



## Super Flower Leadex III Gold ARGB 750W (#2)

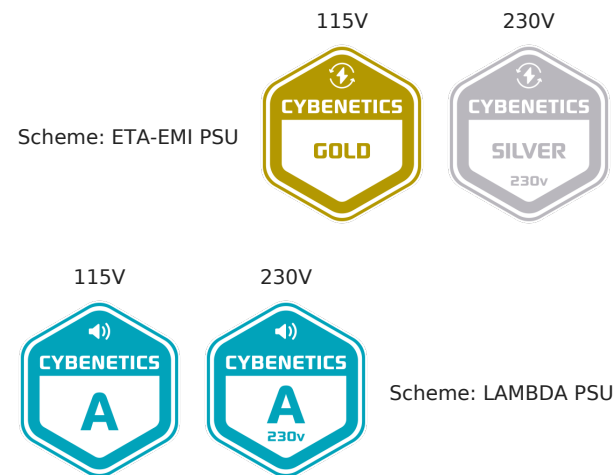
Serial Number S1908199007

Lab ID SF19750137

Certification ID 25891

Test Result Report ID: 19PS891A

Certificate Issue Date: Nov 30, 2019



A handwritten signature in blue ink, appearing to read "A. Bitziopoulos", is written over a faint, circular, dotted-line background.

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                             | Super Flower                   |
| Model                             | Leadex III Gold ARGB 750W (#2) |
| OEM/ODM                           | Super Flower                   |
| Serial Number                     | S1908199007                    |
| Product Specifications            |                                |
| Manufacturer-Provided Information |                                |
| Rated Voltage (Vrms)              | 100-240                        |
| Rated Current (Arms)              | 10                             |
| Rated Frequency (Hz)              | 50-60                          |

|                                                   |                                                                                     |
|---------------------------------------------------|-------------------------------------------------------------------------------------|
| Rated Power (W)                                   | 750                                                                                 |
| Operating Temperature (Continuous Full Load) (°C) |                                                                                     |
| Type                                              | ATX12V                                                                              |
| Cable Design                                      | Fully Modular                                                                       |
| Warranty                                          | -                                                                                   |
| Cybenetics Measurements                           |                                                                                     |
| Dimensions (W x H x D)                            |                                                                                     |
| Weight                                            |                                                                                     |
| Cooling                                           | 130mm Fluid Dynamic Bearing Fan (S1302412M)                                         |
| Semi-Passive Operation                            | ✓ (selectable)                                                                      |
| Cybenetics Testing Information                    |                                                                                     |
| Lab ID                                            | SF19750137                                                                          |
| Date of receipt                                   | Nov 18, 2019                                                                        |
| Testing Date                                      | Nov 26, 2019                                                                        |
| Report Issued Date                                | Nov 30, 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 (590mm)        | 1           | 1                       | 18-22AWG | Yes                 |
| 4+4 pin EPS12V (690mm)                | 2           | 2                       | 18-22AWG | Yes                 |
| 6+2 pin PCIe (540mm+150mm)            | 3           | 6                       | 18-22AWG | Yes                 |
| SATA (550mm+120mm+120mm)              | 3           | 9                       | 18AWG    | No                  |
| 4-pin Molex (550mm+100mm+100mm+100mm) | 1           | 4                       | 18AWG    | No                  |
| ARGB Sync cable (550mm+180mm)         | 1           | 2                       | 28AWG    | No                  |
| AC Power Cord (1380mm) - C13 coupler  | 1           | 1                       | 18AWG    | -                   |

## Power Specifications

|                      |       |      |    |       |      |      |
|----------------------|-------|------|----|-------|------|------|
| Rail                 |       | 3.3V | 5V | 12V   | 5VSB | -12V |
| Max. Power           | Amps  | 20   | 20 | 62.4  | 3    | 0.5  |
|                      | Watts | 100  |    | 748.8 | 15   | 6    |
| Total Max. Power (W) |       | 750  |    |       |      |      |

## Parts Description

|                      |                                                                                                                                                                                                                                                                                                                   |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Data         |                                                                                                                                                                                                                                                                                                                   |
| Manufacturer (OEM)   | Super Flower                                                                                                                                                                                                                                                                                                      |
| Platform Model       | Leadex III                                                                                                                                                                                                                                                                                                        |
| PCB Type             | Single Sided                                                                                                                                                                                                                                                                                                      |
| Primary Side         |                                                                                                                                                                                                                                                                                                                   |
| Transient Filter     | 3x Y caps, 3x X caps, 2x CM chokes, 1x MOV                                                                                                                                                                                                                                                                        |
| Inrush Protection    | NTC Thermistor & Relay                                                                                                                                                                                                                                                                                            |
| Bridge Rectifier(s)  | 1x                                                                                                                                                                                                                                                                                                                |
| APFC MOSFETS         | 2x Infineon IPA50R199CP (550V, 11A @ 100°C, 0.199Ohm) & 1x SPN5003 FET (for reduced no-load consumption)                                                                                                                                                                                                          |
| APFC Boost Diode     | 1x STMicroelectronics STTH8R06D (600V, 8A @ 130°C)                                                                                                                                                                                                                                                                |
| Hold-up Cap(s)       | 2x Nippon Chemi-Con (400V, 330uF each or 660uF combined, 2,000h @ 105°C, KMR)                                                                                                                                                                                                                                     |
| Main Switchers       | 2x Infineon IPA50R140CP (550V, 15A @ 100°C, 0.14Ohm)                                                                                                                                                                                                                                                              |
| APFC Controller      | SF29603 & S9602                                                                                                                                                                                                                                                                                                   |
| Resonant Controllers | SF29605                                                                                                                                                                                                                                                                                                           |
| Topology             | Primary side: Half-Bridge & LLC converter<br>Secondary side: Synchronous Rectification & DC-DC converters                                                                                                                                                                                                         |
| Secondary Side       |                                                                                                                                                                                                                                                                                                                   |
| +12V MOSFETS         | 4x Infineon IPP041N04N (40V, 80A @ 100°C, 4.1mOhm)                                                                                                                                                                                                                                                                |
| 5V & 3.3V            | DC-DC Converters: 8x Alpha & Omega AON6516 (30V, 25A @ 100°C, 8mOhm @ 125°C)<br>PWM Controllers: 2x ON Semiconductor NCP1587A                                                                                                                                                                                     |
| Filtering Capacitors | Electrolytics: 6x Nippon Chemi-Con (105°C, W), 4x Nippon Chemi-Con (4-10,000h @ 105°C, KY), 2x Nippon Chemi-Con (1-5,000h @ 105°C, KZE), 1x Nippon Chemi-Con (1-2,000h @ 105°C, KMG), 7x Nichicon (1,000h @ 105°C, RZ), 1x Nichicon (2-5,000h @ 105°C, HD)<br>Polymers: 8x FPCAP, 3x United Chemi-Con, 2x Jamicon |
| Supervisor IC        | SF29603 & LM339A                                                                                                                                                                                                                                                                                                  |
| Fan controller       | STMicroelectronics STM8S003F3                                                                                                                                                                                                                                                                                     |

|                        |                                                                    |
|------------------------|--------------------------------------------------------------------|
| Fan Model              | Globe Fan S1302412M (130mm, 12V, 0.40A, Fluid Dynamic Bearing Fan) |
| 5VSB Circuit           |                                                                    |
| Rectifier              | 1x PFC PFR20L60CT SBR (60V, 20A)                                   |
| Standby PWM Controller | SF29604                                                            |

