Gamer Storm PL750D

Serial Number 10000142981B4241500001

Lab ID GA75002432

Certification ID 252432

Test Result Report ID: 24PS2432A

Certificate Issue Date: Sep 16, 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	Gamer Storm
Model	PL750D
OEM/ODM	Helly Technology
Serial Number	10000142981B4241500001
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	10-5
Rated Frequency (Hz)	50-60
Rated Power (W)	750
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fixed cables
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	120mm Hydraulic Bearing Fan (W12025HZ12SEMA)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	GA75002432
Date of receipt	Aug 14, 2024
Testing Date	Aug 29, 2024
Report Issued Date	Sep 16, 2024
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors
(Non-accredited measurements)

Captive Cables				
Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors
ATX connector 20+4 pin (560mm)	1	1	18-22AWG	No
4+4 pin EPS12V (735mm)	2	2	18AWG	No
6+2 pin PCIe (590mm+120mm)	1	2	18AWG	No
6+2 pin PCIe (580mm)	1	1	18AWG	No
12+2 pin PCIe (590mm) (600W)	1	1	16-26AWG	No

SATA (445mm+105mm+105mm+105mm) / 4-pin Molex (+100mm)	2	8 / 2	18AWG	No
Modular Cables				
AC Power Cord (1385mm) - C13 coupler	1	1	18AWG	-

Protection Features

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	62.5	3	0.3
	Watts	100		750	15	3.6
Total Max. Power (W)		750				

Parts Description

General Data	
Manufacturer (OEM)	Helly Technology
PCB Type	Double-Sided
Primary Side	
Transient Filter	2x Y caps, 1x X caps, 2x CM chokes, 1x MOV
Inrush Protection	1x NTC Thermistor MF72 10D-15 (10 Ohm @25°C) & Relay
Bridge Rectifier(s)	2x GBU1508 ((560V, 15A @ 100°C)
APFC MOSFETs	2x PTA28N50 (500V, 18A @ 100°C, Rds(on): 0.21Ohm)
APFC Boost Diode	1x WeEN BYC15X-600P (600V, 10A @ 25°C)
Bulk Cap(s)	1x Chengx (420V, 470uF @ 105°C, LS)
Main Switchers	2x PTA28N50 (500V, 18A @ 100°C, Rds(on): 0.21Ohm)

PFC/PWM Controller	Champion CM6800UX
Topology	Primary side: APFC, Double Forward Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	3x Oriental Semiconductor SFS06R03PF (60V, 160A @ 25°C, Rds(on): 3.5mOhm)
5V & 3.3V	DC-DC Converters: 2x XSEMI XP3NA3R4MT (30V, 46A @ 100°C, Rds(on): 3.4mOhm) 2x Rectron Semiconductor 3N5R0 (30V, 19.7A @ @ 70°C, Rds(on): 5mOhm) PWM Controller(s): 2x ANPEC APW7073
Filtering Capacitors	Electrolytic: 10x Chengx (2-3,000 @ 105°C,GR), Polymer: 9x Apaq
Supervisor IC	Infinno IN1S429I-SCG (OCP, OVP, UVP, SCP, PG)
Fan Model	WAM W12025HZ12SEMA (120mm, 12V, 0.25A, Hydraulic Bearing Fan)
5VSB	
High Side Rectifier	P6SMB (220V , 1A)
Standby PWM Controller	Excelliance MOS EM8564A

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)	85.834%
Average Noise Output (>1450 Load Combinations)	33.59dBA

Average PF (>1450 Load Combinations)	0.985
Efficiency With 10W (≤500W) or 2% (>500W) Load	60.353%
Standby Power Consumption	0.0378W
Non-Accredited	
12V Ripple (Full Load)	37.82mV
5V Ripple (Full Load)	18.44mV
3.3V Ripple (Full Load)	17.56mV
5VSB Ripple (Full Load)	17.05mV
12V Load Regulation	0.59%
5V Load Regulation	0.49%
3.3V Load Regulation	1.52%
5VSB Load Regulation	3.24%
Inrush Current	16.840A

230V

Accredited	
Average Efficiency (>1450 load combinations)	88.408%
Average Noise Output (>1450 Load Combinations)	34.69dBA
Average PF (>1450 Load Combinations)	0.941
Efficiency With 10W (≤500W) or 2% (>500W) Load	59.937%
Standby Power Consumption	0.0936W
Non-Accredited	
12V Ripple (Full Load)	35.70mV
5V Ripple (Full Load)	18.08mV
3.3V Ripple (Full Load)	17.42mV
5VSB Ripple (Full Load)	14.73mV
12V Load Regulation	0.60%
5V Load Regulation	0.49%
3.3V Load Regulation	1.61%
5VSB Load Regulation	3.26%
Inrush Current	32.920A
12V Transient Response (200%)	11.36V

5V Transient Response (200%)		5.042V
3.3V Transient Response (200%)		3.229V
5VSB Transient Response (200%)		4.930V
Hold-Up Time & PWR_OK Signal		18.20ms
AC Loss to PWR_OK Hold Up Time		17.10ms
PWR_OK Inactive to DC Loss Delay		1.10ms
PSU Timings: T1 (20% / 100%)	26.0ms	26.0ms
PSU Timings: T3 (20% / 100%)	113.0ms	113.0ms
OPP (28.22°C / 41.24°C)	126.45%	118.18%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	18.2
AC Loss to PWR_OK Hold Up Time (ms)	17.1
PWR_OK Inactive to DC Loss Delay (ms)	1.1

