be quiet!

be quiet! Dark Power 14 850W

Serial Number 019EUL5380000001

Lab ID BQ85003005

Certification ID 253005

Test Result Report ID: 25PS3005A

Certificate Issue Date: Oct 20, 2025

Scheme: ETA-EMI PSU

115V



230V

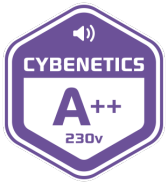


Scheme: LAMBDA PSU

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	be quiet!
Model	Dark Power 14 850W
OEM/ODM	CWT
Serial Number	019EUL5380000001
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 (BQ SIW4-13525-MF)
Semi-Passive Operation	✓ (selectable)
Cybenetics Testing Information	
Lab ID	BQ85003005
Date of receipt	Oct 10, 2025
Testing Date	Oct 17, 2025
Report Issued Date	Oct 20, 2025
Engineer Name	Georgios Theodoros Sarimpalas
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors
(Non-accredited measurements)

Modular Cables				
Description	**Cable Count**	**Connector Count (Total)**	**Gauge**	Cable Type
ATX connector 20+4 pin (600mm)	1	1	16-18AWG	Tinned Copper
8 pin ATX12V (700mm)	1	1	16AWG	Tinned Copper
4+4 pin ATX12V (700mm)	1	1	16AWG	Tinned Copper
2x 6+2 pin PCIe (750mm)	4	4	18AWG	Tinned Copper
12+4 pin PCIe PCIe (600mm)	1	1	16-24AWG	Tinned Copper

SATA (600mm+155mm+155mm+155mm)	2	8	18AWG	Tinned Copper
SATA (600mm+155mm+155mm)	1	3	18AWG	Tinned Copper
SATA (605mm+155mm) / 4-pin Molex (+155mm+150mm)	1	2 / 2	18AWG	Tinned Copper
AC Power Cord (1380mm)	1	1	18AWG	-

Protection Features

Under Voltage Protection	✓
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(1)	12V(2)	12V(3)	12V(4)	5VSB	-12V
Max. Power	Amps	24	24	30	30	35	35	3	0.5
	Watts	120		840				15	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	NTC Thermistor SCK-0510 (5 Ohm @ 25°C) & Relay
Rectifier MOSFETs	4x Toshiba TK055U60Z1 (600V, 40A @ 25°C, Rds(on): 0.055Ohm)
APFC MOSFETs	2x Infineon IPA60R120P7 (650V, 26A @ 25°C, Rds(on): 0.120Ohm)
APFC Boost Diode	Infineon IDH10G65C6 (650V, 10A @ 140°C)

Bulk Cap(s)	2x Nippon Chemi-Con (420V, 470uF each or 940uF combined, 2000h @ 105°C,KMQ)
Main Switchers	4x Alpha & Omega AOTF29S50 (600V, 29A @ 25°C, Rds(on): 0.15Ohm)
APFC Controller	Champion CM6500UNX & Sync Power SPN5003 (reducing no load consumption)
Resonant Controller	Champion CM6901T2X
IC Driver	2x Novosense NSI6602BD
Topology	Primary side: Bridgeless PFC, Full-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	4x Infineon BSC010N04LS (40V, 206A @ 100°C, Rds(on): 1.0mOhm)
5V & 3.3V	DC-DC Converters: 4x UBIQ Semi QN3107M6N (30V, 70A @ 100°C, Rds(on): 2.6mOhm) PWM Controller(s): UPI-Semi uP3861P
Filtering Capacitors	Electrolytic: 7x Rubycon (3-6,000 @ 105°C, YXS) 3x Rubycon (4-10,000 @ 105°C, YXJ) Rubycon (10,000 @ 105°C, YXM) Nichicon (4-10,000 @ 105°C, HE(M)) Polymer: 30x Nippon Chemi-con, 12x FPCAP
Supervisor IC	Weltrend WT7518 (OVP, UVP, OCP, PG)
MCU / Fan Controller	Nuvoton MS51FB9AE
Fan Model	BQ SIW4-13525-MF (135mm, 12V, 0.4A, Fluid Dynamic Bearing Fan)
5VSB Circuit	
Rectifier (High Side)	Dongke DK5V45R10V (45V, 10mOhm)
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)	92.070%
Average Noise Output (>1450 Load Combinations)	10.46dBA
Average PF (>1450 Load Combinations)	0.986
Efficiency With 10W (≤500W) or 2% (>500W) Load	71.305%
Standby Power Consumption	0.0741W
Non-Accredited	
12V Ripple (Full Load)	23.88mV
5V Ripple (Full Load)	20.30mV
3.3V Ripple (Full Load)	21.78mV
5VSB Ripple (Full Load)	20.09mV
12V Load Regulation	0.43%
5V Load Regulation	0.16%
3.3V Load Regulation	0.30%
5VSB Load Regulation	6.57%
Inrush Current	27.270A

230V

Accredited	
Average Efficiency (>1450 load combinations)	93.439%
Average Noise Output (>1450 Load Combinations)	10.61dBA
Average PF (>1450 Load Combinations)	0.959
Efficiency With 10W (≤500W) or 2% (>500W) Load	72.036%
Standby Power Consumption	0.1401W
Non-Accredited	

12V Ripple (Full Load)		22.50mV
5V Ripple (Full Load)		19.82mV
3.3V Ripple (Full Load)		20.09mV
5VSB Ripple (Full Load)		19.94mV
12V Load Regulation		0.45%
5V Load Regulation		0.08%
3.3V Load Regulation		0.27%
5VSB Load Regulation		5.77%
Inrush Current		63.450A
12V Transient Response (200%)		11.51V
5V Transient Response (200%)		4.977V
3.3V Transient Response (200%)		3.222V
5VSB Transient Response (200%)		4.929V
Hold-Up Time & PWR_OK Signal		19.30ms
AC Loss to PWR_OK Hold Up Time		17.10ms
PWR_OK Inactive to DC Loss Delay		2.20ms
PSU Timings: T1 (20% / 100%)	49.0ms	49.0ms
PSU Timings: T3 (20% / 100%)	125.0ms	125.0ms
12V OCP (28.3°C / 41.9°C)	92.50A (154.17%), 11.831V	91.50A (152.50%), 11.840V
5V OCP (28.3°C / 41.9°C)	30.4A (126.67%), 5.088V	30.5A (127.08%), 5.07V
3.3V OCP (28.3°C / 41.9°C)	30.0A (125.00%), 3.373V	30A (125.00%), 3.307V
5VSB OCP (28.3°C / 41.9°C)	5A (166.67%), 4.917V	4.9A (163.33%), 4.883V
OPP (30.40°C / 40.50°C)	129.77%	126.36%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	19.3
AC Loss to PWR_OK Hold Up Time (ms)	17.1
PWR_OK Inactive to DC Loss Delay (ms)	2.2

