Cougar GEX X2 850

Serial Number 12BC02GX85000091

Lab ID CG85002171

Certification ID 252171

Test Result Report ID: 23PS2171A

Certificate Issue Date: Apr 24, 2023

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	Cougar
Model	GEX X2 850
OEM/ODM	XHY-Power
Serial Number	12BC02GX85000091
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	12-6

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	120mm Hydraulic Dynamic Bearing Fan (EFH-12E12H)
Semi-Passive Operation	✓
Cybenetics Testing Information	
Lab ID	CG85002171
Date of receipt	Apr 12, 2023
Testing Date	Apr 19, 2023
Report Issued Date	Apr 24, 2023
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 (660mm)	1	1	18AWG	No
4+4 pin EPS12V (650mm)	1	1	18AWG	No
8 pin EPS12V (650mm)	1	1	18AWG	No
6+2 pin PCIe (650mm+100mm)	2	4	18AWG	No
12+4 pin PCIe (650mm) (450W)	1	1	16-28AWG	No
SATA (510mm+115mm+115mm+115mm)	1	4	18AWG	No
SATA (500mm+115mm+115mm) / 4-pin Molex (+115mm)	2	6 / 2	18AWG	No

AC Power Cord (1360mm) - C13 coupler	1	1	18AWG	-

Power Specifications

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	20	20	70.8	3	0.3
	Watts	100		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, 2x X caps, 2x CM chokes, 1x Mov
Inrush Protection	NTC Thermistor MF72 5D15 & Relay HF46F-G
Bridge Rectifier(s)	2x GBU15J (600V, 15A @ 100°C)
APFC MOSFETs	2x Ncepower NCE65TF130 (650V, 28A @ 100°C, Rds(on): 140mOhm)
APFC Boost Diode	1x DS065006C3
Bulk Cap(s)	1x TK (420V, 680uF, 2000h @ 105°C, LGW)
Main Switchers	4x CS13N50FA9R (500V, 8.5A @ 100°C, Rds(on): 0.5Ohm)
APFC Controller	Champion CM6500UNX
Resonant Controller	Champion CM6901T6
Topology	Primary side: APFC, Full-Bridge & LLC converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	-
+12V MOSFETs	4x CRSM016N06L2 (60V, 136A @ 100°C, Rds(on): 2.4mOhm)
5V & 3.3V	DC-DC Converters: 6x Excelliance MOS EMB07N03H (20V, 35A @ 100°C, Rds(on): 7mOhm) PWM Controller(s): uPI-Semi uP3861P
Filtering Capacitors	Electrolytic: 9x Nippon Chemi-Con (4-10,000h @ 105°C, KY), 3x Nichicon (2-8,000h @ 105°C), 2x PLH, Polymer: 21x FPCAP
Supervisor IC	Infino IN1S424I (OCP, OVP, UVP, SCP, PG)
Fan Model	DWPH EFH-12E12H (120mm, 12V, 0.5A, Hydraulic Dynamic Bearing Fan)

5VSB Circuit	-
Rectifier	1x HM69-60R10 SBR (42V, 22A)
Standby PWM Controller	Excelliance MOS 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 v3.0 Compliance	✓

Performance Summary

115V

Accredited	
Average Efficiency (>1450 load combinations)	89.408%
Average Noise Output (>1450 Load Combinations)	19.01dBA
Average PF (>1450 Load Combinations)	0.984
Efficiency With 10W (≤500W) or 2% (>500W) Load	66.748%
Standby Power Consumption	0.0432W
Non-Accredited	
12V Ripple (Full Load)	27.86mV
5V Ripple (Full Load)	18.79mV
3.3V Ripple (Full Load)	19.84mV
5VSB Ripple (Full Load)	12.82mV
12V Load Regulation	1.50%
5V Load Regulation	0.28%
3.3V Load Regulation	0.51%
5VSB Load Regulation	2.24%

Inrush Current	67.380A

230V

Accredited		
Average Efficiency (>1450 load combinations)		91.438%
Average Noise Output (>1450 Load Combinations)		19.15dBA
Average PF (>1450 Load Combinations)		0.955
Efficiency With 10W (≤500W) or 2% (>500W) Load		-
Standby Power Consumption		0.1258W
Non-Accredited		
12V Ripple (Full Load)		26.84mV
5V Ripple (Full Load)		19.59mV
3.3V Ripple (Full Load)		19.73mV
5VSB Ripple (Full Load)		13.27mV
12V Load Regulation		1.41%
5V Load Regulation		0.28%
3.3V Load Regulation		0.48%
5VSB Load Regulation		2.22%
Inrush Current		82.870A
12V Transient Response (200%)		11.21V
5V Transient Response (200%)		4.951V
3.3V Transient Response (200%)		3.227V
5VSB Transient Response (200%)		4.916V
Hold-Up Time & PWR_OK Signal		24.90ms
AC Loss to PWR_OK Hold Up Time		20.80ms
PWR_OK Inactive to DC Loss Delay		4.10ms
PSU Timings: T1 (20% / 100%)	56.0ms	57.0ms
PSU Timings: T3 (20% / 100%)	139.0ms	138.0ms
OPP (26.76°C / 36.98°C)	128.54%	128.54%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	24.9
AC Loss to PWR_OK Hold Up Time (ms)	20.8
PWR_OK Inactive to DC Loss Delay (ms)	4.1

