CORSAIR

# Corsair SF1000L

Serial Number 22304851000001580277

Lab ID CR10002090

Certification ID 252090

Test Result Report ID: 22PS2090A

Certificate Issue Date: Nov 18, 2022

Scheme: ETA-EMI PSU

115V




230V




Scheme: LAMBDA PSU

115V




230V







Outside Validation Scope



# 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 | Corsair |
| Model | SF1000L |
| OEM/ODM | Great Wall |
| Serial Number | 22304851000001580277 |
| Product Specifications | |
| Manufacturer-Provided Information | |
| Rated Voltage (Vrms) | 100-240 |
| Rated Current (Arms) | 12-6 |

| | |
|---|---|
| Rated Frequency (Hz) | 47-63 |
| Rated Power (W) | 1000 |
| Operating Temperature (Continuous Full Load) (°C) | |
| Type | SFX-L |
| Cable Design | Fully Modular |
| Warranty | - |
| Cybenetics Measurements | |
| Dimensions (W x H x D) | |
| Weight | |
| Cooling | 120mm Fluid Dynamic Bearing Fan<br>(NR1215) |
| Semi-Passive Operation | ✓ |
| Cybenetics Testing Information | |
| Lab ID | CR10002090 |
| Date of receipt | Nov 11, 2022 |
| Testing Date | Nov 18, 2022 |
| Report Issued Date | Nov 18, 2022 |
| 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 (300mm) | 1 | 1 | 16-20AWG | No |
| 4+4 pin EPS12V (400mm) | 2 | 2 | 16AWG | No |
| 12+2 pin PCIe (410mm) (600W) | 1 | 1 | 16-24AWG | No |
| 6+2 pin PCIe (400mm) | 3 | 3 | 16AWG | No |
| 6+2 pin PCIe (400mm+100mm) | 1 | 2 | 16-18AWG | No |
| SATA (110mm+115mm+115mm+115mm) | 2 | 8 | 18AWG | No |
| 4 pin Molex (100mm+110mm+110mm) | 1 | 3 | 18AWG | No |

| | | | | | |
|---|---|---|---|---|---|
| AC Power Cord (1380mm) - C13 coupler | 1 | 1 | 16AWG | - |

## Power Specifications

| Rail | | 3.3V | 5V | 12V | 5VSB | -12V |
|---|---|---|---|---|---|---|
| Max. Power | Amps | 20 | 20 | 83.3 | 3 | 0 |
| | Watts | 150 | | 1000 | 15 | 0 |
| Total Max. Power (W) | | 1000 | | | | |

## Parts Description

| General Data | |
|---|---|
| Manufacturer (OEM) | Great Wall |
| PCB Type | Double Sided |
| Primary Side | |
| Transient Filter | 4x Y caps, 2x X caps, 3x CM chokes, 1x MOV |
| Inrush Protection | 1x NTC Thermistor SCK-056 (5 Ohm) & Relay |
| Bridge Rectifier(s) | 2x Shindengen US30KB80R (800V, 30A @ 97°C) |
| APFC MOSFETs | 2x Infineon IPW60R060C7 (600V, 22A @ 100°C, Rds(on): 0.06Ohm) |
| APFC Boost Diode | 1x Cree C3D16065A (650V, 16A @ 142°C) |
| Bulk Cap(s) | 2x Rubycon (420V, 510uF & 330uF each or 840uF combined, 3,000h @ 105°C, MXK) |
| Main Switchers | 2x ON Semiconductor FCP104N60F (600V, 24A @ 100°C, Rds(on): 0.104Ohm) |
| Driver IC | 1x Novosense NSi6602BD |
| APFC Controller | Champion CM6502UHHX & CM03AX |
| Resonant Controller | Champion CM6901X |
| Topology | Primary side: APFC, Half-Bridge & LLC converter<br>Secondary side: Synchronous Rectification & DC-DC converters |
| Secondary Side | |
| +12V MOSFETs | 8x Vishay SiR608DP (45V, 166A @ 70°C, Rds(on): 1.8mOhm) |
| 5V & 3.3V | DC-DC Converters: 4x Advanced Power AP4024GEMT (30V, 60A, Rds(on): 4.5mOhm)<br>PWM Controller(s): ANPEC APW7159C |
| Filtering Capacitors | Electrolytic: 2x Rubycon (3-6,000h @ 105°C, YXG), 2x Rubycon (4-10,000h @ 105°C, YXF)<br>Polymer: 9x NIC, 3x United Chemi-Con, 20x FPCAP, 4x Nichicon |
| Supervisor IC | IN1S429I-SCG (OCP,OVP, UVP, SCP, PG) |

| | |
|---|---|
| Fan Controller | Microchip PIC16F1824 |
| Fan Model | Corsair NR1215 (120mm, 12V, 0.55A, Fluid Dynamic Bearing Fan) |
| 5VSB Circuit | |
| Rectifier(s) | 1x Infineon ICE5QR1680AG (800V, 5.8A, Rds(on): 1.75Ohm) &<br>1x Texas Instruments CSD18534Q5A FET (60V, 13A, Rds(on): 9.8Ohm) |
| Standby PWM Controller | Infineon ICE5QR1680AG |

# 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 | ✓ |
| ATX v3.0 Compliance | ✓ |

## Performance Summary

### 115V

| | |
|---|---|
| Accredited | |
| Average Efficiency (>1450 load combinations) | 89.779% |
| Average Noise Output (>1450 Load Combinations) | 41.62dBA |
| Average PF (>1450 Load Combinations) | 0.984 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 72.481% |
| Standby Power Consumption | 0.0756W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 17.84mV |
| 5V Ripple (Full Load) | 14.00mV |
| 3.3V Ripple (Full Load) | 11.69mV |
| 5VSB Ripple (Full Load) | 7.68mV |
| 12V Load Regulation | 0.29% |

| | |
|---|---|
| 5V Load Regulation | 0.26% |
| 3.3V Load Regulation | 0.88% |
| 5VSB Load Regulation | 2.32% |
| Inrush Current | 34.390A |

