SILVERSTONE

# SilverStone SFX Platinum 750W

Serial Number

Lab ID SL19750123

Certification ID 25868

Test Result Report ID:

Certificate Issue Date: Oct 15, 2019

Scheme: ETA-EMI PSU

115V




230V




115V




230V




Scheme: LAMBDA PSU



Aristeidis Bitziopoulos, Certification Body General Manager

# General Information

## Test Equipment

| | |
|---|---|
| Electronic Loads | Chroma 63601-5 x2<br>Chroma 63600-2<br>Chroma 63640-80-80 x10<br>Chroma 63610-80-20 |
| AC Sources | Chroma 6530, APM SP300VAC4000W-P, GW Instek ASR-3500 |
| Power Analyzers | Rohde & Schwarz HMC8015 & NPA701 |
| Oscilloscopes | Picoscope 4444, Siglent SDS2104X PLUS |
| Sound Analyzer | Bruel & Kjaer 2270 G4 |
| Microphone | Bruel & Kjaer Type 4955-A |
| Temperature Logger | Picoscope TC-08 |
| Tachometer | UNI-T UT372 |
| Multimeters | Keysight 34465A |
| EMI Analyzer | TekBox TBMR-110M-EU |
| Isolation Transformer | 4kVA |
| UPS | FSP Champ Tower 3kVA, CyberPower OLS3000E 3kVA |
| Testing Methodology | Cybenetics PSU Test Protocol |

## DUT Information(Non-accredited measurements)

| | |
|---|---|
| Product Identification Details | |
| Brand | SilverStone |
| Model | SFX Platinum 750W |
| OEM/ODM | Enhance Electronics |
| Serial Number | |
| Product Specifications | |
| Manufacturer-Provided Information | |
| Rated Voltage (Vrms) | 100-240 |
| Rated Current (Arms) | 9-4 |
| Rated Frequency (Hz) | 50-60 |

| | |
|---|---|
| Rated Power (W) | 750 |
| Operating Temperature (Continuous Full Load) (°C) | |
| Type | SFX |
| Cable Design | Fully Modular |
| Warranty | - |
| Cybenetics Measurements | |
| Dimensions (W x H x D) | |
| Weight | |
| Cooling | 92mm Double Ball Bearing Fan<br>(B0921512HB) |
| Semi-Passive Operation | ✓ |
| Cybenetics Testing Information | |
| Lab ID | SL19750123 |
| Date of receipt | Sep 30, 2019 |
| Testing Date | Jul 10, 2019 |
| Report Issued Date | Oct 15, 2019 |
| Engineer Name | - |
| Authorized By the Laboratory Technical Manager | Aristeidis Bitziopoulos |
| Signature |  |

## Cables and Connectors(Non-accredited measurements)

| Modular Cables | | | | |
|---|---|---|---|---|
| Description | Cable Count | Connector Count (Total) | Gauge | In Cable Capacitors |
| ATX connector 20+4 pin (300-340mm) | 1 | 1 | 16-22AWG | No |
| 4+4 pin EPS12V (400mm) | 1 | 1 | 16AWG | No |
| 6+2 pin PCIe (400mm+150mm) | 2 | 4 | 16-18AWG | No |
| SATA (300mm+190mm+90mm+90mm) | 2 | 8 | 18AWG | No |
| 4-pin Molex (310mm+200mm+200mm) | 1 | 3 | 18AWG | No |

## Power Specifications

| Rail | | 3.3V | 5V | 12V | 5VSB | -12V |
|---|---|---|---|---|---|---|
| Max. Power | Amps | 20 | 20 | 62.5 | 3 | 0.3 |
| | Watts | 120 | | 750 | 15 | 3.6 |
| Total Max. Power (W) | | 750 | | | | |

## Parts Description

| General Data | |
|---|---|
| Manufacturer (OEM) | Enhance Electronics |
| PCB Type | Double Sided |
| Primary Side | |
| Transient Filter | 6x Y caps, 3x X caps, 2x CM chokes, 1x MOV |
| Inrush Protection | NTC Thermistor |
| Bridge Rectifier(s) | 1x |
| APFC MOSFETS | 2x Infineon IPP60R080P7 (650V, 23A @ 100°C, 0.08Ohm) |
| APFC Boost Diode | 1x UnitedSiC UJ3D06516TS (650V, 16A @ 152°C) |
| Hold-up Cap(s) | 1x Rubycon (420V, 470uF, 3,000h @ 105°C, MXK) |
| Main Switchers | 4x Oriental Semiconductor OSG55R140FF (550V, 14.5A @ 100°C, 0.14Ohm) |
| IC Driver | 2x Silicon Labs Si8230BD |
| APFC Controller | ATK AT6101L & CM03X Green PFC Controller |
| Resonant Controllers | Champion CM6901T6 |
| Topology | Primary side: Full-Bridge & LLC converter<br>Secondary side: Synchronous Rectification & DC-DC converters |
| Secondary Side | |
| +12V MOSFETS | 6x Infineon BSC014N04LS (40V, 100A @ 100°C, 1.4mOhm) |
| 5V & 3.3V | DC-DC Converters:4x Infineon BSC018NE2LS (25V, 97A @ 100°C, 1.8mOhm)<br>PWM Controllers: ANPEC APW7159C |
| Filtering Capacitors | Electrolytics: 3x Nippon Chemi-Con (4-10,000h @ 105°C, KY), 1x Rubycon (3-6,000h @ 105°C, YXG)<br>Polymers: 3x FPCAP, 19x Nichicon |
| Supervisor IC | SITI PS223 (OCP, OTP, OVP, UVP, SCP, PG) |
| Fan Model | Globe Fan B0921512HB (92mm, 12V, 0.45A, Ball Bearing Fan) |

| | |
|---|---|
| 5VSB Circuit | |
| Rectifier | 1xPFC PFR10V45CT SBR (45V, 10A) & Silan Microelectronics SVF2N70M FET (700V, 1.3A @ 100°C, 6.5Ohm) |
| Standby PWM Controller | ATK AT6002H |

# Test Results

## Temperature & Compliance Info

| | |
|---|---|
| Temperature Range (°C /°F) | 28-32 / 82.4-89.6 |
| ErP Lot 3/6 Ready | ✓ |
| (EU) No 617/2013 Compliance | ✓ |
| ALPM (Alternative Low Power Mode) compatible | ✓ |

