NCASE SFX850

Serial Number

Lab ID NC85003411

Certification ID 263411

Test Result Report ID: 26PS3411A

Certificate Issue Date: Sep 10, 2026

Scheme: ETA-EMI PSU

115V



230V



Scheme: LAMBDA PSU

115V



230V





Outside Validation Scope



General Information

Test Equipment

Electronic Loads	Chroma 63601-5 x2 Chroma 63600-2 Chroma 63640-80-80 x10 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	NCASE
Model	SFX850
OEM/ODM	SANR
Serial Number	
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	10

Rated Frequency (Hz)	50-60
Rated Power (W)	850
Operating Temperature (Continuous Full Load) (°C)	0 - 45
Type	SFX
Cable Design	Fully Modular
Warranty	No Info
Cybenetics Measurements	
Dimensions (W x H x D)	125 x 63.85 x 100 mm
Weight	0.96 kg (2.11 lb)
Cooling	92mm Fluid Dynamic Bearing Fan (D92PH-12B)
Semi-Passive Operation	✓
Cybenetics Testing Information	
Lab ID	NC85003411
Date of receipt	Aug 30, 2026
Testing Date	Sep 8, 2026
Report Issued Date	Sep 10, 2026
Engineer Name	Ioannis Kalyviotis
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors(Non-accredited measurements)

Modular Cables				
Description	**Cable Count**	**Connector Count (Total)**	**Gauge**	**Cable Type**
ATX connector 20+4 pin (300mm)	1	1	16-20AWG	Tinned Copper
4+4 pin EPS12V (400mm)	1	1	16AWG	Tinned Copper
6+2 pin PCIe (400mm)	2	4	16AWG	Tinned Copper
12+4 pin PCIe (400mm) (600W)	1	1	16-26AWG	Tinned Copper
SATA 120mm+120mm+120mm)	2	6	18AWG	Tinned Copper
4-pin Molex (120mm+120mm+120mm)	1	3	18AWG	Tinned Copper
AC Power Cord (1100mm) - C13 coupler	1	1	18AWG	

Protection Features

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

Power Specifications

Rail		**3.3V**	**5V**	**12V**	**5VSB**
Max. Power	**Amps**	20	20	70.8	3
	Watts	100		850	15
Total Max. Power (W)		850			

Parts Description

General Data	
Manufacturer (OEM)	SANR
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 3x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor MF72-5D13 (5 Ohm @ 25°C) & Relay
Bridge Rectifier	2x GBU2506 (600V, 25A @ 100°C)
APFC MOSFETs	2x Lonten LSD65R099GF (650V, 26A @ 100°C, Rds(on): 0.099Ohm)
APFC Boost Diode	CR Micro CRXF10D065G2 (650V, 10A @ 130°C)
Bulk Cap(s)	1x Nippon Chemi-Con (420V, 560uF, 2000h @ 105°C, KHE)
Main Switchers	2x Shenzhen Sanrise SRC60R068BS (600V, 21.5A @ 125°C, Rds(on): 0.068Ohm)

APFC Controller	Champion CM6500UNX & Champion CM03AX (reducing no load consumption)
Resonant Controller	Champion CU6901V
IC Driver	Sillumin SLMi8233
Topology	Primary side: APFC, Half-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	6x Hymexa HYG009N04LS1C2 (40V, 141A @ 100°C, Rds(on): 0.96mOhm)
5V & 3.3V	DC-DC Converters: 4x PTJ030N03LA (30V) PWM Controller(s): ANPEC APW7159C
Filtering Capacitors	Electrolytic: 1x Rubycon (3~6000h @ 105°C, YXS) 1x Rubycon (5000h @ 105°C, YXF) 3x Rubycon (4~10000h @ 105°C, YXJ) Polymer: 7x Nippon Chemi-Con 19x FPcap
Supervisor IC	GRENERGY GR8329E
Fan Power Switch	ANPEC APW9010
Fan Model	Yate Loon D92PH-12B (92mm, 12V, 0.6A, Fluid Dynamic Bearing Fan)
5VSB Circuit	
Rectifier	PingWei PS1060L
Standby PWM Controller	Depuw DP2358

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 v3.1 PSU Power Excursion	✓
Conducted Emissions EN 55032 & CISPR 32	Passed

Performance Summary

115V

Accredited	
Average Efficiency (>1450 load combinations)	90.205%
Average Noise Output (>1450 Load Combinations)	29.44dBA
Average PF (>1450 Load Combinations)	0.985
Efficiency With 10W (≤500W) or 2% (>500W) Load	68.799%
Standby Power Consumption	0.0291W
Non-Accredited	
12V Ripple (Full Load)	50.32mV
5V Ripple (Full Load)	24.63mV
3.3V Ripple (Full Load)	16.73mV
5VSB Ripple (Full Load)	27.92mV
12V Load Regulation	0.38%
5V Load Regulation	0.22%
3.3V Load Regulation	0.24%
5VSB Load Regulation	2.25%
Inrush Current	27.700A

230V

Accredited	
Average Efficiency (>1450 load combinations)	92.165%
Average Noise Output (>1450 Load Combinations)	26.74dBA
Average PF (>1450 Load Combinations)	0.953
Efficiency With 10W (≤500W) or 2% (>500W) Load	70.416%
Standby Power Consumption	0.0846W
Non-Accredited	

12V Ripple (Full Load)		51.04mV
5V Ripple (Full Load)		24.48mV
3.3V Ripple (Full Load)		16.99mV
5VSB Ripple (Full Load)		26.59mV
12V Load Regulation		0.19%
5V Load Regulation		0.16%
3.3V Load Regulation		0.18%
5VSB Load Regulation		2.23%
Inrush Current		55.970A
12V Transient Response (200%)		11.44V
5V Transient Response (200%)		4.944V
3.3V Transient Response (200%)		3.263V
5VSB Transient Response (200%)		4.935V
Hold-Up Time & PWR_OK Signal		20.30ms
AC Loss to PWR_OK Hold Up Time		16.70ms
PWR_OK Inactive to DC Loss Delay		3.60ms
PSU Timings: T1 (20% / 100%)	91.0ms	91.0ms
PSU Timings: T3 (20% / 100%)	122.0ms	124.0ms
12V OCP (29.9°C / 41.3°C)	90.000A (127.12%), 11.974V — shut down	90.000A (127.12%), 11.996V — shut down
5V OCP (29.9°C / 41.3°C)	23.000A (115%), 5.030V — shut down	22.900A (114.50%), 5.031V — shut down
3.3V OCP (29.9°C / 41.3°C)	23.500A (117.50%), 3.354V — shut down	23.400A (117%), 3.352V — shut down
5VSB OCP (29.9°C / 41.3°C)	4.000A (133.33%), 4.965V — shut down	3.700A (123.33%), 4.970V — shut down
OPP (29.86°C / 41.59°C)	119.15%	126.21%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	20.3
AC Loss to PWR_OK Hold Up Time (ms)	16.7
PWR_OK Inactive to DC Loss Delay (ms)	3.6

