EFFICIENCY AND NOISE REPORT IN ACCORDANCE WITH
CYBENETICS ETA AND CYBENETICS LAMBDA PROCEDURE

Corsair VS550

Lab ID#: 558
Receipt Date: Apr 28, 2018
Test Date: May 8, 2018

Report:
Report Date: May 12, 2018

DUT INFORMATION

Brand	Corsair
Manufacturer (OEM)	HEC
Series	VS
Model Number	
Serial Number	18389853000052597430
DUT Notes	CP-9020171

DUT SPECIFICATIONS

Rated Voltage (Vrms)	100-240
Rated Current (Arms)	10-5
Rated Frequency (Hz)	47-63
Rated Power (W)	550
Type	ATX12V
Cooling	120mm Sleeve Bearing Fan (D12SH-12)
Semi-Passive Operation	✗
Cable Design	Fixed cables

TEST EQUIPMENT

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RESULTS

Temperature Range (°C /°F)	28-30 / 82.4-86 (+-2°C / +- 3.6°F)
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓

115V

Average Efficiency	83.290%
Efficiency With 10W (≤500W) or 2% (>500W)	54.513
Average Efficiency 5VSB	79.597%
Standby Power Consumption (W)	0.0462126
Average PF	0.990
Avg Noise Output	29.69 dB(A)
Efficiency Rating (ETA)	BRONZE
Noise Rating (LAMBDA)	A-

230V

Average Efficiency	85.561%
Average Efficiency 5VSB	78.848%
Standby Power Consumption (W)	0.1057410
Average PF	0.960
Avg Noise Output	30.12 dB(A)
Efficiency Rating (ETA)	BRONZE
Noise Rating (LAMBDA)	Standard++

POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	24	20	44	3	0.3
	Watts	120		528	15	3.6
Total Max. Power (W)		550				

CABLES AND CONNECTORS

Captive Cables

Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors
ATX connector 20+4 pin (550mm)	1	1	18-20AWG	No
4+4 pin EPS12V (620mm)	1	1	18AWG	No
6+2 pin PCIe (550mm+110mm)	1	2	18AWG	No
SATA (440mm+120mm+120mm)	2	6	18AWG	No
SATA (450mm) / 4-pin Molex (+120mm+120mm) / FDD (+120mm)	1	1 / 2 / 1	18-20AWG	No
AC Power Cord (1380mm) - C13 coupler	1	1	18AWG	-

