FSP Technology VITA GM 1000W

S4021000112

Lab ID FS10002467

Certification ID 252467

Test Result Report ID: 24PS2467A

Certificate Issue Date: Jun 10, 2024

Scheme: ETA-EMI PSU

115V



230V



Scheme: LAMBDA PSU

115V



230V





Outside Validation Scope



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	FSP Technology
Model	VITA GM 1000W
OEM/ODM	FSP
Serial Number	S4021000112
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	100-240

□□□□ (Arms)	6-12
□□□□ (Hz)	50-60
□□□□ (W)	1000
Operating Temperature (Continuous Full Load) (°C)	
□□	ATX12V
□□□□	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
□□	120mm Rifle Bearing Fan (D12SH-12)
□□□□□	✗
Cybenetics Testing Information	
Lab ID	FS10002467
Date of receipt	Jun 5, 2024
Testing Date	May 21, 2024
Report Issued Date	Jun 10, 2024
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□□
(Non-accredited measurements)

□□□□□				
□□	□□□□	□□□□□□	**Gauge**	In Cable Capacitors
ATX □□ 20+4 pin (600mm)	1	1	18-22AWG	□
4+4 pin EPS 12V □□ (700mm)	2	2	16AWG	□
6+2pin PCIe□□ (650mm+150mm)	2	4	16-18AWG	□
12+4 pin PCIe (700mm) (600W)	1	1	16-24AWG	□

SATA□□ (500mm+150mm+150mm+150mm)	1	4	18AWG	□
SATA□□ (500mm+150mm) / 4-pin Molex (+155mm+100mm)	2	4 / 4	18-20AWG	□
AC Power Cord (1350mm) - C13 coupler	1	1	18AWG	-

Protection Features

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
□□□□	□□	20	20	83.33	3	0.3
	□	100		1000	15	3.6
□□□□□ (W)		1000				

Parts Description

General Data	
Manufacturer (OEM)	FSP
PCB Type	Double Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	1x NTC Thermistor SCK-056 (5 Ohm) & Relay
Bridge Rectifier(s)	2x GBU2508 (600V, 25A @ 100°C)
APFC MOSFETs	2x GP36S60YERD

APFC Boost Diode	1x Toshiba TRS8E65F (650V, 8A, @ 175°C)
Bulk Cap(s)	1x Nippon Chemi-con (450V, 680uF, 3,000h @ 105°C, KHS)
Main Switchers	2x Toshiba TK25A60X5 (600V, 25A, @ 150°C, Rds(on): 0.14Ohm)
APFC Controller	Champion CM6500UNX
Resonant Controller	Champion CU6901VPA
Topology	Primary side: APFC, Half-Bridge & LLC converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	6x Toshiba TPH1R204PL (40V, 150A @ 25°C, Rds(on): 1.24mOhm)
5V & 3.3V	DC-DC Converters: 4x XSEMI XP3R303GMT-L (30V, 25A @ 70°C, Rds(on): 3.3mOhm) PWM Controller(s): UPI uP3861P
Filtering Capacitors	Electrolytic: 4x Nippon Chemi-Con (105°C, W) 2x Nippon Chemi-Con (1-5,000h @ 105°C,KZE), 2x Nippon Chemi-Con (5-6,000h @ 105°C, ZKH), Polymer: 4x Nippon Chemi-Con, 2x Apaq, 26x
Supervisor IC	IN1T703I-SDG
Fan Model	Yate Loon D12SH-12 (120mm, 12V, 0.30A, Rifle Bearing Fan)
5VSB Circuit	
TVS Diode	1x SMAJ58AC
High Side Rectifier	US1MGR (1000V, 1A)
Standby PWM Controller	Grenery GR9230UK

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

115V

Accredited	
□□□□ (>1450 load combinations)	90.095%
Average Noise Output (>1450 Load Combinations)	25.17dBA
PF□□□ (>1450 Load Combinations)	0.977
Efficiency With 10W (≤500W) or 2% (>500W) Load	71.809%
□□□□□□	0.0504W
Non-Accredited	
12V Ripple (Full Load)	22.89mV
5V Ripple (Full Load)	16.21mV
3.3V Ripple (Full Load)	21.38mV
5VSB Ripple (Full Load)	24.84mV
12V Load Regulation	0.63%
5V Load Regulation	1.60%
3.3V Load Regulation	2.34%
5VSB Load Regulation	2.68%
Inrush Current	37.700A

230V

Accredited	
□□□□ (>1450 load combinations)	92.244%
Average Noise Output (>1450 Load Combinations)	25.03dBA
PF□□□ (>1450 Load Combinations)	0.936
Efficiency With 10W (≤500W) or 2% (>500W) Load	73.655%
□□□□□□	0.1479W
Non-Accredited	
12V Ripple (Full Load)	15.76mV
5V Ripple (Full Load)	18.75mV
3.3V Ripple (Full Load)	20.26mV

