Wentai AiBARZA AIdan D1515 (1300W)

Serial Number -

Lab ID WT13003083

Certification ID 253083

Test Result Report ID: 25PS3083A

Certificate Issue Date: Jan 12, 2026

115V

Scheme: ETA-EMI PSU

115V

Scheme: LAMBDA PSU

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	Wentai
Model	AiBARZA AIdan D1515 (1300W)
OEM/ODM	Wentai
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	7.5-15
Rated Frequency (Hz)	50-60
Rated Power (W)	1300
Operating Temperature (Continuous Full Load) (°C)	0 - 50
Type	ATX12V
Cable Design	Fully Modular
Warranty	No Info
Cybenetics Measurements	
Dimensions (W x H x D)	150 x 85 x 190mm
Weight	2.80 kg (6.17 lb)
Cooling	135mm Double Ball Bearing Fan (CF1325H12D)
Semi-Passive Operation	✓
Cybenetics Testing Information	
Lab ID	WT13003083
Date of receipt	Nov 25, 2025
Testing Date	Dec 30, 2025
Report Issued Date	Jan 12, 2026
Engineer Name	Georgios Theodoros Sarimpalas
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors
(Non-accredited measurements)

Modular Cables				
Description	**Cable Count**	**Connector Count (Total)**	**Gauge**	**Cable Type**
ATX connector 20+4 pin (610mm)	1	1	16-20AWG	Tinned Copper
4+4 pin EPS12V (1010mm)	2	2	16AWG	Tinned Copper
6+2 pin PCIe (690mm)	4	4	16-18AWG	Tinned Copper
12+4 pin PCIe (750mm) (600W)	4	4	16-24AWG	Tinned Copper
SATA (400mm+120mm+120mm)	3	9	18AWG	Tinned Copper

4-pin Molex (450mm+120mm)	3	6	18AWG	Tinned Copper
AC Power Cord (1390mm) - C19 coupler	1	1	14AWG	-

Protection Features

Under Voltage Protection	✓
Over Power Protection	✓
Over Current (+12V) Protection	✓
Over Temperature Protection	✓
Short Circuit Protection	✓
Surge Protection	✓
Inrush Current Protection	✓
Fan Failure Protection	✗

Power Specifications

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	20	20	108.3	3	0.3
	Watts	100		1300	15	3.6
Total Max. Power (W)		1300				

Parts Description

General Data	
Manufacturer (OEM)	Wentai
PCB Type	Double-Sided
Primary Side	
Transient Filter	6x Y caps, 3x X caps, 2x CM chokes, 1x MOV, 1x discharge IC
Inrush Protection	1x NTC Thermistor SCK-15105 (10Ohm) & Relay
Inrush Bypass Diode	1x MCC S8ML (1000V, 8A @ 25°C)
Bridge Rectifier(s)	1x Lision GBJ25JL, 8x SemiHow HCA60R040 (600V, 68.8A, 0.04ohm)
Bridge Rectify Controller	NXP TEA2209T
PFC MODFETs (HEMTs)	2x Transphorm TP65H050WS GaN FETs (650V, 25A @ 100°C, Rds(on): 50mOhm)
Bulk Cap(s)	4x Toshin Kogyo (400V, 470uF each or 1,680uF combined, 2,000h @ 105°C, LGW)

Main Switchers	4x Alpha & Omega AOTF29S50 (500V, 18A @ 100°C, 0.15ohm)
PFC (MOSFET) Controller ICs	Texas Instruments UCD3138A
IC Driver(s)	2x Texas Instruments UCC21520
MCUs	Texas Instruments UCD3138A
Topology	Primary side: Digital, Bridgeless Interlaved PFC, Full-Bridge & LLC converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	16x Toshiba TPH1R005PL (45V, 150A @ 25°C, Rds(on): 0.8mOhm)
5V & 3.3V	DC-DC Converters: 6x Excelliance EMB04N03HR(30V, 45A @ 100°C, Rds(on): 4.0mOhm) PWM Controller(s): Anpec APW7159C
Filtering Capacitors	Electrolytic: 5x Toshin Kogyo (8,000h @ 105C, LWY) 2x Toshin Kogyo (5,000h @ 105C, LWV) Polymer: 78x Toshin Kogyo (PRJ)
Supervisor IC	Weltrend WT7502R
Fan Controller	Texas Instruments UCD3138A
Fan Model	135mm Double Ball Bearing Fan (CF1325H12D)
5VSB Circuit	
High Side Rectifier	Primary Side: Potens PMD04N65M (650V, 4A @ 25°C, Rds(on): 260mOhm) Secondary Side: MCC MBR15U45 (45V, 15A @ 90°C)
Standby PWM Controller	Weltrend WT7161R

