

Material Safety Data Sheet

Section 1 Chemical Product and Company Identification

Product information battery Model: APP00315
Lithium-Ion Rechargeable cell Model: Li-Fun 625771
Nominal Voltage: 3.8V
Watt-hour Rating: 15.2Wh
Manufacturer: APACK.TECHNOLOGY CO., LTD.
Address: 6F, No. 653-2, Jhongheng Rd., Sinjhuang Dist, New Taipei City 242, Taiwan
Telephone: +886-2-2903-1303

Section 2 Composition/Information on Ingredients

INGREDIENTS	Weight Percentage/%(about)	CAS No.
Cobaltic lithium oxide 钴酸锂	35.05%	12190-79-3
Graphite powder 石墨	15.98%	7782-42-5
Garbon black 导电炭黑	0.79%	1333-86-4
Hexafluoropropylene-vinylidene fluoride copolymer 氟共聚物	9.87%	9011-17-0
Dimethyl carbonate 碳酸二甲酯	4.38%	616-38-6
Ethyl methyl carbonate 碳酸甲乙酯	2.29%	623-53-0
Lithium hexafluorophosphate 六氟磷酸锂	2.95%	21324-40-3
Ethylene carbonate(EC) 碳酸乙烯酯	6.34%	96-49-1
Diethyl carbonate(DEC) 二甲基碳酸酯	2.76%	105-58-8
Propylene carbonate(PC) 丙烯碳酸酯	1.11%	108-32-7
Copper 铜	8.39%	7440-50-8
Styrene-butadiene rubber(SBR) 丁苯橡胶	0.71%	61789-96-6
Aluminium 铝	9.38%	7429-90-5

Section 3 Hazards Identification

The lithium ion batteries are not hazardous used according to the instructions of manufacturer under normal conditions. In case of abuse, there's a risk of explode, rupture, fire, heat, leakage of internal components, which could cause casualty loss. Abuses include but not limited to the following cases: charge for a long time, short circuit, put into fire, whack with hard object, puncture with acute object, crush, break.

Section 4 First-aid Measures

The lithium batteries are not hazardous with eye and skin contact under normal circumstance. In case of fire or rupture, the leakage of internal hazardous substance and formation of hazardous substance would occur, take the following measures if contact with it:

Eye : Check for and remove any contact lenses. Immediately flush with plenty of clean water for atleast 15 minutes, seek medical assistance;

Skin: Immediately flush with plenty of clean water for 15 minutes; seek medical assistance if severe;

Inhalation: If inhaled, remove to fresh air immediately, seek medical assistance, and ventilate the contaminated area.

Ingestion: Rinse mouth with clean water immediately, activate vomit under the direction of expert, and seek medical assistance.

Section 5 Fire-fighting Measures

Extinguish with plenty of water, dry powder extinguishers, sands, earth. Combustion products and decomposed products by contact of water or air with internal substance include: carbon monoxide, carbon dioxide, hydrogen fluoride, phosphorus fluoride.

Section 6 Accidental Release Measures

When leakage of batteries happens, liquid could be absorbed with sands, earth or other inert substance, and the contaminated area should be ventilated meantime.

Section 7 Handling and Storage

Don't handle and store batteries with metalwork. Store and use far away from heat, sparks, open flame, or any other ignition source, and under room temperature (<30°C) in ventilating and dehumidifying environments.

Section 8 Exposure Controls/Personal Protection

There is no need for protect under normal conditions. In engineering aspect, ventilation equipment should be installed. Gas mask, blinkers, gloves and during chemical erosion an exposure suit are required when dealing with fire and leakage.



Section 9 Physical and Chemical Properties

Batteries are not single chemical material; there are no specific physical and chemical properties such as melting point and boiling point. Main purpose of lithium batteries: used in portable and digital products.

Section 10 Stability and Reactivity

Batteries are safe under normal conditions. The following substance might appear after catching fire or leakage: organic carbonate, hydrogen fluoride, carbon monoxide, carbon dioxide, phosphorus fluoride.

Section 11 Toxicological Information

Batteries are not hazardous when used properly. If the batteries catch fire or the internal substance leaks, combustion products and decomposed products might have irritation and toxicity to skin, eye and respiratory systems. Toxicity data of some substance are listed following:

Hydrogen fluoride:

Extremely toxic. May be fatal if inhaled or ingested. Readily absorbed through the skin contact may be fatal. Possible mutagen. LCLo: 50 ppm/30m (human beings) · LC50 : 1276 ppm/1h (rats) °

Carbon and graphite:

Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation. Causes chronic damage to upper respiratory tract and cardiovascular system.