5VSB Ripple (Full Load)		21.23mV
12V Load Regulation		0.64%
5V Load Regulation		1.60%
3.3V Load Regulation		2.37%
5VSB Load Regulation		2.70%
Inrush Current		64.590A
12V Transient Response (200%)		11.48V
5V Transient Response (200%)		4.952V
3.3V Transient Response (200%)		3.148V
5VSB Transient Response (200%)		4.914V
□□□□ & PG□□		16.60ms
AC Loss to PWR_OK Hold Up Time		13.20ms
PWR_OK Inactive to DC Loss Delay		3.40ms
PSU Timings: T1 (20% / 100%)	44.0ms	47.0ms
PSU Timings: T3 (20% / 100%)	112.0ms	112.0ms
12V OCP (26.6°C / 41.6°C)	90.80A (108.96%), 12.073V	86.60A (103.92%), 12.095V
5V OCP (26.6°C / 41.6°C)	26.1A (130.50%), 5.046V	24.5A (122.50%), 5.048V
3.3V OCP (26.6°C / 41.6°C)	26.1A (130.50%), 3.327V	24A (120.00%), 3.337V
5VSB OCP (26.6°C / 41.6°C)	4.2A (140.00%), 4.976V	4.2A (140.00%), 4.979V
OPP (28.42°C / 42.74°C)	115.10%	112.70%

□□□□ & PG□□

Hold-Up Time (ms)	16.6
AC Loss to PWR_OK Hold Up Time (ms)	13.2
PWR_OK Inactive to DC Loss Delay (ms)	3.4

Tables

115V

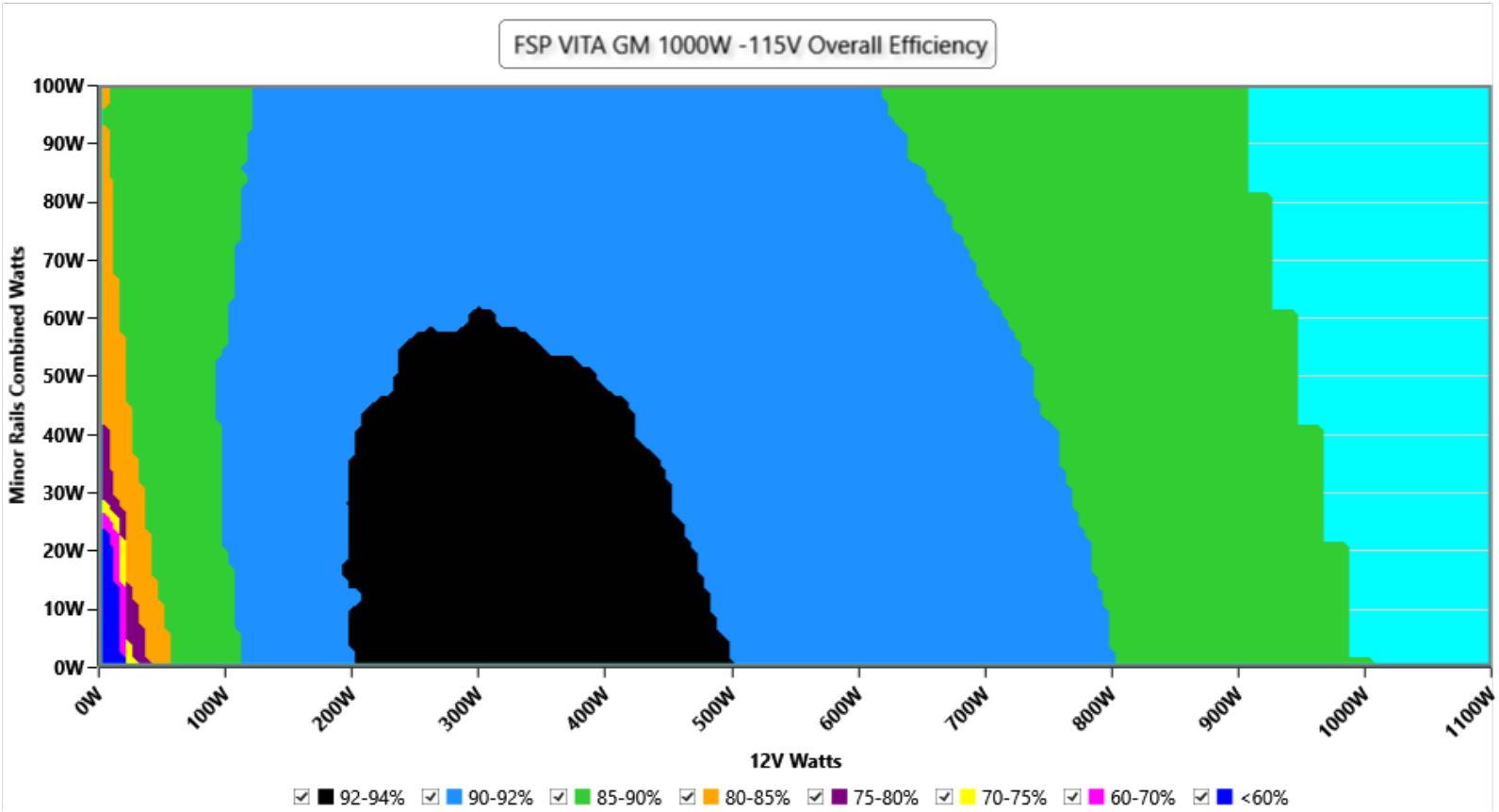
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.08 V	115.04 V	113.85 V	115.11 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.99 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.09 %	N/A	0.20 %	2.00 %	PASS
Real Power:	0.050 W	0.005 W	N/A	0.093 W	N/A	N/A
Apparent Power:	12.827 W	12.769 W	N/A	12.897 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	231.00 V	230.89 V	227.70 V	231.07 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:	1.417	1.416	1.340	1.419	1.490	PASS
Mains Voltage THD:	0.17 %	0.15 %	N/A	0.26 %	2.00 %	PASS
Real Power:	0.148 W	0.102 W	N/A	0.224 W	N/A	N/A
Apparent Power:	43.948 W	43.658 W	N/A	44.265 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

