# UN38.3 测试报告

# UN38.3 Test Report

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| **申请商 APPLICANT** | : | 深圳市天珑移动技术有限公司 Shenzhen Tinno Mobile Technology Corp. |
| **产品名称 PRODUCT NAME** | : | 可充电锂离子电芯 Rechargeable Li-ion Cell |
| **型号/MODEL NAME** | : | U383246PV |
| **商标/TRADE NAME** | : | N/A |
| **品牌/BRAND NAME** | : | N/A |
| **额定值/RATING** | : | 3.8 V, 600 mAh, 2.28 Wh |
| **接收日期 RECEIPT DATE** | : | 2022-12-02 |
| **测试日期 TEST DATE** | : | 2022-12-02 to 2022-12-22 |
| **签发日期 ISSUE DATE** | : | 2023-01-03 |

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签发
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# 测试报告声明

# Test Report Declaration

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| **申请商/Applicant** | 深圳市天珑移动技术有限公司<br>Shenzhen Tinno Mobile Technology Corp. | |
| **申请商地址<br>Applicant Address** | 深圳市南山区西丽街道西丽社区同发南路天珑移动总部大厦南侧 27-001<br>27-001, South Side of Tianlong Mobile Headquarters Building, Tongfa South Road, Xili Community, Xili Street, Nanshan District, Shenzhen, Guangdong, PRC | |
| **产品名称<br>Product Name** | 可充电锂离子电芯<br>Rechargeable Li-ion Cell | |
| **型号/ Model Name** | U383246PV | |
| **额定值/ Rating** | 3.8 V, 600 mAh, 2.28 Wh | |
| **制造商信息<br>Manufacturer information** | 制造商/Manufacturer | 吉安市优特利科技有限公司<br>JI'AN UTILITY TECHNOLOGY CO., LTD. |
| | 制造商地址<br>Manufacturer Address | 中国江西省国家井冈山经济技术开发区(江西吉安)<br>ECONOMIC AND TECHNICAL DEVELOPMENT AREA,JINGGANGSHAN,JIANGXI PROVINCE, CHINA<br>( JI'AN, JIANGXI) |
| **工厂信息<br>Factory information** | 工厂<br>Factory | 吉安市优特利科技有限公司<br>JI'AN UTILITY TECHNOLOGY CO., LTD. |
| | 工厂地址<br>Factory Address | 中国江西省国家井冈山经济技术开发区(江西吉安)<br>ECONOMIC AND TECHNICAL DEVELOPMENT AREA,JINGGANGSHAN,JIANGXI PROVINCE, CHINA<br>( JI'AN, JIANGXI) |
| **尺寸/Size** | 45.6×31.6×3.8mm | |
| **电池信息<br>Battery information** | 单电芯/ Single cell | |
| | 物理特性/Physical description | 棱形固体/ Prismatic solid |
| **检验方法及判定标准<br>Test Method and Criterion** | 联合国《关于危险货物运输的建议书试验和标准手册》第七版修正1第38.3节<br>UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS, Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.7/Amend.1, section 38.3 | |
| **测试项目<br>Test Items** | 高度模拟试验；温度试验；振动试验；冲击试验；外短路试验；挤压试验；强制放电<br>Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Crush, Force discharge | |
| **测试结论<br>Conclusion** | 受检样品通过 UN 38.3 各项检测，检测结果合格<br>The sample has passed the test items of UN38.3 | |
| **备注/ Remarks** | 测试结果为临限值时，我司将出具测量不确定度,并依据 95%的置信区间，给出判定结果。<br>When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% Confidence intervals. | |