Test Results

Temperature & Compliance Info

Temperature Range (°C /°F)	28-32 / 82.4-89.6
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓
ALPM (Alternative Low Power Mode) compatible	✓
ATX v3.1 PSU Power Excursion	✓

Performance Summary 115V

Accredited	
Average Efficiency (>1450 load combinations)	93.055%
Average Noise Output (>1450 Load Combinations)	7.12dBA
Average PF (>1450 Load Combinations)	0.989
Efficiency With 10W (≤500W) or 2% (>500W) Load	70.778%
Standby Power Consumption	0.0271W
Non-Accredited	
12V Ripple (Full Load)	43.17mV
5V Ripple (Full Load)	21.92mV
3.3V Ripple (Full Load)	24.14mV
5VSB Ripple (Full Load)	16.92mV
12V Load Regulation	0.59%
5V Load Regulation	0.21%
3.3V Load Regulation	0.27%
5VSB Load Regulation	0.82%
Inrush Current	16.242A

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	25.6
AC Loss to PWR_OK Hold Up Time (ms)	20.1
PWR_OK Inactive to DC Loss Delay (ms)	5.5

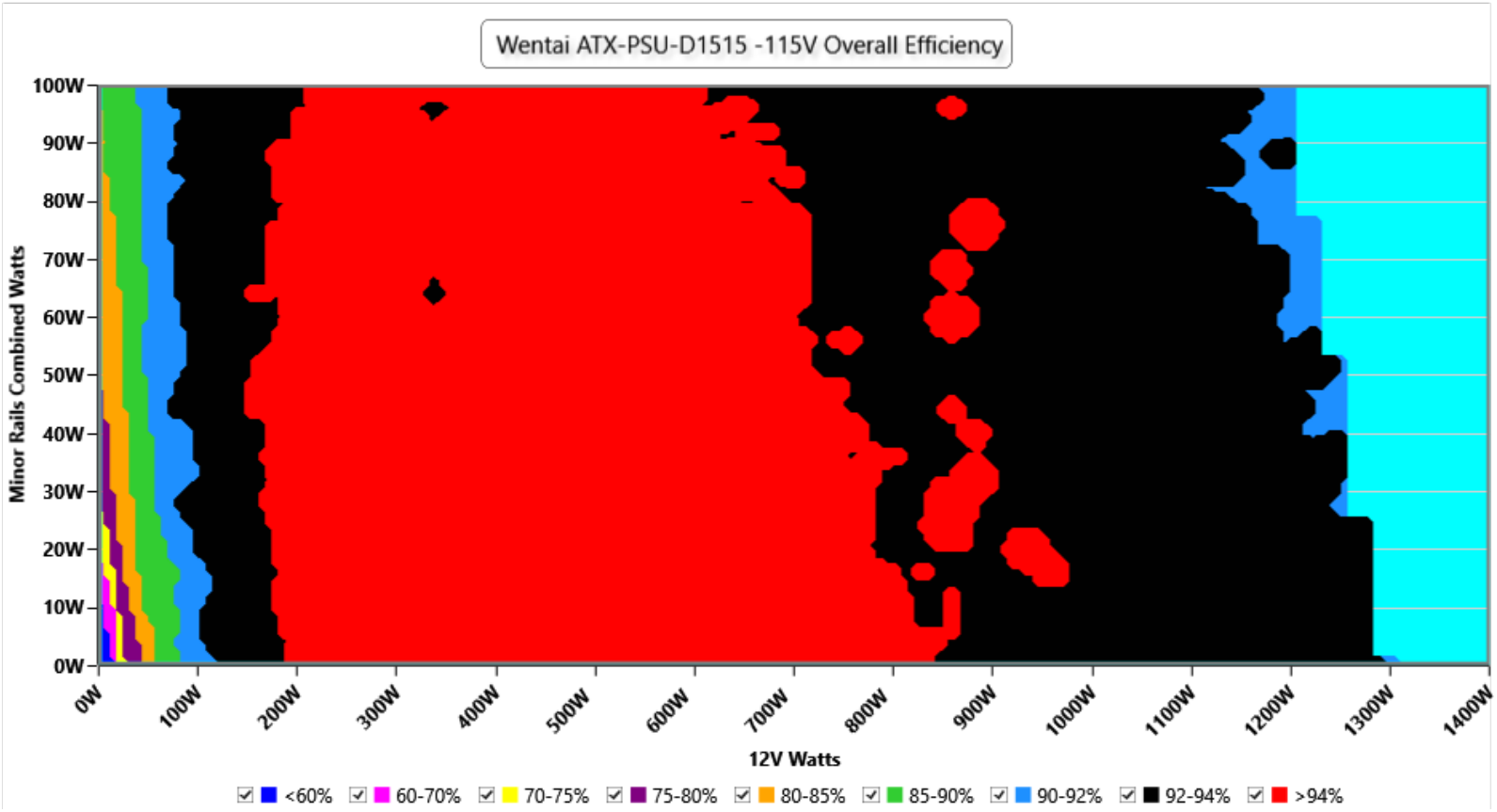
Tables 115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.01 V	115.00 V	113.85 V	115.04 V	116.15 V	PASS