## 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 | ✓                 |

### Performance Summary

#### 115V

|                                                |          |
|------------------------------------------------|----------|
| Accredited                                     |          |
| Average Efficiency (>1450 load combinations)   | 88.863%  |
| Average Noise Output (>1450 Load Combinations) | 24.34dBA |
| Average PF (>1450 Load Combinations)           | 0.983    |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 68.905%  |
| Standby Power Consumption                      | 0.0471W  |
| Non-Accredited                                 |          |
| 12V Ripple (Full Load)                         | 12.40mV  |
| 5V Ripple (Full Load)                          | 13.58mV  |
| 3.3V Ripple (Full Load)                        | 21.46mV  |
| 5VSB Ripple (Full Load)                        | 13.90mV  |
| 12V Load Regulation                            | 0.56%    |
| 5V Load Regulation                             | 0.72%    |
| 3.3V Load Regulation                           | 1.21%    |
| 5VSB Load Regulation                           | 3.30%    |

|                |         |
|----------------|---------|
| Inrush Current | 36.704A |
|----------------|---------|

## 230V

|                                                |          |         |
|------------------------------------------------|----------|---------|
| Accredited                                     |          |         |
| Average Efficiency (>1450 load combinations)   | 90.981%  |         |
| Average Noise Output (>1450 Load Combinations) | 23.55dBA |         |
| Average PF (>1450 Load Combinations)           | 0.924    |         |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | -        |         |
| Standby Power Consumption                      | 0.0790W  |         |
| Non-Accredited                                 |          |         |
| 12V Ripple (Full Load)                         | 13.00mV  |         |
| 5V Ripple (Full Load)                          | 13.94mV  |         |
| 3.3V Ripple (Full Load)                        | 22.53mV  |         |
| 5VSB Ripple (Full Load)                        | 13.39mV  |         |
| 12V Load Regulation                            | 0.71%    |         |
| 5V Load Regulation                             | 0.64%    |         |
| 3.3V Load Regulation                           | 1.18%    |         |
| 5VSB Load Regulation                           | 3.21%    |         |
| Inrush Current                                 | 65.914A  |         |
| Hold-Up Time & PWR_OK Signal                   | 21.30ms  |         |
| AC Loss to PWR_OK Hold Up Time                 | 18.10ms  |         |
| PWR_OK Inactive to DC Loss Delay               | 3.20ms   |         |
| PSU Timings: T1 (20% / 100%)                   | 243.0ms  | 248.0ms |
| PSU Timings: T3 (20% / 100%)                   | 193.0ms  | 197.0ms |
| OPP (0.00°C / 0.00°C)                          | 119.47%  | -       |

## Hold-Up Time & PWR\_OK Signal

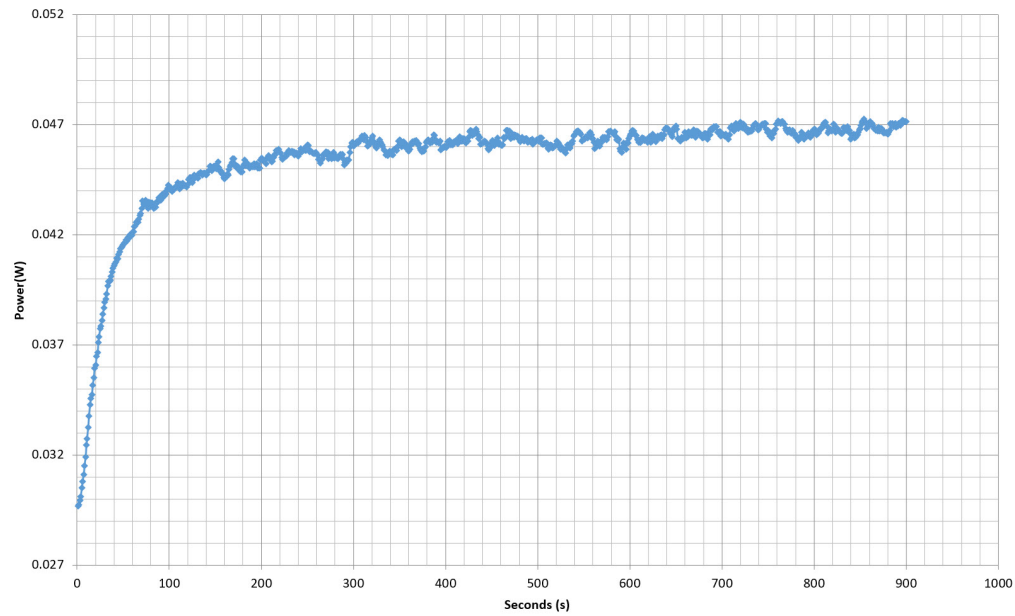
|                                       |      |
|---------------------------------------|------|
| Hold-Up Time (ms)                     | 21.3 |
| AC Loss to PWR_OK Hold Up Time (ms)   | 18.1 |
| PWR_OK Inactive to DC Loss Delay (ms) | 3.2  |

