Make It Yours.

Cooler Master Elite Platinum 850

Serial Number CM1520850F24052003500076

Lab ID CM85003462

Certification ID 263462

Test Result Report ID: 26PS3462A

Certificate Issue Date: Nov 5, 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	Cooler Master
Model	Elite Platinum 850
OEM/ODM	XHY Power
Serial Number	CM1520850F24052003500076
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	6-12
Rated Frequency (Hz)	50-60
Rated Power (W)	850
Operating Temperature (Continuous Full Load) (°C)	0 - 50
Type	ATX12V
Cable Design	Fully Modular
Warranty	12 years
Cybenetics Measurements	
Dimensions (W x H x D)	150 x 85 x 140mm
Weight	1.58 kg (3.48 lb)
Cooling	120mm Rifle Bearing Fan (DF1202512RFMN)
Semi-Passive Operation	✓
Cybenetics Testing Information	
Lab ID	CM85003462
Date of receipt	Sep 29, 2026
Testing Date	Oct 30, 2026
Report Issued Date	Nov 5, 2026
Engineer Name	Ioannis Kalyviotis
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors
(Non-accredited measurements)

Description	Cable Count	Connector Count (Total)	Gauge	Cable Type
ATX connector 24 pin (600mm)	1	1	18-20AWG	Tinned Copper
4+4 pin EPS12V (700mm)	1	1	18AWG	Tinned Copper
8 pin EPS12V (700mm)	1	1	18AWG	Tinned Copper
6+2 pin PCIe (600mm)	3	3	18AWG	Tinned Copper
12+4 pin PCIe (600mm) (600W)	1	1	16-24AWG	Tinned Copper

SATA (410mm+120mm) / 4-pin Molex (+120mm)	3	6/3	18AWG	Tinned Copper
AC Power Cord (1370mm) - 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**	**-12V**
Max. Power	**Amps**	20	20	70.8	3	0.3
	Watts	100		849.6	15	3.6
Total Max. Power (W)		850				

Parts Description

General Data	
Manufacturer (OEM)	Xin Hui Yuan Technology
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	1x NTC Thermistor MF72 5D-15 (5.0 Ohm @ 25°C) & Relay
Bridge Rectifier	2x Yangzhou Yangjie GBUL2506 (600V, 25A @ 125°C)
APFC MOSFETs	2x CR Micro CRJT140N65G2F (650V, 15A @ 100°C, Rds(on): 0.140Ohm)

APFC Boost Diode	1x CR Micro CRXI06D065G3 (650V, 6A @ 163°C)
Bulk Cap(s)	1x Rubycon (420V, 560uF, 2000h @ 105°C, MXE)
Main Switchers	4x Ncepower NCE65TF130 (650V, 18A@ 100°C, Rds(on): 0.130Ohm)
APFC Controller	Champion CM6500UNX
Resonant Controller	Champion CM6901T6X
Topology	Primary side: APFC, Full-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	4x Champion CMR011N06NS (60V, 289A @ 25°C, Rds(on): 1.1mOhm)
5V & 3.3V	DC-DC Converters: 6x CR Micro CRSM035N03L6Z (30V, 54A @ 100°C, Rds(on): 3.5mOhm) PWM Controller(s): Atkic AT8852Z
Filtering Capacitors	Electrolytic: 3x Nippon Chemi-con (@ 105°C, W) 7x Rubycon (4,000-10,000h @ 105°C, YXJ) 1x Rubycon (6,000-10,000h @ 105°C, ZLH) Polymer: 18x Nichicon FPCAP
Supervisor IC	IN1T7031-SDG
Fan Power Switch	B772 PNP Transistor
Fan Model	DF1202512RFMN (120mm, 12V, 0.20A, Rifle Bearing Fan)
5VSB Circuit	
Rectifier	Dongke DK5V60R10S (60V, 10mΩ)
Standby PWM Controller	ExcellianceMOS EM8569C

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)	90.184%
Average Noise Output (>1450 Load Combinations)	19.50dBA
Average PF (>1450 Load Combinations)	0.989
Efficiency With 10W (≤500W) or 2% (>500W) Load	66.377%
Standby Power Consumption	0.0319W
Non-Accredited	
12V Ripple (Full Load)	26.97mV
5V Ripple (Full Load)	13.57mV
3.3V Ripple (Full Load)	12.21mV
5VSB Ripple (Full Load)	14.37mV
12V Load Regulation	0.29%
5V Load Regulation	0.95%
3.3V Load Regulation	0.90%
5VSB Load Regulation	2.56%
Inrush Current	25.540A

230V

Accredited		
Average Efficiency (>1450 load combinations)		91.986%
Average Noise Output (>1450 Load Combinations)		19.52dBA
Average PF (>1450 Load Combinations)		0.961
Efficiency With 10W (≤500W) or 2% (>500W) Load		67.015%
Standby Power Consumption		0.0782W
Non-Accredited		
12V Ripple (Full Load)		25.75mV
5V Ripple (Full Load)		13.52mV
3.3V Ripple (Full Load)		12.26mV
5VSB Ripple (Full Load)		12.89mV
12V Load Regulation		0.25%
5V Load Regulation		0.99%
3.3V Load Regulation		1.02%
5VSB Load Regulation		2.56%
Inrush Current		73.660A
12V Transient Response (200%)		11.43V
5V Transient Response (200%)		4.905V
3.3V Transient Response (200%)		3.203V
5VSB Transient Response (200%)		4.975V
Hold-Up Time & PWR_OK Signal		16.90ms
AC Loss to PWR_OK Hold Up Time		14.70ms
PWR_OK Inactive to DC Loss Delay		2.20ms
PSU Timings: T1 (20% / 100%)	53.0ms	54.0ms
PSU Timings: T3 (20% / 100%)	112.0ms	112.0ms
12V OCP (30.4°C / 40.5°C)	79.600A (112.43%), 12.063V — shut down	78.200A (110.45%), 12.073V — shut down
5V OCP (30.4°C / 40.5°C)	23.900A (119.50%), 4.920V — shut down	23.800A (119.00%), 4.912V — shut down
3.3V OCP (30.4°C / 40.5°C)	24.400A (122.00%), 3.243V — shut down	24.300A (121.50%), 3.236V — shut down
5VSB OCP (30.4°C / 40.5°C)	5.400A (180.00%), 5.005V — shut down	5.400A (180.00%), 5.001V — shut down
OPP (29.86°C / 43.52°C)	119.14%	117.39%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	16.9
AC Loss to PWR_OK Hold Up Time (ms)	14.7
PWR_OK Inactive to DC Loss Delay (ms)	2.2

Vampire Power

Tables

115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	114.99 V	114.96 V	113.85 V	115.02 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	60.00 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.417	1.490	PASS
Mains Voltage THD:	0.13 %	0.09 %	N/A	0.18 %	2.00 %	PASS
Real Power:	0.032 W	-0.001 W	N/A	0.059 W	N/A	N/A
Apparent Power:	6.552 W	6.530 W	N/A	6.575 W	N/A	N/A
Power Factor:	0.007	N/A	N/A	N/A	N/A	N/A

