NZXT

NZXT C1200 Gold

Serial Number 52241Z04700003

Lab ID NZ12002447

Certification ID 252447

Test Result Report ID: 24PS2447A

Certificate Issue Date: May 20, 2024

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	NZXT
Model	C1200 Gold
OEM/ODM	Channel Well Technology
Serial Number	52241Z04700003
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	14

Rated Frequency (Hz)	50-60
Rated Power (W)	1200
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	135mm Fluid Dynamic Bearing Fan (HA13525H12SF-Z)
Semi-Passive Operation	✓ (selectable)
Cybenetics Testing Information	
Lab ID	NZ12002447
Date of receipt	May 7, 2024
Testing Date	May 17, 2024
Report Issued Date	May 20, 2024
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 (600mm)	1	1	16-20AWG	No
4+4 pin EPS12V (700mm)	1	1	16AWG	No
8 pin EPS12V (700mm)	1	1	16AWG	No
6+2 pin PCIe (650mm)	3	3	16-18AWG	No
12+4 pin PCIe (645mm) (600W)	1	1	16-24AWG	No
SATA (500mm+145mm+145mm+145mm)	3	12	18AWG	No
4-pin Molex (500mm+145mm+145mm+145mm)	1	4	18AWG	No

Modular Cables				
AC Power Cord (1415mm) - C13 coupler	1	1	14AWG	-

Protection Features(Manufacturer)

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	22	22	100	3	0
	Watts	120		1200	15	0
Total Max. Power (W)		1200				

Parts Description

General Data	
Manufacturer (OEM)	CWT
Platform	CXT
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	1x NTC Thermistor SCK207R0 (7Ω @ 25°C) & Relay
Bridge Rectifier(s)	2x WeEn WNB2560M (600V, 25A @ 127°C)
APFC MOSFETs	3x Infineon IPA60R099P6 (650V, 24A @ 100°C, Rds(on): 0.99Ohm)
APFC Boost Diode	1x On Semi FFSP1665A (650V, 16A @ 135°C)
Bulk Cap(s)	2x Rubycon (420V, 680uF each or 1360uF combined, 2000h @ 105°C,MXE)
Main Switchers	2x Infineon IPA60R099P6 (650V, 24A @ 100°C, Rds(on): 0.99Ohm)

APFC Controller	Champion CM6500UNX & CM03X (for no load consumption)
Resonant Controller	Champion CM6901
Topology	Primary side: APFC, Half-Bridge & LLC converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	10x Infineon BSC014N04LS (40V, 125A @ 100°C, Rds(on): 1.4mOhm)
5V & 3.3V	DC-DC Converters: 2x QM3054M6 (30V, 61A @ 100°C, Rds(on): 4.8mOhm) & 2x QN3107M6N (30V, 74A @ 100°C, Rds(on): 2.6mOhm) PWM Controller(s): uP3861P
Filtering Capacitors	Electrolytic: 4x Nippon Chemi-Con (W) 3x Rubycon (4-10,000 @ 105°C, YXF), Polymer: 31x FPCAPS, 1x Nippon Chemi-Con
Supervisor IC	Weltrend WT7502 (OVD, UVD, PGO,)
Fan Model	Hong Hua (HA13525H12SF-Z) (135mm, 12V, 0.5A Fluid Dynamic Bearing Fan)
5VSB	
TVS Diode	P6SMB
Rectifier	Pingwey R1MF
Synchronous Rectification Driver	Leadtrend LD8926AA1
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)	88.108%
Average Noise Output (>1450 Load Combinations)	26.58dBA
Average PF (>1450 Load Combinations)	0.983
Efficiency With 10W (≤500W) or 2% (>500W) Load	74.614%
Standby Power Consumption	0.0173W
Non-Accredited	
12V Ripple (Full Load)	18.92mV
5V Ripple (Full Load)	8.47mV
3.3V Ripple (Full Load)	8.91mV
5VSB Ripple (Full Load)	7.97mV
12V Load Regulation	0.87%
5V Load Regulation	0.44%
3.3V Load Regulation	1.11%
5VSB Load Regulation	2.04%
Inrush Current	25.470A

230V

Accredited	
Average Efficiency (>1450 load combinations)	90.520%
Average Noise Output (>1450 Load Combinations)	26.16dBA
Average PF (>1450 Load Combinations)	0.961
Efficiency With 10W (≤500W) or 2% (>500W) Load	73.986%
Standby Power Consumption	0.0828W
Non-Accredited	
12V Ripple (Full Load)	20.48mV
5V Ripple (Full Load)	10.98mV
3.3V Ripple (Full Load)	12.75mV

5VSB Ripple (Full Load)		10.11mV
12V Load Regulation		0.86%
5V Load Regulation		0.40%
3.3V Load Regulation		0.99%
5VSB Load Regulation		1.88%
Inrush Current		47.960A
12V Transient Response (200%)		11.33V
5V Transient Response (200%)		4.920V
3.3V Transient Response (200%)		3.181V
5VSB Transient Response (200%)		4.810V
Hold-Up Time & PWR_OK Signal		29.50ms
AC Loss to PWR_OK Hold Up Time		26.00ms
PWR_OK Inactive to DC Loss Delay		3.50ms
PSU Timings: T1 (20% / 100%)	59.0ms	59.0ms
PSU Timings: T3 (20% / 100%)	131.0ms	132.0ms
OPP (27.49°C / 41.18°C)	125.25%	125.26%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	29.5
AC Loss to PWR_OK Hold Up Time (ms)	26
PWR_OK Inactive to DC Loss Delay (ms)	3.5



Tables

115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	114.87 V	114.83 V	113.85 V	114.91 V	116.15 V	PASS