Stromverbrauch im Ruhezustand

Tables

115V

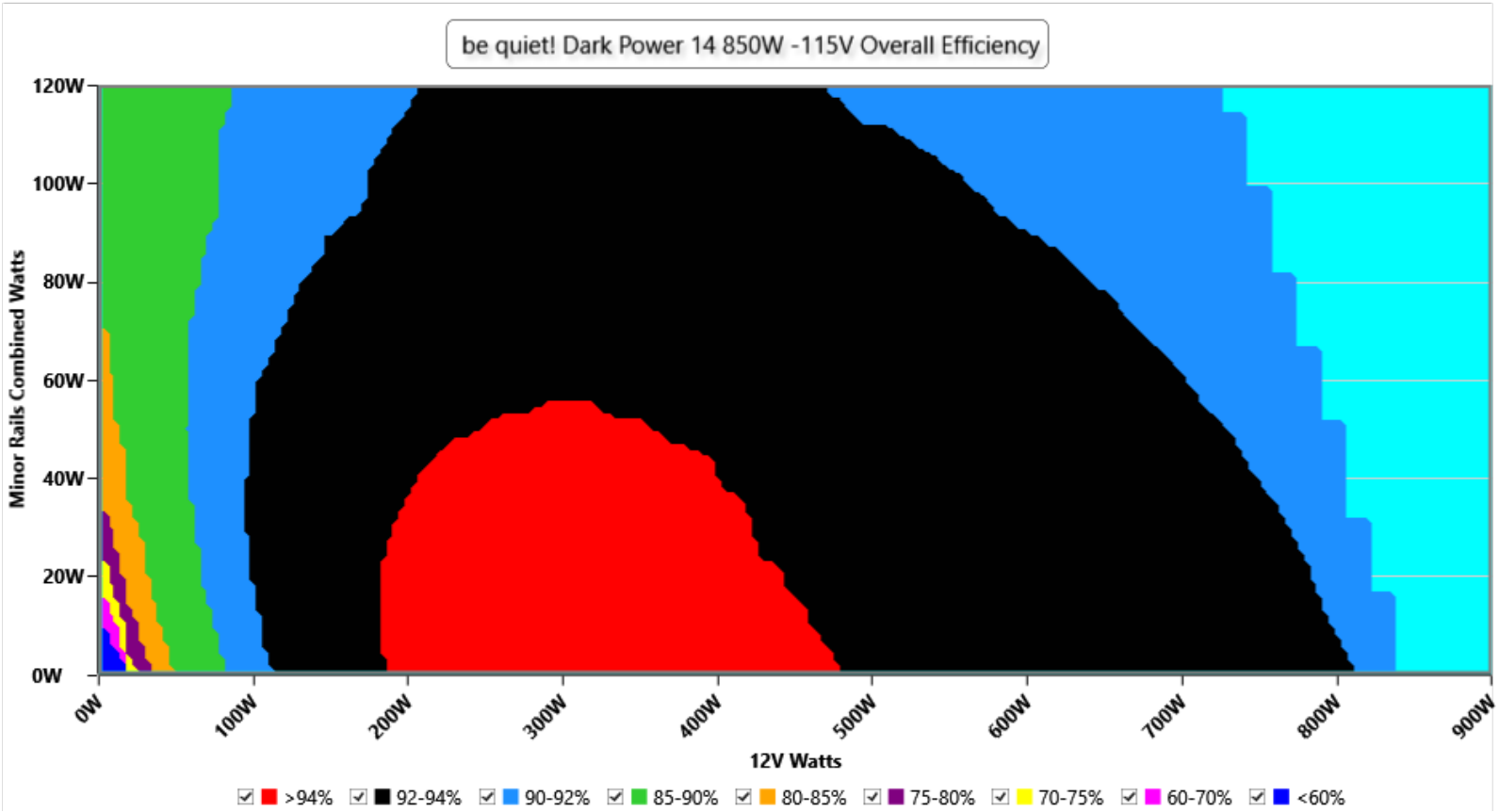
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.04 V	114.98 V	113.85 V	115.12 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.91 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.417	1.490	PASS
Mains Voltage THD:	0.13 %	0.11 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.074 W	0.011 W	N/A	0.142 W	N/A	N/A
Apparent Power:	10.261 W	10.226 W	N/A	10.291 W	N/A	N/A
Power Factor:	0.010	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	230.00 V	229.97 V	227.70 V	230.04 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:	0.15 %	0.13 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.140 W	0.083 W	N/A	0.209 W	N/A	N/A
Apparent Power:	33.550 W	33.510 W	N/A	33.587 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