## Stromverbrauch im Ruhezustand

### Graphs

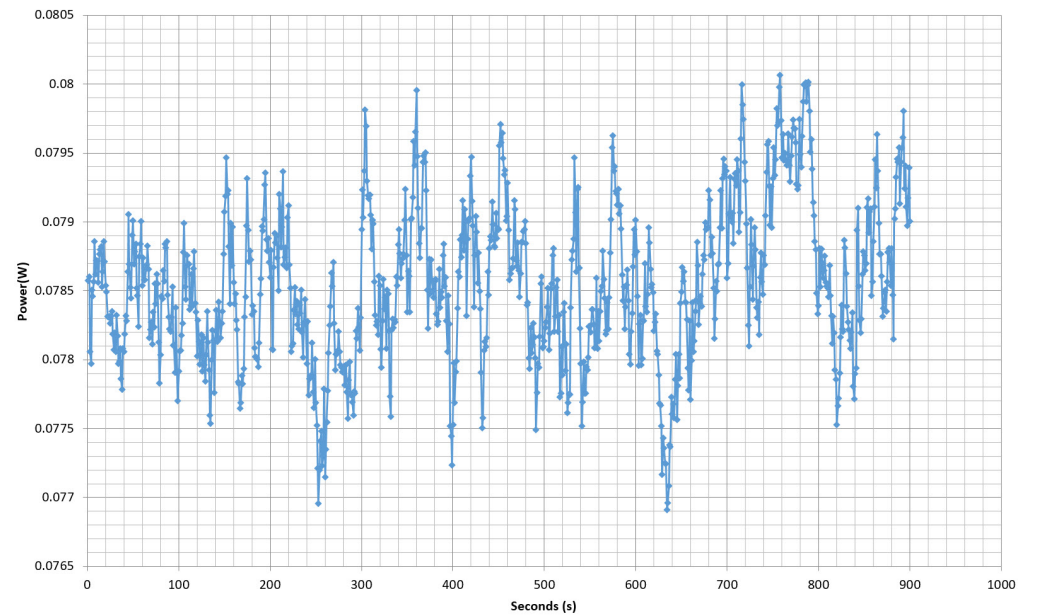
115V

Power - S1908199007 - 22/11/2019 - 09:43



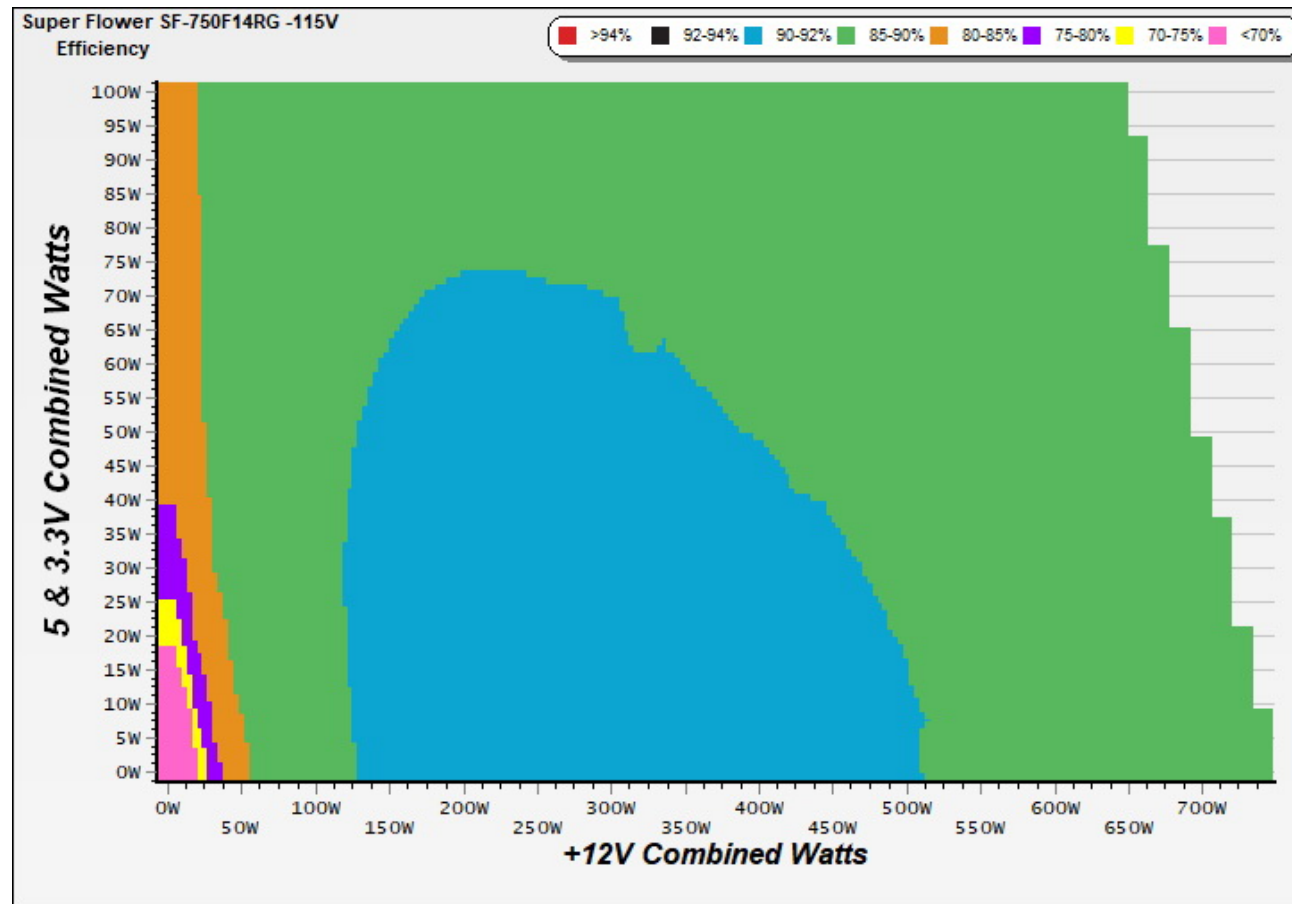
230V

Power - S1908199007 - 22/11/2019 - 09:43