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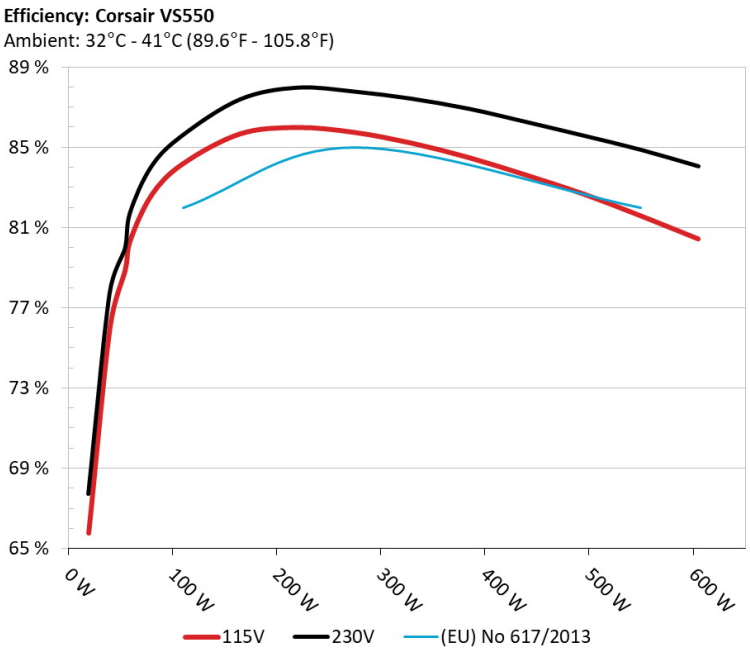
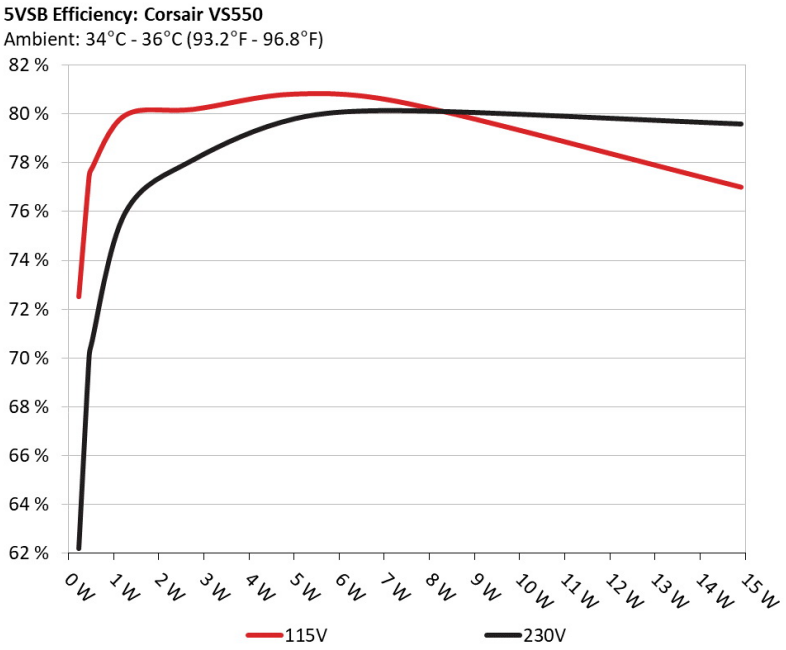
EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE



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

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

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.227	72.524%	0.036
	5.030V	0.313		115.05V
2	0.090A	0.453	77.436%	0.067
	5.030V	0.585		115.05V
3	0.550A	2.762	80.197%	0.272
	5.021V	3.444		115.05V
4	1.000A	5.012	80.826%	0.349
	5.011V	6.201		115.05V
5	1.500A	7.502	80.442%	0.393
	5.001V	9.326		115.05V
6	2.999A	14.907	77.011%	0.455
	4.970V	19.357		115.05V

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

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.227	62.192%	0.013
	5.030V	0.365		230.20V
2	0.090A	0.453	70.015%	0.023
	5.030V	0.647		230.20V
3	0.550A	2.762	78.111%	0.115
	5.021V	3.536		230.18V
4	1.000A	5.012	79.796%	0.183
	5.012V	6.281		230.19V
5	1.500A	7.502	80.124%	0.237
	5.001V	9.363		230.19V
6	3.000A	14.904	79.581%	0.326
	4.968V	18.728		230.19V

