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# Cooler Master G GOLD 550 V2 (MWE GOLD 550 V3 Non-Modular)

Serial Number MPE5502ACAAGEU1241400151

Lab ID CM55002484

Certification ID 252484

Test Result Report ID: 24PS2484A

Certificate Issue Date: Jul 1, 2024

115V 230V

Scheme: ETA-EMI PSU 


115V 230V







Scheme: LAMBDA PSU




Outside Validation Scope



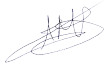
# General Information

## 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 | Cooler Master |
| Model | G GOLD 550 V2 (MWE GOLD 550 V3 Non-Modular) |
| OEM/ODM | Gospower |
| Serial Number | MPE5502ACAAGEU1241400151 |
| Product Specifications | |
| Manufacturer-Provided Information | |
| Rated Voltage (Vrms) | 100-240 |

| | |
|---|---|
| Rated Current (Arms) | 8-4 |
| Rated Frequency (Hz) | 50-60 |
| Rated Power (W) | 550 |
| Operating Temperature (Continuous Full Load) (°C) | |
| Type | ATX12V |
| Cable Design | Fixed cables |
| Warranty | - |
| Cybenetics Measurements | |
| Dimensions (W x H x D) | |
| Weight | |
| Cooling | 120mm Fluid Dynamic Bearing Fan<br>(HA1225H12F-Z) |
| Semi-Passive Operation | ✓ |
| Cybenetics Testing Information | |
| Lab ID | CM55002484 |
| Date of receipt | May 29, 2024 |
| Testing Date | Jun 19, 2024 |
| Report Issued Date | Jul 1, 2024 |
| Engineer Name | - |
| Authorized By the Laboratory Technical Manager | Aristeidis Bitziopoulos |
| Signature |  |

## Cables and Connectors
## (Non-accredited measurements)

| **Captive Cables** | | | | |
|---|---|---|---|---|
| **Description** | **Cable Count** | **Connector Count (Total)** | **Gauge** | In Cable Capacitors |
| ATX connector 24 pin (500mm) | 1 | 1 | 18AWG | No |
| 4+4 pin EPS12V (580mm) | 1 | 1 | 18AWG | No |
| 6+2 pin PCIe (600mm+125mm) | 1 | 2 | 16-18AWG | No |
| SATA (410mm+150mm+150mm) | 2 | 6 | 18AWG | No |

| | | | | |
|---|---|---|---|---|
| 4-pin Molex (400mm+150mm+150mm) | 1 | 3 | 18AWG | No |
| **Modular Cables** | | | | |
| AC Power Cord (1380mm) - 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 | ✗ |

### Power Specifications

| Rail | | 3.3V | 5V | 12V | 5VSB | -12V |
|---|---|---|---|---|---|---|
| Max. Power | Amps | 20 | 20 | 45.8 | 3 | 0.3 |
| | Watts | 120 | | 549.6 | 15 | 3.6 |
| Total Max. Power (W) | | 550 | | | | |

## 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) | 87.721% |
| Average Noise Output (>1450 Load Combinations) | 22.82dBA |
| Average PF (>1450 Load Combinations) | 0.977 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 71.339% |
| Standby Power Consumption | 0.0743W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 73.10mV |
| 5V Ripple (Full Load) | 22.02mV |
| 3.3V Ripple (Full Load) | 18.33mV |
| 5VSB Ripple (Full Load) | 44.44mV |
| 12V Load Regulation | 1.42% |
| 5V Load Regulation | 2.99% |
| 3.3V Load Regulation | 3.44% |
| 5VSB Load Regulation | 3.99% |
| Inrush Current | 65.900A |

### 230V

| | |
|---|---|
| Accredited | |
| Average Efficiency (>1450 load combinations) | 89.325% |
| Average Noise Output (>1450 Load Combinations) | 25.86dBA |
| Average PF (>1450 Load Combinations) | 0.899 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 73.187% |
| Standby Power Consumption | 0.2015W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 71.21mV |
| 5V Ripple (Full Load) | 21.57mV |
| 3.3V Ripple (Full Load) | 18.04mV |

| | | |
|---|---|---|
| 5VSB Ripple (Full Load) | | 43.03mV |
| 12V Load Regulation | | 1.45% |
| 5V Load Regulation | | 3.01% |
| 3.3V Load Regulation | | 3.47% |
| 5VSB Load Regulation | | 4.01% |
| Inrush Current | | 132.900A |
| 12V Transient Response (150%) | | 11.75V |
| 5V Transient Response (150%) | | 4.967V |
| 3.3V Transient Response (150%) | | 3.222V |
| 5VSB Transient Response (150%) | | 4.998V |
| Hold-Up Time & PWR_OK Signal | | 16.40ms |
| AC Loss to PWR_OK Hold Up Time | | 14.40ms |
| PWR_OK Inactive to DC Loss Delay | | 2.00ms |
| PSU Timings: T1 (20% / 100%) | 45.0ms | 45.0ms |
| PSU Timings: T3 (20% / 100%) | 126.0ms | 127.0ms |
| 12V OCP (26.4°C / 43.0°C) | 69.00A (150.66%), 11.925V | 68.80A (150.22%), 11.948V |
| 5V OCP (26.4°C / 43.0°C) | 25.9A (129.50%), 4.967V | 25.2A (126.00%), 4.969V |
| 3.3V OCP (26.4°C / 43.0°C) | 30A (150.00%), 3.289V | 30A (150.00%), 3.287V |
| 5VSB OCP (26.4°C / 43.0°C) | 4.2A (140.00%), 5.019V | 4.2A (140.00%), 5.002V |
| OPP (26.28°C / 43.42°C) | 150.00% | 150.00% |

## Hold-Up Time & PWR_OK Signal

| | |
|---|---|
| Hold-Up Time (ms) | 16.4 |
| AC Loss to PWR_OK Hold Up Time (ms) | 14.4 |
| PWR_OK Inactive to DC Loss Delay (ms) | 2 |

