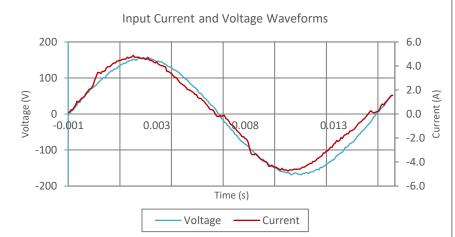
## **80 PLUS Verification and Testing Report**

| TYPICAL EFFICIENCY (50% Load): | 91.48% |  |
|--------------------------------|--------|--|
| AVERAGE EFFICIENCY :           | 90.59% |  |
| 80 PLUS COMPLIANT:             | YES    |  |



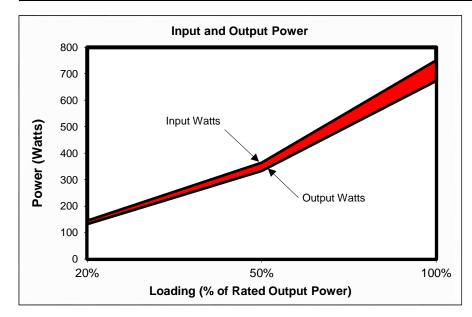
| ID Number     | 5616     |
|---------------|----------|
| Manufacturer  | PCCOOLER |
| Model Number  | GI-P650  |
| Serial Number | N/A      |
| Year          | 2019     |
| Туре          | ATX12V   |
| Test Date     | 7/30/19  |

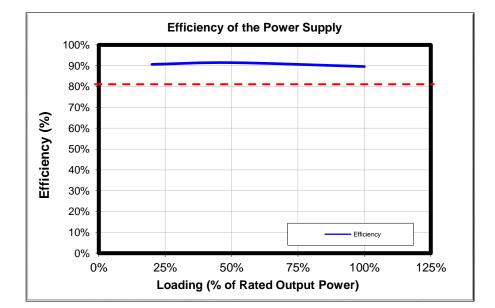
| Rated Specifications                                   | Value                      | Units |  |
|--|----------------------------|-------|--|
| Input Voltage  | 100-240                    | Volts |  |
| Input Current  | 10-5                       | Amps  |  |
| Input Frequency  | 50-60                      | Hz    |  |
| Rated Output Power                                     | 650                        | Watts |  |
| Note: All measurements were taken with input voltage a | at 115 V nominal at 60 Hz. |       |  |



Input AC Current Waveform (ITHD = 9.05%, 50% Load)

|      | PF   |        |      | Input  | DC Terminal Voltage (V)/ DC Load Current (A) |            |           |           |           | Output | Efficiency |
|------|------|--------|------|--------|--|------------|-----------|-----------|-----------|--------|------------|
| RMS  | FF   | THD    | Load | Watts  | 12V (cumulative of 12V1, 12V2, etc.)         | -12V       | 3.3V      | 5V        | 5Vsb      | Watts  | Efficiency |
| 0.69 | 0.96 | 12.78% | 10%  | 76.00  | 12.1/4.6                                     | 12.21/0.03 | 3.35/1.02 | 5.06/1.02 | 5.08/0.25 | 65.87  | 86.67%     |
| 1.29 | 0.98 | 10.29% | 20%  | 145.40 | 12.14/9.18                                   | 12.21/0.05 | 3.36/2.04 | 5.07/2.03 | 5.07/0.51 | 131.82 | 90.66%     |
| 3.20 | 0.99 | 9.05%  | 50%  | 364.00 | 12.25/23.02                                  | 12.21/0.13 | 3.38/5.1  | 5.07/5.06 | 5.04/1.27 | 333.00 | 91.48%     |
| 6.58 | 0.99 | 6.27%  | 100% | 750.80 | 12.42/45.97                                  | 12.23/0.25 | 3.4/10.21 | 5.07/10.1 | 4.98/2.54 | 672.90 | 89.62%     |







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/* 

