TEST REPORT ADDENDUM – CONDUCTED

FROM



Test of: Hewlett Packard Enterprise APIN0344, APIN0345

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

Test Report Serial No.: HPEN111-U5_Conducted WiFi Rev A

Issue Date: 22nd August 2017

Master Document Number	Addendum Reports
HPEN111-U5_Master WiFi	HPEN111-U5_Conducted WiFi
	HPEN111-U5_Radiated WiFi

This report is only valid in conjunction with the reports listed in the above table. Together these reports address the requirements for the type of device operating under the standard as listed.





Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 2 of 221

Table of Contents

1. TEST RESULTS	3
1.1. 6 dB & 99% Bandwidth	
1.2. Conducted Output Power	8
1.3. Power Spectral Density	14
1.4. Emissions	19
1.4.1. Conducted Emissions	
1.4.1.1. Conducted Spurious Emissions	
1.4.1.2. Conducted Band-Edge Emissions	24
6	

A. APPENDIX - GRAPHICAL IMAGES	
A.1. 6 dB & 99% Bandwidth	
A.2. Power Spectral Density	81
A.3. Emissions	
A.3.1. Conducted Emissions	
A.3.1.1. Conducted Spurious Emissions	141
A.3.1.2. Conducted Band-Edge Emissions	
0	



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5 Conducted Rev A Issue Date: 22nd August 2017 Page: 3 of 221

1. TEST RESULTS

1.1. 6 dB & 99% Bandwidth

Conducted Test Conditions for 6 dB and 99% Bandwidth					
Standard:	FCC CFR 47:15.247	Ambient Temp. (°C):	24.0 - 27.5		
Test Heading:	6 dB and 99 % Bandwidth	Rel. Humidity (%):	32 - 45		
Standard Section(s):	15.247 (a)(2) Pressure (mBars): 999 - 1001				
Reference Document(s):	See Normative References				

Test Procedure for 6 dB and 99% Bandwidth Measurement

The bandwidth at 6 dB and 99 % was measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

Testing was performed under ambient conditions at nominal voltage. Where the device operated with multiple antenna ports i.e. MIMO device, each port was measured and reported.

Test configuration and setup used for the measurement was per the Conducted Test Set-up specified in this document.

Limits for 6 dB and 99% Bandwidth

(a) Operation under the provisions of this Section is limited to frequency hopping and digitally modulated intentional radiators that comply with the following provisions:

(2) Systems using digital modulation techniques may operate in the 902-928 MHz and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 4 of 221

Equipment Configuration for 6 dB & 99% Bandwidth

Variant:	802.11b	Duty Cycle (%):	99
Data Rate:	1.00 MBit/s	Antenna Gain (dBi):	Not Applicable
Modulation:	ССК	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	СС
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled		

Test Measurement Results

Test	Measured 6 dB Bandwidth (MHz)				6 dB Bandy	width (MHz)	Limit	Lowest
Frequency	Port(s)				o ab Bana		Emm	Margin
MHz	а	b	с	d	Highest	Lowest	KHz	MHz
2412.0	<u>9.000</u>	<u>9.000</u>	<u>9.000</u>	<u>9.000</u>	9.000	9.000	≥500.0	-8.50
2437.0	<u>10.000</u>	<u>11.000</u>	<u>10.930</u>	<u>11.000</u>	11.000	10.000	≥500.0	-9.50
2462.0	<u>9.000</u>	<u>8.470</u>	<u>8.930</u>	<u>8.470</u>	9.000	8.470	≥500.0	-7.97

Test		Measured 99% E	Bandwidth (MHz)	Maximum		
Frequency		Por	t(s)	99% Bandwidth		
MHz	а	b	С	d	(MHz)	
2412.0	<u>12.305</u>	<u>12.175</u>	<u>12.189</u>	<u>12.050</u>	12.305	
2437.0	<u>26.407</u>	<u>29.355</u>	<u>28.197</u>	<u>30.743</u>	30.743	
2462.0	<u>11.907</u>	<u>11.681</u>	<u>11.698</u>	<u>11.539</u>	11.907	

Traceability to Industry Recognized Test Methodologies				
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK			
Measurement Uncertainty:	2.81 dB			

Note: click the links in the above matrix to view the graphical image (plot).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 5 of 221

Equipment Configuration for 6 dB & 99% Bandwidth

Variant:	802.11g	Duty Cycle (%):	99
Data Rate:	6.00 MBit/s	Antenna Gain (dBi):	Not Applicable
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	CC
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled		

Test Measurement Results

Test	M	easured 6 dB E	Bandwidth (MF	łz)	6 dB Bandy	vidth (MHz)	Limit	Lowest
Frequency	Port(s)				• • • • • • • • • • •			Margin
MHz	а	b	С	d	Highest	Lowest	KHz	MHz
2412.0	<u>16.270</u>	<u>16.270</u>	<u>16.270</u>	<u>16.200</u>	16.270	16.200	≥500.0	-15.70
2437.0	<u>16.270</u>	<u>16.270</u>	<u>16.270</u>	<u>16.270</u>	16.270	16.270	≥500.0	-15.77
2462.0	<u>16.270</u>	<u>16.270</u>	<u>16.270</u>	<u>16.270</u>	16.270	16.270	≥500.0	-15.77

Test		Measured 99% E	Bandwidth (MHz)	Maximum		
Frequency		Por	t(s)	99% Bandwidth		
MHz	а	b	С	d	(MHz)	
2412.0	<u>16.592</u>	<u>16.594</u>	<u>16.582</u>	<u>16.548</u>	16.594	
2437.0	<u>33.899</u>	<u>34.817</u>	<u>33.745</u>	<u>35.979</u>	35.979	
2462.0	<u>16.535</u>	<u>16.485</u>	<u>16.452</u>	<u>16.430</u>	16.535	

Traceability to Industry Recognized Test Methodologies			
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK		
Measurement Uncertainty:	2.81 dB		

Note: click the links in the above matrix to view the graphical image (plot).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 6 of 221

Equipment Configuration for 6 dB & 99% Bandwidth

Variant:	802.11n HT-20	Duty Cycle (%):	99	
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	Not Applicable	
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable	
TPC:	Not Applicable Tested By: CC			
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled			

Test Measurement Results

Test	M	easured 6 dB E	Bandwidth (MF	łz)	6 dB Band	width (MHz)	Limit	Lowest
Frequency		Por	t(s)				Linin	Margin
MHz	а	b	С	d	Highest	Lowest	KHz	MHz
2412.0	<u>17.530</u>	<u>17.530</u>	<u>17.530</u>	<u>17.530</u>	17.530	17.530	≥500.0	-17.03
2437.0	<u>17.330</u>	<u>17.530</u>	<u>17.470</u>	<u>17.470</u>	17.530	17.330	≥500.0	-16.83
2462.0	<u>17.530</u>	<u>17.530</u>	<u>17.530</u>	<u>17.470</u>	17.530	17.470	≥500.0	-16.97

Test		Measured 99% E	Bandwidth (MHz	Maximum		
Frequency		Por	rt(s)	99% Bandwidth		
MHz	а	b	С	d	(MHz)	
2412.0	<u>17.814</u>	<u>17.782</u>	<u>17.816</u>	<u>17.761</u>	17.816	
2437.0	<u>35.011</u>	<u>35.664</u>	<u>35.022</u>	<u>36.837</u>	36.837	
2462.0	<u>17.765</u>	<u>17.685</u>	<u>17.664</u>	<u>17.652</u>	17.765	

Traceability to Industry Recognized Test Methodologies					
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK				
Measurement Uncertainty:	±2.81 dB				

Note: click the links in the above matrix to view the graphical image (plot).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 7 of 221

Equipment Configuration for 6 dB & 99% Bandwidth

Variant:	802.11n HT-40	Duty Cycle (%):	99	
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	Not Applicable	
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable	
TPC:	Not Applicable Tested By: CC			
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled			

Test Measurement Results

Test	M	easured 6 dB E	Bandwidth (MF	łz)	6 dB Bandy	width (MHz)	Limit	Lowest
Frequency		Por	t(s)			Matri (11112)	Linit	Margin
MHz	а	b	С	d	Highest	Lowest	KHz	MHz
2422.0	<u>36.130</u>	<u>36.130</u>	<u>35.870</u>	<u>35.330</u>	36.130	35.330	≥500.0	-34.83
2437.0	<u>35.870</u>	<u>36.130</u>	<u>36.130</u>	<u>36.270</u>	36.270	35.870	≥500.0	-35.37
2452.0	<u>35.870</u>	<u>36.130</u>	<u>36.130</u>	<u>36.130</u>	36.130	35.870	≥500.0	-35.37

Test		Measured 99% E	Bandwidth (MHz	Maximum 99% Bandwidth		
Frequency		Рог	rt(s)			
MHz	а	b	С	d	(MHz)	
2422.0	<u>36.092</u>	<u>36.109</u>	<u>36.045</u>	<u>35.998</u>	36.109	
2437.0	<u>70.042</u>	<u>71.446</u>	<u>69.239</u>	<u>71.511</u>	71.511	
2452.0	<u>36.095</u>	<u>36.137</u>	<u>36.120</u>	<u>36.082</u>	36.137	

Traceability to Industry Recognized Test Methodologies				
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK			
Measurement Uncertainty:	±2.81 dB			

Note: click the links in the above matrix to view the graphical image (plot).