115V

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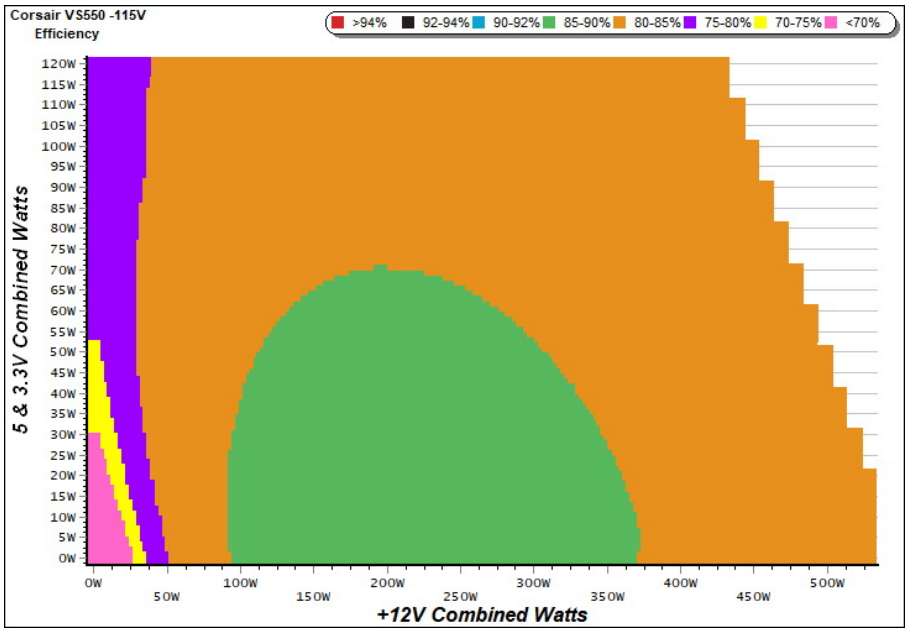
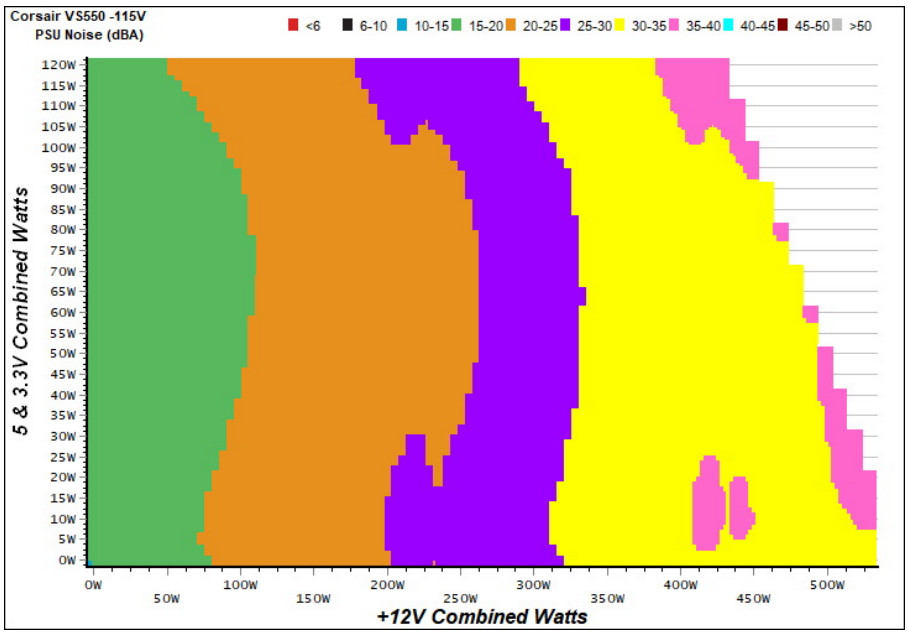
EFFICIENCY GRAPH 115V



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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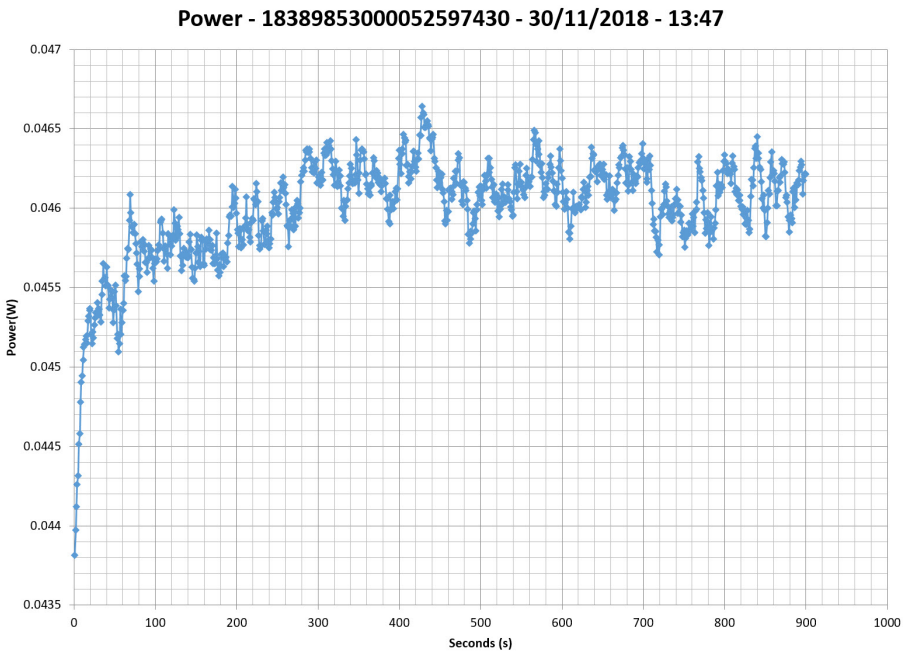
VAMPIRE POWER -115V