# 深圳市摩尔环宇通信技术有限公司检验报告

## Shenzhen Morlab Communications Technology Co., Ltd. Test Report

| 序号 No. | 检验项目名称 Name of test items | 标准要求或标准款号 Standard Requirement or the Clause Number of Standard | 检测结果 Test Result | 本项结论 Test Conclusion | 备注 Remarks |
|---|---|---|---|---|---|
| 1 | 高度模拟试验 Altitude simulation | 联合国《关于危险货物运输的建议书 试验和标准手册》(以下简称:试验和标准手册) UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Amend.1, 38.3 试验 T.1 Test T.1 | 见附表 1 See Appendix 1 | 合格 Passed | / |
| 2 | 温度试验 Thermal Test | 试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Amend.1, 38.3 试验 T.2 Test T.2 | 见附表 2 See Appendix 2 | 合格 Passed | / |
| 3 | 振动试验 Vibration | 试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Amend.1, 38.3 试验 T.3 Test T.3 | 见附表 3 See Appendix 3 | 合格 Passed | / |
| 4 | 冲击试验 Shock | 试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Amend.1, 38.3 试验 T.4 Test T.4 | 见附表 4 See Appendix 4 | 合格 Passed | / |
| 5 | 外短路试验 External short circuit | 试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Amend.1, 38.3 试验 T.5 Test T.5 | 见附表 5 See Appendix 5 | 合格 Passed | / |
| 6 | 挤压试验 Crush | 试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Amend.1, 38.3 试验 T.6 Test T.6 | 见附表 6 See Appendix 6 | 合格 Passed | / |
| 7 | 过充电试验 Overcharge | 试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Amend.1, 38.3 试验 T.7 Test T.7 | 见附表 7 See Appendix 7 | N/A | / |
| 8 | 强制放电 Force discharge | 试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Amend.1, 38.3 试验 T.8 Test T.8 | 见附表 8 See Appendix 8 | 合格 Passed | / |
| 检验环境条件 Test Environment Condition | | 环境温度: 15~25℃ Ambient Temperature: 15~25℃ | | | |
| 备注 Remarks | | 试验样品为单电芯，无过充电保护装置，不适用于过充电试验。 The battery cell do not equip with overcharge protection that are not subjected to the overcharge test. | | | |

| Change History | | |
|---|---|---|
| **Version** | **Date** | **Reason for change** |
| 1.0 | 2023-01-03 | First edition |
| | | |

# 检验报告-附件 1

## Test Report-Appendix 1

| 序号 No. | 1 | 检测项目名称 Name of test items | | 高度模拟试验 Altitude simulation | | | | |
|---|---|---|---|---|---|---|---|---|
| 样品编号 Sample No. | 样品状态 Sample Status | 试验前 Before | | 试验后 After | | 质量损失 Mass Loss/% | 剩余电压 Residual OCV/% | 其他现象 Other Event |
| | | 质量 Weight/g | 开路电压 OCV/V | 质量 Weight/g | 开路电压 OCV/V | | | |
| 1 | 首次充满 Fully charged at first cycle | 10.5460 | 4.333 | 10.5454 | 4.329 | 0.0057 | 99.91 | O |
| 2 | 首次充满 Fully charged at first cycle | 10.5205 | 4.333 | 10.5200 | 4.330 | 0.0048 | 99.93 | O |
| 3 | 首次充满 Fully charged at first cycle | 10.5199 | 4.332 | 10.5192 | 4.329 | 0.0067 | 99.93 | O |
| 4 | 首次充满 Fully charged at first cycle | 10.5369 | 4.331 | 10.5365 | 4.328 | 0.0038 | 99.93 | O |
| 5 | 首次充满 Fully charged at first cycle | 10.5849 | 4.332 | 10.5845 | 4.328 | 0.0038 | 99.91 | O |
| 6 | 25 次循环后充满 Fully charged after 25 cycles | 10.6331 | 4.330 | 10.6325 | 4.327 | 0.0056 | 99.93 | O |
| 7 | 25 次循环后充满 Fully charged after 25 cycles | 10.4852 | 4.331 | 10.4847 | 4.328 | 0.0048 | 99.93 | O |
| 8 | 25 次循环后充满 Fully charged after 25 cycles | 10.4256 | 4.333 | 10.4248 | 4.329 | 0.0077 | 99.91 | O |
| 9 | 25 次循环后充满 Fully charged after 25 cycles | 10.5597 | 4.332 | 10.5592 | 4.329 | 0.0047 | 99.93 | O |
| 10 | 25 次循环后充满 Fully charged after 25 cycles | 10.5552 | 4.333 | 10.5546 | 4.330 | 0.0057 | 99.93 | O |