Vampire Power

Tables

115V

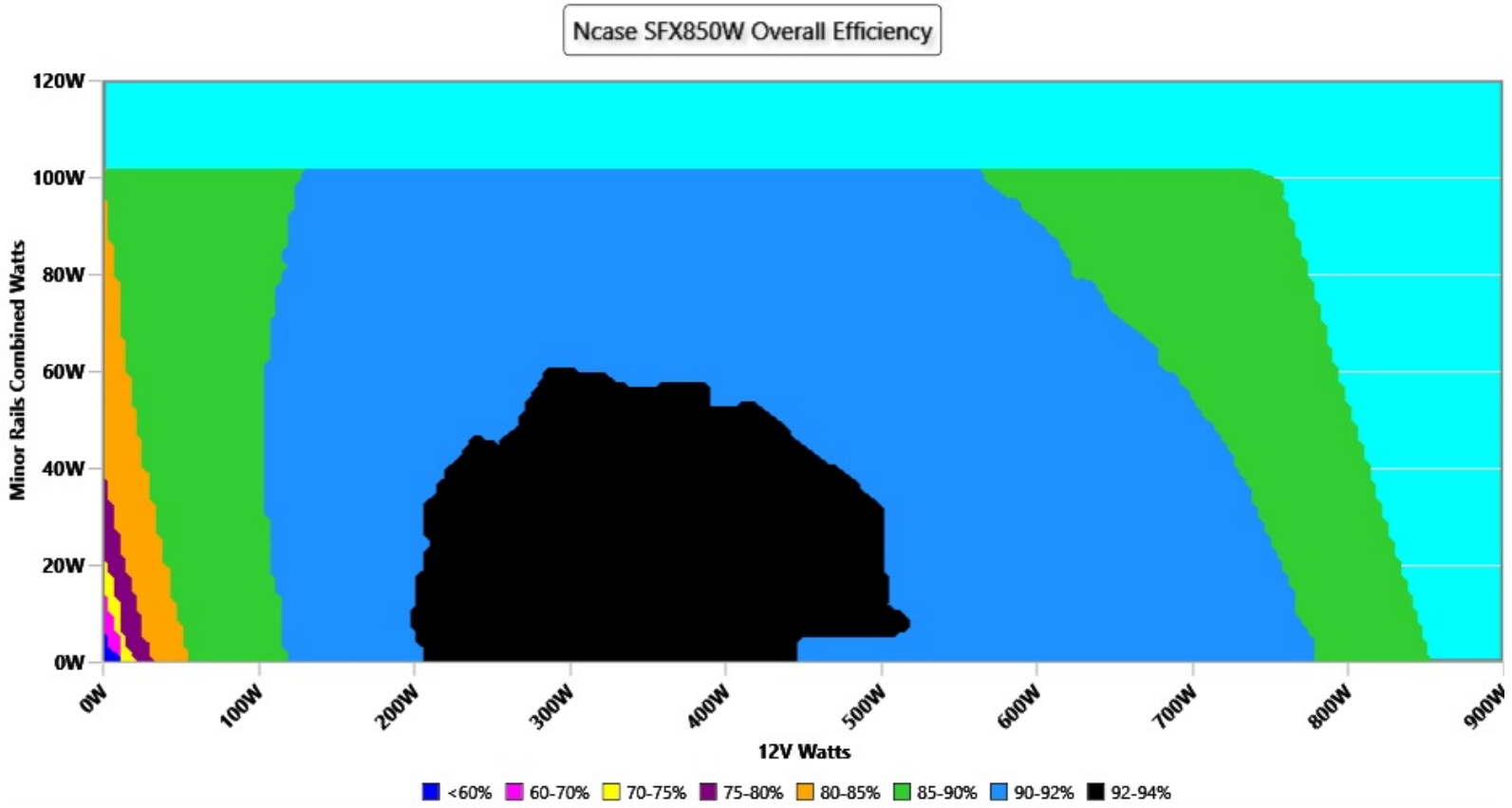
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	114.98 V	114.95 V	113.85 V	115.00 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.95 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.13 %	0.10 %	N/A	0.17 %	2.00 %	PASS
Real Power:	0.029 W	-0.004 W	N/A	0.057 W	N/A	N/A
Apparent Power:	7.731 W	7.679 W	N/A	7.760 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	229.99 V	229.95 V	227.70 V	229.99 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	50.00 Hz	49.50 Hz	50.00 Hz	50.50 Hz	PASS
Mains Voltage CF:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.14 %	0.13 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.085 W	0.045 W	N/A	0.146 W	N/A	N/A
Apparent Power:	25.143 W	25.103 W	N/A	25.185 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

