

# **UN38.3 Lithium Battery Test Report**

This Test Report is valid for all Lithium batteries included in Eloflex Electrical Wheelchairs.



This document confirms that the Lithium batteries included in the Eloflex wheelchairs meet all the demands made by IATA for transport by air of lithium batteries regards to the test UN38.3



## **Shenzhen Anbotek Compliance Laboratory Limited**

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# 锂电池 UN38.3 测试报告 Lithium Battery UN38.3 Test Report

委托单位(Client) : 杭州东建能源科技有限公司

Hangzhou Dongjian Energy Tech Co., Ltd

生产工厂

(Manufacturer)

: 杭州东建能源科技有限公司

Hangzhou Dongjian Energy Tech Co., Ltd

样品名称(Product) : 锂离子充电电池组

Li-ion Rechargeable Battery Pack

样品型号(Model) : DJ-2410

接收日期

2016年05月19日

Date of Receipt

May. 19, 2016

检测日期

2016年05月19日至2016年06月07日

Date of Test

May. 19, 2016 to Jun. 07, 2016

(Approved Signatory)

审核 Checked by

检测

Tested by

报告专用章 Stamp





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#### 1. 样品描述(SAMPLE DESCRIPTION):

样品名称: Sample Name	锂离子充印 Li-ion Rec	电电池组 hargeable Battery P	ack	电池型号: Battery Me	odel	DJ-2410		
委托单位: Client	杭州东建能源科技有限公司 Hangzhou Dongjian Energy Tech Co., Ltd							
委托方地址: Add. Of Client	浙江省杭州市莆山区瓜沥镇群力村 12-21Qunli Village, Guali Town , Hangzhou ,Zhejiang China							
生产工厂: Manufacturer	杭州东建能源科技有限公司 Hangzhou Dongjian Energy Tech Co., Ltd							
标称电压 Nominal Voltage	25.2V	额定容量 Rated Capacity	11.00	Ah 59Wh	商标 Trademark		HD the	
充电电流 Charge Current	2A	最大连续 充电电流 Maximum Continuous Charge Current		)A	充电截止电流 End Charge Current		0.2A	
终止电压 Cut-off Voltage	21.0V	最大放电电流 Maximum Discharge Current		)A	充电限制电压 Limited Charge Voltage		29.4V	
内含电芯个数 Cells Number	7	电芯型号 Cell Model	11	168130	电芯额定容量 Cell Rated Capacity		10Ah	
测试开始日期 Client date	2016年05月19日 May. 19, 2016			结束日期 shed date	2016年06月07日 Jun. 07, 2016			

## 2. 参考方法 (REFERENCE METHOD)

《联合国关于危险货物运输的建议书—试验和标准手册》

(ST/SG/AC.10/11/Rev.5/Amend.1&ST/SG/AC.10/11/Rev.5/Amend.2)

(United Nations Recommendations On The Transport Of Dangerous Goods, Manual Of Tests And Criteria) (ST/SG/AC.10/11/Rev.5/Amend.1&ST/SG/AC.10/11/Rev.5/Amend.2).



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#### 3. 测试项目 (TEST ITEM)

1. 高度模拟 (Altitude simulation)

C HOTE/County

2. 温度试验(Thermal test)

6. 挤压(Crush)

3. 振动(Vibration)

7. 过度充电(Overcharge)

4. 冲击(Shock)

IN to to the HALL

CT-3008-25V10A-NA

8. 强制放电(Forced discharge)

43-90-20-34-400

5. 外部短路(External short circuit)

#### 4. 本次检测所使用的设备清单:

Major instruments of measurement used in the test:

设备名称/型号	编号	校准有效期
Name of equipment	Serial No.	Due Date
/Model		
模拟高空低压试验箱	SE-132	2017-03-10
Low Pressure Test Machine		
BE-DY-125		
快速温变箱	SE-137	2017-03-10
High and Low Temperature		
Chamber		
BE-THK-150M8		
振动台	SE-439	2016-10-19
Vibration Machine		
EV103VT650VC Susb-2		
机械冲击台	SE-440	2016-10-19
Shock Machine		
HSKT-10	1.00 7.00	120.2.2.2.0.
温控型短路试验机	SE-133	2017-03-10
Thermostat Short-circuit		
Testing Machine		
BE-1000W	05.05	2047.00.40
挤压试验机	SE-135	2017-03-10
Crush Machine		
BE-6045	05 470	2012 10 10
25V10A 电池充放电仪	SE-172	2016-10-19
Battery Charge and Discharge		
Machine		

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5. 检测地点、环境条件

Place and Environmental Conditions of the test

地点:深圳安博检测股份有限公司电池实验室

温度 (20±5)℃ 相对湿度 (40~70) %RH

Place

Temperature

R.H.

#### 6. 测试结论(CONCLUSION)

测试项目 ITEM	样品编号 SAMPLE NUMBER	执行标准 STANDARD	结论 CONCLUSION
高度模拟 (Altitude simulation)	B1~B4, B5~B8	1	通过 (PASS)
温度试验(Thermal test)	1	1 m - 1	通过 (PASS)
振动(Vibration)		300	通过 (PASS)
冲击(Shock)		4000	通过 (PASS)
外部短路 (External short circuit)		UN38.3	通过 (PASS)
挤压(Crush)	C21~C25		通过 (PASS)
过度充电(Overcharge)	B1~B4, B5~B8	100	通过 (PASS)
强制放电 (Forced discharge)	C1~C10, C11~C20		通过 (PASS)

#### 说明(Notes):

B1~B4 为第一个充放电周期完全充电状态的电池;

Batteries at first cycle in fully charged states;

C21~C25: 为第一个充放电周期 50%设计额定容量状态的电芯;

Cells at first cycle at 50% of the design rated capacity;

C1~C10: 为第一个充放电周期完全放电状态的电芯;

Cells at first cycle in fully discharged states;

B5~B8: 为 50 个充放电周期后完全充电状态的电池;

Batteries after 50 cycles ending in fully charged states;

C11~C20: 为 50 个充放电周期后完全放电状态的电芯:

Cells after 50 cycles ending in fully discharged states.



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### 声明 (DECLARATION)

 测试参考文件:《联合国关于危险货物运输的建议书—试验和标准手册》 (ST/SG/AC.10/11/Rev.5/Amend.1&ST/SG/AC.10/11/Rev.5/Amend.2)

(United Nations Recommendations On The Transport Of Dangerous Goods, Manual Of Tests And Criteria) (ST/SG/AC.10/11/Rev.5/Amend.1&ST/SG/AC.10/11/Rev.5/Amend.2).

- 测试实验室:深圳安博检测股份有限公司 地址:广东省深圳市宝安区西乡街道后瑞第三工业区A栋四楼东 Test place Lab: Shenzhen Anbotek Compliance Laboratory Limited East of 4/F., Building A, Hourui No.3 Industrial Zone, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China
- 3. 本报告不能修改和删除。

Compliance Laboratory Limited.

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