备注: L-漏液，V-漏气，D-解体， R-破裂，F-起火，O-无漏液，无解体，无破裂，无起火；

Remark: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No Leakage, No Venting, No Disassembly, No Rupture, No Fire

# 检验报告-附件 2

## Test Report-Appendix 2

| 序号 No. | 2 | 检测项目名称 Name of test items | | 温度试验 Thermal Test | | | | |
|---|---|---|---|---|---|---|---|---|
| 样品编号 Sample No. | 样品状态 Sample Status | 试验前 Before | | 试验后 After | | 质量损失 Mass Loss/% | 剩余电压 Residual OCV/% | 其他现象 Other Event |
| | | 质量 Weight/g | 开路电压 OCV/V | 质量 Weight/g | 开路电压 OCV/V | | | |
| 1 | 首次充满 Fully charged at first cycle | 10.5454 | 4.329 | 10.5381 | 4.257 | 0.0692 | 98.34 | O |
| 2 | 首次充满 Fully charged at first cycle | 10.5200 | 4.330 | 10.5126 | 4.259 | 0.0703 | 98.36 | O |
| 3 | 首次充满 Fully charged at first cycle | 10.5192 | 4.329 | 10.5118 | 4.258 | 0.0703 | 98.36 | O |
| 4 | 首次充满 Fully charged at first cycle | 10.5365 | 4.328 | 10.5290 | 4.258 | 0.0712 | 98.38 | O |
| 5 | 首次充满 Fully charged at first cycle | 10.5845 | 4.328 | 10.5771 | 4.257 | 0.0699 | 98.36 | O |
| 6 | 25 次循环后充满 Fully charged after 25 cycles | 10.6325 | 4.327 | 10.6250 | 4.256 | 0.0705 | 98.36 | O |
| 7 | 25 次循环后充满 Fully charged after 25 cycles | 10.4847 | 4.328 | 10.4774 | 4.259 | 0.0696 | 98.41 | O |
| 8 | 25 次循环后充满 Fully charged after 25 cycles | 10.4248 | 4.329 | 10.4174 | 4.259 | 0.0710 | 98.38 | O |
| 9 | 25 次循环后充满 Fully charged after 25 cycles | 10.5592 | 4.329 | 10.5519 | 4.258 | 0.0691 | 98.36 | O |
| 10 | 25 次循环后充满 Fully charged after 25 cycles | 10.5546 | 4.330 | 10.5472 | 4.259 | 0.0701 | 98.36 | O |
| 备注: L-漏液，V-漏气，D-解体， R-破裂，F-起火，O-无漏液，无解体，无破裂，无起火；<br>Remark: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No Leakage, No Venting, No Disassembly, No Rupture, No Fire | | | | | | | | |

# 检验报告-附件 3

## Test Report-Appendix 3

| 序号 No. | 3 | 检测项目名称 Name of test items | | 振动试验 Vibration | | | | |
|---|---|---|---|---|---|---|---|---|
| 样品编号 Sample No. | 样品状态 Sample Status | 试验前 Before | | 试验后 After | | 质量损失 Mass Loss/% | 剩余电压 Residual OCV/% | 其他现象 Other Event |
| | | 质量 Weight/g | 开路电压 OCV/V | 质量 Weight/g | 开路电压 OCV/V | | | |
| 1 | 首次充满 Fully charged at first cycle | 10.5381 | 4.257 | 10.5372 | 4.256 | 0.0085 | 99.98 | O |
| 2 | 首次充满 Fully charged at first cycle | 10.5126 | 4.259 | 10.5116 | 4.258 | 0.0095 | 99.98 | O |
| 3 | 首次充满 Fully charged at first cycle | 10.5118 | 4.258 | 10.5109 | 4.256 | 0.0086 | 99.95 | O |
| 4 | 首次充满 Fully charged at first cycle | 10.5290 | 4.258 | 10.5280 | 4.256 | 0.0095 | 99.95 | O |
| 5 | 首次充满 Fully charged at first cycle | 10.5771 | 4.257 | 10.5760 | 4.256 | 0.0104 | 99.98 | O |
| 6 | 25 次循环后充满 Fully charged after 25 cycles | 10.6250 | 4.256 | 10.6240 | 4.255 | 0.0094 | 99.98 | O |
| 7 | 25 次循环后充满 Fully charged after 25 cycles | 10.4774 | 4.259 | 10.4765 | 4.257 | 0.0086 | 99.95 | O |
| 8 | 25 次循环后充满 Fully charged after 25 cycles | 10.4174 | 4.259 | 10.4164 | 4.258 | 0.0096 | 99.98 | O |
| 9 | 25 次循环后充满 Fully charged after 25 cycles | 10.5519 | 4.258 | 10.5510 | 4.257 | 0.0085 | 99.98 | O |
| 10 | 25 次循环后充满 Fully charged after 25 cycles | 10.5472 | 4.259 | 10.5463 | 4.258 | 0.0085 | 99.98 | O |
| 备注: L-漏液，V-漏气，D-解体， R-破裂，F-起火，O-无漏液，无解体，无破裂，无起火；<br>Remark: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No Leakage, No Venting, No Disassembly, No Rupture, No Fire | | | | | | | | |

