

# **REGULATORY COMPLIANCE TEST REPORT**

FCC CFR 47 Part 15 Subpart E 15.407 ISED RSS-247 Issue 2

Report No.: HPEN155-U9 Rev A (UNII)

**Addendum: FCC Power Density** 

Company: Hewlett Packard Enterprise Company

Model Name: ASIN0304, ASIN0303



# REGULATORY COMPLIANCE TEST REPORT

Company Name: Hewlett Packard Enterprise Company

Model Name: ASIN0304, ASIN0303

To: FCC CFR 47 Part 15 Subpart E 15.407

Test Report Serial No.: HPEN155-U9 Rev A (UNII)

**Addendum:** FCC Power Density

This report supersedes: NONE

Applicant: Hewlett Packard Enterprise Company

3333 Scott Blvd

Santa Clara, California 95054

USA

Issue Date: 23rd July 2021

## This Test Report is Issued Under the Authority of:

MiCOM Labs, Inc.

575 Boulder Court Pleasanton California 94566 USA

Phone: +1 (925) 462-0304 Fax: +1 (925) 462-0306 www.micomlabs.com



MiCOM Labs is an ISO 17025 Accredited Testing Laboratory



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### 1. TEST RESULTS

### 1.1. Power Spectral Density

Conducted Test Conditions for Power Spectral Density					
Standard:	FCC CFR 47:15.407	CC CFR 47:15.407 Ambient Temp. (°C): 24.0 - 27.5			
Test Heading:	Power Spectral Density	Power Spectral Density Rel. Humidity (%): 32 - 45			
Standard Section(s):	15.407 (a) <b>Pressure (mBars):</b> 999 - 1001				
Reference Document(s):	See Normative References				

#### **Test Procedure for Power Spectral Density**

The in-band power spectral density was measured using the test technique specified in KDB 789033. A 1 MHz measurement bandwidth was implemented for the analyzer sweep. Once the sweep is complete the analyzer trace data is downloaded and used 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.

Test configuration and setup used for the measurement was per the Conducted Test Set-up section 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 spectrum in some 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**

#### Operating Frequency Band 5150-5250 MHz

15. 407 (a)(1)

- (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
- (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the

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frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### Operating Frequency Band 5250-5350 and 5470 - 5725 MHz

15. 407 (a)(2)

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### Operating Frequency Band 5725 - 5850 MHz

15. 407 (a)(3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

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### 9.4.1 FCC Power Density Measurements

<b>Equipment Confid</b>	uration for	Power S	nectral	Density
Equipment comi	juration ioi	I CWGI C	pecuai	Density

Variant:	802.11a	Duty Cycle (%):	99.0
Data Rate:	6.00 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)			Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5180.0	<u>5.585</u>	<u>7.012</u>			9.372	17.0	-7.6
5200.0	<u>5.896</u>	<u>7.523</u>			9.749	17.0	-7.3
5240.0	<u>5.900</u>	7.734			9.843	17.0	-6.9

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).

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#### **Equipment Configuration for Power Spectral Density**

Variant:	802.11ac-80	Duty Cycle (%):	99.0
Data Rate:	29.30 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurem	nent Results						
T4	N	leasured Power	Spectral Densit	Summation			
Test Frequency	Port(s) (dBm/MHz)			Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5210.0	<u>-1.201</u>	<u>0.166</u>			<u>2.532</u>	15.7	-13.2

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).

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#### **Equipment Configuration for Power Spectral Density**

Variant:	802.11ax-20	Duty Cycle (%):	99.0
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)			Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5180.0	<u>5.257</u>	<u>6.791</u>			<u>9.117</u>	15.7	-6.6
5200.0	<u>5.447</u>	7.053			9.317	15.7	-6.4
5240.0	<u>5.879</u>	<u>7.326</u>			9.686	15.7	-6.0

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).

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#### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11ax-40	Duty Cycle (%):	97.0
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurem	nent Results						
T4	N	leasured Power	Spectral Densit	Summation			
Test Frequency	Port(s) (dBm/MHz)			Peak Marker + DCCF (+0.13 dB)	Limit	Margin	
MHz	a b c d			dBm/MHz	dBm/MHz	dB	
5190.0	<u>2.675</u>	4.314			<u>6.675</u>	15.7	-9.0
5230.0	3.078	4.320			<u>6.748</u>	15.7	-9.0

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).

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### **Equipment Configuration for Power Spectral Density**

Variant:	802.11ax-80	Duty Cycle (%):	96.0
Data Rate:	29.30 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
	N	leasured Power	Spectral Densit	EIRP			
Test Frequency	Port(s) (dBm/MHz)			Summation Peak Marker + DCCF (+0.18 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5210.0	<u>-0.646</u>	0.603			<u>3.201</u>	15.7	-12.5

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).

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### **Equipment Configuration for Power Spectral Density**

Variant:	802.11n HT-20	Duty Cycle (%):	99.0
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5180.0	<u>5.125</u>	<u>6.745</u>			9.047	15.7	-6.7
5200.0	<u>5.299</u>	<u>6.513</u>			<u>8.957</u>	15.7	-6.8
5240.0	<u>5.778</u>	<u>7.468</u>			<u>9.709</u>	15.7	-6.0

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

DCCF - Duty Cycle Correction Factor

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#### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11n HT-40	Duty Cycle (%):	99.0
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measuren	nent Results						
T4	N	leasured Power	Spectral Densit	Summation			
Test Frequency	Port(s) (dBm/MHz)			Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5190.0	2.225	<u>3.853</u>			<u>6.169</u>	15.7	-9.5
5230.0	3.036	4.282			6.684	15.7	-9.0

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

DCCF - Duty Cycle Correction Factor

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### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11a	Duty Cycle (%):	99.0
Data Rate:	6.00 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density  Port(s) (dBm/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5260.0	<u>5.898</u>	7.321			<u>9.665</u>	11.0	-1.3
5300.0	<u>6.376</u>	<u>7.815</u>			<u>10.167</u>	11.0	-0.8
5320.0	<u>6.408</u>	<u>7.636</u>			<u>10.066</u>	11.0	-0.9

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

DCCF - Duty Cycle Correction Factor

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

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#### **Equipment Configuration for Power Spectral Density**

Variant:	802.11ac-80	Duty Cycle (%):	99.0
Data Rate:	29.30 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
T4	N	leasured Power	Spectral Densit	Summation			
Test Frequency	Port(s) (dBm/MHz)			Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	a b c d			dBm/MHz	dBm/MHz	dB	
5290.0	<u>-1.015</u>	0.419			<u>2.745</u>	9.7	-7.0

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).

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#### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11ax-20	Duty Cycle (%):	99.0
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency					Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5260.0	<u>5.548</u>	<u>7.059</u>			9.344	9.7	-0.4
5300.0	<u>6.056</u>	<u>7.125</u>			9.587	9.7	-0.1
5320.0	<u>6.005</u>	7.388			9.662	9.7	-0.0

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

DCCF - Duty Cycle Correction Factor

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

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Variant:	802.11ax-40	Duty Cycle (%):	99.0
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurem	nent Results						
Tool	N	leasured Power	Spectral Densit	Summation			
Test Frequency		Port(s) (dBm/MHz)			Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	а	a b c d				dBm/MHz	dB
5270.0	<u>2.851</u>	<u>4.136</u>			<u>6.580</u>	9.7	-3.1
5310.0	3.433	4.442			<u>6.967</u>	9.7	-2.7

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).

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#### **Equipment Configuration for Power Spectral Density**

Variant:	802.11ax-80	Duty Cycle (%):	96.0
Data Rate:	29.30 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
T4	N	leasured Power	Spectral Densit	Summation			
Test Frequency	Port(s) (dBm/MHz)			Peak Marker + DCCF (+0.18 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5290.0	<u>-0.417</u>	<u>1.031</u>			<u>3.496</u>	9.7	-6.2

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).

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### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11n HT-20	Duty Cycle (%):	99.0
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency					Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5260.0	<u>5.315</u>	<u>6.464</u>			<u>8.917</u>	9.7	-0.8
5300.0	<u>6.014</u>	6.699			9.386	9.7	-0.3
5320.0	<u>5.937</u>	<u>7.169</u>			<u>9.619</u>	9.7	-0.1

Traceability to Industry Recognized Test Methodologies					
Work Instruct	on: WI-03 MEASURING RF SPECTRUM MASK				
Measurement Uncertai	nty: ±2.81 dB				

DCCF - Duty Cycle Correction Factor

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

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Serial #:

Variant:	802.11n HT-40	Duty Cycle (%):	99.0
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurem	nent Results						
T4	Measured Power Spectral Density						
Test Frequency	Port(s) (dBm/MHz)			Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5270.0	<u>2.776</u>	3.462			<u>6.173</u>	9.7	-3.5
5310.0	3.355	4.262			<u>6.840</u>	9.7	-2.9

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).

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HPEN155-U9 Rev A (UNII)

### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11a	Duty Cycle (%):	99.0
Data Rate:	6.00 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density  Port(s) (dBm/MHz)			Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5500.0	<u>6.198</u>	<u>6.994</u>			<u>9.653</u>	11.0	-1.4
5580.0	6.681	<u>7.582</u>			<u>10.157</u>	11.0	-0.9
5720.0	<u>6.776</u>	<u>6.188</u>			9.492	11.0	-1.5

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).

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HPEN155-U9 Rev A (UNII)

#### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11ac-80	Duty Cycle (%):	96.0
Data Rate:	29.30 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)			Summation Peak Marker + DCCF (+0.18 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5530.0	<u>-0.225</u>	0.441			<u>3.167</u>	9.7	-6.5
5610.0	<u>-0.054</u>	0.363			<u>3.275</u>	9.7	-6.4
5690.0	<u>0.051</u>	<u>-0.026</u>			<u>3.158</u>	9.7	-6.6

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

DCCF - Duty Cycle Correction Factor

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

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HPEN155-U9 Rev A (UNII)

### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11ax-20	Duty Cycle (%):	99.0
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5500.0	<u>6.113</u>	<u>6.715</u>			9.429	9.7	-0.3
5580.0	<u>5.419</u>	<u>6.505</u>			9.009	9.7	-0.7
5720.0	6.388	6.428			<u>9.381</u>	9.7	-0.3

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

DCCF - Duty Cycle Correction Factor

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

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HPEN155-U9 Rev A (UNII)

#### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11ax-40	Duty Cycle (%):	99.0
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5510.0	<u>3.572</u>	3.905			6.738	9.7	-3.0
5550.0	4.649	4.658			<u>7.561</u>	9.7	-2.1
5710.0	4.350	3.857			<u>7.112</u>	9.7	-2.6

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).

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HPEN155-U9 Rev A (UNII)

#### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11ax-80	Duty Cycle (%):	96.0
Data Rate:	29.30 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)				Summation Peak Marker + DCCF (+0.18 dB)	Limit	Margin
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5530.0	0.350	<u>1.256</u>			<u>3.925</u>	9.7	-5.8
5610.0	0.833	1.224			4.098	9.7	-5.6
5690.0	0.742	1.027			<u>4.061</u>	9.7	-5.6

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

DCCF - Duty Cycle Correction Factor

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

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Serial #: HPEN155-U9 Rev A (UNII)

#### **Equipment Configuration for Power Spectral Density**

Variant:	802.11n HT-20	Duty Cycle (%):	99.0
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	GMH
Engineering Test Notes:			

Test Measurem	Test Measurement Results						
Test Frequency	Measured Power Spectral Density Port(s) (dBm/MHz)			Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5500.0	6.237	6.866			9.583	9.7	-0.1
5580.0	<u>6.373</u>	6.650			9.473	9.7	-0.2
5720.0	<u>6.254</u>	<u>5.813</u>			<u>9.035</u>	9.7	-0.7

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).

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HPEN155-U9 Rev A (UNII)

#### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11n HT-40	Duty Cycle (%):	99.0
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	GMH
Engineering Test Notes:			

Test Measurement Results							
Test Frequency				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/MHz	dBm/MHz	dB
5510.0	3.440	3.604			6.484	9.7	-3.2
5550.0	4.414	<u>4.176</u>			7.225	9.7	-2.5
5710.0	4.045	3.075			<u>6.566</u>	9.7	-3.1

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).

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HPEN155-U9 Rev A (UNII)

#### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11a	Duty Cycle (%):	99.0
Data Rate:	6.00 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	GMH
Engineering Test Notes:			

Test Measurem	Test Measurement Results						
Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)			Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/500 KHz	dBm/500 KHz	dB
5745.0	3.692	3.776			6.720	30.0	-23.3
5785.0	<u>3.218</u>	3.979			<u>6.577</u>	30.0	-23.4
5825.0	3.932	4.368			<u>7.210</u>	30.0	-22.8

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).

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Serial #: HPEN155-U9 Rev A (UNII)

### **Equipment Configuration for Power Spectral Density**

Variant:	802.11ac-80	Duty Cycle (%):	99.0
Data Rate:	29.30 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	GMH
Engineering Test Notes:			

Test Measurem	ent Results						
_ ,	N	leasured Power	Spectral Densit	у	Summation		
Test Frequency	Port(s) (dBm/500 KHz)			Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/500 KHz	dBm/500 KHz	dB
5775.0	<u>-3.405</u>	<u>-2.986</u>			2.655	28.7	-26.1

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).

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HPEN155-U9 Rev A (UNII)

#### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11ax-20	Duty Cycle (%):	99.0
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	GMH
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)			Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/500 KHz	dBm/500 KHz	dB
5745.0	3.523	3.297			6.396	28.7	-22.3
5785.0	3.109	3.354			<u>6.216</u>	28.7	-22.5
5825.0	3.848	3.887			<u>6.836</u>	28.7	-21.9

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).

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### **Equipment Configuration for Power Spectral Density**

Variant:	802.11ax-40	Duty Cycle (%):	99.0
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	GMH
Engineering Test Notes:			

Test Measurem	nent Results						
Tool	N	Measured Power Spectral Density Summation					
Test Frequency		Port(s) (dBm/500 KHz)			Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a b c d			dBm/500 KHz	dBm/500 KHz	dB	
5755.0	0.387	<u>1.118</u>			<u>3.680</u>	28.7	-25.0
5795.0	0.466	0.465			3.352	28.7	-25.4

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).

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Serial #: HPEN155-U9 Rev A (UNII)

#### **Equipment Configuration for Power Spectral Density**

Variant:	802.11ax-80	Duty Cycle (%):	99.0
Data Rate:	29.30 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	GMH
Engineering Test Notes:			

Test Measurem	Test Measurement Results						
_ ,	N	Measured Power Spectral Density Summation					
Test Frequency	Port(s) (dBm/500 KHz)			Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	a b c d			dBm/500 KHz	dBm/500 KHz	dB	
5775.0	<u>-2.445</u>	<u>-2.248</u>			3.532	28.7	-25.2

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).

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HPEN155-U9 Rev A (UNII)

#### **Equipment Configuration for Power Spectral Density**

Serial #:

Variant:	802.11n HT-20	Duty Cycle (%):	99.0
Data Rate:	6.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	GMH
Engineering Test Notes:			

Test Measurement Results							
Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	а	b	С	d	dBm/500 KHz	dBm/500 KHz	dB
5745.0	3.462	3.458			<u>6.514</u>	28.7	-22.2
5785.0	2.957	<u>3.645</u>			6.364	28.7	-22.3
5825.0	3.859	3.642			6.769	28.7	-21.9

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

DCCF - Duty Cycle Correction Factor

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

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Serial #: HPEN155-U9 Rev A (UNII)

### **Equipment Configuration for Power Spectral Density**

Variant:	802.11n HT-40	Duty Cycle (%):	99.0
Data Rate:	13.50 MBit/s	Antenna Gain (dBi):	4.30
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	3.00
TPC:	Not Applicable	Tested By:	GMH
Engineering Test Notes:			

Test Measuren	ent Results						
Toot	Measured Power Spectral Density			Summation			
Test Frequency		Port(s) (dBm/500 KHz)		Peak Marker + DCCF (+0.04 dB)	Limit	Margin	
MHz	а	b	С	d	dBm/500 KHz	dBm/500 KHz	dB
5755.0	0.309	0.364			<u>3.353</u>	28.7	-25.4
5795.0	0.334	0.326			3.300	28.7	-25.4

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).

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# A. APPENDIX - GRAPHICAL IMAGES

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Title:

Hewlett Packard Enterprise Company ASIN0304

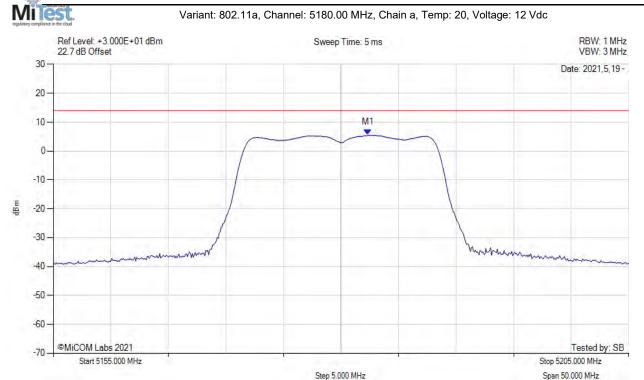
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

# A.1. Power Spectral Density

### A.4.1 FCC Power Density Measurement Results

#### POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5182.330 MHz : 5.585 dBm	Limit: ≤ 13.990 dBm

back to matrix

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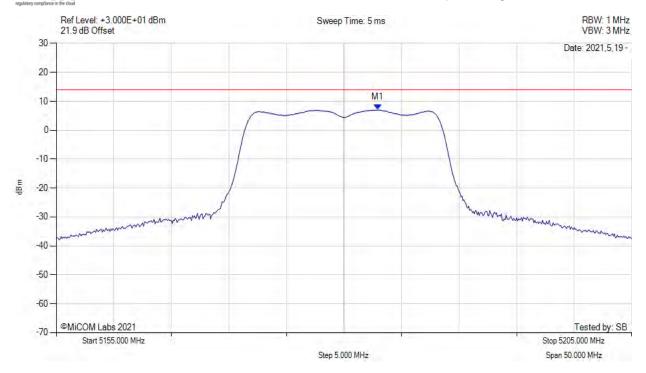


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#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5182.920 MHz: 7.012 dBm	Limit: ≤ 13.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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Title: Hewle

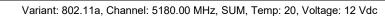
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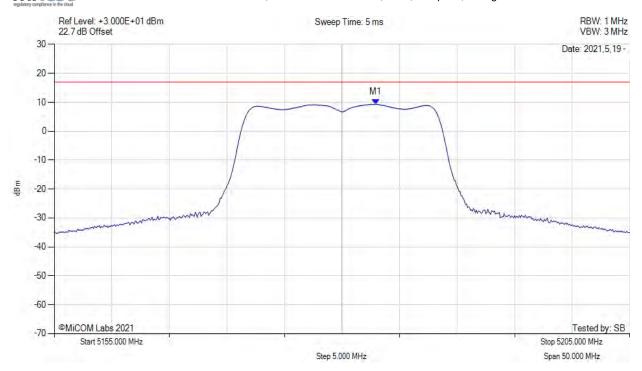
Hewlett Packard Enterprise Company ASIN0304

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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5182.900 MHz: 9.328 dBm	Limit: ≤ 17.0 dBm
Sweep Count = +100	M1 + DCCF : 5182.900 MHz : 9.372 dBm	Margin: -7.6 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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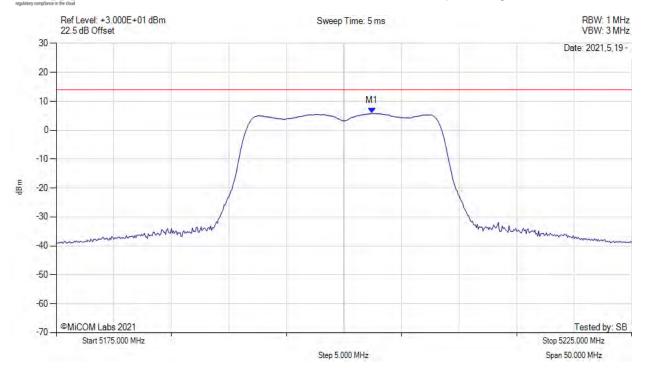


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5202.420 MHz : 5.896 dBm	Limit: ≤ 13.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIFW		

back to matrix

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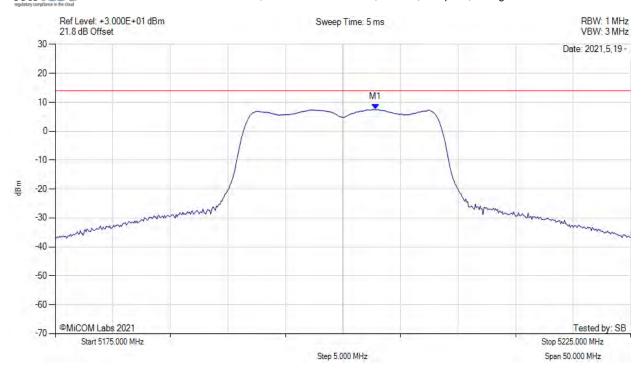


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5202.830 MHz: 7.523 dBm	Channel Frequency: 5200.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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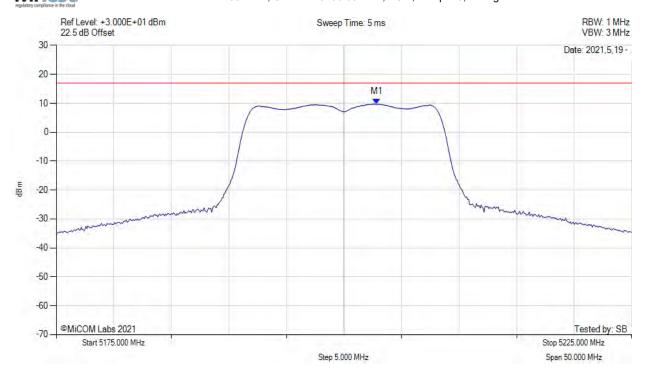


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5202.800 MHz: 9.705 dBm	Limit: ≤ 17.0 dBm
Sweep Count = +100	M1 + DCCF : 5202.800 MHz : 9.749 dBm	Margin: -7.3 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

 $25^{th}$  June 2021 Issue Date:

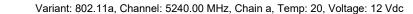
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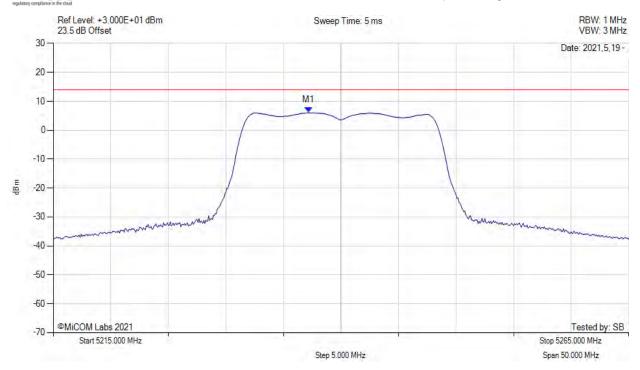


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5237.170 MHz: 5.900 dBm	Limit: ≤ 13.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

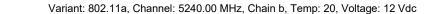
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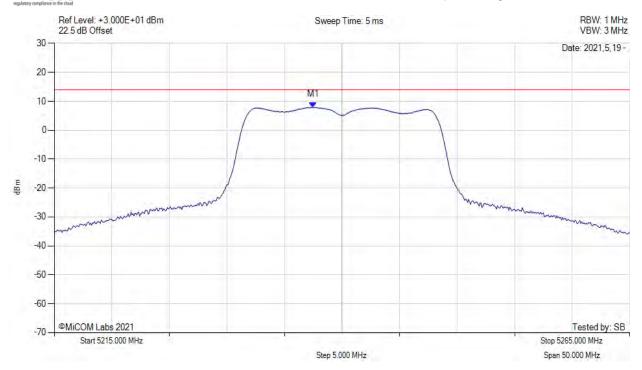


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5237.500 MHz: 7.734 dBm	Limit: ≤ 13.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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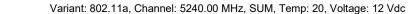
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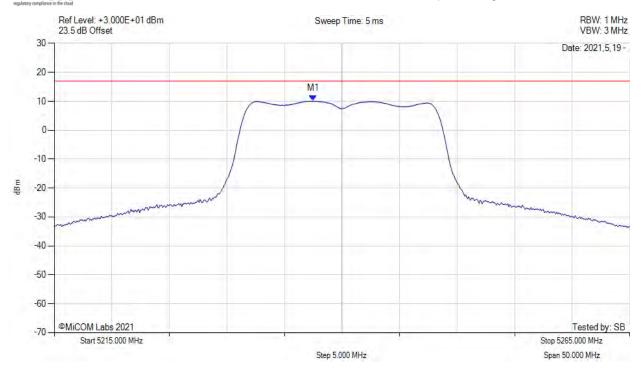


