



Report No.:  
报告编号: YW20140401UA501

# 检验报告

## TEST REPORT

NAME OF SAMPLE: Lithium-ion Battery

产品名称: 锂离子电池

CLIENT: HUIZHOU EVE Energy CO., Ltd

委托单位: 惠州亿纬锂能股份有限公司

CLASSIFICATION OF TEST: Commission test

检验类别: 委托检测

广州邦禾检测技术有限公司

Guangzhou MCM Certification and Testing Co., Ltd



Applicant information 申请资料	
Name of samples 样品名称	Lithium-ion Battery 锂离子电池
Type/ Model 型号规格	SP300 3,7V 3760mAh 13,9Wh
Trade mark 商标	—
Commission by 委托单位	HUIZHOU EVE Energy CO., Ltd 惠州亿纬锂能股份有限公司
Commissioner address 委托单位地址	NO.36, HuiFeng 7th Road, Zhongkai Hi-Tech Zone, HuiZhou, Guangdong, China 广东省惠州市仲恺高新区惠风七路 36 号
Manufacturer 制造商	HUIZHOU EVE Energy CO., Ltd 惠州亿纬锂能股份有限公司
Manufacturer address 制造商地址	NO.36, HuiFeng 7th Road, Zhongkai Hi-Tech Zone, HuiZhou, Guangdong, China 广东省惠州市仲恺高新区惠风七路 36 号
Factory 生产厂	HUIZHOU EVE Energy CO., Ltd 惠州亿纬锂能股份有限公司
Factory address 生产厂地址	NO.36, HuiFeng 7th Road, Zhongkai Hi-Tech Zone, HuiZhou, Guangdong, China 广东省惠州市仲恺高新区惠风七路 36 号
Appearance 样品外观颜色	—
Sample status 样品状态	Good 完好
Package of goods 样品外包装	Carton 纸箱
Quantity of sample 样品数量	41pcs
Sample identification 样品标识序号	b1#~b16# ; c1#~c25#
Reference standard 参考标准	MH/T1052-2013 《Tests for lithium batteries transported by air》 MH/T1052-2013 《航空运输锂电池测试规范》
Receiving date 接样日期	2014.03.28
Completing date 测试完成日期	2014.04.10

Test Conclusion 测试结论					
No. 序号	Name of test 测试项目名称	Testing standard 测试标准	Test result 测试结果	Conclusion 本项结论	Remarks 备注
1	Altitude simulation 高度模拟	UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.5,amend1, 38.3. 联合国《关于危险货物运输的建议书试验和标准手册》ST/SG/AC.10/11/ Rev. 5, amend1, 38.3.	See Appendix 1 见附表 1	Passed 合格	/
2	Thermal test 温度试验		See Appendix 2 见附表 2	Passed 合格	/
3	Vibration 振动		See Appendix 3 见附表 3	Passed 合格	/
4	Shock 冲击		See Appendix 4 见附表 4	Passed 合格	/
5	External Short-circuit 外部短路		See Appendix 5 见附表 5	Passed 合格	/
6	Impact 撞击		/	/	N/A 不适用
	Crush 挤压		See Appendix 6 见附表 6	Passed 合格	/
7	Overcharge 过度充电		See Appendix 7 见附表 7	Passed 合格	/
8	Forced discharge 强制放电		See Appendix 8 见附表 8	Passed 合格	/
9	Drop test 跌落测试	联合国《关于危险货物运输的建议书 规章范本》(Rev.17) 特殊规定 188 条款 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Model Regulations(17 <sup>th</sup> ) special provisions 188	See Appendix 9 见附表 9	Passed 合格	/
<p><b>Conclusion/结论:</b>                      The Lithium-ion Batteries submitted by HUIZHOU EVE Energy CO., Ltd had passed the test items of UNITED NATIONS "Recommendations on the Transport of Dangerous Goods, Manual of Test and Criteria ST/SG/AC, 10/11/Rev.5 amend1, 38.3. The package was capable of withstanding 1,2m drop test of UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Model Regulations (17<sup>th</sup>) special provisions 188.                      由惠州亿纬锂能股份有限公司送检的锂离子电池符合联合国《关于危险品货物运输的建议书 试验和标准手册》ST/SG/AC, 10/11/Rev.5 amend1, 38.3 的要求。包装符合联合国《关于危险货物运输的建议书 规章范本》(Rev. 17) 特殊规定 188 条款 1, 2 米跌落测试要求。</p> <p style="text-align: center;">Seal/公章: Date of issue: /日期: Apr. 10, 2014</p>					

