CPS PCCooler YS850

Serial Number A3A1520003

Lab ID PL85002370

Certification ID 252370

Test Result Report ID: 24PS2370A

Certificate Issue Date: Feb 23, 2024

Scheme: ETA-EMI PSU

115V



230V



Scheme: LAMBDA PSU

115V



230V





Outside Validation Scope



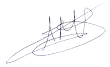
General Information

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	CPS PCCooler
Model	YS850
OEM/ODM	Seasonic
Serial Number	A3A1520003
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	11-5.5

Rated Frequency (Hz)	50-60
Rated Power (W)	850
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 (HA13525H12F-Z)
Semi-Passive Operation	✓ (selectable)
Cybenetics Testing Information	
Lab ID	PL85002370
Date of receipt	Jan 25, 2024
Testing Date	Feb 6, 2024
Report Issued Date	Feb 23, 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 (610mm)	1	1	16-18AWG	No
4+4 pin EPS12V (710mm)	2	2	16AWG	No
6+2 pin PCIe (760mm)	2	2	16-18AWG	No
12+4 pin PCIe (700mm) (600W)	1	1	16-28AWG	No
SATA (410mm+155mm)	1	2	18AWG	No
SATA (500mm+155mm+155mm+155mm)	2	8	18AWG	No
4-pin Molex (450mm+125mm+125mm)	1	3	18AWG	No

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	20	20	70	3	0.3
	Watts	100		840	15	3.6
Total Max. Power (W)		850				

Parts Description

General Data	
Manufacturer (OEM)	Seasonic
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV, 1x CM02X (Discharge IC)
Inrush Protection	1x NTC Thermistor MF72-5D20L (5 Ohm) & Relay
Bridge Rectifier(s)	2x
APFC MOSFETs	2x Infineon IPP60R160P6 (650V, 23.8A, @ 25°C Rds(on): 0.160Ohm)
APFC Boost Diode	1x ST STTH8S06 (600V, 8A)
Bulk Cap(s)	1x Nippon Chemi-Con (420V, 390uF, 2,000h @ 105°C, KMR) & 1x Nippon Chemi-Con (420V, 330uF, 2,000h @ 105°C, KMR)
Main Switchers	4x Great Power GPT13N50D (500V, 13A , Rds(on): 0.49Ohm)
APFC Controller	Champion CM6500UNX
Resonant Controller	Champion CU6901VPA

Topology	Primary side: APFC, Full-Bridge & LLC converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	6x Nexperia PSMN1R0-40YLD (40V, 198A @ 100°C, Rds(on): 1.93mOhm)
5V & 3.3V	DC-DC Converters: 6x Nexperia PSMN4R0-30YLD (30V, 67A @ 100°C, Rds(on): 6.6mOhm) PWM Controller(s): ANPEC APW7159C
Filtering Capacitors	Electrolytic: 4x Nippon Chemi-Con (5-6,000h @ 105°C, KZH) 4x Nippon Chemi-Con (5-6,000h @ 105°C, KY) 3x Nichicon (2-5,000h @ 105°C, HD), 2x Rubycon (3-6,000h @ 105°C, YXG), 1x Nippon Chemi-Con (1-5,000h @ 105°C, KZE) Polymer: 8x FCAP, 25x FPCAP, 2x Rubycon
Supervisor IC	Weltrend WT7527 (OCP, OVP, UVP, SCP, PG)
Fan Model	Hong Hua HA13525H12F-Z (135mm, 12V, 0.50A, Fluid Dynamic Bearing Fan)

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)	88.828%
Average Noise Output (>1450 Load Combinations)	24.67dBA
Average PF (>1450 Load Combinations)	0.973
Efficiency With 10W (≤500W) or 2% (>500W) Load	73.271%
Standby Power Consumption	0.0542W
Non-Accredited	
12V Ripple (Full Load)	26.02mV
5V Ripple (Full Load)	18.93mV
3.3V Ripple (Full Load)	18.94mV

5VSB Ripple (Full Load)	25.18mV
12V Load Regulation	0.85%
5V Load Regulation	0.54%
3.3V Load Regulation	0.85%
5VSB Load Regulation	2.25%
Inrush Current	32.500A

230V

Accredited		
Average Efficiency (>1450 load combinations)		91.112%
Average Noise Output (>1450 Load Combinations)		25.53dBA
Average PF (>1450 Load Combinations)		0.939
Efficiency With 10W (≤500W) or 2% (>500W) Load		72.448%
Standby Power Consumption		0.1297W
Non-Accredited		
12V Ripple (Full Load)		27.00mV
5V Ripple (Full Load)		19.37mV
3.3V Ripple (Full Load)		18.06mV
5VSB Ripple (Full Load)		25.52mV
12V Load Regulation		0.87%
5V Load Regulation		0.52%
3.3V Load Regulation		0.85%
5VSB Load Regulation		2.23%
Inrush Current		65.850A
12V Transient Response (200%)		11.45V
5V Transient Response (200%)		4.890V
3.3V Transient Response (200%)		3.194V
5VSB Transient Response (200%)		4.935V
Hold-Up Time & PWR_OK Signal		24.60ms
AC Loss to PWR_OK Hold Up Time		19.80ms
PWR_OK Inactive to DC Loss Delay		4.80ms
PSU Timings: T1 (20% / 100%)	72.0ms	71.0ms

