NZXT

NZXT C850 SFX Gold

Serial Number -

Lab ID NZ85002904

Certification ID 252904

Test Result Report ID: 25PS2904A

Certificate Issue Date: Aug 20, 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 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	NZXT
Model	C850 SFX Gold
OEM/ODM	CWT
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	5-10
Rated Frequency (Hz)	50-60
Rated Power (W)	850
Operating Temperature (Continuous Full Load) (°C)	0 - 50
Type	SFX
Cable Design	Fully Modular
Warranty	10 years
Cybenetics Measurements	
Dimensions (W x H x D)	125 x 63.5 x 100mm
Weight	0.966 kg (2.13lb)
Cooling	92mm Fluid Dynamic Bearing Fan (HA9215SH12FD-F00)
Semi-Passive Operation	✓
Cybenetics Testing Information	
Lab ID	NZ85002904
Date of receipt	Jul 10, 2025
Testing Date	Aug 16, 2025
Report Issued Date	Aug 20, 2025
Engineer Name	Georgios Theodoros Sarimpalas
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 24 pin (350mm)	1	1	16AWG	Tinned Copper
4+4 pin ATX12V (475mm)	1	1	16AWG	Tinned Copper
2x 6+2 pin PCIe (475mm)	2	4	16-18AWG	Tinned Copper
6+2 pin PCIe (475mm)	1	1	16-18AWG	Tinned Copper
12+4 pin PCIe (475mm) (600W)	1	1	16-24AWG	Tinned Copper

SATA (105mm+100mm+150mm)	2	6	18AWG	Tinned Copper
4-pin Molex (105mm+100mm+100mm)	1	3	18AWG	Tinned Copper

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	✗

Power Specifications

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	20	20	70.83	3	0
	Watts	100		850	15	0
Total Max. Power (W)		850				

Parts Description

General Data	
Manufacturer (OEM)	CWT
PCB Type	Double-Sided
Primary Side	
Transient Filter	2x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	1x NTC Thermistor SCK-056 (5 Ohm) & Relay
Bridge Rectifier(s)	2x GBUE2560 (600 V, 25 A @ 140 °C)
APFC MOSFETs	2x Infineon IPW60R099P6 (650 V, 24 A @ 100 °C, Rds(on): 0.099 Ohm)
APFC Boost Diode	2x Infineon IDDD08G65C6 (650 V, 8 A @ 150°C)
Bulk Cap(s)	1x Rubycon (420 V, 560 uF, 3,000 h @ 105 °C, MXT)
Main Switchers	2x Infineon IPA60R099P6 (650 V, 24 A @ 100 °C, Rds(on): 0.099 Ohm)

APFC Controller	1x Champion CM6500UNX & 1x Sync Power SPN5003 (reduce no-load consumption)
Resonant Controller	Champion CU6901VAC
Topology	Primary side: APFC, Half-Bridge & LLC Resonant converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	8x International Rectifier IRFH7004PbF (40 V, 164 A @ 100 °C, Rds (on): 1.4 mOhm)
5V & 3.3V	DC-DC Converters: 8x UBIQ QM3054M6 (30 V, 61 A @ 100 °C, Rds (on): 4.8 mOhm) PWM Controller(s): Anpec APW7159C
Filtering Capacitors	Electrolytic: 3x Rubycon (6~10,000h @ 105 °C, ZLH) 3x Rubycon (4~10,000h @ 105 °C, YXF) 1x Nippon Chemi-con (2~4,000h @ 105 °C, W) Polymer: 8x Nichicon FPCAP 8x Nippon Chemi-con
Supervisor IC	INFsitronix IN1S315I (OVP, UVP, SCP, PG)
Fan Controller	8A08A1
Fan Model	Hong Hua HA9215SH12FD-F00 (92 mm, 12 V, 0.46 A, Fluid Dynamic Bearing Fan)
5VSB	
Standby PWM Controller	On-Bright OB2365T

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	✓

Performance Summary

115V

Accredited	
Average Efficiency (>1450 load combinations)	89.887%
Average Noise Output (>1450 Load Combinations)	25.29dBA
Average PF (>1450 Load Combinations)	0.989
Efficiency With 10W (≤500W) or 2% (>500W) Load	74.457%
Standby Power Consumption	0.0299W
Non-Accredited	
12V Ripple (Full Load)	29.46mV
5V Ripple (Full Load)	18.36mV
3.3V Ripple (Full Load)	17.42mV
5VSB Ripple (Full Load)	37.59mV
12V Load Regulation	0.29%
5V Load Regulation	0.18%
3.3V Load Regulation	0.66%
5VSB Load Regulation	2.94%
Inrush Current	33.545A

230V

Accredited	
Average Efficiency (>1450 load combinations)	91.826%
Average Noise Output (>1450 Load Combinations)	25.39dBA
Average PF (>1450 Load Combinations)	0.964
Efficiency With 10W (≤500W) or 2% (>500W) Load	74.385%
Standby Power Consumption	0.0770W
Non-Accredited	
12V Ripple (Full Load)	30.05mV
5V Ripple (Full Load)	18.09mV
3.3V Ripple (Full Load)	17.29mV

5VSB Ripple (Full Load)		28.62mV
12V Load Regulation		0.35%
5V Load Regulation		0.22%
3.3V Load Regulation		0.69%
5VSB Load Regulation		2.90%
Inrush Current		64.545A
12V Transient Response (200%)		11.52V
5V Transient Response (200%)		4.991V
3.3V Transient Response (200%)		3.271V
5VSB Transient Response (200%)		4.938V
Hold-Up Time & PWR_OK Signal		19.90ms
AC Loss to PWR_OK Hold Up Time		16.80ms
PWR_OK Inactive to DC Loss Delay		3.10ms
PSU Timings: T1 (20% / 100%)	58.0ms	57.0ms
PSU Timings: T3 (20% / 100%)	126.0ms	126.0ms
12V OCP (29.2°C / 42.9°C)	89.40A (126.22%), 11.970V	89.40A (126.22%), 11.997V
5V OCP (29.2°C / 42.9°C)	25.1A (125.50%), 5.084V	24.8A (124.00%), 5.084V
3.3V OCP (29.2°C / 42.9°C)	25.8A (129.00%), 3.337V	25.7A (128.50%), 3.336V
5VSB OCP (29.2°C / 42.9°C)	4.5A (150.00%), 4.955V	4.4A (146.67%), 4.953V
OPP (29.85°C / 43.89°C)	123.84%	123.84%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	19.9
AC Loss to PWR_OK Hold Up Time (ms)	16.8
PWR_OK Inactive to DC Loss Delay (ms)	3.1