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5237.500 MHz: 9.803 dBm	Limit: ≤ 17.0 dBm
Sweep Count = +100	M1 + DCCF : 5237.500 MHz : 9.843 dBm	Margin: -6.9 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

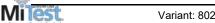
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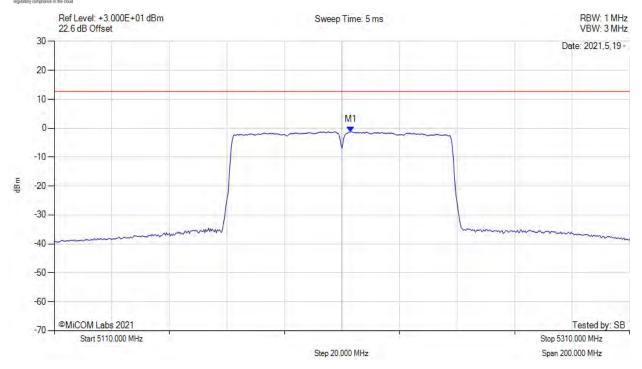
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ac-80, Channel: 5210.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5213.000 MHz : -1.201 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

Issue Date: 25<sup>th</sup> June 2021

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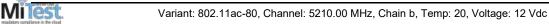
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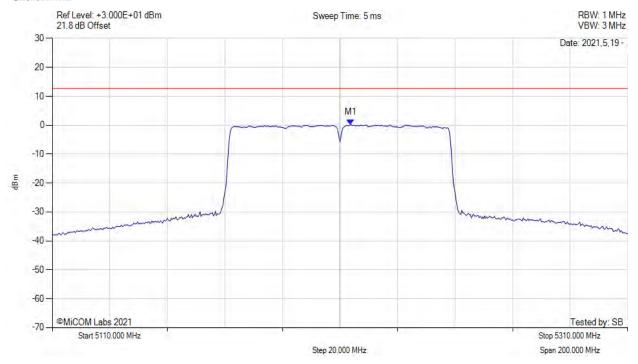


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5213.700 MHz: 0.166 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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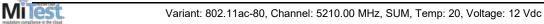


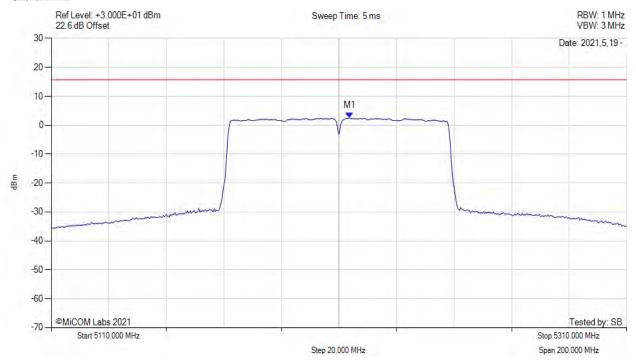
Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #:

HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5213.700 MHz: 2.488 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5213.700 MHz : 2.532 dBm	Margin: -13.2 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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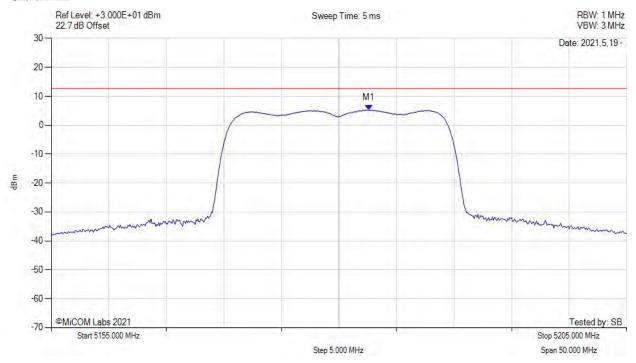
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5180.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5182.580 MHz: 5.257 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

 $25^{th}$  June 2021 Issue Date:

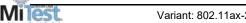
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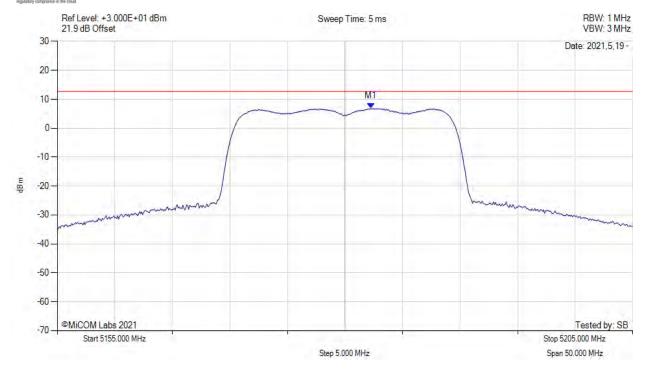
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY







Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5182.250 MHz: 6.791 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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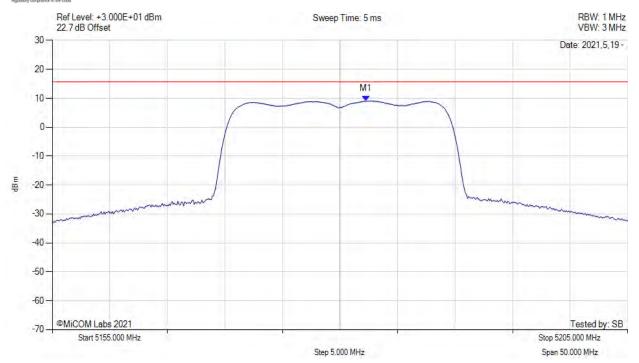
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



### Variant: 802.11ax-20, Channel: 5180.00 MHz, SUM, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5182.300 MHz: 9.073 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5182.300 MHz : 9.117 dBm	Margin: -6.6 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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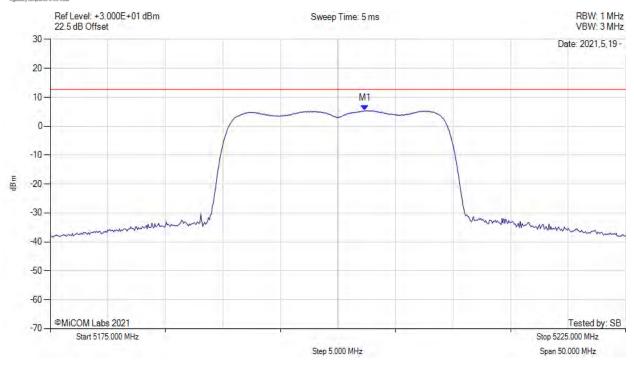
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5200.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5202.330 MHz: 5.447 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

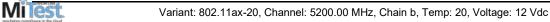
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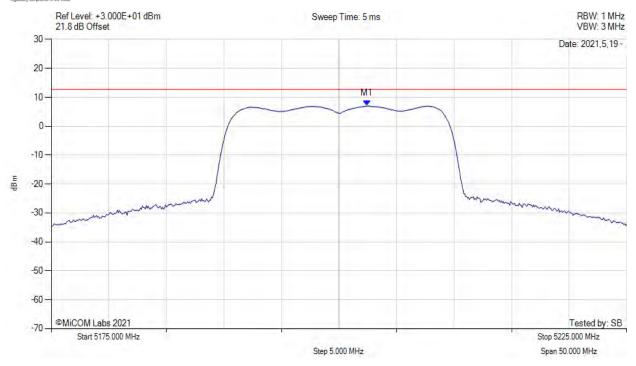
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HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Serial #:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5202.420 MHz: 7.053 dBm	Channel Frequency: 5200.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		<u>'</u>

back to matrix

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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5202.700 MHz: 9.273 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5202.700 MHz : 9.317 dBm	Margin: -6.4 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

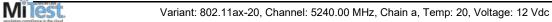
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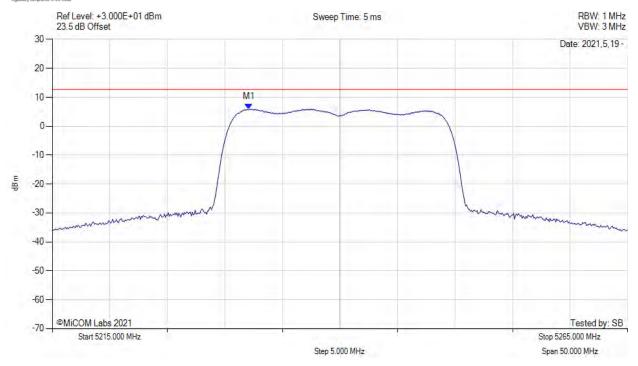


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Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5232.080 MHz : 5.879 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

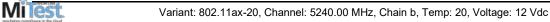
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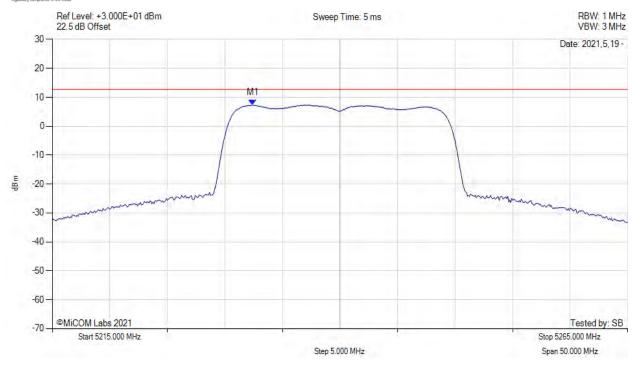


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5232.420 MHz: 7.326 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

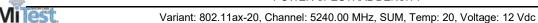
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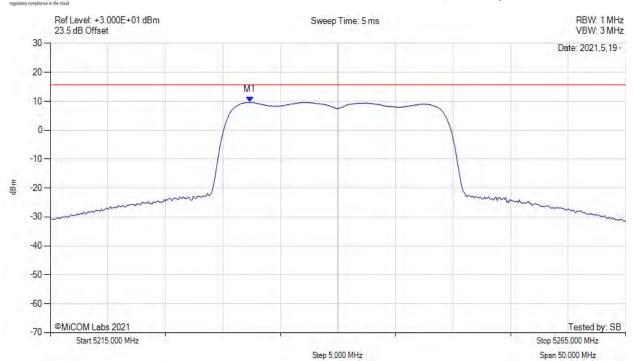


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5232.300 MHz: 9.642 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5232.300 MHz : 9.686 dBm	Margin: -6.0 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

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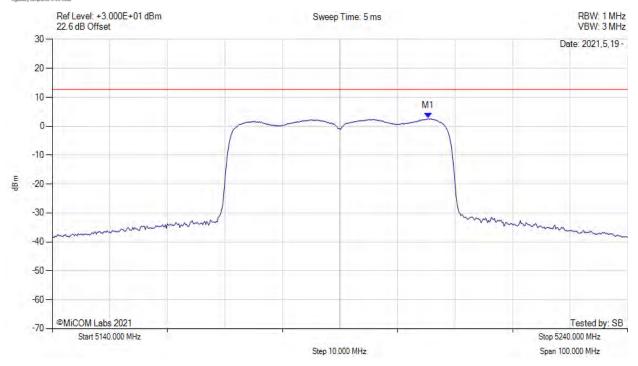
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5190.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5205.330 MHz: 2.675 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

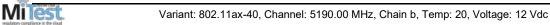
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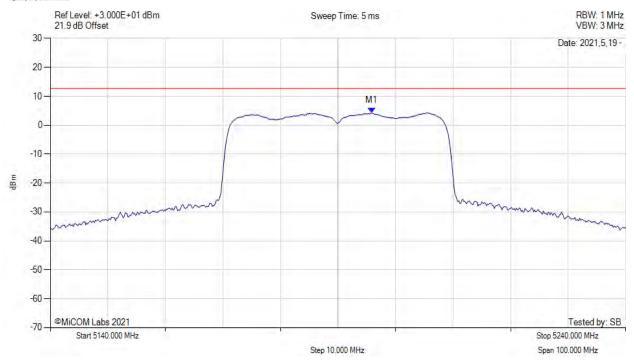


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5195.830 MHz: 4.314 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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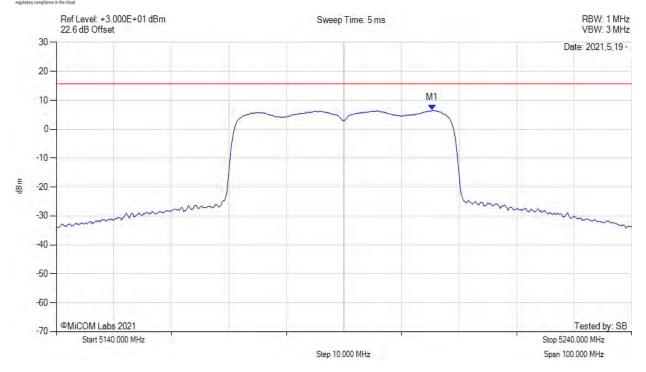
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



### Variant: 802.11ax-40, Channel: 5190.00 MHz, SUM, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5205.300 MHz: 6.543 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5205.300 MHz : 6.675 dBm	Margin: -9.0 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.13 dB	
Trace Mode = VIFW		

back to matrix

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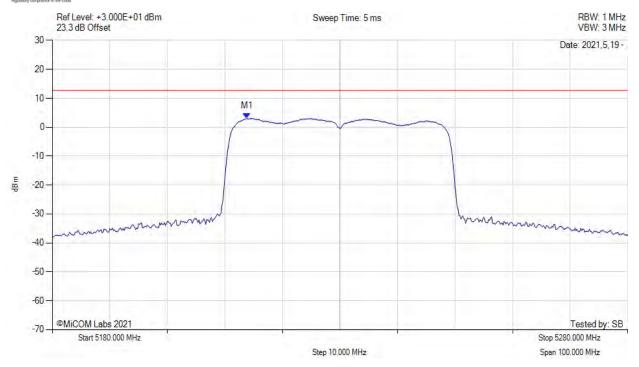
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### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5230.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5213.830 MHz: 3.078 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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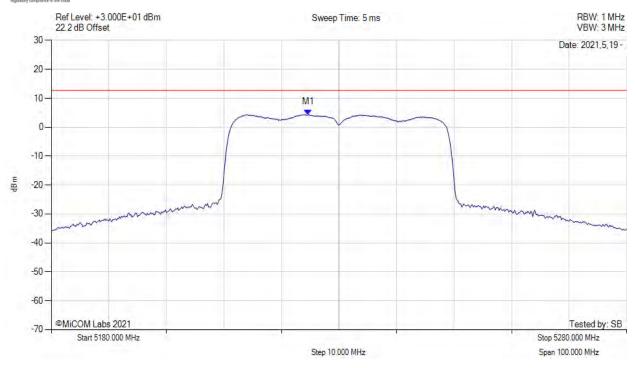


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Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5224.670 MHz: 4.320 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

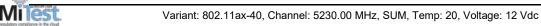
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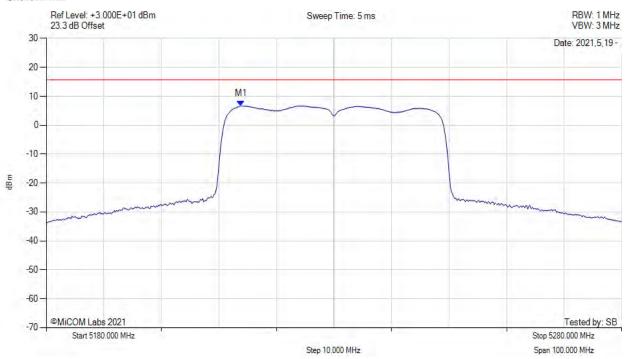


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2 Serial #:

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5213.800 MHz : 6.704 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5213.800 MHz : 6.748 dBm	Margin: -9.0 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.13 dB	
Trace Mode = VIEW		

back to matrix

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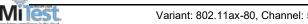
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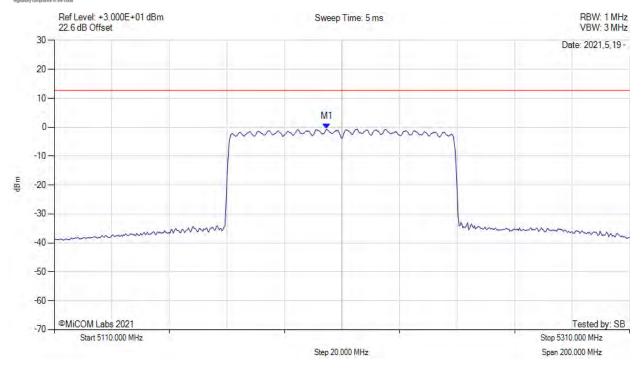
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5210.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5204.700 MHz : -0.646 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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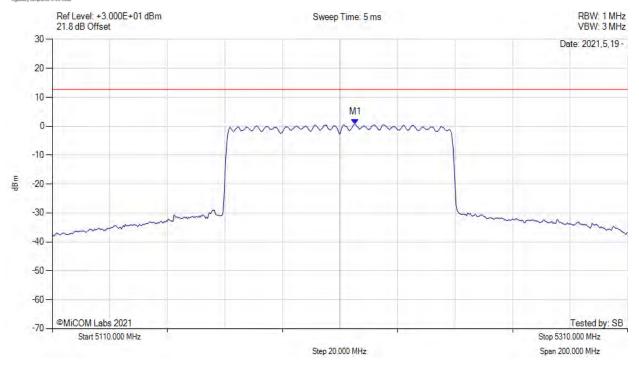


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5215.300 MHz: 0.603 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

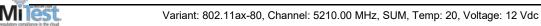
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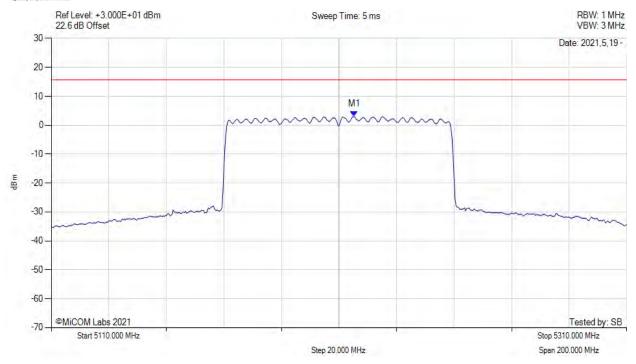
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HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Serial #:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5215.300 MHz : 3.024 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5215.300 MHz : 3.201 dBm	Margin: -12.5 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.18 dB	
Trace Mode = VIFW		

back to matrix

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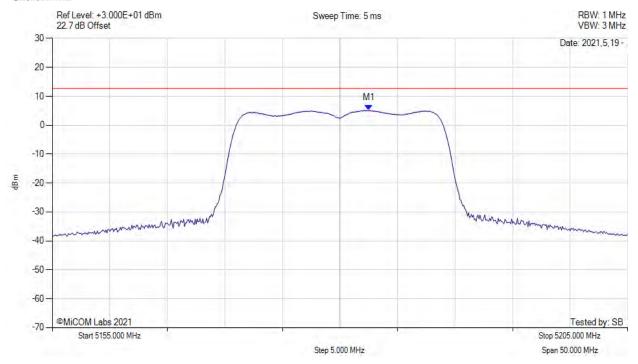
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5182.500 MHz: 5.125 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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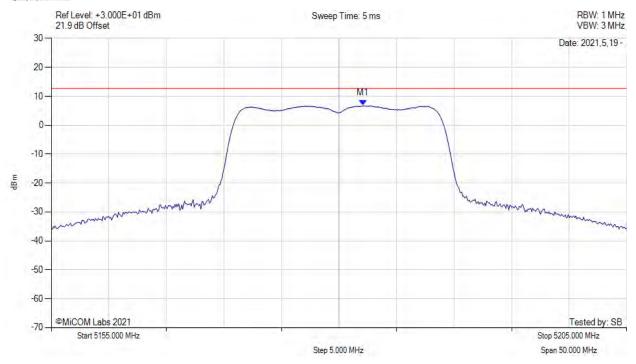
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5180.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5182.080 MHz: 6.745 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

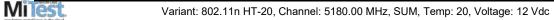
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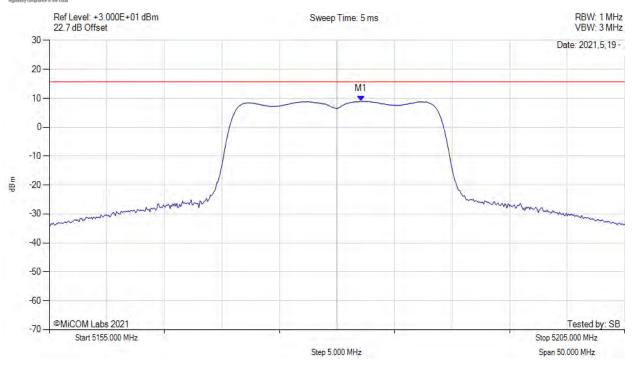


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Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5182.100 MHz: 9.003 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5182.100 MHz : 9.047 dBm	Margin: -6.7 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

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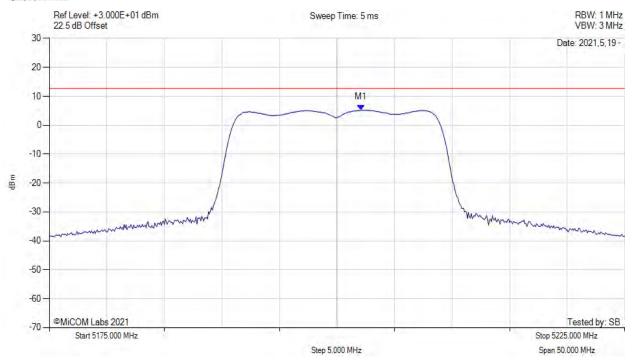


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Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5202.080 MHz: 5.299 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

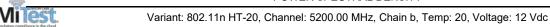
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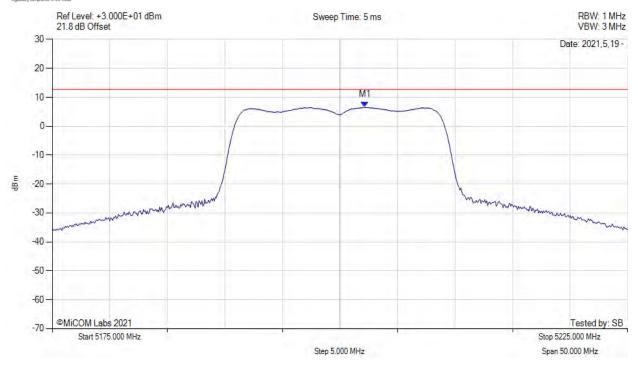


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5202.170 MHz: 6.513 dBm	Channel Frequency: 5200.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

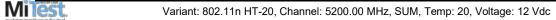
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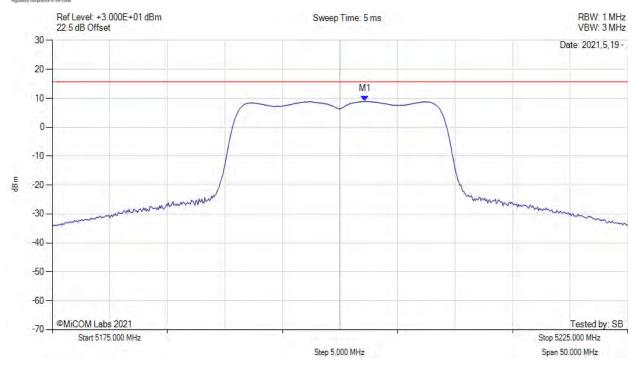


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Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5202.200 MHz: 8.913 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5202.200 MHz : 8.957 dBm	Margin: -6.8 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

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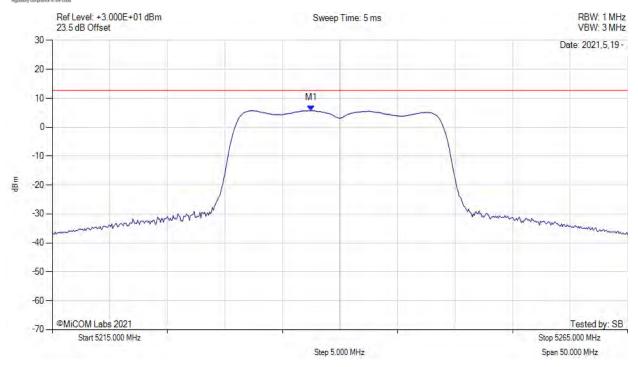
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5240.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5237.500 MHz: 5.778 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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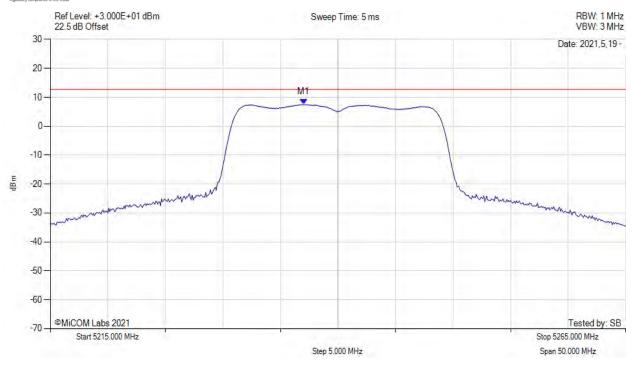


