# Super Flower Leadex VIII 850W

S2507199005

Lab ID SF85002916

Certification ID 252916

Test Result Report ID: 25PS2916A

Certificate Issue Date: Aug 19, 2025

Scheme: ETA-EMI PSU

115V




230V




115V




230V




Scheme: LAMBDA PSU




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 | Super Flower |
| Model | Leadex VIII 850W |
| OEM/ODM | Super Flower |
| Serial Number | S2507199005 |
| Product Specifications | |
| Manufacturer-Provided Information | |
| □□□□ (Vrms) | 100-240 |

| | |
|---|---|
| □□□□ (Arms) | 10 |
| □□□□ (Hz) | 50-60 |
| □□□□ (W) | 850 |
| Operating Temperature (Continuous Full Load) (°C) | |
| □□ | ATX12V |
| □□□□ | Fully Modular |
| Warranty | - |
| Cybenetics Measurements | |
| Dimensions (W x H x D) | |
| Weight | |
| □□ | 120mm Double Ball Bearing Fan (ZFB122512H) |
| □□□□□ | ✓ (selectable) |
| Cybenetics Testing Information | |
| Lab ID | SF85002916 |
| Date of receipt | Jul 8, 2025 |
| Testing Date | Aug 13, 2025 |
| Report Issued Date | Aug 19, 2025 |
| Engineer Name | - |
| Authorized By the Laboratory Technical Manager | Aristeidis Bitziopoulos |
| Signature |  |

## □□□□□
## (Non-accredited measurements)

| □□□□□ | | | | |
|---|---|---|---|---|
| □□ | □□□□ | □□□□□□ | **Gauge** | In Cable Capacitors |
| ATX □□ 20+4 pin (600mm) | 1 | 1 | 16-20AWG | □ |
| 4+4 pin ATX12V (700mm) | 2 | 2 | 18AWG | □ |
| 6+2pin PCIe□□ (700mm+150mm) | 1 | 2 | 18AWG | □ |
| 6+2pin PCIe□□ (700mm) | 1 | 1 | 16-18AWG | □ |
| 12+4 pin PCIe (700mm) (600W) | 1 | 1 | 16-26AWG | □ |

| | | | | |
|---|---|---|---|---|
| SATA□□ (550mm+130mm+130mm+130mm) | 2 | 8 | 18AWG | □ |
| 4-pin Molex (550mm+150mm+150mm+150mm) | 1 | 4 | 18AWG | □ |
| AC Power Cord (1375mm) - C13 coupler | 1 | 1 | 18AWG | - |

## Protection Features

| | |
|---|---|
| Under Voltage Protection | ✓ |
| Over Power Protection | ✓ |
| Over Current (+12V) Protection | ✓ |
| Over Temperature Protection | ✓ |
| Short Circuit Protection | ✓ |
| Surge Protection | ✓ |
| Inrush Current Protection | ✓ |
| Fan Failure Protection | ✗ |

## □□□□

| □ | | 3.3V | 5V | 12V | 5VSB | -12V |
|---|---|---|---|---|---|---|
| □□□□ | □□ | 20 | 20 | 70.8 | 3 | 0.5 |
| | □ | 100 | | 849.6 | 15 | 6 |
| □□□□□ (W) | | 850 | | | | |

## Parts Description

| | |
|---|---|
| **General Data** | |
| Manufacturer (OEM) | Super Flower |
| PCB Type | Double-Sided |
| **Primary Side** | |
| Transient Filter | 6x Y caps, 3x X caps, 2x CM chokes, 1x MOV |
| Inrush Protection | NTC Thermistor SCK-0512 (5 Ohm @ 25°C) & Relay |
| Bridge Rectifier | 2x GBU15J (600V, 15A @ 100°C) |
| APFC MOSFETs | 3x Infineon IPA60R180P7S (650V, 11A @ 100°C, Rds(on): 0.180Ohm) |
| APFC Boost Diode | CREE C3D10065I (650V, 9A @ 135°C) |
| Bulk Cap(s) | Rubycon (400V, 820uF, 3000h @ 105°C, MXK) |

| | |
|---|---|
| Main Switchers | 4x Infineon IPB60R180P7 (650V, 11A @ 100°C, Rds(on): 0.180Ohm) |
| APFC Controller | Infineon ICE3PCS02G &<br>Sync Power SPN5003 (reducing no load consumption) |
| Resonant Controller | STMicroelectronics MZLT407 |
| Topology | Primary side: APFC, Half-Bridge & LLC Resonant Converter<br>Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters |
| **Secondary Side** | |
| +12V MOSFETs | 8x Infineon BSC027N04LS (40V, 88A @ 100°C, Rds(on): 2.7mOhm) |
| 5V & 3.3V | DC-DC Converters: 4x Infineon BSC0906NS (30V, 40A @ 100°C, Rds(on): 4.5mOhm)<br>PWM Controller(s): ANPEC APW7159C |
| Filtering Capacitors | Electrolytic:<br>2x Nippon Chemi-con (4-10,000h @ 105°C, KYA)<br>2x Nippon Chemi-con (1-2,000h @ 105°C, KMG)<br>Nippon Chemi-con (2-5,000h @ 105°C, KZE)<br>2x Nippon Chemi-con (@ 105°C,W)<br>Rubycon (6-10,000h @ 105°C, ZLH)<br>5x CapXon (2-5,000h @105°C, KF)<br>Polymer:<br>21x Nippon Chemi-con |
| Supervisor IC | JTC113 & LM324ADG |
| MCU / Fan Controller | STMicroelectronics ST69404 |
| Fan Model | ZIC ZFB122512H (120mm, 12V, 0.45A, Double Ball Bearing Fan) |
| **5VSB Circuit** | |
| Rectifier (High Side) | PFC PFR20L60CT SBR (60V, 20A) |
| Standby PWM Controller | 29604 |

# Test Results

## Temperature & Compliance Info

| | |
|---|---|
| □□□□ (°C /°F) | 28-32 / 82.4-89.6 |
| □□ ErP Lot3/6□□ | ✓ |
| □□ (EU) No 617/2013□□ | ✓ |
| ALPM (Alternative Low Power Mode) compatible | ✓ |

| | |
|---|---|
| ATX v3.1 PSU Power Excursion | ✓ |

## Performance Summary

### 115V

| | |
|---|---|
| Accredited | |
| □□□□ (>1450 load combinations) | 90.470% |
| Average Noise Output (>1450 Load Combinations) | 27.10dBA |
| PF□□□ (>1450 Load Combinations) | 0.988 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 67.360% |
| □□□□□□ | 0.0461W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 19.04mV |
| 5V Ripple (Full Load) | 21.98mV |
| 3.3V Ripple (Full Load) | 16.45mV |
| 5VSB Ripple (Full Load) | 15.06mV |
| 12V Load Regulation | 0.12% |
| 5V Load Regulation | 0.44% |
| 3.3V Load Regulation | 0.76% |
| 5VSB Load Regulation | 2.03% |
| Inrush Current | 35.080A |

