

UN38.3 测试报告

UN38.3 Test Report

报告编号
Report No.

RHDTL260309130

样品名称及型号

二次锂离子电池 EB-BN950ABA

Sample Name
& Model

Secondary Li-ion Battery EB-BN950ABA

委托单位

株式会社アイプラン

Consignor

/

东莞市鸿鼎储能检测技术有限公司

Dongguan HDTL Technology Co., Ltd.

| | | | |
|--|---|---------------------|--|
| 委托人 Applicant | 株式会社アイプラン | | |
| 委托人地址 Applicant's address | 日本国東京都千代田区岩本町 2-15-19 岩本町サニービル 3 階 | | |
| 制造商 Manufacturer | 利瑞盛新能源科技(惠州)有限公司 Liruisheng New Energy Technology (Huizhou) Co., Ltd | | |
| 制造商地址 Manufacturer's address | 广东省惠州市仲恺高新区平南工业区 48 号小区二期厂房(五层) Phase II Plant (Fifth Floor), No.48 District, Pingnan Industrial Park, Zhongkai Hi-Tech Development Zone, Huizhou City, Guangdong | | |
| 联系电话 Telephone Number | 15107527650 | | |
| 邮件地址 Email address | songruifeng@liruisheng-hz.com | | |
| 网址 Website | / | | |
| 样品名称 Sample Name | 二次锂离子电池 Secondary Li-ion Battery | | |
| 样品型号 Sample Model | EB-BN950ABA | | |
| 样品外观 Appearance | 银色近长方体, 尺寸:90.3*37.9*4.3 (mm) Approximate Silver Cuboid, size:90.3*37.9*4.3 (mm) | | |
| 商标 Trademark | / | | |
| 测试方法和判定标准 Test method and criterion | 联合国《试验和标准手册》第八修正版 38.3 章节 United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3 | | |
| 样品接收日期 Accepted date | 2026.03.09 | 测试起讫日期 Test date | 2026.03.09 ~ 2026.04.17 |
| 测试项目 Test items | 高度模拟、温度试验、振动、冲击、外部短路、撞击/挤压、强制放电。 Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Impact/Crush, Forced discharge. | | |
| 测试结论 Conclusion | 检验结论: Test conclusion: 由株式会社アイプラン送检的可充电锂离子聚合物电池, 根据联合国《试验和标准手册》第八修正版 38.3 章节进行检测。 The Rechargeable Li-ion polymer Battery submitted for inspection by 株式会社アイプラン are tested according to United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3. 检验结果: 通过 Test result: Pass 签发日期(Issue date): 2026.04.17 | | |
| 主检 Tested by: |  | 审核 Checked by: | 刘志鹏 Approved by:   |

| 参数信息 Parameter information | | |
|--------------------------------------|------------|----------------|
| 产品 Product | 电芯 Cell | 电池 Battery |
| 型号 Model | 554091 | EB-BN950ABA |
| 标称电压 Nominal Voltage | 3.85V | 3.85V(12.71Wh) |
| 额定容量 Rated Capacity | 3300mAh | 3300mAh |
| 充电限制电压 Limited Charge Voltage | 4.4V | 4.4V |
| 标准充电电流 Standard Charge Current | 660mA | 660mA |
| 标准放电电流 Standard Discharge Current | 660mA | 660mA |
| 最大充电电流 Max Charge Current | 1650mA | 1650mA |
| 最大放电电流 Max Discharge Current | 1650mA | 1650mA |
| 充电截止电流 End Charge Current | 66mA | 66mA |
| 放电终止电压 Discharge Cut-off Voltage | 3V | 3V |
| 质量 Mass | 45.154g | |
| 电芯个数 Cells Number | 1PCS | |

