



NO.1122100422

# 检 测 报 告

## Test Report

样品名称： 锂离子聚合物电池 PL582624 3.87V 440mAh 1.70Wh

Name of Sample: Li-ion polymer battery PL582624 3.87V 440mAh 1.70Wh

委托单位： 东莞新能源科技有限公司

Consignor: Dongguan Amperex Technology Limited

上海化工院检测有限公司

Shanghai Institute of Chemical Industry Testing Co., Ltd.



# 上海化工院检测有限公司 检测报告

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|                                |                                                                                                                                                                                                    |                                                     |                         |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------|
| 样品名称<br>Name of Sample         | 中文<br>Chinese                                                                                                                                                                                      | 锂离子聚合物电池 PL582624 3.87V 440mAh 1.70Wh               |                         |
|                                | 英文<br>English                                                                                                                                                                                      | Li-ion polymer battery PL582624 3.87V 440mAh 1.70Wh |                         |
| 样品编号<br>Sample No.             | 1122100422                                                                                                                                                                                         |                                                     |                         |
| 委托单位<br>Consignor              | 东莞新能源科技有限公司<br>Dongguan Amperex Technology Limited                                                                                                                                                 |                                                     |                         |
| 生产单位<br>Manufacturer           | 东莞新能源科技有限公司<br>Dongguan Amperex Technology Limited                                                                                                                                                 |                                                     |                         |
| 检测方法<br>Test method            | 联合国《试验和标准手册》<br>ST/SG/AC.10/11/Rev.7 38.3 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7<br>Section 38.3                                                                                     |                                                     |                         |
| 判定标准<br>Criterion              | 联合国《试验和标准手册》<br>ST/SG/AC.10/11/Rev.7 38.3 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7<br>Section 38.3                                                                                     |                                                     |                         |
| 样品外观<br>Appearance             | 银色, 黄色双色 铝塑外壳<br>Silvery and yellow Aluminum-plastics shell                                                                                                                                        |                                                     |                         |
| 样品接受日期<br>Accepted Date        | 2022-10-27                                                                                                                                                                                         | 检测起迄日期<br>Test Date                                 | 2022-11-08 ~ 2022-11-23 |
| 检测项目<br>Test Items             | 高度模拟;热测试;振动;冲击;外短路;挤压;过充电;强制放电<br>Altitude simulation, Thermal test, Vibration, Shock, External short<br>circuit, Crush, Overcharge, Forced discharge                                              |                                                     |                         |
| 检测结论<br>Conclusion             | 经检测, 该样品符合联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3标准要求。<br>The sample has passed the test items of UN Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.7 Section 38.3<br><br>生效日期(Date): 2022-11-23 |                                                     |                         |
| 备注<br>Comment                  | 可充电单电芯电池Rechargeable Single Cell Battery. /                                                                                                                                                        |                                                     |                         |
| 委托单位地址<br>Consignor<br>Address | /                                                                                                                                                                                                  |                                                     | 邮政编码<br>Post Code<br>/  |

