ENDORFY

# Endorfy Vero L6 550W

EY7A0162508004029

Lab ID EY55003013

Certification ID 253013

Test Result Report ID: 25PS3013A

Certificate Issue Date: Oct 31, 2025

230V

Scheme: ETA-EMI PSU




230V




Scheme: LAMBDA PSU




Outside Validation Scope



# General Information

## Test Equipment

| | |
|---|---|
| Electronic Loads | Chroma 63601-5 x2<br>Chroma 63600-2<br>Chroma 63640-80-80 x10<br>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 | Endorfy |
| Model | Vero L6 550W |
| OEM/ODM | Jiumeng |
| Serial Number | EY7A0162508004029 |
| Product Specifications | |
| Manufacturer-Provided Information | |
| □□□□ (Vrms) | 200-240 |
| □□□□ (Arms) | 5 |

| | |
|---|---|
| □□□□ (Hz) | 50-60 |
| □□□□ (W) | 550 |
| Operating Temperature (Continuous Full Load) (°C) | |
| □□ | ATX12V |
| □□□□ | Fixed cables |
| Warranty | - |
| Cybenetics Measurements | |
| Dimensions (W x H x D) | |
| Weight | |
| □□ | 120mm Fluid Dynamic Bearing Fan (Stratus 10-1111 0.25A) |
| □□□□□ | ✗ |
| Cybenetics Testing Information | |
| Lab ID | EY55003013 |
| Date of receipt | Oct 15, 2025 |
| Testing Date | Oct 24, 2025 |
| Report Issued Date | Oct 31, 2025 |
| Engineer Name | Okeke Ugochukwu Onyedikachukwu |
| Authorized By the Laboratory Technical Manager | Aristeidis Bitziopoulos |
| Signature |  |

## □□□□ (Non-accredited measurements)

| □□□□ | | | | |
|---|---|---|---|---|
| □□ | □□□□ | □□□□□□ | **Gauge** | In Cable Capacitors |
| ATX □□ 24 pin (575mm) | 1 | 1 | 18-20AWG | Copper |
| 4+4 pin EPS 12V □□ (685mm+145mm) | 1 | 2 | 18AWG | Copper |
| 6+2pin PCIe□□ (575mm+145mm) | 1 | 2 | 18AWG | Copper |
| 12+4 pin PCIe (615mm) (300W) | 1 | 1 | 16-26AWG | Tinned Copper |
| SATA□□ (510mm+150mm+150mm) | 1 | 3 | 18AWG | Copper |
| SATA□□ (510mm+150mm) / 4-pin Molex (+150mm) | 1 | 2 / 1 | 18AWG | Copper |
| □□□□□ | | | | |

| | | | | |
|---|---|---|---|---|
| AC Power Cord (1360mm) - C13 coupler | 1 | 1 | 18AWG | - |

## Protection Features(Manufacturer)

| | |
|---|---|
| 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 | 45 | 3 | 0 |
| | □ | 100 | | 540 | 15 | 0 |
| □□□□□ (W) | | 550 | | | | |

## Parts Description

| | |
|---|---|
| **General Data** | |
| Manufacturer (OEM) | Jiumeng |
| PCB Type | Double-Sided |
| **Primary Side** | |
| Transient Filter | 4x Y caps, 2x X caps, 2x CM chokes, 1x MOV |
| Inrush Protection | NTC Thermistor MF72 3D-20 (3 Ohm @ 25°C) |
| Bridge Rectifier | GBU1506 (600V, 3.2A @ 100°C) without heat sink |
| APFC MOSFETs | SI-Trend SI16N50F (500V, 16A @ 25°C, Rds(on): 0.35Ohm) |
| APFC Boost Diode | SI-Trend SI8U600F (600V, 8A @ 100°C) |
| Bulk Cap(s) | Teapo (400V, 330uF, 105°C, TD(M)) |
| Main Switchers | 2x SI-Trend SI16N50F (500V, 16A @ 25°C, Rds(on): 0.35Ohm) |
| PFC/PWM Controller | Champion CM6800UBX |

| | |
|---|---|
| Topology | Primary side: APFC, Double Forward<br>Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters |
| **Secondary Side** | |
| +12V MOSFETs | 2x Oriental Semiconductor SFS130N06P (60V, 130A @ 25°C, Rds(on): 3.5mOhm) |
| 5V & 3.3V | DC-DC Converters: 4x Rectron Semiconductor RMN3N5R0DF (30V, 19.7A @ 70°C, Rds(on): 5mOhm)<br>PWM Controller(s): ANPEC APW7159C |
| Filtering Capacitors | Electrolytic:<br>8x Teapo (1-3,000 @ 105°C, SC)<br>2x Teapo (2,000 @ 105°C, SH)<br>Polymer:<br>4x Teapo (FG) |
| Supervisor IC | GRENERGY GR8329E (OVP, UVP, OCP ) |
| Fan Model | Endorfy Stratus 10-1111 (120mm, 12V, 0.25A, Fluid Dynamic Bearing Fan) |
| **5VSB Circuit** | |
| Rectifier | PingWei PS860L (60V, 8A) |
| Standby PWM Controller | Chipown PN8141 |