### 230V

| | |
|---|---|
| Accredited | |
| □□□□ (>1450 load combinations) | 92.217% |
| Average Noise Output (>1450 Load Combinations) | 26.30dBA |
| PF□□□ (>1450 Load Combinations) | 0.953 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 68.055% |
| □□□□□□ | 0.1004W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 19.49mV |

| | | |
|---|---|---|
| 5V Ripple (Full Load) | | 21.72mV |
| 3.3V Ripple (Full Load) | | 15.87mV |
| 5VSB Ripple (Full Load) | | 14.64mV |
| 12V Load Regulation | | 0.12% |
| 5V Load Regulation | | 0.44% |
| 3.3V Load Regulation | | 0.73% |
| 5VSB Load Regulation | | 2.01% |
| Inrush Current | | 72.150A |
| 12V Transient Response (200%) | | 11.55V |
| 5V Transient Response (200%) | | 4.934V |
| 3.3V Transient Response (200%) | | 3.201V |
| 5VSB Transient Response (200%) | | 5.022V |
| □□□□ & PG□□ | | 29.90ms |
| AC Loss to PWR_OK Hold Up Time | | 27.10ms |
| PWR_OK Inactive to DC Loss Delay | | 2.80ms |
| PSU Timings: T1 (20% / 100%) | 101.0ms | 101.0ms |
| PSU Timings: T3 (20% / 100%) | 120.0ms | 120.0ms |
| 12V OCP (30.1°C / 42.0°C) | 86.00A (121.47%), 12.098V | 85.80A (121.19%), 12.102V |
| 5V OCP (30.1°C / 42.0°C) | 26.8A (134.00%), 4.976V | 26.3A (131.50%), 4.979V |
| 3.3V OCP (30.1°C / 42.0°C) | 26.6A (133.00%), 3.279V | 27A (135.00%), 3.279V |
| 5VSB OCP (30.1°C / 42.0°C) | 4.9A (163.33%), 5.041V | 4.8A (160.00%), 5.041V |
| OPP (29.87°C / 41.34°C) | 121.49% | 121.49% |

## □□□□ & PG□□

| | |
|---|---|
| Hold-Up Time (ms) | 29.9 |
| AC Loss to PWR_OK Hold Up Time (ms) | 27.1 |
| PWR_OK Inactive to DC Loss Delay (ms) | 2.8 |

## Tables

### 115V

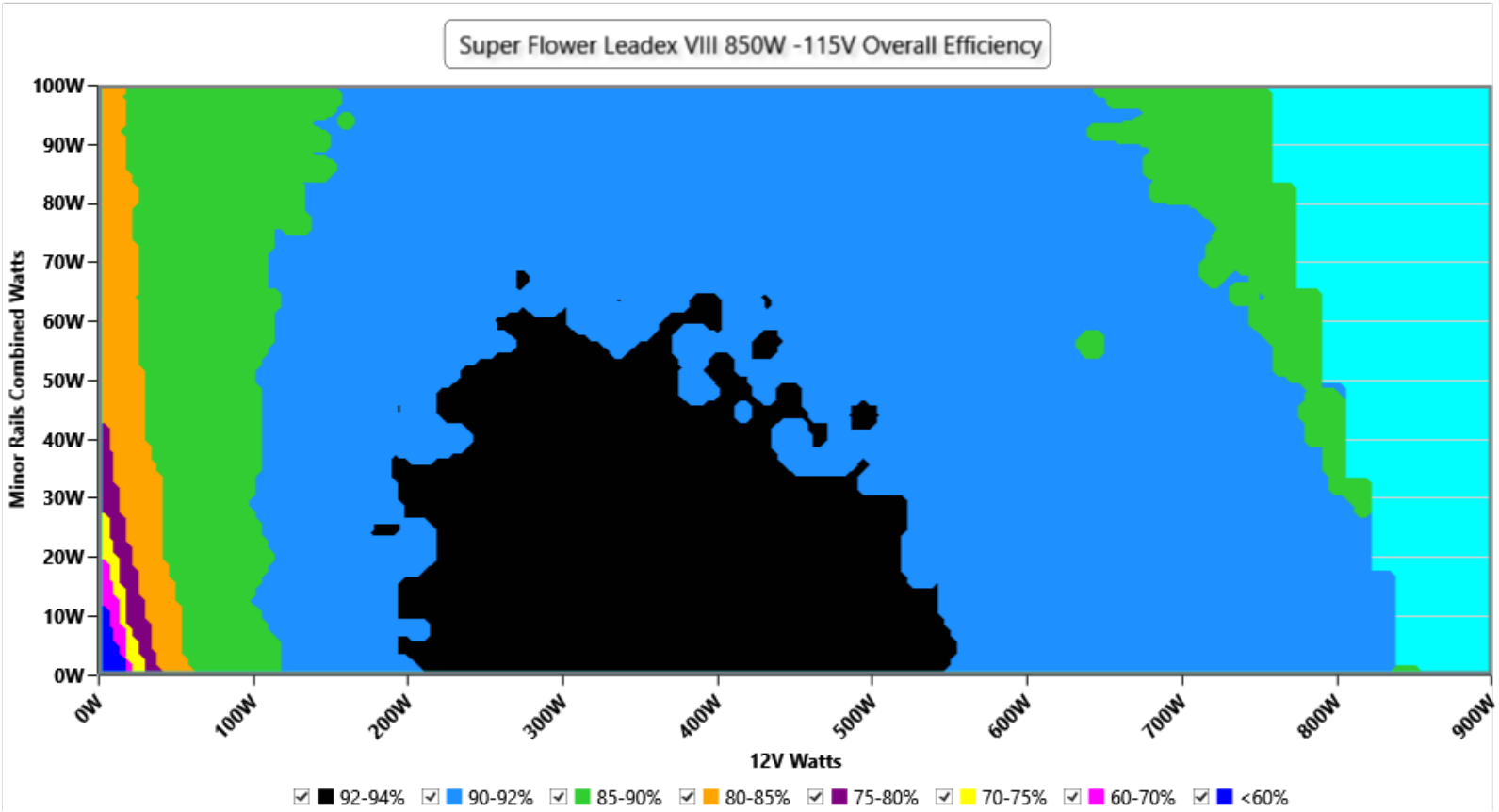
| Detailed Results | | | | | | |
|---|---|---|---|---|---|---|
| | Average | Min | Limit Min | Max | Limit Max | Result |
| Mains Voltage RMS: | 115.10 V | 115.04 V | 113.85 V | 115.14 V | 116.15 V | PASS |
| Mains Frequency: | 60.00 Hz | 59.98 Hz | 59.40 Hz | 60.02 Hz | 60.60 Hz | PASS |
| Mains Voltage CF: | 1.416 | 1.415 | 1.340 | 1.418 | 1.490 | PASS |
| Mains Voltage THD: | 0.13 % | 0.08 % | N/A | 0.19 % | 2.00 % | PASS |
| Real Power: | 0.046 W | -0.002 W | N/A | 0.086 W | N/A | N/A |
| Apparent Power: | 8.295 W | 8.006 W | N/A | 8.605 W | N/A | N/A |
| Power Factor: | 0.009 | N/A | N/A | N/A | N/A | N/A |

### 230V

| Detailed Results | | | | | | |
|---|---|---|---|---|---|---|
| | Average | Min | Limit Min | Max | Limit Max | Result |
| Mains Voltage RMS: | 231.07 V | 230.94 V | 227.70 V | 231.13 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: | 1.417 | 1.417 | 1.340 | 1.419 | 1.490 | PASS |
| Mains Voltage THD: | 0.17 % | 0.14 % | N/A | 0.27 % | 2.00 % | PASS |
| Real Power: | 0.100 W | 0.059 W | N/A | 0.159 W | N/A | N/A |
| Apparent Power: | 27.357 W | 26.965 W | N/A | 27.804 W | N/A | N/A |
| Power Factor: | 0.004 | N/A | N/A | N/A | N/A | N/A |

