



# UN38.3 测试报告

## UN38.3 Test Report

|                |                                                                                                                   |
|----------------|-------------------------------------------------------------------------------------------------------------------|
| 样品名称:          | 可充电锂离子电池 ARB-L37-12000                                                                                            |
| Sample Name:   | Rechargeable Li-ion Battery ARB-L37-12000                                                                         |
| 型号规格:          | ARB-L37-12000 3.6V 12000mAh 43.2Wh                                                                                |
| Model:         |                                                                                                                   |
| 委托单位:          | 深圳市朗恒电子有限公司                                                                                                       |
| Applicant:     | SHEN ZHEN LANG HENG ELECTRONIC CO.,LTD                                                                            |
| 检验项目:          | 高度模拟、温度试验、振动、冲击、外部短路、撞击、过度充电、强制放电                                                                                 |
| Test Items:    | Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Impact, Overcharge, Forced discharge |
| 检验类别:          | 委托检验                                                                                                              |
| Test Category: | Commission test                                                                                                   |

北京迪捷姆空运技术开发有限公司

Beijing DGM Air Transport Technology Co., Ltd.

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The report is issued by DGM China according to the test of the goods and the information of its shipping provided by the applicant (shipper or his agent).

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According to the demand of test, DGM China requires the applicant to provide true and exact sample and data of the cargo.

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The applicant guarantees that the declared goods and/or the sample who provides should be identical with the contents of cargo that is to be transported.

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北京迪捷姆空运技术开发有限公司

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UN38.3 Test Report

|                            |                                                                                                                                                                                                                                                                                                                                                        |                                                                                                             |                       |                                       |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------|
| 样品名称<br>Sample Name        | 可充电锂离子电池 ARB-L37-12000<br>Rechargeable Li-ion Battery ARB-L37-12000                                                                                                                                                                                                                                                                                    |                                                                                                             | 商标<br>Trademark       | FENIX                                 |
|                            |                                                                                                                                                                                                                                                                                                                                                        |                                                                                                             | 型号/规格<br>Model        | ARB-L37-12000 3.6V 12000mAh<br>43.2Wh |
| 委托单位<br>Applicant          | 名称<br>Name                                                                                                                                                                                                                                                                                                                                             | 深圳市朗恒电子有限公司<br>SHEN ZHEN LANG HENG ELECTRONIC CO.,LTD                                                       |                       |                                       |
|                            | 地址<br>Address                                                                                                                                                                                                                                                                                                                                          | 深圳市宝安区 33 区东方明工业城二栋八楼<br>8/F, 2nd Building, DongFangMing Industrial Center, 33rd District, Bao'an, Shenzhen |                       |                                       |
| 来样方式<br>Means of Receiving | 委托方送样<br>Submitted by applicant                                                                                                                                                                                                                                                                                                                        |                                                                                                             | 送样日期<br>Accepted Date | 2018-10-30                            |
| 检验日期<br>Test Date          | 2018-11-06~2018-11-23                                                                                                                                                                                                                                                                                                                                  |                                                                                                             |                       |                                       |
| 检验地点<br>Test Site          | 本检测室（电池室）<br>DGM(Battery room)                                                                                                                                                                                                                                                                                                                         |                                                                                                             |                       |                                       |
| 检验项目<br>Test Items         | 高度模拟、温度试验、振动、冲击、外部短路、撞击、过度充电、强制放电<br>Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Impact, Overcharge, Forced discharge                                                                                                                                                                                                 |                                                                                                             |                       |                                       |
| 检验依据<br>Test Method        | 联合国《关于危险货物运输的建议书-试验和标准手册》（第 6 版修订一）38.3 节<br>UN Recommendations on the Transport of Dangerous Goods Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amendment 1/ Subsection 38.3                                                                                                                                                                     |                                                                                                             |                       |                                       |
| 检验结论<br>Conclusion         | <p>根据联合国《关于危险货物运输的建议书-试验和标准手册》（第 6 版修订一）38.3 节的规定，该电池样品通过所有项目检测，符合该条款的性能要求。</p> <p>The samples have passed all test items of UN Recommendations on the Transport of Dangerous Goods - Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amendment 1/ Subsection 38.3</p> <p>检验单位(盖章)<br/>Test Lab(Stamp)</p> <p>签发日期(Issue Date): 2018 年 12 月 06 日</p> |                                                                                                             |                       |                                       |

