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检测报告 UN38.3

LiFePO4 BATTERY PACK
磷酸铁锂电池组
LP18-48200
MUST ENERGY (GUANGDONG) TECHNOLOGY CO.,LTD
美世乐(广东)新能源科技有限公司
Commission Test
5. 7. 女托测试 大 ^排 7. 7. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 7. 7. 7. 7. 7. 7. 7

Shenzhen Tiansu Calibration and Testing Co., Ltd

深圳天溯计量检测股份有限公司

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Name of samples: LiFePO4 BATTERY PACK	Trade mark: -
样品名称: 磷酸铁锂电池组	商标:MUST
Tian Tian	Commissioner address:
Commissioned by:	1-5F, 7F, 9F, 10Fof No.8 building, No.115, Zhangcha Road
MUST ENERGY (GUANGDONG) TECHNOLOGY	1,Chancheng district,Foshan city,Guangdong
CO.,LTD	Province, P.R. China
委托单位:	委托单位地址:
美世乐 (广东) 新能源科技有限公司	
美世尔() 乐) 新 能 源 件 技 有 സ 公 可	中国广东省佛山市禅城区张槎一路 115 号八座一层、二层、
7,000	三层、四层、五层、七层、九层、 十层
≥ M	Manufacturer address:
Manufacturer by:	1-5F, 7F, 9F, 10Fof No.8 building,No.115,Zhangcha Road
MUST ENERGY (GUANGDONG) TECHNOLOGY	1,Chancheng district,Foshan city,Guangdong
CO.,LTD	Province.P.R.China
制造单位:	制造单位地址:
美世乐(广东)新能源科技有限公司	中国广东省佛山市禅城区张槎一路 115 号八座一层、二层、
XEN () N) MIRWITK HIKA I	三层、四层、五层、七层、九层、十层
70.56	二広、四広、工広、乙広、儿広、 一広
Manufacturer's Contact Information	Manufacturer's Web Site
制造商联系信息: 7000 500	制造商网址: www.mustpower.cn
Phone: 15012636534 Email: rd-cp@mustpower.cn	利亞的內址: www.mustpower.cm
7 64	A Su
Type/Model 5	Shape: Approximate Cuboid
型号规格: LP18-48200	样品形状: 近长方体
Tian 5	t in S
Appearance color: Black	Sample size
样品颜色: 黑色	样品尺寸: L(580mm)* W(482mm)*H(222mm)
K VIII TIER S	7. 7.1
Rated info. 5"	Cell quantity
额定信息: 51.2V/200Ah/10.24kwh	组成电芯数量: 16PCS
	1 9 Mil 5" E Mil 5 E M
Quantity of sample: 30cells+8batteries	Cell model
样品数量: 30 个电芯+8 个电池	电芯型号: LP54173210
N A (M.S. T. VIII)	7100
Limited charge voltage	Cut-off voltage
充电限制电压: 57.6V	放电截止电压: 44V
元七代刊七年. 07.00	M T M L T L . TTV
Standard charge current	Max continuous charge current
标准充电电流: 20A	最大持续充电电流: 50A
141 F / 1 To To Vill. 201	秋八N 头儿七七帅. JUA
Standard discharge current	Max continuous discharge current
标准放电电流: 50A	最大持续放电电流: 100A
Possiving data 7144 54	Comple identification
Receiving date	Sample identification
接样日期: 2022 年 06 月 08 日	样品标识序号: C01#~C30#, B01#~B08#
7,000 3	T
Completing date	Test item: 8 items
完成日期: 2022 年 06 月 25 日	测试项目: 8 项
Test conclusion:	

Test conclusion:

检测结论:

The LiFePO4 BATTERY PACK submitted by MUST ENERGY (GUANGDONG) TECHNOLOGY CO.,LTD are tested according to Section 38.3 of The Seventh Revised Edition of the United Nations Recommendations on the Transport of Dangerous Goods, Manual of Test and Criteria (ST/SG/AC.10/11/Rev.7/Section38.3). The test results comply with the relevant requirements of the standard.