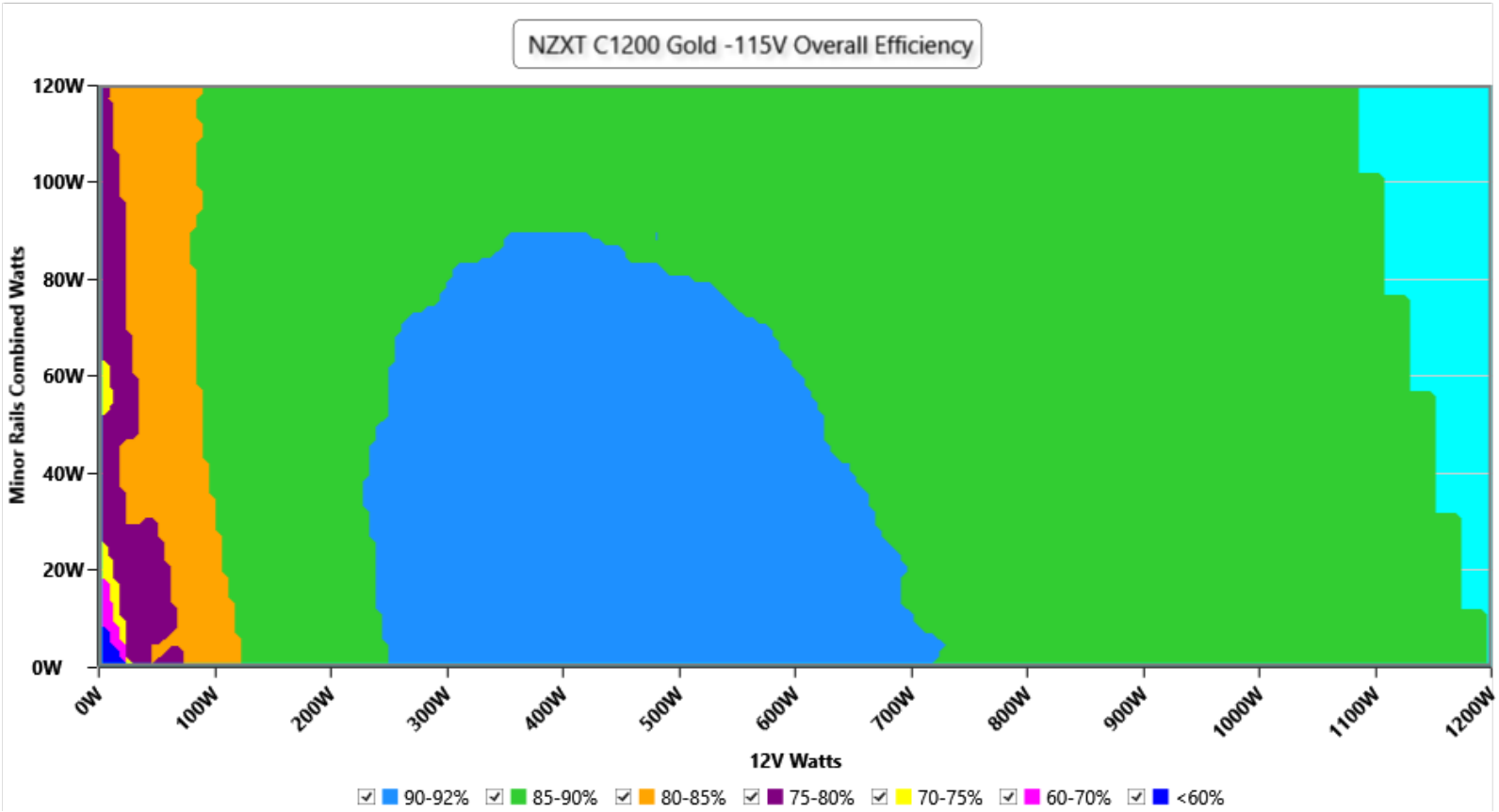
Mains Frequency:	60.00 Hz	59.98 Hz	59.40 Hz	60.02 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.417	1.417	1.340	1.419	1.490	PASS
Mains Voltage THD:	0.14 %	0.10 %	N/A	0.19 %	2.00 %	PASS
Real Power:	0.017 W	0.015 W	N/A	0.020 W	N/A	N/A
Apparent Power:	10.339 W	10.316 W	N/A	10.359 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	229.98 V	229.91 V	227.70 V	230.04 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	1.418	1.490	PASS
Mains Voltage THD:	0.17 %	0.15 %	N/A	0.20 %	2.00 %	PASS
Real Power:	0.083 W	0.071 W	N/A	0.099 W	N/A	N/A
Apparent Power:	34.780 W	34.748 W	N/A	34.805 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