1.2. Conducted Output Power

Conducted Test Conditions for Fundamental Emission Output Power							
Standard:	FCC CFR 47:15.247	Ambient Temp. (°C):	24.0 - 27.5				
Test Heading:	Output Power	Rel. Humidity (%):	32 - 45				
Standard Section(s):	15.247 (b) & (c)	Pressure (mBars):	999 - 1001				
Reference Document(s):	See Normative References						
Test Procedure for Fundamental In the case of average power me	Emission Output Power Measurer asurements an average power ser	nent nsor was utilized.					
For peak power measurements the bandwidth.	ne spectrum analyzer built-in powe	er function was used to integrate p	eak power over the 20 dB				
Testing was performed under am MIMO device, each port was mea	bient conditions at nominal voltage asured, summed (Σ) and reported.	e only. Where the device operate	d with multiple antenna ports i.e.				
Test configuration and setup use Supporting Information Calculated Power = A + G + Y+ 1	d for the measurement was per the	e Conducted Test Set-up specified	l in this document.				
A = Total Power [10*Log10 (10 ^{a/1} G = Antenna Gain Y = Beamforming Gain x = Duty Cycle (average power m	⁰ + 10 ^{b/10} + 10 ^{c/10} + 10 ^{d/10})] neasurements only)						
Limits for Fundamental Emissi (b) The maximum peak conducter systems:	on Output Power d output power of the intentional ra	adiator shall not exceed the follow	ng for non-frequency hopping				
(3) For systems using digita power measurement, comp power. Maximum Conducte elements averaged across level. Power must be summ during which the transmitte alternative modulation meth mode.	al modulation in the 902-928 MHz a liance with the one Watt limit can d Output Power is defined as the all symbols in the signaling alphab red across all antennas and anten r is off or is transmitting at a reduc roods), the maximum conducted ou	and 2400-2483.5 MHz bands: 1 W be based on a measurement of the total transmit power delivered to al et when the transmitter is operation na elements. The average must no ed power level. If multiple modes of tput power is the highest total trans	att. As an alternative to a peak e maximum conducted output I antennas and antenna g at its maximum power control of include any time intervals of operation are possible (e.g., smit power occurring in any				
(4) The conducted output p gains that do not exceed 6 greater than 6 dBi are used in paragraphs (b)(3) of this	(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.						
 (c) Operation with directional antenna gains greater than 6 dBi. (1) Fixed point-to-point operation: (i) Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. 							
(iii) Fixed, point-to-poi multipoint systems, or information. The oper professionally installe operations. The instru	nt operation, as used in paragraph nnidirectional applications, and mu ator of the spread spectrum or dig d, the installer is responsible for en ction manual furnished with the in	ns (c)(1)(i) and (c)(1)(ii) of this sect ultiple co-located intentional radiat- itally modulated intentional radiato nsuring that the system is used ex- tentional radiator shall contain lang	ion, excludes the use of point-to- ors transmitting the same r or, if the equipment is clusively for fixed, point-to-point guage in the installation				

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



Title: To:

Hewlett Packard Enterprise APIN0344 & APIN0345 FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5 Conducted Rev A Issue Date: 22nd August 2017 Page: 9 of 221

instructions informing the operator and the installer of this responsibility.

(2) In addition to the provisions in paragraphs (b)(3), (b)(4) and (c)(1)(i) of this section, transmitters operating in the 2400-2483.5 MHz band that emit multiple directional beams, simultaneously or sequentially, for the purpose of directing signals to individual receivers or to groups of receivers provided the emissions comply with the following:

(i) Different information must be transmitted to each receiver.

(ii) If the transmitter employs an antenna system that emits multiple directional beams but does not do emit multiple directional beams simultaneously, the total output power conducted to the array or arrays that comprise the device, i.e., the sum of the power supplied to all antennas, antenna elements, staves, etc. and summed across all carriers or frequency channels, shall not exceed the limit specified in paragraph (b)(1) or (b)(3) of this section, as applicable. However, the total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi. The directional antenna gain shall be computed as follows:

(A) The directional gain shall be calculated as the sum of 10 log (number of array elements or staves) plus the directional gain of the element or stave having the highest gain.

(B) A lower value for the directional gain than that calculated in paragraph (c)(2)(ii)(A) of this section will be accepted if sufficient evidence is presented, e.g., due to shading of the array or coherence loss in the beamforming.

(iii) If a transmitter employs an antenna that operates simultaneously on multiple directional beams using the same or different frequency channels, the power supplied to each emission beam is subject to the power limit specified in paragraph (c)(2)(ii) of this section. If transmitted beams overlap, the power shall be reduced to ensure that their aggregate power does not exceed the limit specified in paragraph (c)(2)(ii) of this section. In addition, the aggregate power transmitted simultaneously on all beams shall not exceed the limit specified in paragraph (c)(2)(ii) of this section by more than 8 dB.

(iv) Transmitters that emit a single directional beam shall operate under the provisions of paragraph (c)(1) of this section.



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 10 of 221

Equipment Configuration for Average Output Power					
Variant:	802.11b	Duty Cycle (%):	99.0		
Data Rate:	1.00 MBit/s	Antenna Gain (dBi):	2.00		
Modulation:	ССК	Beam Forming Gain (Y)(dB):	Not Applicable		
TPC:	Not Applicable Tested By: CC				
Engineering Test Notes:	Engineering Test Notes: Mode 1: Radio 1 Enabled; Radio 0 Disabled				

Test Measurement Results

Test	N	leasured Outp	ut Power (dBn	n)	Calculated Total Power	Limit	EUT Power	
Frequency		Por	t(s)		Σ Port(s)		•	Setting
MHz	а	b	С	d	dBm	dBm	dB	J
2412.0	18.24	17.52	17.33	17.45	23.67	30.00	-6.33	75.00
2437.0	21.67	21.21	20.63	20.37	27.02	30.00	-2.98	100.00
2462.0	17.86	17.15	17.01	16.99	23.29	30.00	-6.71	75.00

Traceability to Industry Recognized Test Methodologies

Work Instruction: WI-01 MEASURING RF OUTPUT POWER Measurement Uncertainty: 1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

Power restrictions (power setting <100) are due to radiated measurements namely spurious or band-edge measurements



Equipment Configuration for Average Output Power					
Variant:	802.11g	Duty Cycle (%):	99.0		
Data Rate:	6.00 MBit/s	Antenna Gain (dBi):	2.00		
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable		
TPC:	Not Applicable Tested By: CC				
Engineering Test Notes:	ineering Test Notes: Mode 1: Radio 1 Enabled; Radio 0 Disabled				

Test	N	leasured Outp	ut Power (dBn	n)	Calculated	Limit	Margin	
Frequency	ency Port(s)				Σ Port(s)	Linit	Margin	Setting
MHz	а	b	С	d	dBm	dBm	dB	J
2412.0	14.47	13.85	13.88	13.80	20.03	30.00	-9.97	61.00
2437.0	22.01	21.61	20.98	20.84	27.41	30.00	-2.59	100.00
2462.0	13.75	12.88	12.85	12.94	19.14	30.00	-10.86	58.00

Traceability to Industry Recognized Test Methodologies

Work Instruction: WI-01 MEASURING RF OUTPUT POWER Measurement Uncertainty: 1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

Power restrictions (power setting <100) are due to radiated measurements namely spurious or band-edge measurements



Equipment Configuration for Average Output Power						
Variant:	802.11n HT-20	Duty Cycle (%):	99.0			
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.00			
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00			
TPC:	Not Applicable	Tested By:	CC			
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled					

Test	Measured Output Power (dBm)				Calculated Total Power	Limit	Margin	EUT Power
Frequency	requency Port(s)				Σ Port(s)		•	Setting
MHz	а	b	С	d	dBm	dBm	dB	5
2412.0	16.06	15.47	15.31	15.40	21.59	29.00	-7.41	68.00
2437.0	21.99	21.57	20.95	20.85	27.39	29.00	-1.61	100.00
2462.0	14.26	13.38	13.27	13.33	19.60	29.00	-9.40	60.00

Traceability to Industry Recognized Test Methodologies

Work Instruction: WI-01 MEASURING RF OUTPUT POWER Measurement Uncertainty: ±1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

Power restrictions (power setting <100) are due to radiated measurements namely spurious or band-edge measurements



Equipment Configuration for Average Output Power						
Variant:	802.11n HT-40	Duty Cycle (%):	99.0			
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.00			
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00			
TPC:	Not Applicable	Tested By:	CC			
Engineering Test Notes:	: Mode 1: Radio 1 Enabled; Radio 0 Disabled					

Test	N	leasured Outp	ut Power (dBn	n)	Calculated	Limit	Margin	
Frequency	Jency Port(s)				Σ Port(s)	Linit	margin	Setting
MHz	а	b	С	d	dBm	dBm	dB	J
2422.0	15.22	14.39	14.31	14.21	20.57	29.00	-8.43	63.00
2437.0	21.90	21.48	21.08	21.29	27.47	29.00	-1.53	100.00
2452.0	12.00	11.09	10.98	10.75	17.25	29.00	-11.75	50.00

Traceability to Industry Recognized Test Methodologies

Work Instruction: WI-01 MEASURING RF OUTPUT POWER Measurement Uncertainty: ±1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

Power restrictions (power setting <100) are due to radiated measurements namely spurious or band-edge measurements



Title: To:

1.3. Power Spectral Density

Conducted Test Conditions for Power Spectral Density					
Standard:	CC CFR 47:15.247 Ambient Temp. (°C): 24.0 - 27.5				
Test Heading:	Power Spectral Density	Rel. Humidity (%):	32 - 45		
Standard Section(s):	15.247 (e) Pressure (mBars): 999 - 1001				
Reference Document(s):	See Normative References				

Test Procedure for Power Spectral Density

The transmitter output was connected to a spectrum analyzer and the measured made in a 3 kHz resolution bandwidth using the analyzer auto-coupled sweep-time. A peak value was found over the full emission bandwidth and the spectrum downloaded for post processing purposes.

Where the device operated with multiple antenna ports i.e. MIMO device, each port was measured separately. The Peak Power Spectral Density is the highest level found across the emission bandwidth. With multiple antenna port measurements the numerical analyzer data from each port is summed (å) and a link to this additional graphic is provided.

Testing was performed under ambient conditions at nominal voltage only.