# 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 230V

| | |
|---|---|
| Accredited | |
| □□□□ (>1450 load combinations) | 87.462% |
| Average Noise Output (>1450 Load Combinations) | 28.22dBA |
| PF□□□ (>1450 Load Combinations) | 0.962 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 60.098% |

| | | |
|---|---|---|
| □□□□□□ | | 0.1443W |
| Non-Accredited | | |
| 12V Ripple (Full Load) | | 30.40mV |
| 5V Ripple (Full Load) | | 17.40mV |
| 3.3V Ripple (Full Load) | | 18.17mV |
| 5VSB Ripple (Full Load) | | 19.15mV |
| 12V Load Regulation | | 0.49% |
| 5V Load Regulation | | 0.36% |
| 3.3V Load Regulation | | 0.49% |
| 5VSB Load Regulation | | 2.66% |
| Inrush Current | | 75.450A |
| 12V Transient Response (150%) | | 11.54V |
| 5V Transient Response (150%) | | 4.981V |
| 3.3V Transient Response (150%) | | 3.242V |
| 5VSB Transient Response (150%) | | 5.021V |
| □□□□ & PG□□ | | 15.20ms |
| AC Loss to PWR_OK Hold Up Time | | 14.00ms |
| PWR_OK Inactive to DC Loss Delay | | 1.20ms |
| PSU Timings: T1 (20% / 100%) | 52.0ms | 50.0ms |
| PSU Timings: T3 (20% / 100%) | 122.0ms | 121.0ms |
| 12V OCP (29.6°C / 43.9°C) | 63.60A (141.33%), 12.129V | 63.60A (141.33%), 12.121V |
| 5V OCP (29.6°C / 43.9°C) | 25A (125.00%), 5.028V | 23.9A (119.50%), 5.032V |
| 3.3V OCP (29.6°C / 43.9°C) | 26.6A (133.00%), 3.284V | 25.1A (125.50%), 3.285V |
| 5VSB OCP (29.6°C / 43.9°C) | 4A (133.33%), 5.008V | 4A (133.33%), 4.993V |
| OPP (29.09°C / 41.00°C) | 123.69% | 121.88% |