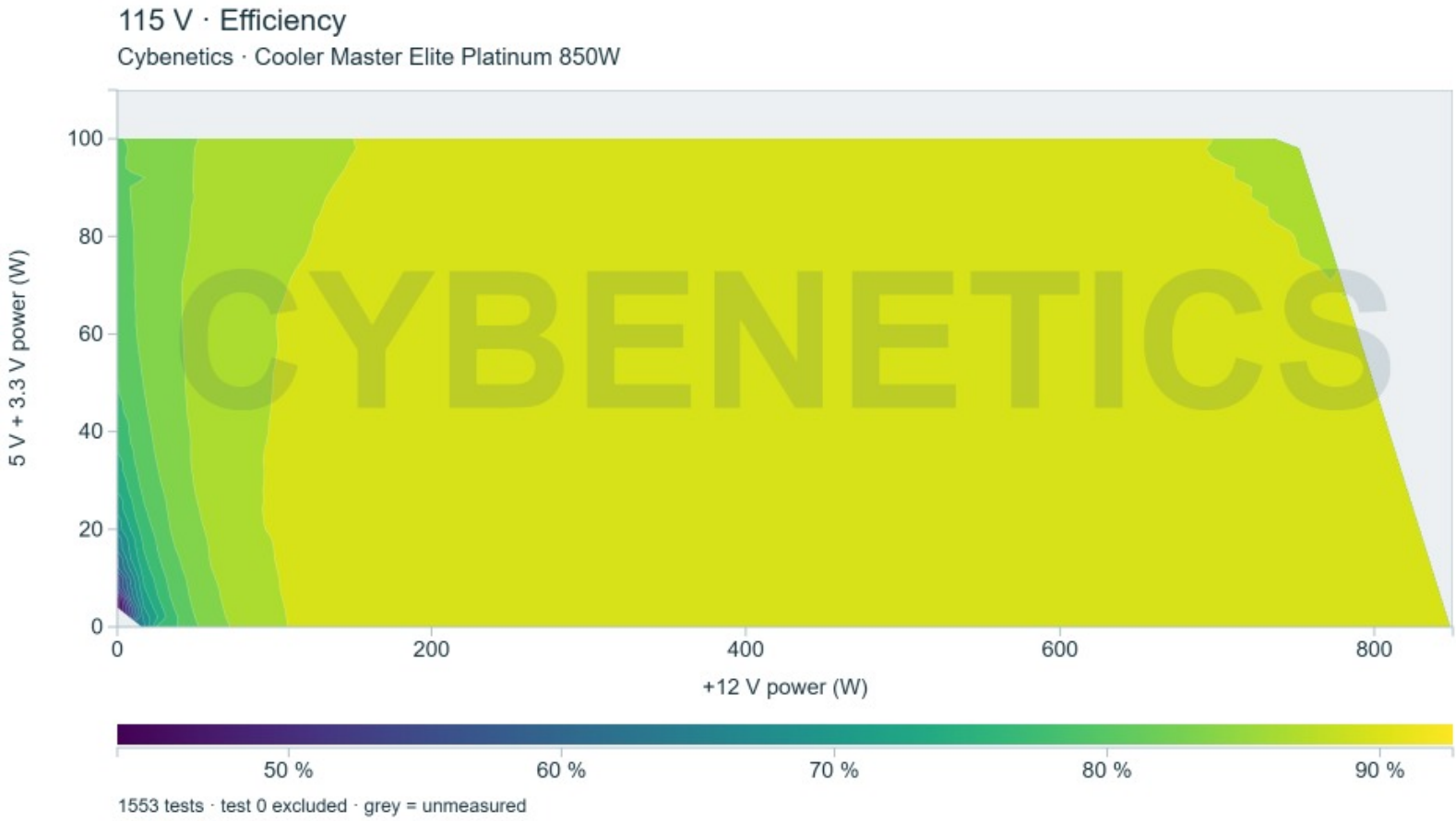
230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	230.02 V	230.01 V	227.70 V	230.05 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	50.00 Hz	49.50 Hz	50.01 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:	0.078 W	0.052 W	N/A	0.120 W	N/A	N/A
Apparent Power:	20.477 W	20.451 W	N/A	20.502 W	N/A	N/A

Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

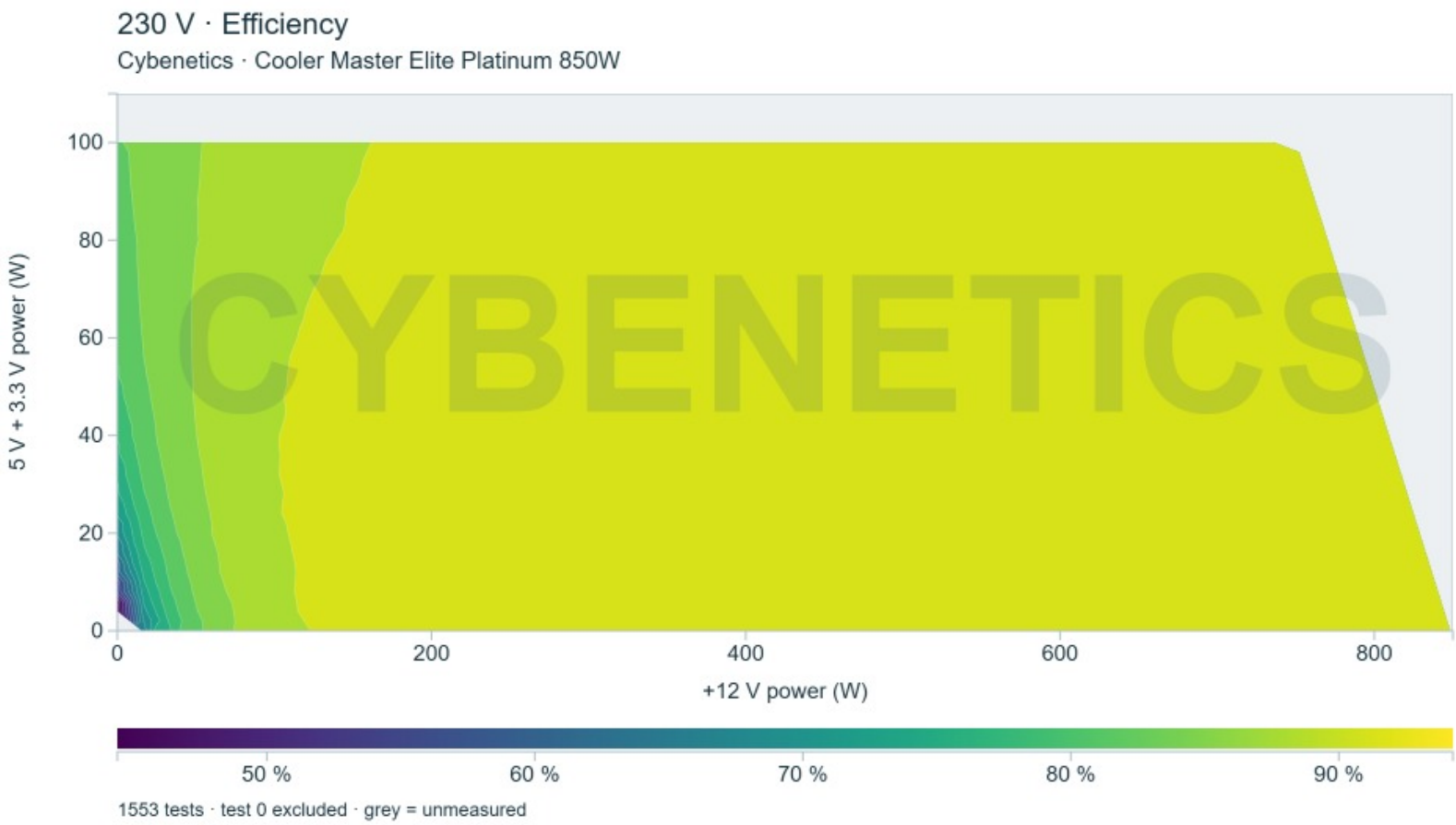
115V



INFO

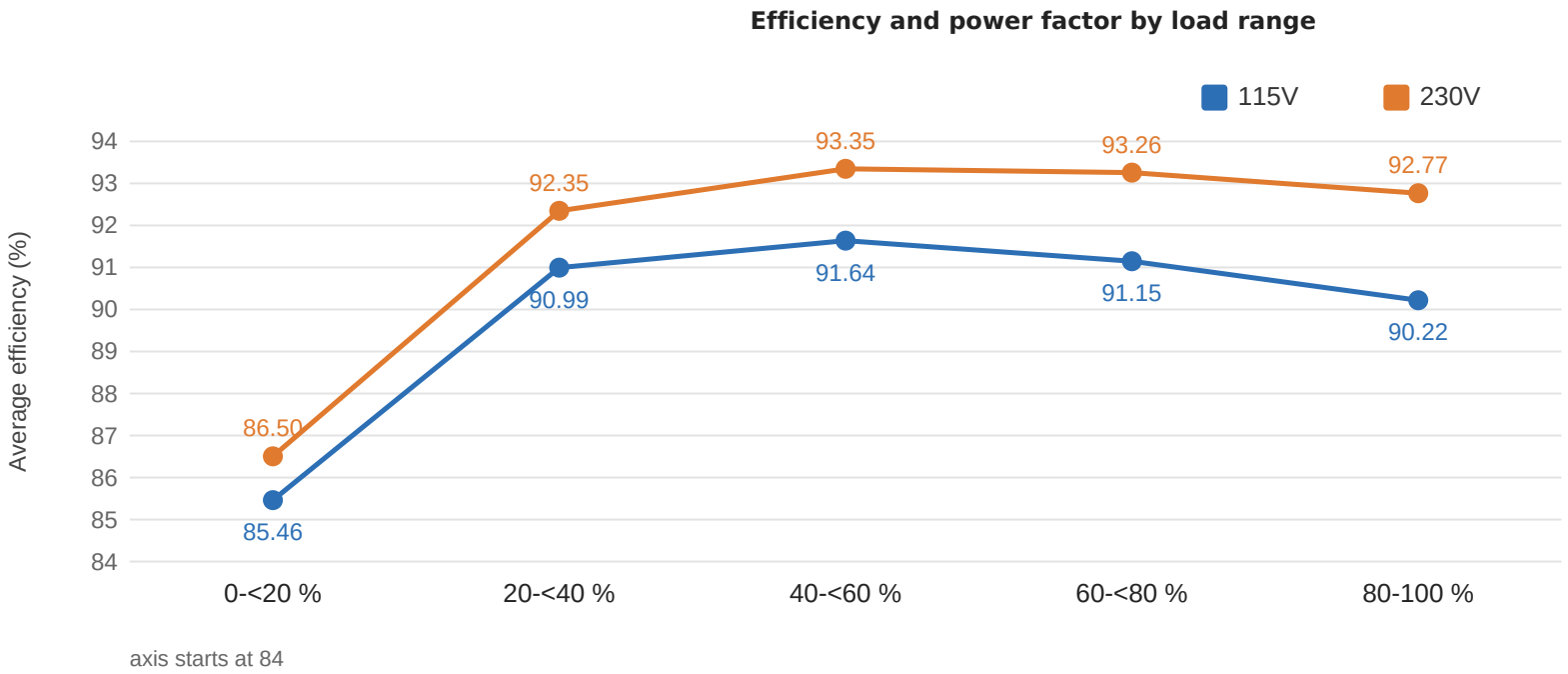
This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

230V

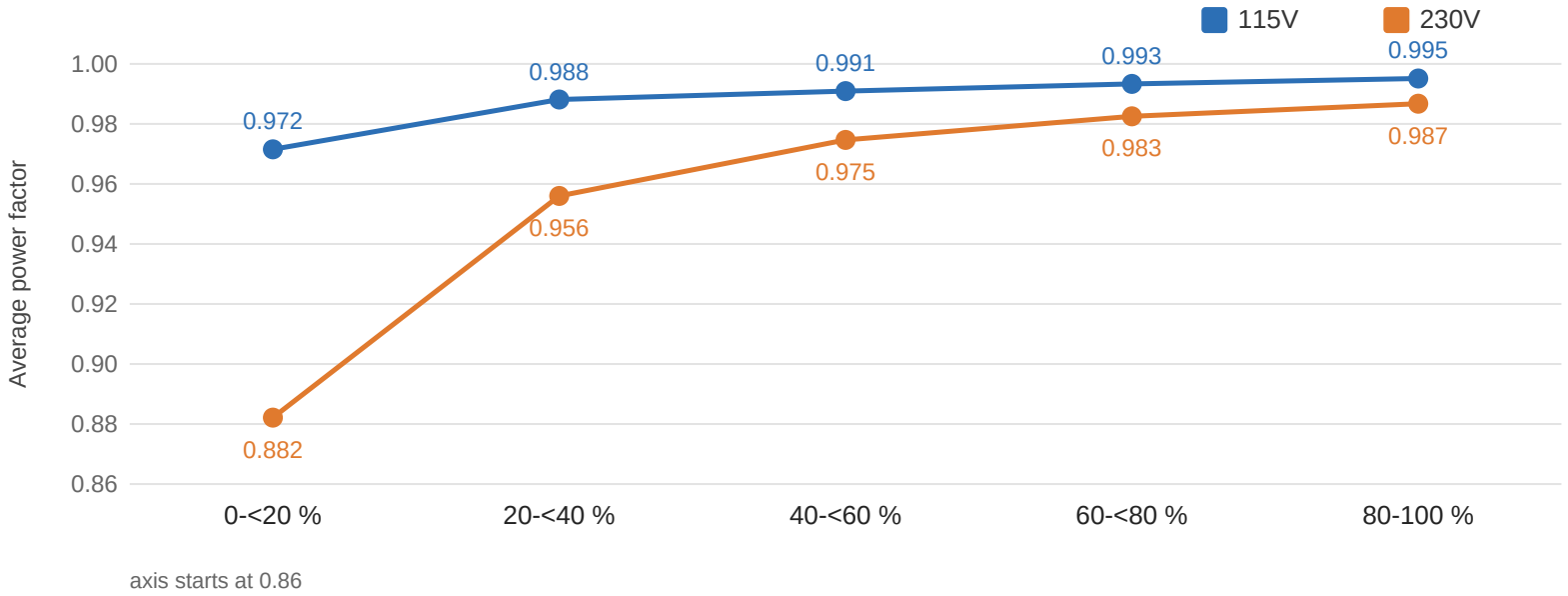


INFO

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 84



axis starts at 0.86

Load range	Points	Efficiency 115V	Efficiency 230V	PF 115V	PF 230V
0-<20 %	228 / 228	85.46%	86.50%	0.972	0.882
20-<40 %	331 / 331	90.99%	92.35%	0.988	0.956
40-<60 %	327 / 327	91.64%	93.35%	0.991	0.975
60-<80 %	333 / 333	91.15%	93.26%	0.993	0.983
80-100 %	334 / 334	90.22%	92.77%	0.995	0.987
70-100 % (High-Load)	505 / 505	90.47%	92.91%	0.995	0.986
All (published average)	1553 / 1553	90.18%	91.99%	0.989	0.961

