NZXT

NZXT C1000 Gold

Serial Number 52241Z05600003

Lab ID NZ10002448

Certification ID 252448

Test Result Report ID: 24PS2448A

Certificate Issue Date: May 21, 2024

Scheme: ETA-EMI PSU

115V



230V



Scheme: LAMBDA PSU

115V



230V





Outside Validation Scope



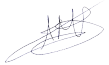
General Information

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	C1000 Gold
OEM/ODM	Channel Well Technology
Serial Number	52241Z05600003
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	13
Rated Frequency (Hz)	50-60
Rated Power (W)	1000
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	NZ10002448
Date of receipt	May 7, 2024
Testing Date	May 21, 2024
Report Issued Date	May 21, 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

Modular Cables				
SATA (500mm+145mm+145mm+145mm)	3	12	18AWG	No
4-pin Molex (500mm+145mm+145mm+145mm)	1	4	18AWG	No
AC Power Cord (1415mm) - C13 coupler	1	1	14AWG	-

Protection Features

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	83.3	3	0
	Watts	120		1000	15	0
Total Max. Power (W)		1000				

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 GBJ2510 (700V, 25A @100°C)
APFC MOSFETs	2x Vishay SiHA105N60EF (600V, 8A @ 100°C, Rds(on): 0.102Ohm)
APFC Boost Diode	1x On Semi FFSP1065A (650V, 10A @ 152°C)

Bulk Cap(s)	2x Nippon Chemi-con (420V, 560uF each or 1120uF combined, 2000h @ 105°C,KMR)
Main Switchers	2x IPA60R125P6 (650V, 19A @ 100°C, Rds(on): 0.125Ohm)
APFC Controller	Champion CM6500UNX & CM03X (for no load consumption)
Resonant Controller	Champion CM6901VAC
Topology	Primary side: APFC, Half-Bridge & LLC converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	8x 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)	88.708%
Average Noise Output (>1450 Load Combinations)	24.94dBA
Average PF (>1450 Load Combinations)	0.984
Efficiency With 10W (≤500W) or 2% (>500W) Load	78.193%
Standby Power Consumption	0.0361W
Non-Accredited	
12V Ripple (Full Load)	19.06mV
5V Ripple (Full Load)	8.89mV
3.3V Ripple (Full Load)	10.15mV
5VSB Ripple (Full Load)	9.18mV
12V Load Regulation	0.51%
5V Load Regulation	0.36%
3.3V Load Regulation	1.12%
5VSB Load Regulation	1.85%
Inrush Current	25.010A

230V

Accredited	
Average Efficiency (>1450 load combinations)	90.853%
Average Noise Output (>1450 Load Combinations)	24.97dBA
Average PF (>1450 Load Combinations)	0.960
Efficiency With 10W (≤500W) or 2% (>500W) Load	77.962%
Standby Power Consumption	0.0691W
Non-Accredited	

12V Ripple (Full Load)		19.95mV
5V Ripple (Full Load)		9.78mV
3.3V Ripple (Full Load)		11.18mV
5VSB Ripple (Full Load)		9.22mV
12V Load Regulation		0.53%
5V Load Regulation		0.50%
3.3V Load Regulation		1.03%
5VSB Load Regulation		1.89%
Inrush Current		49.560A
12V Transient Response (200%)		11.45V
5V Transient Response (200%)		4.922V
3.3V Transient Response (200%)		3.194V
5VSB Transient Response (200%)		4.882V
Hold-Up Time & PWR_OK Signal		30.50ms
AC Loss to PWR_OK Hold Up Time		26.80ms
PWR_OK Inactive to DC Loss Delay		3.70ms
PSU Timings: T1 (20% / 100%)	60.0ms	60.0ms
PSU Timings: T3 (20% / 100%)	130.0ms	130.0ms
OPP (27.03°C / 42.51°C)	121.93%	121.92%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	30.5
AC Loss to PWR_OK Hold Up Time (ms)	26.8
PWR_OK Inactive to DC Loss Delay (ms)	3.7

Tables

115V

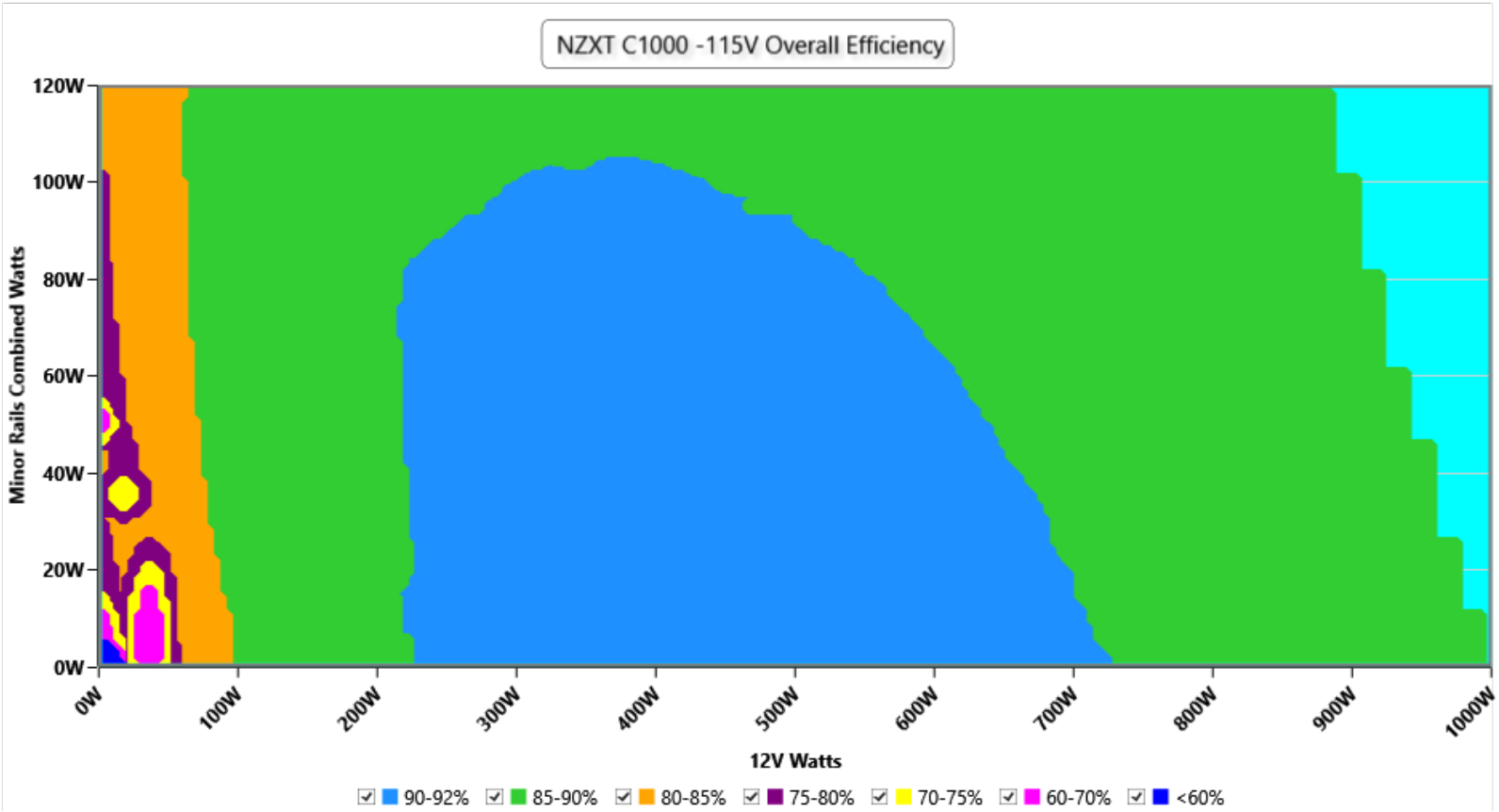
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.13 V	115.13 V	113.85 V	115.16 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.99 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.13 %	0.11 %	N/A	0.15 %	2.00 %	PASS
Real Power:	0.036 W	0.032 W	N/A	0.041 W	N/A	N/A
Apparent Power:	9.844 W	9.840 W	N/A	9.847 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:	230.37 V	230.33 V	227.70 V	230.40 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:	0.069 W	0.058 W	N/A	0.099 W	N/A	N/A
Apparent Power:	32.927 W	32.911 W	N/A	32.942 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

