



URS PRODUCTS AND TESTING PRIVATE LIMITED

F-3, Sector-6 Noida-201301
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CIN NO U21014UP1987PTC008956



SUMMARY OF TEST REPORT

TEST REPORT NO: URS/TEE/RID/20-21/1561

DATED: 08/01/2021

(Number of pages in test report: Page no. 1 to 47)

TEST FORMAT AS PER IS 16046(Part 2):2018/IEC 62133-2:2017

1.Name of Manufacturer: SHENZHEN EAST LINE COMMUNICATION TECH CO LTD

2.Product: Rechargeable Li-ion Battery

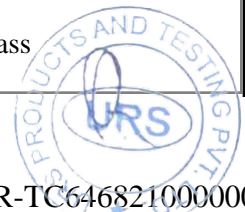
3. Model(s): Lead Model: 623450EL, Series Model: 063450AR, 623452EL, 623453EL, 623455EL, 623456EL, 623457EL

4.Model differences provided (if applicable): Yes

5.Model differences verified as per MEITY Guidelines for series formulation: Yes

6.Test Results: See below

S No.	TEST REQUIREMENT	CLAUSE	VERDICT
1	Parameter measurement tolerances	4.0	Pass
2	General safety considerations	5.0	Pass
3	Venting	5.3	Pass
4	Temperature/Current management	5.4	Pass
5	Terminal contacts	5.5	Pass
6	Assembly of cells into batteries	5.6	Pass
7	Quality plan	5.7	Pass
8	Battery safety components	5.8	Pass
9	Type test and sample size	6.0	Pass
10	Charging procedure for test purposes	7.1	Pass
11	Intended use	7.2	Pass
12	Reasonably foreseeable misuse	7.3	Pass
13	Information for Safety	8.0	Pass
14	Marking	9.0	Pass
15	Packaging and transport	10.0	Pass
16	Charging and discharging range of secondary lithium ion cells for safe use	ANNEX A	Pass





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17	Recommendations to equipment manufacturers and battery assemblers	ANNEX B	Pass
18	Recommendation to the end-users	ANNEX C	Pass
19	Measurement of internal ac resistance for coin cells	ANNEX D	N/A
20	Packing and transport	ANNEX E	Pass
21	Component standards references	ANNEX F	Pass

General Information:

The conformity certificates of critical components are verified to ensure complete testing of apparatus under test and details regarding harmonized IEC standards (where IEC standards are not available) are also provided in the list of critical component.

CONCLUSION:

- 1) Sample meets all relevant requirements of IS 16046(Part 2):2018/IEC 62133-2:2017: YES
- 2) Sample fails to meet the following test requirements: N/A
- 3) I hereby, undertake that the verdict stated in the test report for all the tests matches with the test results.

(Signature of Authorized person with Stamp)



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Manufacturer	SHENZHEN EAST LINE COMMUNICATION TECH CO LTD NO.301, PLANT 4, NO.6 NANLING NORTH ROAD, NANLING COMMUNITY, LONGGANG, SHENZHEN, GUANGDONG, CHINA, 518114		
Test item:	Rechargeable Li-ion Battery		
Identification	Lead Model:623450EL Series Model:063450AR, 623452EL, 623453EL, 623455EL, 623456EL, 623457EL	Serial No.:	Nil
Receipt No.:	URS/TEE/SBLS/20-21/1951	Date of receipt:	29/12/2020
Testing laboratory and its address:	URS PRODUCTS AND TESTING PRIVATE LIMITED F-3, Sector-6 Noida-201301		
Test specification:	IS 16046 (Part 2):2018 / IEC 62133-2:2017		
Test Result:	The test item passed the test specification(s)		
Other Aspects:	<p>- Equipment under test (EUT) is Rechargeable Li-ion Battery Lead Model "623450EL" has been tested as per IS 16046 (Part 2):2018 / IEC 62133-2:2017 complies to all the applicable parameters.</p> <p>- P=Pass, F=Fail, N/A=Not Applicable</p> <p>- Compliance statement in this report has been made considering decision rule as inherent in its test standard and latest version of ILAC G-8.</p>		
This test report relates to the test sample submitted and list of documents attached.			
Tested by:	Approved by / Authorized Signatory:	Issued by:	
Karmveer Kumar , Analyst	Md Fakhre Alam , Sr. Technical Manager	Ankit Kumar , Manager Technical	
08/01/2021	08/01/2021	08/01/2021	



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TEST REPORT

IS 16046 (Part 2):2018 / IEC 62133-2:2017

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 Applications Part 2 Lithium Systems

Report Reference No. :	URS/TEE/RID/20-21/1561
Date of issue :	08/01/2021
Total number of pages	47
Testing Laboratory	URS PRODUCTS AND TESTING PRIVATE LIMITED
Address	F-3, Sector-6 Noida-201301
Manufacturer's name :	SHENZHEN EAST LINE COMMUNICATION TECH CO LTD
Address	NO.301, PLANT 4, NO.6 NANLING NORTH ROAD, NANLING COMMUNITY, LONGGANG, SHENZHEN, GUANGDONG, CHINA, 518114
Test specification:	
Standard	IS 16046 (Part 2):2018 / IEC 62133-2:2017
Test procedure	BIS Compliance Report
Non-standard test method	N/A
Test Report Form No:	BIS_BAT/SCAB_IS16046(PART2)_V1.0
Test Report Form(s) Originator	Bureau of Indian Standards
Master TRF	10.01.2019
Test item description:	Rechargeable Li-ion Battery
Trade Mark	EASTLANE
Model/Type reference	Lead Model:623450EL Series Model:063450AR, 623452EL, 623453EL, 623455EL, 623456EL, 623457EL
Ratings	Nominal Voltage: 3.7Vdc, Rated Capacity: 1000mAh (3.7Wh) (Copy of marking label page no. 05)
Other Documents submitted	Please refer to table – List of attachments at page no. 04

Tested by:	Approved by / Authorized Signatory:	Issued by:
Karmveer Kumar , Analyst	Md Fakhre Alam , Sr. Technical Manager	Ankit Kumar , Manager Technical
08/01/2021	08/01/2021	08/01/2021



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Description	Measurement/ testing	Total No. of tests	Total no. of applicable tests/ Req.	No. of tests/ Req. passed	Page No.
General Requirements	Parameter measurement tolerances	01	01	01	12
General safety considerations	Insulation and wiring	09	07	07	13
General safety considerations	Venting	03	03	03	14
General safety considerations	Temperature/voltage/Current management	04	04	04	15
General safety considerations	Terminal contacts	04	04	04	16
General safety considerations	Assembly of cells into batteries	23	14	14	17
General safety considerations	Quality plan	02	02	02	20
General safety considerations	Battery safety components	02	02	02	21
Type test and sample size	Type test conditions	06	05	05	22
Specific requirements and tests	Charging procedure for test purposes	09	06	06	23
Specific requirements and tests	Intended use	07	04	04	24
Specific requirements and tests	Reasonably foreseeable misuse	48	21	21	25
Information for safety	Information for safety	12	06	06	28
Marking Requirements	Marking	16	07	07	30
Packaging and Transport	Packaging	03	02	02	32
Charging and discharging range of secondary lithium ion cells for safe use	Charging and discharging range of secondary lithium ion cells for safe use (Annex A)	51	10	10	33
Measurement of the internal AC resistance for coin cells	Measurement of the internal AC resistance for coin cells (Annex D)	06	00	N/A	37

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

(Approving Authority)





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Table – List of Attachments

Attachment No.	Attachment Description	No. of pages in Attachment
Attachment-1	Photo document	45-47





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Dated : 08/01/2021

Copy of marking plate:

Copy of marking label:

Rechargeable Li-ion Battery
Designation: 11CP6/34/50
Model: 623450EL
Rated Capacity: 1000mAh (3.7Wh)
Nominal Voltage: 3.7V
Charging Voltage: 4.2V
Polarity: Red line +, Black line -, Green line resistance NTC47K
Warning: May explode if put into fire
1. Use only approved charger manufacturers
2. Do not heat the battery and close to the fire
3. Do not reverse polarity or short circuit
4. Do not disassemble
Date of manufacture: 2 Oct. , 2020
EASTLANE
MADE IN CHINA
Shenzhen East Line Communication Tech Co Ltd.

