ASRock Steel Legend SL-850G / SL-850GW

Serial Number

Lab ID AR85002548

Certification ID 252548

Test Result Report ID: 24PS2548A

Certificate Issue Date: Aug 24, 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	ASRock
Model	Steel Legend SL-850G / SL-850GW
OEM/ODM	HEC
Serial Number	
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	5-10

Rated Frequency (Hz)	50-60
Rated Power (W)	850
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	135mm Fluid Dynamic Bearing Fan (S1352512EH-3M)
Semi-Passive Operation	✓ (selectable)
Cybenetics Testing Information	
Lab ID	AR85002548
Date of receipt	Aug 9, 2024
Testing Date	Aug 24, 2024
Report Issued Date	Aug 24, 2024
DUT Notes	The result apply to both the black and white models.
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	18AWG	No
4+4 pin EPS12V (640mm)	2	2	18AWG	No
6+2 pin PCIe (590mm+140mm)	2	4	18AWG	No
6+2 pin PCIe (590mm)	1	1	18AWG	No
12+4 pin PCIe (645mm) (600W)	1	1	16-24AWG	No
SATA (450mm+120mm+120mm)	3	9	18AWG	No

4-pin Molex (440mm+110mm+110mm)	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	70.9	3	0.3
	Watts	120		850	15	3.6
Total Max. Power (W)		850				

Parts Description

General Data	
Manufacturer (OEM)	HEC
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 3x X caps, 2x CM chokes, 1x MOV, 1x Power IntegrationsCAP200DG (X capacitor Discharge IC)
Inrush Protection	1x NTC Thermistor 5D-15 (5 Ohm @25°C) & Relay
Bridge Rectifier(s)	2x GBU15K (800V, 15A)
APFC MOSFETs	2x Infineon IPA60R099P7 (650V, 20A @ 100°C, Rds(on): 0.099Ohm)
APFC Boost Diode	1x CREE C6D10065A (650V, 10A @ 155°C)

Bulk Cap(s)	1x Nippon Chemi-Con (400V, 560uF, 2000h @ 105°C, KMR)
Main Switchers	2x Infineon IPA60R120P7 (650V, 16A @ 100°C, Rds(on): 0.120Ohm)
APFC Controller	1x Champion CM6500UNX & 1x Champion CM03X
Resonant Controller	1x Champion CM6901T6X
Topology	Primary side: APFC, Half-Bridge & LLC Resonant converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	No info
5V & 3.3V	DC-DC Converters: 2x Potens PDC39F2BX (30V, 76A @ 100°C, Rds(on): 2.95mOhm) PWM Controller(s): 1x ANPECAPW7159C
Filtering Capacitors	Electrolytic: 2x Nippon Chemi-con (2-5,000 @ 105°C, KZE) 2x Rubycon (2-10,000 @ 105°C, YXF), 2x Rubycon (3-6,000 @ 105°C, YXG), 1x Rubycon (4-10,000 @ 105°C, YXJ), 3x Rubycon (6-10,000 @ 105°C, ZLH), 1x Rubycon (6-10,000 @ 105°C, YXH) Polymer: 31x Nippon Chemi-con
Supervisor IC	Weltrend WT7527RT (OCP, OVP, UVP, SCP, PG)
Fan Model	Nuvoton MS51FBAE
Fan Model	RL4Z S1352512EH-3M (135mm, 12V, 0.50A, Fluid Dynamic Bearing Fan)
5VSB/12VSB Circuit	
Rectifier	1x PXY PS1060L (60V, 10A)
Standby PWM Controller	Excelliance MOS EM85690

Test Results

Temperature & Compliance Info

Temperature Range (°C /°F)	28-32 / 82.4-89.6
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓
ALPM (Alternative Low Power Mode) compatible	✓
ATX v3.1 PSU Power Excursion	✓

Performance Summary

115V

Accredited	
Average Efficiency (>1450 load combinations)	89.823%
Average Noise Output (>1450 Load Combinations)	18.27dBA
Average PF (>1450 Load Combinations)	0.982
Efficiency With 10W (≤500W) or 2% (>500W) Load	70.773%
Standby Power Consumption	0.0556W
Non-Accredited	
12V Ripple (Full Load)	44.38mV
5V Ripple (Full Load)	16.97mV
3.3V Ripple (Full Load)	17.24mV
5VSB Ripple (Full Load)	18.29mV
12V Load Regulation	0.36%
5V Load Regulation	0.42%
3.3V Load Regulation	0.74%
5VSB Load Regulation	2.33%
Inrush Current	33.530A

230V

Accredited	
Average Efficiency (>1450 load combinations)	91.931%
Average Noise Output (>1450 Load Combinations)	17.54dBA
Average PF (>1450 Load Combinations)	0.944
Efficiency With 10W (≤500W) or 2% (>500W) Load	72.136%
Standby Power Consumption	0.1105W
Non-Accredited	
12V Ripple (Full Load)	46.46mV
5V Ripple (Full Load)	17.19mV
3.3V Ripple (Full Load)	16.66mV

