

# 80 PLUS Verification and Testing Report

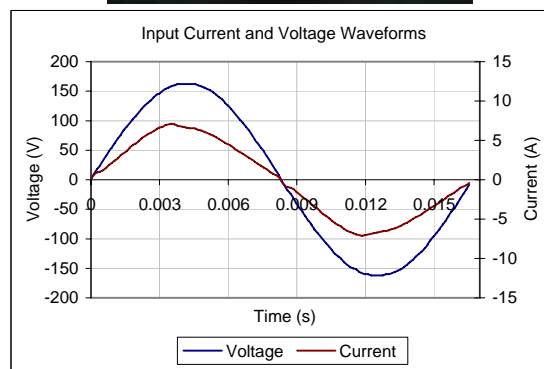
**TYPICAL EFFICIENCY (50% Load):** 85.98%  
**AVERAGE EFFICIENCY :** 84.09%  
**80 PLUS COMPLIANT:** YES



Ecos ID #	943.1
Manufacturer	SPI
Model Number	SPI450ACA8
Serial Number	NA
Year	2008
Type	ATX12V
Test Date	9/26/2008

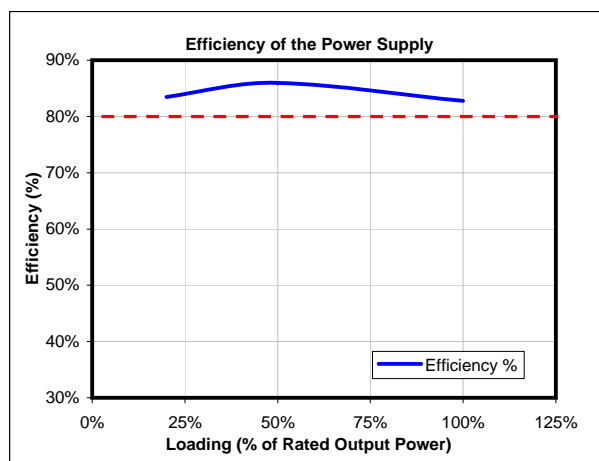
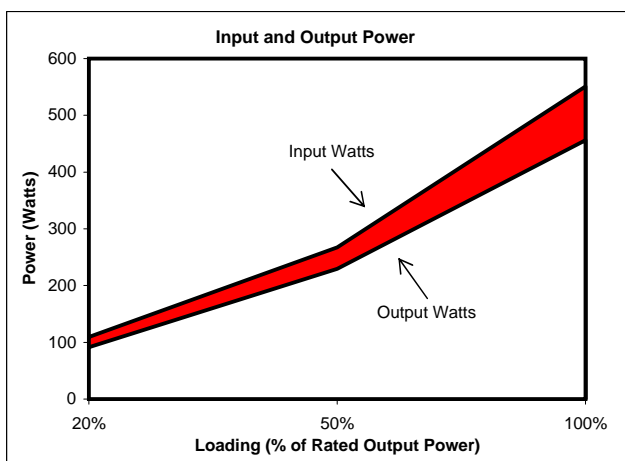
Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	7-3.5	Amps
Input Frequency	50-60	Hz
Rated Output Power	450	Watts

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



Input AC Current Waveform (ITHD = 9.46%, 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	3.3V	5V*	5VSB		
0.96	0.99	12.0%	20%	Light	110	12.2/5.5	12.1/0	3.4/3.4	5.1/2.1	5.1/0.5	91	83.48%
2.34	0.99	9.5%	50%	Typical	267	12.3/13.6	12.2/0.1	3.4/8.4	5.1/5.3	5.1/1.1	230	85.98%
4.80	1.00	6.2%	100%	Full	551	12.2/27.3	12.3/0.3	3.3/16.8	5/10.5	5/2.3	456	82.80%



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/>