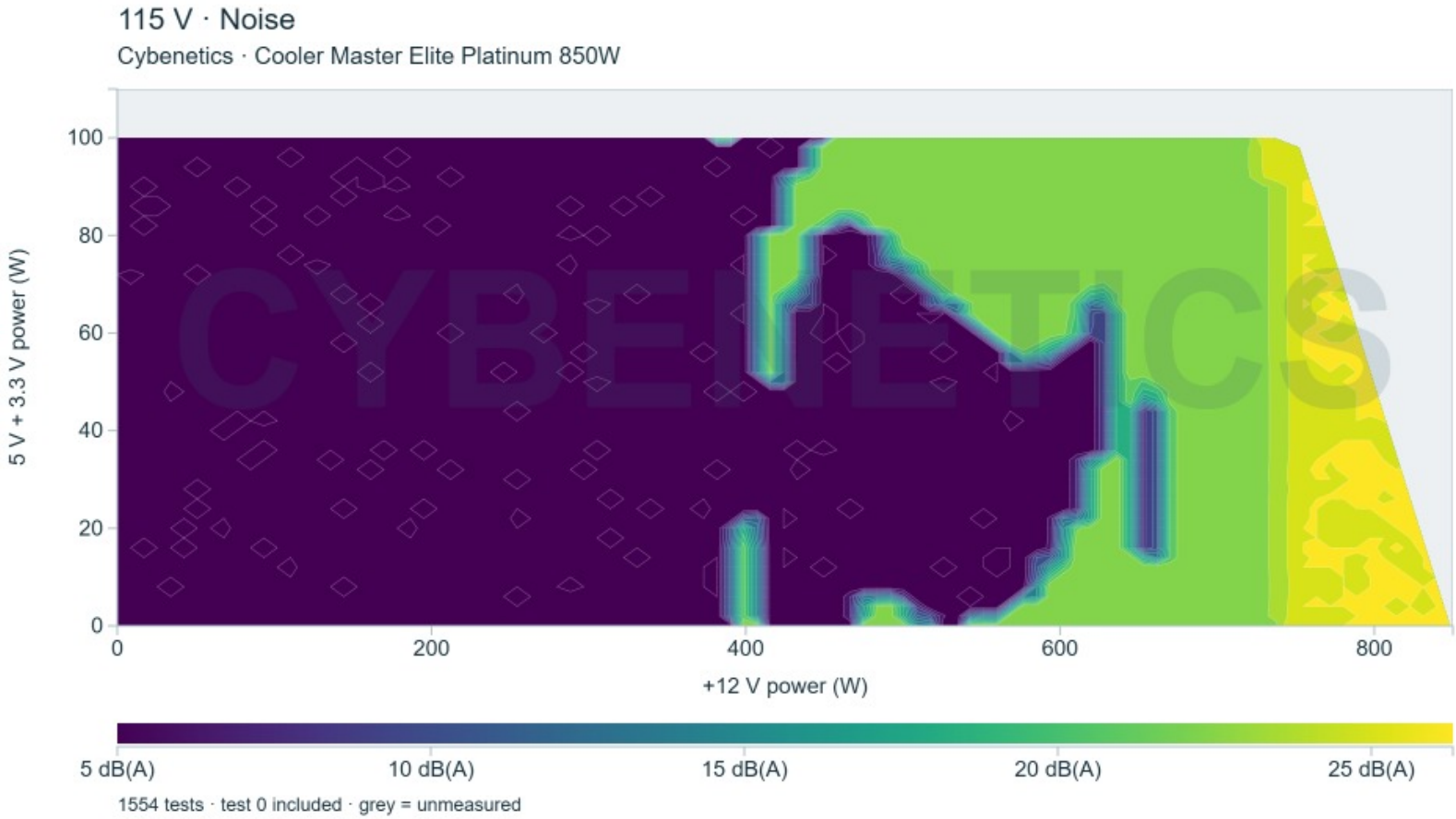
INFO

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

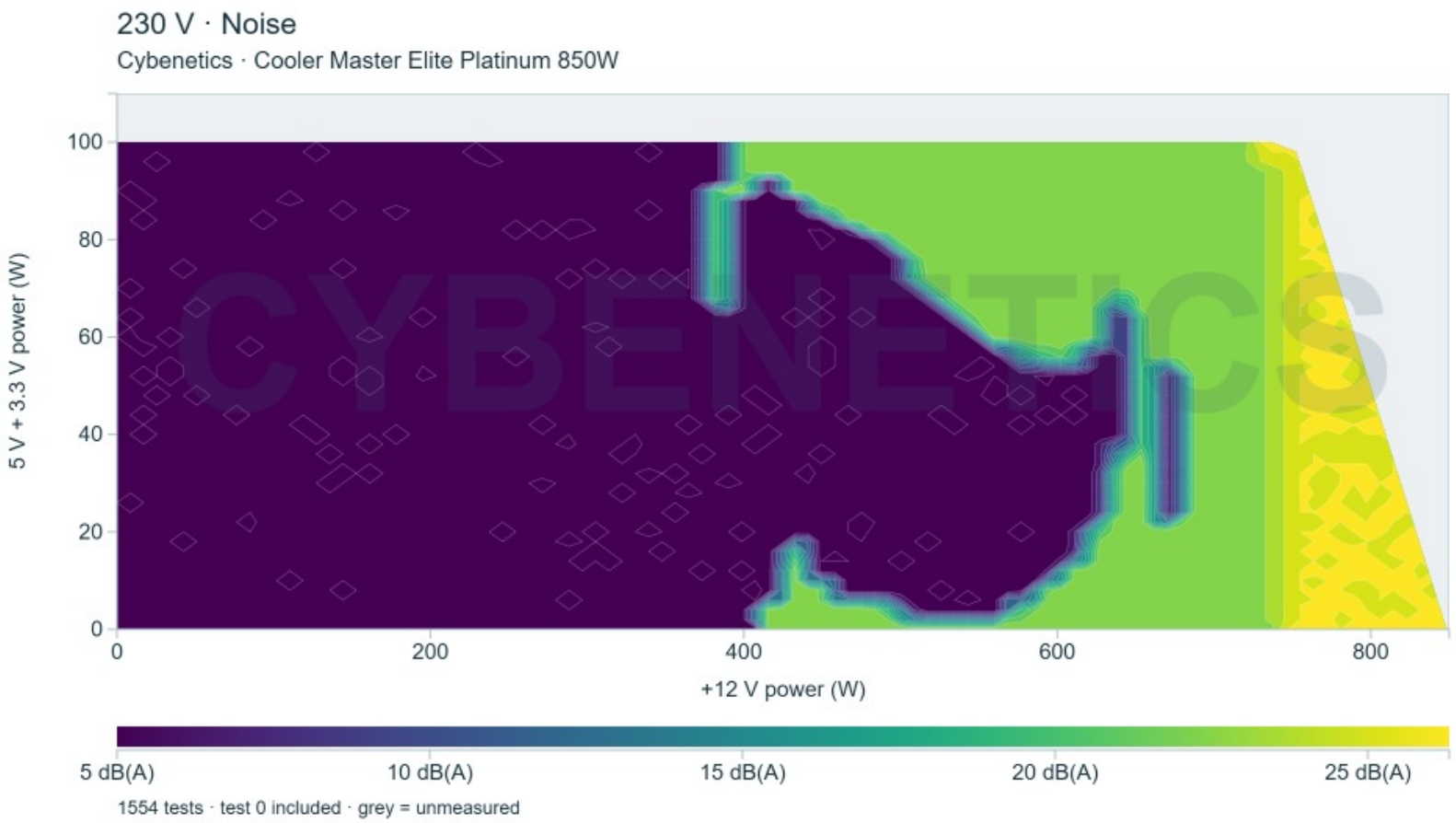
115V



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

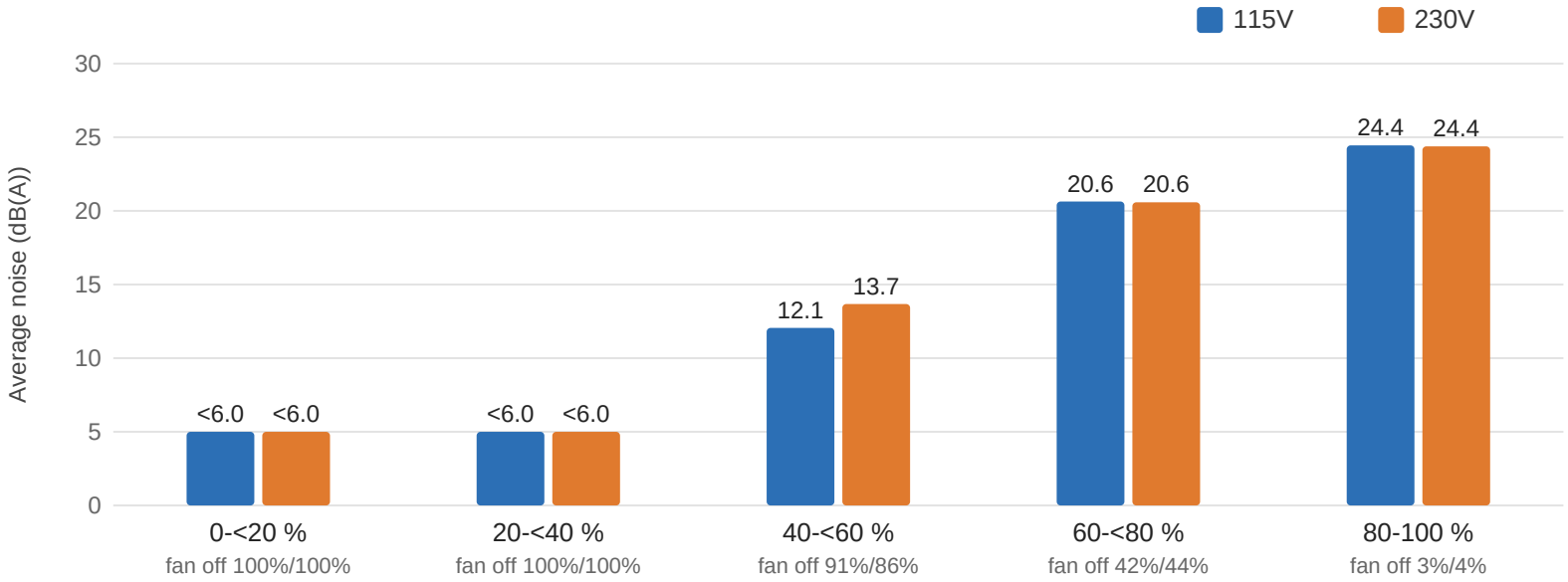
The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

Noise by load range

High-Load Index (70-100 % load)

Noise **23.8 dB(A)** at 115V and **23.7 dB(A)** at 230V · loudest point 26.3 dB(A)

Efficiency 90.47% / 92.91% · power factor 0.995 / 0.986 (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)	100% / 100%
40-<60 %	12.1 (23.5)	13.7 (23.5)	91% / 86%
60-<80 %	20.6 (23.5)	20.6 (23.5)	42% / 44%
80-100 %	24.4 (26.3)	24.4 (26.3)	3% / 4%
70-100 % (High-Load)	23.8 (26.3)	23.7 (26.3)	10% / 11%
All (published average)	19.5 (26.3)	19.5 (26.3)	65% / 64%