PSU Timings: T3 (20% / 100%)	127.0ms	126.0ms
12V OCP (26.6°C / 43.0°C)	97.20A (138.86%), 12.151V	95.60A (136.57%), 12.171V
5V OCP (26.6°C / 43.0°C)	29.4A (147.00%), 4.974V	29.3A (146.50%), 4.973V
3.3V OCP (26.6°C / 43.0°C)	29.3A (146.50%), 3.303V	29.3A (146.50%), 3.303V
5VSB OCP (26.6°C / 43.0°C)	6.4A (213.33%), 4.992V	6.4A (213.33%), 4.988V
OPP (26.85°C / 42.18°C)	141.24%	133.30%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	24.6
AC Loss to PWR_OK Hold Up Time (ms)	19.8
PWR_OK Inactive to DC Loss Delay (ms)	4.8

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Tables

115V

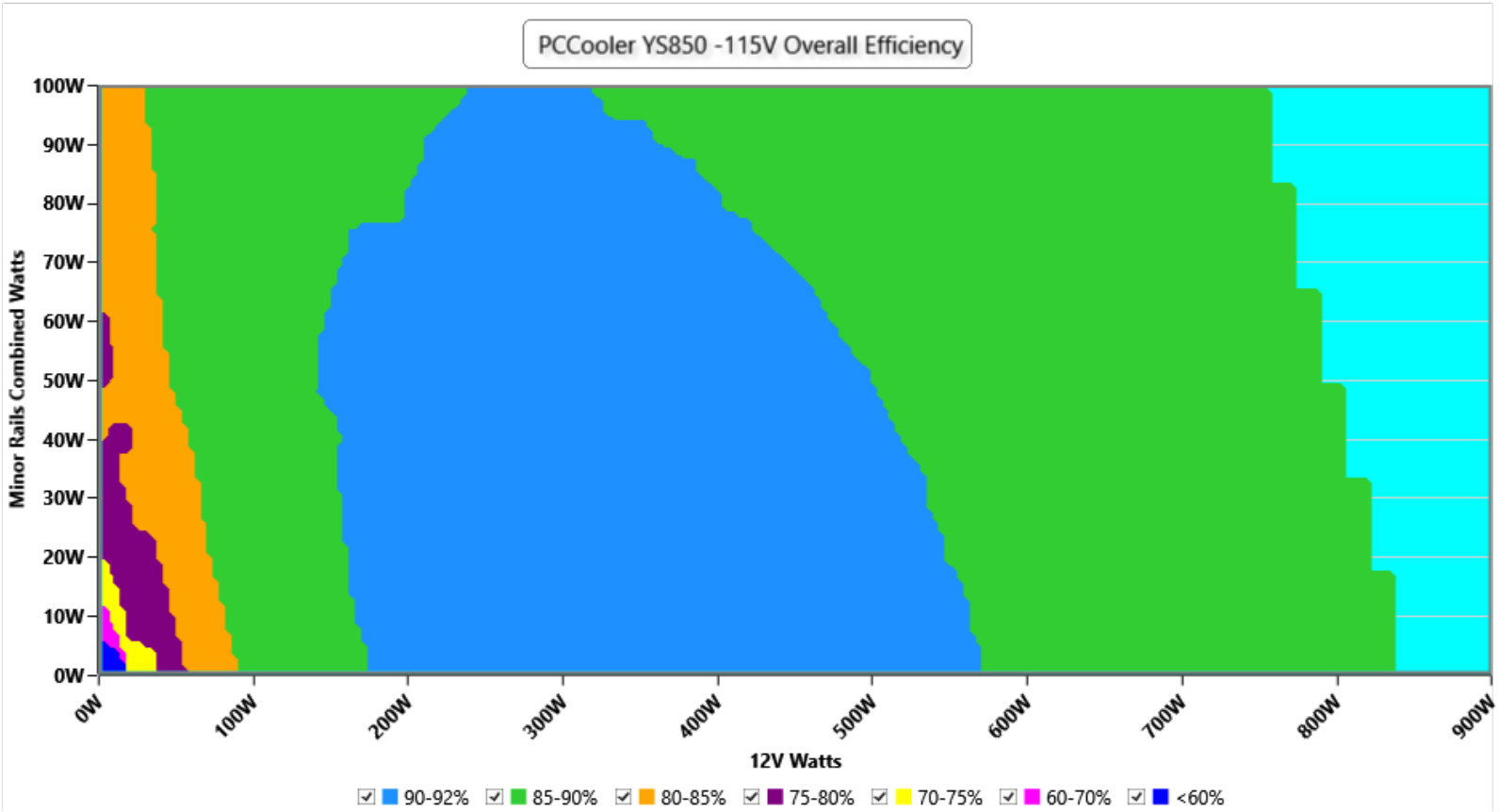
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	114.88 V	114.84 V	113.85 V	114.94 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.99 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.418	1.416	1.340	1.422	1.490	PASS
Mains Voltage THD:	0.15 %	0.09 %	N/A	0.27 %	2.00 %	PASS
Real Power:	0.054 W	-0.002 W	N/A	0.085 W	N/A	N/A
Apparent Power:	10.391 W	10.366 W	N/A	10.425 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	229.97 V	229.90 V	227.70 V	230.01 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:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.08 %	N/A	0.18 %	2.00 %	PASS
Real Power:	0.130 W	0.083 W	N/A	0.192 W	N/A	N/A
Apparent Power:	35.098 W	35.052 W	N/A	35.164 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