检测:

Tested by:

罗晓峰

审核:

Checked by:

王明

批准:

Approved by:

马海

|                                 |                                                                                                      |              |                       |
|---------------------------------|------------------------------------------------------------------------------------------------------|--------------|-----------------------|
| 电池信息<br>Information for battery |                                                                                                      |              |                       |
| 电芯生产厂家<br>Cell manufacturer     | 三星电子有限公司<br>SAMSUN SDI CO.,LTD                                                                       |              |                       |
| 电芯厂家联系电话<br>Phone number        | +852.2.2862.63                                                                                       | 邮箱<br>e-mail | Jian01.xu@samsung.com |
| 电芯厂家地址<br>Address               | 京畿道龙仁市器兴区贡税路 150-20<br>150-20, GONGSE-RO GIHEUNG-GU,YONGIN-SI,GYEONGGI-DO                            |              |                       |
| 电芯厂家网址<br>Website               | //                                                                                                   |              |                       |
| Pack 厂家<br>Pack manufacturer    | 深圳市优能电源技术有限公司<br>SHENZHEN YOUR POWER TECHNOLOGY CO.,LTD                                              |              |                       |
| Pack 厂家联系电话<br>Phone number     | 13603018105                                                                                          | 邮箱<br>e-mail | Sales@yourpower.cn    |
| Pack 厂家地址<br>Address            | 深圳市龙华区观澜街道盛德兰工业园办公楼 4 楼<br>4/F, Office Building SDL Industry Park, Longhua District, Shenzhen, China |              |                       |
| Pack 厂家网址<br>Website            | //                                                                                                   |              |                       |

|                                      |                         |                                        |              |
|--------------------------------------|-------------------------|----------------------------------------|--------------|
| 电芯信息<br>Information for cell         |                         |                                        |              |
| 电芯型号<br>Cell model                   | INR18650-30Q            |                                        |              |
| 标称电压<br>Nominal Voltage              | 3.6V                    | 额定容量<br>Rated Capacity                 | 3000mAh      |
| 标准充电电流<br>Standard charging current  | 1500mA                  | 标准放电电流<br>Standard discharging current | 600mA        |
| 最大连续充电电流<br>Maximum charging current | 3000mA                  | 最大放电电流<br>Maximum discharge current    | 10000mA      |
| 充电限制电压<br>Limited charging voltage   | 4.2V                    | 放电截止电压<br>Cut-Off voltage              | 2.5V         |
| 外观形状<br>Appearance                   | 粉红色圆柱体<br>Pink cylinder | 电芯尺寸<br>Cell size                      | Φ18.3×65.0mm |

|                                      |                                       |                                        |                               |
|--------------------------------------|---------------------------------------|----------------------------------------|-------------------------------|
| 电池信息<br>Information for battery      |                                       |                                        |                               |
| 标准充电电流<br>Standard charging current  | 6000mA                                | 标准放电电流<br>Standard discharging current | 2400mA                        |
| 最大连续充电电流<br>Maximum charging current | 12000mA                               | 最大放电电流<br>Maximum discharge current    | 40000mA                       |
| 充电限制电压<br>Limited charging voltage   | 4.2V                                  | 放电截止电压<br>Cut-Off voltage              | 2.5V                          |
| 规格/型号<br>Model                       | ARB-L37-12000 3.6V 12000mAh<br>43.2Wh | 70.4                                   | 67.9×36.7×36.7mm              |
| 组成电芯数量<br>Number of cell             | 4 个电芯<br>Four cells                   | 外观形状<br>Appearance                     | 黑色近长方体<br>Black almost cuboid |

