

检 验 报 告

Test report

NAME OF SAMPLE.....: Lithium-Ion Battery Pack
产品名称.....: 锂离子电池
Type/型号规格.....: BL2600C1865003S1PGQG
 11.1Vdc 2600mAh 28.86Wh
CLIENT.....: GlobTek, Inc.
委托单位.....: --
Report No.: ED160112011S
报告编号.....:
CLASSIFICATION OF TEST: Commission Test
检验类别.....: 委托测试

东莞市信测科技有限公司

EMTEK (DONGGUAN) CO., LTD

检验报告

TEST REPORT

Commissioned by: GlobTek, Inc. 委托单位:--	Name of samples: Lithium-Ion Battery Pack 样品名称: 锂离子电池
Commissioner address: 186 Veterans Dr. Northvale, NJ 07647 USA 委托单位地址:--	Type/型号规格: BL2600C1865003S1PGQG 11.1Vdc 2600mAh 28.86Wh
Manufacturer : GlobTek (Suzhou) Co., Ltd. 生产单位 : 环球特科(苏州)电源科技有限公司	Appearance: blue 样品外观颜色: 蓝色
Manufacturer address : Building 4, No.76, Jinling East Road, Suzhou Industrial Park, Jiangsu 215021, P.R. China 生产单位地址 : 苏州工业园区金陵东路 76 号 4 幢	Trade mark: GlobTek 商标: GlobTek
Classification of test: commission test 检验类别: 委托测试	Quantity of sample: 8 battery packs, 35 cells 样品数量: 16 个电池组, 35 个电池
Tested according to/测试标准: ST/SG/AC.10/11/Rev.5Section38.3/Amend.1 /Amend.2	Sample identification: 样品标识序号: GlobTek26_#b1~ GlobTek26_#b16, GlobTek26_#c1~ GlobTek26_#c35
Receiving date/接样日期: 2015-12-10	Means of receiving/接样方式: 委托单 送样
Completing date/完成日期: 2016-01-22	Test item/测试项目: 8 items/8 项
Test conclusion: 检验结论	The <u>Lithium-Ion Battery Pack</u> submitted by <u>GlobTek, Inc.</u> are tested according to section UN38.3 of the fifth revised edition amendment 1 and amendment 2 of recommendations on the transport of dangerous Goods, manual of test and criteria(ST/SG/AC.10/11/Rev.5Section 38.3/Amend.1/Amend.2) 由 <u>GlobTek, Inc.</u> 送检的 <u>锂离子电池</u> ，依据《联合国关于危险货物运输的建议书》第 18 修订版之《试验和标准手册》第 5 修订版第 38.3 节进行检测。
Test result: Pass 检验结果: 通过	

Approved by:

批准:

杨冲

Reviewed by:

审核:

陈雷

Tested by:

检测:

周川



Description and illustration of the sample:

样品说明及描述:

The sample's status is good

样品状态良好

The conditions of the batteries of samples No. GlobTek26_#b1 to GlobTek26_#b8 are at first cycle, in fully charged state.

样品编号 GlobTek26_#b1 到 GlobTek26_#b8 的状态为第一个交替充电放电周期完全充电状态的电池组。

The conditions of the batteries of samples No. GlobTek26_#b9 to GlobTek26_#b16 are after fifty cycles ending in fully charged state.

样品编号 GlobTek26_#9 到 GlobTek26_#b16 的状态为在五十个交替充电放电周期完全充电状态的电池组。

The conditions of component cells of samples No. GLOBTEK26_#c1 to GLOBTEK26_#c5 are at first cycle at 50% of the design rated capacity.

样品编号 GLOBTEK26_#c1 到 GLOBTEK26_#c5 的状态为第一个交替充电放电周期充电到设计额定容量的 50%。

The conditions of the cells of samples No. GLOBTEK26_#c6 to GLOBTEK26_#c15 is at first cycle, in fully charged state.

样品编号 GLOBTEK26_#c6 到 GLOBTEK26_#c15 的状态为第一个交替充电放电周期完全充电状态的电池。

The conditions of the cells of samples No. GLOBTEK26_#c16 to GLOBTEK26_#c25 are after first cycle ending in fully discharged state.

样品编号 GLOBTEK26_#c16 到 GLOBTEK26_#c25 的状态为在第一个充电放电周期结束后完全放电状态的电池。

The conditions of the cells of samples No. GLOBTEK26_#c26 to GLOBTEK26_#c35 are after 50 cycles ending in fully discharged state.

