LITHIUM CELL TEST SUMMARY AND SUPPLIER INQUIRY

IN ACCORDANCE WITH SUB-SECTION 38.3 OF MANUAL OF TESTS AND CRITERIA

Name/Description of cell

Manufacturer of cell

Name	Dongguang Zhechang Industrial Co.
Ivallie	
Address	No.8 Jiangnan West road Xiagang Industry park Chang An Town Dongguang
	Guangdong Provice
Phone	+86 769 85348900
E-Mail	zecsep@zhechang.com
Website	www.zhechangcn.com

Manufacturer of the equipment (if the cell is contained in equipment)

Name	Dongguang Zhechang Industrial Co.
Address	No.8 Jiangnan West road Xiagang Industry park Chang An Town Dongguang
	Guangdong Provice
Phone	+86 769 85348900
E-Mail	zecsep@zhechang.com
Website	www.zhechangcn.com

Test laboratory of cell

Name	Shenzhen LCS Compliance Testing Laboralory Ltd.
Address	1/F Xingyuan Industrial Park Tongda Road Baoan Avenue Baoan District
	Shenzhen
Phone	+86 755 8259 1330
E-Mail	Jane.lee@lcs-cert.com
Website	http://www.lcs-cert.com

ID-number and date

Unique test report identification number	LCS181226095ASA
Date of test report	2019-01-18

DESCRIPTION OF CELL (Mark with an"X")

Lithium ion cell	X
Lithium metal cell	

Parameters

Mass in gram (g):	8.9g
Lithium ion: Indicate watt-hour rating (Wh):	1.11Wh
Lithium metal: Indicate lithium metal content in	
gram (g):	

Physical description of cell

Model numbers

TESTS AND RESULTS

List of tests conducted and results	N/A	Pass	Fail
- Mark N/A, pass or fail with an "X"			
T1 - Altitude simulation		X	
T2 - Thermal Test		×	
T3 – Vibration		X	
T4 - Shock		X	
T5 - External Short Circuit		X	
T6 - Impact - for cylindrical cells having a diameter of at least 18		X	
мм			
T6 - Crush - for prismatic cells, pouch cells, button cells and		X	
cylindrical cells			
having a diameter of less than 18 mm			
T7 – Overcharge		X	
T8 - Forced Discharge		X	

Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto

ADDITIONAL SUPPLIER INQUIRY

Mark Yes or no with an "X"	Yes	No
Quality management system for manufacturing cells	X	
Does the manufacturer of the cell/battery manufacture the products		
based on a		
documented quality management system according to transport		
regulations?		
Are the following parameters exceeded?	Х	
Lithium ion cell: more than 20 Wh		
Lithium metal cell: more than 1 g Lithium		

Check point 13 - 15 need to be answered when 12 has been ticked "YES":

Mark Yes or no with an "X"	Yes	No
Does each cell incorporates a safety venting device or is designed	×	
to preclude a violent rupture under normal conditions of carriage?		
Is each cell equipped with an effective means of preventing external	×	
short circuits?		
Is each battery containing cells or series of cells connected in parallel	×	

equipped with effective means as necessary to prevent dangerous	
reverse	
current flow (e.g. diodes, fuses, etc.) Not relevant for cells	

Only in air transport: State of Charge (SoC) for UN 3480 Lithium ion cells and lithium polymer cells

State of Charge (SoC) max. 30 %	X	
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CELLS INSTALLED IN EQUIPMENT

Check point 17 needs to be answered when the cells are installed in articles: Mark N/A, pass or fail with an "X"	N/A	Pass	Fail
17c) Only button cells enclosed?		X	
17b) Number of enclosed cells (other than button cells) per			•
equipment			
When the equipment is intentionally active/switched on during transp	ort e.g.	data	
loggers:			
17c) Confirmation that no dangerous amount of heat is emitted		X	
from the equipment			
17d)Confirmation that the equipment when transported by air		X	
fulfills the defined air transport standards for electromagnetic			
radiation according to DO-160			

Place, Date	Title, Surname, First Name	Company stamp and
		Signature
2019-12-05	Sales manager Lily Peng	SOFT STATE OF STATE O