Vampire Power

Tables

115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	114.88 V	114.80 V	113.85 V	114.95 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.99 Hz	59.40 Hz	60.02 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.419	1.417	1.340	1.422	1.490	PASS
Mains Voltage THD:	0.21 %	0.17 %	N/A	0.30 %	2.00 %	PASS
Real Power:	0.043 W	-0.001 W	N/A	0.081 W	N/A	N/A
Apparent Power:	6.488 W	6.451 W	N/A	6.531 W	N/A	N/A
Power Factor:	0.007	N/A	N/A	N/A	N/A	N/A

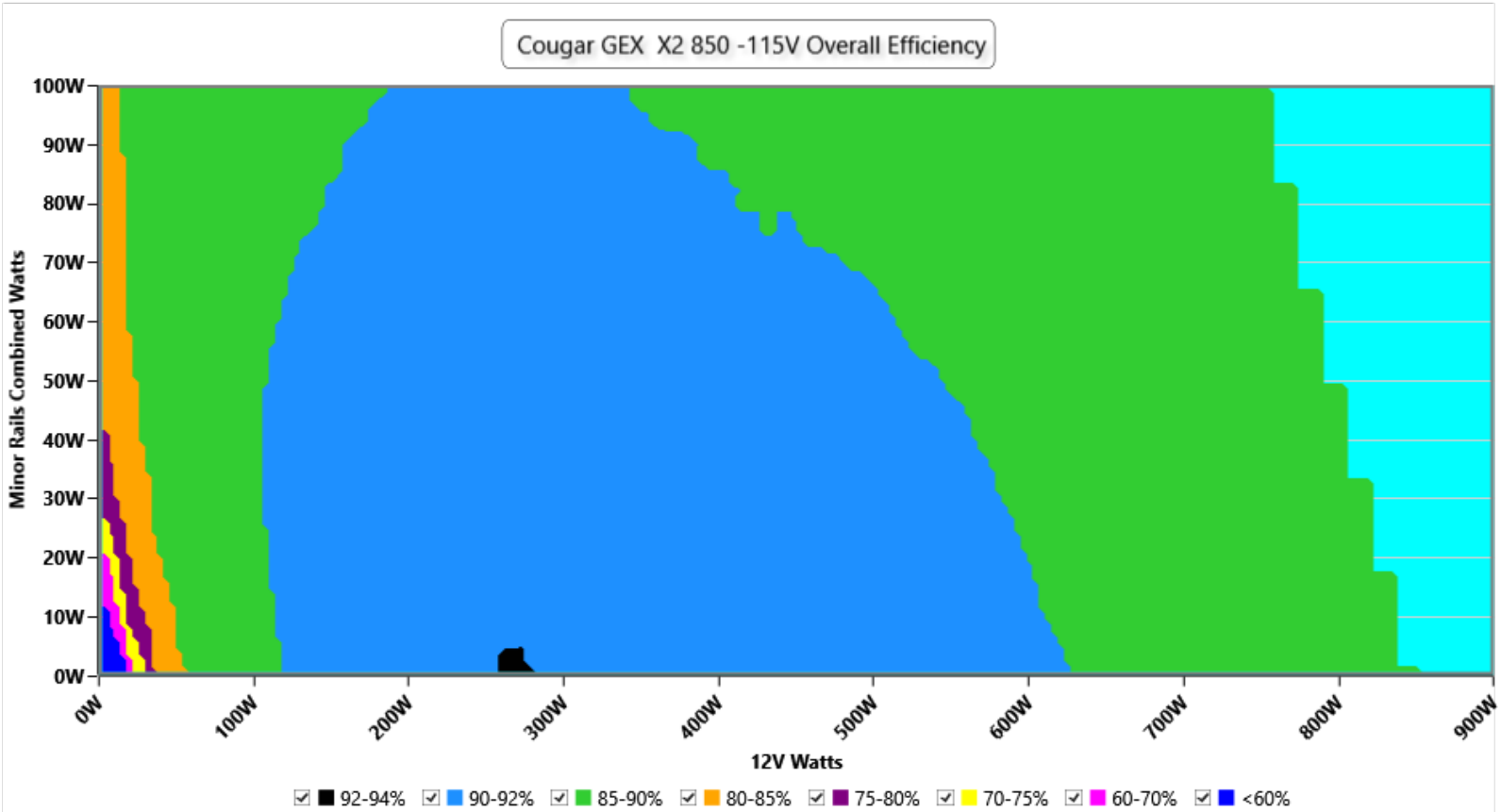
230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	229.76 V	229.70 V	227.70 V	229.84 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:	0.15 %	0.13 %	N/A	0.19 %	2.00 %	PASS
Real Power:	0.126 W	0.078 W	N/A	0.170 W	N/A	N/A
Apparent Power:	22.554 W	22.512 W	N/A	22.593 W	N/A	N/A