## Performance Summary

### 115V

| | |
|---|---|
| Accredited | |
| Average Efficiency (>1450 load combinations) | 90.014% |
| Average Noise Output (>1450 Load Combinations) | 38.49dBA |
| Average PF (>1450 Load Combinations) | 0.990 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 70.293% |
| Standby Power Consumption | 0.1002W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 57.51mV |
| 5V Ripple (Full Load) | 9.57mV |
| 3.3V Ripple (Full Load) | 21.47mV |
| 5VSB Ripple (Full Load) | 29.41mV |
| 12V Load Regulation | 0.58% |
| 5V Load Regulation | 1.94% |
| 3.3V Load Regulation | 2.66% |
| 5VSB Load Regulation | 2.85% |
| Inrush Current | 22.557A |

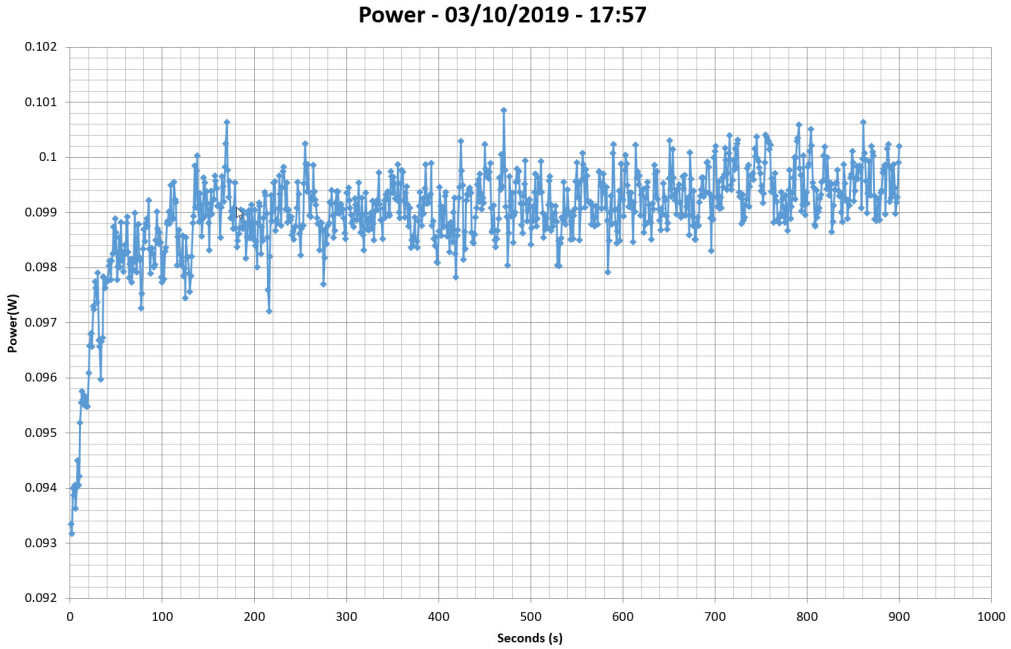
| 230V | | |
|---|---|---|
| Accredited | | |
| Average Efficiency (>1450 load combinations) | | 91.353% |
| Average Noise Output (>1450 Load Combinations) | | 39.09dBA |
| Average PF (>1450 Load Combinations) | | 0.959 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | | - |
| Standby Power Consumption | | 0.1227W |
| Non-Accredited | | |
| 12V Ripple (Full Load) | | 58.63mV |
| 5V Ripple (Full Load) | | 9.47mV |
| 3.3V Ripple (Full Load) | | 22.49mV |
| 5VSB Ripple (Full Load) | | 28.78mV |
| 12V Load Regulation | | 0.60% |
| 5V Load Regulation | | 1.90% |
| 3.3V Load Regulation | | 2.63% |
| 5VSB Load Regulation | | 2.83% |
| Inrush Current | | 10.046A |
| Hold-Up Time & PWR_OK Signal | | 8.80ms |
| AC Loss to PWR_OK Hold Up Time | | 9.40ms |
| PWR_OK Inactive to DC Loss Delay | | -0.60ms |
| PSU Timings: T1 (20% / 100%) | 328.0ms | 328.0ms |
| PSU Timings: T3 (20% / 100%) | 110.0ms | 116.0ms |
| OPP (0.00°C / 0.00°C) | 135.20% | - |

## Hold-Up Time & PWR_OK Signal

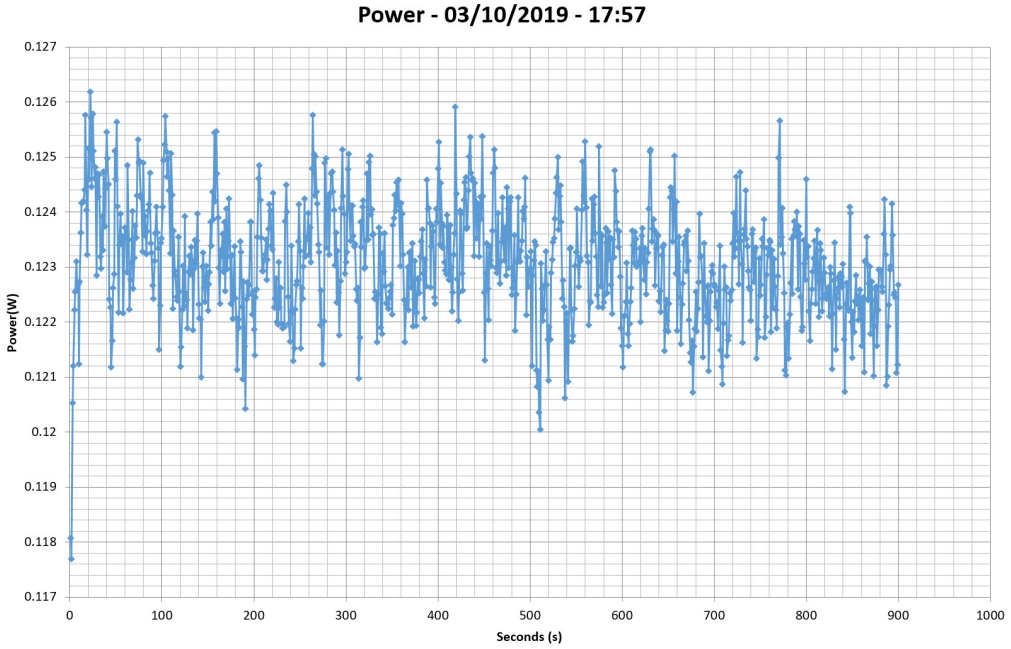
| | |
|---|---|
| Hold-Up Time (ms) | 8.8 |
| AC Loss to PWR_OK Hold Up Time (ms) | 9.4 |
| PWR_OK Inactive to DC Loss Delay (ms) | -0.6 |

