Corsair WS3000

AAWUD52110J26O

Lab ID CR30002950

Certification ID 252950

Test Result Report ID: 25PS2950A

Certificate Issue Date: Aug 26, 2025

230V

Scheme: ETA-EMI PSU



230V

No LAMBDA level

Average noise output 48.04 dB(A), above the 45 dB(A) limit of the lowest LAMBDA level (Standard).

Scheme: LAMBDA PSU



Outside Validation Scope



Aristeidis Bitziopoulos, Certification Body General Manager

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	Corsair
Model	WS3000
OEM/ODM	Great Wall

Serial Number	AAWUD52110J26O
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	220-240
□□□□ (Arms)	16
□□□□ (Hz)	47-63
□□□□ (W)	3000
Operating Temperature (Continuous Full Load) (°C)	
□□	ATX12V
□□□□	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
□□	140mm Fluid Dynamic Bearing Fan (HA1425H12B-Z)
□□□□□	✗
Cybenetics Testing Information	
Lab ID	CR30002950
Date of receipt	Aug 18, 2025
Testing Date	Aug 21, 2025
Report Issued Date	Aug 26, 2025
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□□
(Non-accredited measurements)

□□□□□				
□□	□□□□	□□□□□□	**Gauge**	Cable Type
ATX □□ 20+4 pin (615mm)	1	1	18AWG	Tinned Copper

4+4 pin ATX12V (650mm)	2	2	18AWG	Tinned Copper
6+2pin PCIe□□ (600mm+150mm)	4	8	18AWG	Tinned Copper
12+4 pin PCIe (750mm) (600W)	4	4	16-24AWG	Tinned Copper
SATA□□ (500mm+150mm+150mm+150mm)	1	4	18AWG	Tinned Copper
SATA□□ (500mm+100mm+100mm)	3	9	18AWG	Tinned Copper
4-pin Molex (500mm+150mm+150mm)	1	3	18AWG	Tinned Copper
AC Power Cord (1390mm) - C19 coupler	1	1	16AWG	-

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	✗

□□□□

□		3.3V	5V	12V	5VSB	-12V
□□□□	□□	25	25	250	3	0.8
	□	130		3000	15	9.6
□□□□□ (W)		3000				

Parts Description

General Data	
Manufacturer (OEM)	Great Wall
PCB Type	Double-Sided
Primary Side	
Transient Filter	6x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor & Relay

Bridge Rectifier	2x Shindengen LL25XB60 (600V, 25A @ 113°C)
APFC MOSFETs	2x Infineon IPW60R060C7 (650V, 22A @ 100°C, Rds(on): 0.060Ohm)
APFC Boost Diode	STMicroelectonics STPSC20H065C (650V, 10A @ 135°C)
Bulk Cap(s)	2x Rubycon (420V, 820uF each or 1640uF combined, 3000h @ 105°C, MXT)
Main Switchers	4x Infineon IPW60R070CFD7 (650V, 20A @ 100°C, Rds(on): 0.07Ohm)
APFC Controller	Champion CM6500UHHX & Champion CM03AX (remove phantom power)
Resonant Controller	Champion CM6901X
IC Driver	2x Novosense NSI66002BD
Topology	Primary side: APFC, Full-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	8x ON Semiconductor FDBL0110N60 (60V, 300A @ 25°C, Rds(on): 1.1mOhm)
5V & 3.3V	DC-DC Converters: 4x XSEMI XP4024GEMT (30V, 20.9A @ 70°C, Rds(on): 4.5mOhm) PWM Controller(s): ANPEC APW7159C
Filtering Capacitors	Electrolytic: 2x Nippon Chemi-con (2-5,000 @ 105°C, KZE) 2x Rubycon (7-12,000 @ 105°C, TXW) 2x Rubycon (4-10,000 @ 105°C, YXF) Rubycon (4-10,000 @ 105°C, YXJ) Polymer: 44x FPCAP, 4x Elite, 2x APAQ
Supervisor IC	IN1S429I-SCG
MCU / Fan Controller	STMicroelectronics STM8S103F2
Fan Model	Hong Hua HA1225H12F-Z (140mm, 12V, 0.50, Fluid Dynamic Bearing Fan)
5VSB Circuit	
Rectifier (High Side)	Onsemi NTMFS5C670NL (60V, 50A @ 100°C, Rds(on): 6.1mOhm)
Standby PWM Controller	Power Integrations TNY278PN