## Tables

### 115V

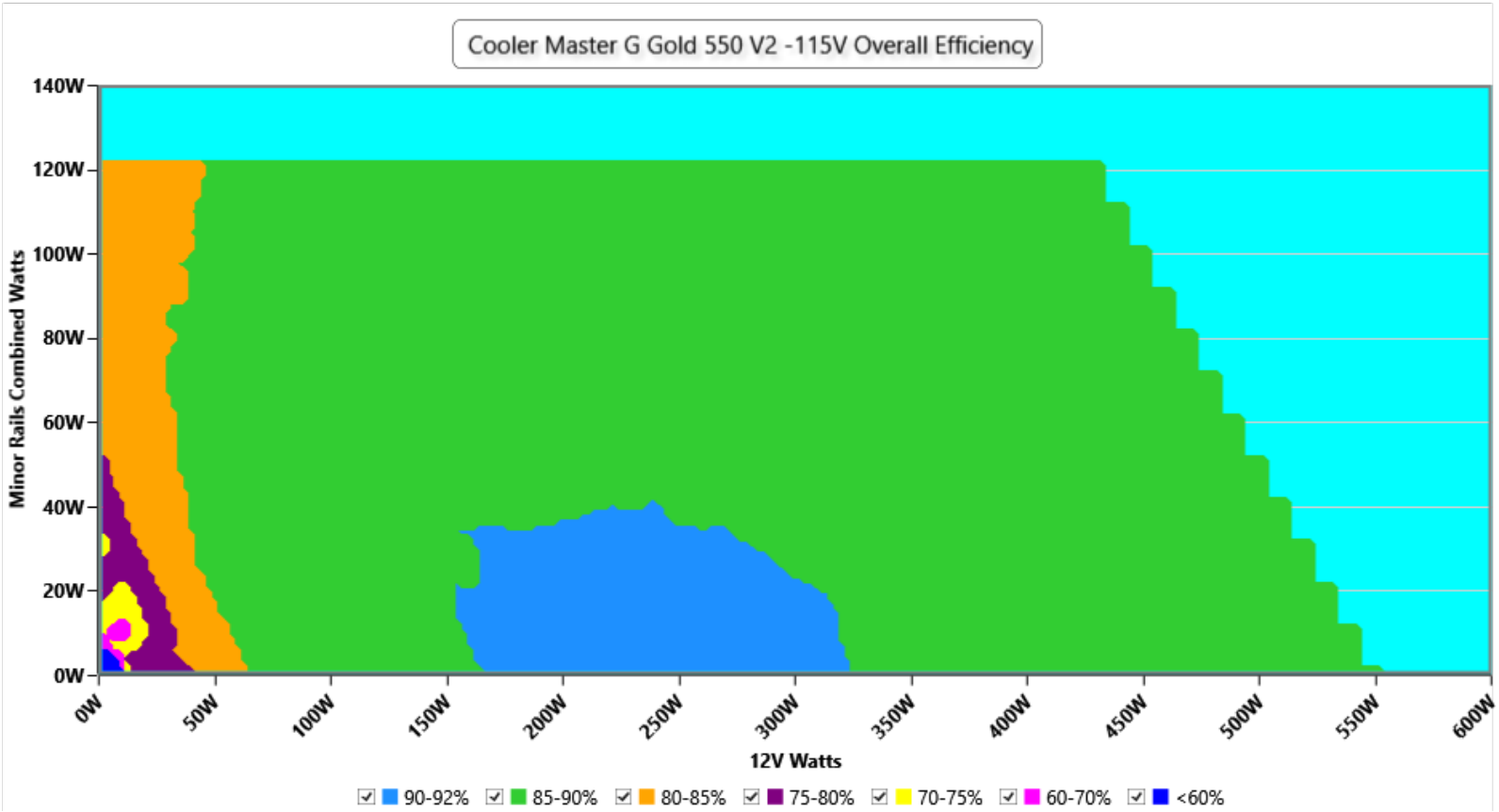
| Detailed Results | | | | | | |
|---|---|---|---|---|---|---|
| | Average | Min | Limit Min | Max | Limit Max | Result |
| Mains Voltage RMS: | 115.07 V | 115.04 V | 113.85 V | 115.11 V | 116.15 V | PASS |
| Mains Frequency: | 60.00 Hz | 59.95 Hz | 59.40 Hz | 60.01 Hz | 60.60 Hz | PASS |
| Mains Voltage CF: | 1.416 | 1.415 | 1.340 | 1.418 | 1.490 | PASS |
| Mains Voltage THD: | 0.13 % | 0.09 % | N/A | 0.18 % | 2.00 % | PASS |
| Real Power: | 0.074 W | 0.017 W | N/A | 0.103 W | N/A | N/A |
| Apparent Power: | 15.970 W | 15.896 W | N/A | 16.056 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: | 231.03 V | 230.93 V | 227.70 V | 231.10 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 % | 0.14 % | N/A | 0.26 % | 2.00 % | PASS |
| Real Power: | 0.201 W | 0.162 W | N/A | 0.284 W | N/A | N/A |
| Apparent Power: | 52.685 W | 52.427 W | N/A | 52.949 W | N/A | N/A |
| Power Factor: | 0.004 | N/A | N/A | N/A | N/A | N/A |

