中国认可 国际互认 检测 TESTING CNAS L4595

TEST REPORT
IEC 60086-1 & IEC 60086-2
Primary Battery - Part 1: General
Primary Battery - Part 2: Physical and electrical specifications

Report reference No ..... :	LCSA030223083S
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Testing laboratory Name ..... :	Shenzhen LCS Compliance Testing Laboratory Ltd.
Address ..... :	Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China
Testing location ..... :	Same as above
Applicant's Name ..... :	CIXI FOREWELL ELECTRONICS CO., LTD
Address ..... :	NO.119, CHAOGONG ROAD, ZONGHAN DISTRICT, CIXI CITY, ZHEJIANG, PROVINCE, CHINA
Test specification:	
Standard ..... :	IEC 60086-1:2021 in conjunction with IEC 60086-2:2021
Test procedure ..... :	Type Test
Non-standard test method ..... :	N/A
Test Report Form No. ..... :	IEC60086_1&2B
Test Report Form(s) Originator .... :	DEKRA Certification B.V.
Master TRF ..... :	Dated 2022-01-06

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Test item description ..... :	Alkaline Zinc-Manganese Dry Cell
Trade mark ..... :	N/A
Manufacturer ..... :	Same as Applicant
Model and/or type reference ..... :	LR6
Rating(s) ..... :	1.5V

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):			
☒	**Testing Laboratory:**	Shenzhen LCS Compliance Testing Laboratory Ltd.	
Testing location/ address ..... :		Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China	
Tested by (name, signature) ..... :		Leo Cai	Leo Cai
Checked by(name, signature) ..... :		Dean Du	Dean Du
Approved by (name, signature) ..... :		Hart Qiu	Hart Qiu
☐	**Testing procedure: CTF Stage 1:**		
Testing location/ address ..... :			
Tested by (name, function, signature)..... :			
Approved by (name, function, signature) .. :			
☐	**Testing procedure: CTF Stage 2:**		
Testing location/ address ..... :			
Tested by (name + signature)..... :			
Witnessed by (name, function, signature) . :			
Approved by (name, function, signature) .. :			
☐	**Testing procedure: CTF Stage 3:**		
☐	**Testing procedure: CTF Stage 4:**		
Testing location/ address ..... :			
Tested by (name, function, signature)..... :			
Witnessed by (name, function, signature) . :			
Approved by (name, function, signature) .. :			
Supervised by (name, function, signature) :			

List of Attachments (including a total number of pages in each attachment):

Attachment 1: Photo documentation.

Summary of testing:

Tests performed (name of test and test clause):	**Testing location:**
IEC 60086-1: 2021 test clause: 4.1 General; 4.1.3.2 Contact pressure resistance; 4.2 Performance; 5 Performance – Testing; 7 Sampling and quality assurance; 8 Battery packaging. IEC 60086-2: 2021 test clause: 8 Physical and electrical specifications.	Shenzhen LCS Compliance Testing Laboratory Ltd. Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Summary of compliance with National Differences:

N/A

Use of uncertainty of measurement for decisions on conformity (decision rule):

☒ No decision rule is specified by the IEC standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty (“simple acceptance” decision rule, previously known as “accuracy method”).

☐ Other: (to be specified, for example when required by the standard or client, or if national accreditation requirements apply)

Information on uncertainty of measurement:

The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer.

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.

Copy of marking plate:

The artwork below may be only a draft.

Alkaline Zinc-Manganese Dry Cell
Model: LR6
+ 1.5V YYYY/MM/DD -
Expiration of a recommended usage period: 5 year.
CIXI FOREWELL ELECTRONICS CO., LTD
WARNING:
Do not disassemble, puncture, crush, heat, or burn.
Keep batteries out of the reach of children

Remark:

1.For the date code YYYY/MM/DD:

“YYYY” means year for manufacture;

“MM” means month for manufacture;

“DD” means day for manufacture.

2.The applicant and manufacturer information, product name, model, trademark and other information in this report are all provided by the applicant, and this laboratory is not responsible for verifying its authenticity.

Test item particulars.....:	
Classification of installation and use.....:	To be defined in final product
Supply connection.....:	Electrode Tab
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 .....:	2023-03-02
Date (s) of performance of tests.....:	2023-03-02 to 2023-03-16
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. "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. **Throughout this report a ☐ comma / ☒ point is used as the decimal separator.**	
Name and address of factory (ies).....:	Same as Applicant