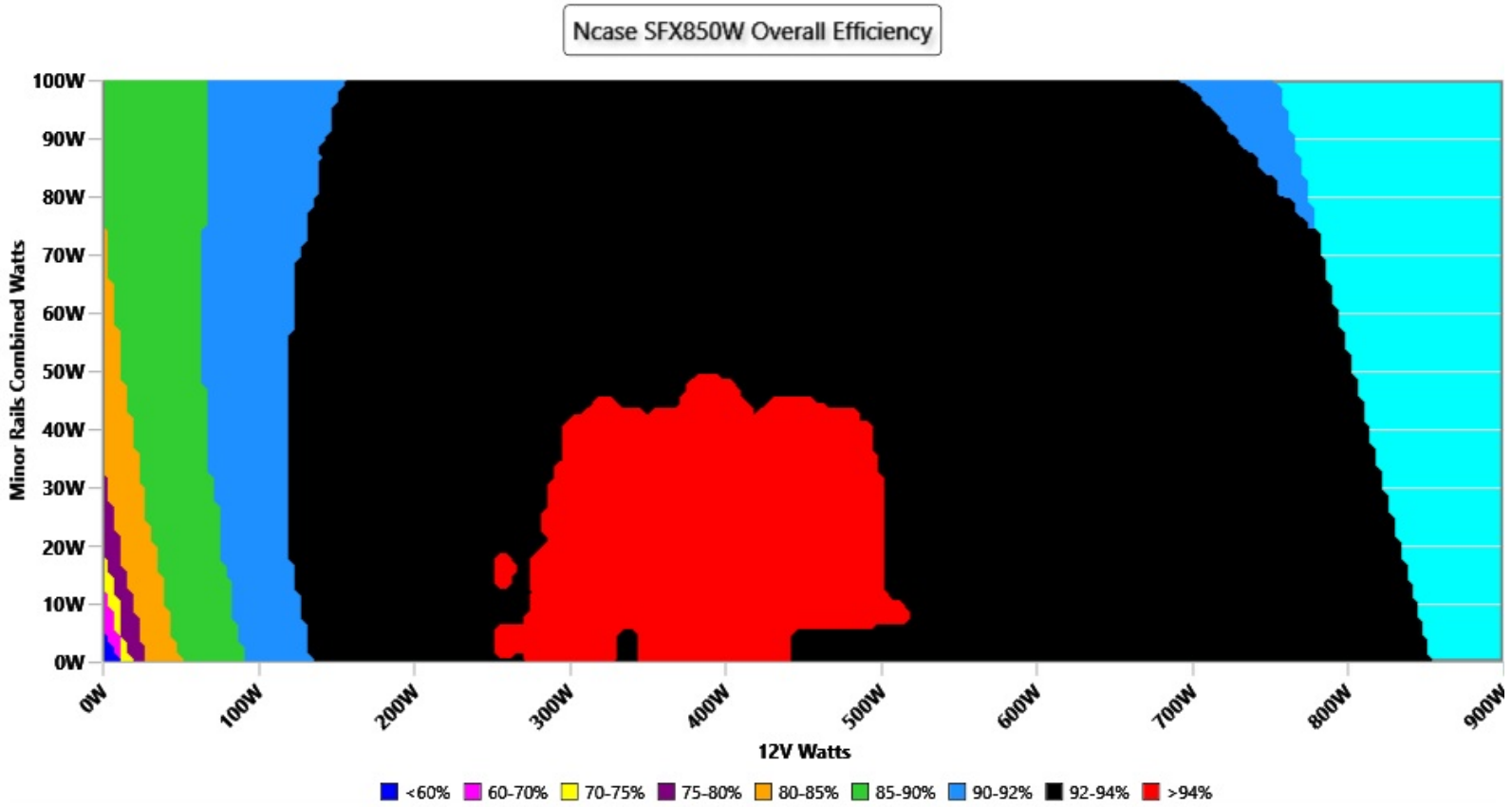
115V



INFO

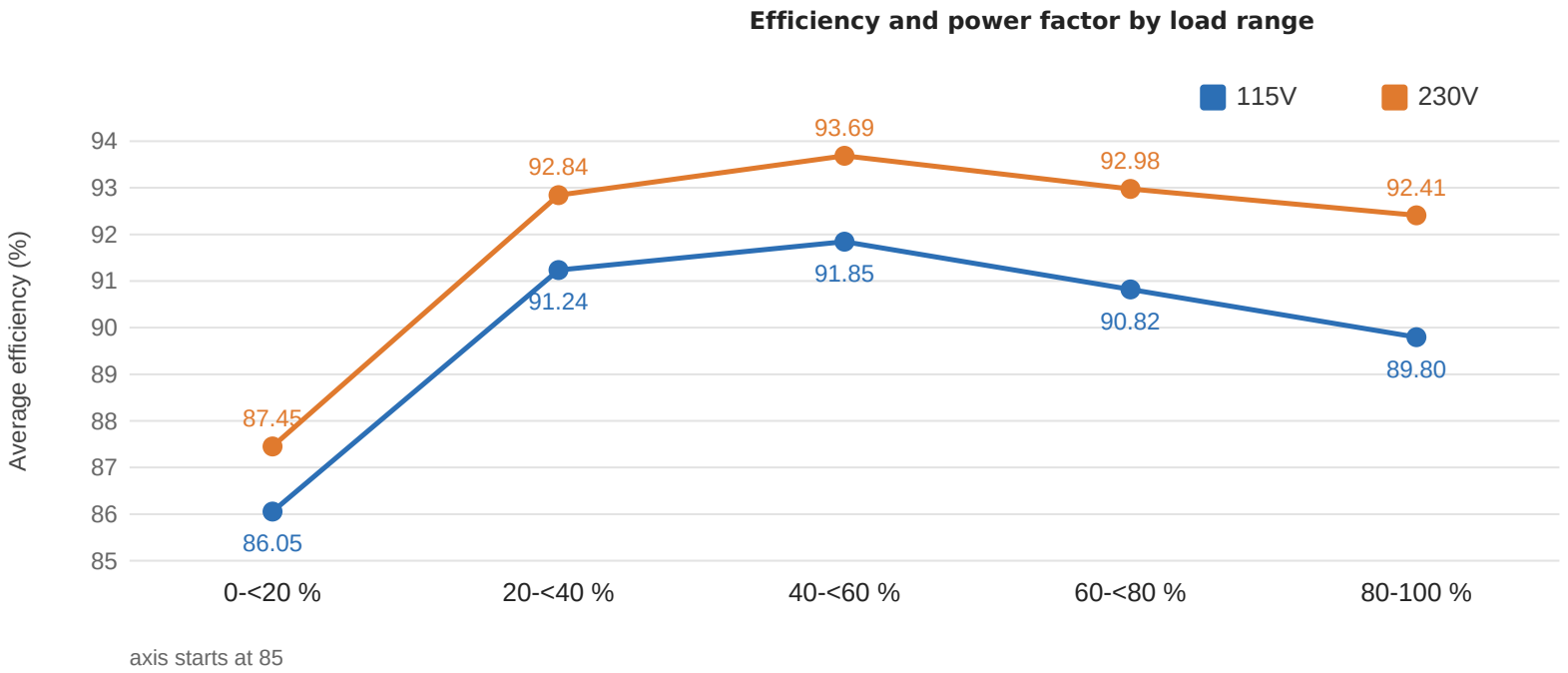
This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

230V

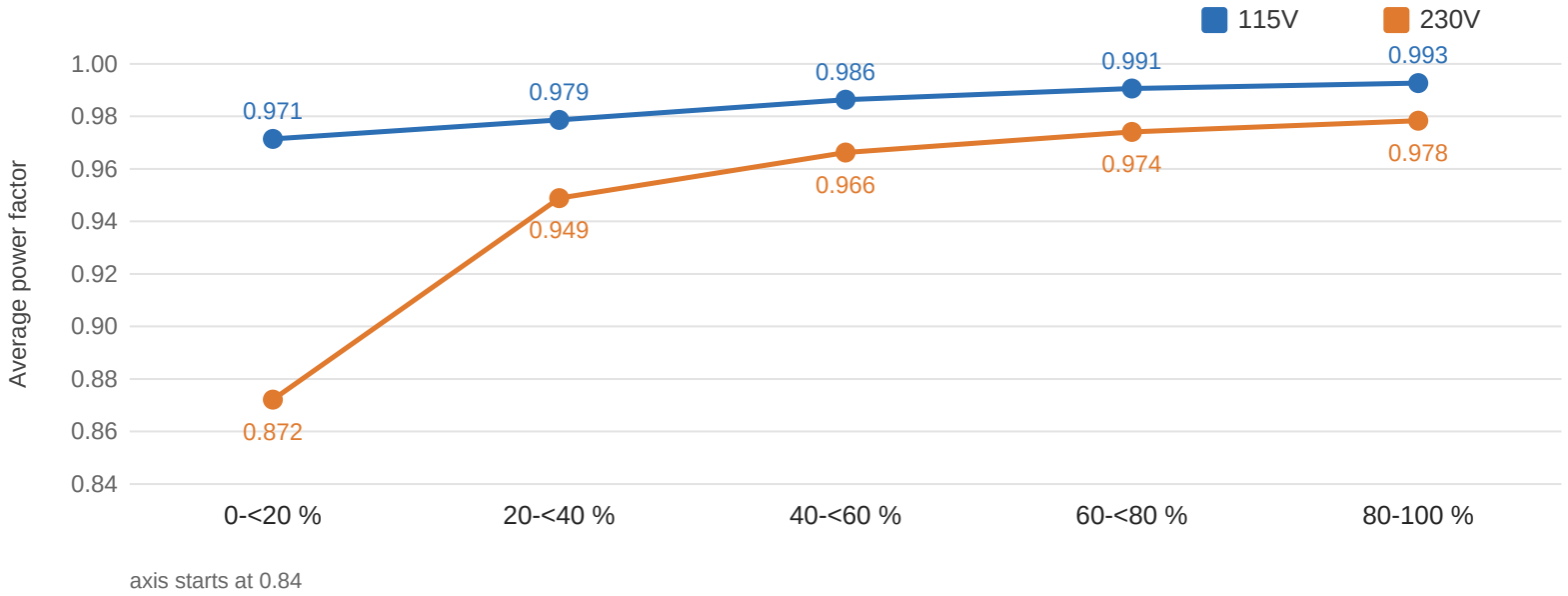


INFO

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



axis starts at 85



axis starts at 0.84

Load range	Points	Efficiency 115V	Efficiency 230V	PF 115V	PF 230V
0-<20 %	228 / 228	86.05%	87.45%	0.971	0.872
20-<40 %	331 / 331	91.24%	92.84%	0.979	0.949
40-<60 %	327 / 327	91.85%	93.69%	0.986	0.966
60-<80 %	333 / 333	90.82%	92.98%	0.991	0.974
80-100 %	334 / 334	89.80%	92.41%	0.993	0.978
70-100 % (High-Load)	505 / 505	90.05%	92.54%	0.992	0.977
All (published average)	1553 / 1553	90.20%	92.17%	0.985	0.953

