



UN38.3 测试报告

UN38.3 Test Report

申请商 : 深圳市天珑移动技术有限公司
APPLICANT : Shenzhen Tinno Mobile Technology Corp.
产品名称 : 可充电锂离子电池
PRODUCT NAME : Rechargeable Li-ion Battery
型号/MODEL NAME : PT34H406082J
商标/TRADE NAME : BLU
品牌/BRAND NAME : BLU
标称/RATING : 3.85V/ 3310 mAh, 12.74 Wh
接收日期 : 2020/08/14
RECEIPT DATE : 2020/08/14
测试日期 : 2020/08/17 - 2020/09/09
TEST DATE : 2020/08/17 - 2020/09/09
签发日期 : 2021/04/23
ISSUE DATE : 2021/04/23

编制
Edited by:

陈碧莲

签发
Approved by:

李冬

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测试报告声明

Test Report Declaration

申请商/Applicant	深圳市天珑移动技术有限公司/ Shenzhen Tinno Mobile Technology Corp.	
申请商地址 Applicant Address	深圳市南山区华侨城东部工业区 H-3 栋 4 楼 4/F, H-3 Building, OCT Eastern Industrial Park. NO.1 XiangShan East Road, Nan Shan District, Shenzhen, P.R. China.	
产品名称/ Product Name	可充电锂离子电池/Rechargeable Li-ion Battery	
型号/ Model Name	PT34H406082J	
标称/ Rating	3.85 V / 3310 mAh, 12.74 Wh	
制造商信息 Manufacturer information	制造商/Manufacturer	宁波维科电池有限公司/Ningbo Veken Battery Co., Ltd.
	制造商地址 Manufacturer Address	宁波保税区西区0212地块2号标准厂房 No.2, Area 0212, West Zone, Free Trade Zone, Ningbo, Zhejiang Province, China
尺寸/Size	82.2×60.1×4 mm	
电池信息 Battery information	内含电芯数量/Cells number	1pcs(1S1P)
	电芯型号/Cell model	396080PU
	物理特性/Physical description	棱形, 黑色/Prismatic, black
检验方法及判定标准 Test Method and Criterion	联合国《关于危险货物运输的建议书试验和标准手册》第六版修正1第38.3节 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	
测试项目 Test Items	高度模拟试验; 温度试验; 振动试验; 冲击试验; 外短路试验; 挤压试验; 过充电试验; 强制放电 Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Crush, Overcharge, Force discharge	
测试结论 Conclusion	受检样品通过 UN 38.3 各项检测, 检测结果合格 The sample has passed the test items of UN38.3	
备注/ Remarks	这份报告基于 UN38.3 测试报告 SZ20060308D01, 电池有以下变化: 1. 标签 (由白色变为黑色, 增加二维码, 改变排版) 2. 商标 (由 N/A 改为 BLU) 3. 品牌 (由 N/A 改为 BLU) 无需额外测试。 This report is based on test report SZ20060308D01, the battery has following changes: 1. Label (from white to black, added QR codes, and change typography) 2. Trade Name (from N/A to BLU) 3. Brand Name (from N/A to BLU) No additional tests were considered necessary.	