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5237.000 MHz : 7.468 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

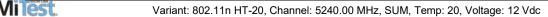
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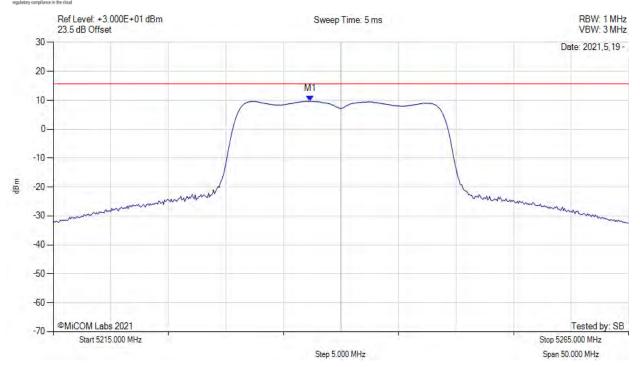


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5237.300 MHz: 9.665 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5237.300 MHz : 9.709 dBm	Margin: -6.0 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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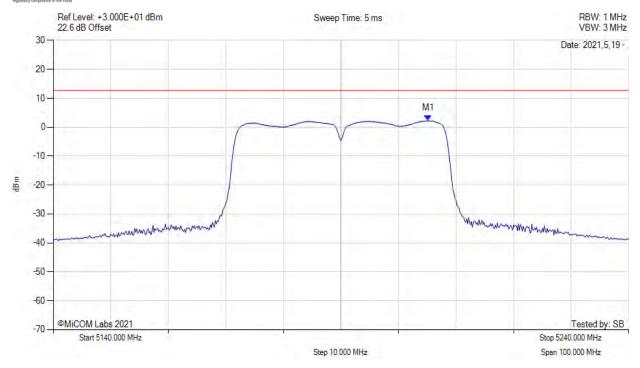


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5205.170 MHz: 2.225 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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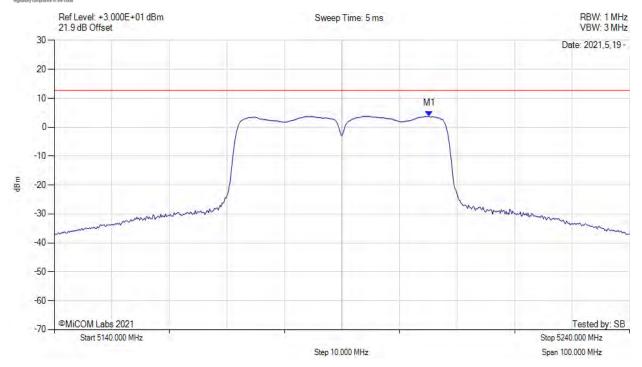
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5190.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5205.170 MHz: 3.853 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

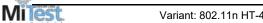
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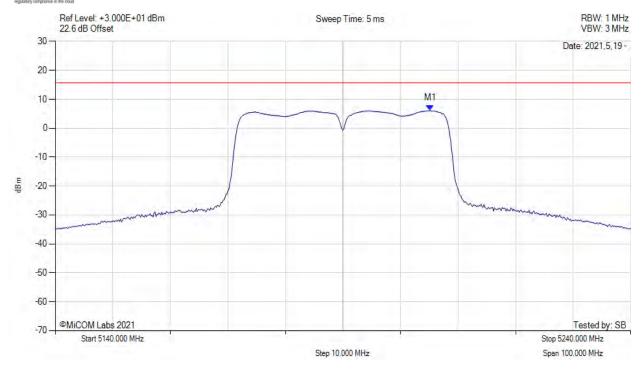
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5190.00 MHz, SUM, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5205.200 MHz: 6.125 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5205.200 MHz : 6.169 dBm	Margin: -9.5 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

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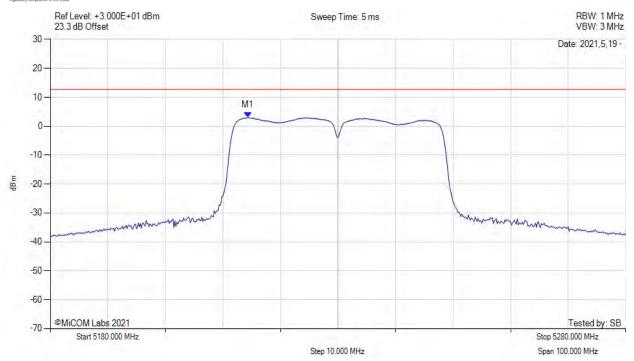
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5214.330 MHz: 3.036 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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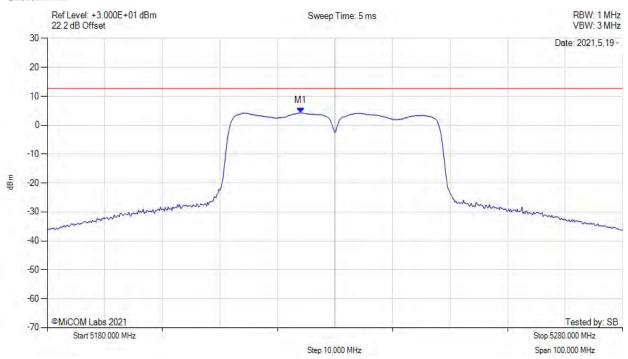
Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5230.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5224.000 MHz : 4.282 dBm	Limit: ≤ 12.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

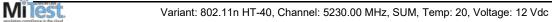
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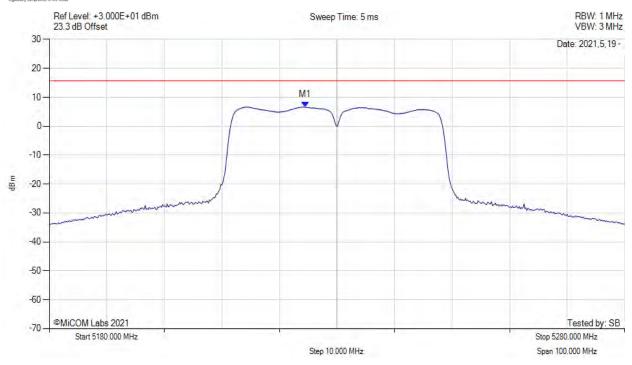


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Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5224.500 MHz: 6.640 dBm	Limit: ≤ 15.7 dBm
Sweep Count = +100	M1 + DCCF : 5224.500 MHz : 6.684 dBm	Margin: -9.0 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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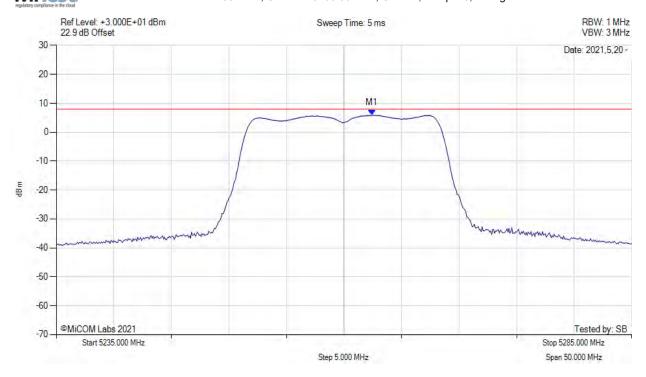


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Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5262.420 MHz: 5.898 dBm	Limit: ≤ 7.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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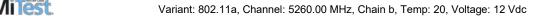
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Hewlett Packard Enterprise Company ASIN0304

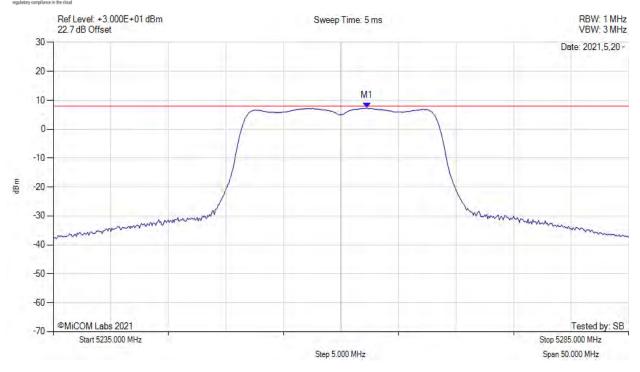
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Serial #:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5262.250 MHz: 7.321 dBm	Limit: ≤ 7.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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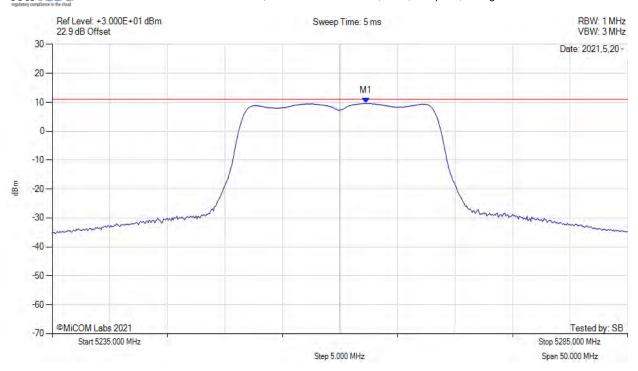


Serial #:

FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2 HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5262.300 MHz: 9.621 dBm	Limit: ≤ 11.0 dBm
Sweep Count = +100	M1 + DCCF : 5262.300 MHz : 9.665 dBm	Margin: -1.3 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

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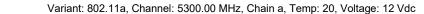
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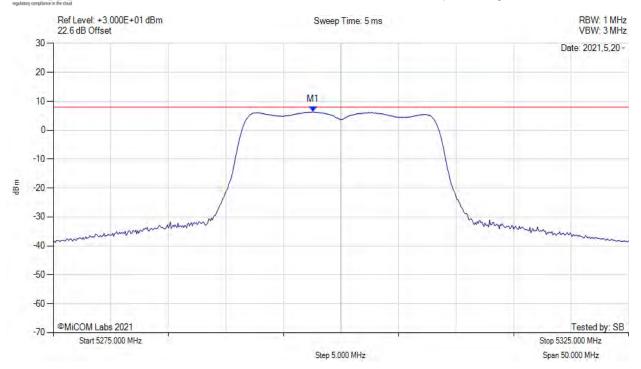


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5297.580 MHz: 6.376 dBm	Limit: ≤ 7.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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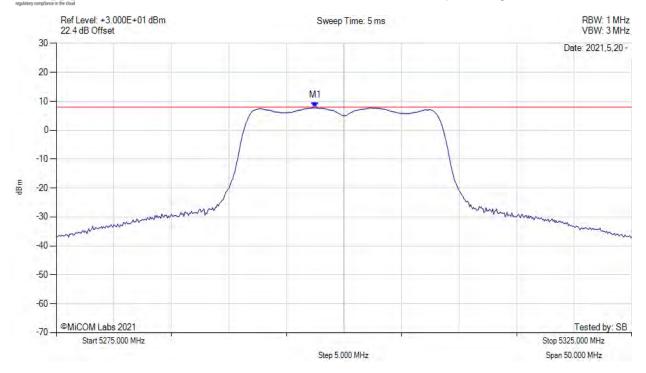


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5297.500 MHz: 7.815 dBm	Channel Frequency: 5300.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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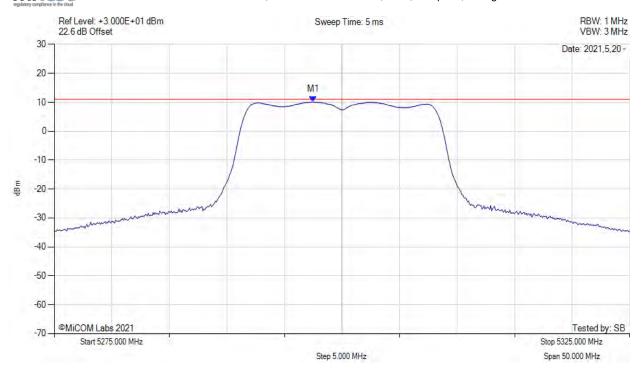


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5297.500 MHz: 10.123 dBm	Limit: ≤ 11.0 dBm
Sweep Count = +100	M1 + DCCF : 5297.500 MHz : 10.167 dBm	Margin: -0.8 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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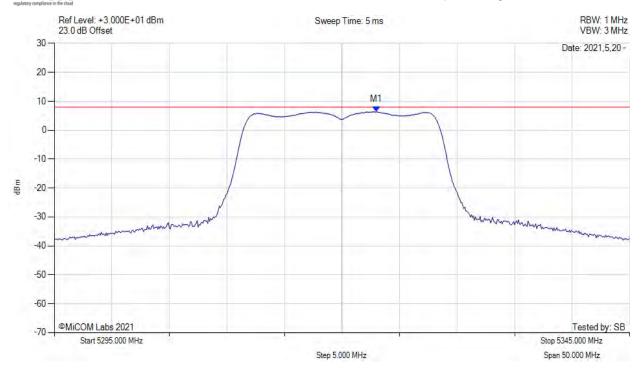


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5323.000 MHz: 6.408 dBm	Limit: ≤ 7.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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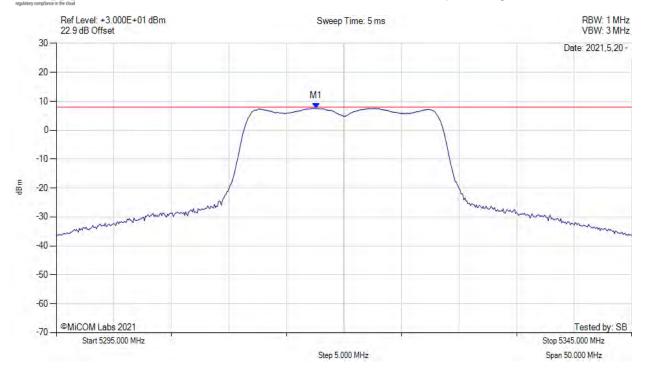


Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5317.580 MHz: 7.636 dBm	Limit: ≤ 7.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

 $25^{th}$  June 2021 Issue Date:

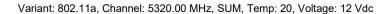
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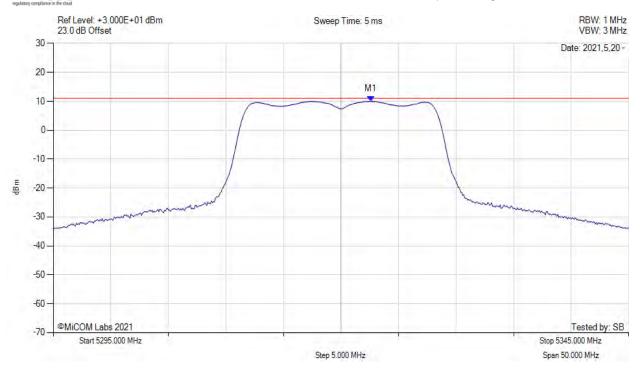


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Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5322.600 MHz: 10.022 dBm	Limit: ≤ 11.0 dBm
Sweep Count = +100	M1 + DCCF : 5322.600 MHz : 10.066 dBm	Margin: -0.9 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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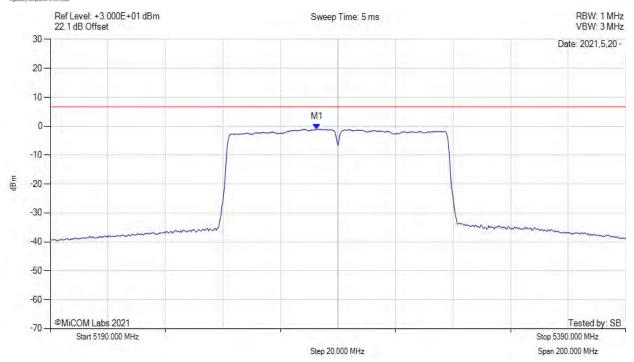
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ac-80, Channel: 5290.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5282.700 MHz: -1.015 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

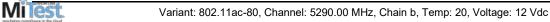
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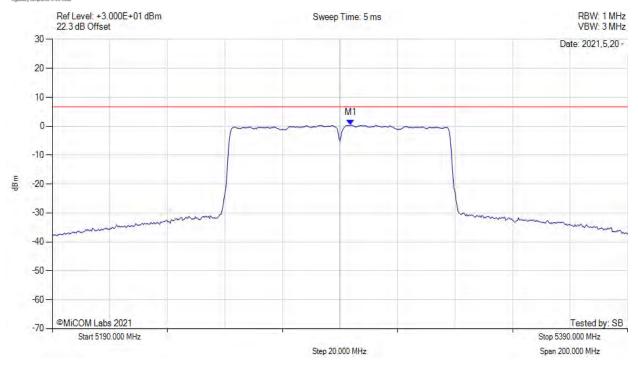


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5293.700 MHz: 0.419 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

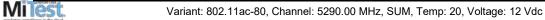
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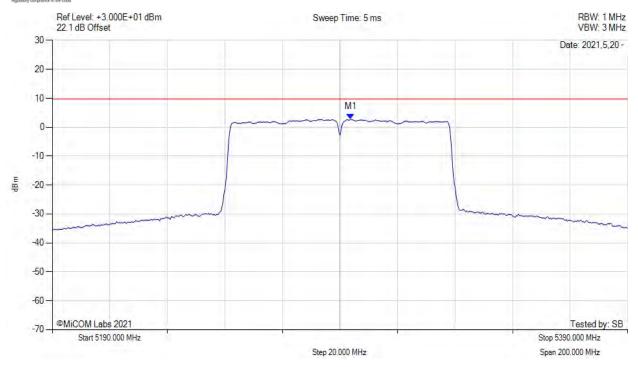


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5293.700 MHz : 2.701 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5293.700 MHz : 2.745 dBm	Margin: -7.0 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

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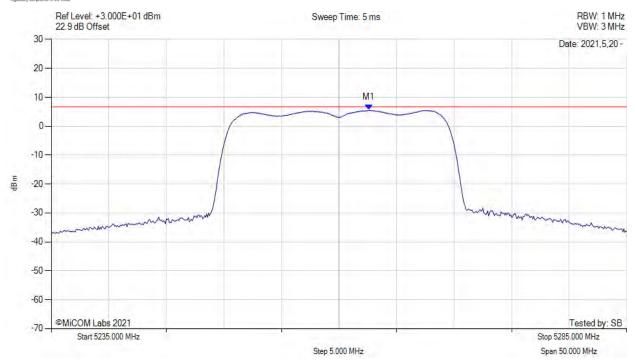
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5260.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5262.580 MHz : 5.548 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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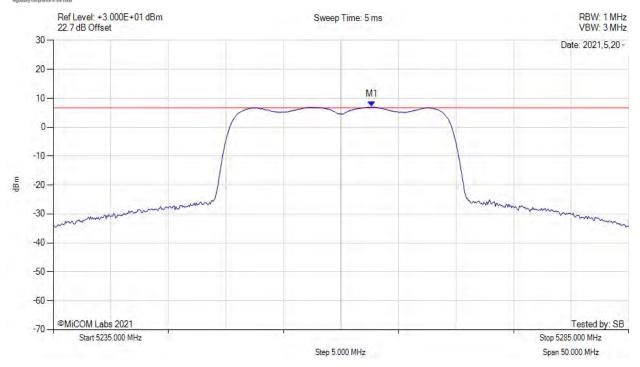
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5260.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5262.670 MHz: 7.059 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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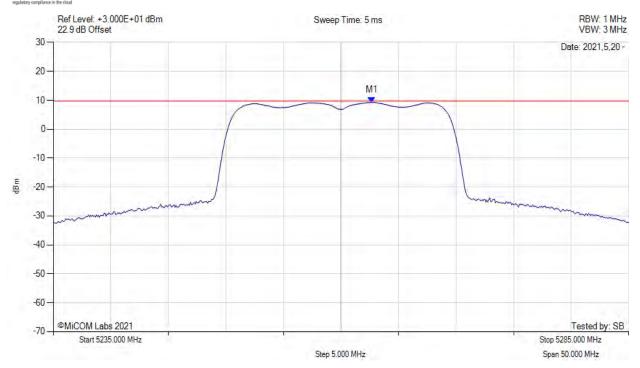
Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5260.00 MHz, SUM, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5262.700 MHz: 9.300 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5262.700 MHz : 9.344 dBm	Margin: -0.4 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

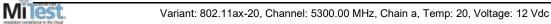
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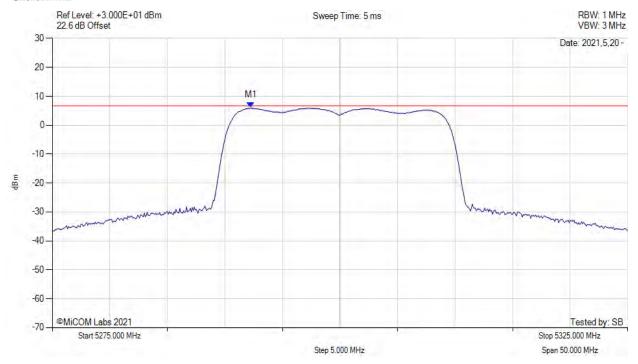


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5292.250 MHz: 6.056 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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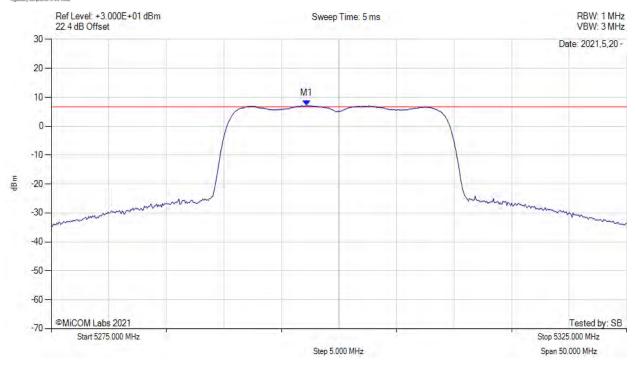
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5300.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5297.170 MHz: 7.125 dBm	Channel Frequency: 5300.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

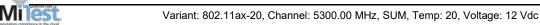
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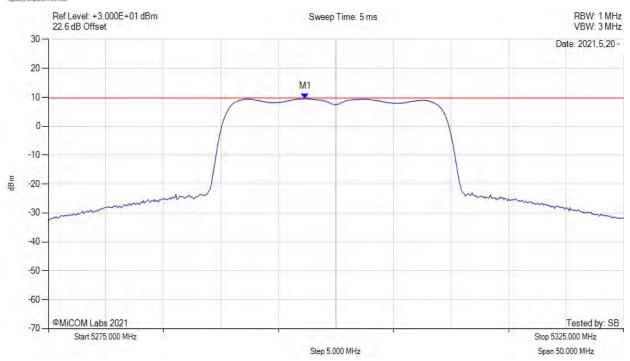


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5297.300 MHz: 9.543 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5297.300 MHz : 9.587 dBm	Margin: -0.1 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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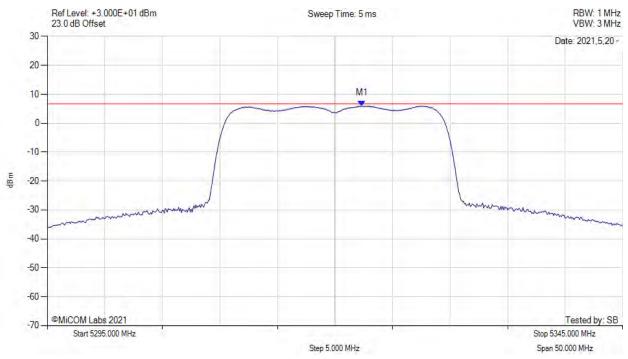
Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #:

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5322.330 MHz: 6.005 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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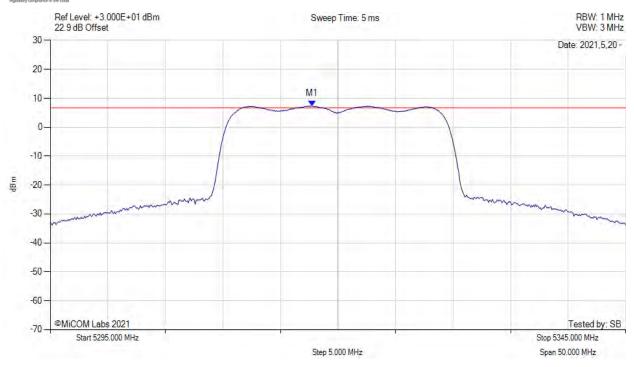


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5317.750 MHz: 7.388 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

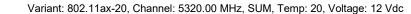
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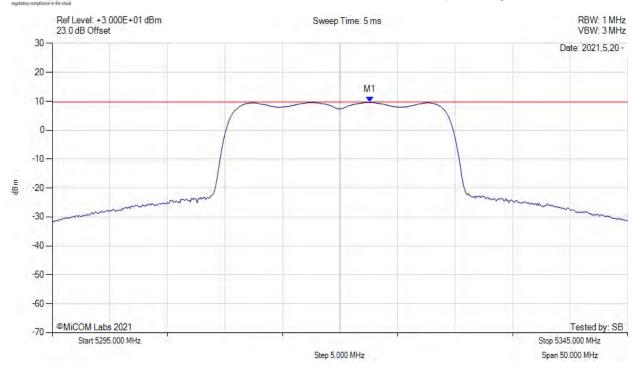


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5322.600 MHz: 9.618 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5322.600 MHz : 9.662 dBm	Margin: 0.0 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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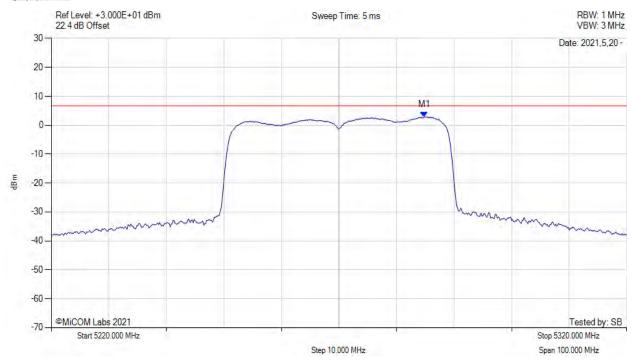
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5270.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5284.830 MHz: 2.851 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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101 of 241 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.