## □□□□□□

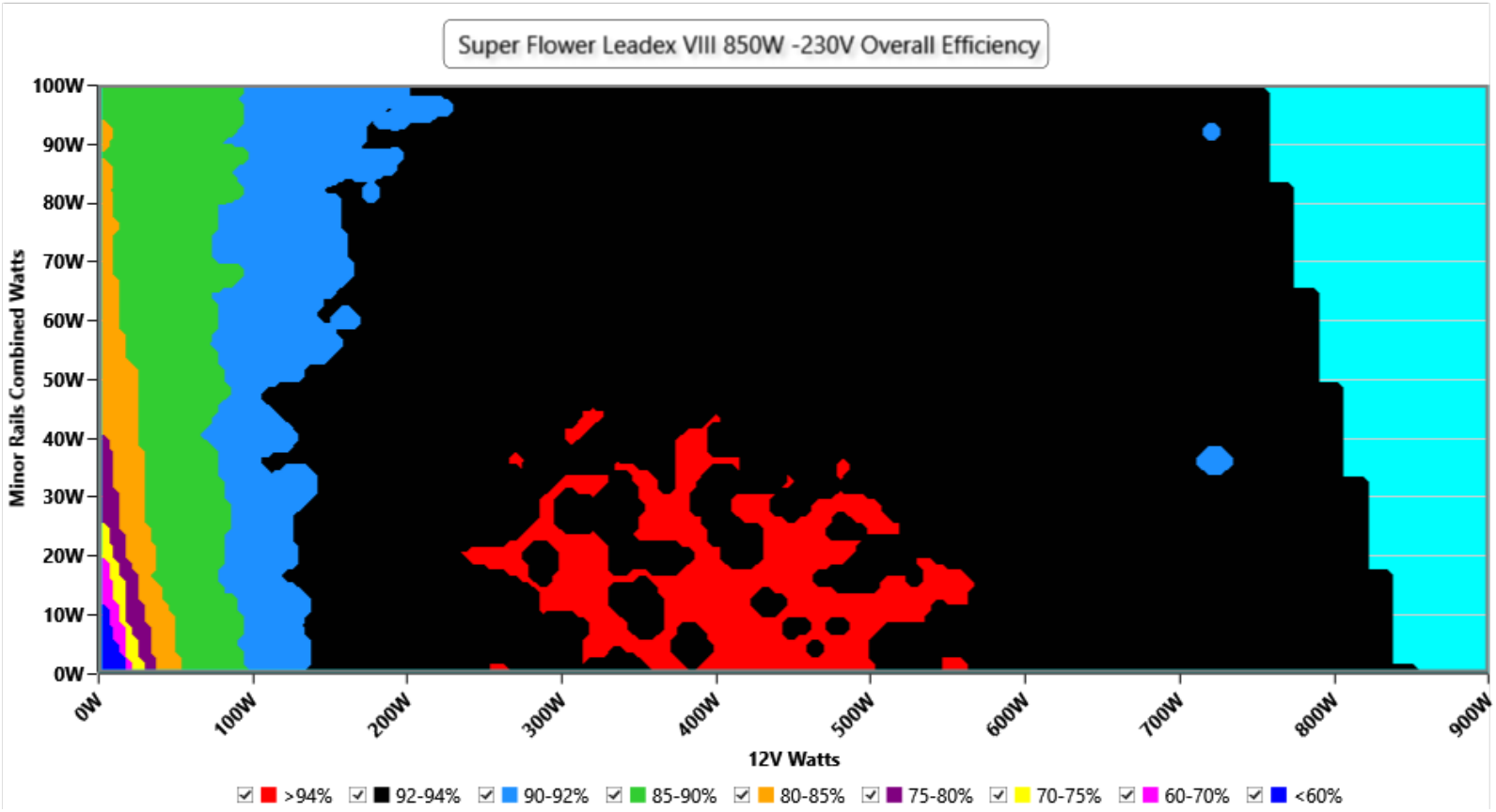
**115V**




□□

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

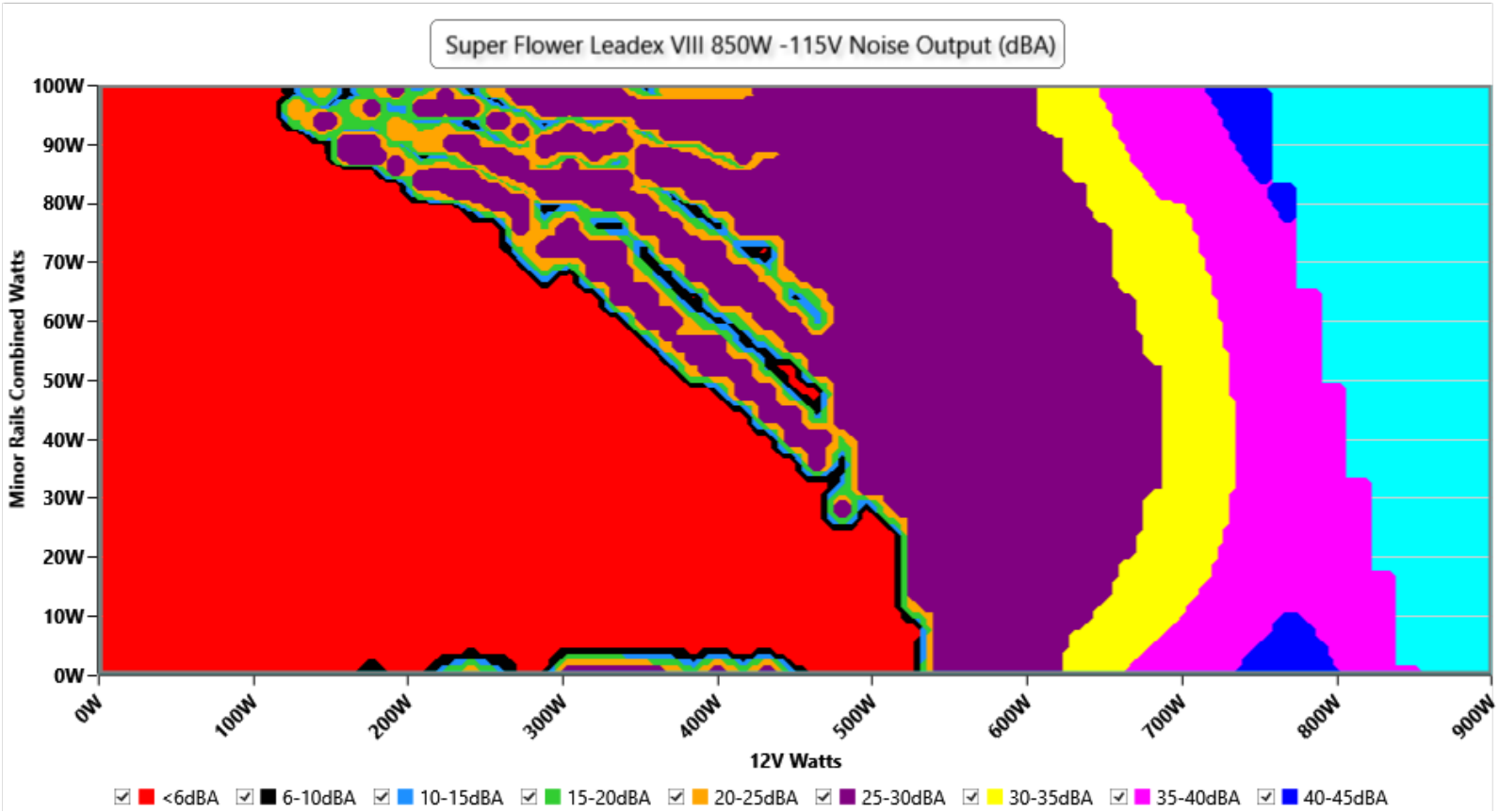
## 230V




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

## □□□□□

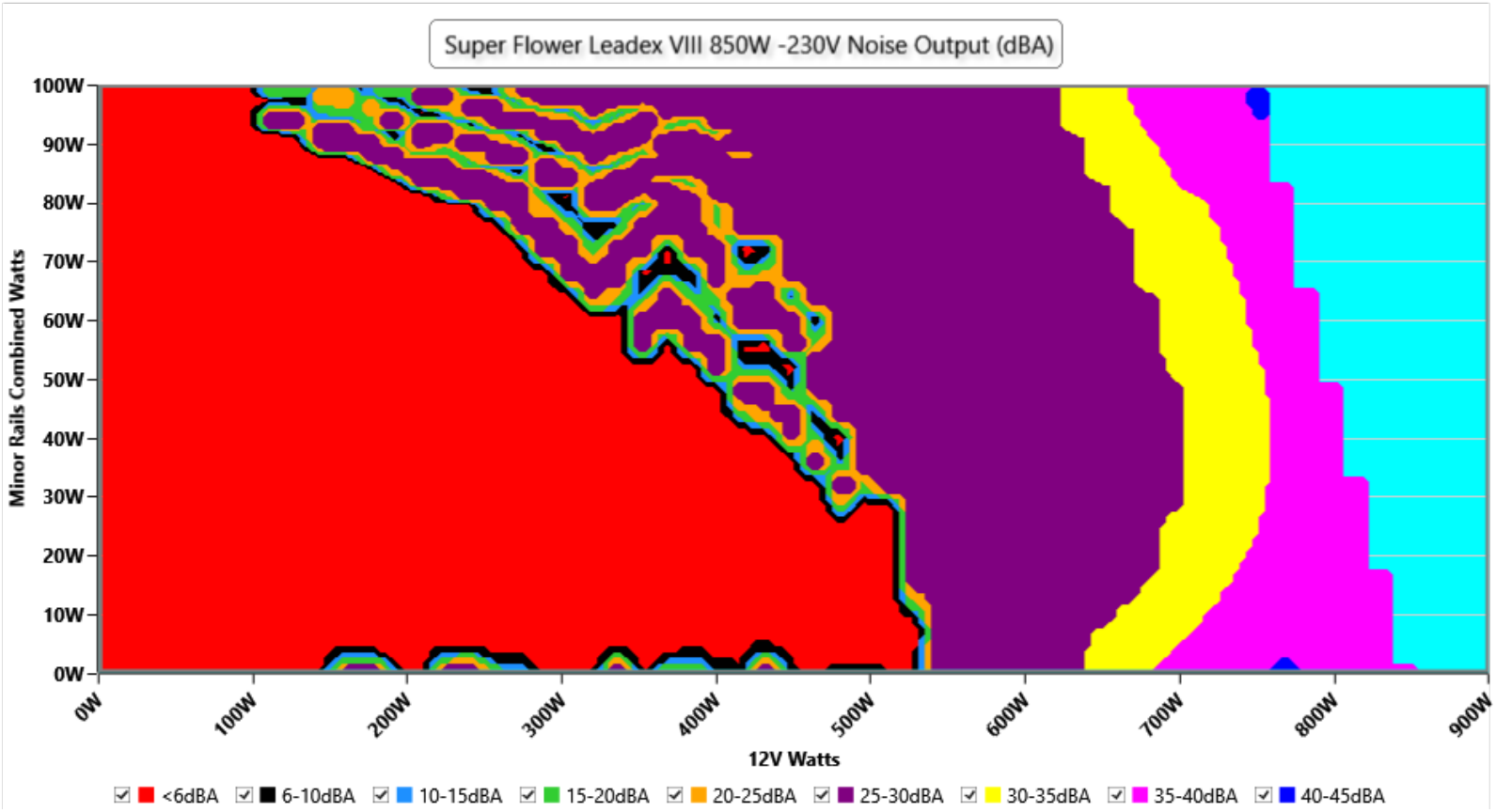
**115V**




□□

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




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) · 35.6 °C | 0 RPM · <6.0 dB(A) · 50.4 °C | fan off in both |
| 20% | 0 RPM · <6.0 dB(A) · 36.1 °C | 0 RPM · <6.0 dB(A) · 49.2 °C | fan off in both |
| 50% | 0 RPM · <6.0 dB(A) · 39.8 °C | 1090 RPM · 29.3 dB(A) · 42.3 °C | fan starts (<6.0 → 29.3) |