## Graphs

### 115V

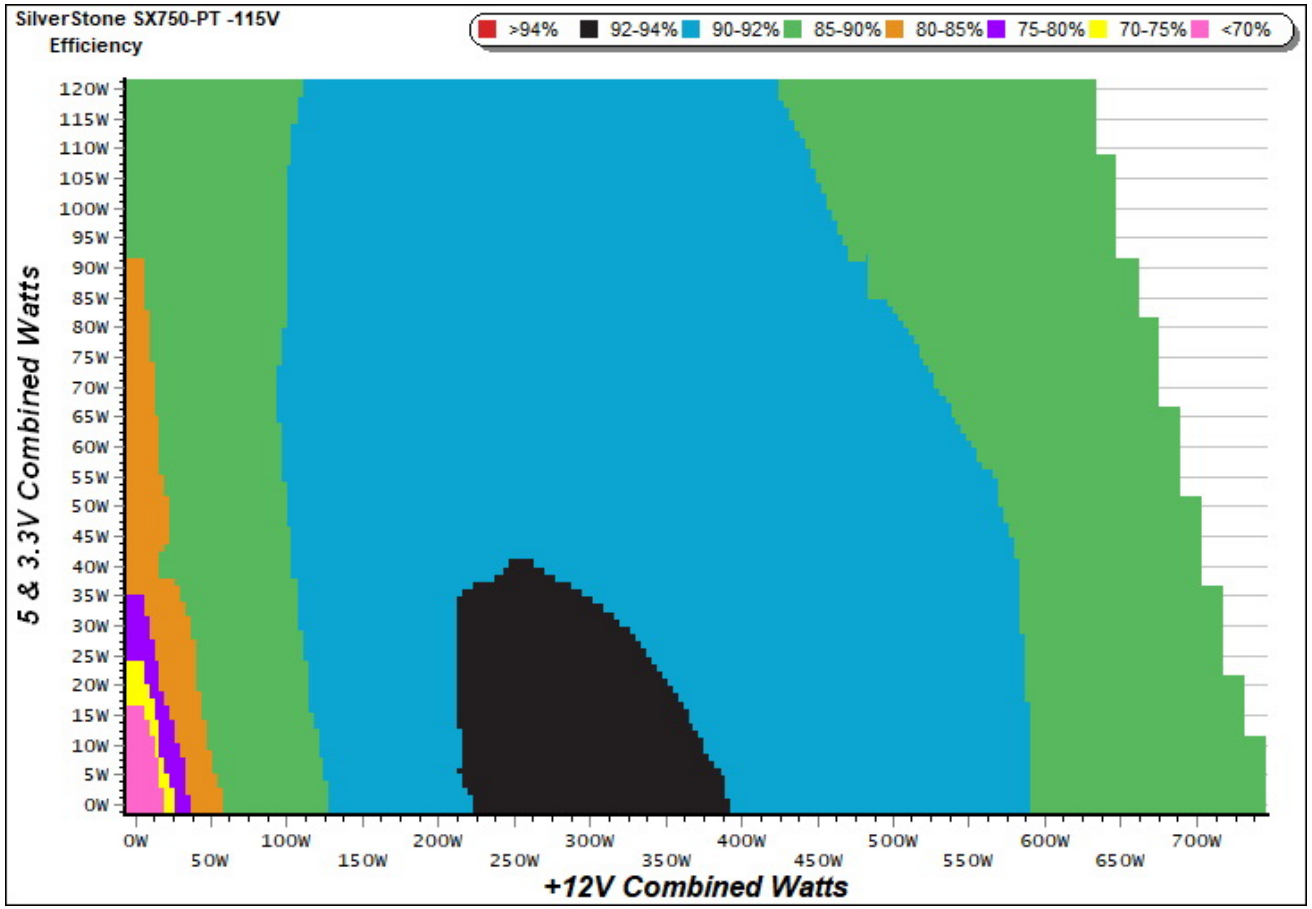



### 230V



## Efficiency Graph

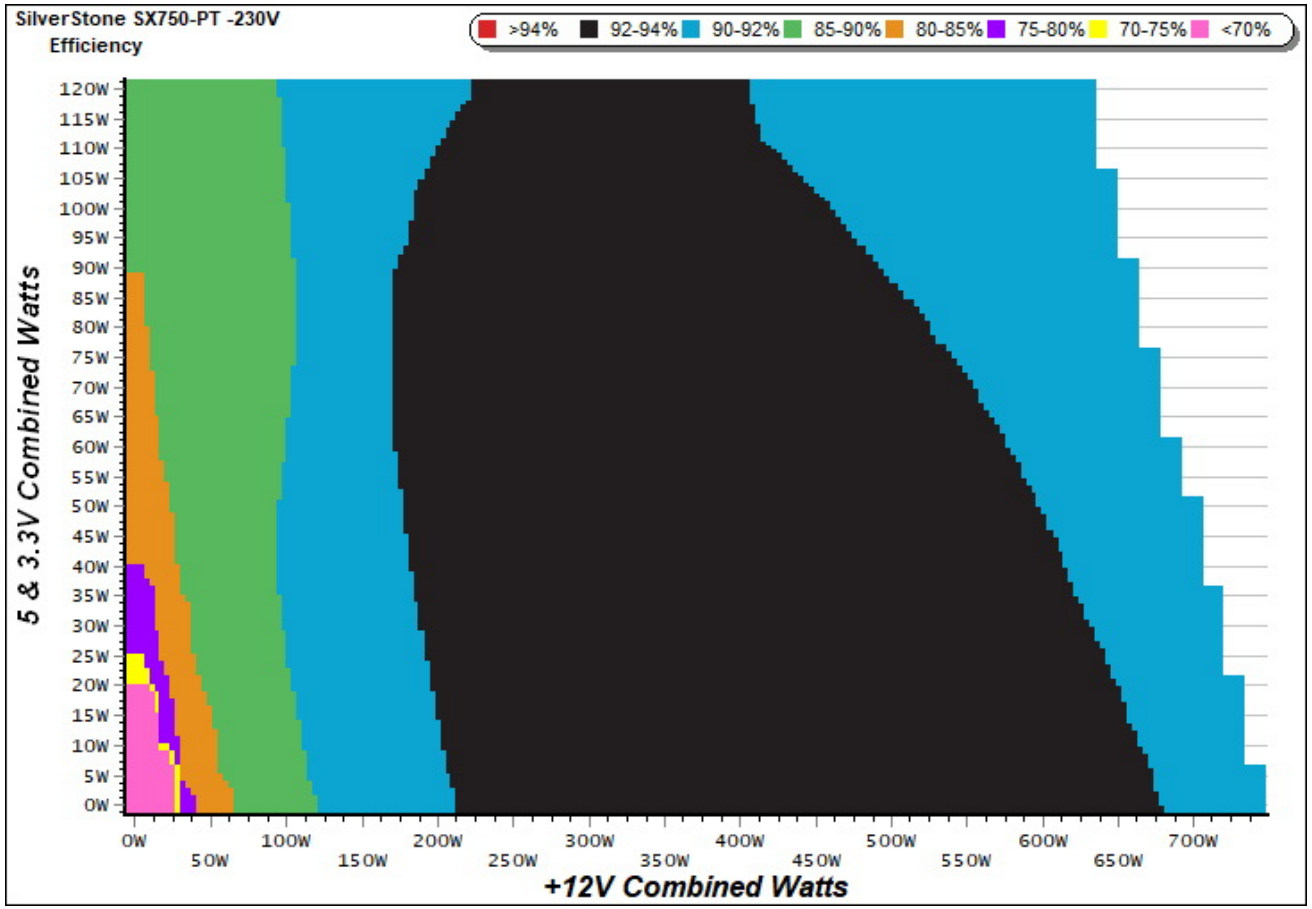
### 115V




### 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.

## 230V

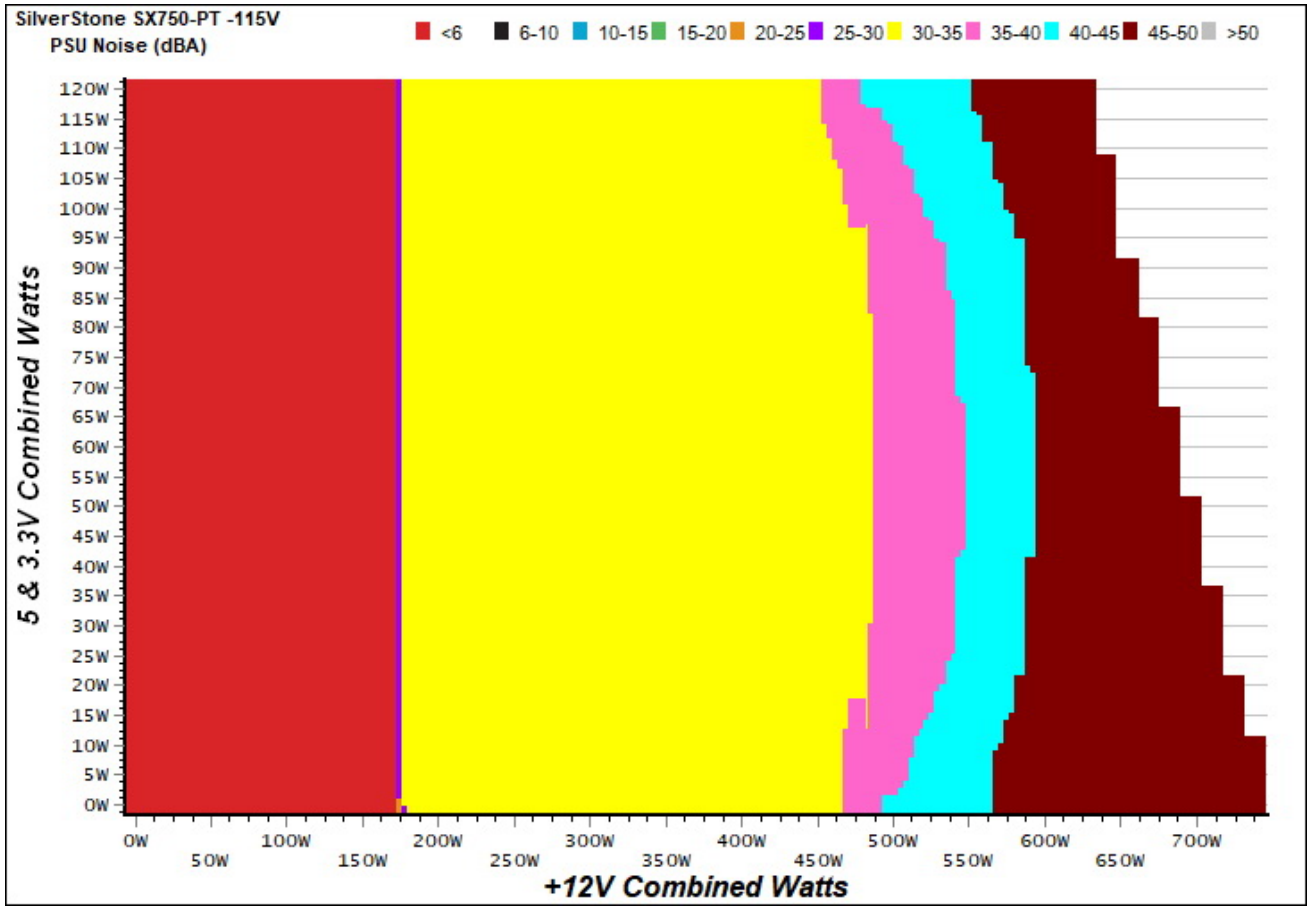



### INFO

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

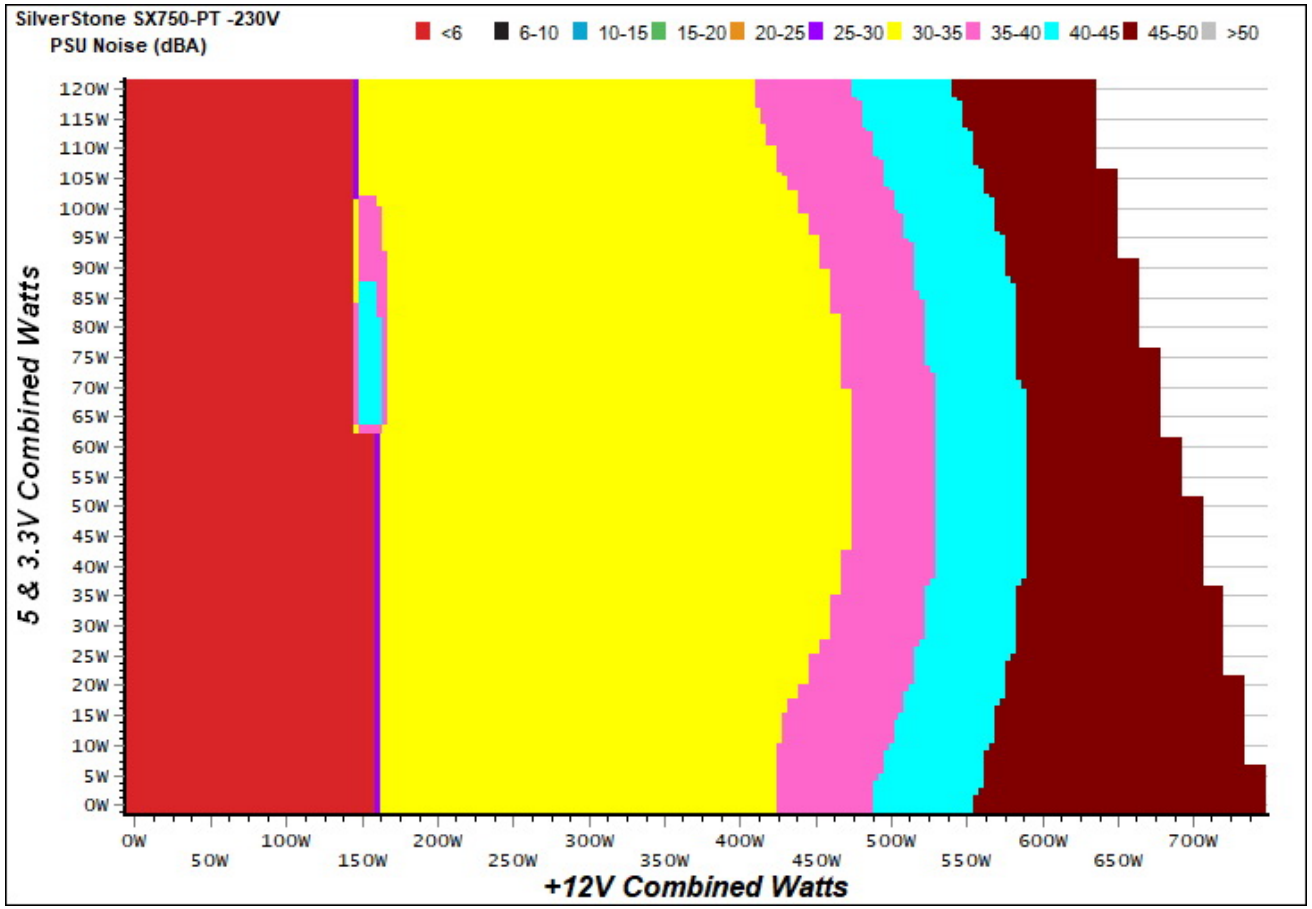
### 115V




### INFO

The PSU`s noise in its entire operational range and under 30-32 °C 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.