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## UN38.3 Test Report

| 序号<br>No.           | 检验项目<br>Test Items                | 标准要求或标准条款<br>Standard Requirement or the<br>Clause of Standard   | 检验结果<br>Test Result                                                                                                                                                                                                                                      | 单项评价<br>Conclusion | 备注<br>Remark |
|---------------------|-----------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------|
| 1                   | 高度模拟<br>Altitude<br>Simulation    | ST/SG/AC.10/11/Rev.6<br>Amendment 1/ Subsection 38.3<br>Test T.1 | 无泄漏、无排气、无解体、无破裂、无起火，<br>试验后的开路电压不低于试验前的 90%。<br>No leakage, no venting, no disassembly, no<br>rupture and no fire. The open circuit voltage of<br>each battery after testing is not less than 90% of<br>its voltage immediately prior to this procedure. | 符合<br>Pass         | /            |
| 2                   | 温度试验<br>Thermal Test              | ST/SG/AC.10/11/Rev.6<br>Amendment 1/ Subsection 38.3<br>Test T.2 | 无泄漏、无排气、无解体、无破裂、无起火，<br>试验后的开路电压不低于试验前的 90%。<br>No leakage, no venting, no disassembly, no<br>rupture and no fire. The open circuit voltage of<br>each battery after testing is not less than 90% of<br>its voltage immediately prior to this procedure. | 符合<br>Pass         | /            |
| 3                   | 振动<br>Vibration                   | ST/SG/AC.10/11/Rev.6<br>Amendment 1/ Subsection 38.3<br>Test T.3 | 无泄漏、无排气、无解体、无破裂、无起火，<br>试验后的开路电压不低于试验前的 90%。<br>No leakage, no venting, no disassembly, no<br>rupture and no fire. The open circuit voltage of<br>each battery after testing is not less than 90% of<br>its voltage immediately prior to this procedure. | 符合<br>Pass         | /            |
| 4                   | 冲击<br>Shock                       | ST/SG/AC.10/11/Rev.6<br>Amendment 1/ Subsection 38.3<br>Test T.4 | 无泄漏、无排气、无解体、无破裂、无起火，<br>试验后的开路电压不低于试验前的 90%。<br>No leakage, no venting, no disassembly, no<br>rupture and no fire. The open circuit voltage of<br>each battery after testing is not less than 90% of<br>its voltage immediately prior to this procedure. | 符合<br>Pass         | /            |
| 5                   | 外部短路<br>External Short<br>Circuit | ST/SG/AC.10/11/Rev.6<br>Amendment 1/ Subsection 38.3<br>Test T.5 | 外壳温度不超过 170 °C，无解体、无破裂、无<br>起火。<br>External temperature does not exceed 170°C. No<br>disassembly, no rupture and no fire.                                                                                                                                | 符合<br>Pass         | /            |
| 6                   | 撞击<br>Impact                      | ST/SG/AC.10/11/Rev.6<br>Amendment 1/ Subsection 38.3<br>Test T.6 | 外壳温度不超过 170 °C，无解体、无起火。<br>External temperature does not exceed 170°C.<br>No disassembly, no fire.                                                                                                                                                       | 符合<br>Pass         | /            |
| 7                   | 过度充电<br>Overcharge                | ST/SG/AC.10/11/Rev.6<br>Amendment 1/ Subsection 38.3<br>Test T.7 | 无解体、无起火。<br>No disassembly, no fire.                                                                                                                                                                                                                     | 符合<br>Pass         | /            |
| 8                   | 强制放电<br>Forced Discharge          | ST/SG/AC.10/11/Rev.6<br>Amendment 1/ Subsection 38.3<br>Test T.8 | 无解体、无起火。<br>No disassembly, no fire.                                                                                                                                                                                                                     | 符合<br>Pass         | /            |
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## T.1: 高度模拟

### T.1: Altitude Simulation

| 样品编号<br>Sample No.  | 样品状态<br>Sample Status               | 测试前<br>Pre-test |             | 测试后<br>After-test |                   |             |                  | 有无泄漏、排气、解体、破裂、起火<br>Leakage, Venting, Disassembly, Rupture, Fire(Yes/No) |
|---------------------|-------------------------------------|-----------------|-------------|-------------------|-------------------|-------------|------------------|--------------------------------------------------------------------------|
|                     |                                     | 质量<br>Mass      | 开路电压<br>OCV | 质量<br>Mass        | 质量损失<br>Mass Loss | 开路电压<br>OCV | 剩余电压<br>Residual |                                                                          |
|                     |                                     | $m_1(g)$        | $V_1(V)$    | $m_2(g)$          | (%)               | $V_2(V)$    | OCV (%)          |                                                                          |
| A1                  | 首次完全充电<br>First cycle fully charged | 198.957         | 4.172       | 198.953           | 0.002             | 4.170       | 99.95            | No                                                                       |
| A2                  | 首次完全充电<br>First cycle fully charged | 199.196         | 4.171       | 199.185           | 0.006             | 4.169       | 99.95            | No                                                                       |
| A3                  | 首次完全充电<br>First cycle fully charged | 199.176         | 4.172       | 199.168           | 0.004             | 4.170       | 99.95            | No                                                                       |
| A4                  | 首次完全充电<br>First cycle fully charged | 199.069         | 4.169       | 199.064           | 0.003             | 4.167       | 99.95            | No                                                                       |
| A5                  | 25 次完全充电<br>25 cycles fully charged | 199.014         | 4.165       | 199.011           | 0.002             | 4.163       | 99.95            | No                                                                       |
| A6                  | 25 次完全充电<br>25 cycles fully charged | 198.786         | 4.169       | 198.783           | 0.002             | 4.168       | 99.98            | No                                                                       |
| A7                  | 25 次完全充电<br>25 cycles fully charged | 199.183         | 4.168       | 199.181           | 0.001             | 4.166       | 99.95            | No                                                                       |
| A8                  | 25 次完全充电<br>25 cycles fully charged | 199.092         | 4.170       | 199.090           | 0.001             | 4.168       | 99.95            | No                                                                       |
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## T.2: 温度试验

