

Lab ID#: AS75002053  
Receipt Date: Jul 2, 2022  
Test Date: Aug 26, 2022

Report: 22PS2053A  
Report Date: Aug 25, 2022

### DUT INFORMATION

Brand	Asus
Manufacturer (OEM)	Great Wall
Series	Rog Loki
Model Number	ROG-LOKI-750P-SFX-L-GAMING
Serial Number	2M050000255
DUT Notes	

### DUT SPECIFICATIONS

Rated Voltage (Vrms)	100-240
Rated Current (Arms)	10-5
Rated Frequency (Hz)	47-63
Rated Power (W)	750
Type	SFX-L
Cooling	120mm Double Ball Bearing Fan (CF1225H12D)
Semi-Passive Operation	✓
Cable Design	Fully Modular

### TEST EQUIPMENT

Electronic Loads	Chroma 63601-5 x4 Chroma 63600-2 x2 63640-80-80 x20 63610-80-20 x2
AC Sources	Chroma 6530, Keysight AC6804B
Power Analyzers	N4L PPA1530 x2
Sound Analyzer	Bruel & Kjaer 2270 G4
Microphone	Bruel & Kjaer Type 4955-A
Data Loggers	Picoscope TC-08 x2, Labjack U3-HV x2
Tachometer	UNI-T UT372 x2
Digital Multimeter	Keysight U1273AX, Fluke 289, Keithley 2015 - THD
UPS	CyberPower OLS3000E 3kVA x2
Transformer	3kVA x2

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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	✓
ALPM (Alternative Low Power Mode) compatible	✓

### 115V

Average Efficiency	90.554%
Efficiency With 10W (≤500W) or 2% (>500W)	71.487
Average Efficiency 5VSB	81.303%
Standby Power Consumption (W)	0.0542000
Average PF	0.986
Avg Noise Output	18.87 dB(A)
Efficiency Rating (ETA)	PLATINUM
Noise Rating (LAMBDA)	A+

### 230V

Average Efficiency	92.331%
Average Efficiency 5VSB	79.929%
Standby Power Consumption (W)	0.0986000
Average PF	0.949
Avg Noise Output	19.20 dB(A)
Efficiency Rating (ETA)	PLATINUM
Noise Rating (LAMBDA)	A+

## POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	20	20	62.5	2.5	0.8
	Watts	110		750	12.5	9.6
Total Max. Power (W)		750				

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## CABLES AND CONNECTORS

### Modular Cables

Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors
ATX connector 20+4 pin (450mm)	1	1	18AWG	No
4+4 pin EPS12V (550mm)	2	2	16AWG	No
12+4 pin PCIe (460mm)	1	1	16-24AWG	No
2x 6+2 pin PCIe (450mm)	1	2	16AWG	No
6+2 pin PCIe (450mm)	1	1	16-18AWG	No
SATA (300mm+190mm+90mm)	2	6	18AWG	No
4 pin Molex (300mm+100mm+100mm+100mm)	1	4	18AWG	No
Addressable Aura RGB cable (80mm)	1	1	22AWG	No
RGB controller cable (85mm)	1	1	24AWG	No

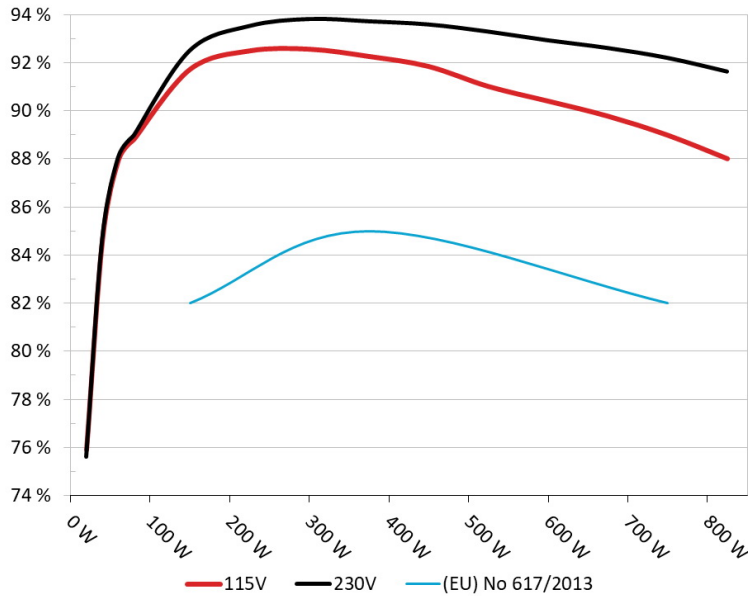
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### EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE

**Efficiency: ASUS ROG-LOKI-750P-SFX-L-GAMING**

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



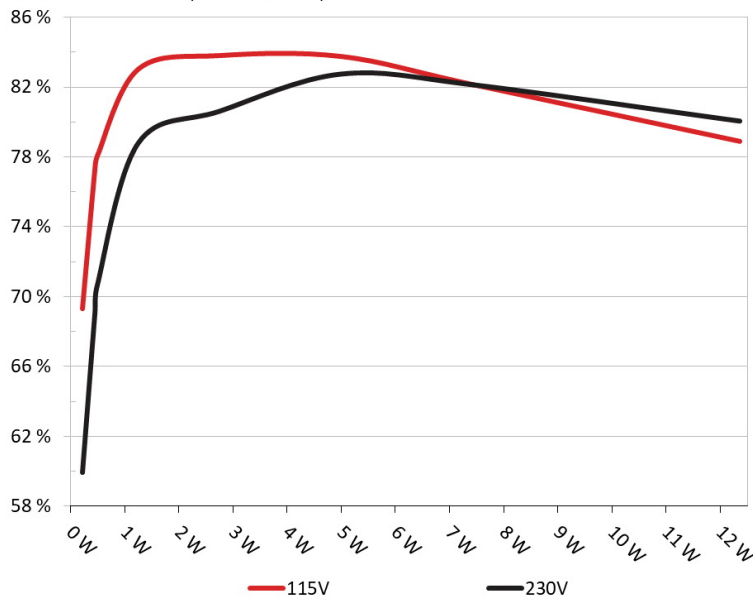
**INFO**

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: ASUS ROG-LOKI-750P-SFX-L-GAMING**

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	0.227W	69.326%	0.035
	5.043V	0.327W		115.17V
2	0.09A	0.454W	77.241%	0.062
	5.041V	0.588W		115.17V
3	0.55A	2.761W	83.812%	0.267
	5.022V	3.294W		115.17V
4	1A	5.005W	83.763%	0.365
	5.005V	5.975W		115.16V
5	1.5A	7.479W	82.124%	0.417
	4.986V	9.106W		115.16V
6	2.499A	12.368W	78.906%	0.472
	4.949V	15.674W		115.16V

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

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.227W	59.92%	0.011
	5.043V	0.36W		230.34V
2	0.09A	0.454W	68.967%	0.021
	5.041V	0.658W		230.34V
3	0.55A	2.759W	80.628%	0.104
	5.018V	3.423W		230.34V
4	1A	5.002W	82.758%	0.17
	5.003V	6.044W		230.34V
5	1.5A	7.475W	82.127%	0.231
	4.984V	9.102W		230.34V
6	2.499A	12.359W	80.06%	0.311
	4.945V	15.437W		230.34V

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# 115V

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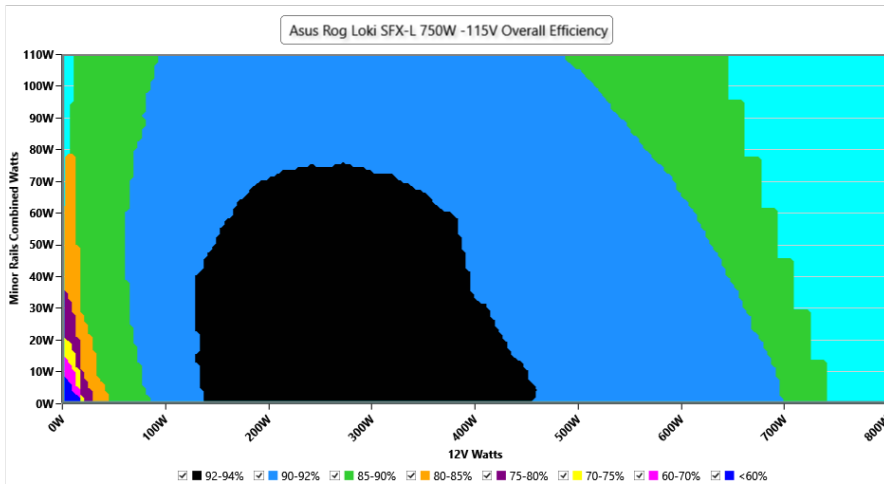
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### EFFICIENCY GRAPH 115V