Test configuration and setup used for the measurement was per the Conducted Test Set-up specified in this document.

Measure and sum the spectra across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The individual spectra are then summed mathematically in linear power units. Unlike in-band power measurements, in which the sum involves a single measured value (output power) from each output, measurements for compliance with PSD limits involve summing entire spectra across corresponding frequency bins on the various outputs. Consistency is maintained for any device with multiple transmitter outputs to be certain the individual outputs are all aligned with the same span and same number of points. In this instance, the linear power spectrum value within the first spectral bin of output 0 is summed with that in the first spectral bin of output 1, and the first spectral bin of output 2, and so on up to the Nth output to obtain the true value for the first frequency bin of the summed spectrum. The summed spectrum value for each frequency bin is computed in this fashion. These summed spectral values were post processed and the resulting numerical and graphical data presented.

NOTE:

It may be observed that the spectrum in some antenna port plots break the limit line however this in itself does NOT constitute a failure. In all cases a spectrum summation plot is provided in order to prove compliance. A failure occurs only after the summation of all spectrum plots have been summed and are found to be greater than the limit line.

Supporting Information

Calculated Power = $A + 10 \log (1/x) dBm$ A = Total Power Spectral Density [10 Log10 (10^{a/10} + 10^{b/10} + 10^{c/10} + 10^{d/10})] x = Duty Cycle

Limits Power Spectral Density

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than +8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.



Equipment Configuration for Power Spectral Density - Average						
Variant:	802.11b	Duty Cycle (%):	99.0			
Data Rate:	1.00 MBit/s	Antenna Gain (dBi):	2.00			
Modulation:	ССК	Beam Forming Gain (Y)(dB):	Not Applicable			
TPC:	Not Applicable	Tested By:	CC			
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled					

Test Frequency	Measured Power Spectral Density Port(s) (dBm/3KHz)			Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/3KHz	dBm/3KHz	dB
2412.0	<u>-12.407</u>	<u>-13.540</u>	<u>-13.420</u>	<u>-13.084</u>	<u>-7.387</u>	8.0	-15.4
2437.0	<u>-11.572</u>	<u>-11.512</u>	<u>-12.375</u>	<u>-12.959</u>	<u>-6.348</u>	8.0	-14.4
2462.0	<u>-14.479</u>	<u>-14.635</u>	<u>-14.802</u>	<u>-14.445</u>	<u>-8.856</u>	8.0	-16.9

Traceability to Industry Recognized Test Methodologies				
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK			
Measurement Uncertainty:	2.81 dB			

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 16 of 221

Equipment Configuration for Power Spectral Density - Average						
Variant:	802.11g	Duty Cycle (%):	99.0			
Data Rate:	6.00 MBit/s	Antenna Gain (dBi):	2.00			
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable			
TPC:	Not Applicable	Tested By:	СС			
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled					

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/3KHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	а	b	С	d	dBm/3KHz	dBm/3KHz	dB
2412.0	<u>-18.567</u>	<u>-19.396</u>	<u>-19.335</u>	<u>-19.093</u>	<u>-13.059</u>	8.0	-21.1
2437.0	<u>-12.809</u>	<u>-13.128</u>	<u>-13.768</u>	<u>-14.203</u>	<u>-7.416</u>	8.0	-15.4
2462.0	<u>-20.950</u>	<u>-21.194</u>	<u>-21.176</u>	<u>-21.114</u>	<u>-15.198</u>	8.0	-23.2

Traceability to Industry Recognized Test Methodologies				
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK			
Measurement Uncertainty:	2.81 dB			

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).



Equipment Configuration for Power Spectral Density - Average						
Variant:	802.11n HT-20	Duty Cycle (%):	99.0			
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.00			
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00			
TPC:	Not Applicable	Tested By:	CC			
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled					

Test Measurement Results

Test Frequency	N	leasured Power Port(s) (d	Spectral Densit Bm/3KHz)	Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/3KHz	dBm/3KHz	dB
2412.0	<u>-18.819</u>	<u>-19.214</u>	<u>-19.314</u>	<u>-18.841</u>	<u>-13.523</u>	8.0	-21.5
2437.0	<u>-12.677</u>	<u>-13.307</u>	<u>-13.319</u>	<u>-13.432</u>	<u>-7.721</u>	8.0	-15.7
2462.0	-20.070	<u>-21.321</u>	<u>-21.356</u>	<u>-21.215</u>	<u>-15.369</u>	8.0	-23.4

Traceability to Industry Recognized Test Methodologies					
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK				
Measurement Uncertainty:	±2.81 dB				

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).



Equipment Configuration for Power Spectral Density - Average							
Variant:	802.11n HT-40	Duty Cycle (%):	99.0				
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.00				
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00				
TPC:	Not Applicable	Tested By:	СС				
Engineering Test Notes:	otes: Mode 1: Radio 1 Enabled; Radio 0 Disabled						

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/3KHz)				Amplitude Summation + DCCF (+0.04 dB)	Limit	Margin
MHz	а	b	С	d	dBm/3KHz	dBm/3KHz	dB
2422.0	<u>-22.565</u>	<u>-23.402</u>	<u>-22.945</u>	<u>-23.252</u>	<u>-17.087</u>	8.0	-25.1
2437.0	<u>-16.117</u>	<u>-15.956</u>	<u>-15.531</u>	<u>-16.235</u>	<u>-10.129</u>	8.0	-18.1
2452.0	<u>-25.491</u>	<u>-26.832</u>	<u>-26.700</u>	<u>-26.972</u>	<u>-20.654</u>	8.0	-28.7

Traceability to Industry Recognized Test Methodologies			
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK		
Measurement Uncertainty:	±2.81 dB		

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).



Title: To:

Hewlett Packard Enterprise APIN0344 & APIN0345 FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5 Conducted Rev A Issue Date: 22nd August 2017 Page: 19 of 221

1.4. Emissions

1.4.1. Conducted Emissions

1.4.1.1. Conducted Spurious Emissions

Conducted Test Conditions for Transmitter Conducted Spurious and Band-Edge Emissions								
Standard:	FCC CFR 47:15.247	Ambient Temp. (°C):	24.0 - 27.5					
Test Heading:	Max Unwanted Emission Levels	Rel. Humidity (%):	32 - 45					
Standard Section(s):	15.247 (d)	Pressure (mBars):	999 - 1001					
Reference Document(s):	See Normative References							

Test Procedure for Transmitter Conducted Spurious and Band-Edge Emissions Measurement

Transmitter Conducted Spurious and Band-Edge emissions were measured at a limit of 30 dBc (average detector) or 20 dBc (peak detector) below the highest in-band spectral density measured with a spectrum analyzer connected to the antenna terminal. Measurements were made while EUT was operating in transmit mode of operation at the appropriate centre frequency closest to the band-edge. Emissions were maximized during the measurement and limits derived from the peak spectral power and drawn on each plot

Where the device operated with multiple antenna ports i.e. MIMO device, each port was measured separately. Testing was performed under ambient conditions at nominal voltage only.

Test configuration and setup used for the measurement was per the Conducted Test Set-up specified in this document.

Limits Transmitter Conducted Spurious and Band-Edge Emissions

(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 20 of 221

Equipment Configuration for Conducted Spurious Emissions - Average	
--	--

Variant:	802.11b	Duty Cycle (%):	99	
Data Rate:	1.00 MBit/s	Antenna Gain (dBi):	2.00	
Modulation:	ССК	Beam Forming Gain (Y):	Not Applicable	
TPC:	Not Applicable	Tested By:	CC	
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled			

Test Measurement Results

Test	Frequency			Conducte	d Spurious E	missions - A	verage (dBm	ı)	
Frequency	Range	Р	ort a	Po	rt b	Po	rt c	Po	rt d
MHz	MHz	SE	Limit	SE	Limit	SE	Limit	SE	Limit
2412.0	30.0 - 26000.0	<u>-56.724</u>	-36.76	<u>-57.294</u>	-37.56	<u>-57.014</u>	-38.06	<u>-56.839</u>	-37.56
2437.0	30.0 - 26000.0	<u>-56.763</u>	-34.78	<u>-57.279</u>	-35.21	<u>-57.092</u>	-35.85	<u>-56.858</u>	-36.69
2462.0	30.0 - 26000.0	<u>-56.819</u>	-38.61	<u>-57.348</u>	-39.09	<u>-57.105</u>	-39.26	<u>-56.881</u>	-39.28

Traceability to Industry Recognized Test Methodologies					
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS				
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB				

Note: click the links in the above matrix to view the graphical image (plot).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 21 of 221

Equipment Configuration for Conducted Spurious Emissions - Average	

Variant:	802.11g	Duty Cycle (%):	99		
Data Rate:	6.00 MBit/s	Antenna Gain (dBi):	2.00		
Modulation:	OFDM	Beam Forming Gain (Y):	Not Applicable		
TPC:	Not Applicable Tested By: CC				
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled				

Test Measurement Results

Test	Frequency			Conducted	d Spurious E	missions - Av	verage (dBm))	
Frequency	Range	P	ort a	Po	rt b	Po	rt c	Po	rt d
MHz	MHz	SE	Limit	SE	Limit	SE	Limit	SE	Limit
2412.0	30.0 - 26000.0	<u>-56.716</u>	-39.96	<u>-57.219</u>	-40.56	<u>-57.120</u>	-39.47	<u>-56.839</u>	-40.42
2437.0	30.0 - 26000.0	<u>-56.706</u>	-35.66	<u>-57.291</u>	-36.14	<u>-57.066</u>	-36.80	<u>-56.834</u>	-36.79
2462.0	30.0 - 26000.0	<u>-56.770</u>	-42.66	<u>-57.362</u>	-43.35	<u>-57.135</u>	-43.41	<u>-56.829</u>	-43.28

Traceability to Industry Recognized Test Methodologies				
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS			
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB			

Note: click the links in the above matrix to view the graphical image (plot).