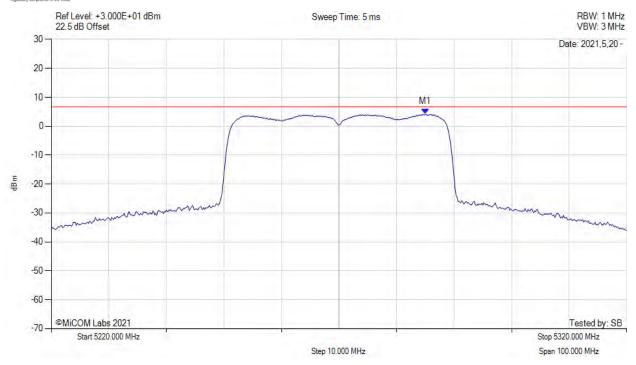
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5270.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5285.000 MHz: 4.136 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

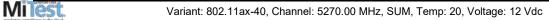
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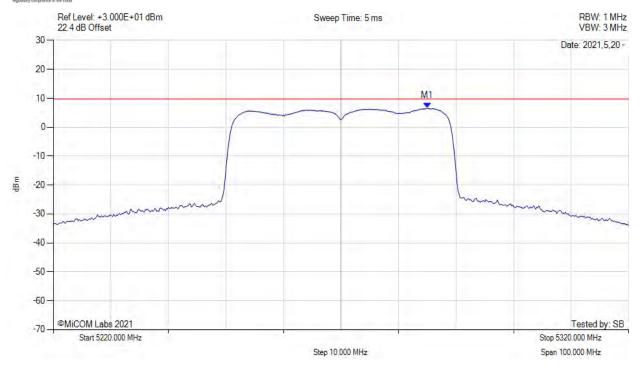


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5285.000 MHz: 6.536 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5285.000 MHz : 6.580 dBm	Margin: -3.1 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

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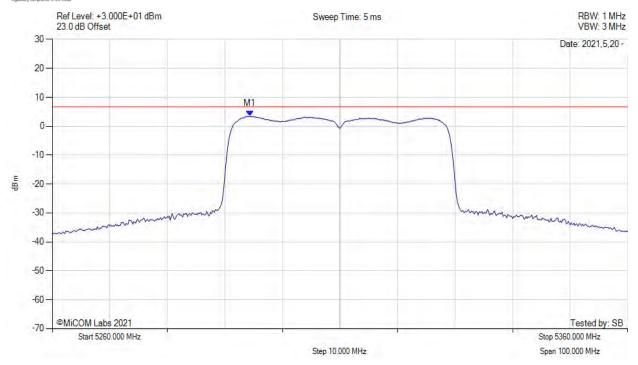
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5310.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5294.330 MHz: 3.433 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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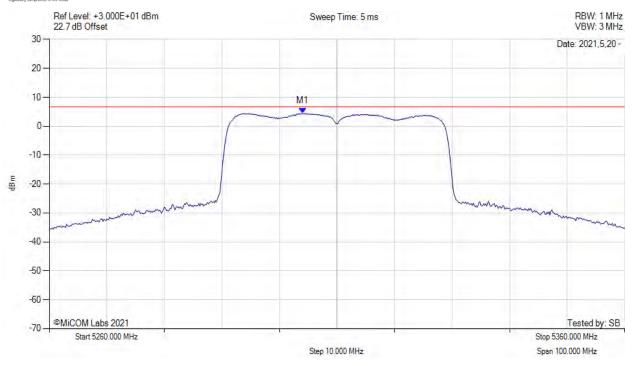
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5310.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5304.000 MHz: 4.442 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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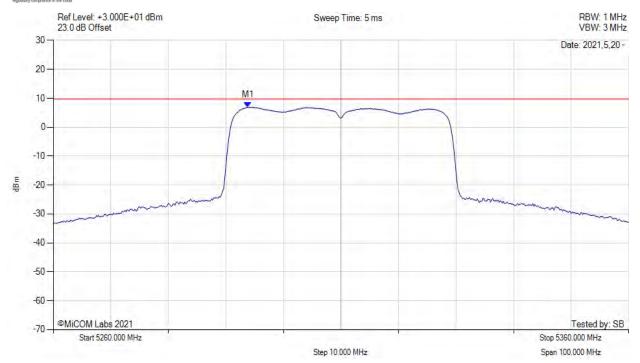
Serial #:

FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2 HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



### Variant: 802.11ax-40, Channel: 5310.00 MHz, SUM, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5293.800 MHz: 6.923 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5293.800 MHz : 6.967 dBm	Margin: -2.7 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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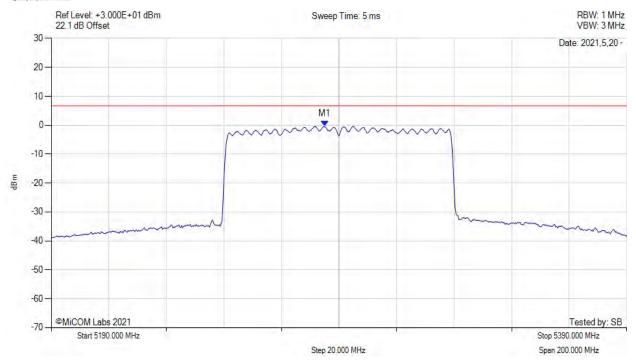
Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5290.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5285.000 MHz: -0.417 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

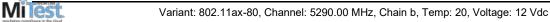
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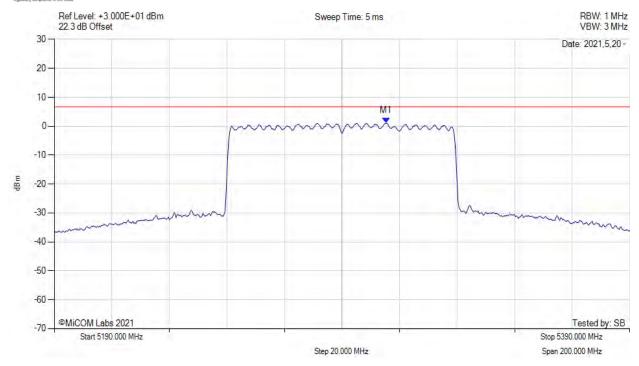


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5305.300 MHz: 1.031 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

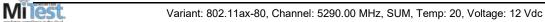
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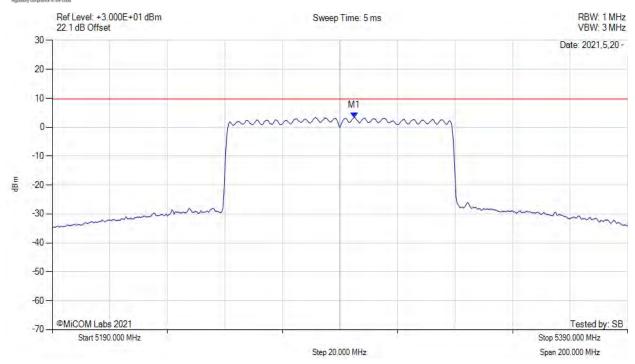


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5295.000 MHz: 3.319 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5295.000 MHz : 3.496 dBm	Margin: -6.2 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.18 dB	
Trace Mode = VIEW		

back to matrix

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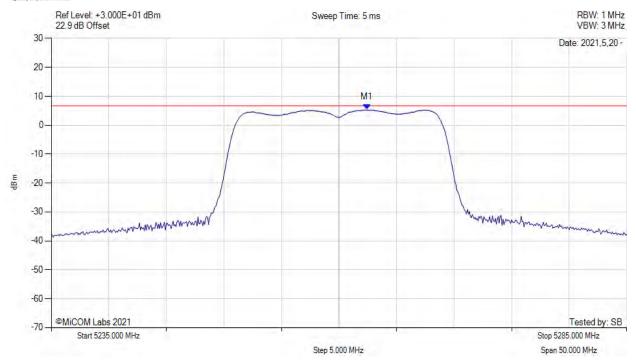
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5262.420 MHz: 5.315 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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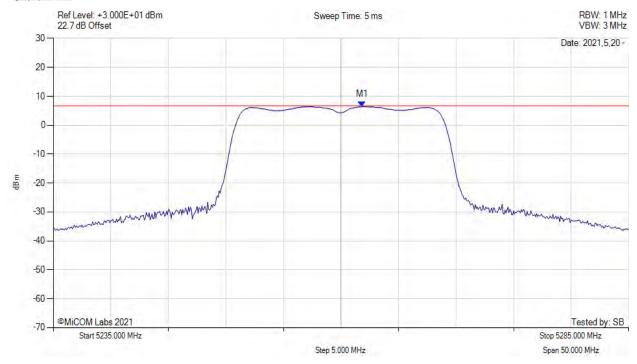
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5261.830 MHz: 6.464 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

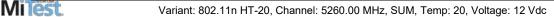
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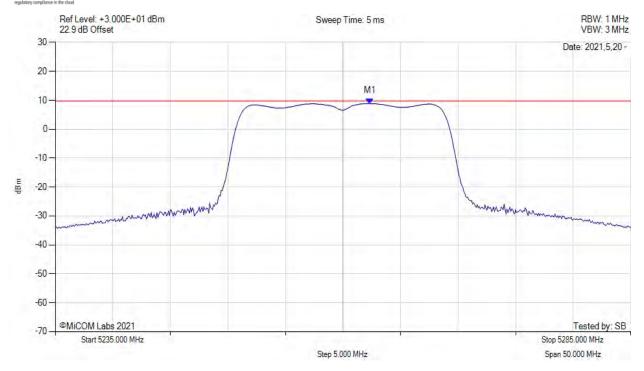


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Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5262.300 MHz: 8.873 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5262.300 MHz : 8.917 dBm	Margin: -0.8 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

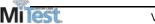
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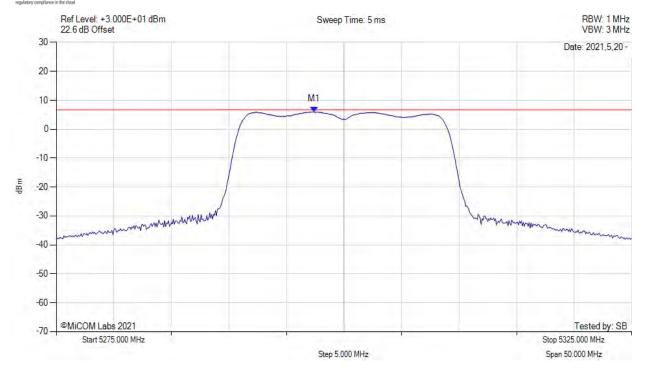
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5300.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5297.420 MHz: 6.014 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		!

back to matrix

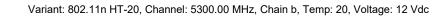
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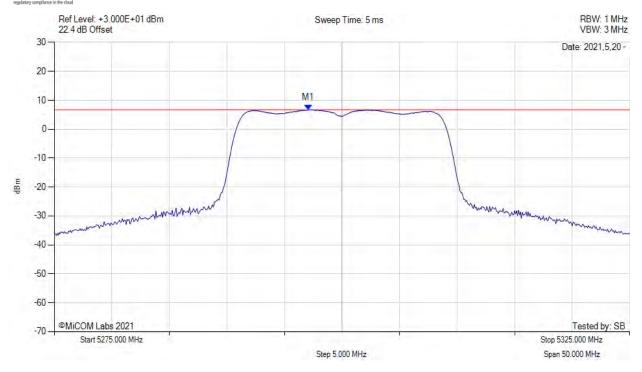


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Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5297.080 MHz: 6.699 dBm	Channel Frequency: 5300.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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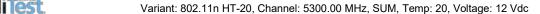
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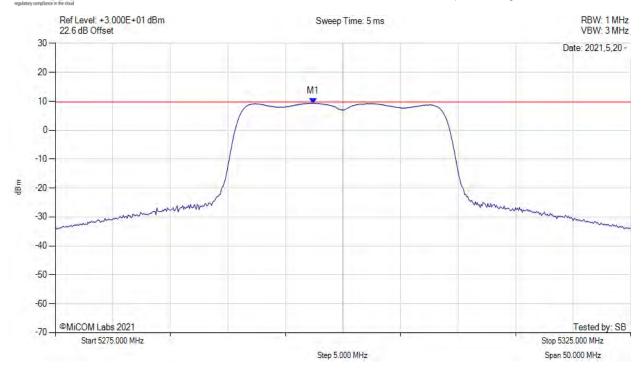


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Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5297.400 MHz: 9.342 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5297.400 MHz : 9.386 dBm	Margin: -0.3 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

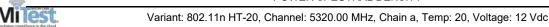
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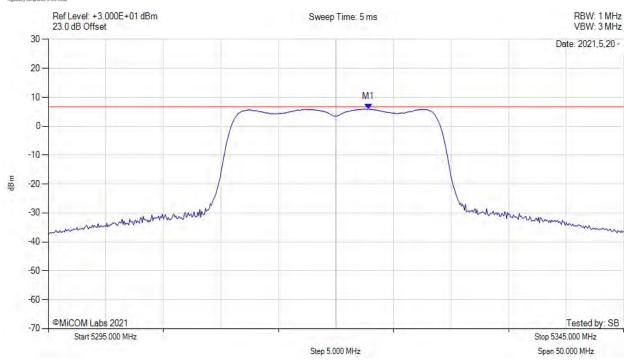


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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5322.830 MHz: 5.937 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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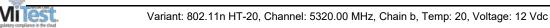


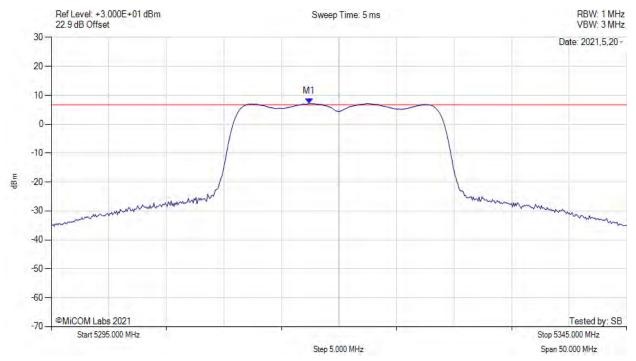
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Serial #:

HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5317.420 MHz : 7.169 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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Page:

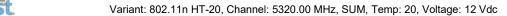
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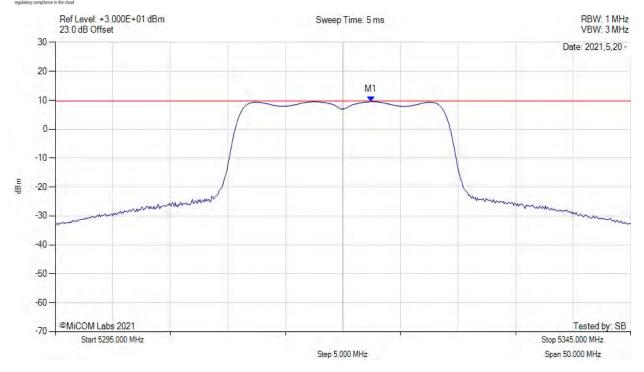


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Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5322.400 MHz: 9.575 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5322.400 MHz : 9.619 dBm	Margin: -0.1 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

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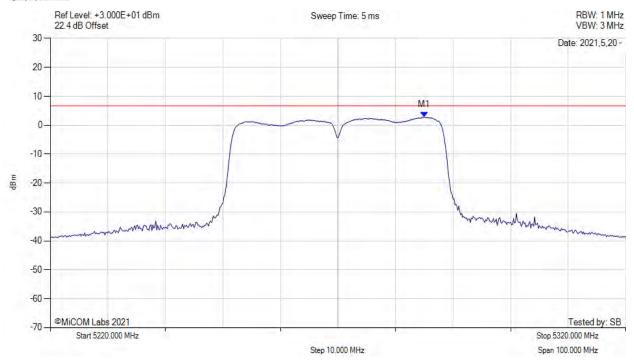
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5285.000 MHz: 2.776 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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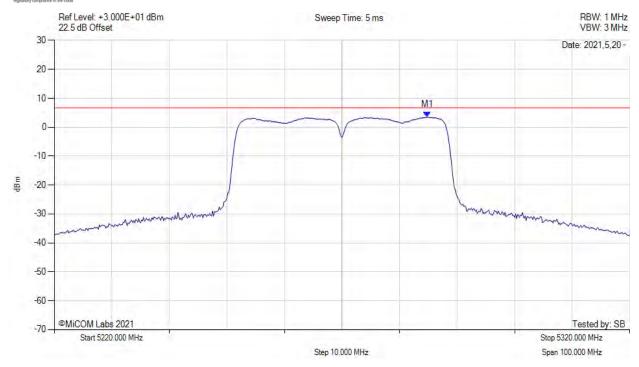


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Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5284.830 MHz: 3.462 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

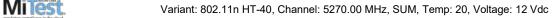
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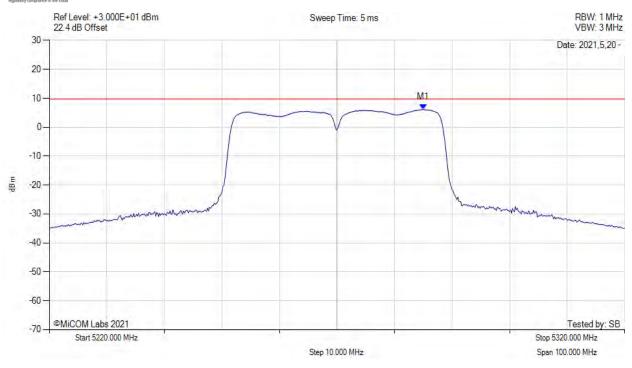


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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5285.000 MHz: 6.129 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5285.000 MHz : 6.173 dBm	Margin: -3.5 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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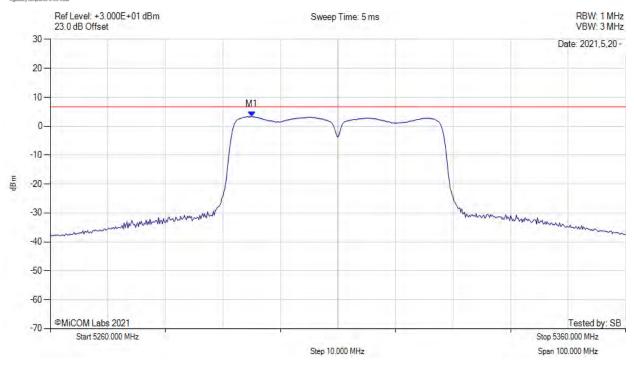


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# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5295.000 MHz: 3.355 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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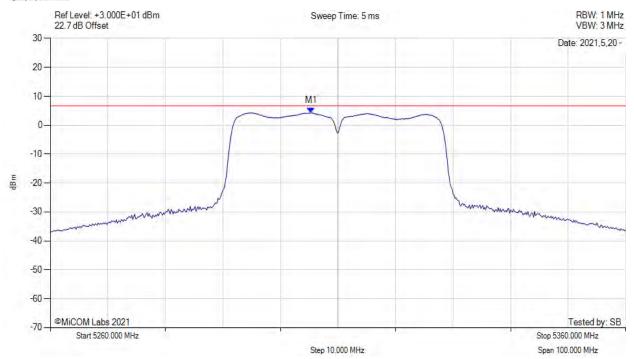
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5310.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5305.330 MHz: 4.262 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

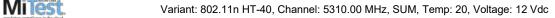
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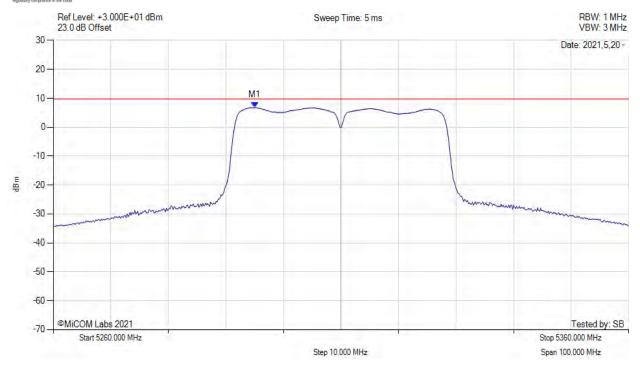
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY



Serial #:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5295.000 MHz: 6.796 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5295.000 MHz : 6.840 dBm	Margin: -2.9 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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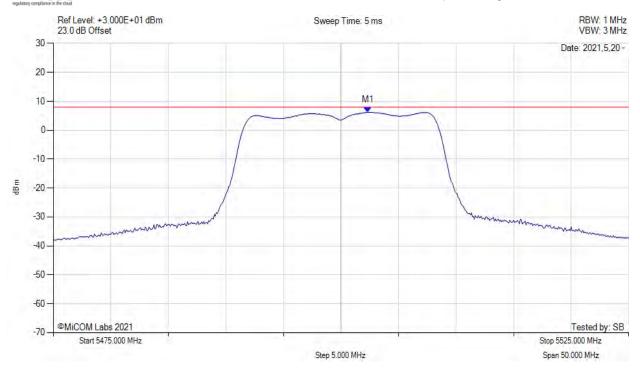


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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5502.330 MHz: 6.198 dBm	Limit: ≤ 7.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

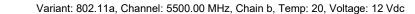
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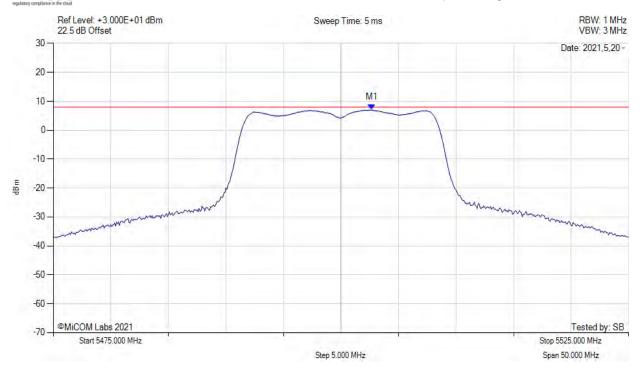


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## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5502.670 MHz: 6.994 dBm	Limit: ≤ 7.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5502.800 MHz: 9.609 dBm	Limit: ≤ 11.0 dBm
Sweep Count = +100	M1 + DCCF : 5502.800 MHz : 9.653 dBm	Margin: -1.4 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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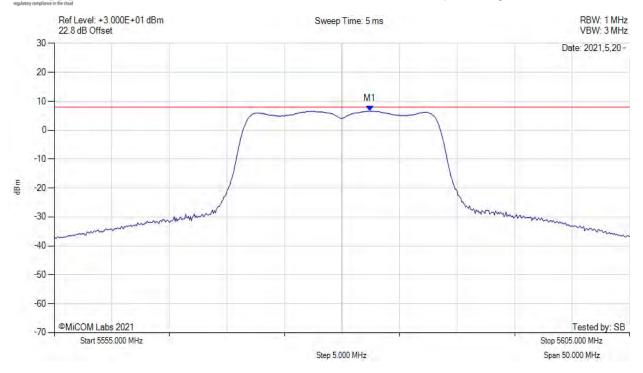