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Tables

115V

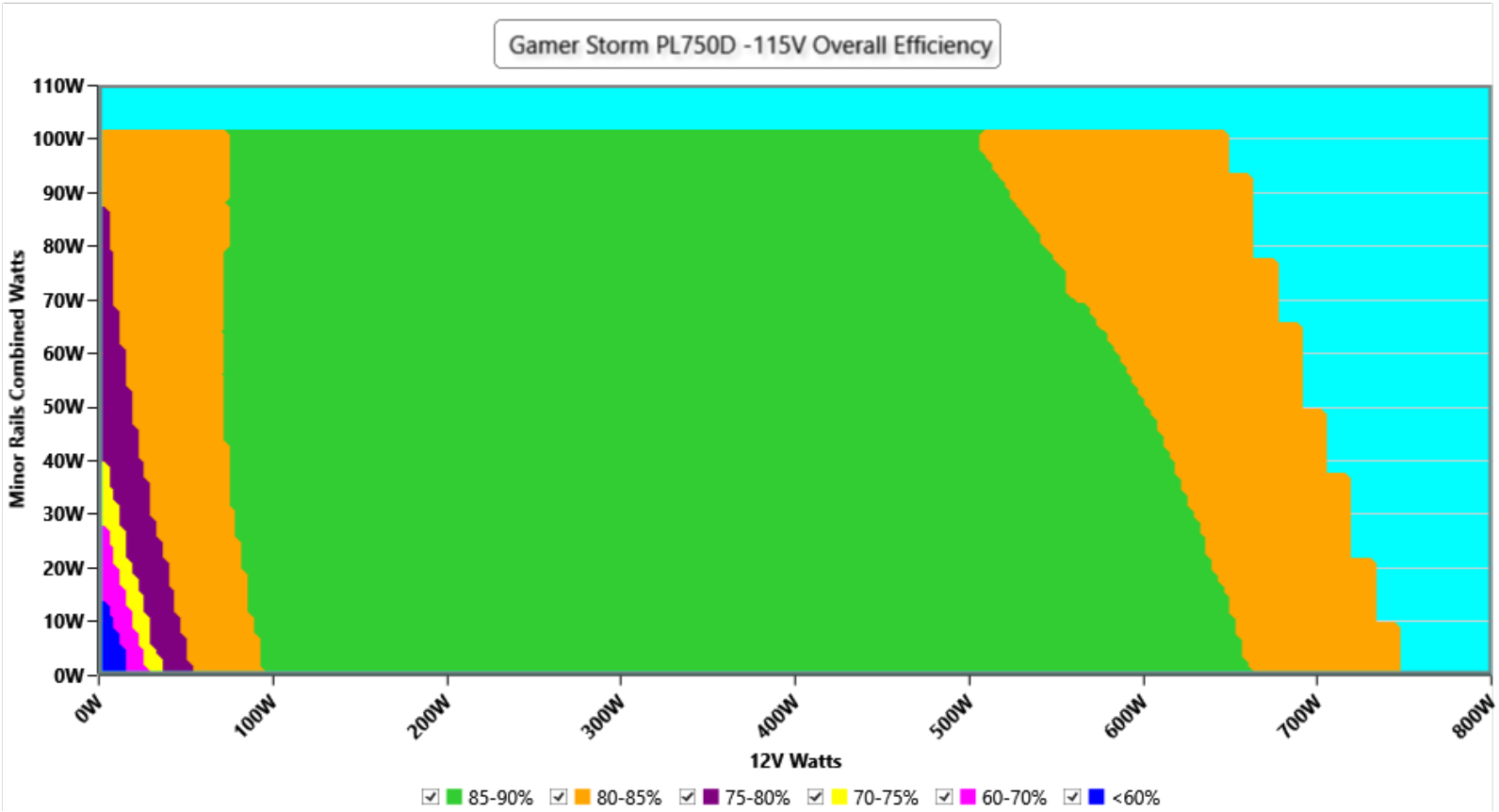
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.13 V	115.12 V	113.85 V	115.16 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.99 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.13 %	0.11 %	N/A	0.15 %	2.00 %	PASS
Real Power:	0.038 W	0.007 W	N/A	0.047 W	N/A	N/A
Apparent Power:	8.527 W	8.519 W	N/A	8.532 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:	230.36 V	230.34 V	227.70 V	230.38 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	50.00 Hz	49.50 Hz	50.00 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:	0.094 W	0.079 W	N/A	0.119 W	N/A	N/A
Apparent Power:	28.559 W	28.541 W	N/A	28.574 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