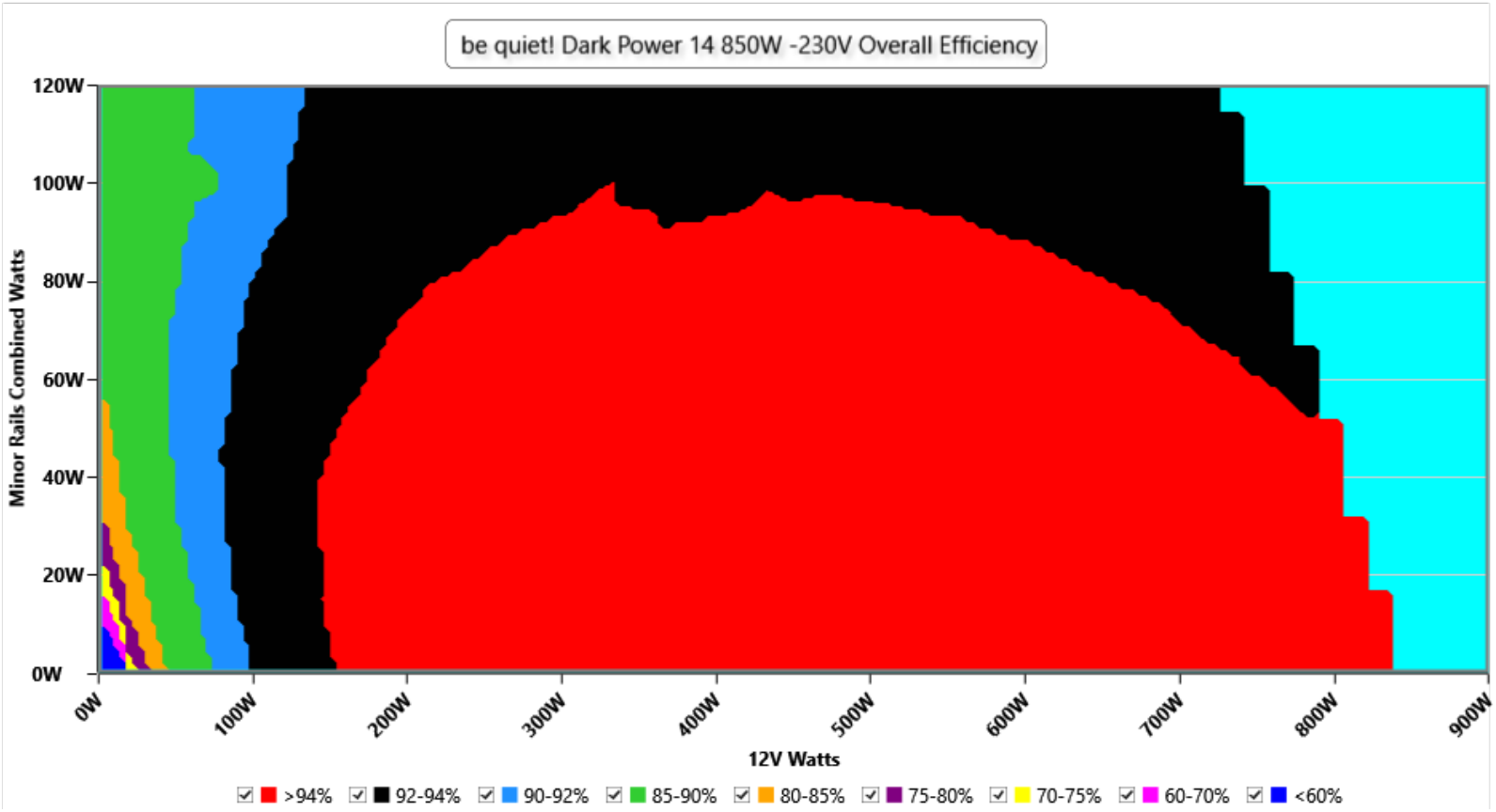
115V



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

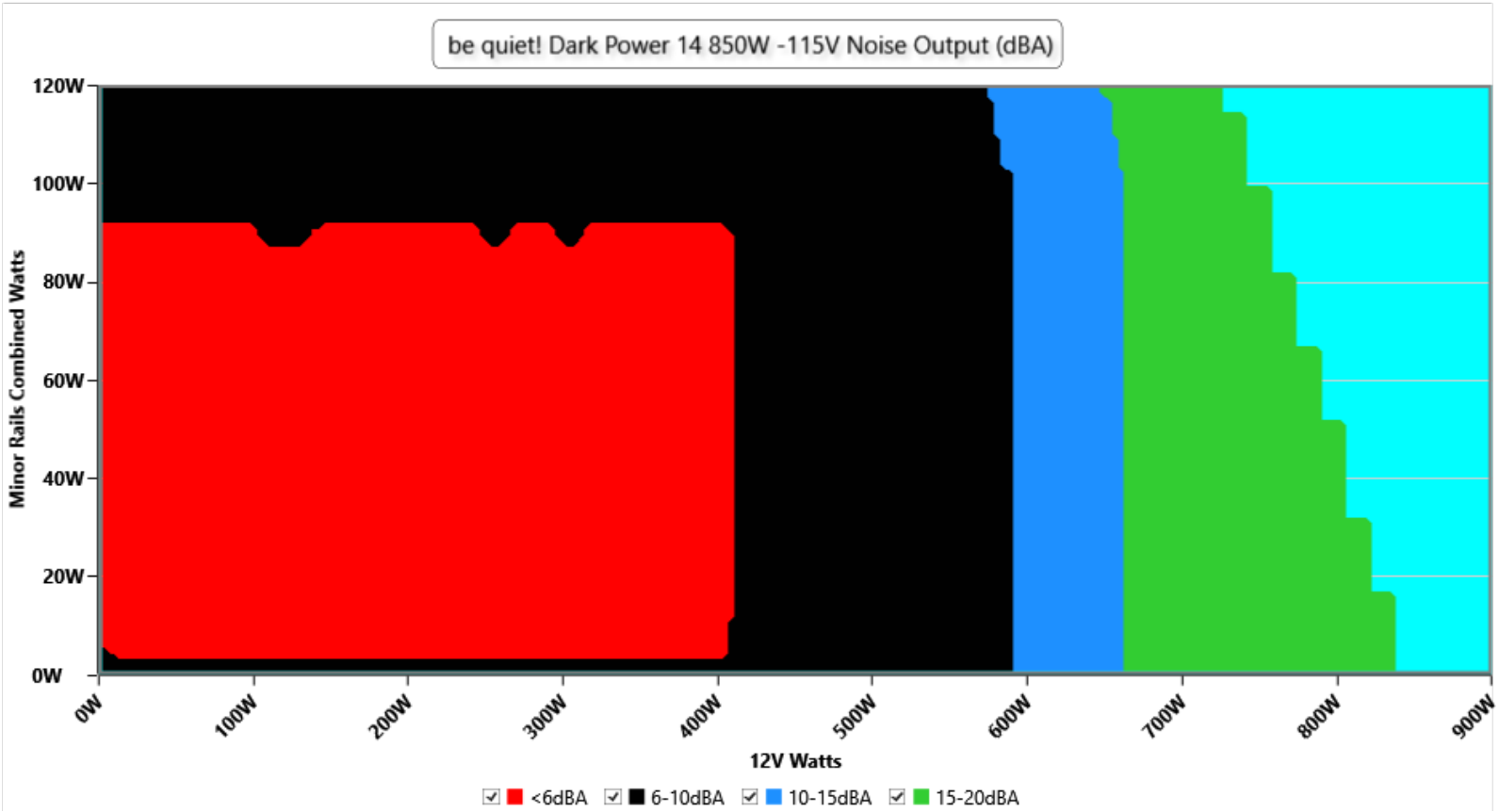


INFO

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Noise Graph

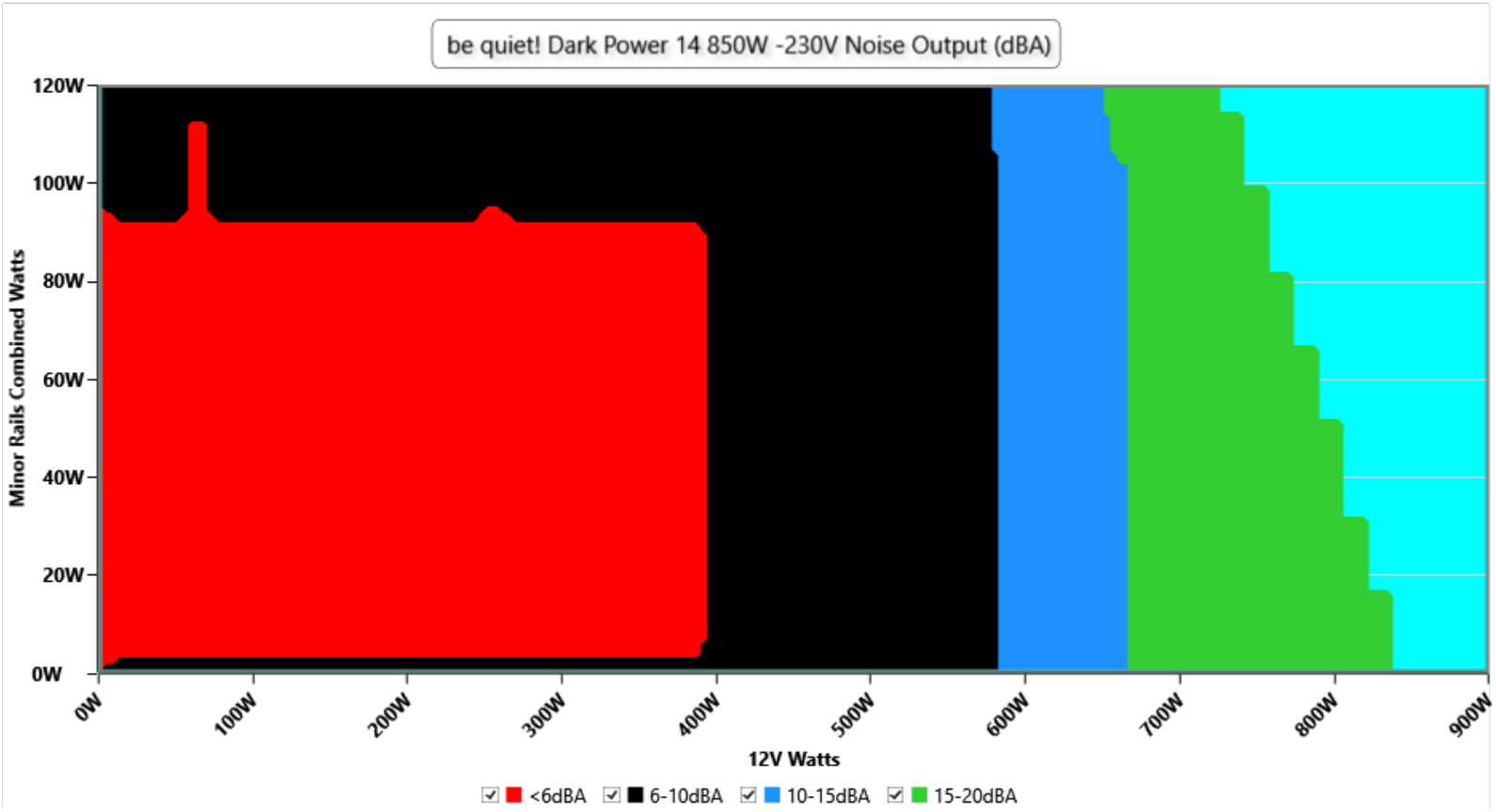
115V



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%	0 RPM · <6.0 dB(A) · 32.1 °C	0 RPM · <6.0 dB(A) · 47.1 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 34.3 °C	0 RPM · <6.0 dB(A) · 50.5 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 36.2 °C	0 RPM · <6.0 dB(A) · 57.6 °C	fan off in both
100%	955 RPM · 20.0 dB(A) · 30.5 °C	1266 RPM · 28.3 dB(A) · 45.6 °C	**+8.3 dB(A)**