Vampire Power

Tables

115V

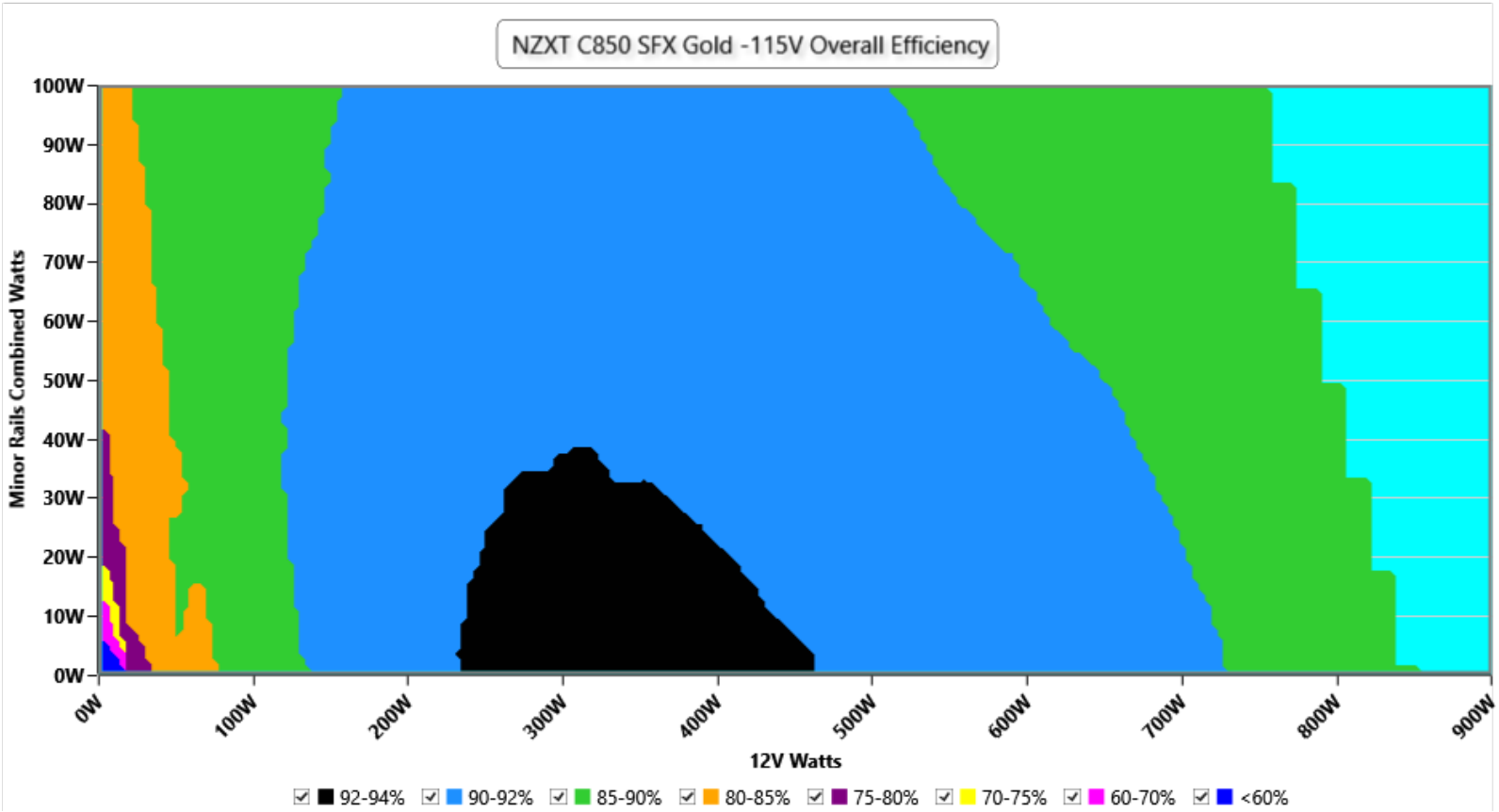
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.09 V	115.03 V	113.85 V	115.13 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.93 Hz	59.40 Hz	60.02 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.09 %	N/A	0.18 %	2.00 %	PASS
Real Power:	0.030 W	-0.003 W	N/A	0.063 W	N/A	N/A
Apparent Power:	7.574 W	7.358 W	N/A	7.792 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:	231.04 V	230.94 V	227.70 V	231.11 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	1.416	1.340	1.419	1.490	PASS
Mains Voltage THD:	0.17 %	0.14 %	N/A	0.25 %	2.00 %	PASS
Real Power:	0.077 W	0.039 W	N/A	0.138 W	N/A	N/A
Apparent Power:	25.322 W	25.007 W	N/A	25.645 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

