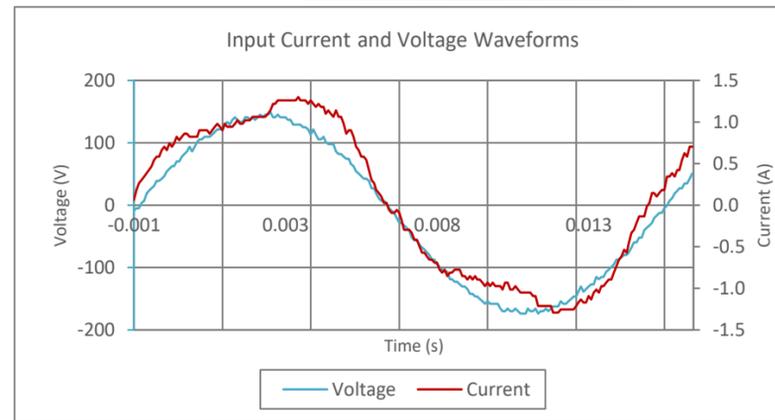


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	86.99%
AVERAGE EFFICIENCY :	85.93%
80 PLUS COMPLIANT:	YES



ID Number	5673
Manufacturer	Lenovo (United States), Inc.
Model Number	HK280-26PP
Serial Number	N/A
Year	2019
Type	CUSTOM
Test Date	9/24/19

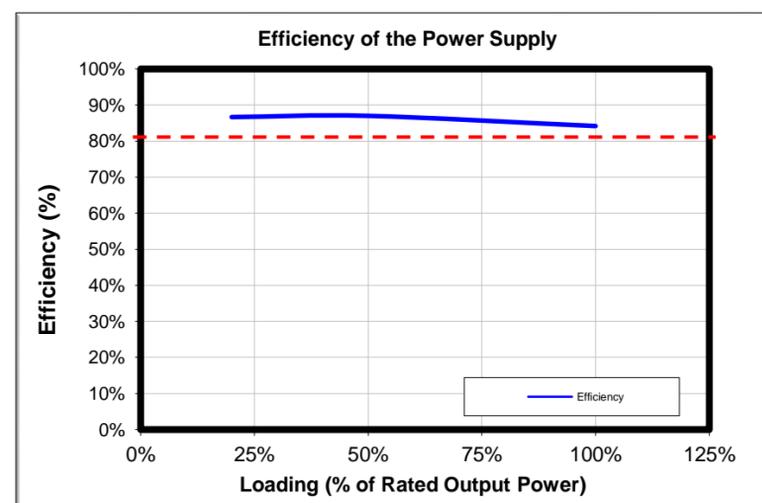
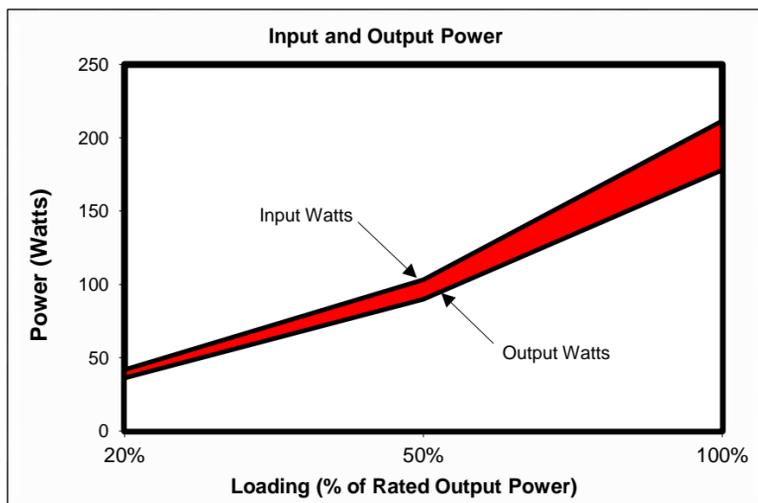


Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	3	Amps
Input Frequency	50/60	Hz
Rated Output Power	180	Watts

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

Input AC Current Waveform (ITHD = 16.65%, 50% Load)

I _{RMS}	PF	I _{THD}	Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)		Output Watts	Efficiency
					12V (cumulative of 12V1, 12V2, etc.)	-12V		
0.21	0.88	46.24%	10%	21.64	12.01/1.48	12.03/0.02	18.06	83.45%
0.38	0.95	32.35%	20%	41.64	11.99/2.97	12.05/0.04	36.08	86.65%
0.91	0.98	16.65%	50%	103.29	11.92/7.44	12.08/0.1	89.85	86.99%
1.84	1.00	6.29%	100%	211.50	11.81/14.87	12.13/0.2	178.00	84.16%



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/>