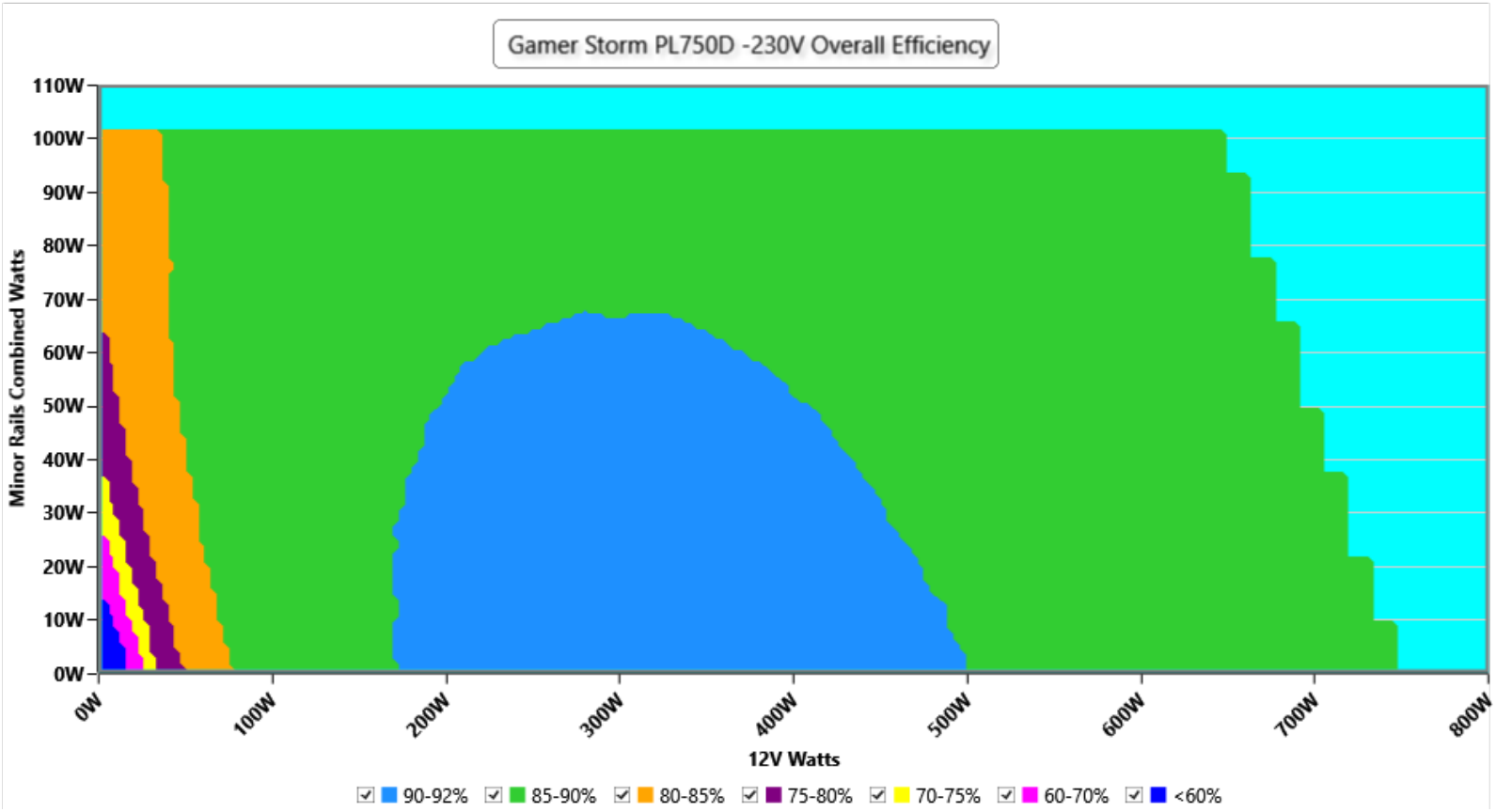
115V



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

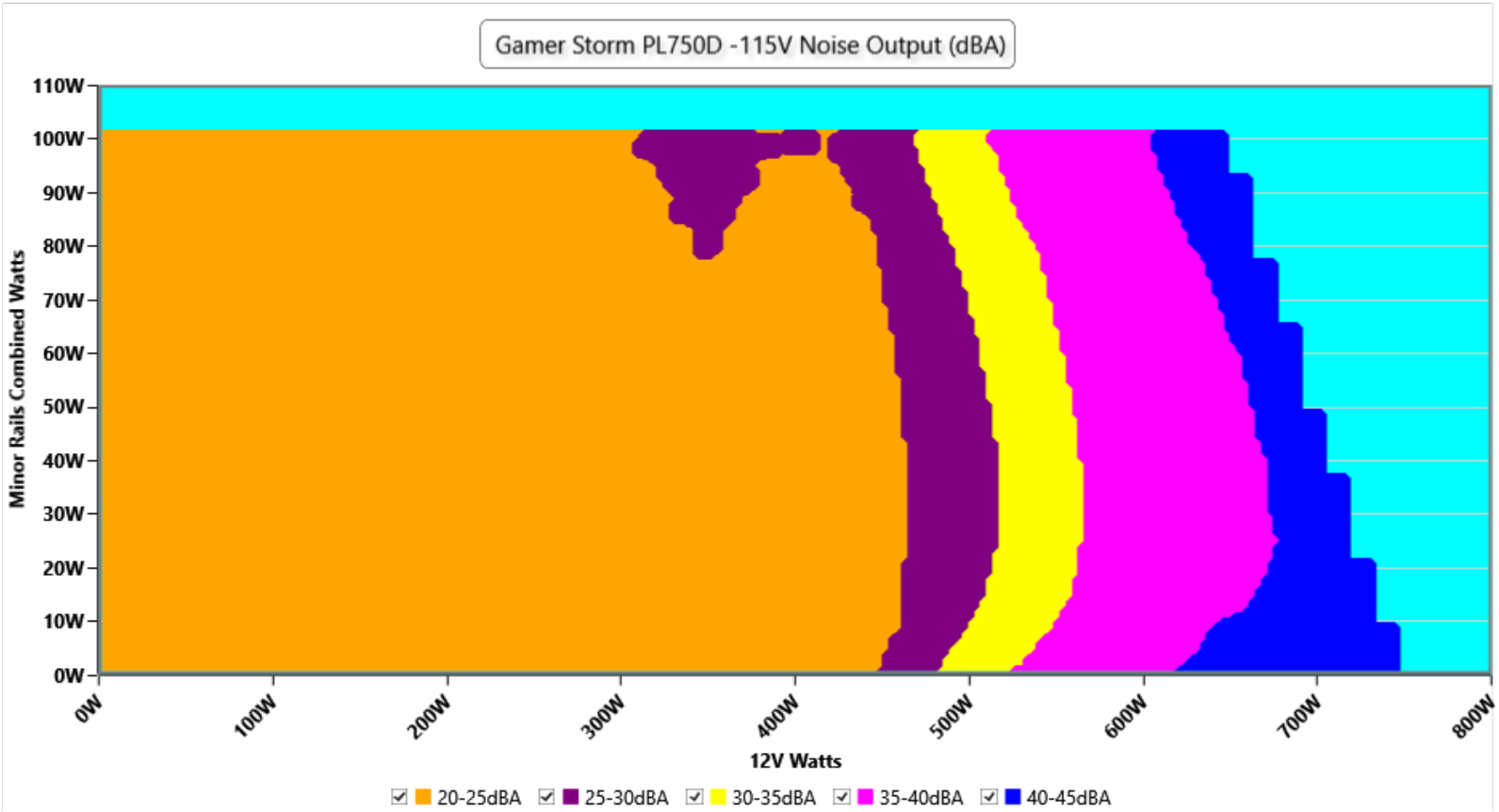


INFO

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Noise Graph

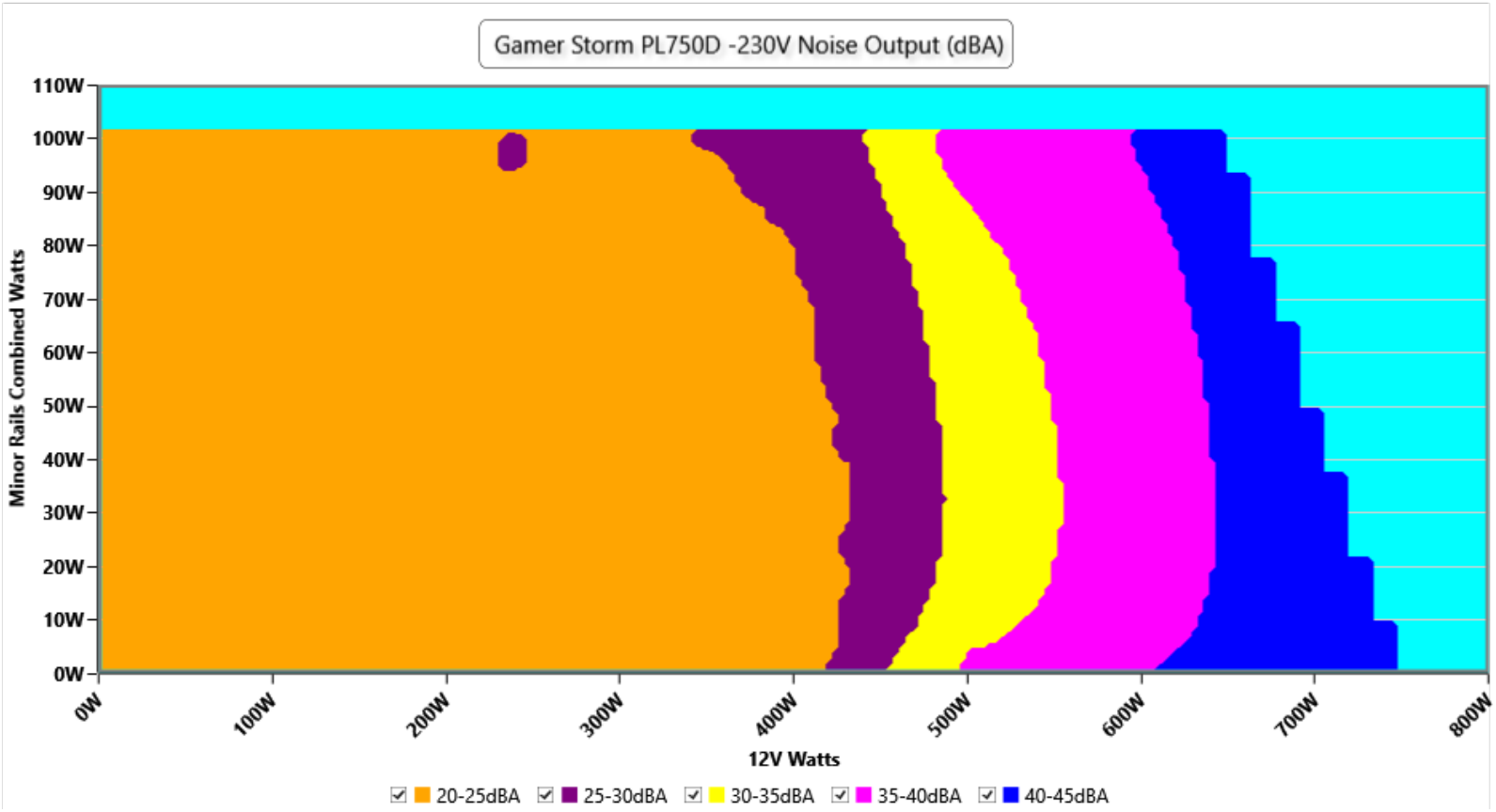
115V



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%	1093 RPM · 25.9 dB(A) · 40.3 °C	1093 RPM · 25.9 dB(A) · 40.3 °C	**+0.0 dB(A)**
