中国认可
检测
TESTING
CNAS L0748

CMA
170014233963

NO.1122010588

检 测 报 告

Test Report

样品名称： 可充电锂离子电芯 ICR18650 3.7V 2600mAh

Name of Sample: Lithiun-ion Rechargeable Cell ICR18650 3.7V 2600mAh

委托单位: 江苏天鹏电源有限公司

Consignor: Jiangsu Tenpower Lithium Co., Ltd.

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

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

NO. 1122010588

样品名称 Name of Sample	中文 Chinese	可充电锂离子电芯 ICR18650 3.7V 2600mAh
	英文 English	Lithiun-ion Rechargeable Cell ICR18650 3.7V 2600mAh
样品编号 Sample No.	1122010588	
委托单位 Consignor	江苏天鹏电源有限公司 Jiangsu Tenpower Lithium Co., Ltd.	
生产单位 Manufacturer	江苏天鹏电源有限公司 Jiangsu Tenpower Lithium Co., Ltd.	
检测方法 Test method	联合国《试验和标准手册》 ST/SG/AC.10/11/Rev.7 38.3 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 Section 38.3	
判定标准 Criterion	联合国《试验和标准手册》 ST/SG/AC.10/11/Rev.7 38.3 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 Section 38.3	
样品外观 Appearance	蓝色 圆柱型塑料薄膜外壳 Blue Cylinder plastics film shell	
样品接受日期 Accepted Date	2022-01-24	检测起迄日期 Test Date: 2022-02-17 ～ 2022-03-09
检测项目 Test Items	高度模拟;热测试;振动;冲击;外短路;撞击;强制放电 Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Impact, Forced discharge	
检测结论 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。 The sample has passed the test items of UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 Section 38.3 生效日期(Date): 2022-03-10	
备注 Comment	可充电锂电池芯Rechargeable Lithium Cell./	
委托单位地址 Consignor Address	/	邮政编码 Post Code: 215600

批准 Approver: 王宗 审核 Checker: 陆建峰 编制 Compiler: 傅俊

职务 Title: 副总工程师(Vice chief engineer)

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《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T1 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 Section 38.3 Test T1	见附表 1 See Appendix 1	合格 Passed	/
2	热测试 Thermal test	联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T2 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 Section 38.3 Test T2	见附表 2 See Appendix 2	合格 Passed	/
3	振动 Vibration	联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T3 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 Section 38.3 Test T3	见附表 3 See Appendix 3	合格 Passed	/
4	冲击 Shock	联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T4 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 Section 38.3 Test T4	见附表 4 See Appendix 4	合格 Passed	/
5	外短路 External short circuit	联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T5 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 Section 38.3 Test T.5	见附表 5 See Appendix 5	合格 Passed	/
6	撞击 Impact	联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T6 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 Section 38.3 Test T.6	见附表 6 See Appendix 6	合格 Passed	/
7	强制放电 Forced discharge	联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T8 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 Section 38.3 Test T.8	见附表 7 See Appendix 7	合格 Passed	/
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检测环境条件 Test Environment Condition	环境温度:20℃;环境湿度:/% Ambient temperature:20℃,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

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 1

NO. 1122010588

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	45.3968	4.22	45.3968	4.21	0.00	99.76	O
002	1CYC完全充电 1CYC Fully charged	45.1313	4.20	45.1316	4.20	0.00	100.00	O
003	1CYC完全充电 1CYC Fully charged	45.2383	4.21	45.2389	4.21	0.00	100.00	O
004	1CYC完全充电 1CYC Fully charged	45.1819	4.21	45.1820	4.21	0.00	100.00	O
005	1CYC完全充电 1CYC Fully charged	45.2201	4.21	45.2196	4.21	0.00	100.00	O
006	25CYC完全充电 25CYC Fully charged	45.5098	4.21	45.5099	4.20	0.00	99.76	O
007	25CYC完全充电 25CYC Fully charged	45.4227	4.22	45.4223	4.21	0.00	99.76	O
008	25CYC完全充电 25CYC Fully charged	45.1838	4.21	45.1846	4.21	0.00	100.00	O
009	25CYC完全充电 25CYC Fully charged	45.1280	4.21	45.1282	4.21	0.00	100.00	O
010	25CYC完全充电 25CYC Fully charged	45.2232	4.21	45.2236	4.21	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.