5VSB Ripple (Full Load)		17.94mV
12V Load Regulation		0.41%
5V Load Regulation		0.46%
3.3V Load Regulation		0.74%
5VSB Load Regulation		2.37%
Inrush Current		65.710A
12V Transient Response (200%)		11.48V
5V Transient Response (200%)		4.979V
3.3V Transient Response (200%)		3.152V
5VSB Transient Response (200%)		4.960V
Hold-Up Time & PWR_OK Signal		18.20ms
AC Loss to PWR_OK Hold Up Time		15.70ms
PWR_OK Inactive to DC Loss Delay		2.50ms
PSU Timings: T1 (20% / 100%)	53.0ms	53.0ms
PSU Timings: T3 (20% / 100%)	123.0ms	123.0ms
12V OCP (29.0°C / 41.4°C)	85.60A (120.73%), 12.139V	84.20A (118.76%), 12.155V
5V OCP (29.0°C / 41.4°C)	31A (155.00%), 5.049V	30.4A (152.00%), 5.05V
3.3V OCP (29.0°C / 41.4°C)	30.1A (150.50%), 3.243V	29.4A (147.00%), 3.243V
5VSB OCP (29.0°C / 41.4°C)	4.1A (136.67%), 5.051V	4A (133.33%), 5.055V
OPP (27.93°C / 44.99°C)	123.84%	121.73%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	18.2
AC Loss to PWR_OK Hold Up Time (ms)	15.7
PWR_OK Inactive to DC Loss Delay (ms)	2.5

Vampire Power

Tables

115V

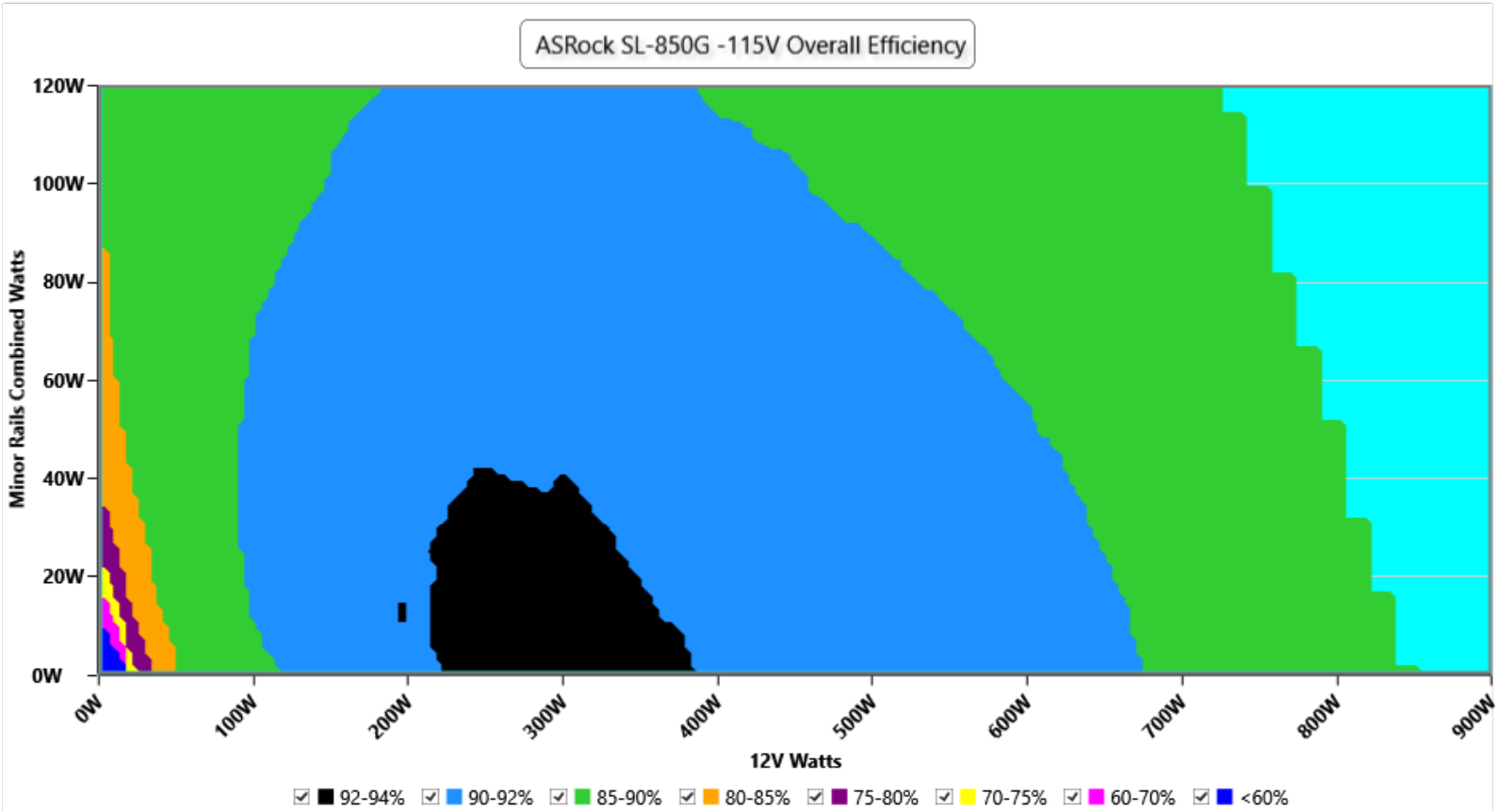
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.09 V	115.05 V	113.85 V	115.13 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.94 Hz	59.40 Hz	60.02 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.08 %	N/A	0.19 %	2.00 %	PASS
Real Power:	0.056 W	-0.004 W	N/A	0.090 W	N/A	N/A
Apparent Power:	9.964 W	9.903 W	N/A	10.028 W	N/A	N/A
Power Factor:	0.005	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	231.05 V	230.95 V	227.70 V	231.11 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	49.99 Hz	49.50 Hz	50.01 Hz	50.50 Hz	PASS
Mains Voltage CF:	1.417	1.417	1.340	1.419	1.490	PASS
Mains Voltage THD:	0.17 %	0.15 %	N/A	0.26 %	2.00 %	PASS
Real Power:	0.110 W	0.065 W	N/A	0.167 W	N/A	N/A
Apparent Power:	34.258 W	34.005 W	N/A	34.501 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