## 230V




### INFO

The PSU`s noise in its entire operational range and under 30-32 °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.

## Noise under high ambient temperature (indicative)

### 115V

| Load | Normal ambient<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 0 RPM · <6.0 dB(A) · 38.3 °C | 0 RPM · <6.0 dB(A) · 38.3 °C | fan off in both |
| 20% | 0 RPM · <6.0 dB(A) · 39.1 °C | 0 RPM · <6.0 dB(A) · 39.1 °C | fan off in both |
| 50% | 1822 RPM · 30.6 dB(A) · 36.0 °C | 1822 RPM · 30.6 dB(A) · 36.0 °C | **+0.0 dB(A)** |
| 100% | 3061 RPM · 45.4 dB(A) · 39.5 °C | 3061 RPM · 45.4 dB(A) · 39.5 °C | **+0.0 dB(A)** |

### 230V

| Load | Normal ambient<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 0 RPM · <6.0 dB(A) · 38.3 °C | 0 RPM · <6.0 dB(A) · 38.3 °C | fan off in both |
| 20% | 0 RPM · <6.0 dB(A) · 39.3 °C | 0 RPM · <6.0 dB(A) · 39.3 °C | fan off in both |
| 50% | 1825 RPM · 30.7 dB(A) · 36.2 °C | 1825 RPM · 30.7 dB(A) · 36.2 °C | **+0.0 dB(A)** |
| 100% | 3037 RPM · 45.3 dB(A) · 39.3 °C | 3037 RPM · 45.3 dB(A) · 39.3 °C | **+0.0 dB(A)** |