上海化工院检测有限公司
检 测 报 告－附表2

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 2

NO. 1122010588

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	45.3968	4.21	45.3963	4.14	0.00	98.34	O
002	1CYC完全充电 1CYC Fully charged	45.1316	4.20	45.1311	4.13	0.00	98.33	O
003	1CYC完全充电 1CYC Fully charged	45.2389	4.21	45.2387	4.14	0.00	98.34	O
004	1CYC完全充电 1CYC Fully charged	45.1820	4.21	45.1817	4.14	0.00	98.34	O
005	1CYC完全充电 1CYC Fully charged	45.2196	4.21	45.2189	4.14	0.00	98.34	O
006	25CYC完全充电 25CYC Fully charged	45.5099	4.20	45.5096	4.13	0.00	98.33	O
007	25CYC完全充电 25CYC Fully charged	45.4223	4.21	45.4223	4.14	0.00	98.34	O
008	25CYC完全充电 25CYC Fully charged	45.1846	4.21	45.1842	4.14	0.00	98.34	O
009	25CYC完全充电 25CYC Fully charged	45.1282	4.21	45.1276	4.14	0.00	98.34	O
010	25CYC完全充电 25CYC Fully charged	45.2236	4.21	45.2230	4.14	0.00	98.34	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.

上海化工院检测有限公司
检 测 报 告－附表3

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 3

NO. 1122010588

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	45.3963	4.14	45.3972	4.14	0.00	100.00	O
002	1CYC完全充电 1CYC Fully charged	45.1311	4.13	45.1324	4.13	0.00	100.00	O
003	1CYC完全充电 1CYC Fully charged	45.2387	4.14	45.2400	4.14	0.00	100.00	O
004	1CYC完全充电 1CYC Fully charged	45.1817	4.14	45.1829	4.14	0.00	100.00	O
005	1CYC完全充电 1CYC Fully charged	45.2189	4.14	45.2192	4.14	0.00	100.00	O
006	25CYC完全充电 25CYC Fully charged	45.5096	4.13	45.5099	4.13	0.00	100.00	O
007	25CYC完全充电 25CYC Fully charged	45.4223	4.14	45.4232	4.14	0.00	100.00	O
008	25CYC完全充电 25CYC Fully charged	45.1842	4.14	45.1852	4.14	0.00	100.00	O
009	25CYC完全充电 25CYC Fully charged	45.1276	4.14	45.1282	4.14	0.00	100.00	O
010	25CYC完全充电 25CYC Fully charged	45.2230	4.14	45.2237	4.14	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.

上海化工院检测有限公司
检 测 报 告－附表4

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 4

NO. 1122010588

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	45.3972	4.14	45.3961	4.14	0.00	100.00	O
002	1CYC完全充电 1CYC Fully charged	45.1324	4.13	45.1315	4.13	0.00	100.00	O
003	1CYC完全充电 1CYC Fully charged	45.2400	4.14	45.2391	4.14	0.00	100.00	O
004	1CYC完全充电 1CYC Fully charged	45.1829	4.14	45.1818	4.14	0.00	100.00	O
005	1CYC完全充电 1CYC Fully charged	45.2192	4.14	45.2183	4.14	0.00	100.00	O
006	25CYC完全充电 25CYC Fully charged	45.5099	4.13	45.5090	4.13	0.00	100.00	O
007	25CYC完全充电 25CYC Fully charged	45.4232	4.14	45.4221	4.14	0.00	100.00	O
008	25CYC完全充电 25CYC Fully charged	45.1852	4.14	45.1843	4.14	0.00	100.00	O
009	25CYC完全充电 25CYC Fully charged	45.1282	4.14	45.1270	4.14	0.00	100.00	O
010	25CYC完全充电 25CYC Fully charged	45.2237	4.14	45.2226	4.14	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.