| 100% | 1544 RPM · 42.0 dB(A) · 30.8 °C | 2045 RPM · 46.8 dB(A) · 45.4 °C | **+4.8 dB(A)** |

### 230V

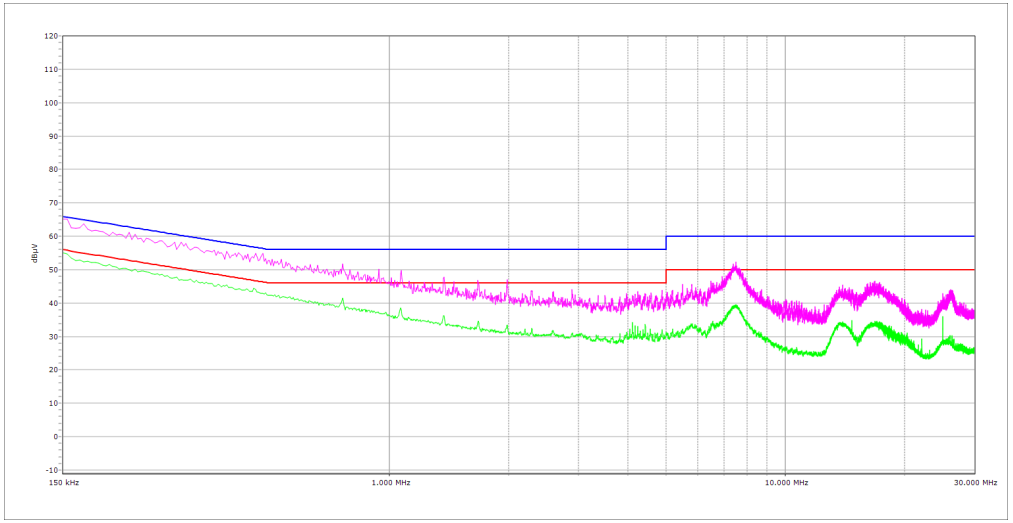
| Load | Normal ambient<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 0 RPM · <6.0 dB(A) · 31.7 °C | 0 RPM · <6.0 dB(A) · 45.6 °C | fan off in both |
| 20% | 0 RPM · <6.0 dB(A) · 33.1 °C | 0 RPM · <6.0 dB(A) · 46.9 °C | fan off in both |
| 50% | 0 RPM · <6.0 dB(A) · 34.7 °C | 1086 RPM · 29.3 dB(A) · 42.2 °C | fan starts (<6.0 → 29.3) |
| 100% | 1436 RPM · 38.6 dB(A) · 30.9 °C | 1971 RPM · 46.7 dB(A) · 45.2 °C | **+8.1 dB(A)** |