Test Results

Temperature & Compliance Info

□□□□ (°C /°F)	28-32 / 82.4-89.6
□□ ErP Lot3/6□□	✓
□□ (EU) No 617/2013□□	✓
ALPM (Alternative Low Power Mode) compatible	✓
ATX v3.1 PSU Power Excursion	✓

Performance Summary 230V

Accredited	
□□□□ (>1450 load combinations)	91.740%
Average Noise Output (>1450 Load Combinations)	48.04dBA
PF□□□ (>1450 Load Combinations)	0.971
Efficiency With 10W (≤500W) or 2% (>500W) Load	67.866%
□□□□□□	0.1212W
Non-Accredited	
12V Ripple (Full Load)	52.02mV
5V Ripple (Full Load)	23.66mV
3.3V Ripple (Full Load)	25.87mV
5VSB Ripple (Full Load)	25.93mV
12V Load Regulation	1.52%
5V Load Regulation	0.44%
3.3V Load Regulation	1.24%
5VSB Load Regulation	4.68%
Inrush Current	150.500A
12V Transient Response (200%)	11.56V
5V Transient Response (200%)	4.964V
3.3V Transient Response (200%)	3.210V
5VSB Transient Response (200%)	4.893V

□□□□ & PG□□		12.60ms
AC Loss to PWR_OK Hold Up Time		11.40ms
PWR_OK Inactive to DC Loss Delay		1.20ms
PSU Timings: T1 (20% / 100%)	60.0ms	59.0ms
PSU Timings: T3 (20% / 100%)	120.0ms	119.0ms
12V OCP (29.1°C / 42.0°C)	-	-
5V OCP (29.1°C / 42.0°C)	38.5A (154.00%), 5.024V	38.5A (154.00%), 5.014V
3.3V OCP (29.1°C / 42.0°C)	40.7A (162.80%), 3.24V	40.5A (162.00%), 3.295V
5VSB OCP (29.1°C / 42.0°C)	5.8A (193.33%), 4.974V	5.7A (190.00%), 4.98V
OPP (0.00°C / 0.00°C)	-	-

