



Test Report

报告编号: WSCT1405000111BS
Report No.

日期: 2014年6月16日
Date: Y M D

第 1 页 共 5 页
page of

申请商 Applicant : TORNADO SCIENCE GROUPS LIMITED 飓风科技集团有限公司

地址 Address : 1-1-402, NanKai Industrial Zone, Tianjin, P.R.China
天津市南开区南开工业园 1-1-402

以下检测之样品是由委托方所提供及确认:

Report on the submitted sample said to be:

样品名称 Sample name : 锂离子电池组 Lithium ion Battery Pack
型号 Model : TDP-12V12A
供应商 Supplier : TORNADO SCIENCE GROUPS LIMITED.
制造厂 Manufacturer : TORNADO SCIENCE GROUPS LIMITED.
接收样品日期 Date of sample received : May.24. 2014
测试时间 Date(s) of test : Jun.5 . 2014~ Jun.8 . 2014

测试要求 Test Requested	结果 Result
1 关于危险货物运输的建议书—规章范本 ST/SG/AC.10/1/Rev.17 188 款。 United nations "recommendations on the TRANSPORT OF DANGEROUS GOODS" model Regulations (17 th Rev. Edition) special provisions 188.	Pass/合格

*****更多详细信息请查阅下页 FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S)*****

测试 Tested by: Davis Yang

审核 Reviewed by: Rain Huang

日期 Date : 2014.6.16
Davis Yang 工程师 Engineer

日期 Date : 2014.6.16
Rain Huang 实验室经理 Lab Manager

批准 Approved by: Wang Fengbing

日期 Date : 2014.06.16

Wang Fengbing
授权签字人 Approved Signatory



Unless otherwise stated the results shown in this test report refer only to the sample (s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有说明, 此报告结果仅对测试之样品负责, 本报告未经本公司书面许可, 不可部分复制。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.wsct-cert.org/items_and_condition.htm and, for electronic format document, subject to Terms and Conditions for Electronic Document at www.wsct-cert.org /en/ Terms-and-Conditions/Terms-e-Document.htm. Attention is draw to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company' s findings at the time of its intervention only and within the limits of Client' s instructions, if any. The Company' s sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law.



Test Report

报告编号: WSCT1405000111BS
Report No.

日期: 2014年6月16日
Date: Y M D

第 2 页 共 5 页
page of

1. 基本信息 Basic information

样品名称 Sample name	锂离子电池组 Lithium ion Battery Pack	型号规格 Type	TDP-12V12A
标称电压 Nominal voltage	12V	额定容量 Rated capacity	12A 144Wh
内含电池数量 Battery number	18/Packing	商标 Trade mark	ENERBYTE
包装件重量 Packaging weight	30.5Kg	包装件尺寸 (L*W*T) Packaging dimensions	(360*360*360) mm
外包装 Outer packing	瓦楞纸箱 Corrugated cate	内包装 Inside packing	纸盒 Paper box
包装件电池净重 Net quantity of batteries per package	1.65Kg/Packing		
试验项目 Test item	1.2 米跌落测试 1.2m drop test		
试验结论 Test conclusion	<p>被测试包装件能够承受 1.2m 跌落试验, 其内装的电池没有破损, 没有产生导致内装电池的直接接触的移动及内容物泄漏, 测试合格。</p> <p>The tested package is capable of withstanding a 1.2m drop test in any orientation without damage to cells or batteries contained therein, without shifting of the contents so as to allow battery to battery or cell to cell contact and without release of contents. the test passed.</p>		

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有说明, 此报告结果仅对测试之样品负责, 本报告未经本公司书面许可, 不可部分复制。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.wsct-cert.org/items_and_condition.htm and, for electronic format document, subject to Terms and Conditions for Electronic Document at www.wsct-cert.org/en/Terms-and-Conditions/Terms-e-Document.htm. Attention is draw to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company' s findings at the time of its intervention only and within the limits of Client' s instructions, if any. The Company' s sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law.



Test Report

报告编号: WSCT1405000111BS
Report No.

日期: 2014年6月16日
Date: Y M D

第 3 页 共 5 页
page of

2. 1.2 米跌落测试 1.2m drop test

环境条件 Environmental conditions: 温度 Temperature (20±5) °C, 相对湿度 R.H. (40-70) %

测试设备 Name of Equipment: 跌落试验机 drop test machine 型号 Model: WSCTBS-012

序号 No.	试验项目 Test item	试验依据	结果/Result	备注 remark
1	1.2 米跌落测试 1.2m drop test	关于危险货物运输的建议书—规章范本 ST/SG/AC.10/1/Rev.17 188 款 United nations “recommendations on the TRANSPORT OF DANGEROUS GOODS” model Regulations (17th Rev. Edition) special provisions 188.	合格/Pass	--

跌落方向 Drop position:

跌落方向 Drop position	上面 Top	前面 Front	侧面 Side	棱 Edge	角 Angle
包装状态 Status	合格/Pass	合格/Pass	合格/Pass	合格/Pass	合格/Pass

测试要求描述 Testing requirements description:

- 1) 每个电芯或电池的包装件或者完全包装件必须能承受 1.2 米跌落测试, 每个包装件进行 5 次不同方向的跌落测试, 而不造成包含在其中的电池或电芯的损坏, 不造成使电池与电池(电芯与电芯)接触的内含物的移动和内含物的释出。

The package of batteries is dropped from 1.2m 5 times per package. Each package is capable of withstanding a 1.2m drop test in any orientation without damage to cells or batteries contained therein, without shifting of the content so as to allow battery to battery(cell to cell) contact and without release of contents.

结论 Conclusion:

包装件通过 1.2m 跌落试验 The package had passed 1.2m drop test.

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有说明, 此报告结果仅对测试之样品负责, 本报告未经本公司书面许可, 不可部分复制。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.wsct-cert.org/items_and_condition.htm and, for electronic format document, subject to Terms and Conditions for Electronic Document at www.wsct-cert.org/en/Terms-and-Conditions/Terms-e-Document.htm. Attention is draw to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company' s findings at the time of its intervention only and within the limits of Client' s instructions, if any. The Company' s sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law.



Test Report

报告编号: WSCT1405000111BS
Report No.日期: 2014年6月16日
Date: Y M D第 4 页 共 5 页
page of

样品图片 Photo of the sample

电池 Battery:



包装件 Package:



Unless otherwise stated the results shown in this test report refer only to the sample (s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有说明, 此报告结果仅对测试之样品负责, 本报告未经本公司书面许可, 不可部分复制。This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.wsct-cert.org/items_and_condition.htm and, for electronic format document, subject to Terms and Conditions for Electronic Document at www.wsct-cert.org/en/Terms-and-Conditions/Terms-e-Document.htm. Attention is draw to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company' s findings at the time of its intervention only and within the limits of Client' s instructions, if any. The Company' s sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law.



Test Report

报告编号: WSCT1405000111BS
Report No.日期: 2014年6月16日
Date: Y M D第 5 页 共 5 页
page of

*****报告结束 End of report*****

Unless otherwise stated the results shown in this test report refer only to the sample (s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有说明,此报告结果仅对测试之样品负责,本报告未经本公司书面许可,不可部分复制。This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.wsct-cert.org/items_and_condition.htm and, for electronic format document, subject to Terms and Conditions for Electronic Document at www.wsct-cert.org/en/Terms-and-Conditions/Terms-e-Document.htm. Attention is draw to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company' s findings at the time of its intervention only and within the limits of Client' s instructions, if any. The Company' s sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law.