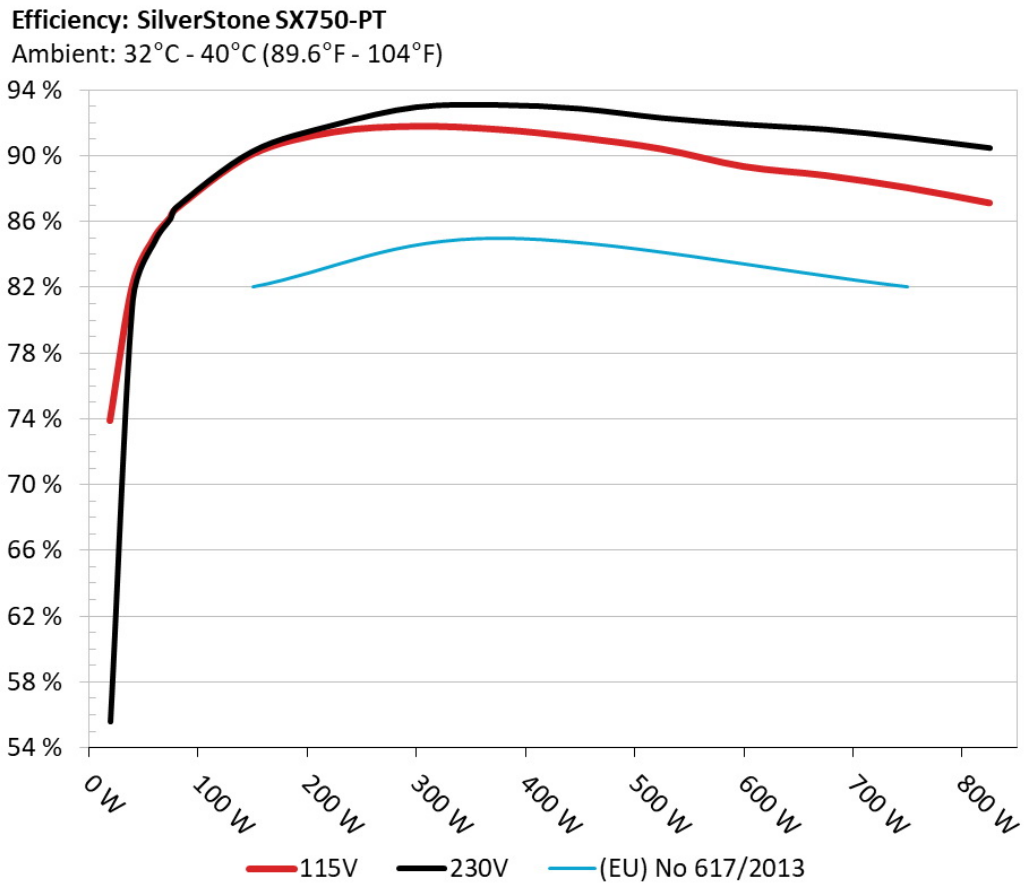
### INFO

Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative of how the fan behaves when it is hot. "<6.0" is the floor of our sound meter, with the fan stopped; with the fan stopped, the intake sensor can read higher than the chamber air.

*Informational. Not part of the ETA or LAMBDA rating.*

## Indicative Performance

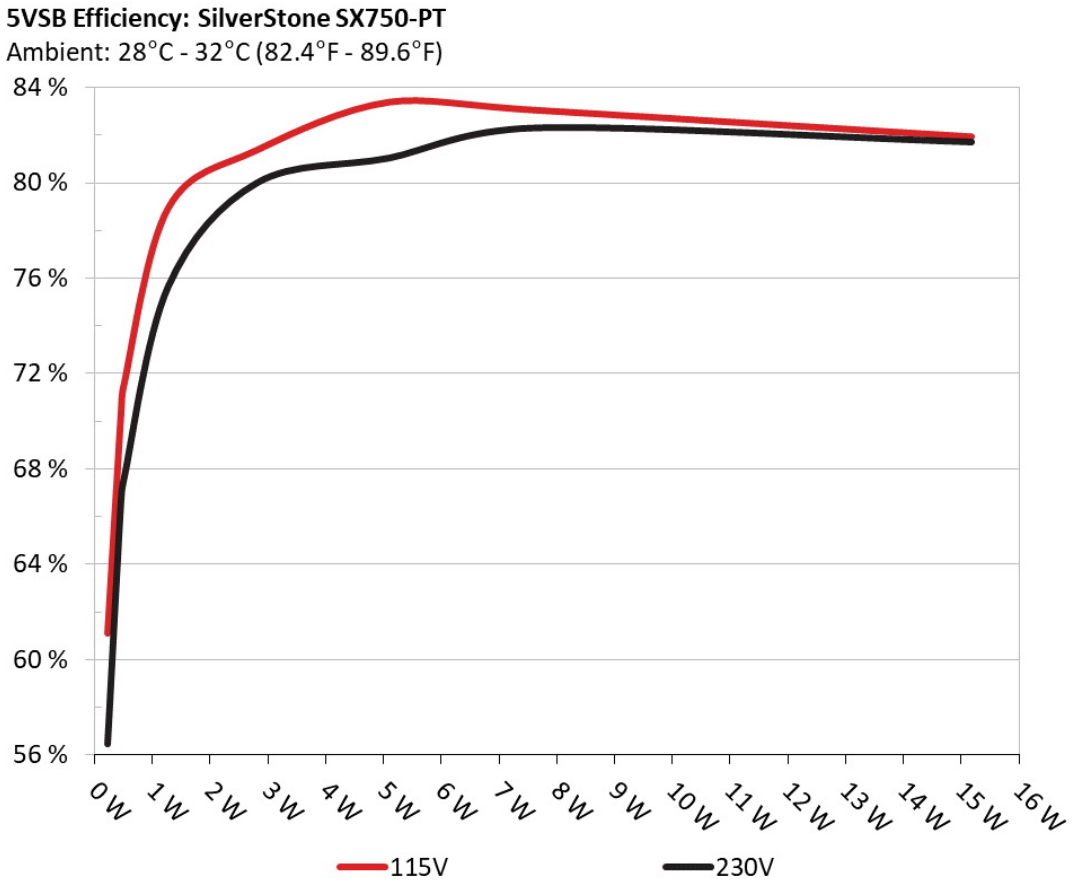
### Efficiency under high ambient temperature




**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




### INFO

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

## 5VSB Efficiency (ERP LOT 3/6 & CEC)

### 115V

| Test # | 5VSB | DC/AC (Watts) | Efficiency | PF/AC Volts |
|---|---|---|---|---|
| 1 | 0.045A | 0.231 | 61.111% | 0.026 |
| | 5.124V | 0.378 | | 115.17V |
| 2 | 0.090A | 0.462 | 70.320% | 0.045 |
| | 5.123V | 0.657 | | 115.16V |
| 3 | 0.550A | 2.813 | 81.395% | 0.198 |
| | 5.112V | 3.456 | | 115.16V |
| 4 | 1.000A | 5.104 | 83.412% | 0.279 |
| | 5.102V | 6.119 | | 115.16V |
| 5 | 1.500A | 7.639 | 83.069% | 0.332 |
| | 5.092V | 9.196 | | 115.16V |
| 6 | 3.000A | 15.178 | 81.955% | 0.400 |
| | 5.059V | 18.520 | | 115.16V |

### 230V

| Test # | 5VSB | DC/AC (Watts) | Efficiency | PF/AC Volts |
|---|---|---|---|---|
| 1 | 0.045A | 0.231 | 56.479% | 0.009 |
| | 5.124V | 0.409 | | 230.35V |
| 2 | 0.090A | 0.462 | 66.667% | 0.014 |
| | 5.123V | 0.693 | | 230.35V |
| 3 | 0.550A | 2.813 | 79.983% | 0.071 |
| | 5.112V | 3.517 | | 230.36V |
| 4 | 1.000A | 5.104 | 81.029% | 0.121 |
| | 5.103V | 6.299 | | 230.35V |
| 5 | 1.500A | 7.639 | 82.290% | 0.167 |
| | 5.092V | 9.283 | | 230.35V |
| 6 | 3.000A | 15.179 | 81.700% | 0.264 |
| | 5.059V | 18.579 | | 230.35V |