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". 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) · 36.0 °C	0 RPM · <6.0 dB(A) · 50.2 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 40.8 °C	0 RPM · <6.0 dB(A) · 48.2 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 41.2 °C	0 RPM · <6.0 dB(A) · 65.4 °C	fan off in both
100%	884 RPM · 25.3 dB(A) · 30.8 °C	1343 RPM · 34.0 dB(A) · 45.5 °C	**+8.7 dB(A)**

230V

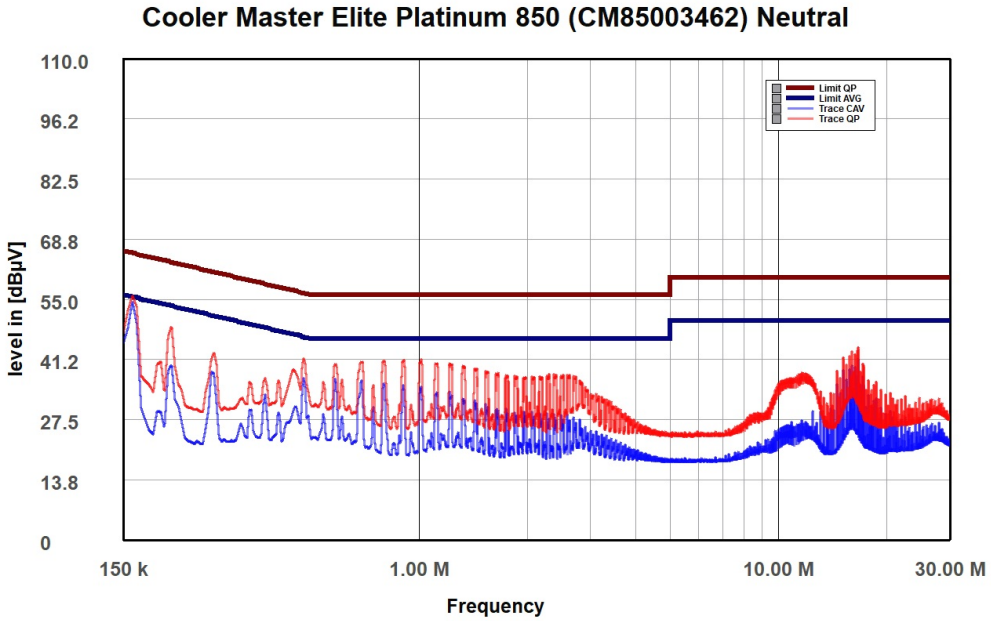
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 41.5 °C	0 RPM · <6.0 dB(A) · 47.2 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 42.4 °C	0 RPM · <6.0 dB(A) · 46.5 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 45.3 °C	0 RPM · <6.0 dB(A) · 50.8 °C	fan off in both
100%	945 RPM · 26.6 dB(A) · 30.5 °C	1347 RPM · 34.0 dB(A) · 45.6 °C	**+7.4 dB(A)**

INFO

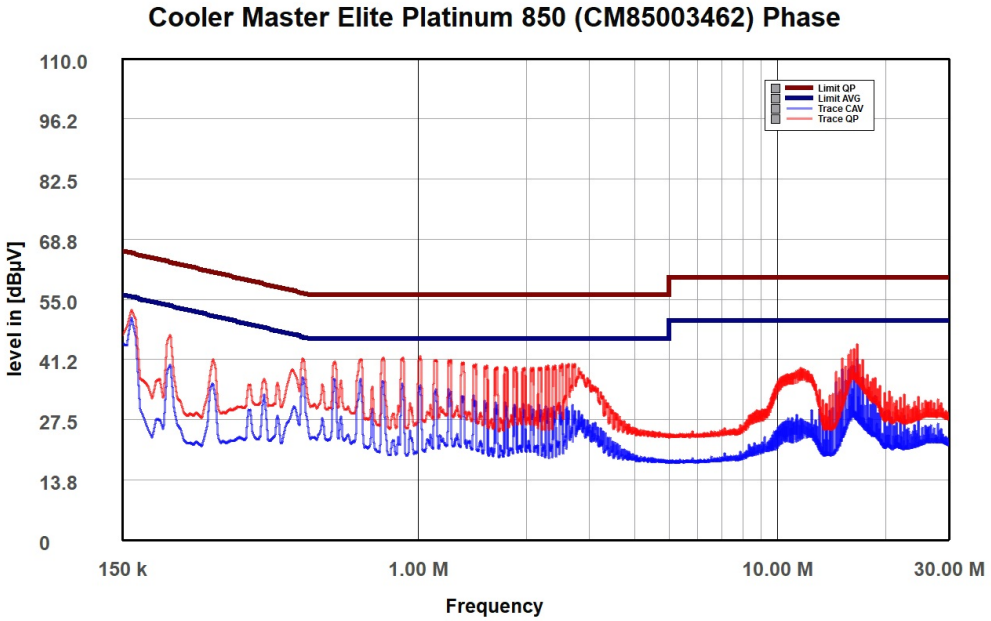
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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



