MSI MAG A850GLS PCIE5

Serial Number -

Lab ID MS85002806

Certification ID 252806

Test Result Report ID: 25PS2806A

Certificate Issue Date: May 8, 2025

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	MSI
Model	MAG A850GLS PCIE5
OEM/ODM	CWT
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	12

Rated Frequency (Hz)	47-63
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 (ZFF132512H)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	MS85002806
Date of receipt	Apr 23, 2025
Testing Date	Mar 8, 2025
Report Issued Date	May 8, 2025
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
8 pin EPS12V (650mm)	2	2	18AWG	No
6+2 pin PCIe (600mm)	2	2	18AWG	No
12+4 pin PCIe (600mm) (600W)	1	1	16-24AWG	No
SATA (500mm+150mm+150mm) / 4-pin Molex (+150mm)	1	3 / 1	18AWG	No
SATA (500mm+150mm) / 4-pin Molex (+150mm) / FDD (+150mm)	2	4 / 2 / 2	18-20AWG	No
AC Power Cord (1390mm) - C13 coupler	1	1	18AWG	-

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	70.8	3	0.3
	Watts	100		850	15	3.6
Total Max. Power (W)		850				

Parts Description

General Data	
Manufacturer (OEM)	CWT
PCB Type	Double-Sided
Primary Side	
Transient Filter	6x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	1x NTC Thermistor SCK207R0 (7 Ohm @25°C) & Relay
Bridge Rectifier(s)	2x GBJ1506 (600V, 15A @ 100°C)
APFC MOSFETs	2x STMicroelectronics STF33N60M2 (650V, 16A @ 100°C, Rds(on): 0.125Ohm)
APFC Boost Diode	1x CRMicro CRXI08D065G2 (650V, 8A @ 165°C)
Bulk Cap(s)	1x Teapo (420V, 560uF @ 105°C, TD(M))
Main Switchers	2x STMicroelectronics STW33N60DM2 (650V, 15.5A @ 100°C, Rds(on): 130mOhm)
APFC Controller	Champion CM6500UNX & 1x Sync Power SPN5003 (For no load consumption)
Resonant Controller	Champion CM6901X

Topology	Primary side: APFC, Half-Bridge & LLC Resonant converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	6x InPower Semiconductor FTG014N04SA (40V, 145A @ 100°C, Rds(on): 1.4mOhm)
5V & 3.3V	DC-DC Converters: 4x UBIQ QN3107M6N (30V, 70A @ 100°C, Rds(on): 2.6mOhm)
Filtering Capacitors	Electrolytic: 8x Chengx (2-3,000h @ 105°C, GR) Polymer: 3x Teapo (FP), 9x BIOSTAR, 19x
Fan Controller	Nuvoton MS51FB9AE
Fan Model	ZIC ZFF132512H (135mm, 12V, 0.45A, Fluid Dynamic Bearing Fan)
5VSB	
Rectifier	1x Dongke Semiconductor DK5V45R10S (45V, 10A)
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)	89.955%
Average Noise Output (>1450 Load Combinations)	18.07dBA
Average PF (>1450 Load Combinations)	0.983
Efficiency With 10W (≤500W) or 2% (>500W) Load	71.388%

Standby Power Consumption	0.0370W
Non-Accredited	
12V Ripple (Full Load)	39.43mV
5V Ripple (Full Load)	18.63mV
3.3V Ripple (Full Load)	21.92mV
5VSB Ripple (Full Load)	25.91mV
12V Load Regulation	0.59%
5V Load Regulation	0.92%
3.3V Load Regulation	0.72%
5VSB Load Regulation	1.77%
Inrush Current	24.950A

230V

Accredited	
Average Efficiency (>1450 load combinations)	91.845%
Average Noise Output (>1450 Load Combinations)	18.05dBA
Average PF (>1450 Load Combinations)	0.947
Efficiency With 10W (≤500W) or 2% (>500W) Load	72.113%
Standby Power Consumption	0.0782W
Non-Accredited	
12V Ripple (Full Load)	39.66mV
5V Ripple (Full Load)	19.27mV
3.3V Ripple (Full Load)	23.37mV
5VSB Ripple (Full Load)	27.32mV
12V Load Regulation	0.65%
5V Load Regulation	0.86%
3.3V Load Regulation	0.57%
5VSB Load Regulation	1.73%
Inrush Current	48.130A
12V Transient Response (200%)	11.37V
5V Transient Response (200%)	4.911V
3.3V Transient Response (200%)	3.251V

5VSB Transient Response (200%)		4.846V
Hold-Up Time & PWR_OK Signal		18.60ms
AC Loss to PWR_OK Hold Up Time		16.60ms
PWR_OK Inactive to DC Loss Delay		2.00ms
PSU Timings: T1 (20% / 100%)	54.0ms	53.0ms
PSU Timings: T3 (20% / 100%)	120.0ms	121.0ms
12V OCP (28.6°C / 40.8°C)	86.80A (122.60%), 11.937V	87.70A (123.87%), 11.941V
5V OCP (28.6°C / 40.8°C)	30.8A (154.00%), 4.969V	29.9A (149.50%), 4.964V
3.3V OCP (28.6°C / 40.8°C)	31.6A (158.00%), 3.35V	29.8A (149.00%), 3.341V
5VSB OCP (28.6°C / 40.8°C)	5.7A (190.00%), 4.918V	5.6A (186.67%), 4.901V
OPP (28.14°C / 41.95°C)	121.49%	121.50%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	18.6
AC Loss to PWR_OK Hold Up Time (ms)	16.6
PWR_OK Inactive to DC Loss Delay (ms)	2

Vampire Power

Tables

115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.05 V	115.02 V	113.85 V	115.10 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:	1.416	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:	0.037 W	-0.000 W	N/A	0.061 W	N/A	N/A
Apparent Power:	10.237 W	10.173 W	N/A	10.303 W	N/A	N/A