## Supplementary Tests (For Reference)

### Typical Load Tests

#### 115V

| Test # | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.382A | 1.961A | 1.997A | 0.982A | 74.522 | 86.218% | 0 | <6.0 | 38.33°C | 0.974 |
| | 12.075V | 5.104V | 3.303V | 5.095V | 86.434 | | | | 34.33°C | 115.16V |
| 2 | 9.823A | 2.947A | 3.005A | 1.181A | 149.433 | 90.062% | 0 | <6.0 | 39.05°C | 0.992 |
| | 12.066V | 5.093V | 3.294V | 5.082V | 165.923 | | | | 34.65°C | 115.16V |
| 3 | 15.663A | 3.446A | 3.500A | 1.381A | 224.969 | 91.435% | 1823 | 30.6 | 35.36°C | 0.997 |
| | 12.064V | 5.081V | 3.286V | 5.070V | 246.043 | | | | 40.49°C | 115.17V |
| 4 | 21.446A | 3.945A | 4.027A | 1.582A | 299.768 | 91.775% | 1823 | 30.6 | 35.42°C | 0.998 |
| | 12.056V | 5.073V | 3.278V | 5.058V | 326.635 | | | | 41.21°C | 115.18V |
| 5 | 26.909A | 4.940A | 5.048A | 1.785A | 374.715 | 91.590% | 1822 | 30.6 | 36.02°C | 0.999 |
| | 12.048V | 5.063V | 3.269V | 5.044V | 409.124 | | | | 42.26°C | 115.18V |
| 6 | 32.380A | 5.939A | 6.075A | 1.988A | 449.670 | 91.095% | 1834 | 30.9 | 36.80°C | 0.999 |
| | 12.040V | 5.053V | 3.260V | 5.031V | 493.630 | | | | 43.58°C | 115.19V |
| 7 | 37.893A | 6.944A | 7.108A | 2.193A | 525.005 | 90.398% | 2559 | 40.8 | 37.05°C | 0.999 |
| | 12.031V | 5.042V | 3.250V | 5.017V | 580.769 | | | | 44.44°C | 115.19V |
| 8 | 43.413A | 7.951A | 8.149A | 2.399A | 600.318 | 89.332% | 3081 | 45.6 | 37.59°C | 1.000 |
| | 12.022V | 5.031V | 3.240V | 5.003V | 672.009 | | | | 45.49°C | 115.19V |
| 9 | 49.307A | 8.465A | 8.664A | 2.403A | 674.841 | 88.792% | 3078 | 45.5 | 38.55°C | 1.000 |
| | 12.013V | 5.022V | 3.232V | 4.995V | 760.022 | | | | 46.82°C | 115.20V |
| 10 | 55.000A | 8.979A | 9.215A | 3.017A | 750.044 | 88.046% | 3061 | 45.4 | 39.46°C | 1.000 |
| | 12.006V | 5.013V | 3.223V | 4.973V | 851.879 | | | | 48.22°C | 115.22V |
| 11 | 61.306A | 8.994A | 9.240A | 3.022A | 825.284 | 87.123% | 3036 | 45.3 | 40.36°C | 0.999 |
| | 11.998V | 5.005V | 3.216V | 4.965V | 947.258 | | | | 50.21°C | 115.19V |
| CL1 | 0.154A | 14.003A | 14.001A | 0.000A | 118.594 | 84.234% | 2370 | 37.8 | 36.47°C | 0.990 |
| | 12.065V | 5.066V | 3.271V | 5.093V | 140.791 | | | | 42.41°C | 115.17V |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| CL2 | 62.532A | 1.006A | 1.000A | 1.000A | 764.481 | 88.460% | 3076 | 45.5 | 39.97°C | 1.000 |
| | 12.012V | 5.038V | 3.244V | 5.034V | 864.211 | | | | 48.77°C | 115.19V |

The results above are not used in the certification process

**230V**

| Test # | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.383A | 1.960A | 1.998A | 0.980A | 74.528 | 86.148% | 0 | <6.0 | 38.27°C | 0.773 |
| | 12.077V | 5.104V | 3.302V | 5.095V | 86.512 | | | | 34.07°C | 230.36V |
| 2 | 9.822A | 2.946A | 3.004A | 1.181A | 149.435 | 90.241% | 0 | <6.0 | 39.25°C | 0.914 |
| | 12.068V | 5.094V | 3.293V | 5.083V | 165.596 | | | | 34.45°C | 230.37V |
| 3 | 15.675A | 3.445A | 3.500A | 1.381A | 224.981 | 91.867% | 1827 | 30.7 | 35.02°C | 0.957 |
| | 12.056V | 5.081V | 3.285V | 5.070V | 244.898 | | | | 40.23°C | 230.37V |
| 4 | 21.449A | 3.944A | 4.027A | 1.582A | 299.774 | 92.936% | 1824 | 30.6 | 35.59°C | 0.974 |
| | 12.055V | 5.073V | 3.277V | 5.058V | 322.558 | | | | 41.50°C | 230.38V |
| 5 | 26.909A | 4.939A | 5.048A | 1.785A | 374.711 | 93.071% | 1825 | 30.7 | 36.20°C | 0.983 |
| | 12.048V | 5.064V | 3.268V | 5.044V | 402.608 | | | | 42.48°C | 230.39V |
| 6 | 32.377A | 5.940A | 6.076A | 1.988A | 449.638 | 92.843% | 1839 | 31.0 | 36.51°C | 0.988 |
| | 12.040V | 5.053V | 3.259V | 5.031V | 484.298 | | | | 43.43°C | 230.39V |
| 7 | 37.890A | 6.943A | 7.109A | 2.193A | 524.970 | 92.276% | 2715 | 43.2 | 37.61°C | 0.991 |
| | 12.031V | 5.043V | 3.249V | 5.018V | 568.910 | | | | 44.81°C | 230.39V |
| 8 | 43.412A | 7.951A | 8.148A | 2.399A | 600.269 | 91.884% | 3076 | 45.5 | 38.06°C | 0.993 |
| | 12.021V | 5.032V | 3.240V | 5.004V | 653.293 | | | | 45.82°C | 230.39V |
| 9 | 49.302A | 8.463A | 8.662A | 2.403A | 674.784 | 91.583% | 3051 | 45.4 | 38.38°C | 0.994 |
| | 12.013V | 5.024V | 3.232V | 4.996V | 736.797 | | | | 46.84°C | 230.37V |
| 10 | 55.002A | 8.974A | 9.219A | 3.017A | 750.002 | 91.074% | 3037 | 45.3 | 39.30°C | 0.995 |
| | 12.005V | 5.014V | 3.222V | 4.973V | 823.509 | | | | 48.27°C | 230.37V |
| 11 | 61.313A | 8.993A | 9.238A | 3.022A | 825.225 | 90.453% | 3046 | 45.4 | 40.18°C | 0.887 |
| | 11.996V | 5.005V | 3.215V | 4.965V | 912.321 | | | | 49.45°C | 230.36V |
| CL1 | 0.152A | 14.002A | 14.000A | 0.000A | 118.590 | 84.203% | 2625 | 41.7 | 36.47°C | 0.889 |
| | 12.067V | 5.069V | 3.270V | 5.094V | 140.839 | | | | 42.16°C | 230.36V |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| CL2 | 62.529A | 1.002A | 1.000A | 1.000A | 764.363 | 91.557% | 3069 | 45.5 | 39.09°C | 0.995 |
| | 12.011V | 5.038V | 3.244V | 5.034V | 834.846 | | | | 48.20°C | 230.36V |