## T.2: Thermal Test

| 样品编号<br>Sample No.  | 样品状态<br>Sample Status               | 测试前<br>Pre-test        |                         | 测试后<br>After-test      |                             |                         |                             | 有无泄漏、排气、<br>解体、破裂、起火<br>Leakage, Venting,<br>Disassembly,<br>Rupture,<br>Fire(Yes/No) |
|---------------------|-------------------------------------|------------------------|-------------------------|------------------------|-----------------------------|-------------------------|-----------------------------|---------------------------------------------------------------------------------------|
|                     |                                     | 质量<br>Mass<br>$m_1(g)$ | 开路电压<br>OCV<br>$V_1(V)$ | 质量<br>Mass<br>$m_2(g)$ | 质量损失<br>Mass<br>Loss<br>(%) | 开路电压<br>OCV<br>$V_2(V)$ | 剩余电压<br>Residual<br>OCV (%) |                                                                                       |
| A1                  | 首次完全充电<br>First cycle fully charged | 198.953                | 4.170                   | 198.943                | 0.005                       | 4.081                   | 97.87                       | No                                                                                    |
| A2                  | 首次完全充电<br>First cycle fully charged | 199.185                | 4.169                   | 199.172                | 0.007                       | 4.082                   | 97.91                       | No                                                                                    |
| A3                  | 首次完全充电<br>First cycle fully charged | 199.168                | 4.170                   | 199.155                | 0.007                       | 4.082                   | 97.89                       | No                                                                                    |
| A4                  | 首次完全充电<br>First cycle fully charged | 199.064                | 4.167                   | 199.052                | 0.006                       | 4.080                   | 97.91                       | No                                                                                    |
| -A5                 | 25 次完全充电<br>25 cycles fully charged | 199.011                | 4.163                   | 199.001                | 0.005                       | 4.078                   | 97.96                       | No                                                                                    |
| A6                  | 25 次完全充电<br>25 cycles fully charged | 198.783                | 4.168                   | 198.769                | 0.007                       | 4.079                   | 97.86                       | No                                                                                    |
| A7                  | 25 次完全充电<br>25 cycles fully charged | 199.181                | 4.166                   | 199.168                | 0.007                       | 4.080                   | 97.94                       | No                                                                                    |
| A8                  | 25 次完全充电<br>25 cycles fully charged | 199.090                | 4.168                   | 199.075                | 0.008                       | 4.081                   | 97.91                       | No                                                                                    |
| 以下空白<br>Blank below |                                     |                        |                         |                        |                             |                         |                             |                                                                                       |