Approved :Xu Hongbin

Reviewed : Fu Ziwen

Tested : Fu Xianjin

批准: Xu Hongbin

审核: Fu Ziwen

测试: Fu Xianjin

# Photos of samples and markings

## 样品及标识照片

**Battery (SP300 3,7V 3760mAh 13,9Wh)**





Packing photos and markings  
包装照片及标识

drop test (before test)



after test



## Appendix 1

## 附表 1

Test Items 测试项目	Altitude simulation 高度模拟						
1,1	<b>Test procedure</b> 测试步骤						
	Test cells and batteries shall be stored at a pressure of 11,6kPa or less for at least six hour at ambient temperature (20±5°C). 试验电池芯和电池在环境温度(20±5°C)下, 储存在小于等于 11,6kPa 的压力下至少六小时。						
1,2	<b>Sample status</b> 样品状态						
	b1#~b4#, at first cycle in fully charged states. b1#~b4#, 在第一个循环完全充电的电池。						
	b5#~b8#, after 50 cycles ending in fully charged states. b5#~b8#, 在第五十个循环完全充电的电池。						
1,3	<b>Result</b> 测试结果						
Sample No. 样品编号	Before 测试前		After 测试后		Mass loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test result 测试结果
	Mass 样品质量 (g)	Voltage 开路电压 (V)	Mass 样品质量 (g)	Voltage 开路电压 (V)			
b1#	98,736	4,19	98,711	4,19	0,025	100,00	○
b2#	99,396	4,19	99,373	4,19	0,023	100,00	○
b3#	99,243	4,19	99,221	4,19	0,022	100,00	○
b4#	99,747	4,20	99,723	4,20	0,024	100,00	○
b5#	99,283	4,19	99,261	4,19	0,022	100,00	○
b6#	99,365	4,19	99,341	4,19	0,024	100,00	○
b7#	99,054	4,20	99,031	4,19	0,023	99,76	○
b8#	99,962	4,19	98,940	4,19	0,022	100,00	○
Note: L-Leakage, V-Venting, D -Disassembly, R -Rupture, F-Fire, O-No leakage, no venting, no disassembly, no rupture, no fire. 注: L- 泄漏; V- 排气; D- 解体; R- 破裂; F- 起火; O- 无泄漏、无排气、无解体、无破裂、无起火。							

