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CNAS L9856

UN38.3 测试报告

UN38.3 Test Report

报告编号 Report No.	CCJC2612788R01
样品名称 Sample name	USB 可充式锂离子电池 USB Rechargeable Lithium-Ion Battery
型号 Model	C
申请商 Applicant	深圳市安为创能科技有限公司 SHENZHEN AVENERGY TECHNOLOGY CO.,LTD.

深圳诚测检测技术有限公司
Shenzhen CCJC Technology Co., Ltd

申请商 Applicant	名称 Name	深圳市安为创能科技有限公司 SHENZHEN AVENERGY TECHNOLOGY CO.,LTD.		
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制造商 Manufacturer	名称 Name	贵州安为创能科技有限公司 Guizhou AVEnergy Technology Co.,Ltd.		
	地址 Address	贵州省安顺市西秀区新安街道西秀产业园区智能终端产业园 D7 栋厂房 1-3 层 Floor1-3, Building D7, lintelligent Terminal Industrial Park, Xixiu Industrial Park, Xin'an Street, Xixiu District, Anshun City, Guizhou Province		
	电话 Tel:	18685380507	邮箱 Mail:	huangzhihua@ferexave.com
	网址 Website:	www.awcnkj.cn		
生产厂 Factory	名称 Name	广东佳为能源股份有限公司 GuangDong JVEnergy Co.,Ltd		
	地址 Address	广东省肇庆市封开县粤桂合作特别试验区平凤拓展区盈田智谷 4 地块 20 号楼三楼 3rd Floor, Building 20, Lot 4, Yingtian Zhigu, Pingfeng Development Zone, Guangdong-Guangxi Cooperation Special Experimental Zone, Pingfeng Town, Fengkai County, Zhaoqing City. Guangdong Province		
测试实验室 Testing Laboratory	名称 Name	深圳诚测检测技术有限公司 Shenzhen CCJC Technology Co., Ltd		
	地址 Address	广东省深圳市宝安区松岗街道溪头社区溪头路 25 号厂房 101 (1-3 层) 1-3/F., Factory Building 101, No.25, Xitou Road, Xitou, Songgang Subdistrict, Bao'an District, Shenzhen, Guangdong, China		
	电话 Tel:	0086-755-23707853	邮箱 Mail:	service@ccjctek.com
	网址 Website:	www.ccjctek.com		
测试标准 Test Standard	联合国《试验和标准手册》(第 8 版+修订 1) 38.3 节 UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8+Amend.1/Subsection 38.3			
接收日期 Accepted date	2026-03-26		测试日期 Test date	2026-03-26 ~ 2026-04-28
测试项目 Test items	高度模拟、温度试验、振动、冲击、外部短路、撞击、过度充电、强制放电。 Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Impact, Overcharge, Forced discharge.			
测试结论 Conclusion	经测试, 样品符合联合国《试验和标准手册》(第 8 版+修订 1) 38.3 节标准要求。 The sample has passed the test items of UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8+Amend.1/ Subsection 38.3.			
主检人: Tested by:	李城志 Li chengzhi		批准人: Approved by:	程鹏 Roc Cheng
职位 Position:	测试工程师 Test Engineer		职位 Position:	技术负责人 Technical Manager
审核人: Inspected by:	赵楠楠 ZhaoNanNan		签发日期: Date of Issue:	2026-04-28
职位 Position:	项目工程师 Project Engineer			