Mains Frequency:	60.00 Hz	59.94 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.417	1.490	PASS
Mains Voltage THD:	0.13 %	0.11 %	N/A	0.17 %	2.00 %	PASS
Real Power:	0.027 W	0.013 W	N/A	0.042 W	N/A	N/A
Apparent Power:	17.205 W	17.186 W	N/A	17.226 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

115V

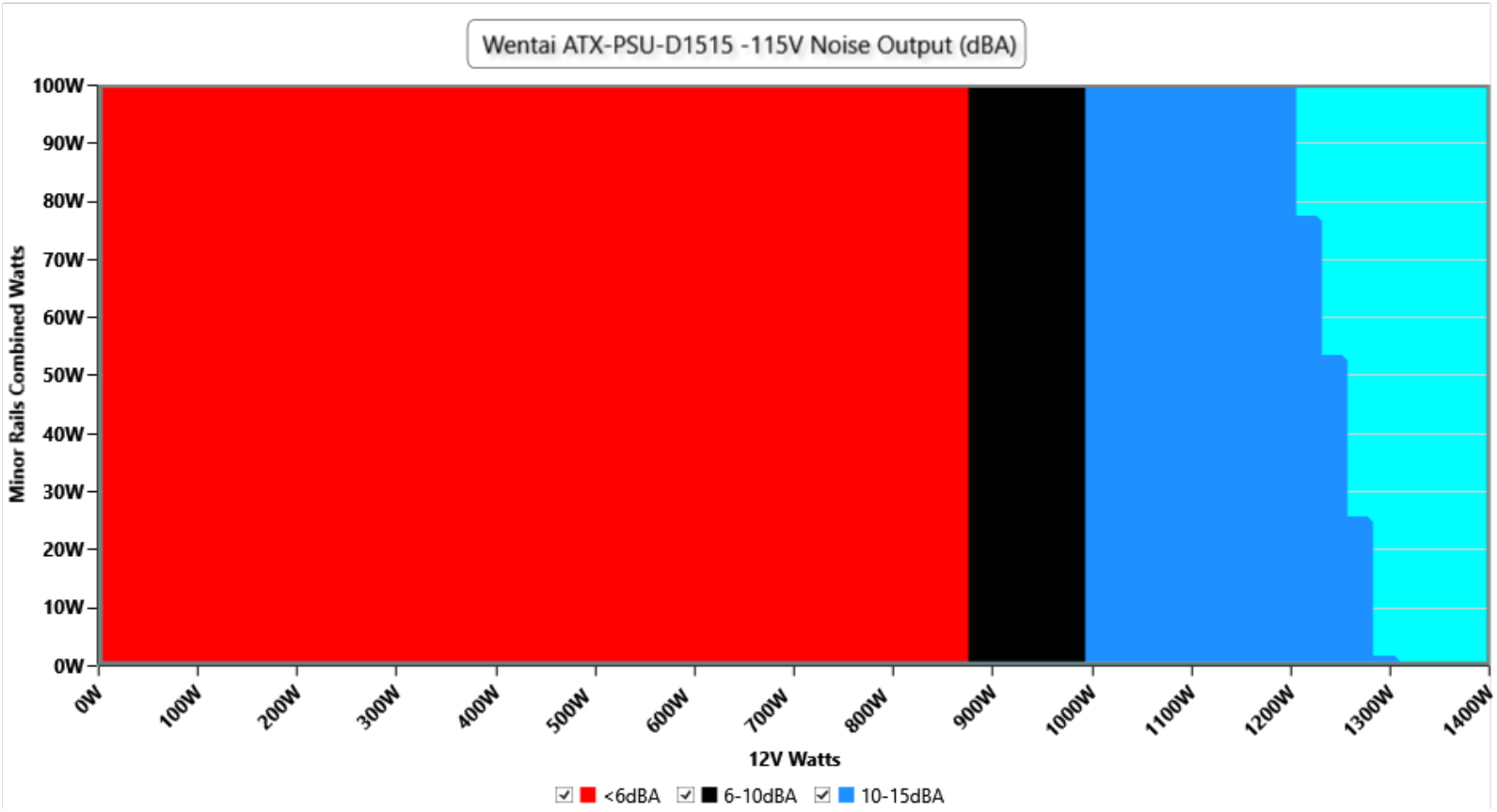


INFO

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 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