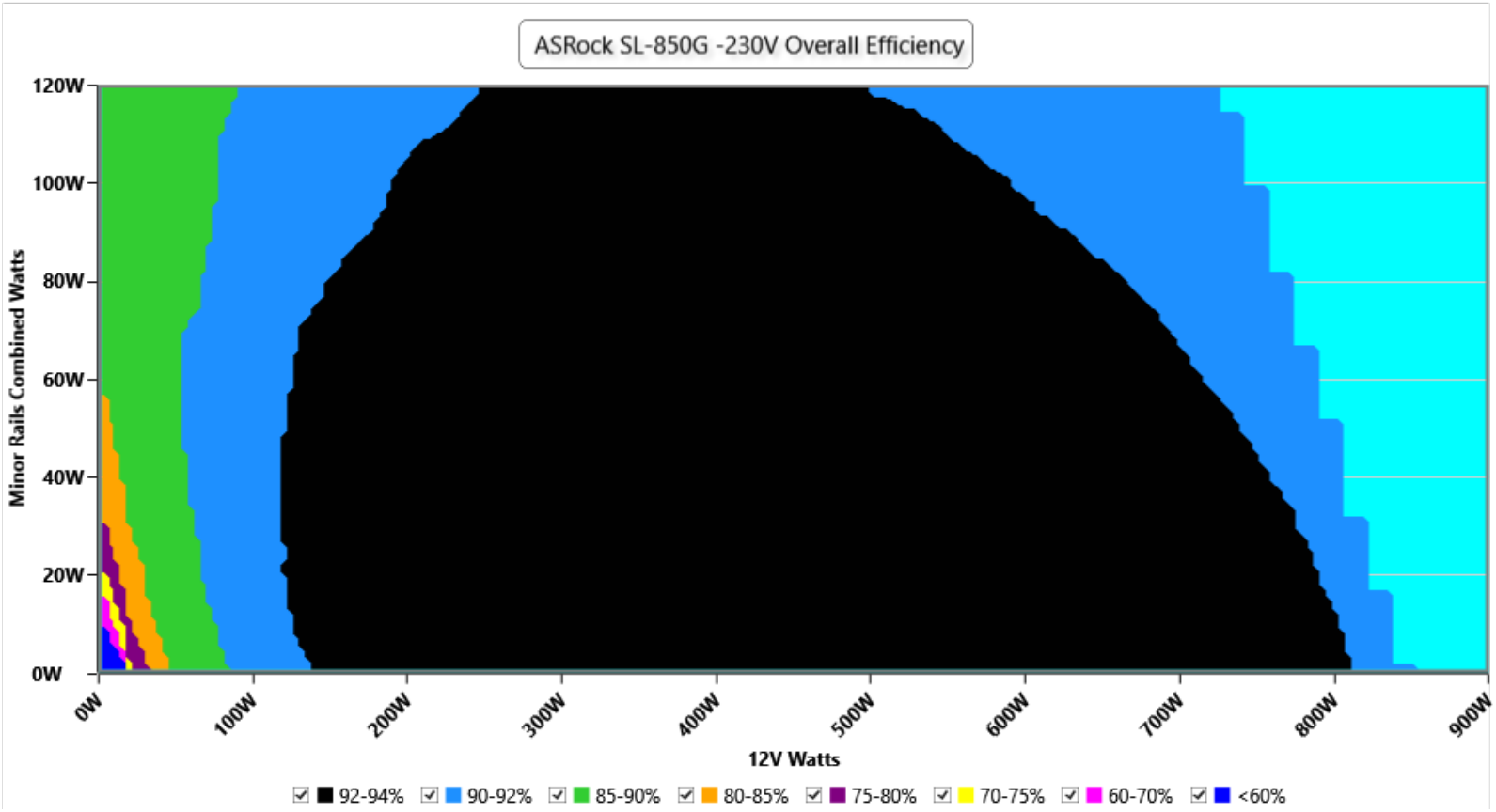
115V



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

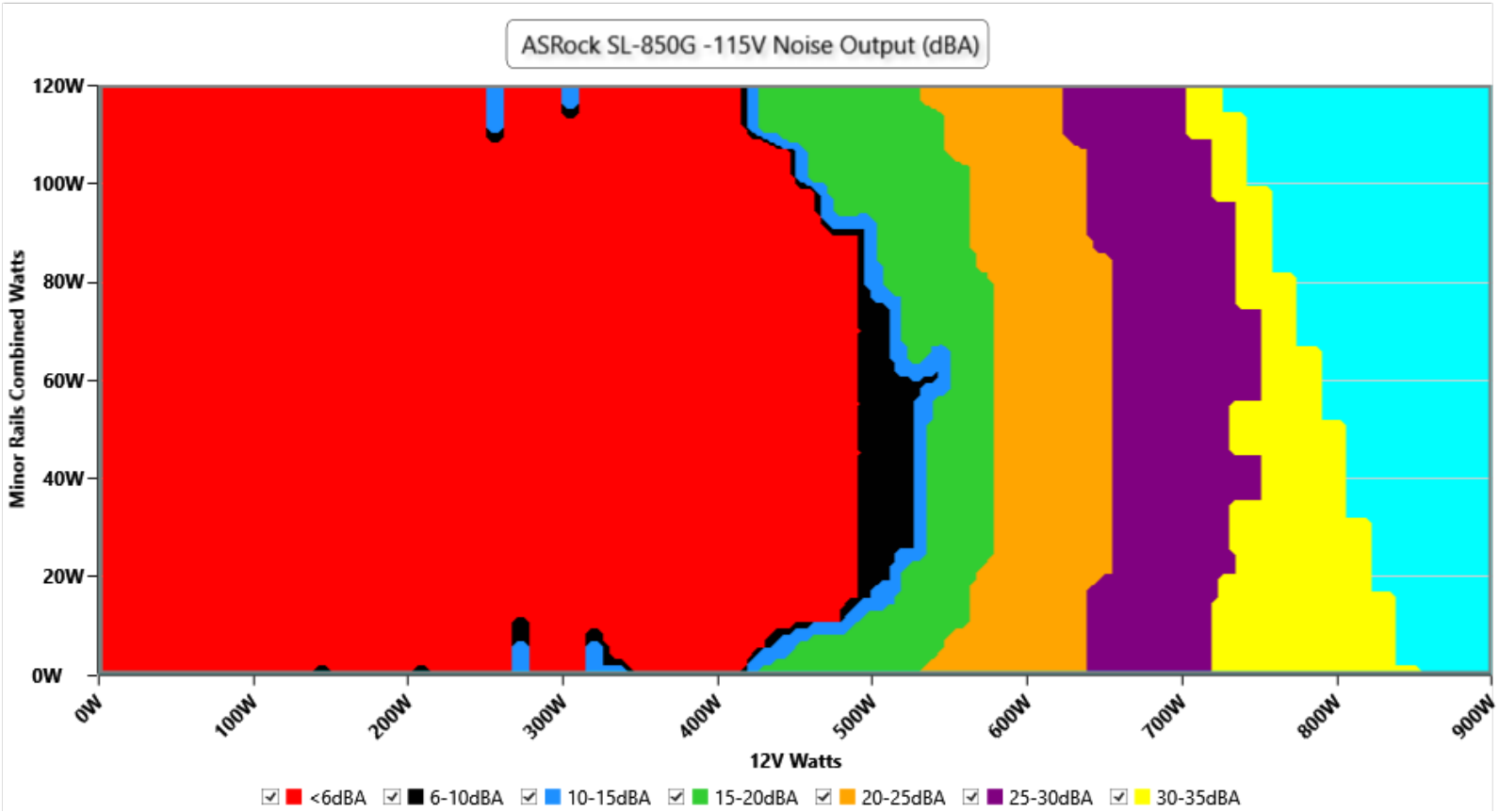


INFO

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

Noise Graph

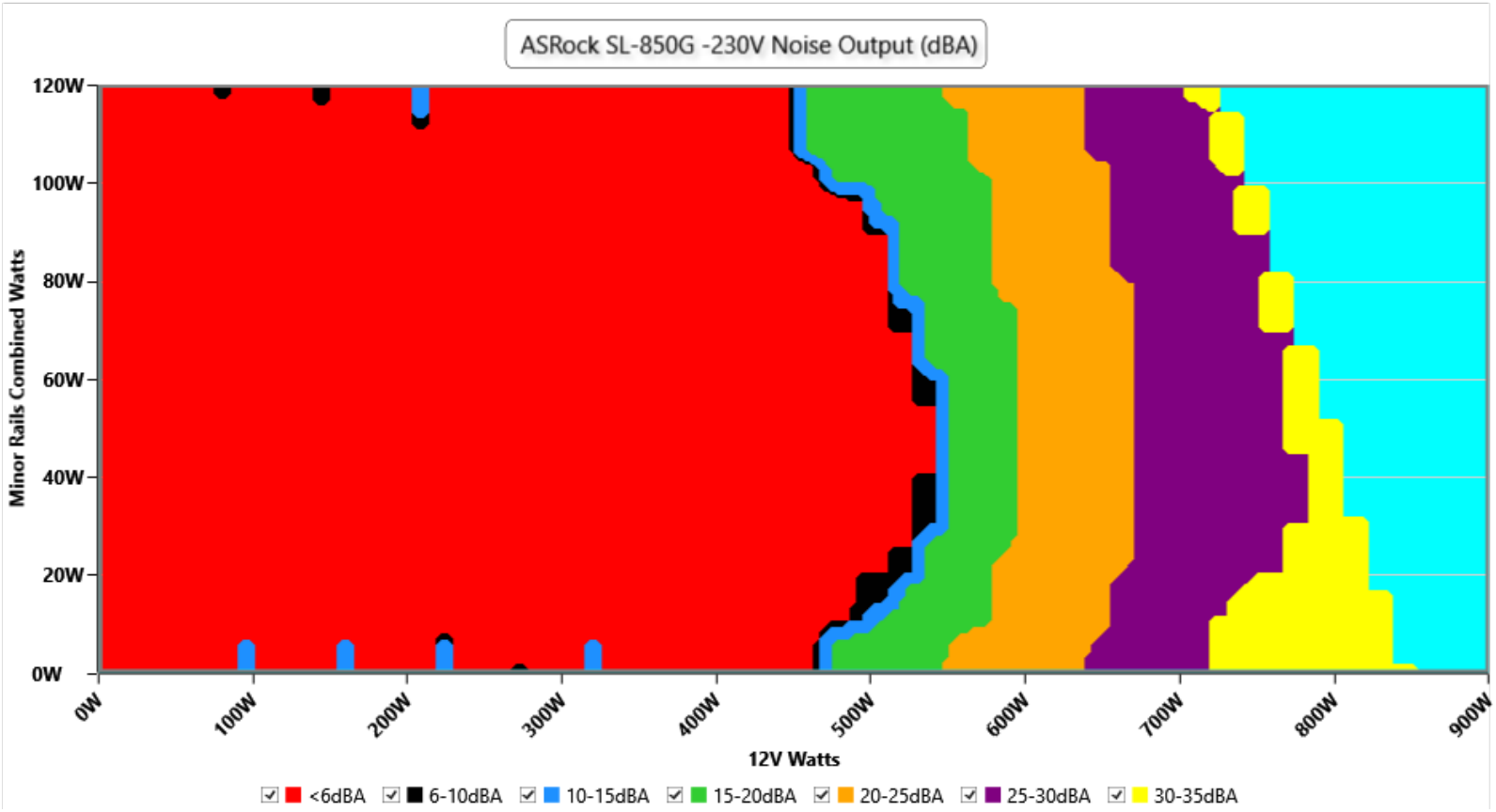
115V



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) · 32.0 °C	0 RPM · <6.0 dB(A) · 48.9 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 34.8 °C	0 RPM · <6.0 dB(A) · 48.2 °C	fan off in both
50%	436 RPM · <6.0 dB(A) · 29.7 °C	447 RPM · <6.0 dB(A) · 42.2 °C	fan off in both
100%	1048 RPM · 25.8 dB(A) · 30.5 °C	1679 RPM · 39.5 dB(A) · 45.5 °C	**+13.7 dB(A)**

230V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 35.2 °C	0 RPM · <6.0 dB(A) · 48.0 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 34.3 °C	0 RPM · <6.0 dB(A) · 48.8 °C	fan off in both
50%	431 RPM · <6.0 dB(A) · 31.5 °C	450 RPM · <6.0 dB(A) · 42.4 °C	fan off in both
100%	943 RPM · 21.4 dB(A) · 30.6 °C	1680 RPM · 39.6 dB(A) · 45.4 °C	**+18.2 dB(A)**

