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Website: www.iqtc.cn Postcode: 510623

01052000001603-1(E) No:

Date: 2020-04-13 Page:

UN38.3 报告 **UN38.3 Test Report**

锂离子蓄电池 样品名称:

Sample Name: **Battery-Box Premium Module**

深圳比亚迪电子有限公司 委托单位:

Applicant: Shenzhen BYD Electronics Co., Ltd.

广州海关技术中心检验检 GUANGZHOU CUSTOMS DISTRICT TECHNOLOGY, CER

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检验证书 TEST REPORT

~6	CIAII A	01E31 KE	CPUKI	12.	ALC:	en,
样品名称	锂离子蓄电池	, O	The state of the s	27.00	AGV	
Sample Name	Battery-Box Premiun	n Module	1	YO .	GUR	
型号 Model	HVM	THOTO	CULING			-
委托单位	深圳比亚迪电子有限	艮公司				
Applicant	Shenzhen BYD Elect	ronics Co., Ltd.				
委托单位地址 Applicant Address	深圳市大鹏新区葵洞 Room 301 of BYD A Shenzhen					g New Distric
生产单位	深圳比亚迪电子有限	艮公司	7	2157	YOM.	200
Manufacture	Shenzhen BYD Elect			180	ens.	alike
生产单位联系信息	地址:深圳市大鹏第 Address:Room 301 District, Shenzhen	of BYD A-4 B	uilding, No.	1 Yan'an Road		t, Dapeng Ne
Manufacturer's Contact Information	电话号码 Phone num	iber: 0/55-898	88888-62113	3		40%
Contact information	电子邮箱 Email addr	ess: wen.yanfa	ng@byd.cor	<u>n</u>		
	网址Website: http://	www.byd.com.c	en	6	34	70,
样品外观与性状	银灰色金属外壳	18	700	70/	740	35
Appearance & Odor	Silver grey metal shell	ll				
测试方法和判定标准 Test method and criterion	联合国《关于危险》 38.3 UNITED NATIONS Manual of Tests and 0	" Recommenda	ations on the	TRANSPOR	T OF DANGERO	
接样时间 Accepted date	2019-11-27	6	测试日期 Test date		2019-11-27~20)19-12-25
测试项目 Test items	高度模拟、温度试验 Altitude simulation, T Forced discharge.		、外部短路	、挤压、过度		
C/12,	经测试,该样品符	夺合联合国《	关于危险负	货物运输的:	建议书 试验和	中标准手册》
结论	ST/SG/AC.10/11/Rev				公光林	477
Conclusion	The sample has pas TRANSPORT OF ST/SG/AC.10/11/Rev	DANGERO	US GOOI		NS Recommendation of Test	dations on the
18	1.检测结果仅对样品	有效。	XXV	Ale	LA HA LA NHI A H	
	The test results are				h極的磁測专用	草人
备注	2.随附 UN38.3 试验				(05)	
Remark	Attached with UN38		6.7		2(E)). 0 1 0 6 0 1 5 4 2	
	3.2020年1月2日月				JAI	
41LVA	The 0105190000723	38-1(E) report is	ssued on Jan.	2, 2020 is inv	alıd.	e e

批准

Approver:

主检

Appraiser:

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电池组信息:

The batteries information:

电池类型 Battery type	锂离子蓄电池 Battery-Box Premium Module	标称电压 Nominal Voltage	51.2V
额定容量 Rated Capacity	54Ah	总能量 Total Energy	2.7648KWh
充电限制电压 Limited Charge Voltage	57.6V	标准充电电流 Standard Charge Current	10.6A
最大充电电流 Maximum Charge Current	55A	充电截止电流 Charge Cut-off Current	2.75A
标准放电电流 Standard discharge Current	10.6A	最大放电电流 Maximum Discharge Curren	100A
放电截止电压 Discharge Cut-off Voltage	40V	尺寸 Overall Dimensions (W×D×H)	584.46*297.60*255.5mm
电芯数量 Cell Quantity	16 PCS	重量 Mass	38.0 kg
电芯容量 Cell Capacity	55Ah	电芯型号 Cell Model	C17
电芯生产单位 Manufacturer of cell	· Cr	市比亚迪锂电池有限公司 hen BYD Electronics Co., Ltd	, MacTHOU
V	- V		1.7