## 230V

| | | |
|---|---|---|
| Accredited | | |
| Average Efficiency (>1450 load combinations) | | 91.628% |
| Average Noise Output (>1450 Load Combinations) | | 41.04dBA |
| Average PF (>1450 Load Combinations) | | 0.952 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | | 71.903% |
| Standby Power Consumption | | 0.1069W |
| Non-Accredited | | |
| 12V Ripple (Full Load) | | 18.36mV |
| 5V Ripple (Full Load) | | 13.76mV |
| 3.3V Ripple (Full Load) | | 12.21mV |
| 5VSB Ripple (Full Load) | | 7.41mV |
| 12V Load Regulation | | 1.30% |
| 5V Load Regulation | | 0.24% |
| 3.3V Load Regulation | | 0.88% |
| 5VSB Load Regulation | | 2.28% |
| Inrush Current | | 64.520A |
| 12V Transient Response (200%) | | 11.63V |
| 5V Transient Response (200%) | | 4.979V |
| 3.3V Transient Response (200%) | | 3.265V |
| 5VSB Transient Response (200%) | | 4.893V |
| Hold-Up Time & PWR_OK Signal | | 20.50ms |
| AC Loss to PWR_OK Hold Up Time | | 17.80ms |
| PWR_OK Inactive to DC Loss Delay | | 2.70ms |
| PSU Timings: T1 (20% / 100%) | 48.0ms | 40.0ms |
| PSU Timings: T3 (20% / 100%) | 114.0ms | 114.0ms |
| OPP (26.52°C / 40.66°C) | 120.61% | 116.91% |

## Hold-Up Time & PWR_OK Signal

| | |
|---|---|
| Hold-Up Time (ms) | 20.5 |
| AC Loss to PWR_OK Hold Up Time (ms) | 17.8 |
| PWR_OK Inactive to DC Loss Delay (ms) | 2.7 |



### Tables

#### 115V

| Detailed Results | | | | | | |
|---|---|---|---|---|---|---|
| | Average | Min | Limit Min | Max | Limit Max | Result |
| Mains Voltage RMS: | 114.94 V | 114.89 V | 113.85 V | 114.97 V | 116.15 V | PASS |
| Mains Frequency: | 60.00 Hz | 59.98 Hz | 59.40 Hz | 60.04 Hz | 60.60 Hz | PASS |
| Mains Voltage CF: | 1.416 | 1.416 | 1.340 | 1.418 | 1.490 | PASS |
| Mains Voltage THD: | 0.15 % | 0.12 % | N/A | 0.20 % | 2.00 % | PASS |
| Real Power: | 0.076 W | 0.048 W | N/A | 0.123 W | N/A | N/A |
| Apparent Power: | 10.288 W | 10.268 W | N/A | 10.307 W | N/A | N/A |
| Power Factor: | 0.007 | N/A | N/A | N/A | N/A | N/A |

