

80 PLUS Verification and Testing Report

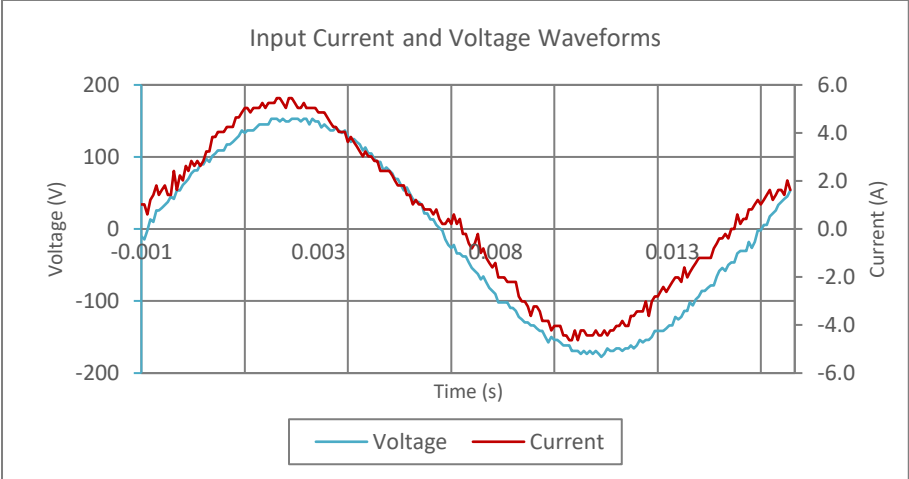
|                                |        |
|--------------------------------|--------|
| TYPICAL EFFICIENCY (50% Load): | 90.59% |
| AVERAGE EFFICIENCY :           | 89.88% |
| 80 PLUS COMPLIANT:             | YES    |



|               |          |
|---------------|----------|
| ID Number     | 5338.2   |
| Manufacturer  | NZXT     |
| Model Number  | NP-S650M |
| Serial Number | N/A      |
| Year          | 2018     |
| Type          | SFX      |
| Test Date     | 7/26/18  |

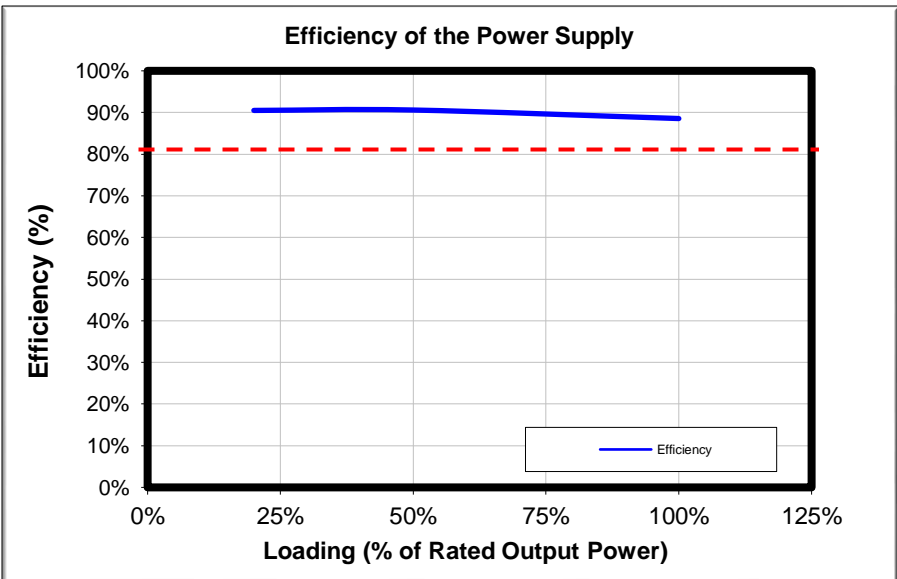
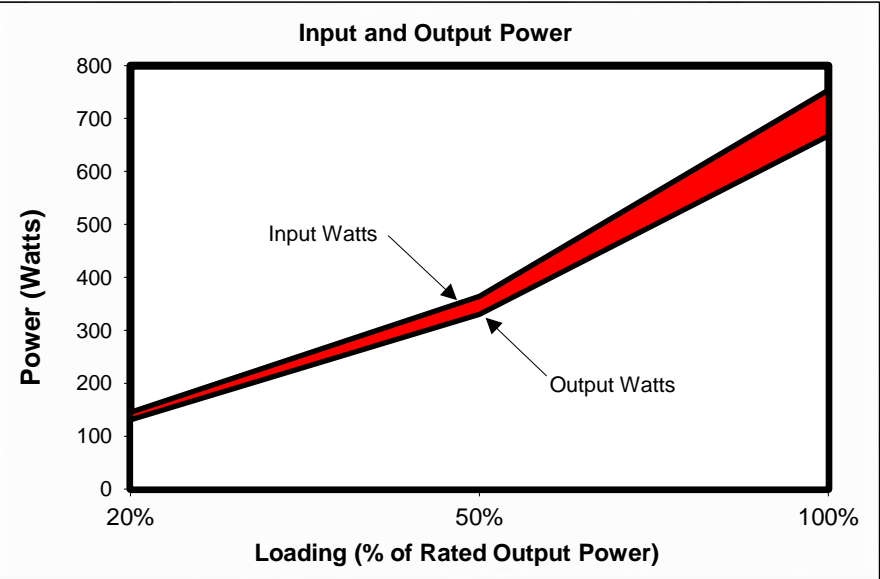
| Rated Specifications | Value   | Units |
|----------------------|---------|-------|
| Input Voltage        | 100-240 | Volts |
| Input Current        | 8-4     | Amps  |
| Input Frequency      | 50-60   | Hz    |
| Rated Output Power   | 650     | Watts |

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



Input AC Current Waveform (ITHD = 10.49%, 50% Load)

| I <sub>RMS</sub> | PF   | I <sub>THD</sub> | 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      |              |            |
| 0.81             | 0.81 | 10.97%           | 10%  | 75.38       | 11.99/4.59                                   | 11.96/0.03 | 3.32/1.02  | 5.03/1.02  | 5.12/0.25 | 65.19        | 86.48%     |
| 1.37             | 0.92 | 10.46%           | 20%  | 144.56      | 12.03/9.19                                   | 11.99/0.05 | 3.32/2.04  | 5.04/2.03  | 5.11/0.51 | 130.82       | 90.50%     |
| 3.25             | 0.97 | 10.49%           | 50%  | 364.00      | 12.13/23.01                                  | 12.19/0.13 | 3.34/5.11  | 5.03/5.07  | 5.08/1.27 | 329.74       | 90.59%     |
| 6.63             | 0.99 | 10.63%           | 100% | 753.70      | 12.3/45.97                                   | 12.67/0.25 | 3.37/10.23 | 5.04/10.12 | 5.04/2.54 | 667.39       | 88.55%     |



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/>