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序号 No.	测试项目名称 Name of test	Stand requirement of	或标准条款与 or the clause r ndard		测试结果 Test result	本项结论 Test conclusion	备注 Remark
1	高空模拟 Altitude simulation	联合国《关于危险货和标准手册》UN Criteria ST/SG/AG 38.3 试验 T.1 Test T.	Manual of C.10/11/Rev.	Tests and	见附表 1 See Appendix 1	合格 Passed	100
2	温度循环 Thermal test	联合国《关于危险货和标准手册》UN Criteria ST/SG/AG 38.3 试验 T.2 Test T.2	Manual of C.10/11/Rev.	Tests and	见附表 2 See Appendix 2	合格 Passed	/
3	振动 Vibration	联合国《关于危险货和标准手册》UN Criteria ST/SG/AG 38.3 试验 T.3 Test T.	Manual of C.10/11/Rev.	Tests and	见附表 3 See Appendix 3	合格 Passed	AHO)
4	冲击 Shock	联合国《关于危险货和标准手册》UN Criteria ST/SG/AG 38.3 试验 T.4 Test T.4	Manual of C.10/11/Rev.	Tests and	见附表 4 See Appendix 4	合格 Passed	/ Jak
7 5 DI	外部短路 External short circuit	联合国《关于危险货和标准手册》UN Criteria ST/SG/AG 38.3 试验 T.5 Test T.	Manual of C.10/11/Rev.	Tests and	见附表 5 See Appendix 5	合格 Passed	
6	挤压 Crush	联合国《关于危险货和标准手册》UN Criteria ST/SG/AG 38.3 试验 T.6 Test T.6	Manual of C.10/11/Rev.	Tests and	见附表 6 See Appendix 6	合格 Passed	KONIE D.
7	过度充电 Overcharge	联合国《关于危险货和标准手册》UN Criteria ST/SG/AG 38.3 试验 T.7 Test T.	Manual of C.10/11/Rev.	Tests and	见附表 7 See Appendix 7	不适用 Not applicable	/ /
8	强制放电 Forced discharge	联合国《关于危险货和标准手册》UN Criteria ST/SG/AG 38.3 试验 T.8 Test T.	Manual of C.10/11/Rev.	Tests and	见附表 8 See Appendix 8	合格 Passed	1
Test e	测试环境 environment condition				境湿度: 45%- mbient humidi		
	All d	测试项目 Test items	.5	S _C C,	DIST P	STOMS	.,01
Subco	分包测试情况 ontracted test condition	分包实验室 Subcontracted	名称 Name 地址		600	邮编 Post code 电话	Jane V
0,	X^Y	Laboratory	Address	,00	, p.Th	Tel	/

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序号 No.						高空模技 Altitude simu	
标准要求 Requirement of Standard 样品状态 Sample	池组应无重量 在试验后的开 组除外)。 Test cells and b temperature 20 venting, no dist battery after test requirement rel b1#~b2#: 第一 b1#~b2#: firs	损失、无渗漏、 路电压不少于身 patteries shall be ±5℃. Cells and assembly, no rup sting is not less t lating to voltage 一个循环完全充 st cycle in fully o	无排气、无焦 其在进行这一记 stored at a pre- batteries meet bure and no fir han 90% of its is not applicab 电的电池; charged states;	解体、无破裂积式验前电压的的 ssure of 11.6kF this requirement re and if the oper voltage immedule to test cells a	和无燃烧, 90%(完全加 Pa or less for nt if there is r en circuit vol liately prior t	字放至少 6h。试验 并且每个试验电池 效电状态的试验申 at least six hours a no mass loss, no le tage of each test c o this procedure." at fully discharge	也或电池组 电池或电池 at ambient eakage, no ell or The
status		二十五个循环完 er 25 cycles endi Before		rged states.	CUANGL	<i>A</i> *	, de la la
样品编号	24 2 111	1	34,247,2	1 11001	质量损失	剩余电压	-
Sample No.	电池质量 m _l (kg)	开路电压 V ₁ (v)	电池质量 m ₂ (kg)	开路电压 V ₂ (v)	Mass loss (%)	利尔电压 Residual OCV(%)	
		7 31 · · · · · ·			Mass loss	Residual	测试结果 Test result O
Sample No.	m ₁ (kg)	$v_1(v)$	m ₂ (kg)	v ₂ (v)	Mass loss (%)	Residual OCV(%)	Test result
Sample No.	m ₁ (kg) 37.95	v ₁ (v) 54.70	m ₂ (kg)	v ₂ (v) 54.70	Mass loss (%) 0.00	Residual OCV(%)	Test result