### INFO

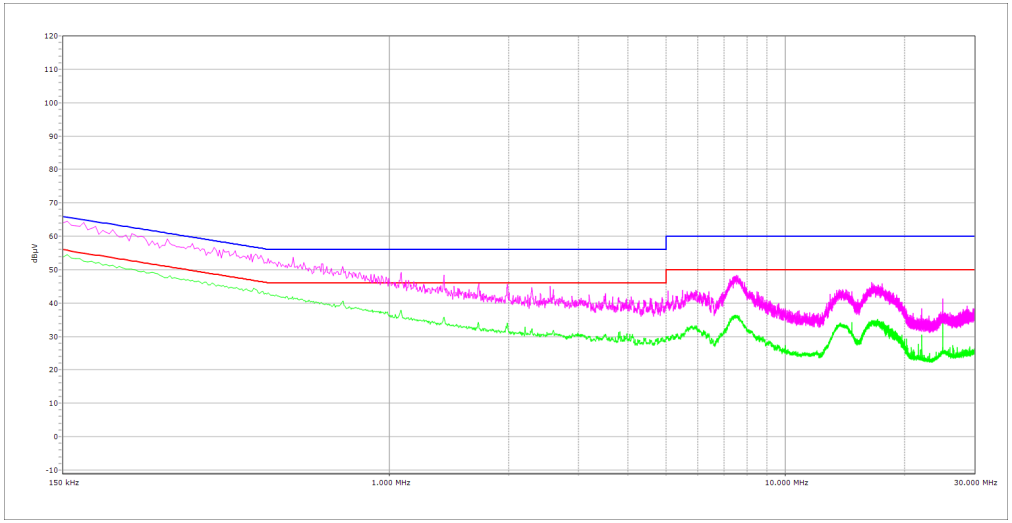
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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