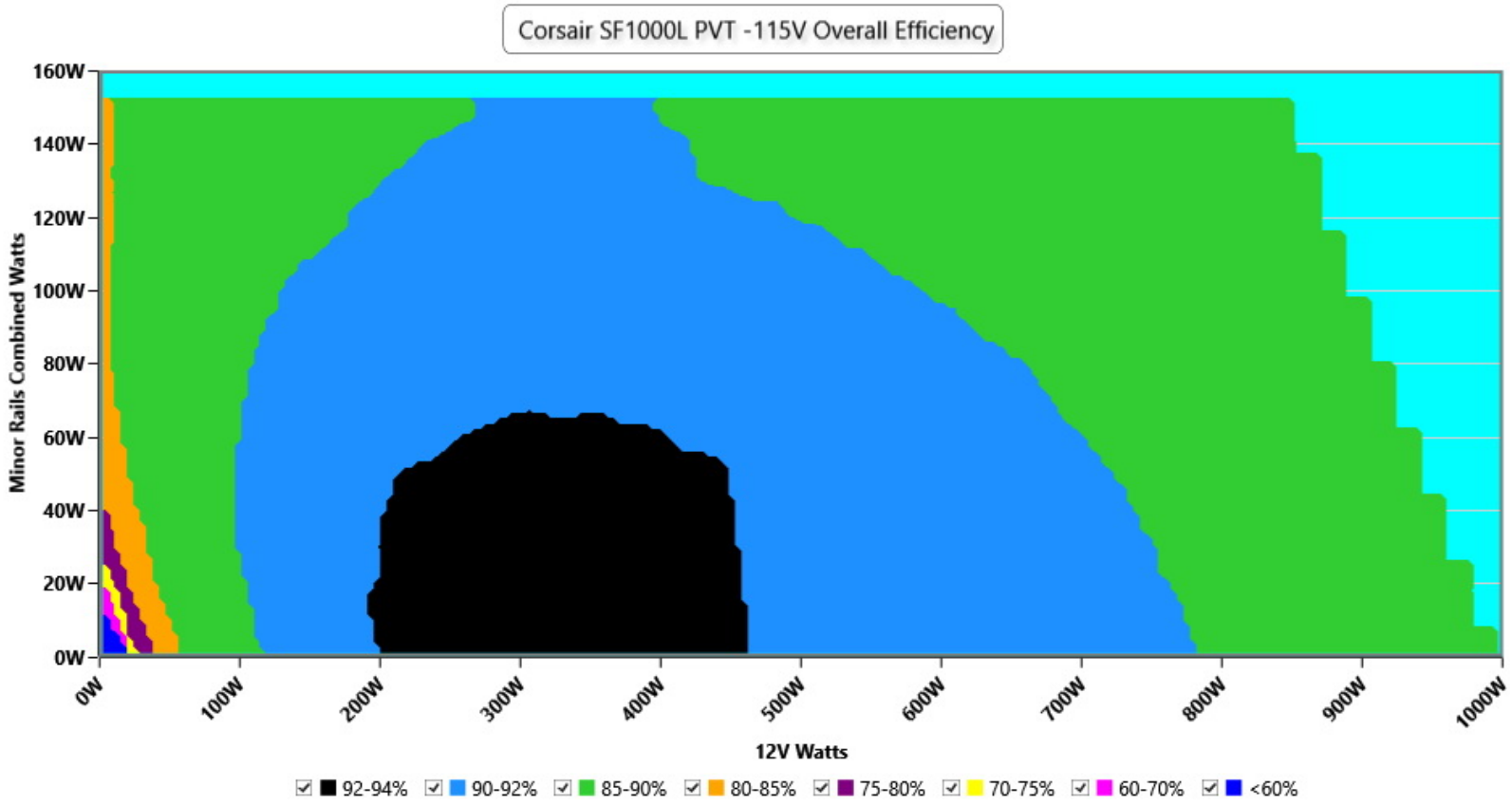
#### 230V

| Detailed Results | | | | | | |
|---|---|---|---|---|---|---|
| | Average | Min | Limit Min | Max | Limit Max | Result |
| Mains Voltage RMS: | 229.88 V | 229.83 V | 227.70 V | 229.96 V | 232.30 V | PASS |
| Mains Frequency: | 50.00 Hz | 49.99 Hz | 49.50 Hz | 50.01 Hz | 50.50 Hz | PASS |
| Mains Voltage CF: | 1.416 | 1.416 | 1.340 | 1.417 | 1.490 | PASS |
| Mains Voltage THD: | 0.21 % | 0.19 % | N/A | 0.24 % | 2.00 % | PASS |
| Real Power: | 0.107 W | 0.087 W | N/A | 0.149 W | N/A | N/A |
| Apparent Power: | 35.075 W | 35.025 W | N/A | 35.145 W | N/A | N/A |

| | | | | | | |
|---|---|---|---|---|---|---|
| Power Factor: | 0.003 | N/A | N/A | N/A | N/A | N/A |

