

Lab ID#: 546
Receipt Date: Nov 12, 2018
Test Date: Nov 20, 2018

Report:

Report Date: Nov 22, 2018

DUT INFORMATION

Brand	Corsair
Manufacturer (OEM)	Seasonic
Series	AX
Model Number	
Serial Number	18437002000059610001
DUT Notes	CP-9020152

DUT SPECIFICATIONS

Rated Voltage (Vrms)	100-240
Rated Current (Arms)	13-6.5
Rated Frequency (Hz)	50-60
Rated Power (W)	1000
Type	ATX12V
Cooling	135mm Fluid Dynamic Bearing Fan (HA13525M12F-Z)
Semi-Passive Operation	✓ (selectable)
Cable Design	Fully Modular

POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	25	25	83	3	0.3
	Watts	125		996	15	3.6
Total Max. Power (W)		1000				

CABLES AND CONNECTORS

Modular Cables

Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors
ATX connector 20+4 pin (610mm)	1	1	16-20AWG	Yes
4+4 pin EPS12V (650mm)	2	2	18AWG	Yes
6+2 pin PCIe (670mm+100mm)	4	8	16-18AWG	Yes
SATA (460mm+110mm+110mm+110mm)	4	16	18AWG	No
4 pin Molex (450mm+100mm+100mm+100mm)	2	8	18AWG	No
FDD Adapter (110mm)	1	1	22AWG	No
AC Power Cord (1400mm)	1	1	14AWG	-

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RESULTS

Temperature Range (°C /°F)	30-32 / 86-89.6 (+-2°C / +- 3.6°F)
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓

115V

Average Efficiency	92.107%
Efficiency With 10W (≤500W) or 2% (>500W)	77.269
Average Efficiency 5VSB	79.719%
Standby Power Consumption (W)	0.0470888
Average PF	0.990
Avg Noise Output	22.85 dB(A)
Efficiency Rating (ETA)	TITANIUM
Noise Rating (LAMBDA)	A

230V

Average Efficiency	94.040%
Average Efficiency 5VSB	77.870%
Standby Power Consumption (W)	0.0801304
Average PF	0.951
Avg Noise Output	21.16 dB(A)
Efficiency Rating (ETA)	TITANIUM
Noise Rating (LAMBDA)	A

TEST EQUIPMENT

Electronic Loads	Chroma 6314A x2 63123A x6 63102A 63101A	Chroma 63601-5 x4 Chroma 63600-2 x2 63640-80-80 x20 63610-80-20 x2
AC Sources	Chroma 6530, Chroma 61604, Keysight AC6804B	
Power Analyzers	N4L PPA1530 x2, N4L PPA5530	
Oscilloscopes	Picoscope 4444 & 3424, Keysight DSOX3024A, Rigol DS2072A	
Voltmeter	Keithley 2015 THD 6.5 Digit	
Sound Analyzer	Bruel & Kjaer 2250-L G4	
Microphone	Bruel & Kjaer Type 4955-A, Bruel & Kjaer Type 4189	
Data Loggers	Picoscope TC-08 x2, Labjack U3-HV x2	

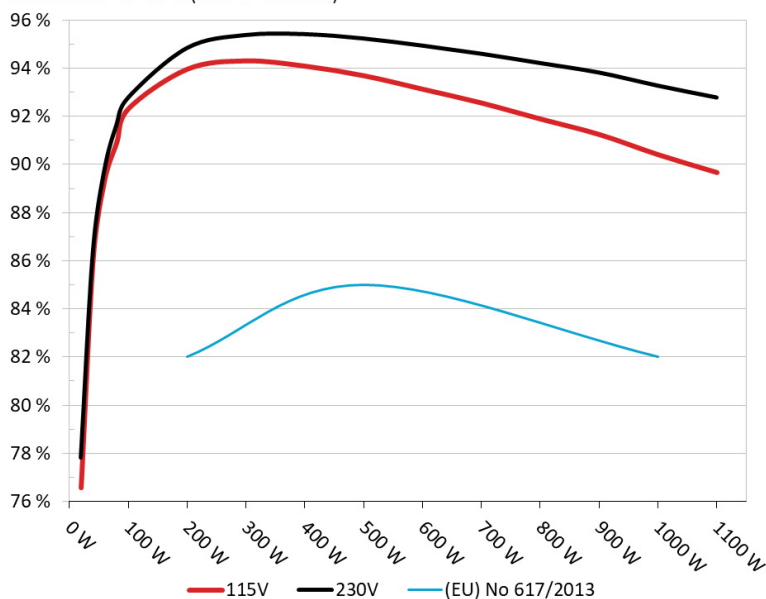
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EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE

Efficiency: Corsair AX1000

Ambient: 37°C - 47°C (98.6°F - 116.6°F)



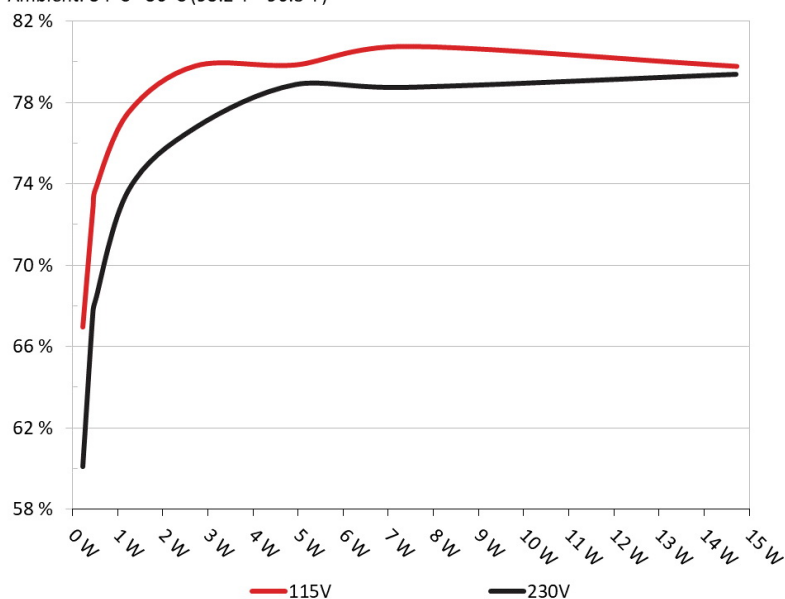
INFO

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

5VSB Efficiency: Corsair AX1000

Ambient: 34°C - 36°C (93.2°F - 96.8°F)



INFO

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

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5VSB EFFICIENCY -115V (ERP LOT 3/6 & CEC)

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.223	66.967%	0.032
	4.961V	0.333		115.10V
2	0.090A	0.447	72.801%	0.059
	4.960V	0.614		115.10V
3	0.550A	2.724	79.812%	0.256
	4.952V	3.413		115.08V
4	1.000A	4.944	79.858%	0.354
	4.943V	6.191		115.08V
5	1.500A	7.404	80.768%	0.409
	4.935V	9.167		115.08V
6	3.000A	14.725	79.789%	0.484
	4.908V	18.455		115.08V

5VSB EFFICIENCY -230V (ERP LOT 3/6 & CEC)