样品编号 GLOBTEK26_#c26 到 GLOBTEK26_#c35 的状态为在 50 个交替充电放电周期结束后完全放电状态的电池。

Description of the sampling procedure:

取样程序的说明:

/

Description of the deviation from the standard, if any;

测试结果不符合标准项的说明:

/

Remarks:

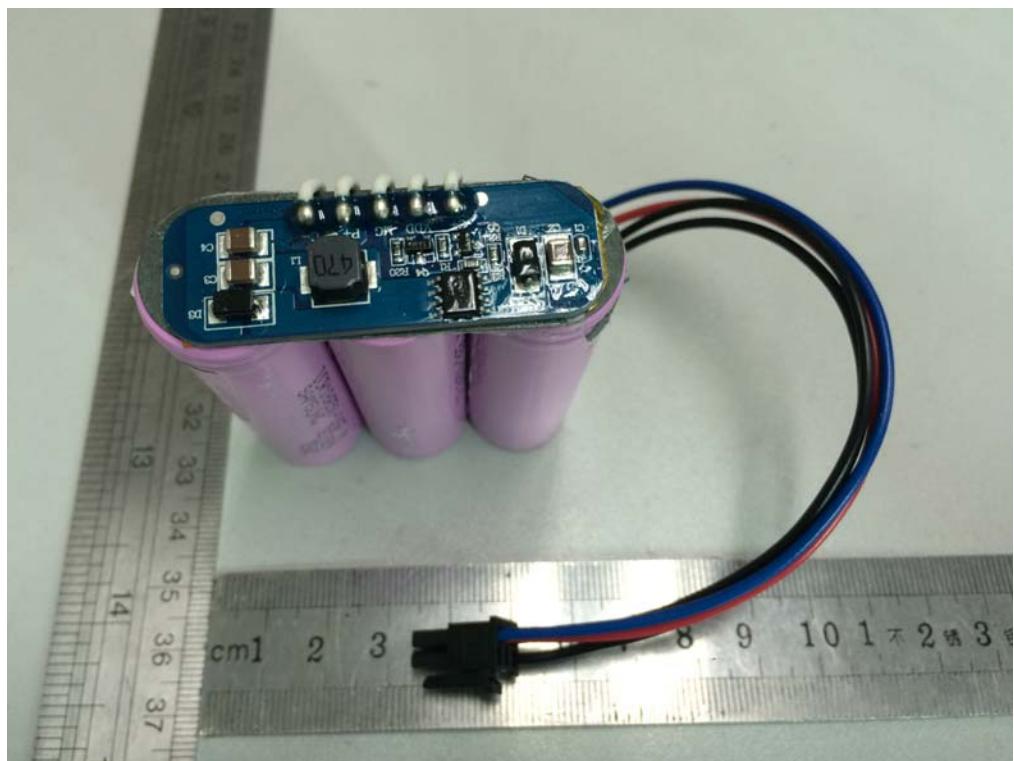
备注: /

Photos of sample and labels/样品照片及标识

Lithium-Ion Battery Pack / 锂离子电池



Internal Battery/内部电池组



Cell/电池



ST/SG/AC.10/11/Rev.5Section 38.3/Amend.1 /Amend.2			
Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
38.3.4	Procedure/测试步骤		-
38.3.4.1	Test1: Altitude simulation/测试 1: 高度模拟 Test cells and batteries shall be stored at a pressure of 11,6kPa or less for at least six hour at ambient temperature($20\pm5^{\circ}\text{C}$)/将电芯和电池在温度为 $20\pm5^{\circ}\text{C}$ ，大气压力为不大于 11,6kpa 的环境中贮存不少于 6 个小时		P
	Requirement/标准要求: 1. Cells and batteries mass loss limit: $\leq 0,1\%$ /样品质量损失≤0,1% 2. Open circuit voltage not less than 90%, the requirement relating to voltage is not applicable to test cells and batteries at full discharged states. 样品试验后开路电压应不低于试验前开路电压的 90 %,此要求不适用于完全放完电的电池和电芯。 3. No leakage, no venting, no disassembly, no rupture and no fire 样品（电池）应无漏液、无冒烟、无分解、无破裂以及无着火现象的发生	The samples GLOBTEK26_#c6 to GLOBTEK26_#c15: GLOBTEK26_#b1 to GLOBTEK26_#b4: GLOBTEK26_#b9 to GLOBTEK26_#b12: No leakage, no venting, no disassembly, no rupture and no fire/ 编号为 GLOBTEK26_#c6 到 GLOBTEK26_#c15: GLOBTEK26_#b1 到 GLOBTEK26_#b4: GLOBTEK26_#b9 到 GLOBTEK26_#b12 的样品： 无漏液，无冒烟，无分解，无破裂以及无着火现象 The data see table1/数据见表 1	

