

Lab ID#: 97

Receipt Date: Apr 10, 2018

Test Date: Apr 19, 2018

Report: 19PS97A

Report Date: Apr 23, 2018

DUT INFORMATION

Brand	Super Flower
Manufacturer (OEM)	Super Flower
Series	Leadex II
Model Number	SF-750F14EG
Serial Number	S1609199008
DUT Notes	

DUT SPECIFICATIONS

Rated Voltage (Vrms)	100-240
Rated Current (Arms)	10
Rated Frequency (Hz)	50-60
Rated Power (W)	750
Type	ATX12V
Cooling	135mm Fluid Dynamic Bearing Fan (RL4Z S1352512HH)
Semi-Passive Operation	✓ (selectable)
Cable Design	Fully Modular

POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	24	24	62.4	3	0.5
	Watts	120		748.8	15	6
Total Max. Power (W)		750				

CABLES AND CONNECTORS

Modular Cables

Description	Cable Count	Connector Count (Total)	Gauge
ATX connector 20+4 pin (540mm)	1	1	18-22AWG
4+4 pin EPS12V (650mm)	2	2	18-22AWG
6+2 pin PCIe (550mm+150mm)	2	4	18-22AWG
SATA (500mm+100mm+100mm)	3	9	18AWG
4 pin Molex (500mm+100mm+100mm+100)	1	4	18AWG

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RESULTS

Temperature Range (°C /°F)	30-32 / 86-89.6 (+-2°C / +- 3.6°F)
ErP Lot 3/6 Ready	ErP Lot 6 2010: ✓ ErP Lot 6 2013: Partially ErP Lot 3 2014: ✓
(EU) No 617/2013 Compliance	✓

115V

Average Efficiency	89.161%
Efficiency With 10W (≤500W) or 2% (>500W)	0.000
Average Efficiency 5VSB	76.891%
Standby Power Consumption (W)	0.1190430
Average PF	0.989
Avg Noise Output	29.84 dB(A)
Efficiency Rating (ETA)	PLATINUM
Noise Rating (LAMBDA)	A-

230V

Average Efficiency	91.143%
Average Efficiency 5VSB	0.000%
Standby Power Consumption (W)	0.2273260
Average PF	0.957
Avg Noise Output	29.28 dB(A)
Efficiency Rating (ETA)	
Noise Rating (LAMBDA)	A-

TEST EQUIPMENT

Electronic Loads	Chroma 6314A x2 63123A x6 63102A 63101A	Chroma 63601-5 x2 Chroma 63600-2 63640-80-80 x10 63610-80-20
AC Sources	Chroma 6530, Chroma 61604	
Power Analyzers	N4L PPA1530, N4L PPA5530	
Oscilloscopes	Picoscope 4444 & 3424, Keysight DSOX3024A, Rigol DS2072A	
Voltmeter	Keithley 2015 THD 6.5 Digit	
Sound Analyzer	Bruel & Kjaer 2250-L G4	
Microphone	Bruel & Kjaer Type 4189	
Data Loggers	Picoscope TC-08 x2, Labjack U3-HV x2	

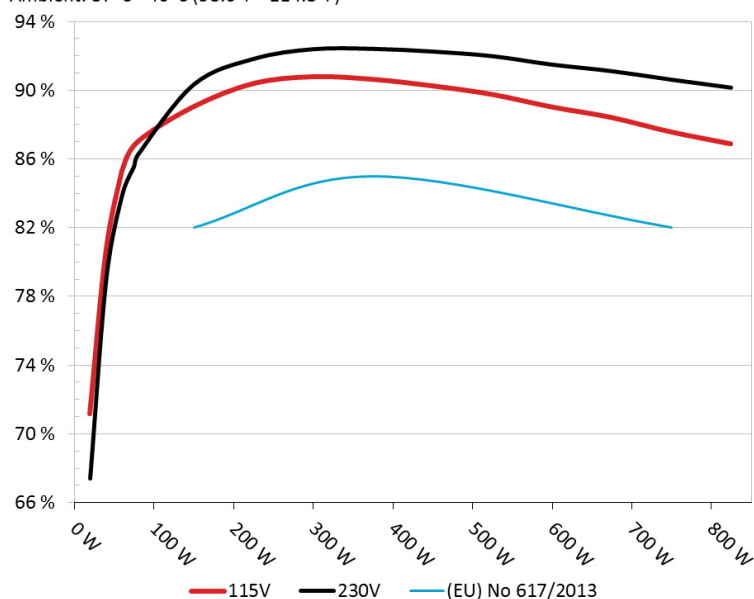
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EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE

Efficiency: Super Flower SF-750F14EG

Ambient: 37°C - 46°C (98.6°F - 114.8°F)