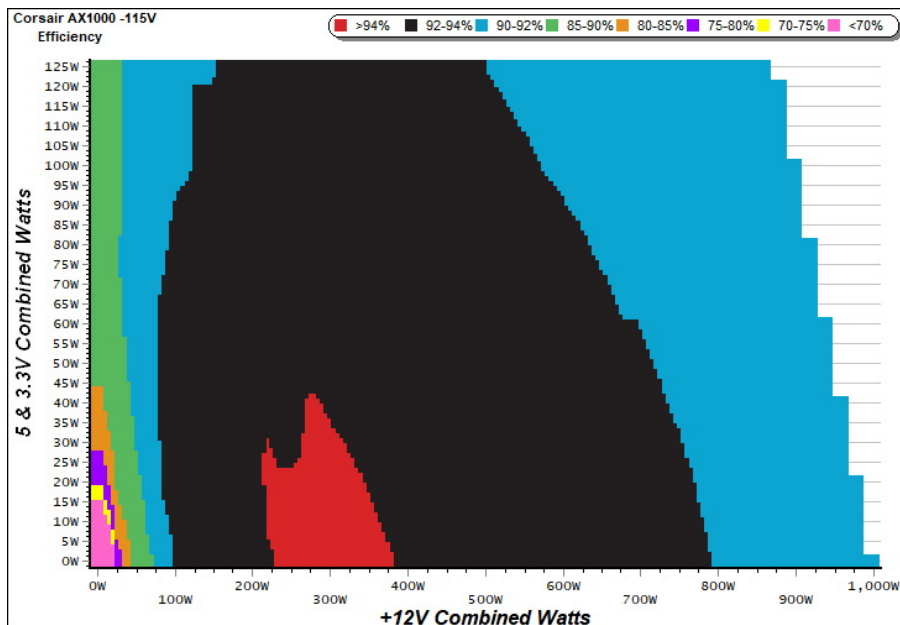
Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.223	60.108%	0.011
	4.962V	0.371		230.24V
2	0.090A	0.446	67.678%	0.019
	4.961V	0.659		230.24V
3	0.550A	2.723	76.769%	0.098
	4.950V	3.547		230.38V
4	1.000A	4.943	78.886%	0.162
	4.942V	6.266		230.38V
5	1.500A	7.399	78.746%	0.220
	4.933V	9.396		230.27V
6	3.000A	14.715	79.386%	0.326
	4.905V	18.536		230.27V