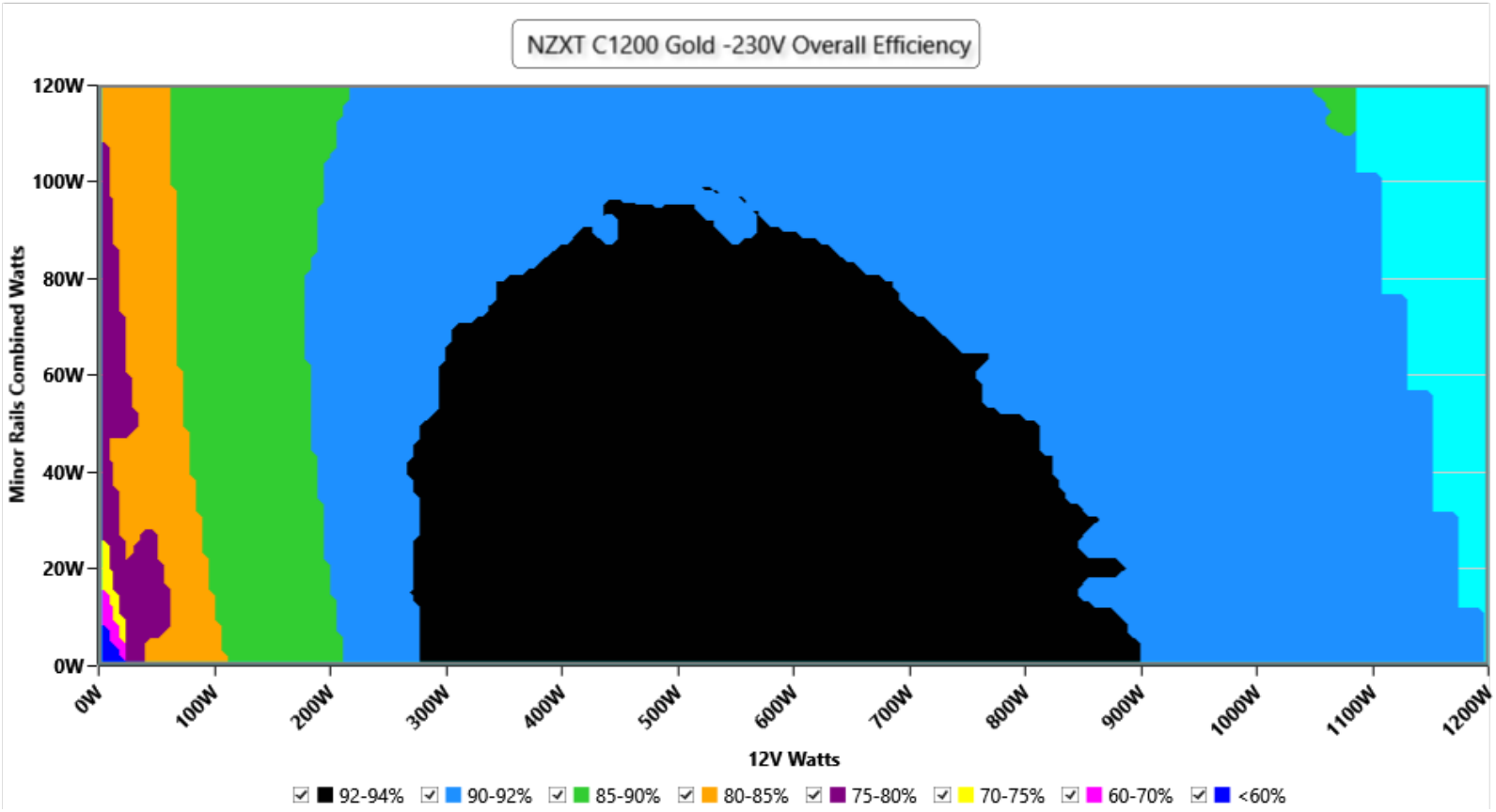
115V



INFO

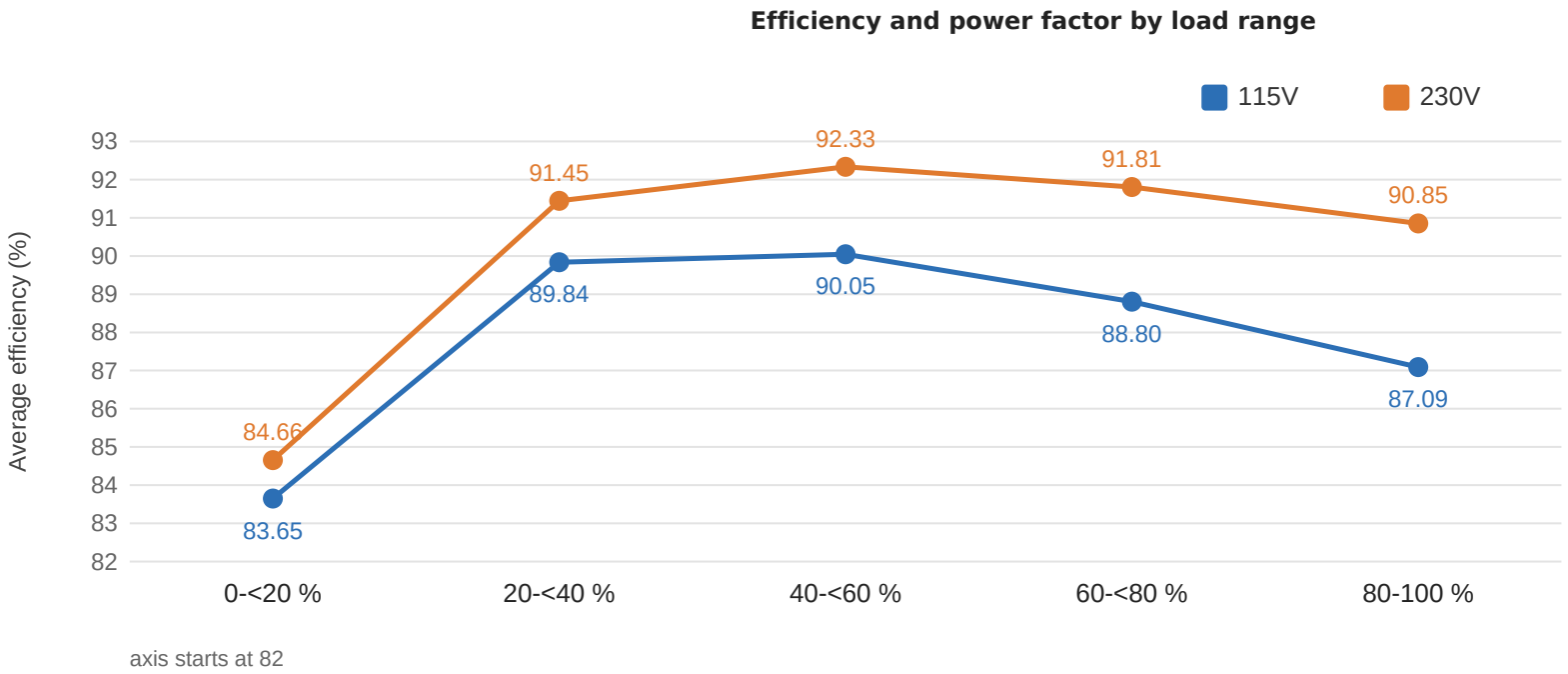
This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

