.73	55.71	Peak (NRB)	Vertical	101	1	--	--	Pass
3	9748.18	45.77	5.29	-6.23	44.83	Peak (NRB)	Vertical	101	12	--	--	Pass

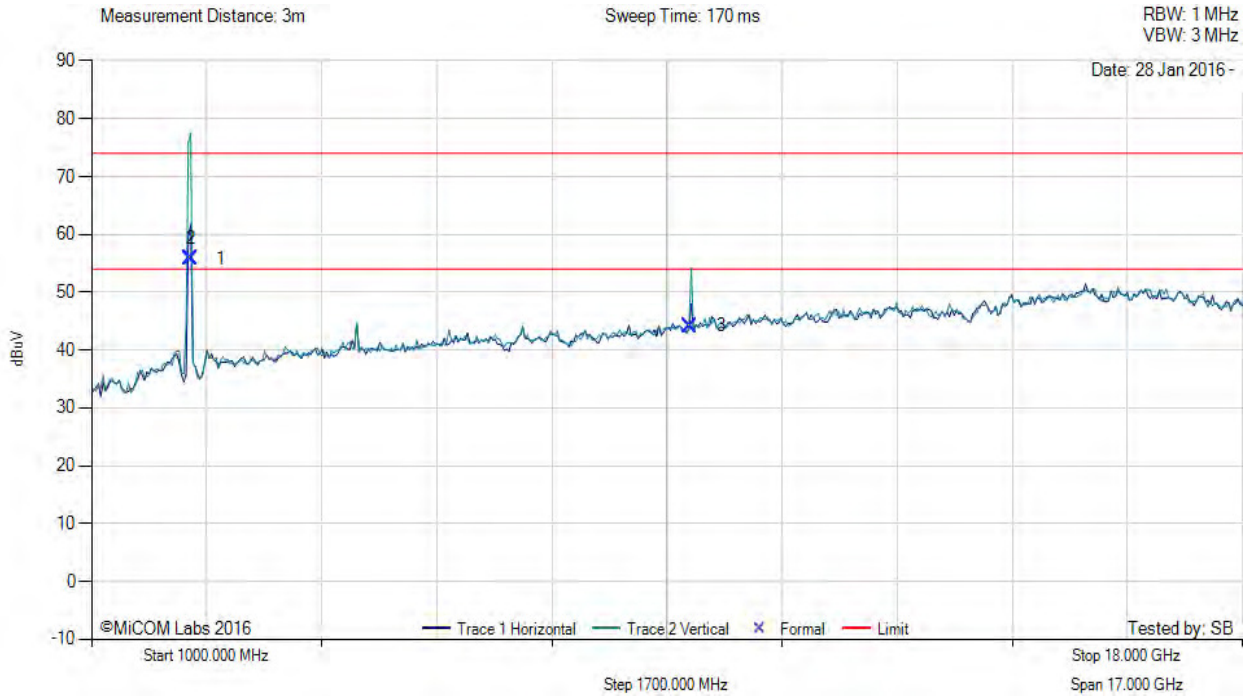
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RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-48, Power Setting: 21



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	2461.04	64.70	2.74	-11.68	55.76	Fundamental	Vertical	101	0	--	--	
2	2461.04	64.70	2.74	-11.68	55.76	Peak (NRB)	Vertical	101	0	--	--	Pass
3	9848.14	44.74	5.39	-5.94	44.19	Peak (NRB)	Vertical	101	11	--	--	Pass

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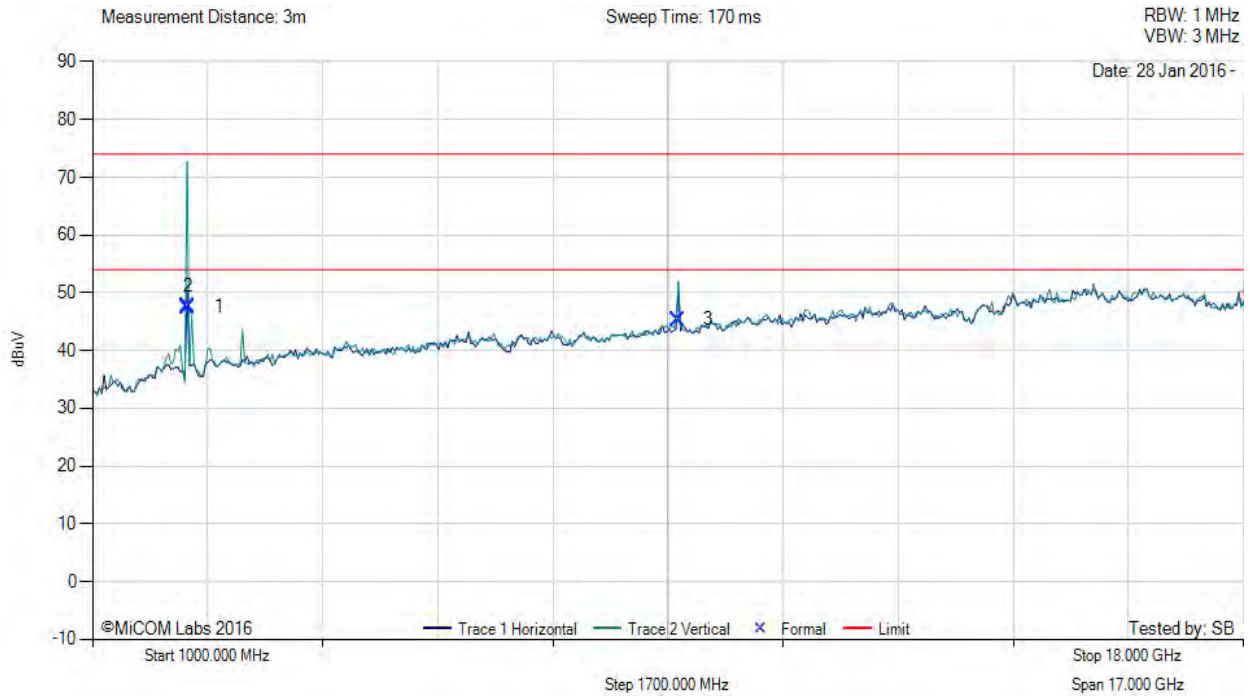


A.1.1.8. Metal Sheet



RADIATED SPURIOUS - RESTRICTED BAND EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: Metal Sheet, Power Setting: 21



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	2412.90	56.63	2.70	-11.79	47.54	Fundamental	Vertical	101	1	--	--	
2	2412.90	56.70	2.70	-11.79	47.61	Peak (NRB)	Vertical	101	1	--	--	Pass
3	9648.06	46.15	5.29	-6.08	45.36	Peak (NRB)	Vertical	101	1	--	--	Pass

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

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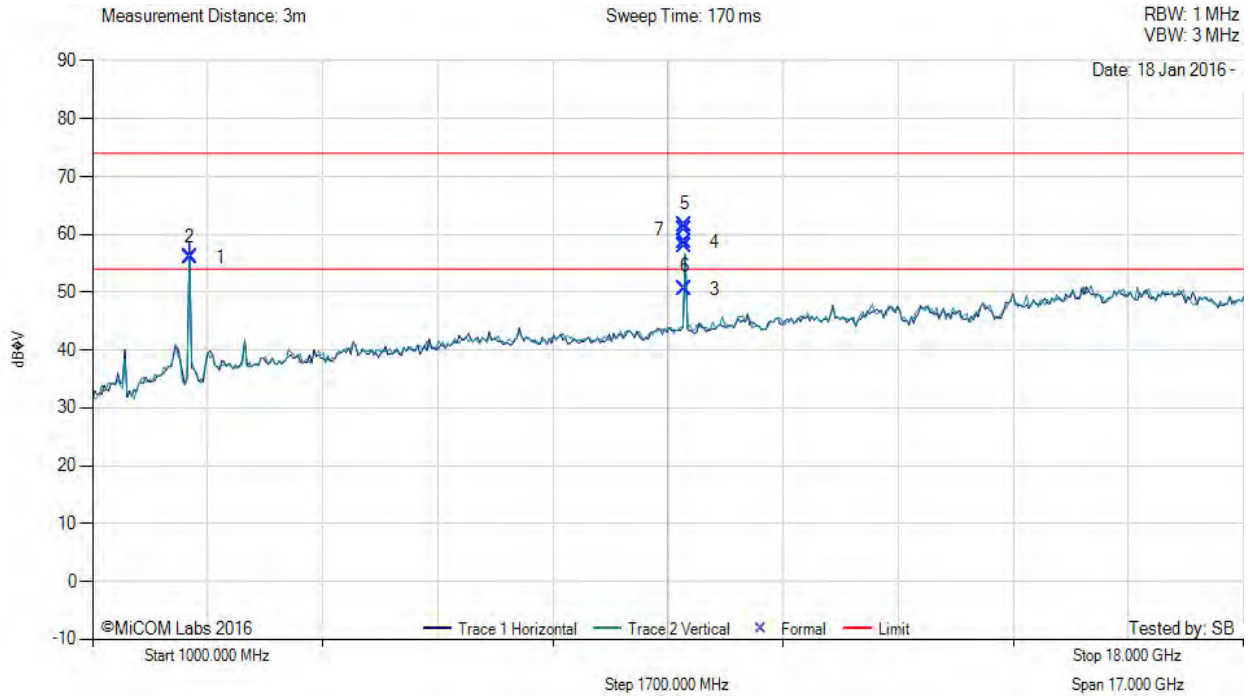
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Variant: 802.11b, Test Freq: 2437.00 MHz, Antenna: Metal Sheet, Power Setting: 21



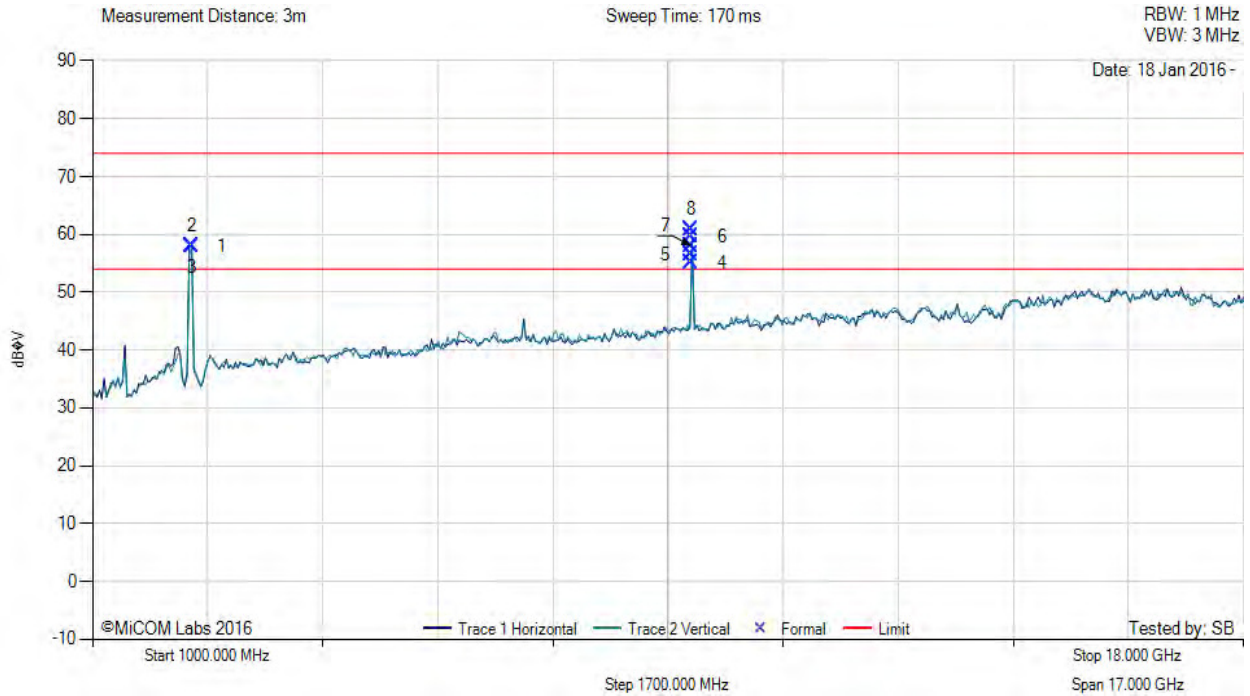
Num	Frequency MHz	Raw dBµV	Cable Loss	AF dB	Level dBµV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBµV/m	Margin dB	Pass /Fail
1	2435.99	65.01	2.72	-11.73	56.00	Fundamental	Horizontal	151	1	--	--	
2	2435.99	65.01	2.72	-11.73	56.00	Peak (NRB)	Horizontal	151	1	--	--	Pass
3	9747.97	51.44	5.29	-6.23	50.50	Peak (NRB)	Vertical	148	195	--	--	Pass

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Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: Metal Sheet, Power Setting: 21



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	2464.08	66.88	2.73	-11.67	57.94	Fundamental	Horizontal	151	130	--	--	
2	2464.08	66.88	2.73	-11.67	57.94	Peak (NRB)	Horizontal	151	130	--	--	Pass
3	2464.08	66.88	2.73	-11.67	57.94	Peak (NRB)	Horizontal	151	130	--	--	Pass
4	9847.96	55.67	5.39	-5.94	55.12	Peak (NRB)	Vertical	151	130	--	--	Pass

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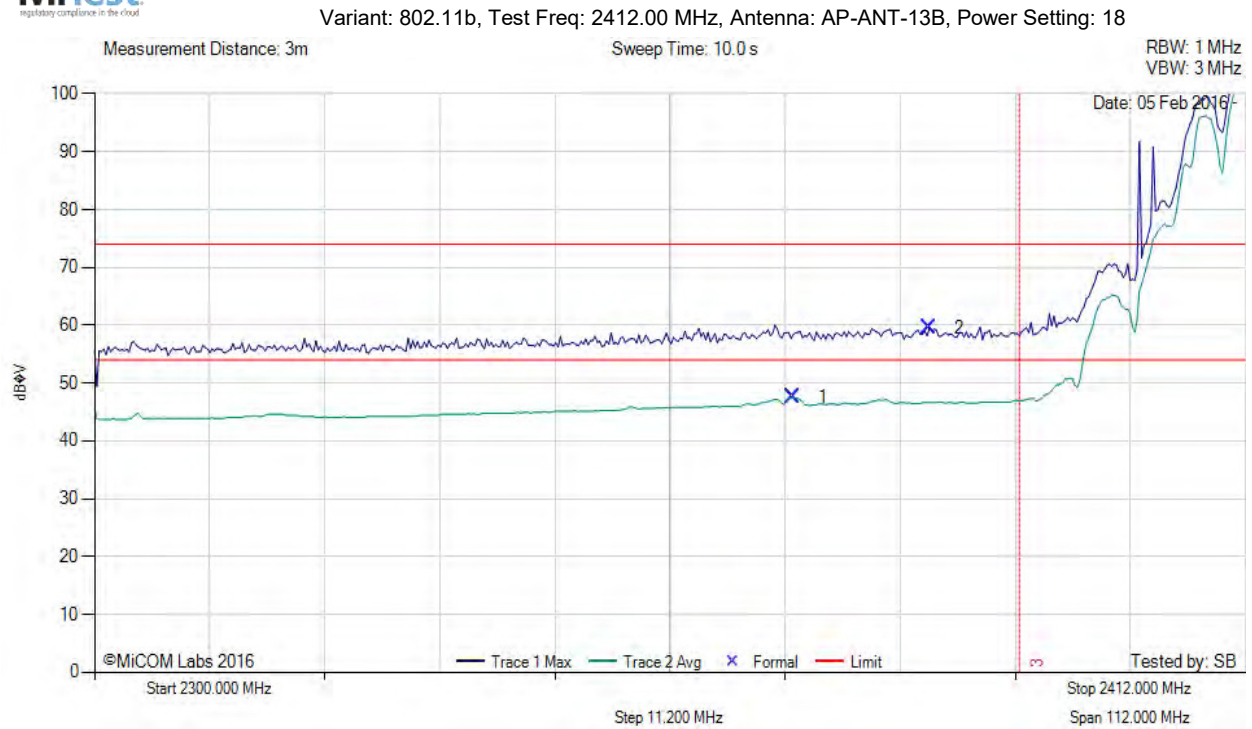


A.1.2. Restricted Band-Edge Emissions

A.1.2.1. AP-ANT-13B



RADIATED - LOWER RESTRICTED BAND-EDGE 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	2367.94	13.04	2.71	31.85	47.60	Max Avg	Vertical	135	361	54.0	-6.4	Pass
2	2381.19	24.87	2.69	31.96	59.52	Max Peak	Vertical	135	361	74.0	-14.5	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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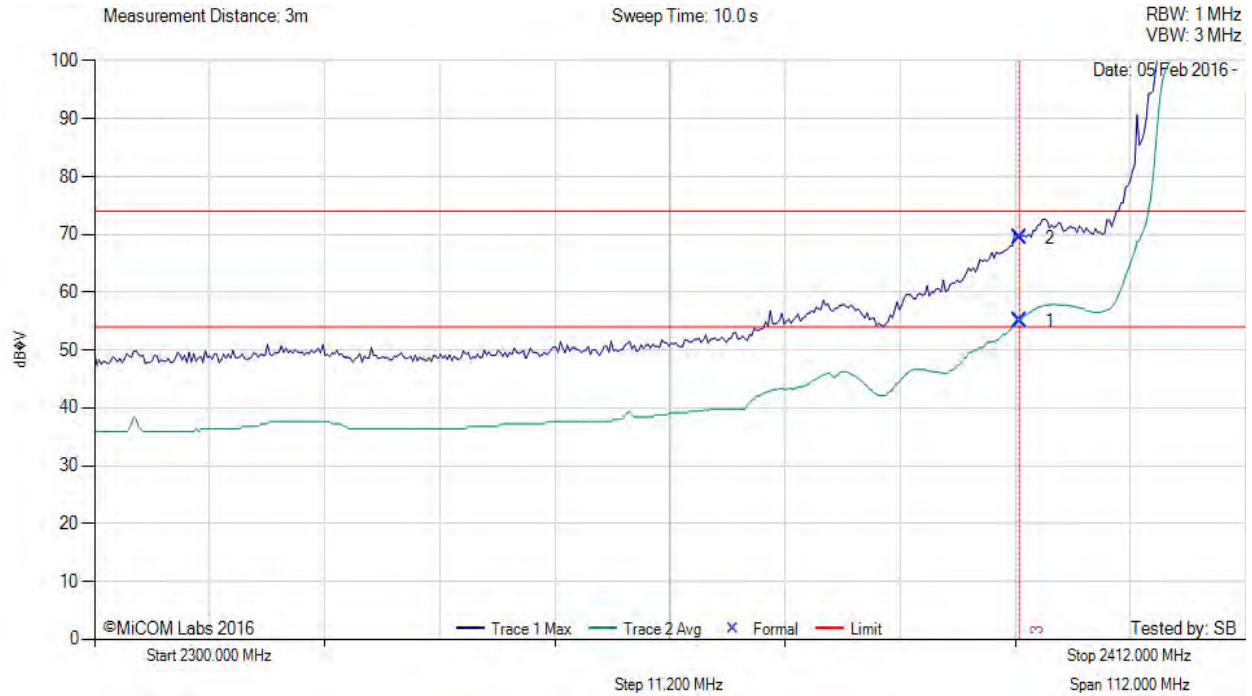


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2412.00 MHz, Antenna: AP-ANT-13B, Power Setting: 16.5



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	2390.00	18.29	2.69	32.04	53.02	Max Avg	Vertical	135	361	54.0	-0.98	Pass
2	2390.00	34.60	2.69	32.04	69.33	Max Peak	Vertical	135	361	74.0	-4.7	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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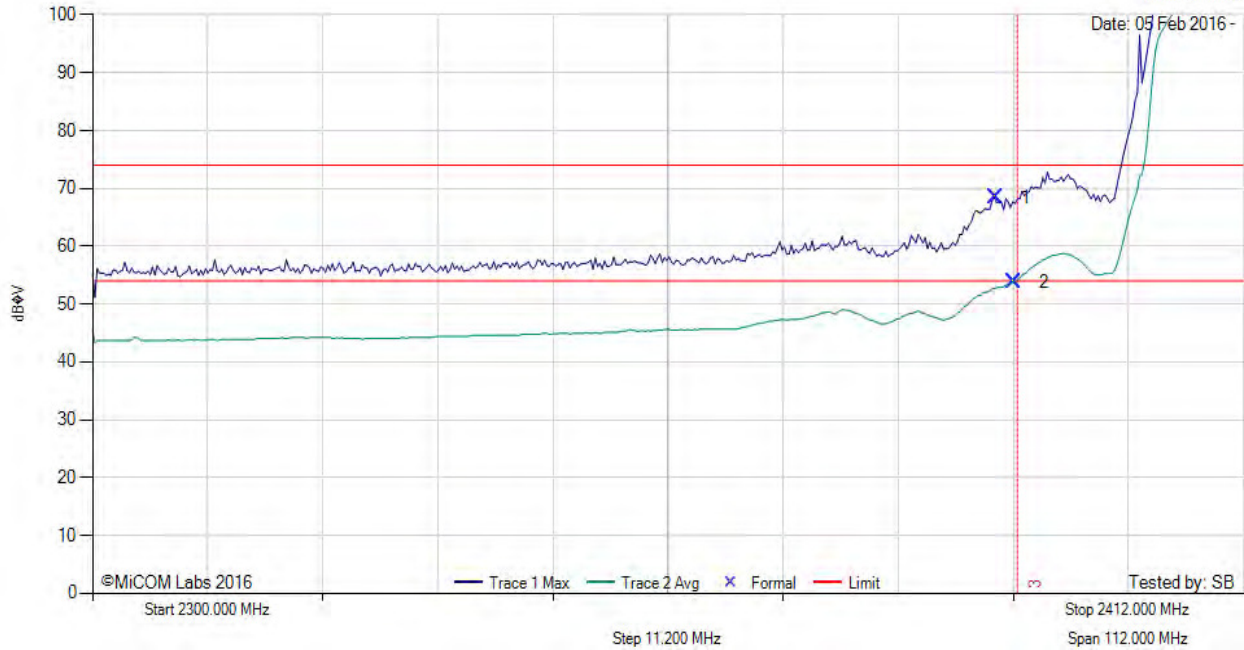
RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2412.00 MHz, Antenna: AP-ANT-13B, Power Setting: 16.5

Measurement Distance: 3m

Sweep Time: 10.0 s

RBW: 1 MHz
VBW: 3 MHz



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	2387.84	33.75	2.68	32.03	68.46	Max Peak	Vertical	135	361	74.0	-5.5	Pass
2	2389.64	19.10	2.69	32.04	53.83	Max Avg	Vertical	135	361	54.0	-0.2	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

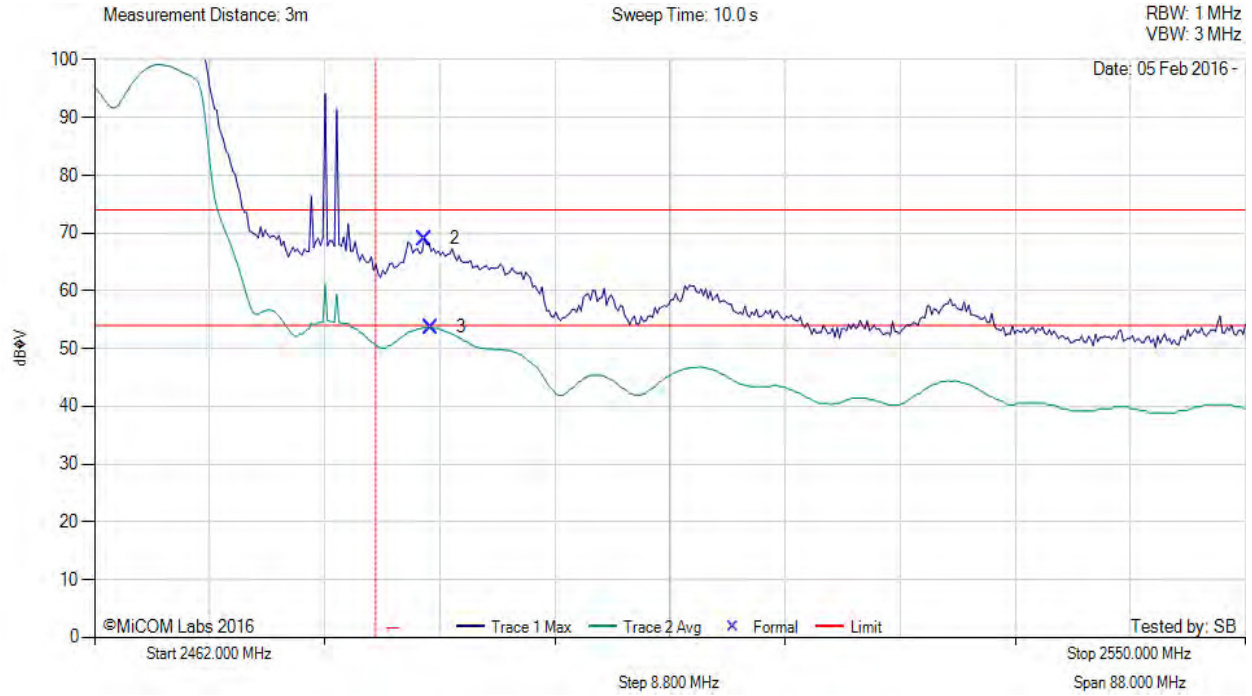
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2452.00 MHz, Antenna: AP-ANT-13B, Power Setting: 16



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	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	
2	2487.19	33.92	2.73	32.37	69.02	Max Peak	Vertical	135	361	74.0	-5.0	Pass
3	2487.68	18.58	2.73	32.38	53.69	Max Avg	Vertical	135	361	54.0	-0.3	Pass