## Efficiency Graph

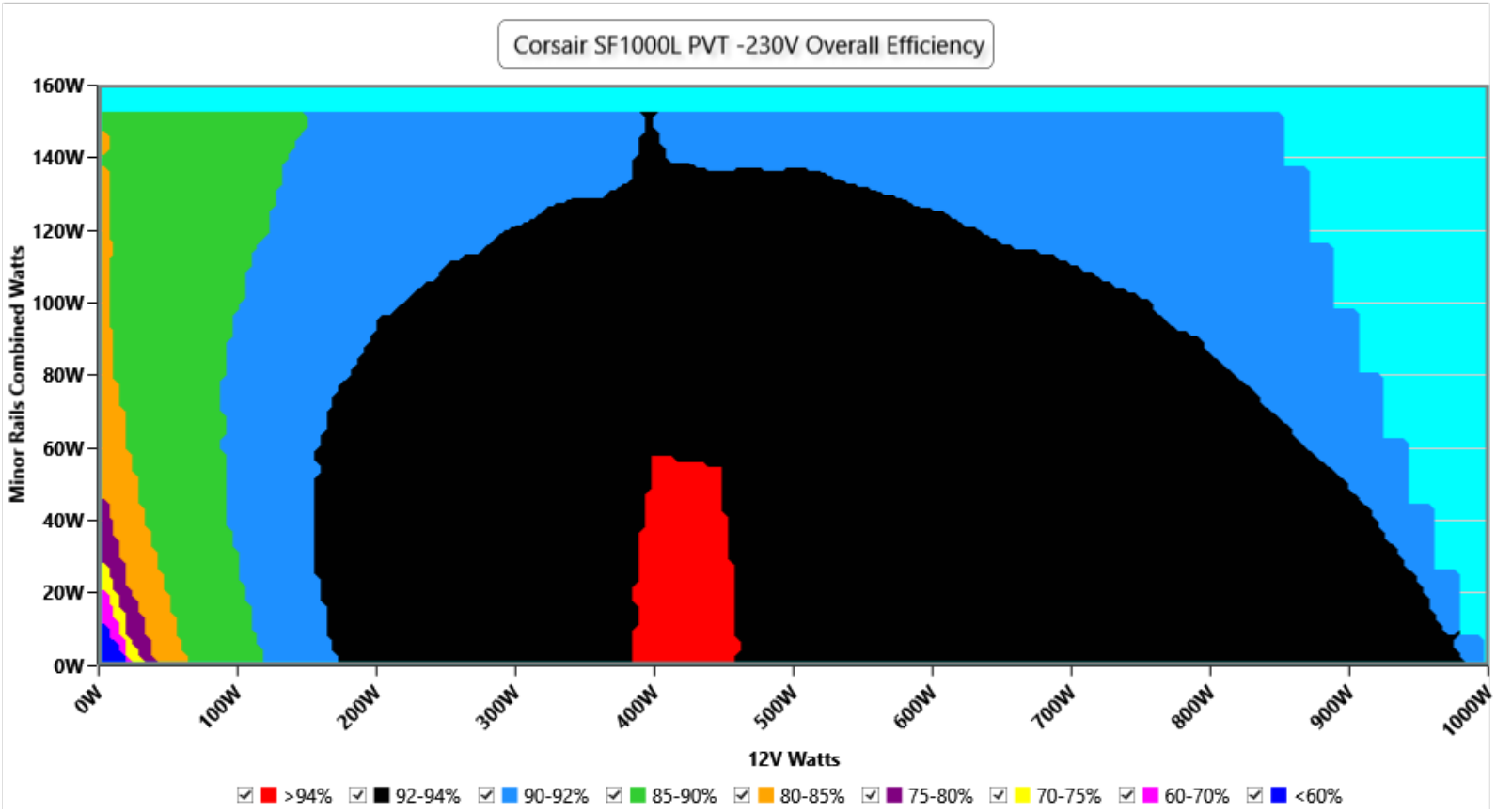
**115V**




**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

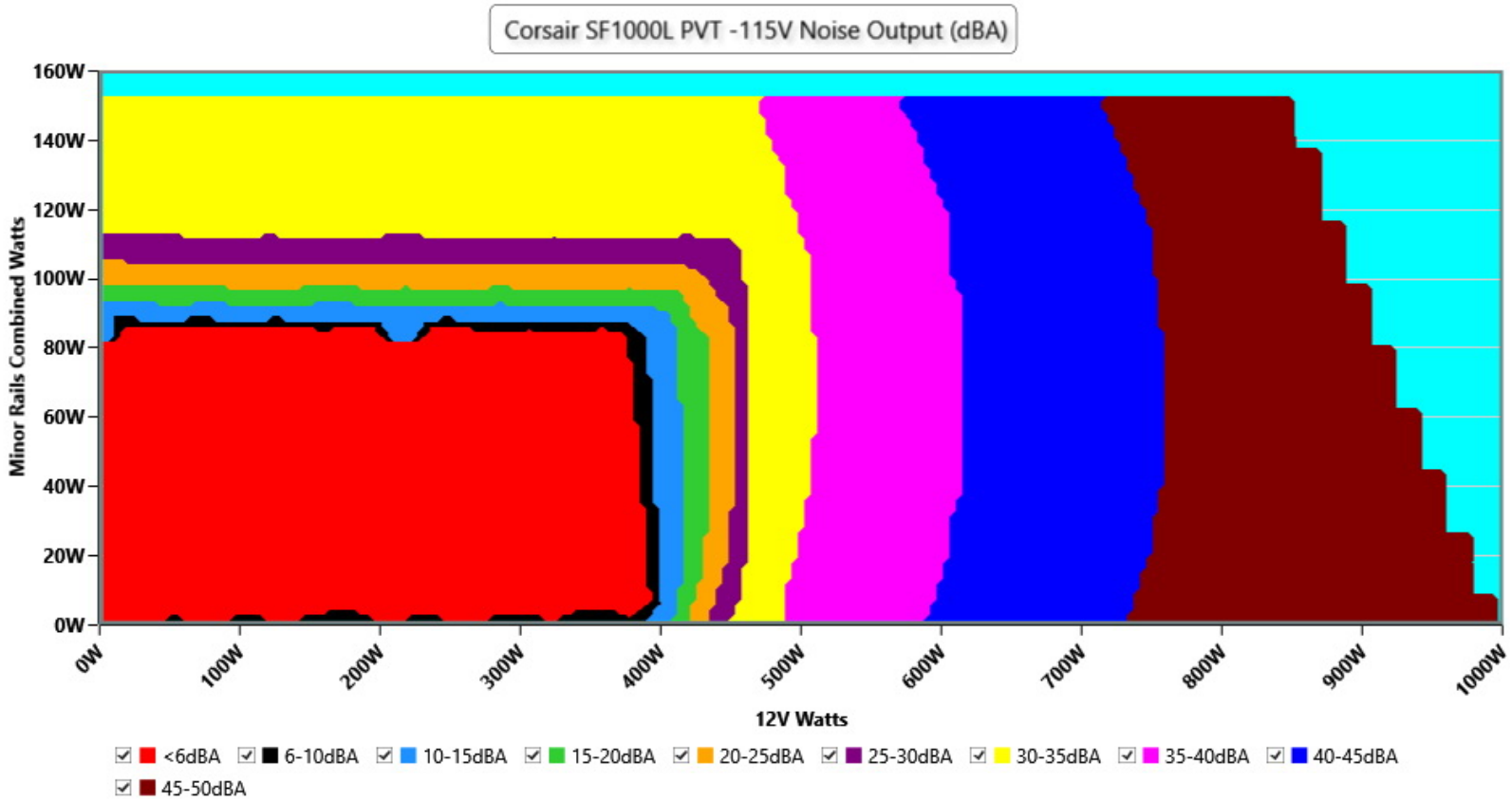



### INFO

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

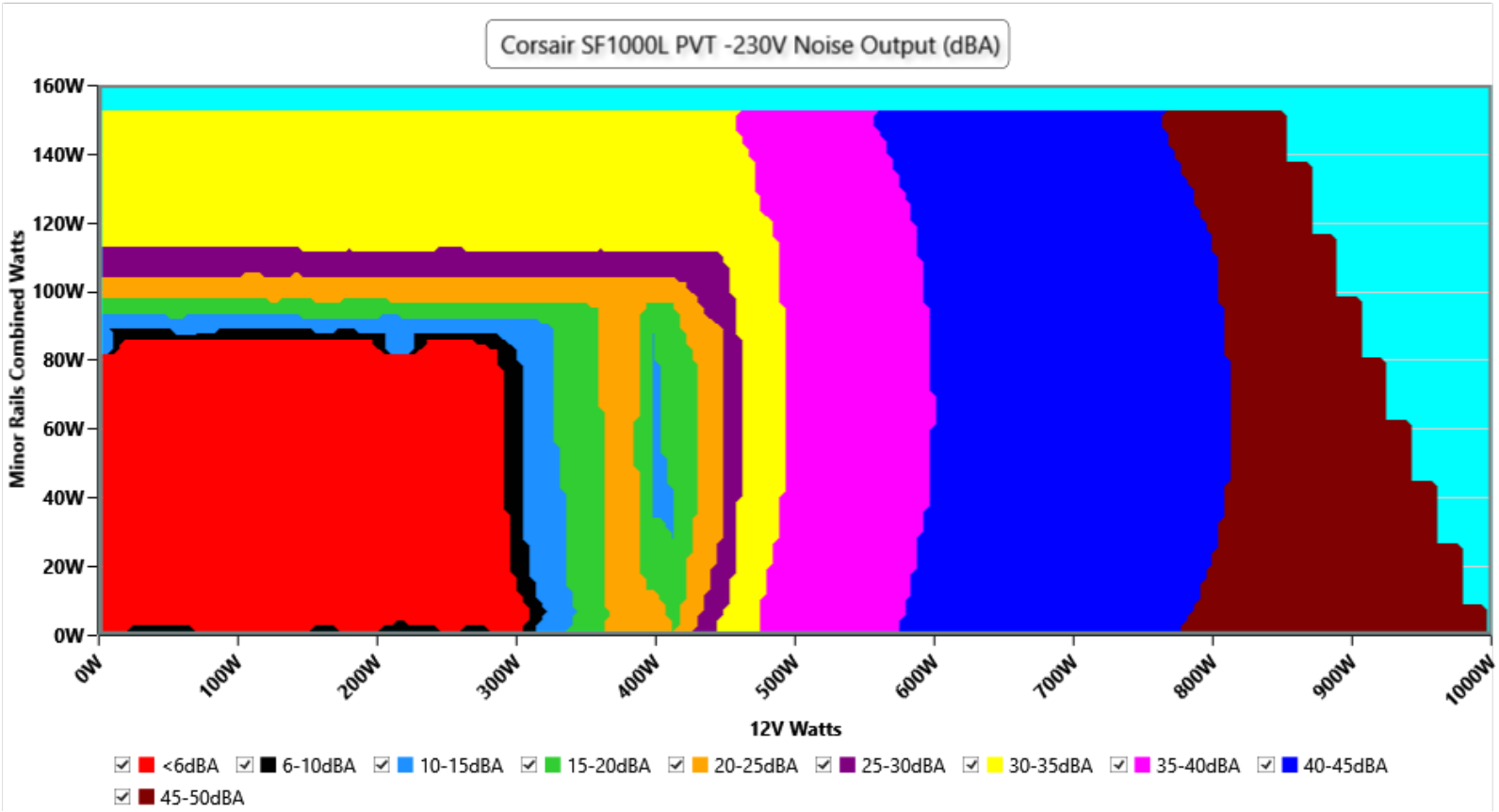
**115V**




**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) · 44.8 °C | 0 RPM · <6.0 dB(A) · 44.8 °C | fan off in both |
| 20% | 0 RPM · <6.0 dB(A) · 45.5 °C | 0 RPM · <6.0 dB(A) · 45.5 °C | fan off in both |
| 50% | 1204 RPM · 34.2 dB(A) · 42.3 °C | 1204 RPM · 34.2 dB(A) · 42.3 °C | **+0.0 dB(A)** |
| 100% | 2373 RPM · 50.4 dB(A) · 46.3 °C | 2373 RPM · 50.4 dB(A) · 46.3 °C | **+0.0 dB(A)** |

### 230V

| Load | Normal ambient<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 776 RPM · 19.9 dB(A) · 40.2 °C | 776 RPM · 19.9 dB(A) · 40.2 °C | **+0.0 dB(A)** |
| 20% | 775 RPM · 19.9 dB(A) · 40.4 °C | 775 RPM · 19.9 dB(A) · 40.4 °C | **+0.0 dB(A)** |
| 50% | 1377 RPM · 37.1 dB(A) · 42.3 °C | 1377 RPM · 37.1 dB(A) · 42.3 °C | **+0.0 dB(A)** |
| 100% | 2386 RPM · 50.4 dB(A) · 45.5 °C | 2386 RPM · 50.4 dB(A) · 45.5 °C | **+0.0 dB(A)** |