## Efficiency Graph

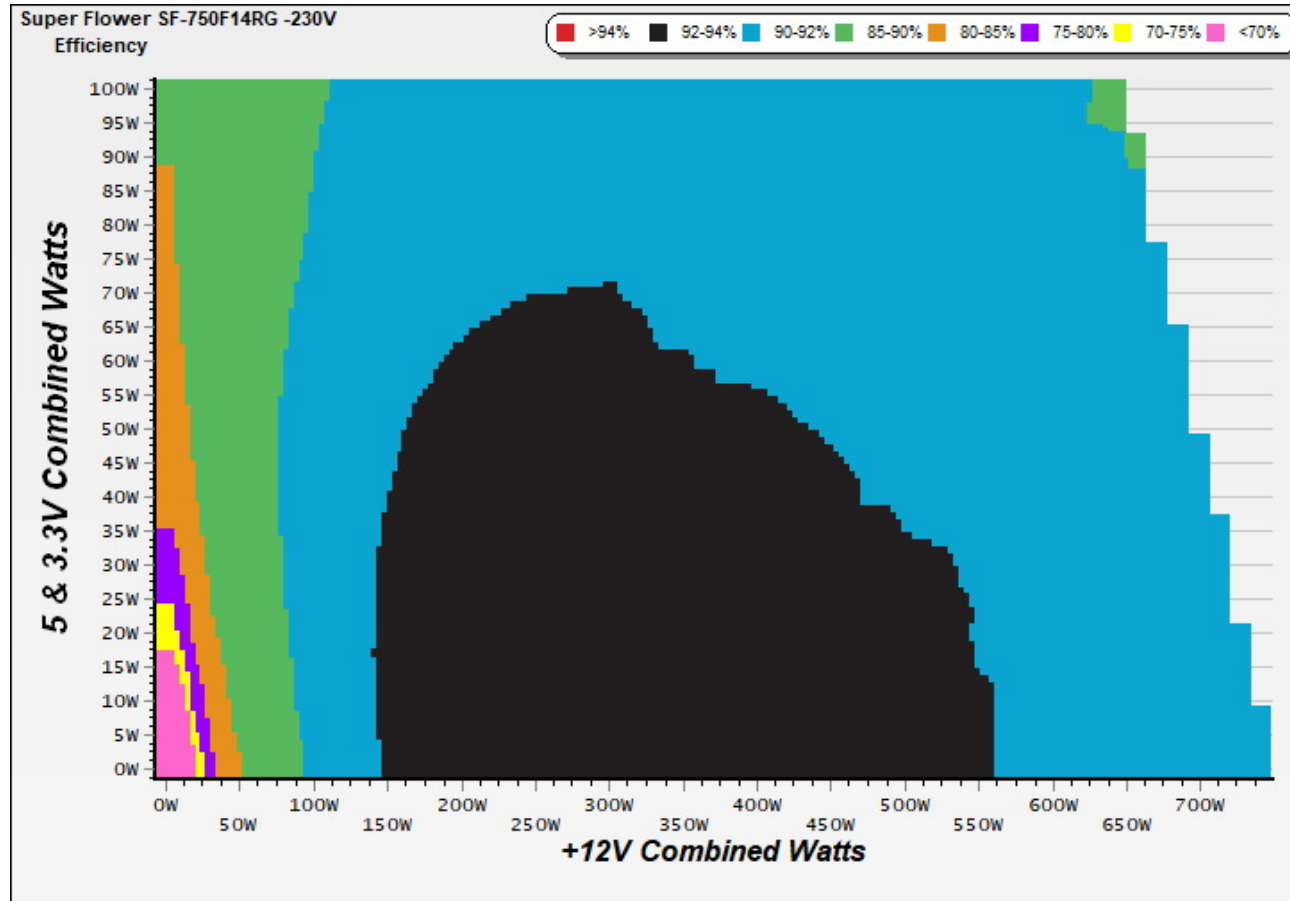
115V



### 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

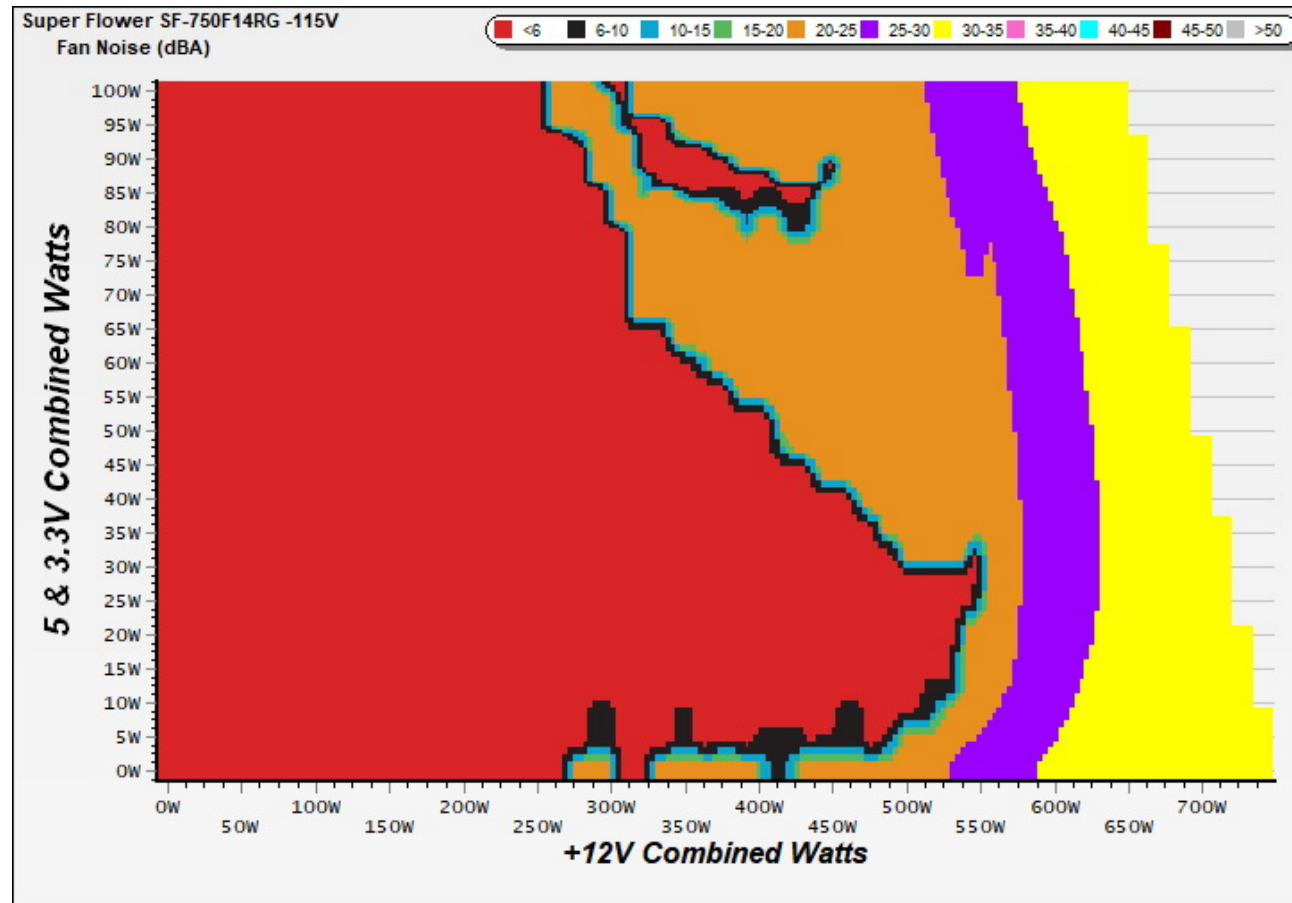


## INFO

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