230V

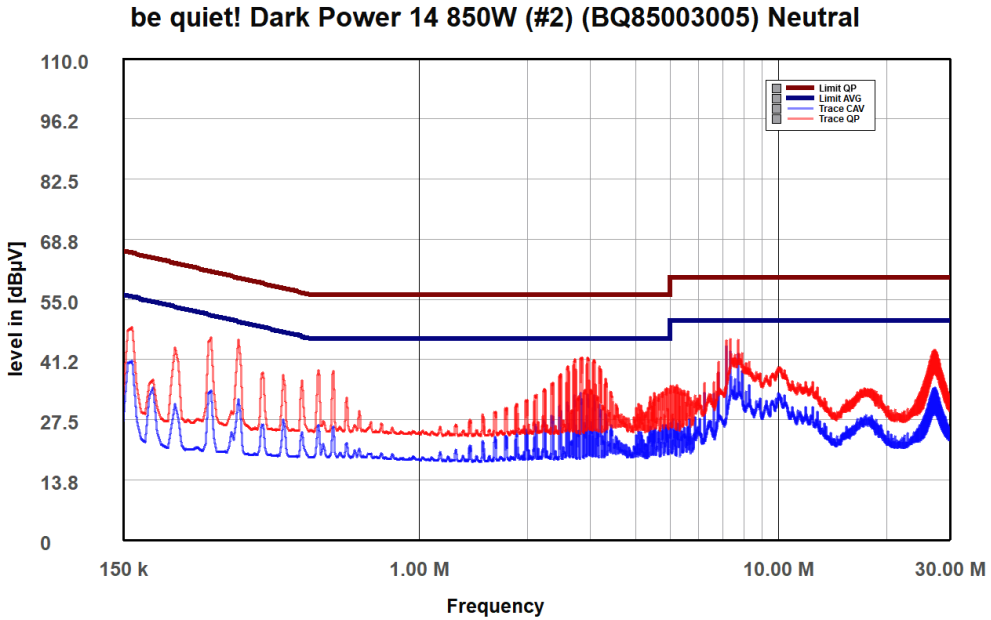
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 31.2 °C	0 RPM · <6.0 dB(A) · 47.4 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 30.9 °C	0 RPM · <6.0 dB(A) · 49.1 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 32.7 °C	0 RPM · <6.0 dB(A) · 51.7 °C	fan off in both
100%	949 RPM · 19.9 dB(A) · 30.5 °C	1329 RPM · 29.8 dB(A) · 45.8 °C	**+9.9 dB(A)**

INFO

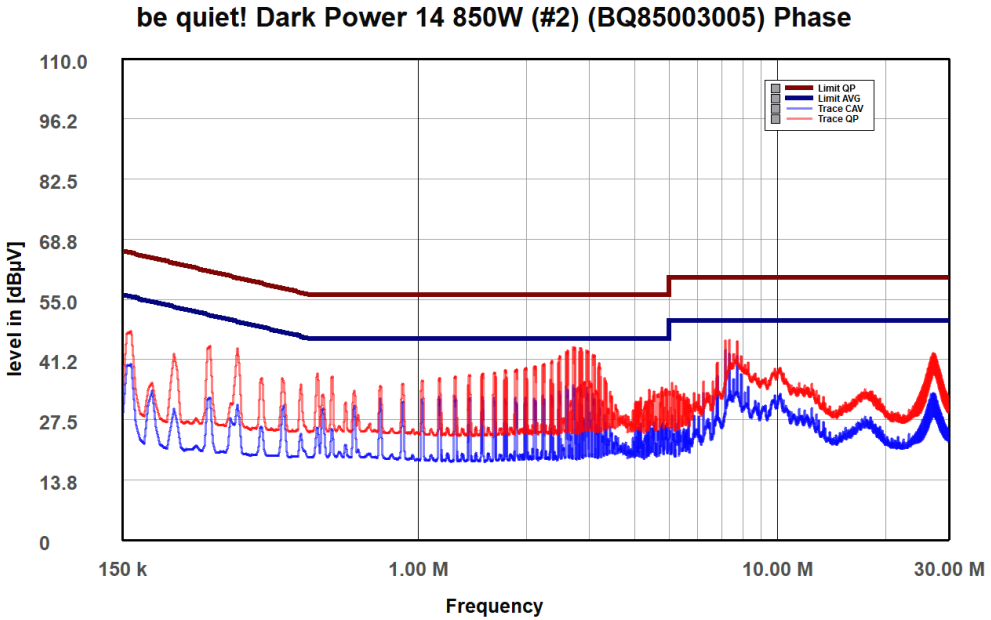
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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