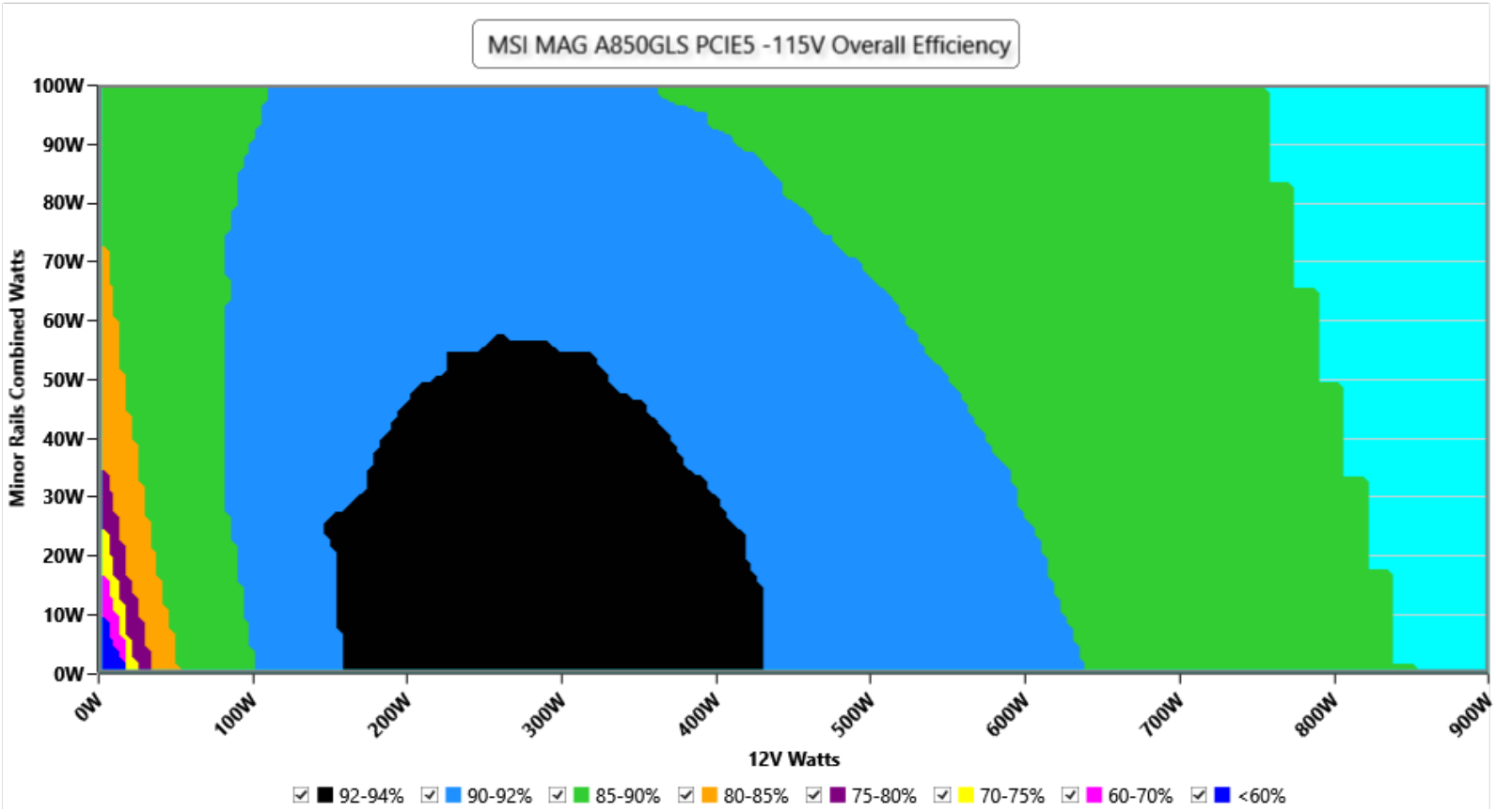
Power Factor:	0.005	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	231.00 V	230.90 V	227.70 V	231.06 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	1.419	1.490	PASS
Mains Voltage THD:	0.17 %	0.14 %	N/A	0.27 %	2.00 %	PASS
Real Power:	0.078 W	0.040 W	N/A	0.150 W	N/A	N/A
Apparent Power:	35.076 W	34.819 W	N/A	35.372 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