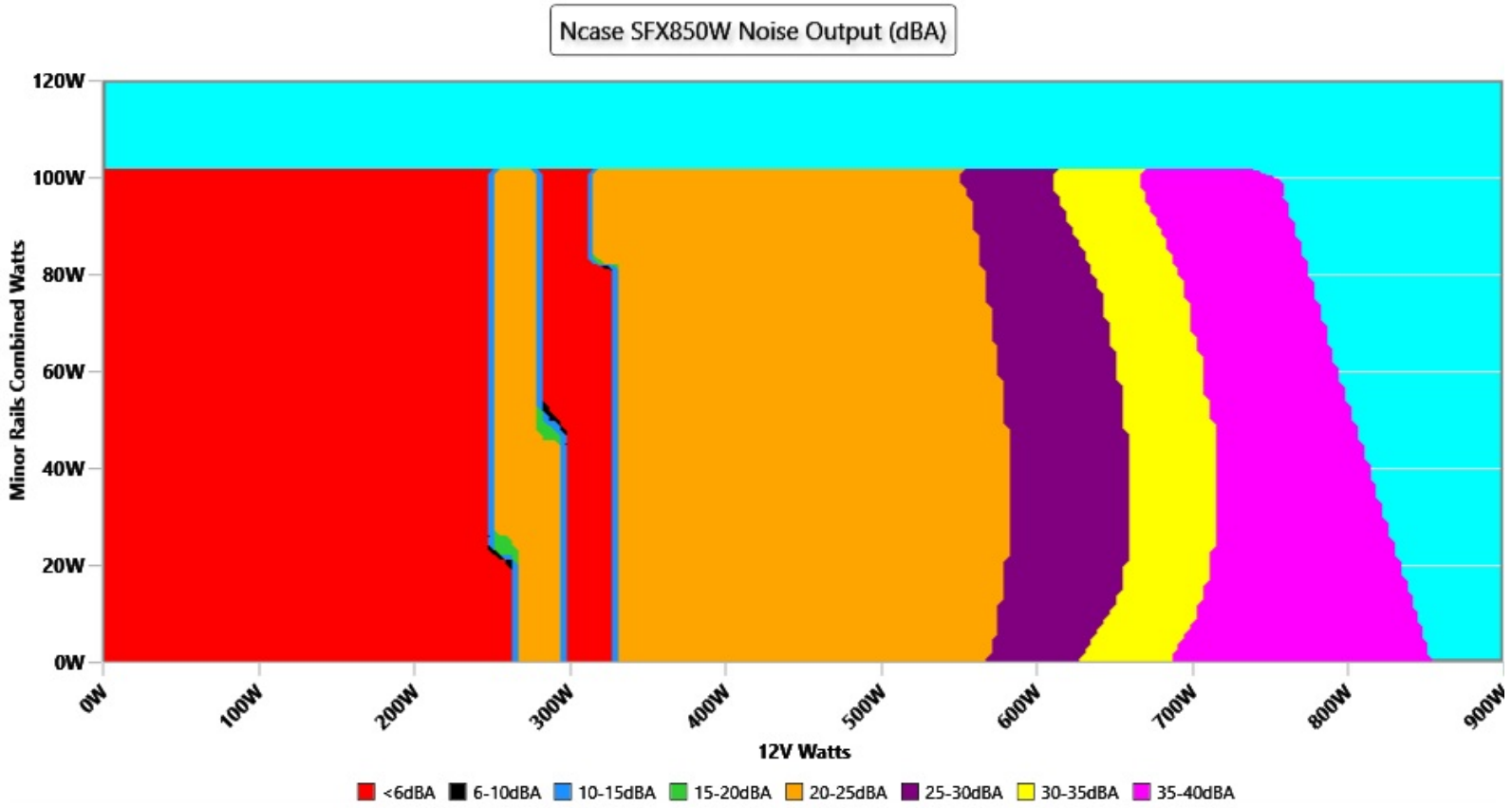
INFO

The average efficiency and power factor in five ranges of load. Calculated from the 1553 (115V) and 1553 (230V) load combinations of the certification sweep, the same data that ETA and LAMBDA use (test 0 excluded). Load is the total DC output as a share of the rated 850 W. These are plain averages of the valid readings, as for the ETA rating, so the ranges combined give back the published averages.

Informational. Not part of the ETA or LAMBDA rating.

Noise Graph

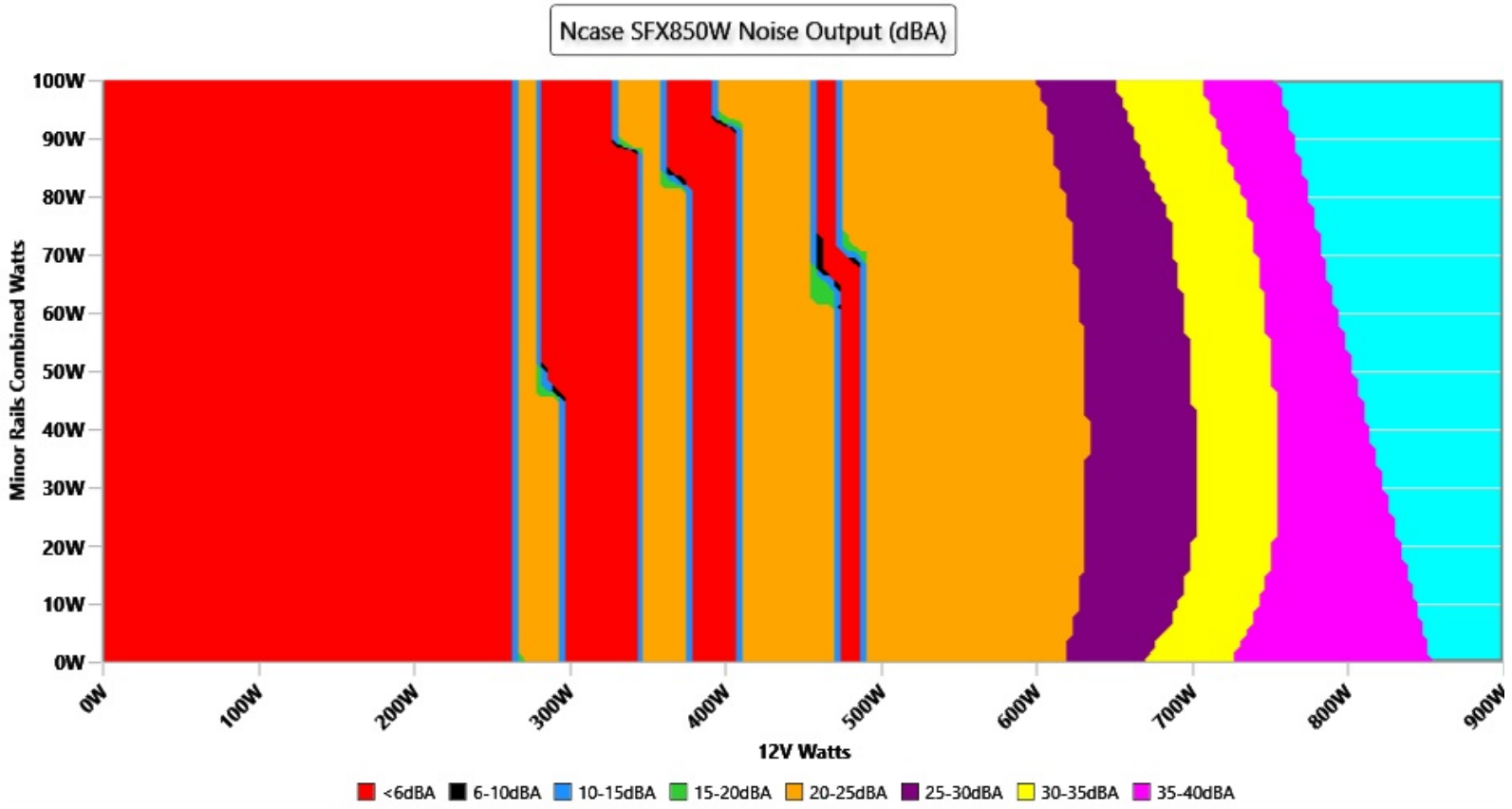
115V



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

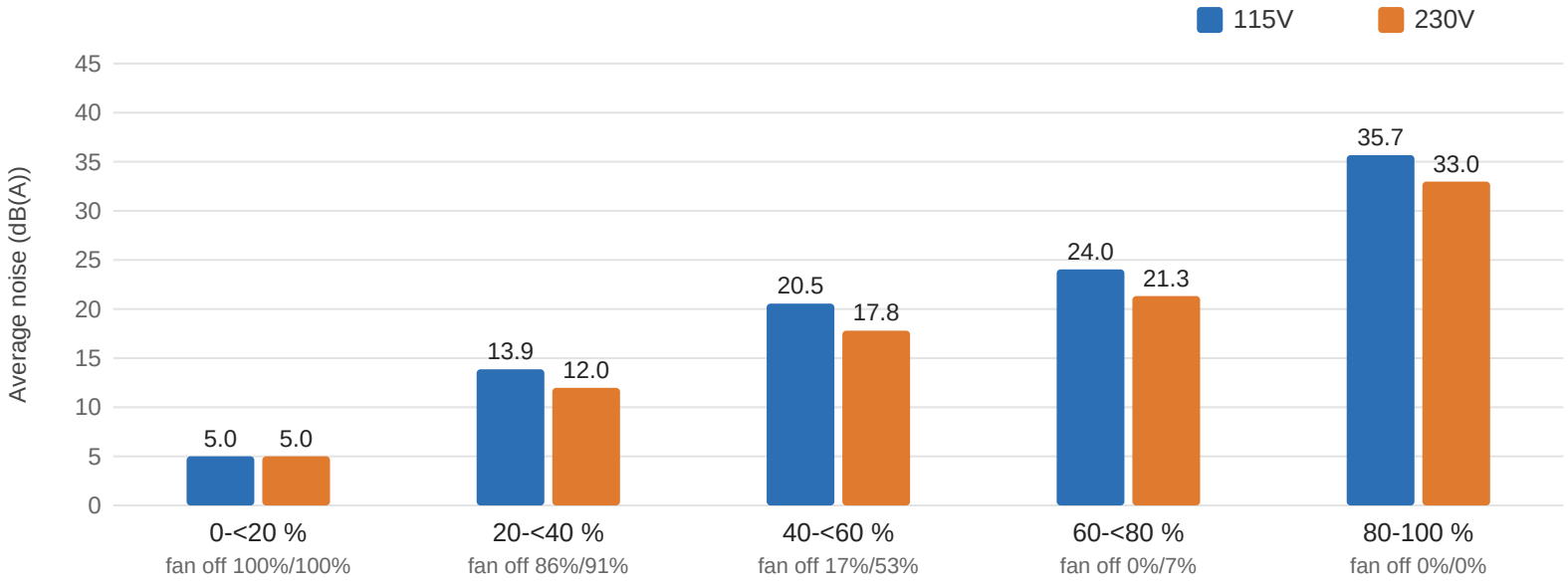
The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