230V

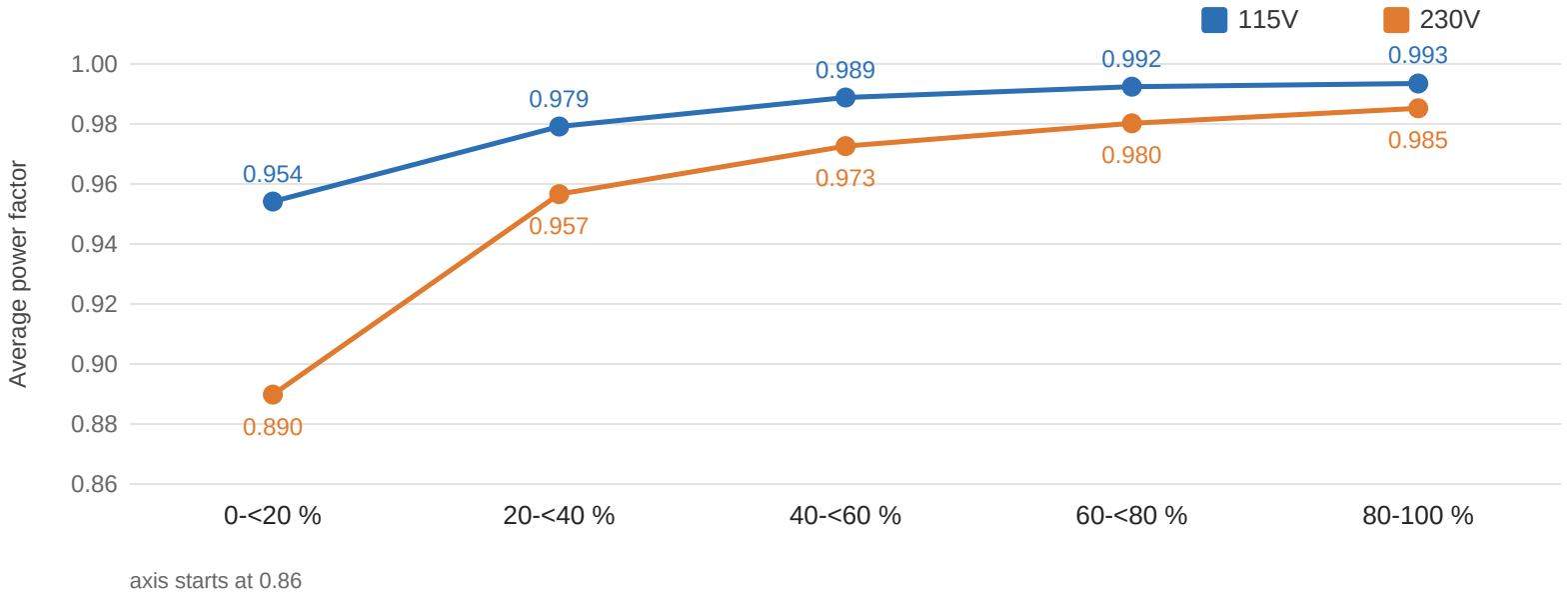


INFO

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



axis starts at 82



axis starts at 0.86

Load range	Points	Efficiency 115V	Efficiency 230V	PF 115V	PF 230V
0-<20 %	245 / 244	83.65%	84.66%	0.954	0.890
20-<40 %	328 / 329	89.84%	91.45%	0.979	0.957
40-<60 %	327 / 327	90.05%	92.33%	0.989	0.973
60-<80 %	328 / 328	88.80%	91.81%	0.992	0.980
80-100 %	331 / 331	87.09%	90.85%	0.993	0.985
70-100 % (High-Load)	497 / 496	87.54%	91.10%	0.993	0.984
All (published average)	1559 / 1559	88.11%	90.52%	0.983	0.961

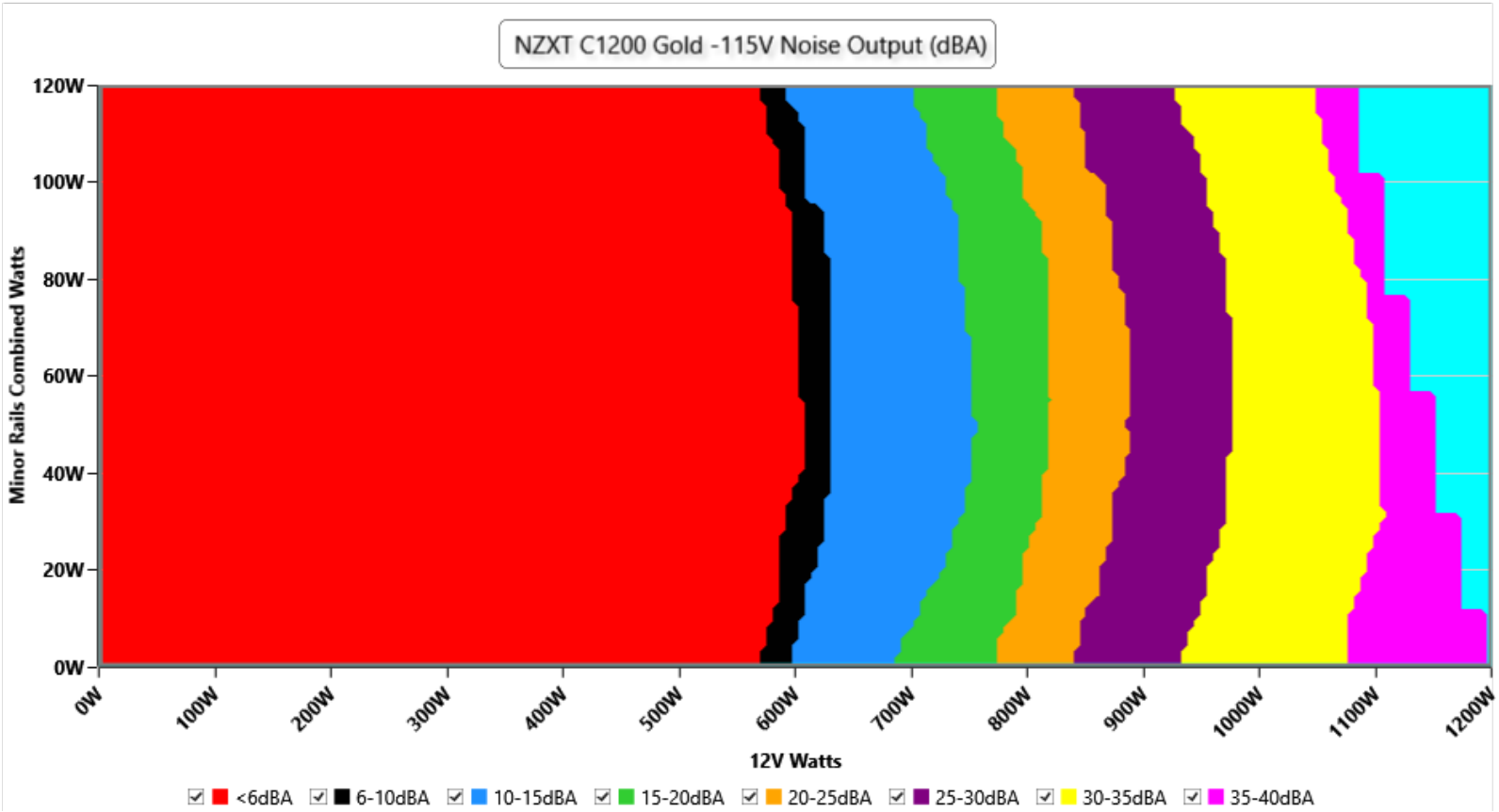
INFO

The average efficiency and power factor in five ranges of load. Calculated from the 1559 (115V) and 1559 (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 1200 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