| 序号 No. | 测试项目名称 Name of test | 标准要求或标准条款号 Standard requirement or the clause number of standard | 测试结果 Test result | 本项结论 Test conclusion | 备注 Remarks |
|---|-----------------------------------|--|----------------------------|----------------------------|---------------|
| 1 | 高度模拟 Altitude simulation | 联合国《试验和标准手册》第八修正版 38.3 章节 United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 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 | 联合国《试验和标准手册》第八修正版 38.3 章节 United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3 试验 T.2 Test T.2 | 见附表 2 See Appendix 2 | 合格 Passed | / |
| 3 | 振动 Vibration | 联合国《试验和标准手册》第八修正版 38.3 章节 United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3 试验 T.3 Test T.3 | 见附表 3 See Appendix 3 | 合格 Passed | / |
| 4 | 冲击 Shock | 联合国《试验和标准手册》第八修正版 38.3 章节 United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3 试验 T.4 Test T.4 | 见附表 4 See Appendix 4 | 合格 Passed | / |
| 5 | 外部短路 External short circuit | 联合国《试验和标准手册》第八修正版 38.3 章节 United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3 试验 T.5 Test T.5 | 见附表 5 See Appendix 5 | 合格 Passed | / |
| 6 | 撞击/挤压 Impact/Crush | 联合国《试验和标准手册》第八修正版 38.3 章节 United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3 试验 T.6 Test T.6 | 见附表 6 See Appendix 6 | 合格 Passed | / |
| 7 | 过度充电 Overcharge | 联合国《试验和标准手册》第八修正版 38.3 章节 United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3 试验 T.7 Test T.7 | 见附表 7 See Appendix 7 | 不适用 Not applicable | / |
| 8 | 强制放电 Forced discharge | 联合国《试验和标准手册》第八修正版 38.3 章节 United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3 试验 T.8 Test T.8 | 见附表 8 See Appendix 8 | 合格 Passed | / |
| 测试环境条件 Test environment condition | | 环境温度: 20°C-25°C; 环境湿度: 45%-75% Ambient temperature: 20°C-25°C; Ambient humidity: 45%-75% | | | |

附表 3
 Appendix 3

| 序号 No. | T.3 | 测试项目名称 Name of Test Items | | 振动 Vibration | | | | |
|--|----------------------------------|------------------------------|-------------------|-------------------|-------------------|-----------------------|------------------------------|---------------------|
| 样品编号 Sample No | 样品状态 Sample status | 测试前 Before | | 测试后 After | | 质量损失 Mass loss (%) | 剩余电压 Residual voltage (%) | 测试结果 Test result |
| | | 电池质量 m_1 (g) | 开路电压 V_1 (V) | 电池质量 m_2 (g) | 开路电压 V_2 (V) | | | |
| C1 | 首次完全充电 1 CYC Fully Charged | 44.798 | 4.32 | 44.798 | 4.32 | 0.000 | 100.00 | O |
| C2 | 首次完全充电 1 CYC Fully Charged | 44.976 | 4.34 | 44.976 | 4.34 | 0.000 | 100.00 | O |
| C3 | 首次完全充电 1 CYC Fully Charged | 44.903 | 4.31 | 44.903 | 4.30 | 0.000 | 99.77 | O |
| C4 | 首次完全充电 1 CYC Fully Charged | 44.835 | 4.32 | 44.835 | 4.31 | 0.000 | 99.77 | O |
| C5 | 首次完全充电 1 CYC Fully Charged | 44.841 | 4.34 | 44.840 | 4.34 | 0.002 | 100.00 | O |
| C6 | 25 次完全充电 25 CYC Fully Charged | 44.857 | 4.32 | 44.856 | 4.32 | 0.002 | 100.00 | O |
| C7 | 25 次完全充电 25 CYC Fully Charged | 44.862 | 4.33 | 44.862 | 4.33 | 0.000 | 100.00 | O |
| C8 | 25 次完全充电 25 CYC Fully Charged | 45.149 | 4.33 | 45.149 | 4.32 | 0.000 | 99.77 | O |
| C9 | 25 次完全充电 25 CYC Fully Charged | 44.880 | 4.34 | 44.880 | 4.33 | 0.000 | 99.77 | O |
| C10 | 25 次完全充电 25 CYC Fully Charged | 45.006 | 4.34 | 45.005 | 4.34 | 0.002 | 100.00 | O |
| 以下空白 | | | | | | | | |
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| 注: L-泄露; V-排气; D-解体; R-破裂; F-起火; O-无泄露、无排气、无解体、无破裂、无起火 Note: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire O-No leakage, no venting, no disassembly, no rupture, no fire. | | | | | | | | |

