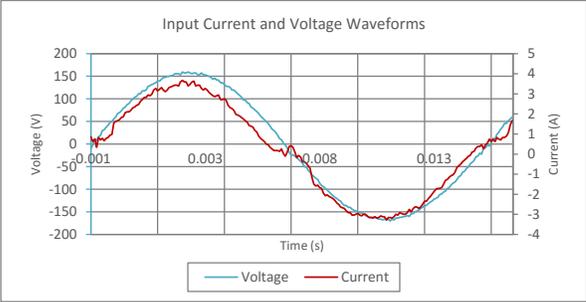


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	86.50%
AVERAGE EFFICIENCY :	84.88%
80 PLUS COMPLIANT:	YES



ID Number	4958
Manufacturer	Cooler Master Technology Inc.
Model Number	MPX-4501-AMAAB
Serial Number	N/A
Year	2017
Type	ATX12V
Test Date	6/5/17

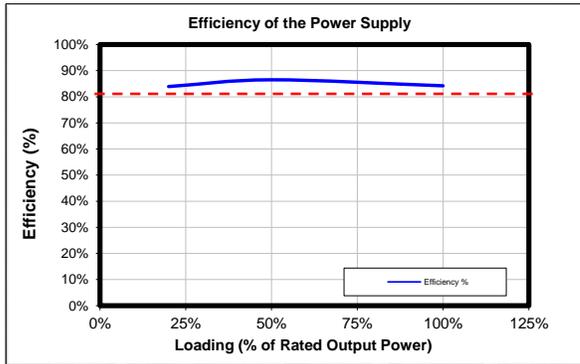
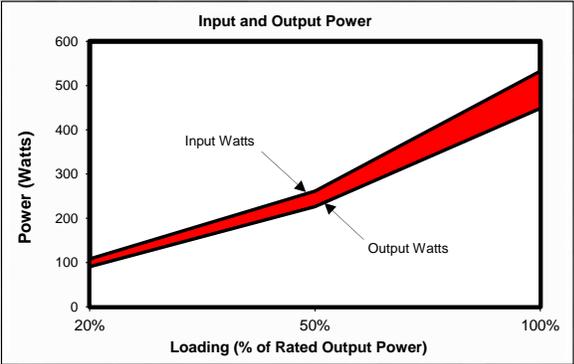


Input AC Current Waveform (ITHD = 9.56%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	8-4	Amps
Input Frequency	50-60	Hz
Rated Output Power	450	Watts

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

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
0.55	0.93	23.58%	10%	58.25	12.06/2.97		11.86/0.02	3.38/0.95	5.11/0.95	5.09/0.24	45.39	77.93%
0.97	0.97	16.69%	20%	108.13	12.04/5.94		11.87/0.05	3.37/1.91	5.09/1.9	5.08/0.47	90.74	83.92%
2.30	0.99	9.56%	50%	261.60	12.01/14.91		11.9/0.12	3.34/4.77	5.06/4.73	5.05/1.19	226.30	86.50%
4.67	0.99	9.43%	100%	532.60	11.95/29.72		11.98/0.24	3.3/9.56	5/9.45	4.99/2.37	448.45	84.20%



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/>