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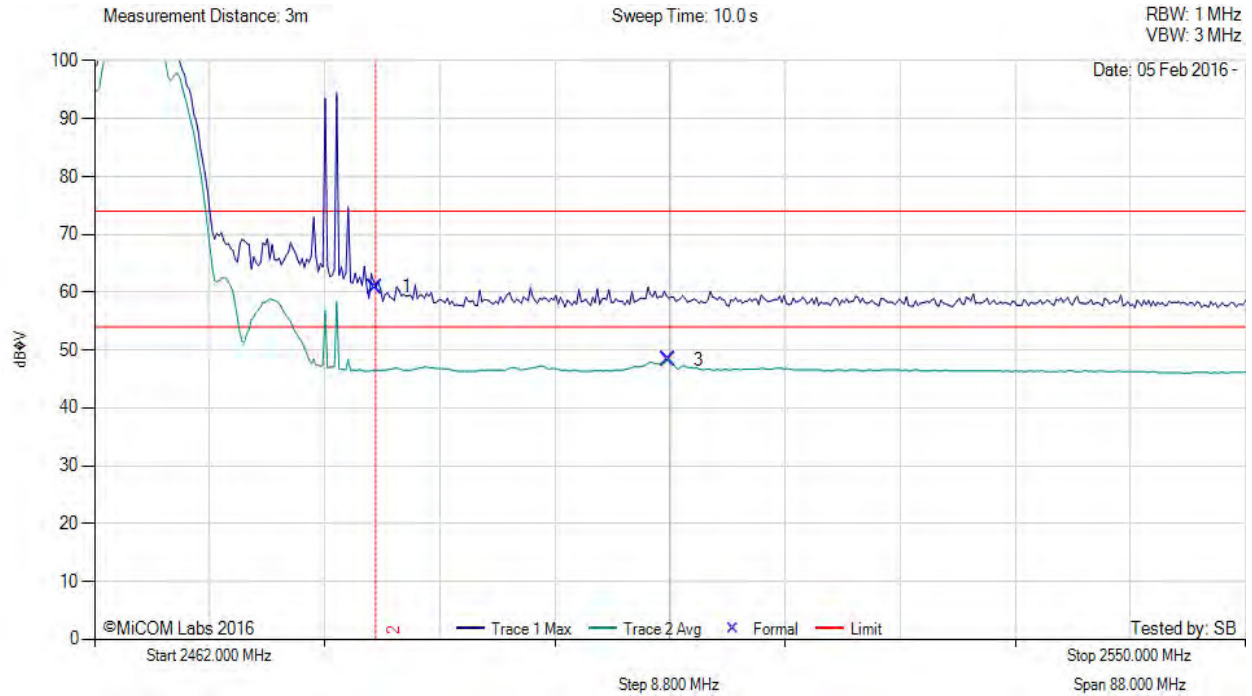


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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-13B, Power Setting: 18



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	2483.50	25.81	2.73	32.37	60.91	Max Peak	Vertical	135	361	74.0	-13.1	Pass
2	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	
3	2505.90	13.23	2.72	32.41	48.36	Max Avg	Vertical	135	361	54.0	-5.6	Pass

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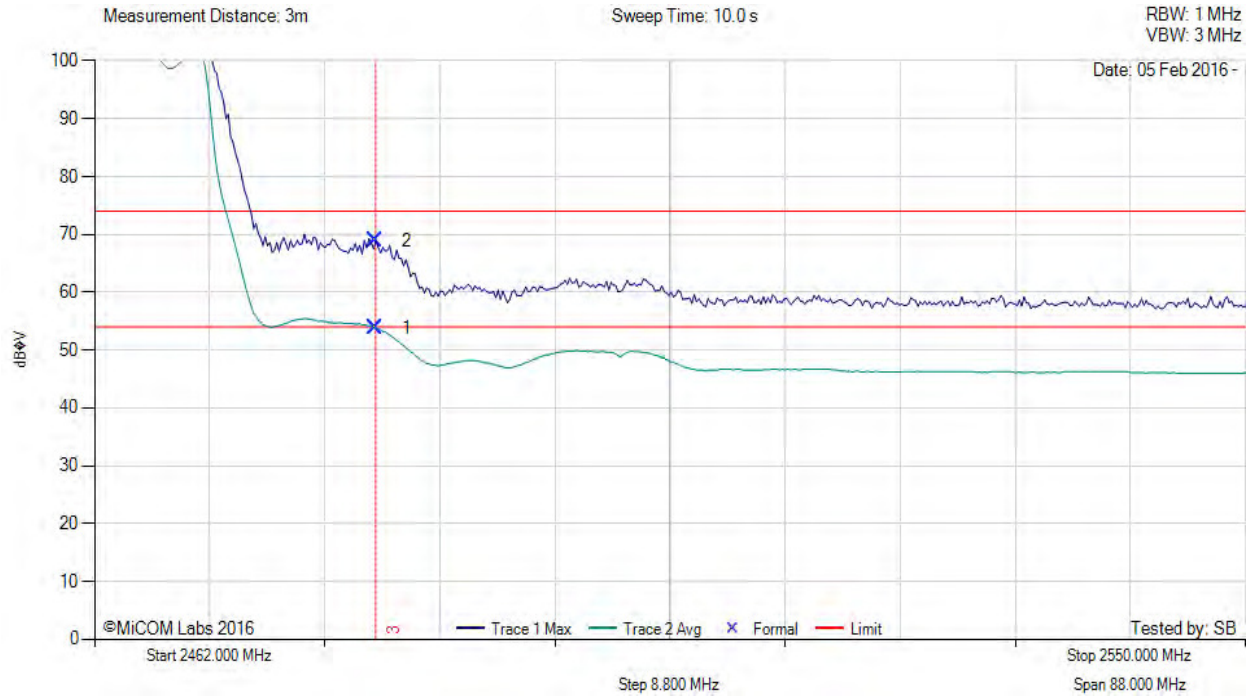


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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2462.00 MHz, Antenna: AP-ANT-13B, Power Setting: 17



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	2483.50	18.72	2.73	32.37	53.82	Max Avg	Vertical	135	361	54.0	-0.2	Pass
2	2483.50	33.78	2.73	32.37	68.88	Max Peak	Vertical	135	361	74.0	-5.1	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

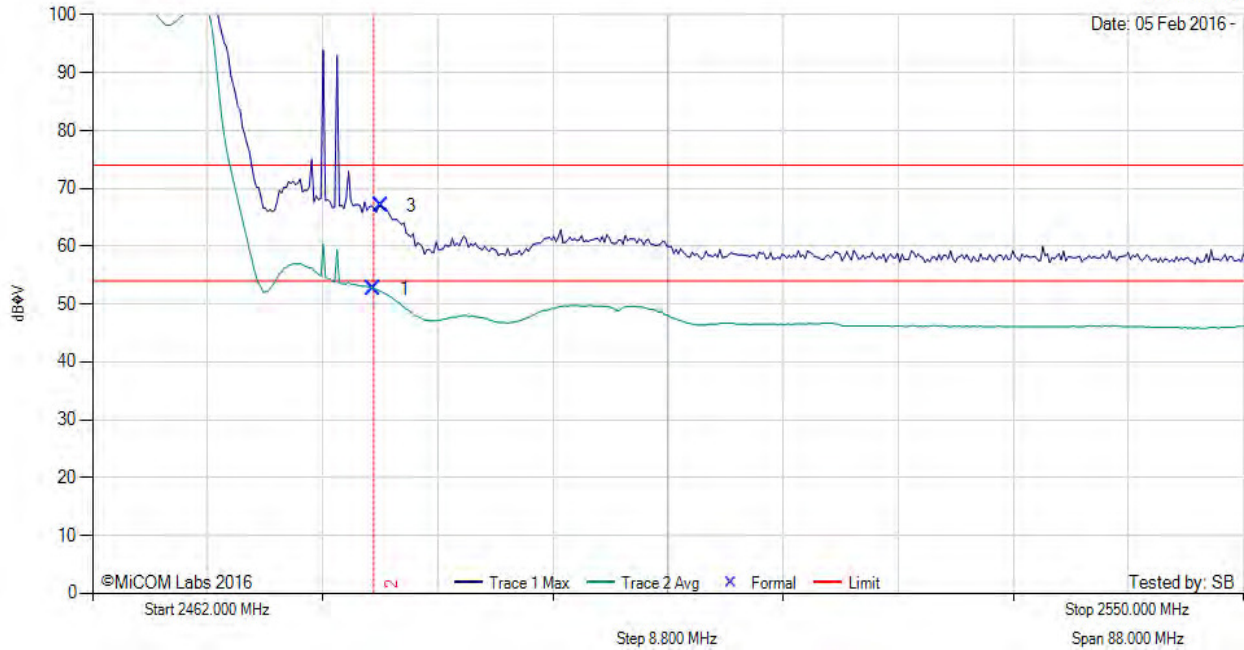
Variant: 802.11n HT-20, Test Freq: 2462.00 MHz, Antenna: AP-ANT-13B, Power Setting: 17

Measurement Distance: 3m

Sweep Time: 10.0 s

RBW: 1 MHz
VBW: 3 MHz

Date: 05 Feb 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	2483.50	17.50	2.73	32.37	52.60	Max Avg	Vertical	135	361	54.0	-1.4	Pass
2	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	
3	2484.03	31.89	2.73	32.37	66.99	Max Peak	Vertical	135	361	74.0	-7.0	Pass

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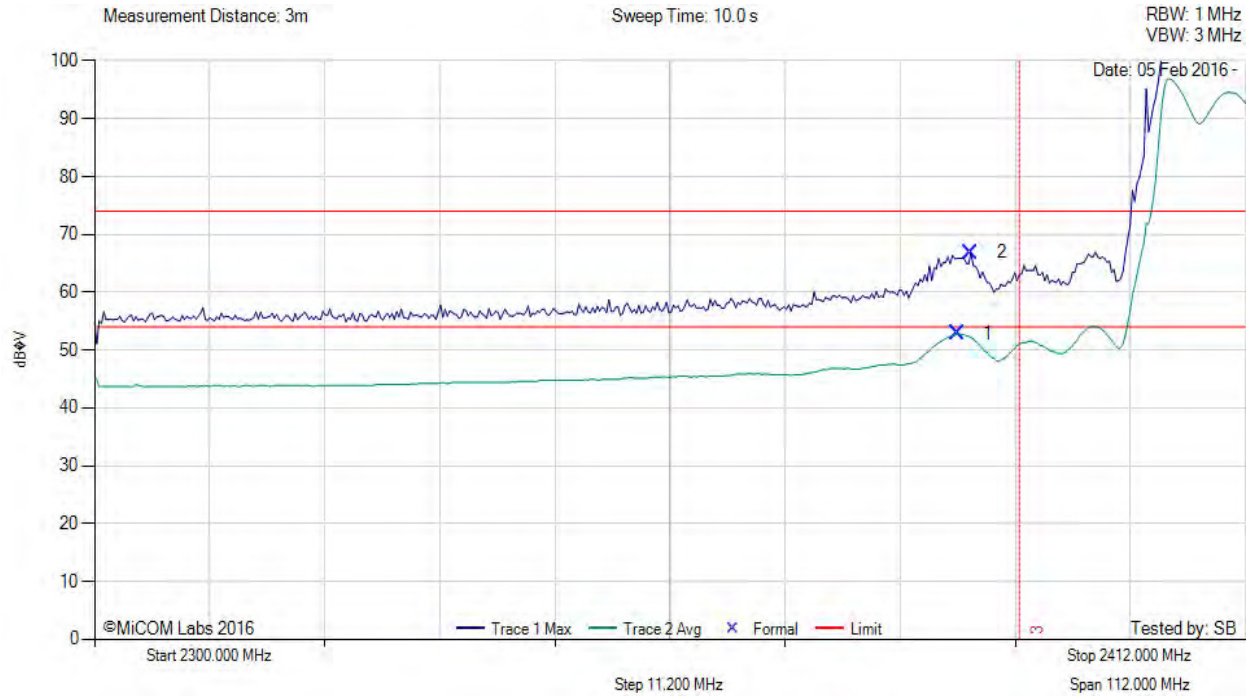


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2422.00 MHz, Antenna: AP-ANT-13B, Power Setting: 12



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	2383.94	18.17	2.68	31.99	52.84	Max Avg	Vertical	135	361	54.0	-1.2	Pass
2	2385.29	32.18	2.68	32.00	66.86	Max Peak	Vertical	135	361	74.0	-7.1	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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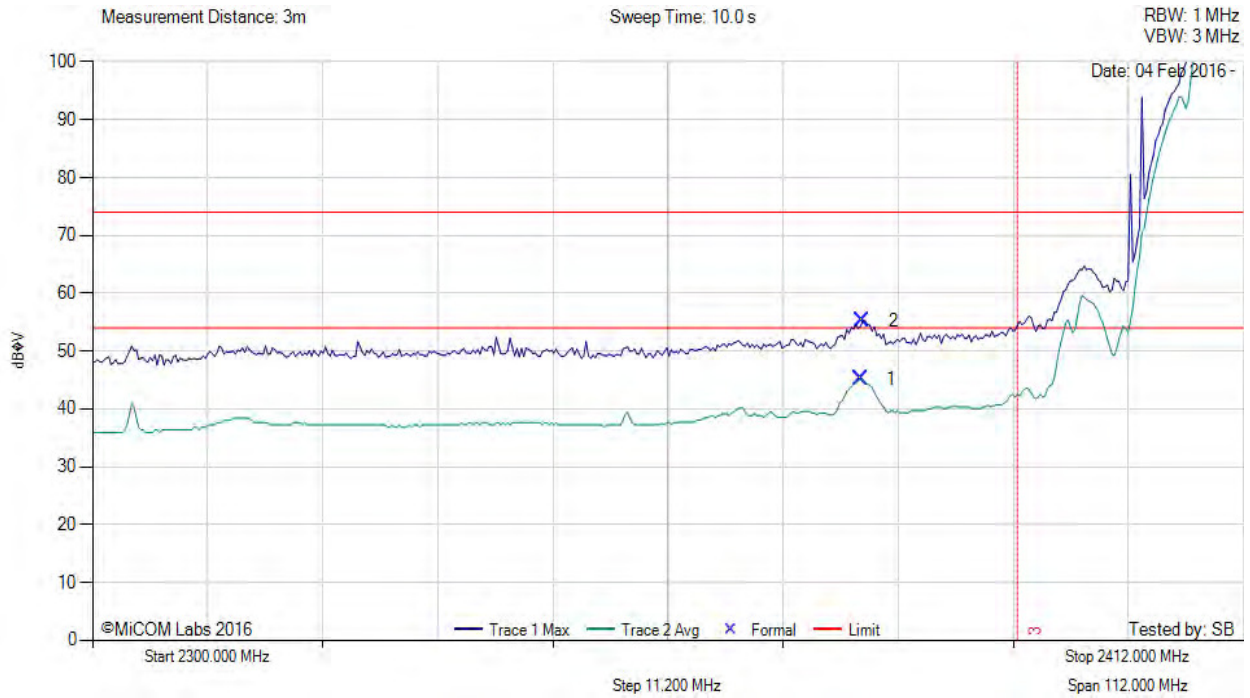


A.1.2.2. AP-ANT-19



RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-19, Power Setting: 18



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	2374.74	10.57	2.70	31.91	45.18	Max Avg	Vertical	148	37	54.0	-8.8	Pass
2	2374.96	20.66	2.70	31.91	55.27	Max Peak	Vertical	148	37	74.0	-18.7	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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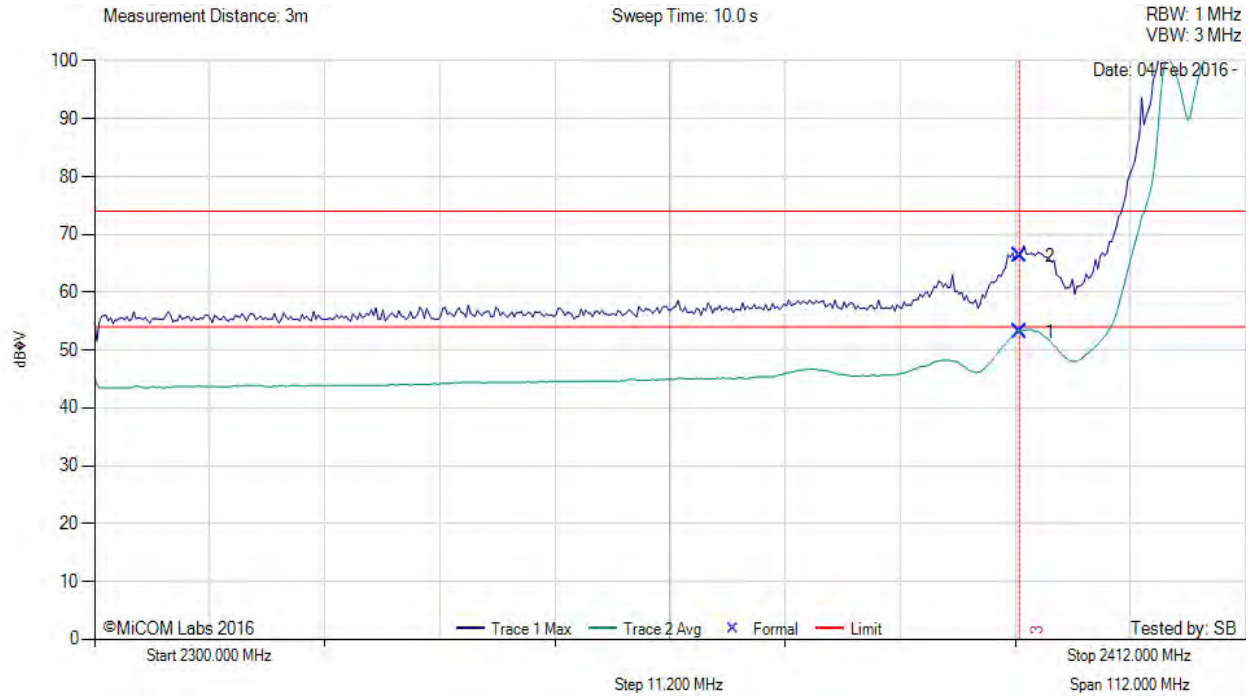


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2412.00 MHz, Antenna: AP-ANT-19, Power Setting: 15.5



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	2390.00	18.37	2.69	32.04	53.10	Max Avg	Vertical	148	37	54.0	-0.9	Pass
2	2390.00	31.56	2.69	32.04	66.29	Max Peak	Vertical	148	37	74.0	-7.7	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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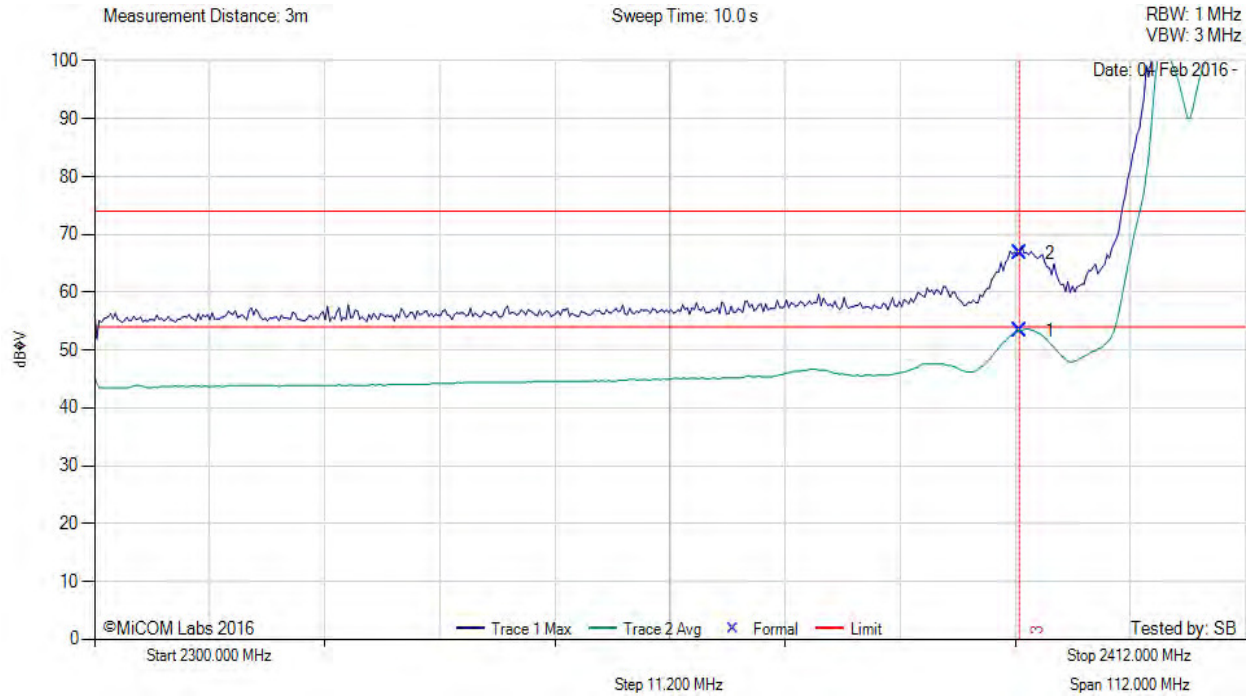


Title: Aruba Networks, Inc APIN0334, APIN0335
To: FCC Subpart C 15.247 (DTS), IC RSS-247
Serial #: ARUB196-U3_Radiated Rev A
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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2412.00 MHz, Antenna: AP-ANT-19, Power Setting: 15.5



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	2390.00	18.64	2.69	32.04	53.37	Max Avg	Vertical	148	37	54.0	-0.6	Pass
2	2390.00	32.05	2.69	32.04	66.78	Max Peak	Vertical	148	37	74.0	-7.2	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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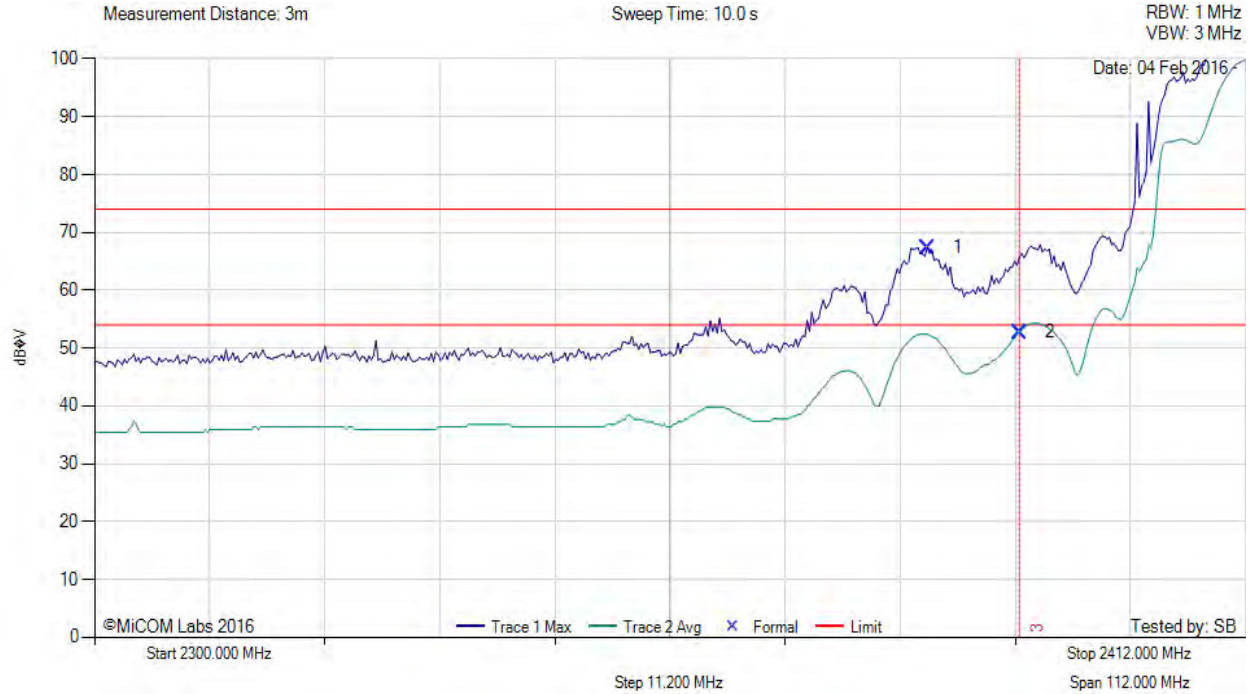


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2422.00 MHz, Antenna: AP-ANT-19, Power Setting: 14



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	2381.02	32.67	2.69	31.96	67.32	Max Peak	Vertical	148	37	74.0	-6.7	Pass
2	2390.00	18.01	2.69	32.04	52.74	Max Avg	Vertical	148	37	54.0	-1.3	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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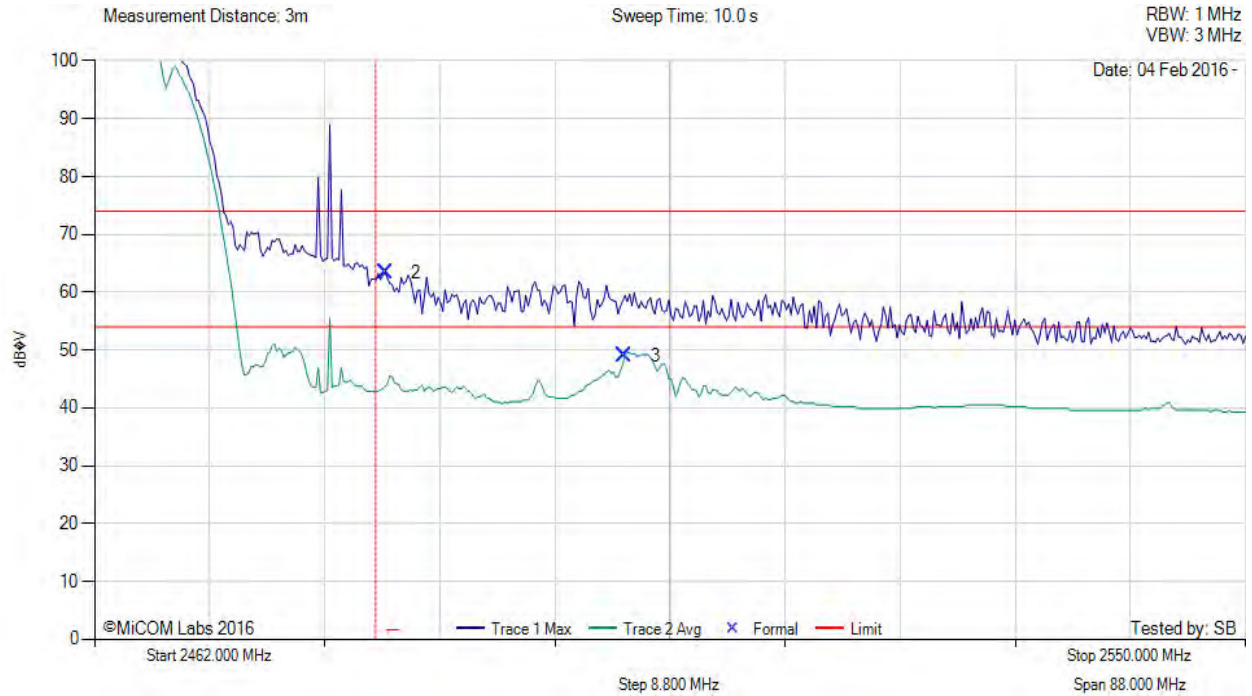


