80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	86.35%
AVERAGE EFFICIENCY :	84.37%
80 PLUS COMPLIANT:	YES

Ecos ID #	3533.2
Manufacturer	Be Quiet!
Model Number	SU9-500W
Serial Number	N/A
Year	2013
Type	ATX12V
Test Date	4/9/13

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	8	Amps
Input Frequency	47-63	Hz
Rated Output Power	500	Watts

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

Input Current and Voltage Waveforms
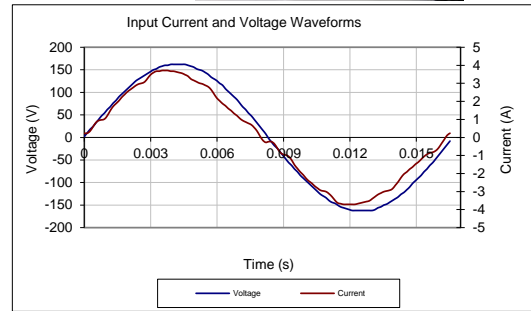
Input AC Current Waveform (ITHD = 8.37%, 50% Load)

I_{RMS} A	PF	I_{THD} (%)	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		
0.59	0.96	18.33%	10%	65.70	11.9/3.3	11.6/0	3.4/1.1	5.1/1.2	5.1/0.2	50.14	76.32%
1.07	0.98	13.39%	20%	120.61	11.9/6.6	11.6/0.1	3.4/2.1	5.1/2.4	5.1/0.4	100.18	83.06%
2.54	0.99	8.37%	50%	290.00	11.9/16.4	11.7/0.1	3.4/5.3	5.1/5.9	5/1.1	250.41	86.35%
5.23	0.99	6.22%	100%	598.20	12/32.8	11.9/0.3	3.4/10.6	5/11.8	5/2.1	500.75	83.71%

Input and Output Power

Efficiency of the Power Supply

PLUG LOAD solutions
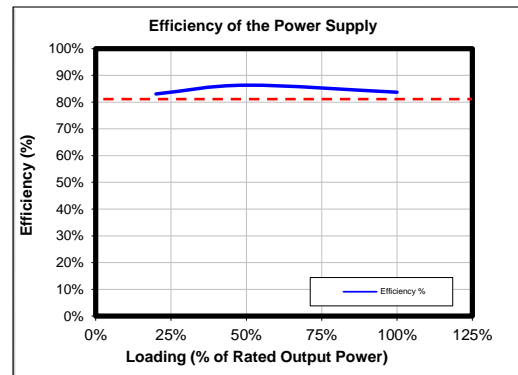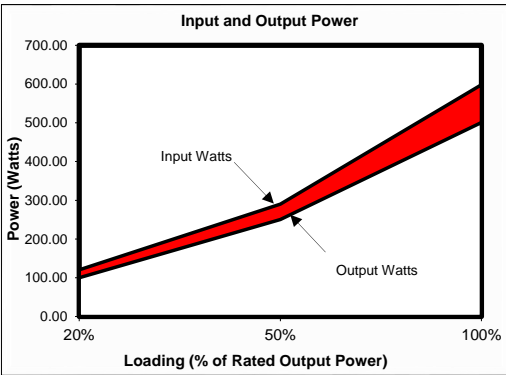
These tests were conducted by a third party independent testing firm on behalf of the 80 PLUS Program. 80 PLUS is a certification program to promote highly-efficient power supplies (greater than 80% efficiency in the active mode) in technology applications. *http://www.80plus.org/*