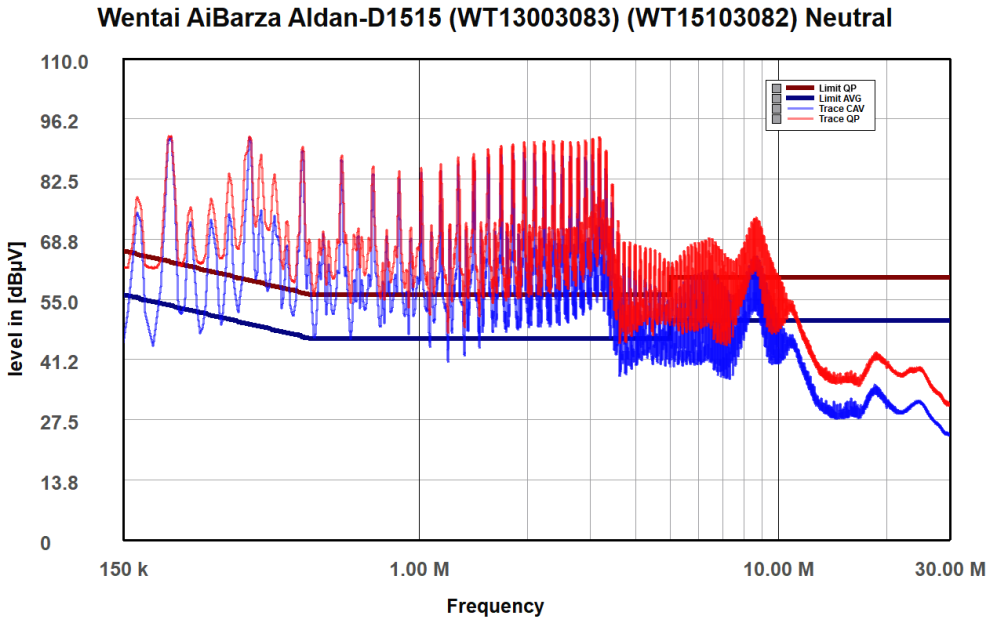
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 30.6 °C	0 RPM · <6.0 dB(A) · 48.4 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 32.3 °C	0 RPM · <6.0 dB(A) · 48.9 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 32.9 °C	0 RPM · <6.0 dB(A) · 44.9 °C	fan off in both
100%	460 RPM · 14.2 dB(A) · 30.3 °C	466 RPM · 12.8 dB(A) · 45.3 °C	**-1.4 dB(A)**

