



中国认可
国际互认
检测
TESTING
CNAS L16465

Report No.: ECT20230714045E

Stacking Test Report

堆码试验报告

Sample name 物品名称	Polymer Li-ion Cell QY 400909 3.7V 28mAh 0.1036Wh 聚合物锂离子电芯 QY 400909 3.7V 28mAh 0.1036Wh
Applicant 申请商	Dongguan Quanyi Energy Co., Ltd. 东莞市全一能源有限公司
Applicant's Address 委托方地址	31 Dongshen Road, Changping Town, Dongguan City, China 东莞市常平镇东深路31号

深圳市卓越检测技术有限公司
Shenzhen ECT Testing Technology Co.,Ltd



Test Report

测试报告

Tested by (+ signature): 测试(签名)	Lee.Yuan/Testing Engineer 袁乐/测试工程师	lee.yuan
Checked by (+ signature): 审核(签名)	Eddie.Shi/Project Manager 施磊/项目经理	Eddie.Shi
Approved by (+ signature): 批准(签名)	Eric.Ren/Technical Manager 任博/技术总监	Eric.Ren
Date of issue: 签发日期.....	2023.12.07	
Testing Laboratory Name: 测试实验室.....	Shenzhen ECT Testing Technology Co.,Ltd 深圳市卓越检测技术有限公司	
Address: 地址.....	B202, Block A.B, Huijuxinqiao 107 Chuangzhi Park, No.18, Shangnan Shangliao Industrial Road, Shangliao Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong, China 广东省深圳市宝安区新桥街道上寮社区上南上寮工业路18号汇聚新桥107创智园 A.B座B202	
Packaging Parts Manufacturer 包装件生产商	Dongguan Zelin Paper Products Co.,Ltd. 东莞市泽林纸制品有限公司	
Packaging Parts Manufacturer's Address 包装件生产商地址	Room 102, No. 26 Shatangwei Fourth Lane, Dalingshan Town, Dongguan City, Guangdong Province, China 广东省东莞市大岭山镇沙塘尾四巷26号	
Test Standard: 测试标准.....	United Nations "Recommendations on the Transport of Dangerous Goods- Model Regulations" (Rev.22) 6.1.5.6 联合国《关于危险货物运输的建议书-规章范本》(22修订版) 6.1.5.6	
Date of performance of test.....: 测试执行日期.....	2023.12.01 ~ 2023.12.05	
Result: 结果.....	Pass 合格	



一. Basic information 基本信息

Name of Goods 货物名称	Polymer Li-ion Cell QY 400909 3.7V 28mAh 0.1036Wh 聚合物锂离子电池 QY 400909 3.7V 28mAh 0.1036Wh		
Packaging dimensions 包装尺寸 (L×W×T)	(35.0*30.0*26.0) cm	Shape 形状	Prismatic 棱柱形
Battery number per packaging 每包装件电池数量	4000PCS	Trade mark 商标	--
Gross weight per package 每包装件毛重	3.8kg		
Net quantity of batteries per package 每包装件电池净重	2.536kg		
Number of stacking layers 堆码层数	12		
The required compressive strength of the carton 纸箱所需抗压强度	41.8kgf		
The required compressive strength of the carton = $\left(\frac{3m}{\text{Height of single packing case (m)}} - 1\right) * \text{Weight of single package.}$ The load lasts for 24 hours. 纸箱所需抗压强度 = $\left(\frac{3m}{\text{单个包装箱高度 (m)}} - 1\right) \times \text{单个包装箱重量, 负荷持续24小时。}$			

二. Stacking test 堆码试验

Name of Equipment 测试设备:

No. 序号	Name 名称	Model 型号	Item 编号	Due. date 校准有效期至	The use 本次使用 (√)
1	Carton stacking machine 纸箱堆码试验机	GX-6010-M1T	SZZY-YQ- 130	2024-02-15	√
2	Electronic scale 电子秤	ACS	SZZY-YQ- 072	2024-02-15	√



Ambient temperature环境温度: $23\pm 2^{\circ}\text{C}$, **Ambient humidity** 环境湿度 : $50\pm 2\%\text{RH}$

Number of test samples 测试样品数量:

Three test samples per design type and manufacturer.

