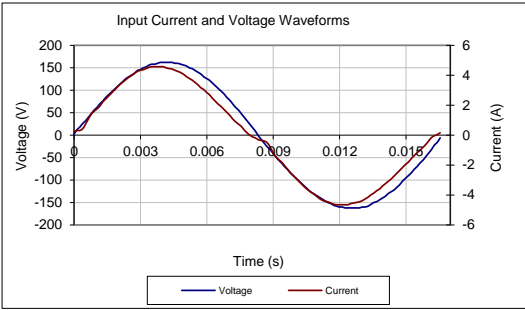


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	92.00%
AVERAGE EFFICIENCY :	90.48%
80 PLUS COMPLIANT:	YES



ID #	2800.1
Manufacturer	SHARKOON Technologies GmbH
Model Number	SilentStorm Cool Zero 650
Serial Number	N/A
Year	2011
Type	ATX12V
Test Date	10/5/2011

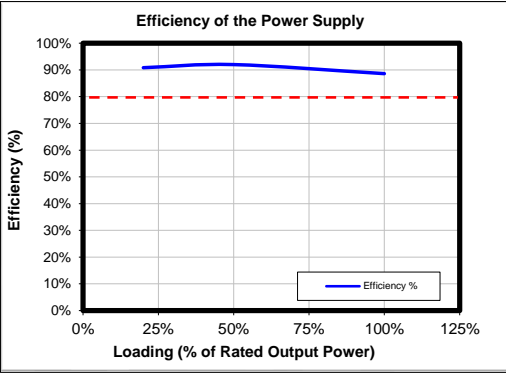
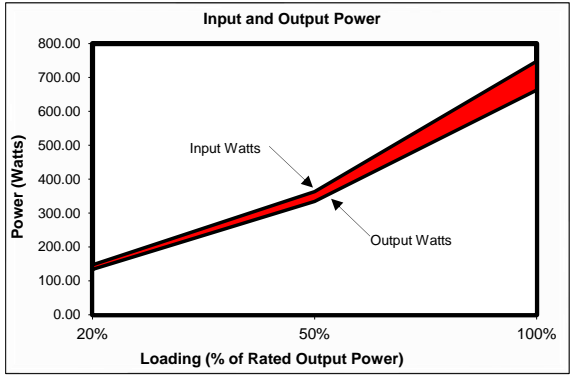


Input AC Current Waveform (ITHD = 7.71%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	4.4	Amps
Input Frequency	50-60	Hz
Rated Output Power	650	Watts

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

I _{RMS} A	PF	I _{THD} (%)	Load (%)	Fraction of Load	Input Watts	DC Terminal Voltage (V) / DC Load Current (A)				Output Watts	Efficiency %	
						12V (cumulative of 12V1, 12V2, etc.)						
1.31	0.98	13.18%	20%	Light	147.42	12.4/8.9	11.8/0.1	3.3/2.4	5.1/2.4	5.2/0.5	133.90	90.83%
3.18	0.99	7.71%	50%	Typical	363.40	12.3/22.3	11.8/0.2	3.3/5.9	5.1/6	5.1/1.2	334.32	92.00%
6.52	1.00	4.71%	100%	Full	747.90	12.2/44.6	12/0.4	3.3/11.8	5/11.9	5.1/2.5	662.70	88.61%



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/>