Marking Label of Lead Model

Rechargeable Li-ion Battery
Designation: 11CP6/34/50
Model: 063450AR
Rated Capacity: 1000mAh (3.7Wh)
Nominal Voltage: 3.7V
Charging Voltage: 4.2V
Polarity: Red line +, Black line -, Green line resistance NTC47K
Warning: May explode if put into fire
1. Use only approved charger manufacturers
2. Do not heat the battery and close to the fire
3. Do not reverse polarity or short circuit
4. Do not disassemble
Date of manufacture: 2 Oct. , 2020
EASTLANE
MADE IN CHINA
Shenzhen East Line Communication Tech Co Ltd.

Marking Label of Series Model





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Dated : 08/01/2021

Rechargeable Li-ion Battery
 Designation: 1ICP5/34/50
 Model: 623452EL
 Rated Capacity: 850mAh (3.145 Wh)
 Nominal Voltage: 3.7V
 Charging Voltage: 4.2V
 Polarity: Red line +, Black line -, Green line resistance NTC47K

 **Warning:** May explode if put into fire 

RECYCLABLE

1. Use only approved charger manufacturers
 2. Do not heat the battery and close to the fire
 3. Do not reverse polarity or short circuit
 4. Do not disassemble

Date of manufacture :2 Oct. , 2020

EASTLANE

MADE IN CHINA
 Shenzhen East Line Communication Tech Co Ltd

Marking Label of Series Model

Rechargeable Li-ion Battery
 Designation: 1ICP5/34/50
 Model: 623453EL
 Rated Capacity: 800mAh (2.96Wh)
 Nominal Voltage: 3.7V
 Charging Voltage: 4.2V
 Polarity: Red line +, Black line -, Green line resistance NTC47K

 **Warning:** May explode if put into fire 

RECYCLABLE

1. Use only approved charger manufacturers
 2. Do not heat the battery and close to the fire
 3. Do not reverse polarity or short circuit
 4. Do not disassemble

Date of manufacture :2 Oct. , 2020

EASTLANE

MADE IN CHINA
 Shenzhen East Line Communication Tech Co Ltd

Marking Label of Series Model





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Rechargeable Li-ion Battery
 Designation: 1ICP6/34/50
 Model: 623455EL
 Rated Capacity: 700mAh (2.59Wh)
 Nominal Voltage: 3.7V
 Charging Voltage: 4.2V
 Polarity: Red line +, Black line -, Green line resistance NTC47K



RECYCLABLE

Warning:
May explode
if put into fire



1. Use only approved charger manufacturers
2. Do not heat the battery and close to the fire
3. Do not reverse polarity or short circuit
4. Do not disassemble

Date of manufacture: 2 Oct. , 2020

EASTLANE

MADE IN CHINA

Shenzhen East Line Communication Tech Co Ltd

Marking Label of Series Model

Rechargeable Li-ion Battery
 Designation: 1ICP6/34/50
 Model: 623456EL
 Rated Capacity: 600mAh (2.22Wh)
 Nominal Voltage: 3.7V
 Charging Voltage: 4.2V
 Polarity: Red line +, Black line -, Green line resistance NTC47K



RECYCLABLE

Warning:
May explode
if put into fire



1. Use only approved charger manufacturers
2. Do not heat the battery and close to the fire
3. Do not reverse polarity or short circuit
4. Do not disassemble

Date of manufacture: 2 Oct. , 2020

EASTLANE

MADE IN CHINA

Shenzhen East Line Communication Tech Co Ltd

Marking Label of Series Model





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Dated : 08/01/2021

Rechargeable Li-ion Battery

Designation: 1ICP6/34/50

Model: 623457EL

Rated Capacity: 500mAh (1.85Wh)

Nominal Voltage: 3.7V

Charging Voltage: 4.2V

Polarity: Red line +, Black line -, Green line resistance NTC47K



RECYCLABLE

Warning:
May explode
if put into fire



1. Use only approved charger manufacturers
2. Do not heat the battery and close to the fire
3. Do not reverse polarity or short circuit
4. Do not disassemble

Date of manufacture: 2 Oct. , 2020

EASTLANE

MADE IN CHINA

Shenzhen East Line Communication Tech Co Ltd

Marking Label of Series Model





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Dated : 08/01/2021		

Test item particulars	Rechargeable Li-ion Battery
Classification of installation and use	Class III & used in the portable application
Supply Connection	Not directly connected to mains
Recommend charging method declared by the manufacturer	CC/CV
Discharge current (0,2 It A)	200mA
Specified final voltage	4.20V
Upper limit charging voltage per cell	4.20V
Maximum charging current	500mA
Charging temperature upper limit	45°C
Charging temperature lower limit	0°C
Polymer cell electrolyte type <input type="checkbox"/> gel polymer <input type="checkbox"/> solid polymer <input checked="" type="checkbox"/> NA	
Possible test case verdicts:	
- test case does not apply to the test object:	N/A
- test object does meet the requirement :	P (Pass)
- test object does not meet the requirement :	F (Fail)
Testing:	
Date of receipt of test item:	29/12/2020
Date(s) of performance of tests:	29/12/2020 to 08/01/2021
General remarks:	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.	
Laboratory conditions	
Ambient Temperature:	(20±5)°C
Ambient Humidity:	(60±15)%RH





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Dated : 08/01/2021

General product information:

1) Application details / Description of the product:

The Equipment under test (EUT) is Rechargeable Li-ion Battery Lead Model "623450EL" has been tested as per IS 16046 (Part 2):2018 / IEC 62133-2:2017 complies to all the applicable parameters.

Equipment under test (EUT) details mention below:

Equipment Name: Rechargeable Li-ion Battery

Brand Name: **EASTLANE**

Model Name: Lead Model: 623450EL, Series Model: 063450AR, 623452EL, 623453EL, 623455EL, 623456EL, 623457EL

Electrical Rating: Nominal Voltage: 3.7Vdc, Rated Capacity: 1000mAh (3.7Wh)

(Copy of marking label page no. 05)

Model	Standard Charging Voltage (Vdc)	Standard Charging Current (mA)	Maximum Charging Current (mA)	Discharging Current (mA)	End Discharge Voltage (Vdc)	Cut-off Current(mA)
623450EL	4.20	200	500	200	3.0	20

Max. specified ambient temperature (°C) : Charging temp. Range: 0°C ~ + 45°C, Discharge temp. Range: -20°C ~ + 60°C

2) Differences between the models:

Similarities:

- a) Same Nominal Voltage
- b) Cells of same construction Design
- c) Same type of Electrode/Electrolytes used

Differences:

- a) Model Name
- b) Rated Capacity

Model Name	Voltage (V)	Capacity(mAh)
623450EL (Lead Model)	3.7V	1000mAh
063450AR	3.7V	1000mAh
623452EL	3.7V	850mAh
623453EL	3.7V	800mAh
623455EL	3.7V	700mAh
623456EL	3.7V	600mAh
623457EL	3.7V	500mAh





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Dated : 08/01/2021

Model No. tested with-in the family series

623450EL (Worst Case)

3) Options:

The equipment was tested without any optional accessory installed. Hence, this report does not cover parameters that are influenced by the installation of optional accessory that might affect safety in the meaning of this standard.