□□□□ & PG□□

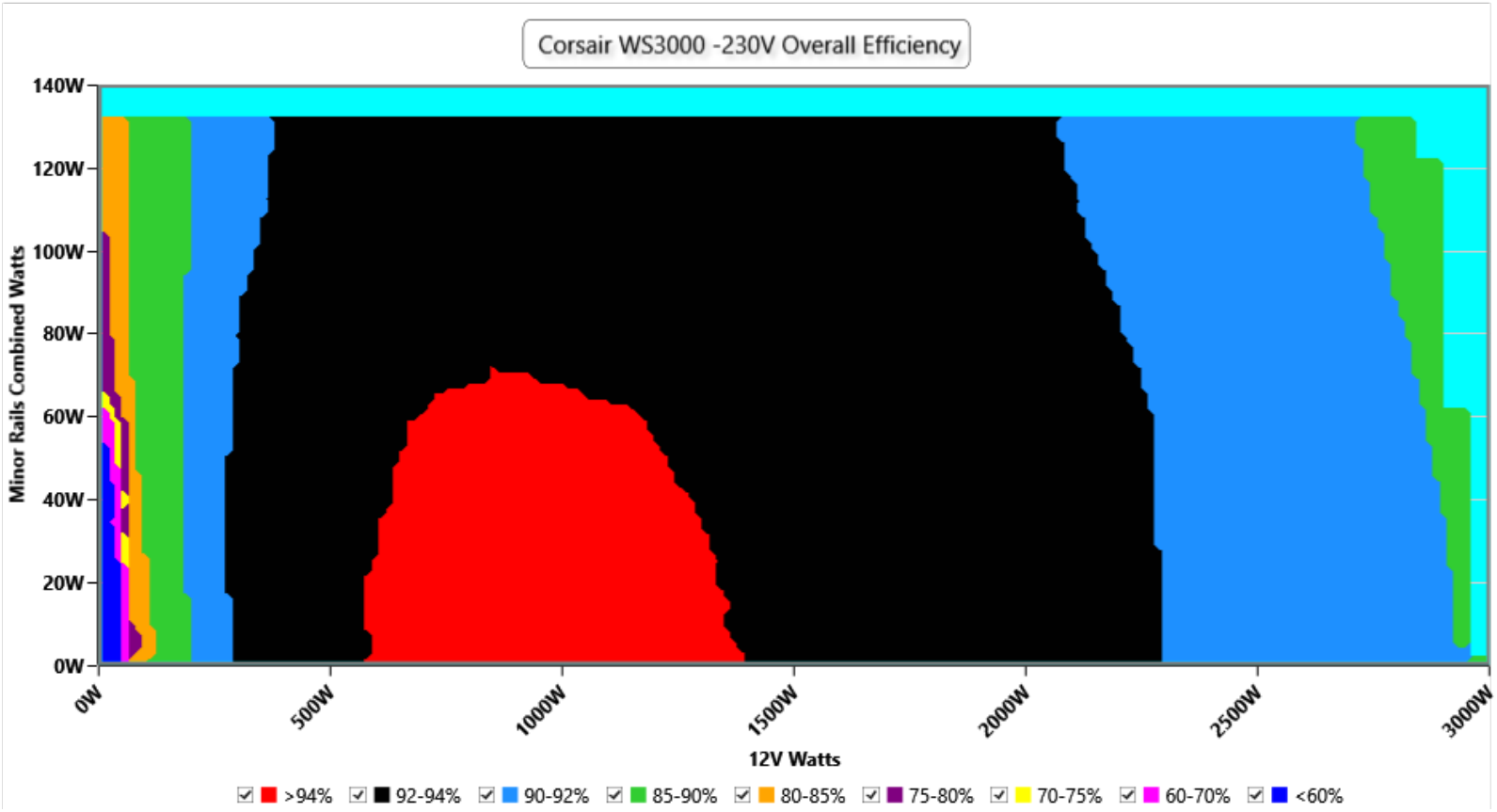
Hold-Up Time (ms)	12.6
AC Loss to PWR_OK Hold Up Time (ms)	11.4
PWR_OK Inactive to DC Loss Delay (ms)	1.2

□□□□

Tables 230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	229.88 V	229.82 V	227.70 V	229.93 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:	0.13 %	0.10 %	N/A	0.15 %	2.00 %	PASS
Real Power:	0.121 W	0.067 W	N/A	0.178 W	N/A	N/A
Apparent Power:	43.610 W	43.563 W	N/A	43.659 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