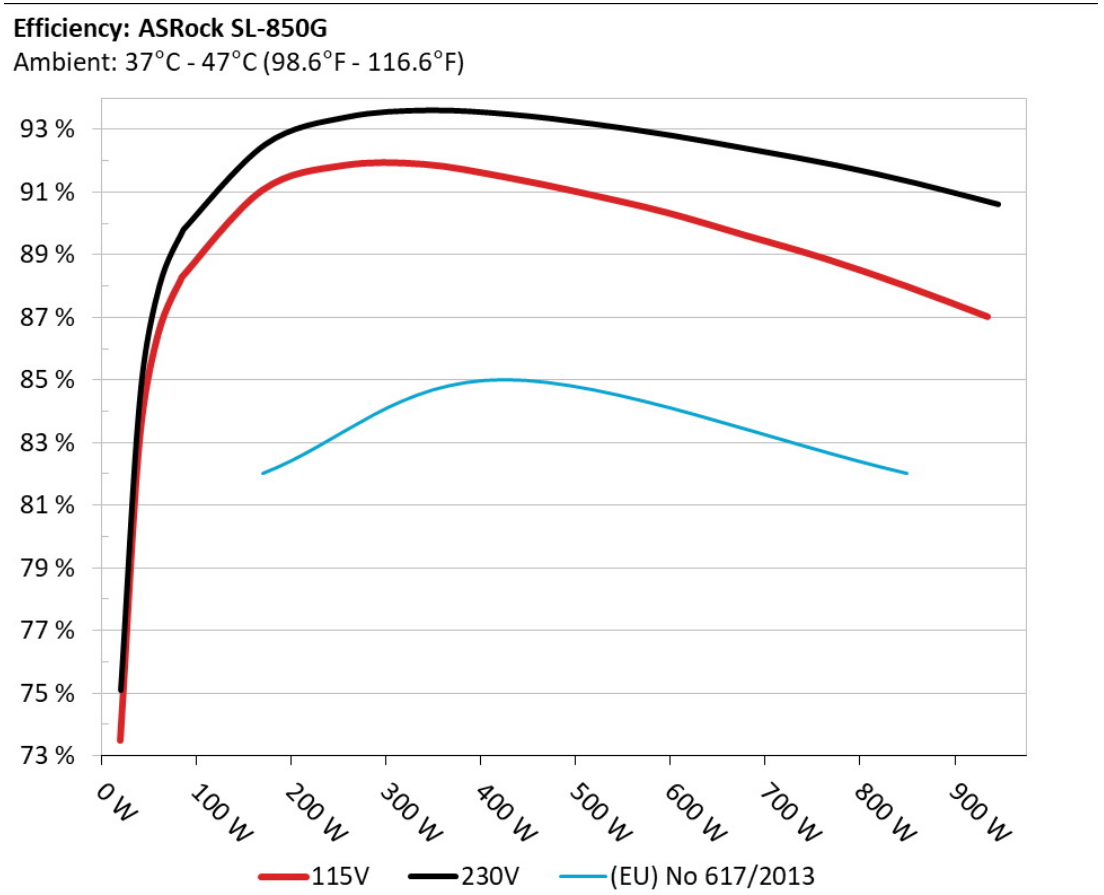
INFO

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

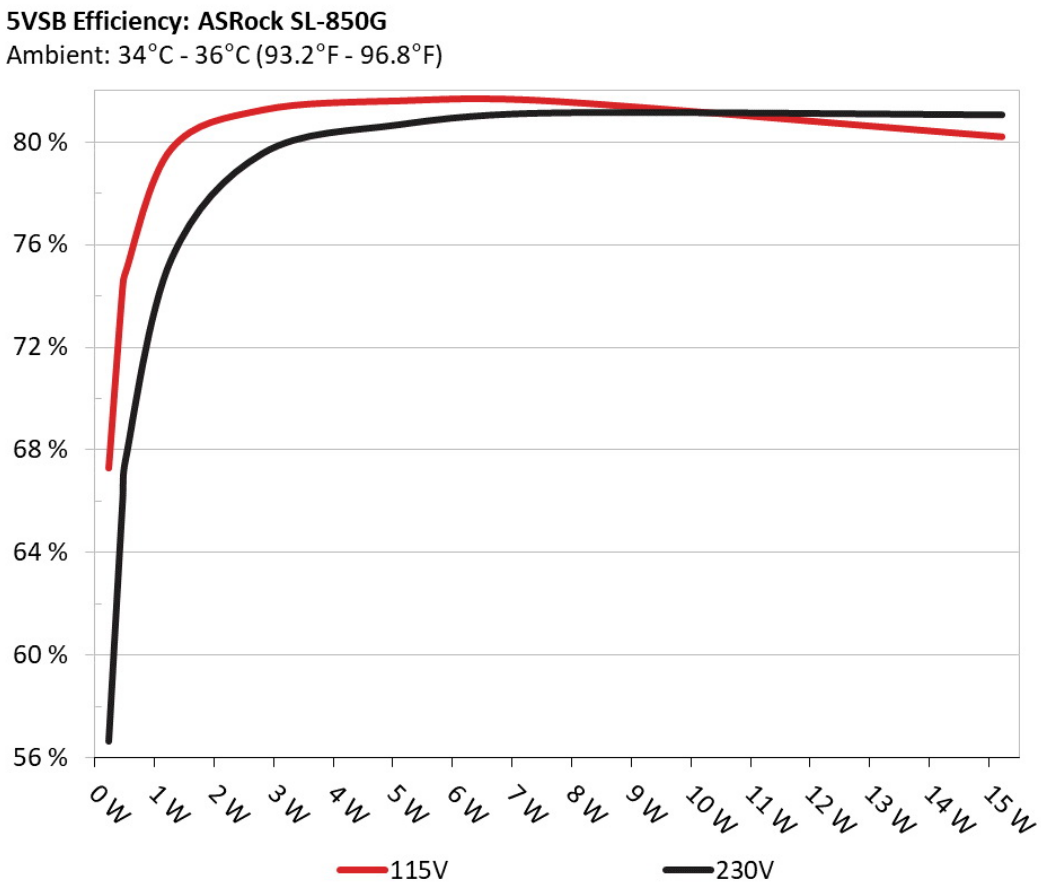
Efficiency under high ambient temperature



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	67.299%	0.033
	5.136V	0.343W		114.92V
2	**0.09A**	0.462W	74.31%	0.06
	5.134V	0.622W		114.92V
3	**0.55A**	2.818W	81.257%	0.264
	5.125V	3.468W		114.92V
4	**1A**	5.115W	81.61%	0.349
	5.115V	6.267W		114.91V
5	**1.5A**	7.659W	81.599%	0.412
	5.105V	9.386W		114.92V
6	**3A**	15.222W	80.212%	0.487
	5.075V	18.977W		114.9V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.231W	56.659%	0.012
	5.136V	0.409W		229.9V
2	**0.09A**	0.462W	65.987%	0.02
	5.135V	0.701W		229.91V
3	**0.55A**	2.818W	79.548%	0.098
	5.125V	3.543W		229.88V
4	**1A**	5.115W	80.663%	0.164
	5.116V	6.342W		229.89V
5	**1.5A**	7.658W	81.118%	0.204
	5.106V	9.439W		229.88V
6	**2.999A**	15.223W	81.043%	0.318
	5.076V	18.783W		229.89V