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Clause	Requirement + Test	Result - Remark	Verdict
4	Parameter measurement tolerances	All controlled and measured values were within the tolerances.	P

*- Total number of Requirements to be observed / inspected =01
 Total No. of applicable Requirement =01
 No. of Requirements for which the sample passed =01
 Total number of tests to be conducted =00
 Total No. of applicable Tests =00
 No. of tests for which the sample passed =N/A

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.





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Clause	Requirement + Test	Result - Remark	Verdict
5	GENERAL SAFETY CONSIDERATIONS	See below	P
5.1	General	The battery is safe and Continue to function in all respect of its intended use, the battery is safe and does not present significant Hazards under the condition of reasonably foreseeable misuse	P
	Cells and batteries so designed and constructed that they are safe under conditions of both intended use and reasonably foreseeable misuse	Complied	P
5.2	Insulation and wiring	See below	P
	The insulation resistance between the positive terminal and externally exposed metal surfaces of the battery (excluding electrical contact surfaces) is not less than 5 MΩ	No conductive part in the Outer case	N/A
	Insulation resistance (MΩ) :	As above	N/A
	Internal wiring and insulation are sufficient to withstand maximum anticipated current, voltage and temperature requirements	In compliance	P
	Orientation of wiring maintains adequate clearance and creepage distances between conductors	As above	P
	Mechanical integrity of internal connections accommodates reasonably foreseeable misuse	Complied	P

*- Total number of Requirements to be observed / inspected =09
 Total No. of applicable Requirement =07
 No. of Requirements for which the sample passed =07
 Total number of tests to be conducted =00
 Total No. of applicable Tests =00
 No. of tests for which the sample passed =N/A

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.



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Dated : 08/01/2021		

Clause	Requirement + Test	Result - Remark	Verdict
5.3	Venting	See below	P
	Battery cases and cells incorporate a pressure relief mechanism or are constructed so that they relieve excessive internal pressure at a value and rate that will preclude rupture, explosion and self-ignition	The open space near the terminal was considered as the pressure relief mechanism, which can release the pressure during the abnormal operation	P
	Encapsulation used to support cells within an outer casing does not cause the battery to overheat during normal operation nor inhibit pressure relief	No overheat during normal operation nor inhibit pressure relief	P

*- Total number of Requirements to be observed / inspected =01
 Total No. of applicable Requirement =01
 No. of Requirements for which the sample passed =01
 Total number of tests to be conducted =02
 Total No. of applicable Tests =02
 No. of tests for which the sample passed =02
 Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.



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Dated : 08/01/2021		

Clause	Requirement + Test	Result - Remark	Verdict
5.4	Temperature, voltage and current management	See below	P
	Batteries are designed such that abnormal temperature rise conditions are prevented	Batteries are designed with abnormal temperature rise protection	P
	Batteries are designed to be within temperature, voltage and current limits specified by the cell manufacturer	Overcharge, over-discharge, over current and short circuit proof circuit used in the battery	P
	Batteries are provided with specifications and charging instructions for equipment manufacturers so that specified chargers are designed to maintain charging within the temperature, voltage and current limits specified	Satisfactory	P

*- Total number of Requirements to be observed / inspected =00
 Total No. of applicable Requirement =00
 No. of Requirements for which the sample passed =N/A
 Total number of tests to be conducted =04
 Total No. of applicable Tests =04
 No. of tests for which the sample passed =04

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.





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Clause	Requirement + Test	Result - Remark	Verdict
5.5	Terminal contacts	See below	P
	The size and shape of the terminal contacts ensure that they can carry the maximum anticipated current	The terminal contacts are designed to carry the maximum anticipated current	P
	External terminal contact surfaces are formed from conductive materials with good mechanical strength and corrosion resistance	No hazard present	P
	Terminal contacts are arranged to minimize the risk of short-circuit	No hazard present	P

*- Total number of Requirements to be observed / inspected =00
 Total No. of applicable Requirement =00
 No. of Requirements for which the sample passed =N/A
 Total number of tests to be conducted =04
 Total No. of applicable Tests =04
 No. of tests for which the sample passed =04
 Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.



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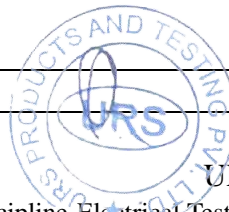
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Clause	Requirement + Test	Result - Remark	Verdict
5.6	Assembly of cells into batteries	See below	P
5.6.1	General	Refer below	P
	Each battery have an independent control and protection for current, voltage, temperature and any other parameter required for safety and to maintain the cells within their operating region	Satisfactory	P
	This protection may be provided external to the battery such as within the charger or the end devices	Protection is provided within the battery	N/A
	If protection is external to the battery, the manufacturer of the battery provide this safety relevant information to the external device manufacturer for implementation	There is no such type of construction	N/A
	If there is more than one battery housed in a single battery case, each battery have protective circuitry that can maintain the cells within their operating regions	There is no such type of construction	N/A
	Manufacturers of cells specify current, voltage and temperature limits so that the battery manufacturer/designer may ensure proper design and assembly	Battery is designed within the recommended cell specifications	P
	Batteries that are designed for the selective discharge of a portion of their series connected cells incorporate circuitry to prevent operation of cells outside the limits specified by the cell manufacturer	Batteries are not designed for selective discharge	N/A
	Protective circuit components added as appropriate and consideration given to the end-device application	Protective circuit components are used in the battery	P
	The manufacturer of the battery provide a safety analysis of the battery safety circuitry with a test report including a fault analysis of the protection circuit under both charging and discharging conditions confirming the compliance	Safety analysis of the battery safety circuitry is provided in the Manufacturer specification	P
5.6.2	Design recommendation	See below	P





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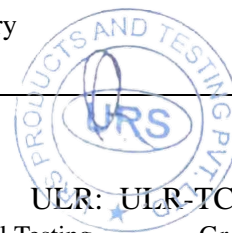
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	For the battery consisting of a single cell or a single cellblock, it is recommended that the charging voltage of the cell does not exceed the upper limit of the charging voltage specified in Table 2	The charging voltage of the cell did not exceed the upper limit of charging voltage specified in Table 2	P
	For the battery consisting of series-connected plural single cells or series-connected plural cellblocks, it is recommended that the voltages of any one of the single cells or single cellblocks does not exceed the upper limit of the charging voltage, specified in Table 2, by monitoring the voltage of every single cell or the single cellblocks	Only one cell is used within the battery	N/A
	For the battery consisting of series-connected plural single cells or series-connected plural cellblocks, it is recommended that charging is stopped when the upper limit of the charging voltage is exceeded for any one of the single cells or single cellblocks by measuring the voltage of every single cell or the single cellblocks	As above	N/A
	For batteries consisting of series-connected cells or cell blocks, nominal charge voltage not be counted as an overcharge protection	As above	N/A
	For batteries consisting of series-connected cells or cell blocks, cells have closely matched capacities, be of the same design, be of the same chemistry and be from the same manufacturer	As above	N/A
	It is recommended that the cells and cell blocks not discharged beyond the cell manufacturer's specified final voltage	Complies	P
	For batteries consisting of series-connected cells or cell blocks, cell balancing circuitry incorporated into the battery management system	Only one cell is used within the battery	N/A



