80 PLUS Verification and Testing Report

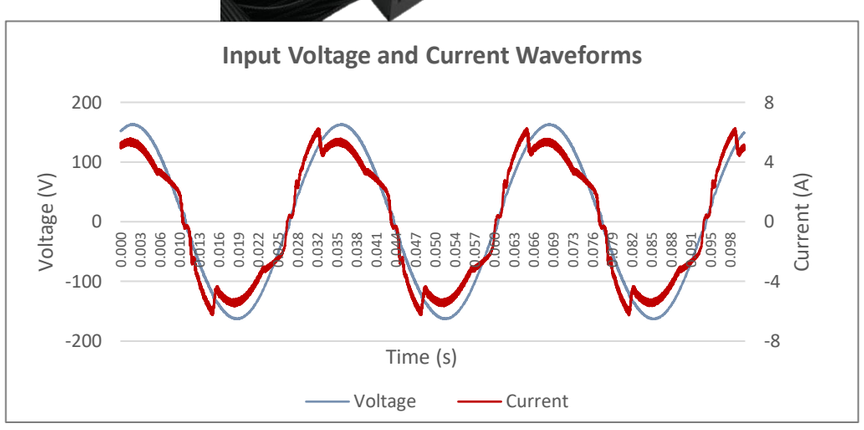
TYPICAL EFFICIENCY (50% Load):	**91.68%**
AVERAGE EFFICIENCY :	**85.13%**
AVERAGE STANDBY EFFICIENCY :	**80.17%**
80 PLUS COMPLIANT:	**Gold**



ID Number	8173
Manufacturer	Hanmi Micronics Inc.
Model Number	MCLEV850GDF12H
Sample 1 S/N:	CG14OMCY4500BA000001
Sample 2 S/N:	CG14OMCY4500BA000001
Type	ATX12V, ATX 3.1, EPS12V
Test Date	4/7/26

Rated	Value	Units
Input Voltage	100-240	**Volts**
Input Current	10	**Amps**
Input Frequency	50-60	**Hz**
Rated Output Power	850	**Watts**

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



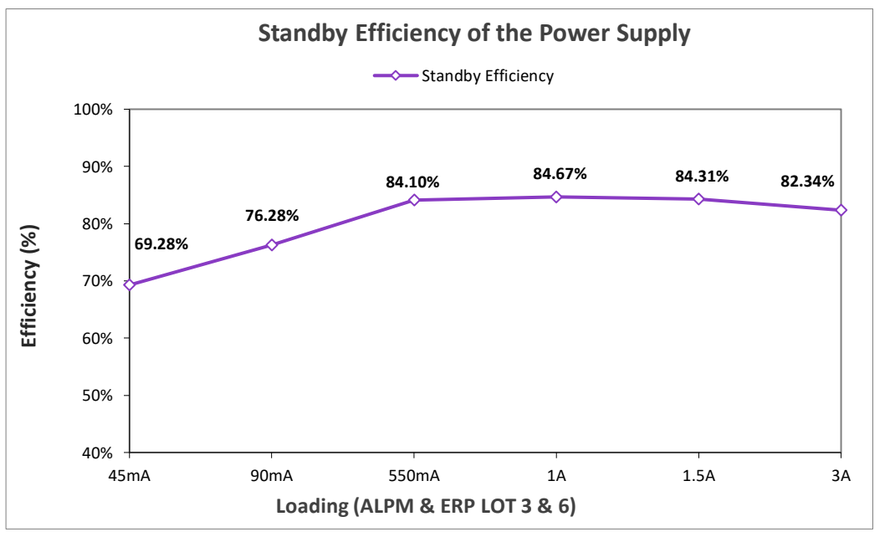
Input AC Current Waveform (ITHD = 18.61%, 50% Load)