## Efficiency Graph

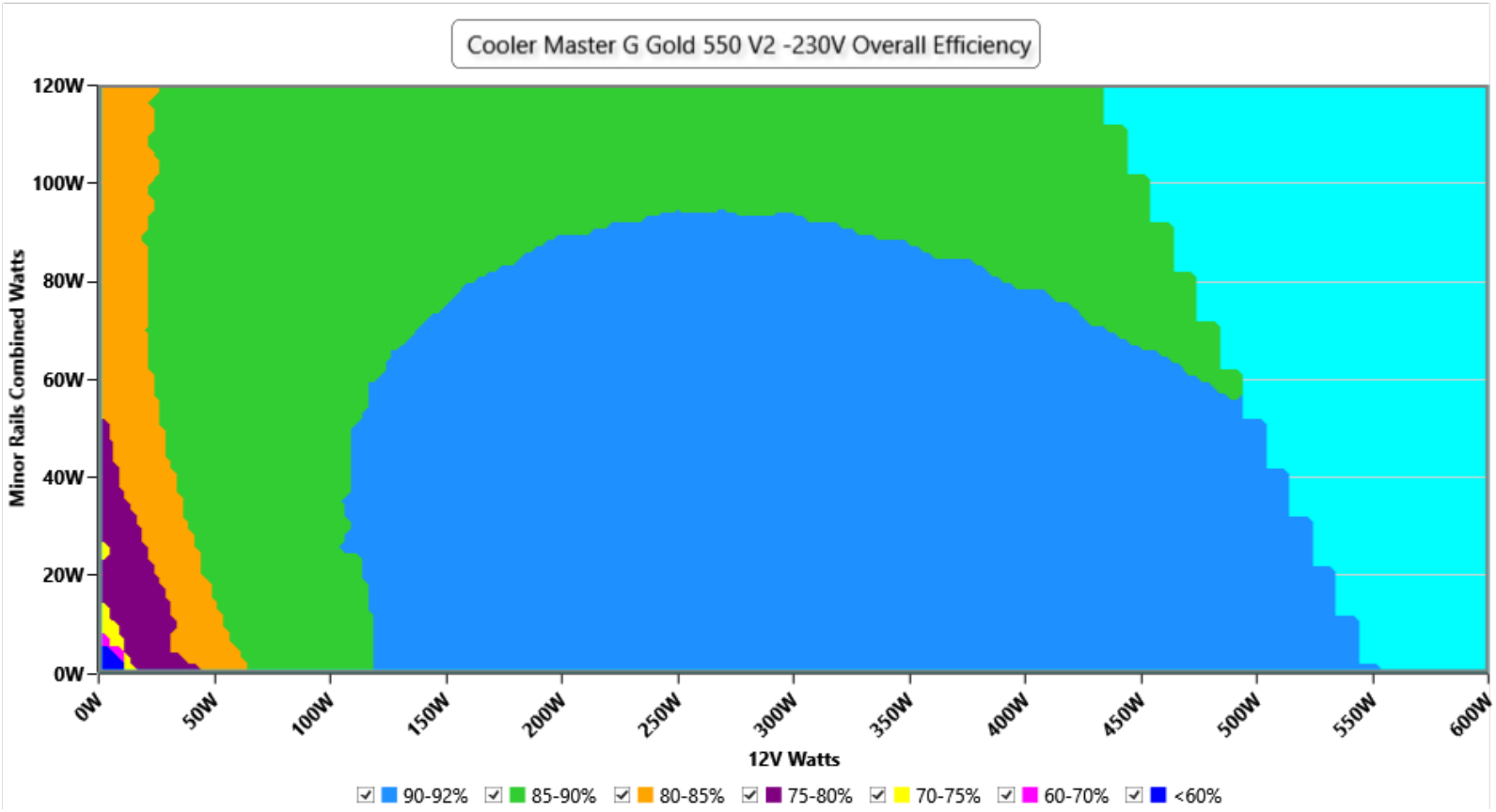
**115V**




**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

## 230V

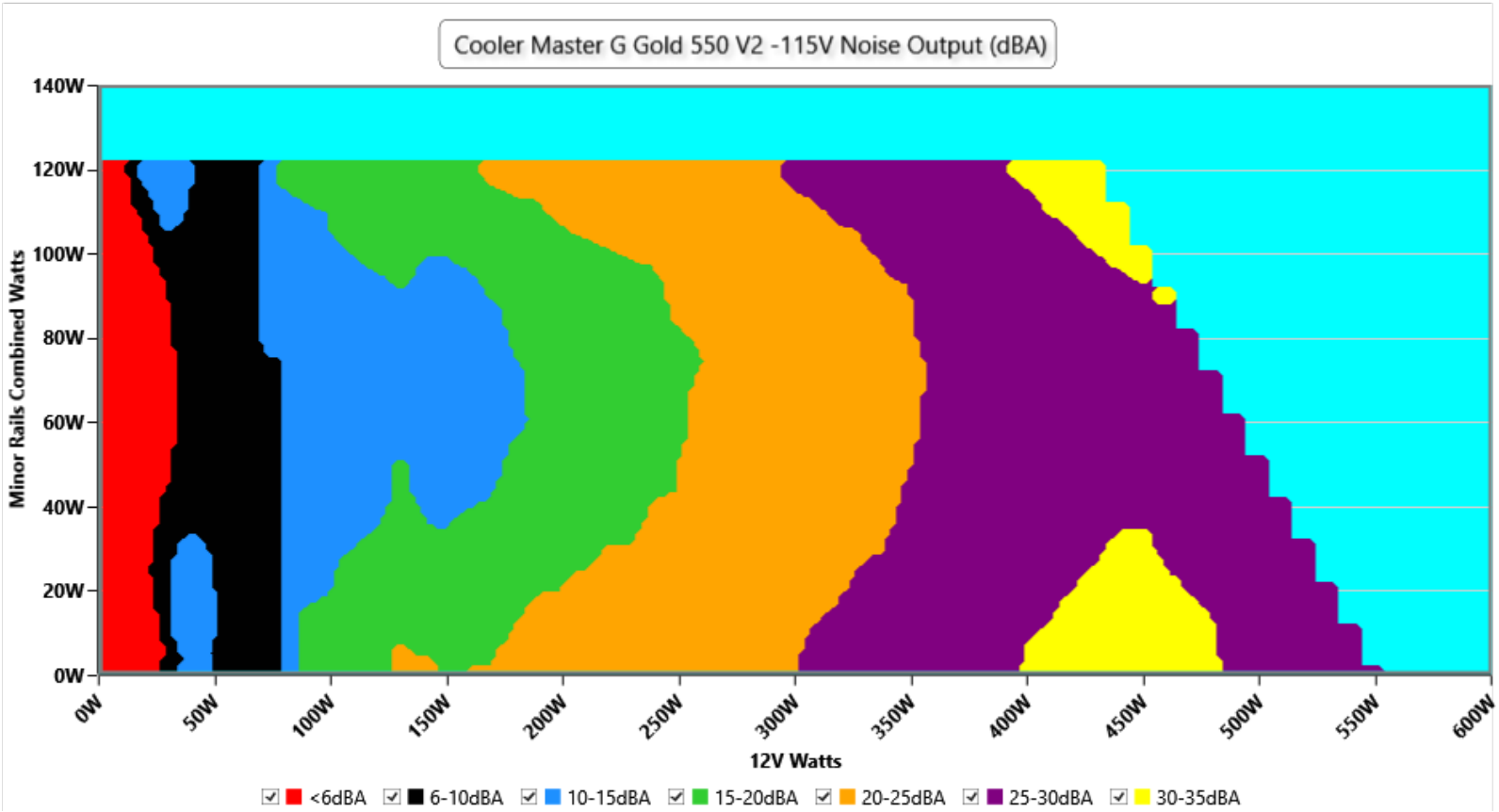



### INFO

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

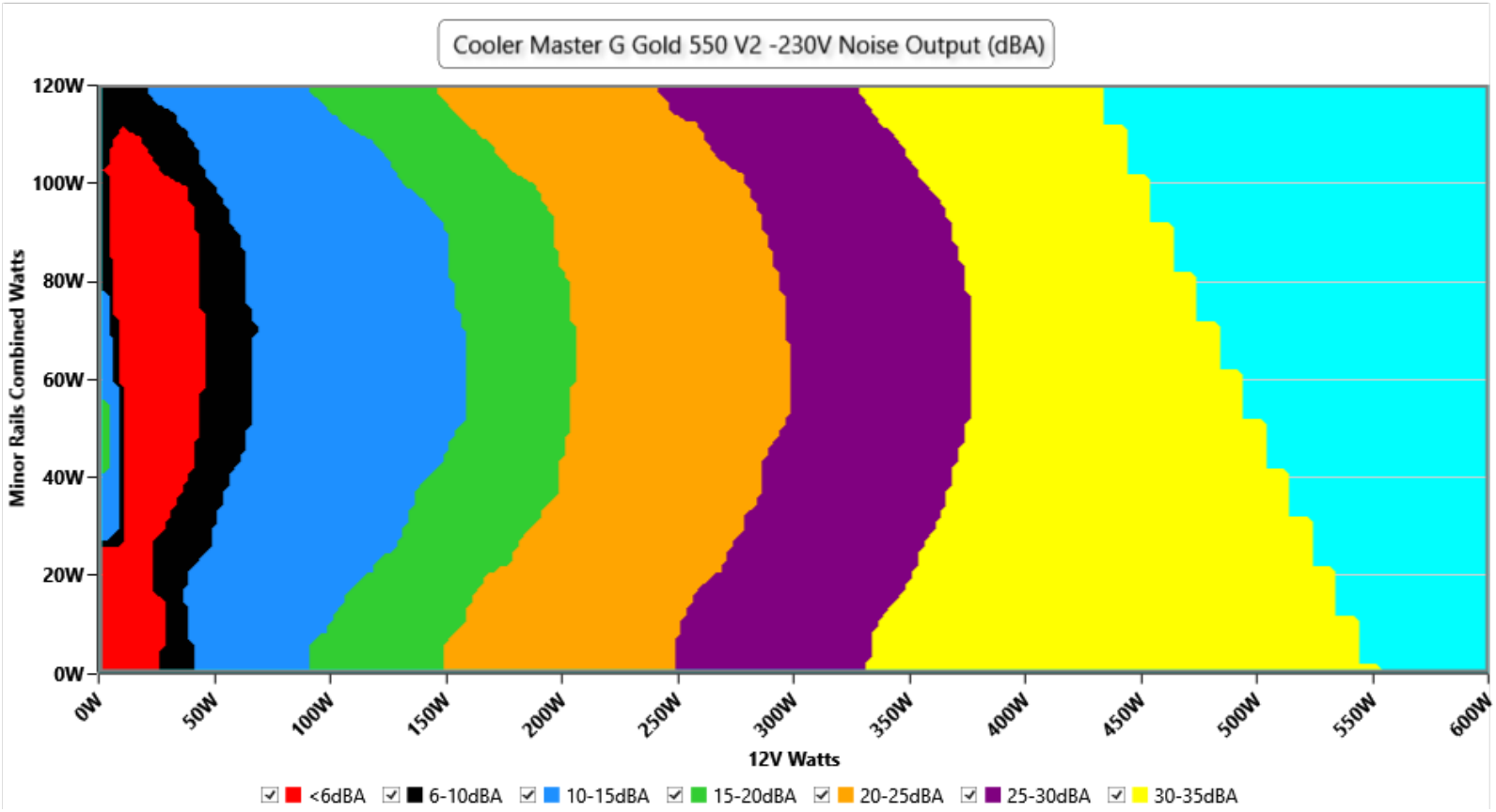
**115V**




**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

## 230V




### 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<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 633 RPM · <6.0 dB(A) · 30.6 °C | 995 RPM · 20.1 dB(A) · 40.4 °C | <6.0 → 20.1 dB(A) |
| 20% | 636 RPM · <6.0 dB(A) · 30.2 °C | 1206 RPM · 26.0 dB(A) · 40.6 °C | <6.0 → 26.0 dB(A) |
| 50% | 841 RPM · 14.6 dB(A) · 30.4 °C | 1495 RPM · 32.4 dB(A) · 42.3 °C | **+17.8 dB(A)** |
| 100% | 1463 RPM · 32.0 dB(A) · 30.8 °C | 1592 RPM · 34.3 dB(A) · 45.5 °C | **+2.3 dB(A)** |

### 230V

| Load | Normal ambient<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 634 RPM · <6.0 dB(A) · 30.6 °C | 1000 RPM · 20.2 dB(A) · 40.3 °C | <6.0 → 20.2 dB(A) |
| 20% | 641 RPM · <6.0 dB(A) · 30.7 °C | 1090 RPM · 22.9 dB(A) · 40.7 °C | <6.0 → 22.9 dB(A) |
| 50% | 858 RPM · 15.2 dB(A) · 30.0 °C | 1403 RPM · 30.9 dB(A) · 42.3 °C | **+15.7 dB(A)** |
| 100% | 1450 RPM · 31.7 dB(A) · 30.7 °C | 1592 RPM · 34.3 dB(A) · 45.1 °C | **+2.6 dB(A)** |