20%	1096 RPM · 25.9 dB(A) · 40.6 °C	1096 RPM · 25.9 dB(A) · 40.6 °C	**+0.0 dB(A)**
50%	1108 RPM · 26.5 dB(A) · 42.4 °C	1108 RPM · 26.5 dB(A) · 42.4 °C	**+0.0 dB(A)**
100%	2108 RPM · 44.5 dB(A) · 45.4 °C	2108 RPM · 44.5 dB(A) · 45.4 °C	**+0.0 dB(A)**

230V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	1084 RPM · 25.6 dB(A) · 40.2 °C	1084 RPM · 25.6 dB(A) · 40.2 °C	**+0.0 dB(A)**
20%	1090 RPM · 25.8 dB(A) · 40.9 °C	1090 RPM · 25.8 dB(A) · 40.9 °C	**+0.0 dB(A)**
50%	1099 RPM · 26.1 dB(A) · 42.1 °C	1099 RPM · 26.1 dB(A) · 42.1 °C	**+0.0 dB(A)**
100%	2107 RPM · 44.5 dB(A) · 45.5 °C	2107 RPM · 44.5 dB(A) · 45.5 °C	**+0.0 dB(A)**

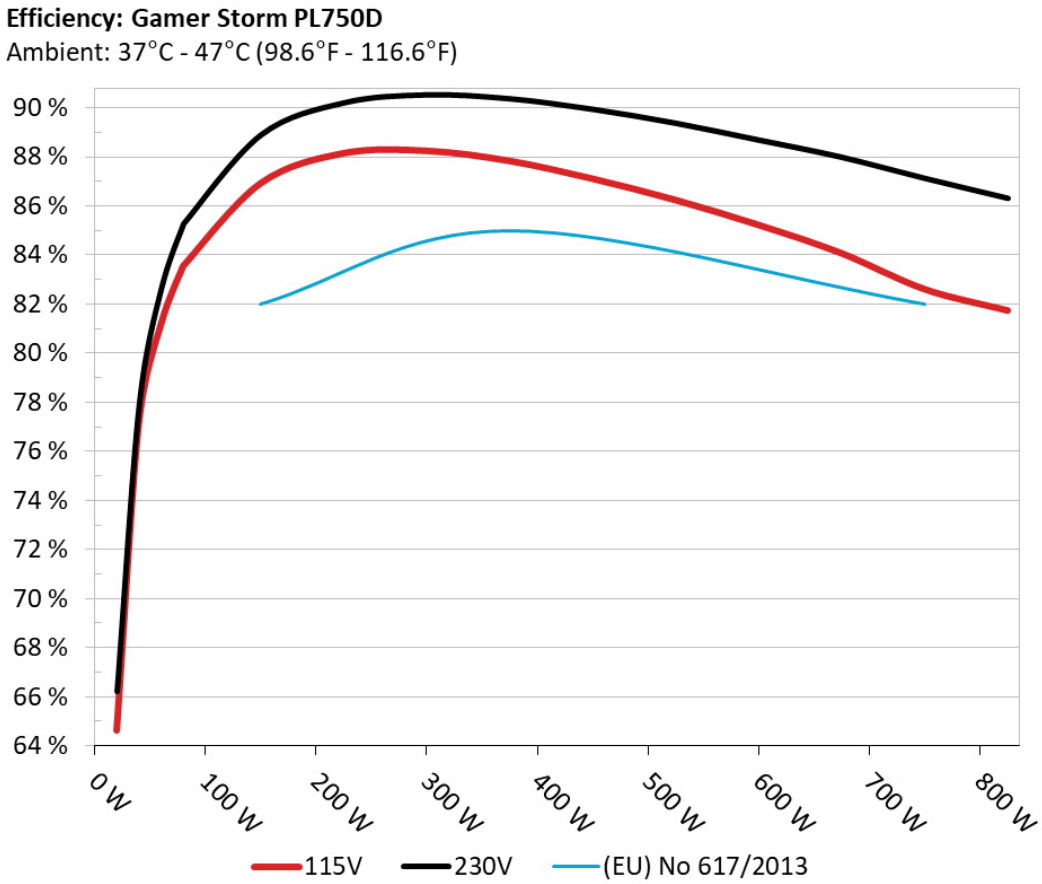
INFO

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: 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.