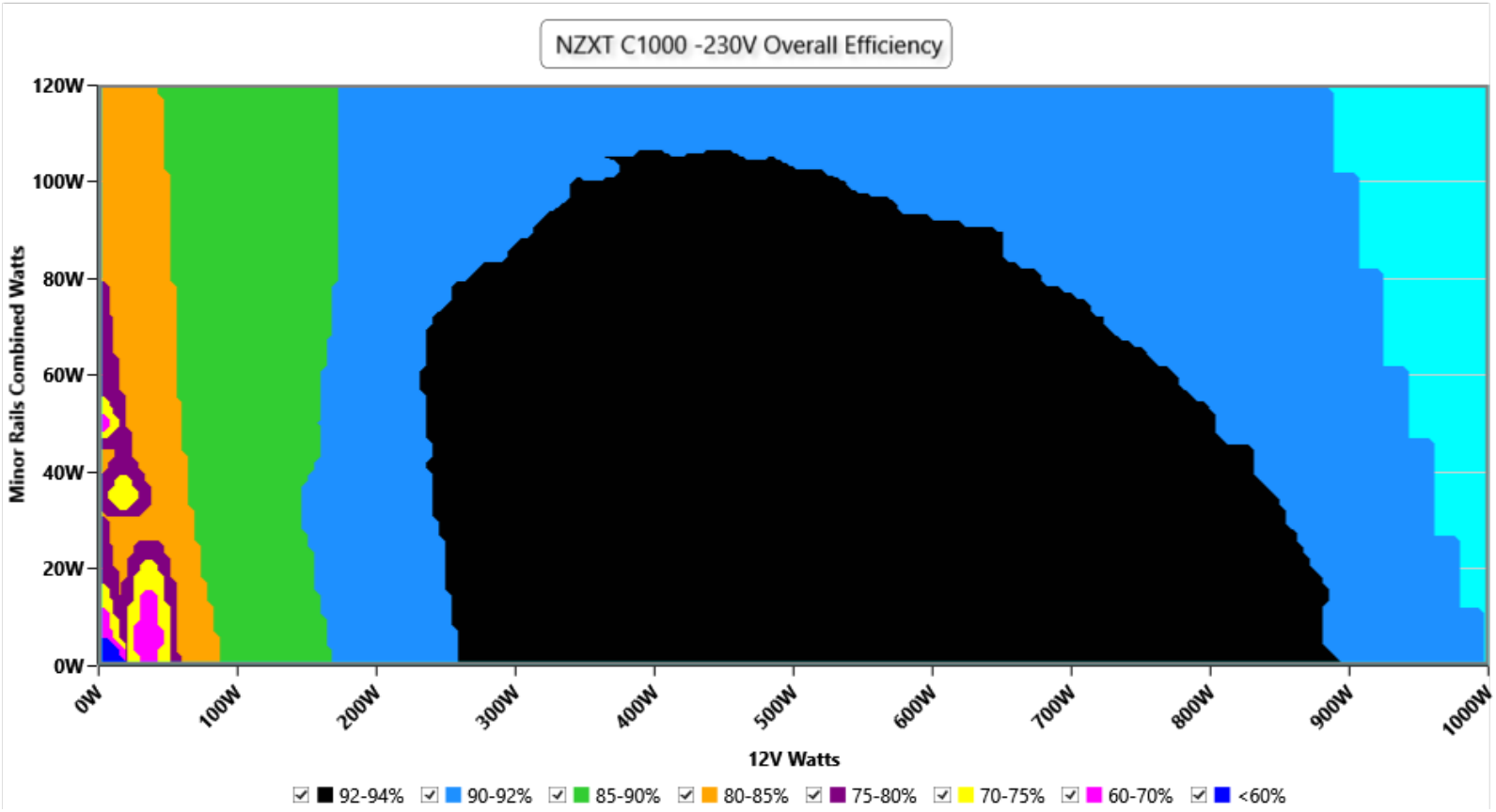
115V



INFO

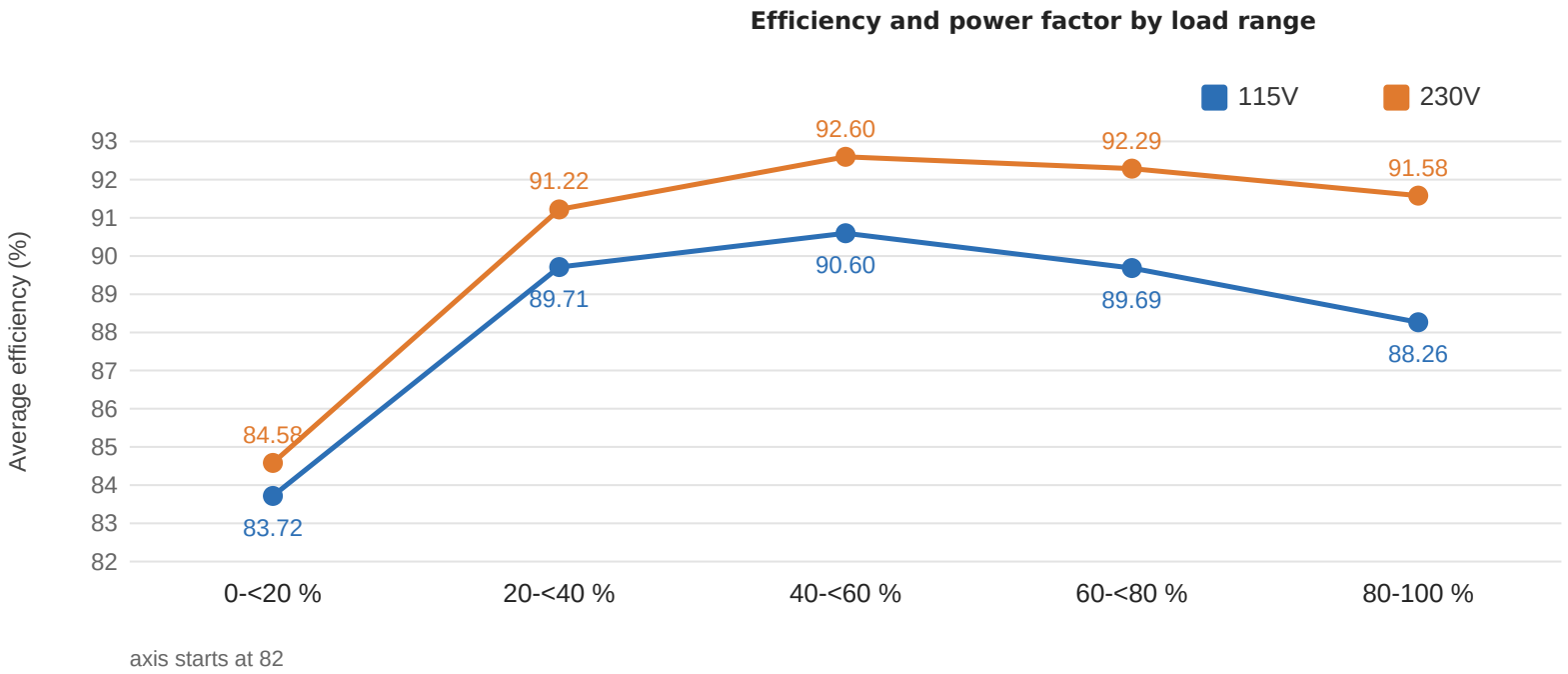
This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

230V

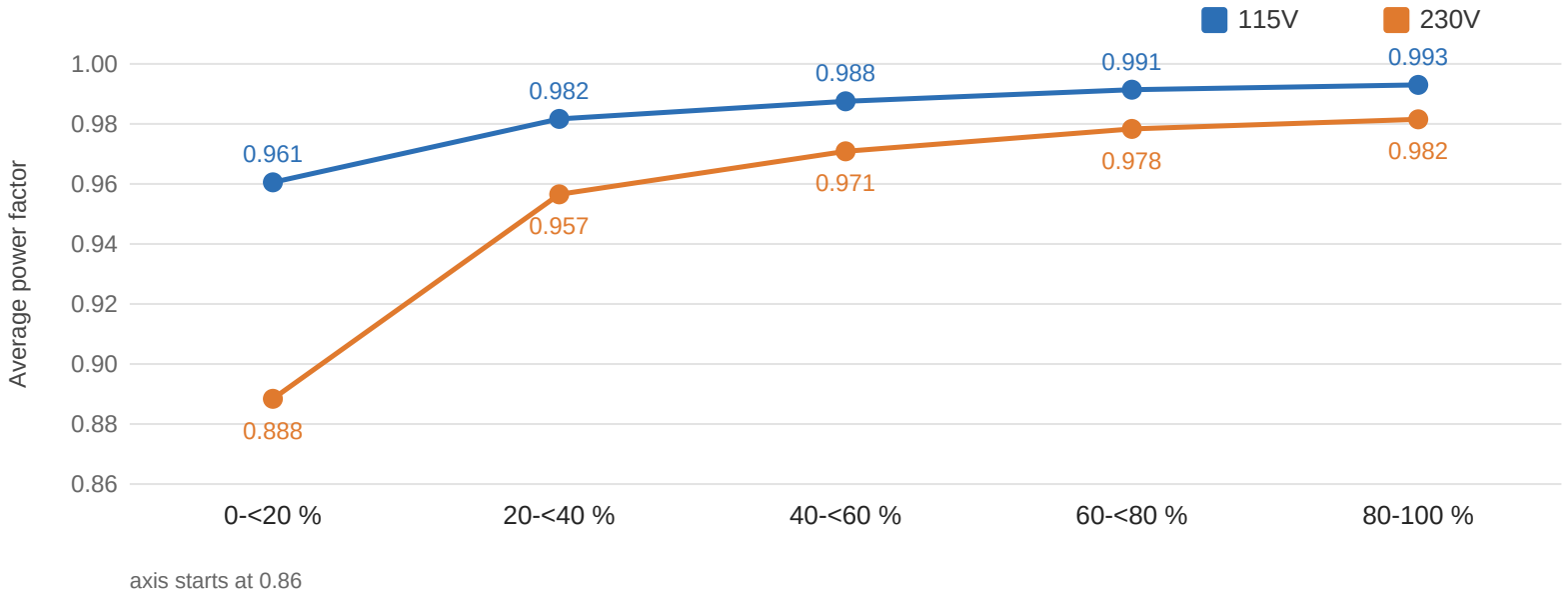


INFO

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 %	228 / 228	83.72%	84.58%	0.961	0.888
20-<40 %	335 / 335	89.71%	91.22%	0.982	0.957
40-<60 %	333 / 333	90.60%	92.60%	0.988	0.971
60-<80 %	333 / 333	89.69%	92.29%	0.991	0.978
80-100 %	340 / 340	88.26%	91.58%	0.993	0.982
70-100 % (High-Load)	506 / 506	88.62%	91.77%	0.993	0.981
All (published average)	1569 / 1569	88.71%	90.85%	0.984	0.960