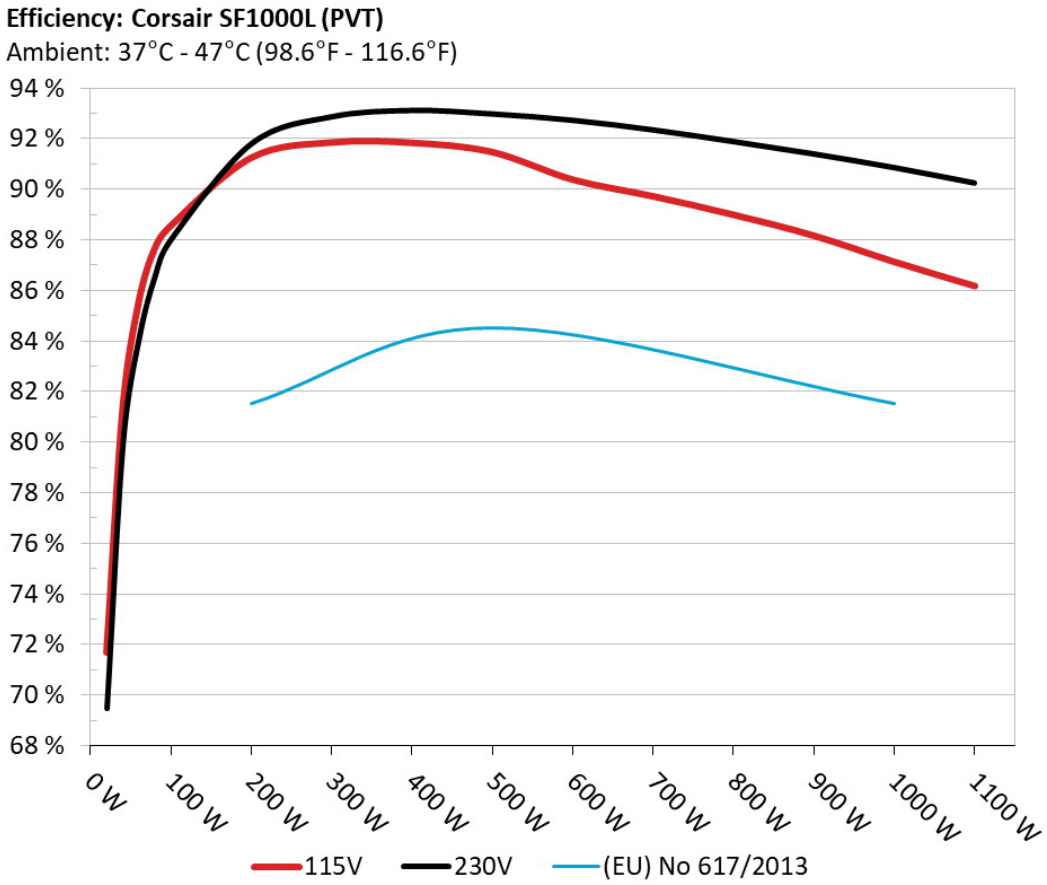
### INFO

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

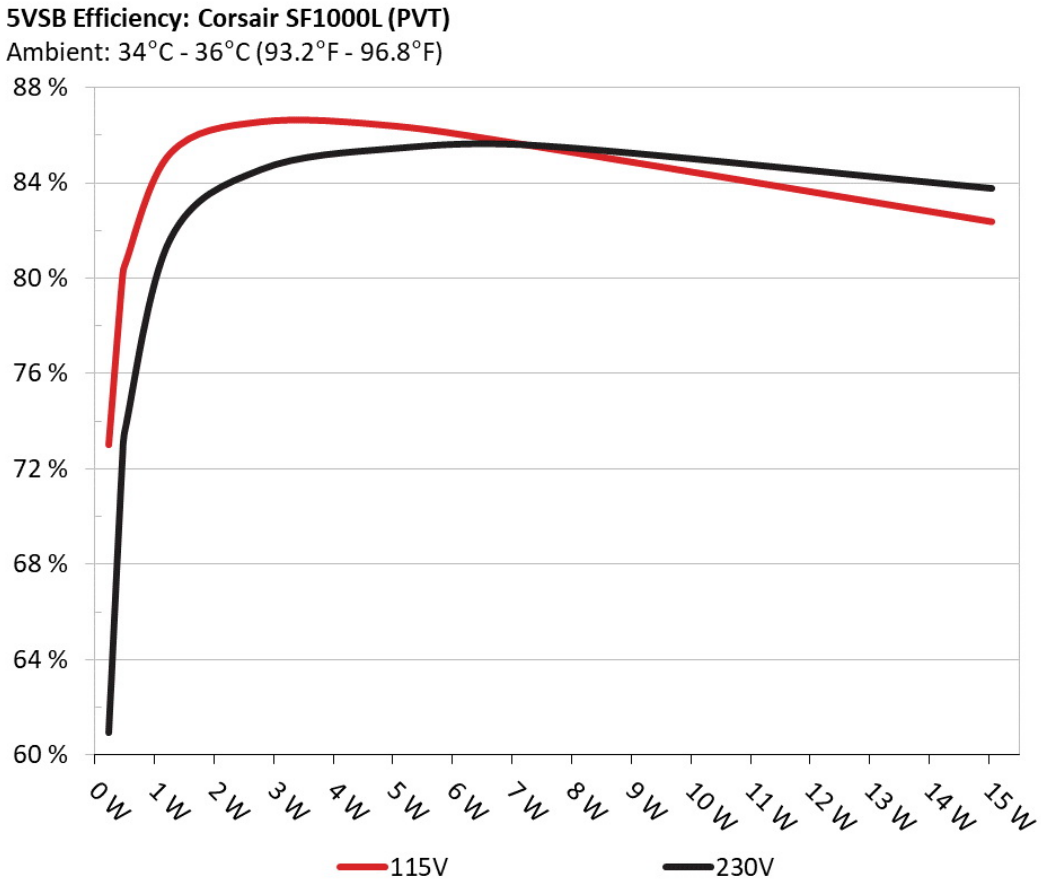
### Efficiency under high ambient temperature




**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 | 0.227W | 72.535% | 0.03 |
| | 5.056V | 0.313W | | 114.94V |
| 2 | 0.09A | 0.455W | 79.515% | 0.054 |
| | 5.055V | 0.572W | | 114.94V |
| 3 | 0.55A | 2.777W | 86.086% | 0.249 |
| | 5.049V | 3.226W | | 114.94V |
| 4 | 1A | 5.042W | 85.907% | 0.353 |
| | 5.042V | 5.869W | | 114.94V |
| 5 | 1.5A | 7.552W | 84.988% | 0.405 |
| | 5.035V | 8.885W | | 114.93V |
| 6 | 3A | 15.042W | 81.894% | 0.485 |
| | 5.014V | 18.368W | | 114.92V |

### 230V

| Test # | 5VSB | DC/AC (Watts) | Efficiency | PF/AC Volts |
|---|---|---|---|---|
| 1 | 0.045A | 0.227W | 60.428% | 0.011 |
| | 5.056V | 0.376W | | 229.9V |
| 2 | 0.09A | 0.455W | 71.879% | 0.018 |
| | 5.055V | 0.634W | | 229.9V |
| 3 | 0.55A | 2.776W | 84.045% | 0.091 |
| | 5.048V | 3.303W | | 229.9V |
| 4 | 1A | 5.04W | 84.937% | 0.154 |
| | 5.04V | 5.933W | | 229.9V |
| 5 | 1.5A | 7.55W | 85.035% | 0.212 |
| | 5.033V | 8.879W | | 229.89V |
| 6 | 3A | 15.038W | 83.261% | 0.316 |
| | 5.012V | 18.061W | | 229.89V |

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 10% | 6.486A | 1.969A | 1.994A | 0.991A | 100.018 | 89.065% | 0 | <6.0 | 44.78°C | 0.967 |
| | 12.090V | 5.079V | 3.31V | 5.046V | 112.293 | | | | 40.5°C | 114.91V |
| 20% | 13.995A | 2.955A | 2.993A | 1.191A | 199.98 | 91.76% | 0 | <6.0 | 45.52°C | 0.966 |
| | 12.081V | 5.077V | 3.307V | 5.036V | 217.936 | | | | 40.81°C | 114.87V |
| 30% | 21.864A | 3.45A | 3.496A | 1.393A | 300.052 | 92.366% | 535 | 7.4 | 41.11°C | 0.978 |
| | 12.074V | 5.073V | 3.303V | 5.027V | 324.858 | | | | 46.28°C | 114.85V |
| 40% | 29.704A | 3.943A | 3.999A | 1.595A | 399.7 | 92.352% | 806 | 21.2 | 41.72°C | 0.985 |
| | 12.069V | 5.073V | 3.301V | 5.017V | 432.802 | | | | 47.26°C | 114.83V |
| 50% | 37.205A | 4.929A | 5.003A | 1.798A | 499.435 | 91.986% | 1204 | 34.2 | 42.29°C | 0.989 |
| | 12.066V | 5.073V | 3.298V | 5.007V | 542.943 | | | | 48.27°C | 114.8V |
| 60% | 44.726A | 5.915A | 6.008A | 2A | 599.952 | 90.893% | 1751 | 43.4 | 42.63°C | 0.991 |
| | 12.077V | 5.073V | 3.296V | 4.996V | 660.067 | | | | 48.85°C | 114.78V |
| 70% | 52.234A | 6.905A | 7.017A | 2.207A | 699.694 | 90.231% | 1936 | 45.6 | 43.41°C | 0.993 |
| | 12.072V | 5.071V | 3.293V | 4.986V | 775.442 | | | | 50.43°C | 114.77V |
| 80% | 59.814A | 7.895A | 8.025A | 2.311A | 799.717 | 89.501% | 2120 | 48.3 | 43.76°C | 0.994 |
| | 12.067V | 5.069V | 3.289V | 4.977V | 893.533 | | | | 51.86°C | 114.74V |
| 90% | 67.728A | 8.389A | 8.519A | 2.416A | 899.499 | 88.676% | 2314 | 49.7 | 44.3°C | 0.995 |
| | 12.063V | 5.067V | 3.287V | 4.968V | 1014.367 | | | | 53.43°C | 114.71V |
| 100% | 75.439A | 8.884A | 9.044A | 3.031A | 999.532 | 87.638% | 2373 | 50.4 | 46.31°C | 0.995 |
| | 12.061V | 5.067V | 3.284V | 4.95V | 1140.523 | | | | 56.39°C | 114.68V |
| 110% | 83.080A | 9.873A | 10.148A | 3.036A | 1100.146 | 86.673% | 2365 | 50.4 | 47.11°C | 0.996 |
| | 12.058V | 5.066V | 3.281V | 4.941V | 1269.317 | | | | 58°C | 114.64V |
| CL1 | 0.116A | 17.818A | 18.026A | 0A | 151.325 | 83.453% | 1772 | 43.6 | 42.84°C | 0.964 |
| | 12.088V | 5.07V | 3.306V | 5.046V | 181.335 | | | | 48.33°C | 114.9V |