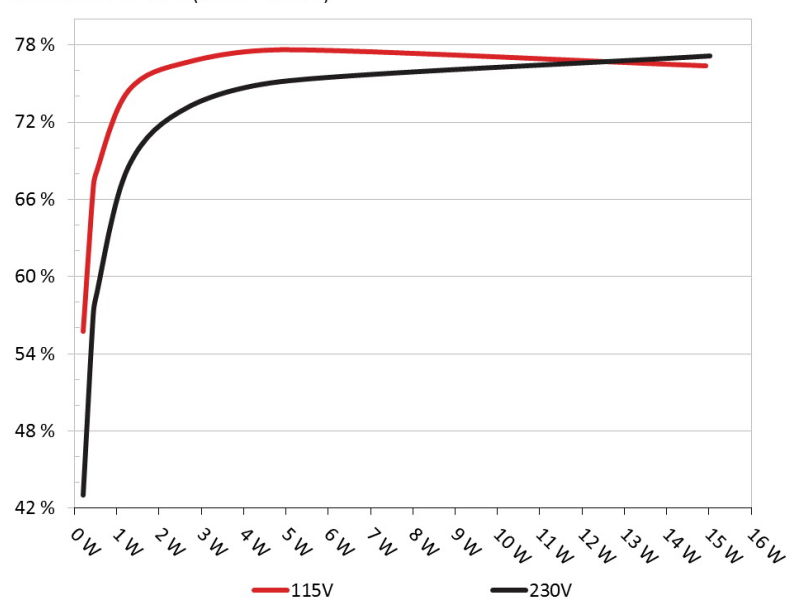
INFO

The PSU's efficiency under high ambient temperatures with 115V and 230V input. For this graph the results of the 10-110% load regulation table are used

5VSB EFFICIENCY

5VSB Efficiency: Super Flower SF-750F14EG

Ambient: 34°C - 36°C (93.2°F - 96.8°F)



INFO

This graph depicts the efficiency levels of the 5VSB rail with 115V and 230V input

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5VSB EFFICIENCY -115V (ERP LOT 3/6 & CEC)

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.042A	0.213	55.759%	0.046
	5.108V	0.382		115.09V
2	0.087A	0.445	66.717%	0.078
	5.107V	0.667		115.10V
3	0.532A	2.709	76.720%	0.292
	5.093V	3.531		115.10V
4	3.003A	14.928	76.409%	0.492
	4.971V	19.537		115.08V

5VSB EFFICIENCY -230V (ERP LOT 3/6 & CEC)

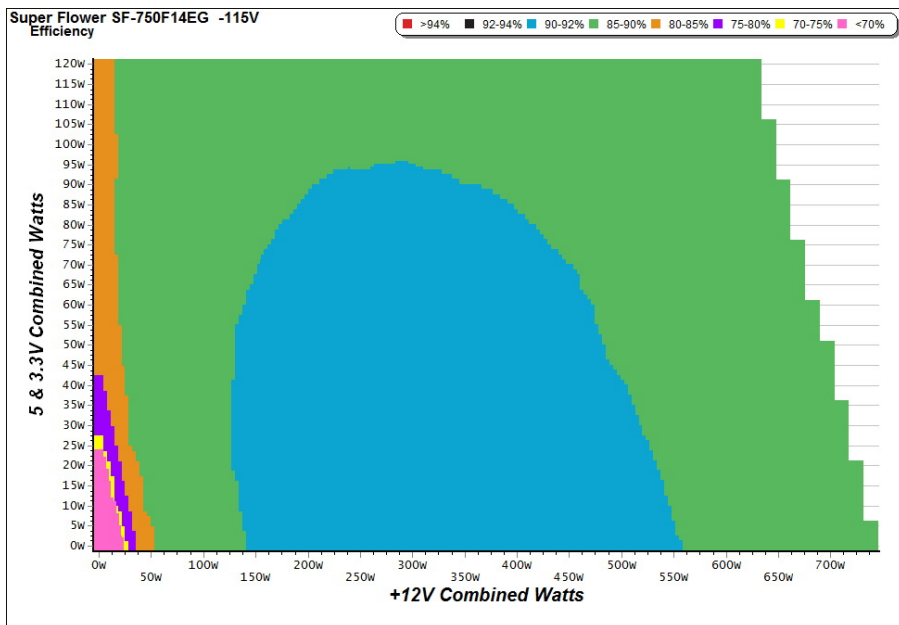
Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.042A	0.213	43.030%	0.018
	5.107V	0.495		230.27V
2	0.087A	0.446	56.815%	0.028
	5.107V	0.785		230.27V
3	0.532A	2.709	73.196%	0.123
	5.093V	3.701		230.27V
4	3.001A	15.025	77.146%	0.353
	5.006V	19.476		230.26V