附表 5
 Appendix 5

| 序号 No. | T.5 | 测试项目名称 Name of Test Items | 外部短路 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 Temperature (°C) | 测试结果 Test result | 备注 Remark |
| C1 | 首次完全充电 1 CYC Fully Charged | 59.2 | O | / |
| C2 | 首次完全充电 1 CYC Fully Charged | 58.5 | O | / |
| C3 | 首次完全充电 1 CYC Fully Charged | 56.5 | O | / |
| C4 | 首次完全充电 1 CYC Fully Charged | 57.1 | O | / |
| C5 | 首次完全充电 1 CYC Fully Charged | 56.2 | O | / |
| C6 | 25 次完全充电 25 CYC Fully Charged | 57.8 | O | / |
| C7 | 25 次完全充电 25 CYC Fully Charged | 56.8 | O | / |
| C8 | 25 次完全充电 25 CYC Fully Charged | 55.0 | O | / |
| C9 | 25 次完全充电 25 CYC Fully Charged | 56.2 | O | / |
| C10 | 25 次完全充电 25 CYC Fully Charged | 56.8 | O | / |
| 以下空白 | | | | |
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| 注: D-解体; R-破裂; F-起火; O-无解体、无破裂、无起火、外表温度不超过 170°C Note: D-Disassembly, R-Rupture, F-Fire, O- No disassembly, no rupture, no fire, external temperature not exceed 170°C. | | | | |

