



NO.1121110087

检测报告

Test Report

样品名称： 锂离子聚合物电池组/二次锂电池组 NH50 3.87V
4850mAh/18.8Wh (RATED) 5000mAh/19.4Wh (TYPICAL)

Name of Sample: RECHARGEABLE LITHIUM ION POLYMER BATTERY NH50 3.87V
4850mAh/18.8Wh (RATED) 5000mAh/19.4Wh (TYPICAL)

委托单位： 飞毛腿（福建）电子有限公司

Consignor: SCUD (Fujian) Electronics 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. 1121110087

1/11

样品名称 Name of Sample	中文 Chinese	锂离子聚合物电池组/二次锂电池组 NH50 3.87V 4850mAh/18.8Wh (RATED) 5000mAh/19.4Wh (TYPICAL)		
	英文 English	RECHARGEABLE LITHIUM ION POLYMER BATTERY NH50 3.87V 4850mAh/18.8Wh (RATED) 5000mAh/19.4Wh (TYPICAL)		
样品编号 Sample No.	1121110087			
委托单位 Consignor	飞毛腿 (福建) 电子有限公司 SCUD (Fujian) Electronics Co., Ltd.			
生产单位 Manufacturer	飞毛腿 (福建) 电子有限公司 SCUD (Fujian) Electronics 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	银色, 黄色双色 铝塑外壳 Silvery and yellow Aluminum-plastics shell			
样品接受日期 Accepted Date	2021-11-04	检测起迄日期 Test Date	2021-11-12 ~ 2021-12-03	
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 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 <div style="text-align: right;">生效日期(Date): 2021-12-07</div>			
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	350015



批准
Approver:
职务
Title: 副总工程师(Vice chief engineer)

审核
Checker:

编制
Compiler:



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. 1121110087

2/11

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	挤压 Crush	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	过充电 Overcharge	联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 试验T7 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 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 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 8 See Appendix 8	合格 Passed	/	
检测环境条件 Test Environment Condition		环境温度:22℃-23℃;环境湿度:/% Ambient temperature:22℃-23℃;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. 1121110087

3/11

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	64.4145	4.42	64.4142	4.41	0.00	99.77	O
002	1CYC完全充电 1CYC Fully charged	64.1618	4.41	64.1613	4.41	0.00	100.00	O
003	1CYC完全充电 1CYC Fully charged	64.2915	4.42	64.2914	4.41	0.00	99.77	O
004	1CYC完全充电 1CYC Fully charged	64.2382	4.41	64.2385	4.41	0.00	100.00	O
005	1CYC完全充电 1CYC Fully charged	64.6228	4.43	64.6222	4.42	0.00	99.77	O
006	25CYC完全充电 25CYC Fully charged	64.6774	4.42	64.6767	4.41	0.00	99.77	O
007	25CYC完全充电 25CYC Fully charged	64.5568	4.43	64.5571	4.42	0.00	99.77	O
008	25CYC完全充电 25CYC Fully charged	64.3825	4.42	64.3829	4.41	0.00	99.77	O
009	25CYC完全充电 25CYC Fully charged	64.5322	4.40	64.5330	4.40	0.00	100.00	O
010	25CYC完全充电 25CYC Fully charged	64.5028	4.42	64.5039	4.41	0.00	99.77	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