基本信息 General Information:	
产品名称	USB 可充式锂离子电池
Product name	USB Rechargeable Lithium-Ion Battery
型号参数	
Model and Parameters	C, 1.5V, 6000mWh(built-in cell: 3.8V 1700mAh 6.46Wh)
商标	
Trade Mark.....	
技术参数 Technical Parameters:	
电池 Cell	
型号 Model	INR19/41
形状 Shape	近圆柱体 Approximate Cylinder
标称电压 Nominal Voltage	3.8V
额定容量 Rated Capacity	1700mAh
标准充电电流 Standard Charge Current	340mA
标准放电电流 Standard Discharge Current	340mA
最大持续充电电流 Max. Continuous Charge Current	1700mA
最大持续放电电流 Max. Continuous Discharge Current	3400mA
充电截止电流 End Charge Current	17mA
最大充电电压 Max. Charge Voltage	4.45V
放电终止电压 Discharge Cut-off Voltage	2.5V
电池组 Battery	
型号 Model	C
形状 Shape	近圆柱体 Approximate Cylinder
标称电压 Nominal Voltage	1.5V(built-in cell:3.8V)
额定能量 Rated Energy	6000mWh (built-in cell: 1700mAh 6.46Wh)
输入 Input	Type-C Input:5V/500mA
输出 Output	1.5V/4000mA
电池连接方式 Cell configuration	1S1P

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8版+修订1) 38.3 节 UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8+Amend.1/Subsection 38.3 试验 T.1 Test T.1	见附表 38.3.4.1 See Table 38.3.4.1	合格 Passed	/
2	温度试验 Thermal test	联合国《试验和标准手册》(第8版+修订1) 38.3 节 UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8+Amend.1/Subsection 38.3 试验 T.2 Test T.2	见附表 38.3.4.2 See Table 38.3.4.2	合格 Passed	/
3	振动 Vibration	联合国《试验和标准手册》(第8版+修订1) 38.3 节 UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8+Amend.1/Subsection 38.3 试验 T.3 Test T.3	见附表 38.3.4.3 See Table 38.3.4.3	合格 Passed	/
4	冲击 Shock	联合国《试验和标准手册》(第8版+修订1) 38.3 节 UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8+Amend.1/Subsection 38.3 试验 T.4 Test T.4	见附表 38.3.4.4 See Table 38.3.4.4	合格 Passed	/
5	外部短路 External short circuit	联合国《试验和标准手册》(第8版+修订1) 38.3 节 UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8+Amend.1/Subsection 38.3 试验 T.5 Test T.5	见附表 38.3.4.5 See Table 38.3.4.5	合格 Passed	/
6	撞击 Impact	联合国《试验和标准手册》(第8版+修订1) 38.3 节 UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8+Amend.1/Subsection 38.3 试验 T.6 Test T.6	见附表 38.3.4.6 See Table 38.3.4.6	合格 Passed	/
7	过度充电 Overcharge	联合国《试验和标准手册》(第8版+修订1) 38.3 节 UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8+Amend.1/Subsection 38.3 试验 T.7 Test T.7	见附表 38.3.4.7 See Table 38.3.4.7	合格 Passed	/
8	强制放电 Forced discharge	联合国《试验和标准手册》(第8版+修订1) 38.3 节 UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8+Amend.1/Subsection 38.3 试验 T.8 Test T.8	见附表 38.3.4.8 See Table 38.3.4.8	合格 Passed	/

TABLE: 38.3.4.1		高度模拟 Altitude simulation					
样品编号 Sample No.	测试前 Before Test		测试后 After Test		质量损失 Mass loss (%)	剩余电压 Residual Voltage (%)	测试结果 Test result
	Mass (g)	OCV (V)	Mass (g)	OCV (V)			
B01	40.786	1.58	40.785	1.58	0.002	100.00	O
B02	40.590	1.57	40.588	1.57	0.005	100.00	O
B03	40.807	1.58	40.806	1.58	0.002	100.00	O
B04	40.545	1.57	40.544	1.57	0.002	100.00	O
B05	40.438	1.58	40.436	1.58	0.005	100.00	O
B06	40.581	1.58	40.580	1.58	0.002	100.00	O
B07	40.882	1.58	40.881	1.58	0.002	100.00	O
B08	40.625	1.57	40.623	1.57	0.005	100.00	O
B09	40.659	1.57	40.658	1.57	0.002	100.00	O
B10	40.643	1.57	40.642	1.57	0.002	100.00	O
No. B01-B05: 编号 B01-B05:	At first cycle, in fully charged states 第 1 个充放电周期，完全充电状态						
No. B06-B10: 编号 B06-B10:	After 25 cycles ending in fully charged states 第 25 个充放电周期，完全充电状态						

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.