Conducted Emissions EN 55032 & CISPR 32



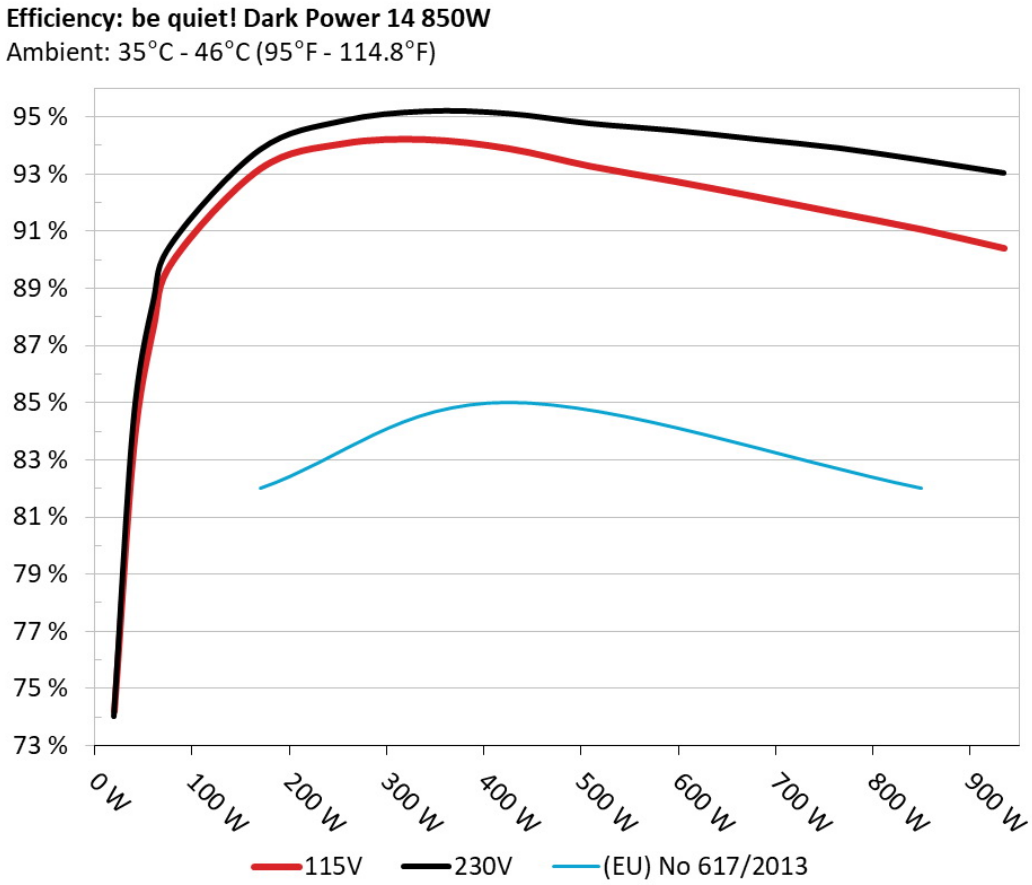
NEUTRAL



PHASE

Indicative Performance

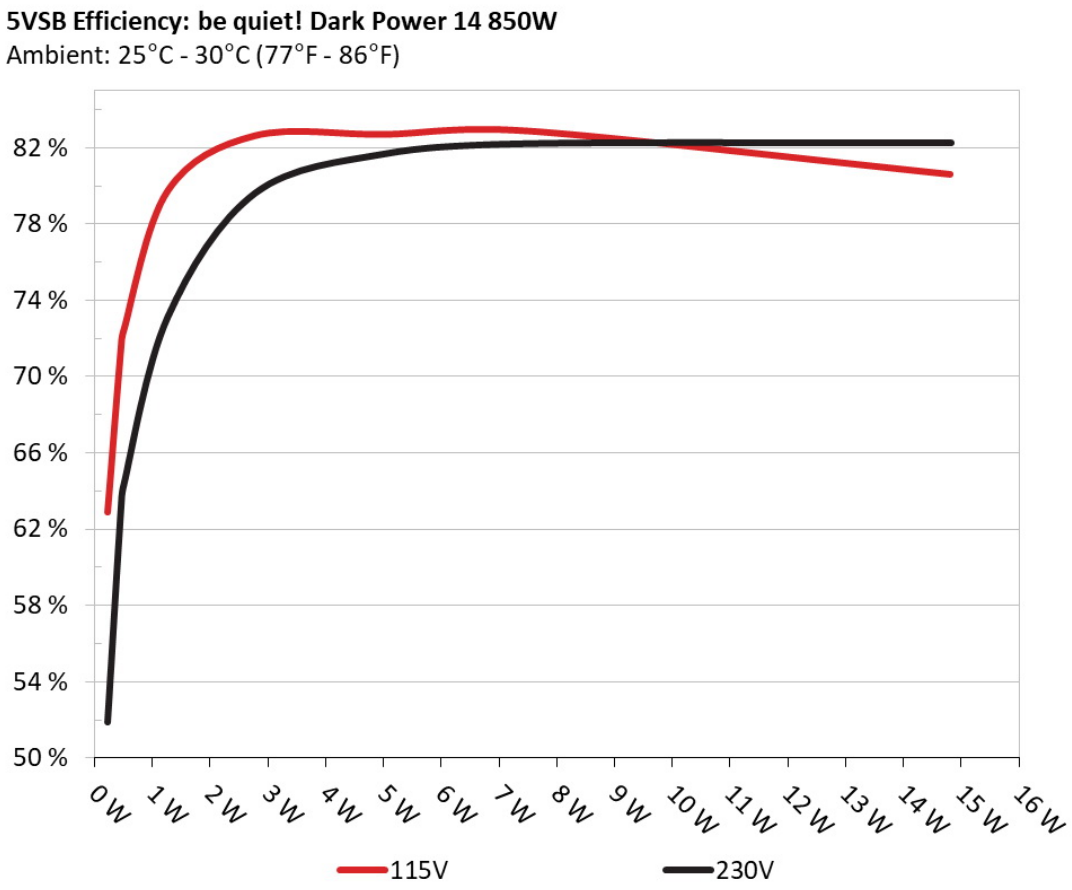
Efficiency under high ambient temperature



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**	0.229W	62.914%	0.036
	5.087V	0.364W		115.04V
2	**0.09A**	0.458W	71.454%	0.063
	5.084V	0.641W		115.04V
3	**0.55A**	2.784W	82.66%	0.236
	5.062V	3.368W		115.04V
4	**1A**	5.04W	82.726%	0.306
	5.039V	6.092W		115.04V
5	**1.5A**	7.523W	82.902%	0.343
	5.015V	9.074W		115.03V
6	**3A**	14.815W	80.635%	0.387
	4.938V	18.373W		115.03V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.229W	51.857%	0.013
	5.087V	0.442W		229.99V
2	**0.09A**	0.458W	62.976%	0.022
	5.084V	0.728W		229.99V
3	**0.55A**	2.784W	79.603%	0.099
	5.062V	3.497W		230V
4	**1A**	5.04W	81.663%	0.157
	5.04V	6.172W		230V
5	**1.5A**	7.524W	82.193%	0.204
	5.015V	9.155W		230V

6	**3A**	14.82W	82.234%	0.28
	4.94V	18.02W		230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.229W	51.857%	0.013
	5.087V	0.442W		229.99V
2	**0.09A**	0.458W	62.976%	0.022
	5.084V	0.728W		229.99V
3	**0.55A**	2.784W	79.603%	0.099
	5.062V	3.497W		230V
4	**1A**	5.04W	81.663%	0.157
	5.04V	6.172W		230V
5	**1.5A**	7.524W	82.193%	0.204
	5.015V	9.155W		230V
6	**3A**	14.82W	82.234%	0.28
	4.94V	18.02W		230V