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5.6.3	Mechanical protection for cells and components of batteries	Complies	P
	Mechanical protection for cells, cell connections and control circuits within the battery provided to prevent damage as a result of intended use and reasonably foreseeable misuse	Protection provided by the end product enclosure, as battery is intended for building into an end product	P
	The mechanical protection can be provided by the battery case or it can be provided by the end product enclosure for those batteries intended for building into an end product	Battery is used as a build into an end product with enclosure for the battery	P
	The battery case and compartments housing cells designed to accommodate cell dimensional tolerances during charging and discharging as recommended by the cell manufacturer	Complied	P
	For batteries intended for building into a portable end product, testing with the battery installed within the end product considered when conducting mechanical tests	Complied	P

*- Total number of Requirements to be observed / inspected =23
 Total No. of applicable Requirement =14
 No. of Requirements for which the sample passed =14
 Total number of tests to be conducted =00
 Total No. of applicable Tests =00
 No. of tests for which the sample passed =N/A

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.





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Clause	Requirement + Test	Result - Remark	Verdict
5.7	Quality plan	See below	P
	The manufacturer prepares and implements a quality plan that defines procedures for the inspection of materials, components, cells and batteries and which covers the whole process of producing each type of cell or battery	The manufactures provide an ISO 9001 Certificate for reference	P

*- Total number of Requirements to be observed / inspected =00
 Total No. of applicable Requirement =00
 No. of Requirements for which the sample passed =N/A
 Total number of tests to be conducted =02
 Total No. of applicable Tests =02
 No. of tests for which the sample passed =02

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Clause	Requirement + Test	Result - Remark	Verdict
5.8	Battery safety components	See below	P
	According annex F	Components are referred from there respective Standards (See List of critical Components page)	P

*- Total number of Requirements to be observed / inspected =00
 Total No. of applicable Requirement =00
 No. of Requirements for which the sample passed =N/A
 Total number of tests to be conducted =02
 Total No. of applicable Tests =02
 No. of tests for which the sample passed =02
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Clause	Requirement + Test	Result - Remark	Verdict
6	TYPE TEST AND SAMPLE SIZE	See below	P
	Tests are made with the number of cells or batteries specified in Table 1 using cells or batteries that are not more than six months old	Provided Samples are complied within 6 month from the manufacturing date	P
	Coin cells with resistance $\leq 3 \Omega$ (measured according annex D) are tested according table 1	This is consider for only Coin Cell	N/A
	Unless otherwise specified, tests are carried out in an ambient temperature of $20 \text{ }^\circ\text{C} \pm 5 \text{ }^\circ\text{C}$	Tests are carried out in an ambient temperature of $20 \text{ }^\circ\text{C} \pm 5 \text{ }^\circ\text{C}$	P
	The safety analysis of 5.6.1 identify those components of the protection circuit that are critical for short-circuit, overcharge and overdischarge protection	Considered	P
	When conducting the short-circuit test, consideration given to the simulation of any single fault condition that is likely to occur in the protecting circuit that would affect the short-circuit test	Single fault condition is simulated in protecting circuit	P

*- Total number of Requirements to be observed / inspected =06
 Total No. of applicable Requirement =05
 No. of Requirements for which the sample passed =05
 Total number of tests to be conducted =00
 Total No. of applicable Tests =00
 No. of tests for which the sample passed =N/A

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Clause	Requirement + Test	Result - Remark	Verdict
7	SPECIFIC REQUIREMENTS AND TESTS	See below	P
7.1	Charging procedure for test purposes	In compliance	P
7.1.1	First procedure	see below	P
	This charging procedure applies to subclauses other than those specified in 7.1.2	Except Procedure specified in Clause No. 7.1.2 First procedure used	P
	Unless otherwise stated in this document, the charging procedure for test purposes is carried out in an ambient temperature of 20 °C ± 5 °C, using the method declared by the manufacturer	The Battery were charged at an ambient temperature of (20°C ± 5°C) according to manufacture specification	P
	Prior to charging, the battery have been discharged at 20 °C ± 5 °C at a constant current of 0,2 It A down to a specified final voltage	Complied	P
7.1.2	Second procedure	See below	N/A
	This charging procedure applies only to 7.3.1, 7.3.4, 7.3.5, and 7.3.9	Not applicable for battery pack	N/A
	After stabilization for 1 h and 4 h, respectively, at ambient temperature of highest test temperature and lowest test temperature, as specified in Table 2, cells are charged by using the upper limit charging voltage and maximum charging current, until the charging current is reduced to 0,05 It A, using a constant voltage charging method	As above	N/A

*- Total number of Requirements to be observed / inspected =01
 Total No. of applicable Requirement =01
 No. of Requirements for which the sample passed =01
 Total number of tests to be conducted =08
 Total No. of applicable Tests =05
 No. of tests for which the sample passed =05
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Clause	Requirement + Test	Result - Remark	Verdict
7.2	Intended use	See below	N/A
7.2.1	Continuous charging at constant voltage (cells)	Safety certified cell used (See appended table 1)	N/A
	Fully charged cells are subjected for 7 days to a charge using the charging method for current and standard voltage specified by the cell manufacturer	As above	N/A
	Results: No fire. No explosion. No leakage	As above	N/A
7.2.2	Case stress at high ambient temperature (battery)	Complies	P
	Oven temperature (°C)	Three batteries were fully charged according to Cl. 7.1.1 and tested for case stress at high temperature condition 70°C±2°C for 7hours	P
	Results: No physical distortion of the battery case resulting in exposure of internal protective components and cells	No physical distortion of the battery case resulting in exposure of internal protective components and cells	P

*- Total number of Requirements to be observed / inspected =05
 Total No. of applicable Requirement =03
 No. of Requirements for which the sample passed =03
 Total number of tests to be conducted =02
 Total No. of applicable Tests =01
 No. of tests for which the sample passed =01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.





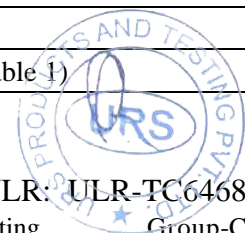
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Clause	Requirement + Test	Result - Remark	Verdict
7.3	Reasonably foreseeable misuse	See below	P
7.3.1	External short-circuit (cell)	See below	N/A
	The cells were tested until one of the following occurred:	Safety certified cell used (See appended table 1)	N/A
	- 24 hours elapsed; or	As above	N/A
	- The case temperature declined by 20 % of the maximum temperature rise	As above	N/A
	Results: No fire. No explosion	As above	N/A
7.3.2	External short-circuit (battery)	Complied	P
	The batteries were tested until one of the following occurred:	See below	P
	- 24 hours elapsed; or	Batteries are tested for 24hrs	P
	- The case temperature declined by 20 % of the maximum temperature rise	No such condition observed	N/A
	In case of rapid decline in short circuit current, the battery pack remained on test for an additional one hour after the current reached a low end steady state condition	No such condition observed	N/A
	A single fault in the discharge protection circuit conducted on one to four (depending upon the protection circuit) of the five samples before conducting the short-circuit test	Complies	P
	A single fault applies to protective component parts such as MOSFET, fuse, thermostat or positive temperature coefficient (PTC) thermistor	A single fault applies to protective component parts such as Mosfet.	P
	Results: No fire. No explosion	No fire, No explosion observed (See appended table 7.3.2)	P
7.3.3	Free fall	Fully charged Batteries tested according to cl.no 7.3.3, The testing was conducted at 20°C ± 5°C	P
	Results: No fire. No explosion	No fire, No explosion	P
7.3.4	Thermal abuse (cells)	Safety certified cell used (See appended table 1)	N/A
	Oven temperature (°C)	As above	N/A
	Results: No fire. No explosion	As above	N/A
7.3.5	Crush (cells)	Safety certified cell used (See appended table 1)	N/A