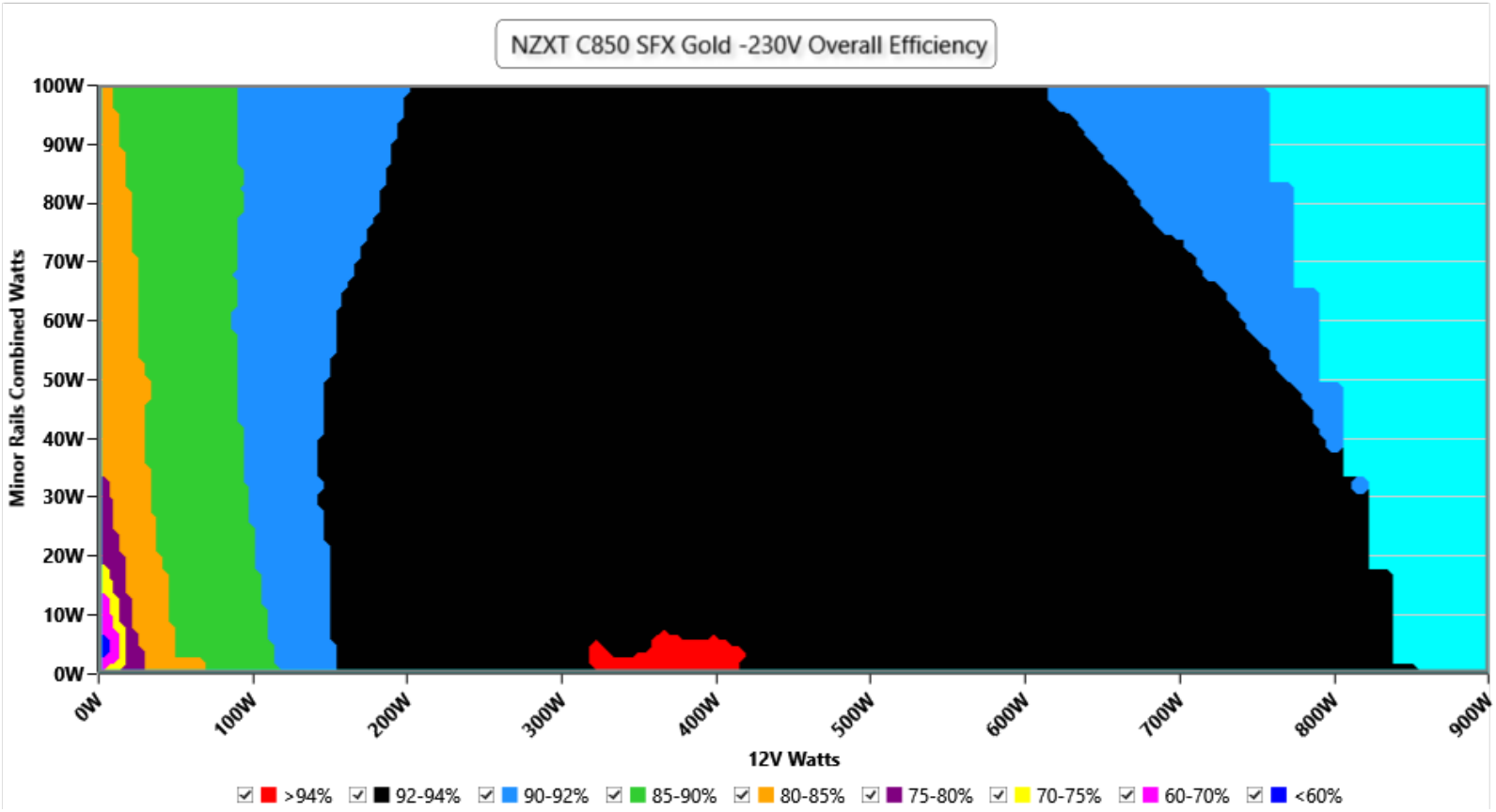
115V



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

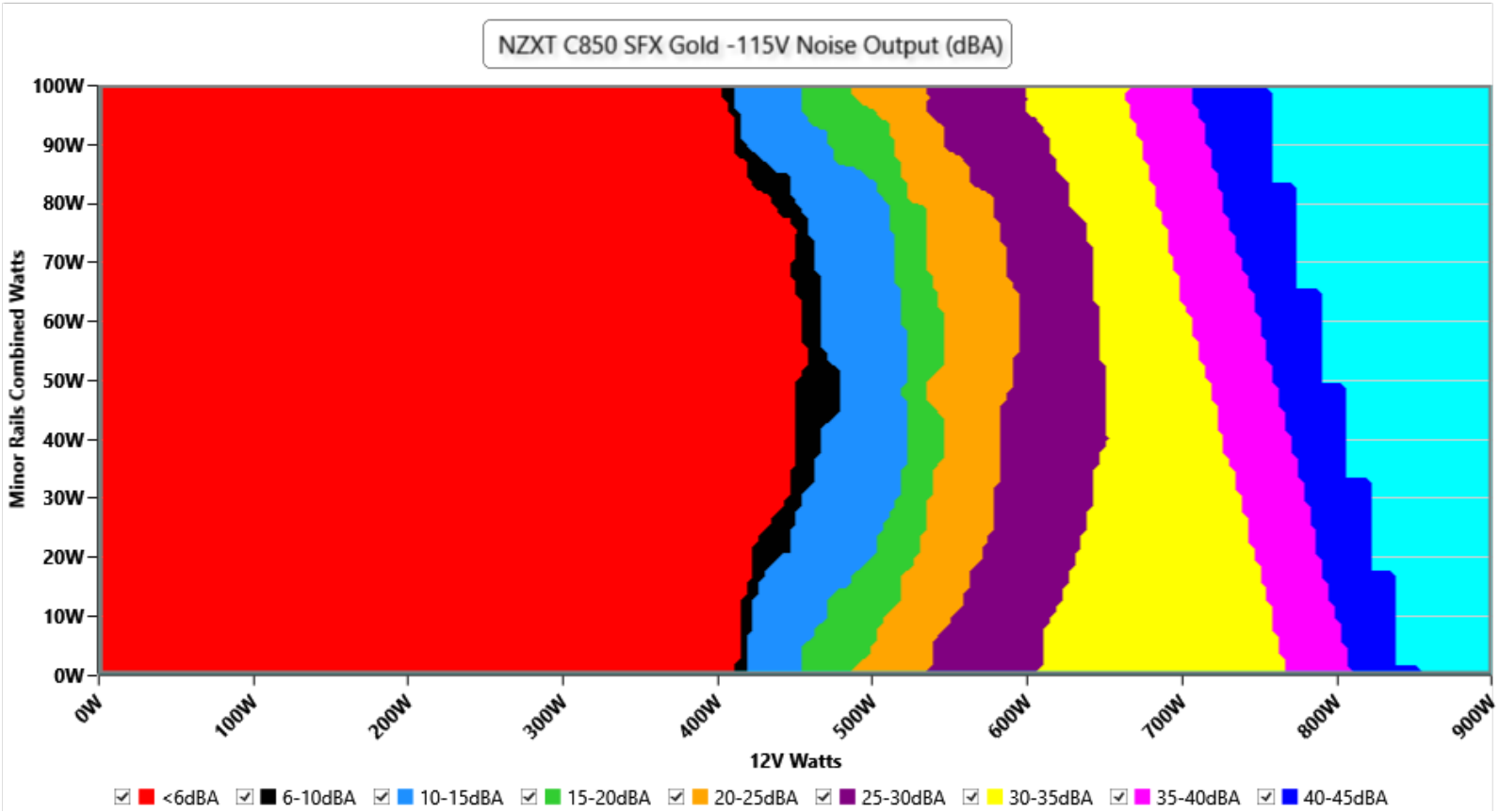


INFO

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

Noise Graph

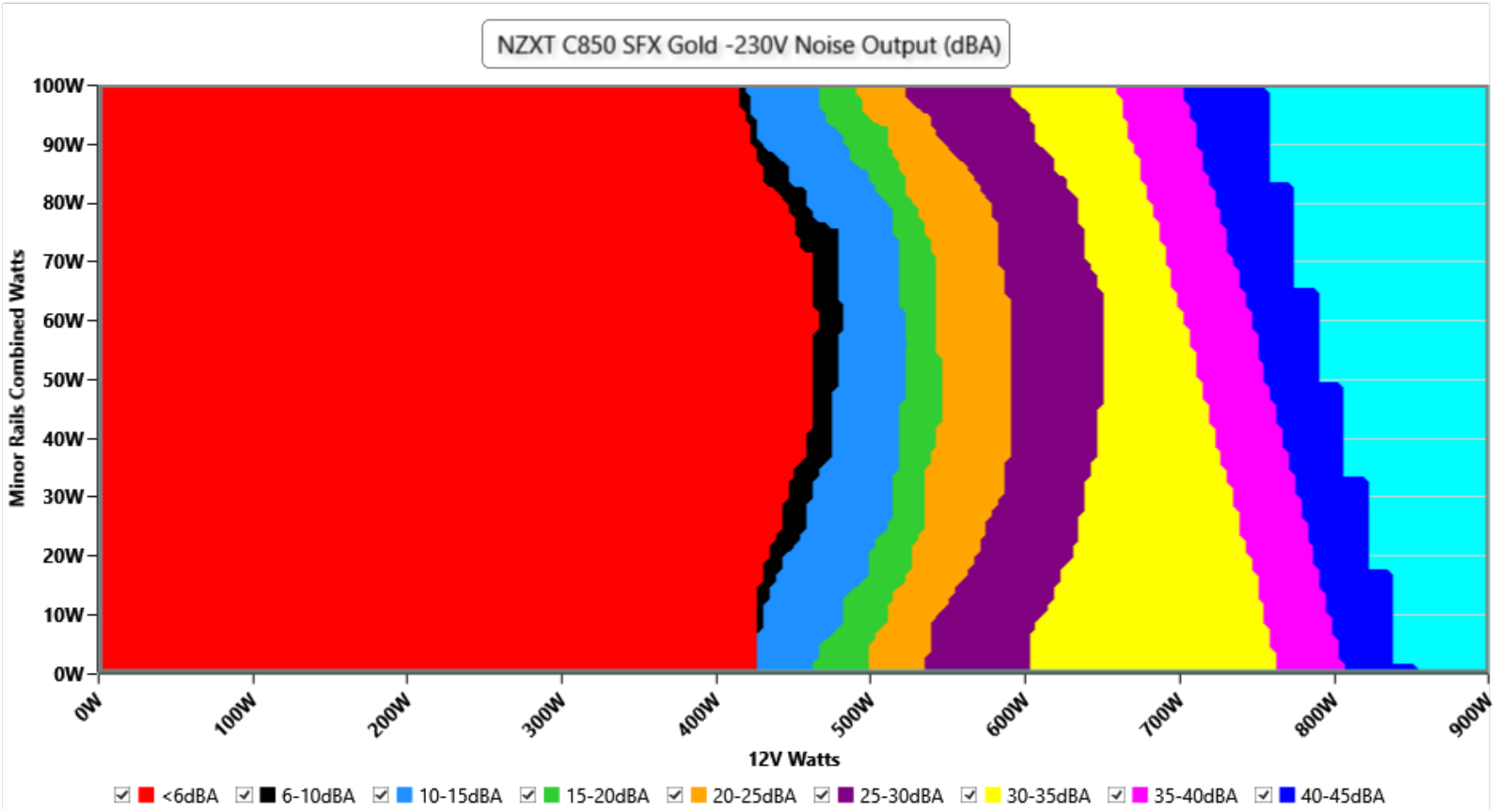
115V



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 fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 37.6 °C	0 RPM · <6.0 dB(A) · 42.6 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 38.9 °C	0 RPM · <6.0 dB(A) · 42.7 °C	fan off in both
50%	491 RPM · <6.0 dB(A) · 30.8 °C	517 RPM · <6.0 dB(A) · 42.2 °C	<6.0 in both
100%	2336 RPM · 41.8 dB(A) · 30.2 °C	2739 RPM · 44.5 dB(A) · 46.0 °C	**+2.7 dB(A)**