Copper: Dust may cause respiratory irritation. LD50: 3.5 mg kg⁻¹(mouse). Aluminium: There is no hazard.

Section 12 Ecological Information

There is no influence to ecology and environment when used properly.

Section 13 Disposal

Deserted batteries couldn't be treated as ordinary trash. Be put to garbage box which recycle batteries after being placed into plastic bags or be dealt as special trash. Couldn't be thrown into fire or placed in high temperature. Couldn't be dissected, pierced, crushed or treated similarly. The package and plastic box which contain batteries could be treated as ordinary trash. Best way is

recycling.

Section 14 Transport Information

For the international transport of lithium batteries, they must comply with these regulations: the International Maritime Dangerous Goods (IMDG) Code by International Maritime Organization (IMO), Dangerous Goods Regulations (DGR) by International Air Transport Association (IATA) and Technical Instructions for the Safe Transport of Dangerous Goods by Air (TI) by International Civil Aviation Organization (ICAO). These regulations are based on the UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria.

Lithium batteries which meet the requirements of UN38.3 (UN Manual of Tests and Criteria, Part III, subsection 38.3) could be transported by air and by sea as ordinary goods, otherwise should be transported according to Class 9, Packing Group 1 hazardous goods.

According to UN classification: However this product's shipping name is "lithium ion batteries"(or "Lithium ion Batteries packed with equipment" or "Lithium ion Batteries contained in equipment"), it is not recognized as "DANGEROUS GOODS" when its transport condition accords with "packing instruction 965 section IB of IATA-DGR"(or "Packing instruction 966 section II" or "Packing instruction 967 section II") or "special provision 188 of IMO-IMDG Code".

1. For lithium ion batteries, UN ID number is 3480. For lithium ion batteries contained in equipment or lithium ion batteries packed with equipment, UN ID number is 3481.
2. The consignment should be fully described by proper shipping name and packed, marked and in proper condition for carriage by air. The consignment is not classified as dangerous under the current edition of the 62nd edition of IATA DGR "Dangerous Goods Regulations" in 2021, Dangerous goods regulation and all applicable carrier and government regulations.
3. For transported by air, Lithium-ion Cells/Batteries shipped as "Not Restricted" Cargo: Must comply with section IB of PI965 or section II of PI967 accordingly; For cells, the Watt-hour rating should not be more than 20Wh; For batteries, the Watt-hour rating should not be more than 100Wh. Watt-hour rating must be marked on the outside of the battery case (marked by manufacturer),

4. Each consignment must be accompanied with a document such as an air waybill with an indication. For those Lithium ion cells/ batteries contained in equipment, the equipment must be equipped with an effective means of preventing accidental activation. The telephone number for additional information for Apack Battery is +886-2-2903-1303.
5. Quantity per package shall not exceed 10 kg.
6. Each package must be capable of withstanding a 1.2m drop test in any orientation without damage of cells or batteries contained therein.
7. Lithium batteries which meet the requirements of A154 could be transported by air, and the batteries manufactured by Apack meet these requirements.(A154 Lithium batteries identified by the manufacturer as being defective for safety reasons, or that have been damaged, that have the potential of producing a dangerous evolution of heat, fire or short circuit are forbidden for transport.)
8. Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit.
9. Transport condition should accord with “special provision 188 of IMO-IMDG Code”.

Section 15 Regulatory Information

OSHA hazard communication standard (29 CFR 1910.1200)

hazardous Non-hazardous

Section 16 Other Information

This information is not effective to all the batteries manufactured by Apack. This information comes from reliable sources, but no warranty is made to the completeness and accuracy of information contained. Apack doesn't assume responsibility for any damage or loss because of misuse of batteries. Users should grasp the correct use method and be responsible for the use of batteries.