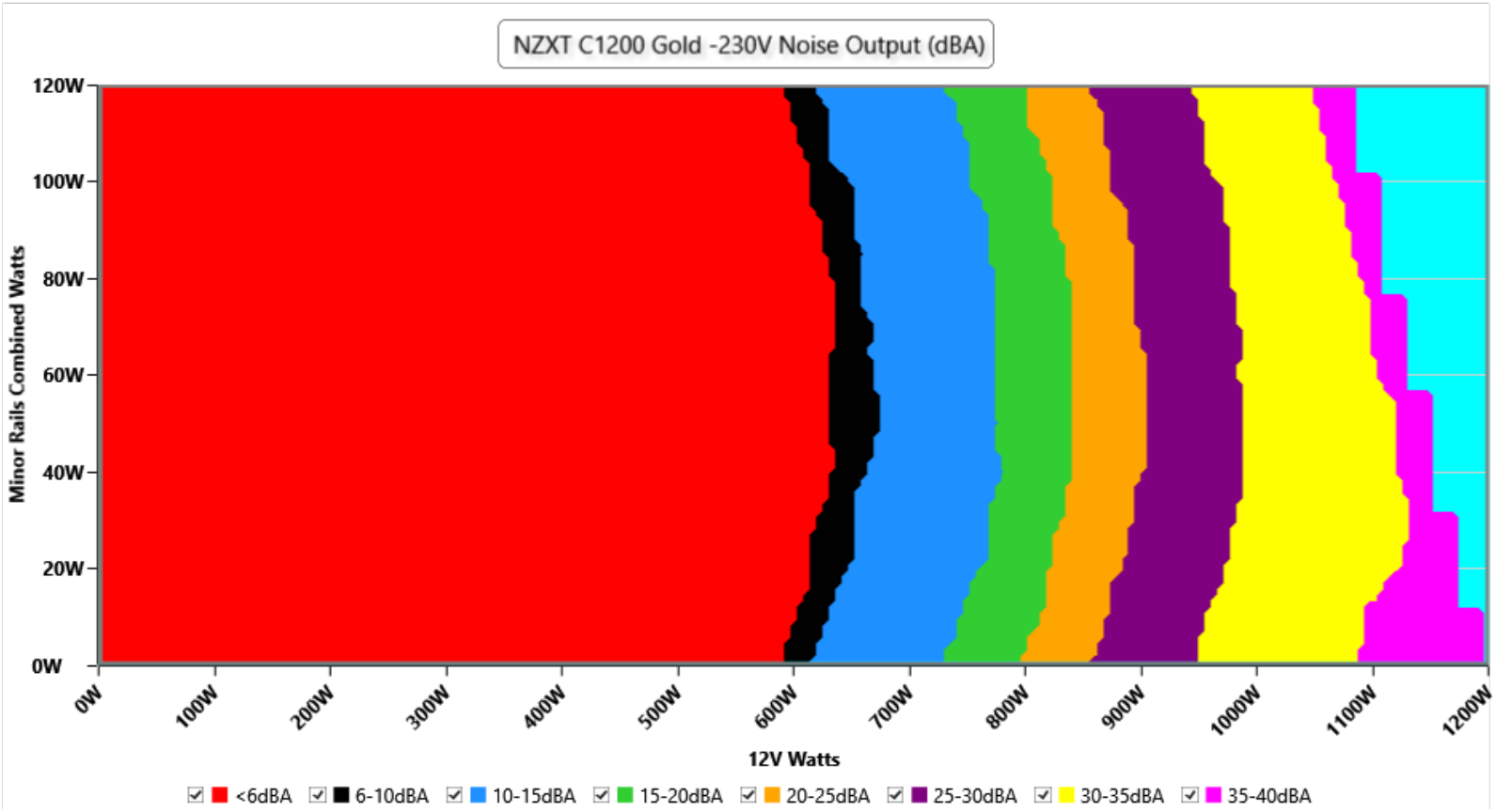
115V



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

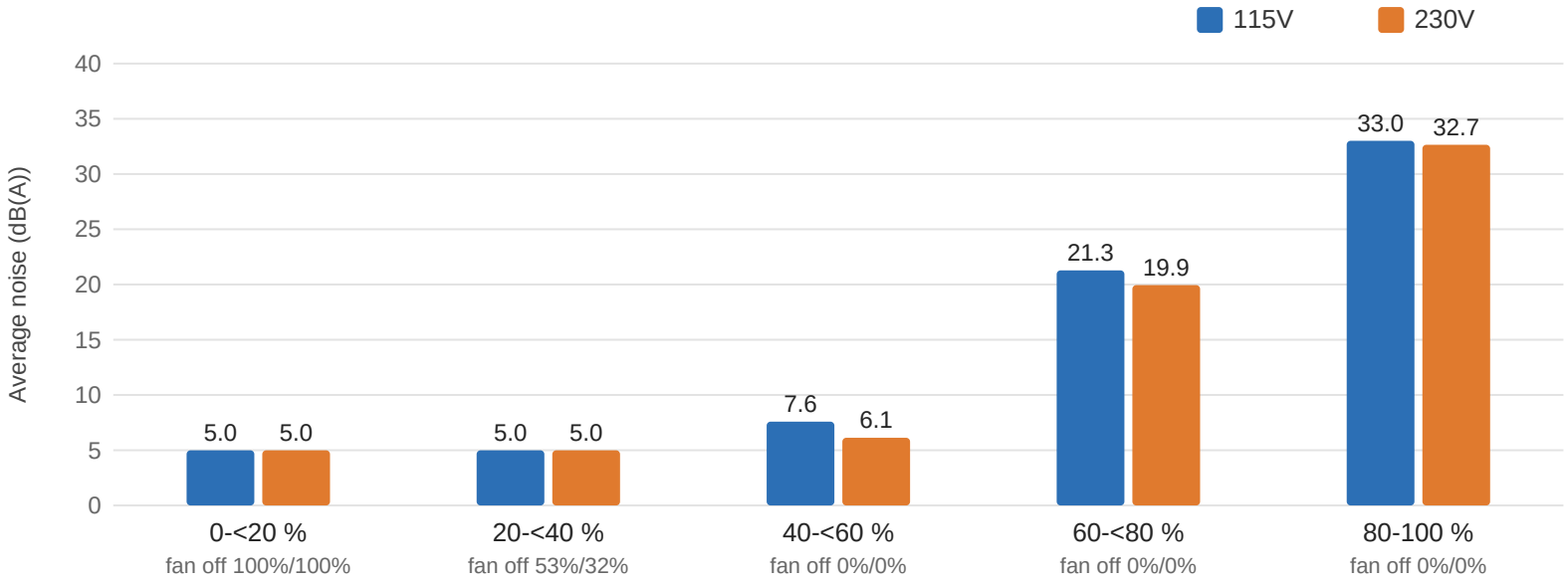
The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

Noise by load range

High-Load Index (70-100 % load)

Noise **31.5 dB(A)** at 115V and **31.1 dB(A)** at 230V · loudest point 37.5 dB(A)

Efficiency 87.54% / 91.10% · power factor 0.993 / 0.984 (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 %	5.0 (5.0)	5.0 (5.0)	53% / 32%
40-<60 %	7.6 (17.4)	6.1 (14.9)	0% / 0%
60-<80 %	21.3 (30.5)	19.9 (28.9)	0% / 0%
80-100 %	33.0 (37.5)	32.7 (37.5)	0% / 0%
70-100 % (High-Load)	31.5 (37.5)	31.1 (37.5)	0% / 0%
All (published average)	26.6 (37.5)	26.2 (37.5)	27% / 22%