Protection Features

OCP (Normal @ 29.0°C)	12V: 85.60A (120.73%), 12.139V 5V: 31A (155.00%), 5.049V 3.3V: 30.1A (150.50%), 3.243V 5VSB: 4.1A (136.67%), 5.051V
OCP (Hot) @ 41.4°C)	12V: 84.20A (118.76%), 12.155V 5V: 30.4A (152.00%), 5.05V 3.3V: 29.4A (147.00%), 3.243V 5VSB: 4A (133.33%), 5.055V
OPP (Normal @ 27.9°C)	1052.66W (123.84%)
OPP (Hot @ 45.0°C)	1034.70W (121.73%)
OTP	✓ (110°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%	**5.199A**	**1.971A**	**2.02A**	**0.978A**	85.005	88.285%	0	<6.0	48.94°C	0.968
	12.195V	5.074V	3.267V	5.114V	96.283				40.45°C	114.89V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20%	**11.406A**	**2.957A**	**3.033A**	**1.176A**	169.951	91.063%	0	<6.0	48.18°C	0.973
	12.191V	5.072V	3.265V	5.104V	186.631				40.54°C	114.86V
30%	**17.963A**	**3.452A**	**3.54A**	**1.374A**	254.962	91.847%	0	<6.0	51.42°C	0.974
	12.186V	5.071V	3.263V	5.095V	277.593				41.26°C	114.83V
40%	**24.529A**	**3.946A**	**4.048A**	**1.573A**	340.055	91.888%	0	<6.0	52.66°C	0.979
	12.183V	5.069V	3.261V	5.085V	370.073				41.84°C	114.81V
50%	**30.742A**	**4.935A**	**5.065A**	**1.774A**	424.906	91.482%	447	<6.0	42.15°C	0.983
	12.179V	5.066V	3.258V	5.075V	464.468				50.44°C	114.77V
60%	**36.934A**	**5.925A**	**6.083A**	**1.975A**	509.433	90.957%	861	19	42.81°C	0.987
	12.174V	5.064V	3.255V	5.064V	560.081				49.79°C	114.74V
70%	**43.199A**	**6.917A**	**7.103A**	**2.177A**	594.73	90.356%	962	22.1	43.26°C	0.989
	12.167V	5.061V	3.253V	5.054V	658.211				50.3°C	114.71V
80%	**49.471A**	**7.907A**	**8.124A**	**2.28A**	679.573	89.611%	1133	25	43.63°C	0.991
	12.162V	5.058V	3.25V	5.045V	758.359				51.19°C	114.67V
90%	**56.141A**	**8.404A**	**8.621A**	**2.383A**	765.007	88.855%	1428	34.9	44.06°C	0.993
	12.157V	5.056V	3.248V	5.037V	860.963				51.85°C	114.64V
100%	**62.551A**	**8.901A**	**9.15A**	**2.989A**	849.807	87.98%	1679	39.5	45.47°C	0.994
	12.152V	5.055V	3.246V	5.018V	965.912				53.04°C	114.6V
110%	**68.834A**	**9.896A**	**10.268A**	**2.993A**	934.374	87.02%	1925	44.3	46.68°C	0.995
	12.147V	5.052V	3.243V	5.011V	1073.751				54.96°C	114.56V
CL1	**0.115A**	**14.276A**	**14.69A**	**0A**	121.301	84.436%	1179	29.3	40.35°C	0.978
	12.200V	5.057V	3.247V	5.125V	143.657				47.39°C	114.87V
CL2	**0.115A**	**19.762A**	**0A**	**0A**	101.362	83.426%	1177	29.3	40.5°C	0.974
	12.200V	5.059V	3.26V	5.13V	121.499				45.46°C	114.87V