## Appendix 2

### 附表 2

Test Items 测试项目	Thermal test 温度测试						
1,1	<b>Test procedure</b> 测试步骤						
	<p>Test cells and batteries are to be stored for at least six hours at a test temperature equal to <math>72\pm 2^{\circ}\text{C}</math>, followed by storage for at least six hours at a test temperature equal to <math>-40\pm 2^{\circ}\text{C}</math>, The maximum time interval between test temperature extremes in 30 minutes, This procedure is to be repeated until 10 total cycles are complete, after which all test cells and batteries are to be stored for 24 hours at ambient temperature (<math>20\pm 5^{\circ}\text{C}</math>).</p> <p>将电芯和电池在温度为 <math>72\pm 2^{\circ}\text{C}</math> 的条件下贮存不少于 6 个小时, 然后, 在温度 <math>-40\pm 2^{\circ}\text{C}</math> 条件下贮存不少于 6 个小时, 两个温度间的间隔最长为 30min, 重复操作上述步骤直到 10 次, 然后, 将其在环境温度为 <math>20\pm 5^{\circ}\text{C}</math> 的条件下放置 24 个小时。</p>						
1,2	<b>Sample status</b> 样品状态						
	<p>b1#~b4#, at first cycle in fully charged states。 b1#~b4#在第一个循环完全充电的电池。</p> <p>b5#~b8#, after 50 cycles ending in fully charged states。 b5#~b8#, 在第五十个循环完全充电的电池。</p>						
1,3	<b>Result</b> 测试结果						
Sample No. 样品编号	Before 测试前		After 测试后		Mass loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test result 测试结果
	Mass 样品质量 (g)	Voltage 开路电压 (V)	Mass 样品质量 (g)	Voltage 开路电压 (V)			
b1#	98,711	4,19	98,709	4,14	0,002	98,81	○
b2#	99,373	4,19	99,371	4,13	0,002	98,57	○
b3#	99,221	4,19	99,218	4,14	0,003	98,81	○
b4#	99,723	4,20	99,720	4,14	0,003	98,57	○
b5#	99,261	4,19	99,259	4,14	0,002	98,81	○
b6#	99,341	4,19	99,338	4,14	0,003	98,81	○
b7#	99,031	4,19	99,027	4,14	0,004	98,81	○
b8#	98,940	4,19	98,937	4,14	0,003	98,81	○
<p>Note: L-Leakage, V-Venting, D -Disassembly, R -Rupture, F-Fire, O-No leakage, no venting, no disassembly, no rupture, no fire.</p> <p>注: L- 泄漏; V- 排气; D- 解体; R- 破裂; F- 起火; O- 无泄漏、无排气、无解体、无破裂、无起火。</p>							

## Appendix 3

## 附表 3

Test Items 测试项目	Vibration 振动						
1,1	<b>Test procedure</b> 测试步骤						
	Cells and batteries are firmly secured to the platform of the vibration machine without distorting the cells in such a manner as to faithfully transmit the vibration, The vibration shall be a sinusoidal wave form with a logarithmic sweep between 7 Hz and 200 Hz and back to 7 Hz traversed in 15 minutes, This cycle shall be repeated 12 times for a total of 3 hours for each of three mutually perpendicular mounting position of the cell. 将电芯和电池牢固地安装在振动台的台面上，然后开始振动。振动以正弦波形式，以 7Hz 增加至 200Hz，然后再减少回到 7Hz 为一个循环，一个循环持续 15 分钟的对数扫频。每个电芯和电池从三个互相垂直的方向上循环 12 次，3 个小时。						
1,2	<b>Sample status</b> 样品状态						
	b1#~b4#, at first cycle in fully charged states. b1#~b4#, 在第一个循环完全充电的电池。						
	b5#~b8#, after 50 cycles ending in fully charged states. b5#~b8#, 在第五十个循环完全充电的电池。						
1,3	<b>Result</b> 测试结果						
Sample No. 样品编号	Before 测试前		After 测试后		Mass loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test result 测试结果
	Mass 样品质量 (g)	Voltage 开路电压 (V)	Mass 样品质量 (g)	Voltage 开路电压 (V)			
b1#	98,709	4,14	98,710	4,14	0,000	100,00	○
b2#	99,371	4,13	99,371	4,13	0,000	100,00	○
b3#	99,218	4,14	99,219	4,14	0,000	100,00	○
b4#	99,720	4,14	99,719	4,14	0,001	100,00	○
b5#	99,259	4,14	99,259	4,14	0,000	100,00	○
b6#	99,338	4,14	99,338	4,14	0,000	100,00	○
b7#	99,027	4,14	99,026	4,14	0,001	100,00	○
b8#	98,937	4,14	98,937	4,14	0,000	100,00	○
Note: L-Leakage, V-Venting, D -Disassembly, R -Rupture, F-Fire, O-No leakage, no venting, no disassembly, no rupture, no fire. 注: L- 泄漏; V- 排气; D- 解体; R- 破裂; F- 起火; O- 无泄漏、无排气、无解体、无破裂、无起火。							