□□□□□□

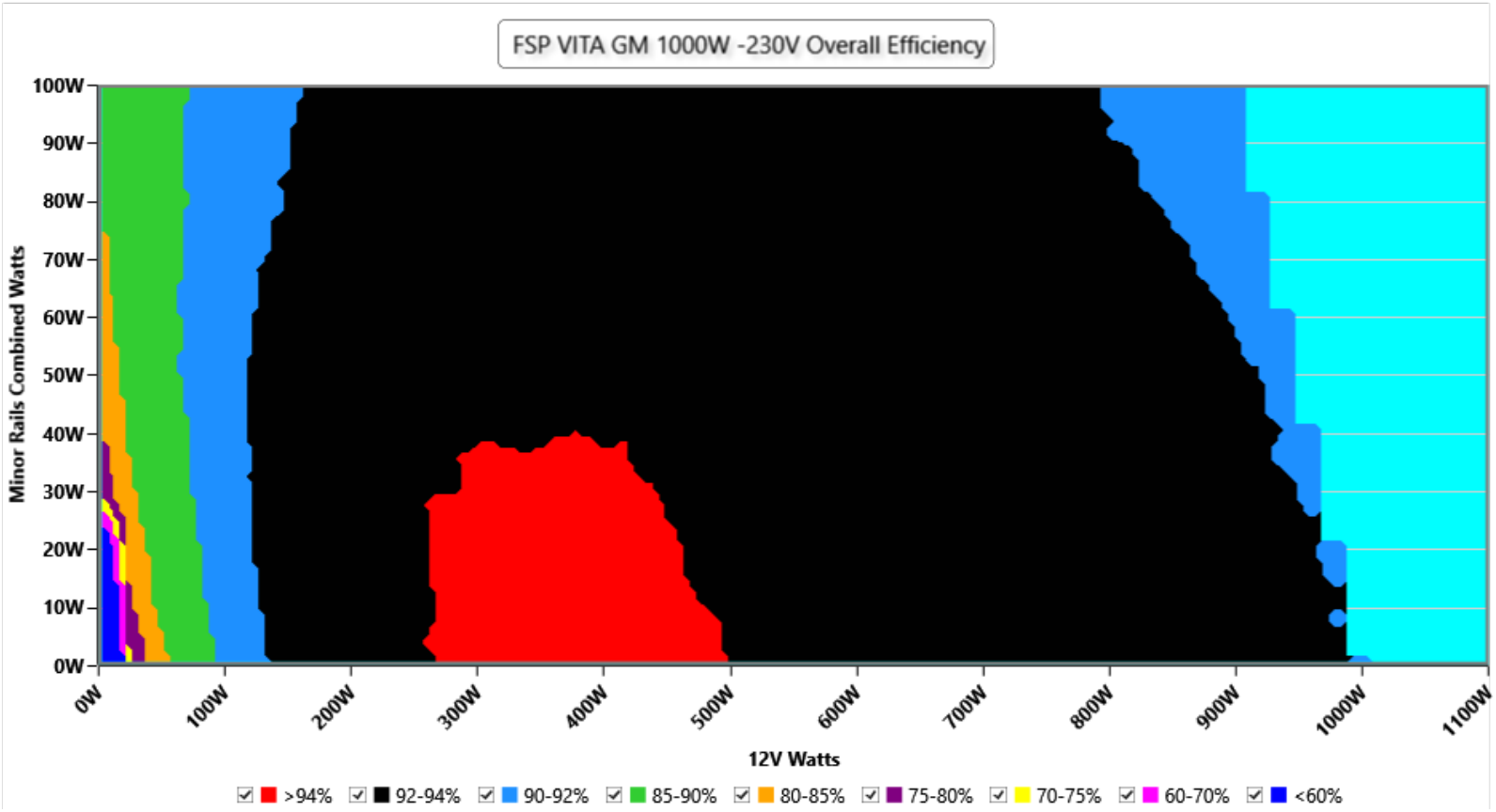
115V



□□

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