INFO

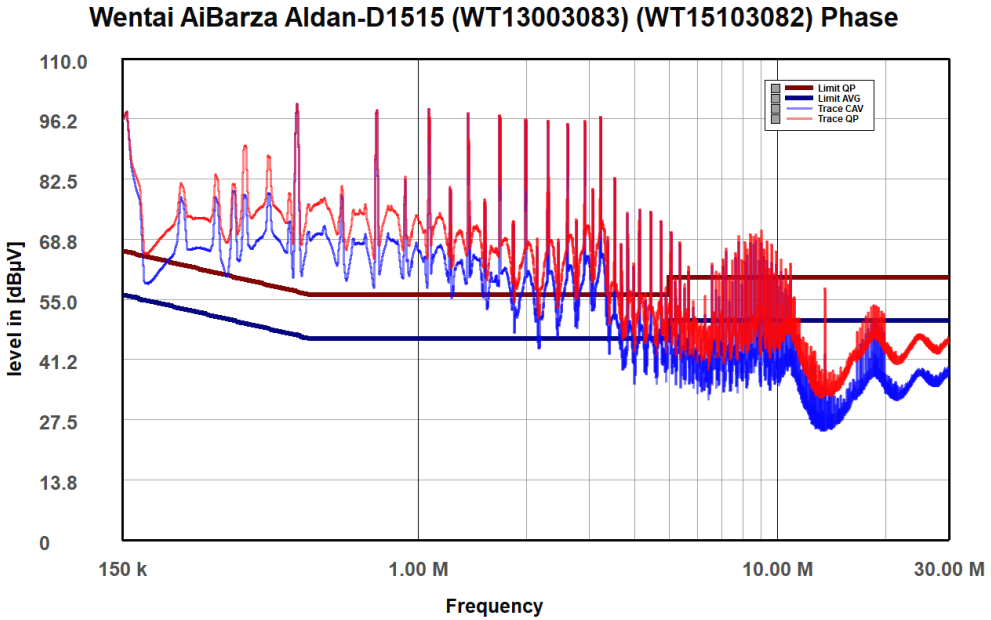
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative 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.