## Appendix 4

### 附表 4

Test Items 测试项目	Shock 冲击						
1,1	<b>Test procedure</b> 测试步骤						
	<p>Test cells and batteries shall be secured to the testing machine by means of a rigid mount which will support all mounting surfaces of each battery, Each cell or battery shall be subjected to a half-sine shock of peak acceleration of 150gn and pulse duration of 6 milliseconds, Each cell or battery shall be subjected to three shocks in the positive direction followed by three shocks in the negative direction of three mutually perpendicular mounting positions of the cell or battery for a total of 18 shocks.</p> <p>以稳固的托架固定住每个电芯和电池样品的全部配件表面。对每个电芯或电池以峰值为 150gn 的半正弦的加速度撞击，脉冲持续 6 毫秒。按三个互相垂直轴向分别对其正负极各碰撞三次，每个电芯或电池碰撞总次数为 18 次。</p>						
1,2	<b>Sample status</b> 样品状态						
	b1#~b4#, at first cycle in fully charged states. b1#~b4#在第一个循环完全充电的电池。						
	b5#~b8#, after 50 cycles ending in fully charged states. b5#~b8#，在第五十个循环完全充电的电池。						
1,3	<b>Result</b> 测试结果						
Sample No. 样品编号	Before 测试前		After 测试后		Mass loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test result 测试结果
	Mass 样品质量 (g)	Voltage 开路电压 (V)	Mass 样品质量 (g)	Voltage 开路电压 (V)			
b1#	98,710	4,14	98,710	4,14	0,000	100,00	O
b2#	99,371	4,13	99,371	4,13	0,000	100,00	O
b3#	99,219	4,14	99,219	4,14	0,001	100,00	O
b4#	99,719	4,14	99,719	4,14	0,000	100,00	O
b5#	99,259	4,14	99,259	4,14	0,000	100,00	O
b6#	99,338	4,14	99,338	4,14	0,001	100,00	O
b7#	99,026	4,14	99,026	4,14	0,000	100,00	O
b8#	98,937	4,14	98,937	4,14	0,000	100,00	O
<p>Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No leakage, no venting, no disassembly, no rupture, no fire.</p> <p>注: L- 泄漏; V- 排气; D- 解体; R- 破裂; F- 起火; O- 无泄漏、无排气、无解体、无破裂、无起火。</p>							

## Appendix 5

### 附表 5

Test Items 测试项目	External short circuit 外部短路		
1,1	<b>Test procedure</b> 测试步骤		
	<p>The cell or battery to be tested shall be temperature stabilized so that its external case temperature reaches <math>55\pm 2^{\circ}\text{C}</math> and then the cell or battery shall be subjected to a short circuit condition with a total external resistance of less than <math>0,1\text{ohm}</math> at <math>55\pm 2^{\circ}\text{C}</math>, This short circuit condition is continued for at least one hour after the cell or battery external case temperature has returned to <math>55\pm 2^{\circ}\text{C}</math>, the cell or battery must be observed for a further six hour for the test to be concluded.</p> <p>保持试验环境温度稳定在 <math>55\pm 2^{\circ}\text{C}</math>，以使电芯或电池样品外表温度达到 <math>55\pm 2^{\circ}\text{C}</math>，然后，在此温度下，将其正负极用小于 <math>0,1</math> 欧姆的线路短接，待电芯或电池的外表温度恢复到 <math>55\pm 2^{\circ}\text{C}</math> 之后再持续 1 小时以上，对电芯或电池必须进一步观察 6 个小时才能下结论。</p>		
1,2	<b>Sample status</b> 样品状态		
	b1#~b4#, at first cycle in fully charged states. b1#~b4#在第一个循环完全充电的电池。		
	b5#~b8#, after 50 cycles ending in fully charged states. b5#~b8#，在第五十个循环完全充电的电池。		
1,3	<b>Result</b> 测试结果		
Sample No. 样品编号	Max. External Temperature 样品表面最高温度 ( $^{\circ}\text{C}$ )	Test result 测试结果	Remark 备注
b1#	56,2	O	/
b2#	55,6	O	/
b3#	55,9	O	/
b4#	55,7	O	/
b5#	56,1	O	/
b6#	55,8	O	/
b7#	55,2	O	/
b8#	55,8	O	/
<p>Note: <b>D</b> -Disassembly, <b>R</b> -Rupture, <b>F</b>-Fire, <b>O</b>- no disassembly, no rupture, no fire. 注： <b>D</b>- 解体； <b>R</b>- 破裂； <b>F</b> - 起火； <b>O</b>-无解体、无破裂、无起火。</p>			