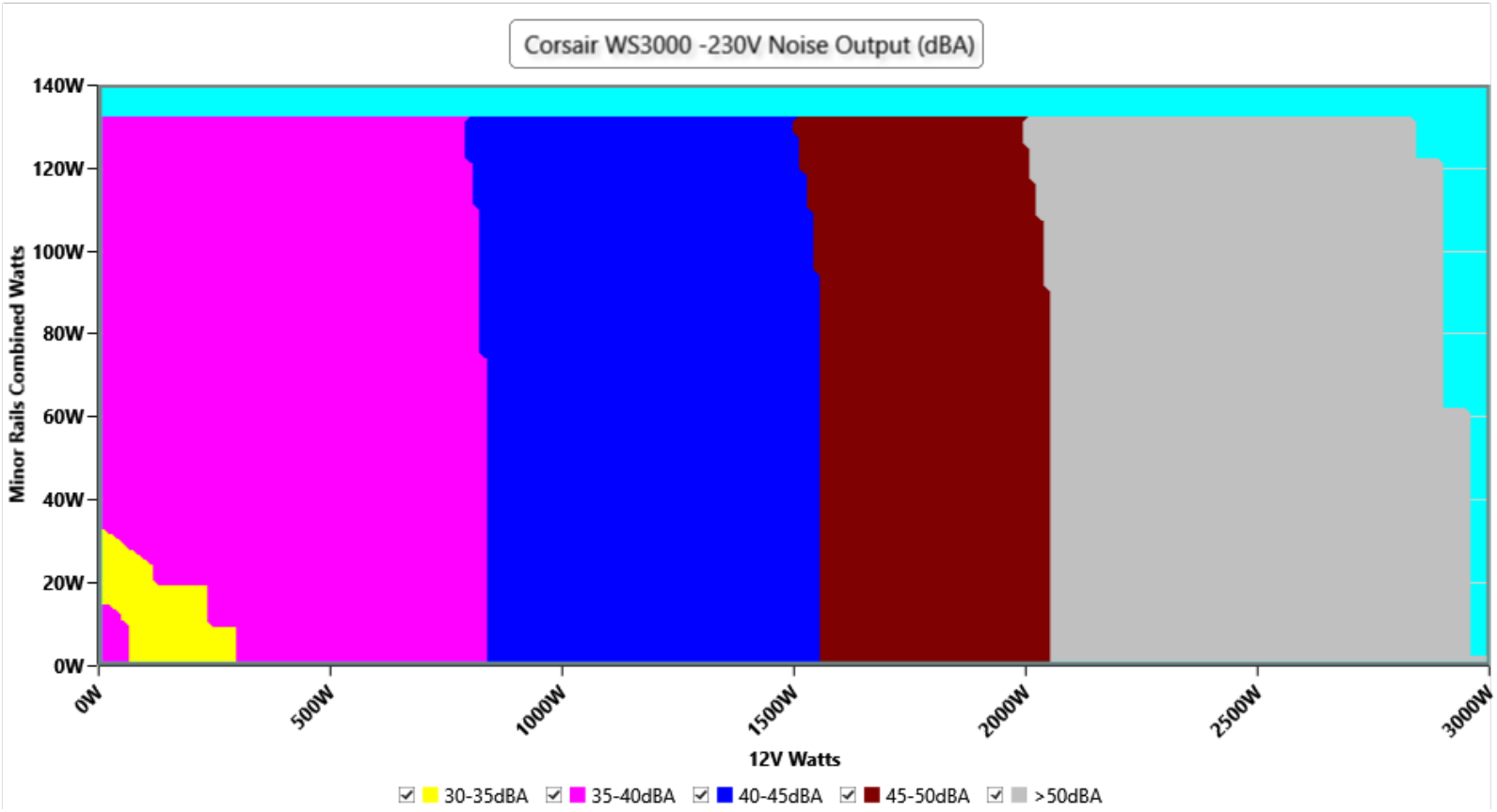
230V



□□

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



□□

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)

230V

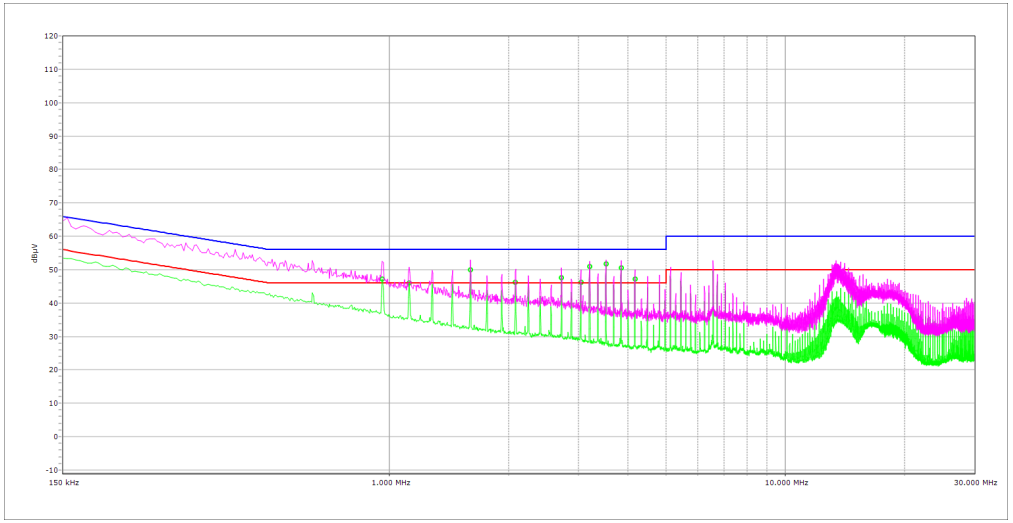
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	1302 RPM · 39.3 dB(A) · 32.0 °C	1619 RPM · 44.4 dB(A) · 40.4 °C	**+5.1 dB(A)**
20%	1274 RPM · 39.0 dB(A) · 31.1 °C	1660 RPM · 44.7 dB(A) · 40.8 °C	**+5.7 dB(A)**
50%	1575 RPM · 44.5 dB(A) · 32.1 °C	2041 RPM · 51.2 dB(A) · 42.3 °C	**+6.7 dB(A)**
100%	2512 RPM · 55.6 dB(A) · 33.5 °C	2503 RPM · 55.3 dB(A) · 45.4 °C	**-0.3 dB(A)**