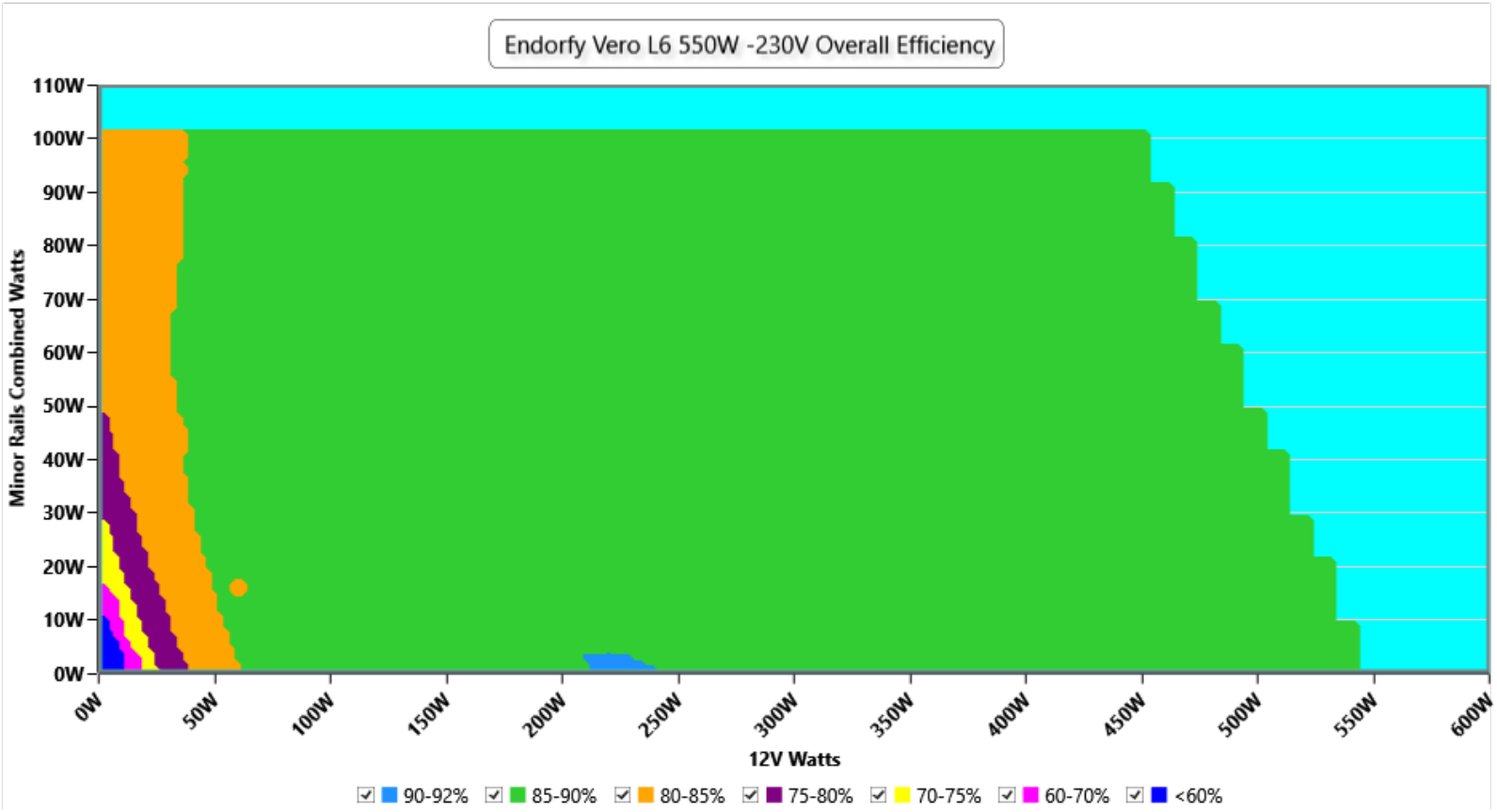
## □□□□ & PG□□

| | |
|---|---|
| Hold-Up Time (ms) | 15.2 |
| AC Loss to PWR_OK Hold Up Time (ms) | 14 |
| PWR_OK Inactive to DC Loss Delay (ms) | 1.2 |

## Tables 230V

| Detailed Results | | | | | | |
|---|---|---|---|---|---|---|
| | Average | Min | Limit Min | Max | Limit Max | Result |
| Mains Voltage RMS: | 230.02 V | 229.97 V | 227.70 V | 230.11 V | 232.30 V | PASS |
| Mains Frequency: | 50.00 Hz | 50.00 Hz | 49.50 Hz | 50.00 Hz | 50.50 Hz | PASS |
| Mains Voltage CF: | 1.415 | 1.415 | 1.340 | 1.416 | 1.490 | PASS |
| Mains Voltage THD: | 0.15 % | 0.13 % | N/A | 0.16 % | 2.00 % | PASS |
| Real Power: | 0.144 W | 0.093 W | N/A | 0.192 W | N/A | N/A |
| Apparent Power: | 22.046 W | 22.004 W | N/A | 22.092 W | N/A | N/A |
| Power Factor: | 0.007 | N/A | N/A | N/A | N/A | N/A |