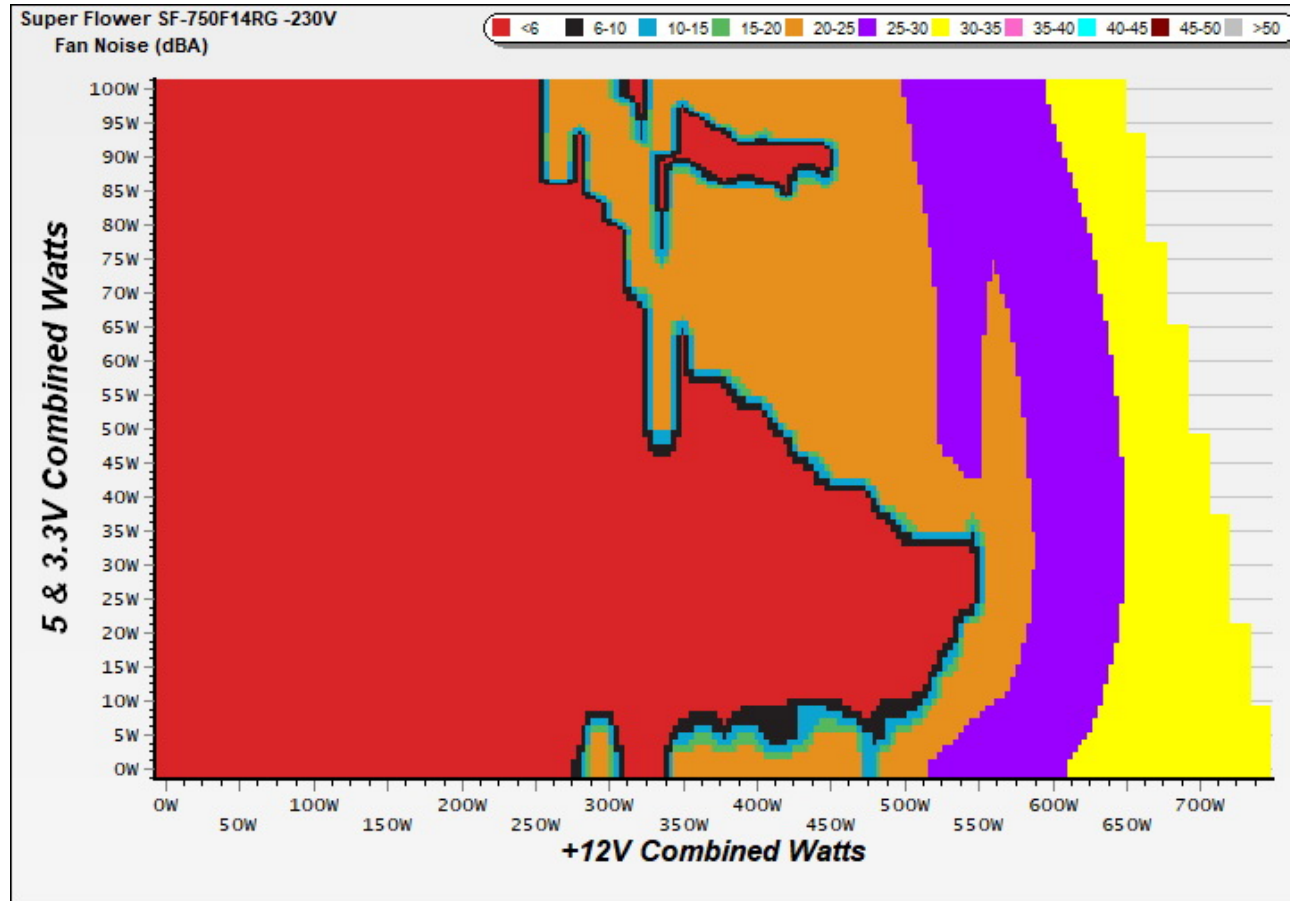
115V



### 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

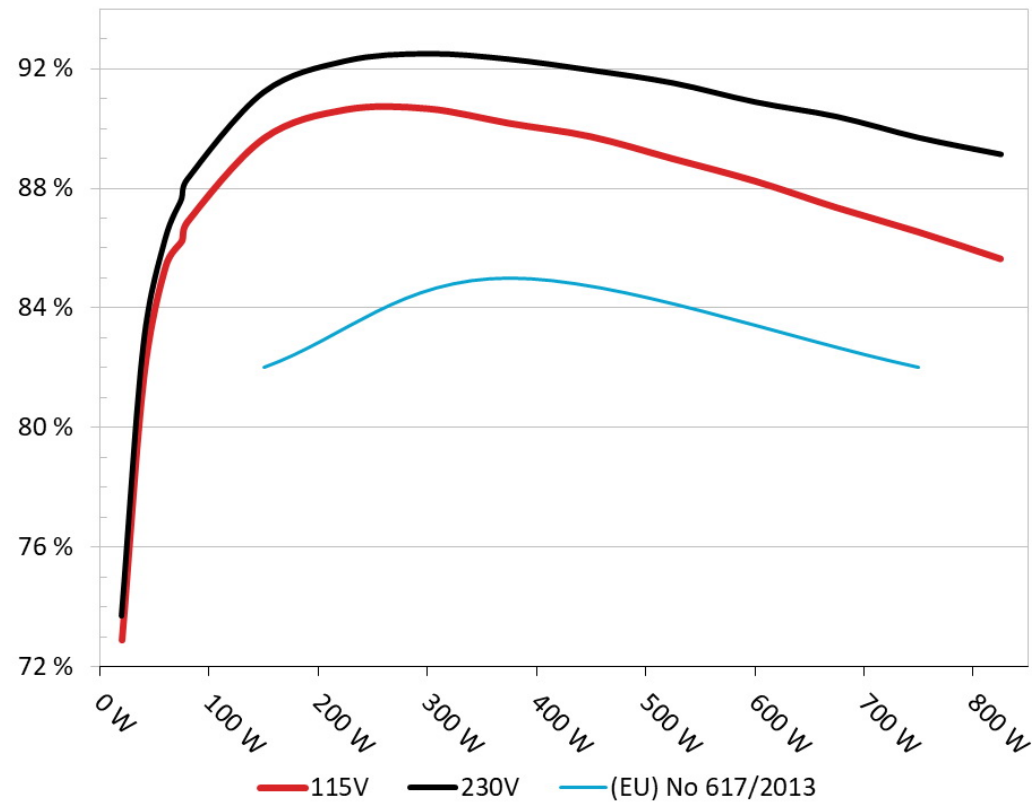
The PSU's noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails.