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-19, Power Setting: 18



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	2484.21	28.24	2.73	32.37	63.34	Max Peak	Vertical	148	37	74.0	-10.7	Pass
2	2502.55	13.94	2.73	32.40	49.07	Max Avg	Vertical	148	37	54.0	-4.9	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

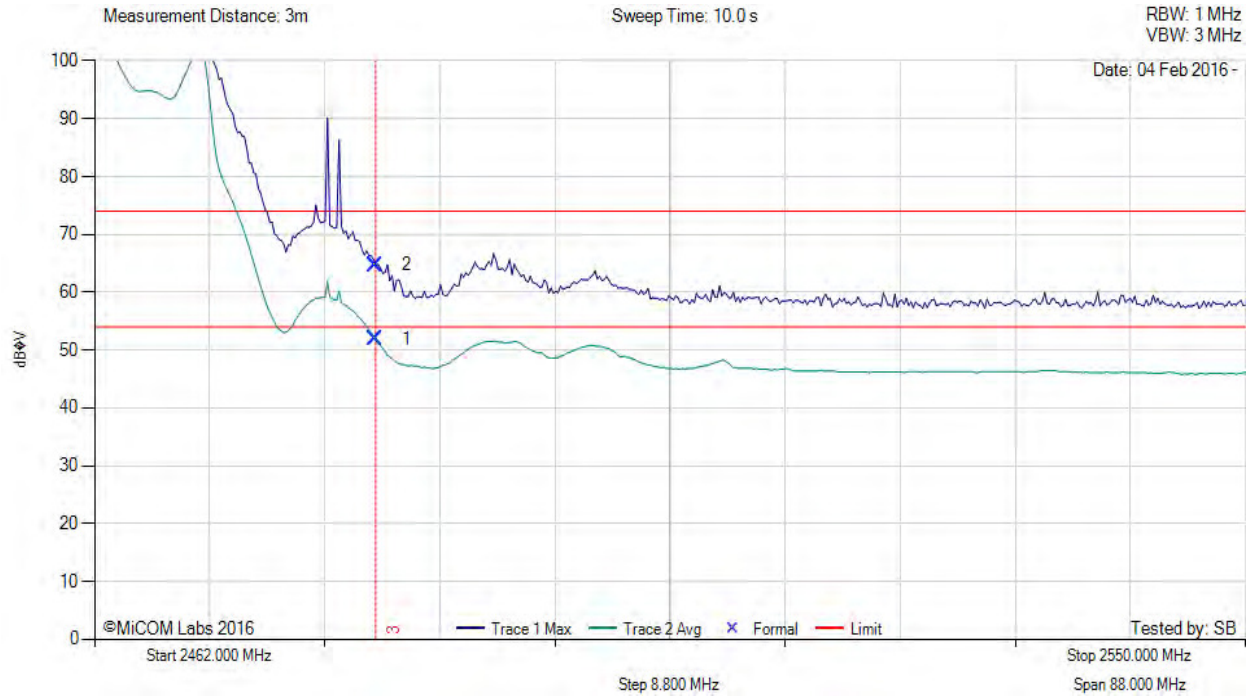
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2462.00 MHz, Antenna: AP-ANT-19, Power Setting: 17



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	2483.50	16.86	2.73	32.37	51.96	Max Avg	Vertical	148	37	54.0	-2.0	Pass
2	2483.50	29.62	2.73	32.37	64.72	Max Peak	Vertical	148	37	74.0	-9.3	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

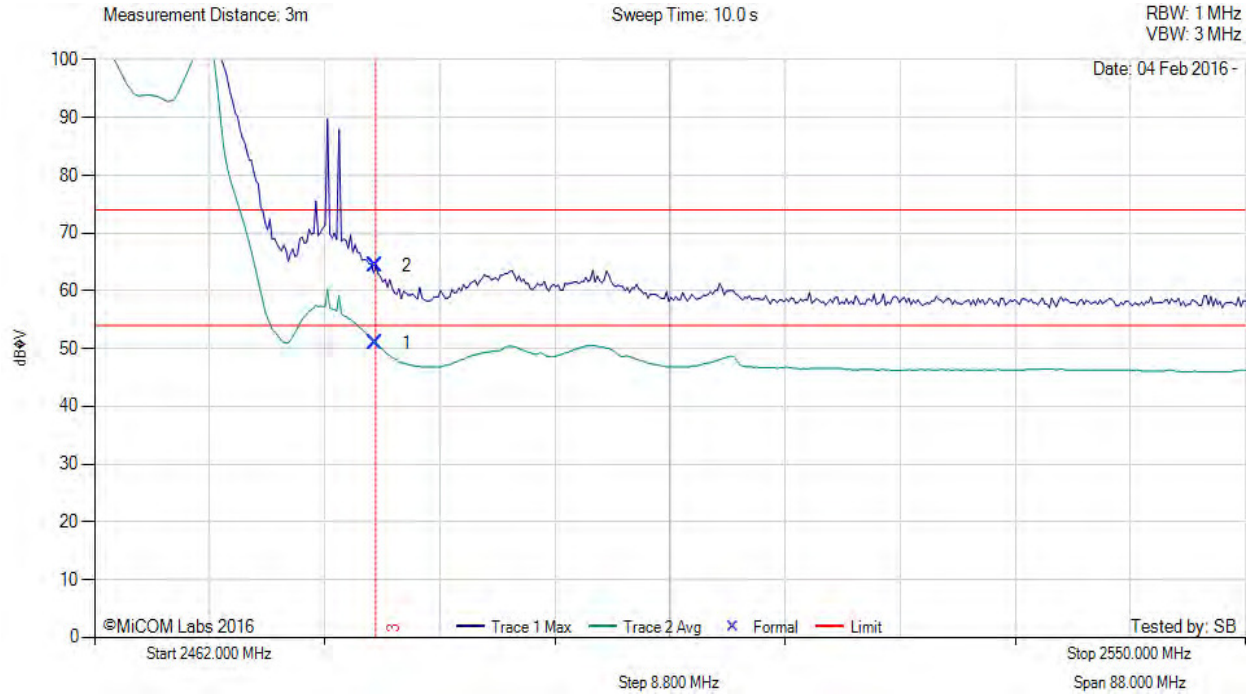
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2462.00 MHz, Antenna: AP-ANT-19, Power Setting: 16.5



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	2483.50	15.90	2.73	32.37	51.00	Max Avg	Vertical	148	37	54.0	-3.0	Pass
2	2483.50	29.29	2.73	32.37	64.39	Max Peak	Vertical	148	37	74.0	-9.6	Pass
3	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

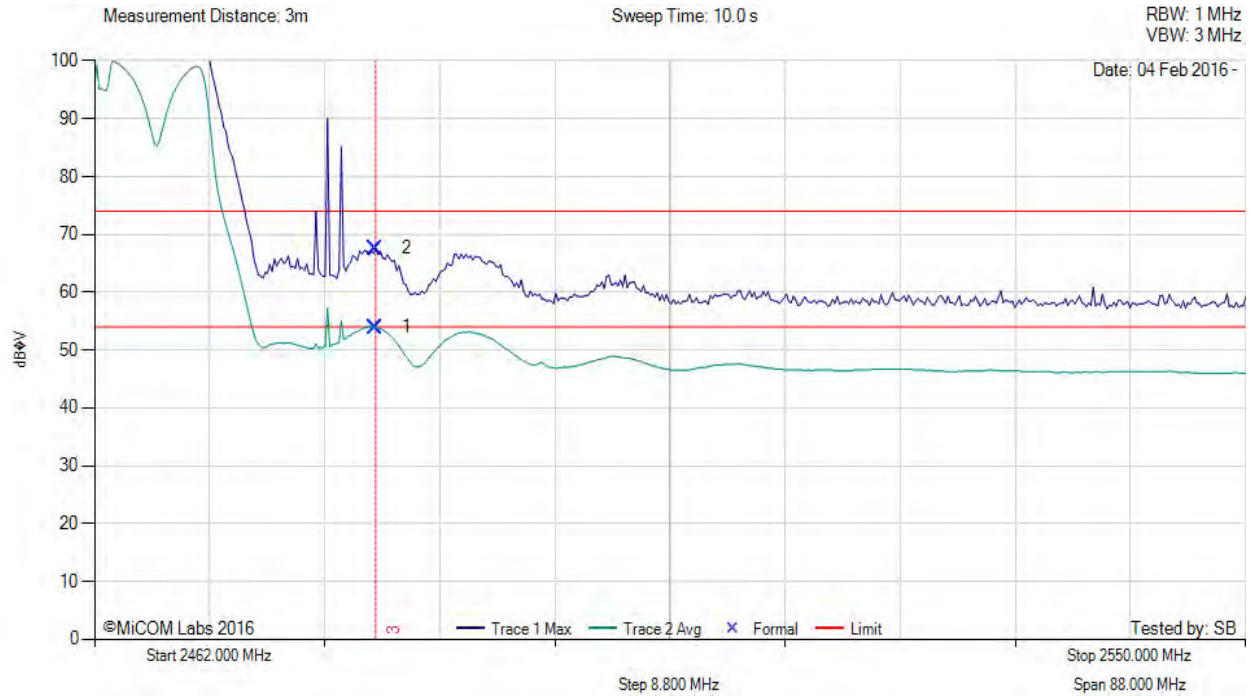
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2452.00 MHz, Antenna: AP-ANT-19, Power Setting: 13



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	2483.50	18.85	2.73	32.37	53.95	Max Avg	Vertical	148	37	54.0	-0.1	Pass
2	2483.50	32.53	2.73	32.37	67.63	Max Peak	Vertical	148	37	74.0	-6.4	Pass
3	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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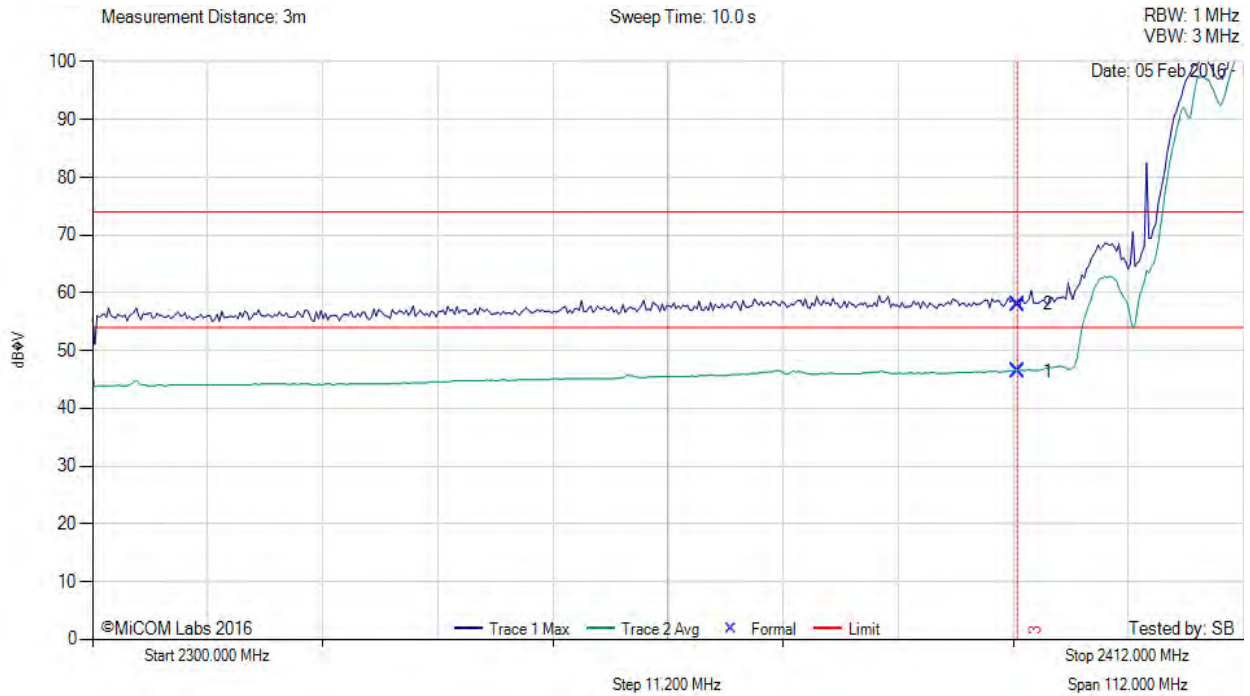


A.1.2.3. AP-ANT-1W



RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-1W, Power Setting: 18



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	2390.00	11.70	2.69	32.04	46.43	Max Avg	Vertical	142	341	54.0	-7.6	Pass
2	2390.00	23.24	2.69	32.04	57.97	Max Peak	Vertical	142	341	74.0	-16.0	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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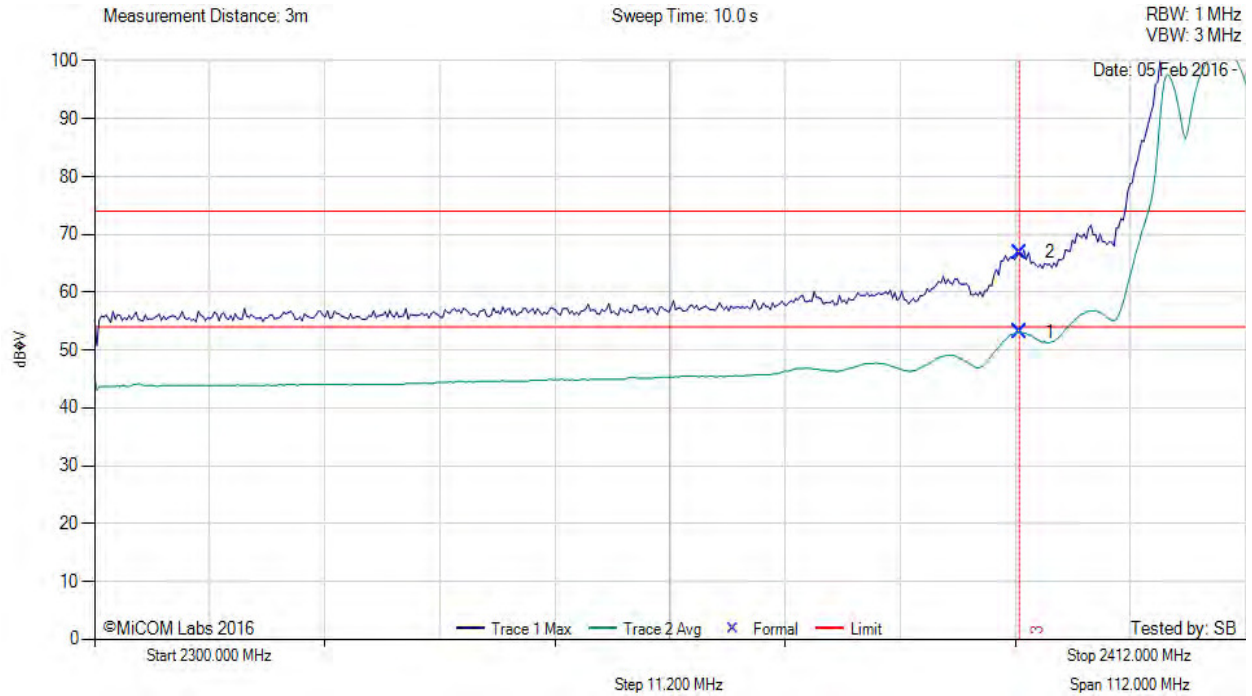


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2412.00 MHz, Antenna: AP-ANT-1W, Power Setting: 17



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	2390.00	18.37	2.69	32.04	53.10	Max Avg	Vertical	142	341	54.0	-0.9	Pass
2	2390.00	32.15	2.69	32.04	66.88	Max Peak	Vertical	142	341	74.0	-7.1	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

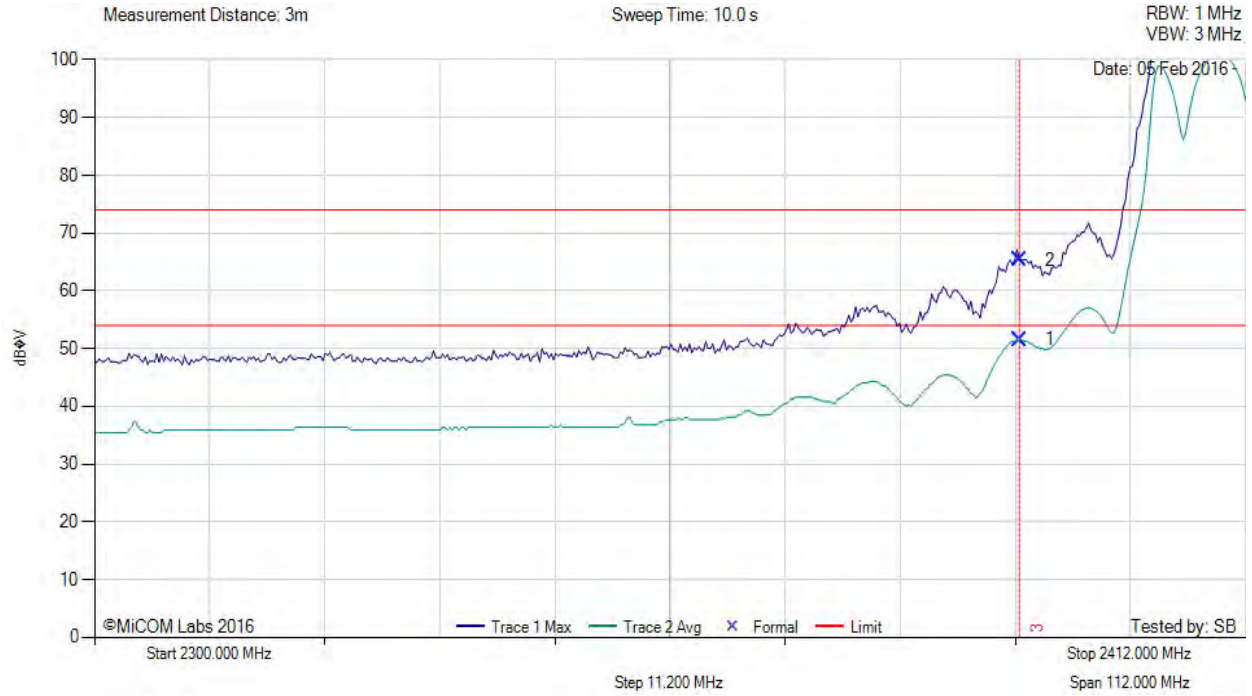
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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2412.00 MHz, Antenna: AP-ANT-1W, Power Setting: 18



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	2390.00	16.77	2.69	32.04	51.50	Max Avg	Vertical	142	341	54.0	-2.5	Pass
2	2390.00	30.55	2.69	32.04	65.28	Max Peak	Vertical	142	341	74.0	-8.7	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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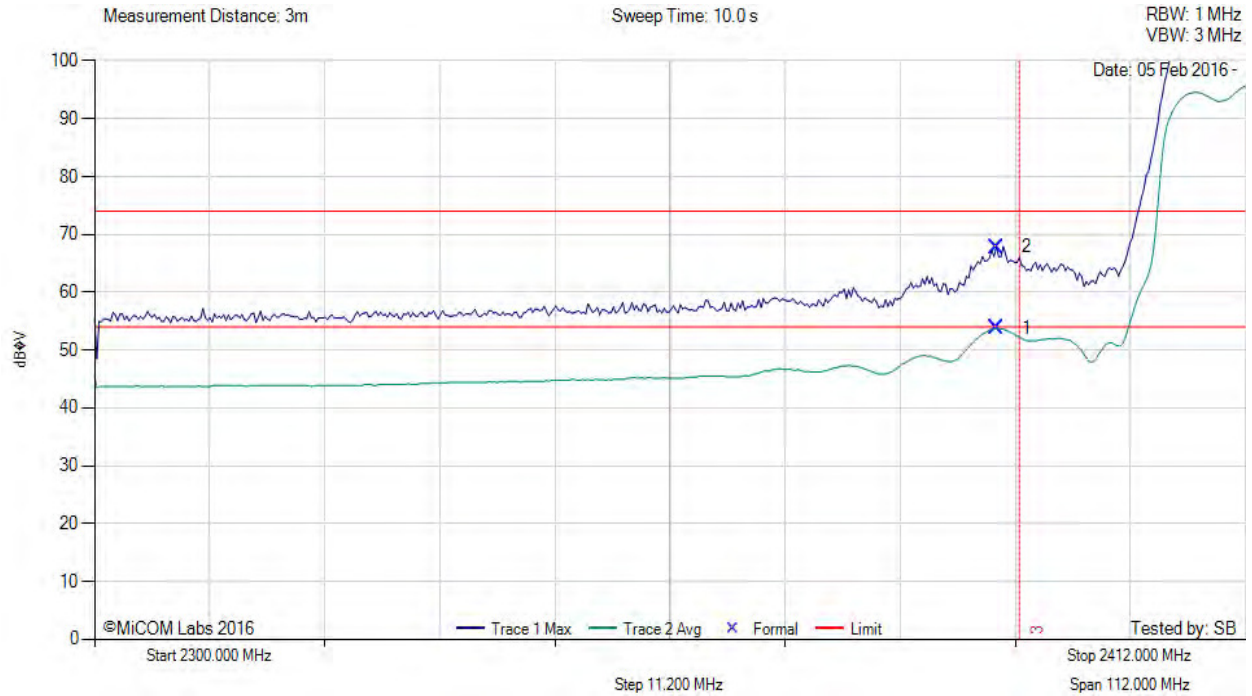


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2422.00 MHz, Antenna: AP-ANT-1W, Power Setting: 14



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	2387.76	19.04	2.68	32.03	53.75	Max Avg	Vertical	142	341	54.0	-0.3	Pass
2	2387.76	33.10	2.68	32.03	67.81	Max Peak	Vertical	142	341	74.0	-6.2	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

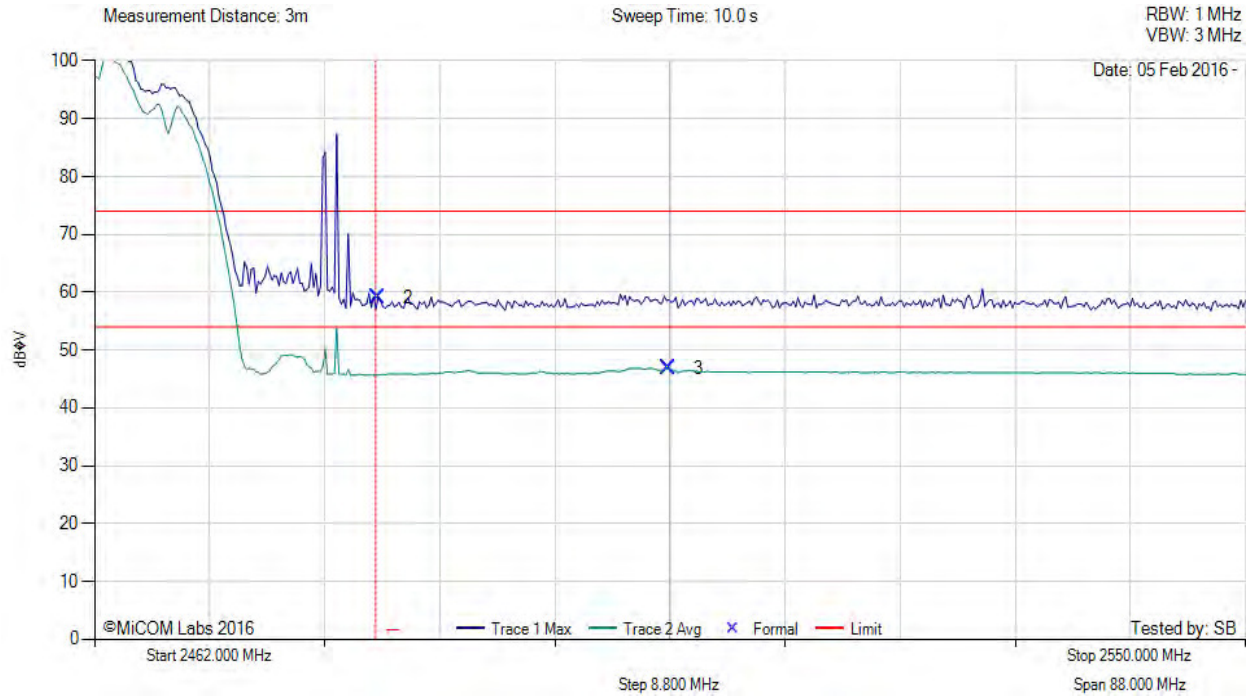
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-1W, Power Setting: 18



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	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	
2	2483.68	24.01	2.73	32.37	59.11	Max Peak	Vertical	142	341	74.0	-14.9	Pass
3	2505.90	11.72	2.72	32.41	46.85	Max Avg	Vertical	142	341	54.0	-7.2	Pass