Noise by load range

High-Load Index (70-100 % load)

Noise **34.1 dB(A)** at 115V and **31.4 dB(A)** at 230V · loudest point 39.0 dB(A)

Efficiency 90.05% / 92.54% · power factor 0.992 / 0.977 (115V / 230V)



Load range	Noise 115V avg (loudest)	Noise 230V avg (loudest)	Fan off 115V / 230V
0-<20 %	5.0 (5.0)	5.0 (5.0)	100% / 100%
20-<40 %	13.9 (22.9)	12.0 (22.9)	86% / 91%
40-<60 %	20.5 (22.9)	17.8 (22.9)	17% / 53%
60-<80 %	24.0 (33.9)	21.3 (29.7)	0% / 7%
80-100 %	35.7 (39.0)	33.0 (37.4)	0% / 0%
70-100 % (High-Load)	34.1 (39.0)	31.4 (37.4)	0% / 0%
All (published average)	29.4 (39.0)	26.7 (37.4)	37% / 47%

INFO

The average noise in five ranges of load, the share of points with the fan stopped (semi-passive operation), and the High-Load Index: the same figures for all points at 70 % of the rated output and above. Calculated from the 1553 (115V) and 1553 (230V) load combinations of the certification sweep, the same data that ETA and LAMBDA use (test 0 excluded). Load is the total DC output as a share of the rated 850 W. Noise is averaged on the energy scale, as for LAMBDA, so the ranges combined give back the published average noise. Each load combination is held for about five seconds; the stabilized readings at fixed loads are under "Noise under high ambient temperature".

Informational. Not part of the ETA or LAMBDA rating.

Noise under high ambient temperature (indicative)

115V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 32.4 °C	0 RPM · <6.0 dB(A) · 48.1 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 33.6 °C	0 RPM · <6.0 dB(A) · 47.9 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 36.8 °C	1386 RPM · 22.1 dB(A) · 42.1 °C	fan starts (<6.0 → 22.1)
100%	1701 RPM · 28.6 dB(A) · 30.9 °C	3087 RPM · 44.0 dB(A) · 45.4 °C	**+15.4 dB(A)**

230V

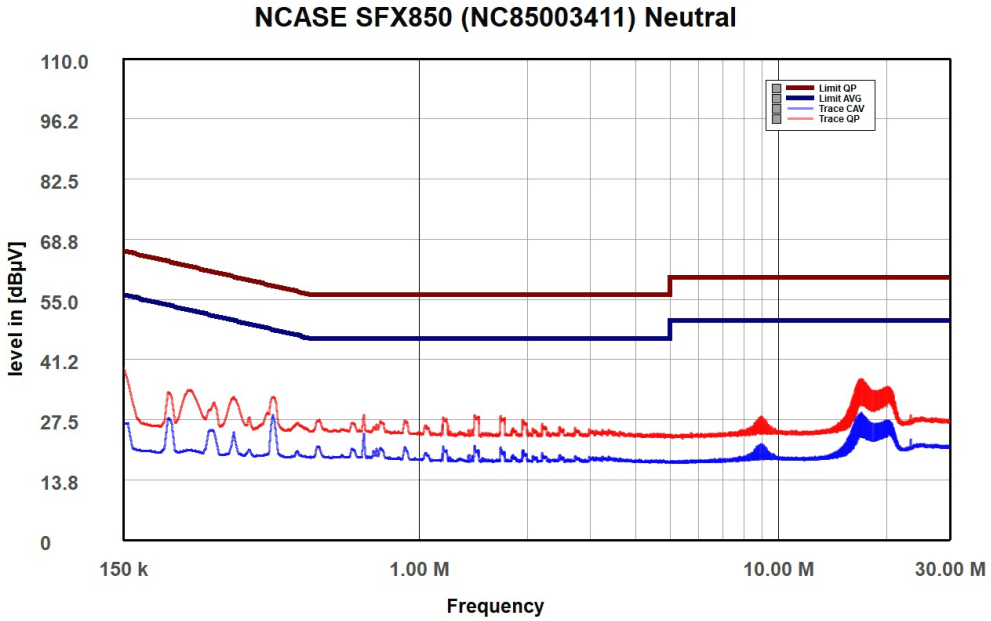
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 34.2 °C	0 RPM · <6.0 dB(A) · 42.5 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 35.6 °C	0 RPM · <6.0 dB(A) · 43.0 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 34.4 °C	0 RPM · <6.0 dB(A) · 46.2 °C	fan off in both
100%	2375 RPM · 37.2 dB(A) · 30.9 °C	3090 RPM · 44.0 dB(A) · 45.2 °C	**+6.8 dB(A)**

INFO

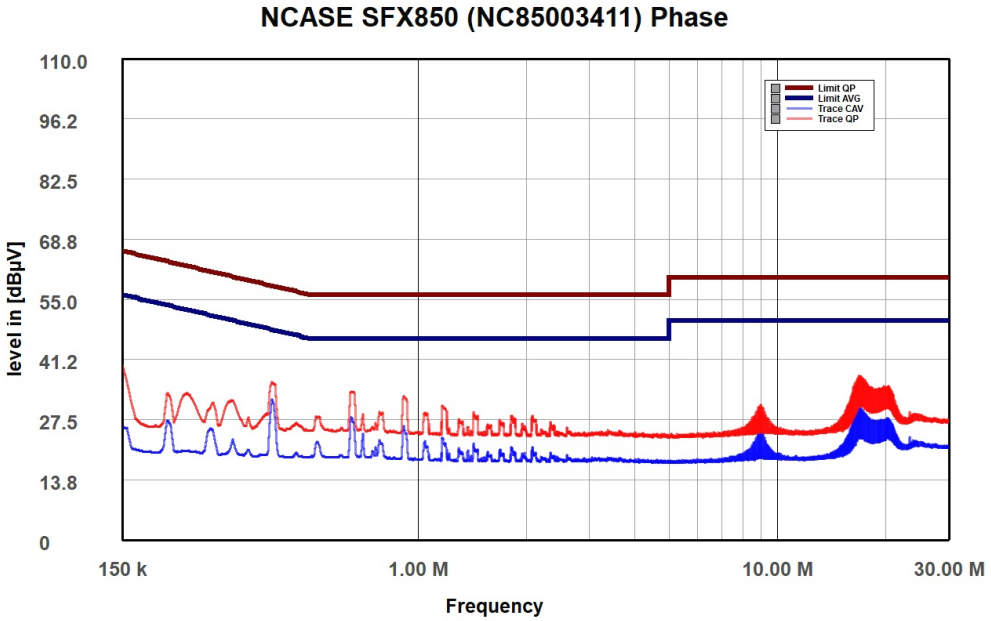
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative 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