#### INFO

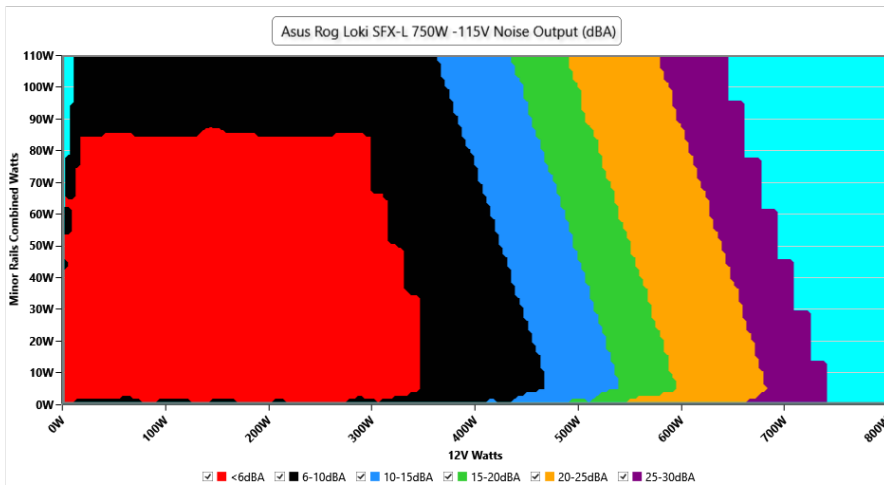
This graph depicts the PSU's efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations



### 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**

**Detailed Results**

	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.16 V	115.13 V	113.85 V	115.20 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.95 Hz	59.40 Hz	60.02 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.10 %	N/A	0.17 %	2.00 %	PASS
Real Power:	0.054 W	0.048 W	N/A	0.062 W	N/A	N/A
Apparent Power:	9.902 W	9.697 W	N/A	10.121 W	N/A	N/A
Power Factor:	0.005	N/A	N/A	N/A	N/A	N/A

**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**

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
10%	4.448A	1.976A	1.985A	1.003A	74.995	88.831%	0	<6.0	44.28°C	0.982
	12.005V	5.062V	3.325V	4.983V	84.423				40.22°C	115.14V
20%	9.914A	2.967A	2.98A	1.207A	149.919	91.726%	0	<6.0	45.43°C	0.981
	12.005V	5.056V	3.322V	4.972V	163.442				41.07°C	115.12V
50%	26.970A	4.944A	4.97A	1.827A	374.4	92.262%	0	<6.0	47.79°C	0.989
	12.009V	5.057V	3.32V	4.927V	405.803				42.26°C	115.07V
100%	55.130A	8.912A	8.96A	2.568A	749.586	88.986%	1189	26.8	45°C	0.996
	12.015V	5.049V	3.314V	4.866V	842.37				55.14°C	114.93V