摩尔实验室检验报告

Morlab Test Report

序号 No.	检验项目名称 Name of test items	标准要求或标准款号 Standard Requirement or the Clause Number of Standard	检测结果 Test Result	本项结论 Test Conclusion	备注 Remarks
1	高度模拟试验 Altitude simulation	联合国《关于危险货物运输的建议书 试验和标准手册》(以下简称:试验和标准手册)UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/Amend.1, 38.3 试验 T.1 Test T.1	见附表 1 See Appendix 1	合格 Passed	/
2	温度试验 Thermal Test	试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/Amend.1, 38.3 试验 T.2 Test T.2	见附表 2 See Appendix 2	合格 Passed	/
3	振动试验 Vibration	试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/Amend.1, 38.3 试验 T.3 Test T.3	见附表 3 See Appendix 3	合格 Passed	/
4	冲击试验 Shock	试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/Amend.1, 38.3 试验 T.4 Test T.4	见附表 4 See Appendix 4	合格 Passed	/
5	外短路试验 External short circuit	试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/Amend.1, 38.3 试验 T.5 Test T.5	见附表 5 See Appendix 5	合格 Passed	/
6	挤压试验 Crush	试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/Amend.1, 38.3 试验 T.6 Test T.6	见附表 6 See Appendix 6	合格 Passed	/
7	过充电试验 Overcharge	试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/Amend.1, 38.3 试验 T.7 Test T.7	见附表 7 See Appendix 7	合格 Passed	/
8	强制放电 Force discharge	试验和标准手册 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/Amend.1, 38.3 试验 T.8 Test T.8	见附表 8 See Appendix 8	合格 Passed	/
检验环境条件 Test Environment Condition		环境温度: 15~25℃ Ambient Temperature: 15~25℃			



Change History		
Version	Date	Reason for change
1.0	2021/04/23	First edition



检验报告-附件 1

Test Report-Appendix 1

序号 No.	1	检测项目名称 Name of test items		高度模拟试验 Altitude simulation				
		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 Weight/g	开路 电压 OCV/V	质量 Weight/g	开路 电压 OCV/V			
1	首次充满 Fully charged at first cycle	43.4674	4.367	43.4672	4.366	0.0005	99.98	O
2	首次充满 Fully charged at first cycle	43.2365	4.372	43.2363	4.371	0.0005	99.98	O
3	首次充满 Fully charged at first cycle	43.592	4.367	43.5918	4.366	0.0005	99.98	O
4	首次充满 Fully charged at first cycle	43.3443	4.369	43.3441	4.368	0.0005	99.98	O
5	首次充满 Fully charged at first cycle	43.2029	4.37	43.2027	4.369	0.0005	99.98	O
6	25 次循环后充满 Fully charged after 25 cycles	43.3265	4.372	43.3264	4.371	0.0002	99.98	O
7	25 次循环后充满 Fully charged after 25 cycles	43.1838	4.366	43.1837	4.365	0.0002	99.98	O
8	25 次循环后充满 Fully charged after 25 cycles	43.2815	4.373	43.2813	4.372	0.0005	99.98	O
9	25 次循环后充满 Fully charged after 25 cycles	43.5135	4.365	43.5134	4.364	0.0002	99.98	O
10	25 次循环后充满 Fully charged after 25 cycles	43.4185	4.373	43.4183	4.372	0.0005	99.98	O

备注: L-漏液, V-漏气, D-解体, R-破裂, F-起火, O-无漏液, 无解体, 无破裂, 无起火;

Remark: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No Leakage, No Venting, No Disassembly, No Rupture, No Fire



检验报告-附件 2

Test Report-Appendix 2

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 Weight/g	开路 电压 OCV/V	质量 Weight/g	开路 电压 OCV/V			
1	首次充满 Fully charged at first cycle	43.4672	4.366	43.4659	4.274	0.0030	97.89	O
2	首次充满 Fully charged at first cycle	43.2363	4.371	43.2338	4.289	0.0058	98.12	O
3	首次充满 Fully charged at first cycle	43.5918	4.366	43.5896	4.273	0.0050	97.87	O
4	首次充满 Fully charged at first cycle	43.3441	4.368	43.3422	4.276	0.0044	97.89	O
5	首次充满 Fully charged at first cycle	43.2027	4.369	43.2004	4.278	0.0053	97.92	O
6	25次循环后充满 Fully charged after 25 cycles	43.3264	4.371	43.3245	4.284	0.0044	98.01	O
7	25次循环后充满 Fully charged after 25 cycles	43.1837	4.365	43.1812	4.274	0.0058	97.92	O
8	25次循环后充满 Fully charged after 25 cycles	43.2813	4.372	43.2785	4.289	0.0065	98.10	O
9	25次循环后充满 Fully charged after 25 cycles	43.5134	4.364	43.5109	4.277	0.0057	98.01	O
10	25次循环后充满 Fully charged after 25 cycles	43.4183	4.372	43.4158	4.286	0.0058	98.03	O

