

1.0 Reference and Address			
Report Number	190514008SZN-001	Original Issued: 25-Jul-2019	Revised: 10-Sep-2019
Standard(s)	<p>UL 2054 Issue:2004/10/29 Ed:2 Rev:2011/09/14 UL Standard for Safety Household and Commercial Batteries</p> <p>Secondary Cells And Batteries Containing Alkaline Or Other Non-Acid Electrolytes – Safety Requirements For Portable Sealed Secondary Cells, And For Batteries Made From Them, For Use In Portable Locations [UL 62133:2017 Ed.2]</p> <p>Secondary Cells And Batteries Containing Alkaline Or Other Non-Acid Electrolytes – Safety Requirements For Portable Sealed Secondary Cells, And For Batteries Made From Them, For Use In Portable Locations [CSA C22.2#62133:2017 Ed.2]</p>		
Applicant	LUXOR WORKSPACES, LLC	Manufacturer	<b><u>DongGuan Techoss electronic technology Co., Ltd.</u></b>
Address	2245N.Delany RD Waukegan,IL60087	Address	18A,ShiMa JianShe Road, TangXia town Dongguan City, Guangdong, 523710
Country	USA	Country	CHINA
Contact	Zach Mundy	Contact	JiangYun Luo
Phone	847-596-8146	Phone	86-13058168512
FAX	--	FAX	--
Email	zmundy@luxorfurn.com	Email	cloudy@techoss.cn

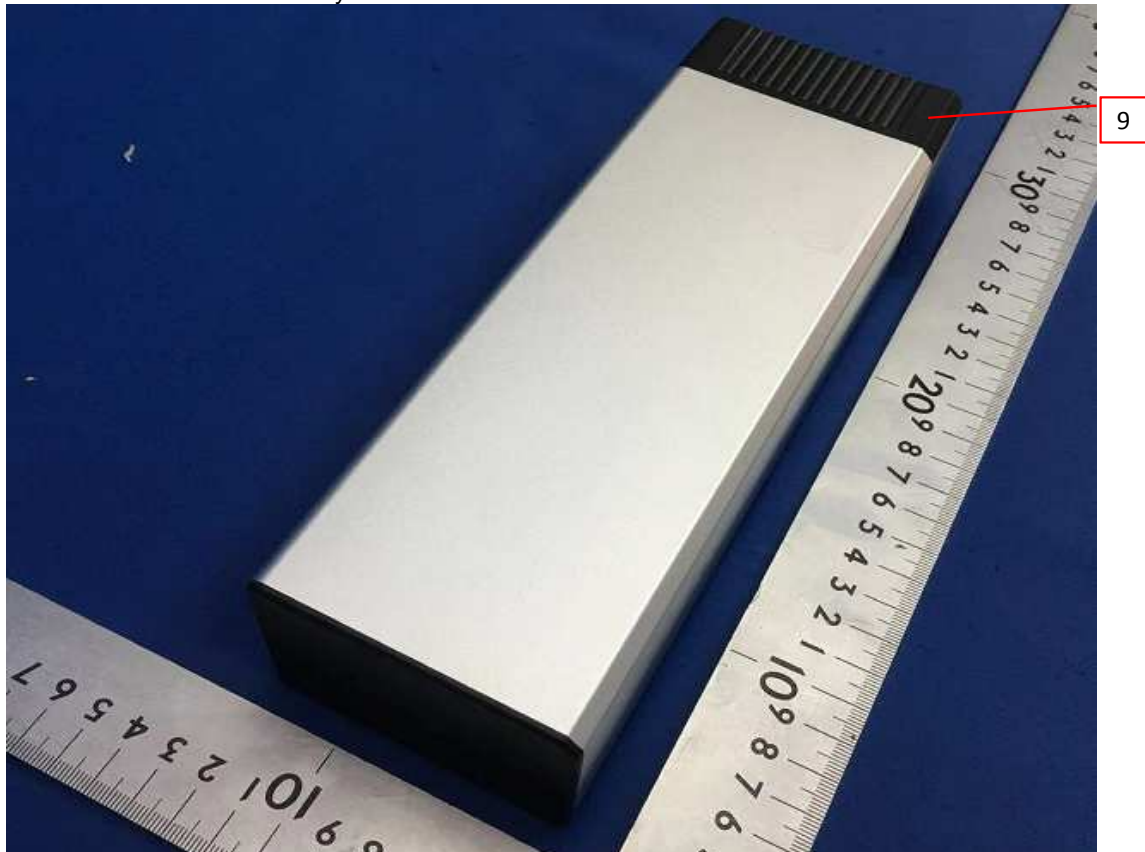
2.0 Product Description	
Product	Li-ion Battery
Brand name	<b>kwikboost</b>
Description	<p>The product covered by this report is rechargeable Li-ion battery intended for use as DC power source. the product is equipped with protect device and 18 cell in 6S3P which comply with UL 1642, see section 4.0 components for details.</p> <p>Nominal Voltage: 22.2V  Normal charging voltage: 25.2V  Normal charging current: 3000mA  Max. charging current: 6600mA  Normal discharging current: 5000mA  End of discharging voltage: 17.4V</p>
Models	KBEP-BAT
Model Similarity	NA
Ratings	22.2V, 6600mAh, 146Wh
Other Ratings	<p>Ambient temperature:  Charge: 0 ~ 45°C  Discharge: -10 ~ 55°C</p>
Conditions of Acceptability	<p>The product covered in this report is incomplete in construction features or limited in performance capabilities and are intended for use and evaluation in other products. Consideration should be given to the following when the component is used in or with another product.  (Typical Conditions of Acceptability to be considered for recognized component products follow:)</p> <ol style="list-style-type: none"> <li>1. Suitability of the enclosure should be evaluated when installed in the end product.</li> <li>2. Temperature Testing should be performed on this component when installed in the end product.</li> </ol>

