## **80 PLUS Verification and Testing Report**

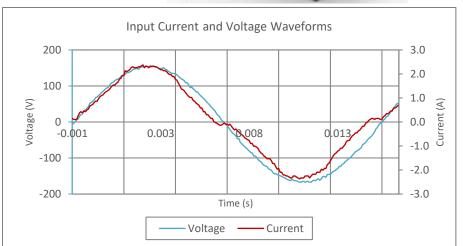
TYPICAL EFFICIENCY (50% Load):	92.00%	
AVERAGE EFFICIENCY: 80 PLUS COMPLIANT:	90.44% YES	



ID Number	5690
Manufacturer	HP, Inc.
Model Number	D19-310P1A
Serial Number	F3A0111936000033
Year	2019
Туре	CUSTOM
Test Date	10/2/19

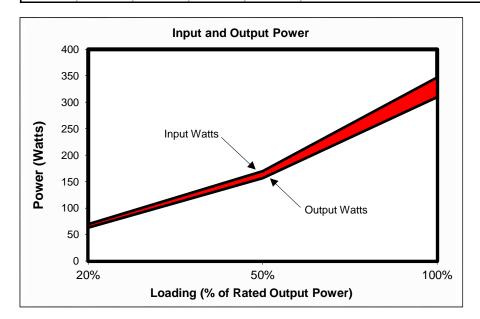
Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	4	Amps
Input Frequency	50-60	Hz
Rated Output Power	310	Watts

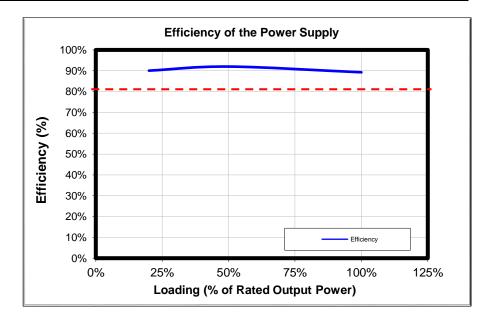
Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.



Input AC Current Waveform (ITHD = 15.3%, 50% Load)

1	PF	<b>I</b>	Load	Input	DC Terminal Voltage (V)/ DC Load Current (A)	Output	Efficiency
IRMS	FF	ITHD	Luau	Watts	12.1V (cumulative of 12V1, 12V2, etc.)	Watts	Efficiency
0.34	0.93	21.61%	10%	36.01	12.26/2.57	31.48	87.43%
0.63	0.96	19.28%	20%	69.80	12.23/5.14	62.85	90.05%
1.50	0.98	15.30%	50%	170.00	12.16/12.86	156.40	92.00%
3.03	1.00	6.35%	100%	346.90	12.04/25.71	309.64	89.26%







These tests were conducted by a third party independent testing firm on behalf of the 80 PLUS Program. 80 PLUS is a certification program to promote highly-efficient power supplies (greater than 80% efficiency in the active mode) in technology applications. <a href="http://www.80plus.org/">http://www.80plus.org/</a>