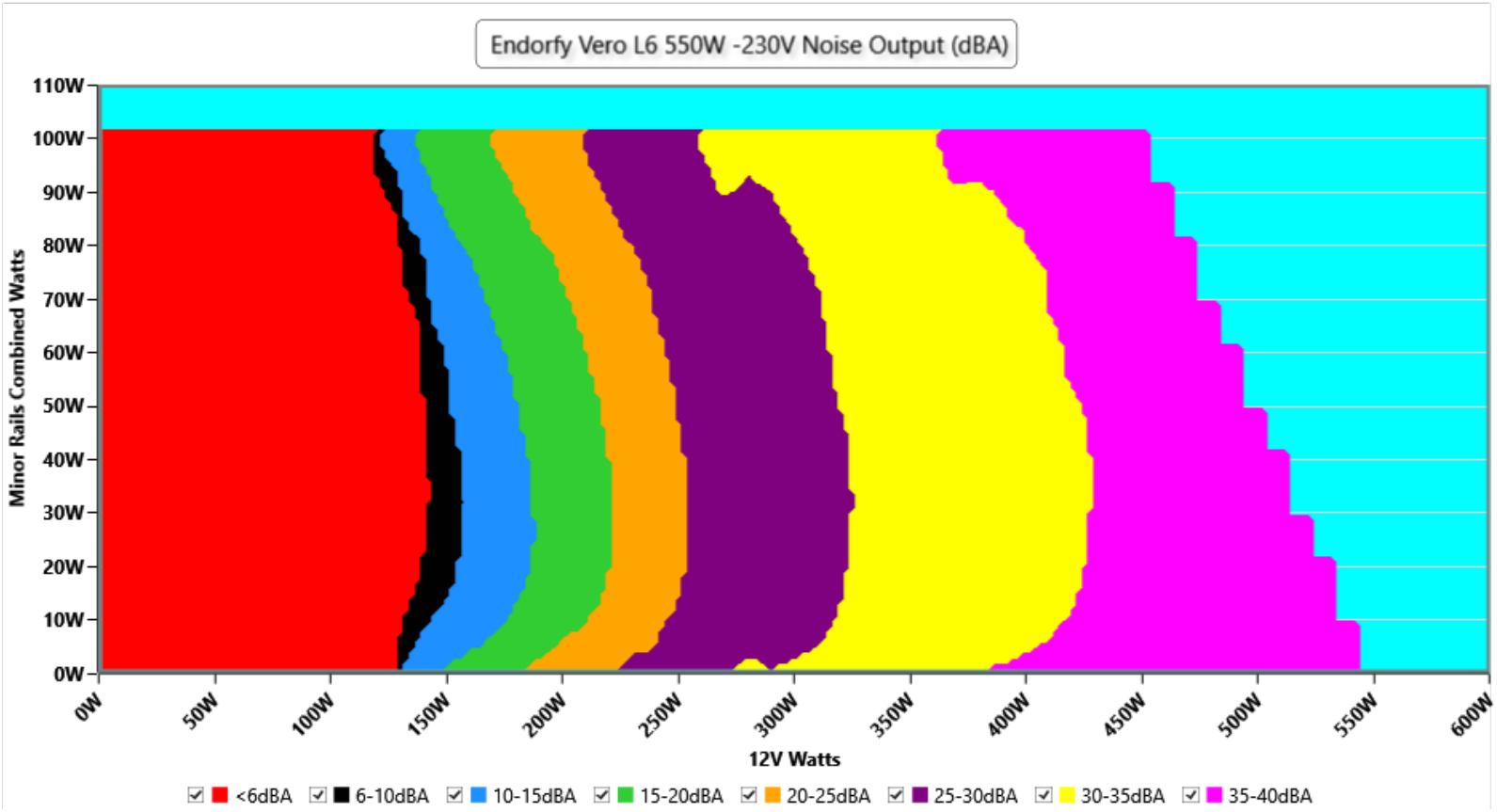
**230V**




□□

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

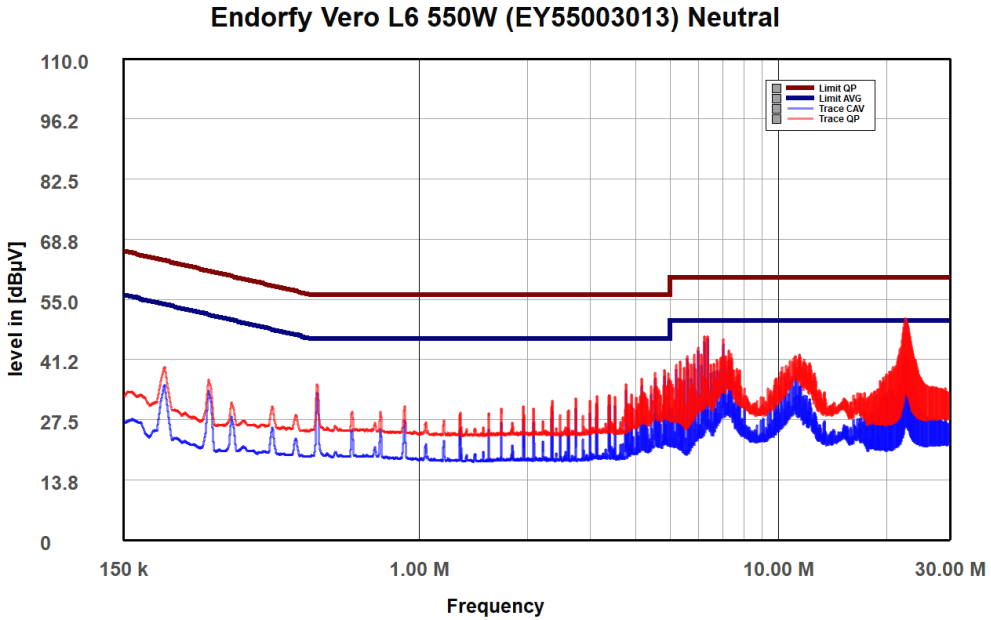
**230V**



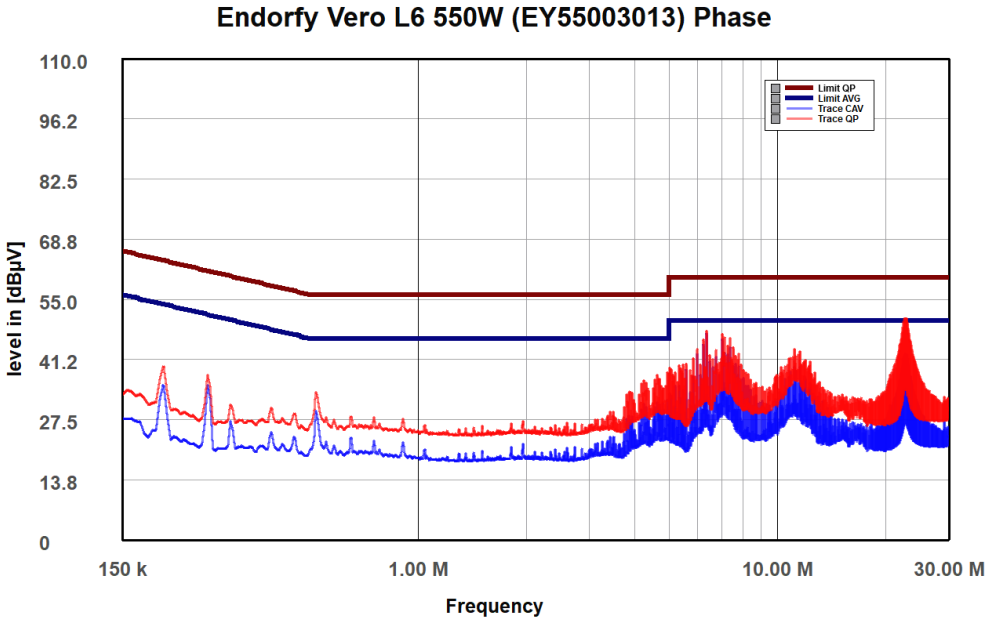

□□

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

## Conducted Emissions EN 55032 & CISPR 32

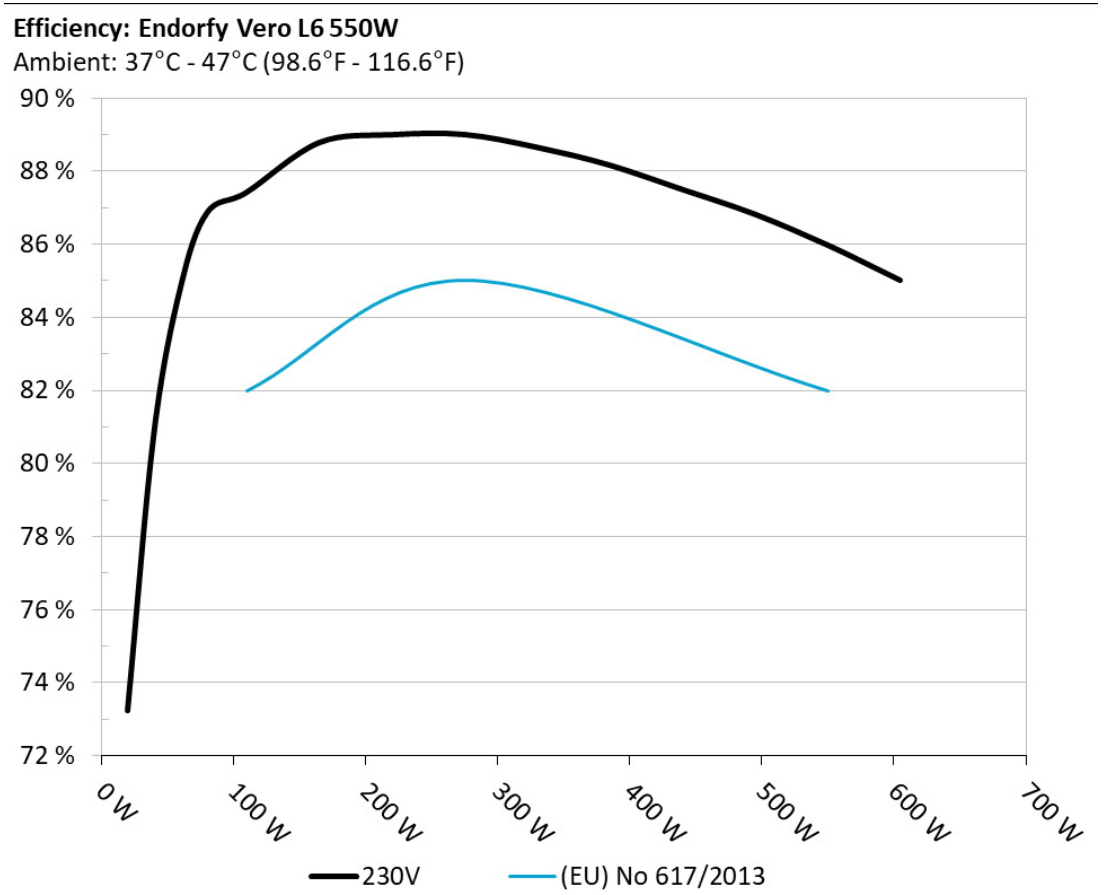



NEUTRAL



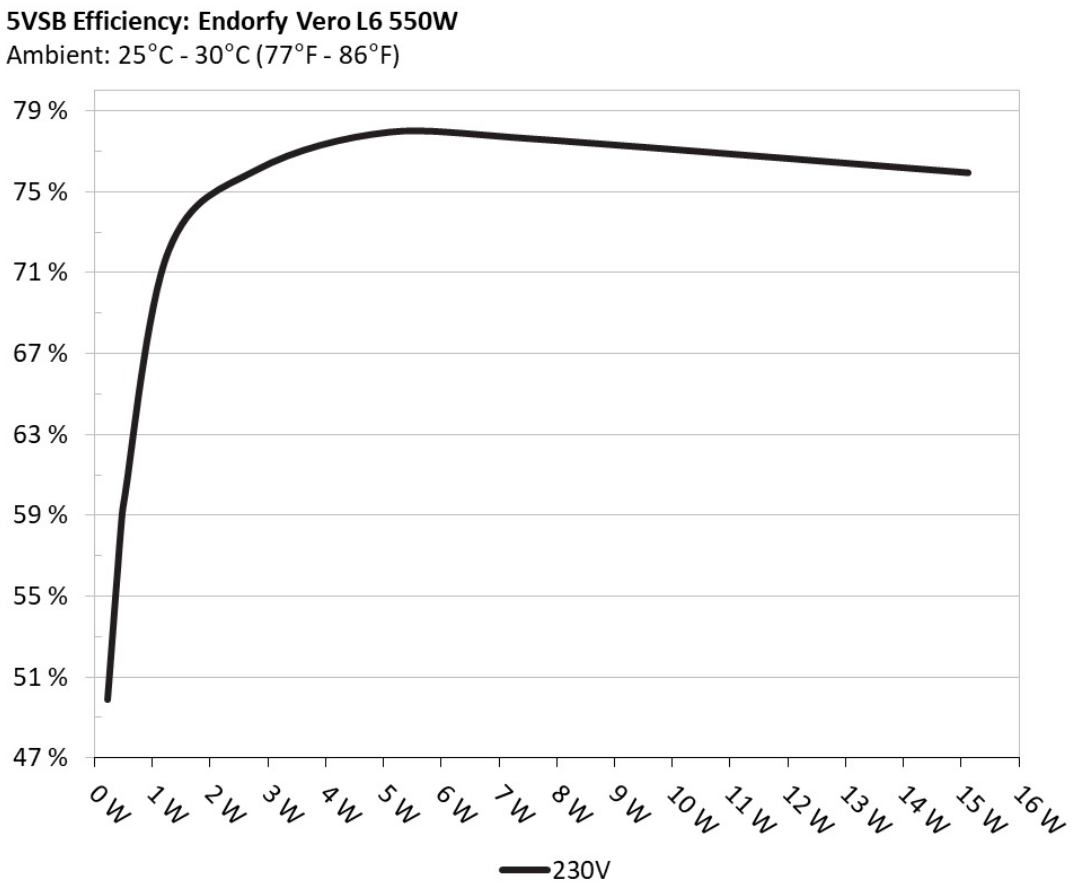

PHASE

## 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) 230V

| □□ # | 5VSB | DC/AC (□ ) | □□ | PF/AC □□ |
|---|---|---|---|---|
| **1** | **0.045A** | 0.231W | 49.895% | 0.022 |