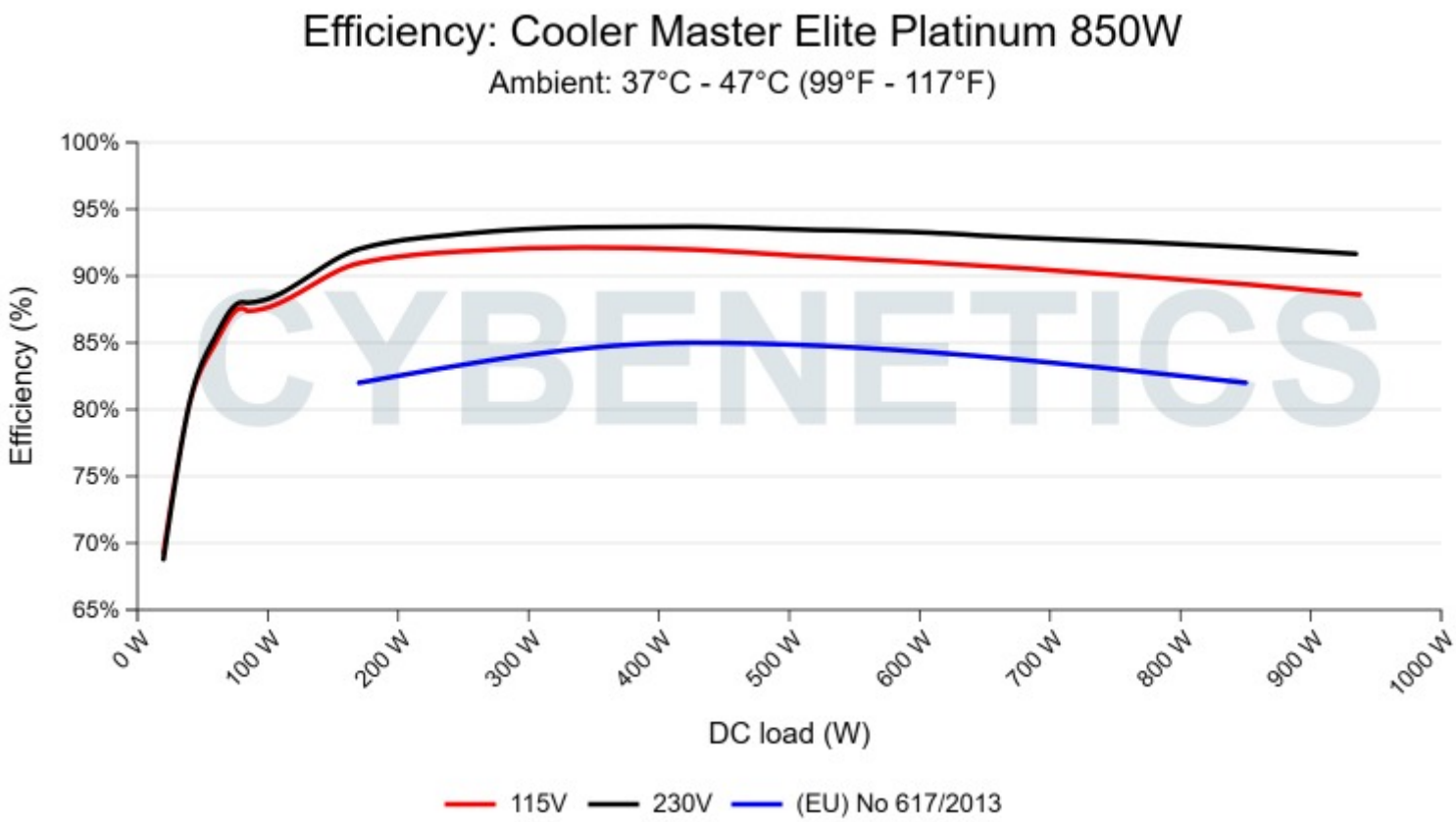
NEUTRAL



PHASE

Indicative Performance

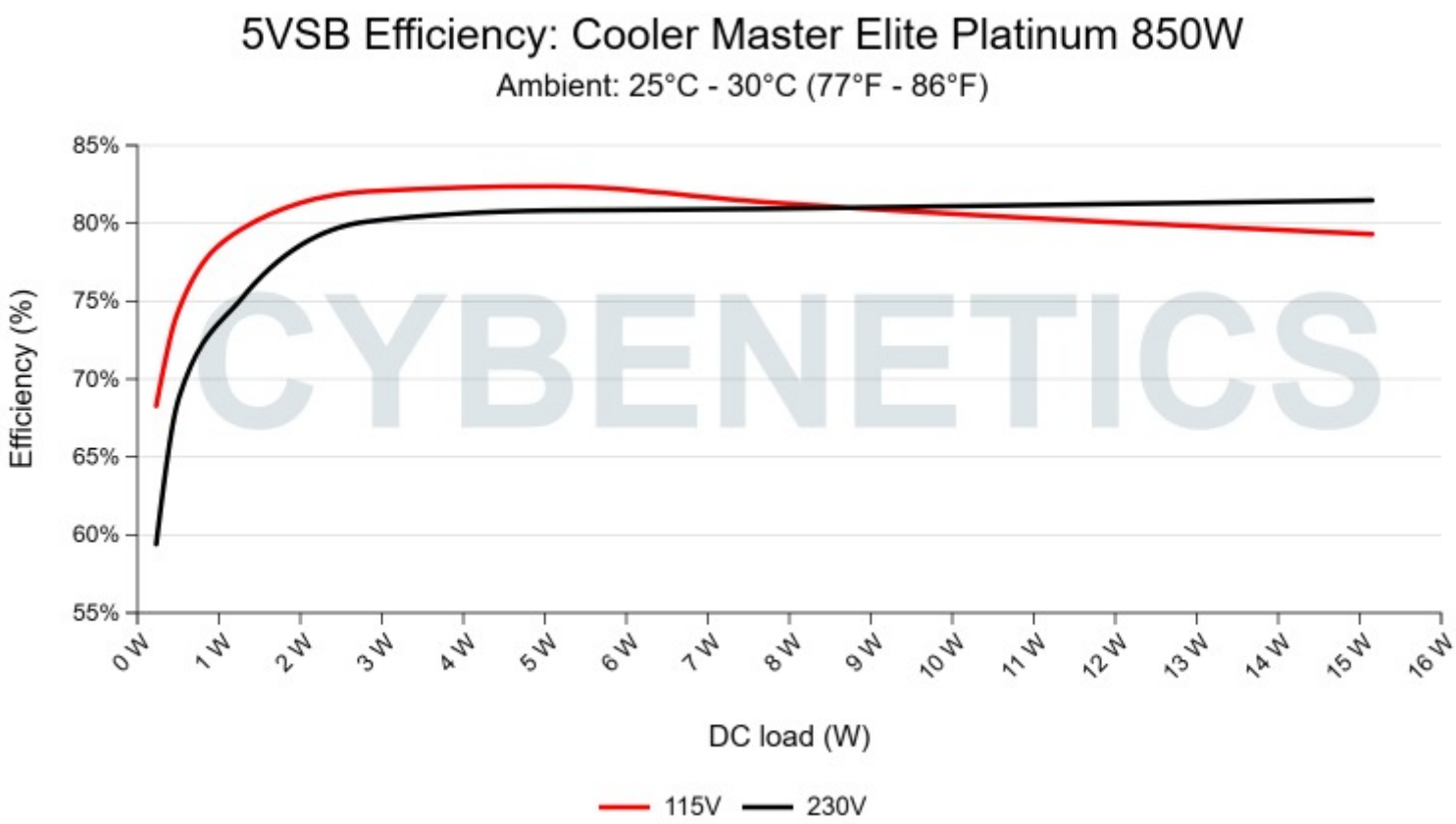
Efficiency under high ambient temperature