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	The crushing force was released upon:	As above	N/A
	- The maximum force of 13 kN ± 0,78 kN has been applied; or	As above	N/A
	- An abrupt voltage drop of one-third of the original voltage has been obtained	As above	N/A
	Results: No fire. No explosion	As above	N/A
7.3.6	Over-charging of battery	Complied	P
	The supply voltage which is:	See below	P
	- 1,4 times the upper limit charging voltage presented in Table A.1 (but not to exceed 6,0 V) for single cell/cell block batteries or	1.4 times upper limit charging voltage per cell are applied.	P
	- 1,2 times the upper limit charging voltage resented in Table A.1 per cell for series connected multi-cell batteries, and	Single cell used	N/A
	- Sufficient to maintain a current of 2,0 It A throughout the duration of the test or until the supply voltage is reached	Sufficient to maintain a current of 2,0 It A throughout the duration of the test	P
	Test was continued until the temperature of the outer casing:	See below	P
	- Reached steady state conditions (less than 10 °C change in 30-minute period); or	No such condition is observed	N/A
	- Returned to ambient	Case temperature returns to ambient	P
	Results: No fire. No explosion	No fire, No explosion observed (See appended table 7.3.6)	P
7.3.7	Forced discharge (cells)	Safety certified cell used (See appended table 1)	N/A
	If the discharge voltage reaches the negative value of upper limit charging voltage within the testing duration, the voltage is maintained at the negative value of the upper limit charging voltage by reducing the current for the remainder of the testing duration	As above	N/A
	If the discharge voltage does not reach the negative value of upper limit charging voltage within the testing duration, the test is terminated at the end of the testing	As above	N/A





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	duration		
	Results: No fire. No explosion	As above	N/A
7.3.8	Mechanical tests (batteries)	Complied	P
7.3.8.1	Vibration	Three fully charge batteries are tested according to cl.no.7.3.8.1	P
	Results: No fire, no explosion, no rupture, no leakage or venting.	No fire, No explosion, no rupture, No leakage or venting is observed (See appended table 7.3.8.1)	P
7.3.8.2	Mechanical shock	Three fully charge batteries are tested according to cl.no.7.3.8.2	P
	Results: No leakage, no venting, no rupture, no explosion and no fire	No fire, No explosion, no rupture, no leakage or venting is observed (See appended table 7.3.8.2)	P
7.3.9	Design evaluation – Forced internal short-circuit (cells)	This is country specific test applicable only in France, Japan, Korea & Switzerland	N/A
	The cells complied with national requirement for	As above	N/A
	The pressing was stopped upon:	As above	N/A
	- A voltage drop of 50 mV has been detected; or	As above	N/A
	- The pressing force of 800 N (cylindrical cells) or 400 N (prismatic cells) has been reached	As above	N/A
	Results: No fire	As above	N/A

*- Total number of Requirements to be observed / inspected =12
 Total No. of applicable Requirement =07
 No. of Requirements for which the sample passed =07
 Total number of tests to be conducted =36
 Total No. of applicable Tests =14
 No. of tests for which the sample passed =14

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.



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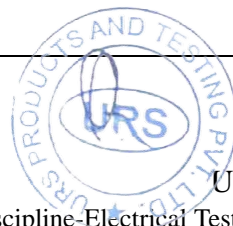
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Clause	Requirement + Test	Result - Remark	Verdict
8	INFORMATION FOR SAFETY	Complied	P
8.1	General	See below	P
	Manufacturers of secondary cells ensure that information is provided about current, voltage and temperature limits of their products	This is not a secondary cell	N/A
	Manufacturers of batteries ensure that equipment manufacturers and, in the case of direct sales, end-users are provided with information to minimize and mitigate hazards	Complied	P
	Systems analyses performed by device manufacturers to ensure that a particular battery design prevents hazards from occurring during use of a product	Complied	P
	As appropriate, any information relating to hazard avoidance resulting from a system analysis provided to the end user	Complied	P
	Do not allow children to replace batteries without adult supervision	Complied	P
8.2	Small cell and battery safety information	See below	N/A
	The following warning language is to be provided with the information packaged with the small cells and batteries or equipment using them:	This is not a Small Battery	N/A
	- Keep small cells and batteries which are considered swallowable out of the reach of children- Keep small cells and batteries which are considered swallowable out of the reach of children	As above	N/A
	- Swallowing may lead to burns, perforation of soft tissue, and death. Severe burns can occur within 2 h of ingestion	As above	N/A
	- In case of ingestion of a cell or battery, seek medical assistance promptly	As above	N/A





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*- Total number of Requirements to be observed / inspected =12

Total No. of applicable Requirement =06

No. of Requirements for which the sample passed =06

Total number of tests to be conducted =00

Total No. of applicable Tests =00

No. of tests for which the sample passed =N/A

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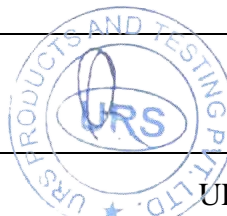
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Clause	Requirement + Test	Result - Remark	Verdict
9	MARKING	See below	P
9.1	Cell marking	EUT is Rechargeable Li-ion Battery	N/A
	Cells marked as specified in IEC 61960, except coin cells	As above	N/A
	Coin cells whose external surface area is too small to accommodate the markings on the cells show the designation and polarity	As above	N/A
	By agreement between the cell manufacturer and the battery and/or end product manufacturer, component cells used in the manufacture of a battery need not be marked	As above	N/A
9.2	Battery marking	See below	P
	Batteries marked as specified in IEC 61960, except for coin batteries	Marked (See copy of marking label page no. 5)	P
	Coin batteries whose external surface area is too small to accommodate the markings on the batteries show the designation and polarity. Batteries also marked with an appropriate caution statement	This is not a coin battery	N/A
	Terminals have clear polarity marking on the external surface of the battery	Clear marking provided on external surface of battery.	P
	Batteries with keyed external connectors designed for connection to specific end products need not be marked with polarity markings if the design of the external connector prevents reverse polarity connections	No external connector is used in the battery	N/A
9.3	Caution for ingestion of small cells and batteries	See below	N/A
	Coin cells and batteries identified as small batteries according to 8.2 include a caution statement regarding the hazards of ingestion in accordance with 8.2	This is not a coin cell and battery	N/A
	When small cells and batteries are intended for direct sale in consumer-replaceable applications, caution for	As above	N/A



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	ingestion given on the immediate package		
9.4	Other information	See below	P
	Storage and disposal instructions	Storage and Disposal Instruction provided on manufacturer specification	P
	Recommended charging instructions	Provided in the manufacturer Specification	P

*- Total number of Requirements to be observed / inspected =16
 Total No. of applicable Requirement =07
 No. of Requirements for which the sample passed =07
 Total number of tests to be conducted =00
 Total No. of applicable Tests =00
 No. of tests for which the sample passed =N/A