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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5582.420 MHz: 6.681 dBm	Limit: ≤ 7.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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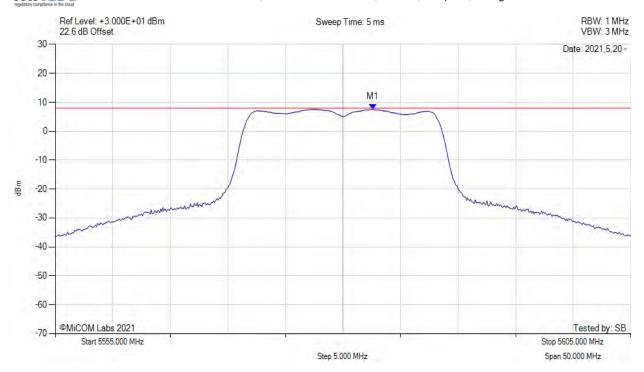


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5582.580 MHz: 7.582 dBm	Channel Frequency: 5580.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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Title: Hew

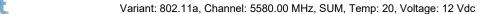
Serial #:

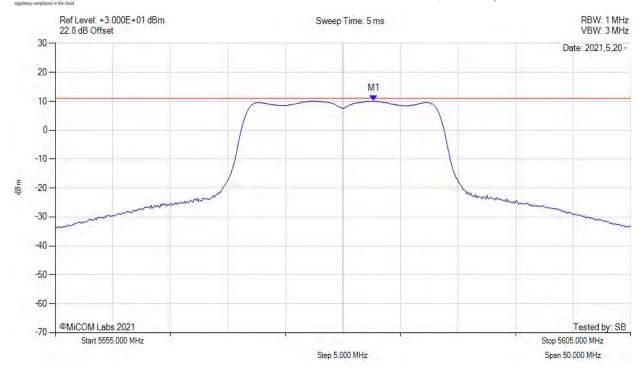
Hewlett Packard Enterprise Company ASIN0304

FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5582.700 MHz: 10.113 dBm	Limit: ≤ 11.0 dBm
Sweep Count = +100	M1 + DCCF : 5582.700 MHz : 10.157 dBm	Margin: -0.9 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

Issue Date: 25<sup>th</sup> June 2021

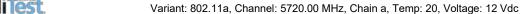
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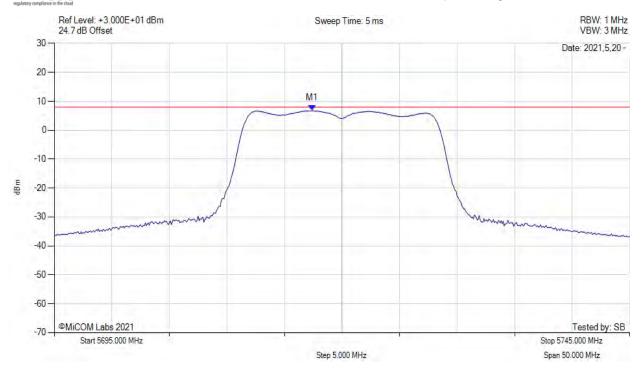


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5717.420 MHz: 6.776 dBm	Limit: ≤ 7.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

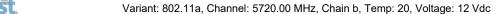
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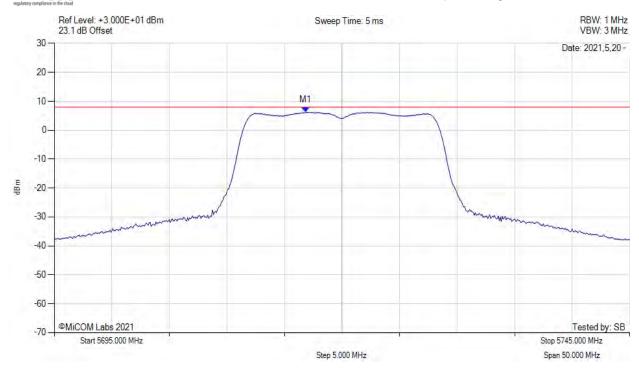


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5716.830 MHz: 6.188 dBm	Limit: ≤ 7.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

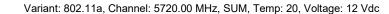
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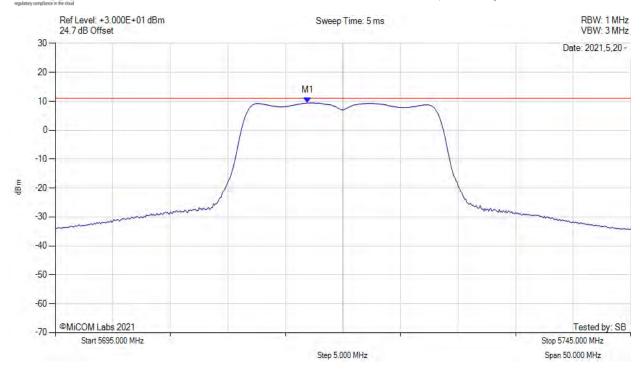


Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5716.900 MHz : 9.448 dBm	Limit: ≤ 11.0 dBm
Sweep Count = +100	M1 + DCCF : 5716.900 MHz : 9.492 dBm	Margin: -1.5 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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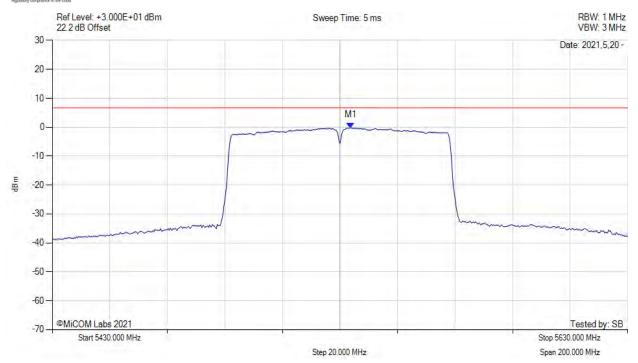
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ac-80, Channel: 5530.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5533.700 MHz: -0.225 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

Issue Date: 25<sup>th</sup> June 2021 Page:

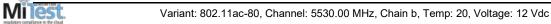
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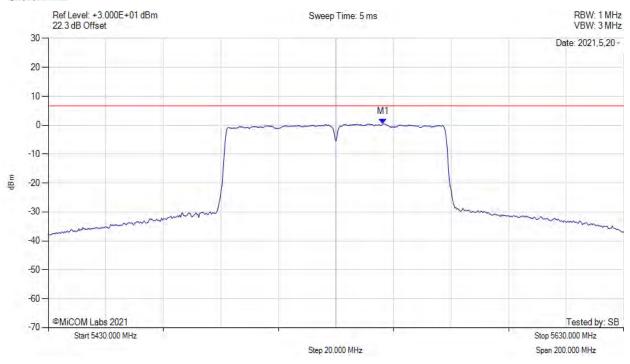


Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5546.300 MHz: 0.441 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

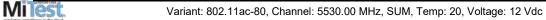
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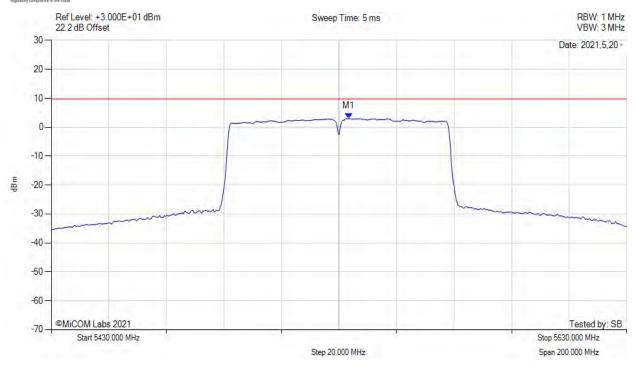


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5533.300 MHz: 2.990 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5533.300 MHz : 3.167 dBm	Margin: -6.5 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.18 dB	
Trace Mode = VIFW		

back to matrix

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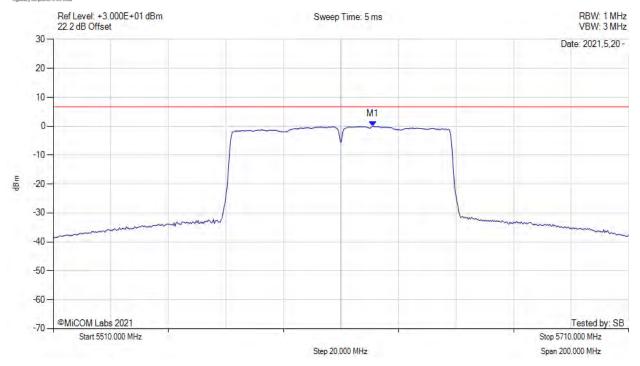
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ac-80, Channel: 5610.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5621.000 MHz : -0.054 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

Issue Date: 25<sup>th</sup> June 2021 Page:

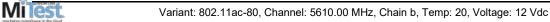
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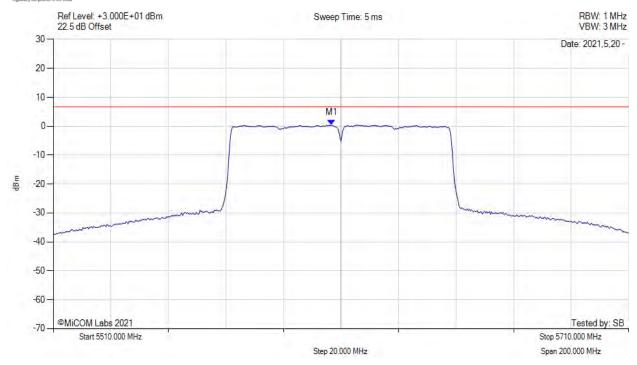


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5606.700 MHz : 0.363 dBm	Channel Frequency: 5610.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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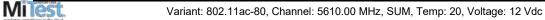
138 of 241 This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report. MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

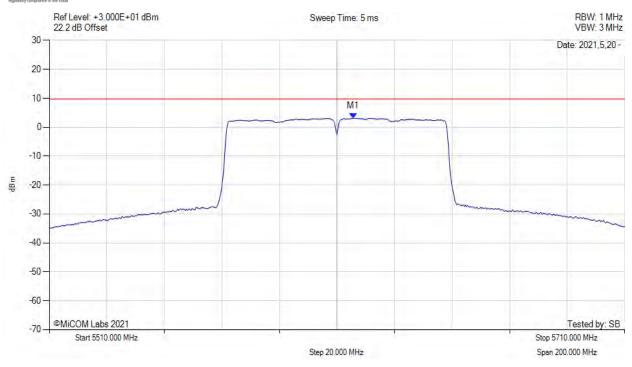


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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5615.700 MHz : 3.098 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5615.700 MHz : 3.275 dBm	Margin: -6.4 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.18 dB	
Trace Mode = VIEW		

back to matrix

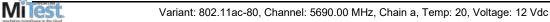
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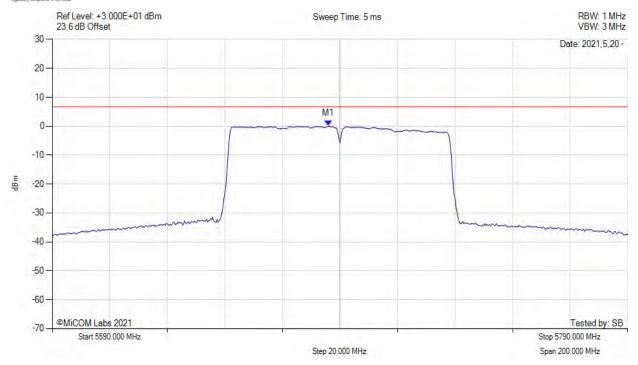


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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5686.000 MHz: 0.051 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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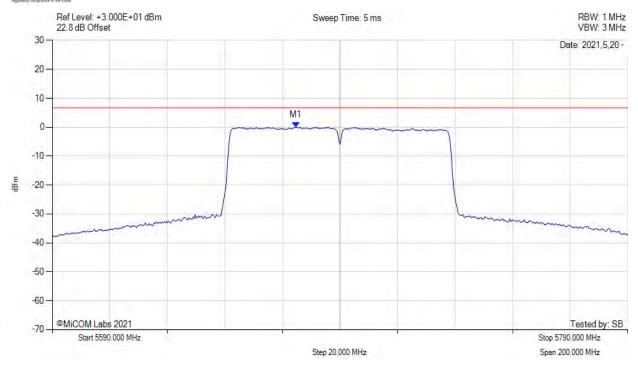


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Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1:5674.700 MHz:-0.026 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5686.000 MHz: 2.981 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5686.000 MHz : 3.158 dBm	Margin: -6.6 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.18 dB	
Trace Mode = VIEW		

back to matrix

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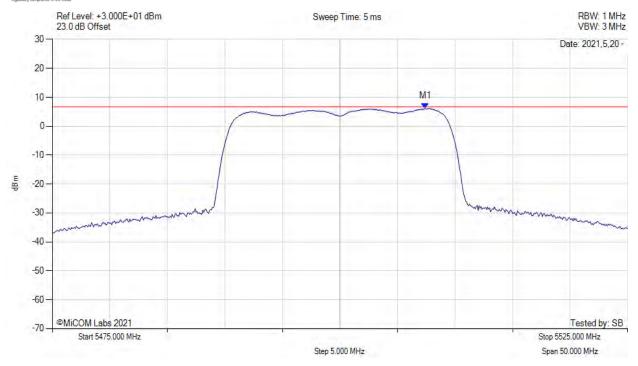
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5500.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5507.420 MHz: 6.113 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

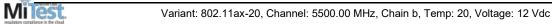
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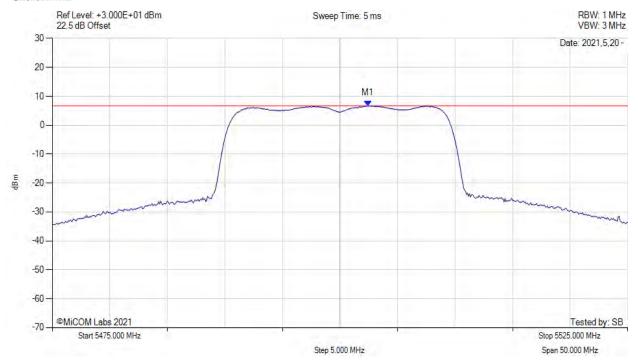


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Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5502.420 MHz : 6.715 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

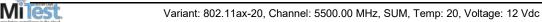
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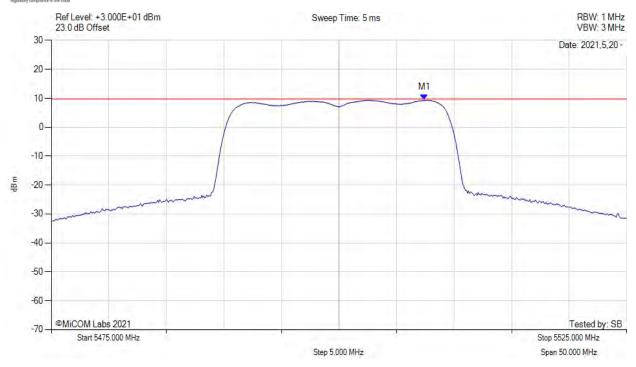


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5507.400 MHz : 9.385 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5507.400 MHz : 9.429 dBm	Margin: -0.3 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		· ·

back to matrix

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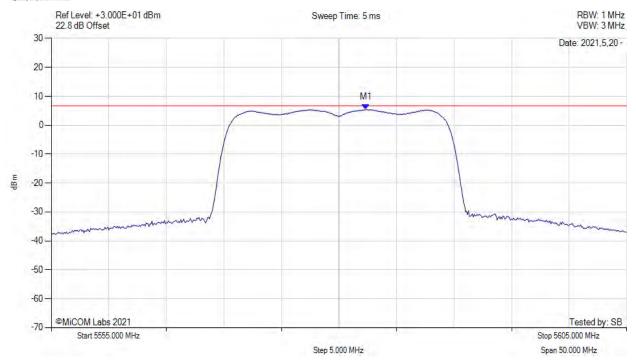
Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5580.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5582.330 MHz: 5.419 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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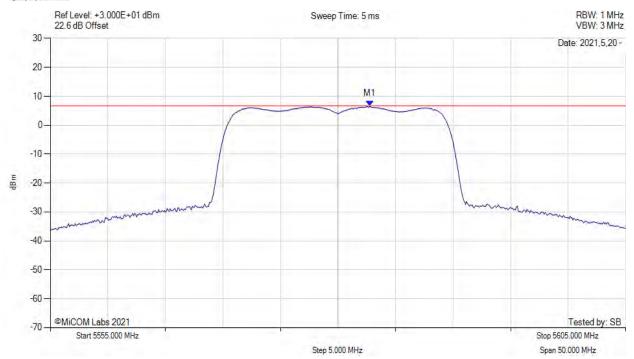
Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5580.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5582.750 MHz: 6.505 dBm	Channel Frequency: 5580.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

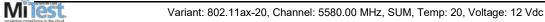
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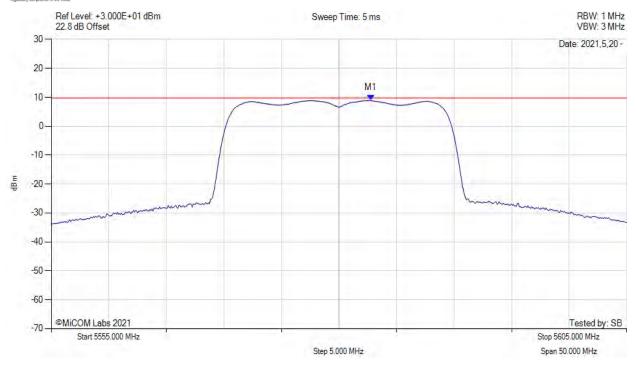


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5582.800 MHz: 8.965 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5582.800 MHz : 9.009 dBm	Margin: -0.7 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

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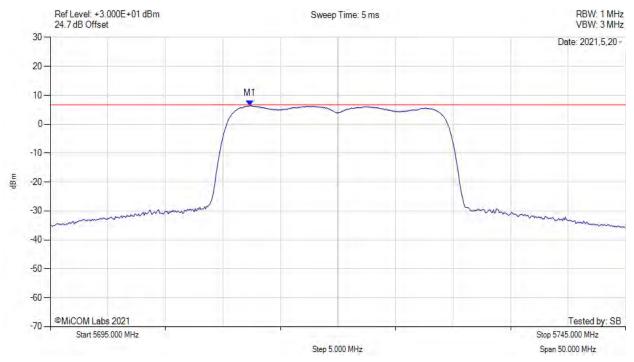


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5712.330 MHz: 6.388 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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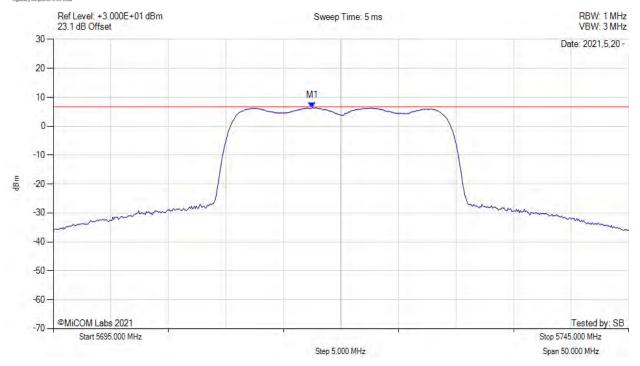
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5720.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5717.500 MHz: 6.428 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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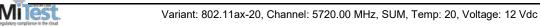


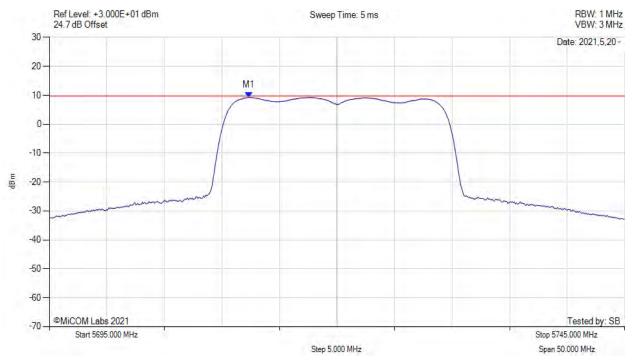
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Serial #:

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5712.300 MHz : 9.337 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5712.300 MHz : 9.381 dBm	Margin: -0.3 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

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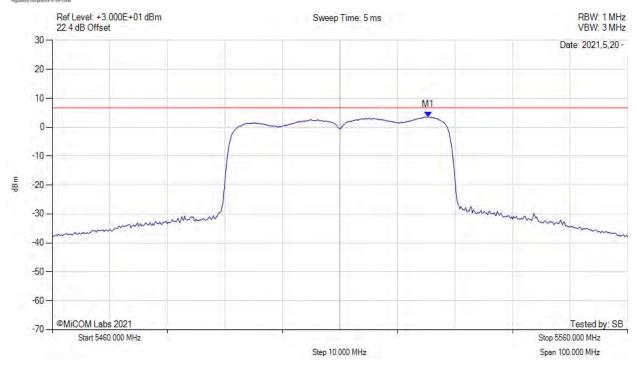
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5510.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5525.330 MHz: 3.572 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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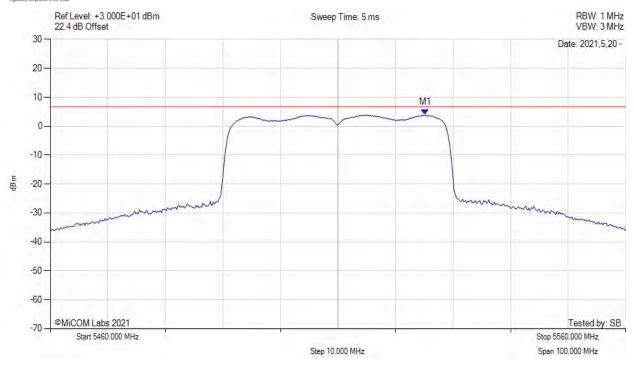
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5510.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5525.170 MHz: 3.905 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

Issue Date: 25<sup>th</sup> June 2021 Page:

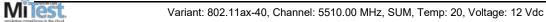
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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5525.300 MHz : 6.694 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5525.300 MHz : 6.738 dBm	Margin: -3.0 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

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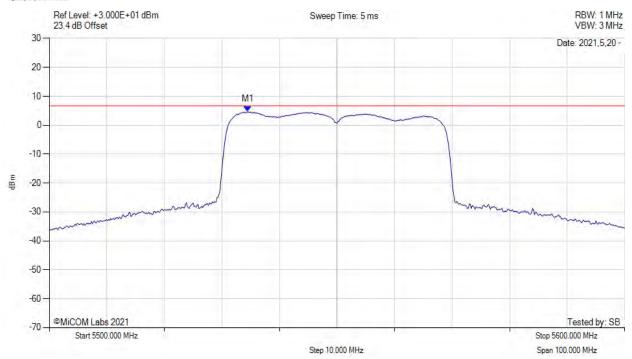
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HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5550.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5534.500 MHz: 4.649 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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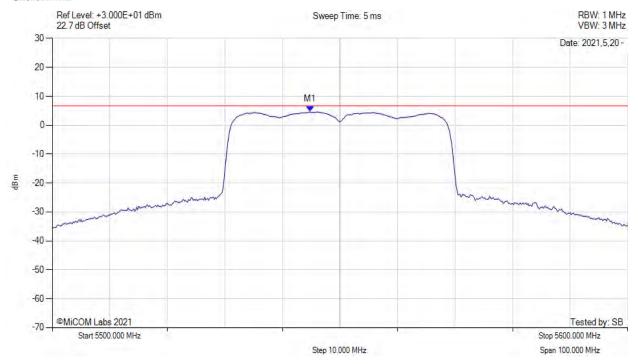
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5550.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5544.830 MHz : 4.658 dBm	Channel Frequency: 5550.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

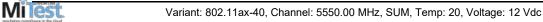
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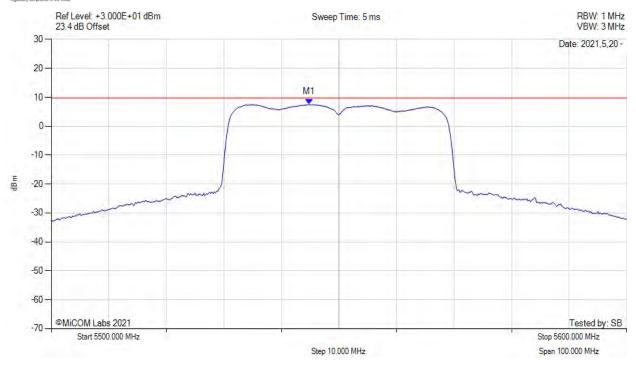