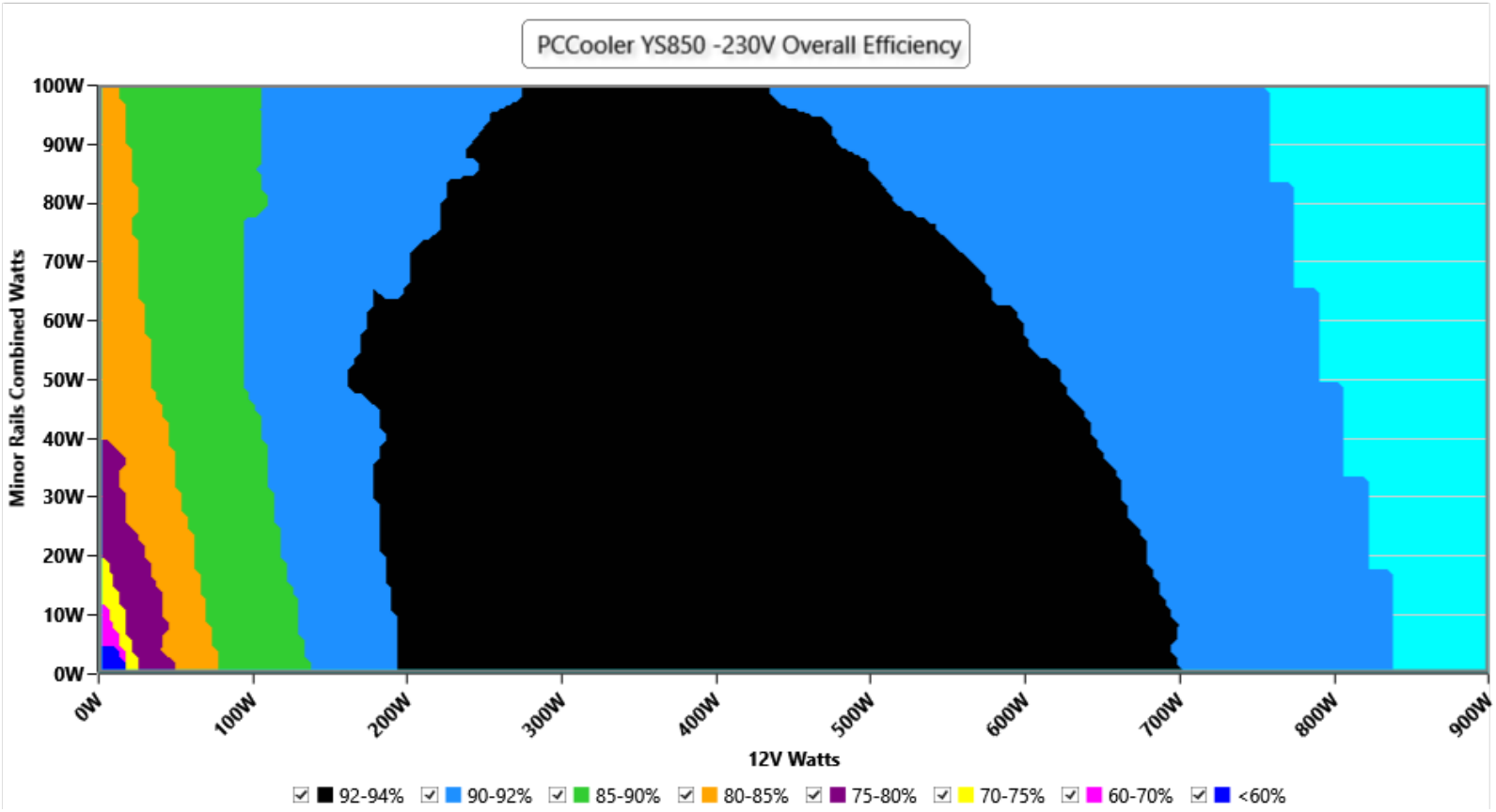
115V



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

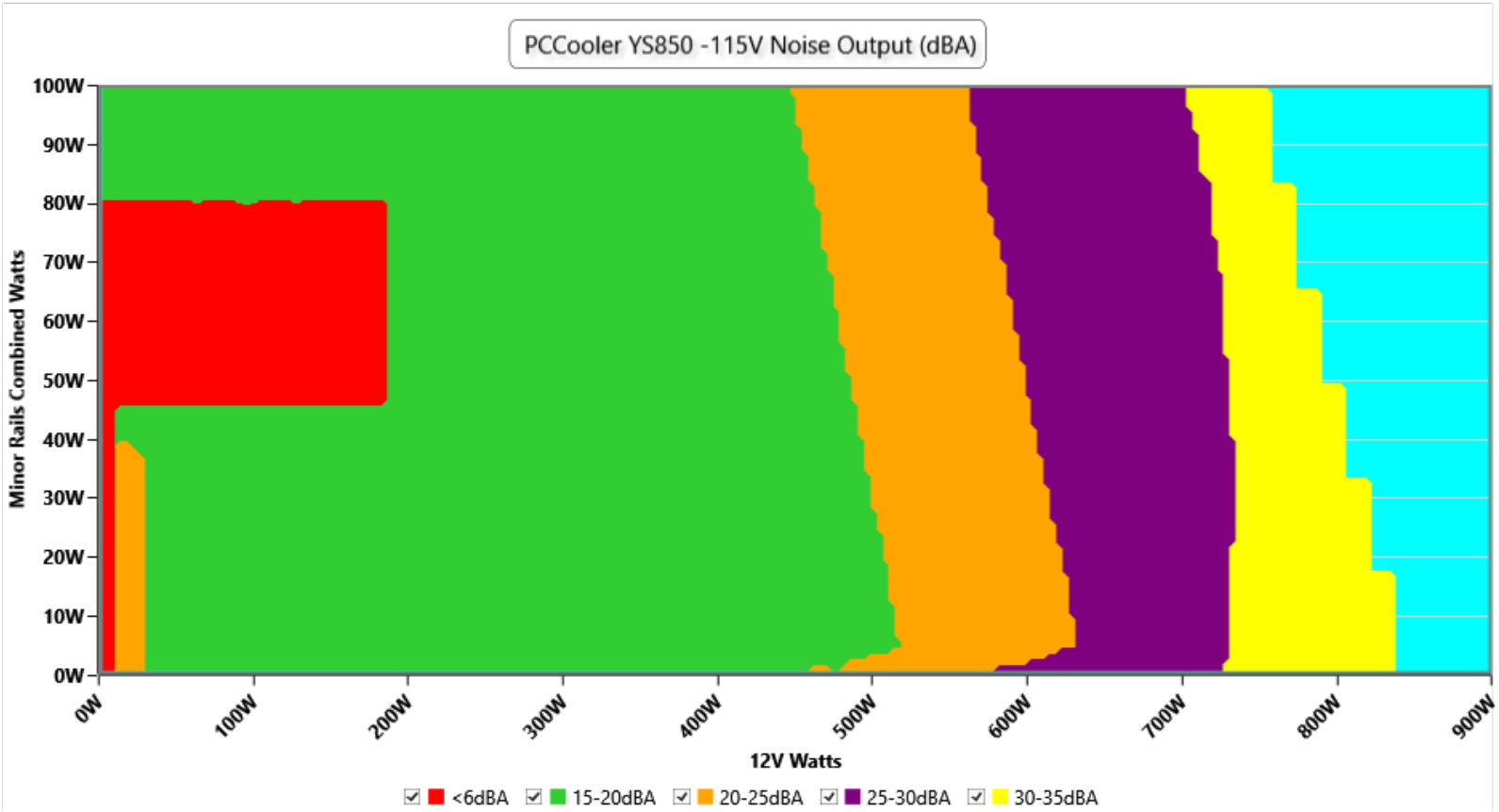


INFO

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Noise Graph

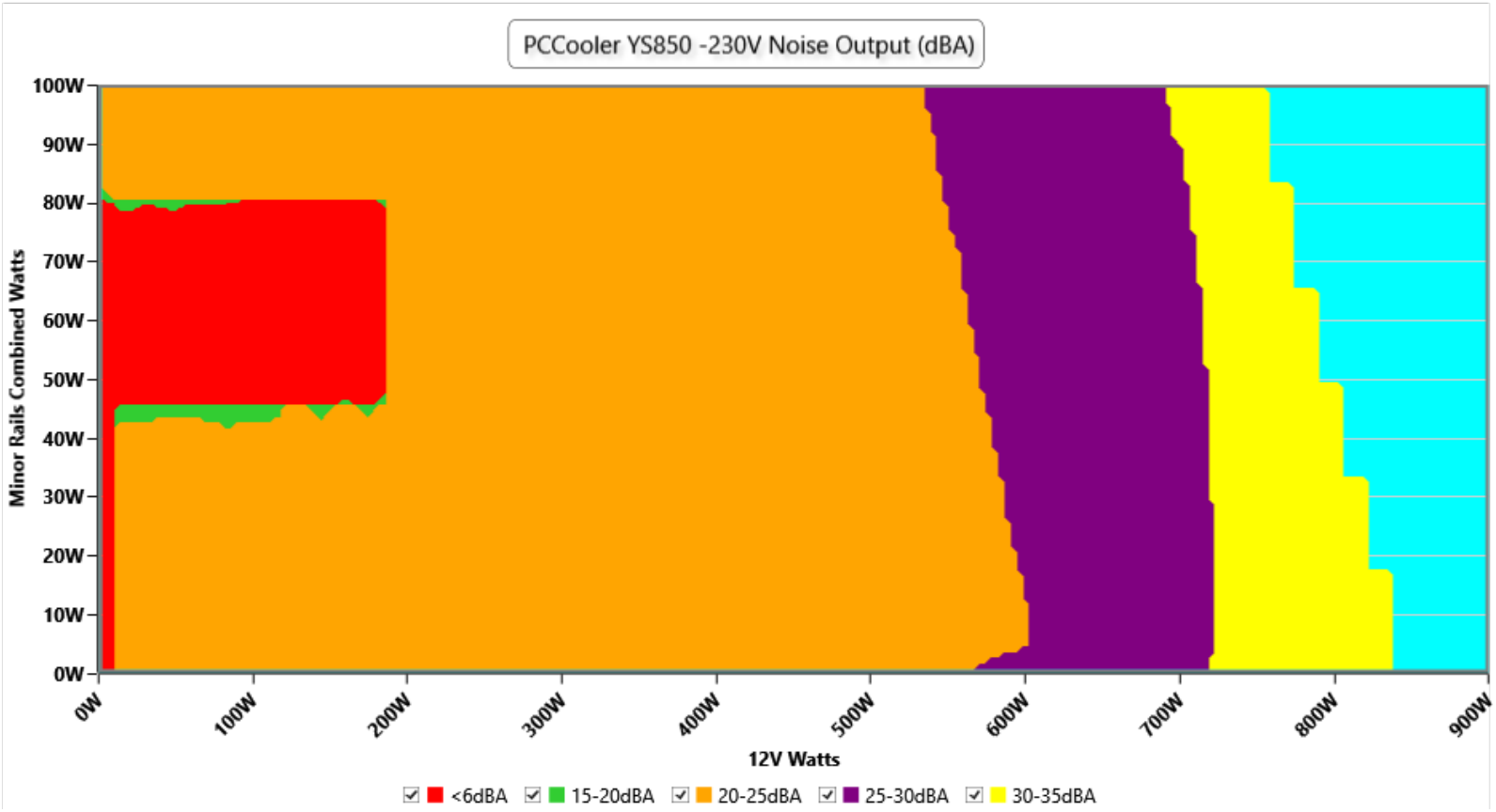
115V



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) · 44.7 °C	0 RPM · <6.0 