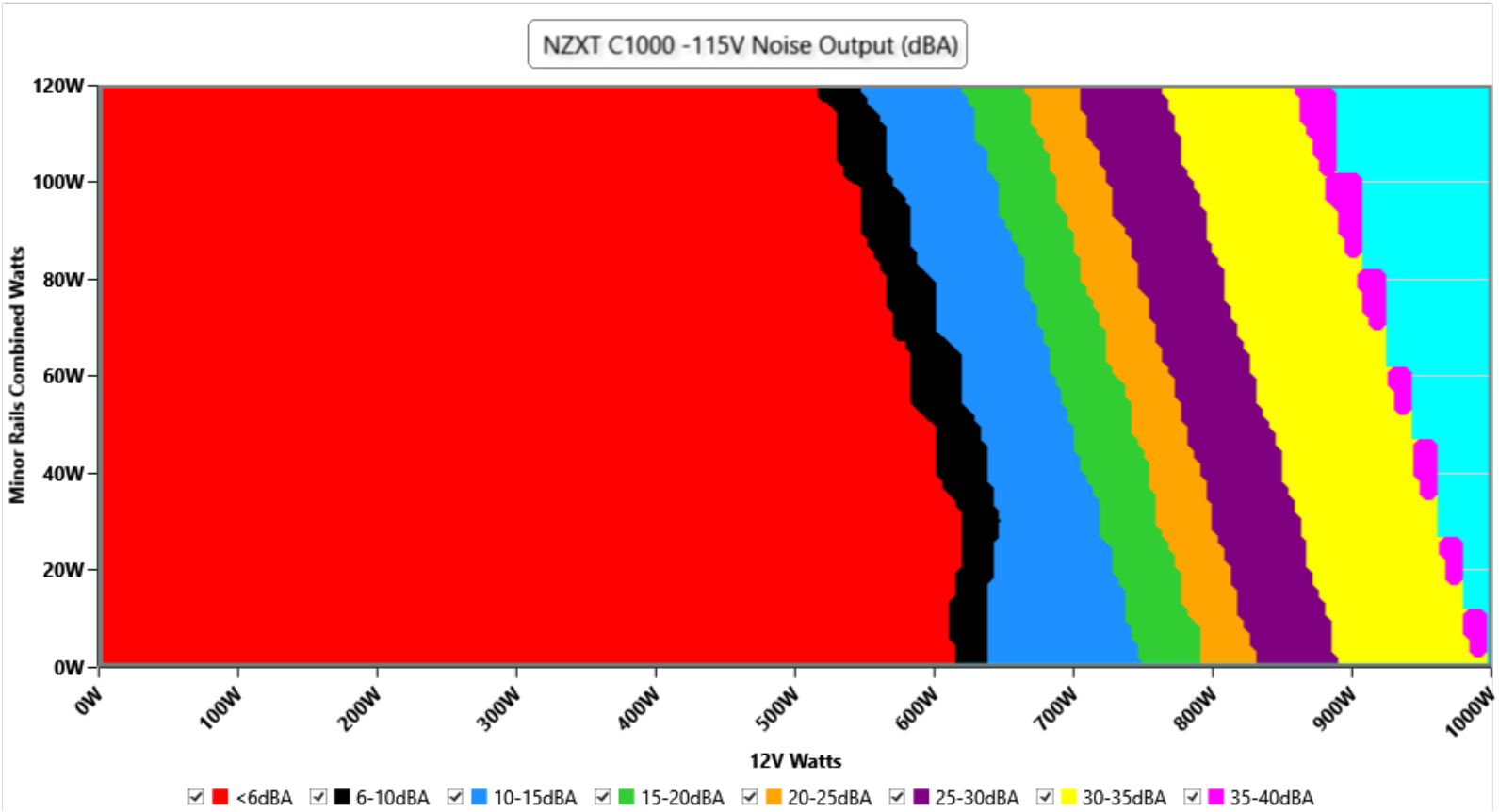
INFO

The average efficiency and power factor in five ranges of load. Calculated from the 1569 (115V) and 1569 (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 1000 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