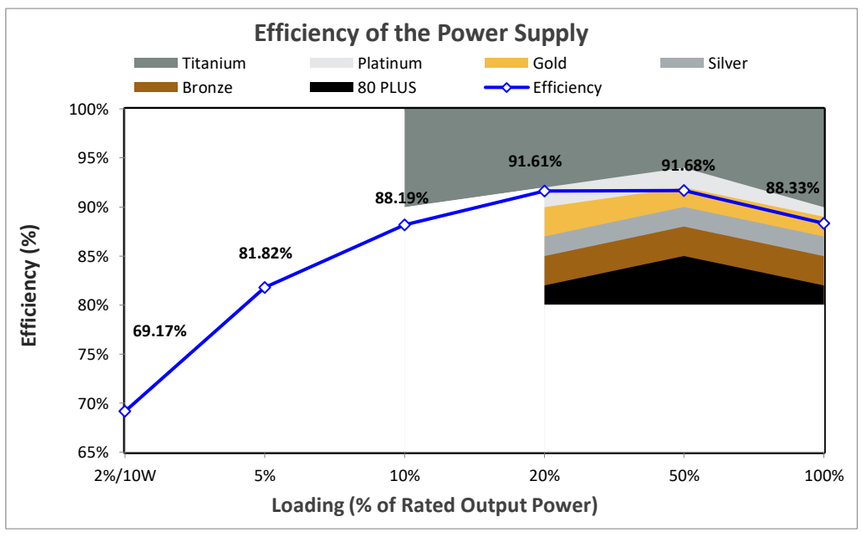
$I_{RMS\ (A)}$	PF	$I_{THD\ (\%)}$	Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)					Output Watts	Efficiency
					12V (cumulative of 12V1, 12V2, etc.)	-12V	3.3V	5V	5VSB		
0.261	0.6823	8.11	0%	**20.50**	**No-Load**						
0.290	**0.7454**	8.29	2%/10W	**24.87**	12.146/1.245	11.319/0.005	3.355/0.211	5.030/0.211	5.115/0.053	**17.20**	**69.17%**
0.497	**0.9195**	6.95	5%	**52.56**	12.146/3.109	11.551/0.013	3.353/0.529	5.029/0.529	5.112/0.132	**43.01**	**81.82%**
0.875	**0.9686**	6.96	10%	**97.51**	12.147/6.218	11.519/0.026	3.351/1.055	5.028/1.056	5.107/0.263	**86.00**	**88.19%**
1.651	**0.9889**	5.87	20%	**187.73**	12.147/12.433	11.484/0.053	3.348/2.113	5.024/2.113	5.096/0.527	**171.98**	**91.61%**
4.173	**0.9763**	18.61	50%	**468.83**	12.146/31.081	11.488/0.132	3.337/5.285	5.015/5.286	5.063/1.317	**429.81**	**91.68%**
8.509	**0.9932**	10.19	100%	**972.26**	12.145/62.150	11.552/0.263	3.316/10.573	4.994/10.574	4.997/2.633	**858.77**	**88.33%**

Note: Efficiency data was obtained from Sample 1 (Serial Number: CG14OMCY4500BA000001)

$I_{RMS\ (A)}$	PF	$I_{THD\ (\%)}$	Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)	Output Watts	Standby Efficiency
					5VSB		
0.163	0.0034	2.79	0mA	**0.06**	**Vampire Load**		
0.163	**0.0176**	5.95	45mA	**0.33**	5.103/0.045	**0.23**	**69.28%**
0.164	**0.0318**	9.36	90mA	**0.60**	5.103/0.090	**0.46**	**76.28%**
0.178	**0.1628**	35.75	550mA	**3.33**	5.096/0.550	**2.80**	**84.10%**
0.201	**0.2592**	51.98	1A	**6.01**	5.090/1.000	**5.09**	**84.67%**
0.234	**0.3361**	63.19	1.5A	**9.04**	5.080/1.500	**7.62**	**84.31%**
0.356	**0.4501**	77.28	3A	**18.43**	5.058/3.001	**15.18**	**82.34%**

Note: Standby efficiency data was obtained from Sample 2 (Serial Number: CG14OMCY4500BA000001)





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.
https://www.clearesult.com/80plus/ [clearesult.com]