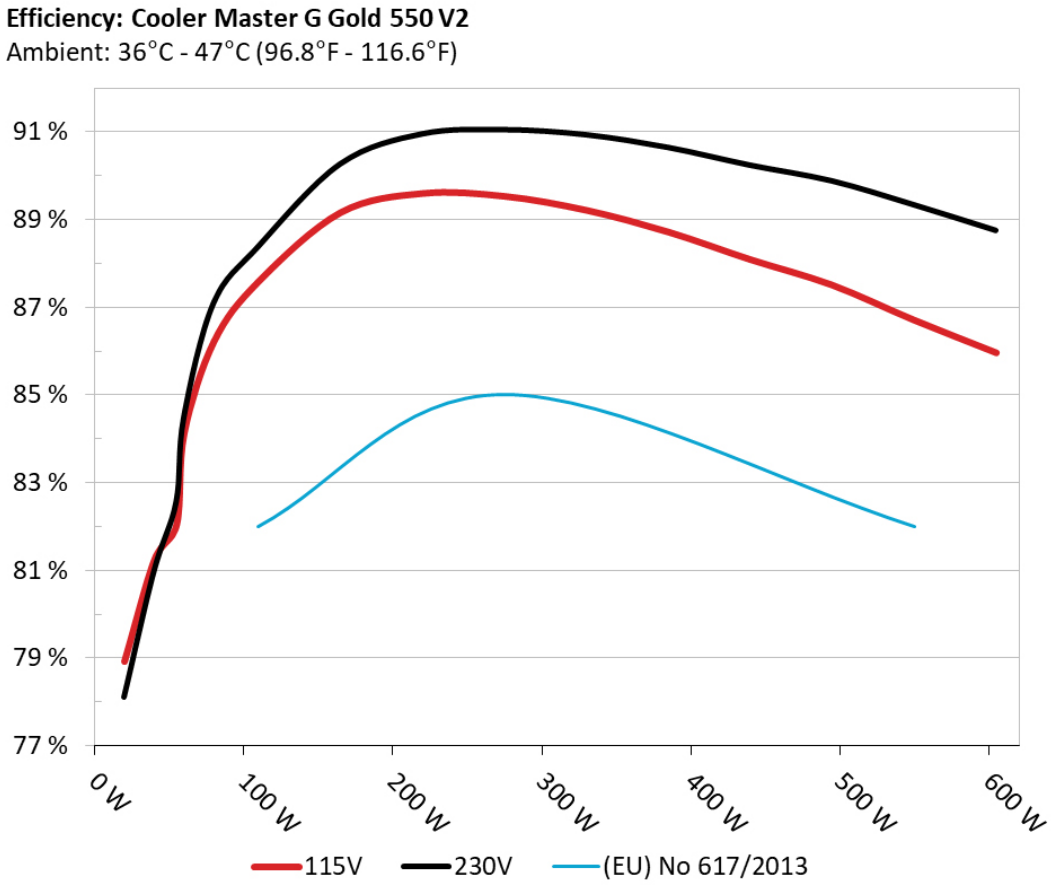
### INFO

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

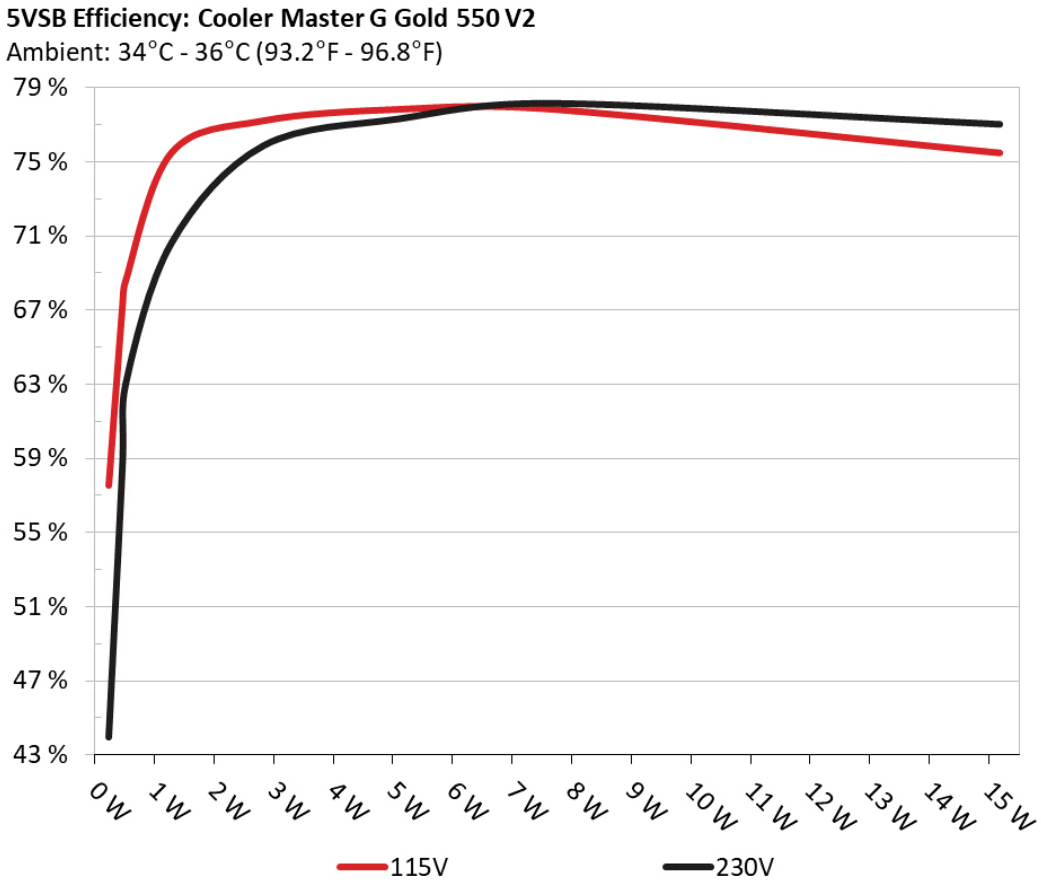
### Efficiency under high ambient temperature