CL3	**0.114A**	**0A**	**20.316A**	**0A**	67.399	78.796%	640	7.6	40.15°C	0.965
	12.198V	5.069V	3.249V	5.13V	85.538				45.41°C	114.89V
CL4	**69.903A**	**0A**	**0A**	**0A**	849.57	88.803%	1475	36.2	45.21°C	0.994
	12.154V	5.067V	3.26V	5.089V	956.699				51.21°C	114.61V

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%	**5.280A**	**2A**	**2A**	**1A**	86.223	89.795%	0	<6.0	48.02°C	0.835
	12.201V	5.074V	3.267V	5.115V	96.023				40.26°C	229.88V
20%	**11.600A**	**3A**	**3A**	**1.2A**	172.614	92.514%	0	<6.0	48.81°C	0.917
	12.196V	5.072V	3.265V	5.104V	186.582				40.73°C	229.87V
30%	**18.242A**	**3.5A**	**3.5A**	**1.4A**	258.688	93.386%	0	<6.0	52.6°C	0.94
	12.191V	5.071V	3.263V	5.095V	277.009				41.28°C	229.85V
40%	**24.908A**	**4A**	**4A**	**1.6A**	345	93.602%	0	<6.0	51.75°C	0.952
	12.187V	5.069V	3.261V	5.084V	368.583				41.95°C	229.83V
50%	**31.206A**	**5.001A**	**5.001A**	**1.8A**	430.902	93.472%	450	<6.0	42.39°C	0.96
	12.182V	5.066V	3.258V	5.074V	460.997				50.04°C	229.82V
60%	**37.530A**	**5.999A**	**6A**	**2A**	516.936	93.171%	864	19.1	42.83°C	0.965
	12.175V	5.063V	3.255V	5.063V	554.829				49.03°C	229.81V
70%	**43.826A**	**6.999A**	**7A**	**2.2A**	602.581	92.791%	965	22.3	43.19°C	0.969
	12.168V	5.06V	3.252V	5.053V	649.4				49.09°C	229.79V
80%	**50.187A**	**7.999A**	**8.001A**	**2.3A**	688.443	92.335%	1135	25	43.74°C	0.972
	12.162V	5.058V	3.25V	5.044V	745.596				49.98°C	229.78V
90%	**56.886A**	**8.499A**	**8.5A**	**2.4A**	774.24	91.851%	1429	34.9	44.34°C	0.975
	12.157V	5.056V	3.248V	5.036V	842.935				50.51°C	229.76V
100%	**63.368A**	**8.999A**	**9A**	**3A**	859.776	91.269%	1680	39.6	45.42°C	0.978
	12.151V	5.054V	3.246V	5.017V	942.017				51.67°C	229.74V
110%	**69.769A**	**9.998A**	**10A**	**3A**	945.406	90.602%	2001	45	46.87°C	0.979
	12.146V	5.052V	3.244V	5.011V	1043.471				53.29°C	229.73V
CL1	**0.118A**	**14.456A**	**14.459A**	**0A**	121.497	86.056%	1181	29.4	41.36°C	0.893
	12.201V	5.057V	3.248V	5.125V	141.186				47.5°C	229.87V
CL2	**0.116A**	**19.991A**	**0A**	**0A**	102.55	84.829%	1178	29.3	40.27°C	0.873
	12.200V	5.059V	3.26V	5.13V	120.89				45°C	229.88V
CL3	**0.116A**	**0A**	**20.003A**	**0A**	66.422	80.153%	641	7.7	41.3°C	0.807
	12.198V	5.069V	3.25V	5.13V	82.869				45.3°C	229.88V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL4	**70.838A**	**0A**	**0A**	**0A**	860.892	91.982%	1521	36.9	45.87°C	0.977
	12.153V	5.067V	3.26V	5.089V	935.934				50.48°C	229.75V