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5544.800 MHz: 7.517 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF: 5544.800 MHz: 7.561 dBm	Margin: -2.1 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

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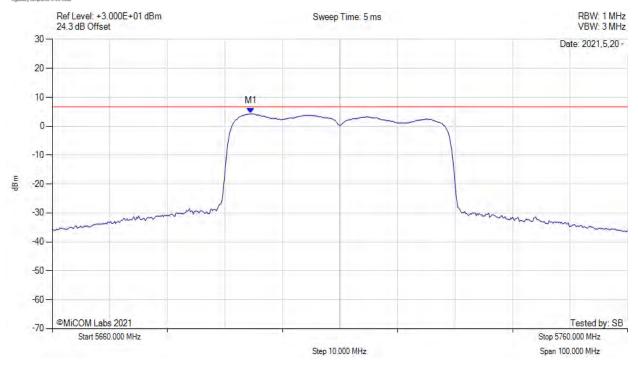
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5710.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5694.500 MHz: 4.350 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

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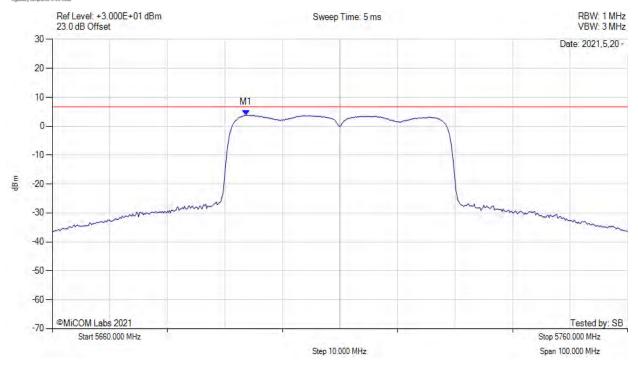
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5710.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5693.670 MHz: 3.857 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

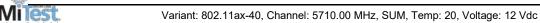
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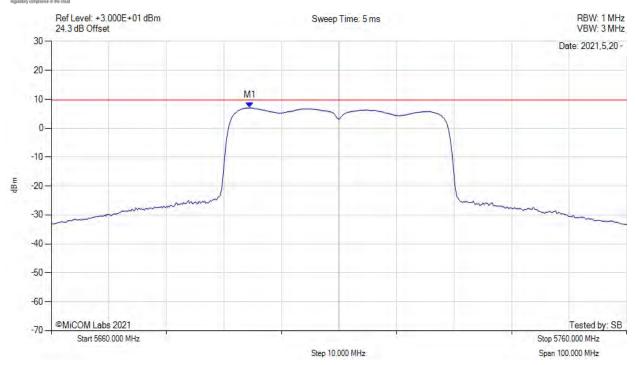


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5694.500 MHz: 7.068 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5694.500 MHz : 7.112 dBm	Margin: -2.6 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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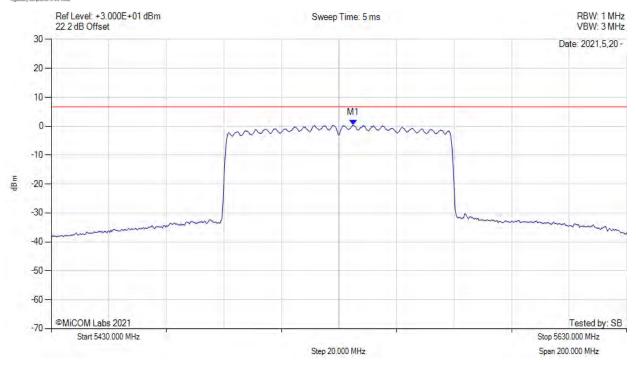
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5530.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5535.000 MHz: 0.350 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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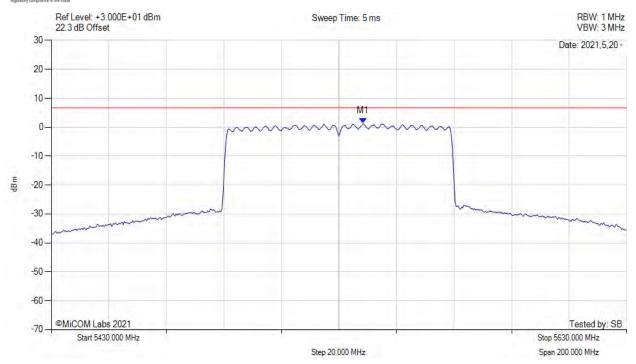
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5530.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5538.300 MHz: 1.256 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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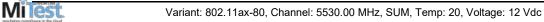


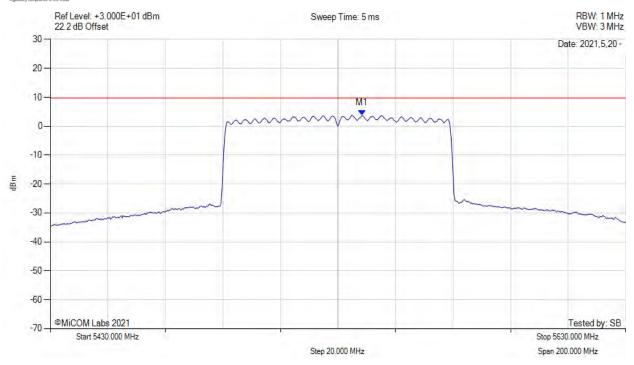
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Serial #:

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5538.300 MHz: 3.748 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5538.300 MHz : 3.925 dBm	Margin: -5.8 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.18 dB	
Trace Mode = VIEW		

back to matrix

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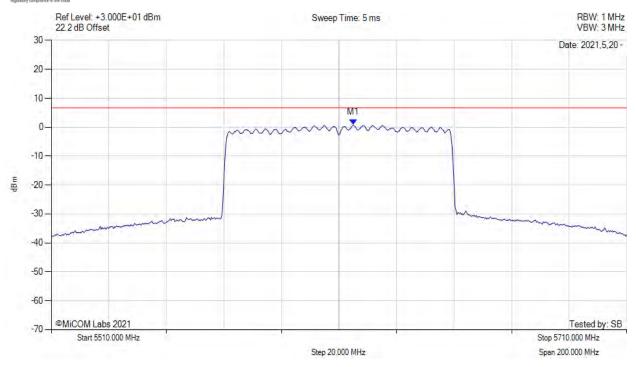
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5610.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5615.000 MHz: 0.833 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

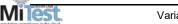
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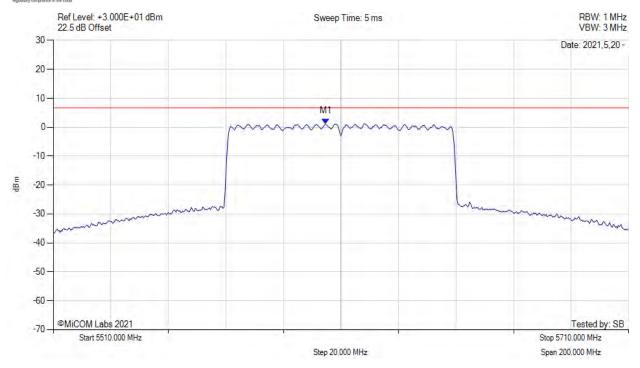
Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5610.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5604.700 MHz: 1.224 dBm	Channel Frequency: 5610.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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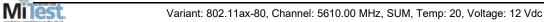
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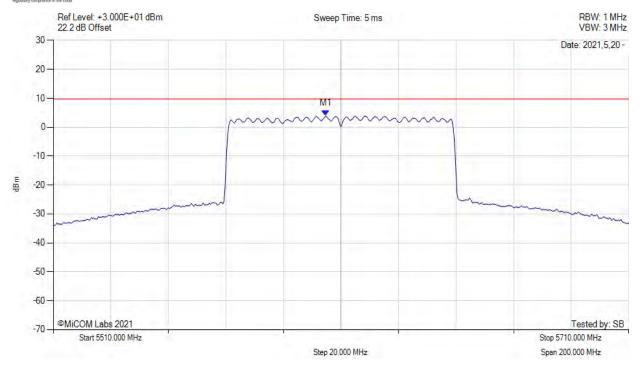


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5604.700 MHz : 3.921 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5604.700 MHz : 4.098 dBm	Margin: -5.6 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.18 dB	
Trace Mode = VIEW		· ·

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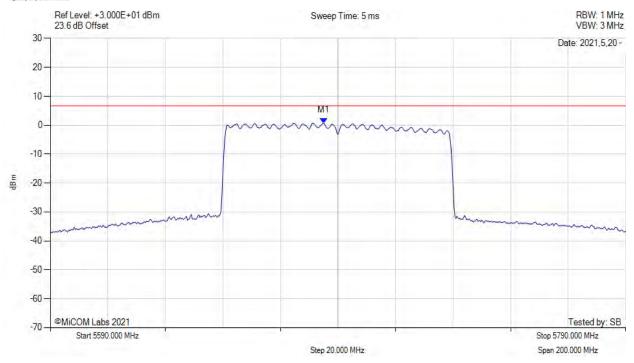
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### POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5690.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5685.000 MHz: 0.742 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

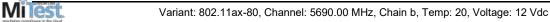
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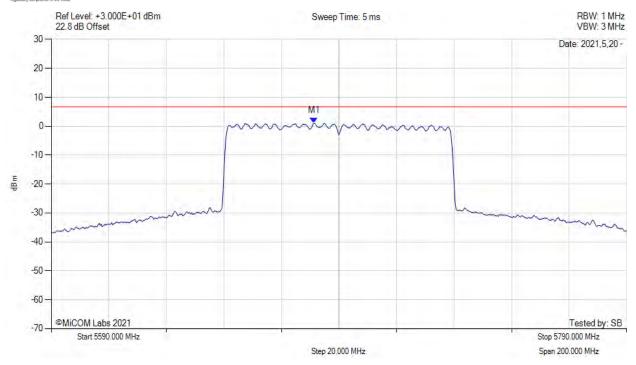


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5681.300 MHz : 1.027 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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Page:

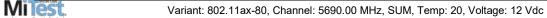
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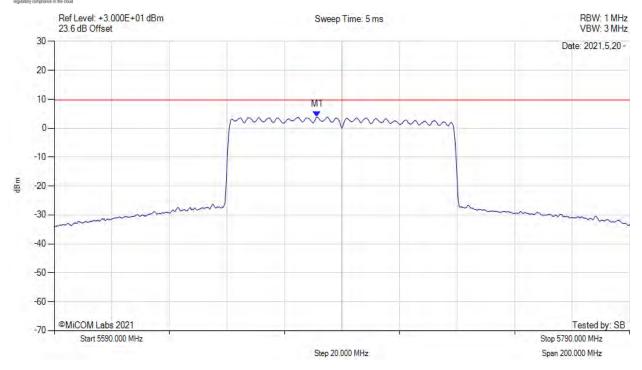


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5681.300 MHz : 3.884 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5681.300 MHz : 4.061 dBm	Margin: -5.6 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.18 dB	
Trace Mode = VIEW		

back to matrix

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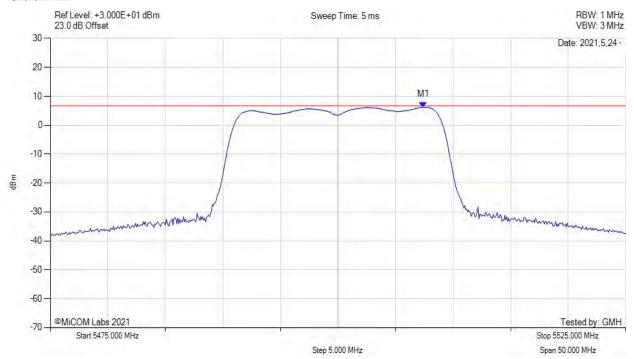
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5507.420 MHz: 6.237 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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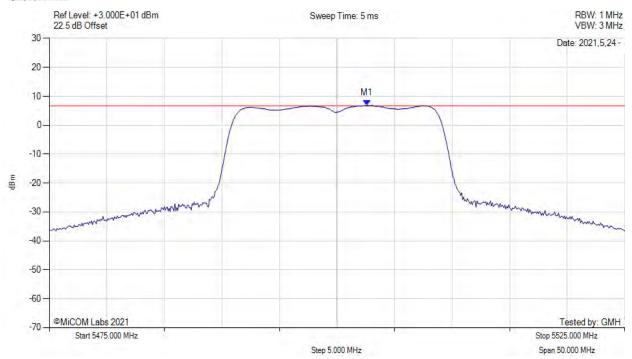


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5502.580 MHz: 6.866 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

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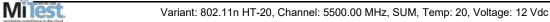
Title: Hewlet

Hewlett Packard Enterprise Company ASIN0304

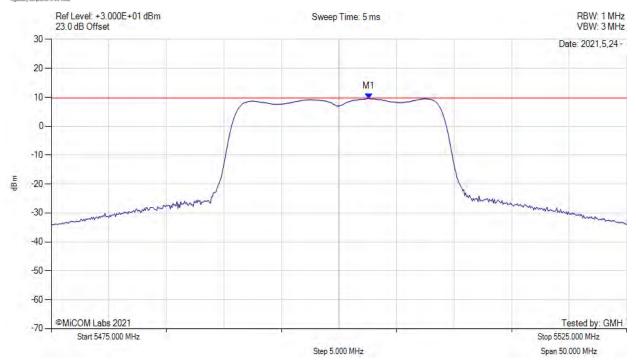
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HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Serial #:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5502.600 MHz: 9.539 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5502.600 MHz : 9.583 dBm	Margin: -0.1 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

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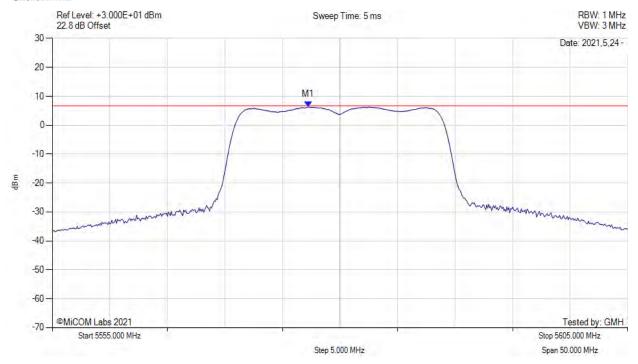
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### POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5577.250 MHz: 6.373 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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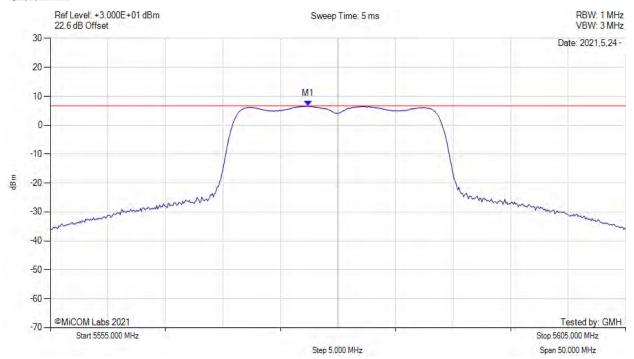
Hewlett Packard Enterprise Company ASIN0304

FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2 HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5577.420 MHz: 6.650 dBm	Channel Frequency: 5580.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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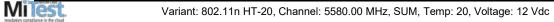
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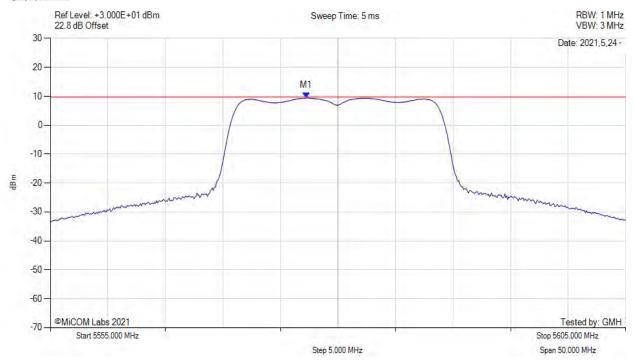


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#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5577.300 MHz: 9.429 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5577.300 MHz : 9.473 dBm	Margin: -0.2 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

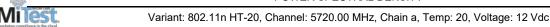
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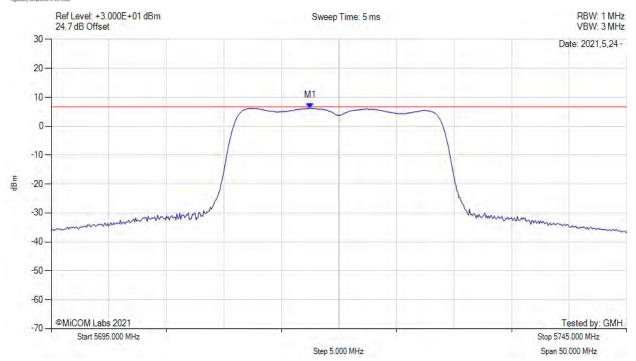


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100	M1 : 5717.500 MHz : 6.254 dBm	Channel Frequency: 5720.00 MHz
RF Atten (dB) = 30		
Trace Mode = VIEW		!

back to matrix

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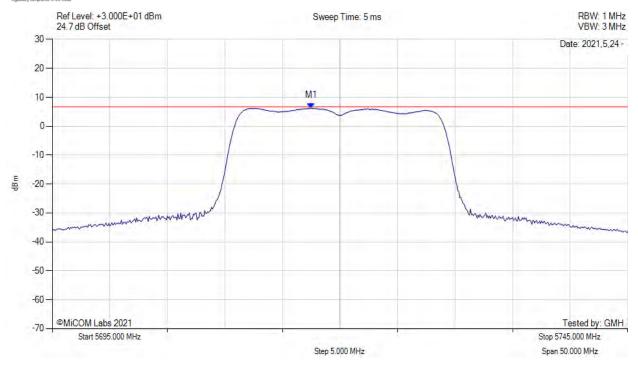
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### POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5720.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5717.500 MHz: 6.254 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

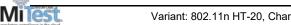
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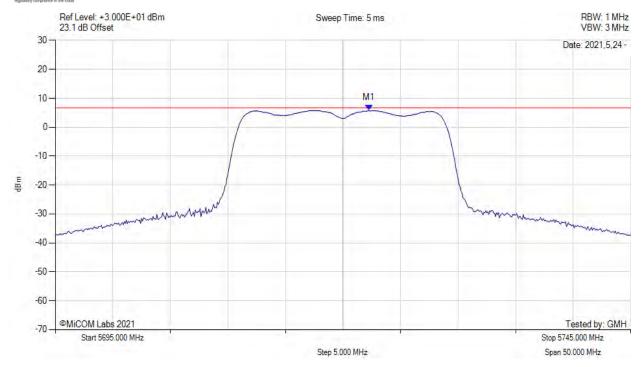
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### POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5720.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5722.250 MHz: 5.813 dBm	Channel Frequency: 5720.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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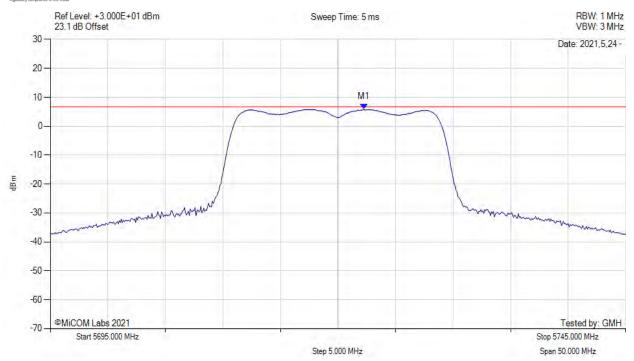
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### POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5720.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5722.250 MHz: 5.813 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

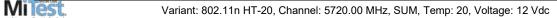
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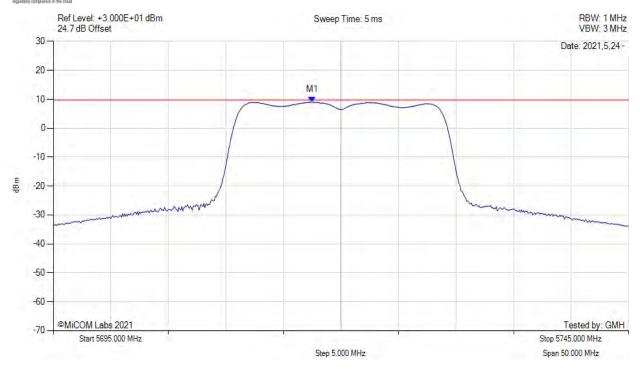


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#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5717.500 MHz: 8.991 dBm	Channel Frequency: 5720.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

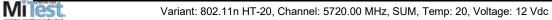
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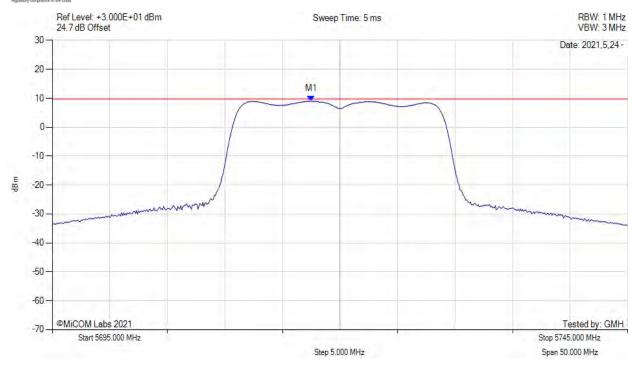


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5717.500 MHz: 8.991 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5717.500 MHz : 9.035 dBm	Margin: -0.7 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

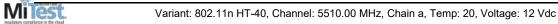
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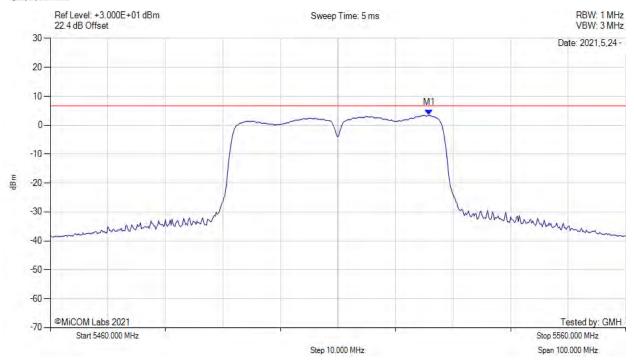


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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5525.830 MHz: 3.440 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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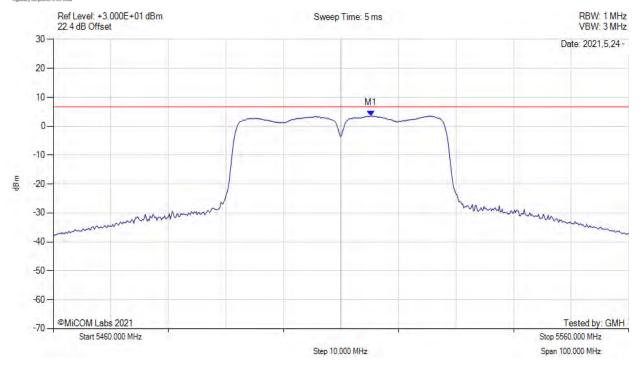
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### POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5515.170 MHz: 3.604 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIFW		

back to matrix

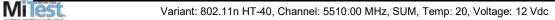
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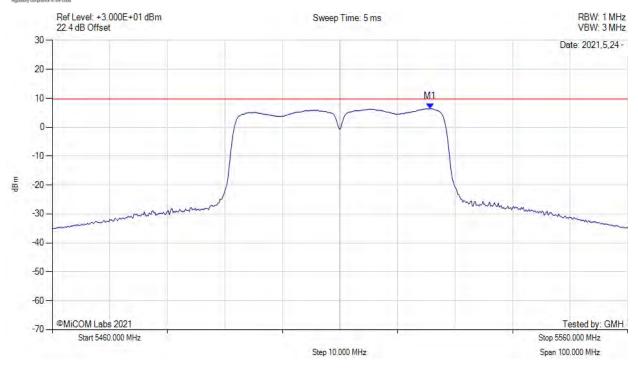