备注: L-漏液, V-漏气, D-解体, R-破裂, F-起火, O-无漏液, 无解体, 无破裂, 无起火;
Remark: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No Leakage, No Venting, No Disassembly, No Rupture, No Fire



检验报告-附件 3

Test Report-Appendix 3

序号 No.	3	检测项目名称 Name of test items		振动试验 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 Weight/g	开路 电压 OCV/V	质量 Weight/g	开路 电压 OCV/V			
1	首次充满 Fully charged at first cycle	43.4659	4.274	43.4657	4.273	0.0005	99.98	O
2	首次充满 Fully charged at first cycle	43.2338	4.289	43.2334	4.287	0.0009	99.95	O
3	首次充满 Fully charged at first cycle	43.5896	4.273	43.5895	4.272	0.0002	99.98	O
4	首次充满 Fully charged at first cycle	43.3422	4.276	43.3419	4.274	0.0007	99.95	O
5	首次充满 Fully charged at first cycle	43.2004	4.278	43.2001	4.277	0.0007	99.98	O
6	25次循环后充满 Fully charged after 25 cycles	43.3245	4.284	43.3245	4.282	0.0000	99.95	O
7	25次循环后充满 Fully charged after 25 cycles	43.1812	4.274	43.1808	4.273	0.0009	99.98	O
8	25次循环后充满 Fully charged after 25 cycles	43.2785	4.289	43.2783	4.288	0.0005	99.98	O
9	25次循环后充满 Fully charged after 25 cycles	43.5109	4.277	43.5107	4.276	0.0005	99.98	O
10	25次循环后充满 Fully charged after 25 cycles	43.4158	4.286	43.4155	4.285	0.0007	99.98	O

备注: L-漏液, V-漏气, D-解体, R-破裂, F-起火, O-无漏液, 无解体, 无破裂, 无起火;

Remark: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No Leakage, No Venting, No Disassembly, No Rupture, No Fire



检验报告-附件 4

Test Report-Appendix 4

序号 No.	4	检测项目名称 Name of test items		冲击试验 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 Weight/g	开路 电压 OCV/V	质量 Weight/g	开路 电压 OCV/V			
1	首次充满 Fully charged at first cycle	43.4657	4.273	43.4655	4.272	0.0005	99.98	O
2	首次充满 Fully charged at first cycle	43.2334	4.287	43.2332	4.286	0.0005	99.98	O
3	首次充满 Fully charged at first cycle	43.5895	4.272	43.5892	4.271	0.0007	99.98	O
4	首次充满 Fully charged at first cycle	43.3419	4.274	43.3417	4.272	0.0005	99.95	O
5	首次充满 Fully charged at first cycle	43.2001	4.277	43.1998	4.276	0.0007	99.98	O
6	25 次循环后充满 Fully charged after 25 cycles	43.3245	4.282	43.3243	4.281	0.0005	99.98	O
7	25 次循环后充满 Fully charged after 25 cycles	43.1808	4.273	43.1805	4.271	0.0007	99.95	O
8	25 次循环后充满 Fully charged after 25 cycles	43.2783	4.288	43.2781	4.286	0.0005	99.95	O
9	25 次循环后充满 Fully charged after 25 cycles	43.5107	4.276	43.5104	4.275	0.0007	99.98	O
10	25 次循环后充满 Fully charged after 25 cycles	43.4155	4.285	43.4152	4.284	0.0007	99.98	O

备注: L-漏液, V-漏气, D-解体, R-破裂, F-起火, O-无漏液, 无解体, 无破裂, 无起火;

