

Lab ID#: 80  
Receipt Date: Jan 31, 2018  
Test Date: Feb 6, 2018

Report:  
Report Date: Feb 8, 2018

### DUT INFORMATION

Brand	Corsair
Manufacturer (OEM)	Channel Well Technology
Series	RMx
Model Number	
Serial Number	16457129000017510014
DUT Notes	CP-9020094 - Retested on 11/10/2017

### DUT SPECIFICATIONS

Rated Voltage (Vrms)	100-240
Rated Current (Arms)	13-6.5
Rated Frequency (Hz)	47-63
Rated Power (W)	1000
Type	ATX12V
Cooling	135mm Rifle Bearing Fan (NR135L)
Semi-Passive Operation	✓
Cable Design	Fully Modular

### POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	25	25	83.3	3	0.8
	Watts	150		1000	15	9.6
Total Max. Power (W)		1000				

### CABLES AND CONNECTORS

Modular Cables

Description	Cable Count	Connector Count (Total)	Gauge
ATX connector 20+4 pin (600mm)	1	1	16-20AWG
4+4 pin EPS12V (650mm)	2	2	18AWG
6+2 pin PCIe (600mm+150mm)	4	8	18AWG
SATA (520mm+115mm+115mm)	3	11	18AWG
4 pin Molex (450mm+100mm+100mm+100mm)	3	12	18AWG
FDD Adapter (+100mm)	1	1	20AWG

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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	88.830%
Efficiency With 10W (≤500W) or 2% (>500W)	0.000
Average Efficiency 5VSB	81.353%
Standby Power Consumption (W)	0.0424304
Average PF	0.994
Avg Noise Output	22.33 dB(A)
Efficiency Rating (ETA)	GOLD
Noise Rating (LAMBDA)	A

### 230V

Average Efficiency	91.037%
Average Efficiency 5VSB	79.721%
Standby Power Consumption (W)	0.0794498
Average PF	0.973
Avg Noise Output	21.86 dB(A)
Efficiency Rating (ETA)	PLATINUM
Noise Rating (LAMBDA)	A

## TEST EQUIPMENT

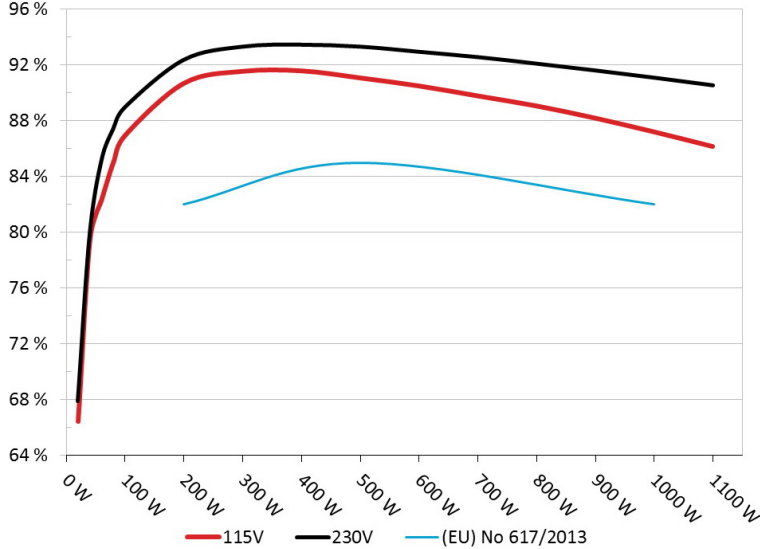
Electronic Loads	Chroma 6314A x2 63123A x6 63102A 63101A	Chroma 63601-5 x2 Chroma 63600-2 63640-80-80 x10 63610-80-20
AC Sources	Chroma 6530, Chroma 61604	
Power Analyzers	N4L PPA1530, N4L PPA5530	
Oscilloscopes	Picoscope 4444 & 3424, Keysight DSOX3024A, Rigol DS2072A	
Voltmeter	Keithley 2015 THD 6.5 Digit	
Sound Analyzer	Bruel & Kjaer 2250-L G4	
Microphone	Bruel & Kjaer Type 4189	
Data Loggers	Picoscope TC-08 x2, Labjack U3-HV x2	

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### EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE

**Efficiency: Corsair RM1000x**  
Ambient: 36°C - 47°C (96.8°F - 116.6°F)

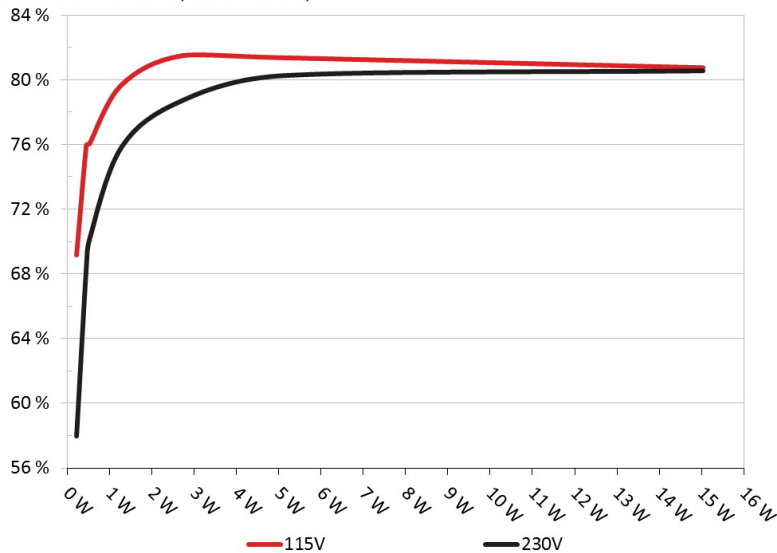


#### INFO

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 RM1000x**  
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	0.042A	0.211	69.180%	0.029
	5.069V	0.305		115.09V
2	0.087A	0.442	75.945%	0.057
	5.068V	0.582		115.09V
3	0.532A	2.691	81.471%	0.245
	5.059V	3.303		115.09V
4	3.002A	15.036	80.683%	0.453
	5.009V	18.636		115.08V

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

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.042A	0.211	57.967%	0.011
	5.069V	0.364		230.22V
2	0.087A	0.442	68.421%	0.019
	5.067V	0.646		230.23V
3	0.532A	2.691	78.707%	0.098
	5.059V	3.419		230.22V
4	3.002A	15.035	80.479%	0.318
	5.009V	18.682		230.22V

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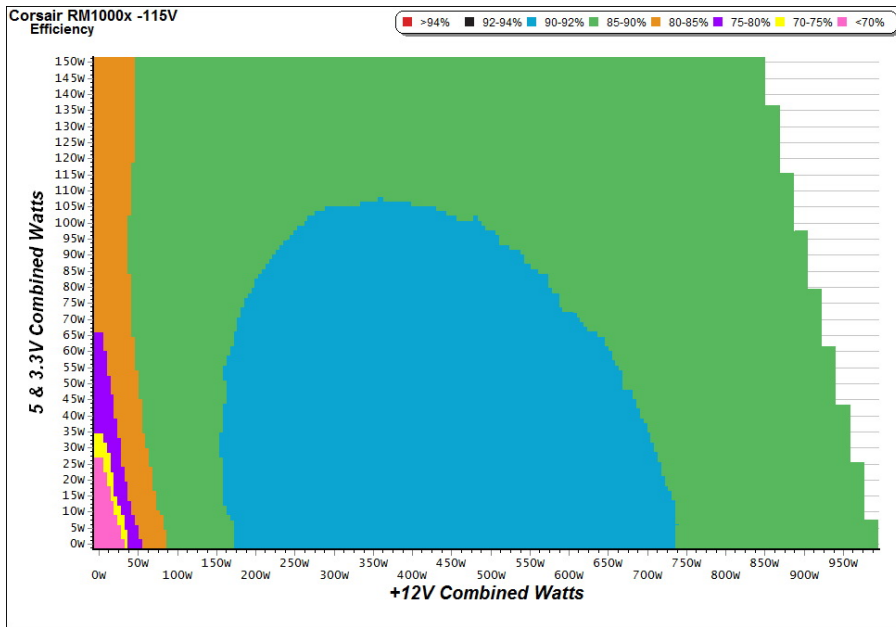
# 115V