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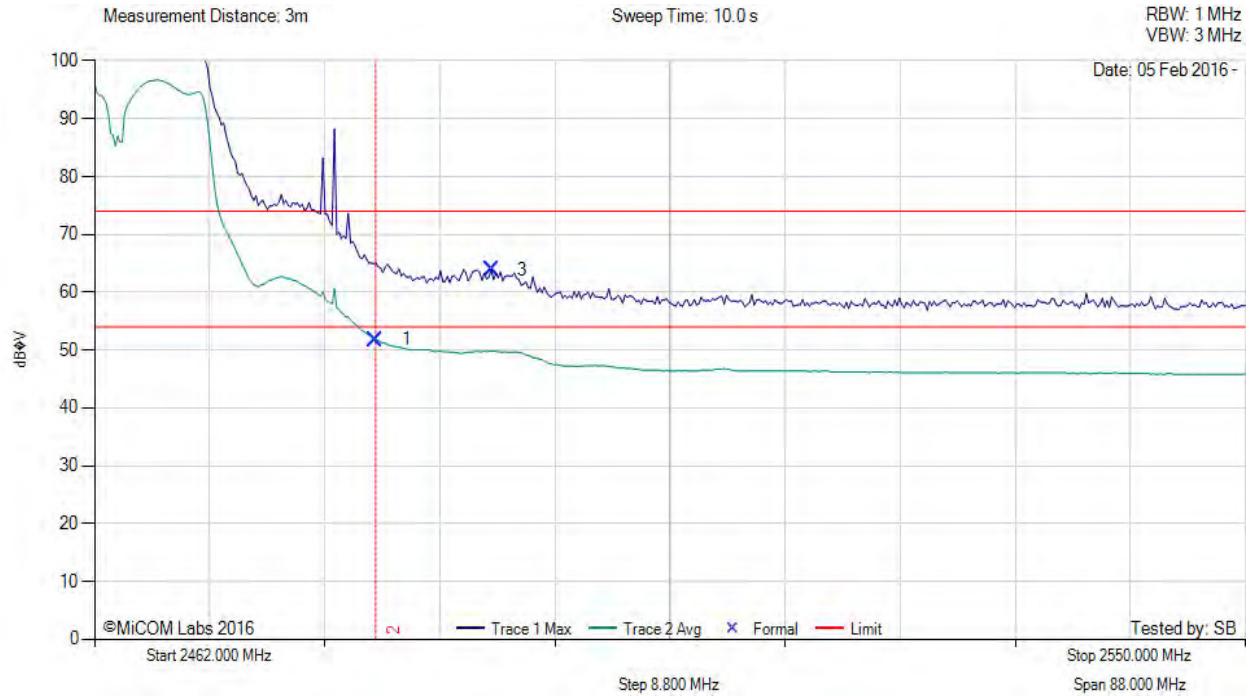


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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2462.00 MHz, Antenna: AP-ANT-1W, Power Setting: 18



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	2483.50	16.70	2.73	32.37	51.80	Max Avg	Vertical	142	341	54.0	-2.2	Pass
2	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	
3	2492.39	28.80	2.74	32.38	63.92	Max Peak	Vertical	142	341	74.0	-10.1	Pass

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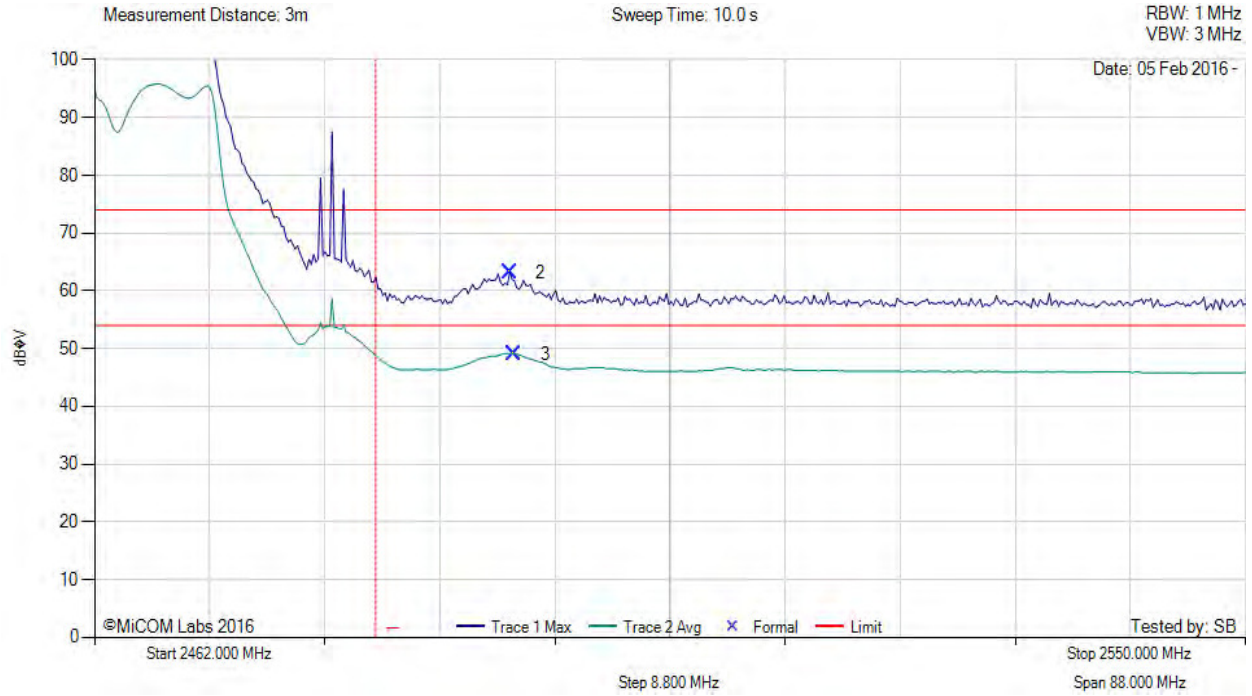


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2462.00 MHz, Antenna: AP-ANT-1W, Power Setting: 18



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	2493.76	28.05	2.74	32.39	63.18	Max Peak	Vertical	142	341	74.0	-10.8	Pass
3	2494.11	13.93	2.74	32.39	49.06	Max Avg	Vertical	142	341	54.0	-4.9	Pass
1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

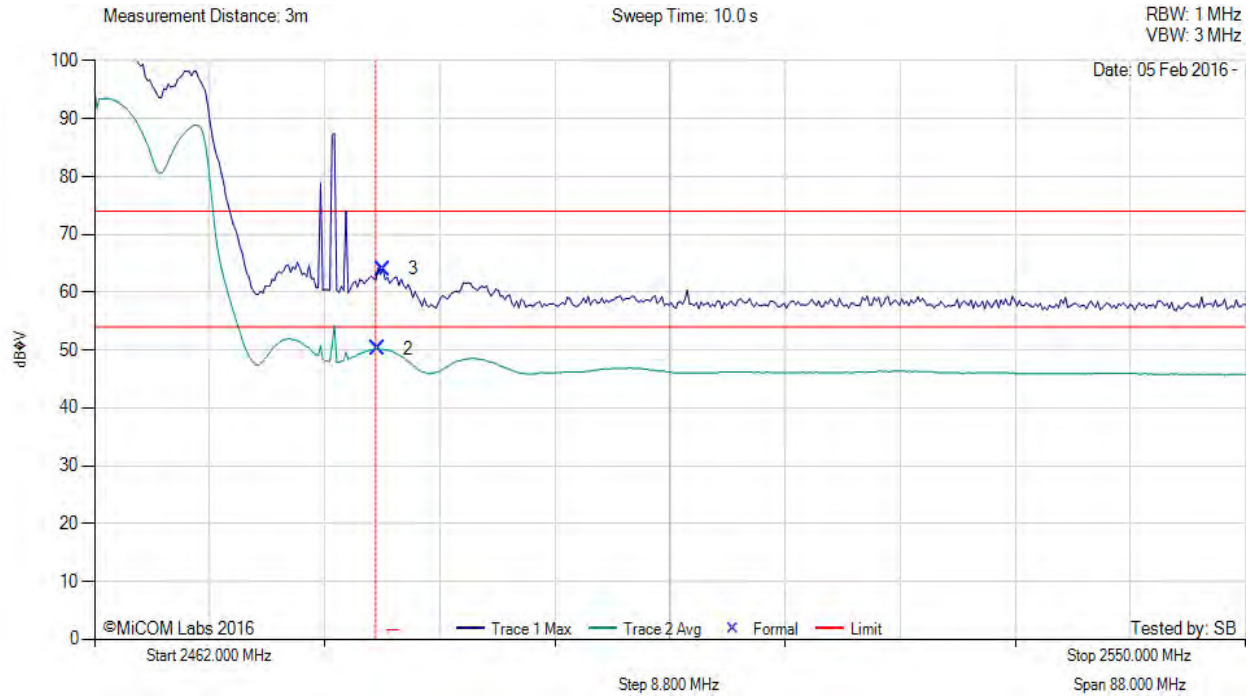
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2452.00 MHz, Antenna: AP-ANT-1W, Power Setting: 14



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	2483.68	15.13	2.73	32.37	50.23	Max Avg	Vertical	142	341	54.0	-3.8	Pass
3	2484.03	28.90	2.73	32.37	64.00	Max Peak	Vertical	142	341	74.0	-10.0	Pass
1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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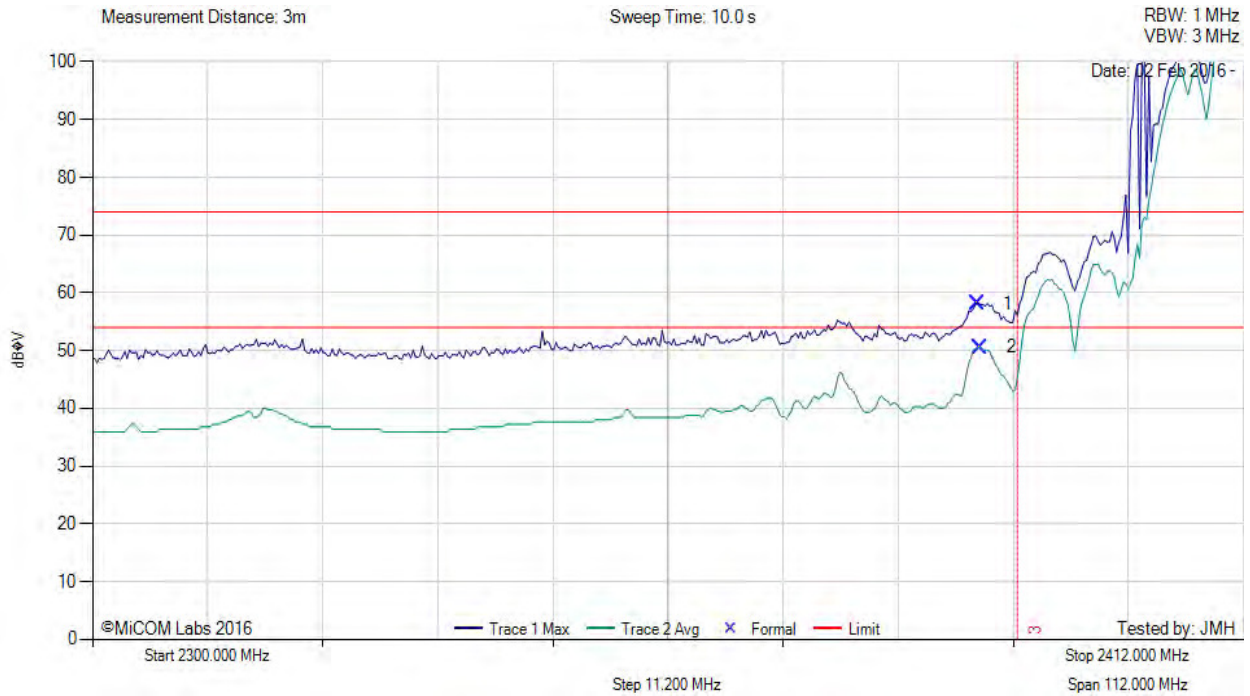


A.1.2.4. AP-ANT-20W



RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-20W, Power Setting: 20



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	2386.10	23.45	2.68	32.01	58.14	Max Peak	Horizontal	166	320	74.0	-15.9	Pass
2	2386.44	15.90	2.68	32.01	50.59	Max Avg	Horizontal	166	320	54.0	-3.4	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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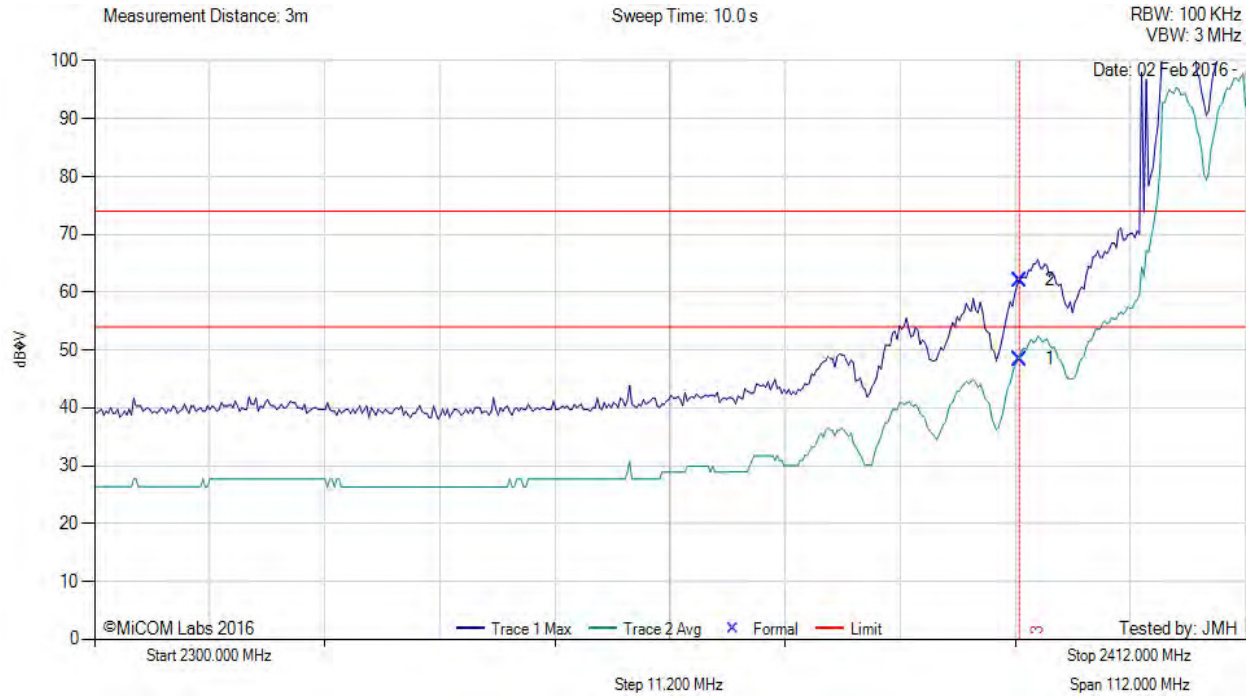


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2412.00 MHz, Antenna: AP-ANT-20W, Power Setting: 18



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	2390.00	13.70	2.69	32.04	48.43	Max Avg	Horizontal	166	320	54.0	-5.6	Pass
2	2390.00	27.39	2.69	32.04	62.12	Max Peak	Horizontal	166	320	74.0	-11.9	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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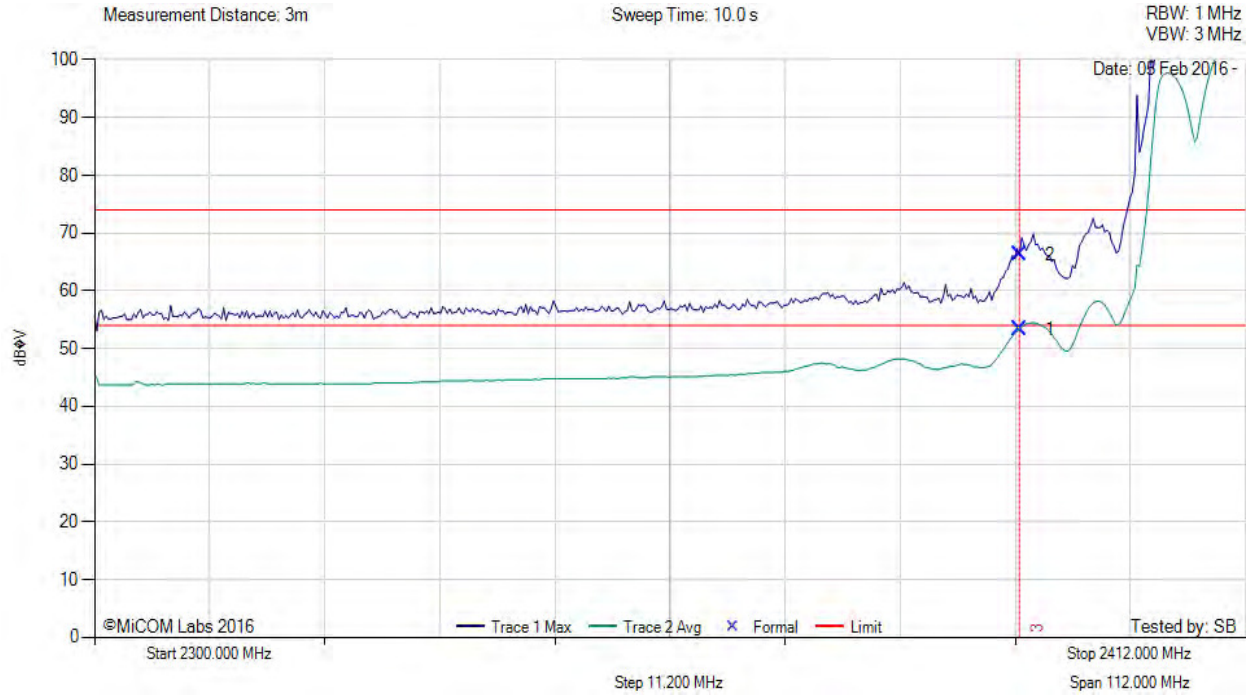


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2412.00 MHz, Antenna: AP-ANT-20W, Power Setting: 16



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	2390.00	18.64	2.69	32.04	53.37	Max Avg	Horizontal	142	318	54.0	-0.6	Pass
2	2390.00	31.49	2.69	32.04	66.22	Max Peak	Horizontal	142	318	74.0	-7.8	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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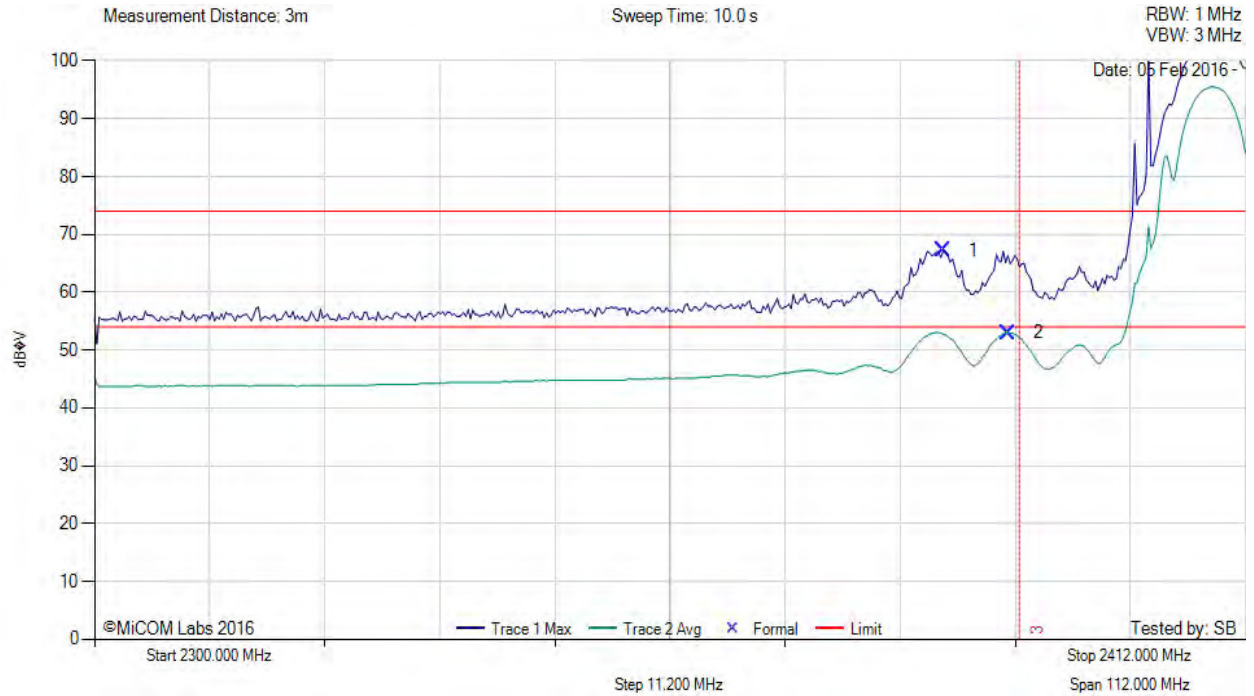


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2422.00 MHz, Antenna: AP-ANT-20W, Power Setting: 13



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	2382.59	32.50	2.68	31.98	67.16	Max Peak	Horizontal	142	318	74.0	-6.8	Pass
2	2388.88	18.30	2.68	32.04	53.02	Max Avg	Horizontal	142	318	54.0	-1.0	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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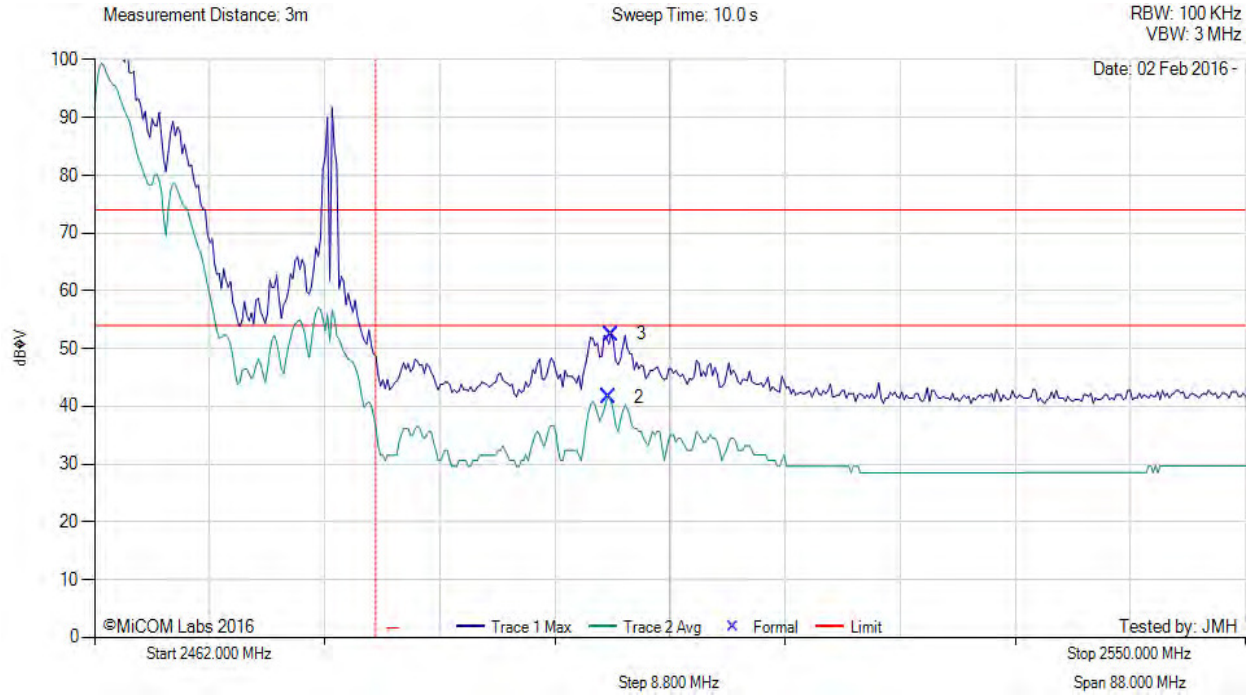


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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-20W, Power Setting: 21



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	2501.32	6.54	2.73	32.40	41.67	Max Avg	Horizontal	159	58	54.0	-12.3	Pass
2	2501.50	17.35	2.73	32.40	52.48	Max Peak	Horizontal	159	58	74.0	-21.5	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2462.00 MHz, Antenna: AP-ANT-20W, Power Setting: 20



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	2483.50	33.04	2.73	32.37	68.14	Max Peak	Horizontal	159	58	74.0	-5.9	Pass
2	2483.77	17.73	2.73	32.37	52.83	Max Avg	Horizontal	159	58	54.0	-1.2	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