上海化工院检测有限公司
检 测 报 告－附表5

Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report—Appendix 5

NO. 1122010588

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 /℃	其他现象 Other Event
001	1CYC完全充电 1CYC Fully charged	104.4	O
002	1CYC完全充电 1CYC Fully charged	98.6	O
003	1CYC完全充电 1CYC Fully charged	102.3	O
004	1CYC完全充电 1CYC Fully charged	105.6	O
005	1CYC完全充电 1CYC Fully charged	101.4	O
006	25CYC完全充电 25CYC Fully charged	99.2	O
007	25CYC完全充电 25CYC Fully charged	108.2	O
008	25CYC完全充电 25CYC Fully charged	103.2	O
009	25CYC完全充电 25CYC Fully charged	105.6	O
010	25CYC完全充电 25CYC Fully charged	105.3	O
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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.

序号 No.	6	检测项目名称 Name of Test Items	撞击 Impact
样品编号 Sample No.	样品状态 Sample Status	样品表面最高温度 Max. External Temperature /℃	其他现象 Other Event
011	1CYC 50%容量 1CYC 50% Capacity	23.8	O
012	1CYC 50%容量 1CYC 50% Capacity	23.1	O
013	1CYC 50%容量 1CYC 50% Capacity	80.1	O
014	1CYC 50%容量 1CYC 50% Capacity	22.8	O
015	1CYC 50%容量 1CYC 50% Capacity	22.7	O
016	25CYC 50%容量 25CYC 50% Capacity	22.7	O
017	25CYC 50%容量 25CYC 50% Capacity	22.6	O
018	25CYC 50%容量 25CYC 50% Capacity	23.2	O
019	25CYC 50%容量 25CYC 50% Capacity	24.1	O
020	25CYC 50%容量 25CYC 50% Capacity	20.7	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.

