



# POWER LITE Thermal Runaway Tested by following UL9540A

R&D Department



# Conclusion

## ■ Background

UL conducted a thermal runaway risk assessment to evaluate safety design of Power Lite battery pack.

## ■ Conclusion

By following the standard UL9540A test, the battery pack manufactured by UZ ENERGY did not trigger a thermal runaway, proven the safety design at extreme condition.

Only the initiating cell forced into thermal runaway, no other cell thermal runaway during the test.

There is no cell to cell propagation between the module.

Only the initiating cell was forced into thermal runaway, no other cell thermal runaway during the test.  
There is no cell to cell propagation between the module.

### 3.4 Test Photo



# Test Standard UL9540A

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## 3 Test Summary

### 3.1 Test Date and Ambient Conditions

Test Date:	2021.10.28
Ambient Temperature (°C) :	21.3
Relative Humidity (%R.H.) :	26

### 3.2 Test Process

Module samples shall be conditioned, prior to testing, through charge and discharge cycles for a minimum of 2 cycles, using a manufacturer specified methodology to verify that the module is functional. Each cycle shall be defined as a charge to 100% SOC and allowed to rest a maximum of 8 h and then discharged to an end of discharge voltage (EODV) specified by the module manufacturer.

Ambient indoor laboratory conditions shall be 25 ±5°C (77 ±9°F) and 50 ±25% RH at the initiation of the test.

One cell is forced into thermal runaway. A surface heating rate of 4°C to 7°C per minute shall be applied to the cell.



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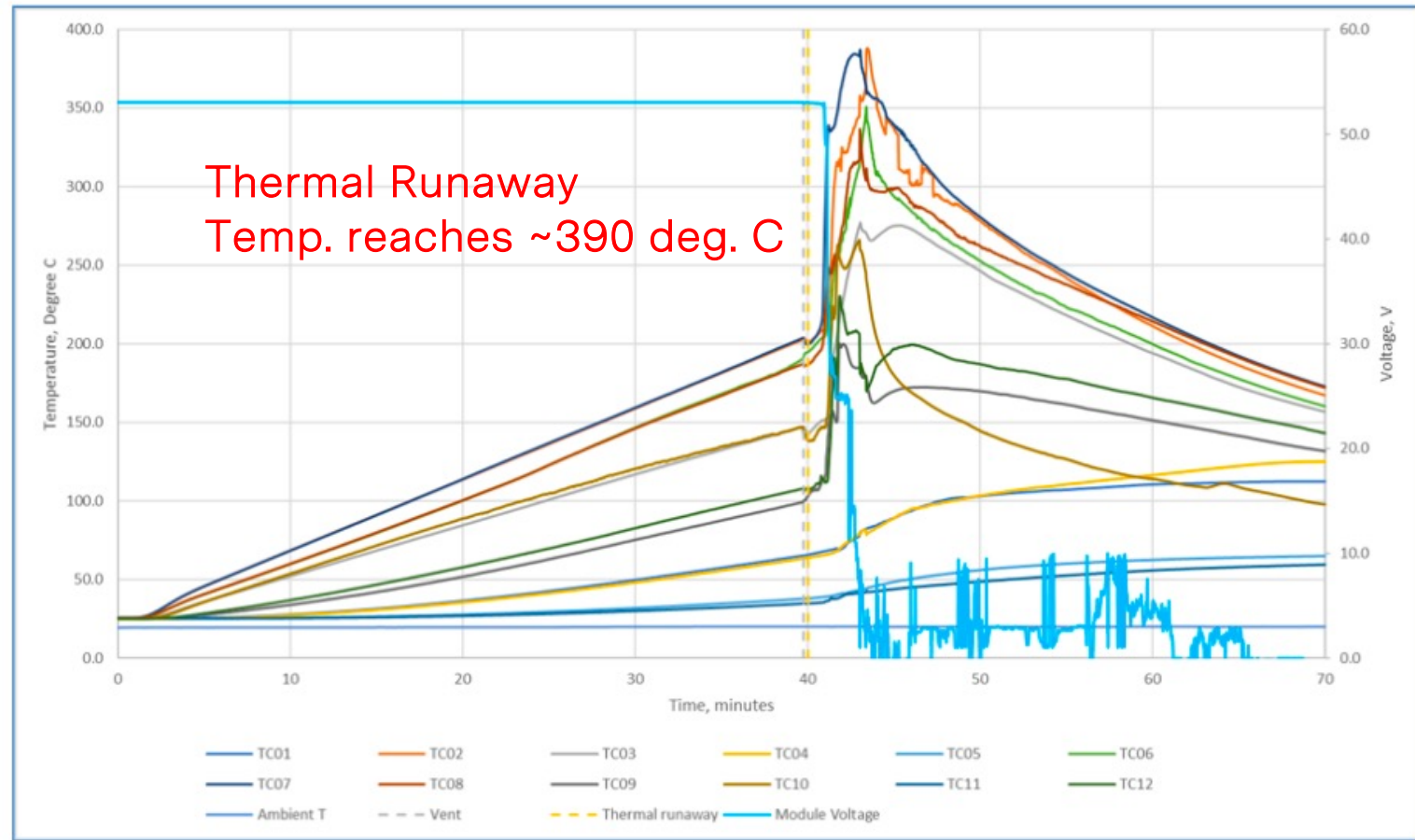
Client information			
Requester	Shenzhen UZ Energy Limited	Address	ROOM313, 3F 3BLOCK, DUOLI INDUSTRIAL ZONE, 105#MEIHUA RD., SHANGMEILIN, FUTIAN DISTRICT, SHENZHEN 518049 Guangdong, P.R.China
Test item information*			
Product Model	L051100-B		
Manufacturer	Shenzhen UZ Energy Limited	Address	ROOM313, 3F 3BLOCK, DUOLI INDUSTRIAL ZONE, 105#MEIHUA RD., SHANGMEILIN, FUTIAN DISTRICT, SHENZHEN 518049 Guangdong, P.R.China
Report information			
Project No.	4790063539	Report No.	4790063539-001
Testing laboratory information			
Testing Laboratory	Beijing Building Materials Testing Academy		
Testing Location	#17 Yaxin Road, Doudian Town, Fangshan District, Beijing 102402, CN		
Test standard and signature			
Standard	Refer to UL9540A module level test method		
Conclusion	Refer to 3.4		
Tested by	Oliver Zhao	Date	2021-10-28
Note	N/A		



# Test Temperature and Voltage Profile



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The module temperature and voltage profile





# Results

- ✓ Only the initiating cell forced into thermal runaway, no other cell thermal runaway during the test.
- ✓ There is no cell to cell propagation between the module.

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Only the initiating cell was forced into thermal runaway, no other cell thermal runaway during the test. There is no cell to cell propagation between the module.

## 3.4 Test Photo





# Thanks For Your Attention

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