## Appendix 6

## 附表 6

Test Items 测试项目	Crush 挤压		
1,1	<b>Test procedure</b> 测试步骤		
	<p>A cell or component cell is to be crushed between two flat surfaces. The crushing is to be gradual with a speed of approximately 1,5cm/s at the first point of contact. The crushing is to be continued until the first of the three options below is reached.</p> <p>(a) The applied force reaches 13kN±0,78kN;  (b) The voltage of the cell drops by at least 100 mV; or  (c) The cell is deformed by 50% or more of its original thickness.</p> <p>Once the maximum pressure has been obtained, the voltage drops by 100mV or more, or the cell is deformed by at least 50% of its original thickness, the pressure shall be released.</p> <p>电池芯或组成电池芯在两个平面间挤压。挤压在第一个接触点以约 1,5cm/s 的速度慢慢进行，直到下面三个选项之一达到为止：</p> <p>(a) 作用力达到 13kN±0,78kN；  (b) 电池芯电压降至少达到 100mV；  (c) 电池厚度和最初比较变形至少 50%。</p> <p>一旦达到最大压力，电压降超过 100mV 或者电池芯变形超过 50%，压力应该解除。</p>		
1,2	<b>Sample status</b> 样品状态		
	C1#~C5#, at first cycle at 50% of the design rated capacity; C1#~C5#, 在第一个循环 50%的额定容量；		
1,3	<b>Result</b> 测试结果		
Sample No. 样品编号	Max. External Temperature 样品表面最高温度 (°C)	Test result 测试结果	Remark 备注
C1#	24,3	O	/
C2#	24,5	O	/
C3#	24,7	O	/
C4#	24,6	O	/
C5#	24,8	O	/
<p>Note: D -Disassembly, F-Fire, O- no disassembly, no fire.  注：D- 解体；F - 起火；O-无解体、无起火。</p>			