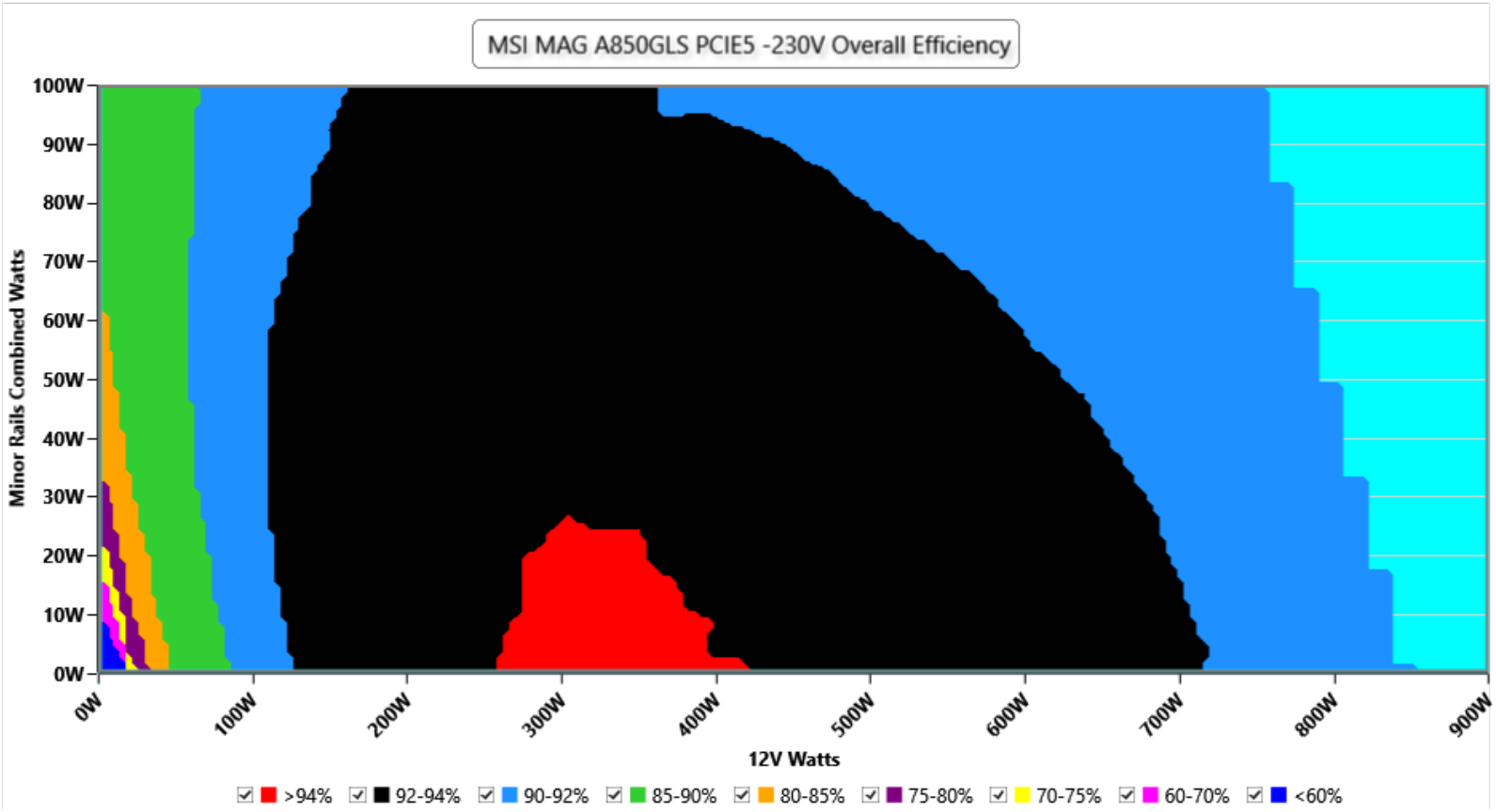
115V



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

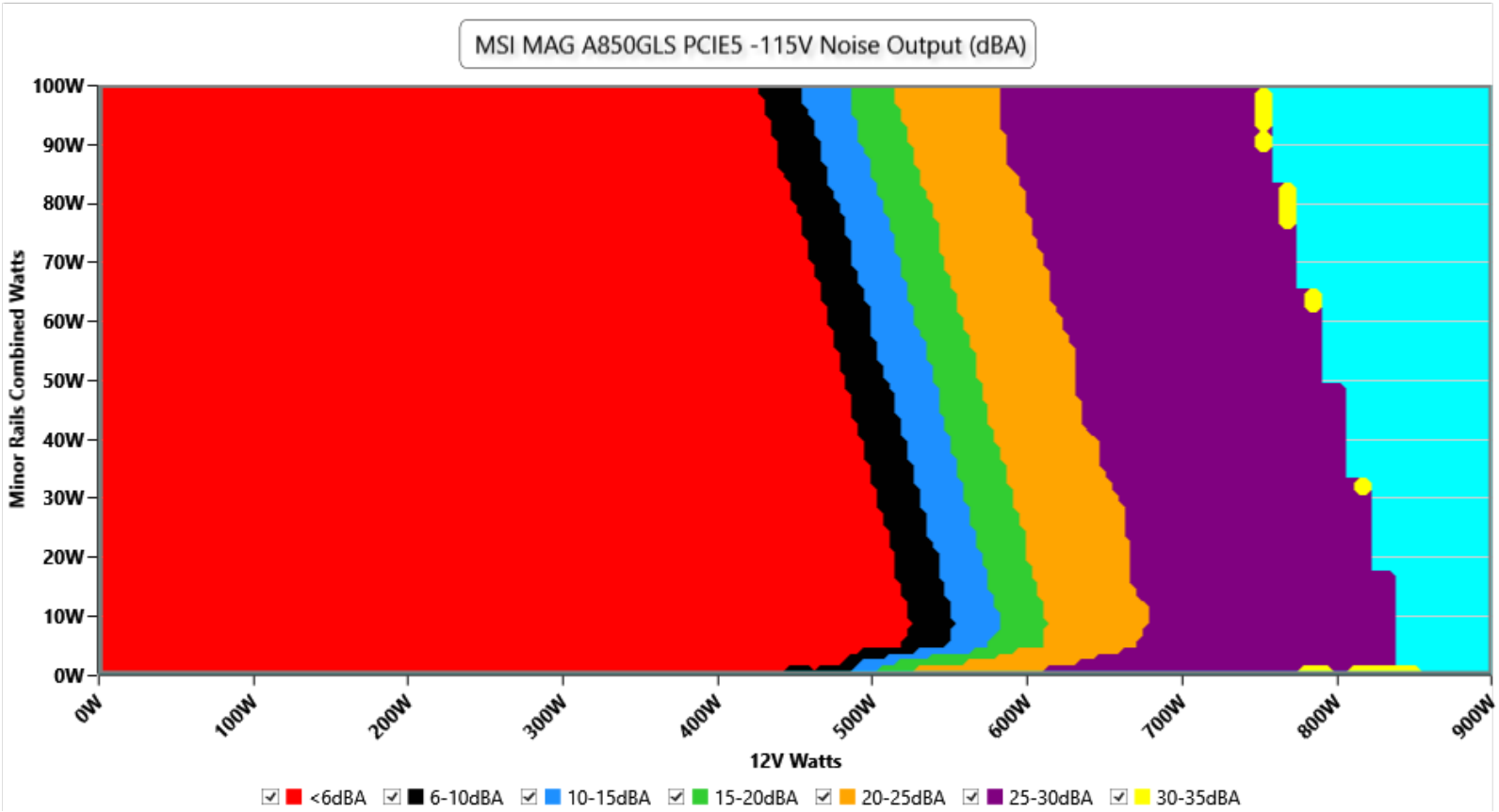


INFO

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

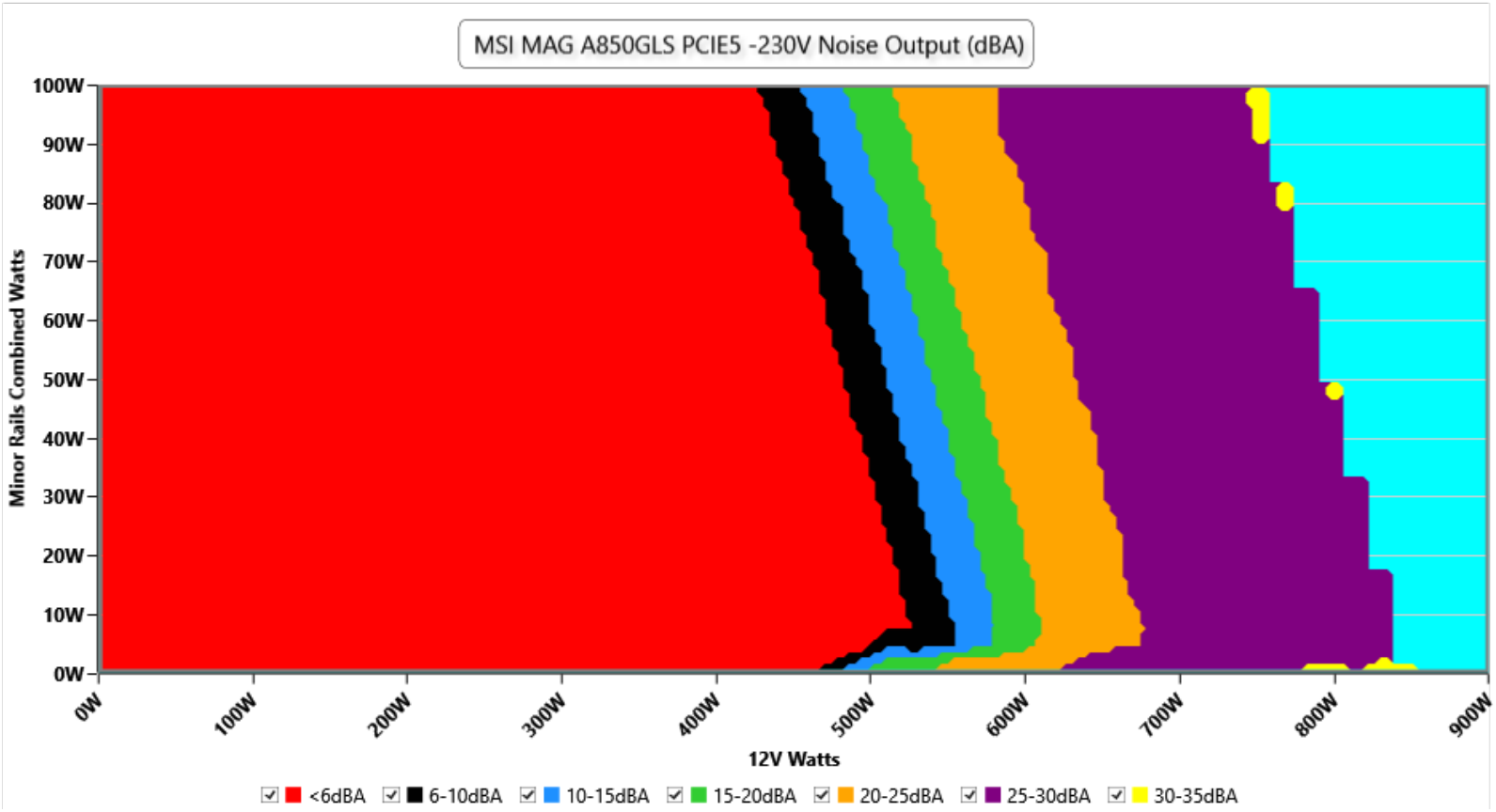
115V



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%	410 RPM · <6.0 dB(A) · 30.6 °C	413 RPM · <6.0 dB(A) · 40.2 °C	fan off in both
20%	408 RPM · <6.0 dB(A) · 30.5 °C	414 RPM · <6.0 dB(A) · 40.7 °C	fan off in both
50%	409 RPM · <6.0 dB(A) · 30.6 °C	419 RPM · <6.0 dB(A) · 42.4 °C	fan off in both
100%	1214 RPM · 30.2 dB(A) · 30.5 °C	2151 RPM · 46.3 dB(A) · 45.1 °C	**+16.1 dB(A)**