TABLE: 38.3.4.2		温度试验 Thermal test					
样品编号 Sample No.	测试前 Before Test		测试后 After Test		质量损失 Mass loss (%)	剩余电压 Residual Voltage (%)	测试结果 Test result
	Mass (g)	OCV (V)	Mass (g)	OCV (V)			
B01	40.785	1.58	40.775	1.55	0.025	98.10	O
B02	40.588	1.57	40.579	1.55	0.022	98.73	O
B03	40.806	1.58	40.797	1.56	0.022	98.73	O
B04	40.544	1.57	40.534	1.55	0.025	98.73	O
B05	40.436	1.58	40.426	1.56	0.025	98.73	O
B06	40.580	1.58	40.571	1.56	0.022	98.73	O
B07	40.881	1.58	40.871	1.55	0.024	98.10	O
B08	40.623	1.57	40.614	1.54	0.022	98.09	O
B09	40.658	1.57	40.648	1.54	0.025	98.09	O
B10	40.642	1.57	40.633	1.55	0.022	98.73	O
No. B01-B05: 编号 B01-B05:	At first cycle, in fully charged states 第 1 个充放电周期, 完全充电状态						
No. B06-B10: 编号 B06-B10:	After 25 cycles ending in fully charged states 第 25 个充放电周期, 完全充电状态						

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.

TABLE: 38.3.4.3		振动 Vibration					
样品编号 Sample No.	测试前 Before Test		测试后 After Test		质量损失 Mass loss (%)	剩余电压 Residual Voltage (%)	测试结果 Test result
	Mass (g)	OCV (V)	Mass (g)	OCV (V)			
B01	40.775	1.55	40.774	1.55	0.002	100.00	O
B02	40.579	1.55	40.579	1.55	0.000	100.00	O
B03	40.797	1.56	40.797	1.56	0.000	100.00	O
B04	40.534	1.55	40.534	1.55	0.000	100.00	O
B05	40.426	1.56	40.425	1.56	0.002	100.00	O
B06	40.571	1.56	40.571	1.56	0.000	100.00	O
B07	40.871	1.55	40.871	1.55	0.000	100.00	O
B08	40.614	1.54	40.614	1.54	0.000	100.00	O
B09	40.648	1.54	40.648	1.54	0.000	100.00	O
B10	40.633	1.55	40.633	1.55	0.000	100.00	O
No. B01-B05: 编号 B01-B05:	At first cycle, in fully charged states 第 1 个充放电周期, 完全充电状态						
No. B06-B10: 编号 B06-B10:	After 25 cycles ending in fully charged states 第 25 个充放电周期, 完全充电状态						

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.

TABLE: 38.3.4.4		冲击 Shock					
样品编号 Sample No.	测试前 Before Test		测试后 After Test		质量损失 Mass loss (%)	剩余电压 Residual Voltage (%)	测试结果 Test result
	Mass (g)	OCV (V)	Mass (g)	OCV (V)			
B01	40.774	1.55	40.774	1.55	0.000	100.00	O
B02	40.579	1.55	40.579	1.54	0.000	99.35	O
B03	40.797	1.56	40.796	1.56	0.002	100.00	O
B04	40.534	1.55	40.534	1.55	0.000	100.00	O
B05	40.425	1.56	40.425	1.56	0.000	100.00	O
B06	40.571	1.56	40.571	1.56	0.000	100.00	O
B07	40.871	1.55	40.871	1.55	0.000	100.00	O
B08	40.614	1.54	40.613	1.54	0.002	100.00	O
B09	40.648	1.54	40.648	1.54	0.000	100.00	O
B10	40.633	1.55	40.633	1.55	0.000	100.00	O
No. B01-B05: 编号 B01-B05:	At first cycle, in fully charged states 第 1 个充放电周期, 完全充电状态						
No. B06-B10: 编号 B06-B10:	After 25 cycles ending in fully charged states 第 25 个充放电周期, 完全充电状态						
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.							