## Appendix 7

### 附表 7

Test Items 测试项目	Overcharge 过度充电		
1,1	<b>Test procedure</b> 测试步骤		
	When the manufacturer's recommended charge voltage is not more than 18V, the minimum voltage of the test shall be the lesser of two times the maximum charge voltage of the or 22V 如果厂家推荐的充电电压不超过 18V, 本测试的最小充电电压应该是两倍的厂家推荐最大充电电压或者是 22V	The manufacturer's recommended maximum charge voltage is 4,2V. The manufacturer's recommended maximum continuous charge current is 1,5A. The voltage of the test is 8,4V. And the Current is 3,0A. 厂家推荐最大充电电压为 4, 2V, 厂家推荐最大充电电流为 1, 5A. 测试的电压为 8, 4V, 电流为 3, 0A.	
	When the manufacturer's recommended charge voltage is more than 18V, the minimum voltage of the test shall be 1,2 times maximum charge voltage 如果厂家推荐的充电电压超过 18V, 本测试的最小充电电压应该为 1, 2 倍的厂家推荐最大充电电压	/	
1,2	<b>Sample status</b> 样品状态		
	b9#~b12#, at first cycle in fully charged states. b9#~b12#, 在第一个循环完全充电的电池。		
	b13#~b16#, after 50 cycles ending in fully charged states. b13#~b16#, 在第五十个循环完全充电的电池。		
1,3	<b>Result</b> 测试结果		
Sample No. 样品编号	Voltage Before test (V) 测试前开路电压 (V)	Test result 测试结果	Remark 备注
b9#	4,19	O	/
b10#	4,19	O	/
b11#	4,19	O	/
b12#	4,19	O	/
b13#	4,19	O	/
b14#	4,20	O	/
b15#	4,19	O	/
b16#	4,19	O	/
Note: D -Disassembly, F-Fire, O- no disassembly, no fire. 注: D- 解体; F - 起火; O-无解体、无起火。			

## Appendix 8

## 附表 8

Test Items 测试项目	Forced discharge 强制放电				
1,1	<b>Test procedure</b> 测试步骤				
	<p>Each cell shall be forced discharged at ambient temperature by connecting it in series with a 12V D. C, power supply at an initial current equal to the maximum discharge current specified the manufacturer The specified discharge current is to be obtained by connecting a resistive load of the appropriate size and rating in series with the test cell, Each cell shall be forced discharged for a time interval (in hours) equal to its rated capacity divided by the initial test current(in ampere).</p> <p>在 20±5℃的环境温度下, 将单个电芯连接在 12V 的直流电源及所串联的适当大小电阻负荷回路上进行强制放电, 此直流电源提供每个电芯初始电流为制造厂指定的最大放电电流, 放电时间为额定容量除以初始电流。</p>				
1,2	<b>Sample status</b> 样品状态				
	C6#~C15#, at first cycle in fully discharged states; C6#~C15#, 在第一个循环完全放电的电芯;				
	C16#~C25#, after 50 cycles ending in fully discharged states; C16#~C25#, 在第五十个循环完全放电的电芯;				
1,3	<b>Result</b> 测试结果				
Sample No. 样品编号	Voltage Before test 测试前开路电压 (V)	Test result 测试结果	Sample No. 样品编号	Voltage Before test 测试前开路电压 (V)	Test result 测试结果
C6#	3,419	O	C16#	3,416	O
C7#	3,415	O	C17#	3,418	O
C8#	3,418	O	C18#	3,418	O
C9#	3,421	O	C19#	3,417	O
C10#	3,416	O	C20#	3,412	O
C11#	3,412	O	C21#	3,416	O
C12#	3,416	O	C22#	3,417	O
C13#	3,417	O	C23#	3,419	O
C14#	3,415	O	C24#	3,412	O
C15#	3,413	O	C25#	3,415	O
Note: D -Disassembly, F-Fire, O- no disassembly, no fire. 注: D- 解体; F - 起火; O-无解体、无起火。					