dB(A) · 44.7 °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%	749 RPM · 21.1 dB(A) · 42.3 °C	749 RPM · 21.1 dB(A) · 42.3 °C	**+0.0 dB(A)**
100%	1461 RPM · 40.9 dB(A) · 45.1 °C	1461 RPM · 40.9 dB(A) · 45.1 °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) · 44.6 °C	0 RPM · <6.0 dB(A) · 44.6 °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%	749 RPM · 21.1 dB(A) · 42.4 °C	749 RPM · 21.1 dB(A) · 42.4 °C	**+0.0 dB(A)**
100%	1455 RPM · 40.9 dB(A) · 45.3 °C	1455 RPM · 40.9 dB(A) · 45.3 °C	**+0.0 dB(A)**

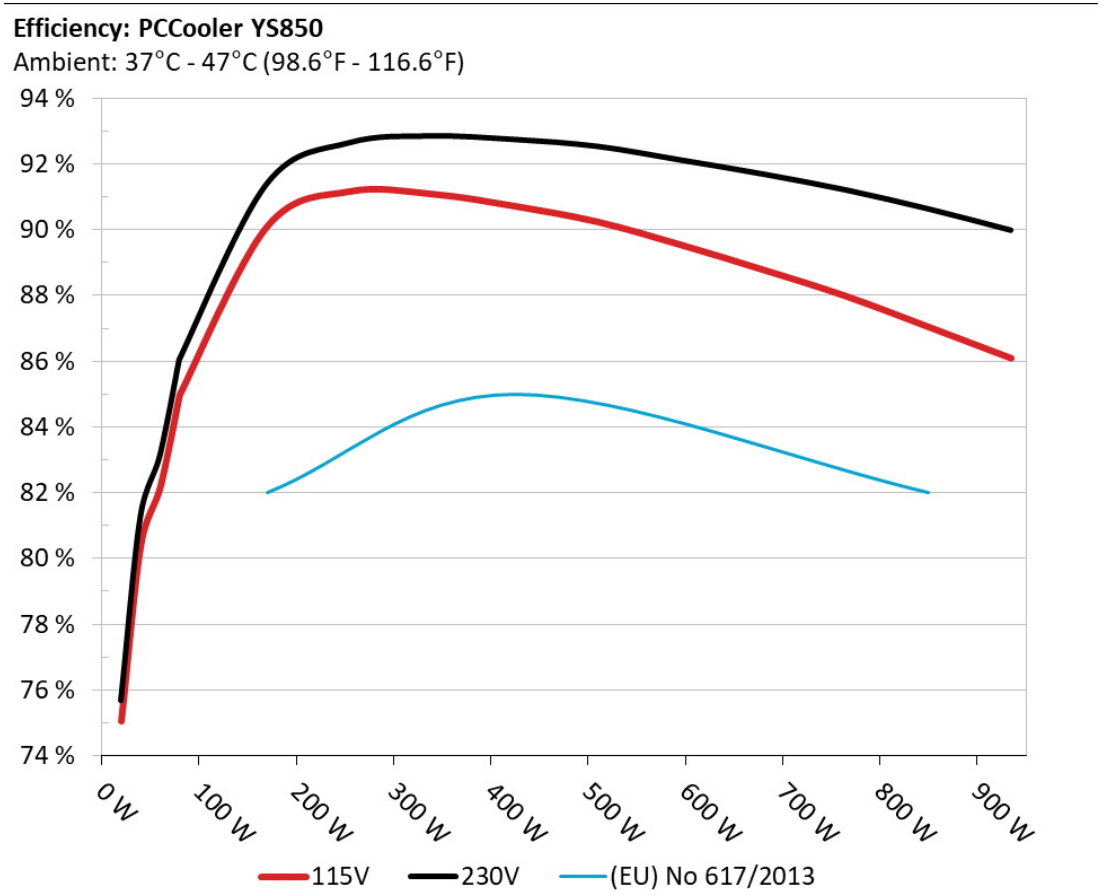
INFO

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, with the fan stopped; 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