Prepared:



Audited:



UN38.3 试验概要

UN38.3 Test Summary

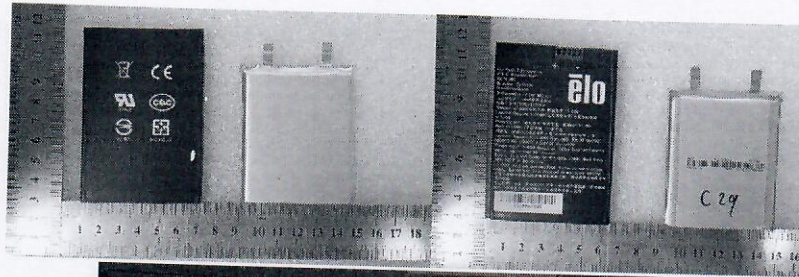


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单位信息 Company information			
委托单位 Consignor	典暉科技股份有限公司 APack Technology Co., Ltd. 台湾新北市新莊區中正路 649-2 號 3 樓 3F, No. 649-2, Jhongjheng Rd., Sinjhuang Dist, New Taipei City 242, Taiwan		
	886229031303	ce@apack.com.tw	http://www.apack.com.tw/
生产单位 Manufacturer	东莞市丰暉电子有限公司 DONGGUAN FUNPACK ELEC.,LTD. 广东省东莞市清溪镇葵清路 45 号 4 号楼 401 室 Room 401,4 Building,NO 45 Kuiqing Road,QingXi Town,Dongguan City,Guangdong Province P.R.China		
	0769-82092529	panxh@funpack.com.cn	http://www.funpack.com.cn/
测试单位 Test lab	上海化工院检测有限公司 Shanghai Research Institute of Chemical Industry Testing Co., Ltd. 中国.上海.普陀区云岭东路 345 号, 200062 No.345 East Yunling Road, Putuo, Shanghai, China 200062		
	86-21-31765555	battery@ghs.cn	www.ghs.cn
电池信息 Battery information			
名称 Name	二次锂电池 Rechargeable Li-ion Battery	品牌 Brand	/
型号 Type	E864455	原始测试型号 Original tested type	/
标称电压(V) Nominal voltage	3.8	容量/能量 Capacity/energy	4000mAh 15.2Wh
描述 Description	可充电锂离子单电芯电池 Rechargeable Li-ion single cell battery	锂含量(g) Li content	/
质量(kg) Mass	0.0780	外观 Appearance	黑色塑胶外壳 black plastics cement shell
测试信息 Test information			
原报告编号 Original test report No.	1120050351	测试报告日期 Date of test report	2020-07-01
测试标准 Test standard	联合国《关于危险货物运输的建议书 试验和标准手册》第 38.3 章 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual ST/SG/AC.10/11/Rev.6/Amend.1		
T.1 高度模拟 Altitude simulation	合格 Passed	T.2 温度测试 Thermal test	合格 Passed
T.3 振动测试 Vibration	合格 Passed	T.4 冲击测试 Shock	合格 Passed
T.5 外部短路 External short circuit	合格 Passed	T.6 挤压 Crush	合格 Passed
T.7 过度充电 Overcharge	合格 Passed	T.8 强制放电 Forced discharge	合格 Passed
38.3.3 (f)	/	38.3.3 (g)	/



样品图片 Sample Picture



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elo

Elo Touch Solutions, Inc
 670 N. McCarthy Blvd.
 Suite 100
 Milpitas, CA 95035
 www.elotouch.com

Rechargeable Li-ion Battery
 二次锂电池/二次锂离子電池組

Model/型号/型号: E864455

Nominal voltage/标称电压/標稱電壓: 3.8Vdc
 Limited charging voltage/充电限制电压/充電限制電壓:
 4.35Vdc

Capacity min./额定容量/額定容量: 4000mAh 15.2Wh

Made in China / 中国制造 / 中國製造

制造商: 典晖科技股份有限公司/典晖科技股份有限公司


Caution: Replace with same type only. Use of another battery may present a fire or explosion. Please refer to user manual or follow local ordinances and/or regulations for disposal.

Risk of Fire and Burns. Do Not Open, Crush, Heat Above 60°C/140°F or Incinerate.

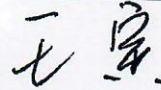

If there is a serious swelling, please do not continue using. The battery is prohibited to use after soaking.