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 1559 (115V) and 1559 (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 1200 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) · 44.5 °C	0 RPM · <6.0 dB(A) · 44.5 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 45.5 °C	0 RPM · <6.0 dB(A) · 45.5 °C	fan off in both
50%	505 RPM · 8.9 dB(A) · 42.2 °C	505 RPM · 8.9 dB(A) · 42.2 °C	**+0.0 dB(A)**
100%	1511 RPM · 41.2 dB(A) · 45.5 °C	1511 RPM · 41.2 dB(A) · 45.5 °C	**+0.0 dB(A)**

230V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 44.5 °C	0 RPM · <6.0 dB(A) · 44.5 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 45.3 °C	0 RPM · <6.0 dB(A) · 45.3 °C	fan off in both
50%	472 RPM · 6.6 dB(A) · 42.2 °C	472 RPM · 6.6 dB(A) · 42.2 °C	**+0.0 dB(A)**
100%	1486 RPM · 40.7 dB(A) · 46.5 °C	1486 RPM · 40.7 dB(A) · 46.5 °C	**+0.0 dB(A)**

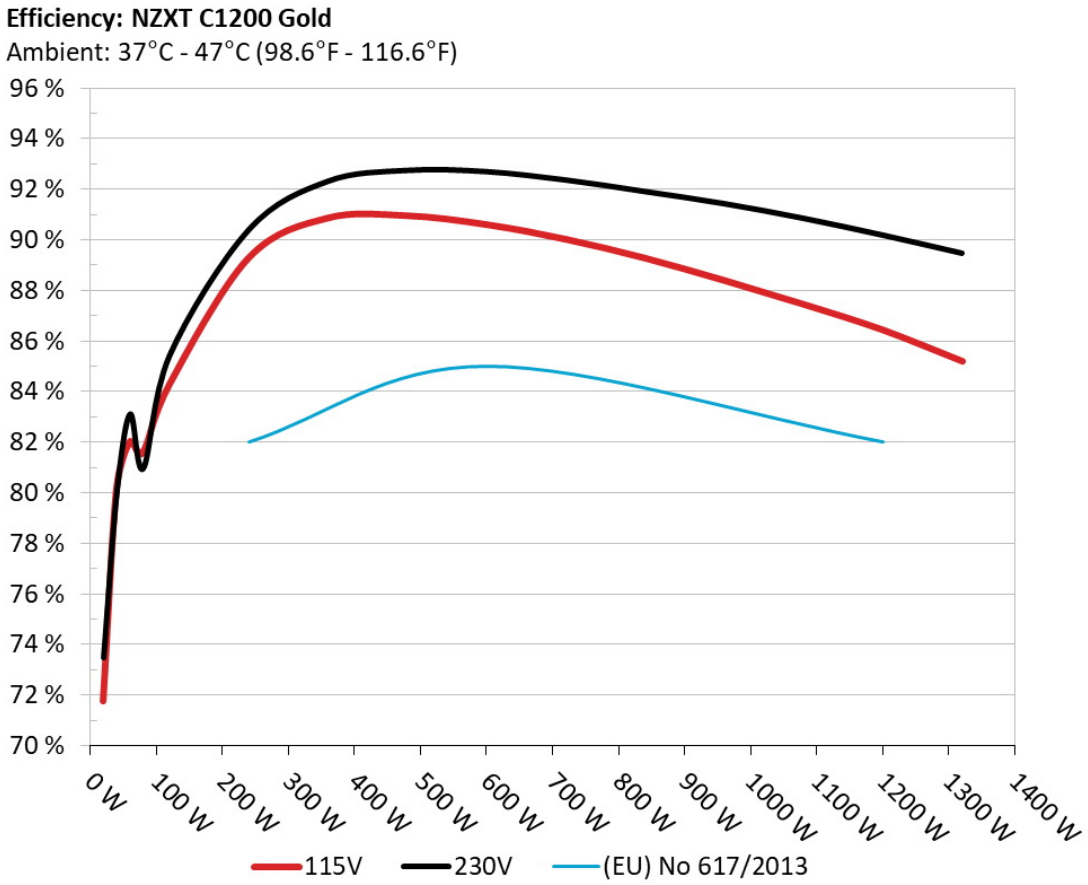
INFO

Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative of how the fan behaves when it is hot. "<6.0" is the floor of our sound meter: 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.

Indicative Performance

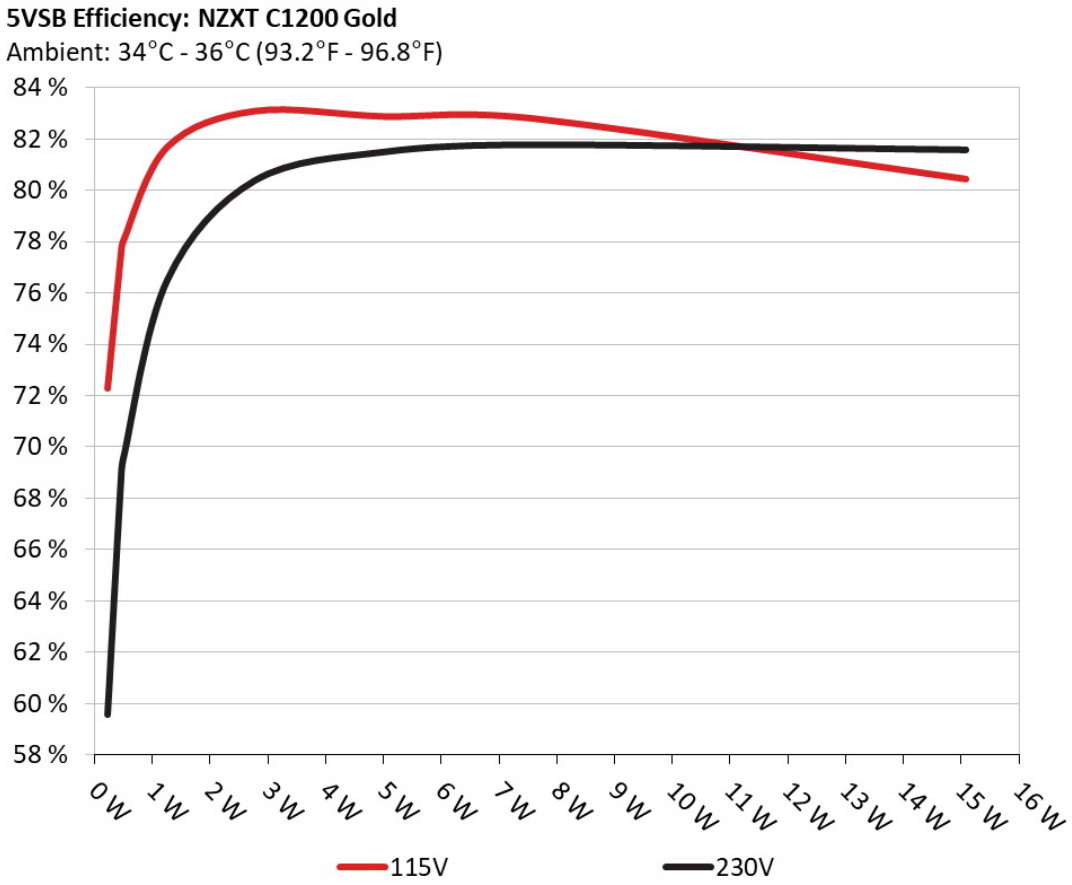
Efficiency under high ambient temperature