INFO

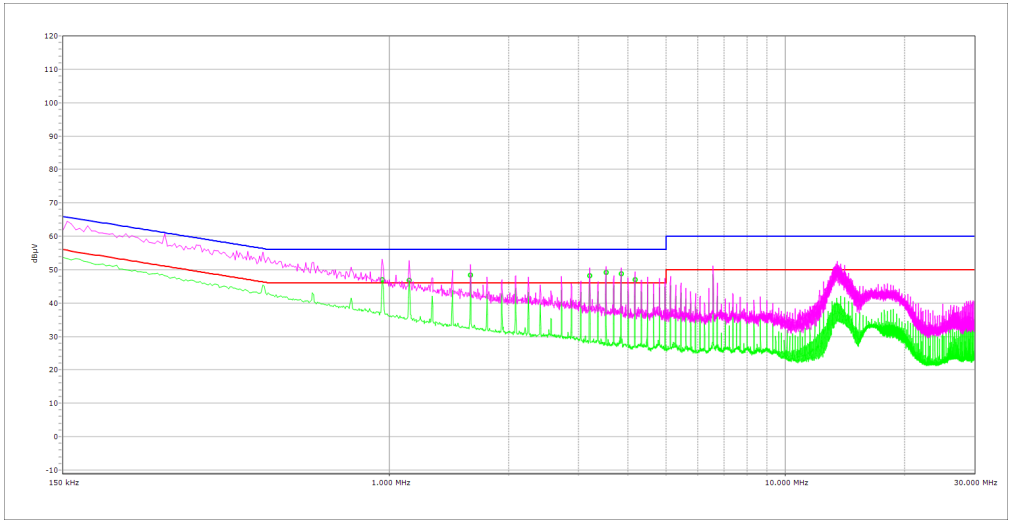
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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