Power Factor:	0.006	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

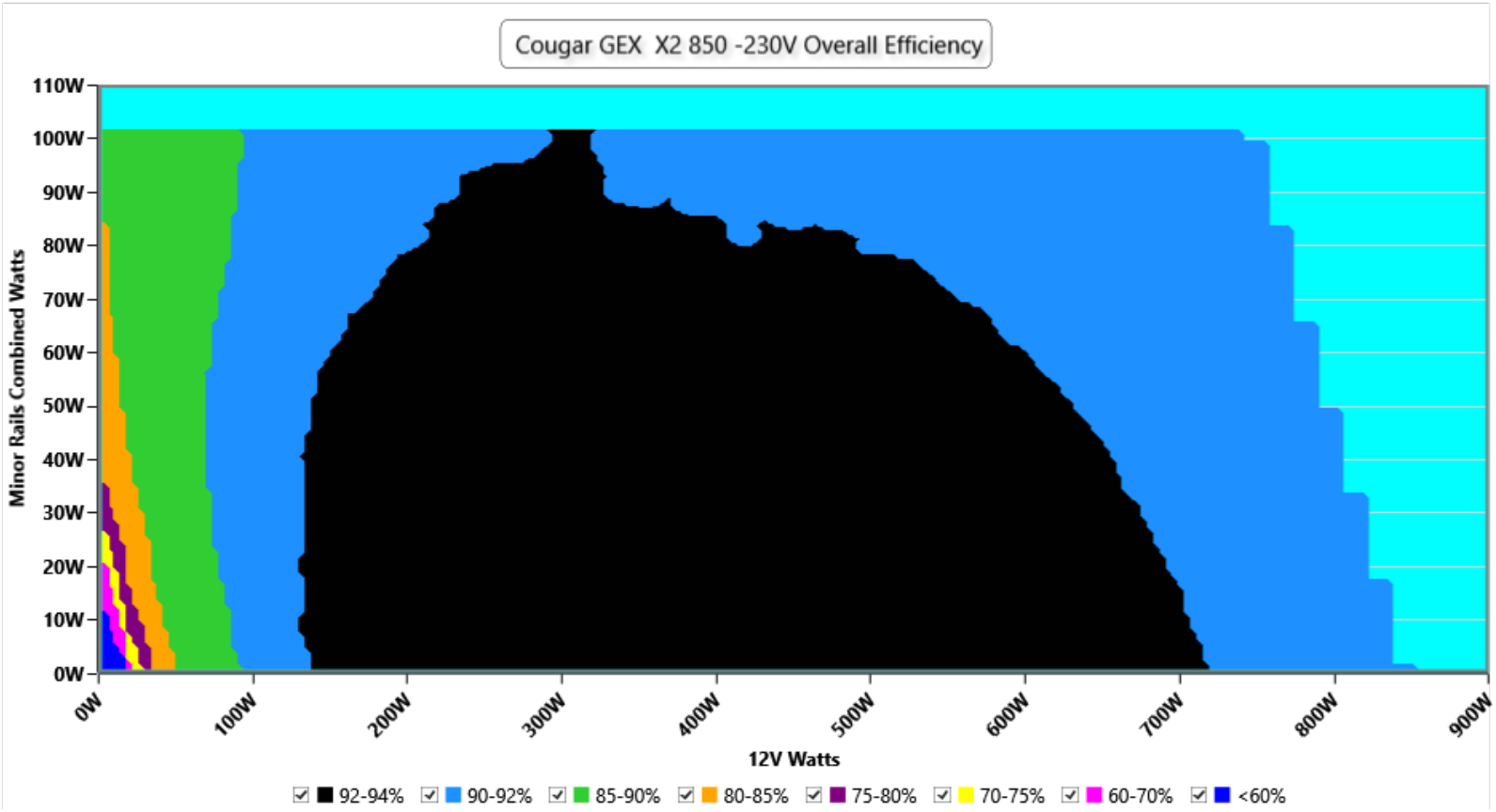
115V



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

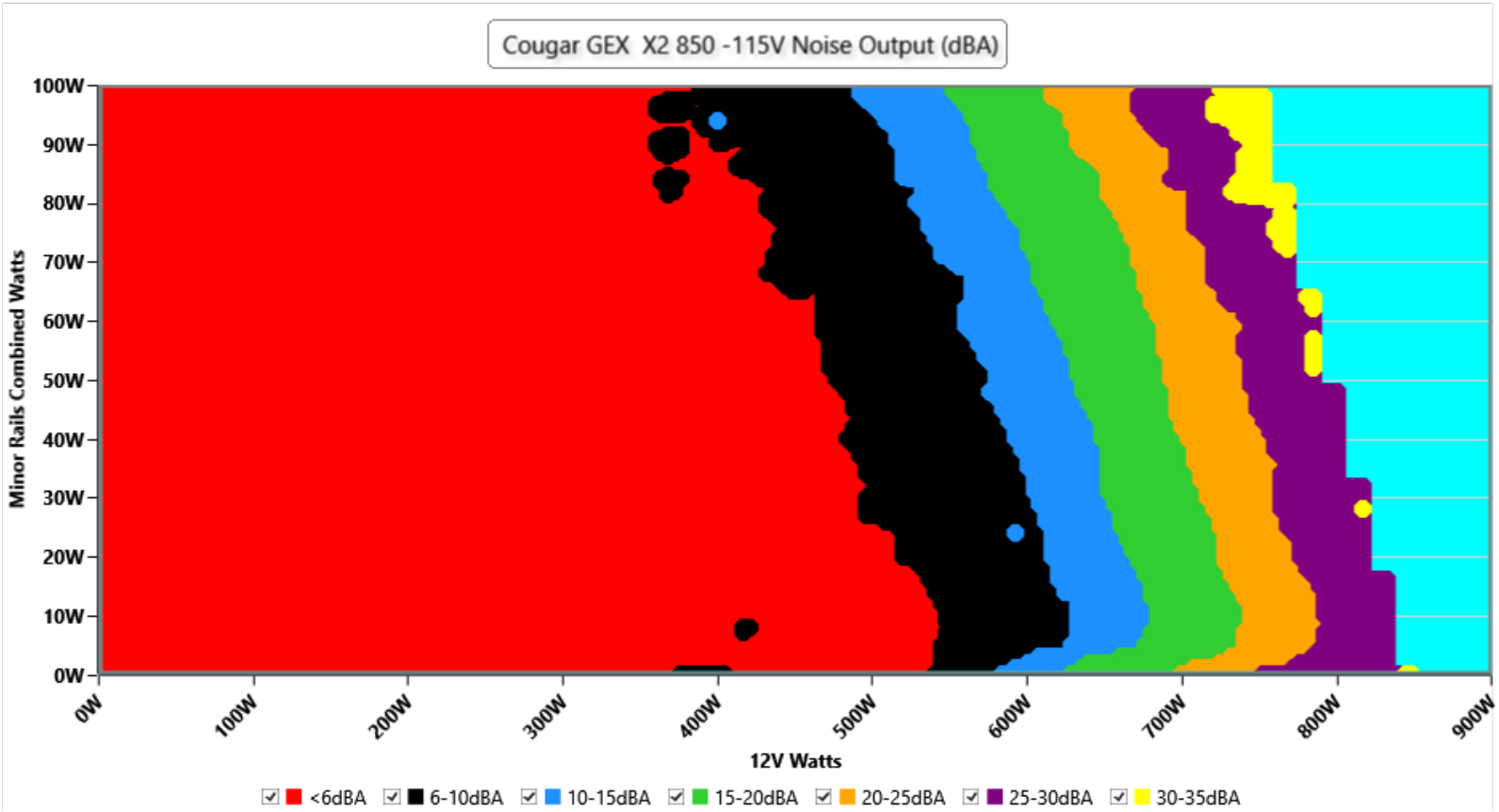


INFO

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Noise Graph

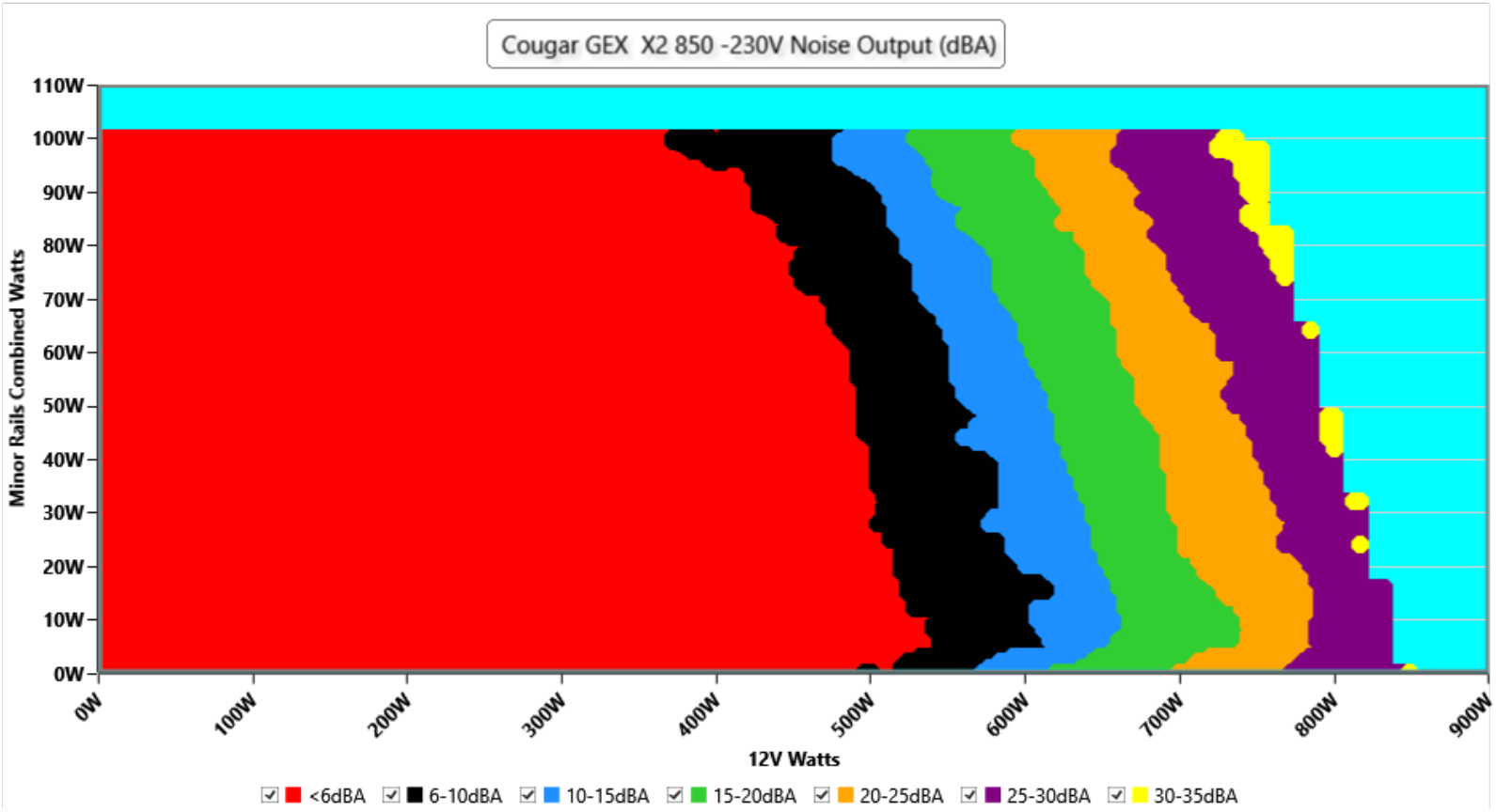
115V



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) · 44.5 °C	0 RPM · <6.0 dB(A) · 44.5 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 45.7 °C	0 RPM · <6.0 dB(A) · 45.7 °C	fan off in both
50%	396 RPM · <6.0 dB(A) · 42.0 °C	396 RPM · <6.0 dB(A) · 42.0 °C	fan off in both
100%	2266 RPM · 48.5 dB(A) · 45.1 °C	2266 RPM · 48.5 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) · 44.5 °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%	309 RPM · <6.0 dB(A) · 42.4 °C	309 RPM · <6.0 dB(A) · 42.4 °C	fan off in both
100%	2268 RPM · 48.6 dB(A) · 45.4 °C	2268 RPM · 48.6 dB(A) · 45.4 °C	**+0.0 dB(A)**