由美世乐(广东)新能源科技有限公司送检的磷酸铁锂电池组,依据联合国《关于危险贷款法额的建议》,试验和标准手册》第七修订版第 38.3 节进行检测,测试结果符合标准相关要求。

Date of issue: June 25, 2022 签发日期: 2022 6 月 25

批准 Approved by 段记簿

审核 Reviewed by

邓兴勇

Tested by-0

徐志龙

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Description and illustration of the sample:

样品说明及描述:

Test item 测试项目	Sample No. 样品编号	State 失 M Tran 5 m ** ********************************	Remark 备注
T1T5	B01#~B02#	at first cycle in fully charged states; 在第一个循环完全充电;	Battery
T.1~T.5	B03#~B04#	after 25 cycles ending in fully charged states; 在第二十五个循环完全充电;	电池
e Tian Su	C01#~C05#	at first cycle at 50% of the design rated capacity; 在第一个循环充电 50%的额定容量;	Cell
T.6	C06#~C10#	after 25 cycles ending in fully charged at 50% of the design rated capacity; 在第二十五个循环充电 50%的额定容量;	电芯
T.7	B05#~B06#	at first cycle in fully charged states; 在第一个循环完全充电;	Battery
7 as 5°	B07#~B08#	after 25 cycles ending in fully charged states; 在第二十五个循环完全充电;	电池
T.8	C11#~C20#	at first cycle in fully discharged states; 在第一个循环完全放电;	Cell
1.0	C21#~C30#	after 25 cycles ending in fully discharged states; 在第二十五个循环完全放电;	电芯

	۱ ـ ـ ـ ! .	-4:	- f 11			
L	escri	วแดก	or the	sampling	procedure):

取样程序的说明:

/

Description of report revision:

报告修订的说明:

/

Remarks:

备注:

The LiFePO4 BATTERY PACK by MUST ENERGY (GUANGDONG) TECHNOLOGY CO.,LTD are large batteries.

由美世乐 (广东) 新能源科技有限公司所送的磷酸铁锂电池组是大电池。



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Photos of Battery\电池图片







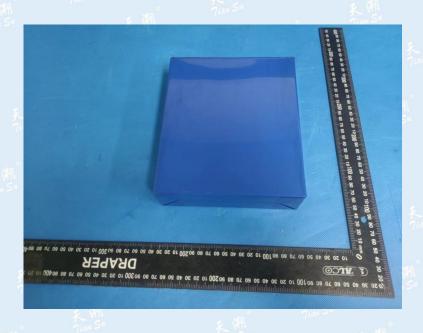
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Photos of Cell\电芯图片





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38.3.4	Procedure/测记	式步骤				天 潮	_
毛侧	Test 1: Altitud	le simulation/	测试 1:高度模		天湖 5S	rjun-"	,
	at ambient tem	perature (20°	C±5℃).		6kPa or less for a Pa 的环境中贮存	14 32	天湖 Tian S
	Requirement/	示准要求:	美) Tian	A See	支潮	7ian Su	-10
	1.Cells and ba 样品质量损		oss limit: ≤0.1%	· 美潮		美洲	5ª P
38.3.4.1	•	0		ne requirement I discharged sta	relating to voltag	je is not	0
	样品试验后和电芯。	开路电压应不低	纸于试验前开路	电压的 90%,此	要求不适用于完全	全放完电的电池	
	3.No leakage,	X432		no rupture and i .无破裂以及无	no fire. 着火现象的发生。	天湖 Tian Su	7ian
天湖 Tian Su	3.No leakage,	X432		2.0		天湖。 7ian 54	天 所 7ian - 7ian Su
Sample	3.No leakage, 样品(电池) Result	应无漏液、无	上排气、无解体、 Afte	2.0		7 m St. Residual OCV	Test result
Sample No. 样品编号	3.No leakage, 样品(电池) Result 测试结果 Before	应无漏液、无	上排气、无解体、 Afte	无破裂以及无 r Test	着火现象的发生。	夫 瀬 Tian Su	Test result 测试结!
No.	3.No leakage, 样品(电池) Result 测试结果 Before 测试	应无漏液、无 e Test 前 Voltage	上排气、无解体、 Afte 测 Mass	无破裂以及无 r Test 试后 Voltage	着火现象的发生。 Mass loss	Residual OCV	result
No. 样品编号	3.No leakage, 样品(电池) Result 测试结果 Before 测试 Mass 样品质量 (kg)	应无漏液、无 e Test 前 Voltage 开路电压(V)	Afte Afte 则 Mass 样品质量(kg)	r Test 试后 Voltage 开路电压(V)	着火现象的发生。 Mass loss 质量损失(%)	Residual OCV 剩余电压(%)	result 测试结
No. 样品编号 B01#	3.No leakage, 样品(电池) Result 测试结果 Before 测试 Mass 样品质量 (kg) 80.343	应无漏液、无 e Test 前 Voltage _{开路电压(V)} 54.976	Afte 別 Mass 样品质量(kg) 80.343	r Test 试后 Voltage 开路电压(V) 54.954	着火现象的发生。 Mass loss 质量损失(%) 0.00	Residual OCV 剩余电压(%) 99.96	result 测试结归 P