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 22 of 221

Equipment Configuration for Conducted Spurious Emissions - Average				
Variant:	802.11n HT-20	Duty Cycle (%):	99	
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.00	
Modulation:	OFDM	Beam Forming Gain (Y):	3.00	
TPC:	Not Applicable Tested By: CC			
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled			

Test Measurement Results

Test	Frequency			Conducted	d Spurious E	missions - Av	verage (dBm))	
Frequency	Range	P	ort a	Po	rt b	Po	rt c	Po	rt d
MHz	MHz	SE	Limit	SE	Limit	SE	Limit	SE	Limit
2412.0	30.0 - 26000.0	<u>-56.966</u>	-39.78	<u>-57.512</u>	-40.50	<u>-57.249</u>	-40.60	<u>-57.092</u>	-40.46
2437.0	30.0 - 26000.0	<u>-57.032</u>	-35.48	<u>-57.540</u>	-36.14	<u>-57.207</u>	-36.62	<u>-57.022</u>	-36.83
2462.0	30.0 - 26000.0	<u>-56.884</u>	-42.08	<u>-57.446</u>	-42.90	<u>-57.224</u>	-43.01	<u>-56.996</u>	-42.92

Traceability to Industry Recognized Test Methodologies					
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS				
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB				

Note: click the links in the above matrix to view the graphical image (plot).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 23 of 221

Equipment Configuration for Conducted Spurious Emissions - Average						
Variant:	802.11n HT-40	Duty Cycle (%):	99			
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.00			
Modulation:	OFDM	Beam Forming Gain (Y):	3.00			
TPC:	Not Applicable Tested By: CC					
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled					

Test Measurement Results

Test	Frequency			Conducted	d Spurious E	missions - Av	verage (dBm))	
Frequency	Range	P	ort a	Po	rt b	Po	rt c	Po	rt d
MHz	MHz	SE	Limit	SE	Limit	SE	Limit	SE	Limit
2422.0	30.0 - 26000.0	<u>-56.918</u>	-41.69	<u>-57.443</u>	-42.44	<u>-57.204</u>	-42.51	<u>-57.054</u>	-42.64
2437.0	30.0 - 26000.0	<u>-56.978</u>	-36.85	<u>-57.446</u>	-37.29	<u>-57.301</u>	-37.91	<u>-57.112</u>	-37.44
2452.0	30.0 - 26000.0	<u>-56.916</u>	-44.23	<u>-57.370</u>	-45.00	<u>-57.262</u>	-45.25	<u>-56.980</u>	-45.49

Traceability to Industry Recognized Test Methodologies					
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS				
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB				

Note: click the links in the above matrix to view the graphical image (plot).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 24 of 221

1.4.1.2. Conducted Band-Edge Emissions

Equipment Configuration for Conducted Low Band-Edge Emissions - Average						
Variant:	802.11b	Duty Cycle (%):	99.0			
Data Rate:	1.00 MBit/s	Antenna Gain (dBi):	2.00			
Modulation:	ССК	CCK Beam Forming Gain (Y)(dB): Not Applicable				
TPC:	Not Applicable Tested By: CC					
Engineering Test Notes:	Mode 1: Radio 1 Enabled; Radio 0 Disabled					

Test Measurement Results

Channel Frequency:	2412.0 MHz	2412.0 MHz					
Band-Edge Frequency:	2400.0 MHz	2400.0 MHz					
Test Frequency Range:	2350.0 - 2422.0	2350.0 - 2422.0 MHz					
	Band-E	Band-Edge Markers and Limit Revised Limit Margin				Margin	
Port(s)	M1 Amplitude (dBm)	Plot Limit (dBm)	M2 Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	(MHz)	
а	<u>-37.27</u>	-27.99	2403.80			-3.800	
b	<u>-37.38</u>	-28.84	2403.90			-3.900	
С	<u>-37.25</u>	-29.05	2403.80			-3.800	
d	<u>-39.61</u>	-28.71	2404.00			-4.000	

Traceability to Industry Recognized Test Methodologies				
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS			
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB			

Note: click the links in the above matrix to view the graphical image (plot).

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 25 of 221

Equipment Configuration for Conducted Low Band-Edge Emissions - Average	le
---	----

Verient	902 11a	Duty Cycle (%):	00.0
variant:	602.11g	Duty Cycle (%):	99.0
Data Rate:	6.00 MBit/s	Antenna Gain (dBi):	2.00
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	СС
Engineering Test Notes:	Mode 1: Radio 1 Enabled: Radio 0 Disabled		

Test Measurement Results

Channel Frequency:	2412.0 MHz					
Band-Edge Frequency:	2400.0 MHz					
Test Frequency Range:	2350.0 - 2422.0 M	ЛНz				
	Band-Ec	lge Markers a	and Limit	Revise	ed Limit	Margin
Port(s)	M1 Amplitude (dBm)	Plot Limit (dBm)	M2 Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	(MHz)
а	<u>-37.31</u>	-34.35	2400.90			-0.900
b	<u>-37.94</u>	-34.97	2400.90			-0.900
С	<u>-36.86</u>	-35.01	2400.60			-0.600
d	<u>-38.03</u>	-34.73	2401.10			-1.100

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).



Variant:	802.11n HT-20	Duty Cycle (%):	99.0
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.00
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	СС
Engineering Test Notes:	Mode 1: Radio 1 Enabled: Radio 0 Disabled		

Channel Frequency:	2412.0 MHz					
Band-Edge Frequency:	2400.0 MHz					
Test Frequency Range:	2350.0 - 2422.0 N	/Hz				
	Band-Ed	ge Markers a	and Limit	Revise	ed Limit	Margin
Port(s)	M1 Amplitude (dBm)	Plot Limit (dBm)	M2 Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	(MHz)
а	<u>-37.06</u>	-34.63	2400.80			-0.800
b	<u>-37.57</u>	-35.07	2400.90			-0.900
C	<u>-37.33</u>	-35.37	2400.60			-0.600
d	<u>-38.19</u>	-34.69	2401.00			-1.000

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 27 of 221

Equipment configuration for conducted Low Dang-Euge Linissions - Average
--

Variant:	802.11n HT-40	Duty Cycle (%):	99.0
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.00
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	СС	
Engineering Test Notes:	Mode 1: Radio 1 Enabled: Radio 0 Disabled		

Test Measurement Results

Channel Frequency:	2422.0 MHz					
Band-Edge Frequency:	2400.0 MHz					
Test Frequency Range:	2292.0 - 2442.0	MHz				
	Band-E	dge Markers	and Limit	Revise	ed Limit	Margin
Port(s)	M1 Amplitude (dBm)	Plot Limit (dBm)	M2 Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	(MHz)
а	<u>-43.55</u>	-38.73	2401.80			-1.800
b	<u>-44.46</u>	-39.44	2401.80			-1.800
C	<u>-44.54</u>	-39.32	2401.80			-1.800
d	<u>-45.48</u>	-39.32	2402.00			-2.000

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 28 of 221

Equipment Config	ouration for Conduct	ed High Band-Edge	Emissions - Average
Equiprilont Coming	garadon for oonaaot	ou ingli bunu bugu	Elineerene / neruge

Variant:	802.11b	Duty Cycle (%):	99.0
Data Rate:	1.00 MBit/s	Antenna Gain (dBi):	2.00
Modulation:	ССК	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable Tested By: CC		
Engineering Test Notes:	Mode 1: Radio 1 Enabled: Radio 0 Disabled		

Test Measurement Results

Channel Frequency:	2462.0 MHz	2462.0 MHz				
Band-Edge Frequency:	2483.5 MHz					
Test Frequency Range:	2452.0 - 2524.0 MHz					
	Band-E	Band-Edge Markers and Limit Revised Limit Margin			Margin	
Port(s)	M3 Amplitude (dBm)	Plot Limit (dBm)	M2 Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	(MHz)
а	<u>-55.98</u>	-29.55	2469.90			-13.600
b	<u>-56.37</u>	-30.06	2469.80			-13.700
С	<u>-57.44</u>	-30.09	2469.60			-13.900
d	<u>-56.30</u>	-30.19	2469.60			-13.900

Traceability to Industry Recognized Test Methodologies				
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS			
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB			

Note: click the links in the above matrix to view the graphical image (plot).

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 29 of 221

Equipment Config	ouration for Con	ducted High Bar	nd-Edae Emissions	- Average
Equipriorit	garaa	aaotoa mgn bai		7.000.0000

Variant:	802.11g	Duty Cycle (%):	99.0
Data Rate:	6.00 MBit/s	Antenna Gain (dBi):	2.00
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable Tested By: CC		
Engineering Test Notes:	Mode 1: Radio 1 Enabled: Radio 0 Disabled		

Test Measurement Results

Channel Frequency:	2462.0 MHz	2462.0 MHz				
Band-Edge Frequency:	2483.5 MHz					
Test Frequency Range:	2452.0 - 2524.0	MHz				
	Band-E	Band-Edge Markers and Limit Revised Limit Margin			Margin	
Port(s)	M3 Amplitude (dBm)	Plot Limit (dBm)	M2 Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	(MHz)
а	<u>-51.73</u>	-36.86	2472.80			-10.700
b	<u>-60.11</u>	-37.26	2472.60			-10.860
C	<u>-54.12</u>	-37.36	2472.60			-10.900
d	<u>-53.75</u>	-37.06	2472.50			-11.000

Traceability to Industry Recognized Test Methodologies				
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS			
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB			

Note: click the links in the above matrix to view the graphical image (plot).