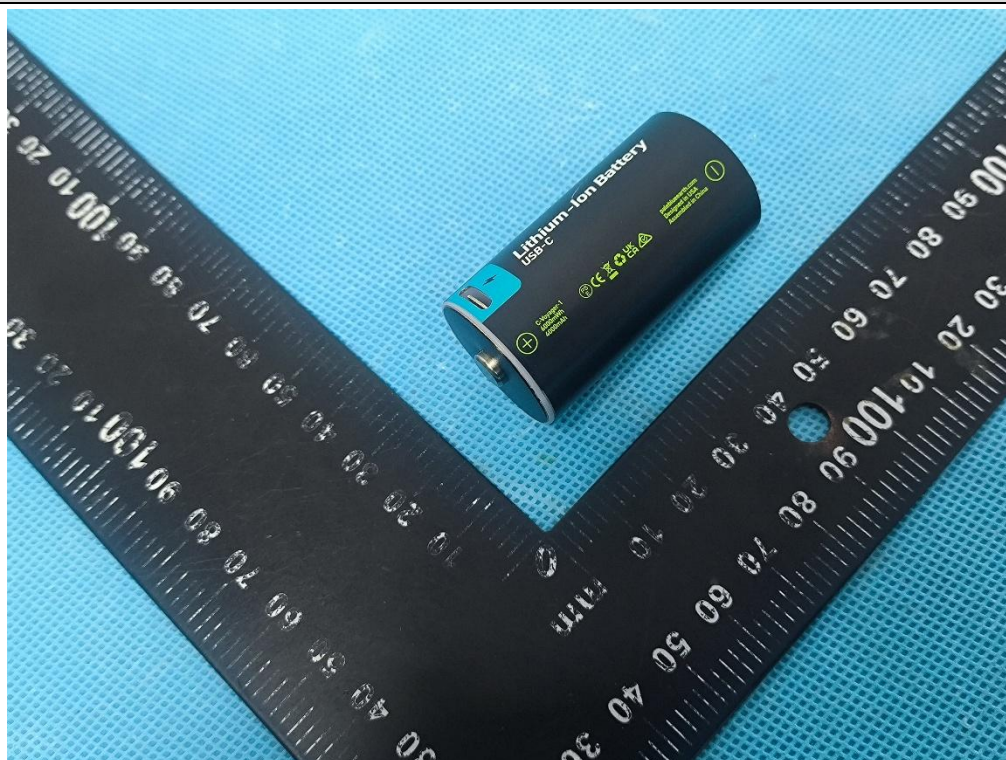
TABLE: 38.3.4.5		外部短路 External short circuit	
样品编号 Sample No.	电路的电阻 Resistance of circuit (mΩ)	样品测量最高温度 Measured maximum sample temperature (°C)	测试结果 Test result
B01	91.2	57.8	O
B02	92.1	57.4	O
B03	89.4	57.2	O
B04	88.6	57.7	O
B05	89.7	58.3	O
B06	90.5	57.4	O
B07	91.7	57.6	O
B08	88.5	57.3	O
B09	90.5	57.3	O
B10	88.4	57.9	O
No. B01-B05: 编号 B01-B05:	At first cycle, in fully charged states 第 1 个充放电周期, 完全充电状态		
No. B06-B10: 编号 B06-B10:	After 25 cycles ending in fully charged states 第 25 个充放电周期, 完全充电状态		
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.			

TABLE: 38.3.4.6	撞击 Impact		
样品编号 Sample No.	开路电压 OCV (V)	样品表面最高温度 Maximum case temperature (°C)	测试结果 Test result
C01	3.73	105.3	O
C02	3.73	104.3	O
C03	3.74	103.6	O
C04	3.73	105.4	O
C05	3.73	103.6	O
C06	3.74	102.6	O
C07	3.74	105.4	O
C08	3.73	102.9	O
C09	3.74	104.7	O
C10	3.73	105.3	O
No. C01-C05: 编号 C01-C05:	At first cycle at 50% of the design rated capacity 第 1 个充放电周期 50%设计额定容量状态		
No. C06-C10: 编号 C06-C10:	After 25 cycle at 50% of the design rated capacity 第 25 个充放电周期 50%设计额定容量状态		
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.			