ST/SG/AC.10/11/Rev.5Section 38.3/Amend.1 /Amend.2			
Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定

38.3.4.2	<p>Test 2: Thermal test/测试 2: 热冲击</p> <p>Test cells and batteries are to be stored for/电池存储条件如下:</p> <ol style="list-style-type: none"> 1. One temperature cycle: $72\pm2^{\circ}\text{C}(6\text{h}) \rightarrow -40\pm2^{\circ}\text{C}(6\text{h})$ 一次温度循环为 $72\pm2^{\circ}\text{C}(6\text{h}) \rightarrow -40\pm2^{\circ}\text{C}(6\text{h})$ 2. The maximum time interval between test temperature extremes is 30 minutes/温度转换最大间隔时间为 30min 3. This procedure is to be repeated 10 times/重复 10 次循环 4. After which all test cells and batteries are to be stored for 24 hours at ambient temperature($20\pm5^{\circ}\text{C}$)/循环结束后, 电池在 $20\pm5^{\circ}\text{C}$ 的条件下搁置 24 小时. 	<p>Requirement/标准要求:</p> <ol style="list-style-type: none"> 1. Cells and batteries mass loss limit: $\leq 0,1\%$/样品质量损失$\leq 0,1\%$ 2. Open circuit voltage not less than 90%, the requirement relating to voltage is not applicable to test cells and batteries at full discharged states. 样品试验后开路电压应不低于试验前开路电压的 90 %, 此要求不适用于完全放完电的电池和电芯。 3. No leakage, no venting, no disassembly, no rupture and no fire 样品(电池)应无漏液、无冒烟、无分解、无破裂以及无着火现象的发生 	<p>The samples GLOBTEK26_#c6 to GLOBTEK26_#c15: GLOBTEK26_#b1 to GLOBTEK26_#b4: GLOBTEK26_#b9 to GLOBTEK26_#b12: No leakage, no venting, no disassembly, no rupture and no fire/ 编号为 GLOBTEK26_#c6 到 GLOBTEK26_#c15: GLOBTEK26_#b1 到 GLOBTEK26_#b4: GLOBTEK26_#b9 到 GLOBTEK26_#b12 的样品: 无漏液, 无冒烟, 无分解, 无破裂以及无着火现象 The data see table1/数据见表 1</p>

ST/SG/AC.10/11/Rev.5Section 38.3/Amend.1 /Amend.2			
Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
Test3: Vibration 测试 3: 振动			
<p>1. Cells and batteries are firmly secured to the platform of the vibration machine/电芯和电池牢固地安装在振动台（的台面）上</p> <p>2. The vibration: A sinusoidal waveform with a logarithmic sweep between 7Hz and 200Hz and back to 7Hz traversed in 15 minutes/振动以正弦波形式，以 7Hz 增加至 200Hz，然后在减少回到 7Hz 为一个循环，一个循环持续 15 分钟的对数前移传送。</p> <p>3. The logarithmic frequency sweep is as follows: from 7Hz a peak acceleration of 1gn is maintained until 18Hz is reached, the amplitude is then maintained at 0,8 mm(1,6 mm total excursion) and the frequency increased until a peak acceleration of 8 gn occurs(approximately 50Hz), A peak acceleration of 8gn is then maintained until the frequency is increased to 200Hz/对数扫频为:从 7 赫兹开始保持 1gn 的最大加速度直到频率为 18 赫兹，然后将振幅保持在 0,8 毫米（总偏移 1,6 毫米）并增加频率直到最大加速度达到 8gn（频率约为 50 赫兹），将最大加速度保持在 8gn 直到频率增加到 200 赫兹。</p> <p>4.This cycle repeated 12 times for a total of 3 hours for each of three mutually perpendicular mounting position of the cell/以振动的其中一个方向必须是垂直样品极性，对每个电芯从三个互相垂直的方向上循环 12 次，共 3 个小时。</p>			
38.3.4.3	<p>Requirement/标准要求:</p> <p>1. Cells and batteries mass loss limit: ≤0,1%/样品质量损失≤0,1%</p> <p>2. Open circuit voltage not less than 90%, the requirement relating to voltage is not applicable to test cells and batteries at full discharged states. 样品试验后开路电压应不低于试验前开路电压的 90 %,此要求不适用于完全放完电的电池和电芯。</p> <p>3. No leakage, no venting, no disassembly, no rupture and no fire 样品（电池）应无漏液、无冒烟、无分解、无破裂以及无着火现象的发生</p>	<p>The samples GLOBTEK26_#c6 to GLOBTEK26_#c15: GLOBTEK26_#b1 to GLOBTEK26_#b4: GLOBTEK26_#b9 to GLOBTEK26_#b12: No leakage, no venting, no disassembly, no rupture and no fire/ 编号为 GLOBTEK26_#c6 到 GLOBTEK26_#c15: GLOBTEK26_#b1 到 GLOBTEK26_#b4: GLOBTEK26_#b9 到 GLOBTEK26_#b12 的样品： 无漏液，无冒烟，无分解，无破裂以及无着火现象</p> <p>The data see table1/数据见表 1</p>	P