Equipment Configuration for Conducted High Band-Edge Emissions - Average

Variant:	802.11n HT-20	Duty Cycle (%):	99.0
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.00
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable Tested By: CC		СС
Engineering Test Notes:	Mode 1: Radio 1 Enabled: Radio 0 Disabled		

Test Measurement Results

Channel Frequency:	2462.0 MHz	2462.0 MHz				
Band-Edge Frequency:	2483.5 MHz					
Test Frequency Range:	2452.0 - 2524.0	2452.0 - 2524.0 MHz				
	Band-E	Band-Edge Markers and Limit Revised Limit Margin				
Port(s)	M3 Amplitude (dBm)	Plot Limit (dBm)	M2 Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	(MHz)
а	<u>-49.16</u>	-36.65	2472.90			-10.600
b	<u>-50.84</u>	-37.35	2472.90			-10.600
C	<u>-50.65</u>	-37.19	2472.80			-10.700
d	<u>-51.04</u>	-36.98	2472.60			-10.900

Traceability to Industry Recognized Test Methodologies				
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS			
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB			

Note: click the links in the above matrix to view the graphical image (plot).



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 31 of 221

Variant:	802.11n HT-40	Duty Cycle (%):	99.0
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.00
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	СС
Engineering Test Notes:	Mode 1: Radio 1 Enabled: Radio 0 Disabled		

Test Measurement Results

Channel Frequency:	2452.0 MHz					
Band-Edge Frequency:	2483.5 MHz					
Test Frequency Range:	2432.0 - 2582.0	MHz				
	Band-Edge Markers and Limit		Revised Limit		Margin	
Port(s)	M3 Amplitude (dBm)	Plot Limit (dBm)	M2 Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	(MHz)
а	<u>-54.02</u>	-41.78	2471.80			-11.700
b	<u>-54.78</u>	-42.59	2471.50			-12.000
C	<u>-55.97</u>	-42.61	2471.50			-12.000
d	<u>-55.00</u>	-42.91	2471.50			-12.000

Traceability to Industry Recognized Test Methodologies			
Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS		
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB		

Note: click the links in the above matrix to view the graphical image (plot).

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 32 of 221

A. APPENDIX - GRAPHICAL IMAGES

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 33 of 221

A.1. 6 dB & 99% Bandwidth



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 2407.470 MHz : 5.775 dBm M2 : 2410.470 MHz : 10.960 dBm Delta1 : 9.000 MHz : -0.366 dB T1 : 2405.867 MHz : -4.339 dBm T2 : 2418.200 MHz : -4.461 dBm OBW : 12.305 MHz	Measured 6 dB Bandwidth: 9.000 MHz Limit: ≥500.0 kHz Margin: -8.50 MHz

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 34 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2407.470 MHz : 4.615 dBm	Measured 6 dB Bandwidth: 9.000 MHz
Sweep Count = 0	M2 : 2413.470 MHz : 10.030 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 9.000 MHz : 0.063 dB	Margin: -8.50 MHz
Trace Mode = MAXH	T1 : 2405.933 MHz : -2.744 dBm	
	T2 : 2418.133 MHz : -5.361 dBm	
	OBW : 12.175 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 35 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2407.470 MHz : 4.194 dBm	Measured 6 dB Bandwidth: 9.000 MHz
Sweep Count = 0	M2 : 2413.000 MHz : 10.004 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 9.000 MHz : 0.408 dB	Margin: -8.50 MHz
Trace Mode = MAXH	T1 : 2405.933 MHz : -2.816 dBm	
	T2 : 2418.133 MHz : -5.421 dBm	
	OBW : 12.189 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 36 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2407.470 MHz : 4.204 dBm	Measured 6 dB Bandwidth: 9.000 MHz
Sweep Count = 0	M2 : 2411.000 MHz : 10.139 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 9.000 MHz : 1.158 dB	Margin: -8.50 MHz
Trace Mode = MAXH	T1 : 2406.000 MHz : -2.760 dBm	
	T2 : 2418.067 MHz : -3.990 dBm	
	OBW : 12.050 MHz	

back to matrix

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


Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 37 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2431.930 MHz : 7.935 dBm	Measured 6 dB Bandwidth: 10.000 MHz
Sweep Count = 0	M2 : 2435.470 MHz : 12.249 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 10.000 MHz : -1.179 dB	Margin: -9.50 MHz
Trace Mode = MAXH	T1 : 2423.467 MHz : -6.118 dBm	
	T2 : 2445.733 MHz : -7.010 dBm	
	OBW : 26.407 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 38 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2430.930 MHz : 5.898 dBm	Measured 6 dB Bandwidth: 11.000 MHz
Sweep Count = 0	M2 : 2435.470 MHz : 11.868 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 11.000 MHz : 1.175 dB	Margin: -10.50 MHz
Trace Mode = MAXH	T1 : 2422.067 MHz : -5.753 dBm	-
	T2 : 2446.333 MHz : -9.859 dBm	
	OBW : 29.355 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 39 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2431.000 MHz : 5.908 dBm	Measured 6 dB Bandwidth: 10.930 MHz
Sweep Count = 0	M2 : 2435.000 MHz : 11.404 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 10.930 MHz : -0.577 dB	Margin: -10.43 MHz
Trace Mode = MAXH	T1 : 2422.333 MHz : -8.219 dBm	
	T2 : 2445.533 MHz : -5.764 dBm	
	OBW : 28.197 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 40 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2430.930 MHz : 5.110 dBm	Measured 6 dB Bandwidth: 11.000 MHz
Sweep Count = 0	M2 : 2435.470 MHz : 10.872 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 11.000 MHz : 0.274 dB	Margin: -10.50 MHz
Trace Mode = MAXH	T1 : 2421.333 MHz : -6.182 dBm	
	T2 : 2446.867 MHz : -8.776 dBm	
	OBW : 30.743 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 41 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2457.470 MHz : 3.463 dBm	Measured 6 dB Bandwidth: 9.000 MHz
Sweep Count = 0	M2 : 2461.470 MHz : 9.390 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 9.000 MHz : -0.011 dB	Margin: -8.50 MHz
Trace Mode = MAXH	T1 : 2456.000 MHz : -3.566 dBm	
	T2 : 2467.933 MHz : -4.299 dBm	
	OBW : 11.907 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 42 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2457.930 MHz : 3.145 dBm	Measured 6 dB Bandwidth: 8.470 MHz
Sweep Count = 0	M2 : 2462.470 MHz : 8.768 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 8.470 MHz : -3.027 dB	Margin: -7.97 MHz
Trace Mode = MAXH	T1 : 2456.200 MHz : -9.128 dBm	
	T2 : 2467.867 MHz : -8.524 dBm	
	OBW : 11.681 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 43 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2457.470 MHz : 2.925 dBm	Measured 6 dB Bandwidth: 8.930 MHz
Sweep Count = 0	M2 : 2463.000 MHz : 8.734 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 8.930 MHz : -3.091 dB	Margin: -8.43 MHz
Trace Mode = MAXH	T1 : 2456.133 MHz : -8.855 dBm	
	T2 : 2467.867 MHz : -8.741 dBm	
	OBW : 11.698 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 44 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2457.470 MHz : 2.977 dBm	Measured 6 dB Bandwidth: 8.470 MHz
Sweep Count = 0	M2 : 2461.000 MHz : 8.653 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 8.470 MHz : -0.029 dB	Margin: -7.97 MHz
Trace Mode = MAXH	T1 : 2456.067 MHz : -6.780 dBm	
	T2 : 2467.667 MHz : -11.734 dBm	
	OBW : 11.539 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 45 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.800 MHz : -0.472 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2417.000 MHz : 4.852 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : 0.477 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2403.667 MHz : -4.809 dBm	
	T2 : 2420.267 MHz : -2.713 dBm	
	OBW : 16.592 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 46 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.800 MHz : -1.273 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2417.000 MHz : 4.129 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : 0.909 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2403.733 MHz : -3.251 dBm	
	T2 : 2420.267 MHz : -2.739 dBm	
	OBW : 16.594 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 47 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.800 MHz : -1.320 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2417.000 MHz : 4.332 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : 0.907 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2403.667 MHz : -5.117 dBm	
	T2 : 2420.267 MHz : -3.051 dBm	
	OBW : 16.582 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 48 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.870 MHz : -0.347 dBm	Measured 6 dB Bandwidth: 16.200 MHz
Sweep Count = 0	M2 : 2417.000 MHz : 5.017 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.200 MHz : 0.826 dB	Margin: -15.70 MHz
Trace Mode = MAXH	T1 : 2403.733 MHz : -3.198 dBm	
	T2 : 2420.267 MHz : -2.737 dBm	
	OBW : 16.548 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 49 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2428.800 MHz : 6.928 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2442.000 MHz : 11.848 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : -0.897 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2420.067 MHz : -6.273 dBm	
	T2 : 2448.933 MHz : -4.261 dBm	
	OBW : 33.899 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 50 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2428.800 MHz : 6.457 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2432.000 MHz : 11.348 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : -1.120 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2419.533 MHz : -5.918 dBm	
	T2 : 2449.067 MHz : -3.744 dBm	
	OBW : 34.817 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 51 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2428.800 MHz : 6.365 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2432.000 MHz : 11.050 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : -1.615 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2419.867 MHz : -7.017 dBm	
	T2 : 2448.667 MHz : -6.640 dBm	
	OBW : 33.745 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 52 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2428.800 MHz : 6.313 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2442.000 MHz : 10.972 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : -1.088 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2418.867 MHz : -5.197 dBm	
	T2 : 2449.400 MHz : -2.672 dBm	
	OBW : 35.979 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 53 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2453.800 MHz : -2.517 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2467.000 MHz : 2.295 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : 0.085 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2453.667 MHz : -6.755 dBm	-
	T2 : 2470.267 MHz : -5.315 dBm	
	OBW : 16.535 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 54 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2453.800 MHz : -4.047 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2460.730 MHz : 1.640 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : 0.669 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2453.733 MHz : -5.731 dBm	
	T2 : 2470.267 MHz : -5.793 dBm	
	OBW : 16.485 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 55 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2453.800 MHz : -3.933 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2457.000 MHz : 1.664 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : 0.168 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2453.733 MHz : -6.257 dBm	
	T2 : 2470.200 MHz : -5.860 dBm	
	OBW : 16.452 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 56 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2453.800 MHz : -3.118 dBm	Measured 6 dB Bandwidth: 16.270 MHz
Sweep Count = 0	M2 : 2457.000 MHz : 2.032 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 16.270 MHz : -0.875 dB	Margin: -15.77 MHz
Trace Mode = MAXH	T1 : 2453.733 MHz : -5.290 dBm	-
	T2 : 2470.200 MHz : -6.268 dBm	
	OBW : 16.430 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 57 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.200 MHz : 0.043 dBm	Measured 6 dB Bandwidth: 17.530 MHz
Sweep Count = 0	M2 : 2417.000 MHz : 4.945 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.530 MHz : 0.123 dB	Margin: -17.03 MHz
Trace Mode = MAXH	T1 : 2403.067 MHz : -3.283 dBm	
	T2 : 2420.867 MHz : -2.493 dBm	
	OBW : 17.814 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 58 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.200 MHz : 0.403 dBm	Measured 6 dB Bandwidth: 17.530 MHz
Sweep Count = 0	M2 : 2417.000 MHz : 4.308 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.530 MHz : -0.036 dB	Margin: -17.03 MHz
Trace Mode = MAXH	T1 : 2403.133 MHz : -2.662 dBm	
	T2 : 2420.867 MHz : -2.827 dBm	
	OBW : 17.782 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 59 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.200 MHz : 0.184 dBm	Measured 6 dB Bandwidth: 17.530 MHz
Sweep Count = 0	M2 : 2417.000 MHz : 4.403 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.530 MHz : 0.097 dB	Margin: -17.03 MHz
Trace Mode = MAXH	T1 : 2403.067 MHz : -3.820 dBm	
	T2 : 2420.867 MHz : -3.313 dBm	
	OBW : 17.816 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 60 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.200 MHz : -0.312 dBm	Measured 6 dB Bandwidth: 17.530 MHz
Sweep Count = 0	M2 : 2417.000 MHz : 4.856 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.530 MHz : 0.907 dB	Margin: -17.03 MHz
Trace Mode = MAXH	T1 : 2403.133 MHz : -3.808 dBm	
	T2 : 2420.867 MHz : -2.749 dBm	
	OBW : 17.761 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 61 of 221