注意: 用錯誤型號電池更換會有爆炸危險, 務必按照說明處置用完的電池。

禁止拆解、撞击、挤压或投入火中。若出现严重鼓胀, 请勿继续使用。请勿置于高温环境中。电池浸水后禁止使用。


 E203000928

1ICP62/57/71

<p>结论 Conclusion</p>	<p>测试样品符合联合国《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.6/Amend.1 38.3 标准要求。The tested samples meet the requirements of test items of the UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/Amend.1 38.3</p>		
<p>备注 Remark</p>	<p>/</p>		
<p>签名 Signature 职务 Title</p>	<p> 王寅 副总工程师 Vice chief engineer</p>	<p>签发日期 Issued date</p>	<p>2020-07-07</p> 

-验证码:158907-

报告结束



NO.1120050351

检 测 报 告

Test Report

样品名称： 二次锂电池 E864455 3.8V 4000mAh 15.2Wh

Name of Sample: Rechargeable Li-ion Battery E864455 3.8V 4000mAh
15.2Wh

委托单位： 典暉科技股份有限公司

Consignor: /



上海化工院检测有限公司

Shanghai Research Institute of Chemical Industry Testing Co., Ltd.

上海化工院检测有限公司 检测报告

Shanghai Research Institute of Chemical Industry
Testing Co., Ltd. Test Report

NO. 1120050351

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样品名称 Name of Sample	中文 Chinese	二次锂电池 E864455 3.8V 4000mAh 15.2Wh		
	英文 English	Rechargeable Li-ion Battery E864455 3.8V 4000mAh 15.2Wh		
样品编号 Sample No.	1120050351			
委托单位 Consignor	典暉科技股份有限公司 /			
生产单位 Manufacturer	東莞市豐暉電子有限公司 Dongguan Funpack elec Co., LTD.			
检测方法 Test 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.6 Amend.1 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3			
判定标准 Criterion	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.6 Amend.1 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3			
样品外观 Appearance	黑色塑胶外壳 Black Plastics cement shell			
样品接受日期 Accepted Date	2020-05-21	检测起迄日期 Test Date	2020-06-02 ~ 2020-07-01	
检测项目 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 Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Crush, Overcharge, Forced discharge			
检测结论 Conclusion	经检测, 该样品符合联合国《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.6 Amend.1 38.3标准要求。 The sample has passed the test items of UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 38.3 生效日期(Date): 2020-07-01			
备注 Comment	可充电单电芯电池 Rechargeable Single Cell Battery. /			
委托单位地址 Consignor Address	/		邮政编码 Post Code	/

批准
Approver:
职务
Title:

张小平

副总工程师 (Vice chief engineer)

审核
Checker:

陆建峰

编制
Compiler:

傅佳



上海化工院检测有限公司 检测报告

Shanghai Research Institute of Chemical Industry
Testing Co., Ltd. Test Report

NO. 1120050351

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序号 No.	检测项目名称 Name of Test Items	标准要求或标准条款号 Standard requirement or The Clause Number of Standard	检测结果 Test Result	本项结论 Conclusion	备注 Remark	
1	高度模拟 Altitude simulation	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.6 Amend.1 38.3 试验T.1 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.1	见附表 1 See Appendix 1	合格 Passed	/	
2	热测试 Thermal test	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.6 Amend.1 38.3 试验T.2 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.2	见附表 2 See Appendix 2	合格 Passed	/	
3	振动 Vibration	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.6 Amend.1 38.3 试验T.3 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.3	见附表 3 See Appendix 3	合格 Passed	/	
4	冲击 Shock	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.6 Amend.1 38.3 试验T.4 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.4	见附表 4 See Appendix 4	合格 Passed	/	
5	外短路 External short circuit	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.6 Amend.1 38.3 试验T.5 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.5	见附表 5 See Appendix 5	合格 Passed	/	
6	挤压 Crush	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.6 Amend.1 38.3 试验T.6 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.6	见附表 6 See Appendix 6	合格 Passed	/	
7	过充电 Overcharge	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.6 Amend.1 38.3 试验T.7 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.7	见附表 7 See Appendix 7	合格 Passed	/	
8	强制放电 Forced discharge	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.6 Amend.1 38.3 试验T.8 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.8	见附表 8 See Appendix 8	合格 Passed	/	
检测环境条件 Test Environment Condition		环境温度:22℃-24℃;环境湿度:/% Ambient temperature:22℃-24℃;Ambient humidity:/%				
分包检验情况 Subcontracted Test Condition		检测项目 Test Item	/			
		分包实验室 Subcontracted Laboratory	名称 Name	/	邮编 Post Code	/
			地址 Address	/	电话 Tel	/