230V

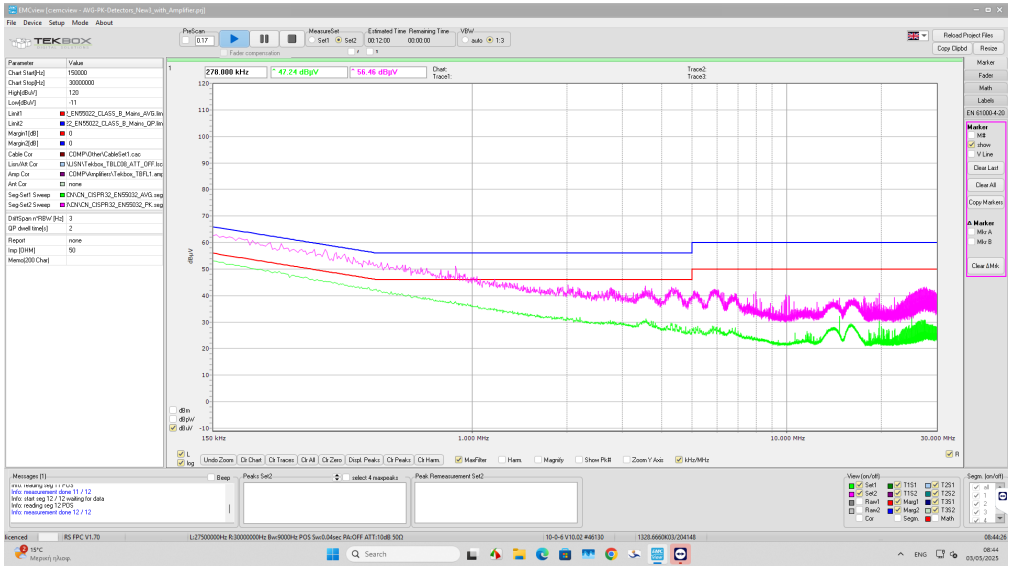
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	393 RPM · <6.0 dB(A) · 30.0 °C	420 RPM · <6.0 dB(A) · 40.3 °C	fan off in both
20%	396 RPM · <6.0 dB(A) · 30.6 °C	420 RPM · <6.0 dB(A) · 40.6 °C	fan off in both
50%	399 RPM · <6.0 dB(A) · 30.4 °C	424 RPM · <6.0 dB(A) · 42.2 °C	fan off in both
100%	1204 RPM · 29.7 dB(A) · 30.9 °C	2077 RPM · 45.4 dB(A) · 45.1 °C	**+15.7 dB(A)**

INFO

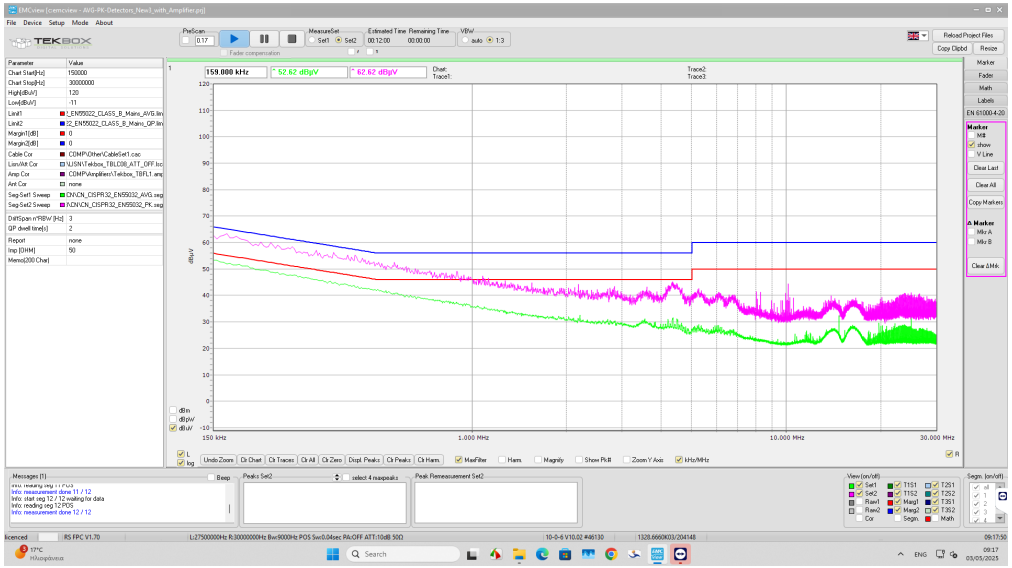
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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