# 检验报告-附件 4

## Test Report-Appendix 4

| 序号 No. | 4 | 检测项目名称 Name of test items | | 冲击试验 Shock | | | | |
|---|---|---|---|---|---|---|---|---|
| 样品编号 Sample No. | 样品状态 Sample Status | 试验前 Before | | 试验后 After | | 质量损失 Mass Loss/% | 剩余电压 Residual OCV/% | 其他现象 Other Event |
| | | 质量 Weight/g | 开路电压 OCV/V | 质量 Weight/g | 开路电压 OCV/V | | | |
| 1 | 首次充满 Fully charged at first cycle | 10.5372 | 4.256 | 10.5360 | 4.255 | 0.0114 | 99.98 | O |
| 2 | 首次充满 Fully charged at first cycle | 10.5116 | 4.258 | 10.5103 | 4.256 | 0.0124 | 99.95 | O |
| 3 | 首次充满 Fully charged at first cycle | 10.5109 | 4.256 | 10.5096 | 4.254 | 0.0124 | 99.95 | O |
| 4 | 首次充满 Fully charged at first cycle | 10.5280 | 4.256 | 10.5267 | 4.255 | 0.0123 | 99.98 | O |
| 5 | 首次充满 Fully charged at first cycle | 10.5760 | 4.256 | 10.5746 | 4.254 | 0.0132 | 99.95 | O |
| 6 | 25 次循环后充满 Fully charged after 25 cycles | 10.6240 | 4.255 | 10.6227 | 4.254 | 0.0122 | 99.98 | O |
| 7 | 25 次循环后充满 Fully charged after 25 cycles | 10.4765 | 4.257 | 10.4752 | 4.256 | 0.0124 | 99.98 | O |
| 8 | 25 次循环后充满 Fully charged after 25 cycles | 10.4164 | 4.258 | 10.4150 | 4.257 | 0.0134 | 99.98 | O |
| 9 | 25 次循环后充满 Fully charged after 25 cycles | 10.5510 | 4.257 | 10.5496 | 4.255 | 0.0133 | 99.95 | O |
| 10 | 25 次循环后充满 Fully charged after 25 cycles | 10.5463 | 4.258 | 10.5450 | 4.257 | 0.0123 | 99.98 | O |

备注: L-漏液，V-漏气，D-解体， R-破裂，F-起火，O-无漏液，无解体，无破裂，无起火；

Remark: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No Leakage, No Venting, No Disassembly, No Rupture, No Fire