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上海化工院检测有限公司  
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| 序号<br>No.                                 | 检测项目名称<br>Name of Test<br>Items  | 标准要求或标准条款号<br>Standard requirement or The<br>Clause Number of Standard                                                          | 检测结果<br>Test Result     | 本项结论<br>Conclusion | 备注<br>Remark    |
|-------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------|-----------------|
| 1                                         | 高度模拟<br>Altitude<br>simulation   | 联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T.1<br>UN Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.7 Section 38.3 Test<br>T.1 | 见附表 1<br>See Appendix 1 | 合格<br>Passed       | /               |
| 2                                         | 热测试<br>Thermal test              | 联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T.2<br>UN Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.7 Section 38.3 Test<br>T.2 | 见附表 2<br>See Appendix 2 | 合格<br>Passed       | /               |
| 3                                         | 振动<br>Vibration                  | 联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T.3<br>UN Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.7 Section 38.3 Test<br>T.3 | 见附表 3<br>See Appendix 3 | 合格<br>Passed       | /               |
| 4                                         | 冲击<br>Shock                      | 联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T.4<br>UN Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.7 Section 38.3 Test<br>T.4 | 见附表 4<br>See Appendix 4 | 合格<br>Passed       | /               |
| 5                                         | 外短路<br>External short<br>circuit | 联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T.5<br>UN Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.7 Section 38.3 Test<br>T.5 | 见附表 5<br>See Appendix 5 | 合格<br>Passed       | /               |
| 6                                         | 挤压<br>Crush                      | 联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T.6<br>UN Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.7 Section 38.3 Test<br>T.6 | 见附表 6<br>See Appendix 6 | 合格<br>Passed       | /               |
| 7                                         | 过充电<br>Overcharge                | 联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T.7<br>UN Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.7 Section 38.3 Test<br>T.7 | 见附表 7<br>See Appendix 7 | 合格<br>Passed       | /               |
| 8                                         | 强制放电<br>Forced discharge         | 联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T.8<br>UN Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.7 Section 38.3 Test<br>T.8 | 见附表 8<br>See Appendix 8 | 合格<br>Passed       | /               |
| 检测环境条件<br>Test Environment<br>Condition   |                                  | 环境温度:22℃-23℃;环境湿度:/%<br>Ambient temperature:22℃-23℃;Ambient humidity:/%                                                         |                         |                    |                 |
| 分包检验情况<br>Subcontracted Test<br>Condition |                                  | 检测项目<br>Test Item                                                                                                               | /                       |                    |                 |
|                                           |                                  | 分包实验室<br>Subcontracted<br>Laboratory                                                                                            | 名称<br>Name              | /                  | 邮编<br>Post Code |
|                                           |                                  |                                                                                                                                 | 地址<br>Address           | /                  | 电话<br>Tel       |

### 检测报告-附表1

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### 检测报告-附表2

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## 检测报告-附表3

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| 序号<br>No.                 | 3                                      | 检测项目名称<br>Name of Test Items |                   | 振动<br>Vibration  |                   |                         |                               |                            |
|---------------------------|----------------------------------------|------------------------------|-------------------|------------------|-------------------|-------------------------|-------------------------------|----------------------------|
| 样品<br>编号<br>Sample<br>No. | 样品状态<br>Sample Status                  | 试验前 Before                   |                   | 试验后 After        |                   | 质量损失<br>Mass Loss<br>/% | 剩余电压<br>Residual<br>OCV<br>/% | 其他<br>现象<br>Other<br>Event |
|                           |                                        | 质量<br>Mass<br>/g             | 开路电压<br>OCV<br>/V | 质量<br>Mass<br>/g | 开路电压<br>OCV<br>/V |                         |                               |                            |
| 001                       | 1CYC完全充电<br>1CYC Fully charged         | 6.5102                       | 4.34              | 6.5105           | 4.34              | 0.00                    | 100.00                        | O                          |
| 002                       | 1CYC完全充电<br>1CYC Fully charged         | 6.5144                       | 4.34              | 6.5148           | 4.33              | 0.00                    | 99.77                         | O                          |
| 003                       | 1CYC完全充电<br>1CYC Fully charged         | 6.5041                       | 4.34              | 6.5043           | 4.34              | 0.00                    | 100.00                        | O                          |
| 004                       | 1CYC完全充电<br>1CYC Fully charged         | 6.5460                       | 4.35              | 6.5464           | 4.35              | 0.00                    | 100.00                        | O                          |
| 005                       | 1CYC完全充电<br>1CYC Fully charged         | 6.5008                       | 4.35              | 6.5012           | 4.35              | 0.00                    | 100.00                        | O                          |
| 006                       | 25CYC完全充电<br>25CYC Fully charged       | 6.5353                       | 4.35              | 6.5357           | 4.34              | 0.00                    | 99.77                         | O                          |
| 007                       | 25CYC完全充电<br>25CYC Fully charged       | 6.4966                       | 4.35              | 6.4971           | 4.35              | 0.00                    | 100.00                        | O                          |
| 008                       | 25CYC完全充电<br>25CYC Fully charged       | 6.5452                       | 4.35              | 6.5455           | 4.35              | 0.00                    | 100.00                        | O                          |
| 009                       | 25CYC完全充电<br>25CYC Fully charged       | 6.5173                       | 4.35              | 6.5176           | 4.34              | 0.00                    | 99.77                         | O                          |
| 010                       | 25CYC完全充电<br>25CYC Fully charged       | 6.5286                       | 4.35              | 6.5292           | 4.35              | 0.00                    | 100.00                        | O                          |
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|                           |                                        |                              |                   |                  |                   |                         |                               |                            |
|                           |                                        |                              |                   |                  |                   |                         |                               |                            |

备注：L-泄漏 V-漏气 D-解体 R-破裂 F-起火 O-无泄漏、无漏气、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.