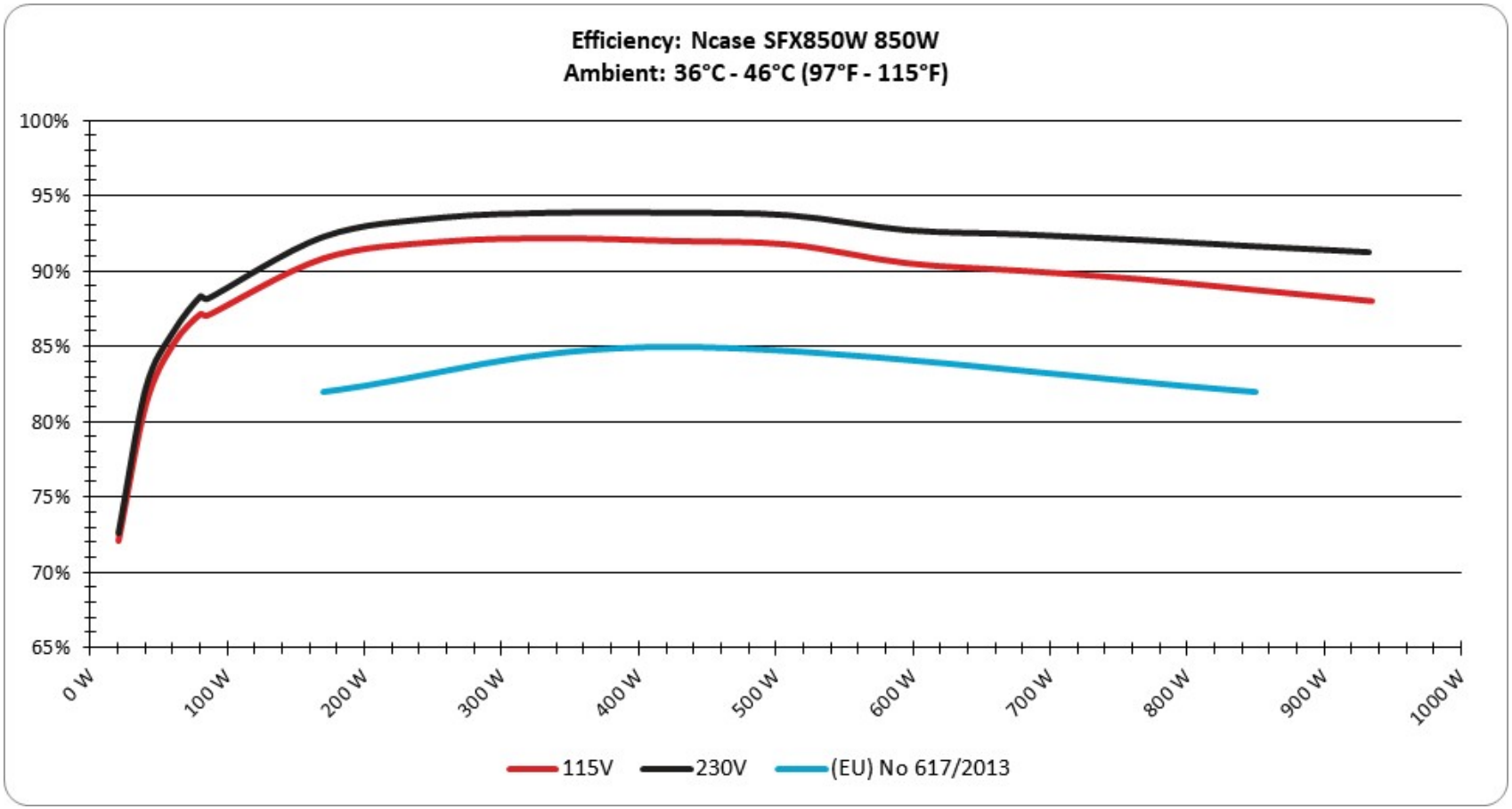
NEUTRAL



PHASE

Indicative Performance

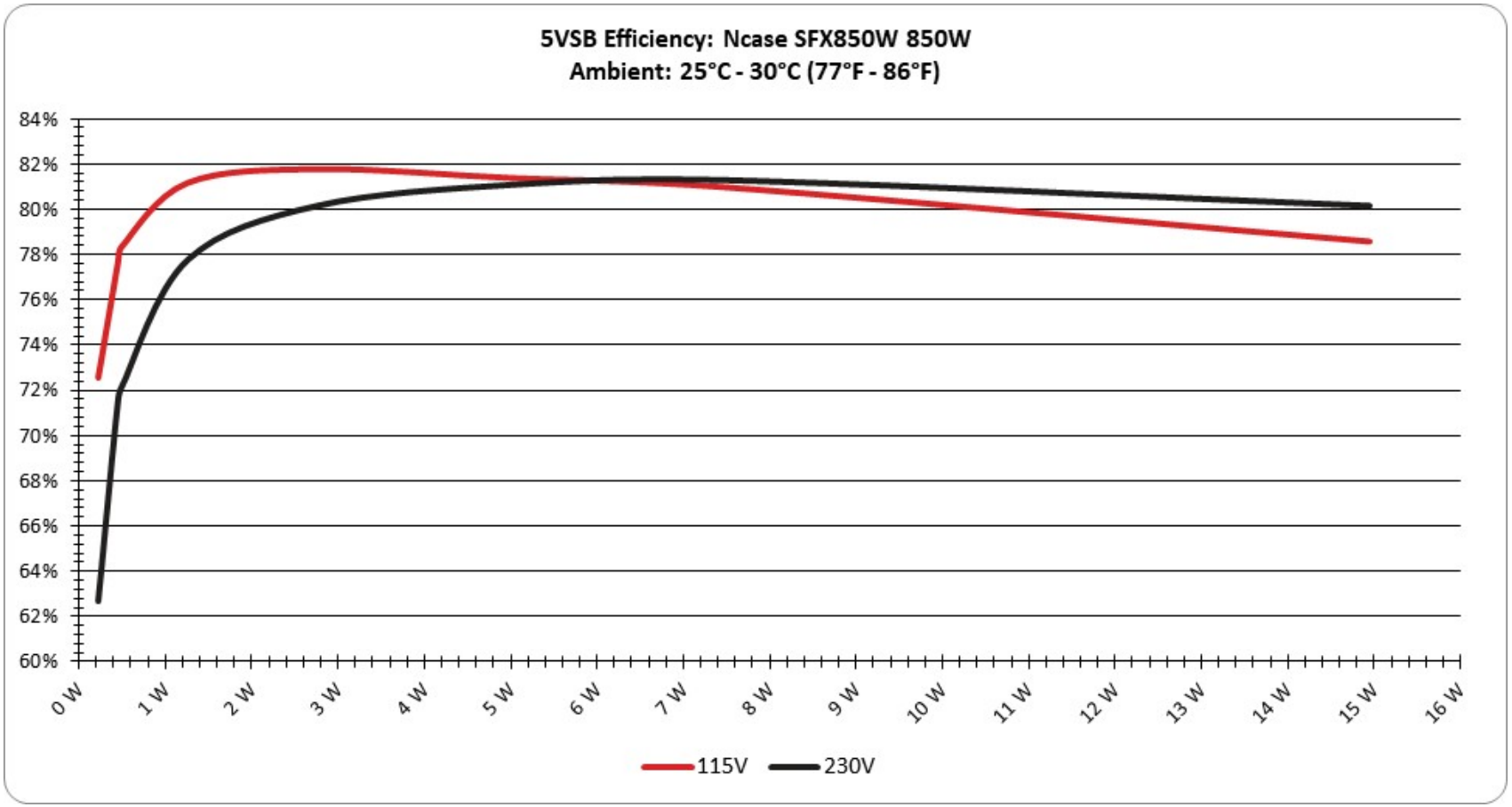
Efficiency under high ambient temperature