### 3.0 Product Photographs

Photo 1 - Overall view of battery



Photo 2 - Overall view-2 of battery



### 3.0 Product Photographs

Photo 3 - Internal view-1 of Battery

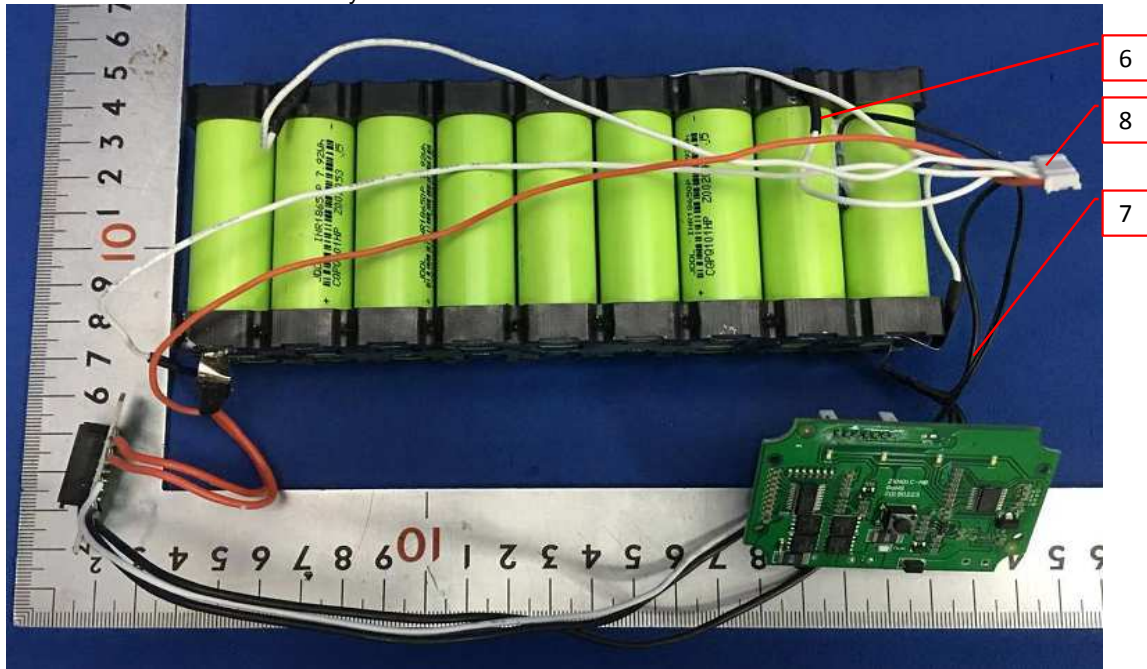