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Clause	Requirement + Test	Result - Remark	Verdict
10	PACKAGING AND TRANSPORT	See below	P
	Packaging for coin cells not small enough to fit within the limits of the ingestion gauge of Figure 3	This is not a Coin Cell	N/A
	The materials and packaging design are chosen so as to prevent the development of unintentional electrical conduction, corrosion of the terminals and ingress of environmental contaminants	Satisfactory	P

*- Total number of Requirements to be observed / inspected =01
 Total No. of applicable Requirement =01
 No. of Requirements for which the sample passed =01
 Total number of tests to be conducted =02
 Total No. of applicable Tests =01
 No. of tests for which the sample passed =01
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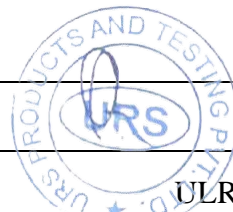
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Clause	Requirement + Test	Result - Remark	Verdict
ANNEX A	CHARGING AND DISCHARGING RANGE OF SECONDARY LITHIUM ION CELLS FOR SAFE USE	See below	P
A.1	General	Complies	P
A.2	Safety of lithium ion secondary battery	4.20V applied	P
A.3	Consideration on charging voltage	See below	P
A.3.1	General	Charging voltage applied as per manufacturer specification	P
A.3.2	Upper limit charging voltage	See below	P
A.3.2.1	General	Upper limit charging voltage of battery is 4.20V per Cell	P
A.3.2.2	Explanation of safety viewpoint	Charging voltage applied during the testing is with-in the upper limit	P
A.3.2.3	Safety requirements, when different upper limit charging voltage is applied	Considered	P
A.4	Consideration of temperature and charging current	See below	N/A
A.4.1	General	This is not applicable for battery pack	N/A
A.4.2	Recommended temperature range	As above	N/A
A.4.2.1	General	As above	N/A
A.4.2.2	Safety consideration when a different recommended temperature range is applied	As above	N/A
A.4.3	High temperature range	As above	N/A
A.4.3.1	General	As above	N/A
A.4.3.2	Explanation of safety viewpoint	As above	N/A
A.4.3.3	Safety considerations when specifying charging conditions in the high temperature range	As above	N/A
A.4.3.4	Safety considerations when specifying a new upper limit in the high temperature range	As above	N/A
A.4.4	Low temperature range	As above	N/A
A.4.4.1	General	As above	N/A
A.4.4.2	Explanation of safety viewpoint	As above	N/A
A.4.4.3	Safety considerations, when specifying charging conditions in the low temperature range	As above	N/A
A.4.4.4	Safety considerations when	As above	N/A





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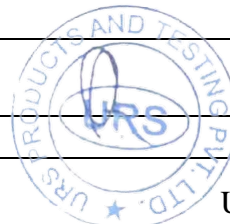
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	specifying a new lower limit in the low temperature range		
A.4.5	Scope of the application of charging current	In compliance	P
A.4.6	Consideration of discharge	See below	N/A
A.4.6.1	General	This is not applicable for battery pack	N/A
A.4.6.2	Final discharge voltage and explanation of safety viewpoint	As above	N/A
A.4.6.3	Discharge current and temperature range	As above	N/A
A.4.6.4	Scope of application of the discharging current	As above	N/A
A.5	Sample preparation	This is country specific test applicable only in France, Japan, Korea & Switzerland	N/A
A.5.1	General	As above	N/A
A.5.2	Insertion procedure for nickel particle to generate internal short	As above	N/A
A.5.3	Disassembly of charged cell	As above	N/A
A.5.4	Shape of nickel particle	As above	N/A
A.5.5	Insertion of nickel particle in cylindrical cell	As above	N/A
A.5.5.1	Insertion of nickel particle in winding core	As above	N/A
A.5.5.2	Marking the position of the nickel particle on both ends of the winding core of the separator	As above	N/A
A.5.6	Insertion of nickel particle in prismatic cell	As above	N/A
A.6	Experimental procedure of the forced internal short-circuit test	As above	N/A
A.6.1	Material and tools for preparation of nickel particle	As above	N/A
A.6.2	Example of a nickel particle preparation procedure	As above	N/A
A.6.3	Positioning (or placement) of a nickel particle	As above	N/A
A.6.4	Damaged separator precaution	As above	N/A
A.6.5	Caution for rewinding separator and electrode	As above	N/A
A.6.6	Insulation film for preventing short-circuit	As above	N/A
A.6.7	Caution when disassembling a cell	As above	N/A





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A.6.8	Protective equipment for safety	As above	N/A
A.6.9	Caution in the case of fire during disassembling	As above	N/A
A.6.10	Caution for the disassembling process and pressing the electrode core	As above	N/A
A.6.11	Recommended specifications for the pressing device	As above	N/A

*- Total number of Requirements to be observed / inspected =51
 Total No. of applicable Requirement =10
 No. of Requirements for which the sample passed =10
 Total number of tests to be conducted =00
 Total No. of applicable Tests =00
 No. of tests for which the sample passed =N/A

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.





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Clause	Requirement + Test	Verdict
ANNEX B	RECOMMENDATIONS TO EQUIPMENT MANUFACTURERS AND BATTERY ASSEMBLERS	P
Clause	Requirement + Test	Verdict
ANNEX C	RECOMMENDATIONS TO THE END-USERS	P





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Clause	Requirement + Test	Result - Remark	Verdict
ANNEX D	MEASUREMENT OF THE INTERNAL AC RESISTANCE FOR COIN CELLS	See below	N/A
D.1	General	This is not a coin cells	N/A
D.2	Method	As above	N/A
	A sample size of three coin cells is required for this measurement	As above	N/A
	Coin cells with an internal resistance of less than or equal to 3 Ω are subjected to the testing according to Clause 6 and Table 1	As above	N/A
	Coin cells with an internal resistance greater than 3 Ω require no further testing	As above	N/A

*- Total number of Requirements to be observed / inspected =06
 Total No. of applicable Requirement =00
 No. of Requirements for which the sample passed =N/A
 Total number of tests to be conducted =00
 Total No. of applicable Tests =00
 No. of tests for which the sample passed =N/A
 Certificate: It is certified that the above tests were performed and found to be not applicable in the requirement tested.





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Clause	Requirement + Test	Verdict
ANNEX E	PACKAGING AND TRANSPORT	P
Clause	Requirement + Test	Verdict
ANNEX F	COMPONENT STANDARDS REFERENCES	P





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TABLE: Critical components information

