



NO.1124010929

检 测 报 告

Test Report

样品名称： 锂离子电池组/二次鋰電池組 QR31 3.88V
2875mAh/11.16Wh (Rated) 3060mAh/11.88Wh(Typical)

Name of Sample: RECHARGEABLE LITHIUM ION BATTERY QR31 3.88V
2875mAh/11.16Wh (Rated) 3060mAh/11.88Wh(Typical)

委托单位： 东莞新能德科技有限公司

Consignor: Dongguan NVT Technology Co., Ltd.

上海化工院检测有限公司

Shanghai Institute of Chemical Industry Testing Co., Ltd.



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样品名称 Name of Sample	中文 Chinese	锂离子电池组/二次锂电池组 QR31 3.88V 2875mAh/11.16Wh (Rated) 3060mAh/11.88Wh(Typical)		
	英文 English	RECHARGEABLE LITHIUM ION BATTERY QR31 3.88V 2875mAh/11.16Wh (Rated) 3060mAh/11.88Wh(Typical)		
样品编号 Sample No.	1124010929			
委托单位 Consignor	东莞新能德科技有限公司 Dongguan NVT Technology Co., Ltd.			
生产单位 Manufacturer	东莞新能德科技有限公司 Dongguan NVT Technology 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&Amend.1 38.3 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7&Amend.1 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&Amend.1 38.3 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7&Amend.1 Section 38.3			
样品外观 Appearance	黑色, 银色双色 铝塑外壳 Black and silvery Aluminum-plastics shell			
样品接受日期 Accepted Date	2024-01-29		检测起迄日期 Test Date	2024-02-07 ~ 2024-03-12
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《试验和标准手册》ST/SG/AC.10/11/Rev.7&Amend.1 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&Amend.1 Section 38.3 生效日期(Date): 2024-03-12			
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	523443

批准
Approver:
职务
Title:

许金

审核
Checker:

陈建峰

编制
Compiler:

傅佳

电化学测试部部长(Head of Electrochemical Testing Department)



上海化工院检测有限公司 检测报告

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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《试验和标准手册》ST/SG/AC. 10/11/Rev. 7&Amend. 1 38.3 试验T.1 UN Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 7&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《试验和标准手册》ST/SG/AC. 10/11/Rev. 7&Amend. 1 38.3 试验T.2 UN Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 7&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《试验和标准手册》ST/SG/AC. 10/11/Rev. 7&Amend. 1 38.3 试验T.3 UN Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 7&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《试验和标准手册》ST/SG/AC. 10/11/Rev. 7&Amend. 1 38.3 试验T.4 UN Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 7&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《试验和标准手册》ST/SG/AC. 10/11/Rev. 7&Amend. 1 38.3 试验T.5 UN Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 7&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《试验和标准手册》ST/SG/AC. 10/11/Rev. 7&Amend. 1 38.3 试验T.6 UN Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 7&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《试验和标准手册》ST/SG/AC. 10/11/Rev. 7&Amend. 1 38.3 试验T.7 UN Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 7&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《试验和标准手册》ST/SG/AC. 10/11/Rev. 7&Amend. 1 38.3 试验T.8 UN Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 7&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:20℃-21℃;环境湿度:/% Ambient temperature:20℃-21℃;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

检测报告-附表1

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检测报告-附表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	38.0569	4.44	38.0574	4.37	0.00	98.42	O
002	1CYC完全充电 1CYC Fully charged	38.0322	4.42	38.0343	4.36	0.00	98.64	O
003	1CYC完全充电 1CYC Fully charged	38.0490	4.45	38.0509	4.37	0.00	98.20	O
004	1CYC完全充电 1CYC Fully charged	38.1156	4.46	38.1166	4.38	0.00	98.21	O
005	1CYC完全充电 1CYC Fully charged	38.1553	4.44	38.1583	4.37	0.00	98.42	O
006	25CYC完全充电 25CYC Fully charged	38.0038	4.44	38.0073	4.37	0.00	98.42	O
007	25CYC完全充电 25CYC Fully charged	38.0715	4.45	38.0723	4.37	0.00	98.20	O
008	25CYC完全充电 25CYC Fully charged	38.0692	4.46	38.0723	4.38	0.00	98.21	O
009	25CYC完全充电 25CYC Fully charged	38.0492	4.44	38.0519	4.37	0.00	98.42	O
010	25CYC完全充电 25CYC Fully charged	38.1049	4.43	38.1062	4.36	0.00	98.42	O
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检测报告-附表3