# 检验报告-附件 5

## Test Report-Appendix 5

| 序号 No. | 5 | 检测项目名称 Name of test items | 外短路试验 External short circuit |
|---|---|---|---|
| 样品编号 Sample No. | 样品状态 Sample status | 样品表面最高温度 Max. External Test Items / ℃ | 其他现象 Other Event |
| 1 | 首次充满 Fully charged at first cycle | 90.9 | O |
| 2 | 首次充满 Fully charged at first cycle | 99.9 | O |
| 3 | 首次充满 Fully charged at first cycle | 91.4 | O |
| 4 | 首次充满 Fully charged at first cycle | 91.6 | O |
| 5 | 首次充满 Fully charged at first cycle | 98.3 | O |
| 6 | 25 次循环后充满 Fully charged after 25 cycles | 105.7 | O |
| 7 | 25 次循环后充满 Fully charged after 25 cycles | 92.6 | O |
| 8 | 25 次循环后充满 Fully charged after 25 cycles | 98.9 | O |
| 9 | 25 次循环后充满 Fully charged after 25 cycles | 108.9 | O |
| 10 | 25 次循环后充满 Fully charged after 25 cycles | 103.9 | O |
| 备注: D-解体， R-破裂，F-起火，O-无解体，无破裂，无起火；<br>Remark: D-Disassembly, R-Rupture, F-Fire, O-No Disassembly, No Rupture, No Fire | | | |

# 检验报告-附件 6

## Test Report-Appendix 6

| 序号 No. | 6 | 检测项目名称 Name of test items | 挤压试验 Crush |
|---|---|---|---|
| 样品编号 Sample No. | 样品状态 Sample status | 样品表面最高温度 Max. External Test Items/ ℃ | 其他现象 Other Event |
| 11 | 首次 50%容量 50% of capacity at first cycle | 21.6 | O |
| 12 | 首次 50%容量 50% of capacity at first cycle | 21.4 | O |
| 13 | 首次 50%容量 50% of capacity at first cycle | 21.6 | O |
| 14 | 首次 50%容量 50% of capacity at first cycle | 21.2 | O |
| 15 | 首次 50%容量 50% of capacity at first cycle | 21.5 | O |
| 16 | 25 次循环后 50%容量 50% of capacity after25 cycles | 22.1 | O |
| 17 | 25 次循环后 50%容量 50% of capacity after25 cycles | 22.0 | O |
| 18 | 25 次循环后 50%容量 50% of capacity after25 cycles | 22.0 | O |
| 19 | 25 次循环后 50%容量 50% of capacity after25 cycles | 21.9 | O |
| 20 | 25 次循环后 50%容量 50% of capacity after25 cycles | 21.9 | O |
| 备注: D-解体，F-起火，O-无解体，无起火；<br>Remark: D-Disassembly, F-Fire, O-No Disassembly, No Fire | | | |

# 检验报告-附件 7

## Test Report-Appendix 7

| 序号<br>No. | 7 | 检测项目名称<br>Name of test items | 过充电试验<br>Overcharge |
|---|---|---|---|
| 样品编号<br>Sample No. | 样品状态<br>Sample status | 其他现象<br>Other Event | |
| N/A | N/A | N/A | |
| 备注: D-解体， F-起火，O-无解体，无起火；<br>Remark: D-Disassembly, F-Fire, O-No Disassembly, No Fire | | | |

