80 PLUS Verification and Testing Report

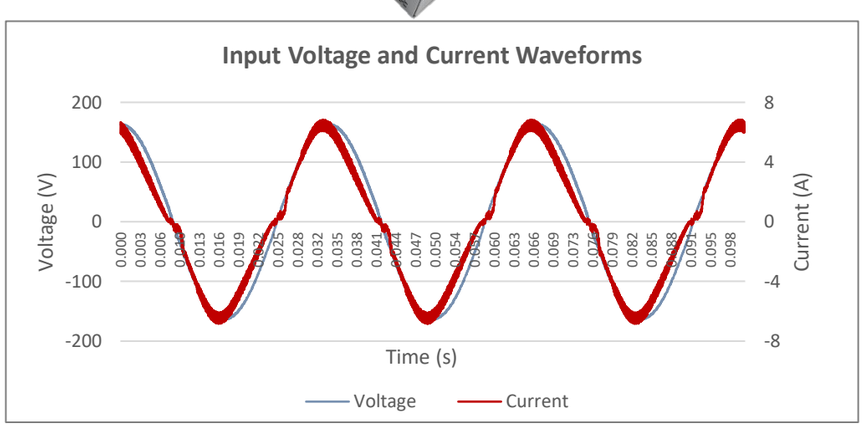
TYPICAL EFFICIENCY (50% Load):	**91.53%**
AVERAGE EFFICIENCY :	**81.50%**
AVERAGE STANDBY EFFICIENCY :	**76.81%**
80 PLUS COMPLIANT:	**Gold**



ID Number	8136
Manufacturer	Frontier
Model Number	AP-850G
Sample 1 S/N:	N/A
Sample 2 S/N:	N/A
Type	ATX12V
Test Date	3/16/26

Rated	**Value**	**Units**
Input Voltage	115-240	**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.



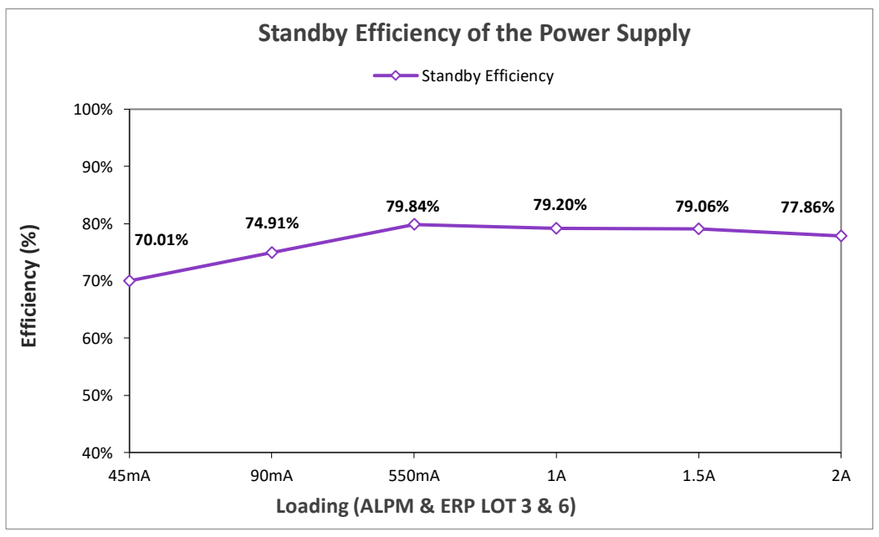
Input AC Current Waveform (ITHD = 11.84%, 50% Load)

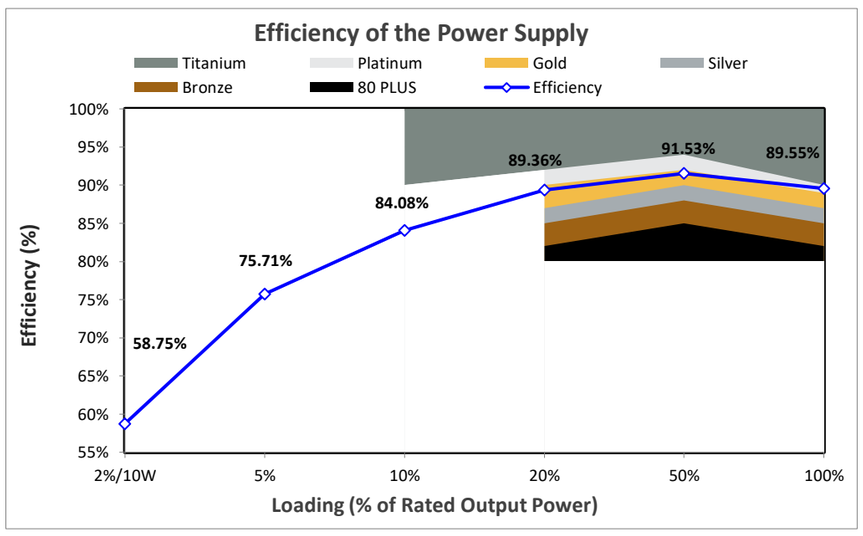
$I_{RMS\ (A)}$	PF	$I_{THD\ (\%)}$	Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)					Output Watts	Efficiency
					12V (cumulative of 12V1, 12V2, etc.)	-12V	3.3V	5V	5VSB		
0.160	0.6113	38.81	0%	**11.28**	**No-Load**						
0.304	**0.8461**	26.87	2%/10W	**29.57**	12.262/1.258	12.219/0.006	3.364/0.199	5.086/0.199	5.131/0.040	**17.37**	**58.75%**
0.533	**0.9368**	16.09	5%	**57.40**	12.273/3.142	12.173/0.015	3.364/0.498	5.087/0.498	5.128/0.100	**43.45**	**75.71%**
0.929	**0.9674**	12.26	10%	**103.35**	12.271/6.283	12.167/0.030	3.364/0.997	5.087/0.997	5.124/0.199	**86.89**	**84.08%**
1.721	**0.9818**	11.16	20%	**194.38**	12.267/12.563	12.114/0.060	3.363/1.991	5.088/1.992	5.116/0.399	**173.70**	**89.36%**
4.184	**0.9855**	11.84	50%	**474.04**	12.257/31.406	12.096/0.150	3.361/4.982	5.088/4.983	5.074/0.997	**433.90**	**91.53%**
8.474	**0.9928**	8.73	100%	**968.13**	12.244/62.809	12.419/0.299	3.357/9.967	5.091/9.968	5.033/1.994	**866.94**	**89.55%**

Note: Efficiency data was obtained from Sample 1 (Serial Number: N/A)

$I_{RMS\ (A)}$	PF	$I_{THD\ (\%)}$	Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)	Output Watts	Standby Efficiency
					5VSB		
0.046	0.0079	9.36	0mA	**0.04**	**Vampire Load**		
0.058	**0.0492**	23.55	45mA	**0.33**	5.131/0.045	**0.23**	**70.01%**
0.081	**0.0661**	35.18	90mA	**0.62**	5.129/0.090	**0.46**	**74.91%**
0.138	**0.2222**	82.96	550mA	**3.52**	5.104/0.550	**2.81**	**79.84%**
0.206	**0.2710**	88.21	1A	**6.41**	5.079/1.000	**5.08**	**79.20%**
0.256	**0.3253**	89.46	1.5A	**9.59**	5.053/1.500	**7.58**	**79.06%**
0.304	**0.3691**	89.57	2A	**12.90**	5.022/2.000	**10.04**	**77.86%**

Note: Standby efficiency data was obtained from Sample 2 (Serial Number: N/A)





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.
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