230V

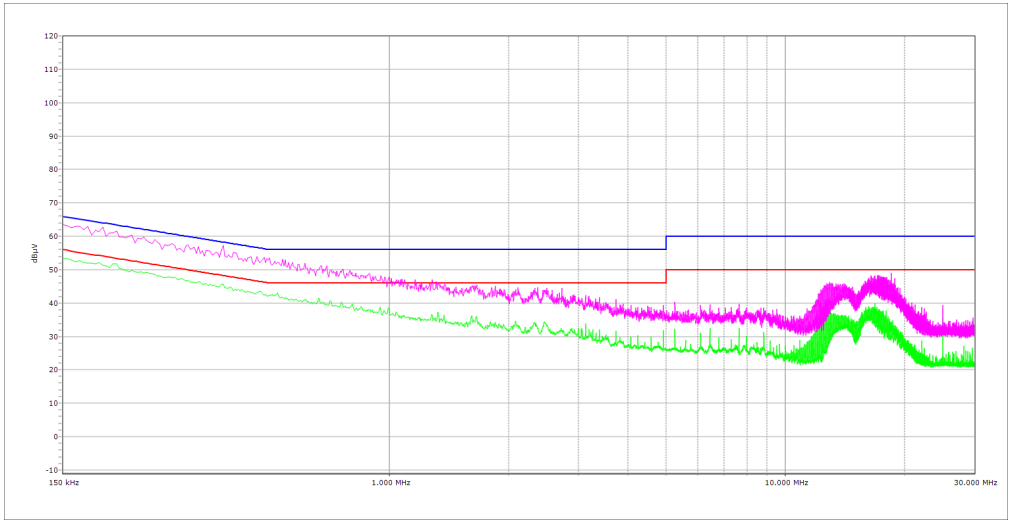
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 38.0 °C	0 RPM · <6.0 dB(A) · 51.7 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 39.0 °C	0 RPM · <6.0 dB(A) · 53.9 °C	fan off in both
50%	511 RPM · <6.0 dB(A) · 30.0 °C	533 RPM · <6.0 dB(A) · 42.3 °C	<6.0 in both
100%	2392 RPM · 42.1 dB(A) · 30.7 °C	2642 RPM · 44.0 dB(A) · 45.4 °C	**+1.9 dB(A)**

INFO

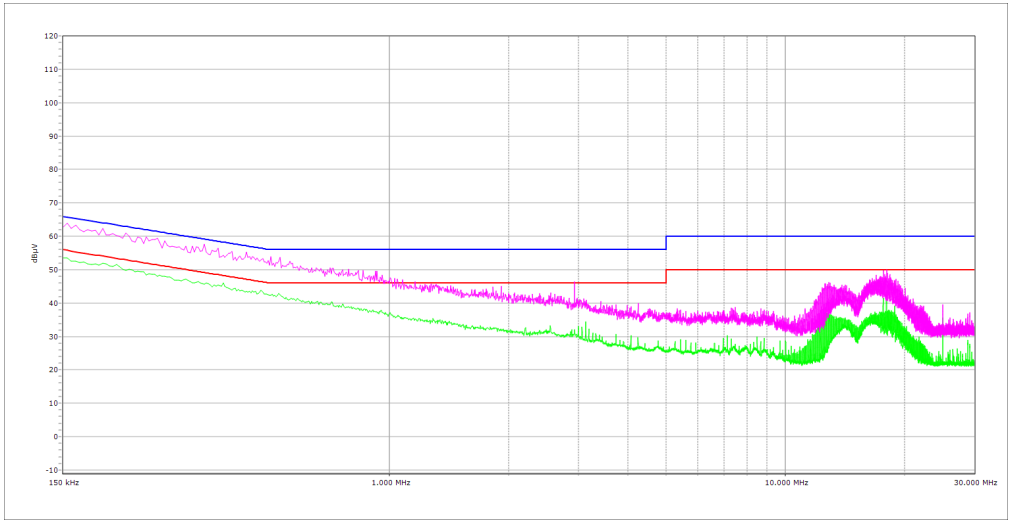
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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



