80 PLUS Verification and Testing Report

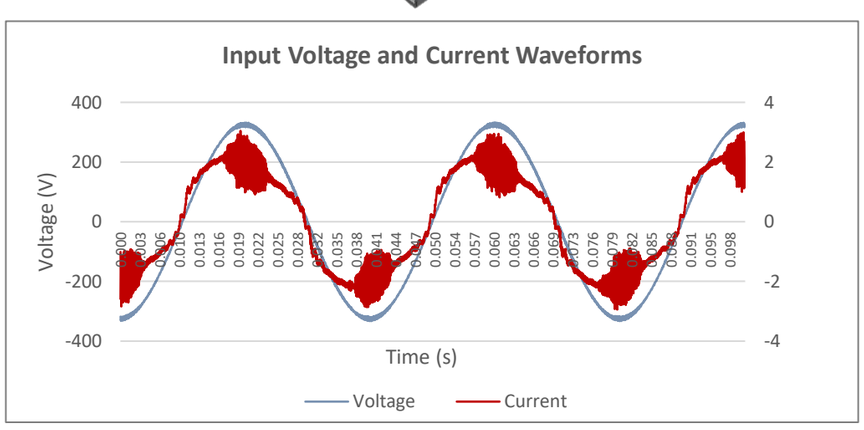
TYPICAL EFFICIENCY (50% Load):	**92.47%**
AVERAGE EFFICIENCY :	**84.88%**
AVERAGE STANDBY EFFICIENCY :	**61.49%**
80 PLUS COMPLIANT:	**Gold**



ID Number	EU-1308
Manufacturer	Great Wall Power Supply Technology Co., Ltd.
Model Number	GW-ATX650BH
Sample 1 S/N:	N/A
Sample 2 S/N:	N/A
Type	ATX 3.1
Test Date	2/6/26

Rated	Value	Units
Input Voltage	200-240	**Volts**
Input Current	8	**Amps**
Input Frequency	60/50	**Hz**
Rated Output Power	650	**Watts**

Note: All measurements were taken with input voltage at 230 V nominal at 50 Hz.



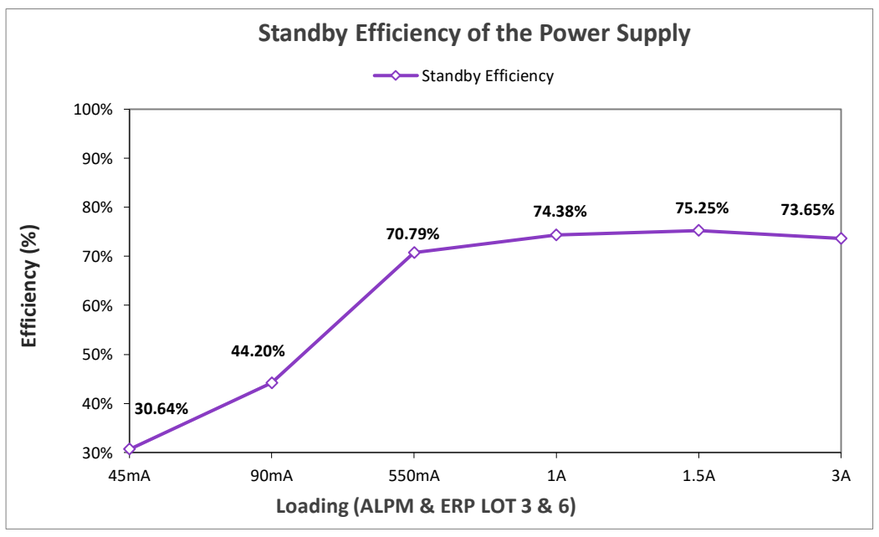
Input AC Current Waveform (ITHD = 15.61%, 50% Load)

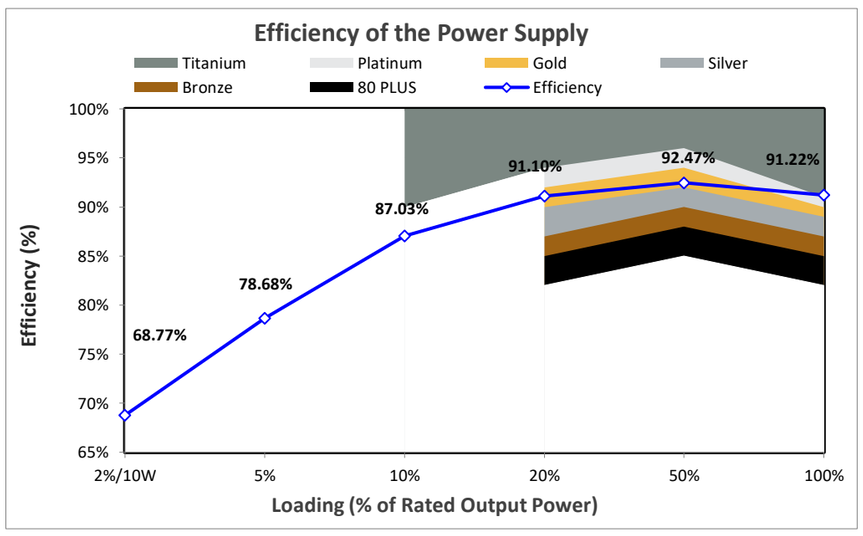
$I_{RMS\ (A)}$	PF	$I_{THD\ (\%)}$	Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)					Output Watts	Efficiency
					12V (cumulative of 12V1, 12V2, etc.)	-12V	3.3V	5V	5VSB		
0.132	0.1160	12.38	0%	**3.54**	**No-Load**						
0.198	**0.4223**	20.84	2%/10W	**19.23**	12.183/0.918	12.058/0.005	3.403/0.204	5.120/0.204	5.119/0.051	**13.22**	**68.77%**
0.288	**0.6349**	14.97	5%	**42.00**	12.179/2.292	12.059/0.013	3.405/0.510	5.121/0.510	5.115/0.127	**33.05**	**78.68%**
0.418	**0.7886**	15.46	10%	**75.91**	12.173/4.583	12.060/0.025	3.406/1.018	5.121/1.018	5.107/0.254	**66.06**	**87.03%**
0.710	**0.8874**	17.39	20%	**144.86**	12.158/9.163	12.059/0.051	3.407/2.038	5.120/2.038	5.093/0.508	**131.96**	**91.10%**
1.608	**0.9613**	15.61	50%	**355.56**	12.116/22.904	12.048/0.127	3.406/5.098	5.106/5.098	5.048/1.270	**328.79**	**92.47%**
3.156	**0.9885**	9.75	100%	**716.63**	12.043/45.803	12.034/0.254	3.406/10.197	5.083/10.198	4.968/2.539	**653.69**	**91.22%**

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		
0.122	0.0148	2.55	0mA	**0.41**	**Vampire Load**		
0.124	**0.0264**	6.64	45mA	**0.75**	5.135/0.045	**0.23**	**30.64%**
0.133	**0.0343**	9.98	90mA	**1.05**	5.133/0.090	**0.46**	**44.20%**
0.157	**0.1102**	34.47	550mA	**3.97**	5.109/0.550	**2.81**	**70.79%**
0.193	**0.1536**	50.49	1A	**6.84**	5.085/1.000	**5.09**	**74.38%**
0.176	**0.2477**	61.94	1.5A	**10.02**	5.028/1.500	**7.54**	**75.25%**
0.234	**0.3650**	77.63	3A	**19.68**	4.830/3.000	**14.49**	**73.65%**

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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