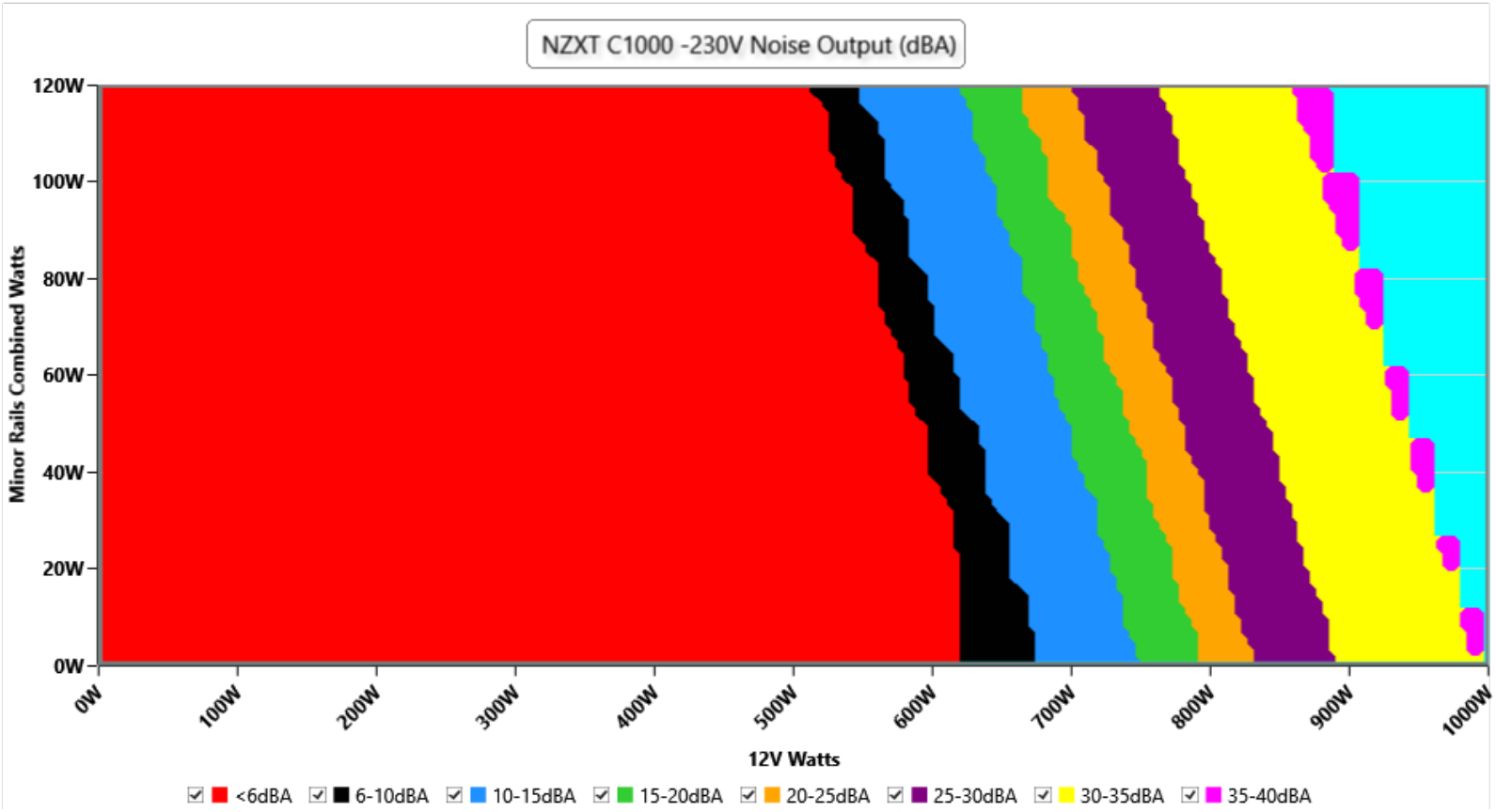
115V



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

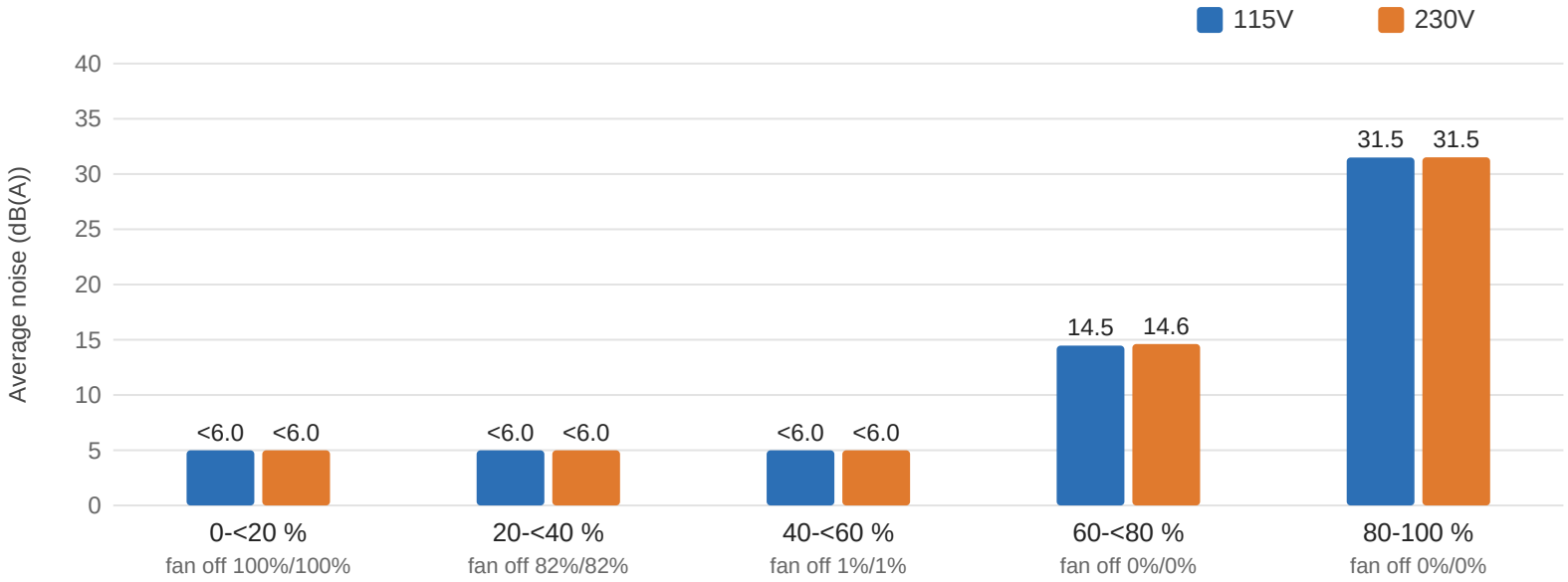
The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

Noise by load range

High-Load Index (70-100 % load)

Noise **29.8 dB(A)** at 115V and **29.9 dB(A)** at 230V · loudest point 36.1 dB(A)

Efficiency 88.62% / 91.77% · power factor 0.993 / 0.981 (115V / 230V)



Load range	Noise 115V avg (loudest)	Noise 230V avg (loudest)	Fan off 115V / 230V
0-<20 %	<6.0 (<6.0)	<6.0 (<6.0)	100% / 100%
20-<40 %	<6.0 (<6.0)	<6.0 (<6.0)	82% / 82%
40-<60 %	<6.0 (<6.0)	<6.0 (<6.0)	1% / 1%
60-<80 %	14.5 (21.8)	14.6 (21.8)	0% / 0%
80-100 %	31.5 (36.1)	31.5 (36.1)	0% / 0%
70-100 % (High-Load)	29.8 (36.1)	29.9 (36.1)	0% / 0%
All (published average)	25.0 (36.1)	25.0 (36.1)	32% / 32%

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 1569 (115V) and 1569 (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 1000 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". Below 6 dB(A), the floor of our sound meter, the table and the chart show <6.0. In the averages a stopped fan counts as 5 dB(A),

as in the published average.