上海化工院检测有限公司
检测报告-附表 1

SRICI Testing Co., Ltd. Test Report—Appendix 1

NO. 1120050351

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序号 No.	1	检测项目名称 Name of Test Items		高度模拟 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 Mass /g	开路电压 OCV /V	质量 Mass /g	开路电压 OCV /V			
001	1CYC完全充电 1CYC Fully charged	77.9003	4.31	77.8994	4.31	0.00	100.00	O
002	1CYC完全充电 1CYC Fully charged	77.8327	4.31	77.8323	4.31	0.00	100.00	O
003	1CYC完全充电 1CYC Fully charged	77.9604	4.31	77.9594	4.31	0.00	100.00	O
004	1CYC完全充电 1CYC Fully charged	77.8794	4.31	77.8785	4.31	0.00	100.00	O
005	1CYC完全充电 1CYC Fully charged	77.6711	4.32	77.6704	4.31	0.00	99.77	O
006	25CYC完全充电 25CYC Fully charged	77.5745	4.31	77.5737	4.31	0.00	100.00	O
007	25CYC完全充电 25CYC Fully charged	78.0013	4.31	78.0004	4.31	0.00	100.00	O
008	25CYC完全充电 25CYC Fully charged	77.7348	4.31	77.7340	4.31	0.00	100.00	O
009	25CYC完全充电 25CYC Fully charged	77.4559	4.31	77.4552	4.31	0.00	100.00	O
010	25CYC完全充电 25CYC Fully charged	77.5946	4.31	77.5942	4.31	0.00	100.00	O
以下空白	This space intentionally left blank							

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.

上海化工院检测有限公司

检测报告 - 附表 2

SRICI Testing Co., Ltd. Test Report - Appendix 2

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序号 No.	2	检测项目名称 Name of Test Items		热测试 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 Mass /g	开路电压 OCV /V	质量 Mass /g	开路电压 OCV /V			
001	1CYC完全充电 1CYC Fully charged	77.8994	4.31	77.9008	4.22	0.00	97.91	O
002	1CYC完全充电 1CYC Fully charged	77.8323	4.31	77.8342	4.24	0.00	98.38	O
003	1CYC完全充电 1CYC Fully charged	77.9594	4.31	77.9607	4.24	0.00	98.38	O
004	1CYC完全充电 1CYC Fully charged	77.8785	4.31	77.8794	4.24	0.00	98.38	O
005	1CYC完全充电 1CYC Fully charged	77.6704	4.31	77.6721	4.21	0.00	97.68	O
006	25CYC完全充电 25CYC Fully charged	77.5737	4.31	77.5752	4.25	0.00	98.61	O
007	25CYC完全充电 25CYC Fully charged	78.0004	4.31	78.0018	4.24	0.00	98.38	O
008	25CYC完全充电 25CYC Fully charged	77.7340	4.31	77.7351	4.22	0.00	97.91	O
009	25CYC完全充电 25CYC Fully charged	77.4552	4.31	77.4572	4.24	0.00	98.38	O
010	25CYC完全充电 25CYC Fully charged	77.5942	4.31	77.5944	4.24	0.00	98.38	O
以下空白	This space intentionally left blank							
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.								

上海化工院检测有限公司
检测报告-附表 3

SRICI Testing Co., Ltd. Test Report—Appendix 3

NO. 1120050351

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序号 No.	3	检测项目名称 Name of Test Items		振动 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 Mass /g	开路电压 OCV /V	质量 Mass /g	开路电压 OCV /V			
001	1CYC完全充电 1CYC Fully charged	77.9008	4.22	77.9029	4.23	0.00	100.00	O
002	1CYC完全充电 1CYC Fully charged	77.8342	4.24	77.8367	4.24	0.00	100.00	O
003	1CYC完全充电 1CYC Fully charged	77.9607	4.24	77.9633	4.24	0.00	100.00	O
004	1CYC完全充电 1CYC Fully charged	77.8794	4.24	77.8818	4.24	0.00	100.00	O
005	1CYC完全充电 1CYC Fully charged	77.6721	4.21	77.6745	4.24	0.00	100.00	O
006	25CYC完全充电 25CYC Fully charged	77.5752	4.25	77.5779	4.24	0.00	99.76	O
007	25CYC完全充电 25CYC Fully charged	78.0018	4.24	78.0046	4.24	0.00	100.00	O
008	25CYC完全充电 25CYC Fully charged	77.7351	4.22	77.7374	4.24	0.00	100.00	O
009	25CYC完全充电 25CYC Fully charged	77.4572	4.24	77.4592	4.23	0.00	99.76	O
010	25CYC完全充电 25CYC Fully charged	77.5944	4.24	77.5973	4.24	0.00	100.00	O
以下空白	This space intentionally left blank							

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.