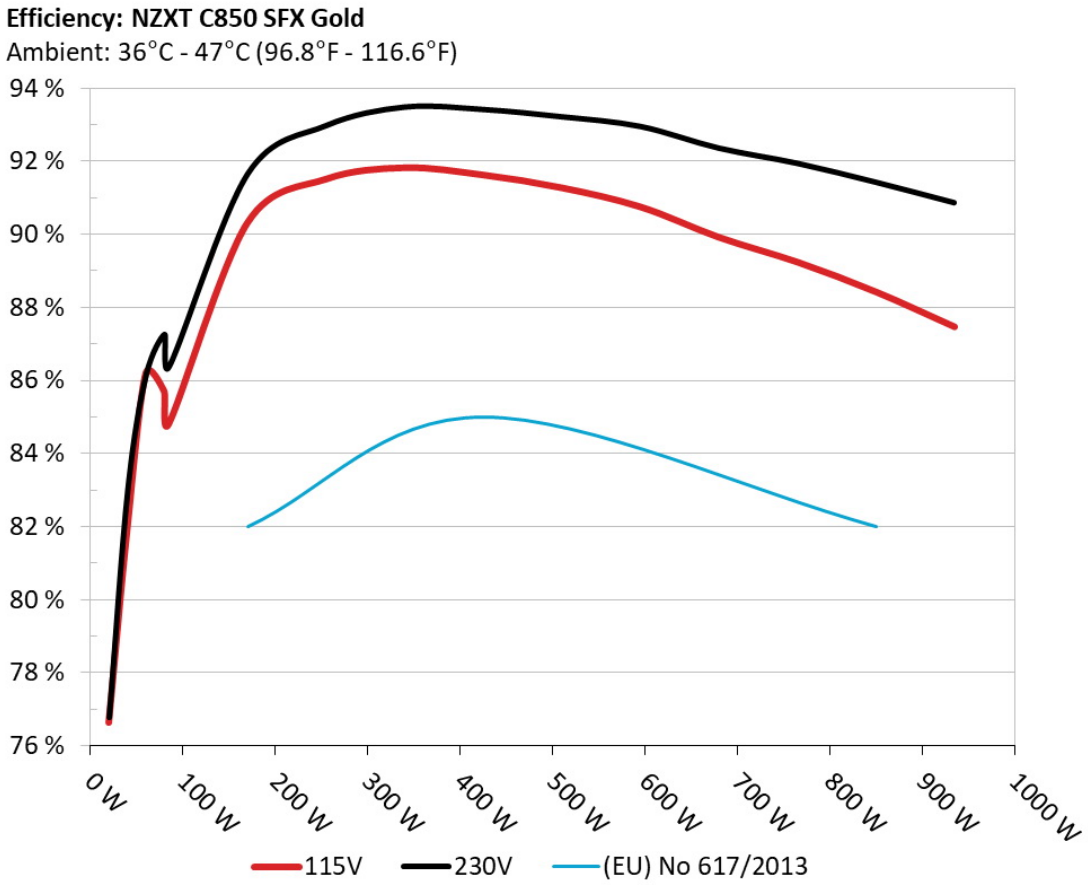
NEUTRAL



PHASE

Indicative Performance

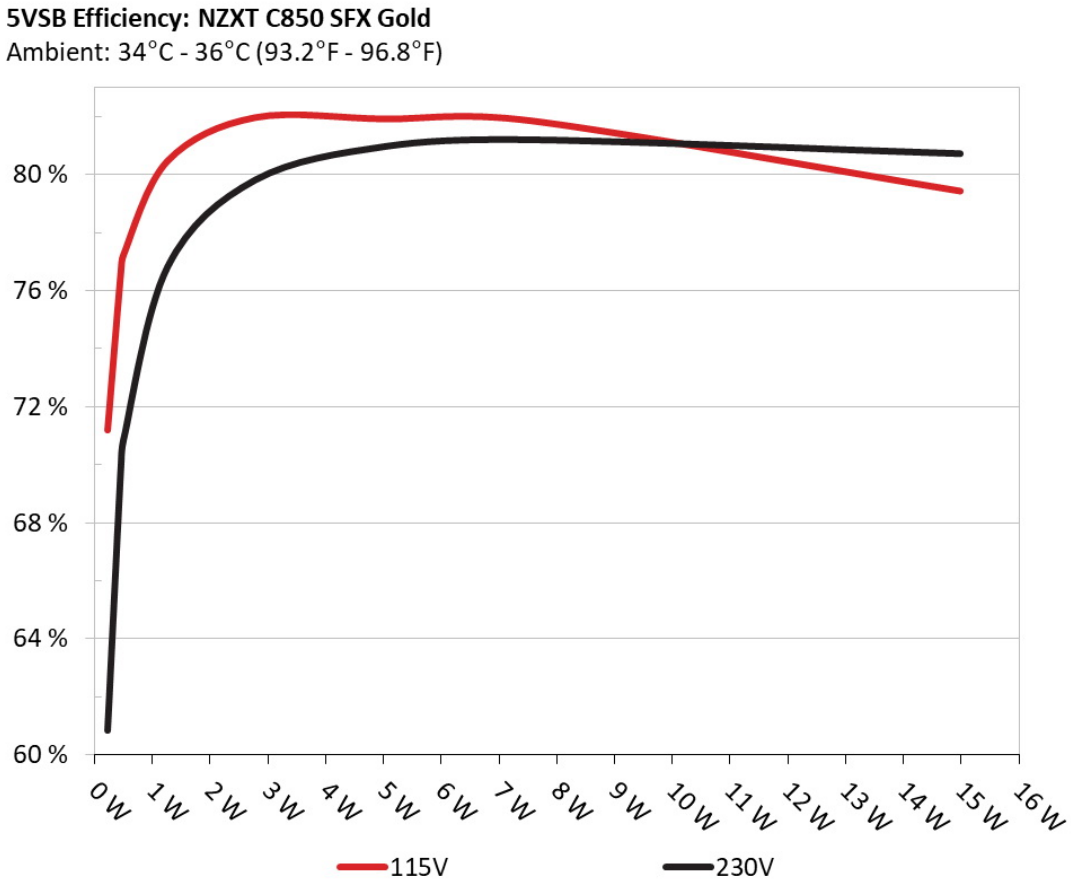
Efficiency under high ambient temperature



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**	0.229W	71.186%	0.039
	5.077V	0.322W		114.95V
2	**0.09A**	0.457W	76.605%	0.073
	5.076V	0.597W		114.94V
3	**0.55A**	2.785W	81.974%	0.302
	5.063V	3.397W		114.93V
4	**1A**	5.052W	81.923%	0.395
	5.051V	6.167W		114.93V
5	**1.5A**	7.558W	81.862%	0.439
	5.038V	9.232W		114.93V
6	**3A**	14.987W	79.436%	0.5
	4.996V	18.868W		114.92V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.229W	60.846%	0.015
	5.077V	0.377W		230.02V
2	**0.09A**	0.457W	69.852%	0.027
	5.075V	0.655W		230V
3	**0.55A**	2.784W	79.829%	0.132
	5.063V	3.488W		230.04V
4	**1A**	5.051W	80.989%	0.21
	5.05V	6.237W		230.04V
5	**1.5A**	7.555W	81.217%	0.273
	5.036V	9.302W		230.05V
6	**3A**	14.984W	80.736%	0.368
	4.995V	18.56W		230.05V