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) · 44.4 °C	0 RPM · <6.0 dB(A) · 44.4 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 45.4 °C	0 RPM · <6.0 dB(A) · 45.4 °C	fan off in both
50%	412 RPM · <6.0 dB(A) · 42.4 °C	412 RPM · <6.0 dB(A) · 42.4 °C	<6.0 in both
100%	1368 RPM · 38.9 dB(A) · 45.7 °C	1368 RPM · 38.9 dB(A) · 45.7 °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) · 44.4 °C	0 RPM · <6.0 dB(A) · 44.4 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 45.1 °C	0 RPM · <6.0 dB(A) · 45.1 °C	fan off in both
50%	417 RPM · <6.0 dB(A) · 42.0 °C	417 RPM · <6.0 dB(A) · 42.0 °C	<6.0 in both
100%	1355 RPM · 38.8 dB(A) · 45.6 °C	1355 RPM · 38.8 dB(A) · 45.6 °C	**+0.0 dB(A)**

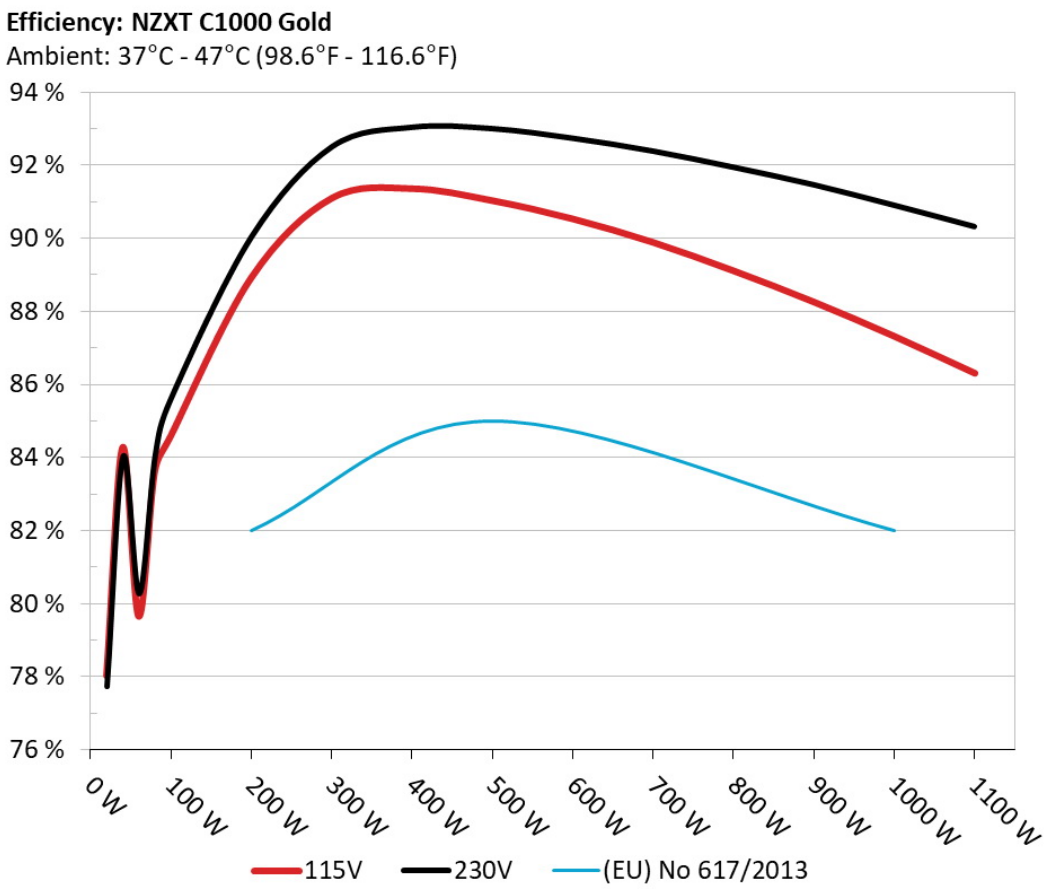
INFO

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

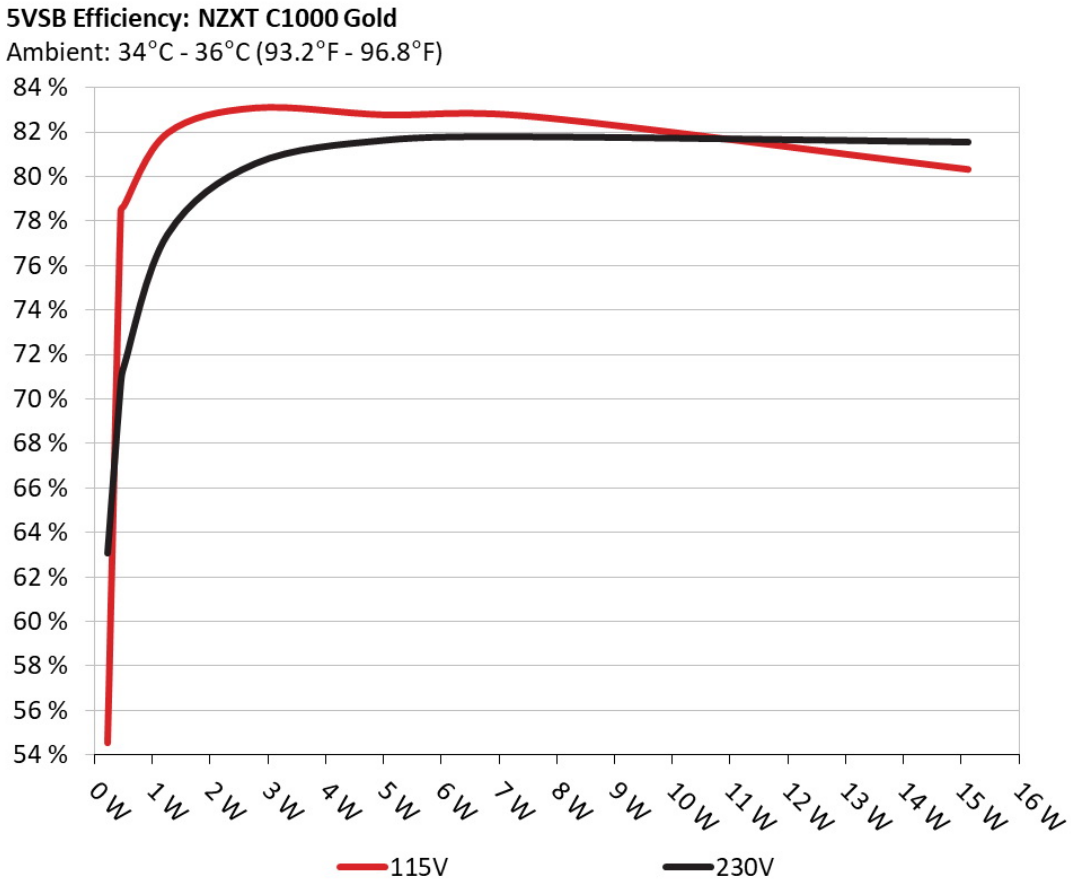
Efficiency under high ambient temperature