注: L-泄漏; V-排气; D-解体; R-破裂; F-起火; O-无泄漏、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.

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附表 2

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温度循环

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	Appe	endix 2	TOWN I	Name of test	5	Thermal	test
标准要求 Requirement of Standard	下存放至少 1. 验电池或电池 无排气、无解 其在进行这一 Test large cells 72±2℃, follow maximum time repeated 10 tin temperature (2) no venting, no battery after tes	或电池组在试验h。两个极端设组在环境温度体、无破裂和试验前电压的 and batteries and between the control of the c	式验温度之间的 20±5℃下存放 无燃烧,并且领 90%(完全放 re to be stored for at least 12 ho en test temperat all test cells an and batteries med o rupture and no than 90% of its	b最大时间间隔 24h。试验电池 每个试验电池 电状态的试验 for at least 12 h ours at a test ter ure extremes is d batteries are et this requirem of fire and if the voltage immed	屬为 30min。 池或电池组在试 电池或电池组在试 电池或电池组 sours at a test to mperature equal s 30 minutes. To to be stored for ment if there is open circuit voliately prior to	重复 10 次,早 无重量损失、 验后的开路申 1除外)。 emperature eq al to -40±2℃. This procedure r 24 hours at a no mass loss, oltage of each this procedure	手将所有试 无渗漏、于 ual to The is to be mbient no leakage, test cell or e. The
样品状态 Sample status	b1#~b2#: firs b3#~b4#: 第二	一个循环完全充 st cycle in fully 二十五个循环完 er 25 cycles end	charged states; 已全充电的电池		GUANGE	et-	-CT CEINTER
	10.	700		ilged states.			
114 114 11	测试前	187 Cr		f After	质量损失	剩余申压	Sent S D D FEE
样品编号 Sample No.	030	187 Cr		18	质量损失 Mass loss (%)	剩余电压 Residual OCV(%)	测试结果 Test result
	测试前电池质量	Before 开路电压	测试后电池质量	f After 开路电压	Mass loss	Residual	
Sample No.	测试前 电池质量 m _l (kg)	Before 开路电压 v ₁ (v)	测试后 电池质量 m ₂ (kg)	于 After 开路电压 v ₂ (v)	Mass loss (%)	Residual OCV(%)	Test result
Sample No.	测试前 电池质量 m ₁ (kg) 37.95	Before 开路电压 v1(v) 54.70	测试后 电池质量 m ₂ (kg) 37.95	开路电压 v ₂ (v) 54.63	Mass loss (%) 0.00	Residual OCV(%)	Test result O

测试项目名称

注: L-泄漏; V-排气; D-解体; R-破裂; F-起火; O-无泄漏、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.