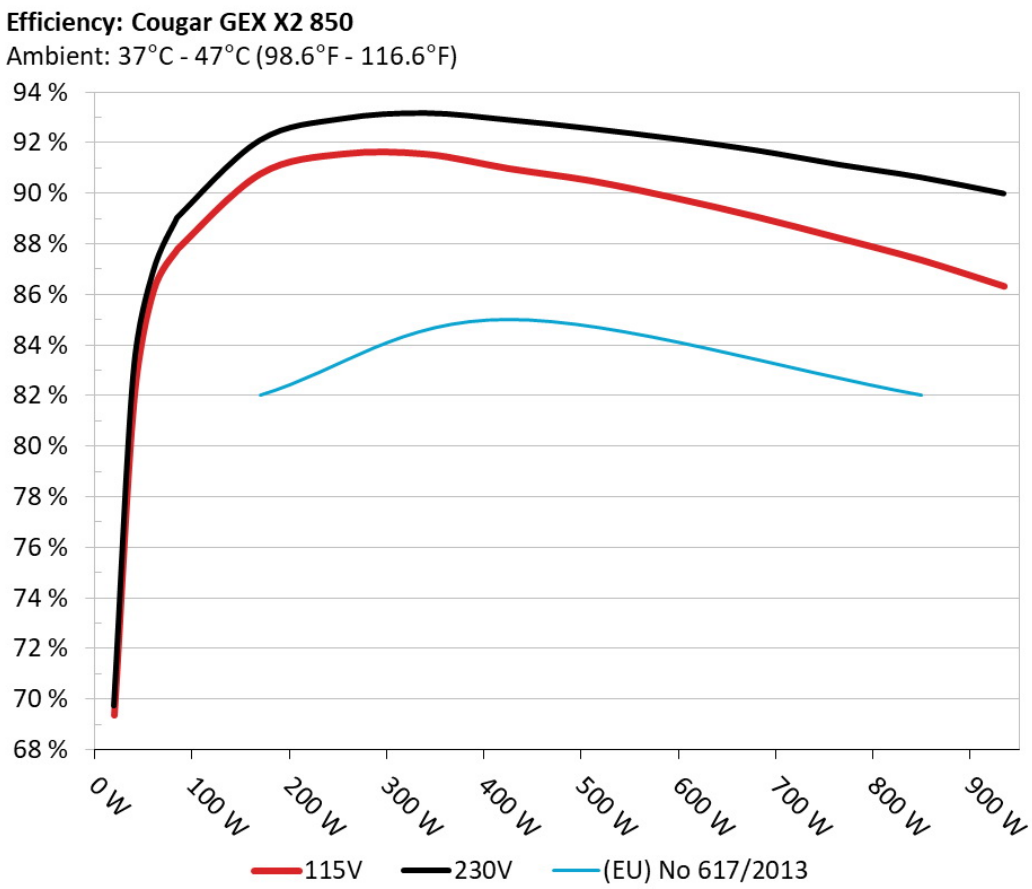
INFO

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

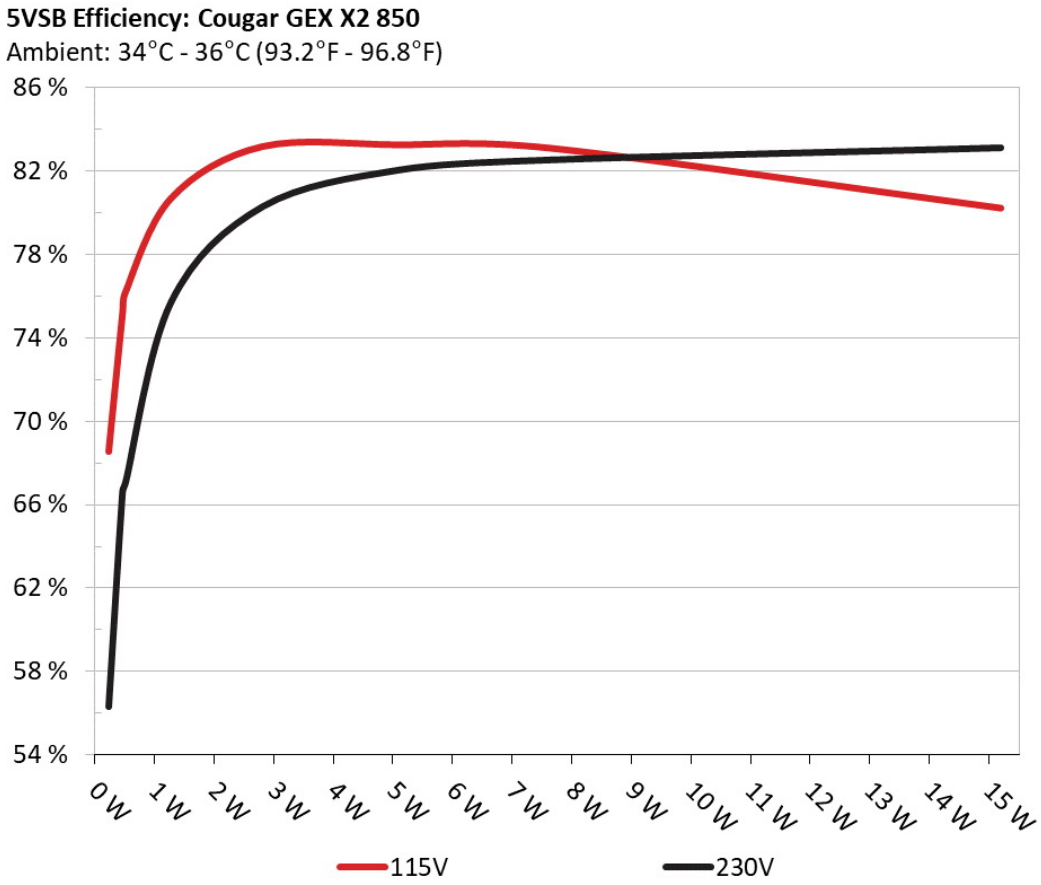
Efficiency under high ambient temperature



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	0.23W	68.056%	0.053
	5.115V	0.338W		114.88V
2	0.09A	0.46W	74.635%	0.094
	5.114V	0.616W		114.88V
3	0.55A	2.808W	82.655%	0.325
	5.106V	3.398W		114.88V
4	1A	5.098W	82.739%	0.396
	5.098V	6.162W		114.88V
5	1.5A	7.635W	82.578%	0.438
	5.09V	9.245W		114.87V
6	3A	15.188W	79.707%	0.493
	5.063V	19.055W		114.87V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.23W	55.822%	0.019
	5.115V	0.412W		229.77V
2	0.09A	0.46W	66.084%	0.032
	5.114V	0.696W		229.77V
3	0.55A	2.808W	79.797%	0.146
	5.106V	3.519W		229.77V
4	1A	5.098W	81.558%	0.225
	5.099V	6.25W		229.77V
5	1.5A	7.635W	82.041%	0.286
	5.09V	9.306W		229.77V
6	3A	15.189W	82.621%	0.37
	5.064V	18.384W		229.77V