Conducted Emissions EN 55032 & CISPR 32



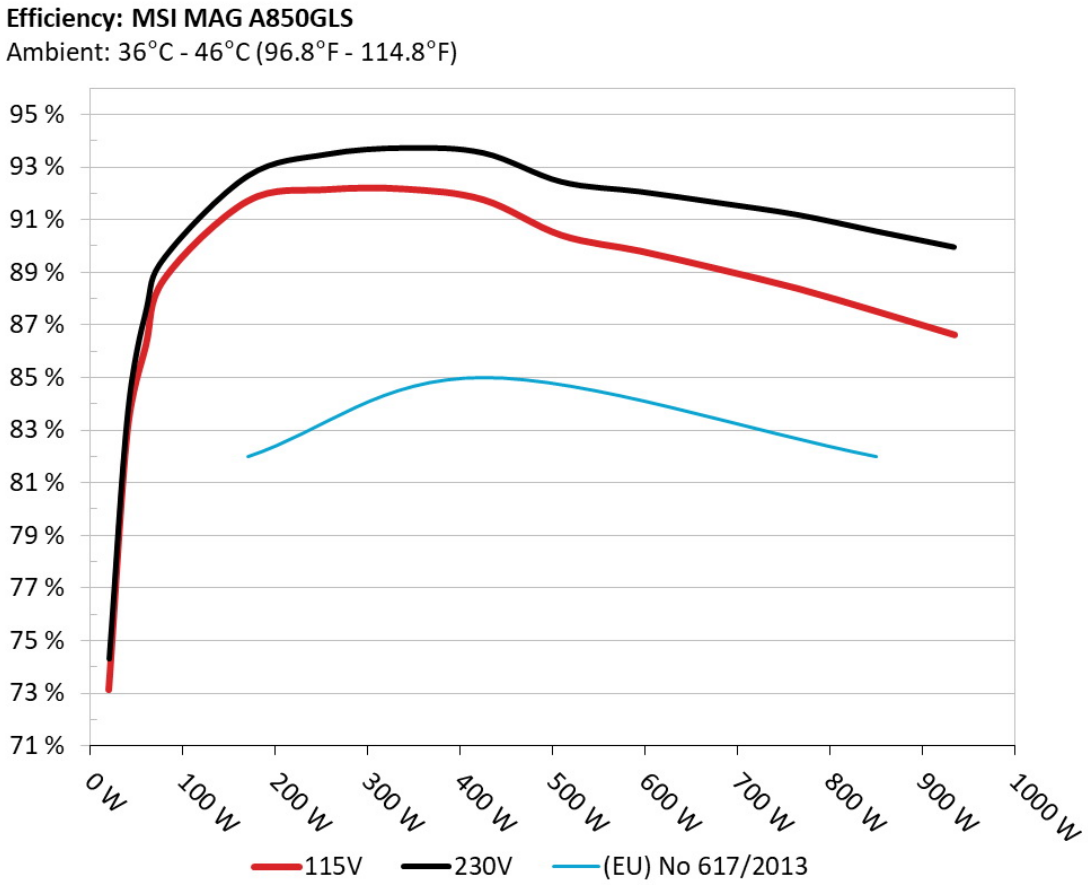
NEUTRAL



PHASE

Indicative Performance

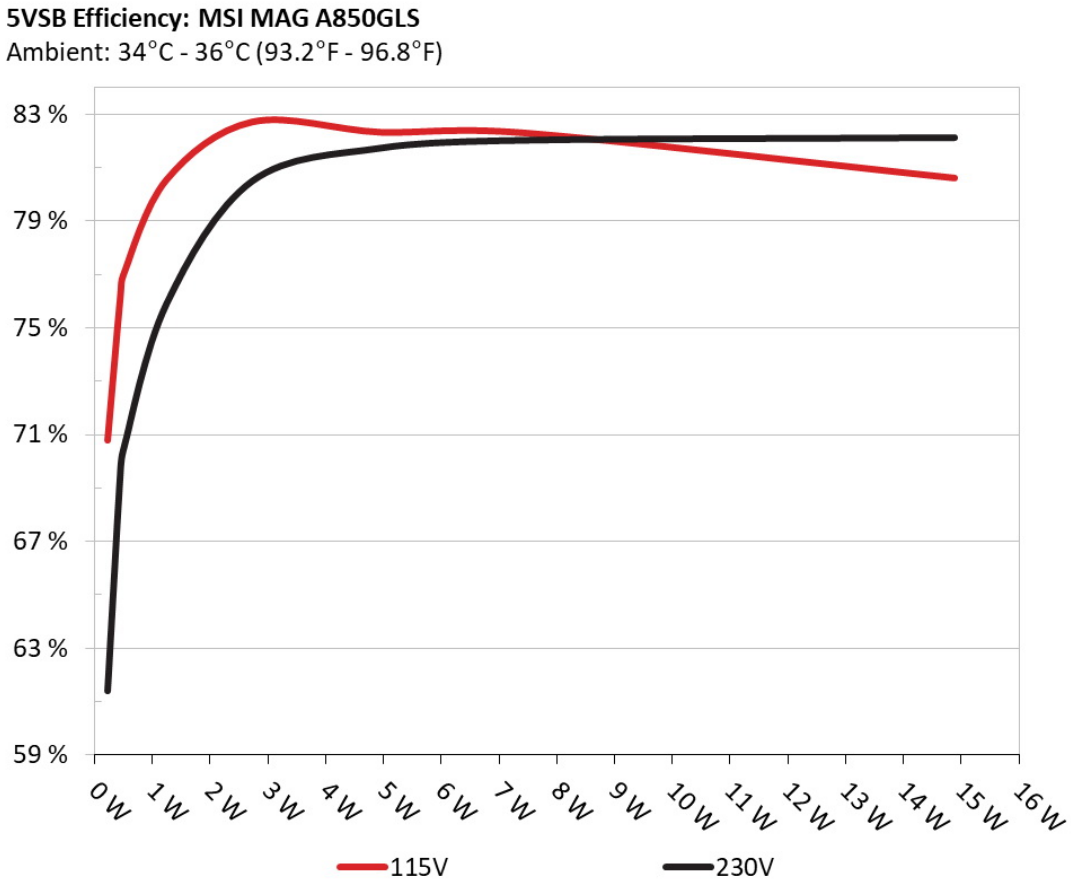
Efficiency under high ambient temperature



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**	0.223W	70.776%	0.03
	4.954V	0.315W		114.84V
2	**0.09A**	0.446W	76.224%	0.055
	4.954V	0.585W		114.84V
3	**0.55A**	2.726W	82.695%	0.254
	4.955V	3.296W		114.83V
4	**1A**	4.956W	82.308%	0.362
	4.956V	6.021W		114.82V
5	**1.5A**	7.436W	82.284%	0.411
	4.957V	9.037W		114.83V
6	**3A**	14.878W	80.595%	0.495
	4.959V	18.461W		114.83V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.223W	61.417%	0.01
	4.953V	0.363W		229.82V
2	**0.09A**	0.446W	69.684%	0.018
	4.954V	0.64W		229.83V
3	**0.55A**	2.725W	80.506%	0.093
	4.955V	3.385W		229.82V
4	**1A**	4.956W	81.744%	0.157
	4.956V	6.063W		229.82V
5	**1.5A**	7.436W	82.034%	0.216
	4.957V	9.065W		229.82V
6	**3A**	14.879W	82.131%	0.312
	4.96V	18.115W		229.82V