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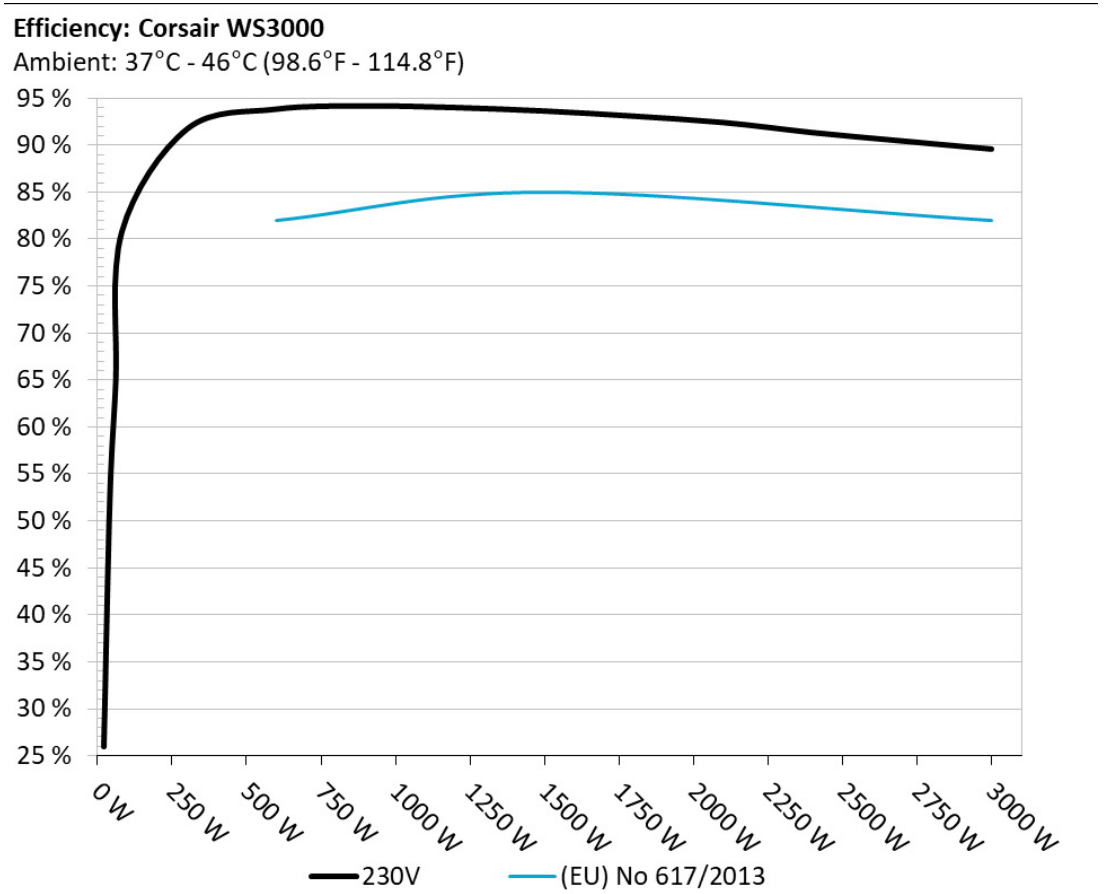
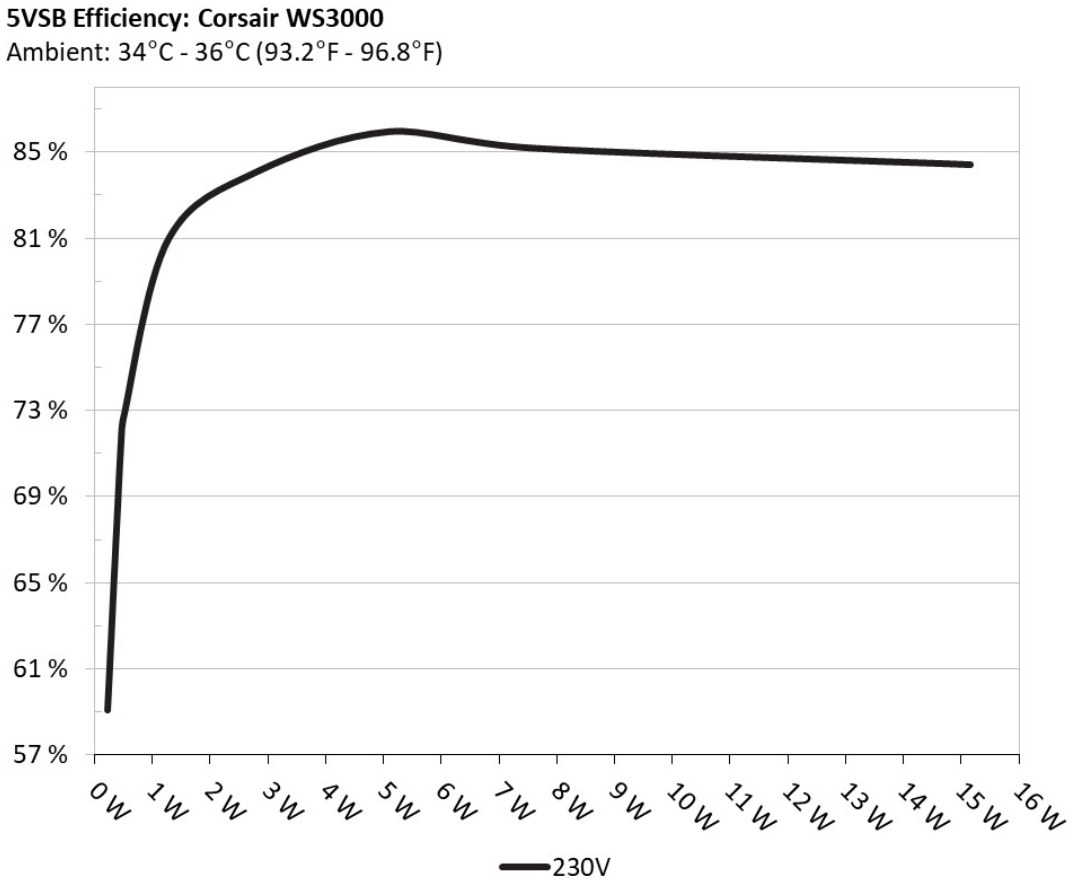