Analyzer Setup	Marker:Frequency:Amplitude	lest Results
Detector = POS	M1 : 2428.130 MHz : 6.284 dBm	Measured 6 dB Bandwidth: 17.330 MHz
Sweep Count = 0	M2 : 2442.000 MHz : 12.072 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.330 MHz : 0.093 dB	Margin: -16.83 MHz
Trace Mode = MAXH	T1 : 2419.267 MHz : -4.629 dBm	
	T2 : 2449.133 MHz : -2.327 dBm	
	OBW : 35.011 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 62 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2428.200 MHz : 7.960 dBm	Measured 6 dB Bandwidth: 17.530 MHz
Sweep Count = 0	M2 : 2432.000 MHz : 11.523 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.530 MHz : -1.276 dB	Margin: -17.03 MHz
Trace Mode = MAXH	T1 : 2418.933 MHz : -4.583 dBm	
	T2 : 2449.333 MHz : -3.985 dBm	
	OBW : 35.664 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 63 of 221



Analyzer Setup	Marker:Frequency:Amplitude	lest Results
Detector = POS	M1 : 2428.200 MHz : 7.880 dBm	Measured 6 dB Bandwidth: 17.470 MHz
Sweep Count = 0	M2 : 2432.000 MHz : 11.331 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.470 MHz : -3.465 dB	Margin: -16.97 MHz
Trace Mode = MAXH	T1 : 2419.067 MHz : -5.169 dBm	
	T2 : 2448.933 MHz : -4.709 dBm	
	OBW : 35.022 MHz	

back to matrix

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



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 64 of 221



Analyzer Setup	Marker:Frequency:Amplitude	lest Results
Detector = POS	M1 : 2428.200 MHz : 8.148 dBm	Measured 6 dB Bandwidth: 17.470 MHz
Sweep Count = 0	M2 : 2442.000 MHz : 11.193 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.470 MHz : -3.278 dB	Margin: -16.97 MHz
Trace Mode = MAXH	T1 : 2418.467 MHz : -4.226 dBm	
	T2 : 2449.533 MHz : -0.911 dBm	
	OBW : 36.837 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 65 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2453.200 MHz : -1.535 dBm	Measured 6 dB Bandwidth: 17.530 MHz
Sweep Count = 0	M2 : 2467.000 MHz : 2.725 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.530 MHz : -0.144 dB	Margin: -17.03 MHz
Trace Mode = MAXH	T1 : 2453.067 MHz : -4.434 dBm	
	T2 : 2470.867 MHz : -4.768 dBm	
	OBW : 17.765 MHz	

back to matrix

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



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 66 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2453.200 MHz : -2.274 dBm	Measured 6 dB Bandwidth: 17.530 MHz
Sweep Count = 0	M2 : 2460.730 MHz : 2.235 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.530 MHz : 0.958 dB	Margin: -17.03 MHz
Trace Mode = MAXH	T1 : 2453.133 MHz : -5.169 dBm	
	T2 : 2470.800 MHz : -3.578 dBm	
	OBW : 17.685 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 67 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2453.200 MHz : -2.370 dBm	Measured 6 dB Bandwidth: 17.530 MHz
Sweep Count = 0	M2 : 2467.000 MHz : 1.928 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.530 MHz : -0.649 dB	Margin: -17.03 MHz
Trace Mode = MAXH	T1 : 2453.133 MHz : -5.749 dBm	
	T2 : 2470.800 MHz : -4.022 dBm	
	OBW : 17.664 MHz	

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 68 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2453.200 MHz : -2.503 dBm	Measured 6 dB Bandwidth: 17.470 MHz
Sweep Count = 0	M2 : 2457.000 MHz : 2.402 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 17.470 MHz : -2.644 dB	Margin: -16.97 MHz
Trace Mode = MAXH	T1 : 2453.133 MHz : -5.100 dBm	
	T2 : 2470.800 MHz : -4.711 dBm	
	OBW : 17.652 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 69 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.870 MHz : -4.006 dBm	Measured 6 dB Bandwidth: 36.130 MHz
Sweep Count = 0	M2 : 2425.730 MHz : 1.277 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 36.130 MHz : -1.032 dB	Margin: -35.63 MHz
Trace Mode = MAXH	T1 : 2403.867 MHz : -4.006 dBm	
	T2 : 2440.000 MHz : -5.038 dBm	
	OBW : 36.092 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 70 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.870 MHz : -3.496 dBm	Measured 6 dB Bandwidth: 36.130 MHz
Sweep Count = 0	M2 : 2425.730 MHz : 0.683 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 36.130 MHz : -2.006 dB	Margin: -35.63 MHz
Trace Mode = MAXH	T1 : 2403.867 MHz : -3.496 dBm	
	T2 : 2440.000 MHz : -5.502 dBm	
	OBW : 36.109 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 71 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2403.870 MHz : -3.528 dBm	Measured 6 dB Bandwidth: 35.870 MHz
Sweep Count = 0	M2 : 2416.930 MHz : 0.790 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 35.870 MHz : -1.574 dB	Margin: -35.37 MHz
Trace Mode = MAXH	T1 : 2403.867 MHz : -3.528 dBm	-
	T2 : 2440.000 MHz : -6.970 dBm	
	OBW : 36.045 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 72 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2404.130 MHz : -4.331 dBm	Measured 6 dB Bandwidth: 35.330 MHz
Sweep Count = 0	M2 : 2416.930 MHz : 1.350 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 35.330 MHz : 2.874 dB	Margin: -34.83 MHz
Trace Mode = MAXH	T1 : 2404.000 MHz : -6.134 dBm	
	T2 : 2440.000 MHz : -7.245 dBm	
	OBW : 35.998 MHz	

back to matrix


Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 73 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2418.870 MHz : 5.430 dBm	Measured 6 dB Bandwidth: 35.870 MHz
Sweep Count = 0	M2 : 2433.270 MHz : 8.860 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 35.870 MHz : -2.989 dB	Margin: -35.37 MHz
Trace Mode = MAXH	T1 : 2400.867 MHz : -5.176 dBm	
	T2 : 2461.400 MHz : -4.849 dBm	
	OBW : 70.042 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 74 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2418.870 MHz : 5.787 dBm	Measured 6 dB Bandwidth: 36.130 MHz
Sweep Count = 0	M2 : 2433.270 MHz : 8.704 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 36.130 MHz : -4.141 dB	Margin: -35.63 MHz
Trace Mode = MAXH	T1 : 2400.733 MHz : -2.225 dBm	
	T2 : 2461.933 MHz : -1.211 dBm	
	OBW : 71.446 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 75 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2418.870 MHz : 4.941 dBm	Measured 6 dB Bandwidth: 36.130 MHz
Sweep Count = 0	M2 : 2420.730 MHz : 8.287 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 36.130 MHz : -3.972 dB	Margin: -35.63 MHz
Trace Mode = MAXH	T1 : 2400.867 MHz : -6.046 dBm	
	T2 : 2461.267 MHz : -6.709 dBm	
	OBW : 69.239 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 76 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2418.730 MHz : 3.142 dBm	Measured 6 dB Bandwidth: 36.270 MHz
Sweep Count = 0	M2 : 2420.730 MHz : 7.990 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 36.270 MHz : -0.391 dB	Margin: -35.77 MHz
Trace Mode = MAXH	T1 : 2400.733 MHz : -2.332 dBm	
	T2 : 2461.933 MHz : -1.396 dBm	
	OBW : 71.511 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 77 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2433.870 MHz : -6.138 dBm	Measured 6 dB Bandwidth: 35.870 MHz
Sweep Count = 0	M2 : 2435.730 MHz : -1.807 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 35.870 MHz : -0.613 dB	Margin: -35.37 MHz
Trace Mode = MAXH	T1 : 2433.867 MHz : -6.138 dBm	
	T2 : 2470.000 MHz : -8.985 dBm	
	OBW : 36.095 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 78 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2433.870 MHz : -5.927 dBm	Measured 6 dB Bandwidth: 36.130 MHz
Sweep Count = 0	M2 : 2436.930 MHz : -2.754 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 36.130 MHz : -3.371 dB	Margin: -35.63 MHz
Trace Mode = MAXH	T1 : 2433.867 MHz : -5.927 dBm	
	T2 : 2470.000 MHz : -9.298 dBm	
	OBW : 36.137 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 79 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2433.870 MHz : -6.236 dBm	Measured 6 dB Bandwidth: 36.130 MHz
Sweep Count = 0	M2 : 2435.730 MHz : -2.453 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 36.130 MHz : -3.202 dB	Margin: -35.63 MHz
Trace Mode = MAXH	T1 : 2433.867 MHz : -6.236 dBm	
	T2 : 2470.000 MHz : -9.438 dBm	
	OBW : 36.120 MHz	