Other supplements: Test result "P" decides that the test item passes.

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38.3.4	Procedure/测	试步骤					_
天湖	Test 2: Thern	mal test/测试 2	: 温度测试	- 100	天洲	-71an >"	7
イidu Su 天瀬 7iau Su 類 Su	72℃±2℃, foll ±2℃, The ma procedure is t batteries are t 将电芯和电池 件下贮存不少	lowed by storag ximum time int to be repeated to be stored for 在温度为 72℃ 于 6 个小时,两	ge for at least si erval between t until 10 total cy 24 hours at am ±2℃的条件下贮	ix hours at a terest temperature cles are completed in bient temperature 存不少于 6 个 局最长为 30min	st temperature e e extremes in 30 ete, after which a ture (20℃±5℃). 小时,然后,在泊	minutes, This all test cells and	天湖 Tian Su Tan Su
38.3.4.2" Su	样品质量损 2.Open circuit applicable t 样品试验后 和电芯。	atteries Mass lo 失≤0.1%. t voltage not les to test cells and 开路电压应不值	l batteries at ful 氐于试验前开路	ne requirement I discharged st 电压的 90%,此	要求不适用于完	Jian Su	P Fian Su Fian Su
	3.No leakage, no venting, no disassembly, no rupture and no fire. 样品(电池)应无漏液、无排气、无解体、无破裂以及无着火现象的发生。						
	Result 测试结果	Tian Su	美潮 。	K WA Tian Su		渊 m Sa	天逝
Sample No.		e Test 式前		After Test 测试后		Residual OCV	Test result
样品编号	Mass 样品质量 (kg)	Voltage 开路电压(V)	Mass 样品质量(kg)	Voltage 开路电压(V)	质量损失(%)	剩余电压(%)	测试结果
B01#	80.343	54.954	80.343	54.701	0.00	99.54	Р
B02#	80.344	54.830	80.344	54.589	0.00	99.56	S P
B03#	80.350	54.471	80.350	54.199	0.00	99.50	P
4 (i)	80.342	55.880	80.342	55.578	0.00	99.46	Р

Other supplements: Test result "P" decides that the test item passes.

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38.3.4	Procedure/测	试步骤					_
天湖	Test 3: Vibra	tion/测试 3:拢	₹ 100 E 200 E		天湖	-7;an >" - ≥80.	
	distorting the be a sinusoid Hz traversed each of three 将电芯和电池加至 200Hz,	cells in such a al wave form w in 15 minutes, mutually perpe 牢固地安装在执 然后再减少回到	manner as to fa ith a logarithmid This cycle shall endicular mount 最动台的台面上。	aithfully transmi c sweep betwee be repeated 12 ing position of t , 然后开始振动 环,一个循环打	n 7 Hz and 200 2 times for a tota	ne vibration shall Hz and back to 7 I of 3 hours for 形式,以 7Hz 增	天湖 Tian Su M Tan Su
38.3.4.3	Requirement	/标准要求:	(Con-	z WA	7ian 5"	7 (A)	Р
30.3.4.3	1.Cells and b		oss limit: ≤0.1%	Tian Su			天湖 Tian Su
	2.Open circuit voltage not less than 90%, The requirement relating to voltage is not applicable to test cells and batteries at full discharged states. 样品试验后开路电压应不低于试验前开路电压的 90%,此要求不适用于完全放完电的电池和电芯。						
	3.No leakage, no venting, no disassembly, no rupture and no fire. 样品(电池)应无漏液、无排气、无解体、无破裂以及无着火现象的发生。						
	Result 测试结果						美術 Tian S
Sample No.	Before Test 测试前		After Test 测试后		Mass loss	Residual OCV	Test result
样品编号	Mass 样品质量 (kg)	Voltage 开路电压(V)	Mass 样品质量(kg)	Voltage 开路电压(V)	质量损失(%)	剩余电压(%)	测试结果
B01#	80.343	54.701	80.343	54.663	0.00	99.93	Р
B02#	80.344	54.589	80.344	54.567	0.00	99.96	Р
0	80.350	54.199	80.350	54.183	0.00	99.97	P _{total} S
B03#	00.000	100					