Photo 4 - Internal view-2 of Battery





### 3.0 Product Photographs

Photo 5 - Front view of PCM

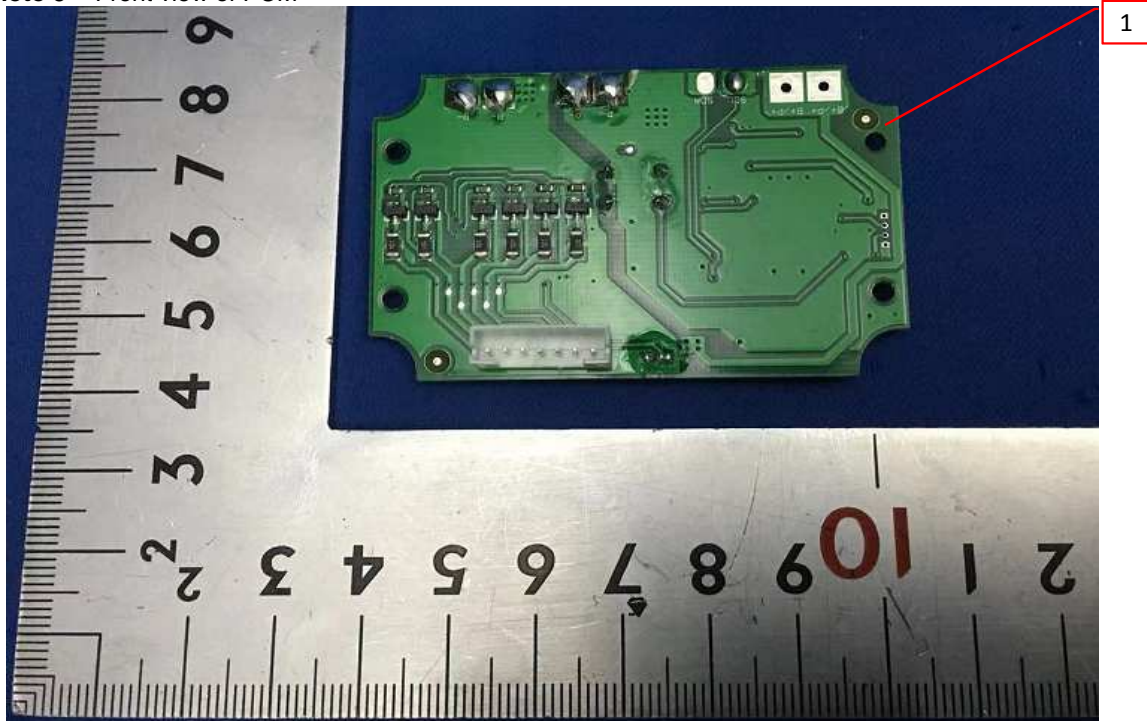
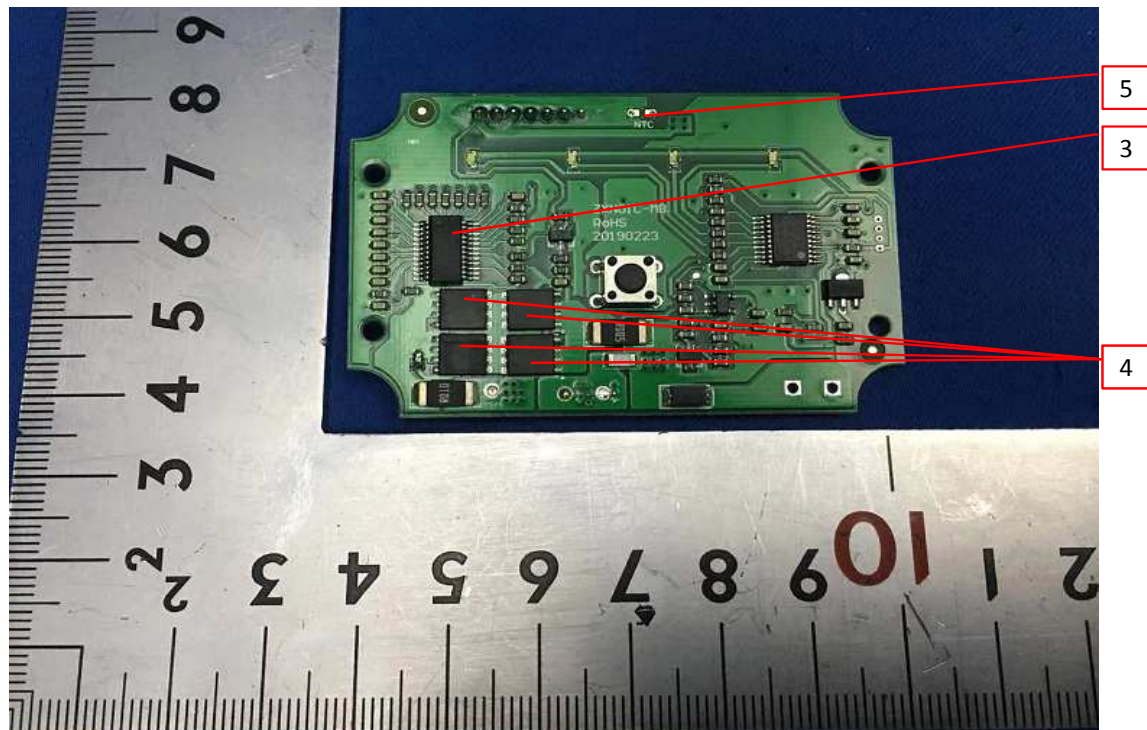