back to matrix



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 80 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS	M1 : 2433.870 MHz : -6.945 dBm	Measured 6 dB Bandwidth: 36.130 MHz
Sweep Count = 0	M2 : 2455.730 MHz : -3.079 dBm	Limit: ≥500.0 kHz
RF Atten (dB) = 20	Delta1 : 36.130 MHz : -3.214 dB	Margin: -35.63 MHz
Trace Mode = MAXH	T1 : 2433.867 MHz : -6.945 dBm	
	T2 : 2470.000 MHz : -10.159 dBm	
	OBW : 36.082 MHz	

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 81 of 221

A.2. Power Spectral Density



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 2411.200 MHz : -12.407 dBm	Limit: ≤ 1.980 dBm

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 82 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results	
Detector = AVER	M1 : 2412.700 MHz : -13.540 dBm	Limit: ≤ 1.980 dBm	
Sweep Count = 0			
RF Atten (dB) = 20			
Trace Mode = VIEW			

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 83 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results	
Detector = AVER	M1 : 2412.600 MHz : -13.420 dBm	Limit: ≤ 1.980 dBm	
Sweep Count = 0			
RF Atten (dB) = 20			
Trace Mode = VIEW			

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 84 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2412.700 MHz : -13.084 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 85 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2412.700 MHz : -7.431 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2412.700 MHz : -7.387 dBm	Margin: -15.4 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 86 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2435.300 MHz : -11.572 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 87 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2435.150 MHz : -11.512 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 88 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2435.250 MHz : -12.375 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 89 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2435.400 MHz : -12.959 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 90 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2435.300 MHz : -6.392 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2435.300 MHz : -6.348 dBm	Margin: -14.4 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 91 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2463.450 MHz : -14.479 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 92 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results	
Detector = AVER	M1 : 2462.750 MHz : -14.635 dBm	Limit: ≤ 1.980 dBm	
Sweep Count = 0			
RF Atten (dB) = 20			
Trace Mode = VIEW			

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 93 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2462.600 MHz : -14.802 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 94 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2462.650 MHz : -14.445 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 95 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2462.700 MHz : -8.900 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2462.700 MHz : -8.856 dBm	Margin: -16.9 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 96 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2416.350 MHz : -18.567 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 97 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.100 MHz : -19.396 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 98 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2416.350 MHz : -19.335 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 99 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2415.750 MHz : -19.093 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 100 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2416.400 MHz : -13.103 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2416.400 MHz : -13.059 dBm	Margin: -21.1 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 101 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2431.050 MHz : -12.809 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 102 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2433.850 MHz : -13.128 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 103 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2430.750 MHz : -13.768 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 104 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2433.850 MHz : -14.203 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 105 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2431.100 MHz : -7.460 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2431.100 MHz : -7.416 dBm	Margin: -15.4 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 106 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2466.350 MHz : -20.950 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 107 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2460.100 MHz : -21.194 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 108 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2460.100 MHz : -21.176 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix


Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 109 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2460.100 MHz : -21.114 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 110 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2460.100 MHz : -15.242 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2460.100 MHz : -15.198 dBm	Margin: -23.2 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 111 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2412.600 MHz : -18.819 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 112 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2419.800 MHz : -19.214 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 113 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2407.000 MHz : -19.314 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 114 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2416.700 MHz : -18.841 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 115 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2419.800 MHz : -13.567 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2419.800 MHz : -13.523 dBm	Margin: -21.5 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	-
Trace Mode = VIEW		

back to matrix



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 116 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2430.750 MHz : -12.677 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 117 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2429.500 MHz : -13.307 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 118 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2430.100 MHz : -13.319 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 119 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2429.150 MHz : -13.432 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 120 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2429.200 MHz : -7.765 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2429.200 MHz : -7.721 dBm	Margin: -15.7 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 121 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2457.000 MHz : -20.070 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 122 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2467.000 MHz : -21.321 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 123 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2459.500 MHz : -21.356 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 124 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2458.550 MHz : -21.215 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 125 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2459.500 MHz : -15.413 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2459.500 MHz : -15.369 dBm	Margin: -23.4 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 126 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2419.500 MHz : -22.565 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 127 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2417.000 MHz : -23.402 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 128 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2427.000 MHz : -22.945 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 129 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2417.000 MHz : -23.252 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 130 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2417.000 MHz : -17.131 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2417.000 MHz : -17.087 dBm	Margin: -25.1 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	-
Trace Mode = VIEW		

back to matrix



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 131 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2424.800 MHz : -16.117 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 132 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2429.500 MHz : -15.956 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title:

Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 133 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2422.000 MHz : -15.531 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 134 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2422.300 MHz : -16.235 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 135 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2422.000 MHz : -10.173 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2422.000 MHz : -10.129 dBm	Margin: -18.1 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 136 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2434.500 MHz : -25.491 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 137 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2437.000 MHz : -26.832 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 138 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2434.800 MHz : -26.700 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 139 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2459.500 MHz : -26.972 dBm	Limit: ≤ 1.980 dBm
Sweep Count = 0		
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 140 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2434.500 MHz : -20.698 dBm	Limit: ≤ 8.0 dBm
Sweep Count = 0	M1 + DCCF : 2434.500 MHz : -20.654 dBm	Margin: -28.7 dB
RF Atten (dB) = 20	Duty Cycle Correction Factor : +0.04 dB	-
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 141 of 221

A.3. Emissions

A.3.1. Conducted Emissions

A.3.1.1. Conducted Spurious Emissions



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -6.759 dBm	Limit: -36.76 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.724 dBm	Margin: -19.96 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 142 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -7.555 dBm	Limit: -37.56 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.294 dBm	Margin: -19.73 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 143 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -8.063 dBm	Limit: -38.06 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.014 dBm	Margin: -18.95 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 144 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -7.565 dBm	Limit: -37.56 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.839 dBm	Margin: -19.28 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix


Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 145 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -4.784 dBm	Limit: -34.78 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.763 dBm	Margin: -21.98 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 146 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -5.212 dBm	Limit: -35.21 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.279 dBm	Margin: -22.07 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 147 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -5.845 dBm	Limit: -35.85 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.092 dBm	Margin: -21.24 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 148 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -6.690 dBm	Limit: -36.69 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.858 dBm	Margin: -20.17 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 149 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -8.606 dBm	Limit: -38.61 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.819 dBm	Margin: -18.21 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 150 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -9.089 dBm	Limit: -39.09 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.348 dBm	Margin: -18.26 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 151 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -9.261 dBm	Limit: -39.26 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.105 dBm	Margin: -17.84 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 152 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -9.281 dBm	Limit: -39.28 dBm
Sweep Count = 0	M2 : 14.230 GHz : -56.881 dBm	Margin: -17.60 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 153 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -9.961 dBm	Limit: -39.96 dBm
Sweep Count = 0	M2 : 14.230 GHz : -56.716 dBm	Margin: -16.76 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 154 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results	
Detector = AVER	M1 : 2410.000 MHz : -10.559 dBm	Limit: -40.56 dBm	
Sweep Count = 0	M2 : 13.620 GHz : -57.219 dBm	Margin: -16.66 dB	
RF Atten (dB) = 20		-	
Trace Mode = VIEW			

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 155 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -9.475 dBm	Limit: -39.47 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.120 dBm	Margin: -17.65 dB
RF Atten (dB) = 20		
Trace Mode = V/IEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 156 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -10.417 dBm	Limit: -40.42 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.839 dBm	Margin: -16.42 dB
RF Atten (dB) = 20		

back to matrix

Trace Mode = VIEW



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 157 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -5.659 dBm	Limit: -35.66 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.706 dBm	Margin: -21.05 dB
RF Atten (dB) = 20		-

back to matrix

Trace Mode = VIEW



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 158 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -6.142 dBm	Limit: -36.14 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.291 dBm	Margin: -21.15 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 159 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -6.803 dBm	Limit: -36.80 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.066 dBm	Margin: -20.27 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 160 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -6.789 dBm	Limit: -36.79 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.834 dBm	Margin: -20.04 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 161 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -12.662 dBm	Limit: -42.66 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.770 dBm	Margin: -14.11 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 162 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -13.349 dBm	Limit: -43.35 dBm
Sweep Count = 0	M2 : 14.230 GHz : -57.362 dBm	Margin: -14.01 dB
RF Atten (dB) = 20		_
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 163 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -13.407 dBm	Limit: -43.41 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.135 dBm	Margin: -13.73 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 164 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -13.276 dBm	Limit: -43.28 dBm
Sweep Count = 0	M2 : 14.230 GHz : -56.829 dBm	Margin: -13.55 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 165 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -9.780 dBm	Limit: -39.78 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.966 dBm	Margin: -17.19 dB
RF Atten (dB) = 20		_
Trace Mode = VIEW		

back to matrix

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

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 166 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -10.501 dBm	Limit: -40.50 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.512 dBm	Margin: -17.01 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 167 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -10.603 dBm	Limit: -40.60 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.249 dBm	Margin: -16.65 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 168 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -10.460 dBm	Limit: -40.46 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.092 dBm	Margin: -16.63 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 169 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -5.479 dBm	Limit: -35.48 dBm
Sweep Count = 0	M2 : 14.230 GHz : -57.032 dBm	Margin: -21.55 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 170 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -6.143 dBm	Limit: -36.14 dBm
Sweep Count = 0	M2 : 14.230 GHz : -57.540 dBm	Margin: -21.40 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 171 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -6.615 dBm	Limit: -36.62 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.207 dBm	Margin: -20.59 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 172 of 221



