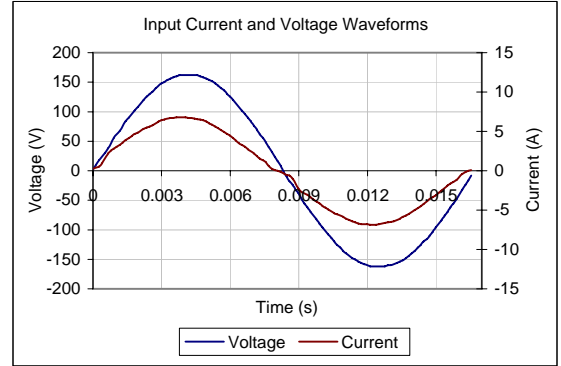


# 80 PLUS Verification and Testing Report



<b>TYPICAL EFFICIENCY (50% Load):</b>	<b>84.89%</b>
<b>AVERAGE EFFICIENCY :</b>	<b>83.26%</b>
<b>80 PLUS COMPLIANT:</b>	<b>YES</b>

<b>Ecos ID #</b>	637
<b>Manufacturer</b>	HIGH POWER
<b>Model Number</b>	HP-450-G14S(C)
<b>Serial Number</b>	NA
<b>Year</b>	2008
<b>Type</b>	ATX12V
<b>Test Date</b>	4/30/2008

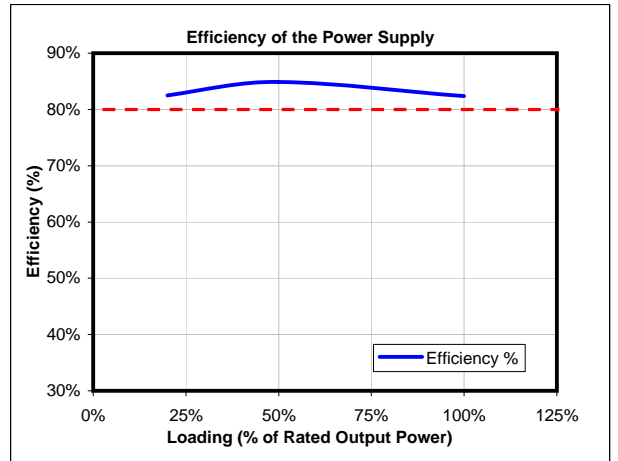
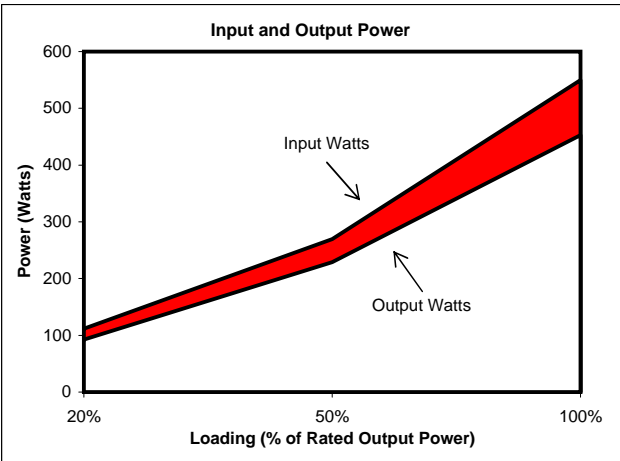


Input AC Current Waveform (ITHD = 9.14%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	8	Amps
Input Frequency	50-60	Hz
<b>Rated Output Power</b>	<b>450</b>	<b>Watts</b>

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

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	3.3V	5V*			5VSB
1.00	0.97	18.3%	20%	Light	112	12.3/5.3	12.1/0	3.4/2.9	5.1/2.9	5.1/0.4	92	82.52%
2.39	0.98	9.1%	50%	Typical	270	12.3/13.3	12.2/0.1	3.3/7.2	5/7.2	5.1/1	229	84.89%
4.80	1.00	4.3%	100%	Full	550	12.3/26.6	12.4/0.2	3.2/14.3	4.8/14.3	4.9/2	453	82.36%



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. <http://www.80plus.org/>