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**	0.228W	72.566%	0.042
	5.055V	0.314W		114.97V
2	**0.09A**	0.455W	77.635%	0.077
	5.054V	0.586W		114.97V
3	**0.55A**	2.774W	81.792%	0.311
	5.043V	3.392W		114.95V
4	**1A**	5.033W	81.391%	0.403
	5.031V	6.183W		114.95V
5	**1.5A**	7.53W	80.974%	0.446
	5.019V	9.3W		114.94V
6	**3.001A**	14.947W	78.589%	0.506
	4.982V	19.019W		114.94V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.228W	62.669%	0.015
	5.056V	0.363W		230.05V
2	**0.09A**	0.455W	71.479%	0.026
	5.055V	0.637W		230.05V
3	**0.55A**	2.775W	80.153%	0.129
	5.044V	3.462W		230.05V
4	**1A**	5.034W	81.078%	0.207
	5.033V	6.209W		230.05V
5	**1.5A**	7.532W	81.277%	0.269
	5.02V	9.267W		230.05V
6	**3A**	14.951W	80.143%	0.364
	4.983V	18.655W		230.04V

Protection Features

OCP (Normal @ 29.9°C)	12V: 90.000A (127.12%), 11.974V — shut down 5V: 23.000A (115%), 5.030V — shut down 3.3V: 23.500A (117.50%), 3.354V — shut down 5VSB: 4.000A (133.33%), 4.965V — shut down
OCP (Hot @ 41.3°C)	12V: 90.000A (127.12%), 11.996V — shut down 5V: 22.900A (114.50%), 5.031V — shut down 3.3V: 23.400A (117%), 3.352V — shut down 5VSB: 3.700A (123.33%), 4.970V — shut down
OVP (per rail)	12V: 13.413V (✓) 5V: 6.016V (✓) 3.3V: 3.843V (✓)
OPP (Normal @ 29.9°C)	1012.82W (119.15%) — shut down
OPP (Hot @ 41.6°C)	1072.80W (126.21%) — shut down
OTP	✓ (128°C @ 12V Heatsink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓ Rail to rail: not tested
PWR_OK	Proper Operation
UVP (Typical Load @ 90V)	✓
UVP (No Damage @ 80V)	✓
Conducted Emissions EN 55032 & CISPR 32	✓
NLO	✓
Fan Failure Protection	✗
SIP	Surge: MOV Inrush: NTC & Bypass Relay

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%	**5.279A**	**1.985A**	**1.974A**	**0.994A**	85	87.013%	0	<6.0	48.11°C	0.97
	12.007V	5.04V	3.344V	5.031V	97.687				40.46°C	114.93V
20%	**11.595A**	**2.978A**	**2.961A**	**1.195A**	169.957	90.807%	0	<6.0	47.88°C	0.976
	11.993V	5.039V	3.343V	5.022V	187.163				40.93°C	114.91V
30%	**18.258A**	**3.474A**	**3.455A**	**1.397A**	254.963	91.895%	0	<6.0	47.94°C	0.979
	11.990V	5.038V	3.343V	5.013V	277.451				41.39°C	114.89V
40%	**24.947A**	**3.972A**	**3.951A**	**1.599A**	340.059	92.121%	1382	22.1	41.91°C	0.983
	11.980V	5.036V	3.341V	5.004V	369.145				52.2°C	114.86V
50%	**31.260A**	**4.966A**	**4.939A**	**1.802A**	424.96	91.948%	1386	22.1	42.06°C	0.987
	11.979V	5.035V	3.341V	4.995V	462.174				55.55°C	114.84V
60%	**37.559A**	**5.962A**	**5.93A**	**2.001A**	509.467	91.706%	1393	22.6	42.57°C	0.989
	11.973V	5.034V	3.339V	4.986V	555.546				54.95°C	114.81V
70%	**43.892A**	**6.957A**	**6.92A**	**2.211A**	594.836	90.481%	1993	33.3	43.41°C	0.991
	11.978V	5.033V	3.339V	4.976V	657.415				57.14°C	114.78V
80%	**50.250A**	**7.95A**	**7.907A**	**2.315A**	679.663	89.97%	2670	41.8	43.84°C	0.992
	11.975V	5.031V	3.338V	4.968V	755.432				57.57°C	114.77V
90%	**57.018A**	**8.449A**	**8.39A**	**2.419A**	765.083	89.418%	3001	43.4	44.02°C	0.993
	11.971V	5.03V	3.337V	4.961V	855.629				57.22°C	114.74V
100%	**63.493A**	**8.947A**	**8.9A**	**3.036A**	849.888	88.693%	3087	44.0	45.38°C	0.994
	11.973V	5.03V	3.336V	4.942V	958.24				61.61°C	114.72V
110%	**69.838A**	**9.944A**	**9.981A**	**3.039A**	934.448	87.966%	3089	44.0	46.2°C	0.995
	11.973V	5.028V	3.336V	4.937V	1062.288				63.42°C	114.7V
CL1	**0.116A**	**11.959A**	**11.855A**	**0A**	101.292	84.701%	1408	23.0	41.94°C	0.982
	12.008V	5.034V	3.348V	5.049V	119.588				54.59°C	114.93V

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**	**19.88A**	**0A**	**0A**	101.39	83.329%	1387	22.1	41.66°C	0.982
	11.999V	5.03V	3.346V	5.051V	121.674				50.16°C	114.94V
CL3	**0.116A**	**0A**	**19.689A**	**0A**	67.384	78.274%	0	<6.0	44°C	0.968
	12.004V	5.043V	3.352V	5.05V	86.087				40.95°C	114.94V
CL4	**70.977A**	**0A**	**0A**	**0.001A**	849.651	89.39%	3054	44.2	45.9°C	0.994
	11.971V	5.036V	3.333V	5.021V	950.501				57.53°C	114.75V

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%	**5.287A**	**1.985A**	**1.974A**	**0.994A**	85.002	88.164%	0	<6.0	42.49°C	0.873
	11.990V	5.039V	3.343V	5.031V	96.413				40.01°C	230.05V
20%	**11.611A**	**2.978A**	**2.962A**	**1.195A**	169.957	92.282%	0	<6.0	43.01°C	0.93
	11.976V	5.038V	3.343V	5.022V	184.17				40.71°C	230.05V
30%	**18.282A**	**3.475A**	**3.456A**	**1.397A**	254.965	93.535%	0	<6.0	42.96°C	0.949
	11.974V	5.038V	3.342V	5.013V	272.587				41.16°C	230.04V
40%	**24.957A**	**3.971A**	**3.95A**	**1.599A**	340.058	93.872%	0	<6.0	44.88°C	0.961
	11.975V	5.038V	3.342V	5.004V	362.256				41.62°C	230.03V
50%	**31.267A**	**4.964A**	**4.937A**	**1.802A**	425.012	93.866%	0	<6.0	46.17°C	0.967
	11.978V	5.038V	3.342V	4.995V	452.786				42.19°C	230.01V
60%	**37.569A**	**5.959A**	**5.928A**	**2.001A**	509.516	93.701%	776	<6.0	42.81°C	0.97
	11.971V	5.036V	3.34V	4.985V	543.765				54.53°C	230V
70%	**43.905A**	**6.955A**	**6.918A**	**2.211A**	594.905	92.717%	1882	31.0	43.39°C	0.975
	11.976V	5.034V	3.339V	4.976V	641.638				53.41°C	230V
80%	**50.274A**	**7.949A**	**7.907A**	**2.315A**	679.716	92.431%	2280	36.3	43.83°C	0.977
	11.970V	5.032V	3.338V	4.969V	735.379				53.8°C	229.98V
90%	**57.036A**	**8.447A**	**8.388A**	**2.419A**	765.142	92.061%	2866	43.1	44.63°C	0.979
	11.968V	5.032V	3.338V	4.962V	831.123				55.81°C	229.97V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**63.528A**	**8.946A**	**8.9A**	**3.036A**	849.937	91.638%	3090	44.0	45.15°C	0.98
	11.967V	5.031V	3.337V	4.942V	927.492				56.35°C	229.96V
110%	**69.956A**	**9.942A**	**9.982A**	**3.038A**	932.401	91.252%	3091	44.0	46.31°C	0.98
	11.951V	5.029V	3.335V	4.939V	1021.252				56.43°C	229.96V
CL1	**0.116A**	**11.957A**	**11.86A**	**0A**	101.292	*85.926%**	0	<6.0	43.49°C	*0.893**
	11.995V	5.035V	3.347V	5.048V	*117.883**				41.04°C	*230.07V**
CL2	**0.116A**	**19.869A**	**0A**	**0A**	101.389	*84.534%**	0	<6.0	41.43°C	*0.895**
	12.000V	5.033V	3.347V	5.051V	*119.939**				40.08°C	*230.07V**
CL3	**0.116A**	**0A**	**19.695A**	**0A**	67.384	*79.394%**	0	<6.0	46.38°C	*0.855**
	12.009V	5.044V	3.351V	5.05V	*84.873**				41.82°C	*230.08V**
CL4	**71.003A**	**0A**	**0A**	**0.001A**	849.619	*92.260%**	3064	44.2	40.96°C	*0.979**
	11.966V	5.038V	3.335V	5.021V	*920.898**				55.91°C	*229.94V**