## Indicative Performance

### Efficiency under high ambient temperature

Efficiency: Super Flower SF-750F14RG

Ambient: 37°C - 47°C (98.6°F - 116.6°F)



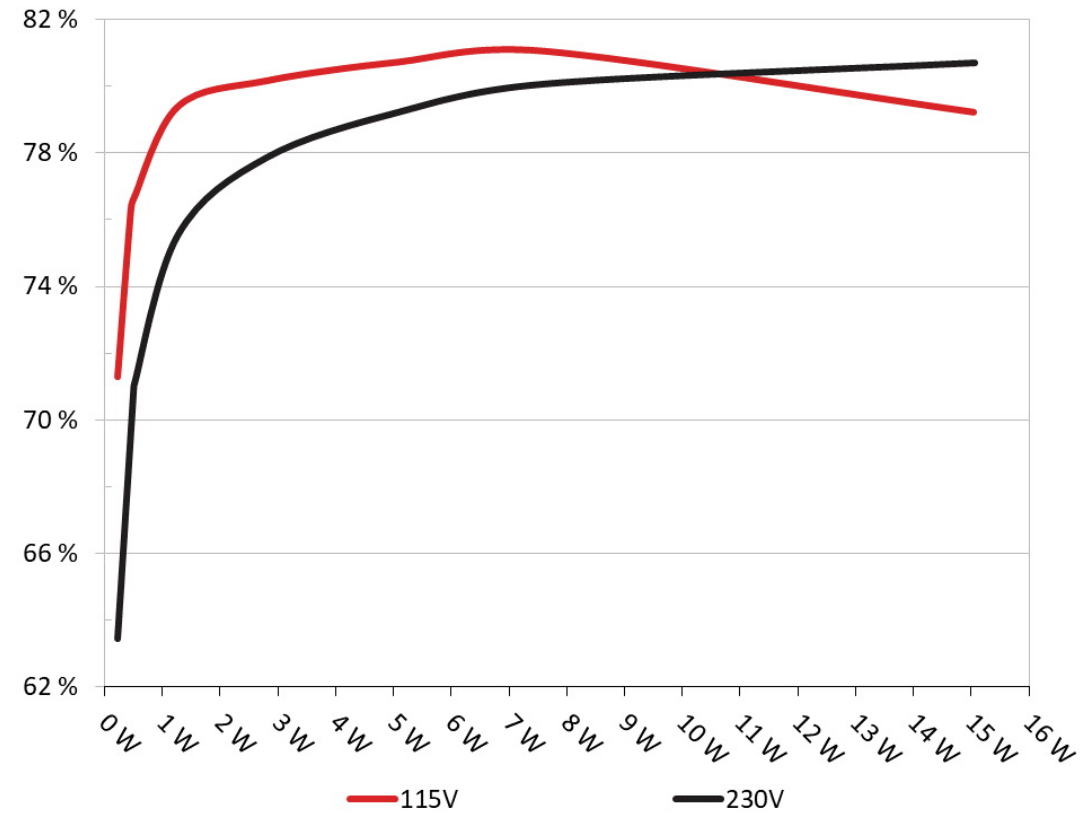
### INFO

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-750F14RG

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.

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

#### 115V

| Test # | 5VSB   | DC/AC (Watts) | Efficiency | PF/AC Volts |
|--------|--------|---------------|------------|-------------|
| 1      | 0.045A | 0.231         | 71.296%    | 0.025       |
|        | 5.125V | 0.324         |            | 115.15V     |
| 2      | 0.090A | 0.461         | 76.325%    | 0.045       |
|        | 5.123V | 0.604         |            | 115.15V     |
| 3      | 0.550A | 2.810         | 80.171%    | 0.223       |
|        | 5.109V | 3.505         |            | 115.15V     |
| 4      | 1.000A | 5.095         | 80.732%    | 0.325       |
|        | 5.094V | 6.311         |            | 115.15V     |
| 5      | 1.500A | 7.617         | 81.058%    | 0.390       |
|        | 5.077V | 9.397         |            | 115.15V     |
| 6      | 3.000A | 15.048        | 79.229%    | 0.472       |
|        | 5.016V | 18.993        |            | 115.14V     |

#### 230V

| Test # | 5VSB   | DC/AC (Watts) | Efficiency | PF/AC Volts |
|--------|--------|---------------|------------|-------------|
| 1      | 0.045A | 0.231         | 63.462%    | 0.008       |
|        | 5.125V | 0.364         |            | 230.34V     |
| 2      | 0.090A | 0.461         | 71.032%    | 0.015       |
|        | 5.123V | 0.649         |            | 230.33V     |
| 3      | 0.550A | 2.810         | 77.861%    | 0.080       |
|        | 5.108V | 3.609         |            | 230.33V     |
| 4      | 1.000A | 5.094         | 79.222%    | 0.136       |
|        | 5.093V | 6.430         |            | 230.33V     |
| 5      | 1.500A | 7.615         | 80.065%    | 0.188       |
|        | 5.076V | 9.511         |            | 230.33V     |
| 6      | 3.000A | 15.067        | 80.697%    | 0.296       |
|        | 5.023V | 18.671        |            | 230.34V     |