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

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

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230V

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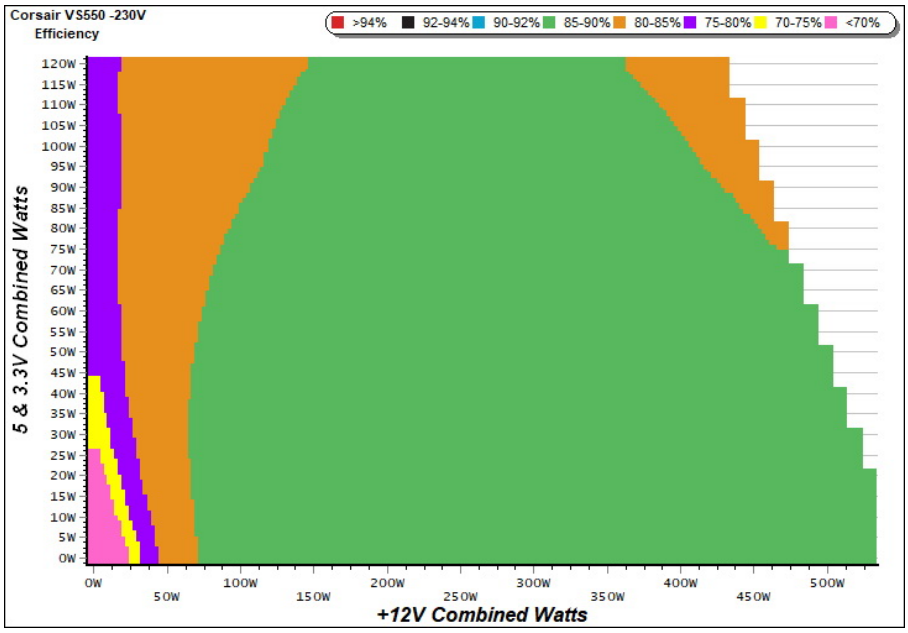
EFFICIENCY GRAPH 230V



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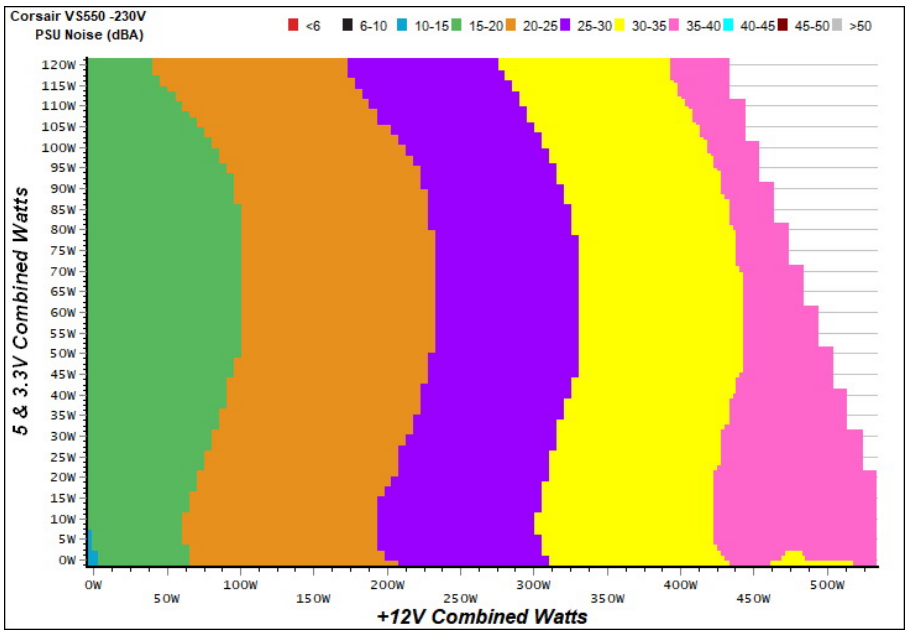
NOISE GRAPH 230V



