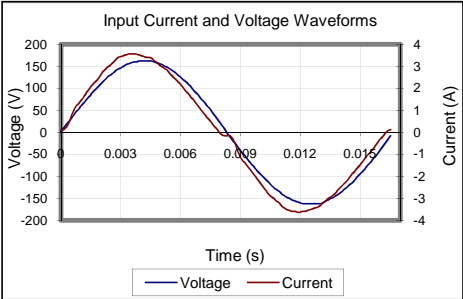


# 80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	90.51%
AVERAGE EFFICIENCY :	88.83%
80 PLUS COMPLIANT:	YES



Ecos ID #	1588
Manufacturer	HEWLETT PACKARD
Model Number	PS-4241-9HA
Serial Number	5ALULOAM7XOOLH
Year	2009
Type	CUSTOM
Test Date	8/18/2009

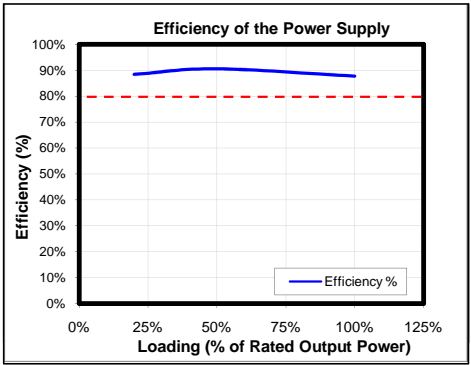
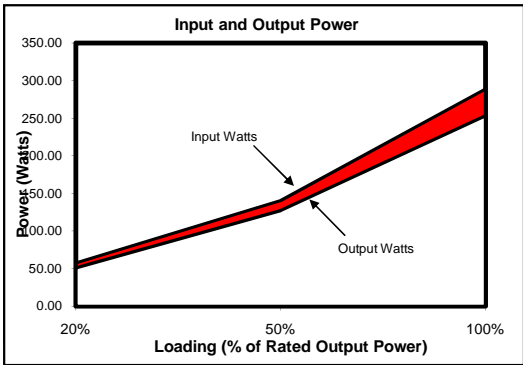


Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	4	Amps
Input Frequency	50-60	Hz
Rated Output Power	240	Watts

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

Input AC Current Waveform (ITHD = 10.57%, 50% Load)

I <sub>RMS</sub> A	PF	I <sub>THD</sub> (%)	Load (%)	Fraction of Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)			Output Watts	Efficiency %
						12V (cumulative of 12V1, 12V2, etc.)	-12V	12VSB		
0.53	0.9536	16.67%	20%	Light	57.66	12.3/3.9	11.8/0	12.3/0.3	50.94	88.34%
1.24	0.9864	10.57%	50%	Typical	140.72	12.2/9.7	11.8/0.1	12.3/0.6	127.36	90.51%
2.52	0.9955	7.14%	100%	Full	289.10	12.2/19.4	11.9/0.1	12.2/1.3	253.41	87.65%



These tests were conducted as a part of the 80 PLUS program. 80 PLUS is a computer buy-down program to promote high-efficiency power supplies (greater than 80% efficiency in the active mode) in desktop computers and desktop-derived servers.



Tested by Electric Power Research Institute, Knoxville, TN.