**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** | 0.232W | 57.559% | 0.025 |
| | 5.147V | 0.404W | | 114.86V |
| **2** | **0.09A** | 0.463W | 67.282% | 0.043 |
| | 5.146V | 0.688W | | 114.86V |
| **3** | **0.55A** | 2.823W | 77.222% | 0.202 |
| | 5.132V | 3.656W | | 114.86V |
| **4** | **1A** | 5.119W | 77.843% | 0.306 |
| | 5.119V | 6.576W | | 114.86V |
| **5** | **1.5A** | 7.656W | 77.841% | 0.371 |
| | 5.103V | 9.835W | | 114.86V |
| **6** | **3A** | 15.173W | 75.488% | 0.461 |
| | 5.057V | 20.1W | | 114.86V |

### 230V

| Test # | 5VSB | DC/AC (Watts) | Efficiency | PF/AC Volts |
|---|---|---|---|---|
| **1** | **0.045A** | 0.232W | 43.948% | 0.01 |
| | 5.145V | 0.527W | | 229.94V |
| **2** | **0.09A** | 0.463W | 58.714% | 0.015 |
| | 5.144V | 0.781W | | 229.95V |
| **3** | **0.55A** | 2.822W | 75.848% | 0.068 |
| | 5.13V | 3.713W | | 229.95V |
| **4** | **1A** | 5.118W | 77.314% | 0.117 |
| | 5.118V | 6.625W | | 229.95V |
| **5** | **1.5A** | 7.655W | 78.142% | 0.165 |
| | 5.103V | 9.793W | | 229.94V |
| **6** | **3A** | 15.175W | 77.013% | 0.276 |
| | 5.058V | 19.703W | | 229.94V |

## Protection Features

| | |
|---|---|
| OCP (Cold @ 26.4°C) | 12V: 69A (150.66%), 11.925V<br>5V: 25.9A (129.5%), 4.967V<br>3.3V: 30A (150%), 3.289V<br>5VSB: 4.2A (140%), 5.019V |
| OCP (Hot) @ 43°C) | 12V: 68.8A (150.22%), 11.948V<br>5V: 25.2A (126%), 4.969V<br>3.3V: 30A (150%), 3.287V<br>5VSB: 4.2A (140%), 5.002V |
| OPP (Cold @ 26.3°C) | 824.99W (150%) |
| OPP (Hot @ 43.4°C) | 825W (150%) |
| OTP | ✓ (110°C @ Secondary Side) |
| SCP | 12V to Earth: ✓<br>5V to Earth: ✓<br>3.3V to Earth: ✓<br>5VSB to Earth: ✓<br>-12V to Earth: ✓ |
| PWR_OK | Proper Operation |
| NLO | ✓ |
| Fan Failure Protection | ✗ |
| SIP | Surge: MOV<br>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%** | **2.744A** | **1.954A** | **1.965A** | **0.98A** | 54.998 | 82.046% | 995 | 20.1 | 40.38°C | 0.929 |
| | 12.170V | 5.118V | 3.358V | 5.104V | 67.048 | | | | 41.88°C | 114.84V |

| Test | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| **20%** | **6.507A** | **2.94A** | **2.958A** | **1.18A** | 109.929 | 87.582% | 1206 | 26 | 40.63°C | 0.971 |
| | 12.146V | 5.103V | 3.347V | 5.087V | 125.518 | | | | 42.69°C | 114.83V |
| **30%** | **10.625A** | **3.438A** | **3.461A** | **1.381A** | 164.92 | 89.152% | 1287 | 28.3 | 41.15°C | 0.982 |
| | 12.128V | 5.091V | 3.337V | 5.071V | 184.99 | | | | 43.73°C | 114.81V |
| **40%** | **14.763A** | **3.938A** | **3.967A** | **1.583A** | 219.997 | 89.589% | 1374 | 30.1 | 41.69°C | 0.984 |
| | 12.110V | 5.079V | 3.327V | 5.054V | 245.563 | | | | 44.24°C | 114.79V |
| **50%** | **18.565A** | **4.938A** | **4.977A** | **1.787A** | 274.984 | 89.522% | 1495 | 32.4 | 42.31°C | 0.986 |
| | 12.092V | 5.064V | 3.316V | 5.037V | 307.171 | | | | 45.17°C | 114.77V |
| **60%** | **22.378A** | **5.944A** | **5.993A** | **1.993A** | 329.971 | 89.203% | 1591 | 34.3 | 42.67°C | 0.982 |
| | 12.073V | 5.048V | 3.304V | 5.019V | 369.907 | | | | 45.96°C | 114.75V |
| **70%** | **26.200A** | **6.958A** | **7.018A** | **2.2A** | 384.963 | 88.708% | 1593 | 34.3 | 43.21°C | 0.981 |
| | 12.055V | 5.031V | 3.292V | 5.001V | 433.965 | | | | 46.85°C | 114.72V |
| **80%** | **30.030A** | **7.976A** | **8.048A** | **2.307A** | 439.393 | 88.084% | 1588 | 34.2 | 43.84°C | 0.982 |
| | 12.038V | 5.014V | 3.28V | 4.985V | 498.831 | | | | 48.97°C | 114.71V |
| **90%** | **34.266A** | **8.497A** | **8.565A** | **2.415A** | 494.406 | 87.502% | 1580 | 34 | 44.21°C | 0.984 |
| | 12.021V | 5.001V | 3.269V | 4.97V | 565.03 | | | | 49.69°C | 114.69V |
| **100%** | **38.319A** | **9.022A** | **9.118A** | **3.037A** | 549.621 | 86.7% | 1592 | 34.3 | 45.54°C | 0.986 |
| | 12.003V | 4.987V | 3.257V | 4.939V | 633.933 | | | | 52.13°C | 114.67V |
| **110%** | **42.249A** | **10.061A** | **10.263A** | **3.046A** | 604.625 | 85.957% | 1591 | 34.3 | 46.85°C | 0.987 |
| | 11.985V | 4.969V | 3.244V | 4.924V | 703.398 | | | | 54.29°C | 114.65V |
| **CL1** | **0.114A** | **14.406A** | **14.391A** | **0.001A** | 121.287 | 81.248% | 1583 | 34.1 | 41.6°C | 0.974 |
| | 12.146V | 5.012V | 3.314V | 5.089V | 149.281 | | | | 45.89°C | 114.82V |
| **CL2** | **0.114A** | **19.968A** | **0A** | **0.001A** | 101.365 | 80.096% | 1529 | 33 | 40.63°C | 0.972 |
| | 12.160V | 5.007V | 3.335V | 5.109V | 126.555 | | | | 43.49°C | 114.82V |
| **CL3** | **0.114A** | **0A** | **19.8A** | **0.001A** | 67.383 | 74.558% | 1543 | 33.3 | 41.46°C | 0.957 |
| | 12.158V | 5.097V | 3.333V | 5.107V | 90.382 | | | | 43.53°C | 114.84V |
| **CL4** | **45.778A** | **0A** | **0A** | **0.001A** | 549.459 | 87.975% | 1595 | 34.3 | 45.53°C | 0.985 |
| | 12.002V | 5.062V | 3.289V | 5.054V | 624.56 | | | | 50.16°C | 114.67V |