# 检验报告-附件 8
## Test Report-Appendix 8

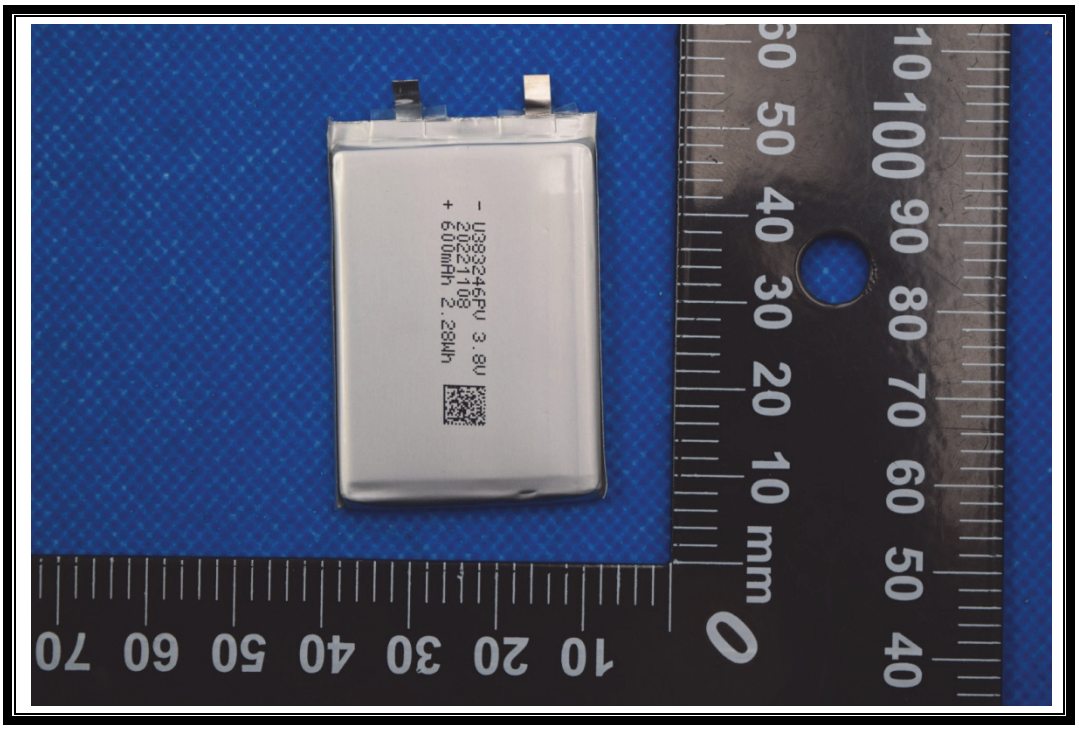
| 序号 No. | 8 | 检测项目名称 Name of test items | 强制放电 Force discharge |
|---|---|---|---|
| 样品编号 Sample No. | 样品状态 Sample status | 放电时间（H） Discharge time | 其他现象 Other Event |
| 21 | 首次完全放电 Fully discharged at first cycle | 1.5 | O |
| 22 | 首次完全放电 Fully discharged at first cycle | 1.5 | O |
| 23 | 首次完全放电 Fully discharged at first cycle | 1.5 | O |
| 24 | 首次完全放电 Fully discharged at first cycle | 1.5 | O |
| 25 | 首次完全放电 Fully discharged at first cycle | 1.5 | O |
| 26 | 首次完全放电 Fully discharged at first cycle | 1.5 | O |
| 27 | 首次完全放电 Fully discharged at first cycle | 1.5 | O |
| 28 | 首次完全放电 Fully discharged at first cycle | 1.5 | O |
| 29 | 首次完全放电 Fully discharged at first cycle | 1.5 | O |
| 30 | 首次完全放电 Fully discharged at first cycle | 1.5 | O |
| 31 | 25 次循环后完全放电 Fully discharged after 25 cycles | 1.5 | O |
| 32 | 25 次循环后完全放电 Fully discharged after 25 cycles | 1.5 | O |

| | | | |
|---|---|---|---|
| 33 | 25 次循环后完全放电<br>Fully discharged after 25 cycles | 1.5 | O |
| 34 | 25 次循环后完全放电<br>Fully discharged after 25 cycles | 1.5 | O |
| 35 | 25 次循环后完全放电<br>Fully discharged after 25 cycles | 1.5 | O |
| 36 | 25 次循环后完全放电<br>Fully discharged after 25 cycles | 1.5 | O |
| 37 | 25 次循环后完全放电<br>Fully discharged after 25 cycles | 1.5 | O |
| 38 | 25 次循环后完全放电<br>Fully discharged after 25 cycles | 1.5 | O |
| 39 | 25 次循环后完全放电<br>Fully discharged after 25 cycles | 1.5 | O |
| 40 | 25 次循环后完全放电<br>Fully discharged after 25 cycles | 1.5 | O |

