TEST REPORT

Product Name:	CLASS 2 BATTERY CHARGER / POWER SUPPLY
Brand Name:	CZJUTAI
Model Number:	JT-DC120V0500-E
Prepared For:	Changzhou Jutai Electronic Co., Ltd
Address:	219 Huashan Middle Road, Xinbei District, changzhou 213031, Jiangsu, China
Prepared By:	Shenzhen DL Testing Technology Co., Ltd.
Address:	101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China
Date of Receipt:	Feb. 12, 2025
Test Date:	Feb. 12, 2025 – Feb. 18, 2025
Date of Report:	Feb. 18, 2025
Report No.:	DL-250218003R

CEC California Appliance Efficiency Regulations CEC-400-2017-002, item(w) Battery Charger Systems.

Report Reference No......:	DL-250218003R
Tested by (printed name + signature) .....:	Nick
Supervised by (printed name + signature) .....:	Ray Liang
Approved by (printed name + signature) .....:	Jade Yang
Date of issue.....:	Feb. 18, 2025
Testing Laboratory Name .....:	Shenzhen DL Testing Technology Co., Ltd.
Address.....:	101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China
Testing location.....:	Same as above.
Address .....:	Same as above.
Applicant's name.....:	Changzhou Jutai Electronic Co., Ltd
Address.....:	219 Huashan Middle Road, Xinbei District, changzhou 213031, Jiangsu, China
Test specification:	
Standard .....:	☒ CEC-140-2021-002 – California Energy Commission for external power supplies ☒ 10 C.F.R. section 430.23(bb) (Appendix Z to Subpart B of part 430)— Uniform Test Method for Measuring the Energy Consumption of External Power Supplies ☒ US EPA "Test Method for Calculating the Energy Efficiency of Single-Voltage External AC-DC and AC-AC Power Supplies", dated August 11, 2004
Test procedure .....:	CEC
Non-standard test method .....:	N/A
Test item description .....:	CLASS 2 BATTERY CHARGER / POWER SUPPLY
Trade Mark .....:	CZJUTAI
Manufacturer ..... :	Changzhou Jutai Electronic Co., Ltd
Address.....:	219 Huashan Middle Road, Xinbei District, changzhou 213031, Jiangsu, China
Model/Type reference.....:	JT-DC120V0500-E
Ratings.....:	Input: 100-240Vac, 50-60Hz, 0.30A Output: 12Vdc, 0.50A

Particulars: test item vs. test requirements	
Type of plug/inlet ……..……..…:	US Plug
Output Power(Po)……..……:	6W
Output cord length……..……:	183cm
Possible test case verdicts:	
– test case does not apply to the test object ……..:	N/A
– test object does meet the requirement ……..:	P (Pass)
– test object does not meet the requirement ……..:	F (Fail)
(1)Name and address of factory ……...:	Changzhou Jutai Electronic Co., Ltd 219 Huashan Middle Road, Xinbei District, changzhou 213031, Jiangsu, China

General remarks

This report shall not be reproduced except in full without the written approval of the testing laboratory.

The test results presented in this report relate only to the object tested.

"(see appended table)" refers to a table appended to the report.

“(see remark #)” refers to a remark appended to the report.

“(see Annex #) refers to an annex appended to the report.

Throughout this report a comma (point) is used as the decimal separator.

Summary of testing:

The sample(s) tested complies with the requirements of U.S.DOE 10 CFR Part 430.32 (w) External power supplies Final Rule, pubished on Feb. 10, 2016 (Level VI).

Appendix Z to Subpart B of Part 430—Uniform Test Method for Measuring the Energy Consumption of External Power Supplies.

The no-load condition power consumption and the average active efficiency were established by a reliable, accurate and reproducible measurement procedure, which takes into account the generally recognized state of the art.

When determining the test conclusion, the Measurement Uncertainty of test has been considered.

Measurements of power of 0.01W or greater was made with an uncertainty of less than or equal to 2% at the 95% confidence level.

Test specification	
Standard	CEC California Appliance Efficiency Regulations CEC-400-2017-002, item(w) Battery Charger Systems. U.S.DOE 10 CFR Part 430.32 (w) External power supplies Final Rule, pubished on Feb. 10, 2016 (Level VI)
Description	The product meets all conditions of a single-voltage external AC to DC power supply
Ambient Temperature	25°C