## Appendix 9

## 附表 9

Test Items 测试项目	Drop test 跌落测试		
1,1	<b>Test procedure</b> 测试步骤		
	The package of batteries is dropped from 1,2m in any orientation. The test floor is concrete floor. 电池的包装件以任意方向从 1,2 米跌落至水泥地面。		
	Each package is capable of withstanding a 1,2m drop test in any orientation without damage to cells or batteries contained therein, without shifting of the contents so as to allow battery to battery(or cell to cell) contact and without release of contents. 每个电池的包装件以任意方向从 1,2 米跌落, 而没有造成包装件内的电池或电芯的损坏, 也没有移动包装件内的电池或电芯使其相互接触以及包装件内的电池或电芯漏出。		
1,2	<b>Package information</b> 包装信息		
	Package weight (kg) 包装重量(kg)	0,30	
	Package size 包装箱尺寸	190×160×120mm	
	Net weight of batteries or cells per package (kg) 单个包装件内电池或电芯的净重量(kg)	0,20	
	number of batteries or cells per package (pcs) 包装件内含电池或电芯的数量(pcs)	2	
	number of equipment per package (pcs) 包装件内含设备数量 (pcs)	/	
1,3	<b>Result</b> 测试结果		
	No battery is damaged or connected by neighbor, the battery should not be released from package. 包装件内的电池或电芯无损坏, 无相互接触。 包装件内的电池或电芯不能从包装件漏出。	Surface 面跌落	The package is not cracked, the contents are not damaged and not shifted. 包装未破裂, 内装物完好。
		Arris 棱跌落	The package is not cracked, the contents are not damaged and not shifted. 包装未破裂, 内装物完好。
		Angle 角跌落	The package is not cracked, the contents are not damaged and not shifted. 包装未破裂, 内装物完好。



# 注 意 事 项

## Important

1. 本报告无检验单位公章、骑缝章无效；  
The test report is invalid without the official stamp and Paging seal of Guangzhou MCM Certification and Testing Co., Ltd.
2. 未经本试验室书面同意，不得部分地复制本报告。  
Nobody is allowed to photocopy or partly photocopy this test report without written permission of Guangzhou MCM Certification and Testing Co., Ltd.
3. 本报告无批准人、审核人及检测人签名无效。  
The test report is invalid without the signatures of Ratifier, Reviewer and Testing engineer.
4. 本报告涂改无效。  
The test report is invalid if altered.
5. 对检验报告若有异议，应于收到报告之日起十五天内向检验单位提出。  
Objections to the test report must be submitted to Guangzhou MCM Certification and Testing Co., Ltd. Within 15 days.
6. 本报告中以逗号代替小数点。  
Throughout this report a comma is used as the decimal separator.
7. 本报告仅对来样负责。  
The test report is valid for the tested samples only.

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**Laboratory:** Guangzhou MCM Certification and Testing Co., Ltd

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✈ 空运  
By Air



NO.2114040500



# 货物运输条件鉴定书

## Certification

### for Safe Transport of Chemical Goods

#### 锂电池—符合包装说明965第II部分

样品名称： 锂离子电池 SP300 3.7V 3760mAh 13.9Wh

Sample name: Lithium-ion Battery SP300 3.7V 3760mAh 13.9Wh

送检单位： 惠州亿纬锂能股份有限公司  
HUIZHOU EVE Energy CO., Ltd

生产单位： 惠州亿纬锂能股份有限公司  
HUIZHOU EVE Energy CO., Ltd



上海化工研究院检测中心  
(上海天科化工检测有限公司)

Shanghai Research Institute of Chemical Industry Testing Centre  
(Shanghai TECH. Chemical Industry Testing Co.,Ltd)

