

# 80 PLUS Verification and Testing Report

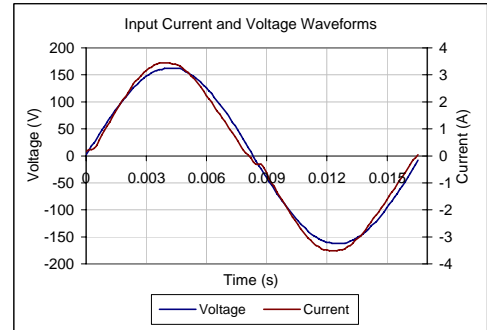
<b>TYPICAL EFFICIENCY (50% Load):</b>	<b>88.68%</b>
<b>AVERAGE EFFICIENCY :</b>	<b>86.75%</b>
<b>80 PLUS COMPLIANT:</b>	<b>YES</b>



<b>Ecos ID #</b>	1501
<b>Manufacturer</b>	DELL
<b>Model Number</b>	L235ES-00
<b>Serial Number</b>	N/A
<b>Year</b>	2009
<b>Type</b>	CUSTOM
<b>Test Date</b>	6/23/2009

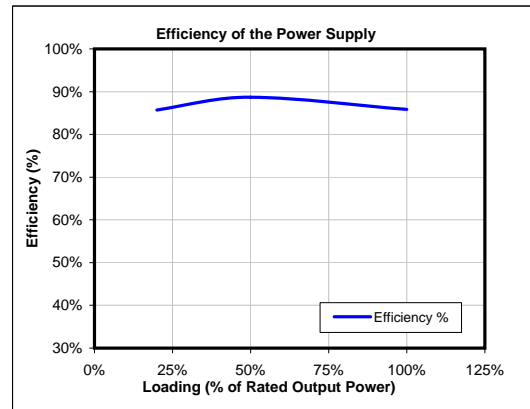
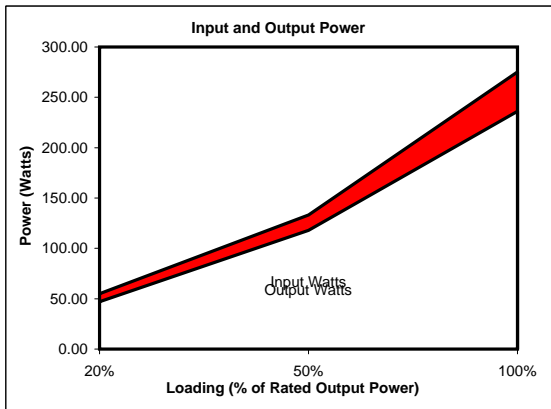
Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	3.5	Amps
Input Frequency	50-60	Hz
<b>Rated Output Power</b>	<b>235</b>	<b>Watts</b>

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



Input AC Current Waveform (ITHD = 12.48%, 50% Load)

I <sub>RMS</sub> A	PF	I <sub>THD</sub> (%)	Load (%)	Fraction of Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)					Output Watts	Efficiency %
						12V (cumulative of 12V1, 12V2, etc.)	-12V	3.3V	5V*	5V (FP)		
0.49	0.9767	20.20%	20%	Light	54.99	12/2.5	12/0.1	3.3/0.7	5.1/2.2	5/0.5	47.13	85.71%
1.17	0.9900	12.48%	50%	Typical	133.00	12/6.3	12.1/0.2	3.3/1.7	5/5.4	5/1.4	117.95	88.68%
2.40	0.9955	8.09%	100%	Full	275.10	12.1/12.7	12.3/0.3	3.3/3.4	5/10.8	5/2.7	236.15	85.84%



These tests were conducted as a part of the 80 PLUS program. 80 PLUS is a computer buy-down program to promote high-efficiency power supplies (greater than 80% efficiency in the active mode) in desktop computers and desktop-derived servers.



Tested by Electric Power Research Institute, Knoxville, TN.