Remark: L-Leakage, V-Venting, D-Disassembly, R-Rupture, F-Fire, O-No Leakage, No Venting, No Disassembly, No Rupture, No Fire



检验报告-附件 5
Test Report-Appendix 5

序号 No.	5	检测项目名称 Name of test items	外短路试验 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 Test Items / °C	其他现象 Other Event
1	首次充满 Fully charged at first cycle	57.6	O
2	首次充满 Fully charged at first cycle	57.1	O
3	首次充满 Fully charged at first cycle	56.9	O
4	首次充满 Fully charged at first cycle	57.4	O
5	首次充满 Fully charged at first cycle	57.3	O
6	25 次循环后充满 Fully charged after 25 cycles	57.3	O
7	25 次循环后充满 Fully charged after 25 cycles	57.1	O
8	25 次循环后充满 Fully charged after 25 cycles	57.2	O
9	25 次循环后充满 Fully charged after 25 cycles	57.5	O
10	25 次循环后充满 Fully charged after 25 cycles	57.7	O

备注: D-解体, R-破裂, F-起火, O-无解体, 无破裂, 无起火;
Remark: D-Disassembly, R-Rupture, F-Fire, O-No Disassembly, No Rupture, No Fire



检验报告-附件 6

Test Report-Appendix 6

序号 No.	6	检测项目名称 Name of test items	挤压试验 Crush
样品编号 Sample No.	样品状态 Sample status	样品表面最高温度 Max. External Test Items/ °C	其他现象 Other Event
11	首次 50%容量 50% of capacity at first cycle	24.3	O
12	首次 50%容量 50% of capacity at first cycle	24.0	O
13	首次 50%容量 50% of capacity at first cycle	23.7	O
14	首次 50%容量 50% of capacity at first cycle	24.1	O
15	首次 50%容量 50% of capacity at first cycle	23.6	O
16	25 次循环后 50%容量 50% of capacity after25 cycles	24.6	O
17	25 次循环后 50%容量 50% of capacity after25 cycles	23.1	O
18	25 次循环后 50%容量 50% of capacity after25 cycles	24.5	O
19	25 次循环后 50%容量 50% of capacity after25 cycles	23.8	O
20	25 次循环后 50%容量 50% of capacity after25 cycles	23.0	O

备注: D-解体, F-起火, O-无解体, 无起火;

Remark: D-Disassembly, F-Fire, O-No Disassembly, No Fire



检验报告-附件 7

Test Report-Appendix 7

序号 No.	7	检测项目名称 Name of test items	过充电试验 Overcharge
样品编号 Sample No.	样品状态 Sample status	其他现象 Other Event	
21	首次充满 Fully charged at first cycle		O
22	首次充满 Fully charged at first cycle		O
23	首次充满 Fully charged at first cycle		O
24	首次充满 Fully charged at first cycle		O
25	25 次循环后充满 Fully charged after 25 cycles		O
26	25 次循环后充满 Fully charged after 25 cycles		O
27	25 次循环后充满 Fully charged after 25 cycles		O
28	25 次循环后充满 Fully charged after 25 cycles		O

备注: D-解体, F-起火, O-无解体, 无起火;
Remark: D-Disassembly, F-Fire, O-No Disassembly, No Fire



检验报告-附件 8

Test Report-Appendix 8

序号 No.	8	检测项目名称 Name of test items	强制放电 Force discharge
样品编号 Sample No.	样品状态 Sample status	放电时间 (H) Discharge time	其他现象 Other Event
29	首次完全放电 Fully discharged at first cycle	1	O
30	首次完全放电 Fully discharged at first cycle	1	O
31	首次完全放电 Fully discharged at first cycle	1	O
32	首次完全放电 Fully discharged at first cycle	1	O
33	首次完全放电 Fully discharged at first cycle	1	O
34	首次完全放电 Fully discharged at first cycle	1	O
35	首次完全放电 Fully discharged at first cycle	1	O
36	首次完全放电 Fully discharged at first cycle	1	O
37	首次完全放电 Fully discharged at first cycle	1	O
38	首次完全放电 Fully discharged at first cycle	1	O
39	25 次循环后完全放电 Fully discharged after 25 cycles	1	O
40	25 次循环后完全放电 Fully discharged after 25 cycles	1	O