### T.3: 振动

### T.3: Vibration

| 样品编号<br>Sample No.  | 样品状态<br>Sample Status               | 测试前<br>Pre-test        |                         | 测试后<br>After-test      |                             |                         |                             | 有无泄漏、排气、<br>解体、破裂、起火<br>Leakage, Venting,<br>Disassembly,<br>Rupture,<br>Fire(Yes/No) |
|---------------------|-------------------------------------|------------------------|-------------------------|------------------------|-----------------------------|-------------------------|-----------------------------|---------------------------------------------------------------------------------------|
|                     |                                     | 质量<br>Mass<br>$m_1(g)$ | 开路电压<br>OCV<br>$V_1(V)$ | 质量<br>Mass<br>$m_2(g)$ | 质量损失<br>Mass<br>Loss<br>(%) | 开路电压<br>OCV<br>$V_2(V)$ | 剩余电压<br>Residual<br>OCV (%) |                                                                                       |
| A1                  | 首次完全充电<br>First cycle fully charged | 198.943                | 4.081                   | 198.936                | 0.004                       | 4.080                   | 99.98                       | No                                                                                    |
| A2                  | 首次完全充电<br>First cycle fully charged | 199.172                | 4.082                   | 199.163                | 0.005                       | 4.081                   | 99.98                       | No                                                                                    |
| A3                  | 首次完全充电<br>First cycle fully charged | 199.155                | 4.082                   | 199.148                | 0.004                       | 4.081                   | 99.98                       | No                                                                                    |
| A4                  | 首次完全充电<br>First cycle fully charged | 199.052                | 4.080                   | 199.045                | 0.004                       | 4.079                   | 99.98                       | No                                                                                    |
| A5                  | 25 次完全充电<br>25 cycles fully charged | 199.001                | 4.078                   | 198.994                | 0.004                       | 4.078                   | 100.00                      | No                                                                                    |
| A6                  | 25 次完全充电<br>25 cycles fully charged | 198.769                | 4.079                   | 198.760                | 0.005                       | 4.077                   | 99.95                       | No                                                                                    |
| A7                  | 25 次完全充电<br>25 cycles fully charged | 199.168                | 4.080                   | 199.162                | 0.003                       | 4.078                   | 99.95                       | No                                                                                    |
| A8                  | 25 次完全充电<br>25 cycles fully charged | 199.075                | 4.081                   | 199.067                | 0.004                       | 4.079                   | 99.95                       | No                                                                                    |
| 以下空白<br>Blank below |                                     |                        |                         |                        |                             |                         |                             |                                                                                       |

## T.4: 冲击

## T.4: Shock

| 样品编号<br>Sample No.  | 样品状态<br>Sample Status               | 测试前<br>Pre-test        |                         | 测试后<br>After-test      |                             |                         |                             | 有无泄漏、排气、<br>解体、破裂、起火<br>Leakage, Venting,<br>Disassembly,<br>Rupture,<br>Fire(Yes/No) |
|---------------------|-------------------------------------|------------------------|-------------------------|------------------------|-----------------------------|-------------------------|-----------------------------|---------------------------------------------------------------------------------------|
|                     |                                     | 质量<br>Mass<br>$m_1(g)$ | 开路电压<br>OCV<br>$V_1(V)$ | 质量<br>Mass<br>$m_2(g)$ | 质量损失<br>Mass<br>Loss<br>(%) | 开路电压<br>OCV<br>$V_2(V)$ | 剩余电压<br>Residual<br>OCV (%) |                                                                                       |
| A1                  | 首次完全充电<br>First cycle fully charged | 198.936                | 4.080                   | 198.932                | 0.002                       | 4.079                   | 99.98                       | No                                                                                    |
| A2                  | 首次完全充电<br>First cycle fully charged | 199.163                | 4.081                   | 199.158                | 0.003                       | 4.080                   | 99.98                       | No                                                                                    |
| A3                  | 首次完全充电<br>First cycle fully charged | 199.148                | 4.081                   | 199.143                | 0.003                       | 4.080                   | 99.98                       | No                                                                                    |
| A4                  | 首次完全充电<br>First cycle fully charged | 199.045                | 4.079                   | 199.039                | 0.003                       | 4.079                   | 100.00                      | No                                                                                    |
| A5                  | 25 次完全充电<br>25 cycles fully charged | 198.994                | 4.078                   | 198.989                | 0.003                       | 4.078                   | 100.00                      | No                                                                                    |
| A6                  | 25 次完全充电<br>25 cycles fully charged | 198.760                | 4.077                   | 198.756                | 0.002                       | 4.077                   | 100.00                      | No                                                                                    |
| A7                  | 25 次完全充电<br>25 cycles fully charged | 199.162                | 4.078                   | 199.158                | 0.002                       | 4.078                   | 100.00                      | No                                                                                    |
| A8                  | 25 次完全充电<br>25 cycles fully charged | 199.067                | 4.079                   | 199.063                | 0.002                       | 4.079                   | 100.00                      | No                                                                                    |
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**T.5: 外部短路****T.5: External Short Circuit**