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# 230V

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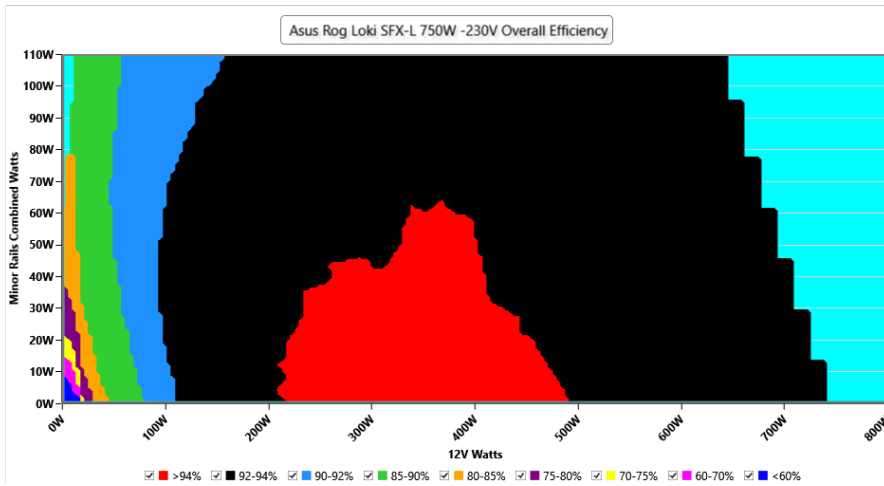
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### EFFICIENCY GRAPH 230V

#### INFO

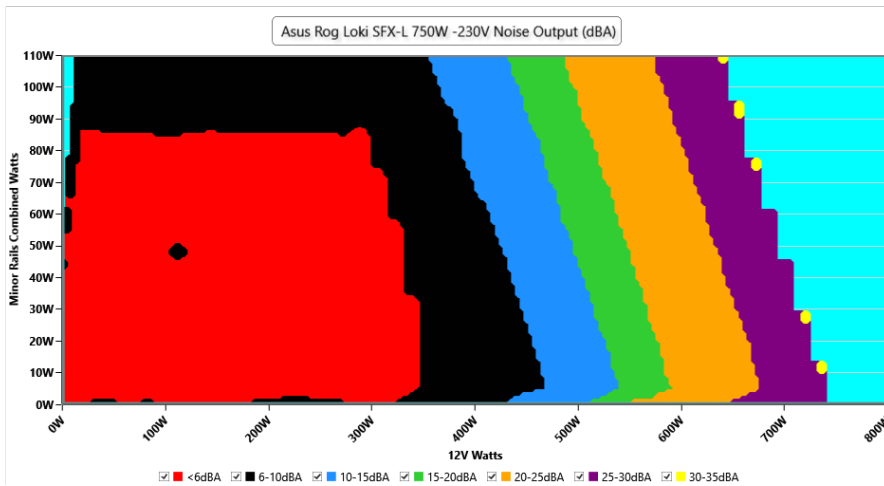
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### NOISE GRAPH 230V

#### INFO

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**VAMPIRE POWER -230V**

**Detailed Results**

	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	230.34 V	230.23 V	227.70 V	230.38 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	49.99 Hz	49.50 Hz	50.01 Hz	50.50 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.417	1.490	PASS
Mains Voltage THD:	0.12 %	0.10 %	N/A	0.20 %	2.00 %	PASS
Real Power:	0.099 W	0.085 W	N/A	0.128 W	N/A	N/A
Apparent Power:	33.071 W	32.638 W	N/A	33.550 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

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**COMMISSION REGULATION (EU) NO 617/2013 TESTING 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%	4.447A	1.975A	1.985A	1.003A	74.997	88.991%	0	<6.0	44.49°C	0.841
	12.007V	5.063V	3.325V	4.986V	84.277				40.46°C	230.33V
20%	9.907A	2.964A	2.979A	1.206A	149.92	92.513%	0	<6.0	44.87°C	0.927
	12.013V	5.061V	3.324V	4.973V	162.056				40.55°C	230.32V
50%	26.973A	4.943A	4.969A	1.825A	374.459	93.732%	0	<6.0	48.13°C	0.968
	12.010V	5.058V	3.321V	4.93V	399.496				42.68°C	230.29V
100%	55.138A	8.913A	8.96A	2.567A	749.623	92.211%	1196	27.1	45.27°C	0.982
	12.014V	5.049V	3.314V	4.867V	812.947				55.32°C	230.24V

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

## Asus ROG-LOKI-750P-SFX-L-GAMING

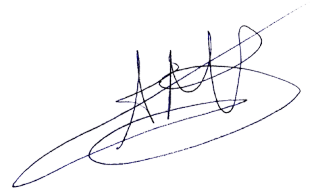


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Power specifications label

### CERTIFICATIONS 115V

**Aristeidis Bitziopoulos**  
Lab Director

### CERTIFICATIONS 230V



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