## 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      | 4.396A  | 1.993A  | 1.993A  | 0.984A | 74.955        | 86.246%    | 0               | <6.0              | 43.20°C        | 0.929       |
|        | 12.135V | 5.021V  | 3.312V  | 5.083V | 86.908        |            |                 |                   | 40.02°C        | 115.15V     |
| 2      | 9.818A  | 2.991A  | 2.995A  | 1.184A | 150.024       | 89.668%    | 0               | <6.0              | 44.57°C        | 0.968       |
|        | 12.132V | 5.017V  | 3.307V  | 5.069V | 167.310       |            |                 |                   | 40.80°C        | 115.15V     |
| 3      | 15.590A | 3.491A  | 3.499A  | 1.385A | 225.032       | 90.623%    | 0               | <6.0              | 45.41°C        | 0.984       |
|        | 12.121V | 5.014V  | 3.304V  | 5.055V | 248.317       |            |                 |                   | 41.03°C        | 115.16V     |
| 4      | 21.376A | 3.995A  | 4.000A  | 1.588A | 300.041       | 90.657%    | 0               | <6.0              | 46.39°C        | 0.990       |
|        | 12.108V | 5.010V  | 3.300V  | 5.041V | 330.963       |            |                 |                   | 41.36°C        | 115.16V     |
| 5      | 26.794A | 4.996A  | 5.007A  | 1.792A | 374.586       | 90.170%    | 0               | <6.0              | 47.87°C        | 0.992       |
|        | 12.095V | 5.006V  | 3.295V  | 5.025V | 415.420       |            |                 |                   | 42.34°C        | 115.16V     |
| 6      | 32.234A | 5.999A  | 6.017A  | 1.996A | 449.526       | 89.723%    | 919             | 23.4              | 42.62°C        | 0.994       |
|        | 12.090V | 5.003V  | 3.291V  | 5.011V | 501.015       |            |                 |                   | 48.86°C        | 115.16V     |
| 7      | 37.682A | 7.003A  | 7.028A  | 2.202A | 524.846       | 88.983%    | 1059            | 28.0              | 43.32°C        | 0.995       |
|        | 12.094V | 5.000V  | 3.287V  | 4.997V | 589.829       |            |                 |                   | 50.32°C        | 115.16V     |
| 8      | 43.138A | 8.003A  | 8.041A  | 2.409A | 600.147       | 88.238%    | 1243            | 32.6              | 43.95°C        | 0.996       |
|        | 12.095V | 4.997V  | 3.283V  | 4.983V | 680.144       |            |                 |                   | 51.35°C        | 115.15V     |
| 9      | 48.972A | 8.512A  | 8.538A  | 2.412A | 674.717       | 87.355%    | 1471            | 36.4              | 44.51°C        | 0.996       |
|        | 12.093V | 4.993V  | 3.279V  | 4.976V | 772.381       |            |                 |                   | 52.75°C        | 115.15V     |
| 10     | 54.614A | 9.020A  | 9.067A  | 3.033A | 749.940       | 86.536%    | 1660            | 39.1              | 45.50°C        | 0.996       |
|        | 12.089V | 4.989V  | 3.276V  | 4.948V | 866.617       |            |                 |                   | 54.46°C        | 115.14V     |
| 11     | 60.861A | 9.026A  | 9.072A  | 3.037A | 825.146       | 85.644%    | 1712            | 39.8              | 46.70°C        | 0.996       |
|        | 12.084V | 4.986V  | 3.273V  | 4.941V | 963.463       |            |                 |                   | 56.38°C        | 115.14V     |
| CL1    | 0.116A  | 12.001A | 12.001A | 0.000A | 100.941       | 83.588%    | 0               | <6.0              | 47.88°C        | 0.950       |
|        | 12.110V | 5.010V  | 3.284V  | 5.097V | 120.760       |            |                 |                   | 42.64°C        | 115.18V     |

|     |         |        |        |        |         |         |      |      |         |         |
|-----|---------|--------|--------|--------|---------|---------|------|------|---------|---------|
| CL2 | 62.446A | 1.001A | 1.000A | 1.000A | 767.799 | 86.904% | 1701 | 39.6 | 45.73°C | 0.996   |
|     | 12.082V | 4.995V | 3.295V | 5.031V | 883.500 |         |      |      | 54.85°C | 115.15V |

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      | 4.393A  | 1.992A  | 1.993A  | 0.984A | 74.957        | 87.655%    | 0               | <6.0              | 43.25°C        | 0.689       |
|        | 12.145V | 5.021V  | 3.312V  | 5.083V | 85.514        |            |                 |                   | 40.03°C        | 230.35V     |
| 2      | 9.821A  | 2.990A  | 2.992A  | 1.184A | 150.034       | 91.220%    | 0               | <6.0              | 44.54°C        | 0.863       |
|        | 12.131V | 5.017V  | 3.307V  | 5.068V | 164.474       |            |                 |                   | 40.70°C        | 230.37V     |
| 3      | 15.590A | 3.491A  | 3.497A  | 1.385A | 225.041       | 92.266%    | 0               | <6.0              | 45.58°C        | 0.921       |
|        | 12.122V | 5.014V  | 3.304V  | 5.055V | 243.905       |            |                 |                   | 41.17°C        | 230.37V     |
| 4      | 21.371A | 3.993A  | 3.999A  | 1.587A | 300.048       | 92.511%    | 0               | <6.0              | 46.63°C        | 0.943       |
|        | 12.112V | 5.010V  | 3.300V  | 5.041V | 324.336       |            |                 |                   | 41.61°C        | 230.38V     |
| 5      | 26.788A | 4.996A  | 5.010A  | 1.791A | 374.600       | 92.326%    | 0               | <6.0              | 47.78°C        | 0.957       |
|        | 12.098V | 5.006V  | 3.295V  | 5.026V | 405.738       |            |                 |                   | 42.01°C        | 230.38V     |
| 6      | 32.226A | 5.997A  | 6.016A  | 1.996A | 449.526       | 91.959%    | 0               | <6.0              | 49.25°C        | 0.966       |
|        | 12.093V | 5.004V  | 3.292V  | 5.012V | 488.832       |            |                 |                   | 42.85°C        | 230.39V     |
| 7      | 37.684A | 7.001A  | 7.027A  | 2.201A | 524.856       | 91.530%    | 1034            | 27.3              | 43.25°C        | 0.973       |
|        | 12.094V | 5.000V  | 3.287V  | 4.999V | 573.424       |            |                 |                   | 50.38°C        | 230.39V     |
| 8      | 43.143A | 8.004A  | 8.038A  | 2.408A | 600.166       | 90.892%    | 1254            | 33.7              | 43.98°C        | 0.979       |
|        | 12.094V | 4.997V  | 3.284V  | 4.984V | 660.306       |            |                 |                   | 51.63°C        | 230.40V     |
| 9      | 49.110A | 8.512A  | 8.535A  | 2.411A | 674.723       | 90.406%    | 1444            | 36.0              | 44.79°C        | 0.946       |
|        | 12.059V | 4.994V  | 3.280V  | 4.978V | 746.328       |            |                 |                   | 52.82°C        | 230.41V     |
| 10     | 54.606A | 9.018A  | 9.065A  | 3.032A | 749.946       | 89.701%    | 1647            | 38.8              | 45.52°C        | 0.947       |
|        | 12.091V | 4.990V  | 3.276V  | 4.950V | 836.054       |            |                 |                   | 54.53°C        | 230.41V     |
| 11     | 60.859A | 9.025A  | 9.070A  | 3.036A | 825.190       | 89.143%    | 1714            | 39.8              | 46.61°C        | 0.946       |
|        | 12.085V | 4.987V  | 3.274V  | 4.943V | 925.689       |            |                 |                   | 56.13°C        | 230.42V     |
| CL1    | 0.113A  | 12.001A | 12.002A | 0.000A | 100.944       | 85.084%    | 0               | <6.0              | 47.59°C        | 0.782       |
|        | 12.110V | 5.011V  | 3.286V  | 5.097V | 118.641       |            |                 |                   | 41.95°C        | 230.40V     |

|     |         |        |        |        |         |         |      |      |         |         |
|-----|---------|--------|--------|--------|---------|---------|------|------|---------|---------|
| CL2 | 62.444A | 1.000A | 1.000A | 1.000A | 767.893 | 90.142% | 1702 | 39.6 | 45.42°C | 0.947   |
|     | 12.084V | 4.993V | 3.294V | 5.033V | 851.868 |         |      |      | 54.29°C | 230.42V |