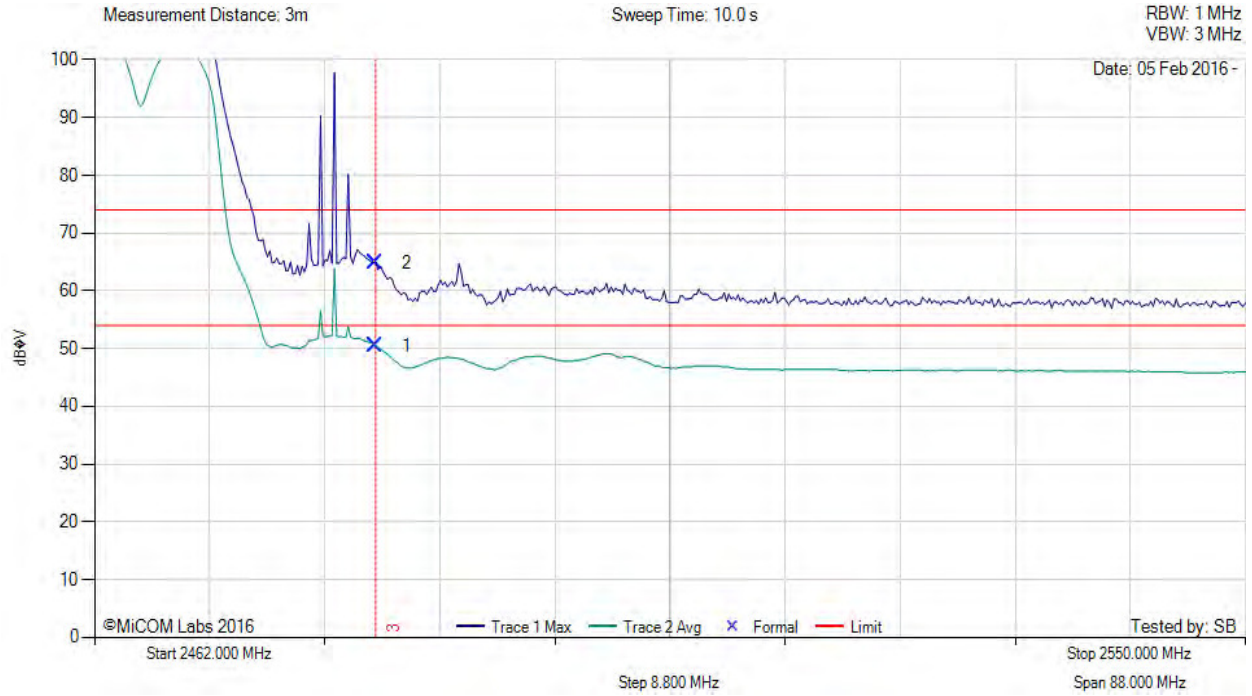
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2462.00 MHz, Antenna: AP-ANT-20W, Power Setting: 17



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	2483.50	15.43	2.73	32.37	50.53	Max Avg	Horizontal	142	318	54.0	-3.5	Pass
2	2483.50	29.69	2.73	32.37	64.79	Max Peak	Horizontal	142	318	74.0	-9.2	Pass
3	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

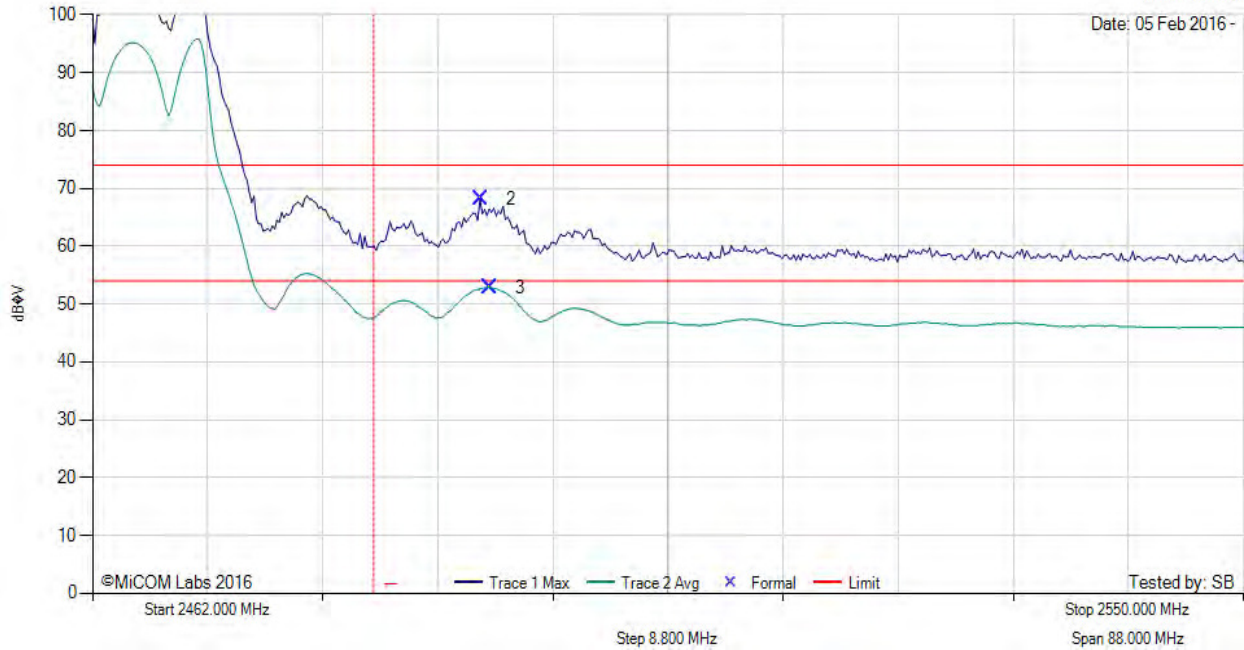
Variant: 802.11n HT-40, Test Freq: 2452.00 MHz, Antenna: AP-ANT-20W, Power Setting: 15

Measurement Distance: 3m

Sweep Time: 10.0 s

RBW: 1 MHz
VBW: 3 MHz

Date: 05 Feb 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
2	2491.68	33.06	2.74	32.38	68.18	Max Peak	Horizontal	142	318	74.0	-5.8	Pass
3	2492.35	17.80	2.74	32.38	52.92	Max Avg	Horizontal	142	318	54.0	-1.1	Pass
1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

[back to matrix](#)

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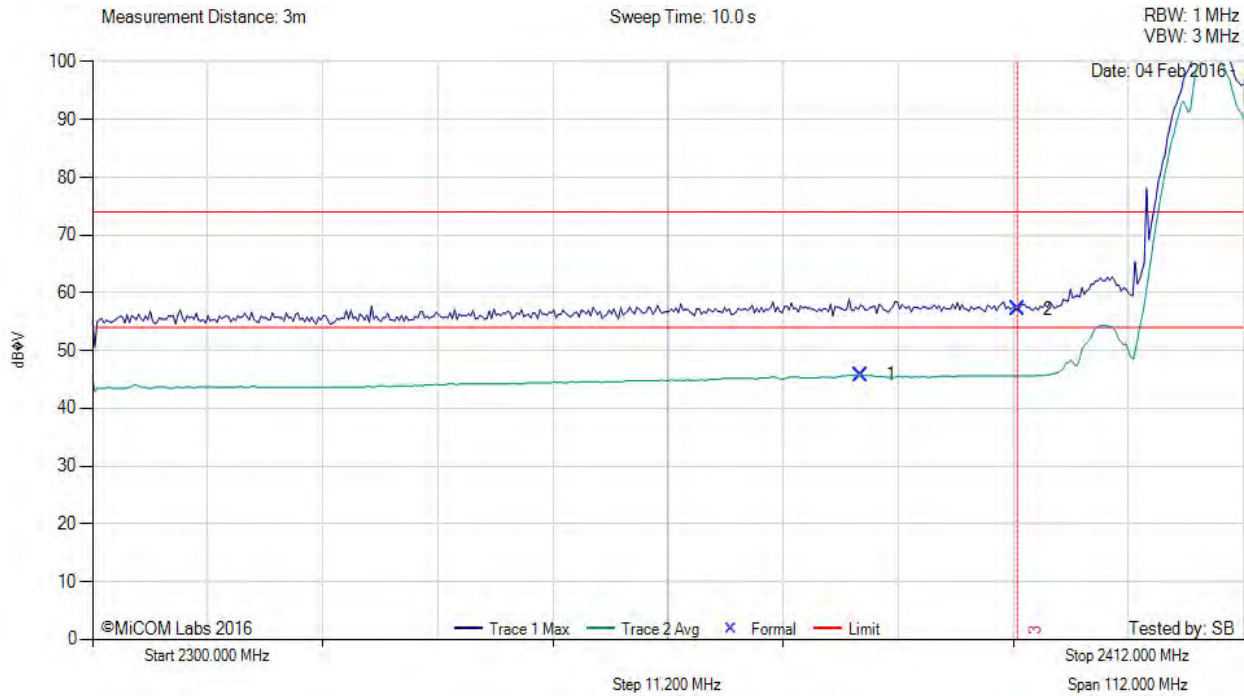


A.1.2.5. AP-ANT-40



RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-40, Power Setting: 19



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	2374.74	11.22	2.70	31.91	45.83	Max Avg	Horizontal	148	48	54.0	-8.2	Pass
2	2390.00	22.45	2.69	32.04	57.18	Max Peak	Horizontal	148	48	74.0	-16.8	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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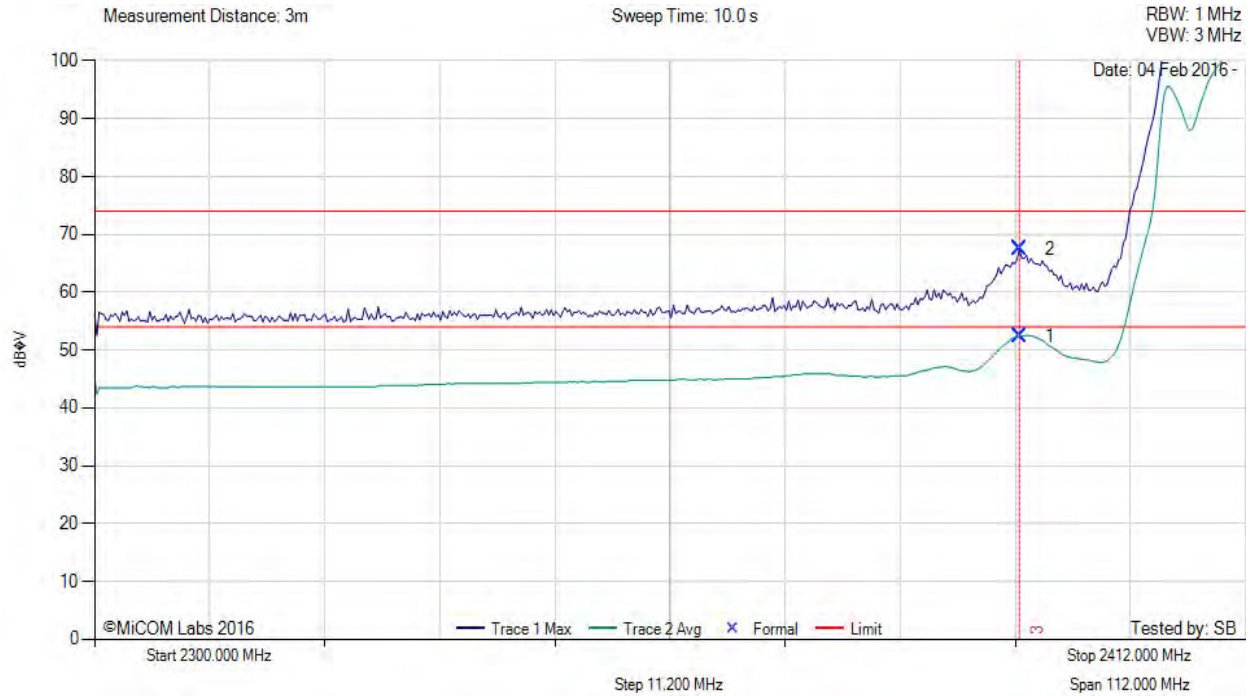


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2412.00 MHz, Antenna: AP-ANT-40, Power Setting: 17



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	2390.00	17.72	2.69	32.04	52.45	Max Avg	Horizontal	148	48	54.0	-1.6	Pass
2	2390.00	32.67	2.69	32.04	67.40	Max Peak	Horizontal	148	48	74.0	-6.6	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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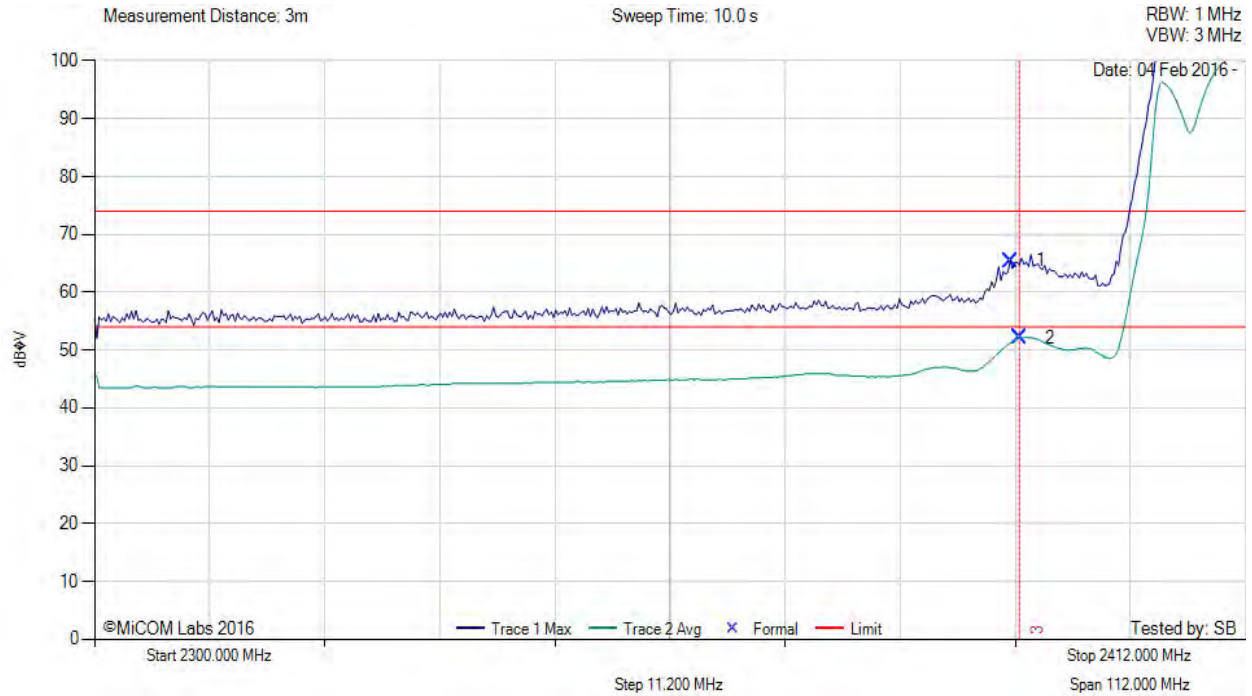


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2412.00 MHz, Antenna: AP-ANT-40, Power Setting: 17



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	2389.10	30.70	2.68	32.04	65.42	Max Peak	Horizontal	148	48	74.0	-8.6	Pass
2	2390.00	17.34	2.69	32.04	52.07	Max Avg	Horizontal	148	48	54.0	-1.9	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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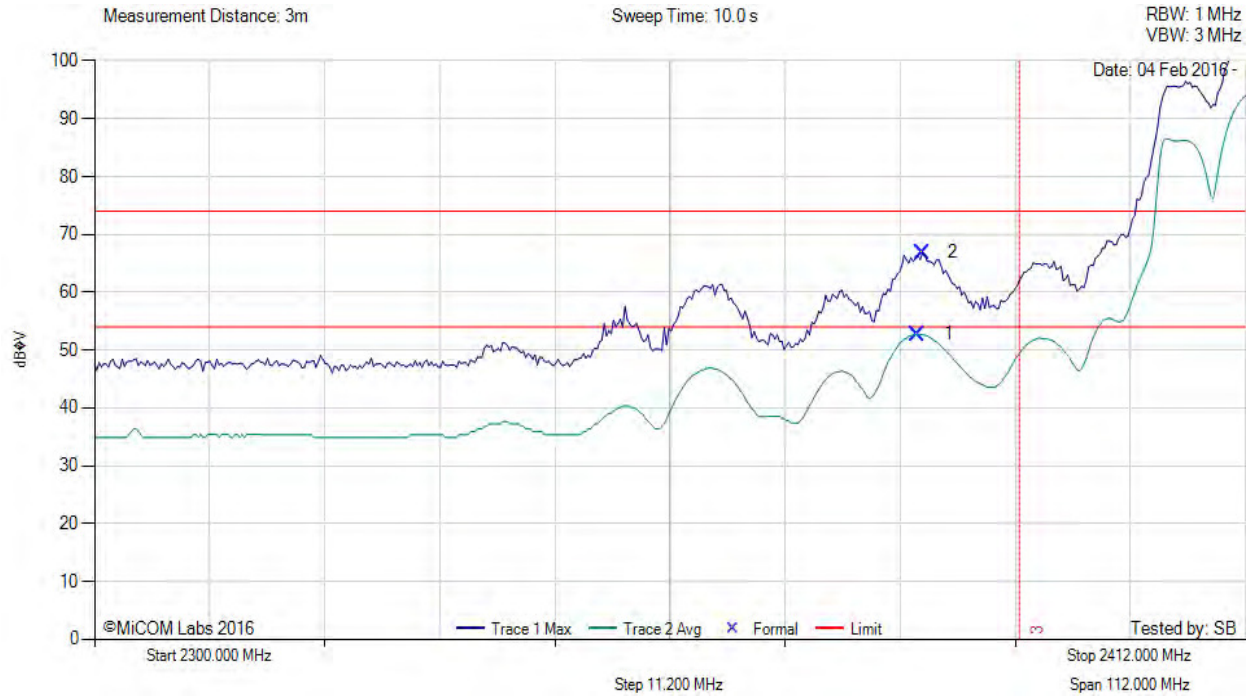


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2422.00 MHz, Antenna: AP-ANT-40, Power Setting: 17



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	2380.13	18.08	2.69	31.96	52.73	Max Avg	Horizontal	148	48	54.0	-1.3	Pass
2	2380.53	32.21	2.69	31.96	66.86	Max Peak	Horizontal	148	48	74.0	-7.1	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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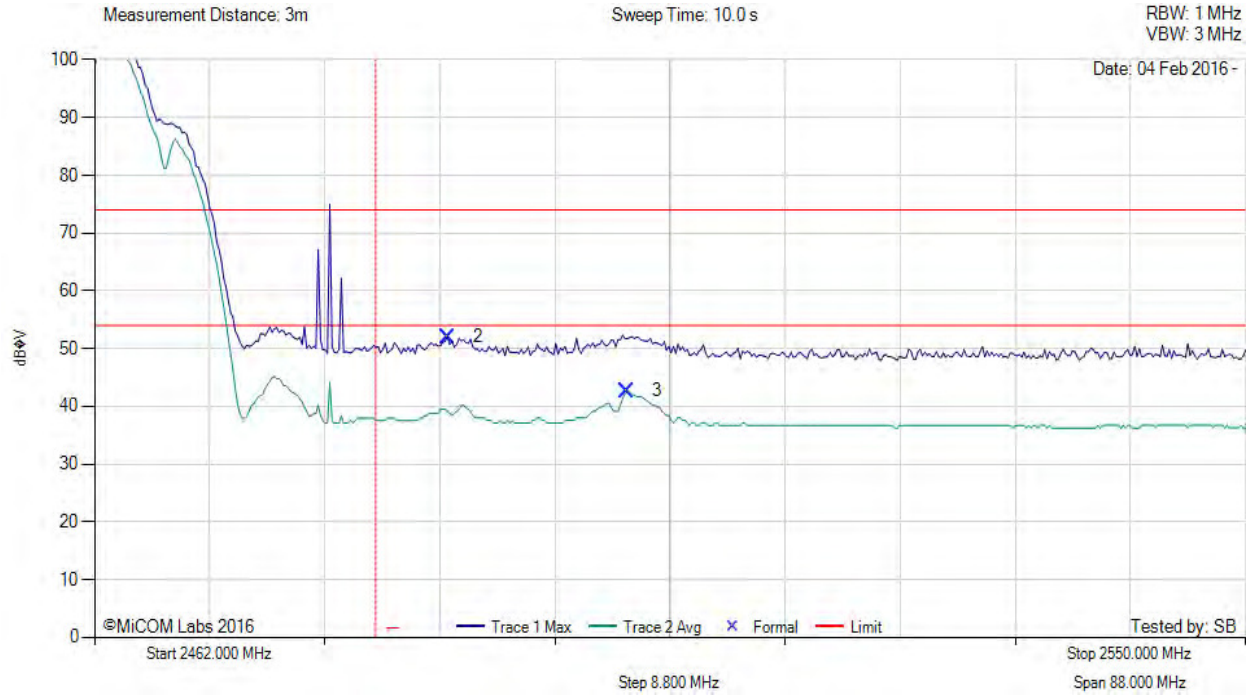


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-40, Power Setting: 18



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	2488.97	16.95	2.73	32.38	52.06	Max Peak	Horizontal	148	48	74.0	-21.9	Pass
2	2502.72	7.57	2.73	32.40	42.70	Max Avg	Horizontal	148	48	54.0	-11.3	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

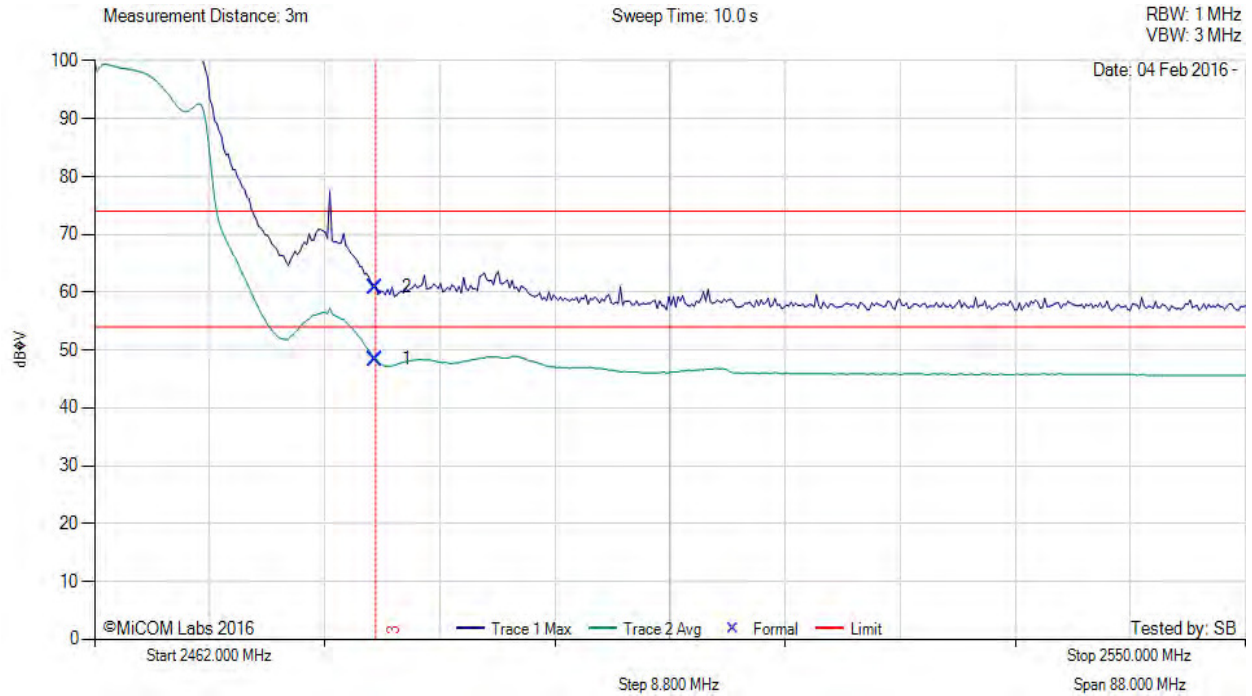
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2462.00 MHz, Antenna: AP-ANT-40, Power Setting: 18



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	2483.50	13.34	2.73	32.37	48.44	Max Avg	Horizontal	148	48	54.0	-5.6	Pass
2	2483.50	25.81	2.73	32.37	60.91	Max Peak	Horizontal	148	48	74.0	-13.1	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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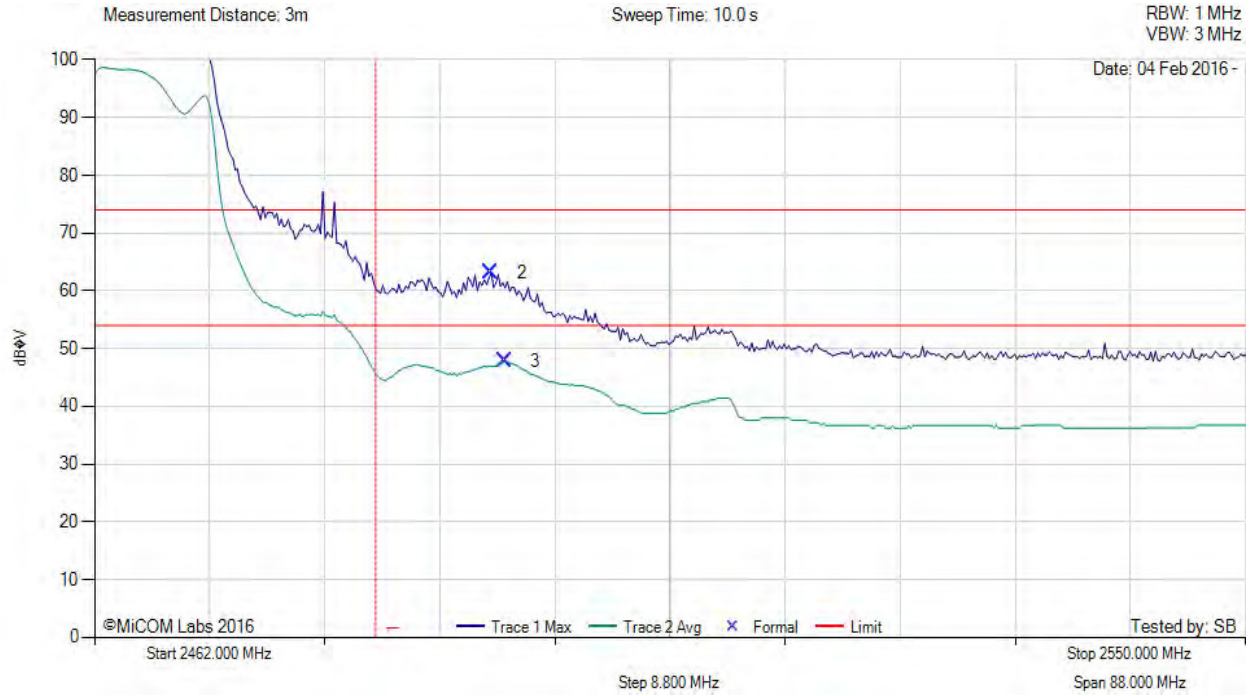