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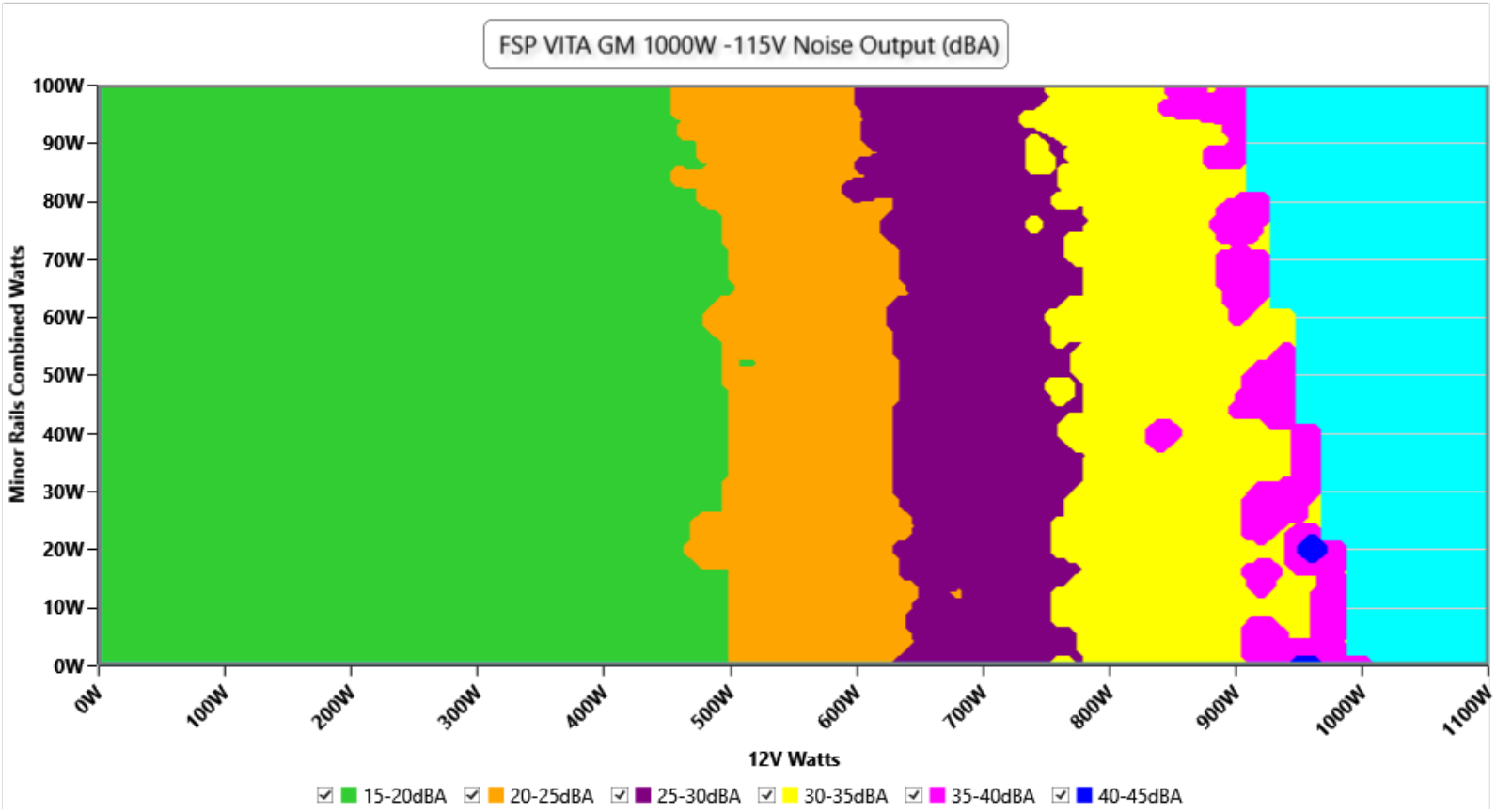
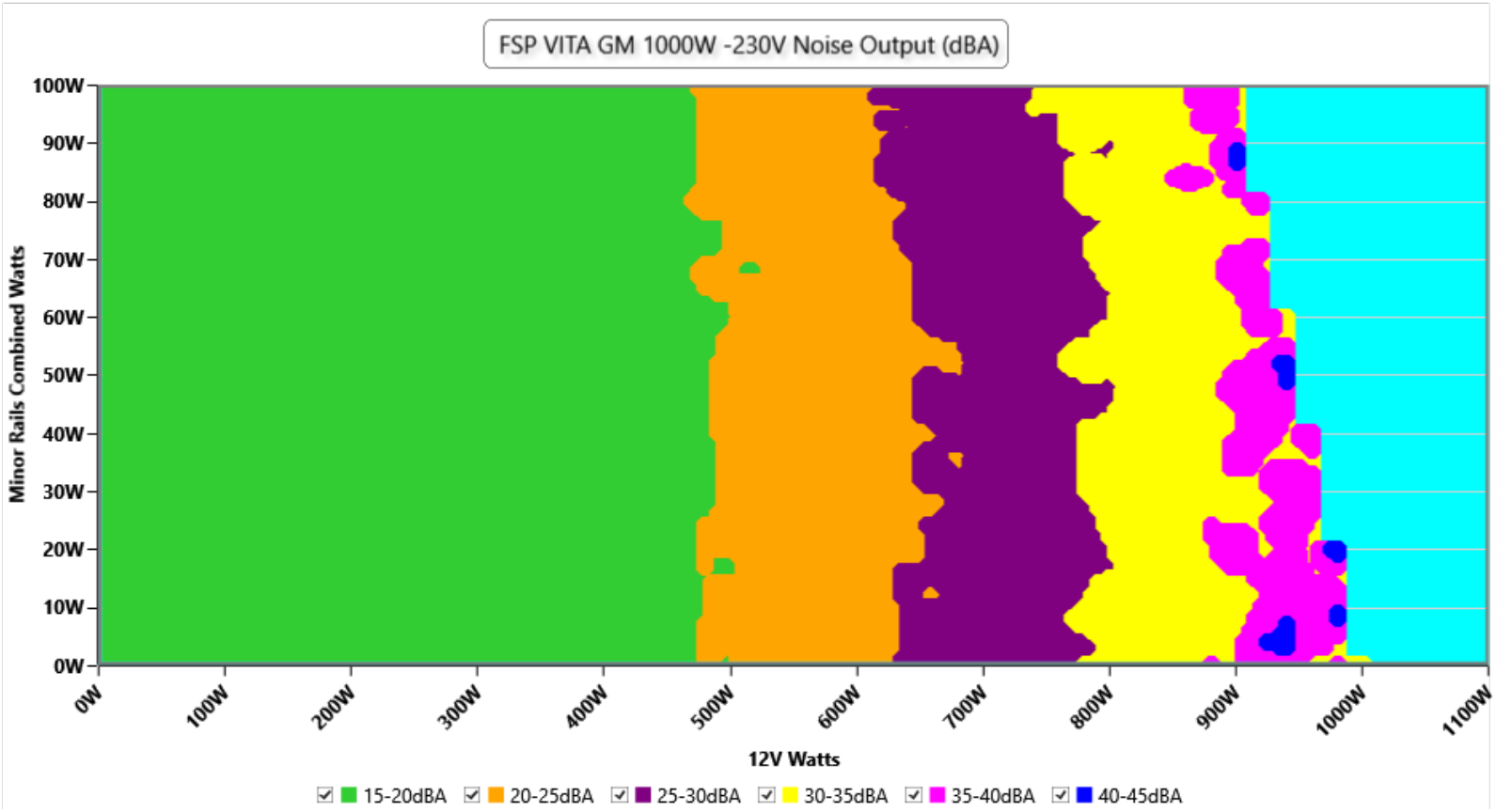
115V