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By Air

# 货物运输条件鉴定书

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NO. 2114040500

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样品名称 Sample name	中文 Chinese	锂离子电池 SP300 3.7V 3760mAh 13.9Wh		
	英文 English	Lithium-ion Battery SP300 3.7V 3760mAh 13.9Wh		
送检单位 Consignor	惠州亿纬锂能股份有限公司 HUIZHOU EVE Energy CO., Ltd			
生产单位 Manufacturer	惠州亿纬锂能股份有限公司 HUIZHOU EVE Energy CO., Ltd			
检查方法、程序 Inspection method and procedure	国际航空运输协会《危险品规则》55版 IATA Dangerous Goods Regulations (DGR) 55th Edition			
样品外观 Sample appearance	黑色塑胶外壳 Black Plastics cement shell			
包装件信息 Package information	包装件毛重:0.30kg,锂电池总净重:0.20kg,锂电池总数量:2颗。 Gross Weight:0.30kg,Lithium battery total net weight:0.20kg,Lithium battery total quantity:2.			
序号 NO.	电池种类 Battery type	型号 Model	容量Capacity /锂含量Li content	放置方式 Placement
1	可充电锂离子电池组 Rechargeable Li-ion battery	SP300	3760mAh 13.9Wh	电池单独运输 Battery only
鉴定结论 I DENTIFI CATION CONCLUSION	1. 危险性识别(Hazards identification) 锂电池。 Lithium battery.			
	2. 空运按照国际航空运输协会《危险品规则》办理的类项(Suggestion according to IATA DGR) 该物品满足包装说明965基本要求和第II部分的规定。 The goods meet the requirements in General Requirements and section II of Packaging Instruction 965.			
鉴定结论 I DENTIFI CATION CONCLUSION	3. 包装要求(Packaging requirements) 按包装说明965第II部分要求办理。 The goods are packaged according to the Packaging Instruction 965 section II.			
	检查日期(Inspection date): 2014-04-11 ~ 2014-04-11 生效日期(Valid date): 2014-04-11			
备注 Comment	/			



批准 Approver: *[Signature]*

审核 Checker: *[Signature]*

主检 Appraiser: 俞斌虎

# 货物运输条件鉴定书

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序号 No.	检查结果及其他事项 Inspection results and other things
1	<p>本报告所述锂电池按照《危险品规则》(55版) 3.9.2.6(e)规定的质量管理体系进行制造。 本报告所述锂电池不属于因安全原因召回的锂电池。 本报告所述锂电池不进行以回收或处置为目的的航空运输, 不属于废弃锂电池。 Lithium cells and batteries listed in this report were manufactured under the quality management programme as described in IATA DGR 55th 3.9.2.6(e). Lithium cells and batteries listed in this report are not the defective cells or batteries returned to the manufacturer for safety reasons. Lithium cells and batteries listed in this report are not waste lithium cells or batteries, and they will not be shipped for recycling or disposal.</p>
2	<p>本报告所述锂电池已通过《联合国试验和标准手册》第III部分38.3小节相应测试要求。 包装件能够承受1.2m跌落试验。 Lithium cells and batteries listed in this report are of the types proven to meet the requirements of each applicable test in the UN Manual of Tests and Criteria, Part III, sub-section 38.3. The package has passed the 1.2m drop test.</p>
3	<p>锂电池完全封装在内包装内, 位于坚固的外包装中。 Lithium cells and batteries are packed in inner packagings that completely enclose the cell or battery and placed in a strong outer packaging.</p>
4	<p>电池具有适当的防短路措施。 Cells and batteries are properly protected to prevent short circuits.</p>
5	<p>每批托运货物必须附带一份包括以下内容的文件: —标明包装件内装有锂离子电池芯或电池组。 —标明包装件必须小心轻放, 如果包装件损坏, 有着火的风险。 —标明如包装件受到损坏, 必须遵守的特别程序, 包括检查和必要时重新包装。 —了解其它情况的电话号码。 —当使用航空货运单时, 如果托运货物中有贴锂电池操作标签的包装件, 那么必须在“货物名称和数量”栏注明“锂离子电池符合包装说明965第II部分”。 Each consignment must be accompanied with a document with an indication that: —The package contains lithium ion cells or batteries. —The package must be handled with care and that a flammability hazard exists if the package is damaged. —Special procedures must be followed in the event the package is damaged, to include inspection and repacking if necessary. —A telephone number for additional information. —Where a consignment includes packages bearing the lithium battery handling label, the words “Lithium ion batteries in compliance with Section II of PI 965” must be shown in the “Nature and Quantity of Goods” box of the air waybill, when an air waybill is used.</p>
6	<p>每个包装件应贴有锂电池操作标签。 Each package should be labelled with a lithium battery handling label.</p>
7	/

- 验证码: 126888 -

上海化工研究院检测中心

Shanghai Research Institute of Chemical Industry Testing Centre



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