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115V

EFFICIENCY GRAPH 115V



INFO

This graph depicts the PSU's efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

NOISE GRAPH 115V



INFO

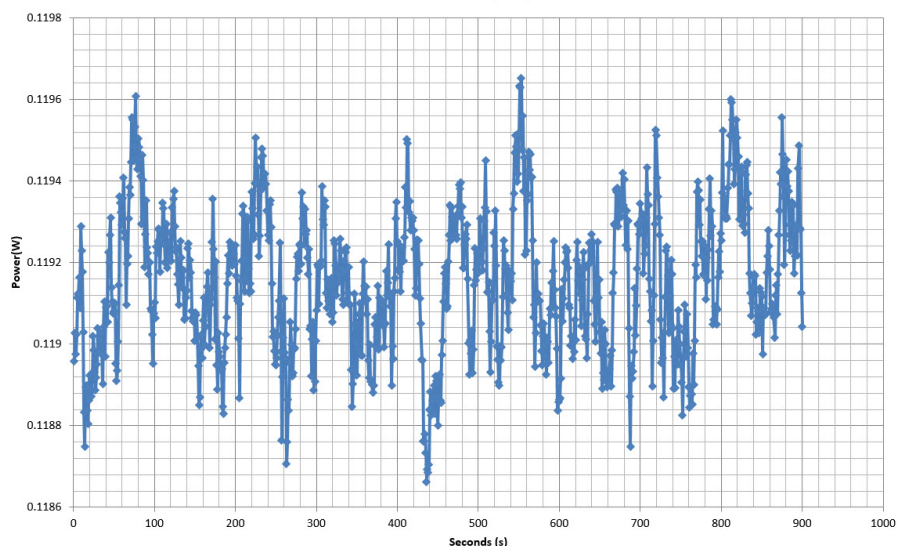
The PSU's noise in its entire operational range and under 30-32 °C (+2 °C) ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

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VAMPIRE POWER -115V

Power - S1609199008 - 22/04/2017 - 21:58



INFO

This graph is generated by the PPA Standby Power Analysis software which takes full control of the power analyzer during the whole procedure. This application features all of the EN50564 & IEC62301 test limits for standby power software testing

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COMMISSION REGULATION (EU) NO 617/2013 TESTING 115V

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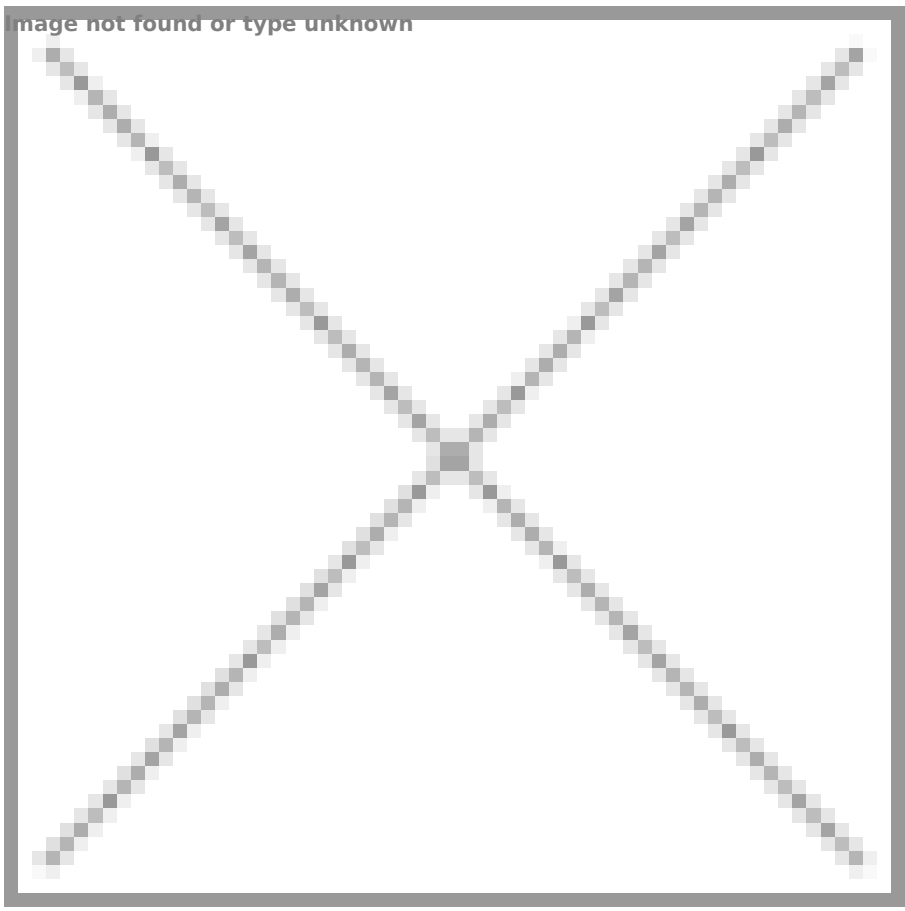
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230V