| 样品编号<br>Sample No   | 样品状态<br>Sample Status               | 样品表面最高温度(°C)<br>Highest External Temperature/°C | 有无解体、破裂、起火<br>Disassembly, Rupture, Fire(Yes/No) |
|---------------------|-------------------------------------|-------------------------------------------------|--------------------------------------------------|
| A1                  | 首次完全充电<br>First cycle fully charged | 87.7                                            | No                                               |
| A2                  | 首次完全充电<br>First cycle fully charged | 85.1                                            | No                                               |
| A3                  | 首次完全充电<br>First cycle fully charged | 84.6                                            | No                                               |
| A4                  | 首次完全充电<br>First cycle fully charged | 82.5                                            | No                                               |
| A5                  | 25 次完全充电<br>25 cycles fully charged | 83.54                                           | No                                               |
| A6                  | 25 次完全充电<br>25 cycles fully charged | 86.2                                            | No                                               |
| A7                  | 25 次完全充电<br>25 cycles fully charged | 81.9                                            | No                                               |
| A8                  | 25 次完全充电<br>25 cycles fully charged | 84.8                                            | No                                               |
| 以下空白<br>Blank below |                                     |                                                 |                                                  |

## T.6: 撞击

## T.6: Impact

| 样品编号<br>Sample No.  | 样品状态<br>Sample Status                              | 样品表面最高温度(℃)<br>Highest External Temperature/℃ | 有无解体、起火<br>Disassembly, Fire(Yes/No) |
|---------------------|----------------------------------------------------|-----------------------------------------------|--------------------------------------|
| B1                  | 首次 50%容量<br>First cycle charged 50% rated capacity | 28.9                                          | No                                   |
| B2                  | 首次 50%容量<br>First cycle charged 50% rated capacity | 29.6                                          | No                                   |
| B3                  | 首次 50%容量<br>First cycle charged 50% rated capacity | 30.0                                          | No                                   |
| B4                  | 首次 50%容量<br>First cycle charged 50% rated capacity | 28.4                                          | No                                   |
| B5                  | 首次 50%容量<br>First cycle charged 50% rated capacity | 29.7                                          | No                                   |
| B6                  | 25 次 50%容量<br>25 cycle charged 50% rated capacity  | 29.8                                          | No                                   |
| B7                  | 25 次 50%容量<br>25 cycle charged 50% rated capacity  | 30.3                                          | No                                   |
| B8                  | 25 次 50%容量<br>25 cycle charged 50% rated capacity  | 31.2                                          | No                                   |
| B9                  | 25 次 50%容量<br>25 cycle charged 50% rated capacity  | 30.9                                          | No                                   |
| B10                 | 25 次 50%容量<br>25 cycle charged 50% rated capacity  | 29.5                                          | No                                   |
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**T.7: 过度充电****T.7: Overcharge**

| 样品编号<br>Sample No. | 样品状态<br>Sample Status               | 有无解体、起火<br>Disassembly, Fire(Yes/No) |
|--------------------|-------------------------------------|--------------------------------------|
| C1                 | 首次完全充电<br>First cycle fully charged | No                                   |
| C2                 | 首次完全充电<br>First cycle fully charged | No                                   |
| C3                 | 首次完全充电<br>First cycle fully charged | No                                   |
| C4                 | 首次完全充电<br>First cycle fully charged | No                                   |
| C5                 | 25 次完全充电<br>25 cycles fully charged | No                                   |
| C6                 | 25 次完全充电<br>25 cycles fully charged | No                                   |
| C7                 | 25 次完全充电<br>25 cycles fully charged | No                                   |
| C8                 | 25 次完全充电<br>25 cycles fully charged | No                                   |