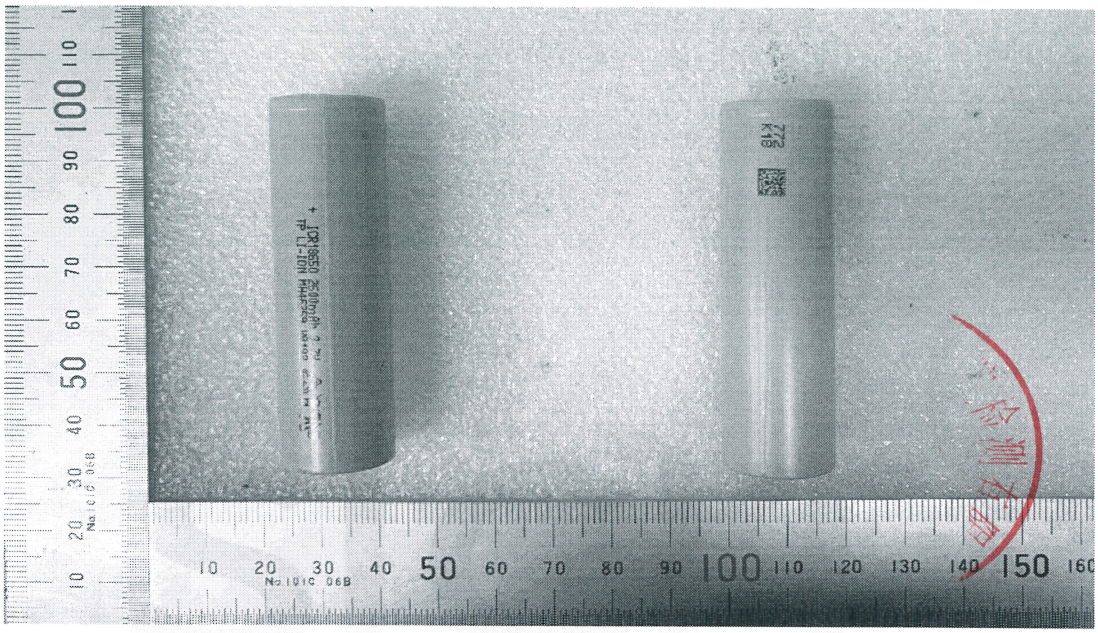
上海化工院检测有限公司
检 测 报 告－附表7

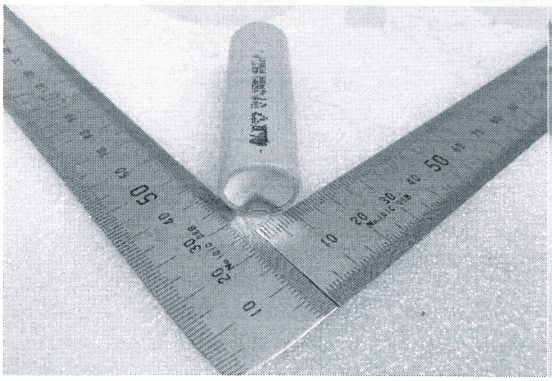
Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 7

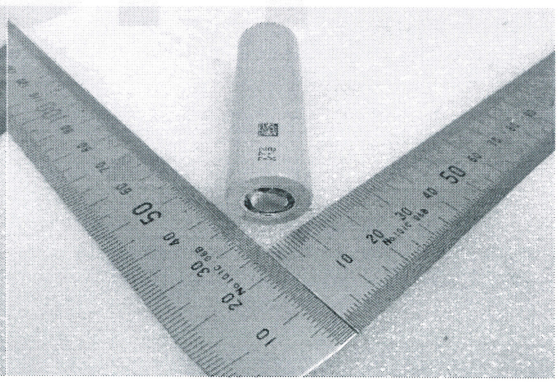
NO. 1122010588

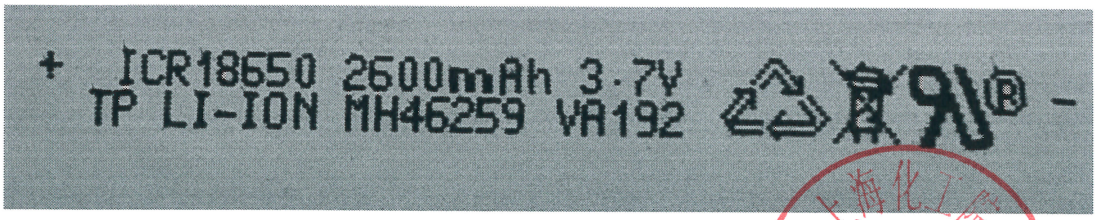
序号 No.	7	检测项目名称 Name of Test Items	强制放电 Forced discharge
样品编号 Sample No.	样品状态 Sample Status	其他现象 Other Event	
021	1CYC完全放电 1CYC Fully discharged	O	
022	1CYC完全放电 1CYC Fully discharged	O	
023	1CYC完全放电 1CYC Fully discharged	O	
024	1CYC完全放电 1CYC Fully discharged	O	
025	1CYC完全放电 1CYC Fully discharged	O	
026	1CYC完全放电 1CYC Fully discharged	O	
027	1CYC完全放电 1CYC Fully discharged	O	
028	1CYC完全放电 1CYC Fully discharged	O	
029	1CYC完全放电 1CYC Fully discharged	O	
030	1CYC完全放电 1CYC Fully discharged	O	
031	25CYC完全放电 25CYC Fully discharged	O	
032	25CYC完全放电 25CYC Fully discharged	O	
033	25CYC完全放电 25CYC Fully discharged	O	
034	25CYC完全放电 25CYC Fully discharged	O	
035	25CYC完全放电 25CYC Fully discharged	O	
036	25CYC完全放电 25CYC Fully discharged	O	
037	25CYC完全放电 25CYC Fully discharged	O	
038	25CYC完全放电 25CYC Fully discharged	O	
039	25CYC完全放电 25CYC Fully discharged	O	
040	25CYC完全放电 25CYC Fully discharged	O	

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.









报告结束