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
4	**REQUIREMENTS**		P
4.1	**General**		P
4.1.1	Design		P
	Additionally, information on equipment design can be found in Annex B		P
4.1.2	Battery dimensions		P
	The dimensions for individual types of batteries are given in IEC 60086-2 and IEC 60086-3		P
4.1.3	Terminals		P
4.1.3.1	General		P
	Terminals are in accordance with Clause 6 of IEC 60086-2		P
	Their physical shape is designed in such a way that they ensure that the batteries make and maintain good electrical contact at all times		P
	They are made of materials that provide adequate electrical conductivity and corrosion protection		P
4.1.3.2	Contact pressure resistance		P
	Where stated in the battery specification tables or the individual specification sheets in IEC 60086-2, the following applies		P
	A force of 10 N applied through a steel ball of 1 mm diameter at the centre of each contact area for a period of 10 s does not cause any apparent deformation which might prevent satisfactory operation of the battery	10N, 10s, No any apparent deformation.	P
4.1.3.3	Cap and base		P
	This type of terminal is used for batteries which have their dimensions specified according to Figures 1 and 7 of IEC 60086-2 and which have the cylindrical side of the battery insulated from the terminals		P
4.1.3.4	Cap and case		N/A
	This type of terminal is used for batteries which have their dimensions specified according to Figures 8, 9, 10, 14, 15 and 16 of IEC 60086-2, but in which the cylindrical side of the battery forms part of the positive terminal		N/A
4.1.3.5	Screw terminals		N/A
	This contact consists of a threaded rod in combination with either a metal or insulated metal nut		N/A
4.1.3.6	Flat contacts		N/A

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
	These are essentially flat metal surfaces adapted to make electrical contact by suitable contact mechanisms bearing against them		N/A
4.1.3.7	Flat or spiral springs		N/A
	These contacts comprise flat metal strips or spirally wound wires which are in a form that provides pressure contact		N/A
4.1.3.8	Plug-in-sockets		N/A
	These are made up of a suitable assembly of metal contacts, mounted in an insulated housing or holding device and adapted to receive corresponding pins of a mating plug		N/A
4.1.3.9	Snap fasteners		N/A
4.1.3.9.1	General		N/A
	These contacts are composed of a combination comprising a stud (non-resilient) for the positive terminal and a socket (resilient) for the negative terminal		N/A
	They are suitable metal so as to provide efficient electrical connection when joined to the corresponding parts of an external circuit		N/A
4.1.3.9.2	Snap fastener		N/A
	This type of terminal consists of a stud for the positive terminal and a socket for the negative terminal. These are made from nickel plated steel or other suitable material		N/A
	They are designed to provide a secure physical and electrical connection, when fitted with similar corresponding parts for connection to an electrical circuit		N/A
4.1.3.10	Wire		N/A
	Wire leads are single or multi-strand flexible insulated tinned copper		N/A
	The positive terminal wire covering is red and the negative black		N/A
4.1.3.11	Other spring contacts or clips		N/A
	These contacts are generally used on batteries when the corresponding parts of the external circuit are not precisely known		N/A
	They are made of spring brass or of other material having similar properties		N/A
4.1.4	Classification (electrochemical system)		P

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Primary batteries are classified according to their electrochemical system		P
	Each system, with the exception of the zinc-ammonium chloride, zinc chloride-manganese dioxide system, has been allocated a letter denoting the particular system		P
	The electrochemical systems that have been standardized up to now are given in Table 1		P
4.1.5	Designation		P
	The designation of primary batteries is based on their physical parameters, their electrochemical system as well as modifiers, if needed		P
	A comprehensive explanation of the designation system (nomenclature) can be found in Annex C		P
4.1.6	Marking		P
4.1.6.1	General		P
	With the exception of small batteries too small to mark with all items (see 4.1.6.2), each battery is marked with the following information	Not small batteries.	N/A
	a) designation, IEC or common .....:	LR6	P
	b) expiration of a recommended usage period or year and month or week of manufacture .....:	Expiration of a recommended usage period: 5years.	P
	The year and month or week of manufacture may be in code .....:		P
	c) polarity of the positive (+) terminal .....:	“ + ”, “ – ”	P
	d) nominal voltage.....:	1.5V	P
	e) name or trade mark of the manufacturer or supplier .....:	CIXI FOREWELL ELECTRONICS CO., LTD	P
	f) cautionary advice .....:	See page 3.	P
4.1.6.2	Marking of smaller batteries	Not small batteries.	N/A
	a) Some batteries, mainly category 3 and category 4 batteries have a surface too small to accommodate all markings shown in 4.1.6.1		N/A
	For these batteries the designation 4.1.6.1a) and the polarity 4.1.6.1c) are marked on the battery .....:		N/A
	All other markings shown in 4.1.6.1 are given on the immediate packing instead of on the battery .....:		
	b) For P-system batteries		N/A
	4.1.6.1a) are on the battery, the sealing tab or the package .....:		N/A
	4.1.6.1c) are marked on the sealing tab and/or on the battery.....:		N/A