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

NO. 1121110087

4/11

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	64.4142	4.41	64.4106	4.34	0.01	98.41	O
002	1CYC完全充电 1CYC Fully charged	64.1613	4.41	64.1589	4.34	0.00	98.41	O
003	1CYC完全充电 1CYC Fully charged	64.2914	4.41	64.2869	4.34	0.01	98.41	O
004	1CYC完全充电 1CYC Fully charged	64.2385	4.41	64.2344	4.33	0.01	98.19	O
005	1CYC完全充电 1CYC Fully charged	64.6222	4.42	64.6191	4.34	0.00	98.19	O
006	25CYC完全充电 25CYC Fully charged	64.6767	4.41	64.6727	4.34	0.01	98.41	O
007	25CYC完全充电 25CYC Fully charged	64.5571	4.42	64.5536	4.33	0.01	97.96	O
008	25CYC完全充电 25CYC Fully charged	64.3829	4.41	64.3788	4.33	0.01	98.19	O
009	25CYC完全充电 25CYC Fully charged	64.5330	4.40	64.5282	4.33	0.01	98.41	O
010	25CYC完全充电 25CYC Fully charged	64.5039	4.41	64.4998	4.34	0.01	98.41	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

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

NO. 1121110087

5/11

序号 No.	3	检测项目名称 Name of Test Items		振动 Vibration				
		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
样品 编号 Sample No.	样品状态 Sample Status	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	64.4106	4.34	64.4073	4.34	0.01	100.00	0
002	1CYC完全充电 1CYC Fully charged	64.1589	4.34	64.1556	4.34	0.01	100.00	0
003	1CYC完全充电 1CYC Fully charged	64.2869	4.34	64.2845	4.33	0.00	99.77	0
004	1CYC完全充电 1CYC Fully charged	64.2344	4.33	64.2317	4.33	0.00	100.00	0
005	1CYC完全充电 1CYC Fully charged	64.6191	4.34	64.6161	4.34	0.00	100.00	0
006	25CYC完全充电 25CYC Fully charged	64.6727	4.34	64.6702	4.34	0.00	100.00	0
007	25CYC完全充电 25CYC Fully charged	64.5536	4.33	64.5494	4.33	0.01	100.00	0
008	25CYC完全充电 25CYC Fully charged	64.3788	4.33	64.3755	4.33	0.01	100.00	0
009	25CYC完全充电 25CYC Fully charged	64.5282	4.33	64.5253	4.33	0.00	100.00	0
010	25CYC完全充电 25CYC Fully charged	64.4998	4.34	64.4957	4.34	0.01	100.00	0
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

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

NO. 1121110087

6/11

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	64.4073	4.34	64.4060	4.34	0.00	100.00	O
002	1CYC完全充电 1CYC Fully charged	64.1556	4.34	64.1545	4.34	0.00	100.00	O
003	1CYC完全充电 1CYC Fully charged	64.2845	4.33	64.2831	4.33	0.00	100.00	O
004	1CYC完全充电 1CYC Fully charged	64.2317	4.33	64.2308	4.33	0.00	100.00	O
005	1CYC完全充电 1CYC Fully charged	64.6161	4.34	64.6150	4.34	0.00	100.00	O
006	25CYC完全充电 25CYC Fully charged	64.6702	4.34	64.6690	4.34	0.00	100.00	O
007	25CYC完全充电 25CYC Fully charged	64.5494	4.33	64.5482	4.33	0.00	100.00	O
008	25CYC完全充电 25CYC Fully charged	64.3755	4.33	64.3744	4.33	0.00	100.00	O
009	25CYC完全充电 25CYC Fully charged	64.5253	4.33	64.5242	4.33	0.00	100.00	O
010	25CYC完全充电 25CYC Fully charged	64.4957	4.34	64.4946	4.33	0.00	99.77	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

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

NO. 1121110087

7/11

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	57.2	O
002	1CYC完全充电 1CYC Fully charged	58.3	O
003	1CYC完全充电 1CYC Fully charged	57.3	O
004	1CYC完全充电 1CYC Fully charged	56.7	O
005	1CYC完全充电 1CYC Fully charged	57.3	O
006	25CYC完全充电 25CYC Fully charged	57.8	O
007	25CYC完全充电 25CYC Fully charged	57.9	O
008	25CYC完全充电 25CYC Fully charged	56.9	O
009	25CYC完全充电 25CYC Fully charged	57.7	O
010	25CYC完全充电 25CYC Fully charged	56.6	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