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5525.700 MHz: 6.440 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5525.700 MHz : 6.484 dBm	Margin: -3.2 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

back to matrix

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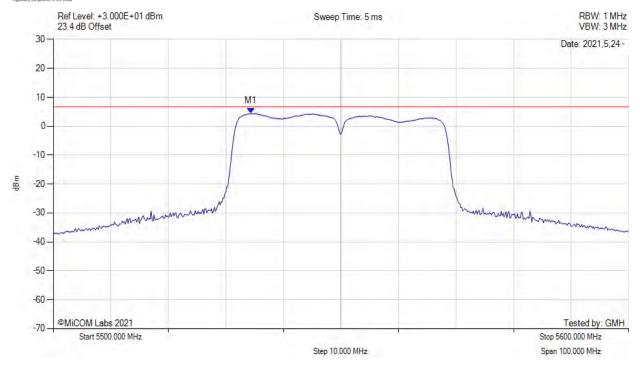
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5534.330 MHz : 4.414 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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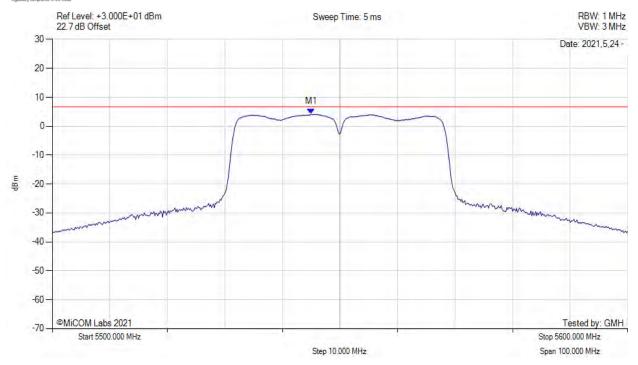
Serial #:

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5545.000 MHz: 4.176 dBm	Channel Frequency: 5550.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

 $25^{th}$  June 2021 Issue Date:

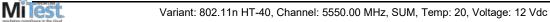
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5545.000 MHz: 7.181 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5545.000 MHz : 7.225 dBm	Margin: -2.5 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

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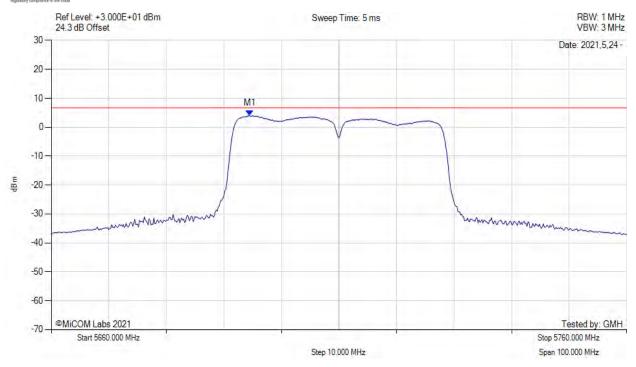
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5710.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5694.500 MHz: 4.045 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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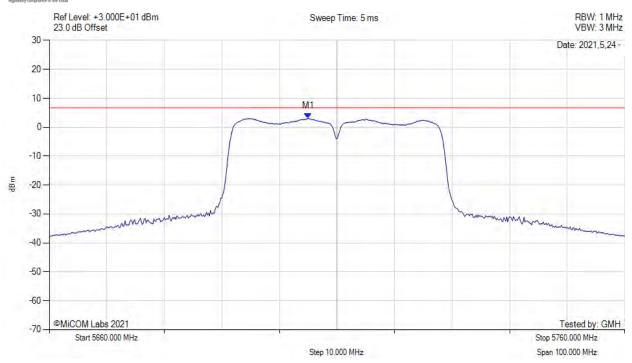
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5710.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5705.000 MHz: 3.075 dBm	Limit: ≤ 6.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

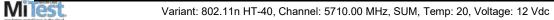
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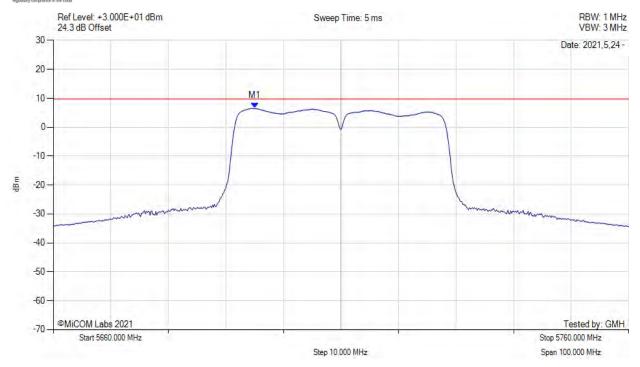


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5695.000 MHz: 6.522 dBm	Limit: ≤ 9.7 dBm
Sweep Count = +100	M1 + DCCF : 5695.000 MHz : 6.566 dBm	Margin: -3.1 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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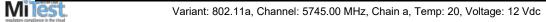
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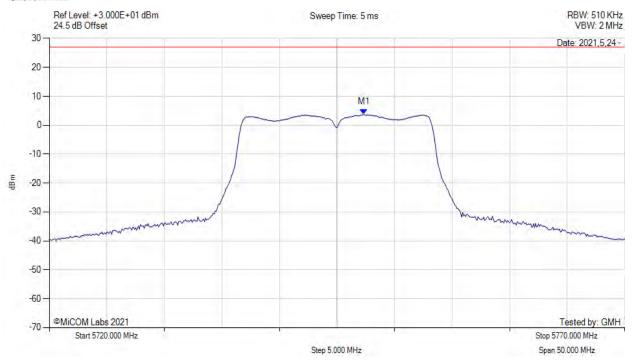
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Serial #:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5747.330 MHz: 3.692 dBm	Limit: ≤ 26.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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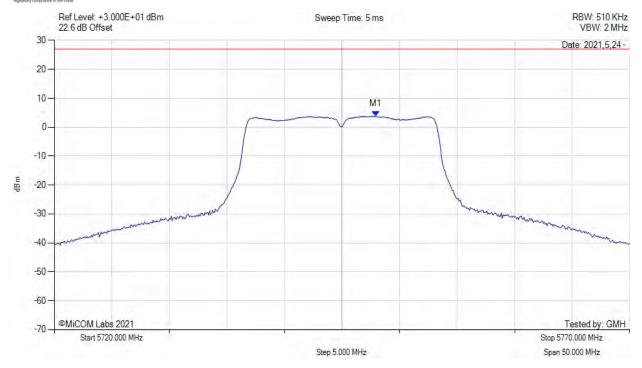


Serial #:

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5747.920 MHz: 3.776 dBm	Limit: ≤ 26.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

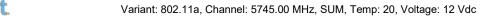
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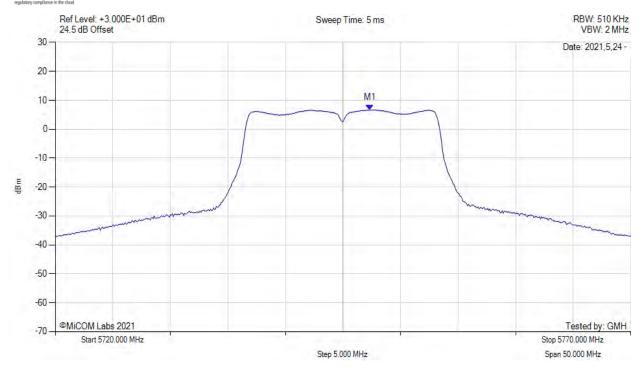


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5747.300 MHz: 6.676 dBm	Limit: ≤ 30.0 dBm
Sweep Count = +100	M1 + DCCF : 5747.300 MHz : 6.720 dBm	Margin: -23.3 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

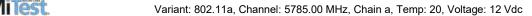
back to matrix

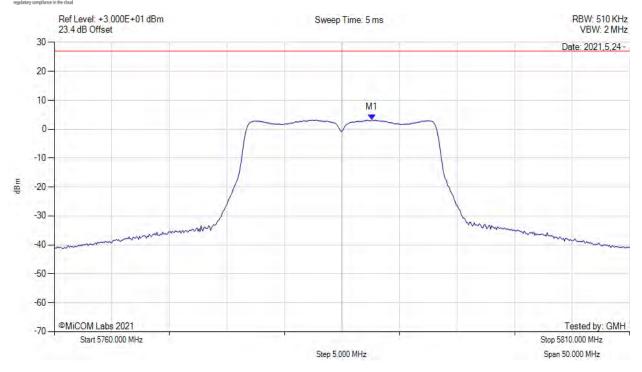
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5787.580 MHz: 3.218 dBm	Limit: ≤ 26.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

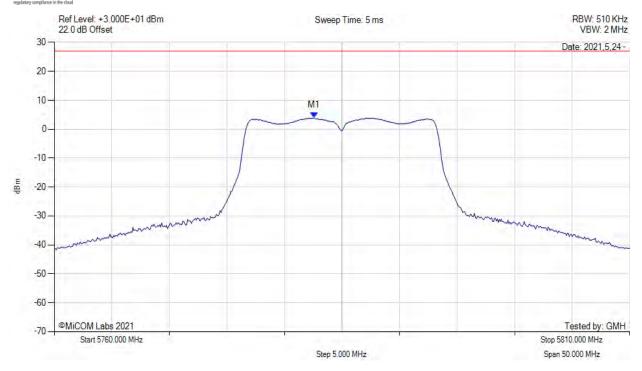
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5782.580 MHz: 3.979 dBm	Channel Frequency: 5785.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

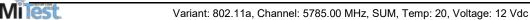
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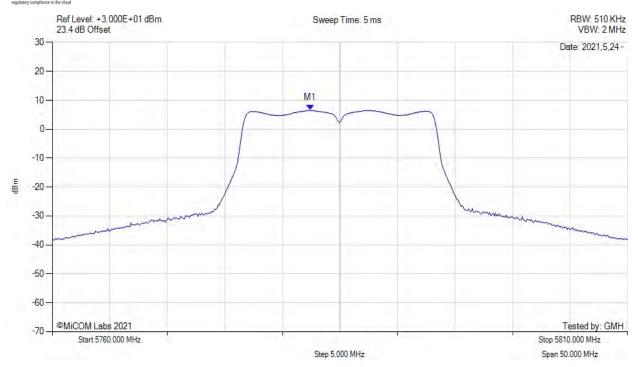


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5782.400 MHz: 6.533 dBm	Limit: ≤ 30.0 dBm
Sweep Count = +100	M1 + DCCF : 5782.400 MHz : 6.577 dBm	Margin: -23.4 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

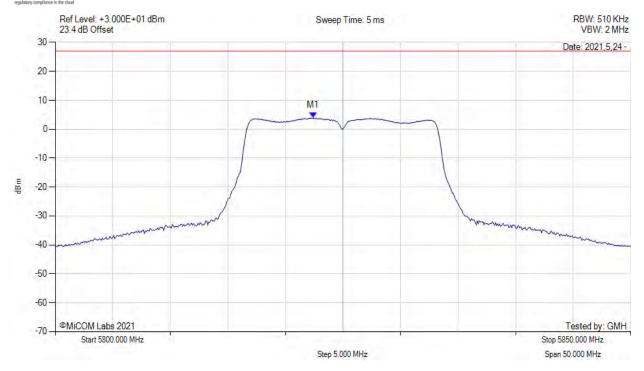
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5822.420 MHz: 3.932 dBm	Limit: ≤ 26.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

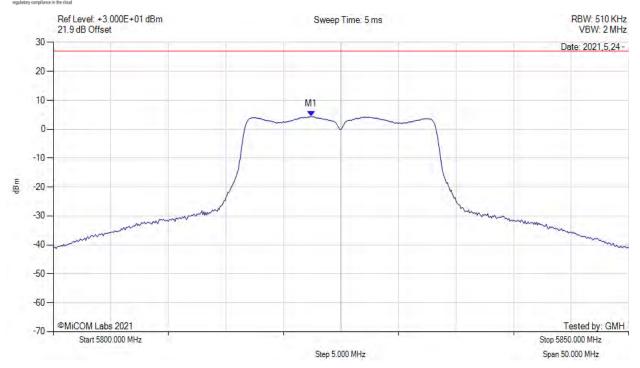
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5822.420 MHz: 4.368 dBm	Limit: ≤ 26.990 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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Title: |-

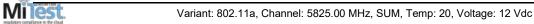
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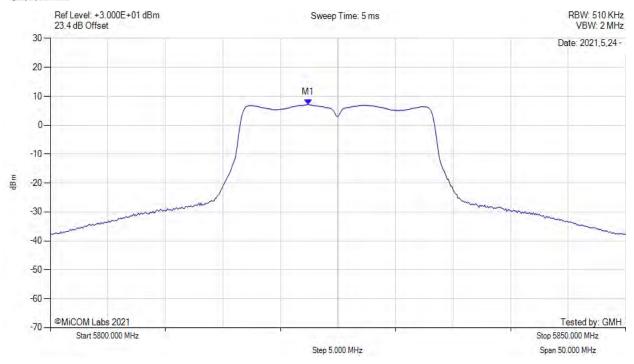
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HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5822.400 MHz: 7.166 dBm	Limit: ≤ 30.0 dBm
Sweep Count = +100	M1 + DCCF : 5822.400 MHz : 7.210 dBm	Margin: -22.8 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

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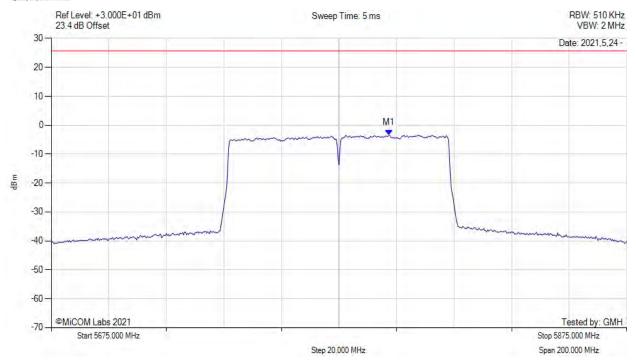
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ac-80, Channel: 5775.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5792.300 MHz: -3.405 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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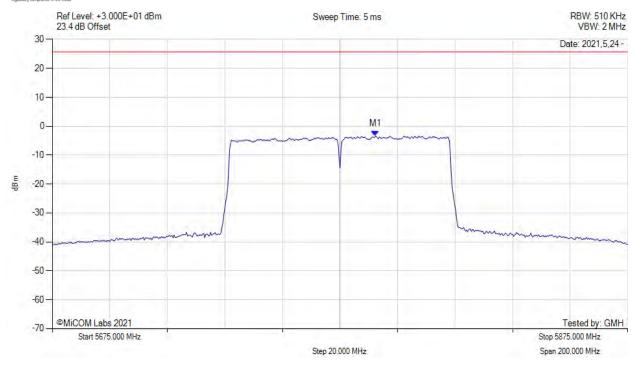
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ac-80, Channel: 5775.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5787.300 MHz: -3.457 dBm	Channel Frequency: 5775.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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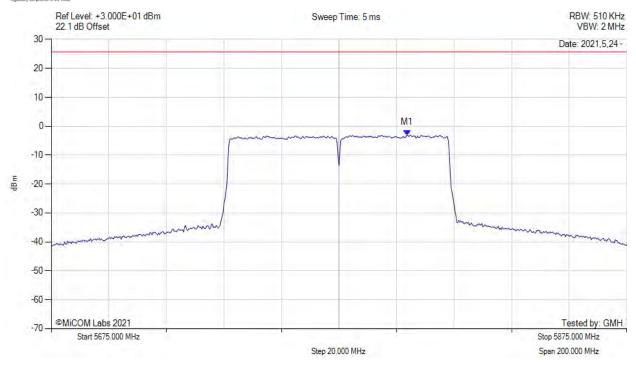
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ac-80, Channel: 5775.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100	M1 : 5798.700 MHz : -3.092 dBm	Channel Frequency: 5775.00 MHz
RF Atten (dB) = 30 Trace Mode = VIEW		

back to matrix

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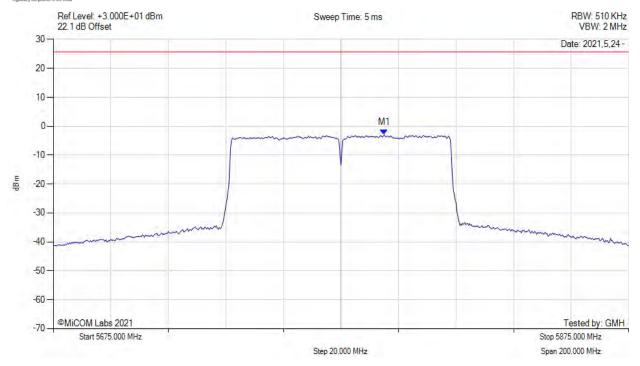
Serial #:

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ac-80, Channel: 5775.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5790.000 MHz: -2.986 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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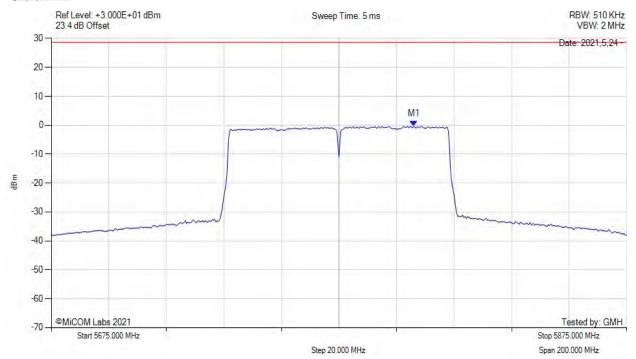
Serial #:

HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



### Variant: 802.11ac-80, Channel: 5775.00 MHz, SUM, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5801.000 MHz: -0.329 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5801.000 MHz : -0.285 dBm	Margin: -29.0 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

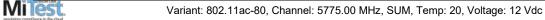
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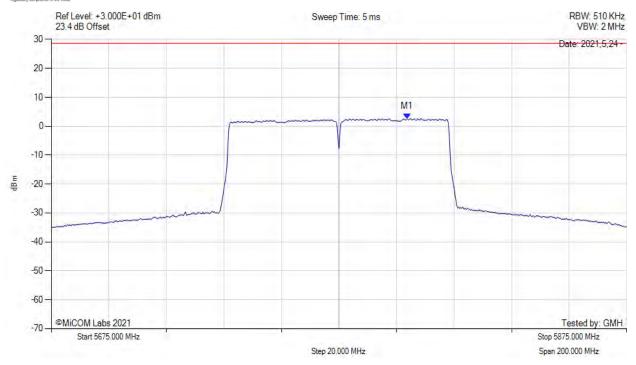


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### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5798.700 MHz: 2.611 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5798.700 MHz : 2.655 dBm	Margin: -26.1 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIFW		

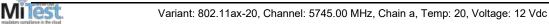
back to matrix

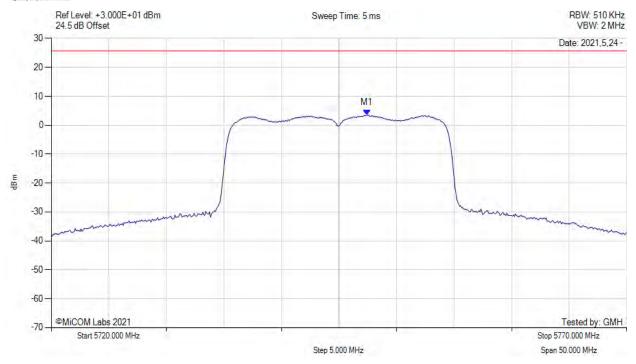
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Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5747.420 MHz: 3.523 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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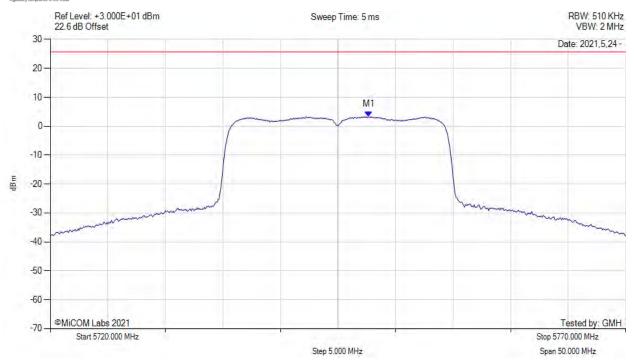
Hewlett Packard Enterprise Company ASIN0304 FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5745.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5747.670 MHz: 3.297 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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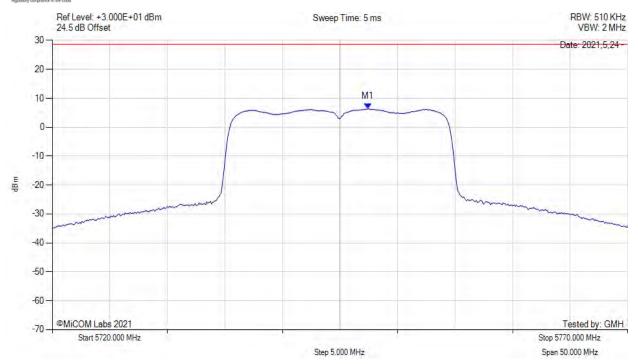
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5745.00 MHz, SUM, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5747.400 MHz: 6.352 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5747.400 MHz : 6.396 dBm	Margin: -22.3 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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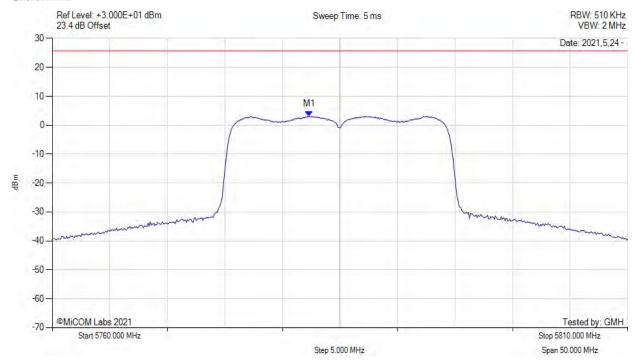
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HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5785.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5782.330 MHz: 3.109 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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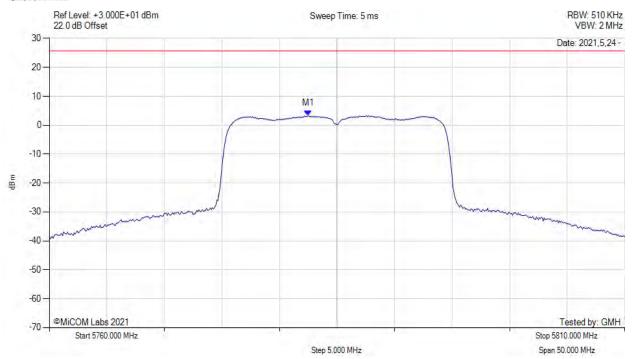


Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5785.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5782.500 MHz: 3.354 dBm	Channel Frequency: 5785.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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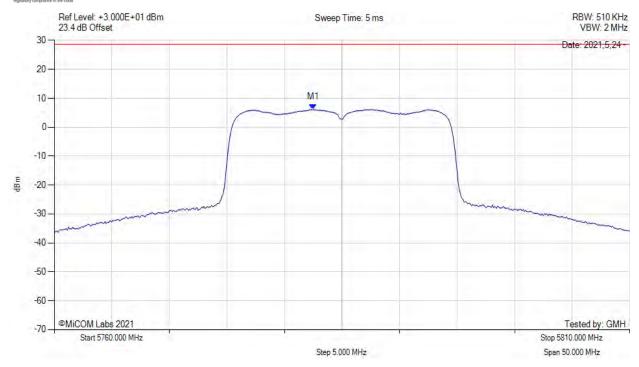
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5785.00 MHz, SUM, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5782.500 MHz : 6.172 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5782.500 MHz : 6.216 dBm	Margin: -22.5 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

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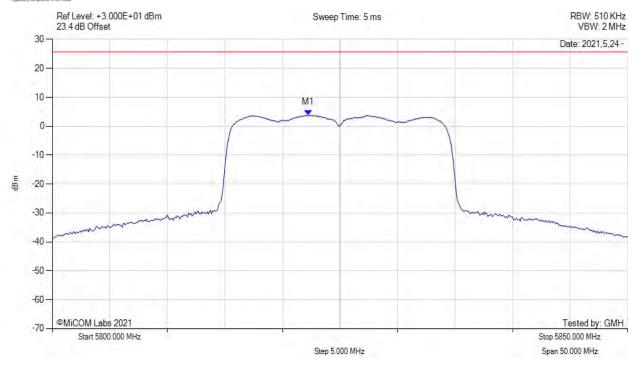
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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5825.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5822.250 MHz: 3.848 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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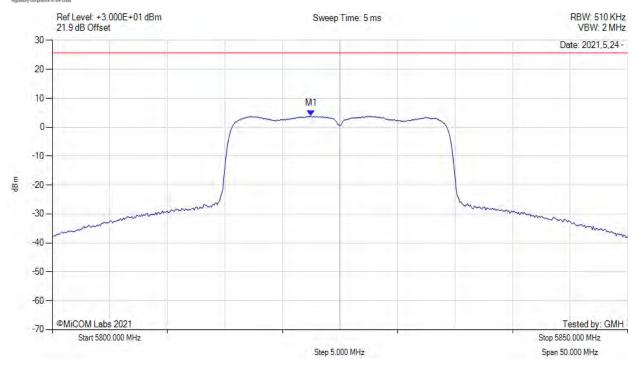
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-20, Channel: 5825.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5822.500 MHz: 3.887 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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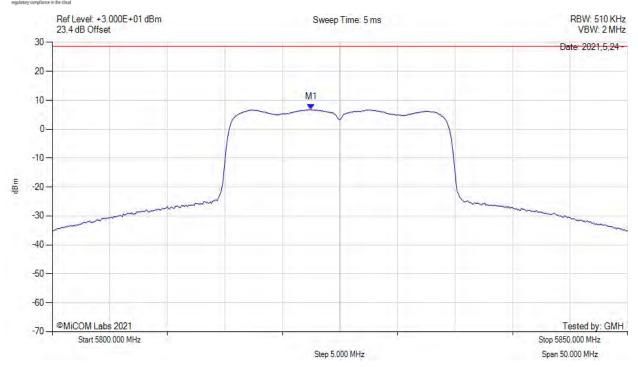