Protection Features

OCP (Normal @ 29.2°C)	12V: 89.4A (126.22%), 11.97V 5V: 25.1A (125.5%), 5.084V 3.3V: 25.8A (129%), 3.337V 5VSB: 4.5A (150%), 4.955V
OCP (Hot @ 42.9°C)	12V: 89.4A (126.22%), 11.997V 5V: 24.8A (124%), 5.084V 3.3V: 25.7A (128.5%), 3.336V 5VSB: 4.4A (146.67%), 4.953V
OPP (Normal @ 29.9°C)	1052.65W (123.84%)
OPP (Hot @ 43.9°C)	1052.66W (123.84%)
OTP	✓ (149°C @ Heat Sink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -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 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%	**5.270A**	**1.974A**	**1.963A**	**0.992A**	85.011	84.821%	0	<6.0	42.57°C	0.98
	12.030V	5.066V	3.362V	5.041V	100.225				40.36°C	114.86V
20%	**11.575A**	**2.961A**	**2.947A**	**1.193A**	169.96	90.321%	0	<6.0	42.68°C	0.983
	12.014V	5.066V	3.36V	5.028V	188.175				40.59°C	114.84V
30%	**18.227A**	**3.455A**	**3.44A**	**1.396A**	254.966	91.519%	516	<6.0	41.41°C	0.984
	12.010V	5.065V	3.358V	5.017V	278.594				55.55°C	114.82V
40%	**24.885A**	**3.95A**	**3.933A**	**1.599A**	340.062	91.83%	518	<6.0	41.69°C	0.988
	12.009V	5.064V	3.356V	5.005V	370.314				57.57°C	114.79V
50%	**31.160A**	**4.937A**	**4.92A**	**1.803A**	424.913	91.631%	517	<6.0	42.19°C	0.99
	12.016V	5.064V	3.354V	4.992V	463.72				60.83°C	114.76V
60%	**37.419A**	**5.926A**	**5.909A**	**2A**	509.4	91.281%	938	16.4	42.64°C	0.992
	12.016V	5.063V	3.351V	4.979V	558.058				62.59°C	114.73V
70%	**43.741A**	**6.916A**	**6.9A**	**2.215A**	594.754	90.757%	1487	32.2	43.08°C	0.993
	12.017V	5.062V	3.349V	4.967V	655.322				60.98°C	114.7V
80%	**50.041A**	**7.904A**	**7.89A**	**2.32A**	679.562	89.924%	1957	38.4	43.69°C	0.994
	12.023V	5.06V	3.346V	4.957V	755.708				61.2°C	114.66V
90%	**56.815A**	**8.401A**	**8.374A**	**2.425A**	764.994	89.238%	2364	42	44.76°C	0.995
	12.013V	5.058V	3.344V	4.948V	857.25				62.02°C	114.63V
100%	**63.296A**	**8.898A**	**8.888A**	**3.046A**	849.787	88.423%	2739	44.5	45.98°C	0.995
	12.008V	5.057V	3.342V	4.924V	961.05				64.8°C	114.59V
110%	**69.632A**	**9.889A**	**9.974A**	**3.051A**	934.365	87.469%	3104	47.3	46.5°C	0.996
	12.007V	5.055V	3.339V	4.916V	1068.231				67.29°C	114.55V
CL1	**0.116A**	**11.879A**	**11.858A**	**0A**	101.298	83.63%	609	<6.0	40.54°C	0.989
	12.077V	5.067V	3.348V	5.06V	121.126				60.11°C	114.89V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL2	**0.115A**	**19.702A**	**0A**	**0A**	101.345	82.835%	524	<6.0	41.1°C	0.989
	12.071V	5.073V	3.356V	5.063V	122.349				57.12°C	114.89V
CL3	**0.115A**	**0A**	**19.75A**	**0A**	67.4	75.834%	520	<6.0	40.31°C	0.979
	12.029V	5.063V	3.342V	5.063V	88.878				53.45°C	114.9V
CL4	**70.780A**	**0A**	**0A**	**0.001A**	849.535	89.251%	2457	42.5	45.67°C	0.995
	12.003V	5.059V	3.354V	5.018V	951.855				60.35°C	114.6V

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%	**5.262A**	**1.973A**	**1.963A**	**0.992A**	85.007	86.398%	0	<6.0	51.72°C	0.896
	12.048V	5.068V	3.363V	5.039V	98.39				40.05°C	230.03V
20%	**11.560A**	**2.96A**	**2.946A**	**1.194A**	169.955	91.669%	0	<6.0	53.9°C	0.951
	12.028V	5.068V	3.361V	5.027V	185.401				40.62°C	230.01V
30%	**18.209A**	**3.454A**	**3.439A**	**1.396A**	254.963	92.985%	536	<6.0	41.47°C	0.966
	12.022V	5.067V	3.359V	5.016V	274.197				55.46°C	230V
40%	**24.867A**	**3.949A**	**3.932A**	**1.599A**	340.057	93.491%	533	<6.0	41.53°C	0.973
	12.018V	5.065V	3.357V	5.004V	363.732				56.04°C	229.99V
50%	**31.156A**	**4.937A**	**4.919A**	**1.803A**	424.895	93.423%	533	<6.0	42.32°C	0.975
	12.016V	5.064V	3.354V	4.992V	454.809				54.37°C	229.98V
60%	**37.406A**	**5.925A**	**5.909A**	**2A**	509.392	93.226%	1093	22.4	42.62°C	0.979
	12.020V	5.064V	3.352V	4.979V	546.405				63.02°C	229.96V
70%	**43.744A**	**6.915A**	**6.899A**	**2.215A**	594.747	92.961%	1484	32.1	43.27°C	0.981
	12.016V	5.062V	3.349V	4.967V	639.78				63.14°C	229.95V
80%	**50.048A**	**7.903A**	**7.89A**	**2.32A**	679.547	92.368%	1894	37.7	43.54°C	0.984
	12.021V	5.06V	3.346V	4.958V	735.697				63.93°C	229.94V
90%	**56.824A**	**8.399A**	**8.373A**	**2.425A**	764.981	91.949%	2246	40.9	44.81°C	0.984
	12.010V	5.059V	3.344V	4.949V	831.957				65.15°C	229.92V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**63.306A**	**8.896A**	**8.887A**	**3.046A**	849.777	91.433%	2642	44	45.35°C	0.985
	12.006V	5.057V	3.342V	4.925V	929.399				66.45°C	229.91V
110%	**69.702A**	**9.889A**	**9.972A**	**3.05A**	934.34	90.876%	3053	47.1	46.51°C	0.986
	11.995V	5.055V	3.34V	4.918V	1028.148				66.98°C	229.88V
CL1	**0.115A**	**11.877A**	**11.853A**	**0A**	101.284	84.808%	533	<6.0	40.65°C	0.918
	12.054V	5.067V	3.349V	5.06V	119.425				48.65°C	230.03V
CL2	**0.115A**	**19.701A**	**0A**	**0A**	101.354	83.866%	531	<6.0	40.58°C	0.919
	12.060V	5.074V	3.357V	5.063V	120.854				53.76°C	230.02V
CL3	**0.115A**	**0A**	**19.744A**	**0A**	67.397	77.242%	527	<6.0	40.5°C	0.883
	12.019V	5.064V	3.343V	5.063V	87.252				51.57°C	230.03V
CL4	**70.804A**	**0A**	**0A**	**0.001A**	849.52	92.192%	2501	43	45.15°C	0.985
	11.998V	5.059V	3.355V	5.018V	921.472				61.18°C	229.89V