The results above are not used in the certification process

## 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%** | **2.744A** | **1.954A** | **1.965A** | **0.98A** | 54.996 | 82.574% | 1000 | 20.2 | 40.27°C | 0.637 |
| | 12.169V | 5.118V | 3.359V | 5.104V | 66.602 | | | | 42.19°C | 229.94V |
| **20%** | **6.507A** | **2.94A** | **2.957A** | **1.179A** | 109.922 | 88.397% | 1090 | 22.9 | 40.73°C | 0.797 |
| | 12.144V | 5.103V | 3.347V | 5.087V | 124.356 | | | | 41.97°C | 229.93V |
| **30%** | **10.627A** | **3.437A** | **3.461A** | **1.38A** | 164.911 | 90.281% | 1169 | 25.1 | 41.02°C | 0.868 |
| | 12.125V | 5.091V | 3.337V | 5.071V | 182.668 | | | | 42.63°C | 229.92V |
| **40%** | **14.767A** | **3.938A** | **3.967A** | **1.583A** | 219.988 | 90.97% | 1289 | 28.3 | 41.8°C | 0.902 |
| | 12.107V | 5.079V | 3.327V | 5.055V | 241.827 | | | | 43.47°C | 229.91V |
| **50%** | **18.567A** | **4.938A** | **4.977A** | **1.787A** | 274.98 | 91.064% | 1403 | 30.9 | 42.33°C | 0.923 |
| | 12.090V | 5.064V | 3.315V | 5.037V | 301.961 | | | | 43.84°C | 229.9V |
| **60%** | **22.380A** | **5.944A** | **5.994A** | **1.992A** | 329.968 | 90.949% | 1540 | 33.2 | 42.76°C | 0.935 |
| | 12.071V | 5.048V | 3.304V | 5.02V | 362.805 | | | | 45.21°C | 229.89V |
| **70%** | **26.203A** | **6.959A** | **7.019A** | **2.2A** | 384.967 | 90.658% | 1594 | 34.3 | 43.41°C | 0.943 |
| | 12.054V | 5.031V | 3.291V | 5.001V | 424.637 | | | | 45.74°C | 229.88V |
| **80%** | **30.039A** | **7.978A** | **8.051A** | **2.307A** | 439.395 | 90.257% | 1592 | 34.3 | 43.77°C | 0.95 |
| | 12.034V | 5.013V | 3.279V | 4.985V | 486.827 | | | | 46.32°C | 229.87V |
| **90%** | **34.276A** | **8.499A** | **8.567A** | **2.414A** | 494.403 | 89.898% | 1588 | 34.2 | 44.66°C | 0.954 |
| | 12.017V | 5V | 3.268V | 4.97V | 549.964 | | | | 47.83°C | 229.87V |
| **100%** | **38.330A** | **9.024A** | **9.12A** | **3.037A** | 549.623 | 89.351% | 1592 | 34.3 | 45.11°C | 0.958 |
| | 11.999V | 4.986V | 3.256V | 4.939V | 615.134 | | | | 49.26°C | 229.86V |
| **110%** | **42.260A** | **10.063A** | **10.266A** | **3.047A** | 604.624 | 88.766% | 1596 | 34.3 | 46.25°C | 0.962 |
| | 11.981V | 4.968V | 3.243V | 4.924V | 681.118 | | | | 51.33°C | 229.85V |
| **CL1** | **0.114A** | **14.407A** | **14.392A** | **0.001A** | 121.287 | 82.216% | 1588 | 34.2 | 41.78°C | 0.83 |
| | 12.145V | 5.011V | 3.314V | 5.089V | 147.516 | | | | 45.71°C | 229.94V |
| **CL2** | **0.114A** | **19.97A** | **0A** | **0.001A** | 101.365 | 80.82% | 1502 | 32.5 | 40.33°C | 0.798 |
| | 12.158V | 5.006V | 3.335V | 5.11V | 125.418 | | | | 42.77°C | 229.94V |
| **CL3** | **0.113A** | **0A** | **19.802A** | **0.001A** | 67.381 | 75.135% | 1473 | 32.1 | 40.78°C | 0.72 |
| | 12.157V | 5.097V | 3.333V | 5.107V | 89.678 | | | | 42.24°C | 229.94V |

| Test | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| **CL4** | **45.795A** | **0A** | **0A** | **0.001A** | 549.46 | 90.586% | 1599 | 34.3 | 46.35°C | 0.957 |
| | 11.998V | 5.061V | 3.288V | 5.055V | 606.57 | | | | 48.11°C | 229.86V |