Photo 6 - Back view of PCM



### 3.0 Product Photographs

Photo 7 - Front view of Cell block



Photo 8 - Back view of Cell block



4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
5	1	PCB	Shenzhen meiyadi Circuit Technology Co., Ltd	ZXN01C-MB	Thickness min. 1.6mm, V-0, 130 °C	UR
6	2	PTC	PROSEMI Semiconductor, Ltd	1206TD-30AS	32Vdc, Ihold: 30A, Itrip: 150A	UR
6	3	IC (U3)	CELLWISE	CW1073AAAS	Overcharge protection voltage: 4.25±0.025V, Over discharge protection voltage: 2.7±0.03V, 3Discharging overcurrent detection voltage: 0.1V±0.005V	NR
6	4	MOSFET (Q8, Q9, Q11, Q12)	Sowinsemi Semiconductor, Ltd	SW100N30D5	V <sub>DS</sub> = 30V, V <sub>GS</sub> = ±20V, I <sub>d</sub> = 100A	NR
6	5	NTC	DONGGUAN XINXIANG ELECTRONICS TECHNOLOGY CO., LTD	MF52-103F-3435-150L	Resistance: 10KΩ, B=3435K Temperature: 25°C	UR
3	6	Tape	DONGGUAN LIANCHENG LABOUR INSURANCE	PET	200°C, V-0 Lian cheng labour insurance	UR
3	7	Wiring	ShenZhen LI XIN HUI Electronic Co., LTD	3239	26AWG, 150°C, 3000Vac 20AWG, 150°C, 3000Vac	UR
3	8	Connector	DongGuan NORDE electronics Co., LTD	Nylon 9T	Nylon, UL94V0, 105°C, min thickness: 6.85mm	UR
2	9	Enclosure	Dongguan Zhang Xing Hardware Products Co., Ltd.	C6200	ABS+PC/V0, Thickness min. 54mm	UR
7	10	Cell	Jiangxi jiuding-power new energy technology co., LTD	INR18650P	3.6V, 2200mAh, 7.92Wh	UR
<p>NOTES:</p> <p>1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.</p> <p>2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.</p> <p>3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.</p>						

#### **5.0 Critical Unlisted CEC Components**

No Unlisted CEC components are used in this report.



## 6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. Spacing - NA

2. Mechanical Assembly - Components such as switches, fuseholders, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.

3. Corrosion Protection - NA

4. Accessibility of Live Parts - NA

5. Grounding - NA

6. Polarized Connection - NA

7. Internal Wiring - Refer to Section 4.0, Components No. 4 for details.

8. Schematics - Refer to Section 7.0, Illustrations No. 2-3 for details.

9. Markings - The product is marked as follows:

- manufacturer's name or brand name
- model number
- electrical ratings (input voltage, nominal voltage, capacity or watt-hour).
- manufacture date.

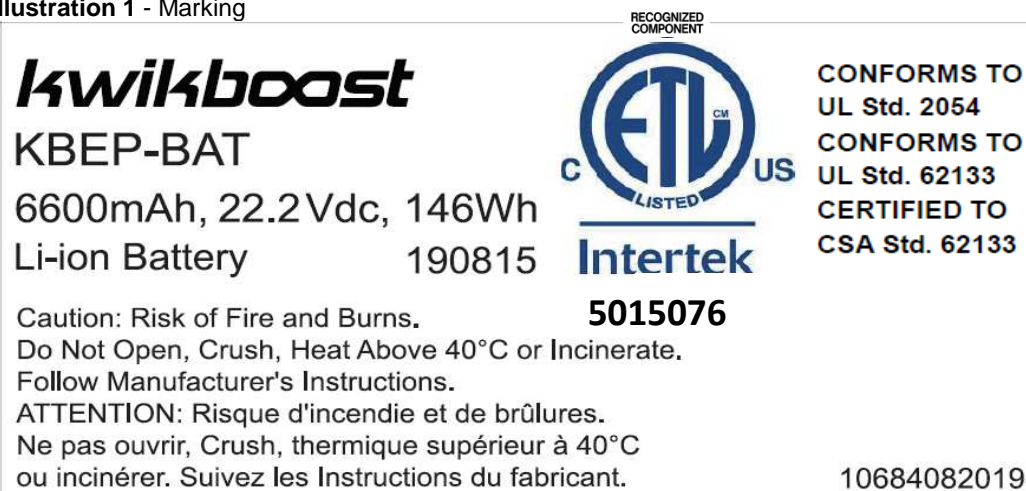
Refer to Section 7.0, Illustration No.1 for details.

