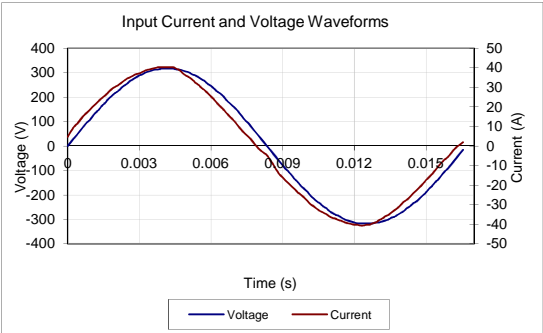


# 80 PLUS Verification and Testing Report

<b>TYPICAL EFFICIENCY (50% Load):</b>	<b>96.37%</b>
<b>AVERAGE EFFICIENCY :</b>	<b>95.40%</b>
<b>80 PLUS COMPLIANT:</b>	<b>YES</b>



<b>Ecos ID #</b>	SO-857.1
<b>Manufacturer</b>	Super Micro Computer, Inc.
<b>Model Number</b>	PWS-1K23A-1R
<b>Serial Number</b>	N/A
<b>Year</b>	2014
<b>Type</b>	1U
<b>Test Date</b>	12/04/14



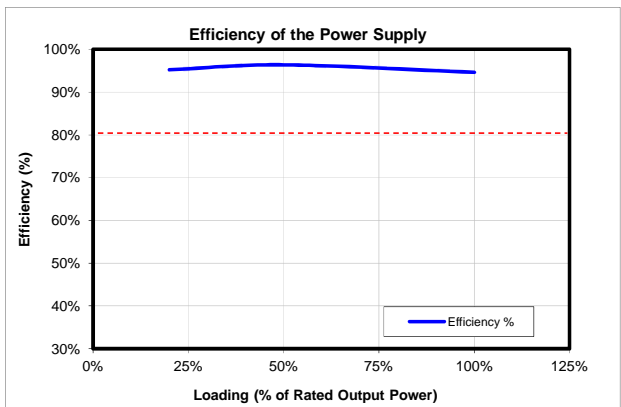
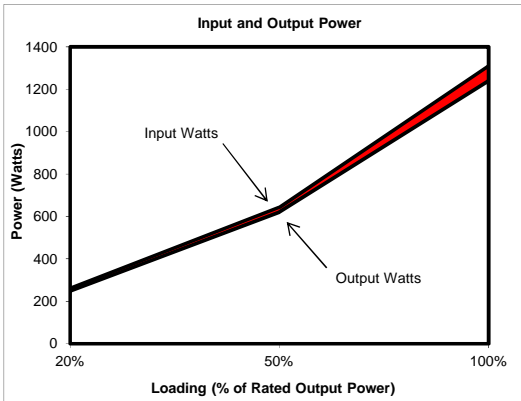
Input AC Current Waveform (ITHD = 2.76%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	<b>100-127 / 200-240</b>	Volts
Input Current	<b>15-12 / 8.5-7</b>	Amps
Input Frequency	<b>50-60</b>	Hz
<b>Rated Output Power</b>	<b>1,200</b>	<b>Watts</b>

Note: All measurements were taken with input voltage at 230 V nominal and 60 Hz.

I <sub>RMS</sub> A	PF	I <sub>THD</sub> (%)	Load (%)	Fraction of Load	Input Watts	External Fan (W)*	DC Terminal Voltage (V)/ DC Load Current (A)		Output Watts	Efficiency %
							12V	5Vsb		
0.67	0.86	10.71	10%	Low	133	2.86	12.17/9.83	5.13/0.39	122	91.79%
1.20	0.95	8.15	20%	Light	261	3.09	12.42/19.72	5.13/0.79	249	95.21%
2.85	0.98	2.76	50%	Typical	644	3.09	12.38/49.28	5.12/1.96	620	96.37%
5.74	0.99	1.40	100%	Full	1311	3.21	12.38/98.59	5.1/3.92	1240	94.62%

\* Fan power is not included in the efficiency calculations



These tests were conducted by a third party independent testing firm on behalf of the 80 PLUS<sup>®</sup> 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/>

