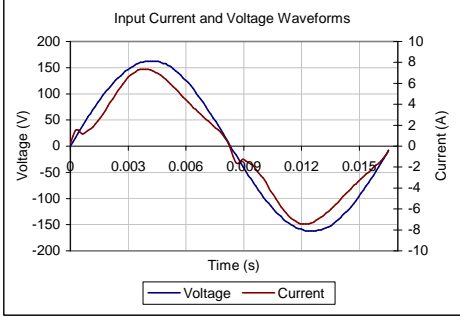


80 PLUS Verification and Testing Report

| | |
|--------------------------------|--------|
| TYPICAL EFFICIENCY (50% Load): | 83.45% |
| AVERAGE EFFICIENCY : | 81.77% |
| 80 PLUS COMPLIANT: | YES |



| | |
|---------------|---------------------|
| Ecos ID # | 1426 |
| Manufacturer | FSP TECHNOLOGY INC. |
| Model Number | FSP450-80EVMR |
| Serial Number | S8520100008 |
| Year | 2009 |
| Type | CUSTOM |
| Test Date | 6/9/2009 |

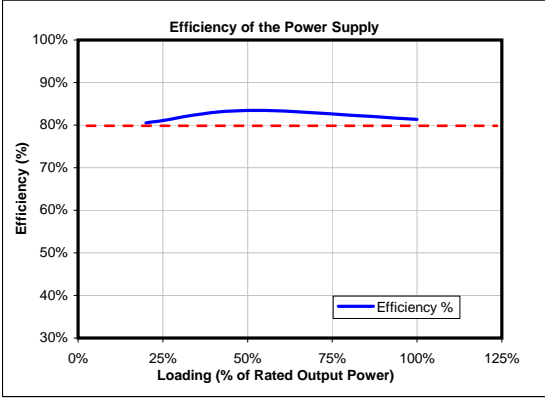
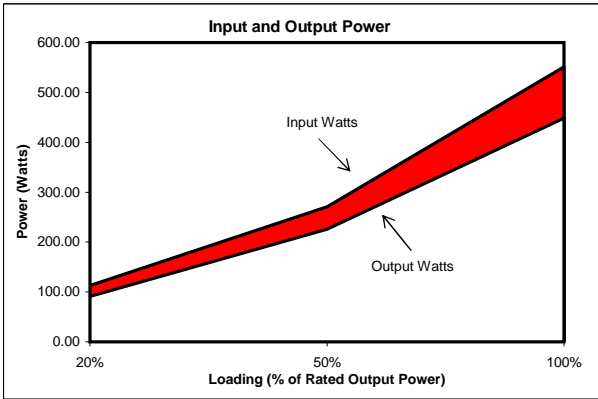


Input AC Current Waveform (ITHD = 16.9%, 50% Load)

| Rated Specifications | Value | Units |
|---------------------------|------------|--------------|
| Input Voltage | 100-240 | Volts |
| Input Current | 8-4 | Amps |
| Input Frequency | 47-63 | Hz |
| Rated Output Power | 450 | Watts |

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

| I _{RMS} A | PF | I _{THD} (%) | Load (%) | Fraction of 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 | | |
| 1.01 | 0.9697 | 22.19% | 20% | Light | 113.04 | 12.1/5.3 | 12.1/0.1 | 3.3/2.8 | 5.1/2.7 | 5.1/0.3 | 90.99 | 80.49% |
| 2.39 | 0.9838 | 16.90% | 50% | Typical | 271.00 | 12/13.4 | 12/0.3 | 3.3/6.9 | 5.1/6.9 | 5/0.8 | 226.14 | 83.45% |
| 4.83 | 0.9921 | 12.25% | 100% | Full | 551.10 | 11.9/26.8 | 12/0.6 | 3.2/13.7 | 5/13.7 | 5/1.5 | 448.37 | 81.36% |



These tests were conducted as a part of the 80 PLUS program. 80 PLUS is a computer buy-down program to promote high-efficiency power supplies (greater than 80% efficiency in the active mode) in desktop computers and desktop-derived servers.



Tested by Electric Power Research Institute, Knoxville, TN.