10. Cautionary Markings - Refer to Section 7.0, Illustrations No. 1 for details.

11. Installation, Operating and Safety Instructions - Safety Instructions for use of this products are provided by the manufacturer.

## 7.0 Illustrations

Illustration 1 - Marking

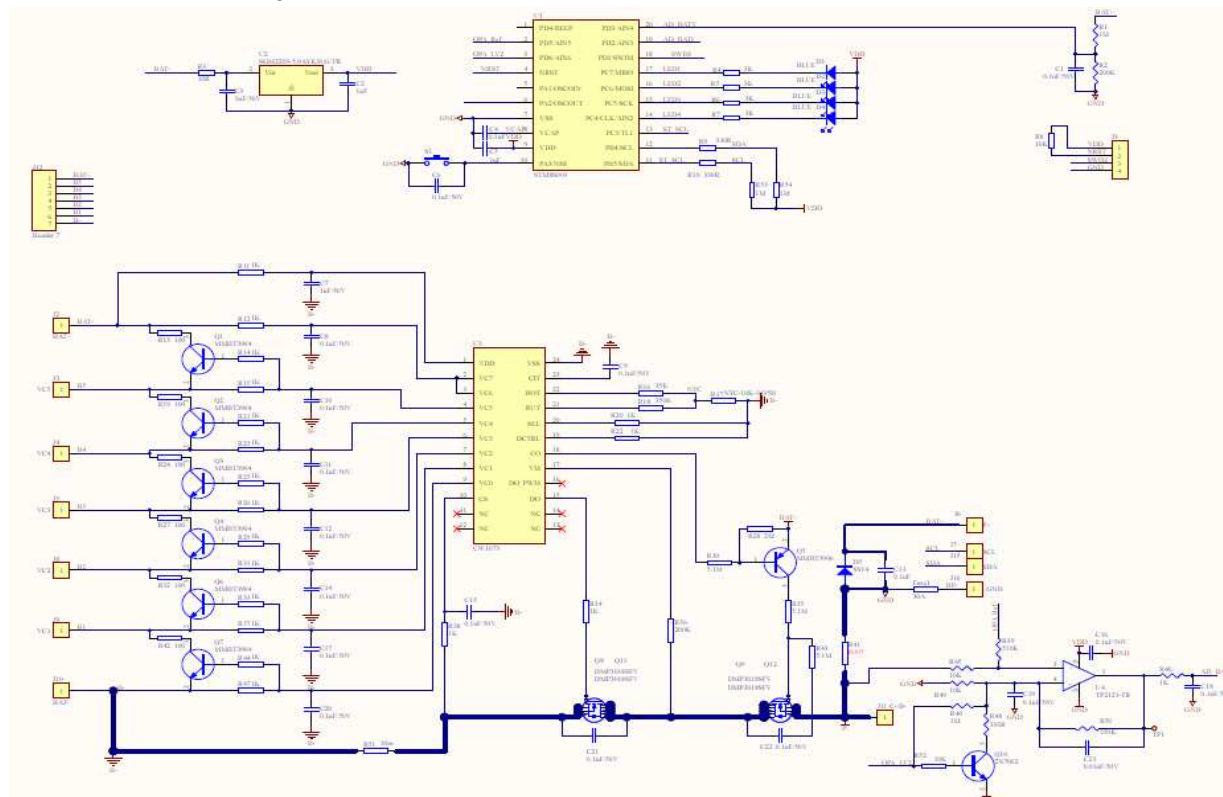


Note 1: The ETL logo shall not be less than 8 mm in width and in height, the "Intertek" shall not be less than 3 mm in height, the "C", "US" and the control No. "5015076" shall not be less than 2 mm in height, the "CONFORMS TO UL STD. 2054" shall not be less than 1.5 mm in height, the "CM" shall not be less than 1 mm in height.

Note 2: For the manufacture date in the marking "190815",  
"19" represents year.  
"08" represents month.  
"15" represents day.