EFFICIENCY GRAPH 230V

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INFO

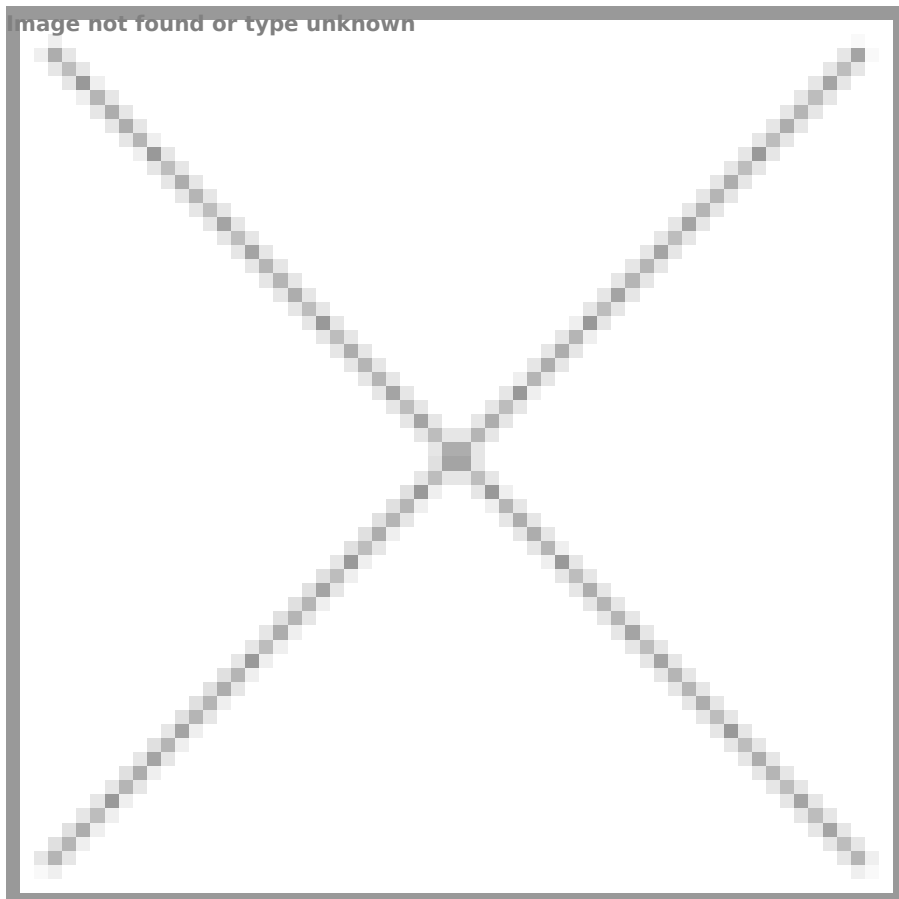
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VAMPIRE POWER -230V



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COMMISSION REGULATION (EU) NO 617/2013 TESTING 230V

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EFFICIENCY AND NOISE REPORT IN ACCORDANCE WITH
CYBENETICS ETA AND CYBENETICS LAMBDA PROCEDURE

Super Flower Leadex II 750W

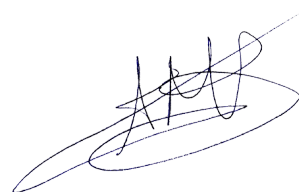


Top side

Model NO / 型号: SF-750F14EG		Switching power supply	
交流式电源供应器			
AC INPUT 交流输入		200Vac-240Vac 10A 60Hz/50Hz	
DC OUTPUT 直流输出	+3.3V +5V +12V -12V +5VSB		
Max output current	24A 24A 62.4A 0.5A 3.0A		
Max Combined Wattage 额定功率	120W 748.8W 6W 15W		
		750W	
AC INPUT 交流输入		100Vac-240Vac 10A 60Hz/50Hz	
DC OUTPUT 直流输出	+3.3V +5V +12V -12V +5VSB		
Max output current	24A 22A 54.1A 0.5A 3.0A		
Max Combined Wattage 额定功率	110W 649.2W 6W 15W		
		650W	
		SF-650F14MG (100V-240V:650W)	
		FULL RANGE ACTIVE	
		S1609199008	

Power specifications label

CERTIFICATIONS 115V

Aris Mpitsiopoulos
Lab Director

CERTIFICATIONS 230V



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