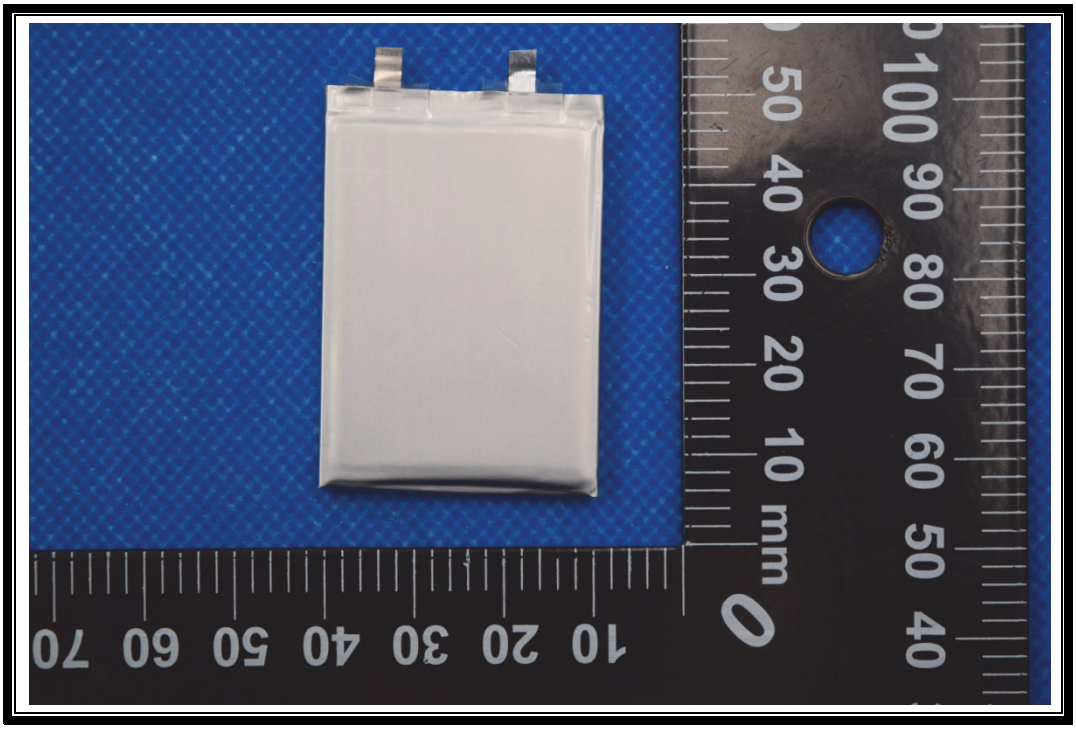
备注: D-解体， F-起火，O-无解体，无起火；
Remark: D-Disassembly, F-Fire, O-No Disassembly, No Fire
最大放电电流/ Max Continuous Discharge Current: 400 mA