INFO

The PSU`s efficiency under high ambient temperatures with 115V and 230V input. For this graph the results of the 10-110% load regulation table are used

5VSB Efficiency



INFO

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

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

115V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.227W	72.27%	0.03
	5.048V	0.314W		114.88V
2	**0.09A**	0.454W	77.437%	0.056
	5.047V	0.586W		114.87V
3	**0.55A**	2.773W	83.08%	0.256
	5.043V	3.338W		114.87V
4	**1A**	5.039W	82.869%	0.362
	5.04V	6.081W		114.86V
5	**1.5A**	7.554W	82.799%	0.415
	5.037V	9.124W		114.86V
6	**3A**	15.075W	80.432%	0.497
	5.026V	18.742W		114.86V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.227W	59.572%	0.011
	5.054V	0.382W		229.95V
2	**0.09A**	0.454W	68.613%	0.019
	5.049V	0.663W		229.94V
3	**0.55A**	2.773W	80.39%	0.095
	5.043V	3.45W		229.94V
4	**1A**	5.04W	81.514%	0.16
	5.04V	6.183W		229.94V
5	**1.5A**	7.555W	81.786%	0.22
	5.037V	9.238W		229.94V
6	**3A**	15.074W	81.587%	0.322
	5.025V	18.476W		229.94V

Protection Features

Protection Features	
OCP (Cold @ 27°C)	12V: 122A (122%), 12.081V 5V: 26.8A (121.82%), 5.056V 3.3V: 28.3A (128.64%), 3.335V 5VSB: 4.9A (163.33%), 5V
OCP (Hot @ 43°C)	12V: 123A (123%), 12.112V 5V: 26.5A (120.45%), 5.059V 3.3V: 27.5A (125%), 3.331V 5VSB: 4.8A (160%), 5.003V
OPP (Cold @ 27°C)	1503.05W (125.25%)
OPP (Hot @ 41°C)	1503.08W (125.26%)
OTP	✓ (160°C @ secondary side)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓
PWR_OK	Proper operation
NLO	✓
Fan Failure Protection	✓
SIP	Surge: MOV Inrush: NTC Thermistor & 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
	8.096A	**1.973A**	**1.964A**	**0.993A**	120.001	84.263%	0	<6.0	44.47°C	0.949
	12.155V	5.07V	3.36V	5.036V	142.416				40.23°C	115.1V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
	17.190A	**2.959A**	**2.95A**	**1.193A**	239.962	89.275%	0	<6.0	45.5°C	0.973
	12.162V	5.07V	3.356V	5.029V	268.791				40.93°C	115.05V
	26.614A	**3.454A**	**3.445A**	**1.395A**	359.266	90.853%	0	<6.0	46.41°C	0.98
	12.145V	5.068V	3.352V	5.02V	395.439				41.4°C	115.02V
	36.122A	**3.948A**	**3.942A**	**1.597A**	479.639	90.949%	410	<6.0	41.71°C	0.986
	12.137V	5.067V	3.349V	5.012V	527.369				47.25°C	114.99V
	45.255A	**4.94A**	**4.932A**	**1.8A**	599.444	90.601%	505	8.9	42.18°C	0.99
	12.130V	5.062V	3.345V	5V	660.404				48.26°C	114.75V
	54.465A	**5.932A**	**5.926A**	**2A**	719.947	90.018%	696	17.2	42.94°C	0.992
	12.121V	5.059V	3.341V	4.99V	799.773				49.45°C	114.91V
	63.619A	**6.925A**	**6.922A**	**2.209A**	839.69	89.271%	918	26.3	43.16°C	0.993
	12.112V	5.056V	3.337V	4.98V	940.609				50.21°C	114.87V
	72.853A	**7.916A**	**7.919A**	**2.314A**	959.677	88.389%	1111	32.1	43.43°C	0.993
	12.104V	5.053V	3.333V	4.971V	1085.752				51.47°C	114.82V
	82.408A	**8.415A**	**8.409A**	**2.419A**	1079.515	87.445%	1321	38.0	44.56°C	0.994
	12.098V	5.05V	3.329V	4.962V	1234.51				53.59°C	114.78V
	91.740A	**8.914A**	**8.93A**	**3.032A**	1199.575	86.433%	1511	41.2	45.5°C	0.994
	12.098V	5.048V	3.325V	4.947V	1387.868				55.64°C	114.74V
	100.981A	**9.909A**	**10.027A**	**3.037A**	1320.21	85.191%	1717	44.6	46.59°C	0.995
	12.100V	5.046V	3.32V	4.939V	1549.701				57.47°C	114.72V
	0.115A	**14.265A**	**14.245A**	**0A**	121.299	79.529%	489	7.9	41.78°C	0.954
	12.170V	5.061V	3.348V	5.038V	152.522				51.12°C	115.09V
	0.115A	**21.723A**	**0A**	**0A**	111.387	77.513%	409	<6.0	41.08°C	0.95
	12.173V	5.064V	3.352V	5.044V	143.695				49.72°C	115.09V
	0.115A	**0A**	**21.758A**	**0A**	73.986	72.262%	408	<6.0	40.22°C	0.955
	12.168V	5.079V	3.336V	5.039V	102.386				48.62°C	115.11V
	99.171A	**0A**	**0A**	**0A**	1200.048	87.191%	1487	40.7	45.79°C	0.994
	12.100V	5.061V	3.326V	4.986V	1376.354				55.1°C	114.76V