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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2462.00 MHz, Antenna: AP-ANT-40, Power Setting: 18



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	2492.32	27.99	2.74	32.38	63.11	Max Peak	Horizontal	148	48	74.0	-10.9	Pass
3	2493.38	12.70	2.74	32.38	47.82	Max Avg	Horizontal	148	48	54.0	-6.2	Pass
1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

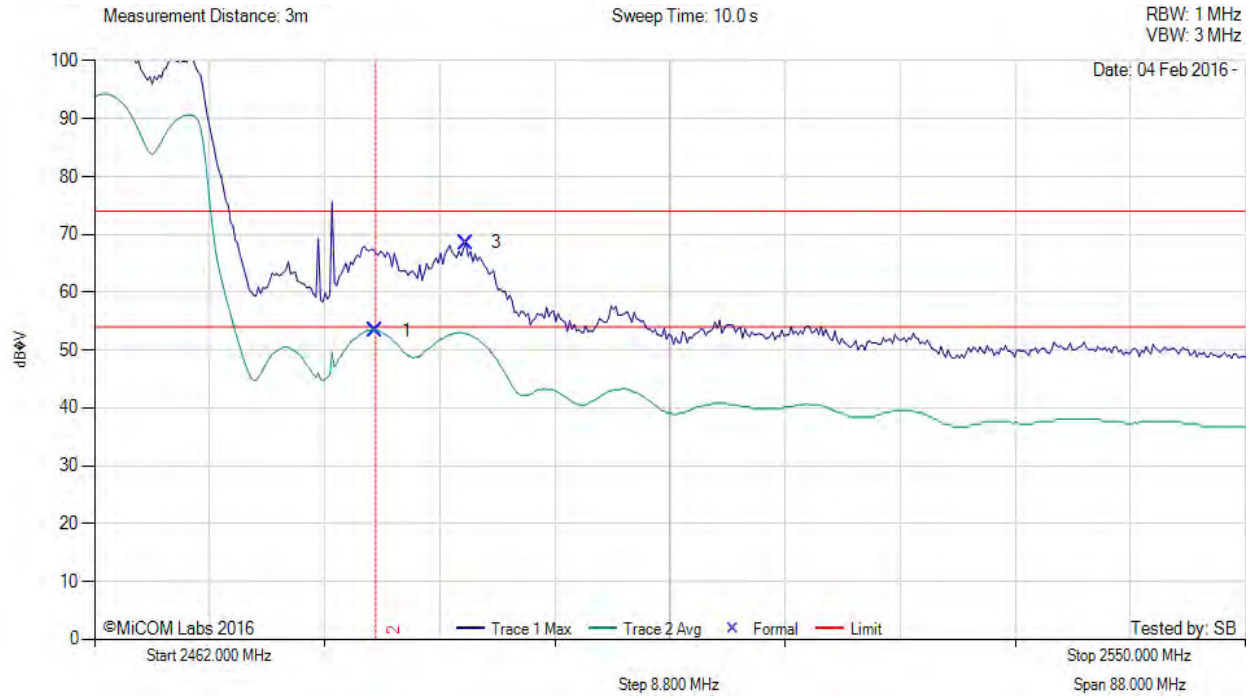
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2452.00 MHz, Antenna: AP-ANT-40, Power Setting: 17



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	2483.50	18.24	2.73	32.37	53.34	Max Avg	Horizontal	148	48	54.0	-0.7	Pass
3	2490.38	33.42	2.74	32.38	68.54	Max Peak	Horizontal	148	48	74.0	-5.5	Pass
2	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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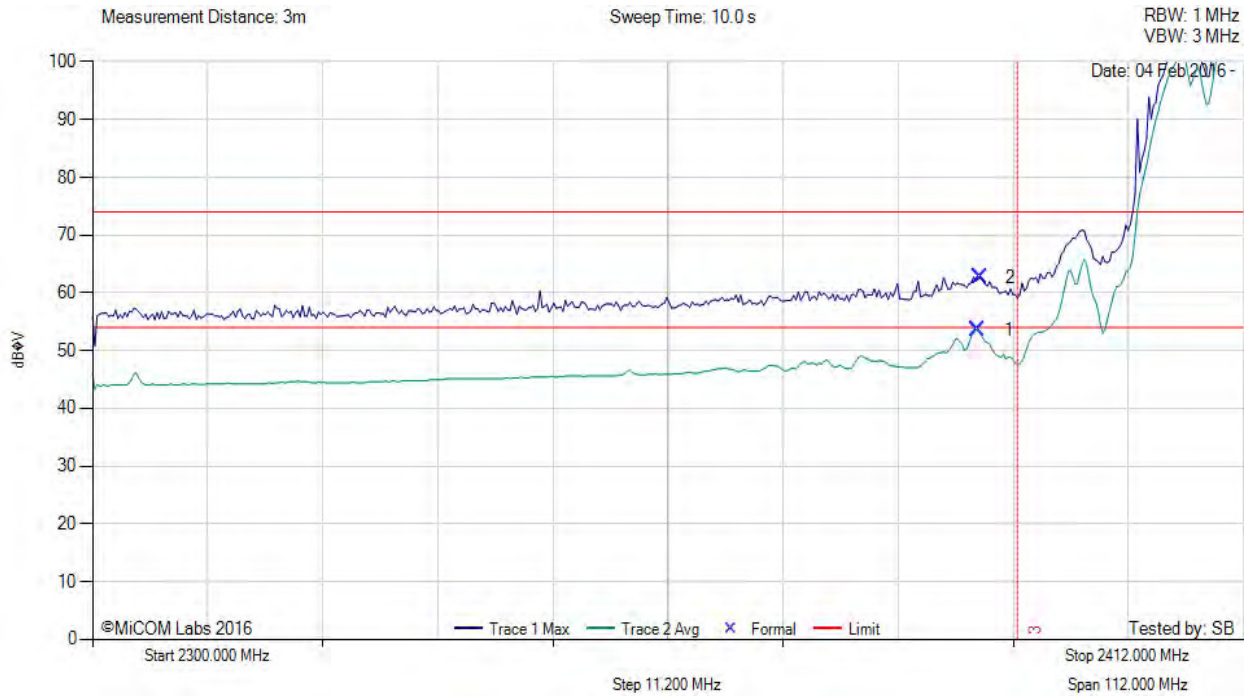


A.1.2.6. AP-ANT-45



RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-45, Power Setting: 20



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	2386.18	18.85	2.68	32.01	53.54	Max Avg	Horizontal	163	374	54.0	-0.5	Pass
2	2386.41	27.99	2.68	32.01	62.68	Max Peak	Horizontal	163	374	74.0	-11.3	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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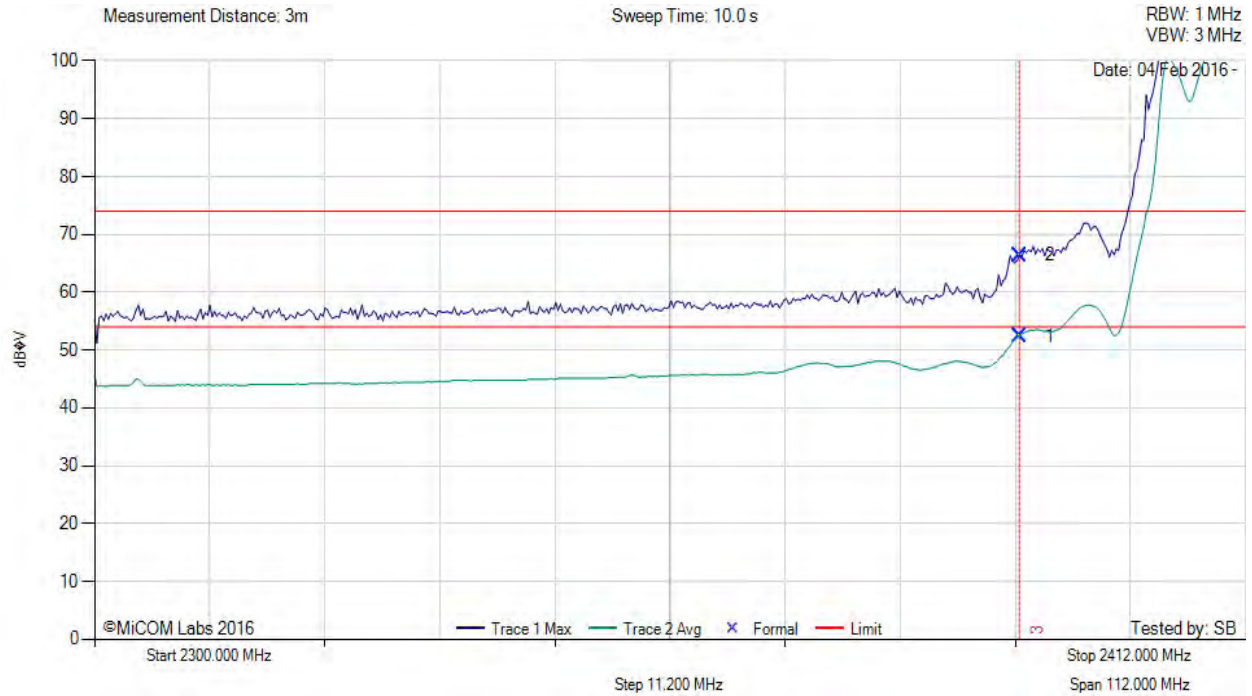


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2412.00 MHz, Antenna: AP-ANT-45, Power Setting: 15



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	2390.00	17.72	2.69	32.04	52.45	Max Avg	Horizontal	163	374	54.0	-1.6	Pass
2	2390.00	31.62	2.69	32.04	66.35	Max Peak	Horizontal	163	374	74.0	-7.7	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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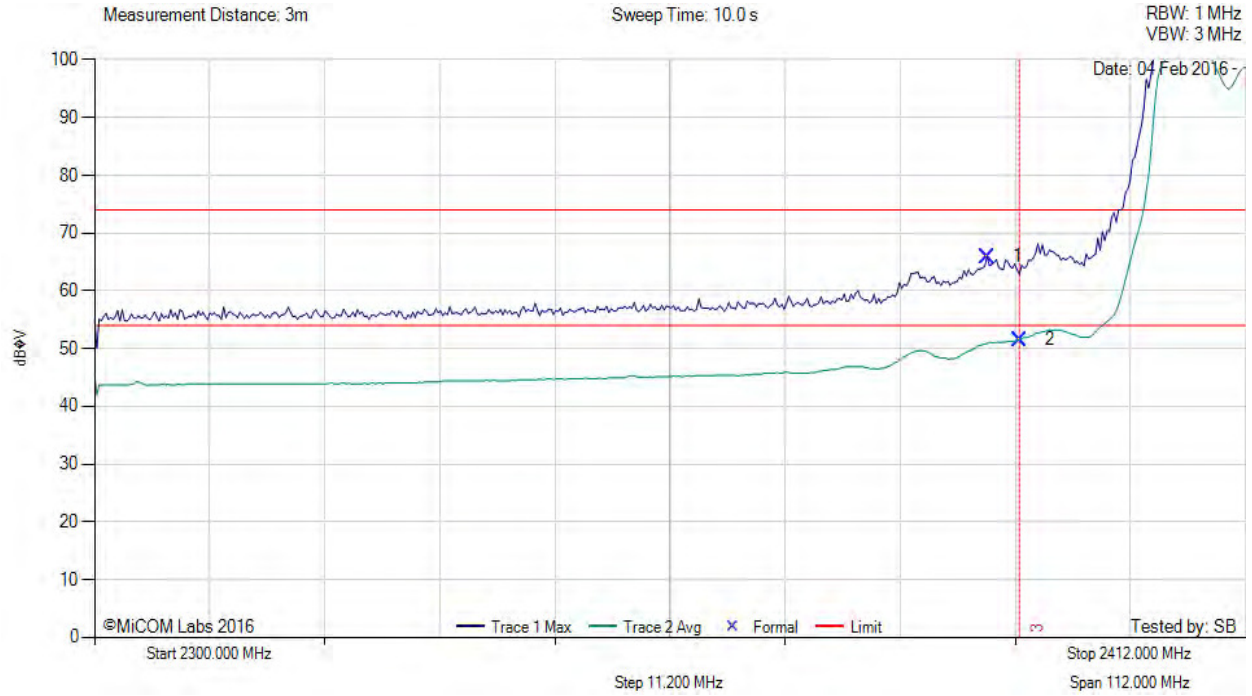


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2412.00 MHz, Antenna: AP-ANT-45, Power Setting: 17



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	2386.86	31.23	2.68	32.02	65.93	Max Peak	Vertical	163	374	74.0	-8.1	Pass
2	2390.00	16.85	2.69	32.04	51.58	Max Avg	Vertical	163	374	54.0	-2.4	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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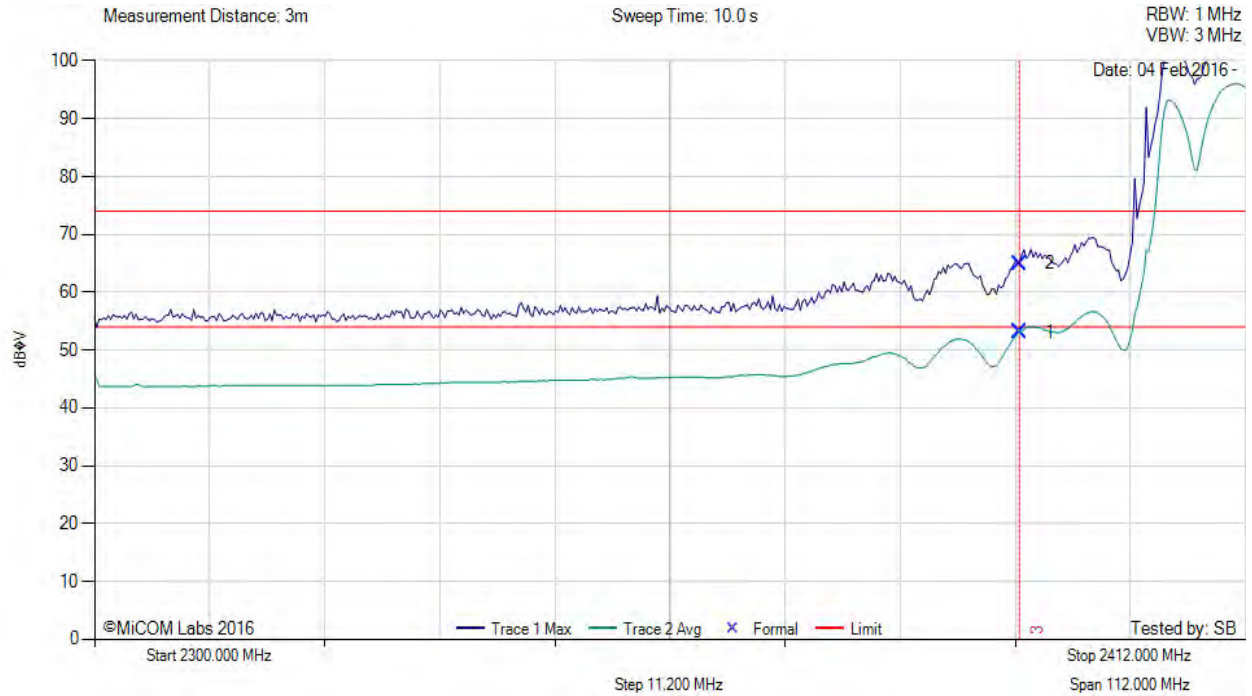


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2422.00 MHz, Antenna: AP-ANT-45, Power Setting: 14



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	2390.00	18.30	2.69	32.04	53.03	Max Avg	Vertical	163	374	54.0	-1.0	Pass
2	2390.00	30.23	2.69	32.04	64.96	Max Peak	Vertical	163	374	74.0	-9.0	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

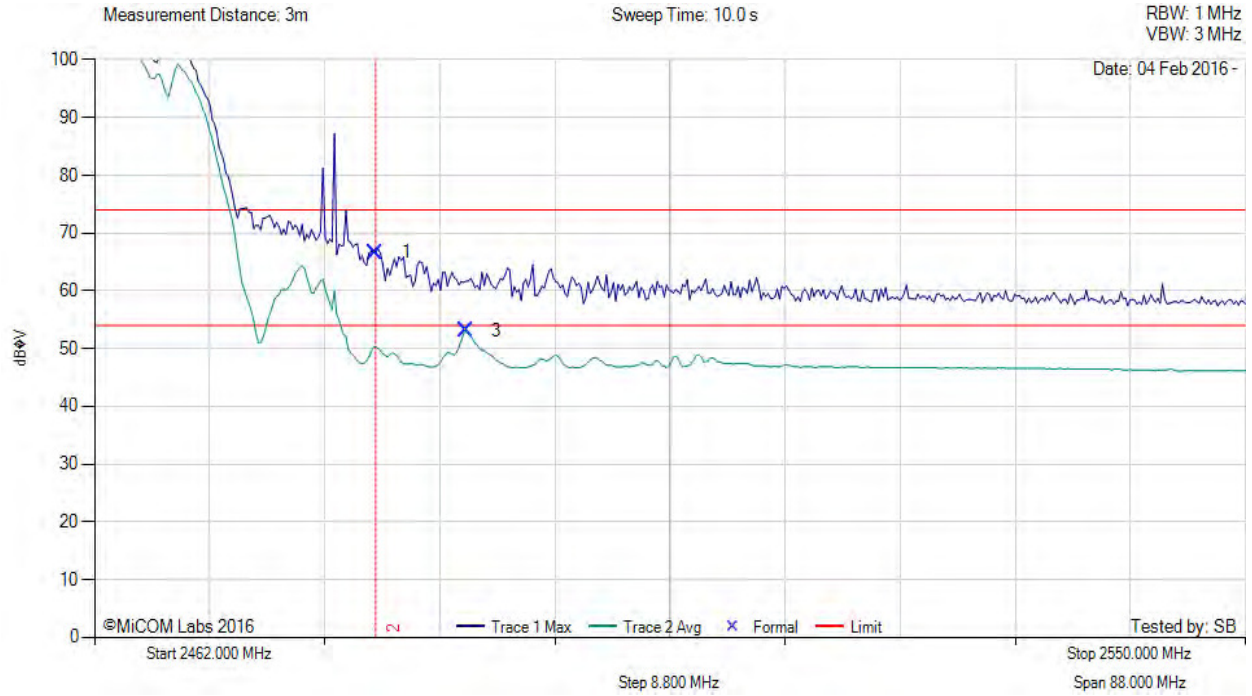
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-45, Power Setting: 20



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	2483.50	31.57	2.73	32.37	66.67	Max Peak	Horizontal	163	374	74.0	-7.3	Pass
2	2490.39	18.02	2.74	32.38	53.14	Max Avg	Horizontal	163	374	54.0	-0.9	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

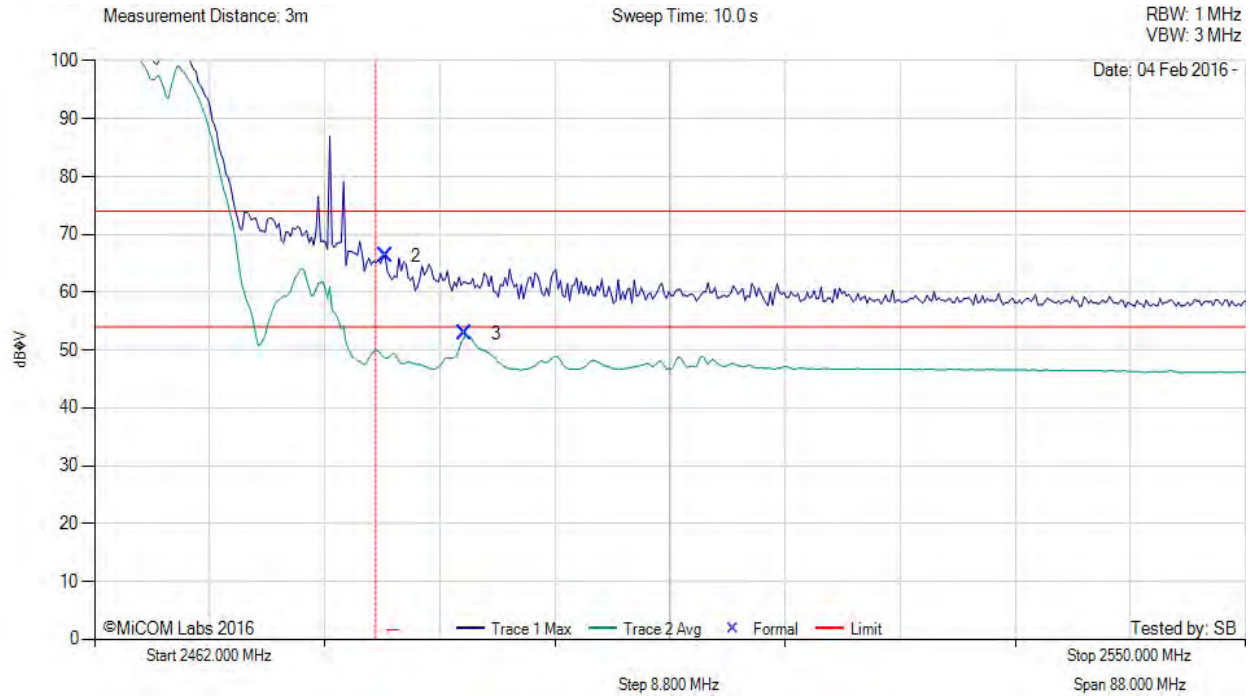
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2462.00 MHz, Antenna: AP-ANT-45, Power Setting: 18



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	2484.21	31.15	2.73	32.37	66.25	Max Peak	Horizontal	163	374	74.0	-7.8	Pass
2	2490.34	17.72	2.74	32.38	52.84	Max Avg	Horizontal	163	374	54.0	-1.2	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

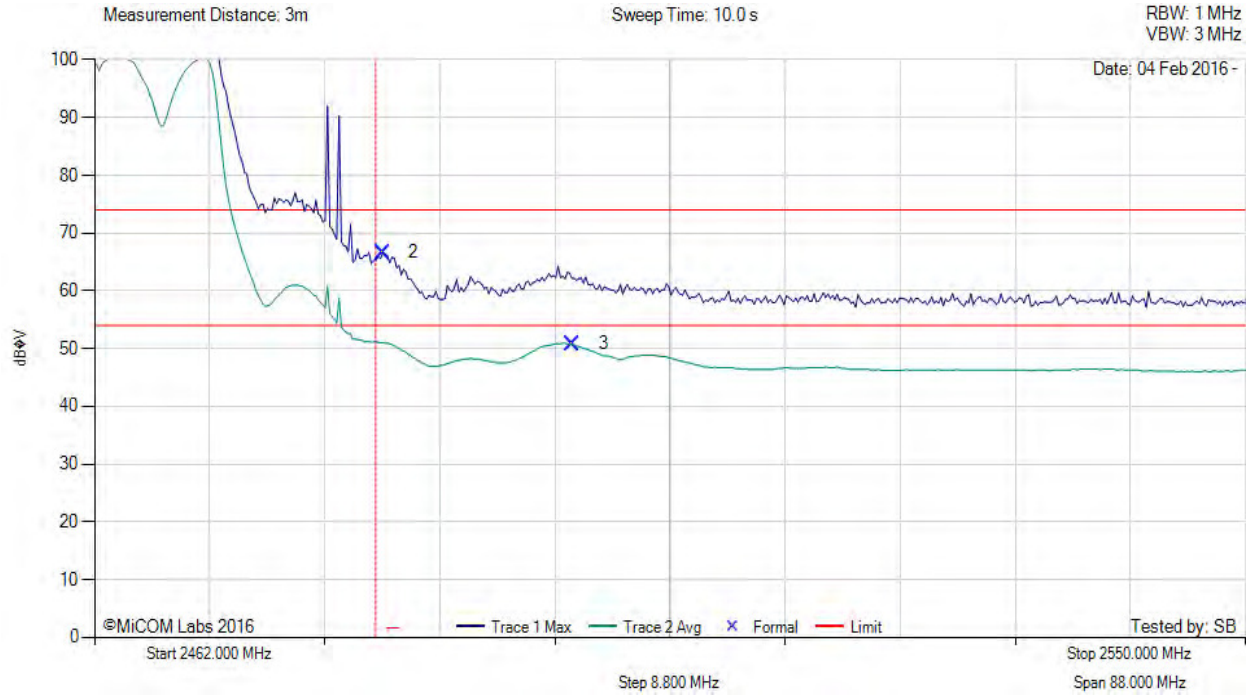
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2462.00 MHz, Antenna: AP-ANT-45, Power Setting: 18



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	2484.03	31.54	2.73	32.37	66.64	Max Peak	Vertical	163	374	74.0	-7.4	Pass
3	2498.58	15.71	2.73	32.40	50.84	Max Avg	Vertical	163	374	54.0	-3.2	Pass
1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