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115V

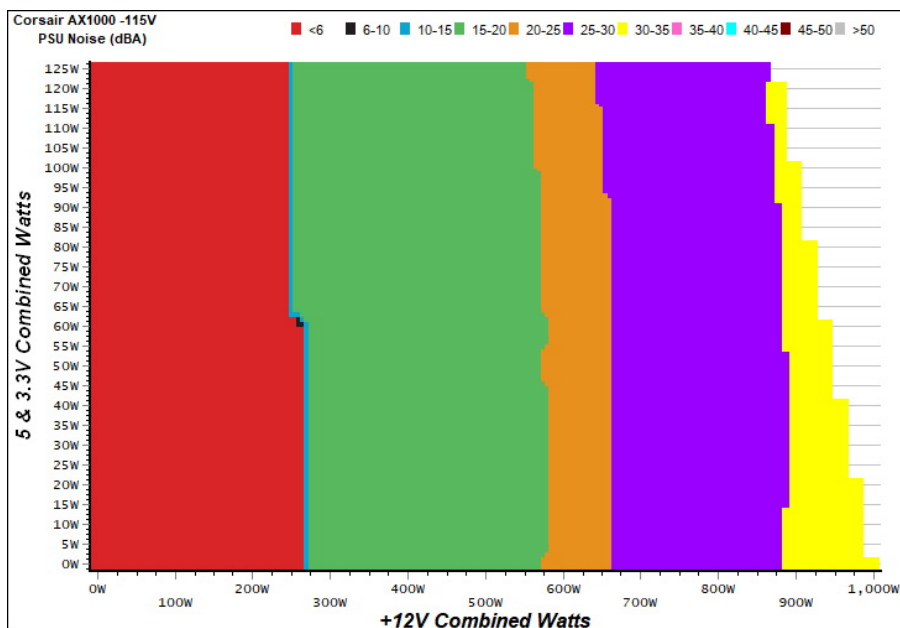
EFFICIENCY GRAPH 115V



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

NOISE GRAPH 115V



INFO

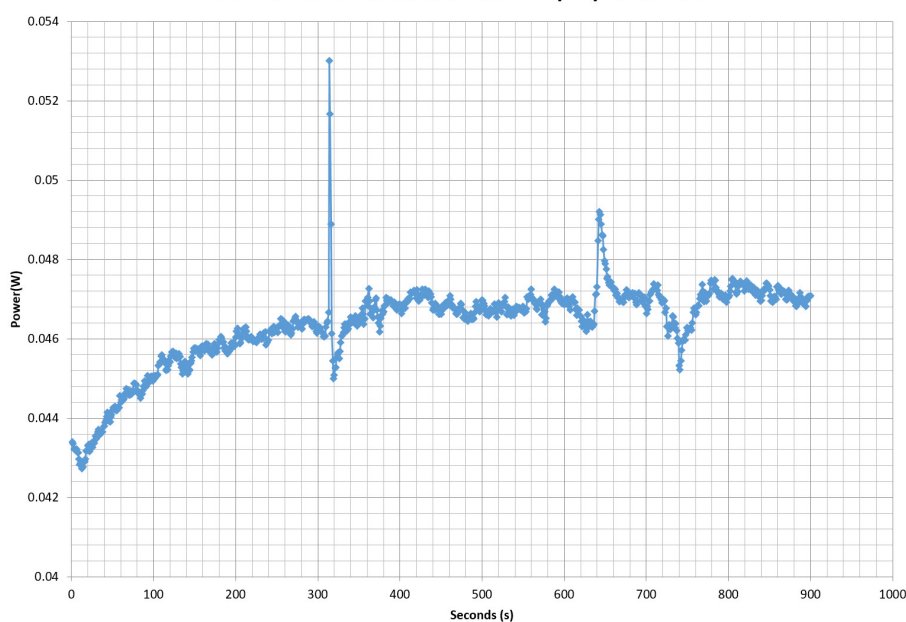
The PSU's noise in its entire operational range and under 30-32 °C (+2 °C) ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

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VAMPIRE POWER -115V

Power - 18437002000059610001 - 15/11/2018 - 11:44



INFO

This graph is generated by the PPA Standby Power Analysis software which takes full control of the power analyzer during the whole procedure. This application features all of the EN50564 & IEC62301 test limits for standby power software testing

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COMMISSION REGULATION (EU) NO 617/2013 TESTING 115V

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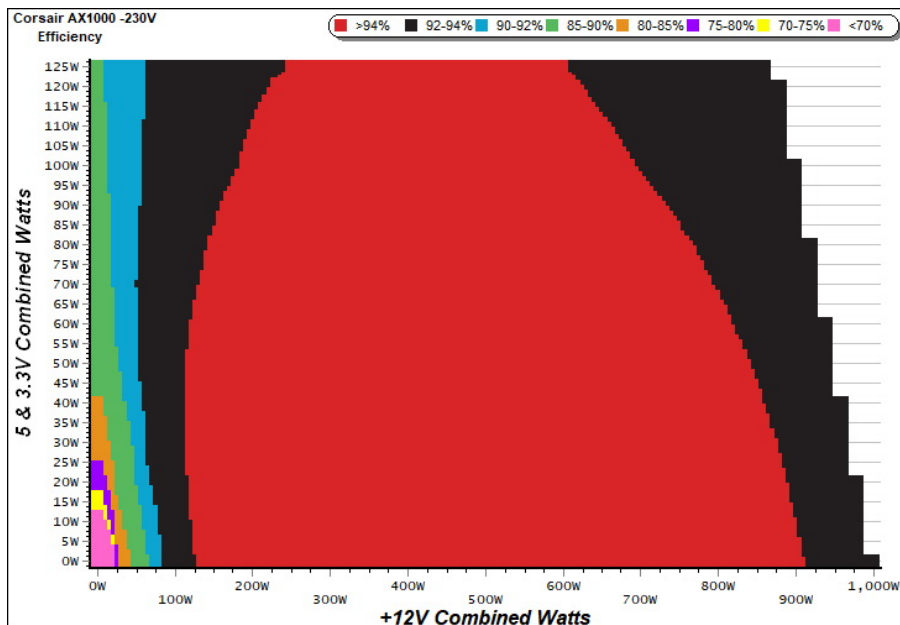
230V