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**PAGE 5/13**

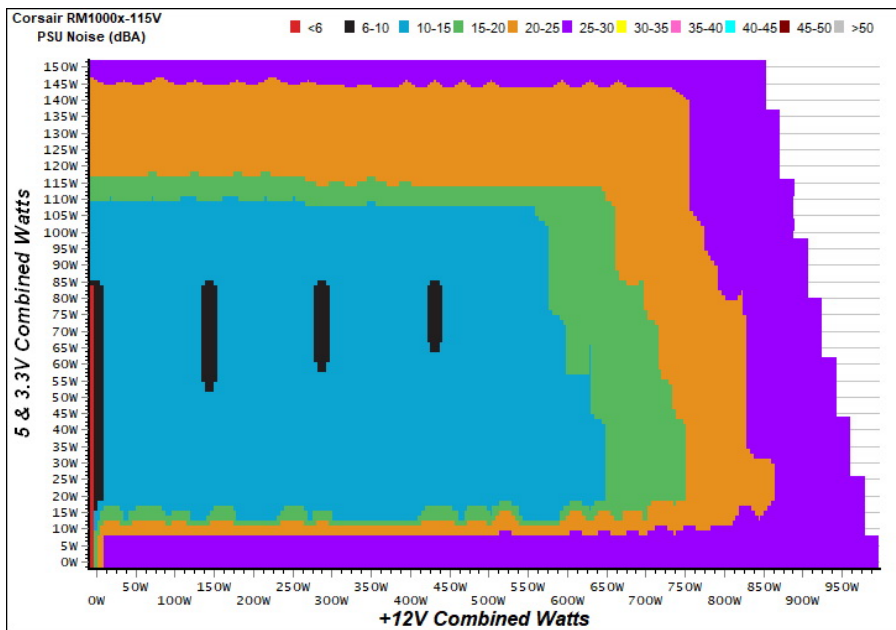
### EFFICIENCY GRAPH 115V



#### 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

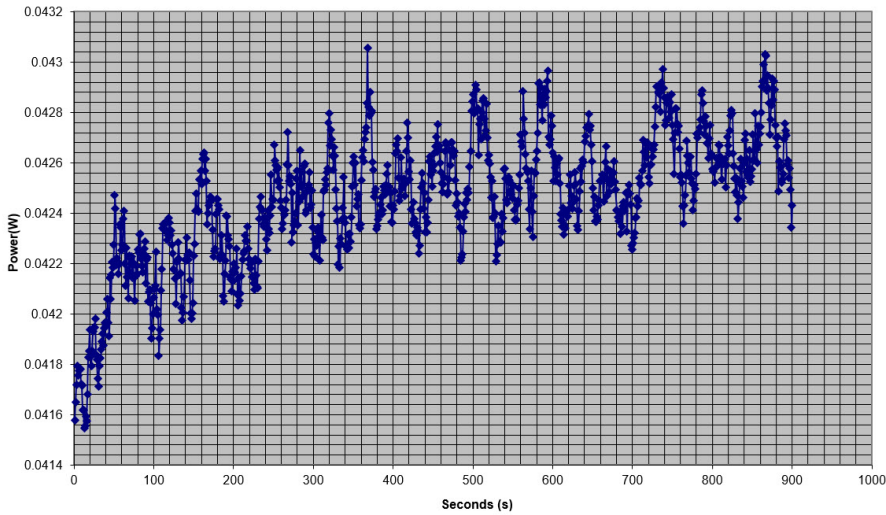
The PSU's noise in its entire operational range and under 30-32 °C (+-2 °C) ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

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**VAMPIRE POWER -115V**

Power - - 06/03/2017 - 19:14



**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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**PAGE 8/13**