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			V		- 10 m		
序号 No.		针表 3 pendix 3	TONE C	则试项目名称 Name of test		振	
标准要求 Requirement of Standard	Ign 的最大加速速度达到 2gn(频的电池或电池或电池线 无渗漏、电压不少于其 The large Cells distorting the cesinusoidal wave until 18Hz is refrequency incre of 2gn is then m times for a total of the directions requirement if t	电池组直接安装 度度,直到 18Hz。 频率约为 25Hz) 组安装方向的每 无排气、无解 在进行这一试验 and batteries are ells in such a ma eform with a log ached. The amp ased until a peal anintained until t l of 3 hours for each of vibration masses of vibration masses.	然后将振幅份 .将最大加速度 手个方向重复进 体、无破裂和 全前电压的 90% e firmly secured anner as to faithf arithmic sweep litude is then man k acceleration of the frequency is each of three mu ust be perpendiculoss, no leakage	持在 0.8mme 保持在 2gn 直 行 12 次,一 无燃烧,并且 6 (完全放电 to the platfor fully transmit from 7Hz to a aintained at 0. f 2gn occurs (a increased to 2 tually perpendental to the ter to, no venting, no	(总偏移 1.6mi 共振动 3h。让 每个试验电池 状态的试验电池 大态的试验电池 m of the vibrathe the vibration.' a peak accelera 8mm (1.6mm approximately 200Hz. This cy dicular mounti minal face. Ce no disassembly	m),并增加频率到 200Hz。对 3 式验电池或电流 也或电池组在设 也或电池组件 tion machine w The vibration s ation of 1gn is n total excursion 25Hz). A peak ycle shall be rep ing positions of ells and batterie y, no rupture ar	直到最大加 三个互相垂直 出组应无开 就验后的开 without hall be a naintained) and the acceleration peated 12 The cell. One as meet this and no fire and
		int voltage of eaction to this proced fully discharged	dure. The requir				
样品状态 Sample status	immediately pri and batteries at b1#~b2#: 第一 b1#~b2#: first b3#~b4#: 第二	ior to this proced	dure. The required states. 电的电池; charged states; 全充电的电池。	ement relating			
Sample status	immediately pri and batteries at b1#~b2#: 第一 b1#~b2#: first b3#~b4#: 第二	for to this proced fully discharged have a considered for the fully considered for the fully considered for 25 cycles endi	dure. The required states. 电的电池; charged states; 全充电的电池。	ement relating	g to voltage is	not applicable	to test cells
Sample	immediately pri and batteries at b1#~b2#: 第一 b1#~b2#: first b3#~b4#: 第二 b3#~b4#: afte	for to this proced fully discharged have a considered for the fully considered for the fully considered for 25 cycles endi	elure. The required states. 电的电池; charged states; 全充电的电池。 ng in fully charged	ement relating			
Sample status 样品编号	immediately pri and batteries at b1#~b2#: 第一 b1#~b2#: first b3#~b4#: 第二 b3#~b4#: afte	ior to this proced fully discharged have a considered fully discharged have a considered fully considered fully considered fully considered fully considered full full full full full full full ful	ture. The required states. 电的电池; sharged states; 全充电的电池。ng in fully charged states; 测试后电池质量	ged states. After 开路电压	g to voltage is 质量损失 Mass loss	not applicable 剩余电压 Residual	to test cells 测试结果
Sample status 样品编号 Sample No.	immediately pri and batteries at b1#~b2#: 第一 b1#~b2#: first b3#~b4#: 第二 b3#~b4#: afte	ior to this proced fully discharged here fully discharged here here fully control of the contro	dure. The required states. 电的电池; sharged states; 全充电的电池。 ng in fully charged states with the magnetic states and states with the magnetic states and states are states and states and states and states are states are states are states and states are states are states and states are states are states are states and states are stat	ged states. After 开路电压 v2(v)	质量损失 Mass loss (%)	not applicable 剩余电压 Residual OCV(%)	jy 试结果 Test result
Sample status 样品编号 Sample No.	immediately pri and batteries at b1#~b2#: 第一 b1#~b2#: first b3#~b4#: 第二 b3#~b4#: afte 测试前 电池质量 m1(kg)	ior to this proced fully discharged fully discharged fully discharged fully discharged function fully control fully f	eture. The required states. 电的电池; charged states; 全充电的电池。 mg in fully charged states with the state of the	ged states. After 开路电压 v2(v) 54.68	质量损失 Mass loss (%)	剩余电压 Residual OCV(%)	加试结果 Test result

注:L-泄漏; V-排气; D-解体; R-破裂; F-起火; O-无泄漏、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.