Step 2597.000 MHz

Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -6.835 dBm	Limit: -36.83 dBm
Sweep Count = 0	M2 : 14.230 GHz : -57.022 dBm	Margin: -20.19 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 173 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -12.077 dBm	Limit: -42.08 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.884 dBm	Margin: -14.80 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 174 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -12.895 dBm	Limit: -42.90 dBm
Sweep Count = 0	M2 : 13.660 GHz : -57.446 dBm	Margin: -14.55 dB
RF Atten (dB) = 20		-
Trace Mode = VIFW		

back to matrix

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

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 175 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -13.006 dBm	Limit: -43.01 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.224 dBm	Margin: -14.21 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 176 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -12.918 dBm	Limit: -42.92 dBm
Sweep Count = 0	M2 : 14.230 GHz : -56.996 dBm	Margin: -14.08 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 177 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -11.695 dBm	Limit: -41.69 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.918 dBm	Margin: -15.23 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 178 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2410.000 MHz : -12.441 dBm	Limit: -42.44 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.443 dBm	Margin: -15.00 dB
BE Atten (dB) = 20		-

back to matrix

Trace Mode = VIEW



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 179 of 221

Margin: -14.69 dB



Marker:Frequency:Amplitude	Test Results
M1 : 2410.000 MHz : -12.514 dBm	Limit: -42.51 dBm

M2 : 13.620 GHz : -57.204 dBm

back to matrix

Analyzer Setup Detector = AVER

Sweep Count = 0

RF Atten (dB) = 20Trace Mode = VIEW



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 180 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results	
Detector = AVER	M1 : 2410.000 MHz : -12.640 dBm	Limit: -42.64 dBm	
Sweep Count = 0	M2 : 13.620 GHz : -57.054 dBm	Margin: -14.41 dB	
RF Atten (dB) = 20			
Trace Mode = VIEW			

back to matrix


Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 181 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -6.846 dBm	Limit: -36.85 dBm
Sweep Count = 0	M2 : 14.230 GHz : -56.978 dBm	Margin: -20.13 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 182 of 221

Margin: -20.16 dB



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -7.288 dBm	Limit: -37.29 dBm

M2 : 14.230 GHz : -57.446 dBm

back to matrix

Sweep Count = 0

RF Atten (dB) = 20Trace Mode = VIEW

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 183 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -7.912 dBm	Limit: -37.91 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.301 dBm	Margin: -19.39 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 184 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -7.442 dBm	Limit: -37.44 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.112 dBm	Margin: -19.67 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 185 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -14.227 dBm	Limit: -44.23 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.916 dBm	Margin: -12.69 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 186 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -15.000 dBm	Limit: -45.00 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.370 dBm	Margin: -12.37 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 187 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -15.254 dBm	Limit: -45.25 dBm
Sweep Count = 0	M2 : 13.620 GHz : -57.262 dBm	Margin: -12.01 dB
RF Atten (dB) = 20		
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 188 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2450.000 MHz : -15.489 dBm	Limit: -45.49 dBm
Sweep Count = 0	M2 : 13.620 GHz : -56.980 dBm	Margin: -11.49 dB
RF Atten (dB) = 20		-
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 189 of 221

A.3.1.2. Conducted Band-Edge Emissions



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -37.271 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2403.760 MHz : -28.495 dBm	
RF Atten (dB) = 20	M3 : 2411.320 MHz : 2.014 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 190 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -37.380 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2403.880 MHz : -29.212 dBm	
RF Atten (dB) = 20	M3 : 2412.640 MHz : 1.160 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 191 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -37.245 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2403.760 MHz : -30.628 dBm	
RF Atten (dB) = 20	M3 : 2412.760 MHz : 0.953 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 192 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -39.606 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2404.000 MHz : -29.515 dBm	
RF Atten (dB) = 20	M3 : 2412.760 MHz : 1.290 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 193 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -37.306 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2400.880 MHz : -35.040 dBm	
RF Atten (dB) = 20	M3 : 2416.360 MHz : -4.345 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 194 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -37.941 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2400.880 MHz : -36.542 dBm	
RF Atten (dB) = 20	M3 : 2410.120 MHz : -4.973 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 195 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -36.864 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2400.640 MHz : -35.930 dBm	
RF Atten (dB) = 20	M3 : 2410.120 MHz : -5.015 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 196 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -38.029 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2401.120 MHz : -35.091 dBm	
RF Atten (dB) = 20	M3 : 2416.360 MHz : -4.733 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 197 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -37.059 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2400.760 MHz : -34.859 dBm	
RF Atten (dB) = 20	M3 : 2413.240 MHz : -4.628 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 198 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -37.569 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2400.880 MHz : -35.540 dBm	
RF Atten (dB) = 20	M3 : 2419.480 MHz : -5.068 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 199 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -37.325 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2400.640 MHz : -35.931 dBm	
RF Atten (dB) = 20	M3 : 2407.000 MHz : -5.372 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 200 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -38.186 dBm	Channel Frequency: 2412.00 MHz
Sweep Count = 0	M2 : 2401.000 MHz : -34.834 dBm	
RF Atten (dB) = 20	M3 : 2419.480 MHz : -4.686 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 201 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -43.547 dBm	Channel Frequency: 2422.00 MHz
Sweep Count = 0	M2 : 2401.750 MHz : -40.036 dBm	
RF Atten (dB) = 20	M3 : 2418.250 MHz : -8.734 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 202 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -44.455 dBm	Channel Frequency: 2422.00 MHz
Sweep Count = 0	M2 : 2401.750 MHz : -40.998 dBm	
RF Atten (dB) = 20	M3 : 2429.500 MHz : -9.439 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 203 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -44.541 dBm	Channel Frequency: 2422.00 MHz
Sweep Count = 0	M2 : 2401.750 MHz : -40.422 dBm	
RF Atten (dB) = 20	M3 : 2417.000 MHz : -9.322 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 204 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2400.000 MHz : -45.482 dBm	Channel Frequency: 2422.00 MHz
Sweep Count = 0	M2 : 2402.000 MHz : -40.213 dBm	
RF Atten (dB) = 20	M3 : 2419.500 MHz : -9.317 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 205 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2462.680 MHz : 0.452 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2469.880 MHz : -29.367 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -55.982 dBm	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 206 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2462.800 MHz : -0.064 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2469.760 MHz : -30.050 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -56.366 dBm	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 207 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2462.680 MHz : -0.093 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2469.640 MHz : -28.796 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -57.435 dBm	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 208 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2461.240 MHz : -0.190 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2469.640 MHz : -29.670 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -56.297 dBm	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 209 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2467.000 MHz : -6.863 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2472.760 MHz : -36.316 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -51.731 dBm	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 210 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2459.800 MHz : -7.265 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2472.640 MHz : -37.234 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -60.106 dBm	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 211 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2459.800 MHz : -7.357 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2472.640 MHz : -37.249 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -54.121 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 212 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2460.760 MHz : -7.063 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2472.520 MHz : -36.289 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -53.752 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 213 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2458.240 MHz : -6.653 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2472.880 MHz : -36.230 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -49.157 dBm	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 214 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2467.000 MHz : -7.351 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2472.880 MHz : -37.308 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -50.839 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 215 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2463.280 MHz : -7.187 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2472.760 MHz : -36.950 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -50.650 dBm	
Trace Mode = VIEW		

back to matrix



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A **Issue Date:** 22nd August 2017 Page: 216 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2458.240 MHz : -6.976 dBm	Channel Frequency: 2462.00 MHz
Sweep Count = 0	M2 : 2472.640 MHz : -35.835 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -51.043 dBm	
Trace Mode = VIEW		

back to matrix

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


Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 217 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2438.250 MHz : -11.778 dBm	Channel Frequency: 2452.00 MHz
Sweep Count = 0	M2 : 2471.750 MHz : -41.740 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -54.015 dBm	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 218 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2434.500 MHz : -12.587 dBm	Channel Frequency: 2452.00 MHz
Sweep Count = 0	M2 : 2471.500 MHz : -40.329 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -54.776 dBm	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 219 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2438.250 MHz : -12.608 dBm	Channel Frequency: 2452.00 MHz
Sweep Count = 0	M2 : 2471.500 MHz : -40.716 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -55.968 dBm	
Trace Mode = VIEW		

back to matrix

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



Title: Hewlett Packard Enterprise APIN0344 & APIN0345 To: FCC 15.247 DTS & ISED RSS-247 Serial #: HPEN111-U5_Conducted Rev A Issue Date: 22nd August 2017 Page: 220 of 221



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 2457.000 MHz : -12.913 dBm	Channel Frequency: 2452.00 MHz
Sweep Count = 0	M2 : 2471.500 MHz : -41.090 dBm	
RF Atten (dB) = 20	M3 : 2483.500 MHz : -55.000 dBm	
Trace Mode = VIEW		

back to matrix

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



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