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
	8.092A	**1.972A**	**1.966A**	**0.991A**	119.965	85.43%	0	<6.0	44.47°C	0.896
	12.155V	5.071V	3.357V	5.044V	140.432				40.18°C	229.92V
	17.191A	**2.958A**	**2.952A**	**1.191A**	239.907	90.402%	0	<6.0	45.33°C	0.943
	12.158V	5.071V	3.353V	5.037V	265.377				40.76°C	229.9V
	26.603A	**3.452A**	**3.448A**	**1.392A**	359.017	92.314%	0	<6.0	46.51°C	0.956
	12.140V	5.069V	3.35V	5.029V	388.91				41.44°C	229.89V
	36.115A	**3.947A**	**3.944A**	**1.593A**	479.432	92.75%	414	<6.0	41.91°C	0.968
	12.134V	5.068V	3.347V	5.02V	516.924				47.5°C	229.86V
	45.262A	**4.937A**	**4.935A**	**1.796A**	599.173	92.7%	472	6.6	42.22°C	0.974
	12.122V	5.064V	3.344V	5.01V	646.365				48.32°C	229.85V
	54.488A	**5.929A**	**5.928A**	**2A**	719.706	92.368%	659	15.4	42.83°C	0.976
	12.111V	5.061V	3.34V	5.001V	779.182				49.48°C	229.83V
	63.661A	**6.921A**	**6.923A**	**2.204A**	839.441	91.915%	855	24.3	43.25°C	0.981
	12.101V	5.058V	3.337V	4.991V	913.296				50.32°C	229.82V
	72.912A	**7.913A**	**7.92A**	**2.308A**	959.44	91.434%	1088	31.5	43.68°C	0.984
	12.091V	5.055V	3.333V	4.982V	1049.327				51.74°C	229.79V
	82.477A	**8.411A**	**8.409A**	**2.413A**	1079.256	90.854%	1277	36.9	44.08°C	0.986
	12.086V	5.053V	3.329V	4.974V	1187.91				53.09°C	229.78V
	91.825A	**8.909A**	**8.929A**	**3.024A**	1199.29	90.191%	1486	40.7	46.46°C	0.987
	12.084V	5.051V	3.326V	4.96V	1329.737				56.46°C	229.76V
	101.083A	**9.903A**	**10.025A**	**3.029A**	1319.916	89.471%	1682	43.9	47.08°C	0.988
	12.085V	5.049V	3.321V	4.953V	1475.261				57.97°C	229.73V
	0.114A	**14.259A**	**14.261A**	**0A**	121.29	80.516%	490	8.0	42.29°C	0.903
	12.171V	5.063V	3.345V	5.046V	150.64				61.38°C	229.93V
	0.114A	**21.7A**	**0A**	**0A**	111.333	78.552%	410	<6.0	40.69°C	0.897
	12.173V	5.067V	3.348V	5.051V	141.727				60.42°C	229.93V
	0.114A	**0A**	**21.78A**	**0A**	73.981	72.043%	410	<6.0	42.02°C	0.866
	12.167V	5.08V	3.333V	5.047V	102.69				59.84°C	229.93V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
	99.268A	**0A**	**0A**	**0A**	1199.927	90.725%	1438	39.8	46.72°C	0.987
	12.088V	5.061V	3.326V	4.998V	1322.616				64.58°C	229.74V

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	1.232A	0.493A	0.491A	0.198A	19.998	71.751%	0	<6.0	39.77°C	0.864
	12.058V	5.07V	3.357V	5.048V	27.872				36.7°C	115.13V
40W	2.710A	0.69A	0.688A	0.297A	39.997	80.104%	0	<6.0	40.85°C	0.936
	12.058V	5.069V	3.359V	5.045V	49.928				37.51°C	115.13V
60W	4.190A	0.888A	0.883A	0.397A	59.996	82.003%	0	<6.0	41.94°C	0.933
	12.057V	5.07V	3.362V	5.044V	73.162				38.26°C	115.12V
80W	5.624A	1.085A	1.08A	0.496A	79.951	81.577%	0	<6.0	42.97°C	0.95
	12.150V	5.07V	3.362V	5.043V	98.008				39.03°C	115.11V

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	1.231A	0.493A	0.492A	0.198A	19.986	73.467%	0	<6.0	39.69°C	0.504
	12.054V	5.068V	3.353V	5.053V	27.205				36.59°C	229.94V
40W	2.711A	0.691A	0.688A	0.297A	39.988	79.997%	0	<6.0	40.86°C	0.705
	12.056V	5.068V	3.356V	5.051V	49.985				37.54°C	229.94V
60W	4.191A	0.888A	0.884A	0.396A	59.988	83.102%	0	<6.0	41.71°C	0.797
	12.055V	5.07V	3.359V	5.051V	72.205				38.13°C	229.93V
80W	5.623A	1.085A	1.08A	0.495A	79.917	80.954%	0	<6.0	43°C	0.858
	12.144V	5.07V	3.359V	5.049V	98.721				39.16°C	229.93V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	7.94mV	5.31mV	3.71mV	5.30mV	Pass
20% Load	11.20mV	5.30mV	4.07mV	5.35mV	Pass
30% Load	9.99mV	8.06mV	5.90mV	5.35mV	Pass
40% Load	9.62mV	10.76mV	10.73mV	5.55mV	Pass
50% Load	9.97mV	7.80mV	5.70mV	5.60mV	Pass
60% Load	11.76mV	7.81mV	4.88mV	5.66mV	Pass
70% Load	12.06mV	10.40mV	6.77mV	6.27mV	Pass
80% Load	12.47mV	7.35mV	9.77mV	6.06mV	Pass
90% Load	14.04mV	8.77mV	8.90mV	7.44mV	Pass
100% Load	18.92mV	8.47mV	8.91mV	7.97mV	Pass
110% Load	20.74mV	19.31mV	12.96mV	10.26mV	Pass
Crossload1	9.36mV	7.26mV	9.39mV	6.50mV	Pass
Crossload2	10.03mV	6.43mV	4.12mV	6.37mV	Pass
Crossload3	7.53mV	6.78mV	9.97mV	5.96mV	Pass
Crossload4	18.13mV	7.34mV	6.03mV	7.22mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	9.64mV	8.40mV	9.72mV	7.74mV	Pass
20% Load	12.42mV	9.02mV	9.41mV	7.54mV	Pass
30% Load	11.62mV	9.69mV	9.98mV	7.90mV	Pass
40% Load	9.90mV	9.32mV	9.52mV	7.07mV	Pass
50% Load	10.78mV	10.20mV	10.55mV	8.36mV	Pass
60% Load	12.06mV	15.09mV	11.43mV	8.62mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	13.82mV	9.74mV	11.89mV	9.24mV	Pass
80% Load	13.87mV	10.15mV	12.31mV	9.14mV	Pass
90% Load	14.33mV	11.13mV	11.22mV	9.09mV	Pass
100% Load	20.48mV	10.98mV	12.75mV	10.11mV	Pass
110% Load	21.78mV	22.33mV	15.75mV	10.08mV	Pass
Crossload1	10.55mV	9.75mV	12.29mV	9.57mV	Pass
Crossload2	11.96mV	13.19mV	9.83mV	9.09mV	Pass
Crossload3	9.49mV	8.66mV	12.15mV	9.45mV	Pass
Crossload4	20.61mV	10.27mV	10.33mV	9.06mV	Pass

The results above are not used in the certification process

NZXT C1200 Gold



Top side



Power specifications label