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%	5.332A	1.986A	1.979A	0.982A	84.992	87.776%	0	<6.0	44.54°C	0.961
	11.888V	5.033V	3.334V	5.09V	96.831				40.14°C	114.85V
20%	11.691A	2.982A	2.971A	1.181A	169.92	90.779%	0	<6.0	45.68°C	0.973
	11.892V	5.03V	3.332V	5.079V	187.179				40.89°C	114.82V
30%	18.409A	3.48A	3.467A	1.381A	254.916	91.566%	0	<6.0	46.39°C	0.98
	11.890V	5.029V	3.331V	5.07V	278.398				41.29°C	114.79V
40%	25.131A	3.979A	3.964A	1.581A	339.998	91.56%	0	<6.0	47.26°C	0.986
	11.890V	5.027V	3.33V	5.06V	371.335				41.72°C	114.77V
50%	31.475A	4.975A	4.958A	1.782A	424.783	90.99%	396	<6.0	42.04°C	0.989
	11.891V	5.025V	3.328V	5.05V	466.843				48.24°C	114.73V
60%	37.808A	5.969A	5.953A	1.984A	509.299	90.506%	745	17.4	42.6°C	0.991
	11.889V	5.026V	3.326V	5.04V	562.729				49.31°C	114.7V
70%	44.225A	6.965A	6.949A	2.187A	594.647	89.835%	1187	31.4	43.12°C	0.992
	11.884V	5.025V	3.324V	5.03V	661.93				50.17°C	114.67V
80%	50.649A	7.961A	7.946A	2.29A	679.487	89.079%	1717	41.8	43.56°C	0.993
	11.878V	5.025V	3.322V	5.022V	762.793				51.57°C	114.63V
90%	57.481A	8.458A	8.431A	2.393A	764.892	88.233%	2249	48.5	44.62°C	0.994
	11.872V	5.024V	3.321V	5.014V	866.899				53.69°C	114.6V
100%	64.027A	8.96A	8.948A	3.002A	849.719	87.361%	2266	48.5	45.12°C	0.994
	11.870V	5.022V	3.319V	4.997V	972.648				55.22°C	114.56V
110%	70.426A	9.962A	10.038A	3.006A	934.322	86.326%	2283	48.8	46.88°C	0.995
	11.871V	5.019V	3.317V	4.99V	1082.315				57.82°C	114.53V
CL1	0.116A	11.986A	11.946A	0A	101.293	83.486%	0	<6.0	46.21°C	0.974
	11.908V	5.022V	3.324V	5.098V	121.327				40.73°C	114.83V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL2	0.116A	19.972A	0A	0A	101.342	81.808%	462	7.3	40.68°C	0.973
	11.910V	5.005V	3.329V	5.101V	123.875				47.73°C	114.83V
CL3	0.116A	0A	19.907A	0A	67.396	75.835%	0	<6.0	49.68°C	0.956
	11.912V	5.013V	3.316V	5.1V	88.871				40.58°C	114.85V
CL4	71.576A	0A	0A	0A	849.53	87.907%	2270	48.6	45.2°C	0.994
	11.869V	5.026V	3.329V	5.057V	966.403				56.01°C	114.57V

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%	5.332A	1.986A	1.978A	0.982A	84.991	88.924%	0	<6.0	44.51°C	0.844
	11.890V	5.034V	3.336V	5.09V	95.575				40.24°C	229.76V
20%	11.694A	2.98A	2.968A	1.181A	169.912	92.111%	0	<6.0	45.29°C	0.929
	11.888V	5.033V	3.335V	5.08V	184.462				40.55°C	229.75V
30%	18.411A	3.478A	3.464A	1.38A	254.906	92.968%	0	<6.0	46.22°C	0.954
	11.887V	5.031V	3.334V	5.071V	274.18				41.02°C	229.73V
40%	25.133A	3.977A	3.961A	1.581A	339.984	93.189%	0	<6.0	47.19°C	0.967
	11.888V	5.029V	3.332V	5.061V	364.834				41.64°C	229.72V
50%	31.474A	4.974A	4.954A	1.782A	424.739	92.922%	309	<6.0	42.4°C	0.973
	11.891V	5.026V	3.331V	5.051V	457.091				48.48°C	229.7V
60%	37.800A	5.968A	5.948A	1.984A	509.251	92.578%	689	14.8	42.67°C	0.979
	11.890V	5.027V	3.329V	5.041V	550.083				49.27°C	229.69V
70%	44.214A	6.963A	6.943A	2.186A	594.599	92.178%	1145	30.4	43.31°C	0.981
	11.885V	5.027V	3.327V	5.031V	645.057				50.35°C	229.67V
80%	50.635A	7.959A	7.938A	2.289A	679.436	91.718%	1638	40.2	43.51°C	0.983
	11.880V	5.026V	3.325V	5.023V	740.787				51.58°C	229.66V
90%	57.463A	8.456A	8.423A	2.392A	764.842	91.15%	2247	48.5	44.06°C	0.985
	11.875V	5.025V	3.324V	5.015V	839.098				53.14°C	229.64V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	64.006A	8.957A	8.939A	3.001A	849.667	90.642%	2268	48.6	45.35°C	0.987
	11.874V	5.023V	3.323V	4.998V	937.383				55.43°C	229.62V
110%	70.398A	9.96A	10.028A	3.005A	934.278	90.003%	2280	48.8	46.58°C	0.988
	11.876V	5.02V	3.321V	4.991V	1038.053				57.52°C	229.61V
CL1	0.116A	11.983A	11.935A	0A	101.286	84.875%	0	<6.0	46.1°C	0.879
	11.910V	5.023V	3.327V	5.098V	119.338				40.59°C	229.75V
CL2	0.116A	19.968A	0A	0A	101.338	83.063%	377	<6.0	40.43°C	0.882
	11.912V	5.006V	3.332V	5.101V	121.995				47.44°C	229.75V
CL3	0.116A	0A	19.889A	0A	67.392	77.038%	0	<6.0	50.14°C	0.826
	11.914V	5.013V	3.319V	5.101V	87.484				41.11°C	229.76V
CL4	71.566A	0A	0A	0A	849.501	91.159%	2264	48.5	45.48°C	0.986
	11.871V	5.027V	3.332V	5.057V	931.895				56.45°C	229.62V