上海化工院检测有限公司
检测报告-附表 4

SRICI Testing Co., Ltd. Test Report—Appendix

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NO. 1120050351

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序号 No.	4	检测项目名称 Name of Test Items		冲击 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 Mass /g	开路电压 OCV /V	质量 Mass /g	开路电压 OCV /V			
001	1CYC完全充电 1CYC Fully charged	77.9029	4.23	77.9002	4.23	0.00	100.00	O
002	1CYC完全充电 1CYC Fully charged	77.8367	4.24	77.8344	4.23	0.00	99.76	O
003	1CYC完全充电 1CYC Fully charged	77.9633	4.24	77.9600	4.23	0.00	99.76	O
004	1CYC完全充电 1CYC Fully charged	77.8818	4.24	77.8787	4.23	0.00	99.76	O
005	1CYC完全充电 1CYC Fully charged	77.6745	4.24	77.6715	4.23	0.00	99.76	O
006	25CYC完全充电 25CYC Fully charged	77.5779	4.24	77.5746	4.23	0.00	99.76	O
007	25CYC完全充电 25CYC Fully charged	78.0046	4.24	78.0022	4.23	0.00	99.76	O
008	25CYC完全充电 25CYC Fully charged	77.7374	4.24	77.7346	4.23	0.00	99.76	O
009	25CYC完全充电 25CYC Fully charged	77.4592	4.23	77.4564	4.23	0.00	100.00	O
010	25CYC完全充电 25CYC Fully charged	77.5973	4.24	77.5948	4.23	0.00	99.76	O
以下空白	This space intentionally left blank							
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.								

**上海化工院检测有限公司
检测报告-附表 5**

SRICI Testing Co., Ltd. Test Report—Appendix 5 NO. 1120050351

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序号 No.	5	检测项目名称 Name of Test Items	外短路 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	其他现象 Other Event
001	1CYC完全充电 1CYC Fully charged	58.1	O
002	1CYC完全充电 1CYC Fully charged	58.5	O
003	1CYC完全充电 1CYC Fully charged	58.9	O
004	1CYC完全充电 1CYC Fully charged	59.4	O
005	1CYC完全充电 1CYC Fully charged	59.6	O
006	25CYC完全充电 25CYC Fully charged	58.3	O
007	25CYC完全充电 25CYC Fully charged	58.2	O
008	25CYC完全充电 25CYC Fully charged	58.6	O
009	25CYC完全充电 25CYC Fully charged	58.5	O
010	25CYC完全充电 25CYC Fully charged	58.6	O
以下空白	This space intentionally left blank		
备注: D-解体 R-破裂 F-起火 O-无解体、无起火、无破裂。 Note: D-Disassembly R-Ruptur F-Fire O-No Disassembly, No Fire & No Rupture.			

上海化工院检测有限公司

检测报告-附表 6

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序号 No.	6	检测项目名称 Name of Test Items	挤压 Crush
样品编号 Sample No.	样品状态 Sample Status	样品表面最高温度 Max. External Temperature /°C	其他现象 Other Event
011	1CYC 50%容量 1CYC 50% Capacity	23.5	O
012	1CYC 50%容量 1CYC 50% Capacity	23.6	O
013	1CYC 50%容量 1CYC 50% Capacity	23.2	O
014	1CYC 50%容量 1CYC 50% Capacity	23.7	O
015	1CYC 50%容量 1CYC 50% Capacity	23.6	O
016	25CYC 50%容量 25CYC 50% Capacity	23.8	O
017	25CYC 50%容量 25CYC 50% Capacity	23.4	O
018	25CYC 50%容量 25CYC 50% Capacity	23.4	O
019	25CYC 50%容量 25CYC 50% Capacity	23.4	O
020	25CYC 50%容量 25CYC 50% Capacity	23.4	O
以下空白	This space intentionally left blank		
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 7