ST/SG/AC.10/11/Rev.5Section 38.3/Amend.1 /Amend.2			
Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
Test 4: Shock/测试 4: 冲击			
<p>1. The cells and batteries shall be secured to the testing machine/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。</p> <p>2. Shock: a half-sine shock of peak acceleration of 150 gn and pulse duration of 6 milliseconds, large cells and large batteries shall be subjected to a half-sine or peak acceleration of 50 gn an dpulse duration of 11 milliseconds/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，大型电池和大型电池组须经受最大加速度 50gn 和脉冲持续时间 11 毫秒的半正弦波冲击。</p> <p>3. 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/每个电池或电池组须在三个互相垂直的电池安装方位的正方向经受三次冲击，接着在反方向经受三次冲击，总共经受 18 次冲击。</p>			
38.3.4.4	Requirement/标准要求: 1. Cells and batteries mass loss limit: ≤0,1%/样品质量损失≤0,1% 2. Open circuit voltage not less than 90%, the requirement relating to voltage is not applicable to test cells and batteries at full discharged states. 样品试验后开路电压应不低于试验前开路电压的 90%,此要求不适用于完全放完电的电池和电芯。 3. No leakage, no venting, no disassembly, no rupture and no fire 样品（电池）应无漏液、无冒烟、无分解、无破裂以及无着火现象的发生	The samples GLOBTEK26_#c6 to GLOBTEK26_#c15: No leakage, no venting, no disassembly, no rupture and no fire/ 编号为 GLOBTEK26_#c6 到 GLOBTEK26_#c15 的样品： 无漏液，无冒烟，无分解，无破裂以及无着火现象 The data see table1/ 数据见表 1	P

ST/SG/AC.10/11/Rev.5Section 38.3/Amend.1 /Amend.2			
Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定

38.3.4.5	<p>Test: external short circuit/测试 5 外接短路</p> <p>1. The cell or battery to be tested shall be temperature stabilized so that its external case temperature reaches $55\pm2^{\circ}\text{C}$/保持试验环境温度稳定在 $55\pm2^{\circ}\text{C}$，以使电芯或电池样品外表温度达到 $55\pm2^{\circ}\text{C}$</p> <p>2. The cell or battery shall be subjected to a short circuit condition with a total external resistance of less than 0,1 ohm at $55\pm2^{\circ}\text{C}$, this short circuit condition is continued for at least one hour after the cell or battery external case temperature has returned to $55\pm2^{\circ}\text{C}$ 在将样品正负极用小于 0.1Ω 的总电阻回路进行短路，样品的外表温度恢复到 $55\pm2^{\circ}\text{C}$ 之后保持短路状态 1 小时以上。</p> <p>3. The cell or battery must be observed for a further six hour for the test to be concluded/对电芯或电池必须进一步观察 6 个小时才能下结论。</p>	
	<p>Requirements/标准要求:</p> <p>During the test and within six hours after test, the cells or batteries/在测试过程中以及之后 6 个小时内，电芯或电池样品</p> <p>1. External temperature not exceed 170°C 外表温度不超过 170°C</p> <p>2. No disassembly, no rupture and no fire. 无分解、无破裂和无着火现象发生</p>	<p>The samples GLOBTEK26_#c6 to GLOBTEK26_#c15: GLOBTEK26_#b1 to GLOBTEK26_#b4: GLOBTEK26_#b9 to GLOBTEK26_#b12: no disassembly, no rupture and no fire/ 编号为 GLOBTEK26_#c6 到 GLOBTEK26_#c15: GLOBTEK26_#b1 到 GLOBTEK26_#b4: GLOBTEK26_#b9 到 GLOBTEK26_#b12 的样品：无分解，无破裂以及无着火现象 The data see table1/ 数据见表 1</p>

