

Lab ID#: 286

Receipt Date: Jan 15, 2018

Test Date: Jan 27, 2018

Report:

Report Date: Jan 31, 2018

DUT INFORMATION

Brand	SilverStone
Manufacturer (OEM)	Enhance Electronics
Series	SFX
Model Number	SX800-LTI
Serial Number	171300125
DUT Notes	

DUT SPECIFICATIONS

Rated Voltage (Vrms)	100-240
Rated Current (Arms)	12-6
Rated Frequency (Hz)	50-60
Rated Power (W)	800
Type	SFX-L
Cooling	120mm Sleeve Bearing Fan (S1201512HB)
Semi-Passive Operation	✓
Cable Design	Fully Modular

POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	16	15	66	2.5	0.3
	Watts	80		792	12.5	3.6
Total Max. Power (W)		800				

CABLES AND CONNECTORS

Modular Cables

Description	Cable Count	Connector Count (Total)	Gauge
ATX connector 20+4 pin (300mm)	1	1	16-22AWG
4+4 pin EPS12V (410mm)	1	1	16AWG
6+2 pin PCIe (410mm+150mm)	1	2	16-18AWG
6+2 pin PCIe (560mm+150mm)	1	2	16-18AWG
SATA (305mm+200mm+90mm+90mm)	3	12	18AWG
4 pin Molex (305mm+200mm+200mm)	1	3	18AWG
FDD Adapter (+110mm)	1	1	22AWG

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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	91.041%
Efficiency With 10W (≤500W) or 2% (>500W)	0.000
Average Efficiency 5VSB	79.831%
Standby Power Consumption (W)	0.0913032
Average PF	0.986
Avg Noise Output	38.22 dB(A)
Efficiency Rating (ETA)	TITANIUM
Noise Rating (LAMBDA)	S+

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 4955-A, Bruel & Kjaer Type 4189	
Data Loggers	Picoscope TC-08 x2, Labjack U3-HV x2	

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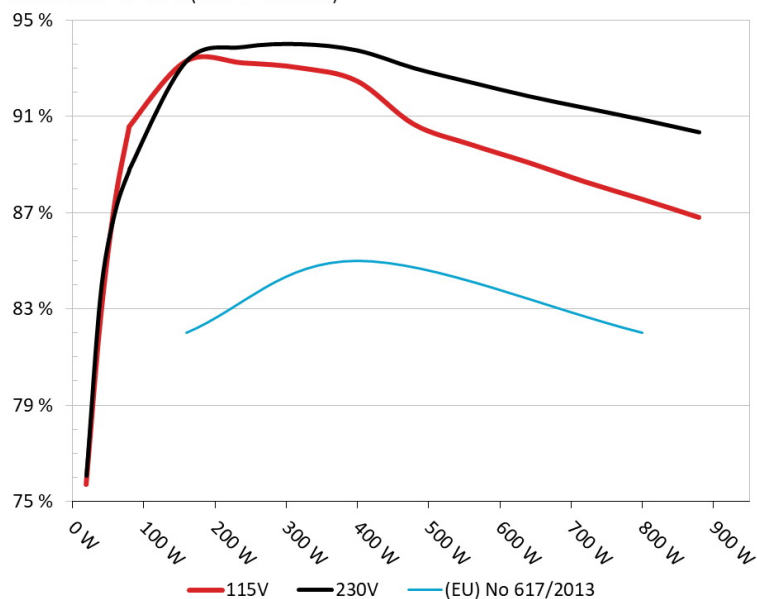
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EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE