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

## Conducted Emissions EN 55032 & CISPR 32

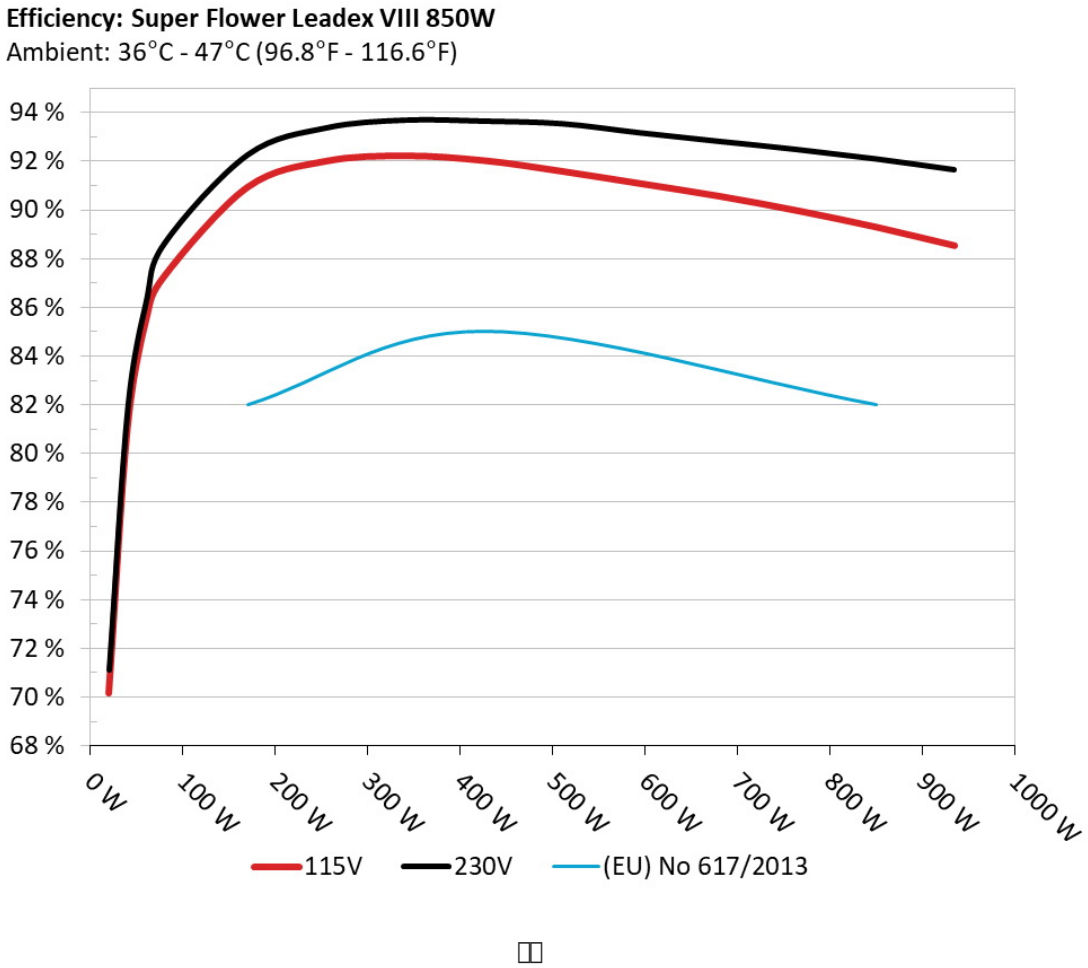



NEUTRAL



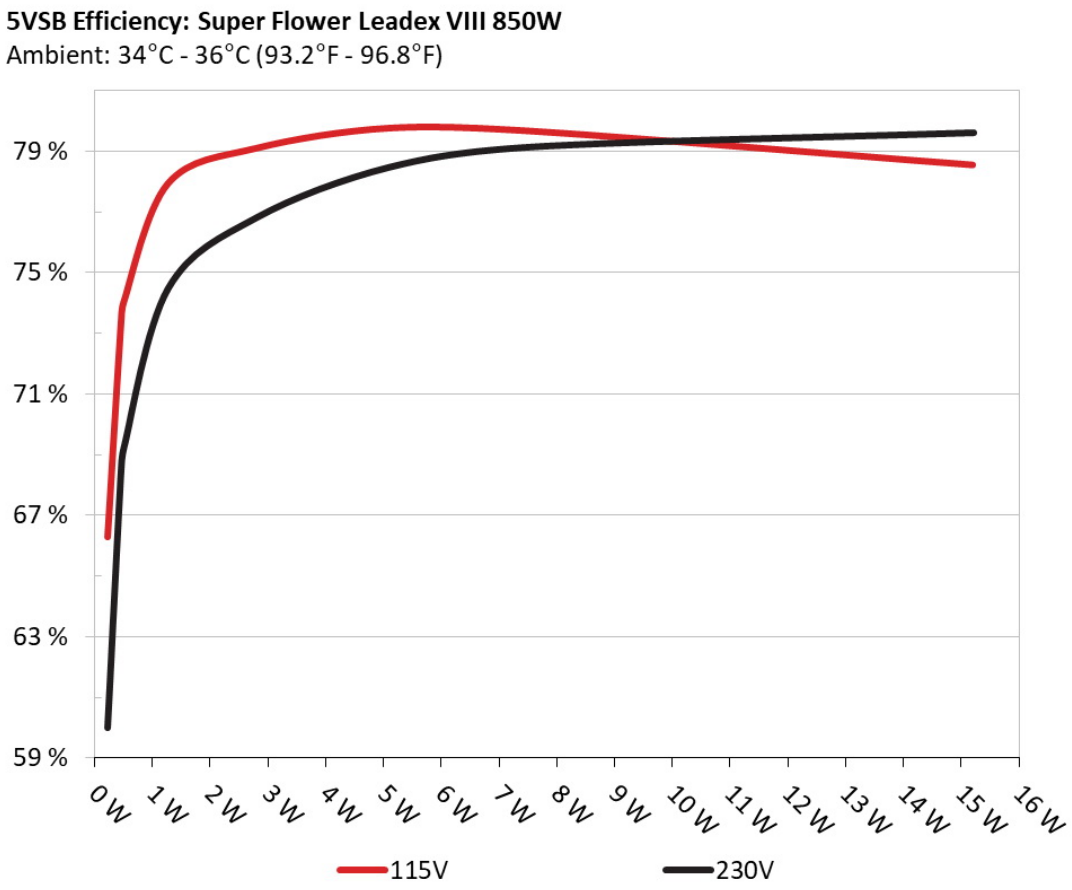

PHASE

## Indicative Performance




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□□□□




□□

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

## □□□□ □□ 5Vsb □□ (ErP Lot3/6 & CEC)

### 115V

| □□ # | 5VSB | DC/AC (□ ) | □□ | PF/AC □□ |
|---|---|---|---|---|
| **1** | **0.045A** | 0.231W | 66.273% | 0.04 |
| | 5.121V | 0.349W | | 114.94V |
| **2** | **0.09A** | 0.461W | 73.289% | 0.072 |
| | 5.121V | 0.629W | | 114.93V |
| **3** | **0.55A** | 2.812W | 79.086% | 0.294 |
| | 5.112V | 3.557W | | 114.92V |
| **4** | **1A** | 5.105W | 79.746% | 0.376 |
| | 5.105V | 6.401W | | 114.92V |
| **5** | **1.5A** | 7.645W | 79.637% | 0.423 |
| | 5.096V | 9.6W | | 114.92V |
| **6** | **3A** | 15.206W | 78.532% | 0.481 |
| | 5.068V | 19.363W | | 114.91V |

### 230V

| □□ # | 5VSB | DC/AC (□ ) | □□ | PF/AC □□ |
|---|---|---|---|---|
| **1** | **0.045A** | 0.231W | 60.002% | 0.015 |
| | 5.12V | 0.386W | | 230.04V |
| **2** | **0.09A** | 0.461W | 68.392% | 0.026 |
| | 5.12V | 0.675W | | 230.04V |
| **3** | **0.55A** | 2.812W | 76.827% | 0.129 |
| | 5.113V | 3.668W | | 230.04V |
| **4** | **1A** | 5.107W | 78.486% | 0.203 |
| | 5.106V | 6.508W | | 230.03V |
| **5** | **1.5A** | 7.648W | 79.163% | 0.258 |
| | 5.098V | 9.662W | | 230.02V |
| **6** | **3A** | 15.221W | 79.623% | 0.35 |
| | 5.074V | 19.116W | | 230.02V |

## Protection Features

| | |
|---|---|
| OCP (Normal @ 30.1°C) | 12V: 86A (121.47%), 12.098V<br>5V: 26.8A (134%), 4.976V<br>3.3V: 26.6A (133%), 3.279V<br>5VSB: 4.9A (163.33%), 5.041V |
| OCP (Hot @ 42°C) | 12V: 85.8A (121.19%), 12.102V<br>5V: 26.3A (131.5%), 4.979V<br>3.3V: 27A (135%), 3.279V<br>5VSB: 4.8A (160%), 5.041V |
| OPP (Normal @ 29.9°C) | 1032.68W (121.49%) |
| OPP (Hot @ 41.3°C) | 1032.67W (121.49%) |
| OTP | ✓ (114°C @ Heat Sink) |
| SCP | 12V to Earth: ✓<br>5V to Earth: ✓<br>3.3V to Earth: ✓<br>5VSB to Earth: ✓<br>-12V to Earth: ✓ |
| PWR_OK | Proper Operation |
| UVP (Full Load @ 90V) | ✓ |
| UVP (No Damage @ 80V) | ✓ |
| Conducted Emissions EN55032 & CISPR 32 | ✓ |
| NLO | ✓ |
| Fan Failure Protection | ✗ |
| SIP | Surge: MOV<br>Inrush: NTC & Bypass Relay |

## Supplementary Tests (For Reference)

### 10-110%□□□□

#### 115V

| □□ | 12V | 5V | 3.3V | 5VSB | DC/AC (□ ) | □□ | □□□□ (RPM) | □□□□□□□ (dB[A]) | □□ (□□ /□□ ) | PF/AC □□ |
|---|---|---|---|---|---|---|---|---|---|---|
| **10%** | **5.253A** | **1.997A** | **2.002A** | **0.981A** | 85.008 | 87.077% | 0 | <6.0 | 50.35°C | 0.951 |
| | 12.070V | 5.008V | 3.298V | 5.097V | 97.622 | | | | 40.48°C | 114.9V |
| **20%** | **11.525A** | **2.997A** | **3.005A** | **1.18A** | 169.959 | 90.918% | 0 | <6.0 | 49.16°C | 0.98 |
| | 12.066V | 5.006V | 3.295V | 5.087V | 186.955 | | | | 40.73°C | 114.88V |
| **30%** | **18.148A** | **3.497A** | **3.508A** | **1.379A** | 254.969 | 91.991% | 0 | <6.0 | 48.81°C | 0.989 |
| | 12.063V | 5.004V | 3.293V | 5.078V | 277.141 | | | | 41.44°C | 114.85V |
| **40%** | **24.777A** | **3.998A** | **4.012A** | **1.578A** | 340.066 | 92.208% | 1087 | 29.3 | 41.59°C | 0.992 |
| | 12.062V | 5.003V | 3.291V | 5.07V | 368.802 | | | | 51.4°C | 114.82V |
| **50%** | **31.044A** | **5.001A** | **5.019A** | **1.779A** | 424.92 | 92.017% | 1090 | 29.3 | 42.29°C | 0.994 |
| | 12.061V | 5V | 3.288V | 5.061V | 461.746 | | | | 54.56°C | 114.78V |
| **60%** | **37.284A** | **6.004A** | **6.028A** | **1.98A** | 509.459 | 91.575% | 1311 | 33.7 | 42.76°C | 0.995 |
| | 12.060V | 4.997V | 3.285V | 5.052V | 556.328 | | | | 53.9°C | 114.75V |
| **70%** | **43.588A** | **7.009A** | **7.039A** | **2.181A** | 594.765 | 91.07% | 1471 | 37.9 | 43.15°C | 0.996 |
| | 12.059V | 4.995V | 3.282V | 5.043V | 653.068 | | | | 53.97°C | 114.72V |
| **80%** | **49.895A** | **8.011A** | **8.05A** | **2.284A** | 679.586 | 90.554% | 1659 | 40.7 | 43.55°C | 0.996 |
| | 12.059V | 4.992V | 3.28V | 5.036V | 750.499 | | | | 54.35°C | 114.68V |
| **90%** | **56.599A** | **8.515A** | **8.543A** | **2.387A** | 764.998 | 89.955% | 1846 | 44.3 | 44.58°C | 0.997 |
| | 12.059V | 4.99V | 3.278V | 5.029V | 850.462 | | | | 55.26°C | 114.65V |
| **100%** | **63.035A** | **9.019A** | **9.068A** | **2.992A** | 849.811 | 89.281% | 2045 | 46.8 | 45.44°C | 0.997 |
| | 12.059V | 4.989V | 3.275V | 5.013V | 951.847 | | | | 56.59°C | 114.61V |
| **110%** | **69.338A** | **10.026A** | **10.176A** | **2.996A** | 934.384 | 88.523% | 2248 | 47.5 | 46.41°C | 0.997 |
| | 12.059V | 4.986V | 3.273V | 5.007V | 1055.516 | | | | 58.08°C | 114.57V |
| **CL1** | **0.116A** | **12.049A** | **12.081A** | **0A** | 101.299 | 83.295% | 1031 | 27.6 | 40.62°C | 0.962 |
| | 12.075V | 4.995V | 3.287V | 5.102V | 121.6 | | | | 48.63°C | 114.9V |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CL2** | **0.116A** | **20.048A** | **0A** | **0A** | 101.347 | 81.727% | 214 | <6.0 | 41.66°C | 0.963 |
| | 12.074V | 4.986V | 3.295V | 5.105V | 124.015 | | | | 51.2°C | 114.9V |
| **CL3** | **0.115A** | **0A** | **20.092A** | **0A** | 67.401 | 76.242% | 1077 | 28.9 | 41.11°C | 0.95 |
| | 12.073V | 5.015V | 3.285V | 5.105V | 88.403 | | | | 49.49°C | 114.91V |
| **CL4** | **70.483A** | **0A** | **0A** | **0A** | 849.558 | 90.034% | 1890 | 44.3 | 45.39°C | 0.997 |
| | 12.054V | 5.001V | 3.286V | 5.068V | 943.6 | | | | 55.11°C | 114.62V |