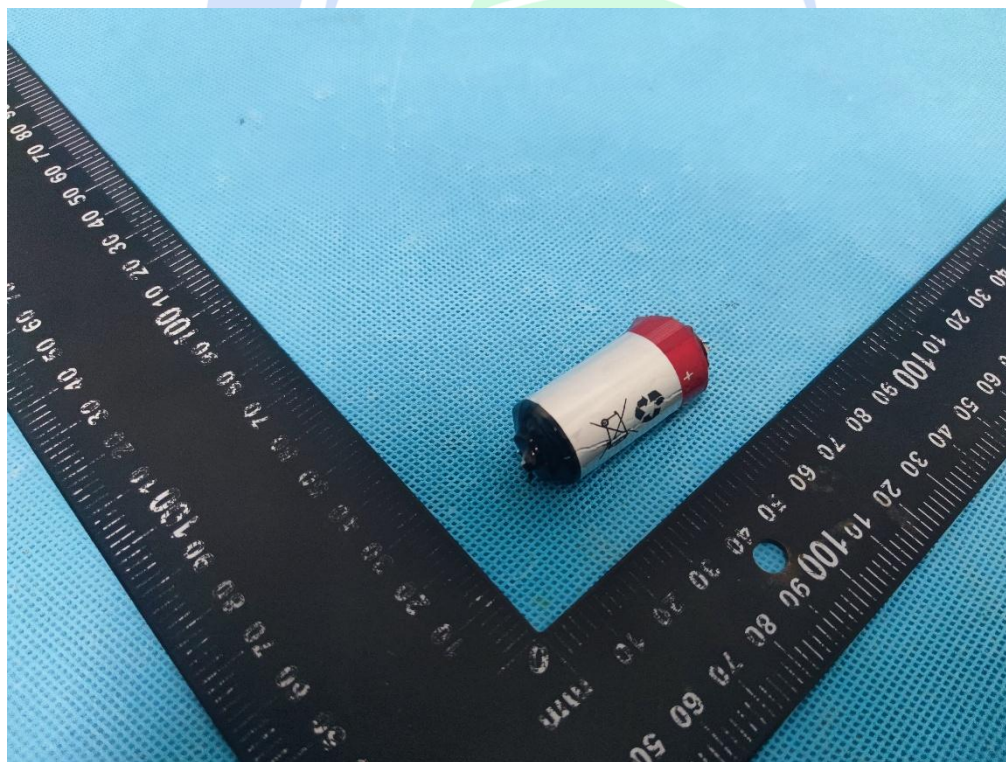
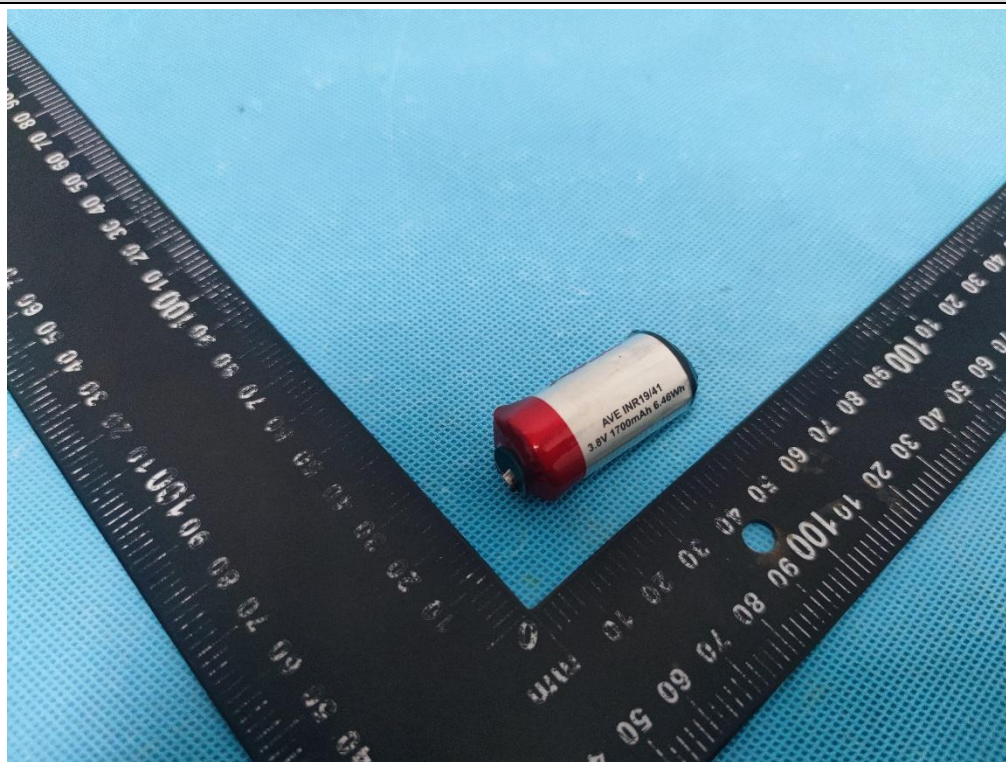
TABLE: 38.3.4.7	过度充电 Overcharge	
样品编号 Sample No.	开路电压 OCV (V)	测试结果 Test result
B11	1.58	O
B12	1.57	O
B13	1.57	O
B14	1.58	O
B15	1.57	O
B16	1.58	O
B17	1.58	O
B18	1.58	O
No. B11-B14: 编号 B11-B14:	At first cycle, in fully charged states 第 1 个充放电周期, 完全充电状态	
No. B15-B18: 编号 B15-B18:	After 25 cycles ending in fully charged states 第 25 个充放电周期, 完全充电状态	
注: D-解体; F-起火; O-无解体、无起火 Note: D-Disassembly, F-Fire, O- No disassembly, no fire.		