| | 5.138V | 0.465W | | 230V |

| | | | | |
|---|---|---|---|---|
| **2** | **0.09A** | 0.462W | 58.41% | 0.037 |
| | 5.137V | 0.794W | | 230V |
| **3** | **0.55A** | 2.819W | 76.08% | 0.153 |
| | 5.124V | 3.709W | | 229.99V |
| **4** | **1A** | 5.112W | 77.936% | 0.23 |
| | 5.11V | 6.56W | | 229.99V |
| **5** | **1.5A** | 7.642W | 77.591% | 0.282 |
| | 5.093V | 9.849W | | 229.99V |
| **6** | **3.001A** | 15.126W | 75.927% | 0.353 |
| | 5.041V | 19.921W | | 230V |

## Protection Features

| | |
|---|---|
| OCP (Normal @ 29.6°C) | 12V: 63.60A (141.33%), 12.129V<br>5V: 25A (125.00%), 5.028V<br>3.3V: 26.6A (133.00%), 3.284V<br>5VSB: 4A (133.33%), 5.008V |
| OCP (Hot @ 43.9°C) | 12V: 63.60A (141.33%), 12.121V<br>5V: 23.9A (119.50%), 5.032V<br>3.3V: 25.1A (125.50%), 3.285V<br>5VSB: 4A (133.33%), 4.993V |
| OPP (Normal @ 29.1°C) | 680.31W (123.69%) |
| OPP (Hot @ 41.0°C) | 670.33W (121.88%) |
| OTP | ✓ (102°C @ Heat Sink) |
| SCP | 12V to Earth: ✓<br>5V to Earth: ✓<br>3.3V to Earth: ✓<br>5VSB to Earth: ✓ |
| PWR_OK | Proper Operation |
| UVP (Full Load @ 180V) | ✓ |
| UVP (No Damage @ 170V) | ✓ |
| Conducted Emissions EN55032 & CISPR 32 | ✓ |
| NLO | ✓ |
| Fan Failure Protection | ✗ |