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	**1.218A**	**0.492A**	**0.505A**	**0.195A**	20.004	73.484%	0	<6.0	43.67°C	0.87
	12.193V	5.076V	3.27V	5.135V	27.223				36.7°C	114.93V
40W	**2.681A**	**0.689A**	**0.706A**	**0.292A**	40.001	83.001%	0	<6.0	44.1°C	0.936
	12.194V	5.076V	3.27V	5.132V	48.192				37.48°C	114.91V
60W	**4.144A**	**0.886A**	**0.908A**	**0.39A**	60	86.477%	0	<6.0	46.15°C	0.957
	12.194V	5.076V	3.27V	5.129V	69.382				38.59°C	114.9V
80W	**5.602A**	**1.084A**	**1.11A**	**0.488A**	79.949	88.423%	0	<6.0	46.89°C	0.966
	12.195V	5.076V	3.269V	5.126V	90.416				39.52°C	114.89V

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	**1.240A**	**0.5A**	**0.5A**	**0.2A**	20.332	75.101%	0	<6.0	41.49°C	0.489
	12.200V	5.077V	3.27V	5.136V	27.075				36.5°C	229.89V
41W	**2.720A**	**0.7A**	**0.7A**	**0.3A**	40.569	84.449%	0	<6.0	41.59°C	0.669
	12.200V	5.077V	3.27V	5.133V	48.041				37.12°C	229.89V
61W	**4.224A**	**0.9A**	**0.9A**	**0.4A**	61.098	88.007%	0	<6.0	44.06°C	0.767
	12.199V	5.076V	3.27V	5.129V	69.424				38.2°C	229.88V
81W	**5.704A**	**1.1A**	**1.1A**	**0.5A**	81.332	89.977%	0	<6.0	45.55°C	0.824
	12.199V	5.076V	3.269V	5.126V	90.392				39.14°C	229.88V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	19.03mV	14.82mV	13.61mV	13.76mV	Pass
20% Load	20.52mV	14.92mV	13.40mV	13.91mV	Pass
30% Load	20.77mV	15.17mV	13.86mV	15.14mV	Pass
40% Load	23.69mV	14.51mV	13.20mV	15.04mV	Pass
50% Load	25.99mV	15.58mV	14.58mV	15.34mV	Pass
60% Load	25.48mV	14.51mV	13.76mV	15.04mV	Pass
70% Load	27.52mV	14.87mV	13.71mV	15.65mV	Pass
80% Load	29.06mV	14.61mV	14.63mV	16.42mV	Pass
90% Load	30.90mV	15.02mV	15.30mV	15.81mV	Pass
100% Load	44.38mV	16.97mV	17.24mV	18.29mV	Pass
110% Load	47.37mV	16.68mV	16.87mV	17.40mV	Pass
Crossload1	24.30mV	15.90mV	15.65mV	15.40mV	Pass
Crossload2	17.80mV	17.01mV	13.20mV	13.97mV	Pass
Crossload3	16.88mV	14.82mV	16.68mV	14.02mV	Pass
Crossload4	44.99mV	15.20mV	14.35mV	16.55mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	17.80mV	14.46mV	13.45mV	13.91mV	Pass
20% Load	20.00mV	14.46mV	13.25mV	13.96mV	Pass
30% Load	22.76mV	15.68mV	14.48mV	14.83mV	Pass
40% Load	23.79mV	15.28mV	13.91mV	13.86mV	Pass
50% Load	25.12mV	14.87mV	14.37mV	14.68mV	Pass
60% Load	25.79mV	14.10mV	13.66mV	14.68mV	Pass

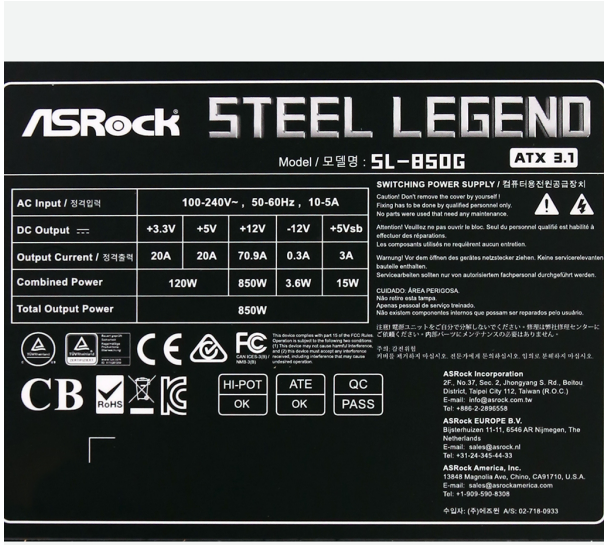
Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	26.60mV	15.38mV	14.58mV	15.19mV	Pass
80% Load	28.91mV	15.89mV	14.68mV	16.73mV	Pass
90% Load	32.59mV	15.07mV	15.81mV	15.60mV	Pass
100% Load	46.46mV	17.19mV	16.66mV	17.94mV	Pass
110% Load	47.67mV	16.96mV	17.51mV	18.60mV	Pass
Crossload1	24.79mV	15.57mV	14.93mV	15.27mV	Pass
Crossload2	18.21mV	17.73mV	13.30mV	15.04mV	Pass
Crossload3	18.52mV	14.30mV	15.55mV	14.17mV	Pass
Crossload4	45.75mV	15.11mV	14.66mV	16.85mV	Pass

The results above are not used in the certification process

ASRock Steel Legend SL-850G / SL-850GW



Top side



Power specifications label

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

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