Other supplements: Test result "P" decides that the test item passes.

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38.3.4	Procedure/测	试步骤					_
天概	Test 4: Shock	(/测试 4: 冲击	Z VIII 7 im 5 ii		天概	-7/an 5" -> &A	2
	to a half-sine smaller) and psubjected to a smaller) and pthree shocks in three mutually 以稳固的托架	shock of peak a oulse duration of half-sine of pe oulse duration of the positive of perpendicular 固定住每个电芯 中的较小值)的	acceleration of of 6 milliseconds ak acceleration of 11 millisecond lirection follower mounting posits 和电池样品的4半正弦的加速度	150g _n (or Accel s, large cells an of 50g _n (or Acc ds. Each cell or d by three shoot ions of the cell of 全部配件表面。 接撞击,脉冲持续	eration(gn)= Vind large batteries celeration(gn)= Vind battery shall be cks in the negative or battery for a total of the cks in the segative contact the cks in the	shall be (miss), which is subjected to be direction of that of 18 shocks. 也以峰值为 150gn 也和大型电池组	天崩 Tien So ian So
38.3.4.4	每个电池或电	池组须在三个互总共经受 18 次	相垂直的电池等			接着在反方向经	天 浒 Tian S
		atteries Mass Io	ss limit: ≤0.1%	fil Se			•
	2.Open circuit applicable t	voltage not les o test cells and	batteries at ful	l discharged sta			天間 7ian Su
	2.Open circuit applicable t 样品试验后 和电芯。 3.No leakage,	voltage not les o test cells and 开路电压应不作 no venting, no	batteries at ful 氐于试验前开路 disassembly, r	l discharged sta 电压的 90%,此 no rupture and r	ates. 要求不适用于完全	è放完电的电池 2	天 渊 7:an Su 1 2
· · · · · · · · · · · · · · · · · · ·	2.Open circuit applicable t 样品试验后 和电芯。 3.No leakage,	voltage not les o test cells and 开路电压应不作 no venting, no) 应无漏液、无	batteries at ful 氐于试验前开路 disassembly, r	l discharged sta 电压的 90%,此 no rupture and r	ates. 要求不适用于完全 no fire.	全放完电的电池	之情 Tian S4
Sample	2.Open circuit applicable t 样品试验后 和电芯。 3.No leakage, 样品(电池 Result/测试结	voltage not les o test cells and 开路电压应不作 no venting, no) 应无漏液、无 # e Test	batteries at ful 低于试验前开路 disassembly, r 排气、无解体、	l discharged sta 电压的 90%,此 no rupture and r	ates. 要求不适用于完全 no fire.	全放完电的电池	Test
Sample No. 样品编号	2.Open circuit applicable t 样品试验后 和电芯。 3.No leakage, 样品(电池 Result/测试结	voltage not les o test cells and 开路电压应不作 no venting, no) 应无漏液、无 # e Test	batteries at ful 低于试验前开路 disassembly, r 排气、无解体、	I discharged sta 电压的 90%,此 no rupture and r 无破裂以及无	ates. 要求不适用于完全 no fire. 着火现象的发生。	≥放完电的电池 7/m/5	Test result 测试结果
No.	2.Open circuit applicable t 样品试验后 和电芯。 3.No leakage, 样品(电池 Result/测试结 Before 测证	voltage not les o test cells and 开路电压应不作 no venting, no)应无漏液、无 课 e Test 式前	batteries at ful 低于试验前开路 disassembly, r 排气、无解体、 After Mass	I discharged sta 电压的 90%,此 no rupture and r 无破裂以及无 r Test 式后 Voltage	ates. 要求不适用于完全 no fire. 着火现象的发生。 Mass loss	於完电的电池 Residual OCV	result
No. 样品编号	2.Open circuit applicable to 样品试验后和电芯。 3.No leakage, 样品(电池 Result/测试结 Before Mass 样品质量 (kg)	voltage not les o test cells and 开路电压应不作 no venting, no)应无漏液、无 f.果 e Test 式前 Voltage 开路电压(V)	batteries at ful 低于试验前开路 disassembly, r 排气、无解体、 After 测证 Mass 样品质量(kg)	I discharged sta 电压的 90%,此 no rupture and r 无破裂以及无 Test 式后 Voltage 开路电压(V)	ates. 要求不适用于完全 no fire. 着火现象的发生。 Mass loss 质量损失(%)	Residual OCV 剩余电压(%)	result 测试结果
No. 样品编号 B01#	2.Open circuit applicable to 样品试验后和电芯。 3.No leakage, 样品(电池 Result/测试结 Before Mass 样品质量 (kg) 80.343	voltage not les o test cells and 开路电压应不作 no venting, no) 应无漏液、无 !果 e Test 式前 Voltage 开路电压(V) 54.663	batteries at ful 氏于试验前开路 disassembly, r 排气、无解体、 After 测试 Mass 样品质量(kg) 80.343	I discharged sta 电压的 90%,此 no rupture and r 无破裂以及无 r Test 式后 Voltage 开路电压(V) 54.641	mass loss 质量损失(%)	Residual OCV 剩余电压(%)	result 测试结果 P