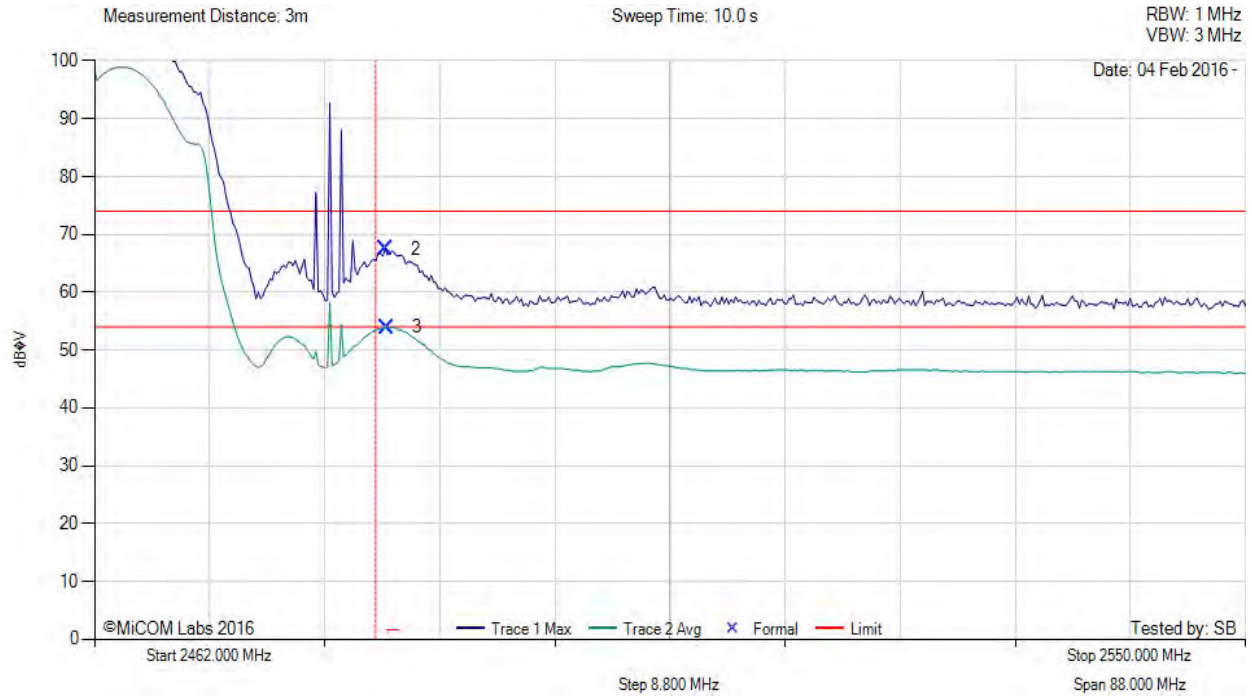
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2452.00 MHz, Antenna: AP-ANT-45, Power Setting: 13



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	2484.21	32.34	2.73	32.37	67.44	Max Peak	Vertical	163	374	74.0	-6.6	Pass
3	2484.38	18.85	2.73	32.37	53.95	Max Avg	Vertical	163	374	54.0	-0.1	Pass
1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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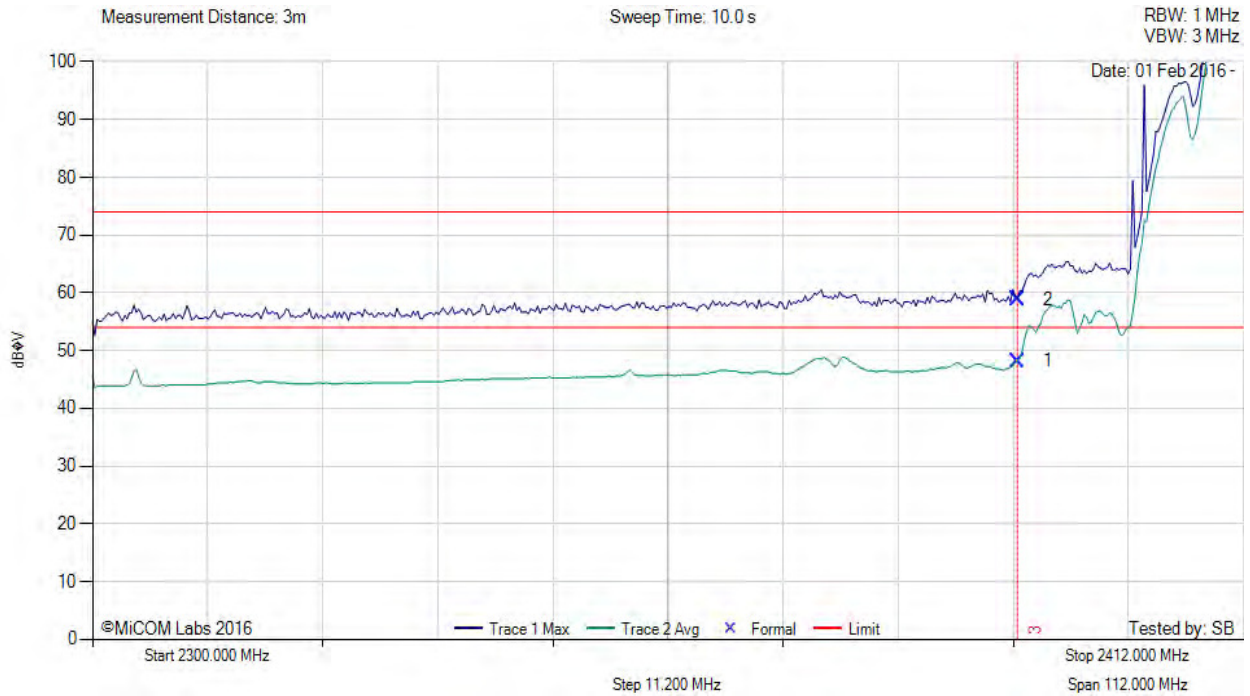


A.1.2.7. AP-ANT-48



RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: AP-ANT-48, Power Setting: 19



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	2390.00	13.46	2.69	32.04	48.19	Max Avg	Vertical	162	362	54.0	-5.8	Pass
2	2390.00	24.14	2.69	32.04	58.87	Max Peak	Vertical	162	362	74.0	-15.1	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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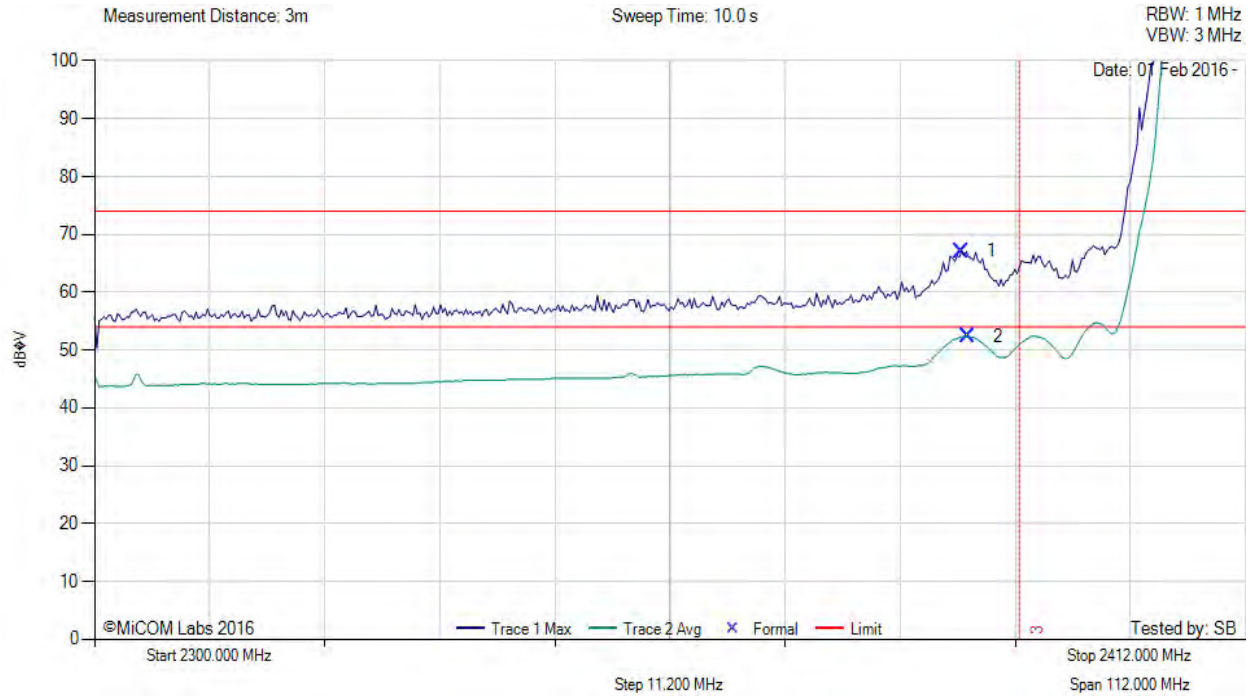


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2412.00 MHz, Antenna: AP-ANT-48, Power Setting: 16



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	2384.34	32.46	2.68	31.99	67.13	Max Peak	Vertical	162	362	74.0	-6.9	Pass
2	2384.97	17.65	2.68	32.00	52.33	Max Avg	Vertical	162	362	54.0	-1.7	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

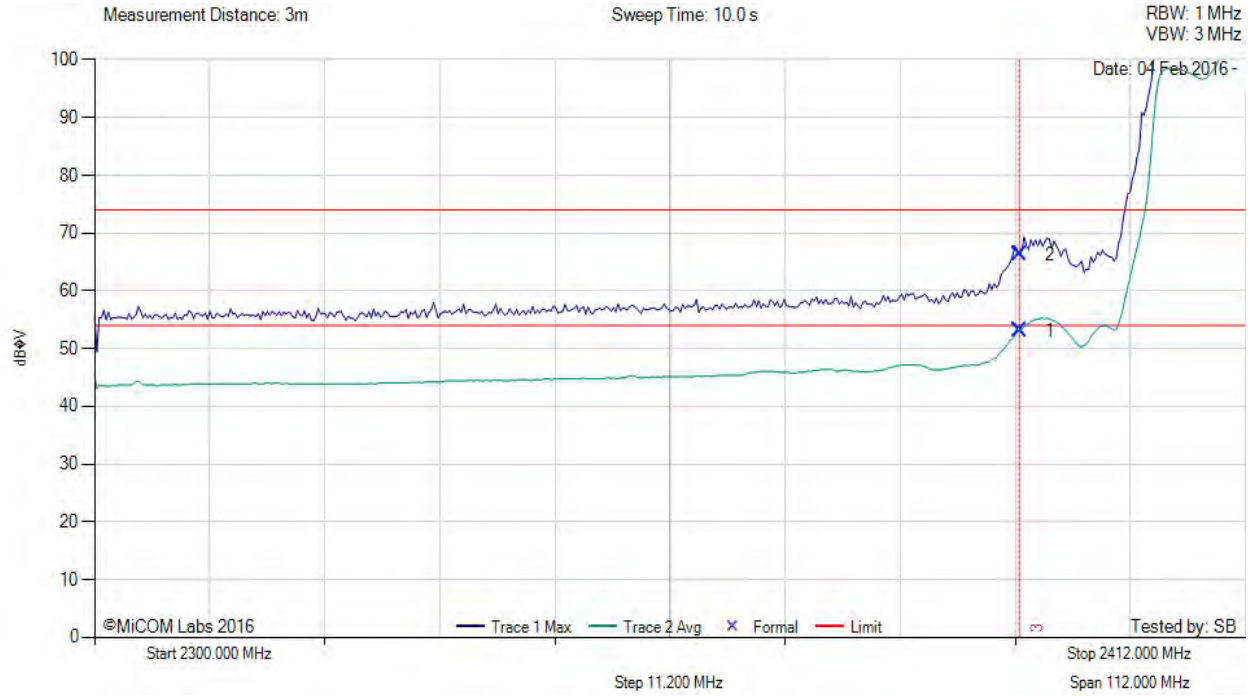
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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2412.00 MHz, Antenna: AP-ANT-48, Power Setting: 15.5



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	2390.00	18.44	2.69	32.04	53.17	Max Avg	Horizontal	167	78	54.0	-0.8	Pass
2	2390.00	31.61	2.69	32.04	66.34	Max Peak	Horizontal	167	78	74.0	-7.7	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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Title: Aruba Networks, Inc APIN0334, APIN0335
To: FCC Subpart C 15.247 (DTS), IC RSS-247
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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

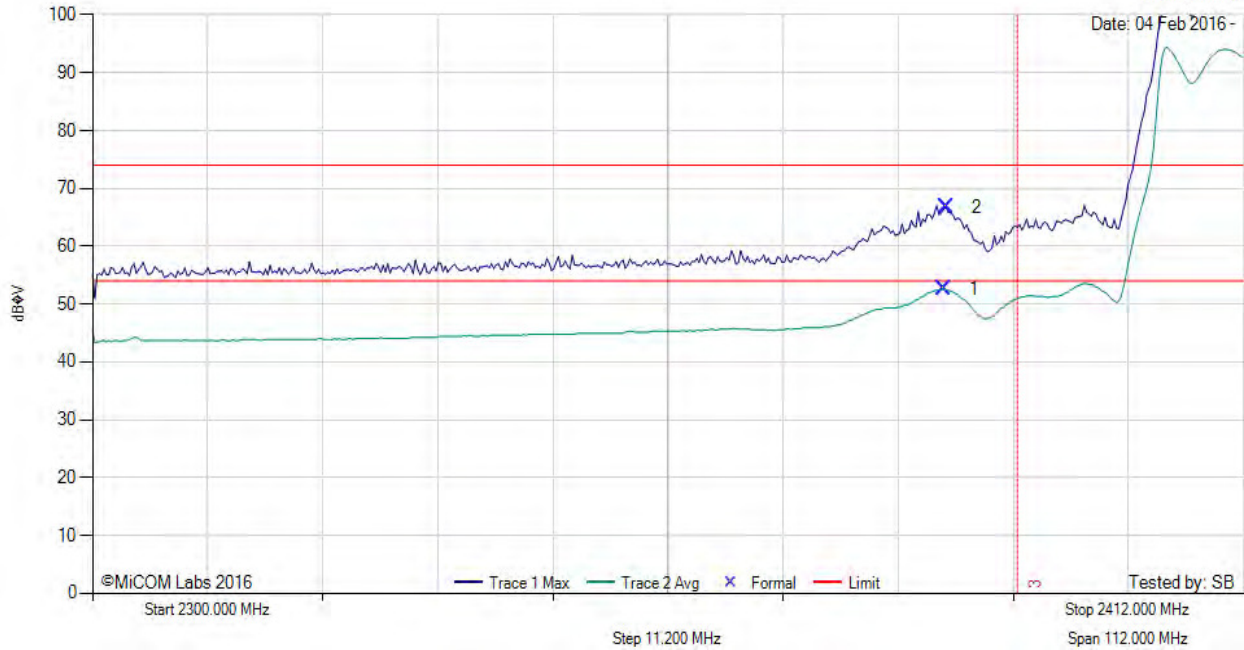
Variant: 802.11n HT-40, Test Freq: 2422.00 MHz, Antenna: AP-ANT-48, Power Setting: 13

Measurement Distance: 3m

Sweep Time: 10.0 s

RBW: 1 MHz
VBW: 3 MHz

Date: 04 Feb 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	2382.82	17.95	2.68	31.98	52.61	Max Avg	Horizontal	167	78	54.0	-1.4	Pass
2	2383.04	32.05	2.68	31.98	66.71	Max Peak	Horizontal	167	78	74.0	-7.3	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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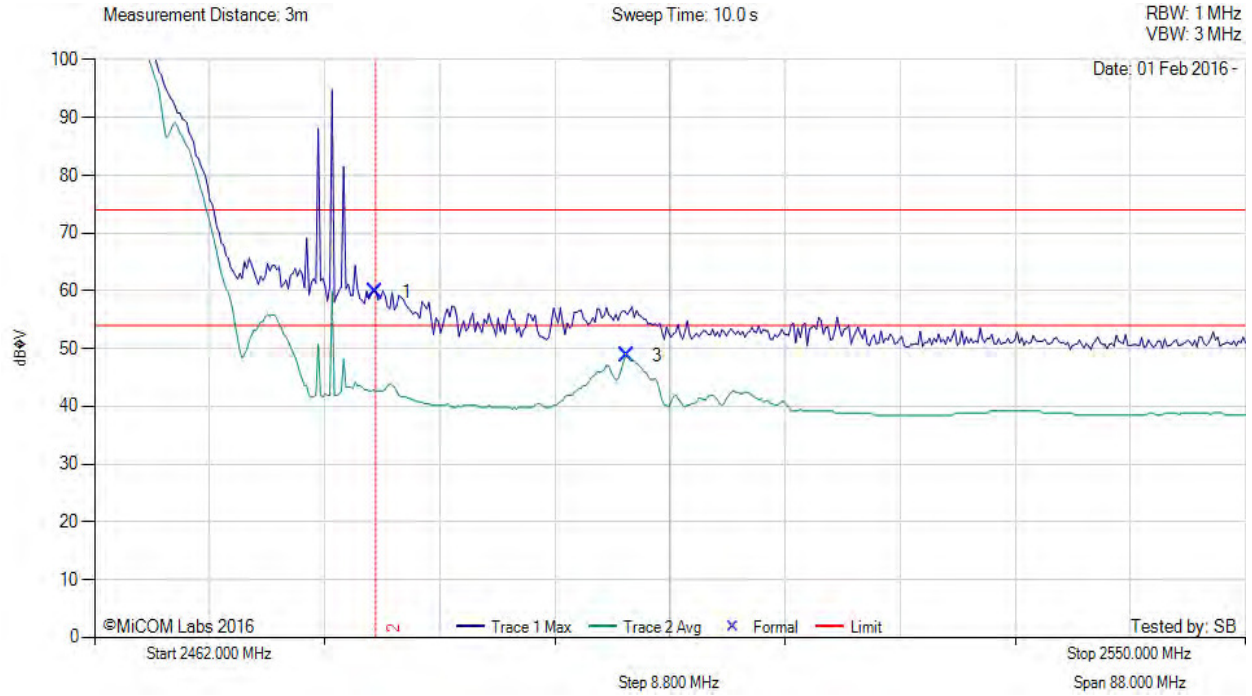


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2462.00 MHz, Antenna: AP-ANT-48, Power Setting: 18



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	2483.50	24.77	2.73	32.37	59.87	Max Peak	Vertical	162	362	74.0	-14.1	Pass
2	2502.72	13.71	2.73	32.40	48.84	Max Avg	Vertical	162	362	54.0	-5.2	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

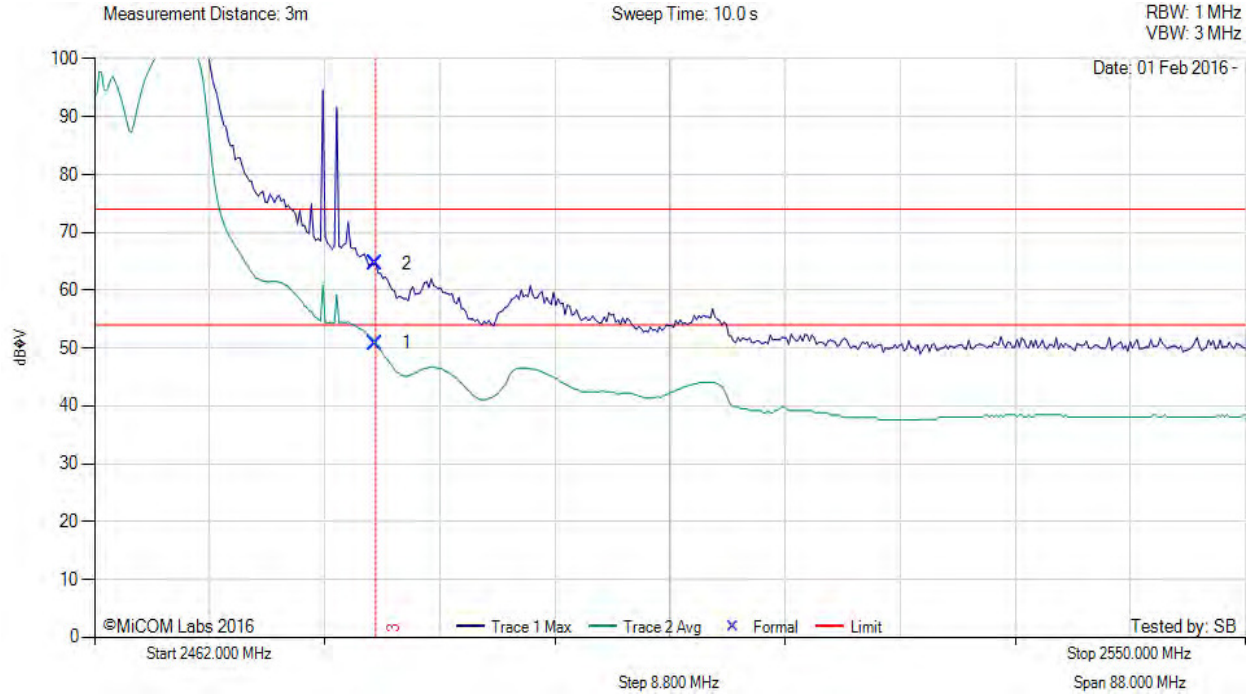
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2462.00 MHz, Antenna: AP-ANT-48, Power Setting: 17



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	2483.50	15.71	2.73	32.37	50.81	Max Avg	Vertical	162	362	54.0	-3.2	Pass
2	2483.50	29.44	2.73	32.37	64.54	Max Peak	Vertical	162	362	74.0	-9.5	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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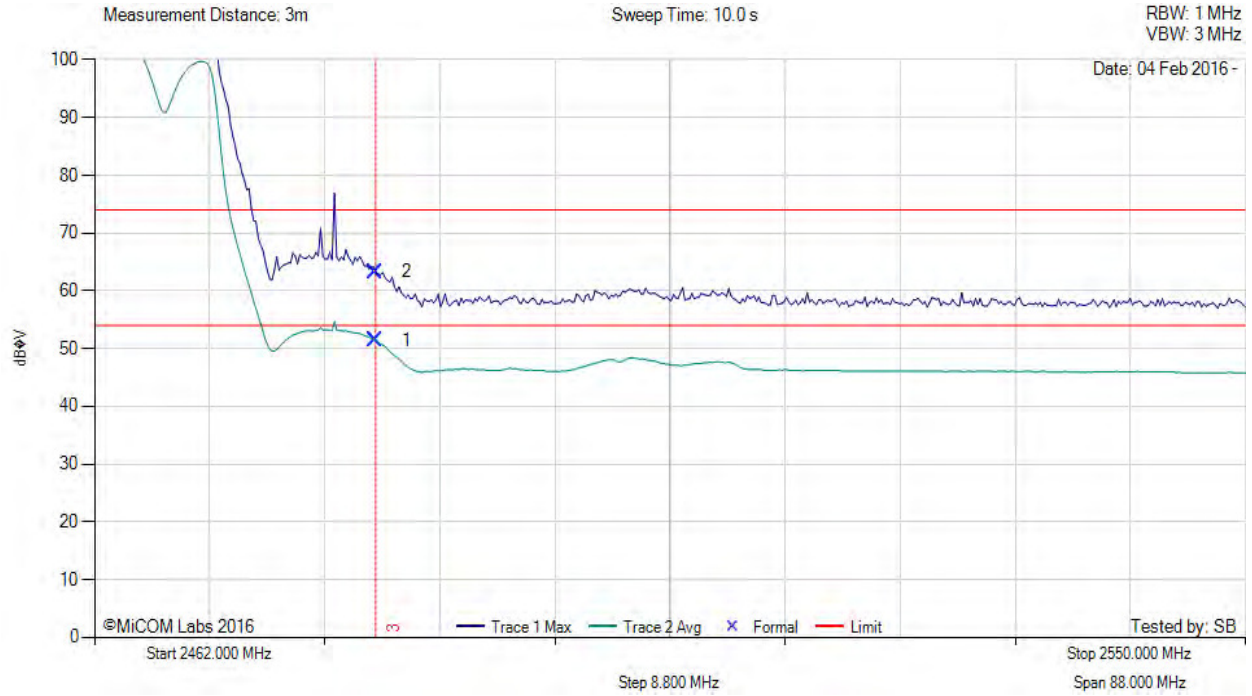


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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2462.00 MHz, Antenna: AP-ANT-48, Power Setting: 15.5



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	2483.50	16.26	2.73	32.37	51.36	Max Avg	Horizontal	167	78	54.0	-2.6	Pass
2	2483.50	28.17	2.73	32.37	63.27	Max Peak	Horizontal	167	78	74.0	-10.7	Pass
3	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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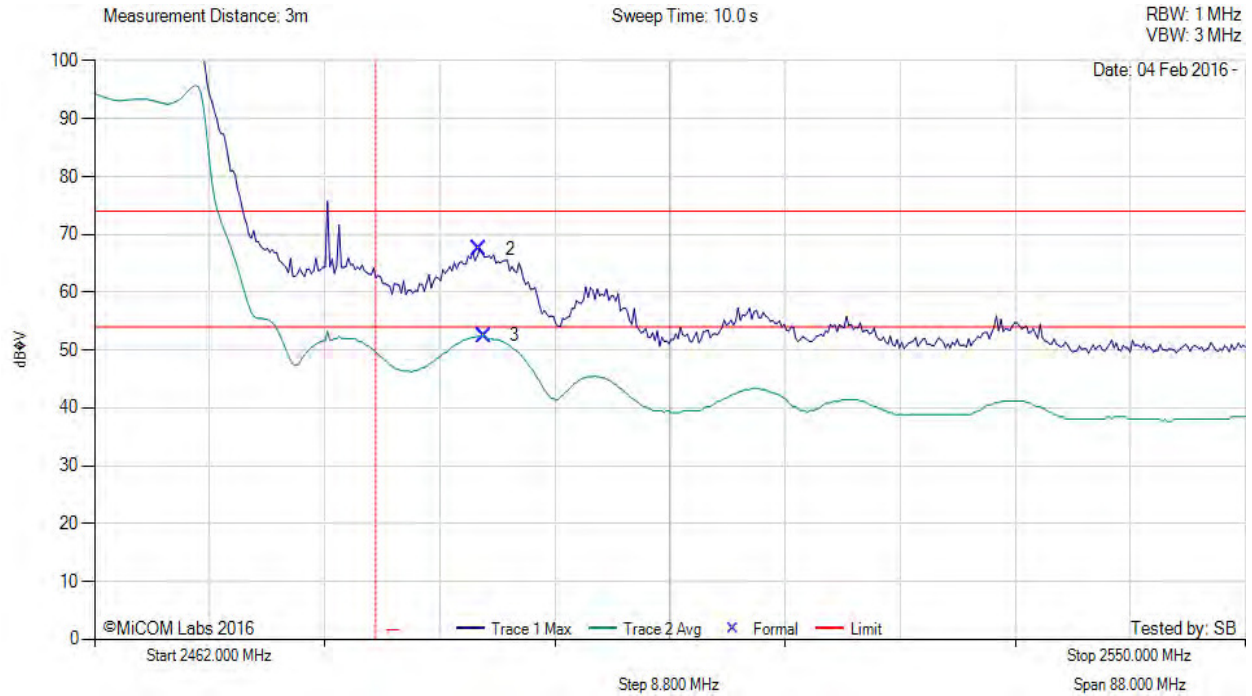