Conducted Emissions EN 55032 & CISPR 32



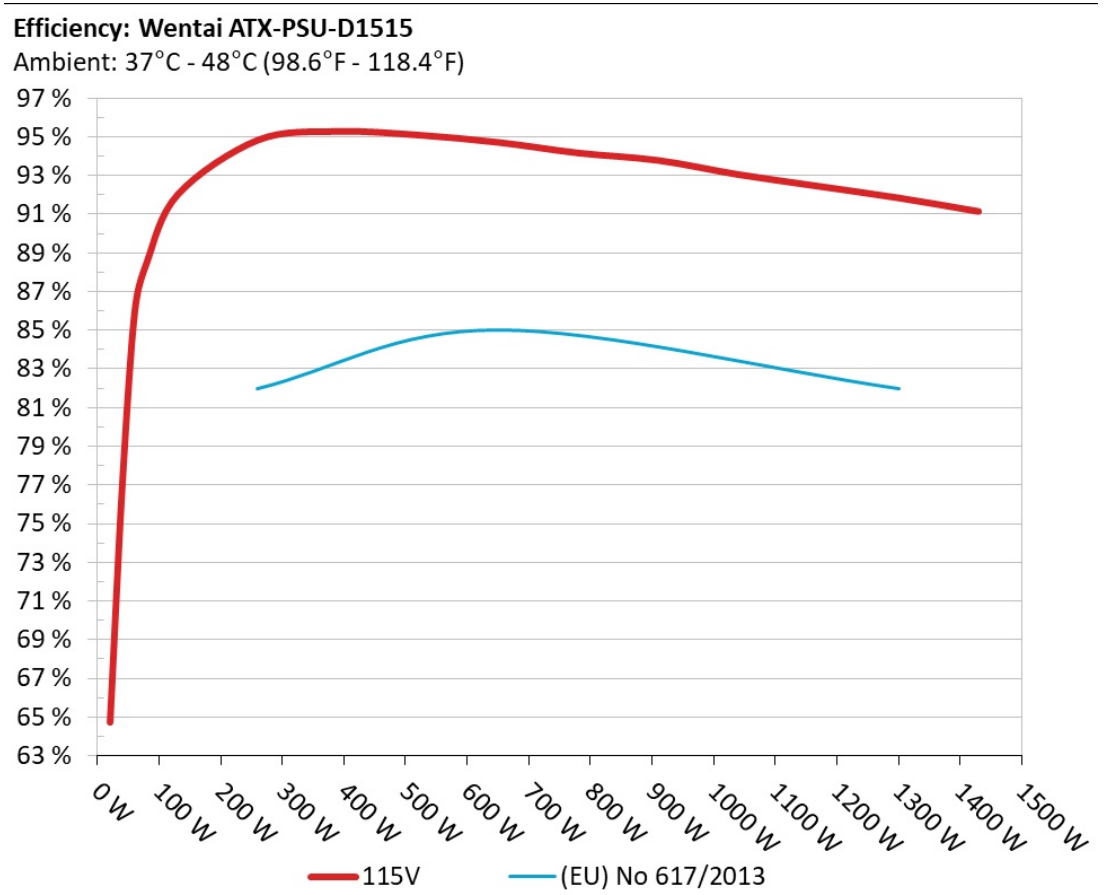
NEUTRAL



PHASE

Indicative Performance

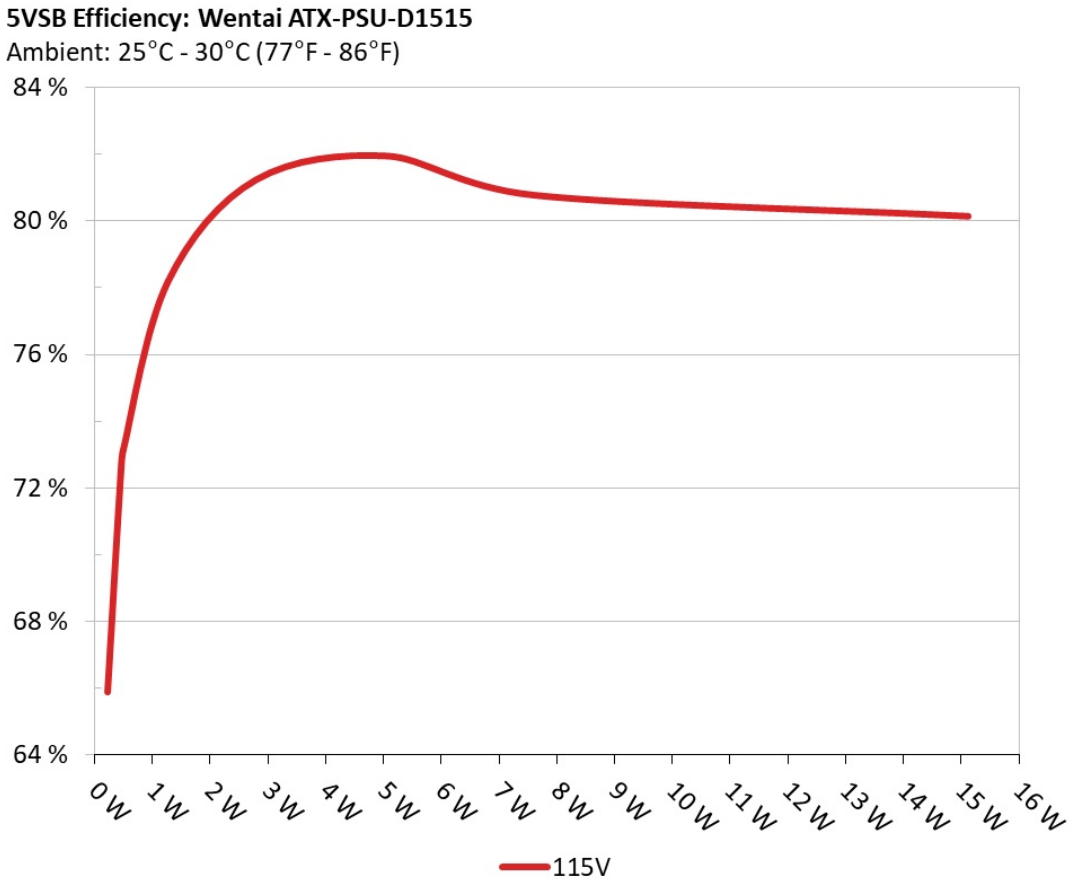
Efficiency under high ambient temperature