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序号 No.		附表 4 pendix 4	OME	测试项目名 Name of te		冲 _i Sho	
标准要求 Requirement of Standard	将电池或电池: gn=√(30000 / 加 其正负极各冲解体、无破裂和验前电压的 90 Test cells and b support all mou shock of peak a milliseconds. E by three shocks or battery for a leakage, no ven cell or battery a requirement relistates.(NOTE:	mass) 中较小者的 击 3 次,共冲击 3 次,共冲击 3 次,并且 %(完全放电器 atteries shall be nting surfaces of cceleration of 50 ach cell or batte in the negative total of 18 shock ting, no disasser fter testing is no ating to voltage	的正弦波冲击 目 18 次。各试 每个试验电池 快态的试验电 secured to the of each test batt Ogn or accelera ry shall be sub direction of the ks. Cells and b mbly, no ruptu ot less than 90% is not applicab	,脉冲持续时 验电池或电池 或电池组在试 池或电池组除 testing machine ery. Each Large tion $(g_n) = \sqrt{30}$ jected to three s ree mutually pe atteries meet the re and no fire and of its voltage	间 11ms,按三 组应无重量损 验后的开路电 外)。 e by means of a e batteries shall 0000 / mass) a shocks in the porpendicular mo is requirement nd if the open of immediately programs.	个相互垂直的失、无渗漏、 、压不少于其在 a rigid mount was be subjected to and pulse duration counting position if there is no matericuit voltage of the processing the processing the processing position to this processing the processin	轴向分别对 无排气、无 进行这一试 which will o a half-sine on of 11 in followed as of the cell ass loss, no of each test edure. The
样品状态 Sample	b1#~b2#: 第一 b1#~b2#: firs	t cycle in fully c	harged states;	.2	CEN	.0	oct
status	b3#~b4#: 第二	二十五个循环完 or 25 cycles endi					
status	b3#~b4#: 第二	er 25 cycles endi	ng in fully cha		质量损失	剩余电压	测试结果
	b3#~b4#: 第二 b3#~b4#: afte	er 25 cycles endi	ng in fully cha	rged states.	质量损失 Mass loss (%)	剩余电压 Residual OCV(%)	测试结果 Test result
status 样品编号	b3#~b4#: 第二 b3#~b4#: afte 测试前 电池质量	er 25 cycles endi Before 开路电压	ng in fully cha 测试后 电池质量	rged states. f After 开路电压	Mass loss	Residual	
status 样品编号 Sample No.	b3#~b4#: 第二 b3#~b4#: afte 测试前 电池质量 m _l (kg)	r 25 cycles endi Before 开路电压 v _I (v)	ng in fully cha 测试后 电池质量 m ₂ (kg)	rged states. After	Mass loss (%)	Residual OCV(%)	Test result
样品编号 Sample No. b1#	b3#~b4#: 第二 b3#~b4#: afte 测试前 电池质量 m ₁ (kg)	r 25 cycles endi Before 开路电压 v ₁ (v) 54.70	mg in fully cha 测试后 电池质量 m ₂ (kg) 37.95	开路电压 v ₂ (v) 54.70	Mass loss (%) 0.00	Residual OCV(%)	Test result O

注:L-泄漏; V-排气; D-解体; R-破裂; F-起火; O-无泄漏、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.