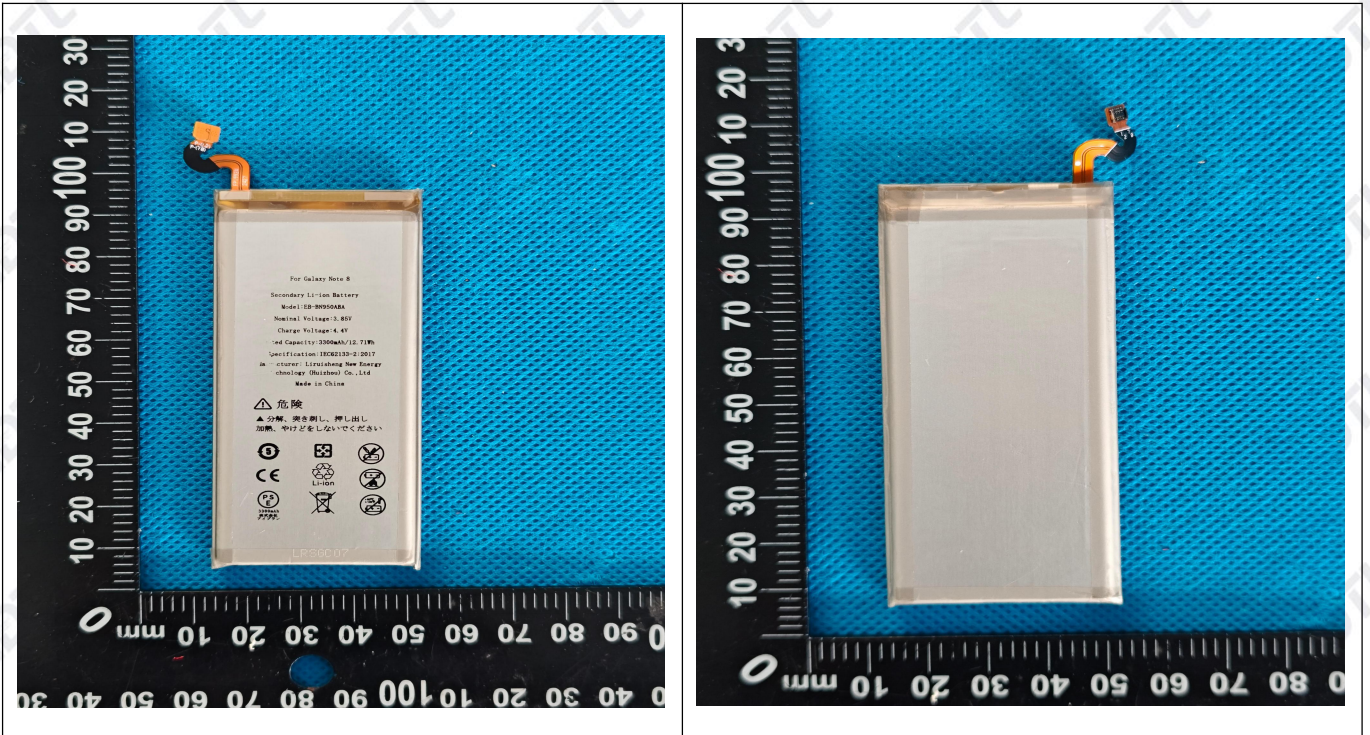
附表 6
 Appendix 6

| 序号 No. | T.6 | 测试项目名称 Name of Test Items | 撞击 Impact | 不适用 Not applicable |
|---|-----------------------------------|--|---------------------|-----------------------|
| | | | 挤压 Crush | 合格 PASS |
| 样品编号 Sample No | 样品状态 Sample status | 样品表面最高温度 Max. External Temperature (°C) | 测试结果 Test result | 备注 Remark |
| C11 | 首次 50%容量 1 CYC 50% Capacity | 25.1 | O | / |
| C12 | 首次 50%容量 1 CYC 50% Capacity | 24.7 | O | / |
| C13 | 首次 50%容量 1 CYC 50% Capacity | 25.2 | O | / |
| C14 | 首次 50%容量 1 CYC 50% Capacity | 24.3 | O | / |
| C15 | 首次 50%容量 1 CYC 50% Capacity | 24.7 | O | / |
| C16 | 25 次 50%容量 25 CYC 50% Capacity | 24.3 | O | / |
| C17 | 25 次 50%容量 25 CYC 50% Capacity | 24.2 | O | / |
| C18 | 25 次 50%容量 25 CYC 50% Capacity | 24.3 | O | / |
| C19 | 25 次 50%容量 25 CYC 50% Capacity | 24.8 | O | / |
| C20 | 25 次 50%容量 25 CYC 50% Capacity | 25.1 | O | / |
| 以下空白 | | | | |
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| 注: D-解体; F-起火; O-无解体、无起火、外表温度不超过 170°C Note: D-Disassembly, F-Fire, O- No disassembly, no fire, external temperature not exceed 170°C. | | | | |

附表 8
 Appendix 8

| 序号 No. | T.8 | 测试项目名称 Name of Test Items | 强制放电 Forced discharge |
|--|-------------------------------------|------------------------------|--------------------------|
| 样品编号 Sample No | 样品状态 Sample status | 测试结果 Test result | 备注 Remark |
| C21 | 首次完全放电 1 CYC Fully Discharged | O | / |
| C22 | 首次完全放电 1 CYC Fully Discharged | O | / |
| C23 | 首次完全放电 1 CYC Fully Discharged | O | / |
| C24 | 首次完全放电 1 CYC Fully Discharged | O | / |
| C25 | 首次完全放电 1 CYC Fully Discharged | O | / |
| C26 | 首次完全放电 1 CYC Fully Discharged | O | / |
| C27 | 首次完全放电 1 CYC Fully Discharged | O | / |
| C28 | 首次完全放电 1 CYC Fully Discharged | O | / |
| C29 | 首次完全放电 1 CYC Fully Discharged | O | / |
| C30 | 首次完全放电 1 CYC Fully Discharged | O | / |
| C31 | 25 次完全放电 25 CYC Fully Discharged | O | / |
| C32 | 25 次完全放电 25 CYC Fully Discharged | O | / |
| C33 | 25 次完全放电 25 CYC Fully Discharged | O | / |
| C34 | 25 次完全放电 25 CYC Fully Discharged | O | / |
| C35 | 25 次完全放电 25 CYC Fully Discharged | O | / |
| C36 | 25 次完全放电 25 CYC Fully Discharged | O | / |
| C37 | 25 次完全放电 25 CYC Fully Discharged | O | / |
| C38 | 25 次完全放电 25 CYC Fully Discharged | O | / |
| C39 | 25 次完全放电 25 CYC Fully Discharged | O | / |
| C40 | 25 次完全放电 25 CYC Fully Discharged | O | / |
| 注: D-解体; F-起火; O-无解体、无起火 Note: D-Disassembly, F-Fire, O- No disassembly, no fire. | | | |

样品图片 Sample Photo



注意事项

Important Notice

1. 本报告书无 HDTL 盖章无效。

The test report is invalid without the official stamp of HDTL.

2. 本报告书无批准人、审核人、及主检人签名无效。

The test report is invalid without the signatures of Ratifier, Reviewer and Testing engineer.

3. 未经 HDTL 书面同意, 不得部分地复制本报告书。

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6. 本报告仅对本次测试样品有效。

The test report is valid for the tested samples only.

7. 本报告中的中文内容仅供参考。

The Chinese contents in this report are only for reference.

8. 对报告书若有异议, 应于收到报告之日起 15 天内向本公司提出。

Objections to the test report must be submitted to HDTL within 15 days.

报告结束

End of report