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

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

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.23W	65.872%	0.02
	5.099V	0.349W		114.89V

2	**0.09A**	0.459W	72.465%	0.037
	5.097V	0.633W		114.89V
3	**0.55A**	2.797W	81.25%	0.185
	5.085V	3.443W		114.88V
4	**1A**	5.078W	81.961%	0.299
	5.078V	6.196W		114.87V
5	**1.5A**	7.604W	80.787%	0.392
	5.069V	9.413W		114.88V
6	**3A**	15.112W	80.155%	0.522
	5.037V	18.853W		114.87V

Protection Features

OCP (Normal @ 31.2°C)	12V: 163.2A (150.69%), 12.067V *Didn't Shut Down 5V: 27.1A (135.5%), 5.153V 3.3V: 30.6A (153%), 3.308V *Didn't Shut Down 5VSB: 3.6A (120%), 5.036V
OCP (Hot @ 42°C)	12V: 138.6A (127.98%), 12.084V 5V: 25.9A (129.5%), 5.159V 3.3V: 29.6A (148%), 3.309V 5VSB: 3.6A (120%), 5.036V
OPP (Normal @ 27.6°C)	1953.11W (150.24%) *Didn't Shut Down
OPP (Hot @ 43.5°C)	1801.65W (138.59%)
OTP	✓ (112°C @ 12V Heatsink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Proper Operation
UVP (Full Load @ 90V)	✓
UVP (No Damage @ 80V)	✓
Conducted Emissions EN55032 & CISPR 32	✗
NLO	✓

Fan Failure Protection	✗
SIP	Surge: MOV Inrush: NTC & Bypass Relay

Supplementary Tests (For Reference)

Typical Load Tests 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%	**9.002A**	**1.94A**	**1.996A**	**0.972A**	129.994	92.046%	0	<6.0	48.37°C	0.974
	12.042V	5.154V	3.306V	5.143V	141.175				40.12°C	114.83V
20%	**19.000A**	**2.911A**	**2.995A**	**1.167A**	259.957	94.852%	0	<6.0	48.86°C	0.994
	12.055V	5.153V	3.305V	5.14V	274.078				40.85°C	114.79V
30%	**29.341A**	**3.396A**	**3.495A**	**1.363A**	389.602	95.298%	0	<6.0	46.58°C	0.997
	12.050V	5.153V	3.305V	5.136V	408.852				41.15°C	114.75V
40%	**39.663A**	**3.882A**	**3.996A**	**1.559A**	519.574	95.113%	0	<6.0	45.05°C	0.996
	12.061V	5.153V	3.304V	5.133V	546.302				41.55°C	114.7V
50%	**49.704A**	**4.853A**	**4.996A**	**1.755A**	649.719	94.737%	0	<6.0	44.88°C	0.996
	12.055V	5.152V	3.303V	5.13V	685.808				42.15°C	114.67V
60%	**59.653A**	**5.824A**	**5.997A**	**1.951A**	779.848	94.186%	0	<6.0	45.47°C	0.988
	12.070V	5.151V	3.302V	5.127V	827.982				42.59°C	114.61V
70%	**69.677A**	**6.796A**	**6.999A**	**2.147A**	909.943	93.8%	0	<6.0	50.02°C	0.996
	12.068V	5.151V	3.301V	5.125V	970.108				43.38°C	114.56V
80%	**79.578A**	**7.767A**	**8A**	**2.245A**	1039.543	93.073%	361	7.9	43.7°C	0.993
	12.085V	5.15V	3.3V	5.124V	1116.958				46.42°C	114.52V
90%	**89.973A**	**8.254A**	**8.487A**	**2.344A**	1169.785	92.467%	419	12.2	44.38°C	0.996
	12.084V	5.149V	3.299V	5.121V	1265.049				47.98°C	114.47V
100%	**100.011A**	**8.742A**	**9.005A**	**2.937A**	1299.417	91.865%	466	12.8	45.33°C	0.995
	12.096V	5.148V	3.298V	5.109V	1414.403				48.84°C	114.42V
110%	**110.083A**	**9.715A**	**10.1A**	**2.936A**	1429.593	91.162%	515	14.3	47.75°C	0.995
	12.094V	5.147V	3.297V	5.11V	1568.138				50.44°C	114.36V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL1	**0.116A**	**11.68A**	**12.018A**	**0A**	101.307	84.206%	0	<6.0	56.62°C	0.967
	12.083V	5.154V	3.303V	5.19V	120.297				40.33°C	114.84V
CL2	**0.116A**	**19.364A**	**0A**	**0A**	101.376	83.251%	0	<6.0	54.33°C	0.968
	12.081V	5.163V	3.299V	5.209V	121.77				40.06°C	114.84V
CL3	**0.115A**	**0A**	**19.927A**	**0A**	67.385	77.757%	0	<6.0	51.65°C	0.944
	12.080V	5.159V	3.312V	5.174V	86.664				40.64°C	114.84V
CL4	**107.463A**	**0A**	**0A**	**0A**	1299.938	92.018%	502	14.6	45.69°C	0.995
	12.096V	5.161V	3.305V	5.148V	1412.672				49.47°C	114.44V