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Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5822.500 MHz: 6.792 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5822.500 MHz : 6.836 dBm	Margin: -21.9 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

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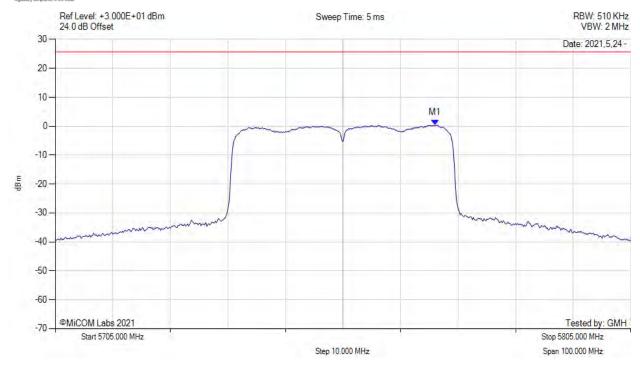
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5755.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5771.000 MHz: 0.387 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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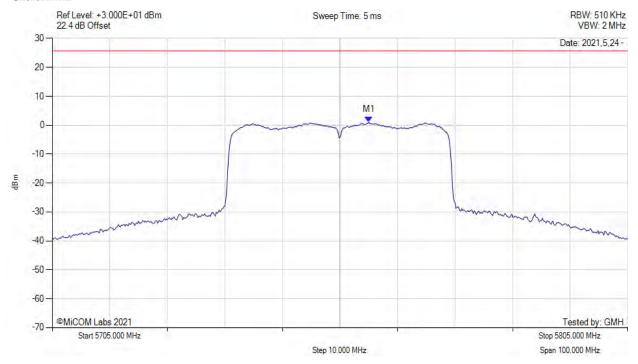


Serial #: HPEN155-U9 Rev A (UNII)

### POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5755.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5760.000 MHz: 1.118 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIFW		

back to matrix

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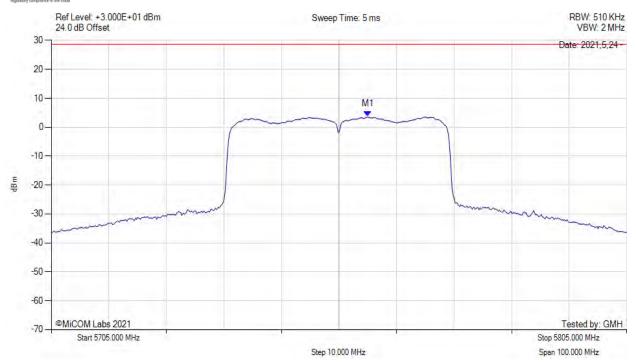
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5755.00 MHz, SUM, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5760.000 MHz: 3.636 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5760.000 MHz : 3.680 dBm	Margin: -25.0 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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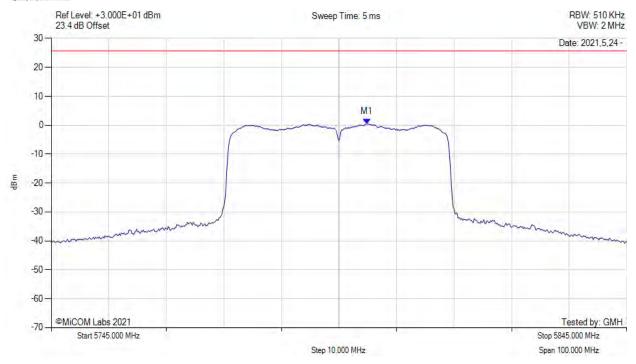


Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5795.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5799.830 MHz: 0.466 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

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Title: H

Serial #:

Hewlett Packard Enterprise Company ASIN0304

FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

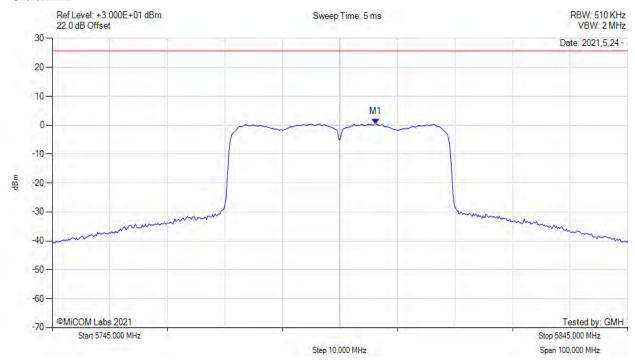
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HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ax-40, Channel: 5795.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1:5801.170 MHz:0.465 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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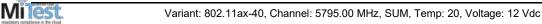
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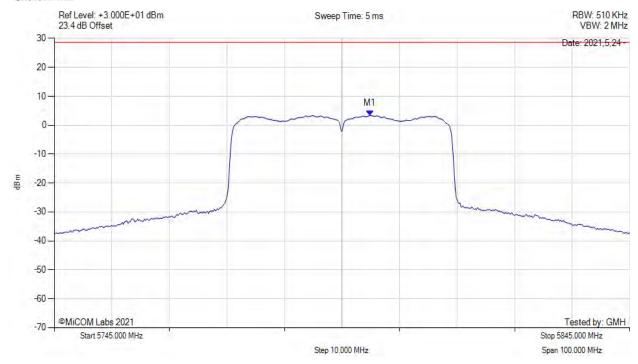


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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5799.800 MHz: 3.308 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5799.800 MHz : 3.352 dBm	Margin: -25.4 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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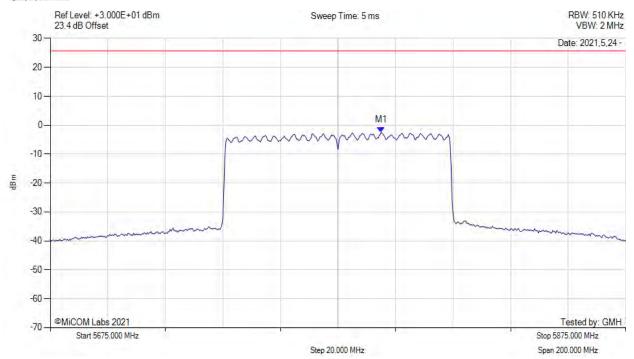


Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5775.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5790.000 MHz: -2.429 dBm	Channel Frequency: 5775.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

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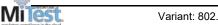
Serial #:

Hewlett Packard Enterprise Company ASIN0304

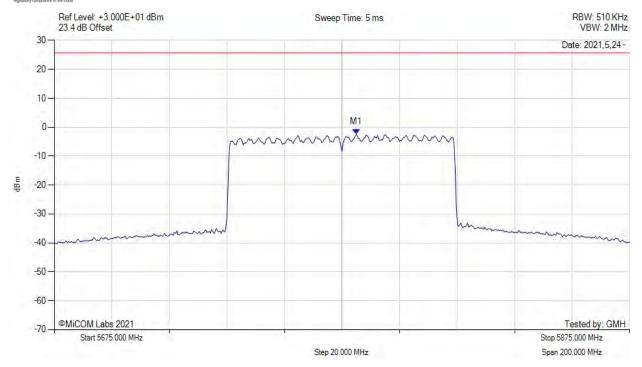
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HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5775.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5780.000 MHz: -2.445 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

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Issue Date: 25<sup>th</sup> June 2021

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Title:

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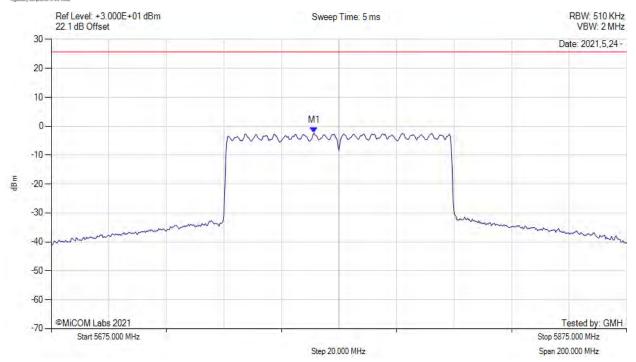
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5775.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5766.300 MHz: -2.316 dBm	Channel Frequency: 5775.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

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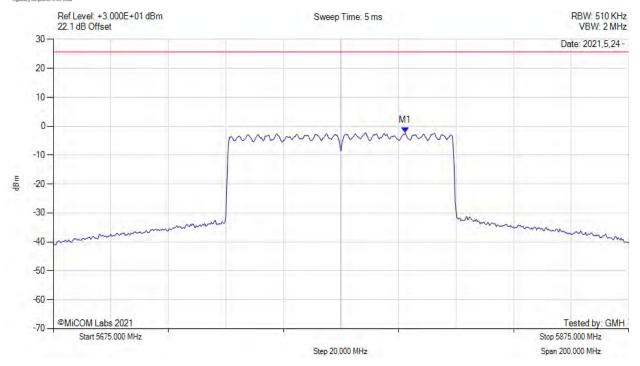
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11ax-80, Channel: 5775.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5797.300 MHz: -2.248 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

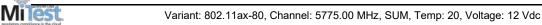
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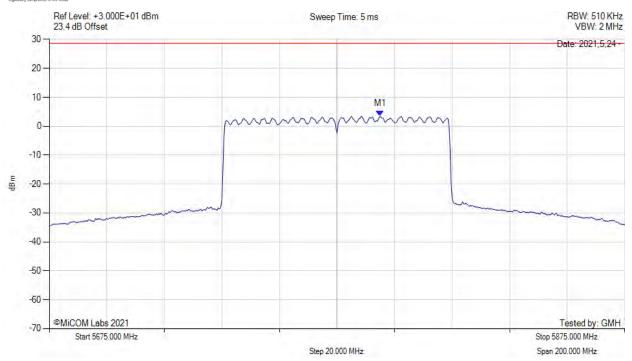
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HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Serial #:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5790.000 MHz: 3.488 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5790.000 MHz : 3.532 dBm	Margin: -25.2 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

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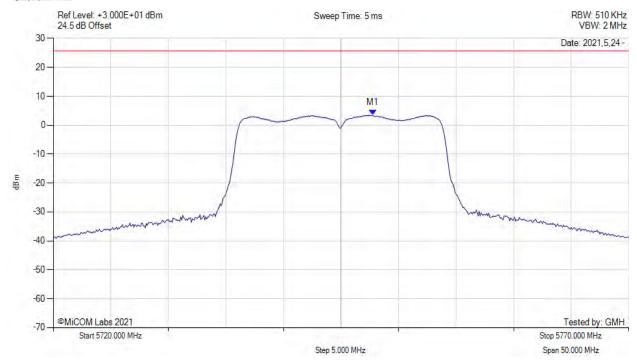


Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5745.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5747.750 MHz: 3.462 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

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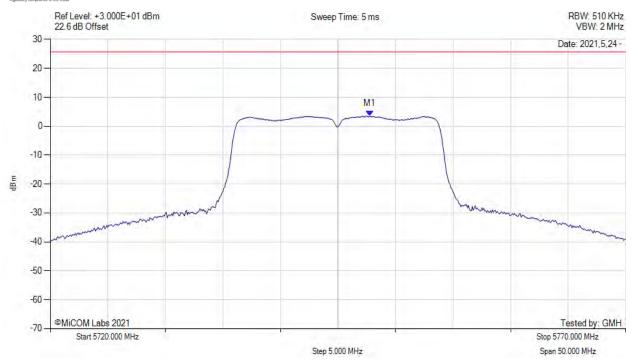
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5745.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5747.750 MHz: 3.458 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

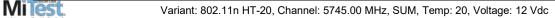
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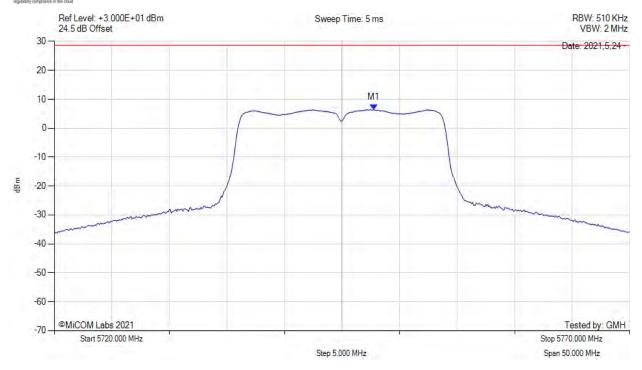
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Serial #: HPEN155-U9 Rev A (UNII)

# POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5747.800 MHz: 6.470 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5747.800 MHz : 6.514 dBm	Margin: -22.2 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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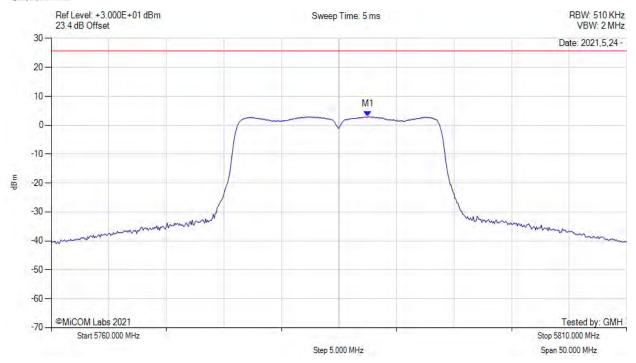
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5785.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5787.500 MHz: 2.957 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

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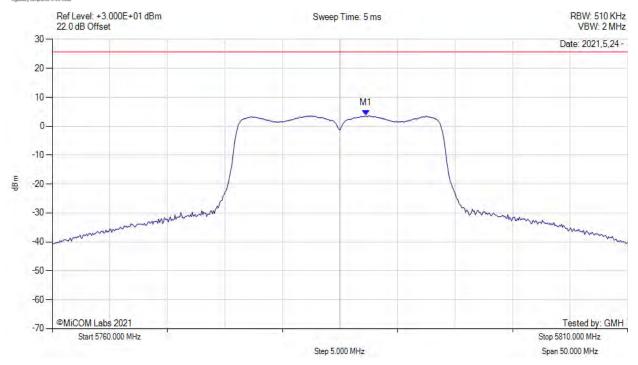
FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2

Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5785.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5787.250 MHz: 3.645 dBm	Channel Frequency: 5785.00 MHz
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

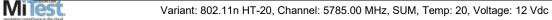
back to matrix

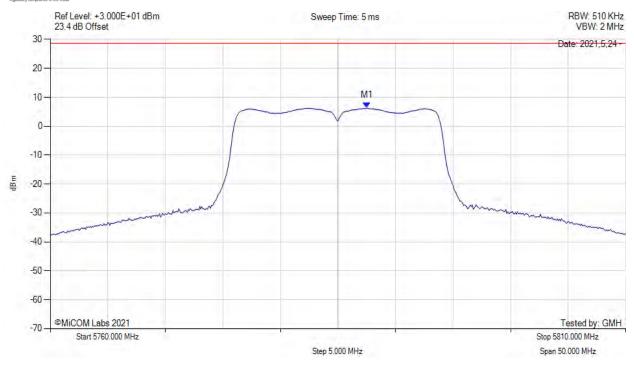
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5787.500 MHz: 6.320 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5787.500 MHz : 6.364 dBm	Margin: -22.3 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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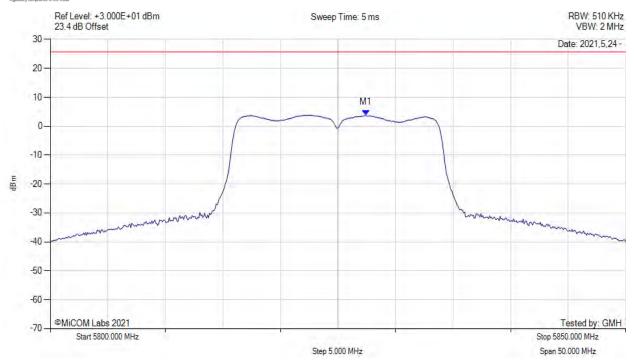
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5825.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5827.420 MHz: 3.859 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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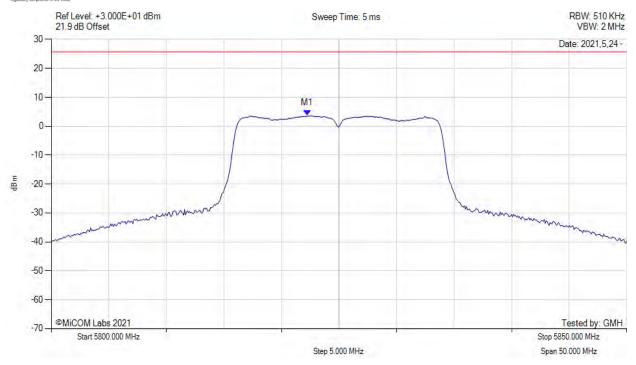
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-20, Channel: 5825.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5822.250 MHz : 3.642 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

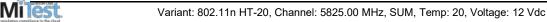
back to matrix

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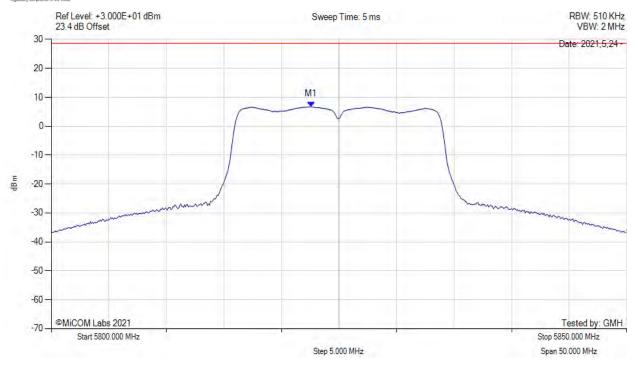


FCC Part 15 Subpart E 15.407, ISED RSS-247 Issue 2 HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Serial #:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5822.600 MHz: 6.725 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5822.600 MHz : 6.769 dBm	Margin: -21.9 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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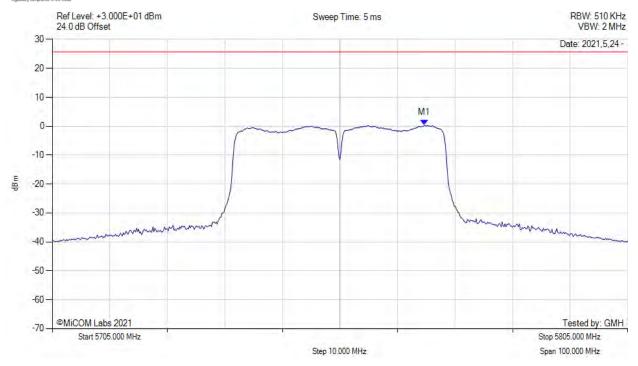
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5755.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5769.670 MHz: 0.309 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

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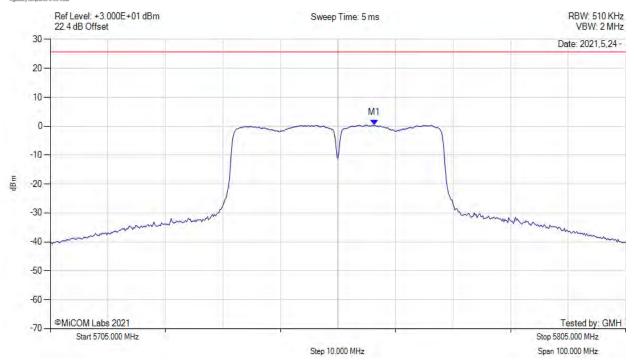


Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5755.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5761.330 MHz: 0.364 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

back to matrix

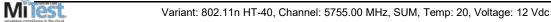
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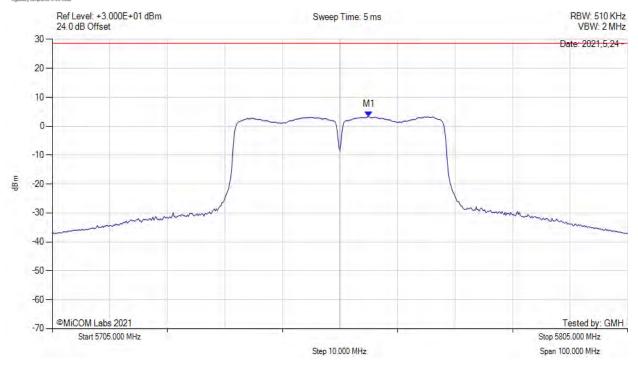


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Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY





Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1 : 5760.000 MHz : 3.309 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5760.000 MHz : 3.353 dBm	Margin: -25.4 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor : +0.04 dB	
Trace Mode = VIEW		

back to matrix

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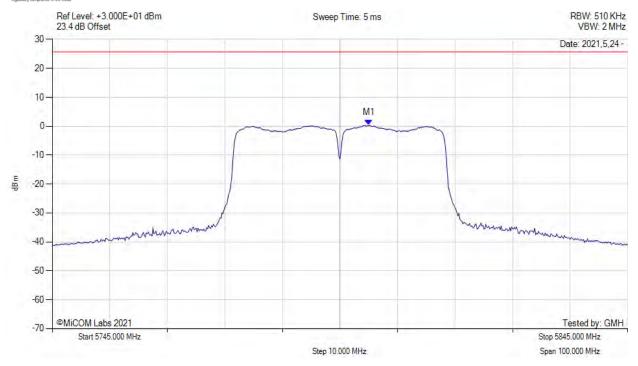
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Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5795.00 MHz, Chain a, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5800.000 MHz: 0.334 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIEW		

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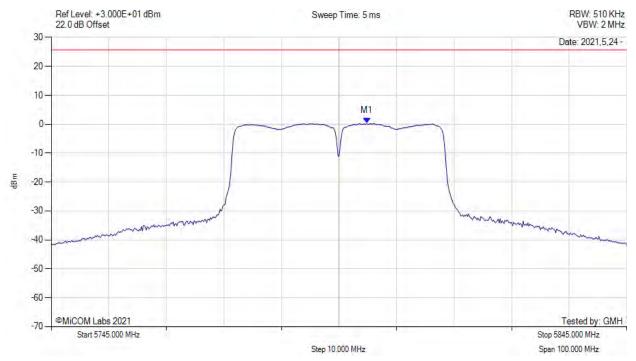


Serial #: HPEN155-U9 Rev A (UNII)

## POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5795.00 MHz, Chain b, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5799.830 MHz: 0.326 dBm	Limit: ≤ 25.690 dBm
Sweep Count = +100		
RF Atten (dB) = 30		
Trace Mode = VIFW		

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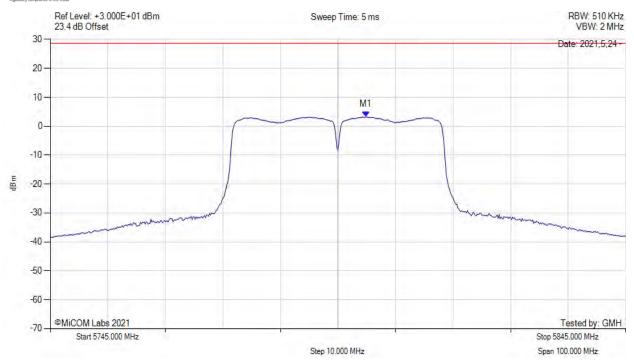
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Serial #: HPEN155-U9 Rev A (UNII)

#### POWER SPECTRAL DENSITY



Variant: 802.11n HT-40, Channel: 5795.00 MHz, SUM, Temp: 20, Voltage: 12 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER	M1: 5799.800 MHz: 3.256 dBm	Limit: ≤ 28.7 dBm
Sweep Count = +100	M1 + DCCF : 5799.800 MHz : 3.300 dBm	Margin: -25.4 dB
RF Atten (dB) = 30	Duty Cycle Correction Factor: +0.04 dB	
Trace Mode = VIEW		

back to matrix

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