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**	0.231W	68.287%	0.056
	5.127V	0.338W		114.98V
2	**0.09A**	0.461W	73.76%	0.1
	5.126V	0.626W		114.97V
3	**0.55A**	2.814W	82.037%	0.338
	5.114V	3.43W		114.96V
4	**1A**	5.104W	82.369%	0.415
	5.102V	6.196W		114.95V
5	**1.5A**	7.636W	81.383%	0.451
	5.089V	9.383W		114.95V
6	**3A**	15.153W	79.296%	0.503
	5.051V	19.109W		114.95V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.231W	59.409%	0.02
	5.126V	0.388W		230.09V
2	**0.09A**	0.461W	67.809%	0.035
	5.125V	0.68W		230.09V
3	**0.55A**	2.813W	80.099%	0.157
	5.114V	3.512W		230.09V
4	**1A**	5.103W	80.819%	0.239
	5.102V	6.314W		230.09V
5	**1.5A**	7.635W	80.913%	0.296
	5.089V	9.436W		230.08V
6	**3A**	15.151W	81.469%	0.372
	5.05V	18.597W		230.08V

Protection Features

OCP (Normal @ 30.4°C)	12V: 79.6A (112.43%), 12.063V — shut down 5V: 23.9A (119.5%), 4.92V — shut down 3.3V: 24.4A (122%), 3.243V — shut down 5VSB: 5.4A (180%), 5.005V — shut down
OCP (Hot @ 40.5°C)	12V: 78.2A (110.45%), 12.073V — shut down 5V: 23.8A (119%), 4.912V — shut down 3.3V: 24.3A (121.5%), 3.236V — shut down 5VSB: 5.4A (180%), 5.001V — shut down
OVP (per rail)	12V: 14.257V (✓) 5V: 5.786V (✓) 3.3V: 3.988V (✓)
OPP (Normal @ 29.9°C)	1012.72W (119.14%) — shut down
OPP (Hot @ 43.5°C)	997.78W (117.39%) — shut down
OTP	✓ (150°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	Accurate but short
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%	**5.246A**	**2.002A**	**2.021A**	**0.981A**	85.003	87.377%	0	<6.0	50.18°C	0.972
	12.085V	4.997V	3.265V	5.097V	97.283				40.46°C	114.93V
20%	**11.510A**	**3.007A**	**3.038A**	**1.18A**	169.975	90.954%	0	<6.0	48.18°C	0.985
	12.082V	4.991V	3.259V	5.086V	186.881				40.81°C	115.02V
30%	**18.243A**	**3.501A**	**3.5A**	**1.4A**	256.372	91.882%	0	<6.0	59.54°C	0.989
	12.082V	4.985V	3.256V	5.074V	279.023				41.07°C	115.01V
40%	**24.909A**	**4.001A**	**4A**	**1.6A**	341.952	92.13%	0	<6.0	61.74°C	0.99
	12.081V	4.98V	3.252V	5.064V	371.163				41.78°C	114.98V
50%	**31.207A**	**5.001A**	**5.001A**	**1.8A**	427.129	91.966%	0	<6.0	65.36°C	0.991
	12.078V	4.973V	3.248V	5.052V	464.443				42.27°C	115.07V
60%	**37.530A**	**6A**	**5.999A**	**2.001A**	512.544	91.487%	805	23.7	42.87°C	0.993
	12.074V	4.973V	3.249V	5.041V	560.236				58.42°C	114.94V
70%	**43.835A**	**7.001A**	**6.998A**	**2.2A**	597.584	91.057%	766	22.9	43.17°C	0.994
	12.068V	4.969V	3.247V	5.029V	656.277				59.95°C	115.03V
80%	**50.198A**	**8.001A**	**7.999A**	**2.3A**	682.726	90.55%	765	22.9	43.93°C	0.995
	12.062V	4.965V	3.245V	5.021V	753.978				57.84°C	115.01V
90%	**56.897A**	**8.5A**	**8.498A**	**2.4A**	767.8	89.968%	1133	32.1	44.25°C	0.995
	12.057V	4.962V	3.244V	5.013V	853.412				58.45°C	115.06V
100%	**63.378A**	**9A**	**8.999A**	**3A**	852.577	89.349%	1343	34.0	45.49°C	0.996
	12.051V	4.96V	3.242V	4.994V	954.209				57.54°C	115.03V
110%	**69.778A**	**10A**	**9.999A**	**3A**	937.442	88.604%	1735	40.1	46.07°C	0.996
	12.047V	4.954V	3.238V	4.987V	1058.018				58.97°C	115.02V
CL1	**0.117A**	**12.048A**	**12.046A**	**0A**	99.934	83.333%	0	<6.0	48.43°C	0.976
	12.094V	4.94V	3.237V	5.106V	119.92				40.37°C	114.94V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL2	**0.117A**	**19.999A**	**0A**	**0A**	99.396	80.894%	0	<6.0	50.67°C	0.976
	12.103V	4.899V	3.227V	5.11V	122.871				40.58°C	114.94V
CL3	**0.117A**	**0A**	**19.998A**	**0A**	65.794	75.201%	0	<6.0	50.78°C	0.967
	12.102V	4.961V	3.219V	5.108V	87.49				40.18°C	114.96V
CL4	**70.843A**	**0A**	**0A**	**0A**	854.192	90.069%	1130	32.1	40.55°C	0.996
	12.058V	4.993V	3.252V	5.073V	948.37				54.48°C	114.98V

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%	**5.247A**	**1.999A**	**2.02A**	**0.981A**	85.003	88.001%	0	<6.0	47.23°C	0.877
	12.083V	5.004V	3.267V	5.097V	96.592				40.32°C	230.04V
20%	**11.510A**	**3.001A**	**3.034A**	**1.18A**	169.961	92.007%	0	<6.0	46.5°C	0.936
	12.081V	4.999V	3.263V	5.086V	184.727				40.81°C	230.05V
30%	**18.123A**	**3.505A**	**3.543A**	**1.379A**	254.968	93.195%	0	<6.0	48.82°C	0.957
	12.079V	4.994V	3.26V	5.076V	273.585				41.17°C	230.04V
40%	**24.743A**	**4.009A**	**4.054A**	**1.58A**	340.055	93.641%	0	<6.0	50.46°C	0.968
	12.078V	4.989V	3.256V	5.065V	363.148				41.75°C	230.04V
50%	**31.004A**	**5.019A**	**5.075A**	**1.781A**	424.949	93.696%	0	<6.0	50.76°C	0.975
	12.077V	4.982V	3.251V	5.054V	453.54				42.27°C	230.04V
60%	**37.238A**	**6.032A**	**6.101A**	**1.984A**	509.478	93.481%	0	<6.0	53.66°C	0.98
	12.076V	4.975V	3.245V	5.042V	545.007				42.9°C	230.03V
70%	**43.562A**	**7.035A**	**7.111A**	**2.187A**	594.803	93.285%	754	23.4	43.14°C	0.983
	12.068V	4.976V	3.249V	5.031V	637.62				50.12°C	230.03V
80%	**49.882A**	**8.044A**	**8.13A**	**2.29A**	679.635	92.871%	766	22.9	43.87°C	0.985
	12.063V	4.972V	3.247V	5.022V	731.808				53.31°C	230.02V
90%	**56.607A**	**8.551A**	**8.626A**	**2.394A**	765.069	92.55%	1025	27.0	44.75°C	0.987
	12.058V	4.97V	3.245V	5.014V	826.655				52.73°C	230.01V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**63.070A**	**9.06A**	**9.156A**	**3.004A**	849.865	92.153%	1347	34.0	45.64°C	0.989
	12.053V	4.967V	3.243V	4.994V	922.237				53.47°C	230V
110%	**69.409A**	**10.075A**	**10.273A**	**3.008A**	934.442	91.656%	1736	40.1	46.52°C	0.989
	12.047V	4.962V	3.241V	4.987V	1019.508				52.8°C	229.99V
CL1	**0.115A**	**12.164A**	**12.257A**	**0A**	101.288	84.322%	0	<6.0	44.19°C	0.901
	12.095V	4.949V	3.239V	5.106V	120.12				40.44°C	230.1V
CL2	**0.115A**	**20.357A**	**0A**	**0A**	101.387	81.858%	0	<6.0	46.01°C	0.904
	12.102V	4.912V	3.231V	5.11V	123.858				40.9°C	230.09V
CL3	**0.116A**	**0A**	**20.447A**	**0A**	67.393	75.919%	0	<6.0	48.03°C	0.866
	12.097V	4.971V	3.228V	5.108V	88.769				40.91°C	230.05V
CL4	**70.440A**	**0A**	**0A**	**0A**	849.7	92.897%	1130	32.1	45.17°C	0.988
	12.063V	4.979V	3.237V	5.072V	914.671				51.72°C	229.95V