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	0.496A	0.494A	0.196A	19.989	69.344%	0	<6.0	39.72°C	0.859
	12.048V	5.036V	3.336V	5.109V	28.824				36.65°C	114.87V
40W	2.748A	0.695A	0.693A	0.294A	39.989	81.73%	0	<6.0	41.01°C	0.925
	11.890V	5.034V	3.335V	5.106V	48.932				37.57°C	114.86V
60W	4.250A	0.893A	0.89A	0.392A	59.989	86.126%	0	<6.0	42.24°C	0.945
	11.888V	5.035V	3.335V	5.103V	69.652				38.43°C	114.86V
80W	5.746A	1.092A	1.088A	0.49A	79.926	87.807%	0	<6.0	43.33°C	0.956
	11.888V	5.034V	3.335V	5.099V	91.022				39.37°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	1.232A	0.496A	0.494A	0.196A	19.989	69.724%	0	<6.0	39.58°C	0.563
	12.041V	5.037V	3.339V	5.109V	28.667				36.52°C	229.77V
40W	2.748A	0.695A	0.692A	0.294A	39.989	82.915%	0	<6.0	40.29°C	0.694
	11.889V	5.036V	3.338V	5.106V	48.229				37.03°C	229.77V
60W	4.250A	0.893A	0.89A	0.392A	59.987	86.88%	0	<6.0	41.47°C	0.778
	11.887V	5.036V	3.338V	5.103V	69.048				38°C	229.76V
80W	5.746A	1.092A	1.087A	0.49A	79.924	89.053%	0	<6.0	42.89°C	0.832
	11.887V	5.036V	3.337V	5.099V	89.749				39.11°C	229.76V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	17.14mV	13.69mV	15.19mV	9.26mV	Pass
20% Load	18.96mV	13.64mV	14.88mV	8.49mV	Pass
30% Load	15.74mV	14.31mV	16.42mV	9.00mV	Pass
40% Load	15.54mV	14.61mV	14.78mV	9.77mV	Pass
50% Load	16.41mV	16.30mV	16.63mV	10.54mV	Pass
60% Load	15.23mV	15.63mV	16.63mV	10.43mV	Pass
70% Load	14.69mV	16.04mV	16.98mV	11.30mV	Pass
80% Load	16.22mV	17.58mV	17.90mV	11.92mV	Pass
90% Load	16.68mV	18.65mV	18.57mV	11.15mV	Pass
100% Load	27.86mV	18.79mV	19.84mV	12.82mV	Pass
110% Load	27.79mV	19.39mV	17.99mV	12.06mV	Pass
Crossload1	29.95mV	21.54mV	20.35mV	15.99mV	Pass
Crossload2	17.58mV	31.27mV	22.81mV	15.70mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	14.46mV	20.18mV	20.98mV	15.60mV	Pass
Crossload4	26.29mV	15.83mV	15.42mV	17.42mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	16.10mV	11.85mV	11.00mV	8.90mV	Pass
20% Load	19.22mV	11.85mV	11.41mV	9.05mV	Pass
30% Load	16.51mV	11.96mV	11.56mV	9.16mV	Pass
40% Load	16.47mV	13.74mV	12.63mV	9.72mV	Pass
50% Load	17.12mV	15.12mV	13.15mV	10.59mV	Pass
60% Load	16.63mV	13.95mV	13.66mV	10.43mV	Pass
70% Load	17.55mV	13.95mV	13.61mV	11.46mV	Pass
80% Load	16.37mV	15.38mV	18.01mV	11.30mV	Pass
90% Load	16.53mV	17.07mV	16.52mV	11.87mV	Pass
100% Load	26.84mV	19.59mV	19.73mV	13.27mV	Pass
110% Load	28.04mV	19.34mV	21.43mV	12.92mV	Pass
Crossload1	22.45mV	19.47mV	20.30mV	15.84mV	Pass
Crossload2	15.69mV	31.22mV	22.66mV	15.65mV	Pass
Crossload3	13.59mV	18.80mV	21.64mV	14.98mV	Pass
Crossload4	26.16mV	14.01mV	14.73mV	16.19mV	Pass

The results above are not used in the certification process

Cougar GEX X2 850



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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