□□

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

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)

115V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	709 RPM · 15.5 dB(A) · 27.6 °C	741 RPM · 16.6 dB(A) · 40.2 °C	**+1.1 dB(A)**
20%	792 RPM · 17.6 dB(A) · 29.3 °C	744 RPM · 16.7 dB(A) · 40.5 °C	**-0.9 dB(A)**
50%	1003 RPM · 24.1 dB(A) · 30.0 °C	904 RPM · 21.4 dB(A) · 42.1 °C	**-2.7 dB(A)**
100%	1353 RPM · 32.9 dB(A) · 32.8 °C	1906 RPM · 42.4 dB(A) · 45.1 °C	**+9.5 dB(A)**

230V

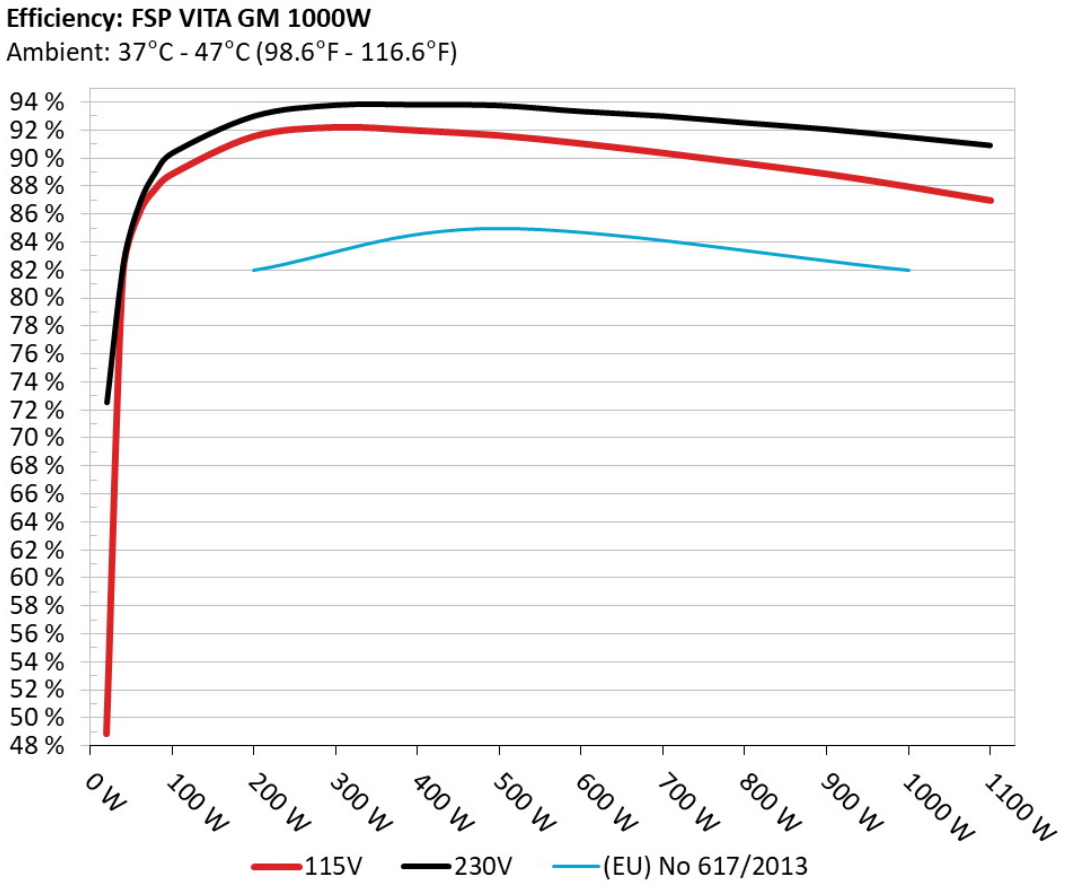
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	727 RPM · 16.0 dB(A) · 30.1 °C	745 RPM · 16.7 dB(A) · 40.3 °C	**+0.7 dB(A)**
20%	726 RPM · 15.9 dB(A) · 29.5 °C	747 RPM · 16.8 dB(A) · 40.9 °C	**+0.9 dB(A)**
50%	731 RPM · 16.1 dB(A) · 29.7 °C	739 RPM · 16.6 dB(A) · 42.4 °C	**+0.5 dB(A)**
100%	1308 RPM · 32.0 dB(A) · 30.4 °C	1921 RPM · 43.0 dB(A) · 45.0 °C	**+11.0 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.