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## T.8: 强制放电

### T.8: Forced Discharge

| 样品编号<br>Sample No.  | 样品状态<br>Sample Status                  | 有无解体、起火<br>Disassembly, Fire(Yes/No) |
|---------------------|----------------------------------------|--------------------------------------|
| D1                  | 首次完全放电<br>First cycle fully discharged | No                                   |
| D2                  | 首次完全放电<br>First cycle fully discharged | No                                   |
| D3                  | 首次完全放电<br>First cycle fully discharged | No                                   |
| D4                  | 首次完全放电<br>First cycle fully discharged | No                                   |
| D5                  | 首次完全放电<br>First cycle fully discharged | No                                   |
| D6                  | 首次完全放电<br>First cycle fully discharged | No                                   |
| D7                  | 首次完全放电<br>First cycle fully discharged | No                                   |
| D8                  | 首次完全放电<br>First cycle fully discharged | No                                   |
| D9                  | 首次完全放电<br>First cycle fully discharged | No                                   |
| D10                 | 首次完全放电<br>First cycle fully discharged | No                                   |
| D11                 | 25 次完全放电<br>25 cycles fully discharged | No                                   |
| D12                 | 25 次完全放电<br>25 cycles fully discharged | No                                   |
| D13                 | 25 次完全放电<br>25 cycles fully discharged | No                                   |
| D14                 | 25 次完全放电<br>25 cycles fully discharged | No                                   |
| D15                 | 25 次完全放电<br>25 cycles fully discharged | No                                   |
| D16                 | 25 次完全放电<br>25 cycles fully discharged | No                                   |
| D17                 | 25 次完全放电<br>25 cycles fully discharged | No                                   |
| D18                 | 25 次完全放电<br>25 cycles fully discharged | No                                   |
| D19                 | 25 次完全放电<br>25 cycles fully discharged | No                                   |
| D20                 | 25 次完全放电<br>25 cycles fully discharged | No                                   |
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# UN38.3 测试报告

## UN38.3 Test Report

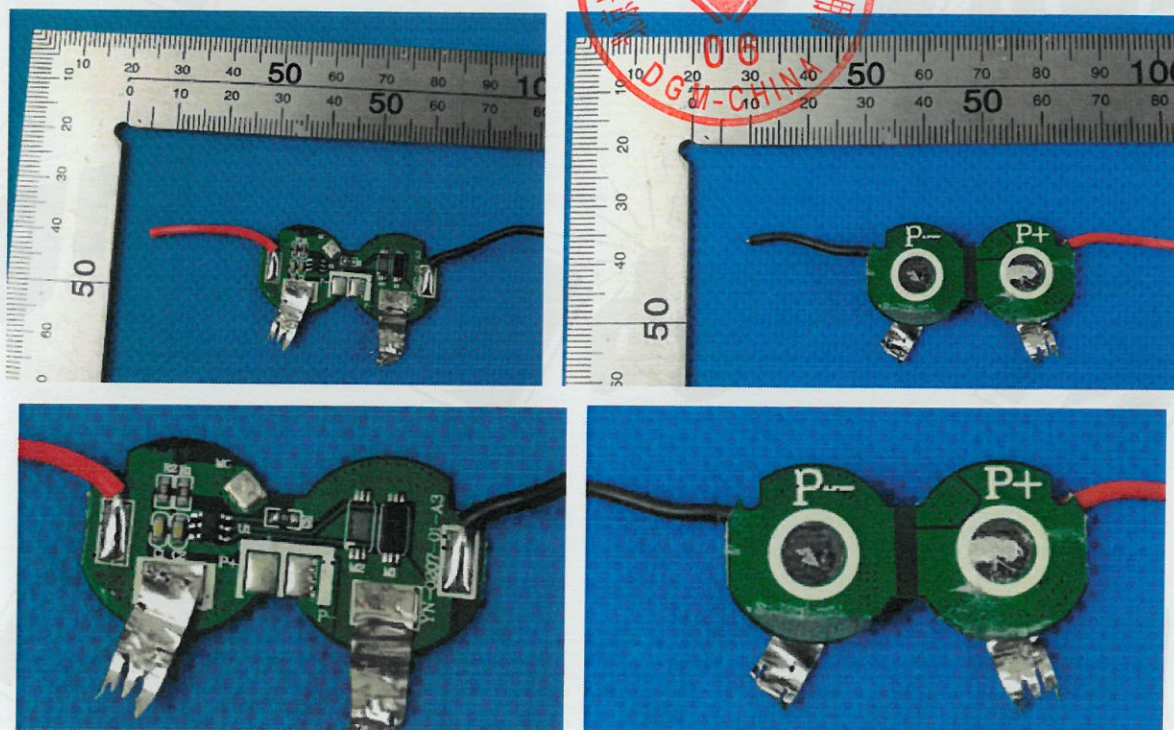
电芯照片/Cell pictures



电池照片/Battery pictures



保护装置/Protective devices



\* End of the report \*