ST/SG/AC.10/11/Rev.5Section 38.3/Amend.1 /Amend.2			
Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定

38.3.4.6	Test 6: Impact/crush/测试 6: 撞击/挤压	P
	Impact(applicable to cylindrical cells not less than 18mm in diameter)/撞击 (适用于直径不小于 18 毫米的圆柱形电池)	
	<p>1. This test sample cell or component cell is to be placed on a flat smooth surface/将试验样品用的电芯或聚合物电芯放在一个平坦光滑的平面上</p> <p>2. A 15,8 mm diameter bar is to be placed across the center of the sample, A 9,1 kg mass is to be dropped from a height of $\pm 2,5\text{cm}$ onto the sample./将一直径为 15,8mm 的横木横过电池中部放置后, 将一质量为 9,1kg 的物体从 $61 \pm 2,5\text{cm}$ 的高度落向样品。</p> <p>3. The test sample is to be impacted with its longitudinal axis parallel to the flat surface and perpendicular to the longitudinal axis the $15,8\text{mm} \pm 0,1\text{mm}$ diameter curved surface lying across the centre of the test sample. Each sample is to be subjected to only a single impact/接受撞击的试样, 纵轴应与平坦的表面平行并与横放在试样中心的直径 $15,8 \pm 0,1$ 毫米弯曲表面的纵轴垂直。每一个试样只经受一次撞击。</p>	
	<p>Requirements/标准要求:</p> <p>1. Cells external temperature not exceed 170°C. 电芯或电池的最高表面温度应不超过 170°C</p> <p>2. No disassembly, no rupture and no fire within six hours of this test 试验结束后 6 个小时之内, 电芯和聚合物电芯应无分解和无着火现象发生。</p>	<p>The samples GLOBTEK26_#c6 to GLOBTEK26_#c15: No leakage, no venting, no disassembly, no rupture and no fire/ 编号为 GLOBTEK26_#c65 到 GLOBTEK26_# 的样品: 无漏液, 无冒烟, 无分解, 无破裂以及无着火现象 The data see table1/ 数据见表 2</p>
	Crush(applicable to prismatic, pouch, coin/button cells and cylindrical cells Less than 18mm in diameter)/挤压 (适用于棱柱形、袋装、硬币/纽扣电池和直径不超过 18 毫米的圆柱形电池)	N/A

ST/SG/AC.10/11/Rev.5Section 38.3/Amend.1 /Amend.2			
Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
<p>1. A cell or component cell is to be crushed between two flat surfaces. The crushing is to be gradual with a speed of approximately 1,5 cm/s at the first point of contact. The crushing is to be continued until the first of the three options below is reached/将电池或元件电池放在两个平面之间挤压，挤压力度逐渐加大，在第一个接触点上的速度大约为 1,5 厘米/秒。挤压持续进行，直到出现以下三种情况之一：</p> <p>(a) The applied force reaches 13kN±0,78kN 施加的力达到 13 千牛±0,78 千牛</p> <p>(b) The voltage of the cell drops by at least 100mV/电池的电压下降至少 100 毫伏</p> <p>(c) The cell is deformed by 50% or more of its original thickness/电池变形达原始厚度的 50%以上。</p> <p>2. A prismatic or pouch cell shall be crushed by applying the force to the widest side. A button/coin cell shall be crushed by applying the force on its flat surfaces/棱柱形或袋装电池应从最宽的一面施压。纽扣/硬币形电池应从其平坦表面施压。圆柱形应从与纵轴垂直的方向施压。</p>			
<p>Requirements/标准要求：</p> <p>1. Cell external temperature not exceed 170°C. 电芯或电池的最高表面温度应不超过 170°C</p> <p>2. No disassembly, no rupture and no fire within six hours of this test 试验结束后 6 个小时之内， 电芯和聚合物电芯应无分解和无着火现象发生</p>			