Protection Features

OCP (Normal @ 28.6°C)	12V: 86.80A (122.60%), 11.937V 5V: 30.8A (154.00%), 4.969V 3.3V: 31.6A (158.00%), 3.35V 5VSB: 5.7A (190.00%), 4.918V
OCP (Hot @ 40.8°C)	12V: 87.70A (123.87%), 11.941V 5V: 29.9A (149.50%), 4.964V 3.3V: 29.8A (149.00%), 3.341V 5VSB: 5.6A (186.67%), 4.901V
OPP (Normal @ 28.1°C)	1032.67W (121.49%)
OPP (Hot @ 42.0°C)	1032.72W (121.50%)
OTP	✓ (115°C @ Heat Sink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Proper Operation
UVP (Full Load @ 90V)	✓
UVP (No Damage @ 80V)	✓
Conducted Emissions EN55032 & 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%	**5.274A**	**1.99A**	**1.976A**	**1.011A**	85.007	88.53%	413	<6.0	40.22°C	0.967
	12.021V	5.024V	3.34V	4.944V	96.018				42.27°C	114.81V
20%	**11.575A**	**2.989A**	**2.966A**	**1.216A**	169.95	91.724%	414	<6.0	40.66°C	0.978
	12.013V	5.019V	3.338V	4.936V	185.288				43.59°C	114.78V
30%	**18.235A**	**3.489A**	**3.463A**	**1.42A**	254.959	92.162%	416	<6.0	41.48°C	0.983
	12.005V	5.016V	3.336V	4.929V	276.641				45.75°C	114.75V
40%	**24.909A**	**3.991A**	**3.96A**	**1.626A**	340.051	92.184%	417	<6.0	41.78°C	0.982
	11.998V	5.012V	3.334V	4.921V	368.883				47.61°C	114.73V
50%	**31.226A**	**4.993A**	**4.954A**	**1.832A**	424.886	91.776%	419	<6.0	42.36°C	0.983
	11.990V	5.007V	3.331V	4.912V	462.957				50.13°C	114.69V
60%	**37.491A**	**5.998A**	**5.95A**	**2A**	509.222	90.426%	636	8.4	42.96°C	0.987
	11.992V	5.002V	3.328V	4.902V	563.134				52.72°C	114.67V
70%	**43.862A**	**7.005A**	**6.95A**	**2.249A**	594.77	89.824%	1100	27.2	43.32°C	0.989
	11.984V	4.997V	3.324V	4.891V	662.15				53.2°C	114.63V
80%	**50.243A**	**8.013A**	**7.949A**	**2.356A**	679.578	89.135%	1384	34	43.6°C	0.99
	11.975V	4.992V	3.321V	4.882V	762.415				53.93°C	114.6V
90%	**57.032A**	**8.521A**	**8.432A**	**2.463A**	765	88.398%	1832	42	44.64°C	0.991
	11.967V	4.988V	3.321V	4.873V	865.402				54.7°C	114.56V
100%	**63.565A**	**9.029A**	**8.95A**	**3.084A**	849.825	87.532%	2151	46.3	45.06°C	0.992
	11.958V	4.984V	3.318V	4.865V	970.874				54.88°C	114.53V
110%	**69.979A**	**10.043A**	**10.048A**	**3.089A**	934.411	86.639%	2269	47.5	46.05°C	0.993
	11.949V	4.978V	3.314V	4.858V	1078.514				56.12°C	114.5V
CL1	**0.117A**	**12.052A**	**11.915A**	**0A**	101.305	85.668%	438	<6.0	42.01°C	0.972
	12.026V	4.995V	3.332V	4.928V	118.254				59.68°C	114.79V

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**	**20.031A**	**0A**	**0A**	101.348	84.329%	435	<6.0	42.92°C	0.972
	12.027V	4.99V	3.32V	4.932V	120.181				58.63°C	114.8V
CL3	**0.115A**	**0A**	**19.735A**	**0A**	67.389	80.593%	433	<6.0	42.32°C	0.965
	12.027V	5.006V	3.344V	4.933V	83.615				56.56°C	114.81V
CL4	**71.030A**	**0A**	**0A**	**0.001A**	849.584	88.328%	1617	38.8	45.5°C	0.992
	11.961V	5.009V	3.321V	4.883V	961.85				52.94°C	114.54V

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%	**5.274A**	**1.99A**	**1.975A**	**1.012A**	85.009	89.424%	420	<6.0	40.26°C	0.834
	12.022V	5.025V	3.341V	4.944V	95.061				43.36°C	229.81V
20%	**11.575A**	**2.988A**	**2.964A**	**1.216A**	169.959	92.656%	420	<6.0	40.61°C	0.92
	12.013V	5.02V	3.34V	4.936V	183.427				44.23°C	229.79V
30%	**18.235A**	**3.489A**	**3.46A**	**1.421A**	254.971	93.477%	421	<6.0	41.46°C	0.944
	12.005V	5.017V	3.338V	4.928V	272.763				45.78°C	229.78V
40%	**24.912A**	**3.99A**	**3.957A**	**1.626A**	340.072	93.722%	423	<6.0	41.92°C	0.956
	11.997V	5.014V	3.337V	4.921V	362.852				47.36°C	229.76V
50%	**31.232A**	**4.992A**	**4.948A**	**1.832A**	424.93	93.532%	424	<6.0	42.18°C	0.963
	11.988V	5.009V	3.335V	4.912V	454.315				49.47°C	229.76V
60%	**37.499A**	**5.996A**	**5.941A**	**2A**	509.266	92.434%	681	10.2	42.89°C	0.974
	11.991V	5.005V	3.334V	4.902V	550.954				52.27°C	229.74V
70%	**43.873A**	**7.002A**	**6.934A**	**2.249A**	594.789	92.06%	993	24.2	43.2°C	0.977
	11.982V	5V	3.332V	4.892V	646.094				51.95°C	229.73V
80%	**50.259A**	**8.008A**	**7.927A**	**2.355A**	679.601	91.636%	1267	31.6	43.69°C	0.979
	11.972V	4.995V	3.33V	4.884V	741.634				52.2°C	229.71V
90%	**57.052A**	**8.515A**	**8.414A**	**2.462A**	765.017	91.184%	1621	38.8	44.33°C	0.981
	11.963V	4.991V	3.328V	4.875V	838.976				53.49°C	229.7V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**63.588A**	**9.023A**	**8.936A**	**3.083A**	849.843	90.559%	2077	45.4	45.08°C	0.981
	11.954V	4.987V	3.324V	4.866V	938.444				54.48°C	229.68V
110%	**70.005A**	**10.036A**	**10.03A**	**3.088A**	934.427	89.955%	2208	46.9	44.4°C	0.983
	11.945V	4.982V	3.32V	4.858V	1038.774				54.5°C	229.67V
CL1	**0.117A**	**12.053A**	**11.899A**	**0A**	101.306	86.523%	437	<6.0	42.54°C	0.872
	12.025V	4.995V	3.336V	4.928V	117.085				57.28°C	229.81V
CL2	**0.117A**	**20.035A**	**0A**	**0A**	101.35	85.107%	435	<6.0	42.63°C	0.874
	12.026V	4.989V	3.322V	4.933V	119.086				56.1°C	229.81V
CL3	**0.115A**	**0A**	**19.71A**	**0A**	67.389	81.128%	432	<6.0	42.83°C	0.811
	12.025V	5.008V	3.348V	4.933V	83.064				54.23°C	229.81V
CL4	**71.056A**	**0A**	**0A**	**0.001A**	849.593	91.35%	1553	37.4	44.06°C	0.981
	11.957V	5.012V	3.324V	4.883V	930.043				51.4°C	229.68V

