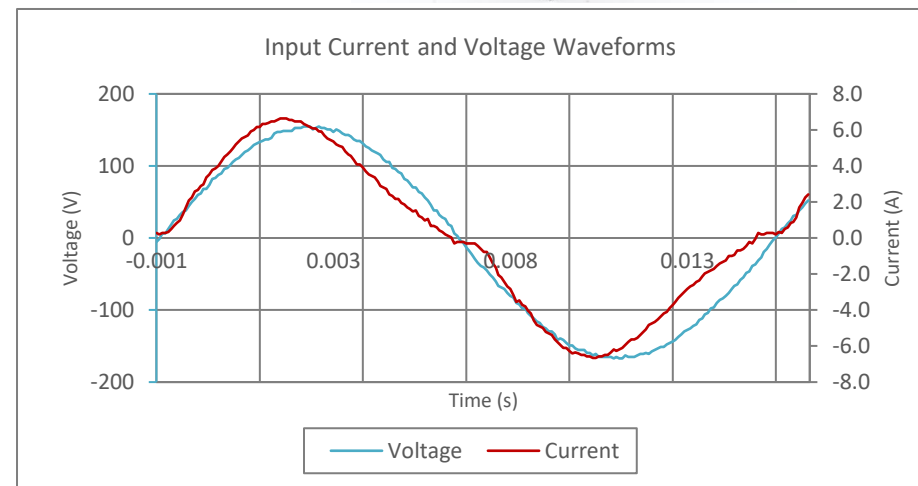


80 PLUS Verification and Testing Report

| | |
|---------------------------------------|---------------|
| TYPICAL EFFICIENCY (50% Load): | 91.22% |
| AVERAGE EFFICIENCY : | 90.06% |
| 80 PLUS COMPLIANT: | YES |



| | |
|----------------------|------------------------------------|
| ID Number | 5832.7 |
| Manufacturer | Micro-Star International Co., Ltd. |
| Model Number | MAG A850GL PCIE5 |
| Serial Number | N/A |
| Year | 2019 |
| Type | ATX12V |
| Test Date | 12/20/19 |

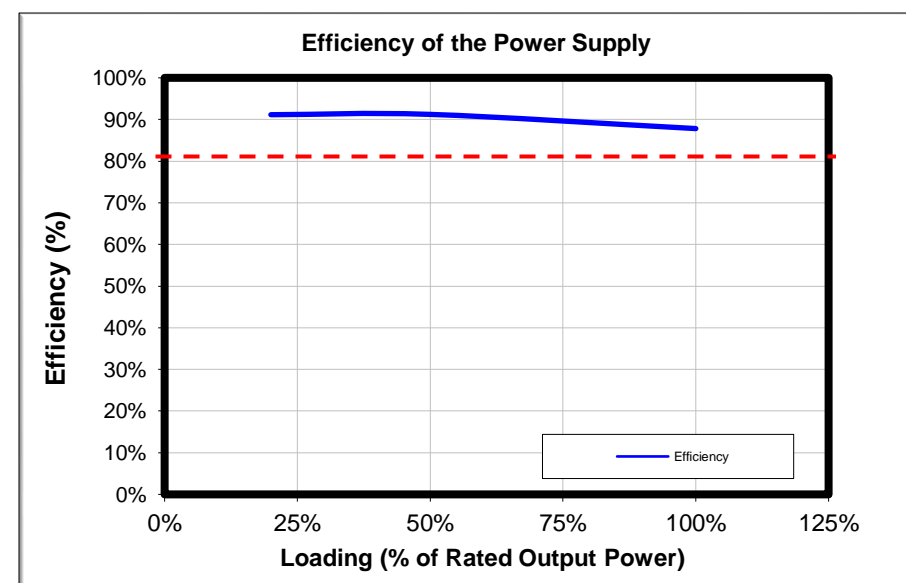
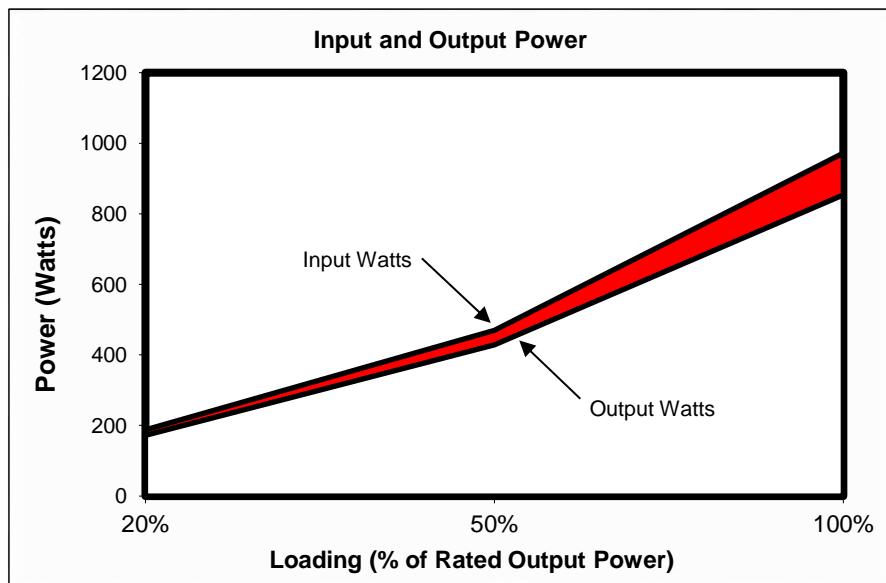


| Rated Specifications | Value | Units |
|---------------------------|------------|--------------|
| Input Voltage | 100-240 | Volts |
| Input Current | 12 | Amps |
| Input Frequency | 47-63 | Hz |
| Rated Output Power | 850 | Watts |

Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.

Input AC Current Waveform (ITHD = 15.33%, 50% Load)

| I _{RMS} | PF | I _{THD} | Load | Input Watts | DC Terminal Voltage (V)/ DC Load Current (A) | | | | | Output Watts | Efficiency |
|------------------|------|------------------|------|-------------|--|------------|-----------|------------|-----------|--------------|------------|
| | | | | | 12V (cumulative of 12V1, 12V2, etc.) | -12V | 3.3V | 5V | 5Vsb | | |
| 0.88 | 0.96 | 19.75% | 10% | 97.41 | 12.06/6.18 | 12.17/0.03 | 3.34/1.16 | 5.02/1.16 | 5.07/0.22 | 85.65 | 87.93% |
| 1.68 | 0.98 | 16.17% | 20% | 188.46 | 12.06/12.4 | 11.96/0.05 | 3.34/2.32 | 5.02/2.31 | 5.06/0.44 | 171.77 | 91.15% |
| 4.18 | 0.98 | 15.33% | 50% | 469.50 | 12.06/30.96 | 11.89/0.13 | 3.34/5.78 | 5.02/5.74 | 5.01/1.09 | 428.29 | 91.22% |
| 8.57 | 0.99 | 11.47% | 100% | 972.00 | 12.05/61.72 | 12.29/0.26 | 3.34/11.6 | 5.01/11.48 | 4.94/2.19 | 853.56 | 87.81% |



These tests were conducted by a third party independent testing firm on behalf of the 80 PLUS Program. 80 PLUS is a certification program to promote highly-efficient power supplies (greater than 80% efficiency in the active mode) in technology applications. <http://www.80plus.org/>