ST/SG/AC.10/11/Rev.5Section 38.3/Amend.1 /Amend.2			
Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定

38.3.4.7	<p>Test 7: Overcharge/测试 7: 过充电</p> <p>1. The charge current shall be twice the manufacturer's recommended maximum continuous charge current/以 2 倍制造厂推荐的最大持续充电电流对样品充电</p> <p>2. The minimum voltage of the test shall be as follows/本测试最小电压为:</p> <p>a). 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 battery 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是厂家标定最大充电电压的两倍或者是 22V 的较小者。</p> <p>b). When the manufacturer's recommended charge voltage is more than 18V, the minimum voltage of the test shall be 1,2 times the 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是厂家标定最大充电电压的 1,2 倍。 3 20±5°C 的环境温度下, 试验持续 24 小时。</p>	<p>测试的电压为 22V, 电流为 4.0A</p>	P
	<p>Requirements/标准要求:</p> <p>No disassembly and no fire within seven days of this test 试验样品在试验中和试验后 7 天内, 应无分解和无着火现象发生。</p>	<p>The sample GLOBTEK26_#b5 到 GLOBTEK26_#b8 和 GLOBTEK26_#b13 到 GLOBTEK26_#b16: / 编号为 GLOBTEK26_#b5 到 GLOBTEK26_#b8 和 GLOBTEK26_#b13 到 GLOBTEK26_#b16 的样品: For voltage data before test, see table 3. /试验前电压见表 3 No disassembly, no rupture and no fire 无分解, 无着火现象</p>	

ST/SG/AC.10/11/Rev.5Section 38.3/Amend.1 /Amend.2			
Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
38.3.4.8	<p>Test8: Forced discharge/测试 8: 强制放电</p> <p>Each cell shall be forced discharged at ambient temperature by connecting it in series with a 12 V D. C. power supply at an initial current equal to the maximum discharge current specified by the manufacturer 20±5°C的环境温度下，将单个电芯连接在 12V 的直流电源上进行强制放电，此直流电源提供给每个电芯初始电流为制造厂指定的最大放电电流。</p> <p>The specified discharge current is to be obtained by connecting a resistive load of the appropriate size and rating in series with the 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) 指定的放电电流通过串联在测试电芯上的合适大小和功率的负载来获得，每个电芯的强制放电时间（小时）为额定容量除以初始电流（安培）。</p> <p>Requirements/标准要求: No disassembly and no fire during the test and within seven days after the test. 试验样品在试验中和试验后 7 天内，应无分解和无着火现象发生。</p>	<p>The sample GLOBTEK26_#c16 to GLOBTEK26_#c35: 编号为 GLOBTEK26_#c16 到 GLOBTEK26_#c35 的样品: For voltage data before test, see table 4. /试验前电压见表 4</p> <p>No disassembly and no fire/ 无分解,无着火现象</p>	P

Table1: T1~T5/表 1. 试验 1~试验 5

Sample No. 样品号	Mass prior to test/ 试验前质量(g)	OCV prior to test/ 试验前电压(V)	Test1: altitude simulation/ 测试 1: 高度模拟		Test2: thermal test/ 测试 2: 热冲击		Test 3: Vibration/ 测试 3: 振动		Test 4: Shock/ 测试 4: 冲击		Test5: external short circuit/ 测试 5 外接短路
			Mass loss(%) 质量损失(%)	Change ratio 电压比(%)	Mass loss(%) 质量损失(%)	Change ratio 电压比(%)	Mass loss(%) 质量损失(%)	Change ratio 电压比(%)	Mass loss(%) 质量损失(%)	Change ratio 电压比(%)	
GLOBTEK 26 #c6	43.658	4.17	0.001	99.97	0.003	99.43	0	99.58	0.005	99.97	83.2
GLOBTEK 26 #c7	43.589	4.18	0.001	99.97	0.004	99.44	0	99.50	0.007	99.98	88.7
GLOBTEK 26 #c8	43.581	4.18	0.001	100.0	0.001	99.62	0.001	99.67	0	99.98	90.2
GLOBTEK 26 #c9	43.685	4.15	0.001	99.97	0.003	99.58	0	100.0	0.002	99.99	91.7
GLOBTEK 26 #c10	43.683	4.17	0.002	99.98	0.002	99.50	0.002	99.69	0.001	99.50	81.3
GLOBTEK 26 #c11	43.679	4.19	0	99.98	0.003	99.66	0.001	99.72	0.004	99.66	75.2
GLOBTEK 26 #c12	43.678	4.18	0	100.0	0.004	99.40	0	99.67	0.002	99.40	78.4
GLOBTEK 26 #c13	43.681	4.19	0.001	99.98	0.001	99.60	0	100.0	0.004	100.0	91.7
GLOBTEK 26 #c14	43.675	4.17	0.003	99.98	0.004	99.41	0	100.0	0	99.72	90.6
GLOBTEK 26 #c15	43.680	4.19	0.001	99.99	0.002	99.53	0.001	99.80	0.002	100.0	91.2
GLOBTEK 26 #b1	162.061	12.41	0	100.0	0.001	99.97	0.001	99.98	0	99.98	56.7
GLOBTEK	162.070	12.44	0	99.98	0.001	99.98	0.001	99.98	0	99.98	57.2