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序号 No.	7	检测项目名称 Name of Test Items	过充电 Overcharge
样品编号 Sample No.	样品状态 Sample Status	其他现象 Other Event	
021	1CYC完全充电 1CYC Fully charged		O
022	1CYC完全充电 1CYC Fully charged		O
023	1CYC完全充电 1CYC Fully charged		O
024	1CYC完全充电 1CYC Fully charged		O
025	25CYC完全充电 25CYC Fully charged		O
026	25CYC完全充电 25CYC Fully charged		O
027	25CYC完全充电 25CYC Fully charged		O
028	25CYC完全充电 25CYC Fully charged		O
以下空白	This space intentionally left blank		
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 No.	8	检测项目名称 Name of Test Items	强制放电 Forced discharge
样品编号 Sample No.	样品状态 Sample Status	其他现象 Other Event	
029	1CYC完全放电 1CYC Fully discharged		0
030	1CYC完全放电 1CYC Fully discharged		0
031	1CYC完全放电 1CYC Fully discharged		0
032	1CYC完全放电 1CYC Fully discharged		0
033	1CYC完全放电 1CYC Fully discharged		0
034	1CYC完全放电 1CYC Fully discharged		0
035	1CYC完全放电 1CYC Fully discharged		0
036	1CYC完全放电 1CYC Fully discharged		0
037	1CYC完全放电 1CYC Fully discharged		0
038	1CYC完全放电 1CYC Fully discharged		0
039	25CYC完全放电 25CYC Fully discharged		0
040	25CYC完全放电 25CYC Fully discharged		0
041	25CYC完全放电 25CYC Fully discharged		0
042	25CYC完全放电 25CYC Fully discharged		0
043	25CYC完全放电 25CYC Fully discharged		0
044	25CYC完全放电 25CYC Fully discharged		0
045	25CYC完全放电 25CYC Fully discharged		0
046	25CYC完全放电 25CYC Fully discharged		0
047	25CYC完全放电 25CYC Fully discharged		0
048	25CYC完全放电 25CYC Fully discharged		0

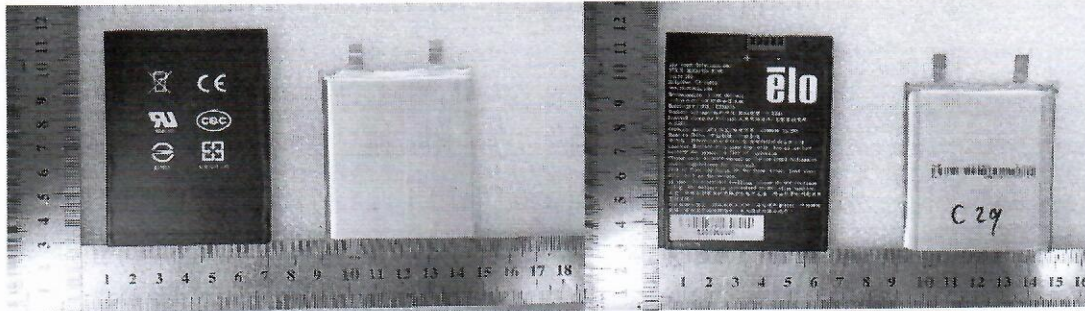
备注: D-解体 F-起火 0-无解体、无起火。
Note: D-Disassembly F-Fire O-No Disassembly & No Fire.

上海化工院检测有限公司
检测报告-附图

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Elo Touch Solutions, Inc
670 N. McCarthy Blvd.
Suite 100
Milpitas, CA 95035
www.elotouch.com


Rechargeable Li-ion Battery
二次锂电池/二次锂离子電池組

Model/型号/型号: E864455

Nominal voltage/标称电压/標稱電壓: 3.8Vdc
Limited charging voltage/充电限制电压/充電限制電壓:
4.35Vdc

Capacity min./額定容量/額定容量: 4000mAh 15.2Wh
Made in China / 中国制造 / 中國製造
制造商: 典暉科技股份有限公司/典暉科技股份有限公司

Caution: Replace with same type only. Use of another battery may present a fire or explosion.
Please refer to user manual or follow local ordinances and/or regulations for disposal.
Risk of Fire and Burns. Do Not Open, Crush, Heat Above 60°C/140°F or Incinerate.
If there is a serious swelling, please do not continue using. The battery is prohibited to use after soaking.
注意: 用錯誤型號電池更換會有爆炸危險, 務必按照說明處置用完的電池。
禁止拆解、撞擊、擠壓或投入火中。若出現嚴重鼓脹, 請勿繼續使用。請勿置于高溫環境中。電池浸水後禁止使用。


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