The results above are not used in the certification process

## Light Load Tests

### 115V

| Test # | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.200A | 0.489A | 0.482A | 0.195A | 19.591 | 73.900% | 0 | <6.0 | 0.605 |
| | 12.078V | 5.115V | 3.314V | 5.119V | 26.510 | | | | 115.16V |
| 2 | 2.460A | 0.979A | 0.996A | 0.391A | 40.009 | 82.103% | 0 | <6.0 | 0.807 |
| | 12.076V | 5.112V | 3.311V | 5.112V | 48.730 | | | | 115.16V |
| 3 | 3.653A | 1.469A | 1.481A | 0.588A | 59.506 | 84.954% | 0 | <6.0 | 0.950 |
| | 12.074V | 5.107V | 3.306V | 5.106V | 70.045 | | | | 115.16V |
| 4 | 4.913A | 1.960A | 1.998A | 0.785A | 79.921 | 86.755% | 0 | <6.0 | 0.977 |
| | 12.074V | 5.103V | 3.302V | 5.099V | 92.123 | | | | 115.16V |

The results above are not used in the certification process

### 230V

| Test # | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.196A | 0.489A | 0.480A | 0.195A | 19.536 | 55.562% | 0 | <6.0 | 0.475 |
| | 12.079V | 5.115V | 3.314V | 5.120V | 35.161 | | | | 230.36V |
| 2 | 2.457A | 0.978A | 0.996A | 0.391A | 39.973 | 81.191% | 0 | <6.0 | 0.582 |
| | 12.079V | 5.112V | 3.310V | 5.113V | 49.233 | | | | 230.36V |
| 3 | 3.651A | 1.467A | 1.482A | 0.588A | 59.491 | 84.694% | 0 | <6.0 | 0.701 |
| | 12.078V | 5.108V | 3.306V | 5.106V | 70.242 | | | | 230.34V |
| 4 | 4.912A | 1.961A | 1.997A | 0.785A | 79.927 | 86.848% | 0 | <6.0 | 0.791 |
| | 12.077V | 5.103V | 3.302V | 5.099V | 92.031 | | | | 230.35V |

The results above are not used in the certification process

## Ripple Measurements

### 115V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 9.4 mV | 5.4 mV | 12.9 mV | 14.4 mV | Pass |
| 20% Load | 13.0 mV | 5.9 mV | 13.2 mV | 15.3 mV | Pass |
| 30% Load | 22.8 mV | 6.8 mV | 14.7 mV | 16.0 mV | Pass |
| 40% Load | 24.7 mV | 6.5 mV | 14.3 mV | 16.5 mV | Pass |
| 50% Load | 29.0 mV | 7.0 mV | 14.9 mV | 17.8 mV | Pass |
| 60% Load | 32.7 mV | 7.2 mV | 16.4 mV | 18.7 mV | Pass |
| 70% Load | 37.4 mV | 8.2 mV | 18.0 mV | 21.5 mV | Pass |
| 80% Load | 41.6 mV | 8.5 mV | 18.4 mV | 23.3 mV | Pass |
| 90% Load | 44.9 mV | 8.9 mV | 19.7 mV | 23.8 mV | Pass |
| 100% Load | 57.5 mV | 9.6 mV | 21.5 mV | 29.4 mV | Pass |
| 110% Load | 81.9 mV | 37.3 mV | 118.2 mV | 95.6 mV | Fail |
| Crossload 1 | 17.2 mV | 7.5 mV | 16.7 mV | 12.2 mV | Pass |
| Crossload 2 | 57.5 mV | 8.5 mV | 20.4 mV | 21.5 mV | Pass |

The results above are not used in the certification process

### 230V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 11.7 mV | 5.4 mV | 13.5 mV | 15.2 mV | Pass |
| 20% Load | 38.4 mV | 5.7 mV | 13.5 mV | 16.3 mV | Pass |
| 30% Load | 19.4 mV | 5.8 mV | 14.0 mV | 16.6 mV | Pass |
| 40% Load | 28.1 mV | 6.6 mV | 14.9 mV | 17.4 mV | Pass |
| 50% Load | 31.1 mV | 9.2 mV | 18.6 mV | 17.9 mV | Pass |
| 60% Load | 32.8 mV | 7.4 mV | 17.3 mV | 18.1 mV | Pass |
| 70% Load | 37.4 mV | 7.6 mV | 17.2 mV | 21.7 mV | Pass |
| 80% Load | 41.3 mV | 8.4 mV | 18.9 mV | 22.4 mV | Pass |

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 90% Load | 45.4 mV | 9.0 mV | 19.8 mV | 22.8 mV | Pass |
| 100% Load | 58.6 mV | 9.5 mV | 22.5 mV | 28.8 mV | Pass |
| 110% Load | 61.9 mV | 9.9 mV | 23.1 mV | 29.9 mV | Pass |
| Crossload 1 | 20.0 mV | 7.5 mV | 17.9 mV | 13.5 mV | Pass |
| Crossload 2 | 58.1 mV | 8.4 mV | 22.1 mV | 24.7 mV | Pass |

The results above are not used in the certification process

**SilverStone SFX Platinum 750W**




Top side




Power specifications label