Other supplements: Test result "P" decides that the test item passes.

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38.3.4	Procedure/测试步骤	_
天湖	Test 5: External short circuit/测试 5: 外部短路	ia 7
38.3.4.5	The cell or battery to be tested shall be temperature stabilized so that its external case temperature reaches 57℃±4℃ and then the cell or battery shall be subjected to a short circuit condition with a total external resistance of less than 0.1 ohm at 57℃±4℃, This short circuit condition is continued for at least one hour after the cell or battery external case temperature has returned to 57℃±4℃, the cell or battery must be observed for a further six hour for the test to be concluded. R持试验环境温度稳定在 57℃±4℃,以使电芯或电池样品外表温度达到 57℃±4℃,然后,在此温度下,将其正负极用小于 0.1 欧姆的线路短接,待电芯或电池的外表温度恢复到 57℃±4℃之后再持续 1 小时以上,对电芯或电池必须进一步观察 6 个小时才能下结论。	Him Su
	Requirement/标准要求:	
	 1.Cells and batteries meet this requirement if their external temperature does not exceed 170℃; 电芯或电池的外壳温度应不超过 170℃; 2. No disassembly, no rupture and no fire during the test and within six hours after this test. 	天湖 Tian Si
	试验后6小时内无解体、无破裂、无起火。	Jian Su
	Result Au 5 Au	e e e e e e e e e e e e e e e e e e e
Sample No. 样品编号	Max External Temp 样品表面最高温度(℃)	Test result 测试结果
B01#	大開 58.2 7im 5i	Р
B02#	58.3	P
		7,000
B03#	58.2 7 m 5 m	Р

Other supplements: Test result "P" decides that the test item passes.