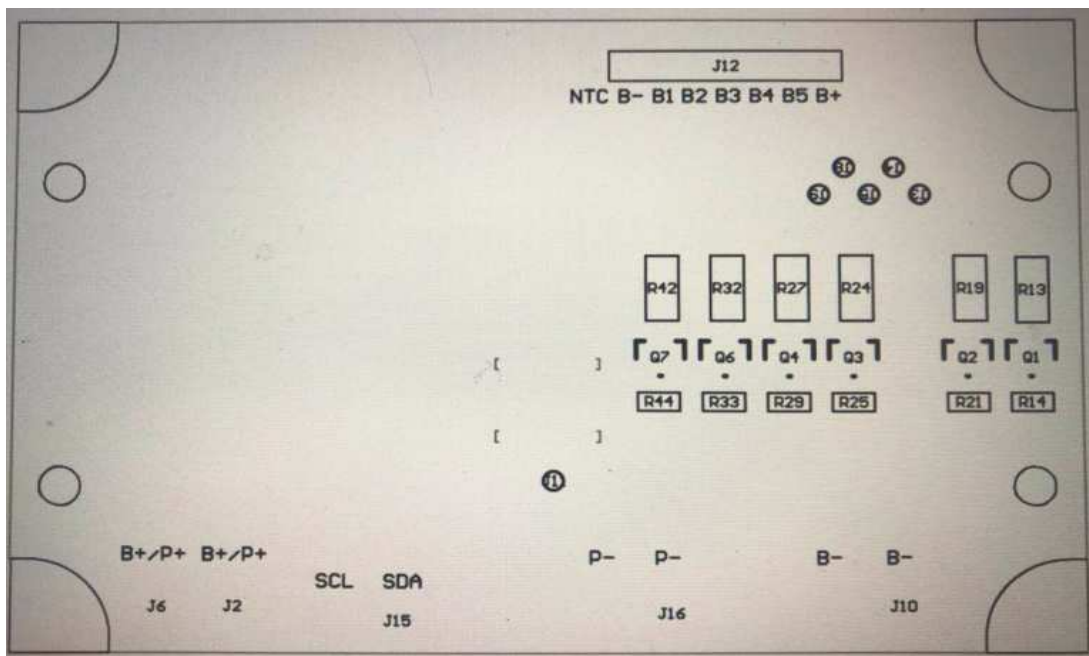
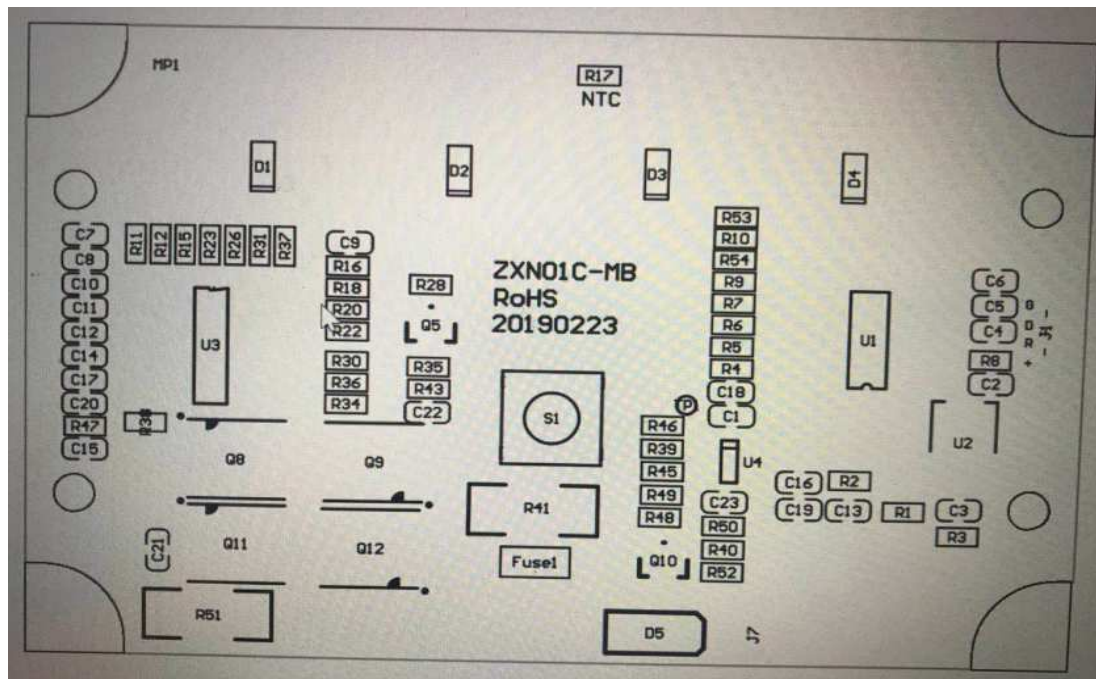
## 7.0 Illustrations