The results above are not used in the certification process

## 230V

| □□ | **12V** | **5V** | **3.3V** | **5VSB** | **DC/AC (□ )** | □□ | □□□□ **(RPM)** | □□□□□□□ **(dB[A])** | □□ **(□□ /□□ )** | **PF/AC □□** |
|---|---|---|---|---|---|---|---|---|---|---|
| **10%** | **5.254A** | **1.997A** | **2.002A** | **0.981A** | 85.007 | 88.484% | 0 | <6.0 | 45.6°C | 0.813 |
| | 12.070V | 5.008V | 3.297V | 5.097V | 96.071 | | | | 40.27°C | 230.02V |
| **20%** | **11.525A** | **2.997A** | **3.005A** | **1.179A** | 169.958 | 92.252% | 0 | <6.0 | 46.93°C | 0.925 |
| | 12.065V | 5.006V | 3.295V | 5.088V | 184.247 | | | | 40.62°C | 230.01V |
| **30%** | **18.148A** | **3.497A** | **3.507A** | **1.378A** | 254.968 | 93.354% | 0 | <6.0 | 46.71°C | 0.954 |
| | 12.062V | 5.005V | 3.293V | 5.079V | 273.111 | | | | 41.13°C | 230V |
| **40%** | **24.777A** | **3.998A** | **4.011A** | **1.578A** | 340.058 | 93.67% | 1090 | 29.3 | 41.88°C | 0.965 |
| | 12.061V | 5.003V | 3.291V | 5.07V | 363.035 | | | | 55.02°C | 229.99V |
| **50%** | **31.041A** | **5A** | **5.018A** | **1.778A** | 424.891 | 93.63% | 1086 | 29.3 | 42.21°C | 0.974 |
| | 12.061V | 5.001V | 3.289V | 5.061V | 453.797 | | | | 54.08°C | 229.99V |
| **60%** | **37.280A** | **6.003A** | **6.027A** | **1.979A** | 509.424 | 93.525% | 1087 | 29.3 | 42.51°C | 0.978 |
| | 12.061V | 4.998V | 3.285V | 5.053V | 544.707 | | | | 52.85°C | 229.97V |
| **70%** | **43.585A** | **7.008A** | **7.038A** | **2.181A** | 594.736 | 93.15% | 1397 | 37.6 | 43.2°C | 0.982 |
| | 12.060V | 4.995V | 3.283V | 5.044V | 638.47 | | | | 54.68°C | 229.95V |
| **80%** | **49.892A** | **8.01A** | **8.049A** | **2.284A** | 679.562 | 92.804% | 1605 | 42.2 | 43.88°C | 0.985 |
| | 12.060V | 4.993V | 3.28V | 5.036V | 732.349 | | | | 55.39°C | 229.94V |
| **90%** | **56.596A** | **8.513A** | **8.542A** | **2.386A** | 764.98 | 92.465% | 1788 | 43.3 | 44.18°C | 0.987 |
| | 12.059V | 4.991V | 3.278V | 5.029V | 827.321 | | | | 56.3°C | 229.92V |
| **100%** | **63.032A** | **9.018A** | **9.067A** | **2.992A** | 849.792 | 92.082% | 1971 | 46.7 | 45.2°C | 0.989 |
| | 12.059V | 4.989V | 3.276V | 5.014V | 922.871 | | | | 57.38°C | 229.9V |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **110%** | **69.334A** | **10.024A** | **10.174A** | **2.996A** | 934.368 | 91.64% | 2243 | 47.6 | 46.65°C | 0.989 |
| | 12.059V | 4.987V | 3.273V | 5.007V | 1019.596 | | | | 61.1°C | 229.89V |
| **CL1** | **0.116A** | **12.048A** | **12.08A** | **0A** | 101.297 | 84.73% | 821 | 19.8 | 40.11°C | 0.867 |
| | 12.075V | 4.996V | 3.287V | 5.103V | 119.529 | | | | 50.78°C | 230.03V |
| **CL2** | **0.115A** | **20.046A** | **0A** | **0A** | 101.344 | 83% | 1100 | 29 | 41.93°C | 0.871 |
| | 12.074V | 4.986V | 3.295V | 5.106V | 122.11 | | | | 50.71°C | 230.03V |
| **CL3** | **0.115A** | **0A** | **20.091A** | **0A** | 67.399 | 77.45% | 1062 | 28.4 | 40.19°C | 0.794 |
| | 12.073V | 5.015V | 3.285V | 5.105V | 87.017 | | | | 49.06°C | 230.03V |
| **CL4** | **70.482A** | **0A** | **0A** | **0A** | 849.556 | 92.787% | 1866 | 44.5 | 45.26°C | 0.988 |
| | 12.054V | 5.001V | 3.285V | 5.069V | 915.598 | | | | 56.84°C | 229.91V |