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序号 No.	附表 5 Appendix 5	测试项目名称 Name of test	外部短路 External short circuit
标准要求 Requirement o Standard	待试验电池或电池组的外壳温度和小于 0.1Ω 的短路条件,当电池或再观察电池或电池组 6h 才结束试6h 内应无解体、无破裂和无燃烧The cell or battery to be tested shall reaches 57±4℃ and then the cell or external resistance of less than 0.1 cleast one hour after the cell or batter battery must be observed for a furth this requirement if their external ten rupture and no fire within six hours	由池组外壳温度回到 57±4℃后、验。电池或电池组的外壳温度点。 be temperature stabilized so that it battery shall be subjected to a short at 57±4℃. This short circuit or external case temperature has refer six hours for the test to be concepted in the con	继续至少 1h, 然后短路断开, 应不超过 170℃,并且试验后 its external case temperature ort circuit condition with a total condition is continued for at eturned to 57±4℃. The cell or luded. Cells and batteries meet
样品状态 Sample status	b1#~b2#: 第一个循环完全充电的b1#~b2#: first cycle in fully charg b3#~b4#: 第二十五个循环完全充b3#~b4#: after 25 cycles ending in	ged states; 区电的电池。	ilis charte
样品编号 Sample No.	样品表面最高温度 Max External Temperature(测试结果 (℃) Test result	备注 Remark
b1#	60.1	The O	STRIP I ONE DE
	60.3	Con O	We I CIL
b2#	40, 00.5	, 45	.02
b2# b3#	61.1	O	Method 1

注: D-解体; R-破裂; F-起火; O-无解体、无破裂、无起火。 Note: D-Disassembly, R-Rupture, F-Fire, O-No Disassembly, No Rupture & No Fire.

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序号 No.	附表 (Appendi		and the same of th	测试项目 Name of		CLION	挤压 Crush	GUANO
ECHIEN S. D.	(适用于棱柱形、 将电池或元件电池 为 1.5cm/s。挤压持	放在两个平	面之间挤足	压,挤压力度;	逐渐加大,在第	一个接触	点上的	速度大约
	(a)施加的力量达到 (b)电池的电压下降 (c)电池变形量达原	13kN±0.78l 至少 100 毫	kN; 伏; 或					
X	棱柱形或袋装电池 与纵轴垂直的方向 试验电池或电池组	应从最宽的 施压。每个	一面施压。 电池只做-	纽扣/硬币电				
标准要求 Requirement of Standard	无解体、无破裂、Crush (applicable to	无起火。						
of Standard	diameter): A cell or gradual with a speed continued until the f (a)The applied force (b)The voltage of the	component of l of approxinists of the the reaches 13ke cell drops l	cell is to be nately 1.5cree options N±0.78kN by at least 1	crushed between/s at the first below is reach; 100mV; or	een two flat surfa point of contact. ned.	ices. The o	crushing	is to be
	(c)The cell is deform Once the maximum cell is deformed by a Each test cell or con this requirement if the no fire during the test	pressure has at least 50% aponent cell aeir external	been obtai of its origin is to be sub temperatur	ned, the voltage nal thickness, to bjected to one cone to does not exc	ge drops by at lead the pressure shall crush only. Cells	l be release and comp	ed. onent c	ells meet
样品状态 Sample status	C1#~C5#:第一个 C1#~C5#: 第二十 C6#~C10#:第二十 C6#~C10#: after 2	cle at 50% of 五个循环 5	f the design 0%的额定	rated capacity 容量的电芯。		angl	HONGO	Ġ
样品编号 Sample No.	样品表面最高温度 Max External Temperature(℃)	测试结果 Test result	备注 Remark	样品编号 Sample No.	样品表面最高 Max Externa Temperature(al 汽车st	式结果 result	备注 Remark
C1#	26.0	O 🔊	/	C6#	24.8	, oci	О	1,01
C2#	25.5	О	1,55	C7#	25.0	CHIM	О	2101
C3#	25.0	О	100°	C8#	25.7	,(О	/
C4#	25.4	O	1	C9#	25.1	NO151	О	PHO INC.
C5#	24.5	O	150	C10#	25.3	XII.	О	1

注: D-解体; R-破裂; F-起火; O-无解体、无破裂、无起火。 Note: D-Disassembly, R-Rupture, F-Fire, O-No Disassembly, No Rupture & No Fire.

