

Test Report

For

ANSI/CAN/UL9540A

**Test Method for Evaluating Thermal Runaway Fire
Propagation in Battery Energy Storage Systems**

[Unit Level]

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Test object / Model: Lithi2-16

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[Summary of Test results]

Cell Level Test
Cell model: CB75
Report No.: CN234568
001

Cell Design:	CB75
Thermal Runaway Methodology:	External heating
Cell Surface Temperature at Gas venting:	127.9 °C
Cell Surface Temperature at Thermal Runaway:	179.8 °C
Gas Composition:	Mainly Hydrocarbon, H ₂ , CO, CO ₂
Lower Flammability Limit:	7.7 Vol% at 24 °C, 7.1 Vol% at 127.9 °C
Burning Velocity:	0.688 m/s
Pmax:	0.798 MPa
Thermal Runaway was Induced in the Cell or not:	Induced
Cell Vent Gas is Flammable or not in Air:	Flammable

Module Level Test
Module model: N/A
Report No: N/A

Module Design:	N/A
Thermal Runaway Methodology:	N/A
External Flaming:	N/A
Locations of Flame Venting:	N/A
Flying Debris:	N/A
Peak Smoke Release Rate:	N/A
Gas Generation and Composition:	N/A
Thermal Runaway are Contained by the Module Design or not:	N/A
Cell Vent Gas is Flammable or not:	N/A
Other Description:	N/A
Test Video file:	N/A

Unit Level Test
Unit model:
Lithi2-16
Report No:
CQES240900088201

Unit Design:	Lithi2-16
Thermal Runaway Methodology:	External heating using thin film
External Flaming:	No external flaming observed
Locations of Flame Venting:	No flame extension observed
Flying Debris:	No flying debris observed
Explosion or not:	No explosion observed
Max. Surface Temperature of Module in Target BESS Unit:	34.7 °C
Max. Temperature Rise on Wall Surfaces:	23.8 °C
Thermal Runaway are Contained by the Unit Design or not:	Contained by the Unit Design
Cell Vent Gas is Flammable or not:	Flammable
Heat Flux in the Center of Egress:	N/A
Cheesecloth Indicator Flaming or not:	No flaming or carbonizing
Test Video File:	Archived by Applicant

Remark:

This report only evaluated unit level test which is listed inside the dotted box.



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