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**	0.228W	54.545%	0.001
	5.066V	0.013W		115.15V
2	**0.09A**	0.456W	78.457%	0.058
	5.065V	0.581W		115.15V
3	**0.55A**	2.784W	83.083%	0.266
	5.061V	3.351W		115.14V
4	**1A**	5.058W	82.766%	0.372
	5.057V	6.111W		115.14V
5	**1.5A**	7.58W	82.697%	0.429
	5.053V	9.166W		115.14V
6	**3A**	15.117W	80.32%	0.503
	5.039V	18.822W		115.15V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.228W	63.066%	0.011
	5.069V	0.362W		230.39V
2	**0.09A**	0.456W	70.707%	0.02
	5.067V	0.645W		230.4V
3	**0.55A**	2.785W	80.589%	0.1
	5.062V	3.456W		230.37V
4	**1A**	5.059W	81.645%	0.168
	5.057V	6.196W		230.37V
5	**1.5A**	7.581W	81.79%	0.23
	5.053V	9.268W		230.36V
6	**3A**	15.114W	81.552%	0.341
	5.038V	18.534W		230.35V

Protection Features

Protection Features	
OCP (Cold @ 27°C)	12V: 102.2A (122.69%), 12.104V 5V: 26.9A (122.27%), 5.027V 3.3V: 28.1A (127.73%), 3.329V 5VSB: 4.8A (160%), 5.014V
OCP (Hot @ 42°C)	12V: 101.6A (121.97%), 12.122V 5V: 26.7A (121.36%), 5.027V 3.3V: 26.6A (120.91%), 3.321V 5VSB: 4.7A (156.67%), 5.013V
OPP (Cold @ 27°C)	1219.26W (121.93%)
OPP (Hot @ 43°C)	1219.22W (121.92%)
OTP	✓ (145°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
	6.442A	**1.987A**	**1.969A**	**0.989A**	100	84.598%	0	<6.0	44.38°C	0.961
	12.169V	5.035V	3.352V	5.056V	118.208				40.15°C	115.11V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
	13.890A	**2.981A**	**2.957A**	**1.189A**	199.949	88.918%	0	<6.0	45.35°C	0.977
	12.170V	5.033V	3.347V	5.049V	224.873				40.76°C	115.08V
	21.685A	**3.479A**	**3.455A**	**1.389A**	299.994	91.091%	0	<6.0	46.31°C	0.982
	12.171V	5.032V	3.343V	5.041V	329.337				41.28°C	115.05V
	29.505A	**3.977A**	**3.954A**	**1.59A**	399.692	91.356%	0	<6.0	47.12°C	0.985
	12.150V	5.031V	3.339V	5.033V	437.511				41.54°C	115.02V
	36.973A	**4.973A**	**4.947A**	**1.792A**	499.443	91.03%	412	<6.0	42.38°C	0.988
	12.142V	5.028V	3.335V	5.024V	548.659				48.4°C	115.01V
	44.523A	**5.971A**	**5.943A**	**1.994A**	600.015	90.527%	492	8.1	42.86°C	0.99
	12.133V	5.026V	3.332V	5.015V	662.799				49.49°C	114.99V
	52.012A	**6.97A**	**6.941A**	**2.198A**	699.781	89.887%	700	17.4	43.14°C	0.992
	12.125V	5.023V	3.328V	5.006V	778.517				50.25°C	114.97V
	59.578A	**7.968A**	**7.94A**	**2.301A**	799.78	89.11%	905	25.9	43.8°C	0.993
	12.116V	5.021V	3.325V	4.998V	897.527				51.88°C	114.94V
	67.472A	**8.469A**	**8.428A**	**2.405A**	899.545	88.26%	1104	31.9	44.25°C	0.993
	12.110V	5.019V	3.322V	4.991V	1019.192				53.31°C	114.9V
	75.140A	**8.97A**	**8.949A**	**3.014A**	999.528	87.322%	1368	38.9	45.68°C	0.993
	12.109V	5.017V	3.318V	4.977V	1144.65				55.87°C	114.87V
	82.735A	**9.97A**	**10.047A**	**3.019A**	1100.136	86.309%	1628	43.0	46.59°C	0.994
	12.109V	5.015V	3.314V	4.969V	1274.641				57.47°C	114.83V
	0.115A	**14.364A**	**14.35A**	**0A**	121.29	81.095%	412	<6.0	40.1°C	0.973
	12.176V	5.026V	3.324V	5.059V	149.568				52°C	115.1V
	0.115A	**21.874A**	**0A**	**0A**	111.383	78.9%	411	<6.0	40.92°C	0.97
	12.180V	5.028V	3.334V	5.065V	141.173				51.42°C	115.1V
	0.114A	**0A**	**21.943A**	**0A**	73.984	73.65%	411	<6.0	40.52°C	0.957
	12.175V	5.038V	3.308V	5.06V	100.455				50.92°C	115.11V
	82.573A	**0A**	**0A**	**0A**	999.941	88.224%	1254	36.1	45.32°C	0.993
	12.109V	5.027V	3.32V	5.02V	1133.418				57.25°C	114.86V