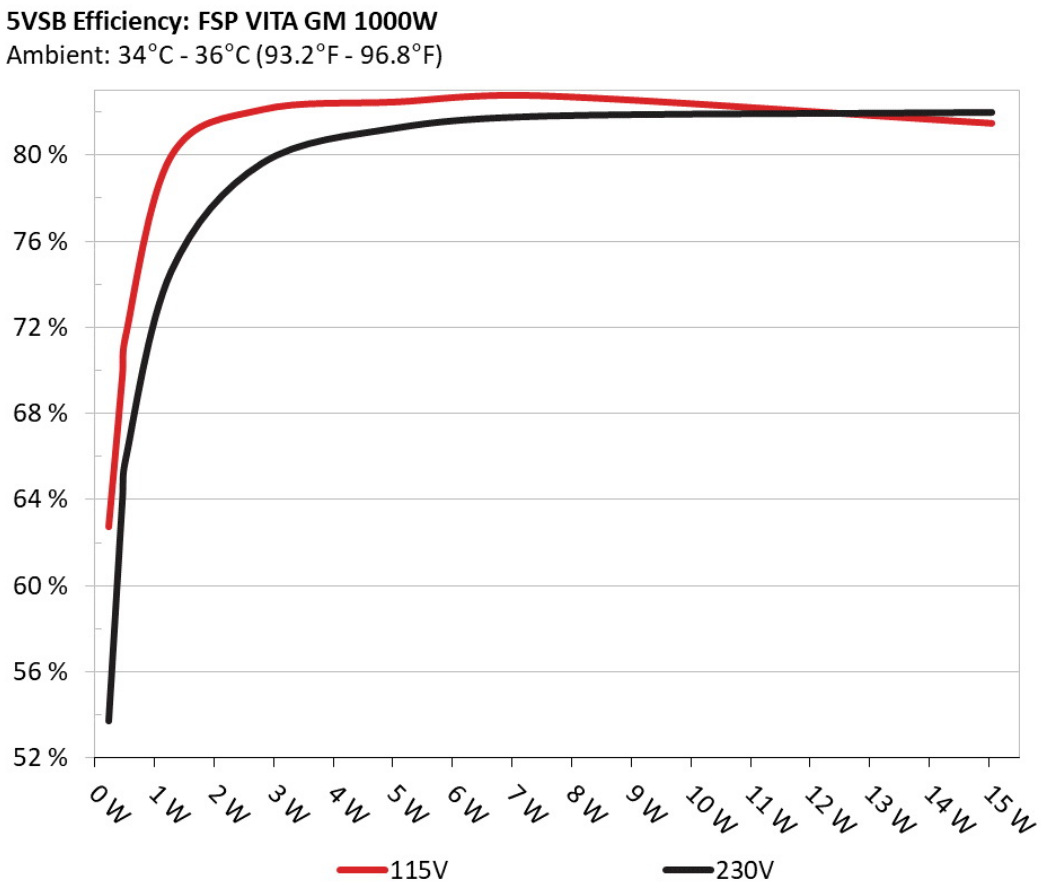
Informational. Not part of the ETA or LAMBDA rating.

Indicative Performance



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)

115V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	**0.045A**	0.229W	62.731%	0.028
	5.093V	0.365W		114.93V
2	**0.09A**	0.458W	69.772%	0.05
	5.092V	0.656W		114.93V
3	**0.55A**	2.794W	82.109%	0.221
	5.079V	3.403W		114.91V
4	**1A**	5.068W	82.475%	0.321
	5.067V	6.144W		114.91V
5	**1.5A**	7.582W	82.751%	0.377
	5.054V	9.162W		114.91V
6	**3A**	15.039W	81.481%	0.46
	5.013V	18.457W		114.9V

230V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	**0.045A**	0.229W	53.695%	0.01
	5.095V	0.431W		229.88V
2	**0.09A**	0.458W	63.977%	0.016
	5.092V	0.722W		229.89V
3	**0.55A**	2.793W	79.595%	0.077
	5.079V	3.51W		229.88V
4	**1A**	5.067W	81.252%	0.13
	5.067V	6.236W		229.88V
5	**1.5A**	7.581W	81.801%	0.182
	5.054V	9.269W		229.88V
6	**3A**	15.039W	81.97%	0.291
	5.013V	18.348W		229.88V

Protection Features

OCP (Cold @ 26.6°C)	12V: 90.8A (108.96%), 12.073V 5V: 26.1A (130.5%), 5.046V 3.3V: 26.1A (130.5%), 3.327V 5VSB: 4.2A (140%), 4.976V
OCP (Hot) @ 41.6°C)	12V: 86.6A (103.92%), 12.095V 5V: 24.5A (122.5%), 5.048V 3.3V: 24A (120%), 3.337V 5VSB: 4.2A (140%), 4.979V
OPP (Cold @ 28.4°C)	1151.01W (115.1%)
OPP (Hot @ 42.7°C)	1126.96W (112.7%)
OTP	✓ (140°C @ Heat Sink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Proper Operation
NLO	✓
Fan Failure Protection	✗
SIP	Surge: MOV & TVS Diode Inrush: NTC & Bypass Relay

Supplementary Tests (For Reference)

10-110%□□□□

115V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	**6.458A**	**1.966A**	**1.965A**	**0.987A**	99.998	88.886%	741	16.6	40.22°C	0.97
	12.140V	5.087V	3.358V	5.065V	112.501				40.79°C	114.87V