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	**1.238A**	**0.494A**	**0.491A**	**0.197A**	20.01	76.624%	0	<6.0	37.15°C	0.899
	12.005V	5.065V	3.364V	5.069V	26.117				36.16°C	114.88V
40W	**2.722A**	**0.691A**	**0.687A**	**0.296A**	40.009	81.947%	0	<6.0	38.8°C	0.962
	12.011V	5.065V	3.363V	5.065V	48.823				37.32°C	114.86V
60W	**4.210A**	**0.889A**	**0.883A**	**0.395A**	60.01	86.195%	0	<6.0	37.8°C	0.972
	12.004V	5.065V	3.363V	5.06V	69.62				38.21°C	114.85V
80W	**5.696A**	**1.086A**	**1.08A**	**0.495A**	79.968	85.695%	0	<6.0	40.98°C	0.979
	11.995V	5.065V	3.362V	5.056V	93.316				39.16°C	114.84V

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	**1.236A**	**0.493A**	**0.49A**	**0.197A**	20.007	76.789%	0	<6.0	44.67°C	0.588
	12.022V	5.068V	3.365V	5.068V	26.054				36.94°C	230.03V
40W	**2.718A**	**0.691A**	**0.687A**	**0.296A**	40.004	83.003%	0	<6.0	46.08°C	0.766
	12.027V	5.067V	3.365V	5.064V	48.197				37.93°C	230.03V
60W	**4.204A**	**0.888A**	**0.883A**	**0.395A**	60.002	86.172%	0	<6.0	49.43°C	0.85
	12.020V	5.067V	3.364V	5.06V	69.632				38.5°C	230.03V
80W	**5.690A**	**1.085A**	**1.079A**	**0.495A**	79.951	87.27%	0	<6.0	49.96°C	0.89
	12.009V	5.067V	3.364V	5.055V	91.614				39.16°C	230.03V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	23.33mV	14.46mV	13.61mV	13.04mV	Pass
20% Load	37.45mV	15.12mV	14.32mV	14.78mV	Pass
30% Load	30.49mV	15.17mV	14.27mV	14.78mV	Pass
40% Load	28.70mV	15.43mV	14.53mV	16.42mV	Pass
50% Load	27.93mV	15.63mV	14.78mV	18.00mV	Pass
60% Load	29.26mV	17.58mV	15.04mV	18.82mV	Pass
70% Load	29.16mV	17.47mV	16.21mV	19.39mV	Pass
80% Load	29.57mV	18.09mV	17.09mV	21.33mV	Pass
90% Load	30.59mV	18.96mV	17.34mV	23.32mV	Pass
100% Load	29.46mV	18.36mV	17.42mV	37.59mV	Pass
110% Load	30.71mV	19.38mV	17.83mV	37.54mV	Pass
Crossload1	36.08mV	15.41mV	15.45mV	18.06mV	Pass
Crossload2	44.87mV	19.11mV	19.03mV	19.44mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	35.51mV	16.50mV	19.49mV	19.33mV	Pass
Crossload4	28.18mV	16.49mV	15.59mV	20.90mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	27.93mV	14.56mV	13.61mV	13.81mV	Pass
20% Load	39.09mV	13.90mV	13.50mV	13.30mV	Pass
30% Load	30.54mV	15.33mV	14.53mV	15.86mV	Pass
40% Load	29.98mV	16.20mV	14.94mV	16.57mV	Pass
50% Load	29.16mV	15.94mV	14.73mV	18.62mV	Pass
60% Load	29.42mV	16.91mV	15.70mV	18.52mV	Pass
70% Load	31.06mV	17.27mV	16.73mV	19.95mV	Pass
80% Load	30.19mV	19.41mV	18.62mV	21.33mV	Pass
90% Load	30.70mV	19.21mV	18.36mV	22.56mV	Pass
100% Load	30.05mV	18.09mV	17.29mV	28.62mV	Pass
110% Load	32.03mV	18.22mV	18.11mV	39.45mV	Pass
Crossload1	42.42mV	15.18mV	14.58mV	17.42mV	Pass
Crossload2	52.44mV	18.75mV	19.08mV	19.23mV	Pass
Crossload3	46.81mV	15.63mV	18.98mV	18.72mV	Pass
Crossload4	28.24mV	17.76mV	16.62mV	21.03mV	Pass

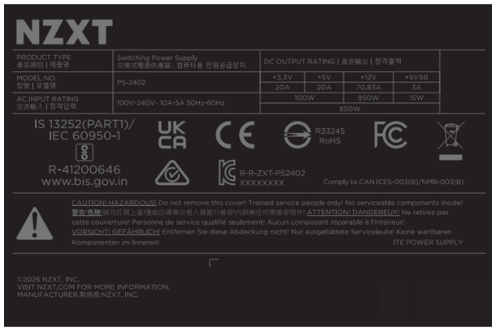
The results above are not used in the certification process

NZXT C850 SFX Gold



Top side

2. PSU model name: C850 SFX Gold
3. Rating label:



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

CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus

www.cybenetics.com - info@cybenetics.com