| | |
|---|---|
| SIP | Surge: MOV<br>Inrush: NTC |

## Supplementary Tests (For Reference)

**10-110%□□□□ 230V**

| □□ | 12V | 5V | 3.3V | 5VSB | DC/AC (□ ) | □□ | □□□□ (RPM) | □□□□□□□ (dB[A]) | □□ (□□ /□□ ) | PF/AC □□ |
|---|---|---|---|---|---|---|---|---|---|---|
| **10%** | **2.751A** | **1.983A** | **1.999A** | **0.98A** | 55.011 | 82.632% | 641 | 7.6 | 40.48°C | 0.843 |
| | 12.145V | 5.043V | 3.303V | 5.101V | 66.575 | | | | 45.78°C | 230.06V |
| **20%** | **6.513A** | **2.976A** | **2.999A** | **1.179A** | 109.967 | 87.418% | 1008 | 21.8 | 40.5°C | 0.929 |
| | 12.139V | 5.041V | 3.301V | 5.091V | 125.795 | | | | 47.48°C | 230.05V |
| **30%** | **10.624A** | **3.473A** | **3.501A** | **1.378A** | 164.967 | 88.781% | 1287 | 29.2 | 41.03°C | 0.955 |
| | 12.134V | 5.04V | 3.3V | 5.082V | 185.815 | | | | 48.47°C | 230.05V |
| **40%** | **14.746A** | **3.97A** | **4.002A** | **1.578A** | 220.052 | 88.998% | 1485 | 33.1 | 41.77°C | 0.968 |
| | 12.128V | 5.039V | 3.298V | 5.072V | 247.255 | | | | 50.51°C | 230.04V |
| **50%** | **18.522A** | **4.965A** | **5.005A** | **1.779A** | 275.051 | 89.003% | 1572 | 34.5 | 42.29°C | 0.974 |
| | 12.122V | 5.037V | 3.297V | 5.061V | 309.036 | | | | 50.5°C | 230.04V |
| **60%** | **22.301A** | **5.96A** | **6.01A** | **1.98A** | 330.045 | 88.653% | 1643 | 35.9 | 42.62°C | 0.98 |
| | 12.117V | 5.035V | 3.295V | 5.051V | 372.289 | | | | 50.88°C | 230.03V |
| **70%** | **26.084A** | **6.957A** | **7.016A** | **2.183A** | 385.05 | 88.165% | 1740 | 37.7 | 43.23°C | 0.983 |
| | 12.112V | 5.033V | 3.293V | 5.04V | 436.74 | | | | 52.59°C | 230.03V |
| **80%** | **29.892A** | **7.952A** | **8.021A** | **2.286A** | 439.733 | 87.503% | 1783 | 38 | 43.72°C | 0.984 |
| | 12.105V | 5.031V | 3.291V | 5.032V | 502.536 | | | | 54.3°C | 230.02V |
| **90%** | **34.076A** | **8.451A** | **8.51A** | **2.389A** | 494.747 | 86.826% | 1783 | 38 | 44.05°C | 0.986 |
| | 12.098V | 5.029V | 3.29V | 5.024V | 569.811 | | | | 56.5°C | 230.01V |
| **100%** | **38.069A** | **8.951A** | **9.031A** | **3.001A** | 549.971 | 85.98% | 1788 | 38 | 45.3°C | 0.988 |
| | 12.091V | 5.028V | 3.289V | 4.999V | 639.649 | | | | 61.06°C | 230V |
| **110%** | **41.934A** | **9.949A** | **10.131A** | **3.004A** | 604.987 | 85.017% | 1789 | 38 | 46.61°C | 0.989 |
| | 12.083V | 5.026V | 3.287V | 4.994V | 711.609 | | | | 64.04°C | 229.99V |
| **CL1** | **0.115A** | **11.965A** | **12.048A** | **0A** | 101.308 | 81.363% | 1293 | 29.3 | 40.55°C | 0.928 |
| | 12.137V | 5.032V | 3.295V | 5.122V | 124.516 | | | | 49.7°C | 230.05V |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CL2** | **0.115A** | **19.902A** | **0A** | **0A** | 101.402 | 80.494% | 1170 | 26.3 | 40.53°C | 0.929 |
| | 12.141V | 5.024V | 3.304V | 5.126V | 125.975 | | | | 49.53°C | 230.05V |
| **CL3** | **0.115A** | **0A** | **20.056A** | **0A** | 67.396 | 74.594% | 1077 | 24 | 41.31°C | 0.895 |
| | 12.139V | 5.046V | 3.291V | 5.123V | 90.351 | | | | 50.78°C | 230.05V |
| **CL4** | **45.474A** | **0A** | **0A** | **0.001A** | 549.791 | 86.866% | 1795 | 38 | 44.7°C | 0.987 |
| | 12.090V | 5.041V | 3.297V | 5.11V | 632.92 | | | | 59.24°C | 229.99V |