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 6

NO. 1121110087

8/11

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	21.3	O
012	1CYC 50%容量 1CYC 50% Capacity	21.7	O
013	1CYC 50%容量 1CYC 50% Capacity	22.1	O
014	1CYC 50%容量 1CYC 50% Capacity	23.3	O
015	1CYC 50%容量 1CYC 50% Capacity	21.4	O
016	25CYC 50%容量 25CYC 50% Capacity	21.8	O
017	25CYC 50%容量 25CYC 50% Capacity	21.7	O
018	25CYC 50%容量 25CYC 50% Capacity	21.4	O
019	25CYC 50%容量 25CYC 50% Capacity	21.6	O
020	25CYC 50%容量 25CYC 50% Capacity	22.1	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

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

NO. 1121110087

9/11

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		0
022	1CYC完全充电 1CYC Fully charged		0
023	1CYC完全充电 1CYC Fully charged		0
024	1CYC完全充电 1CYC Fully charged		0
025	25CYC完全充电 25CYC Fully charged		0
026	25CYC完全充电 25CYC Fully charged		0
027	25CYC完全充电 25CYC Fully charged		0
028	25CYC完全充电 25CYC Fully charged		0
以下空白	This space intentionally left blank		
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.			

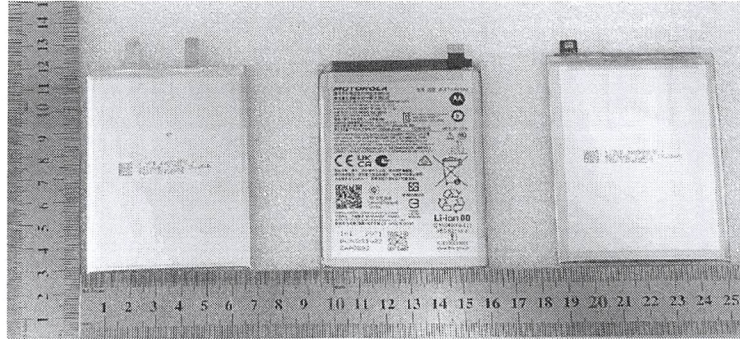
上海化工院检测有限公司
检测报告-附表8

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 8

NO. 1121110087

10/11

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.			



MOTOROLA 型号 型號 MODEL NH50
 摩托罗拉移动技术(中国)有限公司
 摩托羅拉移動技術(中國)有限公司
 RECHARGEABLE LITHIUM ION POLYMER BATTERY
 BATERIA DE POLÍMERO DE ION DE LÍTIO
 BATERIA DE POLÍMERO DE IONS DE LÍTIO
 BATTERIE LITHIUM-ION POLYMÈRE
 BATERAI LITHIUM ION POLYMER
 锂离子聚合物电池组/二次锂离子电池
 标准电压/標稱電壓/NOMINAL VOLTAGE: 3.87V
 额定容量/額定電容量/RATED CAPACITY: 4850mAh/18.8Wh
 典型电容量/TYPICAL CAPACITY: 5000mAh/19.4Wh 11CP5/66/90 GB 31241-2014

SEE MANUAL FOR SAFETY INFORMATION. | VEA MANUAL PARA INFORMACIÓN DE SEGURIDAD. | CONSULTE INFORMAÇÕES DE SEGURANÇA NO MANUAL. | VOIR MANUEL POUR INFORMATION SUR SÉCURITÉ. | LIHAT PANDUAN UNTUK INFORMASI KESELAMATAN. | LIMITED CHARGE VOLTAGE 4.45V --- | TEGANGAN ISI DAYA 4,45V ---

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。充电限制电压4.45V --- 参阅使用手册中安全性能须知。

TIS 2217-2548
 Lenovo(Thailand) Limited
 R35393
 3.87Vdc
 4850mAh

Li-ion 00
 IS 16046(Part 2)
 /IEC 62133-2
 R-XXXXXXX
 www.bis.gov.in

报告结束