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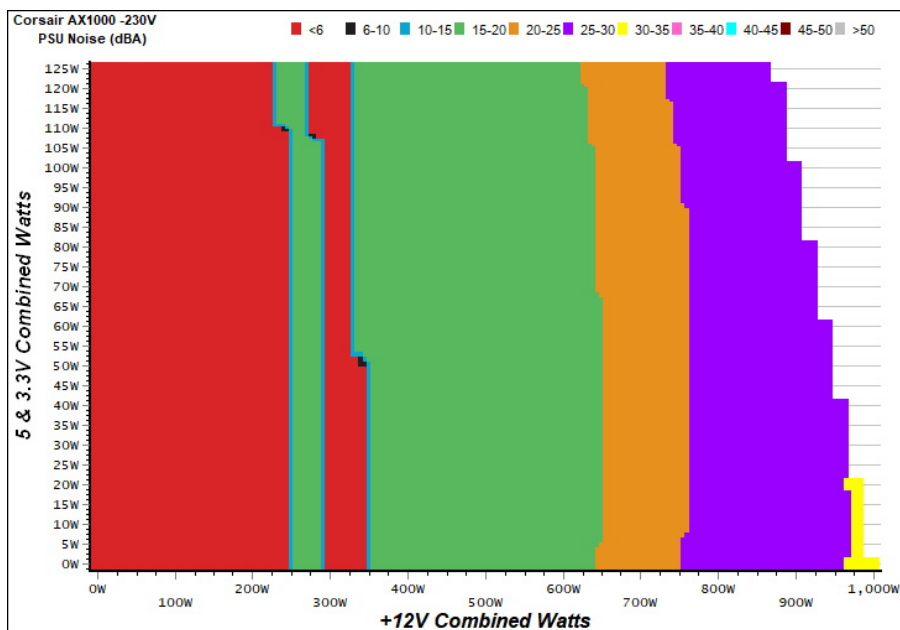
EFFICIENCY GRAPH 230V



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NOISE GRAPH 230V



INFO

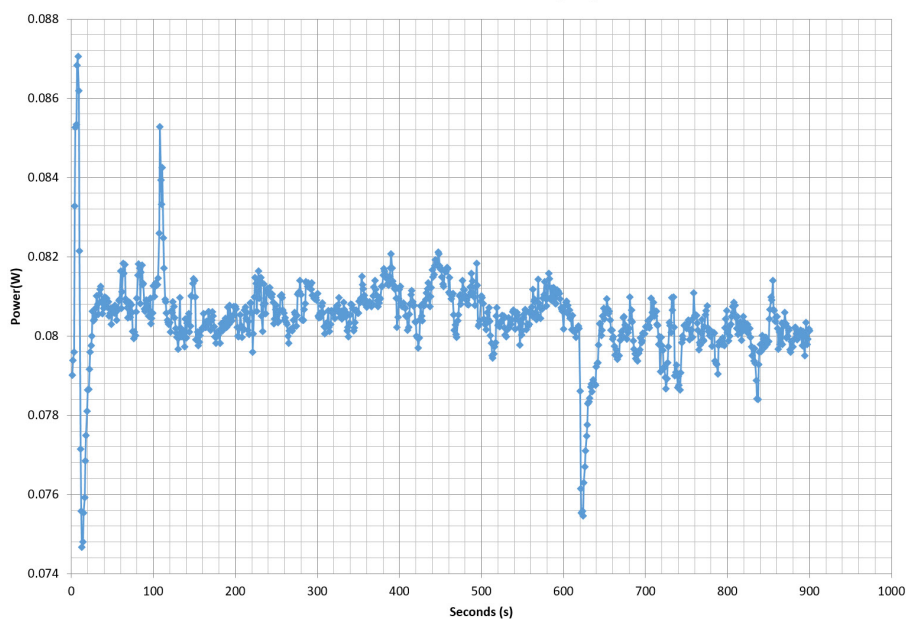
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Top side

CORSAIR					
MODEL / MODELO / 型号 / 型號 / 모델: RPS0114					
POWER SUPPLY / FUENTE DE ALIMENTACIÓN / 전원 공급 장치					
PART NUMBER: CP-9020152 / 75-003206					
交流输入 交流輸入	AC INPUT AC 입력 Entrada de CA	100 - 240V • 13A • 6.5A • 50Hz - 60Hz (200-240V • 6.5A • 50-60Hz 适用于中国地区使用)			
直流输出 直流輸出	DC OUTPUT DC 출력 Salida de CC	+3.3V	+5V	+12V	-12V +5Vsb
最大电流 最大電流	MAX LOAD 최대 부하 Carga Máximo	25A	25A	83A	0.3A 3A
最大瓦特数 最大瓦特數	MAX POWER 최대 출력 Wattaje Combinado Máximo	125W	996W	3.6W	15W
		TOTAL POWER: 1000W PODER TOTAL / 总功率 / 總功率 / 총출력			

Power specifications label

CERTIFICATIONS 115V




Aris Mpitsiopoulos
Lab Director

CERTIFICATIONS 230V



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