The results above are not used in the certification process

## 20-80□□□□□

### 115V

| □□ | **12V** | **5V** | **3.3V** | **5VSB** | **DC/AC (□ )** | □□ | □□□□ **(RPM)** | □□□□□□□ **(dB[A])** | □□ **(□□ /□□ )** | **PF/AC □□** |
|---|---|---|---|---|---|---|---|---|---|---|
| **20W** | **1.231A** | **0.499A** | **0.5A** | **0.196A** | 20.013 | 70.147% | 0 | <6.0 | 42.13°C | 0.822 |
| | 12.073V | 5.011V | 3.3V | 5.115V | 28.532 | | | | 36.34°C | 114.93V |
| **40W** | **2.708A** | **0.699A** | **0.7A** | **0.293A** | 40.006 | 80.975% | 0 | <6.0 | 46.15°C | 0.918 |
| | 12.072V | 5.01V | 3.299V | 5.112V | 49.404 | | | | 37.22°C | 114.92V |
| **60W** | **4.186A** | **0.898A** | **0.9A** | **0.392A** | 60.004 | 85.429% | 0 | <6.0 | 47.23°C | 0.955 |
| | 12.071V | 5.01V | 3.299V | 5.109V | 70.242 | | | | 38.9°C | 114.91V |
| **80W** | **5.661A** | **1.098A** | **1.1A** | **0.49A** | 79.957 | 87.263% | 0 | <6.0 | 50.78°C | 0.949 |
| | 12.070V | 5.009V | 3.298V | 5.106V | 91.639 | | | | 39.47°C | 114.91V |

The results above are not used in the certification process

## 230V

| □□ | 12V | 5V | 3.3V | 5VSB | DC/AC (□ ) | □□ | □□□□ (RPM) | □□□□□□□ (dB[A]) | □□ (□□ /□□ ) | PF/AC □□ |
|---|---|---|---|---|---|---|---|---|---|---|
| **20W** | **1.230A** | **0.499A** | **0.5A** | **0.196A** | 20.01 | 71.119% | 0 | <6.0 | 37.14°C | 0.518 |
| | 12.073V | 5.011V | 3.3V | 5.115V | 28.145 | | | | 36.87°C | 230.02V |
| **40W** | **2.708A** | **0.699A** | **0.7A** | **0.293A** | 40.005 | 81.841% | 0 | <6.0 | 41.76°C | 0.657 |
| | 12.072V | 5.01V | 3.299V | 5.113V | 48.883 | | | | 37.04°C | 230.02V |
| **60W** | **4.186A** | **0.898A** | **0.9A** | **0.391A** | 60.003 | 86.226% | 0 | <6.0 | 43.74°C | 0.747 |
| | 12.070V | 5.01V | 3.299V | 5.11V | 69.577 | | | | 38.72°C | 230.02V |
| **80W** | **5.661A** | **1.098A** | **1.101A** | **0.49A** | 79.956 | 88.627% | 0 | <6.0 | 45.69°C | 0.796 |
| | 12.069V | 5.009V | 3.298V | 5.107V | 90.225 | | | | 39.22°C | 230.02V |

The results above are not used in the certification process

## □□□□

## 115V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 22.97mV | 15.48mV | 15.45mV | 11.25mV | Pass |
| 20% Load | 19.34mV | 17.58mV | 13.71mV | 11.25mV | Pass |
| 30% Load | 18.47mV | 16.86mV | 13.25mV | 11.15mV | Pass |
| 40% Load | 18.47mV | 16.04mV | 14.99mV | 11.00mV | Pass |
| 50% Load | 18.21mV | 17.17mV | 13.50mV | 12.12mV | Pass |
| 60% Load | 19.14mV | 18.39mV | 13.97mV | 12.43mV | Pass |
| 70% Load | 19.13mV | 19.72mV | 14.22mV | 12.38mV | Pass |
| 80% Load | 18.98mV | 19.31mV | 15.50mV | 13.35mV | Pass |
| 90% Load | 19.59mV | 20.18mV | 15.96mV | 14.53mV | Pass |
| 100% Load | 19.04mV | 21.98mV | 16.45mV | 15.06mV | Pass |
| 110% Load | 19.50mV | 22.54mV | 16.75mV | 15.09mV | Pass |
| Crossload1 | 19.87mV | 19.51mV | 15.87mV | 27.09mV | Pass |
| Crossload2 | 24.20mV | 28.66mV | 15.91mV | 29.31mV | Pass |

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| Crossload3 | 30.08mV | 18.85mV | 17.65mV | 28.54mV | Pass |
| Crossload4 | 18.28mV | 17.07mV | 13.51mV | 23.96mV | Pass |

The results above are not used in the certification process

**230V**

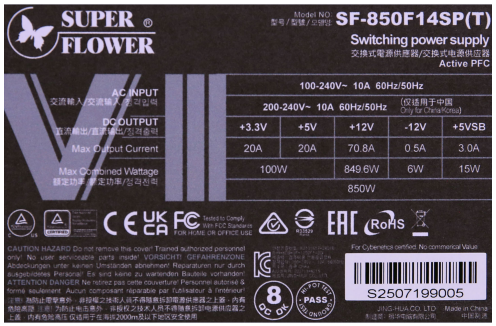
| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 24.15mV | 16.35mV | 14.63mV | 11.25mV | Pass |
| 20% Load | 18.06mV | 18.55mV | 13.61mV | 11.71mV | Pass |
| 30% Load | 18.37mV | 17.17mV | 13.20mV | 11.15mV | Pass |
| 40% Load | 18.57mV | 16.25mV | 15.96mV | 11.51mV | Pass |
| 50% Load | 18.42mV | 17.62mV | 14.43mV | 11.92mV | Pass |
| 60% Load | 18.78mV | 17.27mV | 13.86mV | 11.56mV | Pass |
| 70% Load | 19.29mV | 18.90mV | 14.37mV | 11.71mV | Pass |
| 80% Load | 19.39mV | 19.87mV | 15.76mV | 13.55mV | Pass |
| 90% Load | 20.47mV | 20.69mV | 15.75mV | 13.56mV | Pass |
| 100% Load | 19.49mV | 21.72mV | 15.87mV | 14.64mV | Pass |
| 110% Load | 19.79mV | 22.73mV | 17.73mV | 14.22mV | Pass |
| Crossload1 | 21.10mV | 19.79mV | 16.00mV | 26.21mV | Pass |
| Crossload2 | 24.92mV | 29.02mV | 15.19mV | 28.34mV | Pass |
| Crossload3 | 29.62mV | 18.39mV | 17.09mV | 29.36mV | Pass |
| Crossload4 | 19.26mV | 18.55mV | 15.05mV | 23.79mV | Pass |

The results above are not used in the certification process

## Super Flower Leadex VIII 850W



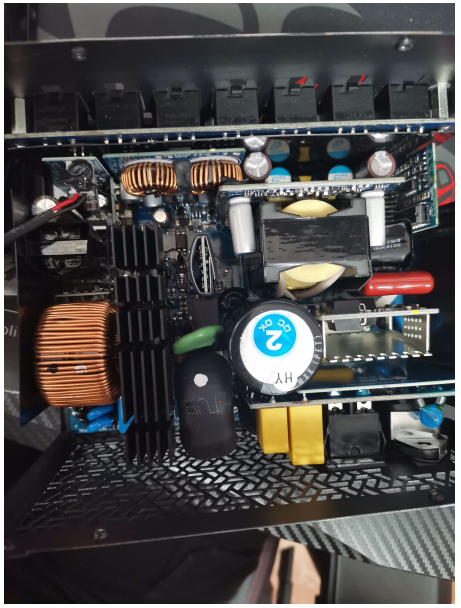

Top side




Power specifications label




Fan



PSU Internals

□□□