Indicative Performance

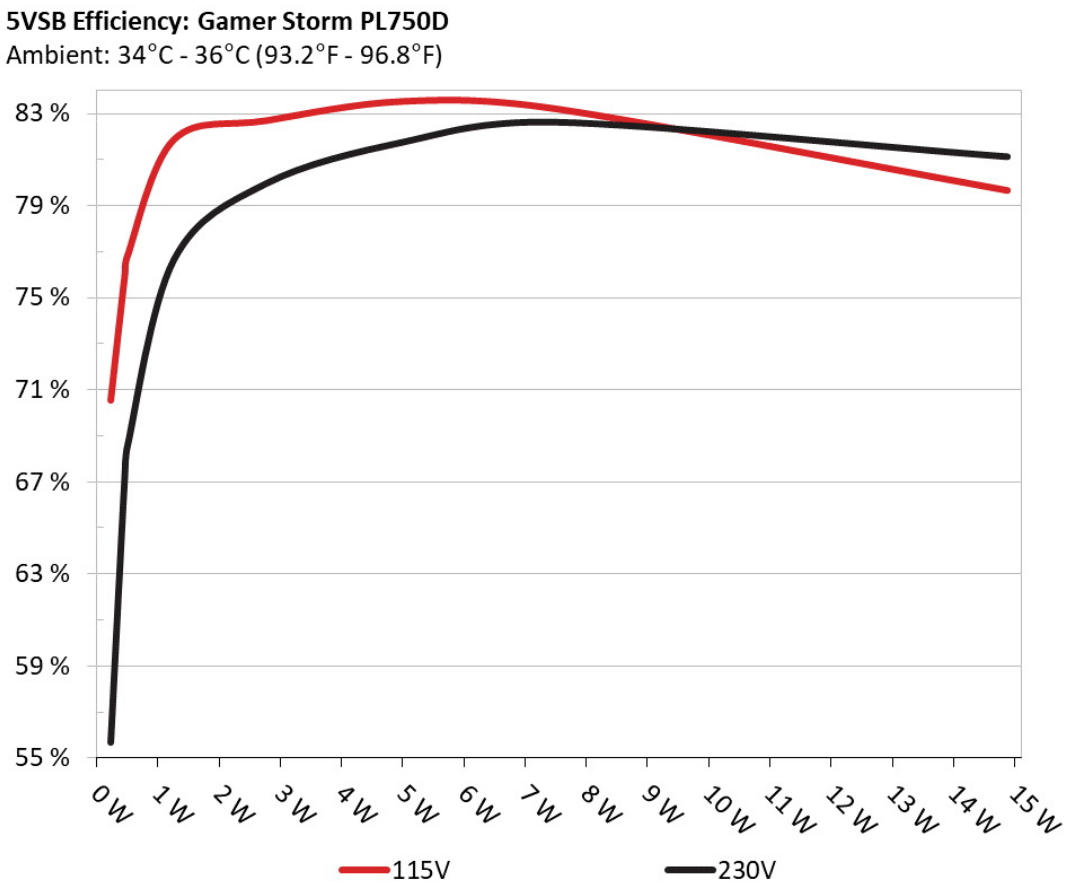
Efficiency under high ambient temperature



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	0.227W	70.557%	0.037
	5.044V	0.322W		115.15V
2	0.09A	0.454W	75.93%	0.069
	5.043V	0.598W		115.15V
3	0.55A	2.767W	82.693%	0.298
	5.029V	3.346W		115.15V
4	1A	5.018W	83.532%	0.404
	5.017V	6.007W		115.14V
5	1.5A	7.506W	83.202%	0.458
	5.002V	9.021W		115.15V
6	3A	14.88W	79.665%	0.523
	4.96V	18.678W		115.15V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.227W	55.698%	0.014
	5.044V	0.408W		230.34V
2	0.09A	0.454W	67.178%	0.024
	5.043V	0.676W		230.36V
3	0.55A	2.767W	79.979%	0.115
	5.029V	3.46W		230.38V
4	1A	5.018W	81.788%	0.19
	5.016V	6.134W		230.39V
5	1.5A	7.506W	82.646%	0.255
	5.002V	9.083W		230.39V
6	3.001A	14.881W	81.146%	0.371
	4.959V	18.335W		230.39V