### Illustration 2 - Circuit diagram



## 7.0 Illustrations

Illustration 3 - PCB layout



## 7.0 Illustrations

Illustration 4 - battery construction

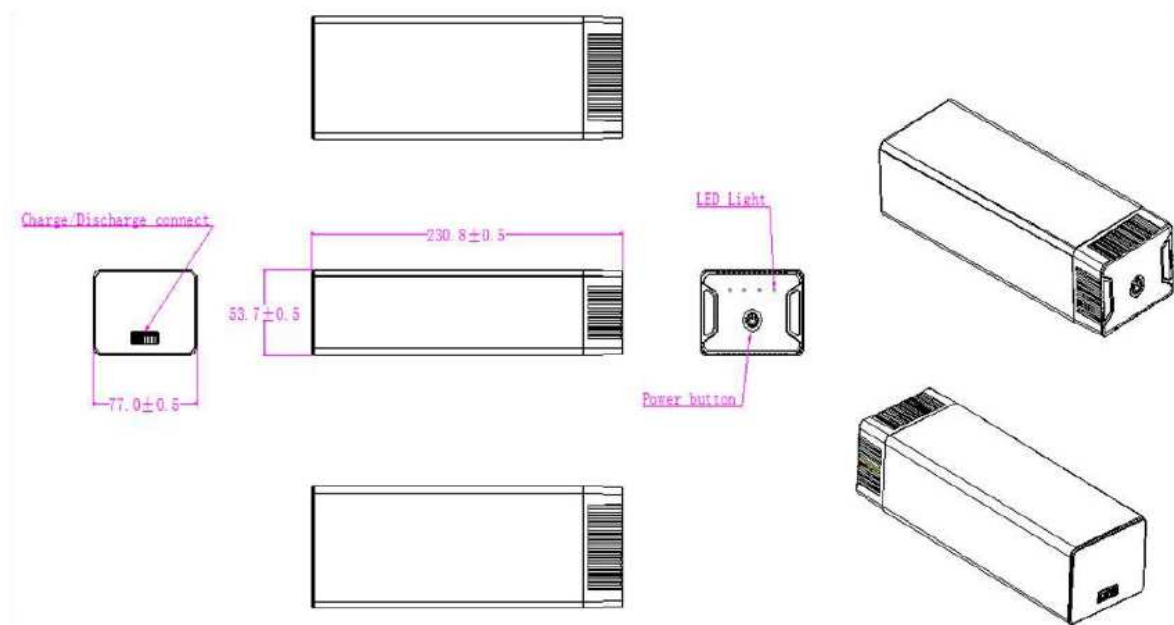


Illustration 5 - battery specification-1

Do not expose to, dispose of the battery in fire.

Do not put the battery in a charger or equipment with wrong terminals connected.

Avoid shorting the battery

Avoid excessive physical shock or vibration.

Do not disassemble or deform the battery pack.

Do not immerse in water.

Do not use the battery mixed with other different make, type, or model batteries.

Keep out of the reach of children, Only use with adult supervision.



## 7.0 Illustrations

### Illustration 6 - battery specification-2

#### 9.2 Charge:

9.2.1 Battery pack must be charged in appropriate charger only.

9.2.2 Never use a modified or damaged charger.

9.2.3 Do not leave battery pack in charger over 24 hours.

9.2.4 Charging current: Can not surpass the biggest charging current which in this specification book stipulated.

9.2.5 Charging voltage: Does not have to surpass the highest amount which in this specification book stipulated to decide the voltage.

9.2.6 Charge temperature: The battery pack must carry on the charge in the ambient temperature scope which this specification book stipulated.

9.2.7 Uses the constant electric current and the constant voltage way charge, the prohibition reverse charges. If the battery positive electrode and the cathode meet instead, can damage the battery pack.

#### 9.3 Discharge:


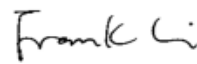
9.3.1 The discharging current does not have to surpass this specification book stipulation the biggest discharging current, the over sized electric current electric discharge can cause the battery capacity play to reduce and to cause the battery heat.

9.3.2 Electric discharge temperature: The battery pack discharge must carry on in the ambient temperature scope which this specification book stipulated.