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** | **1.232A** | **0.487A** | **0.49A** | **0.195A** | 19.997 | 78.919% | 0 | <6.0 | 41.5°C | 0.74 |
| | 12.052V | 5.136V | 3.369V | 5.136V | 25.345 | | | | 36.87°C | 114.85V |
| **40W** | **2.690A** | **0.682A** | **0.686A** | **0.292A** | 39.997 | 81.233% | 705 | 8.1 | 37.62°C | 0.895 |
| | 12.151V | 5.131V | 3.365V | 5.13V | 49.244 | | | | 39.4°C | 114.84V |
| **60W** | **4.150A** | **0.878A** | **0.883A** | **0.39A** | 59.996 | 84.123% | 979 | 19.5 | 38.2°C | 0.933 |
| | 12.174V | 5.127V | 3.362V | 5.123V | 71.32 | | | | 40.69°C | 114.83V |
| **80W** | **5.619A** | **1.074A** | **1.081A** | **0.489A** | 79.936 | 86.208% | 1026 | 21 | 39.13°C | 0.958 |
| | 12.158V | 5.122V | 3.358V | 5.116V | 92.727 | | | | 41.07°C | 114.83V |

The results above are not used in the certification process

### 230V

| Test | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| **20W** | **1.232A** | **0.487A** | **0.49A** | **0.195A** | 19.993 | 78.117% | 0 | <6.0 | 42.28°C | 0.357 |
| | 12.052V | 5.136V | 3.369V | 5.137V | 25.596 | | | | 36.4°C | 229.94V |
| **40W** | **2.690A** | **0.682A** | **0.686A** | **0.292A** | 39.993 | 80.986% | 711 | 8.4 | 37.84°C | 0.548 |
| | 12.151V | 5.131V | 3.365V | 5.13V | 49.394 | | | | 39.97°C | 229.94V |
| **60W** | **4.150A** | **0.878A** | **0.883A** | **0.39A** | 59.993 | 84.488% | 914 | 17.3 | 38.81°C | 0.656 |
| | 12.174V | 5.127V | 3.362V | 5.124V | 71.008 | | | | 40.57°C | 229.93V |
| **80W** | **5.617A** | **1.074A** | **1.081A** | **0.489A** | 79.93 | 87.099% | 930 | 17.6 | 39.16°C | 0.728 |
| | 12.158V | 5.122V | 3.358V | 5.117V | 91.769 | | | | 40.73°C | 229.93V |

The results above are not used in the certification process

## Ripple Measurements

### 115V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 135.51mV | 15.61mV | 11.17mV | 29.37mV | Fail |
| 20% Load | 56.73mV | 12.00mV | 9.67mV | 29.58mV | Pass |
| 30% Load | 55.13mV | 12.37mV | 10.08mV | 29.83mV | Pass |
| 40% Load | 54.77mV | 12.98mV | 10.96mV | 30.30mV | Pass |
| 50% Load | 55.24mV | 13.50mV | 11.69mV | 32.67mV | Pass |
| 60% Load | 55.85mV | 14.32mV | 11.63mV | 33.24mV | Pass |
| 70% Load | 55.75mV | 15.04mV | 12.77mV | 33.96mV | Pass |
| 80% Load | 55.80mV | 18.86mV | 14.48mV | 34.32mV | Pass |
| 90% Load | 55.02mV | 19.22mV | 14.32mV | 37.11mV | Pass |
| 100% Load | 73.10mV | 22.02mV | 18.33mV | 44.44mV | Pass |
| 110% Load | 73.89mV | 23.07mV | 19.60mV | 45.85mV | Pass |
| Crossload1 | 68.33mV | 29.13mV | 21.14mV | 34.05mV | Pass |
| Crossload2 | 54.00mV | 42.50mV | 15.67mV | 31.07mV | Pass |
| Crossload3 | 39.99mV | 13.81mV | 19.86mV | 29.88mV | Pass |
| Crossload4 | 68.94mV | 14.02mV | 10.43mV | 33.68mV | Pass |

The results above are not used in the certification process

### 230V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 140.92mV | 16.43mV | 14.69mV | 30.45mV | Fail |
| 20% Load | 66.78mV | 12.52mV | 9.67mV | 30.30mV | Pass |
| 30% Load | 61.78mV | 12.62mV | 10.65mV | 30.66mV | Pass |
| 40% Load | 60.18mV | 18.24mV | 15.31mV | 31.02mV | Pass |
| 50% Load | 60.80mV | 13.91mV | 11.84mV | 31.33mV | Pass |
| 60% Load | 60.18mV | 15.09mV | 12.41mV | 33.65mV | Pass |

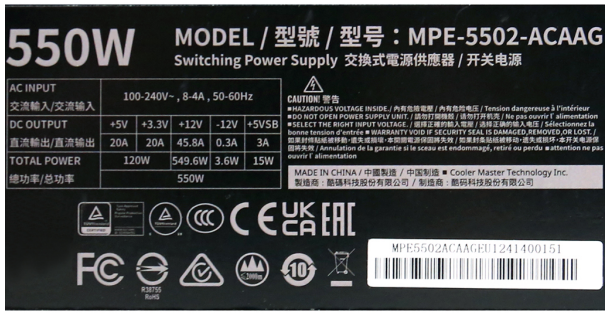
| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 70% Load | 60.03mV | 15.45mV | 12.82mV | 33.29mV | Pass |
| 80% Load | 60.39mV | 18.24mV | 14.74mV | 34.58mV | Pass |
| 90% Load | 59.67mV | 20.35mV | 15.51mV | 35.41mV | Pass |
| 100% Load | 71.21mV | 21.57mV | 18.04mV | 43.03mV | Pass |
| 110% Load | 73.60mV | 23.05mV | 19.34mV | 44.11mV | Pass |
| Crossload1 | 71.35mV | 28.93mV | 22.11mV | 35.17mV | Pass |
| Crossload2 | 61.21mV | 43.94mV | 16.44mV | 32.11mV | Pass |
| Crossload3 | 49.31mV | 13.86mV | 19.81mV | 30.92mV | Pass |
| Crossload4 | 67.71mV | 14.23mV | 11.79mV | 31.20mV | Pass |

The results above are not used in the certification process

## Cooler Master G GOLD 550 V2 (MWE GOLD 550 V3 Non-Modular)



Top side




Power specifications label

Cybenetics □□□□□□□□□□□□□□□□□□ ETA□□□□ LAMBDA□□□□ SAFE□□□□□□□□□□□□□□□□ DELTA□□□□□□ PHI□□□□□□□□

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