20%	**13.934A**	**2.954A**	**2.955A**	**1.187A**	199.949	91.584%	744	16.7	40.53°C	0.975
	12.132V	5.078V	3.35V	5.054V	218.324				42.36°C	114.84V
30%	**21.770A**	**3.451A**	**3.455A**	**1.388A**	300.006	92.226%	746	16.8	41.16°C	0.972
	12.125V	5.071V	3.344V	5.043V	325.293				44.34°C	114.82V
40%	**29.572A**	**3.95A**	**3.957A**	**1.59A**	399.565	92.002%	812	18.4	41.65°C	0.976
	12.118V	5.064V	3.336V	5.033V	434.301				47.3°C	114.79V
50%	**37.057A**	**4.945A**	**4.958A**	**1.793A**	499.285	91.647%	904	21.4	42.06°C	0.979
	12.111V	5.056V	3.328V	5.021V	544.79				49.59°C	114.74V
60%	**44.617A**	**5.945A**	**5.964A**	**1.996A**	599.818	91.068%	1152	29	42.81°C	0.981
	12.103V	5.047V	3.32V	5.01V	658.641				51.42°C	114.7V
70%	**52.124A**	**6.948A**	**6.976A**	**2.201A**	699.555	90.394%	1178	29.1	43.42°C	0.983
	12.095V	5.038V	3.312V	4.998V	773.899				53.76°C	114.67V
80%	**59.706A**	**7.952A**	**7.993A**	**2.305A**	799.559	89.657%	1310	32.1	43.97°C	0.986
	12.087V	5.029V	3.303V	4.989V	891.794				56.5°C	114.63V
90%	**67.635A**	**8.462A**	**8.495A**	**2.409A**	899.373	88.895%	1520	36.3	44.09°C	0.987
	12.078V	5.022V	3.296V	4.981V	1011.75				58.16°C	114.59V
100%	**75.376A**	**8.973A**	**9.03A**	**3.026A**	999.366	87.985%	1906	42.4	45.09°C	0.987
	12.069V	5.014V	3.289V	4.957V	1135.845				58.66°C	114.55V
110%	**83.070A**	**9.988A**	**10.148A**	**3.03A**	1099.976	86.997%	2307	47.9	46.6°C	0.988
	12.058V	5.005V	3.282V	4.95V	1264.39				59.53°C	114.51V
CL1	**0.116A**	**11.901A**	**11.905A**	**0A**	101.302	84.947%	914	21.6	42.28°C	0.973
	12.147V	5.058V	3.335V	5.093V	119.253				52.1°C	114.87V
CL2	**0.115A**	**19.768A**	**0A**	**0A**	101.358	83.532%	878	20.3	41°C	0.972
	12.147V	5.057V	3.339V	5.094V	121.341				48.55°C	114.88V
CL3	**0.114A**	**0A**	**19.782A**	**0A**	67.401	78.944%	794	17.9	39.78°C	0.962
	12.145V	5.066V	3.337V	5.093V	85.381				45.96°C	114.89V
CL4	**82.854A**	**0A**	**0A**	**0.001A**	1000.022	88.611%	1842	42.1	45.05°C	0.987
	12.070V	5.039V	3.309V	5.045V	1128.562				57.91°C	114.55V

The results above are not used in the certification process

230V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	**6.458A**	**1.966A**	**1.966A**	**0.987A**	100	89.994%	745	16.7	40.33°C	0.834
	12.141V	5.087V	3.357V	5.066V	111.119				40.55°C	229.87V
20%	**13.934A**	**2.954A**	**2.956A**	**1.187A**	199.951	93.023%	747	16.8	40.86°C	0.915
	12.132V	5.078V	3.349V	5.055V	214.947				41.67°C	229.85V
30%	**21.769A**	**3.451A**	**3.456A**	**1.388A**	300.005	93.809%	748	16.8	41.1°C	0.939
	12.125V	5.071V	3.342V	5.044V	319.79				42.77°C	229.85V
40%	**29.574A**	**3.95A**	**3.958A**	**1.59A**	399.563	93.835%	780	17	41.55°C	0.95
	12.117V	5.064V	3.335V	5.033V	425.817				44.33°C	229.83V
50%	**37.085A**	**4.945A**	**4.957A**	**1.794A**	499.205	93.779%	739	16.6	42.36°C	0.953
	12.099V	5.056V	3.329V	5.017V	532.316				40.32°C	229.83V
60%	**44.620A**	**5.944A**	**5.968A**	**1.996A**	599.803	93.356%	1022	24.6	42.54°C	0.961
	12.102V	5.047V	3.318V	5.01V	642.488				49.17°C	229.79V
70%	**52.130A**	**6.948A**	**6.979A**	**2.201A**	699.514	93.026%	1191	29.2	43.15°C	0.964
	12.093V	5.038V	3.311V	4.997V	751.955				50.74°C	229.77V
80%	**59.709A**	**7.953A**	**7.996A**	**2.305A**	799.554	92.541%	1290	31.3	43.76°C	0.966
	12.086V	5.029V	3.302V	4.989V	863.962				53.7°C	229.75V
90%	**67.635A**	**8.463A**	**8.499A**	**2.409A**	899.336	92.089%	1736	40.4	44.65°C	0.969
	12.078V	5.021V	3.294V	4.98V	976.586				55.58°C	229.74V
100%	**75.380A**	**8.974A**	**9.035A**	**3.026A**	999.342	91.52%	1921	43	45.01°C	0.971
	12.068V	5.014V	3.287V	4.957V	1091.955				56.84°C	229.71V
110%	**83.069A**	**9.989A**	**10.156A**	**3.03A**	1099.966	90.924%	1973	44.4	46.85°C	0.973
	12.058V	5.005V	3.279V	4.95V	1209.735				56.89°C	229.69V
CL1	**0.116A**	**11.902A**	**11.914A**	**0A**	101.298	86.007%	912	21.6	41.73°C	0.847
	12.147V	5.057V	3.332V	5.093V	117.778				49.96°C	229.87V
CL2	**0.114A**	**19.769A**	**0A**	**0A**	101.353	84.565%	852	20.2	40.55°C	0.849
	12.146V	5.056V	3.337V	5.093V	119.846				47.18°C	229.87V
CL3	**0.114A**	**0A**	**19.799A**	**0A**	67.398	79.931%	791	17.6	40.03°C	0.78
	12.145V	5.066V	3.334V	5.093V	84.321				45.2°C	229.87V