Protection Features

OCP (Normal @ 28.3°C)	12V: 92.5A (154.17%), 11.831V 5V: 30.4A (126.67%), 5.088V 3.3V: 30A (125%), 3.373V 5VSB: 5A (166.67%), 4.917V
OCP (Hot @ 41.9°C)	12V: 91.5A (152.5%), 11.84V 5V: 30.5A (127.08%), 5.07V 3.3V: 30A (125%), 3.307V 5VSB: 4.9A (163.33%), 4.883V
OPP (Normal @ 30.4°C)	1103.03W (129.77%)
OPP (Hot @ 40.5°C)	1074.1W (126.36%)
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
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%	**5.265A**	**1.979A**	**1.996A**	**1A**	85.007	89.786%	0	<6.0	47.12°C	0.931
	12.043V	5.052V	3.307V	5.001V	94.677				40.11°C	115.01V
20%	**11.552A**	**2.97A**	**2.994A**	**1.206A**	169.953	93.172%	0	<6.0	50.47°C	0.973
	12.037V	5.052V	3.307V	4.974V	182.407				40.67°C	114.99V
30%	**18.193A**	**3.465A**	**3.494A**	**1.415A**	254.956	94.052%	0	<6.0	51.76°C	0.987
	12.032V	5.051V	3.306V	4.949V	271.079				41.42°C	114.96V
40%	**24.847A**	**3.961A**	**3.993A**	**1.625A**	340.045	94.195%	0	<6.0	54.9°C	0.992
	12.027V	5.05V	3.306V	4.923V	361.001				41.53°C	114.92V
50%	**31.137A**	**4.952A**	**4.992A**	**1.839A**	424.852	93.882%	0	<6.0	57.57°C	0.994
	12.022V	5.049V	3.305V	4.896V	452.537				42.29°C	114.9V
60%	**37.411A**	**5.943A**	**5.995A**	**2A**	509.123	93.261%	469	6.5	42.85°C	0.995
	12.017V	5.049V	3.303V	4.872V	545.91				53.49°C	114.87V
70%	**43.761A**	**6.933A**	**6.997A**	**2.273A**	594.697	92.74%	480	6.6	43.03°C	0.996
	12.010V	5.049V	3.302V	4.839V	641.251				55.86°C	114.84V
80%	**50.115A**	**7.922A**	**7.998A**	**2.386A**	679.496	92.189%	661	9.7	43.65°C	0.997
	12.004V	5.049V	3.301V	4.819V	737.072				57.18°C	114.81V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
90%	**56.874A**	**8.417A**	**8.484A**	**2.501A**	764.931	91.617%	962	20.3	44.61°C	0.997
	11.999V	5.048V	3.3V	4.798V	834.916				55.99°C	114.78V
100%	**63.355A**	**8.899A**	**9.006A**	**3.15A**	849.705	91.049%	1266	28.3	45.55°C	0.997
	11.996V	5.056V	3.298V	4.762V	933.237				54.2°C	114.74V
110%	**69.731A**	**9.882A**	**10.102A**	**3.127A**	934.292	90.392%	1680	35.8	46.01°C	0.997
	11.989V	5.059V	3.296V	4.797V	1033.6				53.74°C	114.71V
CL1	**0.116A**	**14.238A**	**14.437A**	**0A**	121.288	85.435%	598	8.1	41.93°C	0.96
	12.035V	5.07V	3.304V	5.061V	141.969				47.25°C	114.99V
CL2	**0.115A**	**23.601A**	**0A**	**0A**	121.268	85.065%	1304	29.2	41.83°C	0.96
	12.038V	5.079V	3.304V	5.067V	142.558				45.55°C	115V
CL3	**0.115A**	**0A**	**23.884A**	**0A**	80.596	76.339%	1491	32.8	41.08°C	0.941
	12.037V	5.042V	3.316V	5.066V	105.577				44.01°C	115.01V
CL4	**70.789A**	**0A**	**0A**	**0A**	849.476	91.923%	975	20.7	45.17°C	0.997
	12.001V	5.045V	3.306V	5.015V	924.124				50.77°C	114.75V

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%	**5.266A**	**1.978A**	**1.995A**	**0.995A**	85.007	90.486%	0	<6.0	47.38°C	0.826
	12.039V	5.055V	3.309V	5.025V	93.946				40.15°C	229.99V
20%	**11.555A**	**2.967A**	**2.992A**	**1.2A**	169.958	93.86%	0	<6.0	49.14°C	0.923
	12.034V	5.056V	3.309V	5.002V	181.078				40.68°C	229.97V
30%	**18.199A**	**3.462A**	**3.49A**	**1.406A**	254.969	94.87%	0	<6.0	47.12°C	0.955
	12.029V	5.055V	3.31V	4.981V	268.752				41.13°C	229.96V
40%	**24.856A**	**3.957A**	**3.988A**	**1.614A**	340.067	95.208%	0	<6.0	47.85°C	0.97
	12.023V	5.055V	3.31V	4.959V	357.183				41.57°C	229.94V
50%	**31.153A**	**4.947A**	**4.984A**	**1.824A**	424.913	95.13%	0	<6.0	51.67°C	0.979
	12.018V	5.055V	3.311V	4.936V	446.666				42.16°C	229.93V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
60%	**37.428A**	**5.935A**	**5.979A**	**2A**	509.278	94.78%	463	6.5	42.51°C	0.983
	12.013V	5.055V	3.312V	4.914V	537.33				46.21°C	229.91V
70%	**43.777A**	**6.923A**	**6.974A**	**2.251A**	594.77	94.54%	476	6.6	43.16°C	0.986
	12.008V	5.057V	3.313V	4.888V	629.123				47.44°C	229.9V
80%	**50.131A**	**7.906A**	**7.967A**	**2.361A**	679.568	94.233%	664	9.8	43.94°C	0.989
	12.002V	5.058V	3.314V	4.87V	721.157				49.05°C	229.88V
90%	**56.893A**	**8.4A**	**8.448A**	**2.473A**	765.003	93.921%	839	16.3	44.54°C	0.991
	11.996V	5.058V	3.314V	4.853V	814.517				50.42°C	229.87V
100%	**63.398A**	**8.894A**	**8.962A**	**3.124A**	849.817	93.503%	1329	29.8	45.82°C	0.992
	11.989V	5.059V	3.314V	4.802V	908.866				50.43°C	229.85V
110%	**69.781A**	**9.88A**	**10.043A**	**3.131A**	934.4	93.051%	1716	36.2	46.15°C	0.993
	11.982V	5.06V	3.316V	4.791V	1004.182				50.05°C	229.84V
CL1	**0.117A**	**14.23A**	**14.328A**	**0A**	121.301	86.172%	601	8.1	40.64°C	0.894
	12.034V	5.073V	3.33V	5.058V	140.774				46.57°C	229.98V
CL2	**0.117A**	**23.571A**	**0A**	**0A**	121.277	85.652%	1294	29	41.17°C	0.894
	12.037V	5.086V	3.303V	5.064V	141.592				44.64°C	229.98V
CL3	**0.116A**	**0A**	**23.682A**	**0A**	80.608	77.517%	1426	32.5	40.27°C	0.847
	12.036V	5.042V	3.345V	5.064V	103.989				43.07°C	229.99V
CL4	**70.814A**	**0A**	**0A**	**0A**	849.573	94.319%	979	20.8	45.8°C	0.992
	11.997V	5.045V	3.305V	5.012V	900.748				46.45°C	229.86V