| Test | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| CL2 | 0.116A | 19.73A | 0A | 0A | 101.427 | 82.91% | 1323 | 36.0 | 43.61°C | 0.966 |
| | 12.096V | 5.07V | 3.314V | 5.059V | 122.337 | | | | 50.65°C | 114.91V |
| CL3 | 0.115A | 0A | 19.956A | 0A | 67.383 | 79.109% | 1462 | 38.8 | 44°C | 0.947 |
| | 12.094V | 5.083V | 3.307V | 5.055V | 85.179 | | | | 52.19°C | 114.91V |
| CL4 | 82.905A | 0A | 0A | 0A | 999.906 | 88.645% | 2264 | 49.1 | 45.94°C | 0.995 |
| | 12.061V | 5.073V | 3.287V | 5.009V | 1128.006 | | | | 55.89°C | 114.69V |

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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 10% | 6.470A | 1.97A | 1.994A | 0.991A | 100.018 | 88.519% | 776 | 19.9 | 40.2°C | 0.861 |
| | 12.121V | 5.077V | 3.31V | 5.045V | 112.994 | | | | 44.59°C | 229.88V |
| 20% | 13.963A | 2.956A | 2.994A | 1.191A | 199.969 | 92.297% | 775 | 19.9 | 40.39°C | 0.924 |
| | 12.108V | 5.075V | 3.307V | 5.036V | 216.656 | | | | 45.06°C | 229.87V |
| 30% | 21.828A | 3.449A | 3.496A | 1.392A | 300.016 | 93.359% | 739 | 18.1 | 41.12°C | 0.947 |
| | 12.093V | 5.073V | 3.304V | 5.028V | 321.358 | | | | 46.52°C | 229.86V |
| 40% | 29.656A | 3.942A | 3.998A | 1.594A | 399.634 | 93.606% | 1201 | 34.1 | 41.58°C | 0.956 |
| | 12.086V | 5.074V | 3.301V | 5.018V | 426.93 | | | | 47.42°C | 229.85V |
| 50% | 37.154A | 4.929A | 5.003A | 1.797A | 499.363 | 93.47% | 1377 | 37.1 | 42.32°C | 0.964 |
| | 12.081V | 5.072V | 3.298V | 5.008V | 534.246 | | | | 48.66°C | 229.84V |
| 60% | 44.720A | 5.917A | 6.009A | 2A | 599.873 | 93.22% | 1617 | 41.3 | 42.59°C | 0.97 |
| | 12.077V | 5.071V | 3.295V | 4.998V | 643.504 | | | | 49.49°C | 229.82V |
| 70% | 52.226A | 6.905A | 7.017A | 2.205A | 699.606 | 92.84% | 1853 | 44.5 | 43.64°C | 0.973 |
| | 12.072V | 5.07V | 3.293V | 4.988V | 753.555 | | | | 51.15°C | 229.81V |
| 80% | 59.803A | 7.895A | 8.024A | 2.31A | 799.625 | 92.379% | 2073 | 47.9 | 44.32°C | 0.976 |
| | 12.068V | 5.068V | 3.29V | 4.979V | 865.591 | | | | 52.35°C | 229.8V |
| 90% | 67.715A | 8.389A | 8.517A | 2.415A | 899.399 | 91.892% | 2268 | 49.2 | 44.7°C | 0.979 |
| | 12.064V | 5.067V | 3.287V | 4.971V | 978.755 | | | | 53.79°C | 229.79V |

| Test | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| 100% | 75.426A | 8.883A | 9.042A | 3.029A | 999.422 | 91.354% | 2386 | 50.4 | 45.54°C | 0.981 |
| | 12.062V | 5.067V | 3.284V | 4.953V | 1094.011 | | | | 55.58°C | 229.77V |
| 110% | 83.071A | 9.872A | 10.146A | 3.034A | 1100.044 | 90.743% | 2379 | 50.4 | 46.87°C | 0.983 |
| | 12.058V | 5.066V | 3.281V | 4.944V | 1212.266 | | | | 57.81°C | 229.76V |
| CL1 | 0.116A | 17.817A | 18.024A | 0A | 151.311 | 85.112% | 1665 | 42.0 | 42.96°C | 0.91 |
| | 12.088V | 5.069V | 3.306V | 5.048V | 177.781 | | | | 48.42°C | 229.88V |
| CL2 | 0.115A | 19.732A | 0A | 0A | 101.416 | 82.462% | 1546 | 40.5 | 43.92°C | 0.873 |
| | 12.124V | 5.069V | 3.314V | 5.06V | 122.981 | | | | 50.99°C | 229.88V |
| CL3 | 0.115A | 0A | 19.957A | 0A | 67.382 | 78.106% | 1462 | 38.8 | 44.34°C | 0.819 |
| | 12.117V | 5.082V | 3.307V | 5.056V | 86.27 | | | | 52.54°C | 229.88V |
| CL4 | 82.899A | 0A | 0A | 0A | 999.945 | 91.977% | 2291 | 49.4 | 45.67°C | 0.98 |
| | 12.062V | 5.073V | 3.287V | 5.009V | 1087.166 | | | | 55.66°C | 229.77V |