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
	6.444A	**1.987A**	**1.971A**	**0.989A**	100.031	85.629%	0	<6.0	44.38°C	0.889
	12.172V	5.034V	3.348V	5.056V	116.825				40.18°C	230.4V
	13.892A	**2.982A**	**2.961A**	**1.189A**	199.998	90.041%	0	<6.0	45.12°C	0.941
	12.171V	5.032V	3.344V	5.048V	222.126				40.6°C	230.39V
	21.689A	**3.48A**	**3.459A**	**1.389A**	300.06	92.5%	0	<6.0	46.39°C	0.958
	12.172V	5.031V	3.339V	5.04V	324.389				41.39°C	230.38V
	29.519A	**3.978A**	**3.959A**	**1.59A**	399.886	93.036%	0	<6.0	46.98°C	0.966
	12.150V	5.029V	3.335V	5.032V	429.819				41.53°C	230.37V
	36.984A	**4.975A**	**4.953A**	**1.792A**	499.602	92.999%	417	<6.0	42.03°C	0.972
	12.143V	5.027V	3.332V	5.023V	537.211				48.04°C	230.36V
	44.534A	**5.974A**	**5.948A**	**1.995A**	600.145	92.734%	496	8.4	42.93°C	0.976
	12.133V	5.024V	3.33V	5.014V	647.178				49.43°C	230.35V
	52.023A	**6.973A**	**6.947A**	**2.198A**	699.883	92.383%	690	16.9	43.45°C	0.979
	12.125V	5.022V	3.326V	5.005V	757.589				50.45°C	230.34V
	59.594A	**7.971A**	**7.948A**	**2.302A**	799.917	91.943%	882	25.1	43.91°C	0.98
	12.115V	5.019V	3.322V	4.997V	870.017				52.05°C	230.32V
	67.489A	**8.473A**	**8.437A**	**2.406A**	899.669	91.464%	1103	31.9	44.57°C	0.982
	12.109V	5.017V	3.319V	4.99V	983.637				53.61°C	230.3V
	75.154A	**8.974A**	**8.957A**	**3.016A**	999.626	90.906%	1355	38.8	45.64°C	0.985
	12.108V	5.015V	3.316V	4.975V	1099.637				55.66°C	230.27V
	82.753A	**9.976A**	**10.055A**	**3.02A**	1100.202	90.319%	1605	42.6	46.73°C	0.986
	12.107V	5.013V	3.311V	4.968V	1218.145				57.63°C	230.24V
	0.115A	**14.372A**	**14.338A**	**0A**	121.305	81.83%	417	<6.0	40.93°C	0.915
	12.177V	5.024V	3.327V	5.059V	148.241				51.8°C	230.34V
	0.115A	**21.885A**	**0A**	**0A**	111.395	79.659%	417	<6.0	40.89°C	0.909
	12.182V	5.026V	3.333V	5.065V	139.84				51.36°C	230.34V
	0.115A	**0A**	**21.96A**	**0A**	73.989	74.209%	415	<6.0	40.37°C	0.871
	12.176V	5.037V	3.306V	5.06V	99.706				50.32°C	230.35V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
	82.582A	**0A**	**0A**	**0A**	1000.024	91.703%	1258	36.3	45.99°C	0.984
	12.109V	5.027V	3.318V	5.019V	1090.504				53.47°C	230.24V

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	1.226A	0.497A	0.492A	0.197A	19.999	78.04%	0	<6.0	40.04°C	0.874
	12.111V	5.035V	3.35V	5.069V	25.626				36.85°C	115.13V
40W	2.696A	0.695A	0.689A	0.296A	39.998	84.28%	0	<6.0	40.52°C	0.918
	12.121V	5.035V	3.353V	5.067V	47.459				37.21°C	115.13V
60W	4.154A	0.894A	0.885A	0.395A	59.996	79.663%	0	<6.0	42.02°C	0.939
	12.165V	5.035V	3.355V	5.065V	75.309				38.35°C	115.12V
80W	5.615A	1.092A	1.082A	0.494A	79.949	83.623%	0	<6.0	43.84°C	0.956
	12.168V	5.035V	3.354V	5.063V	95.604				39.94°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	1.226A	0.496A	0.494A	0.197A	20.007	77.738%	0	<6.0	39.83°C	0.527
	12.114V	5.04V	3.339V	5.069V	25.734				36.77°C	230.39V
40W	2.696A	0.695A	0.69A	0.296A	40.005	84.022%	0	<6.0	40.83°C	0.718
	12.124V	5.037V	3.347V	5.067V	47.612				37.59°C	230.39V
60W	4.154A	0.894A	0.887A	0.395A	60.006	80.277%	0	<6.0	41.91°C	0.824
	12.167V	5.036V	3.35V	5.065V	74.748				38.25°C	230.39V
80W	5.616A	1.093A	1.084A	0.494A	79.973	84.048%	0	<6.0	42.99°C	0.865
	12.169V	5.035V	3.35V	5.063V	95.157				39.13°C	230.39V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	6.67mV	6.48mV	4.32mV	4.94mV	Pass
20% Load	8.19mV	5.15mV	4.07mV	5.30mV	Pass
30% Load	14.08mV	5.10mV	5.14mV	5.15mV	Pass
40% Load	11.74mV	11.53mV	15.92mV	5.60mV	Pass
50% Load	10.38mV	6.58mV	5.09mV	6.73mV	Pass
60% Load	10.58mV	8.06mV	5.90mV	6.06mV	Pass
70% Load	11.15mV	12.19mV	8.04mV	6.12mV	Pass
80% Load	11.65mV	7.39mV	9.97mV	6.73mV	Pass
90% Load	13.03mV	8.32mV	9.41mV	8.41mV	Pass
100% Load	19.06mV	8.89mV	10.15mV	9.18mV	Pass
110% Load	21.51mV	8.65mV	10.90mV	9.61mV	Pass
Crossload1	9.76mV	8.66mV	11.12mV	7.38mV	Pass
Crossload2	9.97mV	7.81mV	4.12mV	6.83mV	Pass
Crossload3	7.33mV	5.82mV	11.14mV	6.93mV	Pass
Crossload4	19.93mV	6.83mV	6.02mV	8.05mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	7.28mV	6.78mV	4.53mV	5.10mV	Pass
20% Load	8.19mV	5.51mV	3.87mV	5.40mV	Pass
30% Load	17.39mV	5.00mV	5.24mV	5.30mV	Pass
40% Load	12.84mV	11.02mV	16.12mV	5.91mV	Pass
50% Load	11.74mV	7.19mV	5.24mV	5.55mV	Pass
60% Load	11.11mV	9.18mV	6.46mV	5.86mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	11.96mV	12.24mV	8.14mV	6.37mV	Pass
80% Load	11.76mV	7.30mV	10.12mV	6.78mV	Pass
90% Load	13.79mV	8.72mV	10.07mV	8.05mV	Pass
100% Load	19.95mV	9.78mV	11.18mV	9.22mV	Pass
110% Load	20.60mV	9.04mV	10.95mV	10.53mV	Pass
Crossload1	12.30mV	8.43mV	10.88mV	7.34mV	Pass
Crossload2	9.82mV	7.70mV	4.12mV	6.88mV	Pass
Crossload3	8.09mV	6.07mV	11.39mV	7.28mV	Pass
Crossload4	19.31mV	6.94mV	5.91mV	7.92mV	Pass

The results above are not used in the certification process

NZXT C1000 Gold



Top side



Power specifications label