□□

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□□□□



□□

This graph depicts the efficiency levels of the 5VSB rail with 115V and 230V input

□□□□ □□ 5Vsb □□ (ErP Lot3/6 & CEC) 230V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	**0.045A**	0.231W	59.089%	0.009
	5.128V	0.393W		229.89V

2	**0.09A**	0.461W	71.436%	0.015
	5.127V	0.647W		229.88V
3	**0.55A**	2.813W	84.07%	0.075
	5.115V	3.348W		229.88V
4	**1A**	5.104W	85.936%	0.128
	5.104V	5.939W		229.88V
5	**1.5A**	7.639W	85.161%	0.182
	5.092V	8.971W		229.89V
6	**3A**	15.165W	84.402%	0.3
	5.055V	17.968W		229.88V

Protection Features

OCP (Normal @ 29.1°C)	12V: - 5V: 38.5A (154%), 5.024V 3.3V: 40.7A (162.8%), 3.24V 5VSB: 5.8A (193.33%), 4.974V
OCP (Hot @ 42°C)	12V: - 5V: 38.5A (154%), 5.014V 3.3V: 40.5A (162%), 3.295V 5VSB: 5.7A (190%), 4.98V
OPP (Normal @ -°C)	-
OPP (Hot @ -°C)	-
OTP	✓ (85°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 @ 180V)	✓
UVP (No Damage @ 170V)	✓
Conducted Emissions EN55032 & CISPR 32	✗
NLO	✓

Fan Failure Protection	✗
SIP	Surge: MOV Inrush: NTC & Bypass Relay

Supplementary Tests (For Reference)

10-110%□□□□ 230V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	**22.822A**	**1.979A**	**1.981A**	**0.982A**	300.04	91.787%	1619	44.4	40.39°C	0.943
	12.200V	5.052V	3.332V	5.095V	326.892				43.93°C	229.84V
20%	**46.689A**	**2.97A**	**2.976A**	**1.182A**	599.659	93.882%	1660	44.7	40.8°C	0.971
	12.181V	5.05V	3.327V	5.075V	638.735				44.97°C	229.79V
30%	**70.971A**	**3.467A**	**3.476A**	**1.385A**	899.232	94.223%	1734	46.6	41.17°C	0.978
	12.163V	5.048V	3.323V	5.055V	954.362				46.12°C	229.74V
40%	**95.388A**	**3.964A**	**3.977A**	**1.589A**	1199.665	94.048%	1880	49.1	41.84°C	0.983
	12.144V	5.045V	3.319V	5.035V	1275.587				48.64°C	229.69V
50%	**119.479A**	**4.957A**	**4.978A**	**1.795A**	1499.387	93.683%	2041	51.2	42.29°C	0.985
	12.127V	5.043V	3.315V	5.015V	1600.485				51.24°C	229.63V
60%	**143.711A**	**5.951A**	**5.983A**	**2A**	1799.898	93.132%	2238	53.3	42.86°C	0.988
	12.108V	5.041V	3.31V	4.994V	1932.646				53.89°C	229.58V
70%	**167.971A**	**6.946A**	**6.99A**	**2.213A**	2099.595	92.461%	2430	55.9	43.44°C	0.989
	12.088V	5.04V	3.305V	4.972V	2270.781				55.62°C	229.53V
80%	**192.373A**	**7.939A**	**7.999A**	**2.322A**	2399.576	91.386%	2506	55.4	43.56°C	0.989
	12.068V	5.038V	3.3V	4.953V	2625.78				60.12°C	229.46V
90%	**217.154A**	**8.44A**	**8.492A**	**2.433A**	2699.305	90.497%	2505	55.4	44.63°C	0.99
	12.051V	5.036V	3.297V	4.933V	2982.763				65.69°C	229.41V
100%	**241.840A**	**8.945A**	**9.013A**	**3.063A**	2999.244	89.629%	2503	55.3	45.36°C	0.991
	12.031V	5.031V	3.295V	4.898V	3346.299				71.01°C	229.34V
110%	**241.853A**	**9.945A**	**10.11A**	**3.065A**	3007.836	89.487%	2503	55.3	46.29°C	0.992
	12.030V	5.028V	3.293V	4.895V	3361.212				73.62°C	229.33V