Efficiency: SilverStone SX800-LTI

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



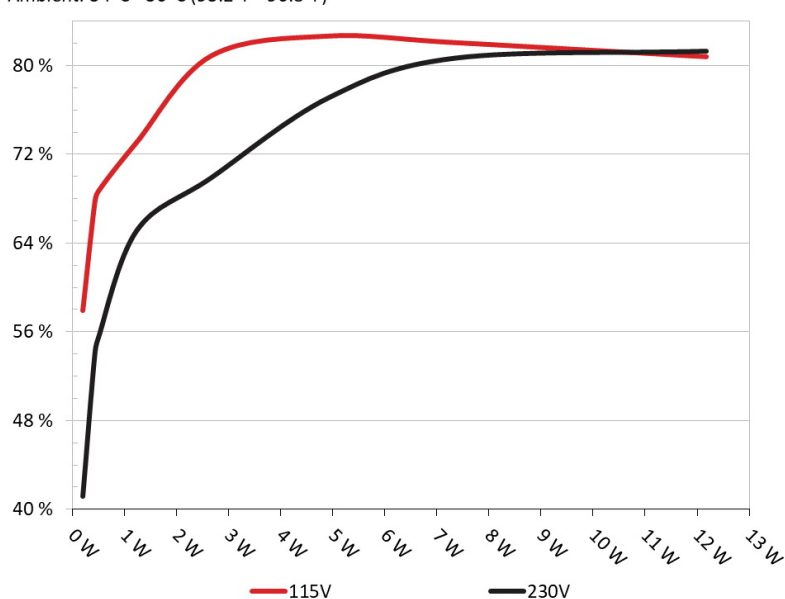
INFO

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: SilverStone SX800-LTI

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	0.205	57.910%	0.029
	4.938V	0.354		115.16V
2	0.087A	0.429	67.453%	0.052
	4.937V	0.636		115.16V
3	0.542A	2.668	80.848%	0.225
	4.923V	3.300		115.16V
4	1.002A	4.919	82.631%	0.324
	4.910V	5.953		115.16V
5	1.501A	7.350	82.040%	0.385
	4.896V	8.959		115.16V
6	2.501A	12.171	80.774%	0.442
	4.867V	15.068		115.16V

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

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.042A	0.205	41.165%	0.012
	4.938V	0.498		230.43V
2	0.087A	0.429	53.692%	0.020
	4.937V	0.799		230.43V
3	0.542A	2.668	69.880%	0.091
	4.923V	3.818		230.42V
4	1.002A	4.918	77.085%	0.144
	4.910V	6.380		230.42V
5	1.501A	7.350	80.672%	0.193
	4.896V	9.111		230.42V
6	2.501A	12.172	81.298%	0.271
	4.866V	14.972		230.42V

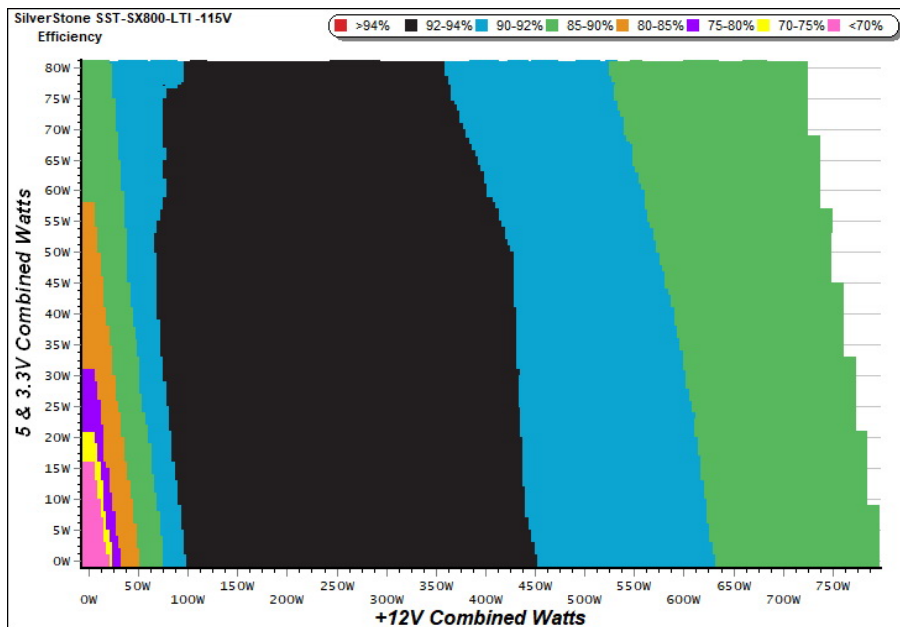
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115V