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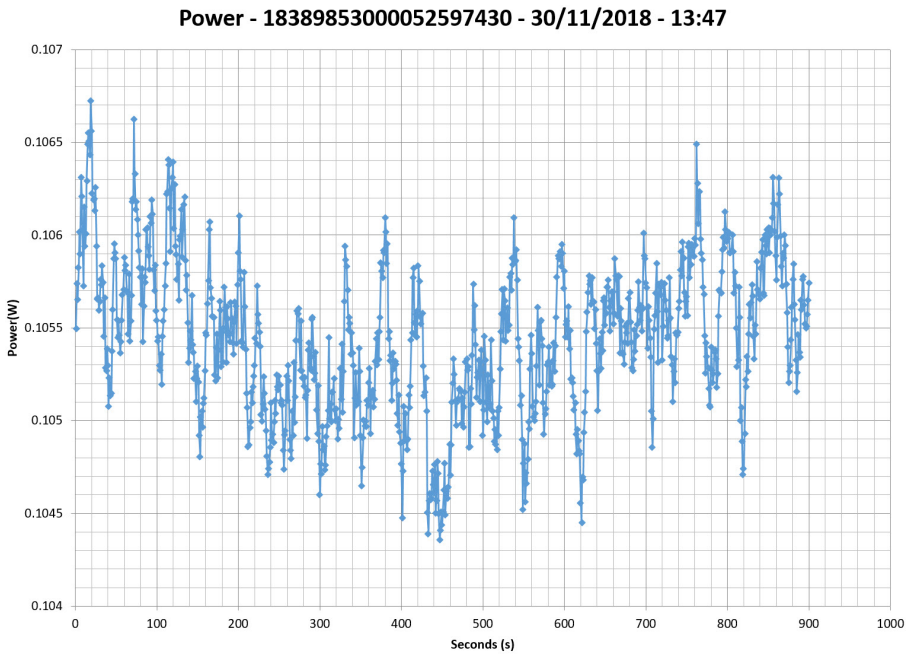
VAMPIRE POWER -230V



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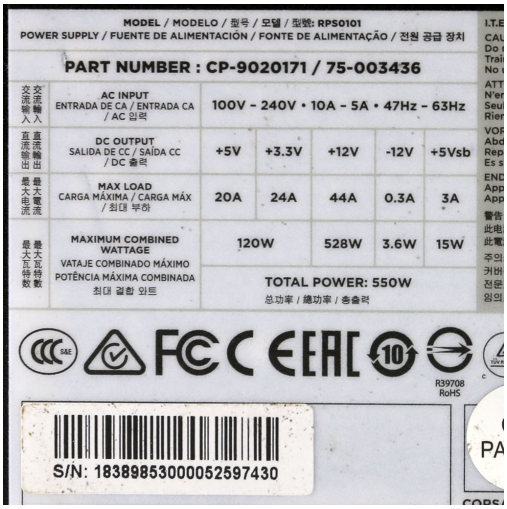
Top side



Power specifications label

CERTIFICATIONS 115V

Aristeidis Bitziopoulos
Lab Director

CERTIFICATIONS 230V