Object/part No.	Manufacturer/ trademark	Type/Model	Technical Data	Standard	Marks of Conformity
Cell for Lead model: 623450EL	Roofer Electronics Technology Shanwei Co Ltd	523450AR1000	3.7V, 1000mAh	IS 16046 (PART 2) : 2018/IEC 62133-2 : 2017	BIS R-41157074
Cell for series model: 063450AR	Roofer Electronics Technology Shanwei Co Ltd	523450AR1000	3.7V, 1000mAh	IS 16046 (PART 2) : 2018/IEC 62133-2 : 2017	BIS R-41157074
Cell for series model: 623452EL	Roofer Electronics Technology Shanwei Co Ltd	433450AR850	3.7V, 850mAh	IS 16046 (PART 2) : 2018/IEC 62133-2 : 2017	BIS R-41157074
Cell for series model: 623453EL	Roofer Electronics Technology Shanwei Co Ltd	433450AR800	3.7V, 800mAh	IS 16046 (PART 2) : 2018/IEC 62133-2 : 2017	BIS R-41157074
Cell for series model: 623455EL	Roofer Electronics Technology Shanwei Co Ltd	523450AR700	3.7V, 700mAh	IS 16046 (PART 2) : 2018/IEC 62133-2 : 2017	BIS R-41157074
Cell for series model: 623456EL	Roofer Electronics Technology Shanwei Co Ltd	523450AR600	3.7V, 600mAh	IS 16046 (PART 2) : 2018/IEC 62133-2 : 2017	BIS R-41157074
Cell for series model: 623457EL	Roofer Electronics Technology Shanwei Co Ltd	523450AR500	3.7V, 500mAh	IS 16046 (PART 2) : 2018/IEC 62133-2 : 2017	BIS R-41157074
IC	SHENZHEN CANSHENG INDUSTRY DEVELOPMENT CO.,LTD.	DW01	Overcharge Detection Voltage:4.30V±0.05V, Over-discharge Detection Voltage:2.4V±0.1V, Discharge Current threshold:0.15V±0.03V, Topr: -40°C to 85°C	IS 16046 (PART 2) : 2018/IEC 62133-2 : 2017	Tested with equipment
Mosfet	SHENZHEN CANSHENG INDUSTRY DEVELOPMENT CO.,LTD.	8205A	VDS: 20V, VGS: ±12V, ID: 6A (TA=25°C), TJ: -55°C to 150°C	IS 16046 (PART 2) : 2018/IEC 62133-2 : 2017	Tested with equipment
PCB	SHENZHEN XING BAO SHUN ELECTRONICS SCIENTIFIC CO LTD	XBS-9	V-0, 130°C	UL 796 (#)	UL: E361977
Enclosure	SABIC JAPAN L L C	EXRL0246 (GG)	V-0, 80°C	UL 94 (#)	UL: E207780
Lead wire	DONGGUAN HUMEN TOP RICH WIRE & CABLE FACTORY	1007	24AWG, 80°C, 300V	UL 758 (#)	UL: E315320
NTC	MURATA MFG CO LTD	NCP03WB473	Tmax (°C): 125°C, 47K(Ohm)	UL/IEC 60730-1	UL: E137188

Supplementary information:

- Evidence provided by the manufacturer for the listed components are verified by us and the evidence is conforming to the requirements of the relevant standard.

- (#): No IEC Standard available





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7.2.1		TABLE: Continuous charging at constant voltage (cells)		N/A	
Sample no.	Recommended charging voltage Vc, (Vdc)	Recommended charging current Irec, (A)	OCV before test, (Vdc)	Results	
--	--	--	--	--	
Supplementary information: Safety certified cell used (See appended table 1)					





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7.3.1	TABLE: External short-circuit (cell)					N/A
Sample no.	Ambient T (°C)	OCV before test, (Vdc)	Resistance of circuit, (mΩ)	Maximum case temperature rise ΔT, (°C)	Results	
Samples charged at charging temperature upper limit:						
--	--	--	--	--	--	
Sample no.	Ambient T (°C)	OCV before test, (Vdc)	Resistance of circuit, (mΩ)	Maximum case temperature rise ΔT, (°C)	Results	
Samples charge at charging temperature lower limit:						
--	--	--	--	--	--	
Supplementary information: Safety certified cell used (See appended table 1)						





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7.3.2 TABLE: External short-circuit (battery)						P
Sample no.	Ambient T (°C)	OCV before test (Vdc)	Resistance of circuit (mΩ)	Maximum case temperature rise ΔT (°C)	Component Singel fault Condition	Results
10	(20 ± 5) °C	4.17	86	1.8	Mosfet pins are shorted	A
11	(20 ± 5) °C	4.15	82	1.4	Mosfet pins are shorted	A
12	(20 ± 5) °C	4.17	81	1.6	Mosfet pins are shorted	A
13	(20 ± 5) °C	4.15	87	1.7	Mosfet pins are shorted	A
14	(20 ± 5) °C	4.16	83	1.2	--	A

Supplementary information:

- A: No fire or explosion
- B: No leakage
- C: Leakage
- D: Fire
- E: Explosion
- F: Bulge
- G: Others (please explain)

7.3.5 TABLE: Crush (cells)					N/A
Sample no.	OCV before test, (Vdc)	OCV at removal of crushing force, (Vdc)	Maximum force applied to the cell during crush (kN)	Results	
Samples charged at charging temperature upper limit:					
--	--	--	--	--	
Sample no.	OCV before test, (Vdc)	OCV at removal of crushing force, (Vdc)	Maximum force applied to the cell during crush (kN)	Results	
Samples charge at charging temperature lower limit:					
--	--	--	--	--	

Supplementary information:

Safety certified cell used (See appended table 1)





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7.3.6	TABLE: Over-charging of battery	P
Constant charging current (A) :	2.0A	
Supply voltage (Vdc) :	5.88V	

Sample no.	OCV before charging, (Vdc)	Total charging time (minute)	Maximum outer casing temperature, (°C)	Results
18	3.12	15	29.4	A
19	3.14	16	29.8	A
20	3.12	14	28.7	A
21	3.11	15	29.2	A
22	3.16	13	28.2	A

Supplementary information:
 A: No fire or explosion
 B: No leakage
 C: Leakage
 D: Fire
 E: Explosion
 F: Bulge
 G: Others (please explain)

7.3.7	TABLE: Forced discharge (cells)	N/A		
Sample no.	OCV before application of reverse charge, (Vdc)	Measured Reverse charge It, (A)	Lower limit discharge voltage (Vdc)	Results
--	--	--	--	--

Supplementary information:
 Safety certified cell used (See appended table 1)





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7.3.8.1 TABLE: Vibration					P
Sample no.	OCV before test (Vdc)	OCV after test (Vdc)	Mass before test (g)	Mass after test (g)	Results
7	4.18	4.17	26.41	26.40	G
8	4.17	4.16	26.43	26.41	G
9	4.18	4.16	26.41	26.39	G

Supplementary information:
 A: No fire or explosion B: No leakage
 C: Leakage D: Fire
 E: Explosion F: Bulge
 G: Others (No fire, No explosion, no rupture, no leakage or venting)

7.3.8.2 TABLE: Mechanical shock					P
Sample no.	OCV before test (Vdc)	OCV after test (Vdc)	Mass before test (g)	Mass after test (g)	Results
15	4.17	4.16	26.42	26.41	G
16	4.18	4.17	26.41	26.40	G
17	4.17	4.16	26.42	26.41	G

Supplementary information:
 A: No fire or explosion B: No leakage
 C: Leakage D: Fire
 E: Explosion F: Bulge
 G: Others (No fire, No explosion, no rupture, no leakage or venting)

7.3.9 TABLE: Forced internal short circuit (cells)					N/A
Sample no.	Chamber ambient T (°C)	OCV before test (Vdc)	Particle location ¹⁾	Maximum applied pressure (N)	Results
Samples charged at charging temperature upper limit:--					
--	--	--	--	--	--
Samples charge at charging temperature lower limit:--					
--	--	--	--	--	--

Supplementary information:
 This is country specific test applicable only in France, Japan, Korea & Switzerland

D.2 TABLE: Internal AC resistance for coin cells				N/A
Sample no.	Ambient T (°C)	Store time (h)	Resistance Rac (Ω)	Results ¹⁾
--	--	--	--	--

