LITHIUM BATTERY TEST SUMMARY AND SUPPLIER INQUIRY

In accordance with sub-section 38.3 of Manual of Tests and Criteria (6 pages)

(N/A = Not Applicable)

1 Name/Description of battery

CR 2 Lithium 3V

1a Name / Description of the cells inside the battery

Lithium manganese dioxide

The test summary of the cells inside the battery must either be presented or under checkpoint 9 and 9a it must be confirmed that UN38.3 test summary for the cells is available

2 Manufacturer of battery

Name: Wuhan Lixing Power Sources Co., Ltd

Address: University Gorden Road East Lake High Tech – Tech Dev. Zone, Wuhan, China 430223

Phone: +86 27-87920955

Email: sales@lisun.com

Website: www.lisun.com

2a Manufacturer of the equipment (if the battery is contained in equipment)

Name: Ningbo Dongxing Electric Co., Ltd

Address: Fenglin Industrial Development Zone, Qiaotou Town, Cixi, Ningbo, Zhejiang, China

Phone: +86 574-63556669

Email: sales@dongxingcn.com

Website: www.dongxingcn.com

3 Test laboratory of battery

Name: PONY Testing International Group

Address_____

Phone _____

Email _____

Website: www.ponytest.com

4 ID-number and date

Unique test report identification number: E04013011119D~1

Date of test report _____

DESCRIPTION OF BATTERY

Name / Description of battery **CR 2 Lithium 3V**

5 Mark the type of battery

Lithium ion battery	YES / NO ____NO
Lithium hybrid battery	YES / NO ____NO
Lithium metal battery	YES / NO ____YES

6 Parameters

Mass in gram (g)	11 g
Lithium ion: Indicate watt hour rating (Wh)	_____
Lithium metal: Indicate lithium metal content in gram (g)	0.30 g
Lithium hybrid: Indicate lithium metal content in gram (g) and watt-hour rating (Wh)	_____

7 Physical description of battery

Cylindrical battery

8 Model numbers

TEST AND RESULTS

9 List of tests conducted and results (Mark N/A, pass or fail with "X" means yes)

		N/A	Pass	Fail
T1	Altitude simulation		X	
T2	Thermal test		X	
T3	Vibration		X	
T4	Shock		X	
T5	External Short Circuit		X	
T6	Impact – for cylindrical cells having a diameter of at least 18 mm See check point 1a and 9a		X	
T6	Crush - for prismatic cells, pouch cells, button cells and cylindrical cells having a diameter of less than 18 mm. See check point 1a and 9a		X	
T7	Overcharge		X	
T8	Forced Discharge, only valid for cells. See check point 1a and 9a		X	

9a UN 38.3 Test Confirmation for the Cells inside the battery

When no separate document for the cells is provided, this confirms that the cells inside the battery (see checkpoint 1a) have successfully passed the UN38.3 test. In this case under checkpoint 9 the T6 and T8 must be marked as "passed" and here under 9a "Cell UN38.3 Test confirmed needs to be ticked.

Cell UN38.3 Test confirmed	Cell UN38.3 Test Not confirmed
Yes	

10 Reference to assembled battery testing requirements

https://pdf.directindustry.com/pdf/wuhan-lixing-torch-power-sources-co-ltd/lithium-battery-lisun-brand-primary-lithium-manganese-battery-cr2pdf/163833-667237.html

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

12 Quality management system for manufacturing batteries

Does the manufacturer of the battery manufacture the products based on a documented quality management system according to transport regulations?

Yes	

13 Are the following parameters exceeded?

Lithium ion battery: more than 100 Wh

Lithium metal battery: more than 2 g Lithium

Lithium hybrid Battery: more than 1,5 g Lithium and/or more than 10 Wh

	NO

	No

Check point 14 – 16 need to be answered when 13 has been ticked "YES":

14 Does each battery incorporates a safety venting device or is designed to preclude a violent rupture under normal conditions or carriage?

Yes	

15 Is each battery equipped with an effective means of preventing external short circuits?

Yes	

16 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.)?

	No

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

	No

BATTERIES INSTALLED IN EQUIPMENT

18 Check point 18 needs to be answered when the batteries are installed in articles

18a Only button cells enclosed

	No

18b Number of enclosed batteries per equipment: 1

When the equipment is intentionally active / switched on during transport e.g. data loggers:

18c Confirmation that no dangerous amount of heat is emitted from the equipment

	No

18d Confirmation that the equipment when transported by air fulfills the defined air transport standards for electromagnetic radiation according to DO-160

Not available	

19 Place, Date

Garching, 22.01.2020

20 Title, Surname, First name

Product manager, Jeong Helen

21 Company stamp and signature

LEDVANCE GmbH