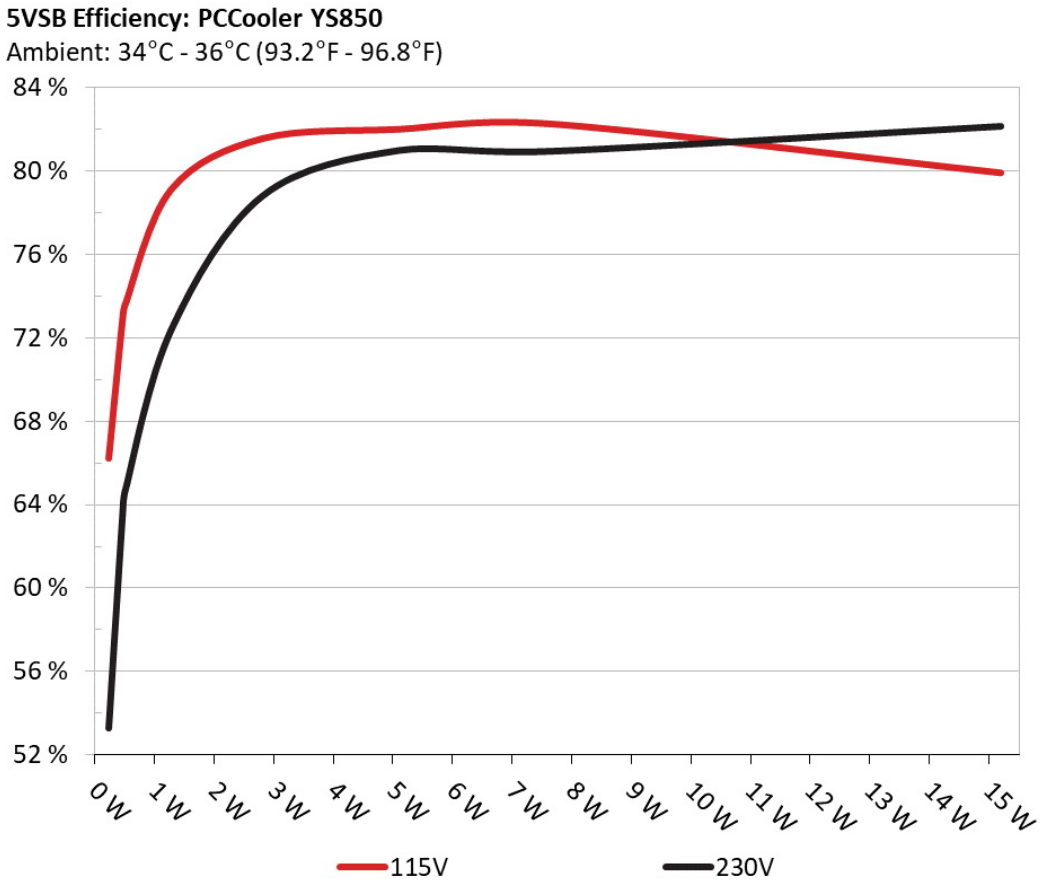
Efficiency under high ambient temperature



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	0.231W	66.216%	0.034
	5.131V	0.349W		114.87V
2	0.09A	0.462W	72.866%	0.061
	5.129V	0.634W		114.87V
3	0.55A	2.816W	81.55%	0.261
	5.12V	3.453W		114.87V
4	1A	5.11W	81.994%	0.355
	5.11V	6.232W		114.87V
5	1.5A	7.65W	82.247%	0.412
	5.1V	9.301W		114.87V
6	3A	15.199W	79.903%	0.486
	5.066V	19.021W		114.87V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.231W	53.284%	0.013
	5.131V	0.434W		229.95V
2	0.09A	0.462W	63.5%	0.021
	5.13V	0.728W		229.95V
3	0.55A	2.815W	78.822%	0.099
	5.119V	3.572W		229.95V
4	1A	5.11W	81.005%	0.164
	5.11V	6.308W		229.95V
5	1.5A	7.65W	80.962%	0.22
	5.1V	9.449W		229.95V
6	3A	15.205W	82.159%	0.327
	5.068V	18.504W		229.95V