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      | 1.220A  | 0.498A | 0.496A | 0.195A | 19.984        | 72.910%    | 0               | <6.0              | 0.719       |
|        | 12.162V | 5.026V | 3.318V | 5.117V | 27.409        |            |                 |                   | 115.14V     |
| 2      | 2.441A  | 0.995A | 0.994A | 0.392A | 39.973        | 81.694%    | 0               | <6.0              | 0.866       |
|        | 12.157V | 5.025V | 3.316V | 5.108V | 48.930        |            |                 |                   | 115.14V     |
| 3      | 3.666A  | 1.494A | 1.493A | 0.588A | 60.003        | 85.399%    | 0               | <6.0              | 0.920       |
|        | 12.153V | 5.023V | 3.314V | 5.099V | 70.262        |            |                 |                   | 115.15V     |
| 4      | 4.887A  | 1.991A | 1.994A | 0.786A | 79.954        | 86.879%    | 0               | <6.0              | 0.931       |
|        | 12.145V | 5.021V | 3.312V | 5.090V | 92.029        |            |                 |                   | 115.15V     |

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      | 1.220A  | 0.497A | 0.497A | 0.196A | 19.986        | 73.703%    | 0               | <6.0              | 0.376       |
|        | 12.161V | 5.026V | 3.319V | 5.116V | 27.117        |            |                 |                   | 230.33V     |
| 2      | 2.441A  | 0.995A | 0.994A | 0.392A | 39.976        | 82.780%    | 0               | <6.0              | 0.516       |
|        | 12.158V | 5.024V | 3.317V | 5.108V | 48.292        |            |                 |                   | 230.34V     |
| 3      | 3.666A  | 1.493A | 1.493A | 0.589A | 60.006        | 86.322%    | 0               | <6.0              | 0.626       |
|        | 12.153V | 5.023V | 3.315V | 5.099V | 69.514        |            |                 |                   | 230.35V     |
| 4      | 4.886A  | 1.992A | 1.992A | 0.786A | 79.956        | 88.296%    | 0               | <6.0              | 0.707       |
|        | 12.148V | 5.021V | 3.313V | 5.090V | 90.554        |            |                 |                   | 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    | 5.9 mV  | 4.9 mV  | 15.6 mV | 9.5 mV  | Pass      |
| 20% Load    | 6.7 mV  | 6.3 mV  | 16.2 mV | 9.4 mV  | Pass      |
| 30% Load    | 7.0 mV  | 7.3 mV  | 16.0 mV | 9.6 mV  | Pass      |
| 40% Load    | 7.6 mV  | 8.1 mV  | 16.5 mV | 10.2 mV | Pass      |
| 50% Load    | 8.8 mV  | 8.9 mV  | 17.1 mV | 12.7 mV | Pass      |
| 60% Load    | 9.2 mV  | 9.1 mV  | 18.2 mV | 13.2 mV | Pass      |
| 70% Load    | 9.4 mV  | 10.2 mV | 17.8 mV | 13.1 mV | Pass      |
| 80% Load    | 10.0 mV | 11.1 mV | 20.7 mV | 12.8 mV | Pass      |
| 90% Load    | 10.3 mV | 12.3 mV | 20.3 mV | 13.0 mV | Pass      |
| 100% Load   | 12.4 mV | 13.6 mV | 21.5 mV | 13.9 mV | Pass      |
| 110% Load   | 13.0 mV | 14.1 mV | 22.0 mV | 15.9 mV | Pass      |
| Crossload 1 | 7.9 mV  | 6.6 mV  | 18.9 mV | 15.7 mV | Pass      |
| Crossload 2 | 12.5 mV | 13.1 mV | 21.3 mV | 13.9 mV | Pass      |

The results above are not used in the certification process

### 230V

| Test     | 12V     | 5V      | 3.3V    | 5VSB    | Pass/Fail |
|----------|---------|---------|---------|---------|-----------|
| 10% Load | 9.5 mV  | 9.6 mV  | 15.5 mV | 12.9 mV | Pass      |
| 20% Load | 6.9 mV  | 6.4 mV  | 16.0 mV | 10.2 mV | Pass      |
| 30% Load | 7.4 mV  | 7.7 mV  | 17.2 mV | 10.4 mV | Pass      |
| 40% Load | 7.7 mV  | 8.5 mV  | 16.7 mV | 10.9 mV | Pass      |
| 50% Load | 8.2 mV  | 9.0 mV  | 16.8 mV | 12.1 mV | Pass      |
| 60% Load | 9.0 mV  | 9.6 mV  | 17.6 mV | 11.1 mV | Pass      |
| 70% Load | 9.8 mV  | 10.3 mV | 17.9 mV | 12.6 mV | Pass      |
| 80% Load | 10.6 mV | 11.8 mV | 19.8 mV | 12.5 mV | Pass      |

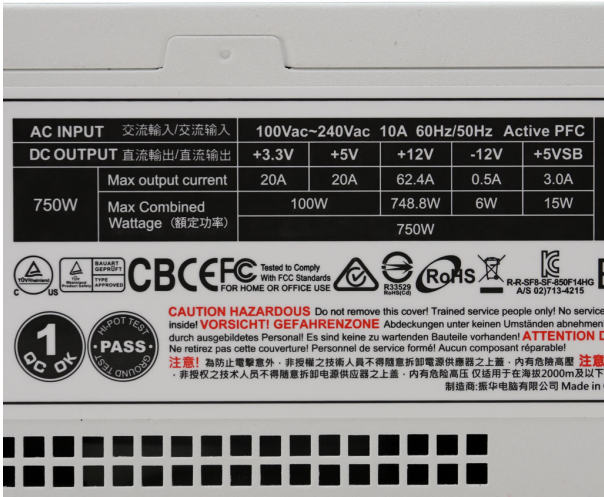
| Test        | 12V     | 5V      | 3.3V    | 5VSB    | Pass/Fail |
|-------------|---------|---------|---------|---------|-----------|
| 90% Load    | 10.8 mV | 12.7 mV | 20.0 mV | 12.5 mV | Pass      |
| 100% Load   | 13.0 mV | 13.9 mV | 22.5 mV | 13.4 mV | Pass      |
| 110% Load   | 13.3 mV | 15.1 mV | 22.8 mV | 14.2 mV | Pass      |
| Crossload 1 | 7.8 mV  | 7.2 mV  | 18.8 mV | 15.8 mV | Pass      |
| Crossload 2 | 13.0 mV | 13.5 mV | 20.7 mV | 13.7 mV | Pass      |

The results above are not used in the certification process

Super Flower Leadex III Gold ARGB 750W (#2)



Top side



Power specifications label

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