# 样品图片 Photographs of the EUT

1




2



## 仪器设备清单/ List of test equipment used:

| 条款 Clause | 仪器设备名称 equipment | 型号 model | 系列号 Serial No. | 厂商 Manufacturer | 校准日期 Calibration date | 失效日期 Expiration date |
|---|---|---|---|---|---|---|
| 样品预处理 Sample pretreatment | 高性能电池检测系统 High-performance battery detection system | CT-4008-5V 6A-S1 | T1806-167 542~T1806 -167548 | newaretechno logy | 2022-07-06 | 2023-07-05 |
| | 电子天平 Electronic scale | JM-B30002 | 370 | Zhuji Chaoze Weighing | 2022-10-10 | 2023-10-09 |
| | 数据采集仪 Data recorder apparatus (Temperature and Voltage recorder) | GM90PS | S5C08022 | YOKOGAWA | 2022-10-10 | 2023-10-09 |
| 高度模拟试验 Altitude simulation | 低气压箱 Vacuum chamber | CHKX-125 | 110711 | gzgongwen | 2022-03-04 | 2023-03-03 |
| | 电子天平 Electronic scale | JM-B30002 | 370 | Zhuji Chaoze Weighing | 2022-10-10 | 2023-10-09 |
| | 数据采集仪 Data recorder apparatus (Temperature and Voltage recorder) | GM90PS | S5C08022 | YOKOGAWA | 2022-10-10 | 2023-10-09 |
| 温度试验 Thermal Test | 快速温变箱 Rapid temperature change box | QW1070P6 W15 | 12174318 | ESPEC | 2022-03-04 | 2023-03-03 |
| | 电子天平 Electronic scale | JM-B30002 | 370 | Zhuji Chaoze Weighing | 2022-10-10 | 2023-10-09 |
| | 数据采集仪 Data recorder apparatus (Temperature and Voltage recorder) | GM90PS | S5C08022 | YOKOGAWA | 2022-10-10 | 2023-10-09 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 振动试验 Vibration | 振动试验台 Vibration test bench | ES-30-370 | D1203045 | donglingtech | 2022-10-10 | 2023-10-09 |
| | 电子天平 Electronic scale | JM-B30002 | 370 | Zhuji Chaoze Weighing | 2022-10-10 | 2023-10-09 |
| | 数据采集仪 Data recorder apparatus (Temperature and Voltage recorder) | GM90PS | S5C08022 | YOKOGAWA | 2022-10-10 | 2023-10-09 |
| 冲击试验 Shock | 冲击碰撞试验台 Shock Test System | SY11-50 | 5120315/J120315 | donglingtech | 2022-03-04 | 2023-03-03 |
| | 电子天平 Electronic scale | JM-B30002 | 370 | Zhuji Chaoze Weighing | 2022-10-10 | 2023-10-09 |
| | 数据采集仪 Data recorder apparatus (Temperature and Voltage recorder) | GM90PS | S5C08022 | YOKOGAWA | 2022-10-10 | 2023-10-09 |
| 外短路试验 External short circuit | 防爆温箱 explosion-proof oven | DE207C | A08351 | Chongqing Hanba | 2022-06-02 | 2023-06-01 |
| | 微电阻测试仪 Milliohm-meter | TOS8010 | TM200445 | TOSSTAR | 2022-03-04 | 2023-03-03 |
| | 短路器 Short circuit | MORLAB-B01 | / | / | 2022-09-30 | 2023-03-29 |
| | 数据采集仪 Data recorder apparatus (Temperature and Voltage recorder) | GM90PS | S5C08022 | YOKOGAWA | 2022-10-10 | 2023-10-09 |

| | | | | | | |
|---|---|---|---|---|---|---|
| ☒挤压试验 Crush<br>□撞击试验 Impact | ☒挤压试验机<br>Crush Apparatus | BE-6045-2T | 20181113001 | DongGuan Bell | 2022-10-10 | 2023-10-09 |
| | □电池冲击试验机<br>Battery impact Apparatus | BE-5066 | 20080910346 | DongGuan Bell | 2022-03-04 | 2023-03-03 |
| | 数据采集仪<br>Data recorder apparatus (Temperature and Voltage recorder) | GM90PS | S5C08022 | YOKOGAWA | 2022-10-10 | 2023-10-09 |
| 过充电试验 Overcharge | 电池充放电系统<br>Battery Testing System | BTS-30V20A-8CH | 19ME190408006 | BETTATEQ | 2022-07-06 | 2023-07-05 |
| | 防爆温箱<br>explosion-proof oven | DE207C | A08351 | Chongqing Hanba | 2022-06-02 | 2023-06-01 |
| | 数据采集仪<br>Data recorder apparatus (Temperature and Voltage recorder) | GM90PS | S5C08022 | YOKOGAWA | 2022-10-10 | 2023-10-09 |
| 强制放电 Force discharge | 直流电源<br>DC power supply | KXN-6050D | 18K6050D040094 | zhaoxinpower | 2022-10-10 | 2023-10-09 |
| | 电子负载<br>Electronic load | IT8512A+ | 802143010737010063 | ITECH | 2022-07-06 | 2023-07-05 |
| | 数据采集仪<br>Data recorder apparatus (Temperature and Voltage recorder) | GM90PS | S5C08022 | YOKOGAWA | 2022-10-10 | 2023-10-09 |

## Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

| | |
|---|---|
| **Laboratory Name:** | Shenzhen Morlab Communications Technology Co., Ltd. |
| **Laboratory Address:** | FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen, GuangDong Province, P. R. China |
| **Telephone:** | +86 755 36698555 |
| **Facsimile:** | +86 755 36698525 |
| **E-mail:** | service@morlab.cn |
| **Website** | Http://www.morlab.cn |

2. Identification of the Responsible Testing Location

| | |
|---|---|
| **Name:** | Shenzhen Morlab Communications Technology Co., Ltd. |
| **Address:** | FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen, GuangDong Province, P. R. China |

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