

## 80 PLUS Verification and Testing Report

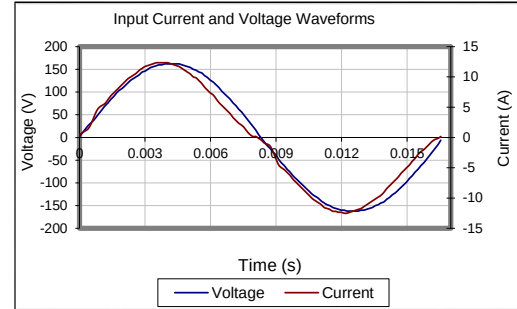
|                                       |               |
|---------------------------------------|---------------|
| <b>TYPICAL EFFICIENCY (50% Load):</b> | <b>90.63%</b> |
| <b>AVERAGE EFFICIENCY :</b>           | <b>89.25%</b> |
| <b>80 PLUS COMPLIANT:</b>             | <b>YES</b>    |



|                      |                            |
|----------------------|----------------------------|
| <b>ID #</b>          | 1495.3                     |
| <b>Manufacturer</b>  | SHARKOON Technologies GmbH |
| <b>Model Number</b>  | SilentStorm Cool Zero 850  |
| <b>Serial Number</b> | N/A                        |
| <b>Year</b>          | 2009                       |
| <b>Type</b>          | ATX12V                     |
| <b>Test Date</b>     | 6/16/2009                  |

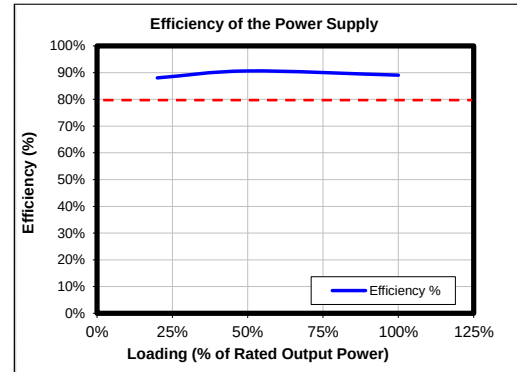
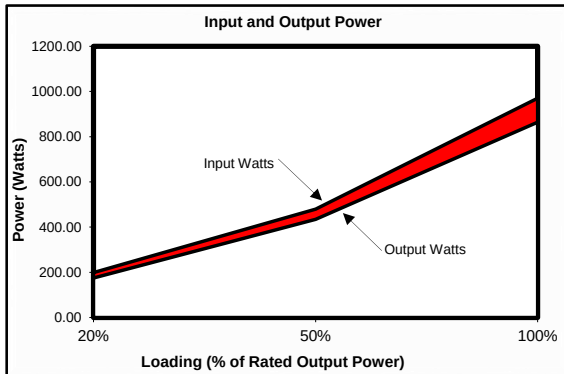
| Rated Specifications      | Value      | Units        |
|---------------------------|------------|--------------|
| Input Voltage             | 100-240    | Volts        |
| Input Current             | 11         | Amps         |
| Input Frequency           | 50-60      | Hz           |
| <b>Rated Output Power</b> | <b>850</b> | <b>Watts</b> |

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



Input AC Current Waveform (ITHD = 12.96%, 50% Load)

| I <sub>RMS</sub><br>A | PF   | I <sub>THD</sub> (%) | Load<br>(%) | Fraction<br>of Load | Input<br>Watts | DC Terminal Voltage (V)/ DC Load Current (A) |  |          |         |         | Output<br>Watts | Efficiency<br>% |        |
|-----------------------|------|----------------------|-------------|---------------------|----------------|----------------------------------------------|--|----------|---------|---------|-----------------|-----------------|--------|
|                       |      |                      |             |                     |                | 12V (cumulative of 12V1, 12V2, etc.)         |  | -12V     | 3.3V    | 5V*     |                 |                 | 5VSB   |
| 1.85                  | 0.93 | 24.15%               | 20%         | Light               | 198.37         | 12.3/11.8                                    |  | 11.8/0.1 | 3.3/3   | 5.2/3   | 5.2/0.5         | 174.65          | 88.04% |
| 4.27                  | 0.98 | 12.96%               | 50%         | Typical             | 479.60         | 12.2/29.6                                    |  | 11.8/0.2 | 3.3/7.5 | 5.2/7.5 | 5.2/1.3         | 434.68          | 90.63% |
| 8.51                  | 0.99 | 7.78%                | 100%        | Full                | 970.30         | 12.2/59.1                                    |  | 11.9/0.4 | 3.3/15  | 5.2/15  | 5.1/2.5         | 864.14          | 89.06% |



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/>