** Interpolated, not measured: the AC power reading was invalid during these tests.*

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	**1.236A**	**0.496A**	**0.493A**	**0.198A**	20.002	72.066%	0	<6.0	39.69°C	0.905
	12.016V	5.041V	3.344V	5.053V	27.755				36.42°C	114.94V
40W	**2.721A**	**0.694A**	**0.691A**	**0.297A**	39.999	81.113%	0	<6.0	40.72°C	0.953
	12.014V	5.041V	3.344V	5.05V	49.313				37.05°C	114.94V
60W	**4.207A**	**0.893A**	**0.888A**	**0.396A**	59.998	85.113%	0	<6.0	43.06°C	0.97
	12.011V	5.041V	3.344V	5.047V	70.492				38.23°C	114.94V
80W	**5.691A**	**1.091A**	**1.086A**	**0.496A**	79.956	87.116%	0	<6.0	44.7°C	0.968
	12.004V	5.04V	3.343V	5.043V	91.78				39.33°C	114.93V

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	**1.240A**	**0.496A**	**0.494A**	**0.198A**	20	72.611%	0	<6.0	38.7°C	0.6
	11.978V	5.038V	3.34V	5.052V	27.544				36.23°C	230.06V
40W	**2.728A**	**0.695A**	**0.691A**	**0.297A**	39.999	82.26%	0	<6.0	39.44°C	0.741
	11.984V	5.038V	3.341V	5.049V	48.625				37.24°C	230.06V
60W	**4.215A**	**0.893A**	**0.889A**	**0.396A**	59.998	85.976%	0	<6.0	39.63°C	0.818
	11.987V	5.039V	3.342V	5.046V	69.785				38.01°C	230.05V
80W	**5.702A**	**1.092A**	**1.086A**	**0.496A**	79.957	88.33%	0	<6.0	40.36°C	0.865
	11.983V	5.039V	3.342V	5.043V	90.52				39.12°C	230.05V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	33.99mV	11.22mV	6.56mV	11.16mV	Pass
20% Load	35.77mV	11.33mV	7.02mV	15.34mV	Pass
30% Load	36.54mV	12.34mV	8.19mV	13.19mV	Pass
40% Load	36.53mV	13.42mV	8.70mV	14.42mV	Pass
50% Load	37.65mV	14.64mV	9.41mV	15.84mV	Pass
60% Load	40.86mV	18.21mV	14.70mV	17.52mV	Pass
70% Load	44.07mV	19.89mV	12.56mV	20.79mV	Pass
80% Load	46.15mV	21.32mV	14.75mV	22.62mV	Pass
90% Load	47.43mV	21.52mV	15.36mV	22.52mV	Pass
100% Load	50.32mV	24.63mV	16.73mV	27.92mV	Pass
110% Load	52.61mV	24.53mV	19.68mV	29.19mV	Pass
Crossload1	37.45mV	14.49mV	10.43mV	17.22mV	Pass
Crossload2	37.04mV	18.41mV	8.19mV	17.47mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	34.96mV	16.02mV	14.24mV	17.07mV	Pass
Crossload4	47.83mV	20.76mV	14.65mV	28.32mV	Pass

The results above are not used in the certification process

230V

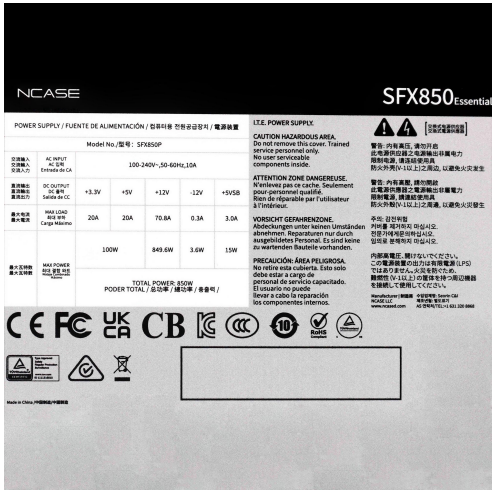
Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	36.13mV	11.63mV	6.51mV	11.31mV	Pass
20% Load	37.25mV	11.99mV	7.22mV	11.77mV	Pass
30% Load	36.28mV	12.60mV	8.09mV	13.19mV	Pass
40% Load	36.99mV	13.57mV	8.90mV	14.47mV	Pass
50% Load	38.62mV	15.00mV	9.81mV	16.05mV	Pass
60% Load	40.05mV	19.89mV	19.12mV	17.42mV	Pass
70% Load	44.11mV	19.64mV	12.51mV	21.75mV	Pass
80% Load	46.25mV	21.17mV	15.16mV	22.21mV	Pass
90% Load	47.83mV	22.39mV	16.68mV	23.64mV	Pass
100% Load	51.04mV	24.48mV	16.99mV	26.59mV	Pass
110% Load	53.28mV	25.10mV	21.67mV	26.90mV	Pass
Crossload1	34.30mV	15.00mV	10.78mV	17.37mV	Pass
Crossload2	39.43mV	19.53mV	8.19mV	17.53mV	Pass
Crossload3	37.65mV	16.53mV	14.65mV	17.68mV	Pass
Crossload4	48.39mV	26.52mV	15.10mV	28.78mV	Pass

The results above are not used in the certification process

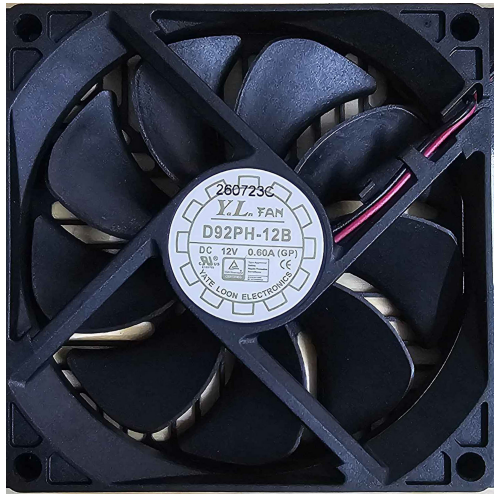
NCASE SFX850



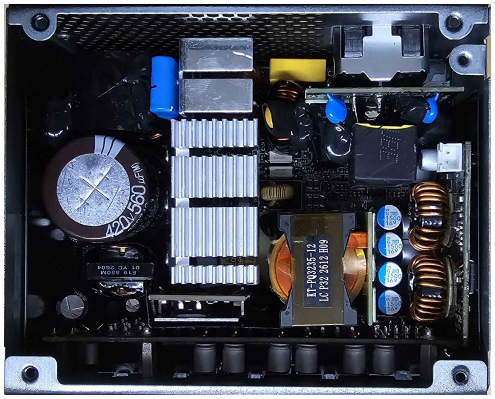
Top side



Power specifications label



Fan



PSU Internals

All data and graphs included in this test report can be used by any individual on the following conditions:

› It should be mentioned that the test results are provided by Cybenetics

› The link to the original test results document should be provided in any case

Cybenetics runs voluntary certification programs for power supplies - ETA for efficiency, LAMBDA for noise and SAFE for safety and correct operation - and for cooling products, with DELTA for chassis soundproofing and PHI for fan airflow and static pressure. THETA rates cooler performance on AMD AM5 and Intel LGA1851 outside ISO 17065 and accreditation scope

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