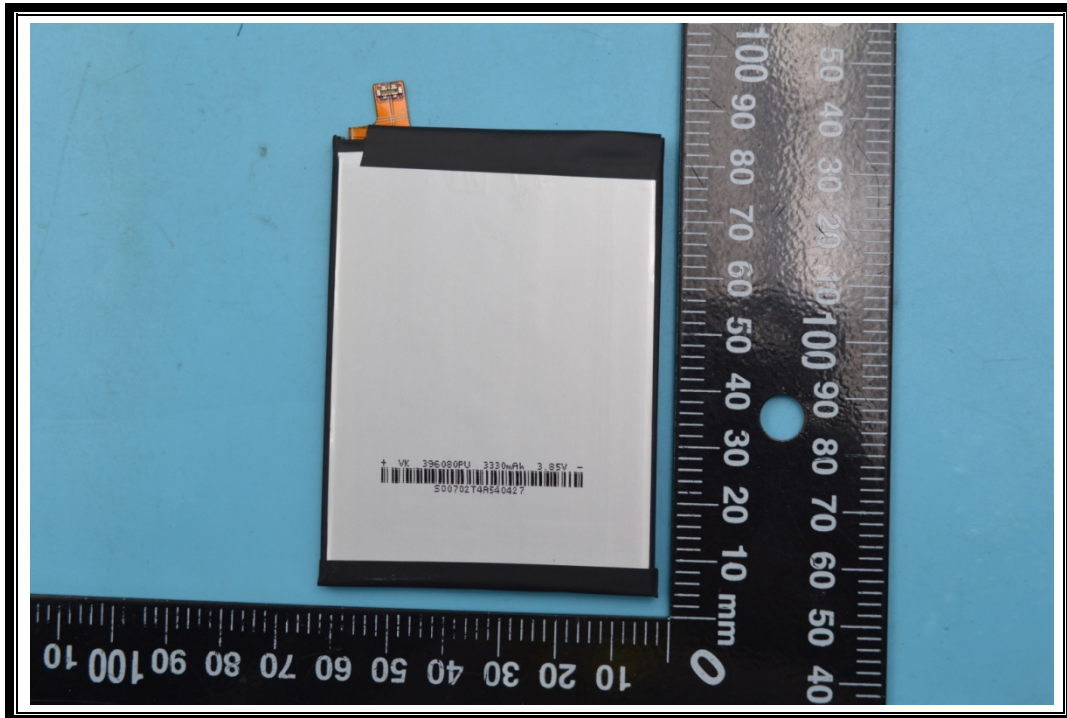
41	25 次循环后完全放电 Fully discharged after 25 cycles	1	O
42	25 次循环后完全放电 Fully discharged after 25 cycles	1	O
43	25 次循环后完全放电 Fully discharged after 25 cycles	1	O
44	25 次循环后完全放电 Fully discharged after 25 cycles	1	O
45	25 次循环后完全放电 Fully discharged after 25 cycles	1	O
46	25 次循环后完全放电 Fully discharged after 25 cycles	1	O
47	25 次循环后完全放电 Fully discharged after 25 cycles	1	O
48	25 次循环后完全放电 Fully discharged after 25 cycles	1	O
备注: D-解体, F-起火, O-无解体, 无起火; Remark: D-Disassembly, F-Fire, O-No Disassembly, No Fire 最大放电电流/ Max Continuous Discharge Current: <u>3330</u> mA			