The results above are not used in the certification process

## 20-80□□□□□ 230V

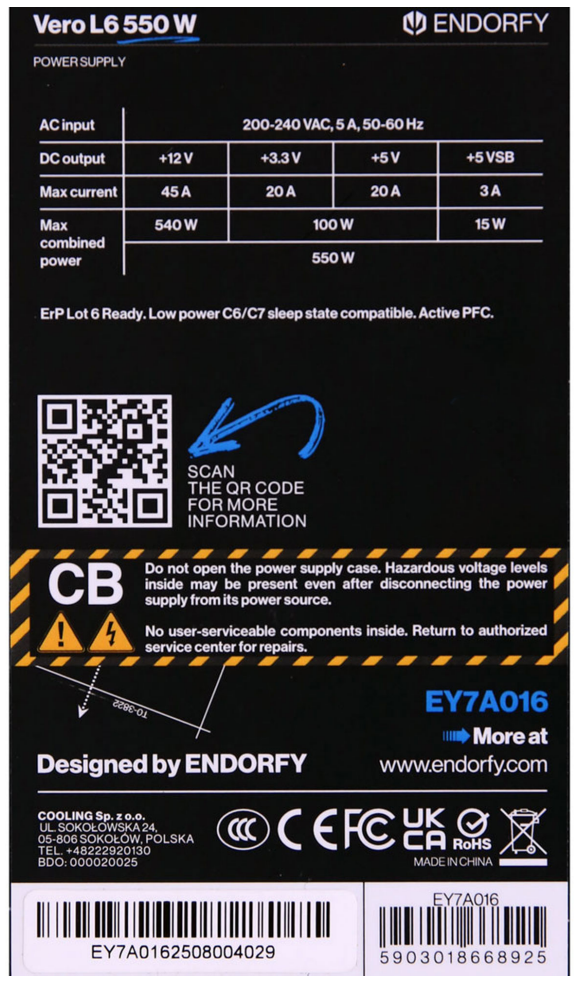
| □□ | **12V** | **5V** | **3.3V** | **5VSB** | **DC/AC (□ )** | □□ | □□□□ **(RPM)** | □□□□□□□ **(dB[A])** | □□ **(□□ /□□ )** | **PF/AC □□** |
|---|---|---|---|---|---|---|---|---|---|---|
| **20W** | **1.223A** | **0.496A** | **0.499A** | **0.195A** | 20.01 | 73.245% | 610 | <6.0 | 36.77°C | 0.625 |
| | 12.150V | 5.046V | 3.305V | 5.132V | 27.319 | | | | 40.09°C | 230.04V |
| **40W** | **2.692A** | **0.694A** | **0.699A** | **0.293A** | 40.007 | 80.847% | 617 | <6.0 | 37.86°C | 0.783 |
| | 12.148V | 5.045V | 3.304V | 5.128V | 49.485 | | | | 41.85°C | 230.05V |
| **60W** | **4.161A** | **0.892A** | **0.899A** | **0.391A** | 60.005 | 84.812% | 622 | 6.2 | 38.4°C | 0.856 |
| | 12.145V | 5.044V | 3.303V | 5.123V | 70.751 | | | | 43.02°C | 230.05V |
| **80W** | **5.628A** | **1.091A** | **1.099A** | **0.489A** | 79.971 | 86.854% | 634 | 7 | 39.68°C | 0.897 |
| | 12.142V | 5.043V | 3.302V | 5.118V | 92.07 | | | | 44.84°C | 230.05V |

The results above are not used in the certification process

## □□□□ 230V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 12.11mV | 12.75mV | 9.10mV | 8.51mV | Pass |
| 20% Load | 11.60mV | 12.81mV | 9.00mV | 8.76mV | Pass |
| 30% Load | 13.23mV | 13.06mV | 8.95mV | 9.17mV | Pass |
| 40% Load | 15.98mV | 13.32mV | 9.26mV | 9.83mV | Pass |
| 50% Load | 16.44mV | 13.42mV | 9.67mV | 11.26mV | Pass |
| 60% Load | 17.35mV | 14.18mV | 10.38mV | 12.68mV | Pass |
| 70% Load | 19.13mV | 15.00mV | 10.83mV | 14.87mV | Pass |
| 80% Load | 21.93mV | 15.71mV | 16.79mV | 16.71mV | Pass |









| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 90% Load | 26.92mV | 16.63mV | 17.91mV | 18.14mV | Pass |
| 100% Load | 30.40mV | 17.40mV | 18.17mV | 19.15mV | Pass |
| 110% Load | 35.56mV | 19.99mV | 20.46mV | 20.32mV | Pass |
| Crossload1 | 11.57mV | 18.50mV | 19.50mV | 9.02mV | Pass |
| Crossload2 | 13.69mV | 26.32mV | 9.51mV | 8.10mV | Pass |
| Crossload3 | 12.52mV | 12.39mV | 27.16mV | 10.90mV | Pass |
| Crossload4 | 34.52mV | 14.31mV | 10.92mV | 13.16mV | Pass |

The results above are not used in the certification process

## Endorfy Vero L6 550W

Top side

Power specifications label

Fan

PSU Internals

本测试报告中包含的所有数据和图表均可在以下条件下由任何人使用：使用过程需提及测试结果由Cybenetics提供。Cybenetics 提供自愿性认证计划：电源方面有ETA（效率）、LAMBDA（噪声）与SAFE（安全与正确运行）；散热产品方面有DELTA（机箱隔音）与PHI（风扇风量与静压）

在任何情况下都应提供原始测试结果文档的网站链接