Protection Features

OCP (Cold @ 26.6°C)	12V: 97.20A (138.86%), 12.151V 5V: 29.4A (147.00%), 4.974V 3.3V: 29.3A (146.50%), 3.303V 5VSB: 6.4A (213.33%), 4.992V
OCP (Hot @ 43.0°C)	12V: 95.60A (136.57%), 12.171V 5V: 29.3A (146.50%), 4.973V 3.3V: 29.3A (146.50%), 3.303V 5VSB: 6.4A (213.33%), 4.988V
OPP (Cold @ 26.9°C)	1200.58W (141.24%)
OPP (Hot @ 42.2°C)	1133.07W (133.30%)
OTP	✓ (135°C @ Heat Sink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Proper Operation
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%	5.214A	1.999A	1.986A	0.979A	84.998	84.982%	0	<6.0	44.67°C	0.953
	12.158V	5.003V	3.324V	5.106V	100.021				40.42°C	114.84V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20%	11.441A	3A	2.981A	1.177A	169.924	90.108%	0	<6.0	45.42°C	0.971
	12.151V	5V	3.321V	5.096V	188.575				40.86°C	114.81V
30%	18.024A	3.502A	3.481A	1.376A	254.925	91.172%	0	<6.0	46.29°C	0.978
	12.144V	4.998V	3.318V	5.087V	279.607				41.26°C	114.78V
40%	24.610A	4.003A	3.981A	1.576A	340.008	91.091%	753	21.2	41.84°C	0.981
	12.142V	4.996V	3.316V	5.078V	373.262				47.39°C	114.76V
50%	30.835A	5.006A	4.98A	1.776A	424.8	90.721%	749	21.1	42.29°C	0.983
	12.138V	4.995V	3.313V	5.068V	468.251				48.33°C	114.72V
60%	37.028A	6.01A	5.982A	1.977A	509.331	90.247%	745	20.9	42.81°C	0.984
	12.140V	4.992V	3.31V	5.058V	564.375				49.39°C	114.69V
70%	43.274A	7.016A	6.985A	2.179A	594.639	89.548%	858	25.4	43.16°C	0.985
	12.144V	4.989V	3.307V	5.048V	664.052				50.24°C	114.66V
80%	49.515A	8.002A	7.988A	2.282A	679.382	88.789%	1072	31.8	43.9°C	0.986
	12.149V	4.986V	3.304V	5.04V	765.169				51.93°C	114.63V
90%	56.149A	8.527A	8.479A	2.385A	764.919	87.982%	1215	35.8	44.22°C	0.987
	12.154V	4.984V	3.302V	5.032V	869.406				53.32°C	114.6V
100%	62.512A	9.032A	9.001A	2.992A	849.719	87.044%	1461	40.9	45.14°C	0.988
	12.158V	4.982V	3.299V	5.013V	976.195				55.22°C	114.55V
110%	68.754A	10.04A	10.1A	2.995A	934.305	86.098%	1801	47.0	46.86°C	0.989
	12.160V	4.98V	3.297V	5.008V	1085.166				57.79°C	114.53V
CL1	0.114A	12.068A	11.98A	0A	101.291	82.848%	755	21.3	39.99°C	0.961
	12.172V	4.988V	3.314V	5.119V	122.261				45.48°C	114.83V
CL2	0.114A	20.068A	0A	0A	101.366	81.855%	874	25.9	40.02°C	0.961
	12.171V	4.982V	3.323V	5.122V	123.833				47.12°C	114.83V
CL3	0.113A	0A	19.933A	0.001A	67.382	75.734%	893	26.5	40.65°C	0.95
	12.165V	5V	3.311V	5.119V	88.972				49.75°C	114.84V
CL4	69.928A	0A	0A	0A	849.498	87.903%	1237	36.6	45.46°C	0.987
	12.149V	4.995V	3.309V	5.085V	966.421				56.42°C	114.56V

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%	5.214A	1.999A	1.986A	0.979A	85	86.057%	0	<6.0	44.64°C	0.816
	12.160V	5.002V	3.323V	5.106V	98.772				40.38°C	229.94V
20%	11.440A	3.001A	2.982A	1.177A	169.932	91.411%	0	<6.0	45.26°C	0.905
	12.153V	4.999V	3.32V	5.096V	185.902				40.71°C	229.92V
30%	18.020A	3.502A	3.481A	1.376A	254.936	92.66%	0	<6.0	46.28°C	0.937
	12.146V	4.997V	3.318V	5.087V	275.134				41.25°C	229.91V
40%	24.606A	4.004A	3.981A	1.576A	340.019	92.863%	753	21.2	41.84°C	0.952
	12.144V	4.996V	3.315V	5.078V	366.151				47.35°C	229.9V
50%	30.833A	5.007A	4.981A	1.776A	424.826	92.757%	749	21.1	42.37°C	0.96
	12.140V	4.994V	3.313V	5.068V	457.998				48.38°C	229.88V
60%	37.025A	6.011A	5.982A	1.977A	509.353	92.549%	745	20.9	42.65°C	0.966
	12.142V	4.991V	3.31V	5.058V	550.356				49.22°C	229.87V
70%	43.270A	7.017A	6.986A	2.179A	594.659	92.134%	895	26.7	43.23°C	0.97
	12.146V	4.989V	3.307V	5.048V	645.437				50.25°C	229.86V
80%	49.519A	8.002A	7.989A	2.281A	679.391	91.707%	1052	31.3	43.73°C	0.973
	12.149V	4.986V	3.304V	5.041V	740.831				51.79°C	229.84V
90%	56.155A	8.528A	8.48A	2.384A	764.93	91.221%	1213	35.8	44.34°C	0.975
	12.152V	4.984V	3.302V	5.033V	838.546				53.38°C	229.83V
100%	62.520A	9.033A	9.002A	2.992A	849.728	90.644%	1455	40.9	45.31°C	0.977
	12.157V	4.982V	3.299V	5.014V	937.435				55.323°C	229.81V
110%	68.758A	10.041A	10.101A	2.995A	934.318	89.997%	1796	47.0	46.78°C	0.978
	12.159V	4.979V	3.296V	5.009V	1038.161				57.69°C	229.8V
CL1	0.114A	12.069A	11.981A	0A	101.292	83.81%	755	21.3	40.49°C	0.85
	12.173V	4.988V	3.313V	5.119V	120.864				45.91°C	229.94V
CL2	0.114A	20.067A	0A	0A	101.36	82.835%	874	25.9	40.05°C	0.852
	12.171V	4.982V	3.323V	5.122V	122.364				47.06°C	229.94V
CL3	0.113A	0A	19.933A	0.001A	67.382	76.502%	892	26.5	40.65°C	0.794
	12.165V	5V	3.311V	5.119V	88.074				49.75°C	229.95V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL4	69.932A	0A	0A	0A	849.497	91.337%	1237	36.6	45.49°C	0.977
	12.148V	4.995V	3.309V	5.085V	930.073				56.45°C	229.81V