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	**1.228A**	**0.499A**	**0.504A**	**0.195A**	19.997	69.279%	0	<6.0	43.66°C	0.908
	12.086V	5.007V	3.271V	5.122V	28.865				36.87°C	114.96V
40W	**2.704A**	**0.699A**	**0.706A**	**0.293A**	39.995	80.424%	0	<6.0	47.77°C	0.949
	12.086V	5.005V	3.27V	5.118V	49.73				37.94°C	114.96V
60W	**4.181A**	**0.9A**	**0.909A**	**0.391A**	59.996	85.003%	0	<6.0	44.48°C	0.964
	12.085V	5.003V	3.268V	5.114V	70.581				38.95°C	114.95V
80W	**5.654A**	**1.1A**	**1.111A**	**0.489A**	79.959	87.596%	0	<6.0	45.92°C	0.968
	12.086V	5.001V	3.267V	5.11V	91.282				39.06°C	114.94V

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	**1.230A**	**0.498A**	**0.504A**	**0.195A**	20.005	68.796%	0	<6.0	38.69°C	0.641
	12.074V	5.016V	3.276V	5.122V	29.079				36.54°C	230.02V
40W	**2.708A**	**0.698A**	**0.705A**	**0.293A**	40.005	80.512%	0	<6.0	42.02°C	0.768
	12.075V	5.014V	3.274V	5.118V	49.688				37.21°C	230.01V
60W	**4.184A**	**0.898A**	**0.908A**	**0.391A**	60.005	85.512%	0	<6.0	41.59°C	0.833
	12.078V	5.011V	3.272V	5.114V	70.171				38.39°C	230V
80W	**5.657A**	**1.098A**	**1.11A**	**0.489A**	79.973	88.041%	0	<6.0	43.69°C	0.869
	12.080V	5.009V	3.27V	5.11V	90.836				39.19°C	230.01V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	17.00mV	13.31mV	9.10mV	9.99mV	Pass
20% Load	18.88mV	9.95mV	11.70mV	10.60mV	Pass
30% Load	20.76mV	11.07mV	7.93mV	10.70mV	Pass
40% Load	21.83mV	11.63mV	8.90mV	11.00mV	Pass
50% Load	19.69mV	12.09mV	9.00mV	10.95mV	Pass
60% Load	21.22mV	11.63mV	10.07mV	11.72mV	Pass
70% Load	21.63mV	11.63mV	10.38mV	11.26mV	Pass
80% Load	22.75mV	12.14mV	11.75mV	11.41mV	Pass
90% Load	24.63mV	13.31mV	11.80mV	12.02mV	Pass
100% Load	26.97mV	13.57mV	12.21mV	14.37mV	Pass
110% Load	29.82mV	17.39mV	13.38mV	16.76mV	Pass
Crossload1	19.34mV	10.56mV	12.31mV	14.01mV	Pass
Crossload2	17.86mV	12.55mV	5.54mV	13.50mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	16.54mV	12.75mV	17.65mV	15.44mV	Pass
Crossload4	26.00mV	12.75mV	8.09mV	15.34mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	17.10mV	10.97mV	7.12mV	11.36mV	Pass
20% Load	19.49mV	11.58mV	7.32mV	11.46mV	Pass
30% Load	22.19mV	11.63mV	7.98mV	11.11mV	Pass
40% Load	23.10mV	13.01mV	8.80mV	12.07mV	Pass
50% Load	21.17mV	12.85mV	9.36mV	11.72mV	Pass
60% Load	21.32mV	12.09mV	7.93mV	12.02mV	Pass
70% Load	22.28mV	12.60mV	7.73mV	12.17mV	Pass
80% Load	23.46mV	13.52mV	11.70mV	12.33mV	Pass
90% Load	24.37mV	12.85mV	11.90mV	13.55mV	Pass
100% Load	25.75mV	13.52mV	12.26mV	12.89mV	Pass
110% Load	27.27mV	12.85mV	12.66mV	13.35mV	Pass
Crossload1	18.93mV	11.68mV	12.46mV	14.11mV	Pass
Crossload2	18.37mV	12.75mV	5.95mV	13.86mV	Pass
Crossload3	17.15mV	13.37mV	18.46mV	16.00mV	Pass
Crossload4	24.93mV	12.45mV	7.53mV	14.77mV	Pass

The results above are not used in the certification process

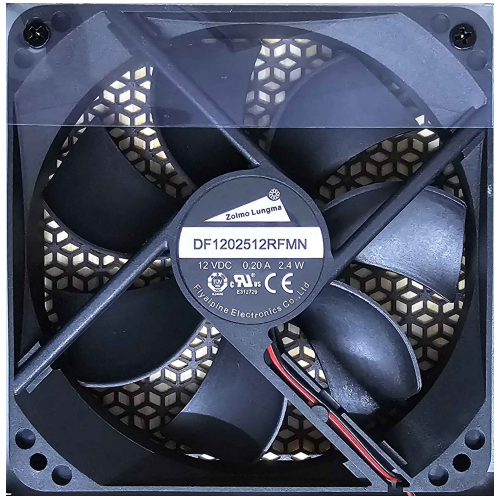
Cooler Master Elite Platinum 850



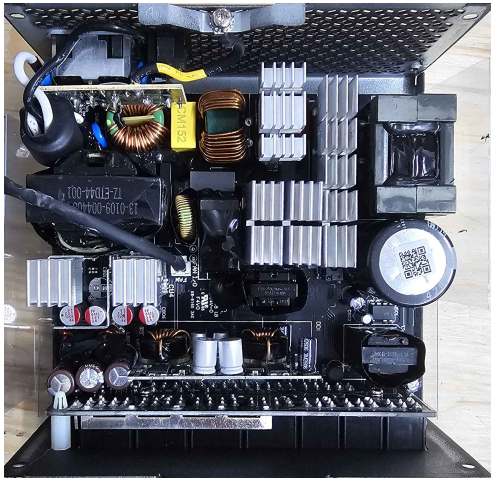
Top side



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

CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus

www.cybenetics.com - info@cybenetics.com