

80 PLUS Verification and Testing Report

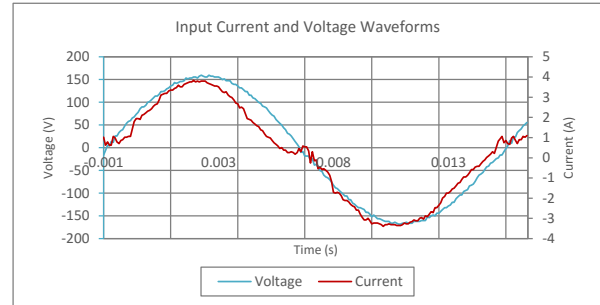
TYPICAL EFFICIENCY (50% Load):	86.30%
AVERAGE EFFICIENCY :	84.43%
80 PLUS COMPLIANT:	YES



ID Number	5141
Manufacturer	CFD Sales Inc.
Model Number	KRPW-BK450W/85+
Serial Number	N/A
Year	2017
Type	ATX12V,EPS12V
Test Date	11/15/17

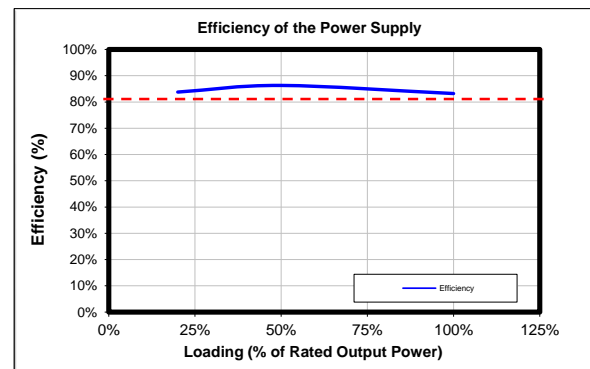
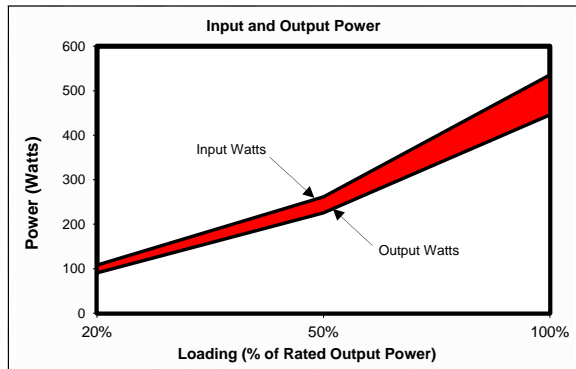
Rated Specifications	Value	Units
Input Voltage	100(90~132)	Volts
Input Current	8	Amps
Input Frequency	50/60	Hz
Rated Output Power	450	Watts

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



Input AC Current Waveform (I_{THD} = 13.191%, 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	3.3V	5V	5Vsb		
0.55	0.92	18.27%	10%	58.42	12.04/2.97	11.91/0.02	3.39/0.95	5.06/0.95	5.08/0.24	45.27	77.49%
0.97	0.97	13.21%	20%	108.19	12.01/5.96	11.92/0.05	3.38/1.91	5.04/1.9	5.07/0.47	90.63	83.77%
2.31	0.98	13.19%	50%	261.35	11.97/14.91	11.98/0.12	3.35/4.77	5/4.73	5.03/1.19	225.54	86.30%
4.68	0.99	5.85%	100%	535.54	11.89/29.69	12.14/0.24	3.3/9.56	4.93/9.45	4.95/2.37	445.66	83.22%



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/>