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<u>ы</u> н ()						
序号 No.	附表 7 Appendix 7	测试项目名积 Name of test			过度充电 Overcharge	
标准要求 Requirement of Standard	(a) 制造商建议的 倍或 22V 两者中的 (b) 制造商建议的 可再充电电池组 The charge current s current. The minimu (a) When the manufa voltage of the test sh 22V. (b) When the manufa of the test shall be 1. Tests are to be con	造商建议的最大连续充 充电电压不大于 18V 较少者。 1充电电压大于 18V 时 在环境温度下试验 24h hall be twice the manufam voltage of the test sha acturer's recommended of all be the lesser of two to acturer's recommended of acturer's recommended of acturer's recommended of acturer's recommended of acturer's recommended of acturer's recommended of acturer's re	时,试验的最小。试样在试验 acturer's recomall be as follow charge voltage imes the maxin charge voltage harge voltage. perature. The	电压应是最后7天内应mended maxs: is not more mum charge is more than duration of	大充电电压的 大充电电压的 无解体和无燃烧 kimum continuou than 18V, the min voltage of the ba 18V, the minim the test shall b	电电压的两 1.2倍。 浇。 us charge nimum attery or um voltage se 24 hours.
样品状态 Sample	b1#~b2#: 第一个循 b1#~b2#: first cycl	f环完全充电的电池; e in fully charged states 上个循环完全充电的电	池。	- Gill	ATE -	CEY CELETY
status		V 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	arged states.			
275 T	b3#~b4#: after 25	cycles ending in fully ch 试结果 st result	narged states.	MOFOCY C	备注 Remark) (S

注: D-解体; R-破裂; F-起火; O-无解体、无破裂、无起火。

Note: D-Disassembly, R-Rupture, F-Fire, O-No Disassembly, No Rupture & No Fire.

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序号 No.	附表 8 Appendix	8	测试项目名 Name of to		强制放电 Forced discharge		
标准要求 Requirement of Standard	定的最大放电电流的燃烧。 Each cell shall be for D.C. power supply at manufacturer. The sp appropriate size and interval (in hours) eq	的条件下强制 ceed discharged an initial curr pecified discha rating in series ual to its rated	放电。原电池或可利d at ambient temperatent equal to the maxinge current is to be obswith the test cell. Eacapacity divided by	F充电电池在试验原 rure by connecting in mum discharge curr otained by connectin ch cell shall be force the initial test curren	起始电流等于制造商络 f 7 天内应无解体和无 in series with a 12V rent specified by the ng a resistive load of the ed discharged for a time at (in Ampere). Primary of fire within seven days		
样品状态 Sample status	C11#~C20#:第一 C11#~C20#: 第二 C21#~C30#:第二 C21#~C30#: after 25	cle in fully disc 上五个循环完	charged states; 全放电的电芯。	S CHARCHOUCH	GUANGTH ME		
样品编号 Sample No.	测试结果 Test result	备注 Remark	样品编号 Sample No.	测试结果 Test result	备注 Remark		
C11#	O GUAL	/	C21#	0	() ()		
C12#	О		C22#	0	PICT / MEDIE		
C13#	0	<i>b</i> /	C23#	0	S. S		
C14#	O CHINO	J. S.	C24#	0	athon /		
C15#	0	IEDIS /	C25#	O O	33127		
C16#	edie o de	/ /	C26#	0	N. S.		
C17#	O	S. S	C27#	O	6461		
C18#	0	/	C28#	o 0	1 100		
C19#	0	1	C29#	0	SUE		
C20#	0	- 17 P	C30#	0	Stom 1 se		

注: D-解体; R-破裂; F-起火; O-无解体、无破裂、无起火。 Note: D-Disassembly, R-Rupture, F-Fire, O-No Disassembly, No Rupture & No Fire.

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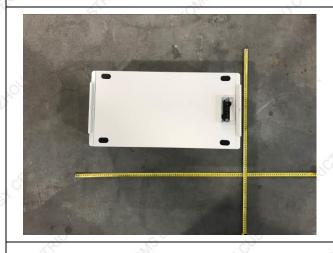
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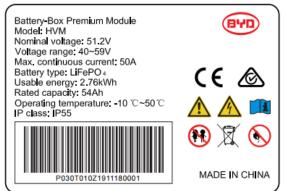
样品图片 Photo of the sample

电池与电芯/Battery and Cell













Li-ion Battery 3.2V 55Ah(176Wh)

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