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**	**0.495A**	**0.499A**	**0.197A**	19.996	74.19%	0	<6.0	43.69°C	0.799
	12.047V	5.053V	3.308V	5.075V	26.951				36.72°C	115.04V
40W	**2.714A**	**0.693A**	**0.698A**	**0.296A**	39.999	83.457%	0	<6.0	46.73°C	0.86
	12.046V	5.053V	3.308V	5.065V	47.926				37.99°C	115.03V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
60W	**4.195A**	**0.891A**	**0.898A**	**0.396A**	60	87.598%	0	<6.0	48.71°C	0.902
	12.045V	5.052V	3.308V	5.055V	68.494				38.15°C	115.02V
80W	**5.673A**	**1.089A**	**1.097A**	**0.496A**	79.951	89.938%	0	<6.0	48.67°C	0.925
	12.044V	5.052V	3.308V	5.045V	88.896				39.22°C	115.01V

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**	**0.494A**	**0.499A**	**0.197A**	19.997	74.045%	0	<6.0	34.54°C	0.473
	12.043V	5.055V	3.305V	5.079V	27.006				36.03°C	229.99V
40W	**2.714A**	**0.692A**	**0.699A**	**0.296A**	39.999	84.35%	0	<6.0	38.1°C	0.652
	12.042V	5.055V	3.306V	5.071V	47.42				37.2°C	229.98V
60W	**4.196A**	**0.89A**	**0.898A**	**0.395A**	60	88.481%	0	<6.0	41.04°C	0.752
	12.040V	5.055V	3.307V	5.064V	67.815				38.95°C	229.98V
80W	**5.674A**	**1.088A**	**1.098A**	**0.495A**	79.951	90.612%	0	<6.0	43.38°C	0.813
	12.039V	5.055V	3.307V	5.056V	88.232				39.48°C	229.98V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	23.58mV	21.05mV	21.23mV	21.23mV	Pass
20% Load	23.38mV	21.46mV	21.64mV	20.36mV	Pass
30% Load	24.86mV	21.41mV	21.33mV	20.10mV	Pass
40% Load	26.35mV	23.14mV	22.46mV	21.53mV	Pass
50% Load	25.63mV	20.84mV	21.08mV	19.90mV	Pass
60% Load	23.43mV	21.51mV	21.64mV	20.66mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	24.25mV	22.38mV	22.61mV	22.46mV	Pass
80% Load	24.25mV	21.92mV	21.89mV	22.56mV	Pass
90% Load	25.63mV	23.30mV	23.02mV	23.02mV	Pass
100% Load	23.88mV	20.30mV	21.78mV	20.09mV	Pass
110% Load	23.57mV	20.04mV	20.71mV	20.55mV	Pass
Crossload1	21.92mV	19.77mV	20.25mV	18.84mV	Pass
Crossload2	24.35mV	26.67mV	20.82mV	19.49mV	Pass
Crossload3	22.61mV	20.69mV	24.50mV	19.69mV	Pass
Crossload4	23.36mV	18.86mV	19.66mV	20.68mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	21.54mV	19.31mV	20.10mV	19.69mV	Pass
20% Load	23.23mV	20.23mV	20.15mV	18.98mV	Pass
30% Load	24.20mV	20.54mV	20.36mV	19.90mV	Pass
40% Load	24.10mV	19.77mV	19.64mV	19.64mV	Pass
50% Load	25.99mV	20.18mV	21.08mV	20.76mV	Pass
60% Load	23.18mV	21.41mV	21.43mV	20.46mV	Pass
70% Load	22.46mV	22.17mV	21.28mV	21.38mV	Pass
80% Load	24.40mV	22.38mV	22.05mV	21.79mV	Pass
90% Load	23.58mV	21.41mV	21.79mV	21.74mV	Pass
100% Load	22.50mV	19.82mV	20.09mV	19.94mV	Pass
110% Load	24.20mV	20.43mV	20.30mV	21.13mV	Pass
Crossload1	21.49mV	21.93mV	20.56mV	18.01mV	Pass
Crossload2	24.97mV	26.11mV	22.25mV	20.97mV	Pass
Crossload3	23.94mV	21.76mV	23.89mV	20.31mV	Pass
Crossload4	24.01mV	20.41mV	20.15mV	19.94mV	Pass

The results above are not used in the certification process

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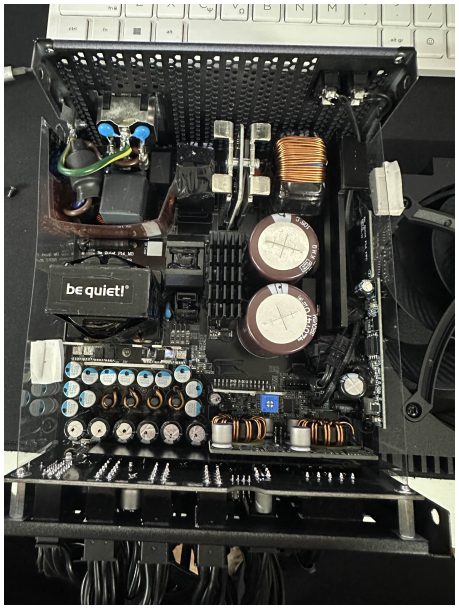
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Power specifications label



Fan



PSU Internals

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