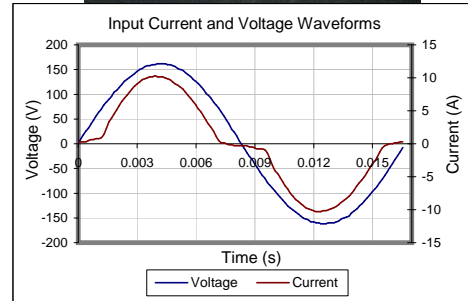


# 80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	86.87%
AVERAGE EFFICIENCY :	85.19%
80 PLUS COMPLIANT:	YES



Ecos ID #	1169.1
Manufacturer	ULTRA PRODUCTS
Model Number	X4-600W
Serial Number	N/A
Year	2008
Type	ATX12V
Test Date	12/1/2008

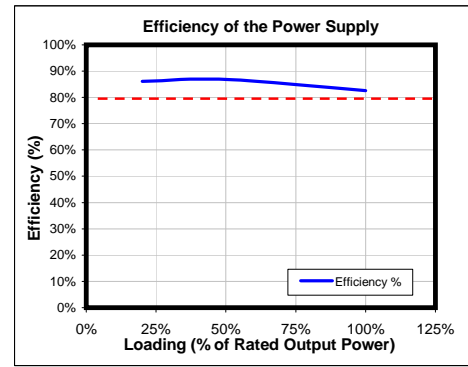
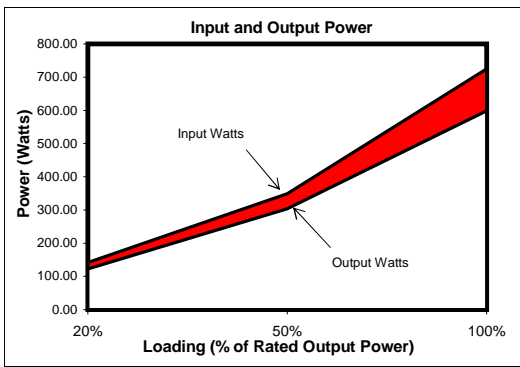


Input AC Current Waveform (ITHD = 30.55%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	115-230	Volts
Input Current	12/8	Amps
Input Frequency	50/60	Hz
<b>Rated Output Power</b>	<b>600</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.)									
1.28	0.9659	1.86%	20%	Light	142.10	12.2/8.4				11.1/0.1	3.3/2.4	5.1/1.6	5.1/0.5	122.39	86.13%
3.20	0.9492	30.55%	50%	Typical	349.32	12.1/21				11.1/0.2	3.3/6	5.1/4	5.1/1.2	303.46	86.87%
6.51	0.9675	24.42%	100%	Full	724.50	11.9/41.9				11/0.5	3.3/12	5.1/8	5/2.5	598.19	82.57%



These tests were conducted as a part 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 computing technology applications.



Tested by Electric Power Research Institute, Knoxville, TN.