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	**1.234A**	**0.497A**	**0.494A**	**0.2A**	19.99	73.143%	405	<6.0	36.67°C	0.878
	12.029V	5.03V	3.342V	4.951V	27.331				37.57°C	114.84V
40W	**2.718A**	**0.696A**	**0.691A**	**0.303A**	40.001	82.943%	408	<6.0	37.07°C	0.931
	12.025V	5.028V	3.342V	4.949V	48.228				38.22°C	114.83V
60W	**4.203A**	**0.895A**	**0.889A**	**0.404A**	60.002	86.23%	410	<6.0	38.05°C	0.952
	12.023V	5.027V	3.341V	4.947V	69.583				39.59°C	114.82V
80W	**5.683A**	**1.094A**	**1.087A**	**0.506A**	79.948	88.764%	412	<6.0	39.46°C	0.966
	12.022V	5.026V	3.341V	4.946V	90.066				41.15°C	114.8V

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	**1.234A**	**0.497A**	**0.494A**	**0.2A**	19.996	74.32%	414	<6.0	36.06°C	0.49
	12.031V	5.03V	3.343V	4.95V	26.905				40.95°C	229.82V
40W	**2.718A**	**0.696A**	**0.691A**	**0.303A**	40.004	83.671%	416	<6.0	37.03°C	0.674
	12.027V	5.029V	3.342V	4.949V	47.812				40.77°C	229.82V
60W	**4.202A**	**0.895A**	**0.889A**	**0.404A**	60.003	87.586%	417	<6.0	38.21°C	0.771
	12.024V	5.028V	3.342V	4.947V	68.511				41.51°C	229.81V
80W	**5.683A**	**1.094A**	**1.086A**	**0.506A**	79.951	89.568%	418	<6.0	39.31°C	0.824
	12.022V	5.027V	3.341V	4.945V	89.263				42.25°C	229.81V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	19.43mV	15.91mV	16.83mV	11.85mV	Pass
20% Load	21.28mV	15.60mV	15.70mV	12.01mV	Pass
30% Load	22.81mV	15.70mV	17.08mV	12.37mV	Pass
40% Load	23.94mV	15.91mV	17.49mV	13.24mV	Pass
50% Load	26.85mV	17.09mV	19.34mV	13.65mV	Pass
60% Load	26.34mV	17.91mV	19.03mV	14.68mV	Pass
70% Load	26.24mV	17.65mV	19.44mV	14.78mV	Pass
80% Load	26.54mV	18.42mV	20.57mV	18.27mV	Pass
90% Load	28.28mV	17.65mV	21.96mV	21.04mV	Pass
100% Load	39.43mV	18.63mV	21.92mV	25.91mV	Pass
110% Load	40.55mV	18.58mV	24.98mV	29.11mV	Pass
Crossload1	26.15mV	15.71mV	17.57mV	13.89mV	Pass
Crossload2	20.82mV	18.99mV	16.26mV	13.80mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	18.56mV	15.24mV	17.44mV	12.93mV	Pass
Crossload4	40.72mV	18.54mV	21.64mV	19.00mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	19.85mV	15.75mV	16.01mV	11.49mV	Pass
20% Load	18.41mV	13.86mV	14.37mV	10.06mV	Pass
30% Load	21.53mV	15.86mV	16.78mV	11.85mV	Pass
40% Load	26.49mV	15.34mV	17.14mV	12.21mV	Pass
50% Load	26.90mV	16.37mV	17.60mV	13.60mV	Pass
60% Load	25.01mV	17.14mV	19.70mV	14.68mV	Pass
70% Load	25.62mV	17.96mV	19.86mV	15.70mV	Pass
80% Load	27.57mV	18.53mV	21.39mV	18.57mV	Pass
90% Load	29.77mV	17.91mV	21.55mV	19.91mV	Pass
100% Load	39.66mV	19.27mV	23.37mV	27.32mV	Pass
110% Load	41.95mV	20.02mV	24.22mV	30.03mV	Pass
Crossload1	25.55mV	16.31mV	17.47mV	15.26mV	Pass
Crossload2	22.45mV	21.81mV	19.44mV	13.91mV	Pass
Crossload3	19.95mV	15.81mV	19.86mV	13.50mV	Pass
Crossload4	40.13mV	18.26mV	22.51mV	18.28mV	Pass

The results above are not used in the certification process

MSI MAG A850GLS PCIE5



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

CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus

www.cybenetics.com - info@cybenetics.com