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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	38.0574	4.37	38.0565	4.37	0.00	100.00	O
002	1CYC完全充电 1CYC Fully charged	38.0343	4.36	38.0327	4.35	0.00	99.77	O
003	1CYC完全充电 1CYC Fully charged	38.0509	4.37	38.0499	4.37	0.00	100.00	O
004	1CYC完全充电 1CYC Fully charged	38.1166	4.38	38.1148	4.38	0.00	100.00	O
005	1CYC完全充电 1CYC Fully charged	38.1583	4.37	38.1568	4.37	0.00	100.00	O
006	25CYC完全充电 25CYC Fully charged	38.0073	4.37	38.0062	4.37	0.00	100.00	O
007	25CYC完全充电 25CYC Fully charged	38.0723	4.37	38.0712	4.37	0.00	100.00	O
008	25CYC完全充电 25CYC Fully charged	38.0723	4.38	38.0704	4.38	0.00	100.00	O
009	25CYC完全充电 25CYC Fully charged	38.0519	4.37	38.0504	4.37	0.00	100.00	O
010	25CYC完全充电 25CYC Fully charged	38.1062	4.36	38.1062	4.37	0.00	100.00	O
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检测报告-附表4

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检测报告-附表5

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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.

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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	
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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.

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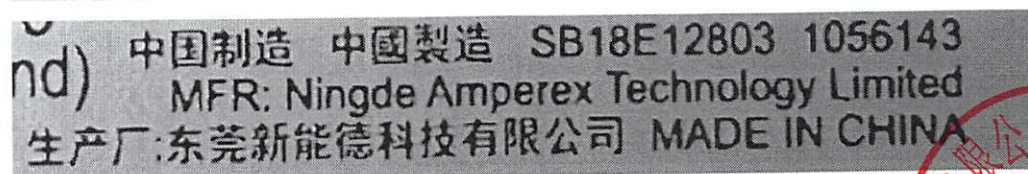
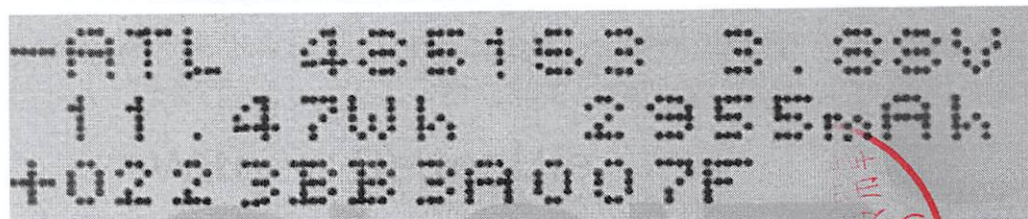
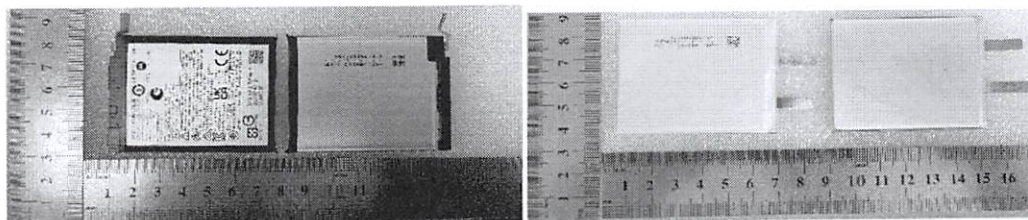
序号 No.	8	检测项目名称 Name of Test Items	强制放电 Forced discharge
样品编号 Sample No.	样品状态 Sample Status	其他现象 Other Event	
029	1CYC完全放电 1CYC Fully discharged	O	
030	1CYC完全放电 1CYC Fully discharged	O	
031	1CYC完全放电 1CYC Fully discharged	O	
032	1CYC完全放电 1CYC Fully discharged	O	
033	1CYC完全放电 1CYC Fully discharged	O	
034	1CYC完全放电 1CYC Fully discharged	O	
035	1CYC完全放电 1CYC Fully discharged	O	
036	1CYC完全放电 1CYC Fully discharged	O	
037	1CYC完全放电 1CYC Fully discharged	O	
038	1CYC完全放电 1CYC Fully discharged	O	
039	25CYC完全放电 25CYC Fully discharged	O	
040	25CYC完全放电 25CYC Fully discharged	O	
041	25CYC完全放电 25CYC Fully discharged	O	
042	25CYC完全放电 25CYC Fully discharged	O	
043	25CYC完全放电 25CYC Fully discharged	O	
044	25CYC完全放电 25CYC Fully discharged	O	
045	25CYC完全放电 25CYC Fully discharged	O	
046	25CYC完全放电 25CYC Fully discharged	O	
047	25CYC完全放电 25CYC Fully discharged	O	
048	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.			

上海化工院检测有限公司
检测报告-附图

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报告结束