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38.3.4	Procedure/测试步骤
支 議員	Test 6: Crush\Impact/
	测试 6: 挤压(适用)
	撞击(不适用)
	Crush 挤压
	A cell or component cell is to be crushed between two flat surfaces. The crushing is to be gradual with a speed of approximately 1.5 cm/s at the first point of contact. The crushing is to be continued until the first of the three options below is reached.
	(a) The applied force reaches 13kN±0.78kN;
	(b) The voltage of the cell drops by at least 100 mV;
	(c) The cell is deformed by 50% or more of its original thickness.
	Once the maximum pressure has been obtained, the voltage drops by 100mV or more, or the cell is deformed by at least 50% of its original thickness, the pressure shall be released. 电池芯或组成电池芯在两个平面间挤压。挤压在第一个接触点以约 1.5cm/s 的速度慢慢进行,直到下面三个选项之一达到为止:
	(a)作用力达到 13kN±0.78kN;
	(b)电池芯电压降至少达到 100mV;
	(c)电池厚度和最初比较变形至少 50%。
	一旦达到最大压力,电压降超过 100 mV 或者电池芯变形超过 50%,压力应该解除。
	Impact 7 m 5 m
	撞击
71.00 S W	(applicable to cylindrical cells not less than 18mm in diameter)
3.3.4.6	The sample cell or component cell is to be placed on a flat smooth surface. A 15.8 mm \pm 0.1 mm diameter, at least 6 cm long, or the longest dimension of the cell, whichever is greater, Type 316 stainless steel bar is to be placed across the centre of the sample. A 9.1 kg \pm 0.1 kg mass is to be dropped from a height of 61cm \pm 2.5 cm at the intersection of the bar and sample in a controlled manner using a near frictionless, vertical sliding track or channel with minimal drag on the falling mass. The vertical track or channel used to guide
	the falling mass shall be oriented 90 degrees from the horizontal supporting surface. The test sample is to be impacted with its longitudinal axis parallel to the flat surface and perpendicular to the longitudinal axis of the 15.8 mm ± 0.1 mm diameter curved surface lying across the centre of the test sample. Each sample is to be subjected to only a single impact.
	Cells and component cells meet this requirement if their external temperature does not exceed 170°C and there is no disassembly and no fire during the test and within six hours after this test.
	(适用于直径不小于 18 毫米的圆柱形电池)将电池或元件电池样品平放在一个平面上,其纵轴平行于测试台面年,将一直径为 15.8 mm ± 0.1 mm 的 316 型不锈钢棒横放在电池中心位置。然后,将一质量为 9.1 kg ± 0.1 kg 的物体从 61cm ± 2.5 cm 的高度落向样品。样品在进行试验时,其外表温度应不超过 170℃。且试验结束后 6 个小时之内,样品应无解体、无起火现象发生。
	Requirement/标准要求:
	1.Cells and component cells meet this requirement if their external temperature does not exceed 170℃;
	电芯的外壳温度应不超过 170℃;
	2. No disassembly, no fire during the test and within six hours after this test.
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

试验后6小时内无解体、无起火。

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) 	Result 测试结果	天開 Tian Su Fian Su	7ian >11 F
Sample No. 样品编号	OCV prior to test 试验前电压(V)	Max External Temp 样品表面最高温度(℃)	Test result 测试结果
C01#	7 3.280 KM	24.0	P-VA Pina Su
C02#	3.260 × W	23.3 7im Su	Р
C03#	3.259	24.8	P
C04#	3.271	7 23.9 Fran Su	Р
C05#	3.252	24.1	Р
C06#	3.252	24.9	Р
C07#	3.259 Jun 5u	24.3	P ^{ian Su}
C08#	3.271 KVI	23.4	Р
C09#	3.275	24.2	Tian P
C10#	3.245	24.3 7 m Su	Р

Other supplements:

Test result "P" decides that the test item passes.

其他补充:

测试结果"P"代表判定该测试项目通过。

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38.3.4	Procedure/测试步骤	_		
Film Su 71 an Su 38.3.4.7	Test 7: Overcharge/测试 7: 过度充电	z (A)		
	When the manufacturer's recommended charge voltage is not more than 18V, the minimum voltage of the test shall be the lesser of two times the maximum charge voltage of the or 22V, whichever is less. When the manufacturer's recommended charge voltage is more than 18V, the charging voltage of the test shall be 1.2 times maximum charge voltage. The charging current is 2 times of the maximum charging current recommended by the manufacturer. 如果厂家推荐的充电电压不超过 18V,本测试的最小充电电压应该是两倍的厂家标定最大充电电压或者是 22V,取其中较小者。如果厂家推荐的充电电压超过 18V,充电电压应该为 1.2			
		Trans-		
	倍的厂家标定最大充电电压。充电电流为厂家推荐的最大充电电流 2 倍。 Requirements/标准要求: No disassembly and no fire during the test and within seven days after the test. 试验样品在试验中和试验后 7 天内,应无解体和无起火现象发生。	天 河 天 河 7:an -		
	倍的厂家标定最大充电电压。充电电流为厂家推荐的最大充电电流 2 倍。 Requirements/标准要求: No disassembly and no fire during the test and within seven days after the test.	所 テ アian テ ル フian フian		
Sample No. 样品编号	倍的厂家标定最大充电电压。充电电流为厂家推荐的最大充电电流 2 倍。 Requirements/标准要求: No disassembly and no fire during the test and within seven days after the test. 试验样品在试验中和试验后 7 天内,应无解体和无起火现象发生。 Result	Test result 测试结果		
•	倍的厂家标定最大充电电压。充电电流为厂家推荐的最大充电电流 2 倍。 Requirements/标准要求: No disassembly and no fire during the test and within seven days after the test. 试验样品在试验中和试验后 7 天内,应无解体和无起火现象发生。 Result 测试结果 OCV prior to test	100		
样品编号	倍的厂家标定最大充电电压。充电电流为厂家推荐的最大充电电流 2 倍。 Requirements/标准要求: No disassembly and no fire during the test and within seven days after the test. 试验样品在试验中和试验后 7 天内,应无解体和无起火现象发生。 Result 测试结果 OCV prior to test 试验前电压 (V)	测试结果		
B05#	倍的厂家标定最大充电电压。充电电流为厂家推荐的最大充电电流 2 倍。 Requirements/标准要求: No disassembly and no fire during the test and within seven days after the test. 试验样品在试验中和试验后 7 天内,应无解体和无起火现象发生。 Result 測试结果 OCV prior to test 试验前电压 (V) 54.976	测试结果 P		

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天 湖 7 can Su 38.3.4.8 38.3.4.8 7 can Su 8 can Su	Test 8: Forced discharge/测试 8: 强制放电					
	Each cell shall be forced discharged at ambient temperature by connecting it in series with a 12V D.C power supply at an initial current equal to the maximum discharge current specified the manufacturer The specified discharge current is to be obtained by connecting a resistive load of the appropriate size and rating in series with the test cell, Each cell shall be forced discharged for a time interval(in hours) equal to its rated capacity divided by the initial test current(in ampere). 在 20℃±5℃的环境温度下,将单个电芯连接在 12V 的直流电源上进行强制放电,此直流电源提供每个电芯初始电流为制造厂指定的最大放电电流,放电时间为额定容量除以初始电流。					
	Requirements/标准要求: No disassembly and no fire during the test and within seven days after the test. 试验样品在试验中和试验后 7 天内,应无解体和无起火现象发生。					
	Result 测试结果	£ Wi	天湖 7ian 5"	7ian Sii 天渊 7ian Sii	K Min Tian Su	
Sample No. 样品编号	OCV prior to test 试验前电压(V)	Test result 测试结果	Sample No. 样品编号	OCV prior to test 试验前电压(V)	Test result 测试结果	
C11#	7im 5m 2.914	Vian Su P	C21#	2.854	Prian	
8- YEAR		_	C22#	2.941	Р	
C12#	2.909	P	022#			
* VIII	2.909	P P	C23#	2.869	F. P.	
C12#	Villa Villa		Cu.	4 9	P	
C12# C13#	2.934	Р	C23#	2.869	7ia# 2"	
C12# C13# C14#	2.934	P P	C23#	2.869	P P	
C12# C13# C14# C15#	2.934 2.860 2.860	P P	C23# C24# C25#	2.869 2.941 2.932	P P	
C12# C13# C14# C15# C16#	2.934 2.860 2.860 2.888	P P P	C23# C24# C25# C26#	2.869 2.941 2.932 2.882	P P	
C12# C13# C14# C15# C16# C17#	2.934 2.860 2.860 2.888 2.887	P P P	C23# C24# C25# C26# C27#	2.869 2.941 2.932 2.882 2.891	P P P P	

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STATEMENTS

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