Protection Features

Protection Features	
OCP (Cold @ 28°C)	12V: 78.8A (126.08%), 11.986V 5V: 30.5A (152.5%), 5.06V 3.3V: 29.4A (147%), 3.303V 5VSB: 3.9A (130%), 4.931V
OCP (Hot @ 42°C)	12V: 74.8A (119.68%), 11.99V 5V: 29.5A (147.5%), 5.059V 3.3V: 28.5A (142.5%), 3.298V 5VSB: 3.9A (130%), 4.929V
OPP (Cold @ 28°C)	948.39W (126.45%)
OPP (Hot @ 41°C)	886.34W (118.18%)
OTP	✓ (108°C @ +12V 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 Thermistor & 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%	4.437A	1.963A	1.98A	0.998A	75.004	82.448%	1093	25.9	40.26°C	0.945
	12.036V	5.096V	3.334V	5.009V	90.97				44.45°C	115.14V
20%	9.898A	2.946A	2.975A	1.201A	149.968	86.932%	1096	25.9	40.63°C	0.971
	12.029V	5.094V	3.328V	4.996V	172.513				45.17°C	115.12V
30%	15.713A	3.438A	3.474A	1.405A	224.972	88.162%	1099	26.1	41.07°C	0.983
	12.022V	5.092V	3.325V	4.984V	255.18				46.08°C	115.1V
40%	21.542A	3.93A	3.975A	1.61A	300.056	88.261%	1101	26.1	41.72°C	0.988
	12.016V	5.09V	3.321V	4.971V	339.962				47.23°C	115.08V
50%	26.987A	4.915A	4.977A	1.816A	374.592	87.852%	1108	26.5	42.35°C	0.991
	12.009V	5.087V	3.316V	4.957V	426.393				48.39°C	115.06V
60%	32.471A	5.902A	5.983A	2A	449.411	87.128%	1321	31.2	42.75°C	0.993
	12.001V	5.084V	3.31V	4.944V	515.807				49.27°C	115.04V
70%	37.968A	6.891A	6.992A	2.232A	524.501	86.258%	1691	39.5	43.16°C	0.994
	11.994V	5.081V	3.304V	4.929V	608.068				50.2°C	115.02V
80%	43.537A	7.878A	8.004A	2.339A	599.733	85.239%	1959	43.3	43.83°C	0.994
	11.986V	5.078V	3.298V	4.917V	703.589				52.1°C	115.01V
90%	49.445A	8.374A	8.499A	2.446A	674.782	84.083%	2094	44.2	44.7°C	0.995
	11.978V	5.076V	3.294V	4.906V	802.519				53.8°C	114.99V
100%	55.157A	8.869A	9.026A	3.074A	749.972	82.614%	2108	44.5	45.42°C	0.995
	11.971V	5.074V	3.29V	4.88V	907.812				55.49°C	114.96V
110%	60.743A	9.86A	10.14A	3.079A	824.991	81.746%	2112	44.5	46.59°C	0.996
	11.963V	5.071V	3.284V	4.872V	1009.228				57.47°C	114.93V
CL1	0.116A	11.848A	12.036A	0A	101.304	79.859%	1116	26.7	40.49°C	0.959
	12.027V	5.081V	3.298V	5.024V	126.854				46.4°C	115.14V

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	19.717A	0A	0A	101.398	79.39%	1119	26.8	40.81°C	0.958
	12.032V	5.072V	3.341V	5.03V	127.72				48.4°C	115.14V
CL3	0.116A	0A	20.197A	0A	67.393	73.462%	1092	25.9	39.92°C	0.946
	12.029V	5.1V	3.268V	5.026V	91.741				49.54°C	115.15V
CL4	62.580A	0A	0A	0.001A	749.76	83.783%	2102	44.4	45.88°C	0.995
	11.981V	5.088V	3.323V	4.982V	894.918				56.38°C	114.97V

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%	4.437A	1.963A	1.98A	0.998A	75.005	84.086%	1084	25.6	40.18°C	0.843
	12.036V	5.096V	3.333V	5.009V	89.198				44.37°C	230.39V
20%	9.898A	2.946A	2.975A	1.201A	149.971	88.876%	1090	25.8	40.94°C	0.901
	12.029V	5.093V	3.328V	4.996V	168.742				45.52°C	230.38V
30%	15.713A	3.438A	3.475A	1.405A	224.972	90.183%	1089	25.7	41.19°C	0.932
	12.023V	5.091V	3.324V	4.984V	249.463				46.22°C	230.37V
40%	21.542A	3.931A	3.977A	1.61A	300.055	90.506%	1092	25.9	41.87°C	0.946
	12.016V	5.089V	3.32V	4.971V	331.533				47.43°C	230.36V
50%	26.985A	4.916A	4.979A	1.816A	374.582	90.349%	1099	26.1	42.14°C	0.954
	12.009V	5.087V	3.314V	4.957V	414.598				48.2°C	230.35V
60%	32.469A	5.903A	5.987A	2A	449.383	89.921%	1301	31.0	42.65°C	0.961
	12.002V	5.084V	3.307V	4.944V	499.752				49.2°C	230.34V
70%	37.960A	6.891A	6.996A	2.232A	524.427	89.353%	1669	39.0	43.25°C	0.967
	11.995V	5.08V	3.302V	4.929V	586.92				50.26°C	230.33V
80%	43.526A	7.878A	8.009A	2.339A	599.637	88.669%	1952	43.2	43.79°C	0.972
	11.987V	5.078V	3.296V	4.918V	676.263				51.83°C	230.32V
90%	49.436A	8.375A	8.505A	2.446A	674.719	87.967%	2093	44.2	44.55°C	0.976
	11.979V	5.075V	3.292V	4.907V	767.013				53.59°C	230.31V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	55.156A	8.872A	9.034A	3.075A	749.981	87.106%	2107	44.5	45.51°C	0.98
	11.971V	5.073V	3.287V	4.879V	861.004				55.55°C	230.31V
110%	60.742A	9.864A	10.149A	3.08A	824.992	86.294%	2110	44.5	46.53°C	0.982
	11.963V	5.069V	3.281V	4.871V	956.023				57.42°C	230.31V
CL1	0.116A	11.85A	12.046A	0A	101.3	81.625%	1114	26.5	40.15°C	0.884
	12.028V	5.08V	3.295V	5.024V	124.105				45.5°C	230.38V
CL2	0.116A	19.721A	0A	0A	101.393	81.2%	1115	26.7	40.06°C	0.883
	12.032V	5.07V	3.341V	5.03V	124.867				47.1°C	230.37V
CL3	0.116A	0A	20.22A	0A	67.388	74.917%	1087	25.6	40.39°C	0.845
	12.029V	5.099V	3.264V	5.026V	89.952				49.47°C	230.37V
CL4	62.570A	0A	0A	0.001A	749.699	88.02%	2099	44.4	45.18°C	0.979
	11.981V	5.088V	3.323V	4.982V	851.749				55.38°C	230.3V