9.3.3 Over-discharges: After the short time excessively discharges charges immediately cannot affect the use, but the long time excessively discharges can cause the battery the performance, battery function losing. The battery long-term has not used, has the possibility to be able to be at because of its automatic flash over characteristic certain excessively discharges the condition, for prevented excessively discharges the occurrence, the battery should maintain the certain electric quantity.

#### 9.4 Disposal:

Regulations vary for different countries. Dispose of in accordance with local regulations.

8.0 Test Summary			
Evaluation Period	14-May-2019 to 10-Jul-2019		Project No. 190514008SZN
Sample Rec. Date	14-May-2019	Condition	Prototype
Sample ID.	Z190514008-001 to 027		
Test Location	Intertek Testing Services Shenzhen Ltd. Longhua Branch 101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu Subdistrict, LongHua District, Shenzhen, P.R. China		
Test Procedure	Testing Lab		
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.			
The following tests were performed:			
Test Description	UL 2054, Issue:2004/10/29 Ed:2 Rev:2011/09/14 UL Standard for Safety Household and Commercial Batteries / Clause	UL 62133/CAN/CSA-C22.2 No. 62133:17 Second Edition Issue:2017/09/05 UL Standard for Safety for Secondary Cells and Batteries / Clause	
Short-Circuit Test	9	--	
Abnormal Charging Test	10	--	
Abusive Overcharge Test	11	--	
Forced-Discharged Test	12	--	
Battery Pack Component Temperature Test	13A	--	
Battery Pack Surface Temperature Test	13B	--	
250N Steady Force Test	19	--	
Mold Stress Relief Test	20	--	
Drop Impact Test	21	--	
8.0 Test Summary			
Evaluation Period	14-Aug-2019 to 6-Sep-2019		Project No. 190826020SZN
Sample Rec. Date	26-Aug-2019	Condition	Prototype
Sample ID.	Z190826020-001 to 021		
Test Location	Intertek Testing Services Shenzhen Ltd. Longhua Branch 101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu Subdistrict, LongHua District, Shenzhen, P.R. China		
Test Procedure	Testing Lab		
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.			
The following tests were performed:			
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Moulded case stress at high ambient temperature (battery)	--	8.2.2	
External short circuit (battery)	--	8.3.2	
Free fall	--	8.3.3	
Over-charging of battery	--	8.3.6	
8.1 Signatures			
A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.			
Completed by:	Terrance Yang	Reviewed by:	Frank Li
Title:	Engineer	Title:	Assistant Manager
Signature:		Signature:	

9.0 Correlation Page For Multiple Listings					
The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.					
BASIC LISTEE	LUXOR WORKSPACES, LLC				
Address	2245N.Delany RD Waukegan,IL60087				
Country	USA				
Product	Li-ion Battery				
MULTIPLE LISTEE 1	None				
Address					
Country					
Brand Name					
ASSOCIATED MANUFACTURER					
Address					
Country					
<table border="1"> <thead> <tr> <th>MULTIPLE LISTEE 1 MODELS</th> <th>BASIC LISTEE MODELS</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>		MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS		
MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS				
MULTIPLE LISTEE 2	None				
Address					
Country					
Brand Name					
ASSOCIATED MANUFACTURER					
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MULTIPLE LISTEE 2 MODELS	BASIC LISTEE MODELS				
MULTIPLE LISTEE 3	None				
Address					
Country					
Brand Name					
ASSOCIATED MANUFACTURER					
Address					
Country					
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MULTIPLE LISTEE 3 MODELS	BASIC LISTEE MODELS				

## 10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

### COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or

### LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

- 1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issue by Intertek
- 4) a product descriptor that identifies the standards used for certification. Example:

**For US standards**, the words, "Conforms to" shall appear with the standard number along with the word, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

**For Canadian standards**, the words "Certified to CAN/CSA Standard CXX No. XX." shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

**Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use.**

The facsimile need not have a control number. A control number will be issued **after signed Certification**

**Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

### MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

### FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

#### 10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

**Note to Intertek Follow Up Inspector: The Component Evaluation Center, CEC, will notify you in writing when these components must be selected and sent to the CEC for re-evaluation**

Ship the samples to:

Intertek Testing Services Shenzhen Ltd. Longhua Branch

ETL Component Evaluation Center

101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu Subdistrict,  
LongHua District, Shenzhen, P.R. China

Shenzhen, China

Attn: Joey Kuang

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.



#### **11.0 Manufacturing and Production Tests**

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

##### **Required Tests**

None

## 12.0 Revision Summary

The following changes are in compliance with the declaration of Section 8.1:

[illegible]