Performance Requirements

Mark	Nameplate Output Power (P_{no})[2]	No-Load Mode Power[3]	Nameplate Output Power (P_{no})	Average Efficiency in Active Mode[4]	Power Factor
VI	Single-Voltage				Not Applicable
	0 to ≤ 49 W	AC-DC: ≤ 0.100 AC-AC: ≤ 0.210	0 to ≤ 1 W	Basic Voltage: ≥ 0.5* P_{no} + 0.16 Low Voltage: ≥ 0.517 *P_{no} + 0.087	
			>1 to ≤ 49 W	Basic Voltage: ≥ 0.071* ln(P_{no}) − 0.0014*P_{no} + 0.67 Low Voltage: ≥ 0.0834 * ln(P_{no}) − 0.0014* P_{no} + 0.609	
	49 to ≤ 250 W	≤ 0.210	>49 to ≤ 250 W	Basic Voltage: ≥ 0.880 Low Voltage: ≥ 0.870	
	>250 W	≤ 0.500	>250 W	≥ 0.875	
	Multiple-Voltage				
	Any	≤ 0.300	0 to ≤ 1 W	≥ 0.497*P_{no} + 0.067	
			>1 to ≤ 49 W	≥ 0.075 *ln(P_{no}) + 0.561	
			>49 W	≥ 0.860	
Remark	1. P_{no} is the Nameplate Output Power of the unit under test. 2. A low-voltage model is an EPS with nameplate output voltage of less than 6 volts and nameplate output current greater than or equal to 550milliamperes. 3. A basic-voltage model is an EPS that is not a low-voltage model.				

Equipment list

Measure Machine	Manufacturer	Model	Rating	Calibrate
Digital Power Meter	YOKOGAWA	WT210	600V, 20A	01-Nov.-2024 to 31-Oct.-2025
Electronic Loading	ITECH	IT8511A+	150V,30A,150W	01-Nov.-2024 to 31-Oct.-2025

Sample1(output:12Vdc, 0.5A)

Model No	JT-DC120V0500-E			Test specimen 1	
Test voltage/ Frequency	**115Vac/ 60Hz**				
Test Item	Measure at load condition				
	5 (full load)	4 (3/4 load)	3 (1/2 load)	2 (1/4 load)	1 (no load)
Percent of nameplate current	100%	75%	50%	25%	0%
Output current (A)	0.500	0.375	0.250	0.125	0
Output voltage (V)	14.50	14.56	14.62	14.62	14.81
Output power (W)	7.25	5.46	3.655	1.828	--
a.c. input voltage (V)	115.0	115.0	115.0	115.0	115.0
a.c. input voltage (mA)	82.16	60.97	40.02	20.22	0.51
a.c. input power (W)	9.16	6.89	4.56	2.32	0.05
Total harmonic distortion (THD)	0.7%	0.7%	0.7%	0.7%	0.7%
True power factor	0.9671	0.9781	0.9891	0.9985	0.9987
Power consumed by EUT (W)	1.910	1.430	0.905	0.493	0.05
Efficiency	79.15	79.25	80.15	78.77	--
Average efficiency	**79.33**				
Standard requirements	**78.88**				
Result	**Pass**				
EPS	**VI**				

Sample2(output:12Vdc, 0.5A)

Model No	JT-DC120V0500-E			Test specimen 1	
Test voltage/ Frequency	**115Vac/ 60Hz**				
Test Item	Measure at load condition				
	5 (full load)	4 (3/4 load)	3 (1/2 load)	2 (1/4 load)	1 (no load)
Percent of nameplate current	100%	75%	50%	25%	0%
Output current (A)	0.500	0.375	0.250	0.125	0
Output voltage (V)	14.48	14.55	14.63	14.63	14.78
Output power (W)	7.24	5.456	3.658	1.829	--
a.c. input voltage (V)	115.0	115.0	115.0	115.0	115.0
a.c. input voltage (mA)	82.95	61.32	40.43	20.32	0.52
a.c. input power (W)	9.17	6.85	4.59	2.32	0.06
Total harmonic distortion (THD)	0.7%	0.7%	0.7%	0.7%	0.7%
True power factor	0.9654	0.9767	0.9887	0.9981	0.9997
Power consumed by EUT (W)	1.930	1.394	0.933	0.491	0.06
Efficiency	78.95	79.65	79.68	78.83	--
Average efficiency	**79.28**				
Standard requirements	**78.88**				
Result	**Pass**				
EPS	**VI**				

Sample3(output:12Vdc, 0.5A)

Model No	JT-DC120V0500-E			Test specimen 1	
Test voltage/ Frequency	**115Vac/ 60Hz**				
Test Item	Measure at load condition				
	5 (full load)	4 (3/4 load)	3 (1/2 load)	2 (1/4 load)	1 (no load)
Percent of nameplate current	100%	75%	50%	25%	0%
Output current (A)	0.500	0.375	0.250	0.125	0
Output voltage (V)	14.59	14.65	14.71	14.71	14.82
Output power (W)	7.295	5.494	3.678	1.839	--
a.c. input voltage (V)	115.0	115.0	115.0	115.0	115.0
a.c. input voltage (mA)	82.56	61.09	40.37	20.19	0.51
a.c. input power (W)	9.24	6.91	4.60	2.33	0.06
Total harmonic distortion (THD)	0.7%	0.7%	0.7%	0.7%	0.7%
True power factor	0.9684	0.9791	0.9895	0.9983	0.9992
Power consumed by EUT (W)	1.945	1.416	0.922	0.491	0.06
Efficiency	78.95	79.50	79.95	78.92	--
Average efficiency	**79.33**				
Standard requirements	**78.88**				
Result	**Pass**				
EPS	**VI**				

Attachment No.1:

Photos:

--- END OF REPORT ---