The results above are not used in the certification process

Light Load Tests 115V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20W	**1.234A**	**0.486A**	**0.499A**	**0.194A**	19.991	64.744%	0	<6.0	41.14°C	0.753
	12.024V	5.144V	3.304V	5.143V	30.911				36.72°C	114.89V
40W	**2.713A**	**0.679A**	**0.699A**	**0.291A**	39.998	77.113%	0	<6.0	44.24°C	0.873
	12.048V	5.153V	3.307V	5.151V	51.86				37.59°C	114.86V
60W	**4.196A**	**0.873A**	**0.898A**	**0.388A**	59.999	85.98%	0	<6.0	45.76°C	0.919
	12.045V	5.154V	3.307V	5.15V	69.796				38.9°C	114.85V
80W	**5.672A**	**1.067A**	**1.098A**	**0.486A**	79.941	88.553%	0	<6.0	47°C	0.945
	12.044V	5.155V	3.307V	5.149V	90.22				39.3°C	114.85V

The results above are not used in the certification process

Ripple Measurements 115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	29.41mV	18.27mV	28.78mV	12.93mV	Pass
20% Load	32.83mV	20.07mV	30.32mV	15.14mV	Pass
30% Load	33.60mV	17.29mV	21.85mV	13.24mV	Pass
40% Load	37.64mV	17.40mV	21.24mV	13.03mV	Pass
50% Load	48.08mV	25.66mV	45.05mV	21.34mV	Pass

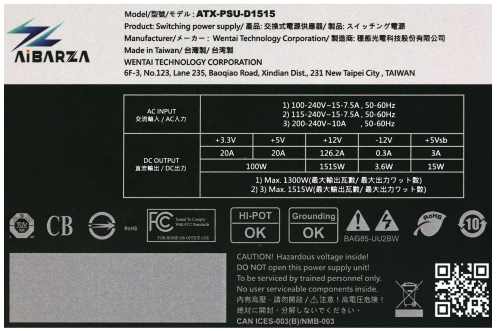
Test	12V	5V	3.3V	5VSB	Pass/Fail
60% Load	64.39mV	25.15mV	29.60mV	16.57mV	Pass
70% Load	36.31mV	18.99mV	24.11mV	14.16mV	Pass
80% Load	54.62mV	24.12mV	36.32mV	19.75mV	Pass
90% Load	36.16mV	22.27mV	24.52mV	14.47mV	Pass
100% Load	43.17mV	21.92mV	24.14mV	16.92mV	Pass
110% Load	46.99mV	24.89mV	29.67mV	17.01mV	Pass
Crossload1	31.71mV	19.22mV	21.18mV	12.36mV	Pass
Crossload2	29.76mV	19.50mV	21.34mV	13.14mV	Pass
Crossload3	27.57mV	17.86mV	22.47mV	12.11mV	Pass
Crossload4	44.01mV	20.99mV	28.69mV	14.92mV	Pass

The results above are not used in the certification process

Wentai AiBARZA AIdan D1515 (1300W)



Top side



Power specifications label



Fan



PSU Internals