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	0.49A	0.494A	0.198A	20.003	64.605%	1074	25.5	36.57°C	0.91
	12.041V	5.099V	3.34V	5.038V	30.961				39.75°C	115.16V
40W	2.716A	0.686A	0.692A	0.298A	40	77.142%	1079	25.6	37.24°C	0.97
	12.039V	5.099V	3.339V	5.034V	51.852				40.77°C	115.15V
60W	4.198A	0.883A	0.89A	0.398A	59.998	81.179%	1084	25.6	38.23°C	0.946
	12.038V	5.098V	3.338V	5.029V	73.907				41.87°C	115.14V
80W	5.676A	1.079A	1.088A	0.498A	79.959	83.552%	1089	25.7	39.77°C	0.946
	12.037V	5.097V	3.337V	5.024V	95.701				43.51°C	115.14V

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	0.49A	0.494A	0.198A	19.999	66.219%	1072	25.5	36.58°C	0.603
	12.042V	5.098V	3.34V	5.038V	30.194				39.77°C	230.37V
40W	2.715A	0.687A	0.692A	0.298A	39.997	77.874%	1074	25.5	37.38°C	0.742
	12.040V	5.098V	3.339V	5.034V	51.357				40.79°C	230.37V
60W	4.197A	0.883A	0.89A	0.398A	59.996	82.617%	1076	25.5	38.46°C	0.807
	12.039V	5.097V	3.337V	5.029V	72.614				42.11°C	230.37V
80W	5.676A	1.079A	1.088A	0.498A	79.958	85.251%	1079	25.6	39.33°C	0.851
	12.037V	5.097V	3.336V	5.024V	93.793				43.05°C	230.37V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	9.4 mV	10.1 mV	6.4 mV	7.4 mV	Pass
20% Load	10.1 mV	10.0 mV	6.2 mV	7.3 mV	Pass
30% Load	11.9 mV	10.0 mV	6.5 mV	7.2 mV	Pass
40% Load	13.4 mV	10.9 mV	6.5 mV	8.1 mV	Pass
50% Load	14.8 mV	11.5 mV	7.0 mV	8.5 mV	Pass
60% Load	17.9 mV	12.8 mV	7.1 mV	9.1 mV	Pass
70% Load	19.4 mV	12.9 mV	7.6 mV	9.6 mV	Pass
80% Load	20.3 mV	13.8 mV	13.5 mV	11.0 mV	Pass
90% Load	23.3 mV	14.9 mV	14.1 mV	12.3 mV	Pass
100% Load	37.8 mV	18.4 mV	17.6 mV	17.1 mV	Pass
110% Load	46.3 mV	20.4 mV	19.6 mV	17.9 mV	Pass
Crossload 1	15.0 mV	14.2 mV	16.2 mV	7.2 mV	Pass
Crossload 2	11.4 mV	15.1 mV	8.5 mV	7.4 mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload 3	10.3 mV	9.1 mV	18.0 mV	6.1 mV	Pass
Crossload 4	40.1 mV	16.4 mV	11.7 mV	12.3 mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	9.0 mV	9.5 mV	6.0 mV	7.1 mV	Pass
20% Load	10.5 mV	10.2 mV	6.3 mV	7.3 mV	Pass
30% Load	12.6 mV	10.9 mV	6.7 mV	7.2 mV	Pass
40% Load	13.2 mV	10.9 mV	6.4 mV	7.7 mV	Pass
50% Load	15.6 mV	11.5 mV	7.1 mV	8.6 mV	Pass
60% Load	17.0 mV	11.7 mV	7.2 mV	8.8 mV	Pass
70% Load	19.3 mV	13.3 mV	7.9 mV	9.3 mV	Pass
80% Load	20.7 mV	14.0 mV	13.2 mV	10.8 mV	Pass
90% Load	23.3 mV	14.4 mV	14.1 mV	11.3 mV	Pass
100% Load	35.7 mV	18.1 mV	17.4 mV	14.7 mV	Pass
110% Load	43.6 mV	18.5 mV	19.8 mV	16.8 mV	Pass
Crossload 1	13.9 mV	14.3 mV	16.0 mV	6.9 mV	Pass
Crossload 2	10.6 mV	15.5 mV	8.5 mV	7.0 mV	Pass
Crossload 3	10.7 mV	8.9 mV	17.6 mV	5.4 mV	Pass
Crossload 4	38.4 mV	17.2 mV	11.9 mV	11.7 mV	Pass

The results above are not used in the certification process

Gamer Storm PL750D



Top side



Power specifications label

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