26 #b2											
GLOBTEK 26 #b3	162.101	12.38	0	99.98	0.001	99.98	0	100.0	0	99.98	55.7
GLOBTEK 26 #b4	162.089	12.46	0	99.99	0.002	99.97	0	99.98	0	99.97	57.2
GLOBTEK 26 #b9	162.088	12.42	0	99.98	0.001	99.98	0.001	99.99	0.001	99.98	55.6
GLOBTEK 26 #b10	162.090	12.40	0	99.98	0.002	99.97	0	99.98	0.002	99.98	56.3
GLOBTEK 26 #b11	162.099	12.42	0	99.99	0.001	99.98	0	99.99	0	100.0	55.9
GLOBTEK 26 #b12	162.076	12.44	0	100.0	0.001	99.98	0.001	100.0	0.001	100.0	56.3

Table2:Crush/表 2:撞击

Test 6: crush/ 测试 6: 撞击	Sample No. 样品号	GLOBTEK26_#c1	GLOBTEK26_#c2	GLOBTEK26_#c3	GLOBTEK26_#c4	GLOBTEK26_#c5
	OCV prior to test/ 试验前电压 (V)	4.19	4.19	4.20	4.22	4.21
	Temperature(°C) 温度 (°C)	85.2	86.4	90.2	87.4	88.6

Table3: Overcharge test of batteries/表 3 电池过充试验

Test 7: overch arge/ 测试 7: 过充电	Sample No 样品号	GLOBTEK26 _#b5	GLOBTEK26 _#b6	GLOBTEK2 6_#b7	GLOBTEK26 _#b8	GLOBTEK26 _#b13	GLOBTEK26_#b14	GLOBTEK26_#b15	GLOBTEK2 6_#b16
	OCV prior to test/ 试验前 电压(V)	12.44	12.40	12.39	12.42	12.40	12.38	12.39	12.43

Table4: Forced discharge/表 4. 强制放电

Test 8: Forced discharge/ 测试 8: 强制放 电	Sample No 样品号	GLOBT EK26_# c16	GLOBT EK26_# c17	GLOBT EK26_# c18	GLOBT EK26_# c19	GLOBT EK26_# c20	GLOBT EK26_# c21	GLOBT EK26_# c22	GLOBT EK26_# c23	GLOBT EK26_# c24	GLOBT EK26_# c25
	OCV prior to test 试验前电压 (V)	3.00	2.98	2.99	2.98	3.02	3.00	3.01	2.99	2.98	3.00
	Sample No 样品号	GLOBT EK26_# c26	GLOBT EK26_# c27	GLOBT EK26_# c28	GLOBT EK26_# c29	GLOBT EK26_# c30	GLOBT EK26_# c31	GLOBT EK26_# c32	GLOBT EK26_# c33	GLOBT EK26_# c34	GLOBT EK26_# c35
	OCV prior to test 试验前电压 (V)	3.01	3.02	3.03	3.01	2.99	3.01	2.97	3.01	2.99	2.99

注意事项

Important

1. 本报告无检验单位印章无效。
The test report is invalid without the official stamp of EMTEK.
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 EMTEK
3. 本报告无批准人、审核人及鉴定人签名无效。
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 EMTEK within 15days
6. 本报告仅对送检样品负责。
The test report is valid for the tested samples only
7. 判定栏中“-”表示“不需要判定”，“P”表示“通过”，“F”表示“不通过”，“N/A”表示“不适用”。
As for the verdict, “-” means “no need for judgement”, “P” means “pass”, “F” means “fail” and “N/A” means “not applicable”.

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