每个设计类型和制造商有三个测试样品。

Test method 测试方法:

The test sample shall be subjected to a force applied to the top surface of the test sample equivalent to the total weight of identical packages which might be stacked on it during transport; where the contents of the test sample are liquids with relative density different from that of the liquid to be transported, the force shall be calculated in relation to the latter. The minimum height of the stack including the test sample shall be 3 meters. The duration of the test shall be 24 hours except that plastics drums, jerricans, and composite packagings 6HH1 and 6HH2 intended for liquids shall be subjected to the stacking test for a period of 28 days at a temperature of not less than 40°C .

测试样品的上表面应受到一个力, 该力相当于在运输过程中可能堆放在其上的相同包装的总重量; 当试验样品的含量是相对密度与被输送液体不同的液体时, 力应按后者的相对密度计算。包括测试样品在内的堆栈的最低高度应为 3 米。测试的持续时间应为 24 小时, 但用于液体的塑料桶、油桶和复合包装 6HH1 和 6HH2 除外。

Testing requirements description 测试要求描述:

The samples in the packing case are not damaged or leaked;
包装箱中的样品没有损坏或泄漏;

The test sample must not be damaged in a way that may adversely affect the safety of transport, or deform that may reduce its strength or cause unstable stacking of the package.

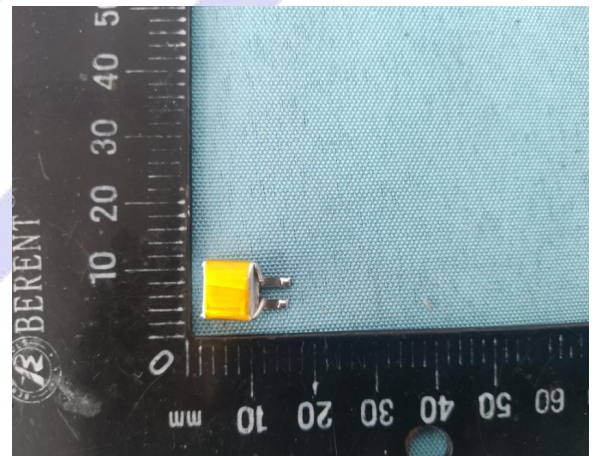
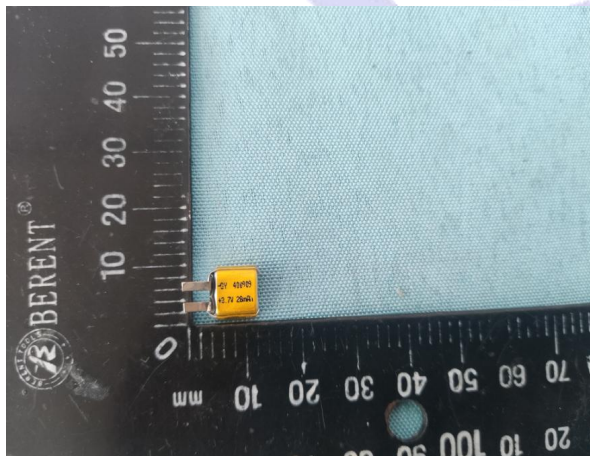
试验样品不得显出可能对运输安全有不利影响的损坏, 或者可能降低其强度或造成包装件堆码不稳定的变形;

In the case of composite or combination packaging, the contents shall not leak out of the inner receptor and inner package.

对复合或组合包装而言, 不得有所装的物质从内贮器和内包装中漏出。

Conclusion结论: **The package had passed Stacking Test Report.** 包装件通过堆码试验

THE PHOTO OF SAMPLE 样品图片





注意事项

Important Notice

1. The test report is invalid without the official stamp of ECT.

本报告书无ECT盖章无效。

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

本报告书无批准人、审核人、及主检人签名无效。

3. Nobody is allowed to partly photocopy this test report without written permission of ECT.

未经ECT书面同意，不得部分地复制本报告书。

4. The report is invalid when anything of following happens – illegal transfer, reproduce, embezzlement, imposture, modification or tampering in any media form.

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5. Product information and customer information provided by the applicant, we are not responsible for its authenticity.

产品信息和客户信息由申请人提供，我们不对其真实性负责。

6. The test report is valid for the tested samples only.

本报告仅对本次测试样品有效。

7. The Chinese contents in this report are only for reference.

本报告中的中文内容仅供参考。

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

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。

End of report