### 检测报告-附表4

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## Testing Co., Ltd. Test Report—Appendix 5

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### 检测报告-附表7

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| 序号<br>No.          | 7                                   | 检测项目名称<br>Name of Test Items | 过充电<br>Overcharge |
|--------------------|-------------------------------------|------------------------------|-------------------|
| 样品编号<br>Sample No. | 样品状态<br>Sample Status               | 其他现象<br>Other Event          |                   |
| 021                | 1CYC完全充电<br>1CYC Fully charged      | O                            |                   |
| 022                | 1CYC完全充电<br>1CYC Fully charged      | O                            |                   |
| 023                | 1CYC完全充电<br>1CYC Fully charged      | O                            |                   |
| 024                | 1CYC完全充电<br>1CYC Fully charged      | O                            |                   |
| 025                | 25CYC完全充电<br>25CYC Fully charged    | O                            |                   |
| 026                | 25CYC完全充电<br>25CYC Fully charged    | O                            |                   |
| 027                | 25CYC完全充电<br>25CYC Fully charged    | O                            |                   |
| 028                | 25CYC完全充电<br>25CYC Fully charged    | O                            |                   |
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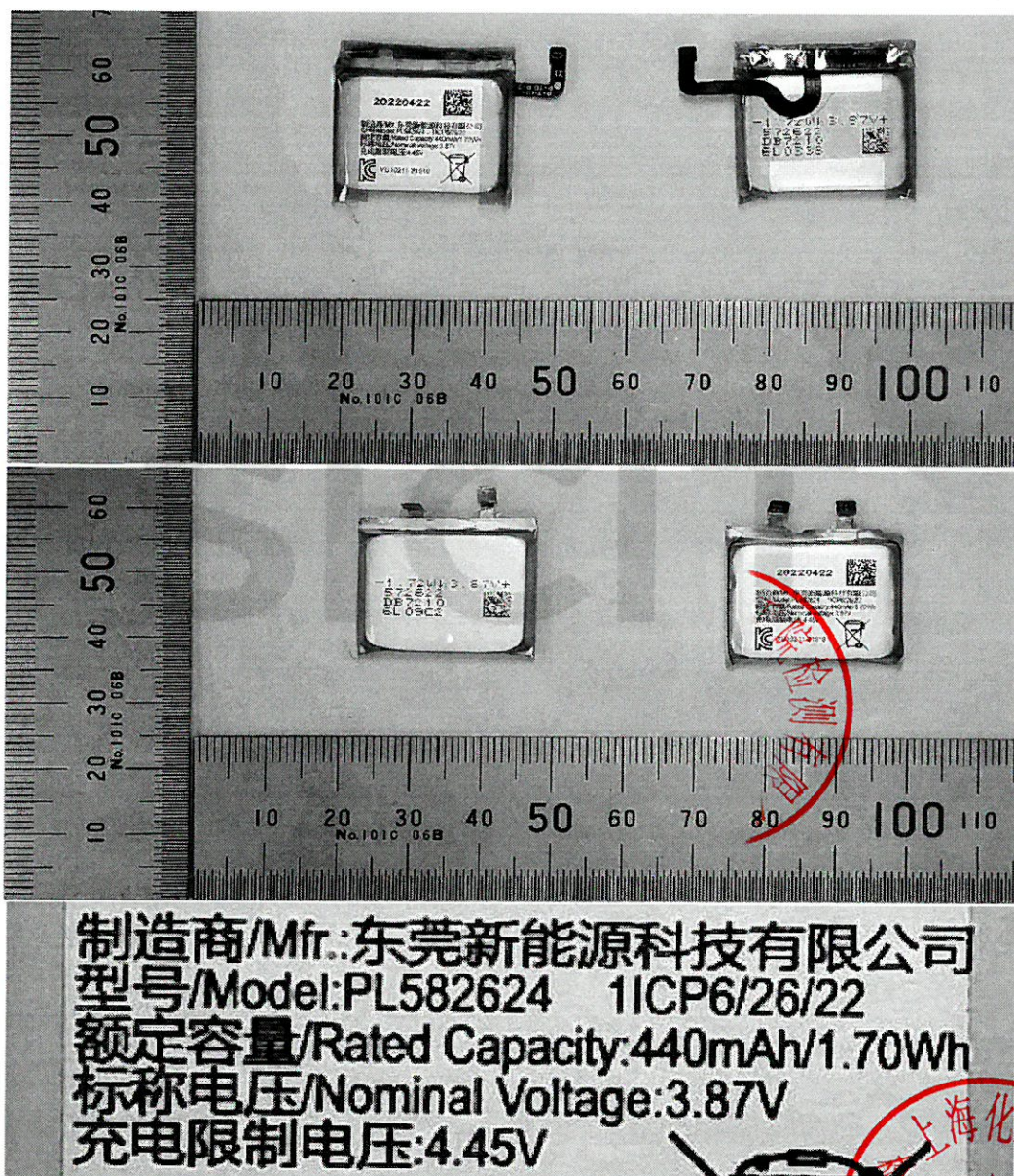
备注：D-解体 F-起火 O-无解体、无起火。  
 Note: D-Disassembly F-Fire O-No Disassembly & No Fire.