样品图片 Photographs of the EUT

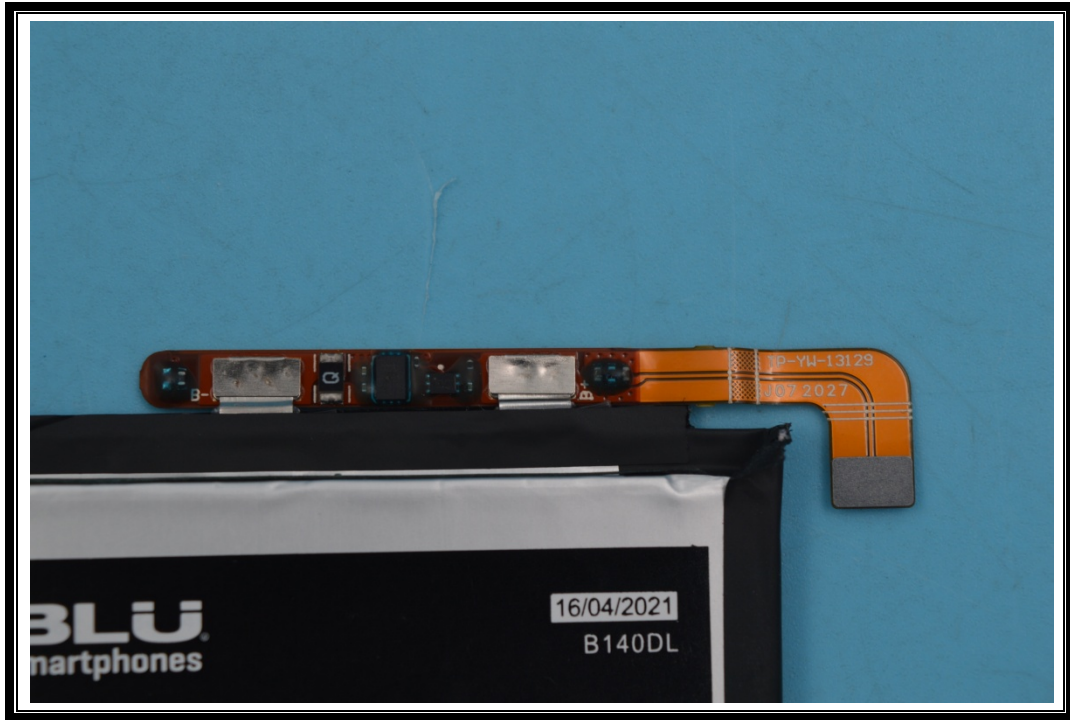
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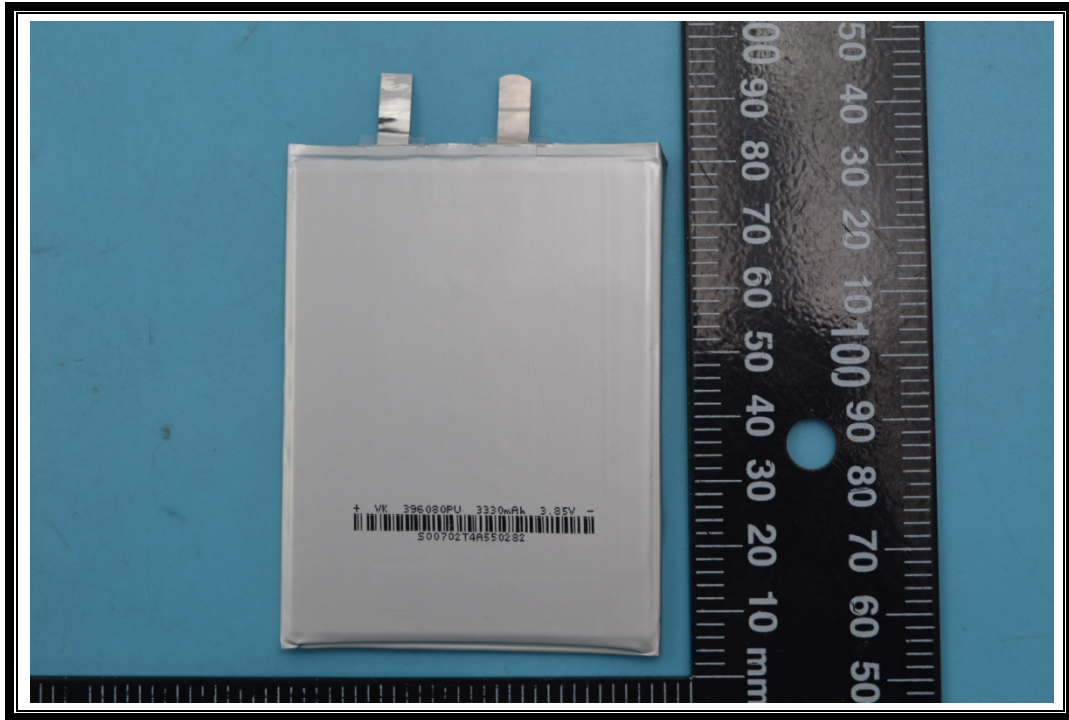
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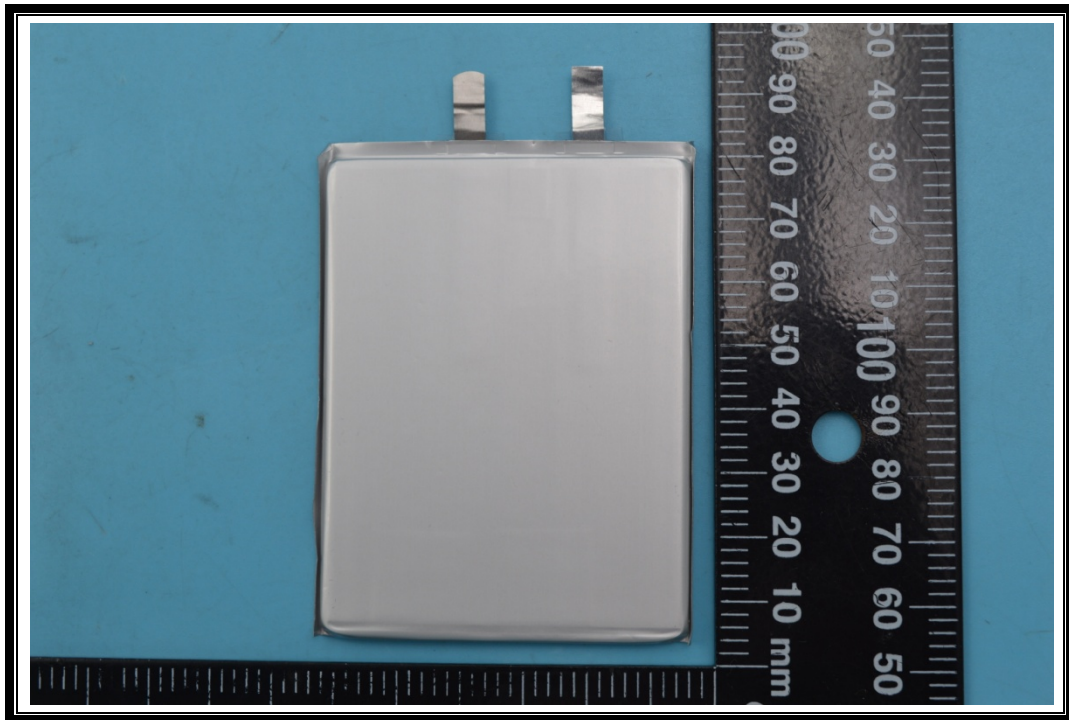
4



5



6





Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Morlab Laboratory of Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525
E-mail:	service@morlab.cn
Website	www.morlab.cn

2. Identification of the Responsible Testing Location

Name:	Morlab Laboratory of Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China

***** END OF REPORT *****