TABLE: 38.3.4.8		强制放电 Forced discharge			
样品编号 Sample No.	开路电压 OCV (V)	测试结果 Test result	样品编号 Sample No..	开路电压 OCV (V)	测试结果 Test result
C11	2.83	O	C21	2.83	O
C12	2.83	O	C22	2.84	O
C13	2.83	O	C23	2.83	O
C14	2.84	O	C24	2.84	O
C15	2.83	O	C25	2.82	O
C16	2.84	O	C26	2.82	O
C17	2.84	O	C27	2.85	O
C18	2.83	O	C28	2.84	O
C19	2.83	O	C29	2.85	O
C20	2.84	O	C30	2.83	O
No. C11-C20: 编号 C11-C20:	At first cycle in fully discharged states 第 1 个充放电周期，完全放电状态				
No. C21-C30: 编号 C21-C30:	After 25 cycles ending in fully discharged states 第 25 个充放电周期，完全放电状态				
注： D-解体； F-起火； O-无解体、无起火 Note: D-Disassembly, F-Fire, O- No disassembly, no fire.					

电池组照片 Battery photos



电池照片 Cell photos



电池组铭牌 Battery label



声 明

Statement

1. 本报告无本单位报告专用章和批准人签章无效。

This report is invalid without the special seal for report of CCJC and the signatures of approver.

2. 本报告涂改和删除无效。

This report is invalid if is blotted out and deleted.

3. 委托单位对检测结果有异议，应于收到报告之日起十五日内向我司提出。

If the applicant has any questions about results, shall submit to CCJC within 15 days.

4. 本报告仅对客户所送样品负责。

This report is responsible for the sample provided by the client only.

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The client should provide samples and relevant data, otherwise we will not bear any relevant responsibilities.

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Testing Laboratory.....:	Shenzhen CCJC Technology Co., Ltd
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