CL4	**82.842A**	**0A**	**0A**	**0.001A**	999.937	92.123%	1555	37	44.47°C	0.971
	12.070V	5.039V	3.307V	5.045V	1085.44				55.62°C	229.72V

The results above are not used in the certification process

20-80□□□□□

115V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
20W	**1.223A**	**0.491A**	**0.49A**	**0.197A**	19.998	48.864%	725	15.9	36.4°C	0.909
	12.140V	5.094V	3.366V	5.09V	40.928				39.58°C	114.89V
40W	**2.692A**	**0.687A**	**0.687A**	**0.295A**	39.998	81.736%	729	16	37.6°C	0.933
	12.144V	5.092V	3.364V	5.087V	48.936				39.33°C	114.9V
60W	**4.162A**	**0.884A**	**0.883A**	**0.393A**	59.998	86.081%	733	16.2	38°C	0.954
	12.143V	5.091V	3.363V	5.083V	69.698				38.97°C	114.89V
80W	**5.626A**	**1.08A**	**1.08A**	**0.492A**	79.945	87.853%	735	16.4	39.27°C	0.96
	12.141V	5.09V	3.362V	5.08V	90.996				39.8°C	114.89V

The results above are not used in the certification process

230V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
20W	**1.224A**	**0.491A**	**0.49A**	**0.196A**	20.004	72.516%	734	16.4	36.51°C	0.445
	12.138V	5.094V	3.365V	5.091V	27.585				38.6°C	229.89V
40W	**2.692A**	**0.687A**	**0.687A**	**0.295A**	40.002	82.364%	735	16.4	37.22°C	0.629
	12.145V	5.092V	3.364V	5.087V	48.569				39°C	229.88V
60W	**4.162A**	**0.884A**	**0.883A**	**0.393A**	60	86.771%	738	16.5	38.21°C	0.735
	12.143V	5.091V	3.362V	5.084V	69.149				39.99°C	229.88V
80W	**5.626A**	**1.08A**	**1.08A**	**0.492A**	79.948	89.038%	738	16.5	39.67°C	0.792
	12.141V	5.09V	3.361V	5.08V	89.79				40.63°C	229.88V

The results above are not used in the certification process

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	14.15mV	12.46mV	13.05mV	13.25mV	Pass
20% Load	14.43mV	11.34mV	11.92mV	13.86mV	Pass
30% Load	12.74mV	21.10mV	20.46mV	15.91mV	Pass
40% Load	11.10mV	18.90mV	16.52mV	13.81mV	Pass
50% Load	12.59mV	12.87mV	13.30mV	16.37mV	Pass
60% Load	12.38mV	11.96mV	14.27mV	16.37mV	Pass
70% Load	13.40mV	13.08mV	15.24mV	17.39mV	Pass
80% Load	13.35mV	15.07mV	16.83mV	19.13mV	Pass
90% Load	12.74mV	11.70mV	13.81mV	17.04mV	Pass
100% Load	22.89mV	16.21mV	21.38mV	24.84mV	Pass
110% Load	24.02mV	18.11mV	21.58mV	26.43mV	Pass
Crossload1	22.04mV	15.27mV	15.47mV	10.86mV	Pass
Crossload2	15.55mV	16.86mV	13.20mV	10.54mV	Pass
Crossload3	13.86mV	9.91mV	13.50mV	10.33mV	Pass
Crossload4	22.75mV	17.06mV	19.51mV	20.34mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	15.38mV	13.03mV	13.50mV	12.38mV	Pass
20% Load	14.46mV	10.52mV	11.05mV	14.17mV	Pass
30% Load	10.54mV	17.52mV	12.58mV	12.58mV	Pass
40% Load	13.05mV	23.19mV	18.16mV	15.65mV	Pass
50% Load	12.64mV	13.28mV	13.66mV	16.68mV	Pass
60% Load	13.20mV	12.57mV	15.19mV	17.49mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	14.58mV	13.64mV	16.62mV	18.05mV	Pass
80% Load	12.43mV	12.21mV	14.99mV	15.86mV	Pass
90% Load	15.25mV	16.04mV	19.49mV	20.00mV	Pass
100% Load	15.76mV	18.75mV	20.26mV	21.23mV	Pass
110% Load	14.53mV	16.91mV	21.79mV	19.49mV	Pass
Crossload1	15.74mV	13.69mV	13.97mV	11.15mV	Pass
Crossload2	15.69mV	17.06mV	13.05mV	10.33mV	Pass
Crossload3	13.40mV	10.53mV	13.15mV	11.00mV	Pass
Crossload4	11.60mV	13.74mV	16.73mV	14.94mV	Pass

The results above are not used in the certification process

FSP Technology VITA GM 1000W

Top side

Power specifications label

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