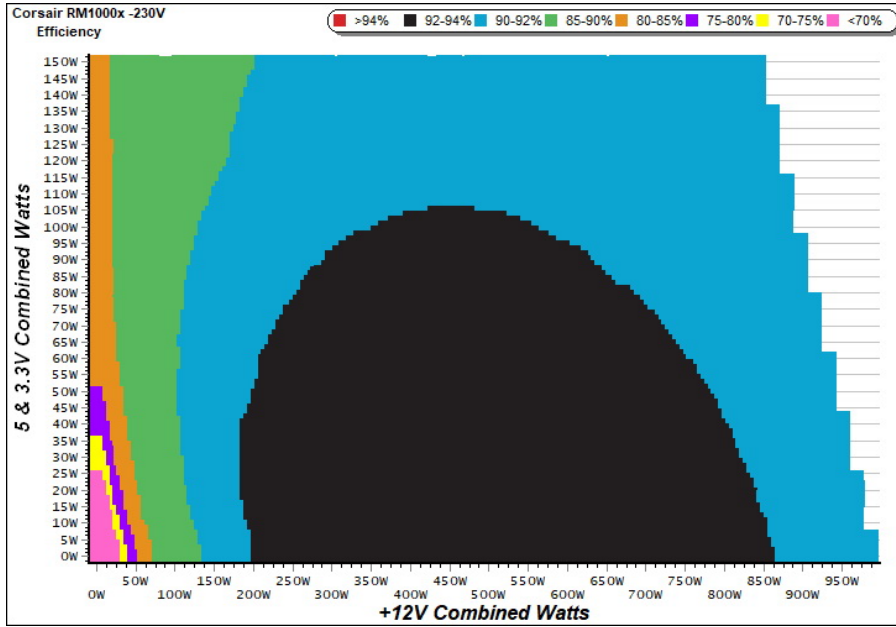
# 230V

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**PAGE 9/13**

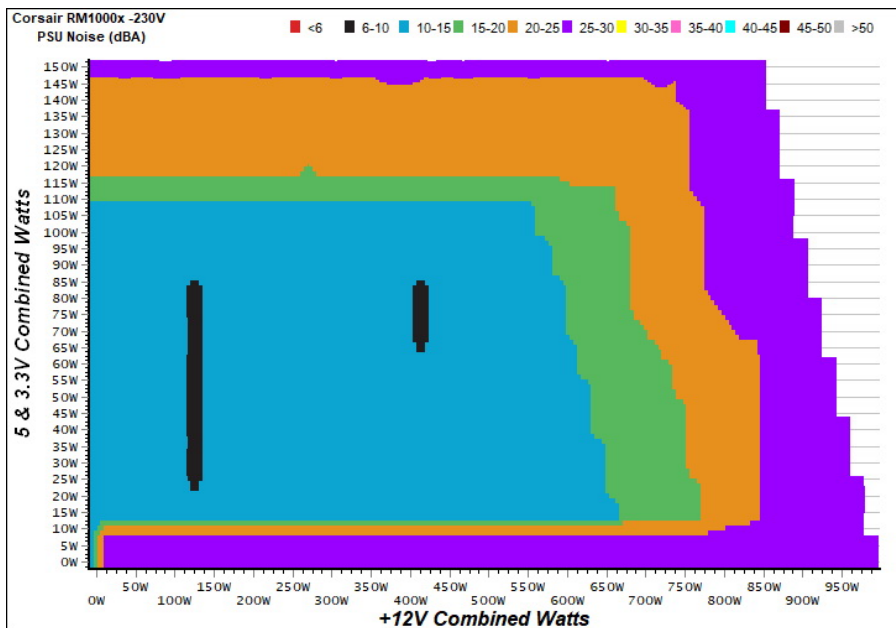
### EFFICIENCY GRAPH 230V



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### NOISE GRAPH 230V



#### INFO

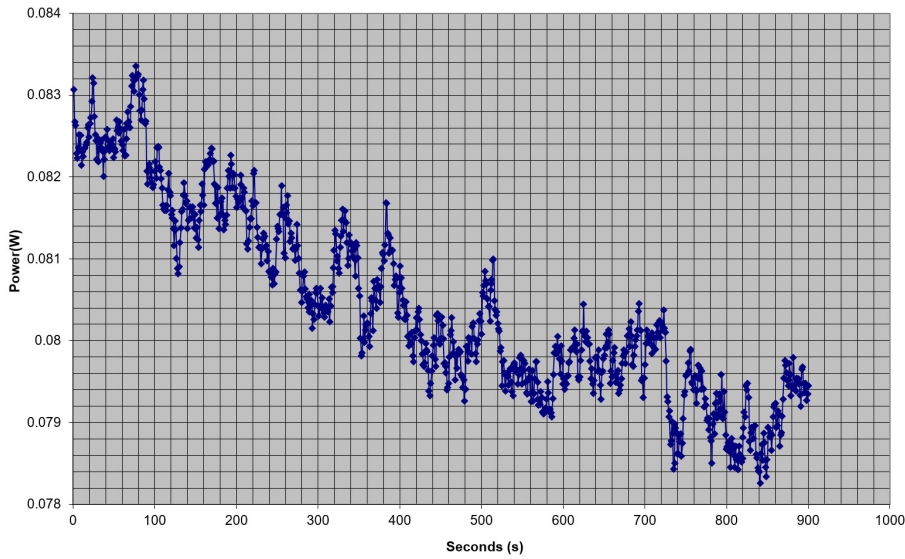
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**PAGE 12/13**

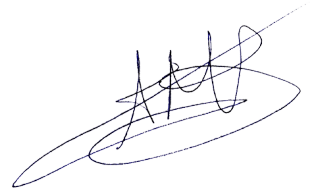


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Power specifications label

### CERTIFICATIONS 115V

**Aris Mpitsiopoulos**  
Lab Director

### CERTIFICATIONS 230V



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