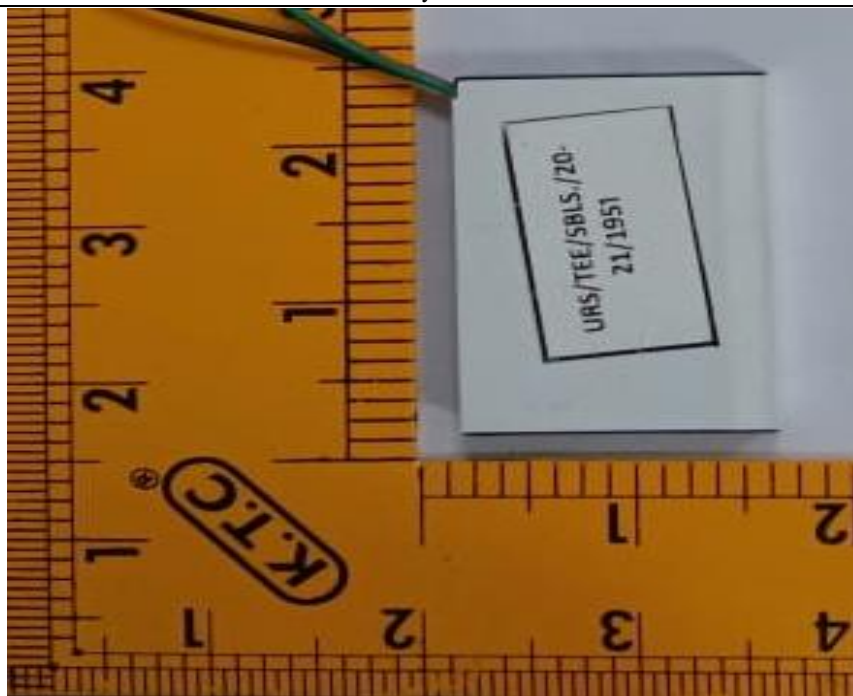
Supplementary information:
 This is not a coin cells



Attachment-1



Battery View 1



Battery View 2





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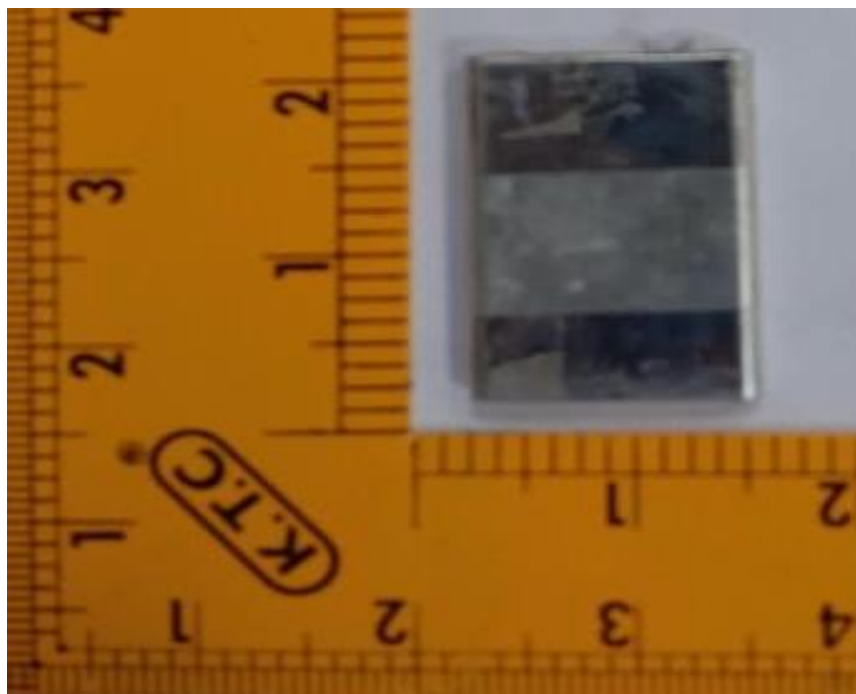
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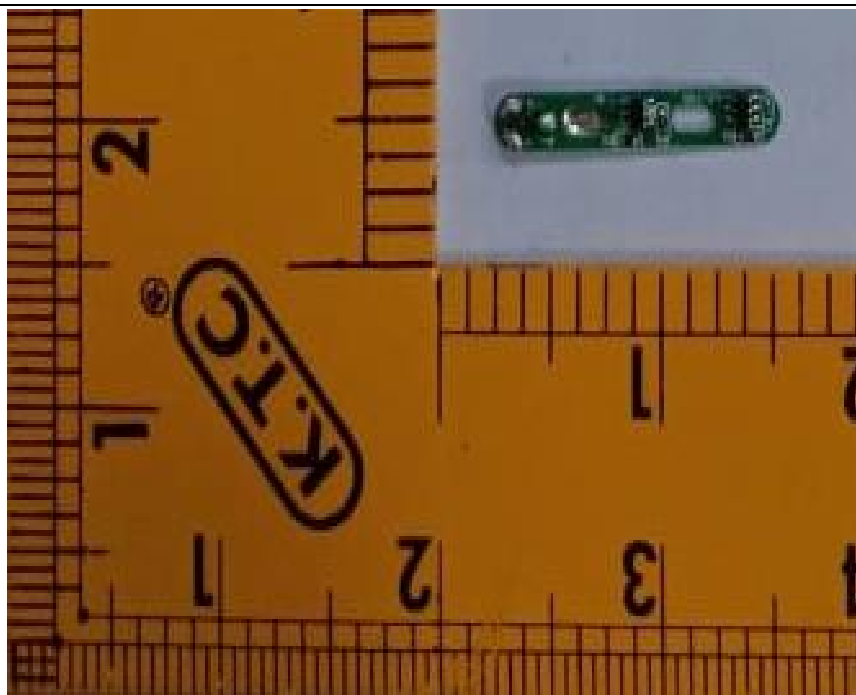
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Cell View



PCB View 1



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Group-Cells And Batteries



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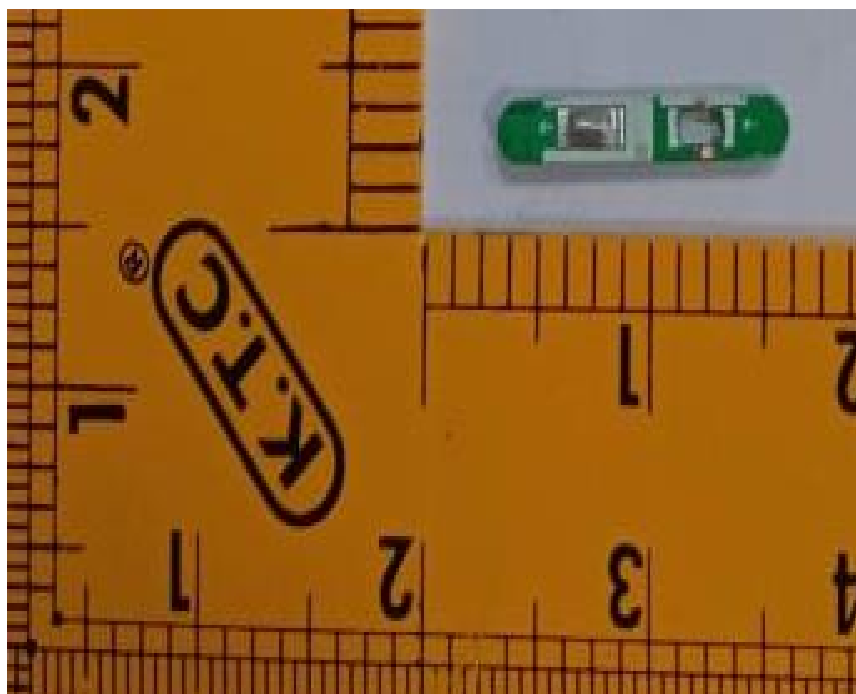
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PCB View 2