CL1	**0.115A**	**15.568A**	**15.464A**	**0A**	131.312	80.471%	1763	46.8	41.92°C	0.858
	12.212V	5.03V	3.337V	5.12V	163.171				47.88°C	229.86V
CL2	**0.115A**	**24.79A**	**0A**	**0A**	126.248	79.175%	1632	44.5	40.12°C	0.852
	12.212V	5.036V	3.323V	5.122V	159.455				44.76°C	229.86V
CL3	**0.114A**	**0A**	**24.619A**	**0A**	83.885	72.526%	1569	44.4	40.06°C	0.766
	12.211V	5.035V	3.351V	5.122V	115.666				43.49°C	229.87V
CL4	**249.484A**	**0A**	**0A**	**0.001A**	2999.845	90.139%	2518	55.7	45.58°C	0.99
	12.024V	5.025V	3.312V	4.983V	3328.056				65.34°C	229.35V

The results above are not used in the certification process

20-80□□□□ 230V

□□	**12V**	**5V**	**3.3V**	**5VSB**	**DC/AC (□)**	□□	□□□□ **(RPM)**	□□□□□□□ **(dB[A])**	□□ **(□□ /□□)**	**PF/AC □□**
20W	**1.218A**	**0.495A**	**0.495A**	**0.195A**	20.013	25.982%	1177	35.6	36.58°C	0.669
	12.205V	5.052V	3.335V	5.127V	77.834				47.49°C	229.89V
40W	**2.678A**	**0.693A**	**0.693A**	**0.293A**	40.007	52.371%	1353	39.4	37.34°C	0.668
	12.205V	5.053V	3.336V	5.125V	77.153				45.07°C	229.89V
60W	**4.140A**	**0.89A**	**0.89A**	**0.391A**	60.003	64.978%	1399	40.9	38.6°C	0.703
	12.205V	5.053V	3.335V	5.121V	92.342				44.1°C	229.88V
80W	**5.594A**	**1.088A**	**1.088A**	**0.489A**	79.946	80.797%	1449	42.9	39.2°C	0.719
	12.214V	5.053V	3.335V	5.118V	98.94				40.73°C	229.87V

The results above are not used in the certification process

□□□□ 230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	30.23mV	17.70mV	18.31mV	13.96mV	Pass
20% Load	30.89mV	18.99mV	17.55mV	14.68mV	Pass
30% Load	32.22mV	18.53mV	18.11mV	15.24mV	Pass
40% Load	33.70mV	18.48mV	19.55mV	18.11mV	Pass
50% Load	36.37mV	20.94mV	20.62mV	17.70mV	Pass
60% Load	39.54mV	21.09mV	21.91mV	18.52mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	43.06mV	20.22mV	20.57mV	20.68mV	Pass
80% Load	47.15mV	22.28mV	26.22mV	20.68mV	Pass
90% Load	47.51mV	22.68mV	28.63mV	23.04mV	Pass
100% Load	52.02mV	23.66mV	25.87mV	25.93mV	Pass
110% Load	50.63mV	27.15mV	26.78mV	29.25mV	Pass
Crossload1	24.54mV	17.02mV	17.41mV	12.46mV	Pass
Crossload2	28.08mV	21.04mV	17.96mV	14.62mV	Pass
Crossload3	24.60mV	17.45mV	19.19mV	14.83mV	Pass
Crossload4	54.28mV	21.67mV	25.72mV	19.58mV	Pass

The results above are not used in the certification process

Corsair WS3000

Top side

Power specifications label

Fan

PSU Internals

本测试报告中包含的所有数据和图表均可在以下条件下由任何人使用：使用过程需提及测试结果由Cybenetics提供。Cybenetics 提供自愿性认证计划：电源方面有 ETA（效率）、LAMBDA（噪声）与 SAFE（安全与正确运行）；散热产品方面有 DELTA（机箱隔音）与 PHI（风扇风量与静压）

在任何情况下都应提供原始测试结果文档的网站链接

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