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]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| 20W | 1.228A | 0.492A | 0.498A | 0.197A | 20.004 | 72.156% | 0 | <6.0 | 39.7°C | 0.845 |
| | 12.095V | 5.079V | 3.313V | 5.065V | 27.721 | | | | 36.58°C | 114.92V |
| 40W | 2.704A | 0.689A | 0.697A | 0.296A | 40.004 | 81.802% | 0 | <6.0 | 40.64°C | 0.914 |
| | 12.095V | 5.08V | 3.313V | 5.062V | 48.903 | | | | 37.39°C | 114.92V |
| 60W | 4.178A | 0.886A | 0.897A | 0.395A | 60.004 | 86.043% | 0 | <6.0 | 42.35°C | 0.938 |
| | 12.094V | 5.08V | 3.313V | 5.058V | 69.736 | | | | 38.59°C | 114.91V |
| 80W | 5.651A | 1.083A | 1.096A | 0.495A | 79.965 | 88.163% | 0 | <6.0 | 43.49°C | 0.954 |
| | 12.092V | 5.08V | 3.312V | 5.055V | 90.701 | | | | 39.53°C | 114.91V |

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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 20W | 1.216A | 0.492A | 0.498A | 0.197A | 20.007 | 69.98% | 0 | <6.0 | 39.75°C | 0.529 |
| | 12.218V | 5.077V | 3.313V | 5.066V | 28.591 | | | | 36.64°C | 229.89V |
| 40W | 2.694A | 0.689A | 0.697A | 0.296A | 40.009 | 80.453% | 508 | 6.2 | 37.08°C | 0.68 |
| | 12.140V | 5.078V | 3.313V | 5.062V | 49.734 | | | | 40.44°C | 229.88V |
| 60W | 4.172A | 0.886A | 0.897A | 0.396A | 60.011 | 84.6% | 603 | 10.4 | 38.92°C | 0.778 |
| | 12.115V | 5.079V | 3.312V | 5.058V | 70.931 | | | | 42.5°C | 229.88V |
| 80W | 5.640A | 1.083A | 1.096A | 0.495A | 79.977 | 87.069% | 692 | 15.1 | 39.05°C | 0.828 |
| | 12.117V | 5.079V | 3.312V | 5.054V | 91.853 | | | | 42.92°C | 229.88V |

The results above are not used in the certification process

## Ripple Measurements

### 115V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 6.88mV | 5.82mV | 5.37mV | 3.07mV | Pass |
| 20% Load | 9.18mV | 8.17mV | 7.72mV | 3.27mV | Pass |
| 30% Load | 8.42mV | 6.64mV | 6.29mV | 3.53mV | Pass |
| 40% Load | 8.57mV | 7.41mV | 6.80mV | 4.20mV | Pass |
| 50% Load | 9.03mV | 8.38mV | 7.42mV | 4.76mV | Pass |
| 60% Load | 10.56mV | 9.09mV | 9.61mV | 5.63mV | Pass |
| 70% Load | 10.34mV | 9.04mV | 8.84mV | 6.19mV | Pass |
| 80% Load | 10.64mV | 10.52mV | 10.48mV | 6.75mV | Pass |
| 90% Load | 11.41mV | 11.59mV | 10.53mV | 7.06mV | Pass |
| 100% Load | 17.84mV | 14.00mV | 11.69mV | 7.68mV | Pass |
| 110% Load | 18.53mV | 12.60mV | 12.73mV | 8.08mV | Pass |
| Crossload1 | 12.32mV | 14.52mV | 12.59mV | 12.55mV | Pass |
| Crossload2 | 10.49mV | 10.93mV | 7.98mV | 10.24mV | Pass |

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| Crossload3 | 9.47mV | 9.81mV | 9.51mV | 11.36mV | Pass |
| Crossload4 | 16.60mV | 8.43mV | 10.05mV | 9.58mV | Pass |

The results above are not used in the certification process

**230V**

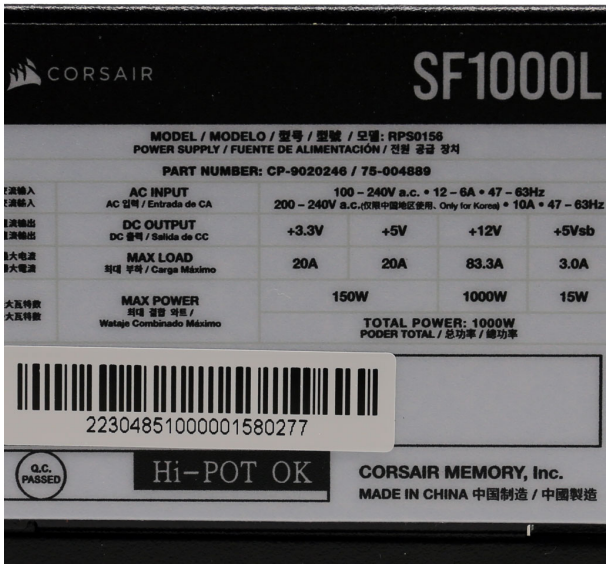
| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 10.37mV | 6.23mV | 5.68mV | 3.12mV | Pass |
| 20% Load | 13.99mV | 5.82mV | 6.96mV | 3.23mV | Pass |
| 30% Load | 9.90mV | 7.10mV | 6.80mV | 3.79mV | Pass |
| 40% Load | 11.08mV | 6.89mV | 7.11mV | 4.20mV | Pass |
| 50% Load | 11.94mV | 17.01mV | 16.31mV | 4.96mV | Pass |
| 60% Load | 11.02mV | 9.96mV | 9.67mV | 5.94mV | Pass |
| 70% Load | 11.18mV | 9.04mV | 9.36mV | 6.50mV | Pass |
| 80% Load | 10.97mV | 10.47mV | 10.74mV | 6.24mV | Pass |
| 90% Load | 11.46mV | 12.26mV | 10.28mV | 6.96mV | Pass |
| 100% Load | 18.36mV | 13.76mV | 12.21mV | 7.41mV | Pass |
| 110% Load | 19.30mV | 13.47mV | 12.97mV | 7.33mV | Pass |
| Crossload1 | 18.27mV | 15.07mV | 12.73mV | 11.92mV | Pass |
| Crossload2 | 13.12mV | 10.42mV | 8.44mV | 9.31mV | Pass |
| Crossload3 | 12.20mV | 9.50mV | 10.84mV | 10.18mV | Pass |
| Crossload4 | 17.42mV | 8.45mV | 9.74mV | 9.50mV | Pass |

The results above are not used in the certification process

## Corsair SF1000L




Top side




Power specifications label