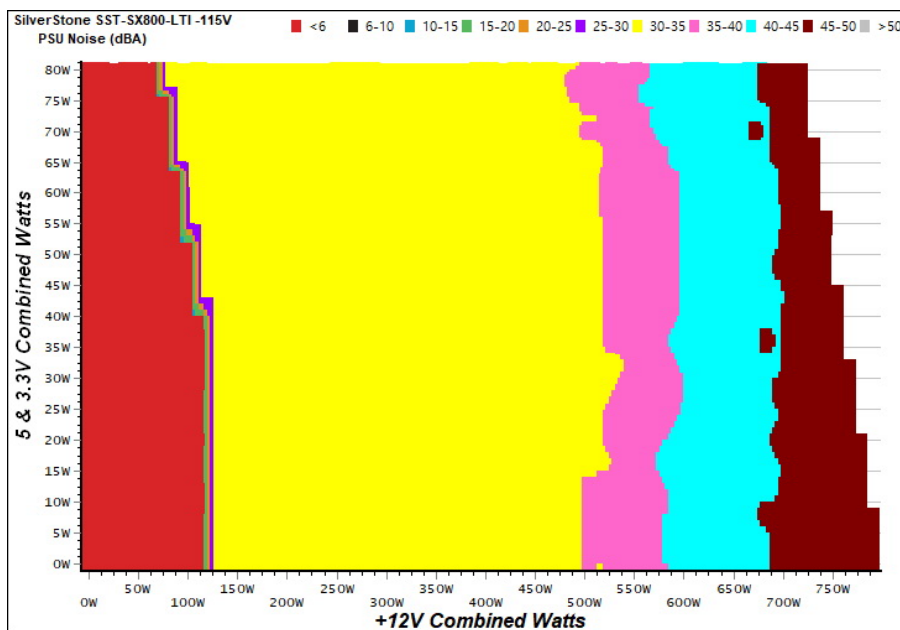
EFFICIENCY GRAPH 115V



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

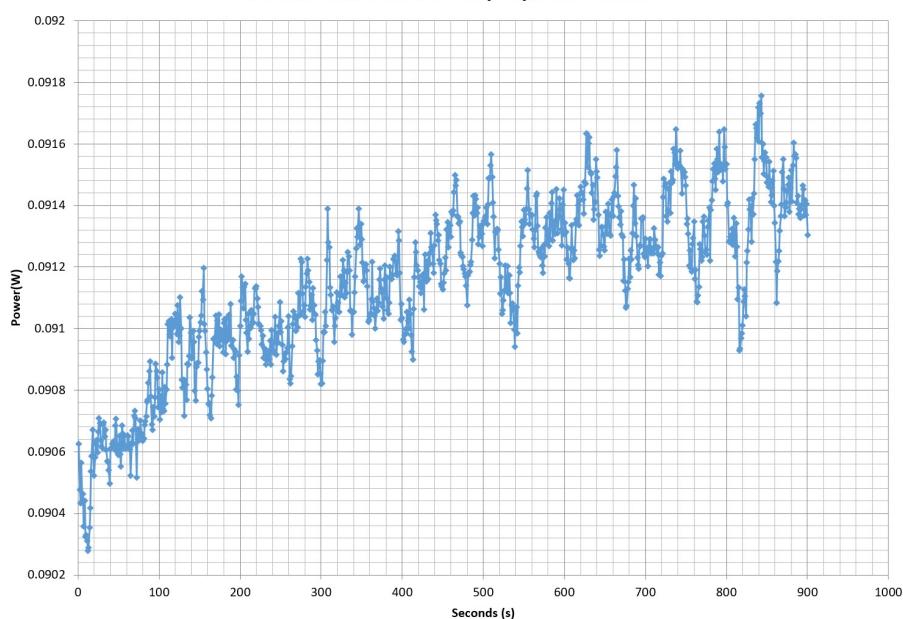
The PSU's noise in its entire operational range and under 30-32 °C (+2 °C) ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

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VAMPIRE POWER -115V

Power - 171300125 - 19/09/2017 - 11:09



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

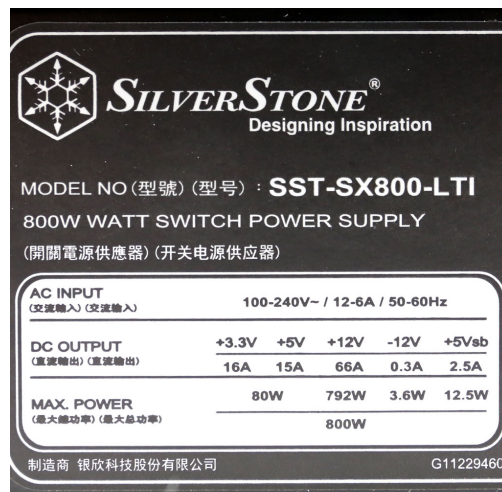
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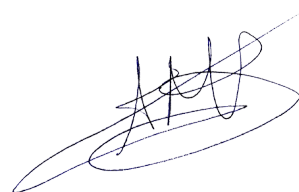


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Power specifications label

CERTIFICATIONS 115V

Aris Mpitsiopoulos
Lab Director

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