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	1.230A	0.499A	0.496A	0.195A	19.993	75.053%	0	<6.0	40.01°C	0.834
	12.062V	5.009V	3.327V	5.126V	26.637				36.94°C	114.87V
40W	2.712A	0.699A	0.694A	0.293A	39.994	80.41%	0	<6.0	40.83°C	0.914
	12.055V	5.008V	3.326V	5.123V	49.737				37.5°C	114.86V
60W	4.158A	0.899A	0.893A	0.391A	59.994	82.172%	0	<6.0	42.19°C	0.94
	12.151V	5.006V	3.326V	5.12V	73.013				38.37°C	114.85V
80W	5.620A	1.099A	1.092A	0.489A	79.932	84.945%	0	<6.0	43.19°C	0.952
	12.155V	5.005V	3.325V	5.117V	94.098				39.21°C	114.85V

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	0.499A	0.496A	0.195A	19.995	75.682%	0	<6.0	39.79°C	0.475
	12.064V	5.008V	3.327V	5.126V	26.416				36.76°C	229.95V
40W	2.712A	0.699A	0.694A	0.293A	39.996	81.278%	0	<6.0	40.79°C	0.654
	12.055V	5.007V	3.326V	5.123V	49.209				37.5°C	229.95V
60W	4.158A	0.899A	0.893A	0.391A	59.996	83.131%	0	<6.0	42.04°C	0.75
	12.149V	5.006V	3.325V	5.12V	72.168				38.55°C	229.94V
80W	5.620A	1.099A	1.092A	0.489A	79.937	85.949%	0	<6.0	42.98°C	0.805
	12.156V	5.004V	3.325V	5.117V	93.002				39.14°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	14.18mV	16.38mV	16.19mV	14.09mV	Pass
20% Load	31.59mV	13.09mV	13.86mV	11.00mV	Pass
30% Load	21.77mV	13.39mV	13.81mV	10.89mV	Pass
40% Load	15.72mV	14.01mV	13.96mV	22.71mV	Pass
50% Load	15.83mV	14.73mV	14.27mV	22.30mV	Pass
60% Load	14.69mV	14.01mV	14.12mV	21.68mV	Pass
70% Load	15.67mV	14.99mV	14.79mV	22.45mV	Pass
80% Load	15.57mV	15.56mV	17.01mV	22.35mV	Pass
90% Load	16.65mV	17.11mV	17.74mV	23.59mV	Pass
100% Load	26.02mV	18.93mV	18.94mV	25.18mV	Pass
110% Load	27.01mV	18.51mV	20.47mV	24.99mV	Pass
Crossload1	13.81mV	19.30mV	18.31mV	26.64mV	Pass
Crossload2	15.47mV	24.16mV	19.55mV	24.67mV	Pass
Crossload3	14.33mV	18.96mV	18.77mV	24.73mV	Pass
Crossload4	25.49mV	17.81mV	16.95mV	24.56mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	14.28mV	16.95mV	16.60mV	13.63mV	Pass
20% Load	36.44mV	13.50mV	13.86mV	10.48mV	Pass
30% Load	24.92mV	13.75mV	14.07mV	10.43mV	Pass
40% Load	16.46mV	15.46mV	13.75mV	21.01mV	Pass
50% Load	14.45mV	14.42mV	13.86mV	21.58mV	Pass
60% Load	15.16mV	14.63mV	14.89mV	21.73mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	16.50mV	15.35mV	16.55mV	21.52mV	Pass
80% Load	15.88mV	16.17mV	17.37mV	22.04mV	Pass
90% Load	16.57mV	17.05mV	17.01mV	21.52mV	Pass
100% Load	27.00mV	19.37mV	18.06mV	25.52mV	Pass
110% Load	29.55mV	18.29mV	19.48mV	24.71mV	Pass
Crossload1	13.92mV	19.46mV	19.58mV	27.39mV	Pass
Crossload2	14.49mV	23.39mV	18.98mV	24.98mV	Pass
Crossload3	13.51mV	17.67mV	18.98mV	24.36mV	Pass
Crossload4	27.67mV	18.53mV	17.24mV	23.71mV	Pass

The results above are not used in the certification process

CPS PCCooler YS850



Top side



Power specifications label