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2452.00 MHz, Antenna: AP-ANT-48, Power Setting: 15



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	2491.44	32.42	2.74	32.38	67.54	Max Peak	Horizontal	167	78	74.0	-6.5	Pass
3	2491.79	17.42	2.74	32.38	52.54	Max Avg	Horizontal	167	78	54.0	-1.5	Pass
1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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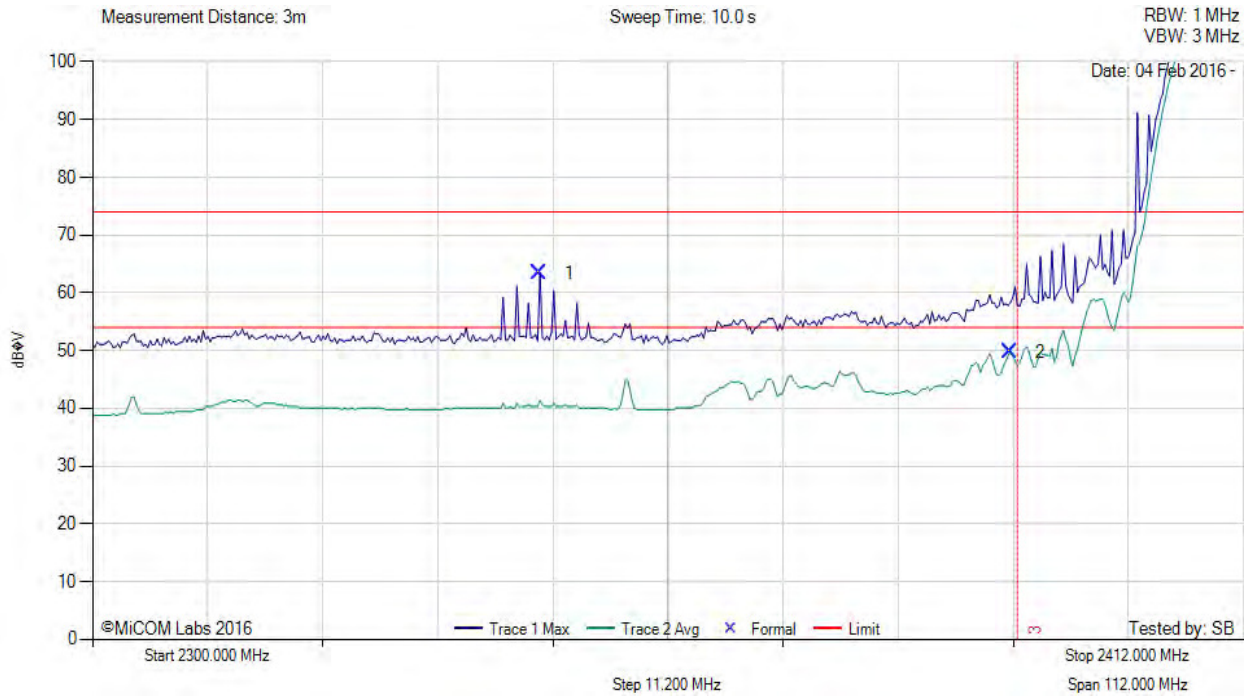


A.1.2.8. Metal Sheet



RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11b, Test Freq: 2412.00 MHz, Antenna: Metal Sheet, Power Setting: 19



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	2343.48	28.96	2.68	31.69	63.33	Max Peak	Horizontal	155	323	74.0	-10.7	Pass
2	2389.31	15.02	2.68	32.04	49.74	Max Avg	Horizontal	155	323	54.0	-4.3	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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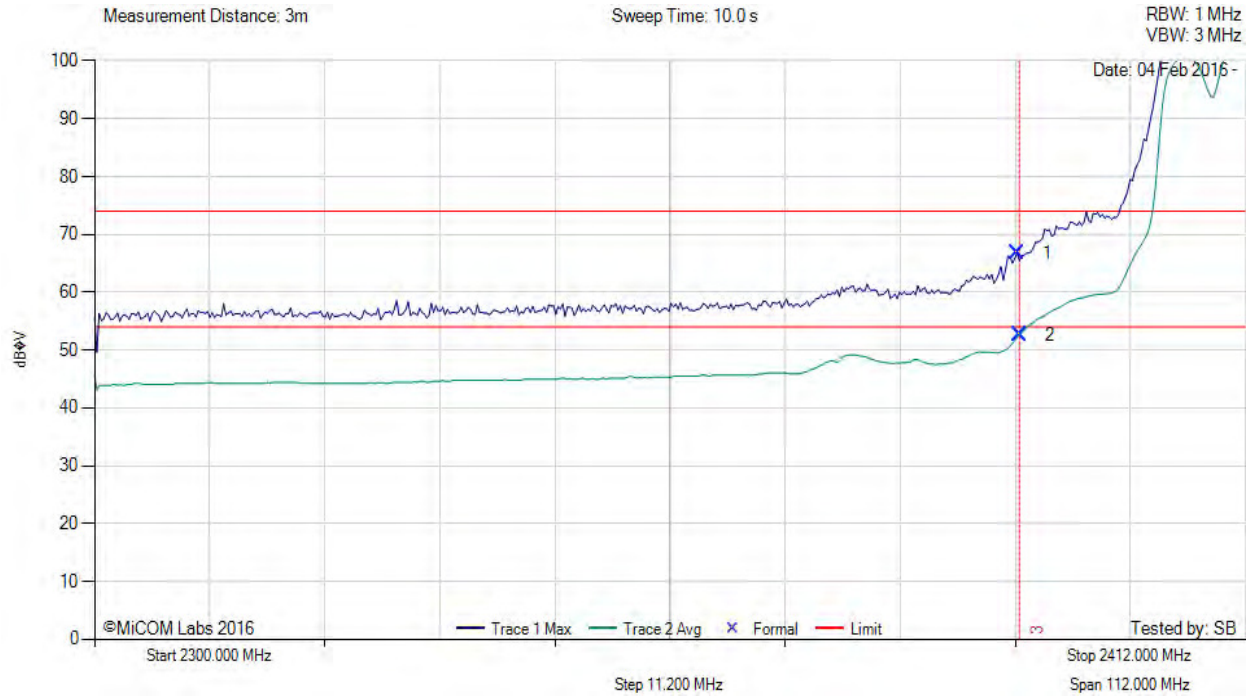


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2412.00 MHz, Antenna: Metal Sheet, Power Setting: 15.5



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	2389.78	32.02	2.69	32.04	66.75	Max Peak	Horizontal	155	323	74.0	-7.3	Pass
2	2390.00	17.94	2.69	32.04	52.67	Max Avg	Horizontal	155	323	54.0	-1.3	Pass
3	2390.00	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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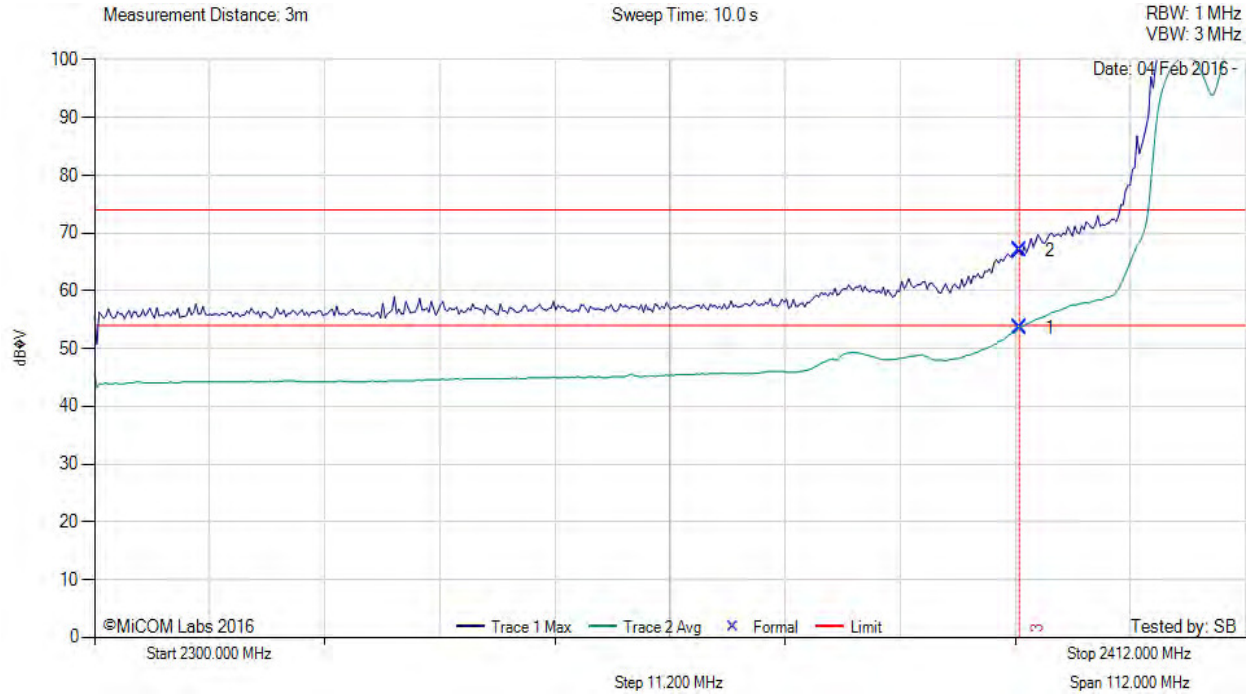


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RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-20, Test Freq: 2412.00 MHz, Antenna: Metal Sheet, Power Setting: 15.5



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	2390.00	18.84	2.69	32.04	53.57	Max Avg	Horizontal	155	323	54.0	-0.4	Pass
2	2390.00	32.24	2.69	32.04	66.97	Max Peak	Horizontal	155	323	74.0	-7.0	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

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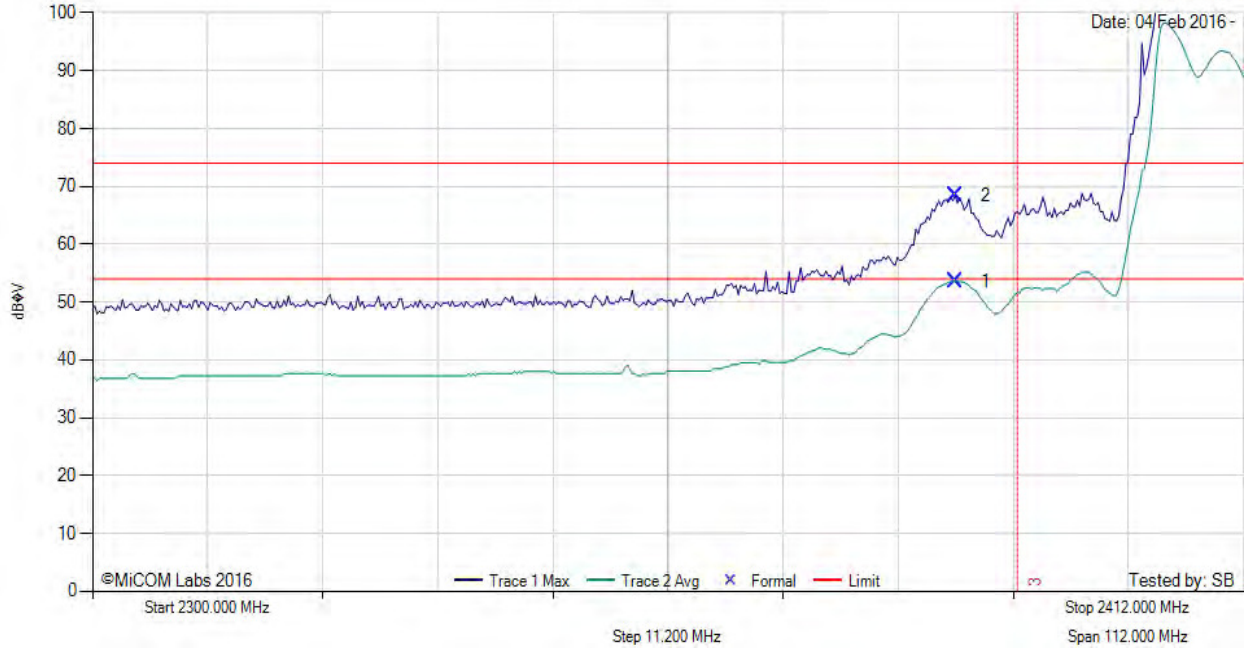
RADIATED - LOWER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2422.00 MHz, Antenna: Metal Sheet, Power Setting: 12

Measurement Distance: 3m

Sweep Time: 10.0 s

RBW: 1 MHz
VBW: 3 MHz



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	2383.94	18.98	2.68	31.99	53.65	Max Avg	Horizontal	155	323	54.0	-0.4	Pass
2	2383.94	33.70	2.68	31.99	68.37	Max Peak	Horizontal	155	323	74.0	-5.6	Pass
3	2390.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

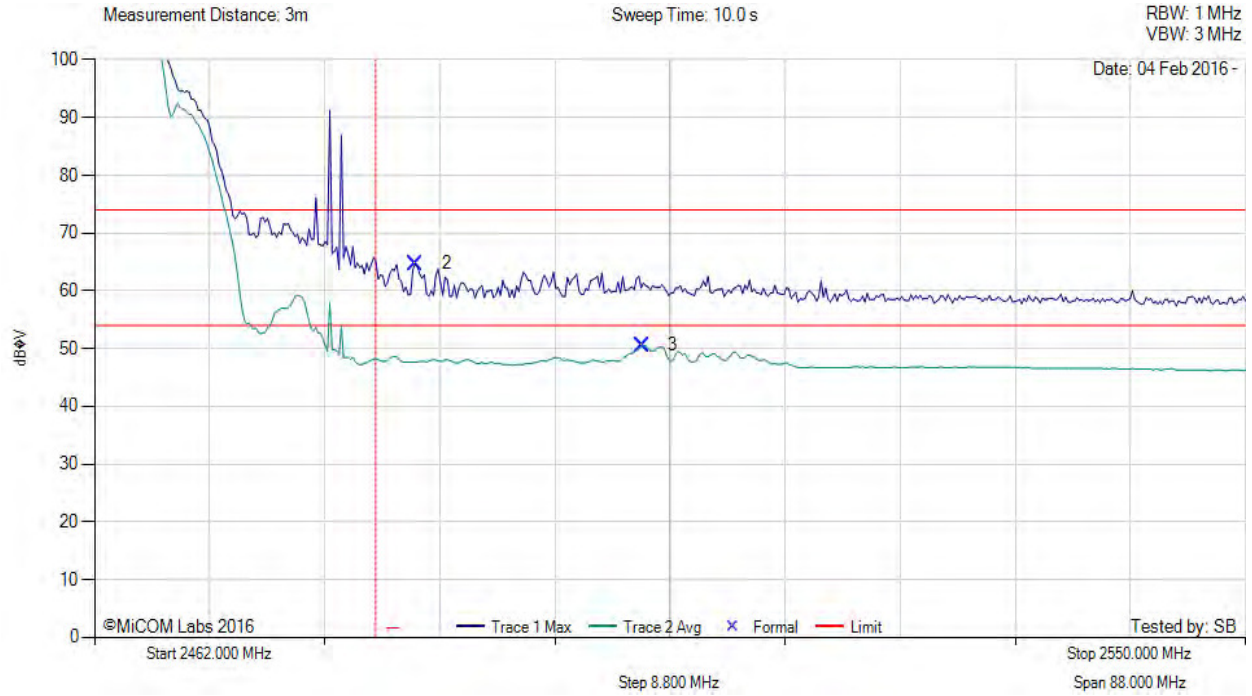
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variation: 802.11b, Test Freq: 2462.00 MHz, Antenna: Metal Sheet, Power Setting: 19



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	2486.57	29.60	2.73	32.37	64.70	Max Peak	Horizontal	155	323	74.0	-9.3	Pass
2	2503.89	15.42	2.73	32.41	50.56	Max Avg	Horizontal	155	323	54.0	-3.4	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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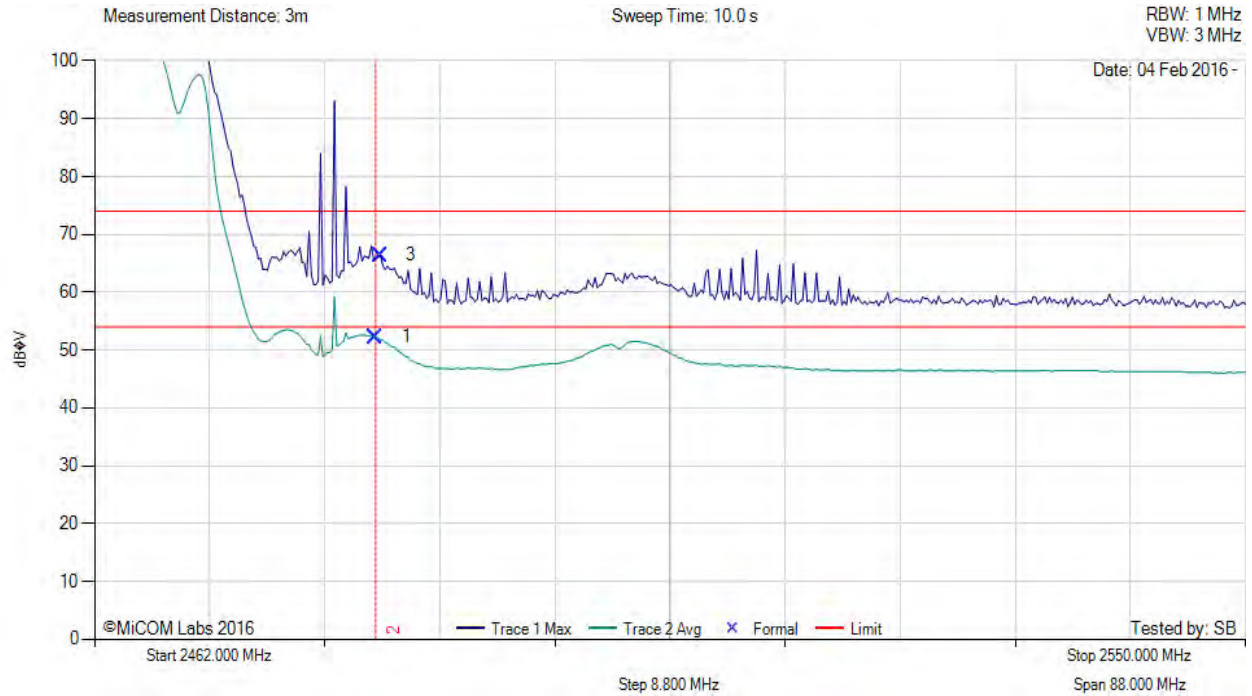


Title: Aruba Networks, Inc APIN0334, APIN0335
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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11g, Test Freq: 2462.00 MHz, Antenna: Metal Sheet, Power Setting: 15.5



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	2483.50	17.19	2.73	32.37	52.29	Max Avg	Horizontal	155	323	54.0	-1.7	Pass
2	2483.85	31.25	2.73	32.37	66.35	Max Peak	Horizontal	155	323	74.0	-7.7	Pass
3	2483.50	0.00	0.00	0.00	--	Band-Edge		0	0	--	--	

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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

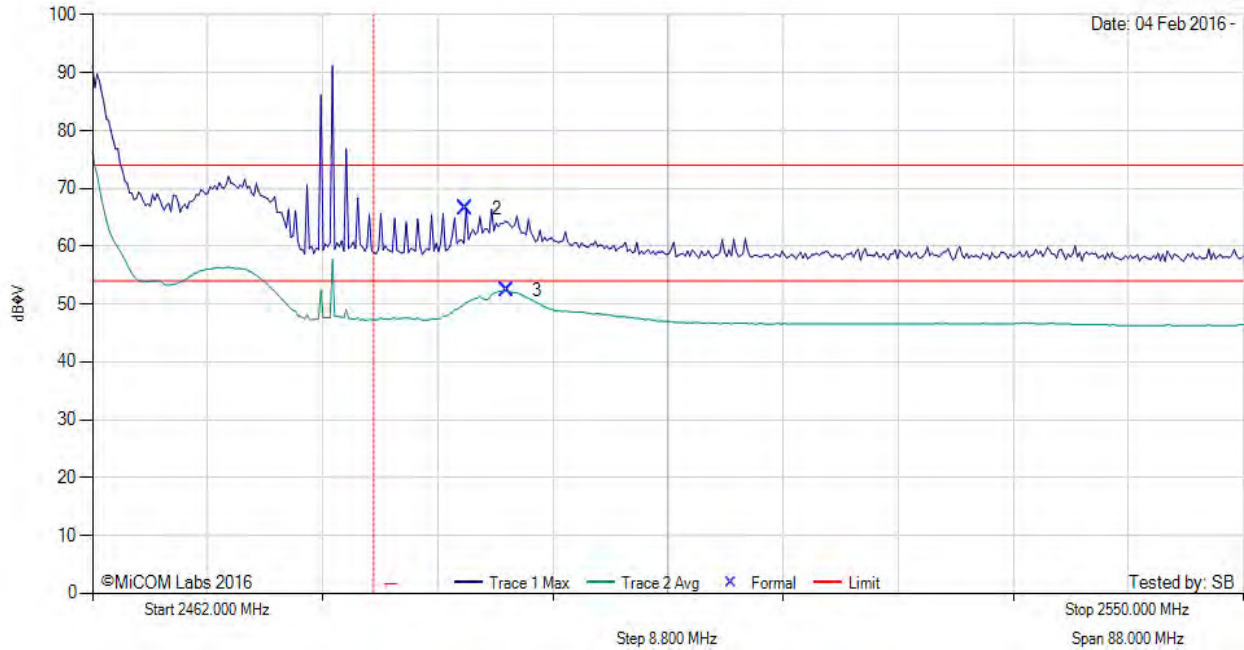
Variant: 802.11n HT-20, Test Freq: 2462.00 MHz, Antenna: Metal Sheet, Power Setting: 17

Measurement Distance: 3m

Sweep Time: 10.0 s

RBW: 1 MHz
VBW: 3 MHz

Date: 04 Feb 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
2	2490.55	31.43	2.74	32.38	66.55	Max Peak	Horizontal	155	323	74.0	-7.5	Pass
3	2493.65	17.18	2.74	32.39	52.31	Max Avg	Horizontal	155	323	54.0	-1.7	Pass
1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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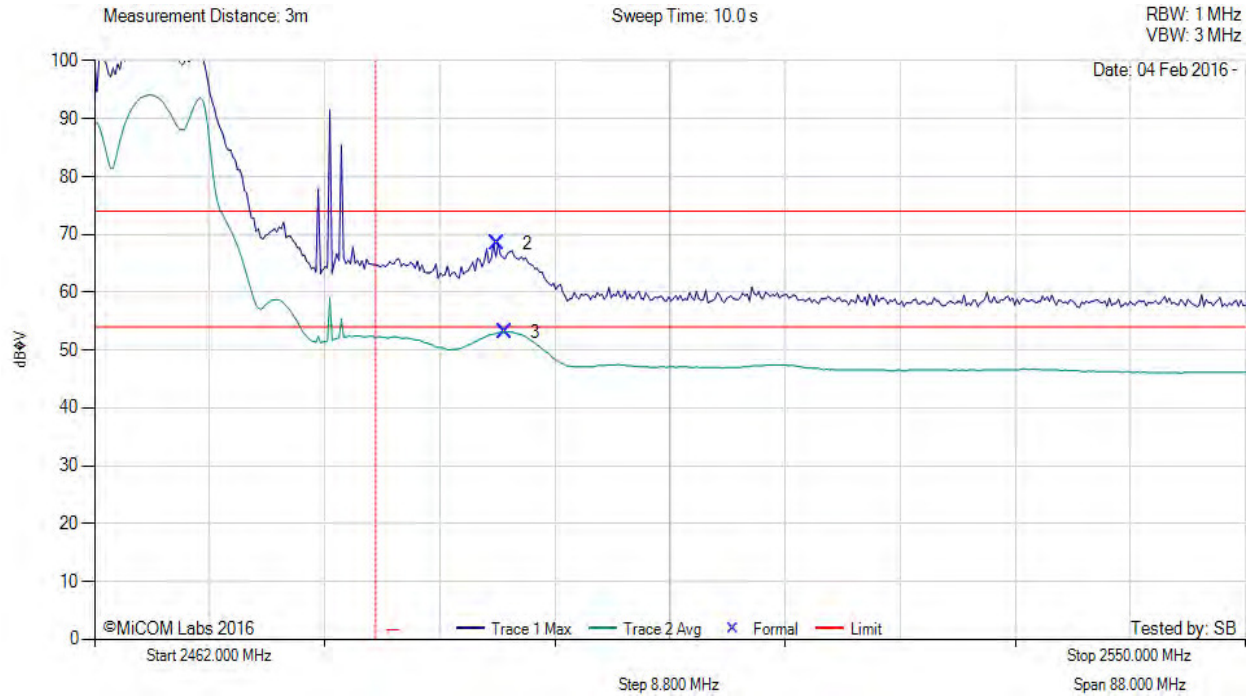


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RADIATED - UPPER RESTRICTED BAND-EDGE EMISSIONS

Variant: 802.11n HT-40, Test Freq: 2452.00 MHz, Antenna: Metal Sheet, Power Setting: 13



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	2492.78	33.24	2.74	32.38	68.36	Max Peak	Horizontal	155	323	74.0	-5.6	Pass
3	2493.34	18.02	2.74	32.38	53.14	Max Avg	Horizontal	155	323	54.0	-0.9	Pass
1	2483.50	--	--	--	--	Band-Edge	--	--	--	--	--	--

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575 Boulder Court
Pleasanton, California 94566, USA
Tel: +1 (925) 462 0304
Fax: +1 (925) 462 0306
www.micomlabs.com