上海化工院检测有限公司  
检 测 报 告 - 附表8  
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| 序号<br>No.                                                                         | 8                                   | 检测项目名称<br>Name of Test Items | 强制放电<br>Forced discharge |
|-----------------------------------------------------------------------------------|-------------------------------------|------------------------------|--------------------------|
| 样品编号<br>Sample No.                                                                | 样品状态<br>Sample Status               | 其他现象<br>Other Event          |                          |
| 029                                                                               | 1CYC完全放电<br>1CYC Fully discharged   | O                            |                          |
| 030                                                                               | 1CYC完全放电<br>1CYC Fully discharged   | O                            |                          |
| 031                                                                               | 1CYC完全放电<br>1CYC Fully discharged   | O                            |                          |
| 032                                                                               | 1CYC完全放电<br>1CYC Fully discharged   | O                            |                          |
| 033                                                                               | 1CYC完全放电<br>1CYC Fully discharged   | O                            |                          |
| 034                                                                               | 1CYC完全放电<br>1CYC Fully discharged   | O                            |                          |
| 035                                                                               | 1CYC完全放电<br>1CYC Fully discharged   | O                            |                          |
| 036                                                                               | 1CYC完全放电<br>1CYC Fully discharged   | O                            |                          |
| 037                                                                               | 1CYC完全放电<br>1CYC Fully discharged   | O                            |                          |
| 038                                                                               | 1CYC完全放电<br>1CYC Fully discharged   | O                            |                          |
| 039                                                                               | 25CYC完全放电<br>25CYC Fully discharged | O                            |                          |
| 040                                                                               | 25CYC完全放电<br>25CYC Fully discharged | O                            |                          |
| 041                                                                               | 25CYC完全放电<br>25CYC Fully discharged | O                            |                          |
| 042                                                                               | 25CYC完全放电<br>25CYC Fully discharged | O                            |                          |
| 043                                                                               | 25CYC完全放电<br>25CYC Fully discharged | O                            |                          |
| 044                                                                               | 25CYC完全放电<br>25CYC Fully discharged | O                            |                          |
| 045                                                                               | 25CYC完全放电<br>25CYC Fully discharged | O                            |                          |
| 046                                                                               | 25CYC完全放电<br>25CYC Fully discharged | O                            |                          |
| 047                                                                               | 25CYC完全放电<br>25CYC Fully discharged | O                            |                          |
| 048                                                                               | 25CYC完全放电<br>25CYC Fully discharged | O                            |                          |
| 备注：D-解体 F-起火 O-无解体、无起火。<br>Note: D-Disassembly F-Fire O-No Disassembly & No Fire. |                                     |                              |                          |



\*\*\*报告结束\*\*\*