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
	4.1.6.1b), 4.1.6.1d) and 4.1.6.1e) are given on the immediate packing instead of on the battery .....:		N/A
	The nominal voltage is marked either 1,4 V or 1,45 V .....:		N/A
	c) Caution for ingestion of swallowable batteries are given .....:		N/A
4.1.6.3	Marking of batteries regarding method of disposal		P
	Marking of batteries with respect to the method of disposal is in accordance with local legal requirements		P
4.1.7	Interchangeability: battery voltage		P
	Voltage range 1, Ur = 1,4 V: Batteries having a standard discharge voltage m × Us equal to or within the range of n × 1,19 V to n × 1,61 V .....:		P
	Voltage range 2, Ur = 3,2 V: Batteries having a standard discharge voltage m × Us equal to or within the range of n × 2,72 V to n × 3,68 V .....:		N/A
4.2	**Performance**		P
4.2.1	Discharge performance		P
	Discharge performance of primary batteries is specified in IEC 60086-2		P
4.2.2	Dimensional stability		P
	The dimensions of batteries are conform with the relevant specified dimensions as given in IEC 60086-2 and IEC 60086-3 at all times during discharge testing under the standard conditions		P
4.2.3	Leakage		N/A
	When batteries are stored and discharged under the standard conditions given in this specification, no leakage occur		N/A
4.2.4	Open-circuit voltage limits		P
	The maximum open-circuit voltage of batteries does not exceed the values given in Table 1 .....:	Open-circuit voltage:1.68V	P
4.2.5	Service output		N/A
	Discharge durations, initial and delayed, of batteries are meet the requirements given in IEC 60086-2		N/A
4.2.6	Safety		P
	When designing primary batteries, safety under conditions of intended use and foreseeable mis-use as prescribed in IEC 60086-4 and IEC 60086-5 are considered	Considered.	P
4.2.7	Validity of testing		P

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Portable primary batteries are subjected to the tests, as required in the 60086 series. Test results remain valid until a design change or requirement revision has been made		N/A
5	**PERFORMANCE – TESTING**		**P**
5.1	**Capacity testing versus application and service output testing**		N/A
	For the preparation of standard methods of measuring performance (SMMP) of consumer goods, refer to Annex E		N/A
	A capacity of a primary battery is established by electrical discharge tests as detailed in D.2.3		N/A
	However, under consumer usage conditions, the capacities realised from electrical discharge test methods can vary		N/A
	The following factors/variables dramatically impact on optimum capacity realisation		N/A
	a) The current demand from the external electrical circuit/device		N/A
	b) The frequency of current demand		N/A
	c) The minimum voltage at which the device will satisfactorily operate		N/A
	d) The temperature of operation		N/A
5.2	**Discharge testing**		N/A
5.2.1	General		N/A
	The discharge tests in this standard fall into two categories		N/A
	– application tests		N/A
	– service output tests		N/A
5.2.2	Application tests		N/A
5.2.2.1	General		N/A
	Application tests are accelerated by discharge load, daily period duty cycle, or both. The specified values for load and time intermittency are take the following factors into consideration		N/A
	– discharge efficiency of the battery relative to the application		N/A
	– typical duty cycle use patterns for the application		N/A
	– total time to conduct the test typically not to exceed 30 days		N/A
5.2.2.2	Application tests with multiple loads		N/A

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
	For application test with multiple loads, the load order during a cycle starts with the heaviest load and move to the lightest load unless otherwise specified		N/A
5.2.3	Service output tests		N/A
	For service output tests, the value of the load resistor are selected such that the service output approximates 30 days		N/A
5.3	**Conformance check to a specified minimum average duration**		N/A
	In order to check the conformance of a battery to any discharge tests specified in IEC 60086-2 and 60086-3, the test is carried out		N/A
5.4	**Guidance for considering proposed value of minimum average duration**		N/A
5.5	**OCV testing**	Test complied.	P
	Open-circuit voltage is measured with the voltage measuring equipment specified in 6.8.1	The voltage measuring equipment complies with 6.8.1.(See Table 5.5)	P
5.6	**Insulation resistance**		N/A
	For batteries with insulating labels, cases or jackets, the resistance between externally exposed surfaces of the battery and either terminal is equal to or greater than 5 MΩ .....:		N/A
5.7	**Battery dimensions**	Test complied.	P
	Dimensions are measured with the measuring equipment specified in 6.8.2	The dimensions measuring equipment complies with 6.8.2.(See Table 5.6)	P
5.8	**Leakage and deformation**		N/A
	After the service output has been determined under the specified environmental conditions, the discharge is continued in the same way until the closed circuit voltage drops for the first time below 40 % of the nominal voltage of the battery		N/A
	The requirements of 4.1.3, 4.2.2 and 4.2.3 are met		N/A
6	**PERFORMANCE – TEST CONDITIONS**		**P**
6.1	**Storage and discharge conditions**		N/A
	Storage before discharge testing and the actual discharge test are carried out under well-defined conditions. Unless otherwise specified, the conditions given in Table 3 are apply.....:		N/A
6.2	**Commencement of discharge tests after storage**		N/A

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
	The period between the completion of storage and the start of a delayed discharge test is not exceed 14 days		N/A
	During this period the batteries are kept at (20 ± 2) °C and (55 + 20 / -40) % RH (except for P-system batteries where the relative humidity is (55 ± 10) % RH)		N/A
	At least one day in these conditions is allowed for normalization before starting a discharge test after storage at high temperature		N/A
6.3	**Discharge test conditions**		N/A
6.3.1	General		N/A
	In order to test a battery it is discharged as specified in IEC 60086-2 or IEC 60086-3 until the voltage on load drops for the first time below the specified end-point		N/A
6.3.2	Compliance		N/A
	When IEC 60086-2 or IEC 60086-3 specify service outputs for more than one discharge test, batteries are meet all of these requirements in order to comply with this specification		N/A
6.4	**Load resistance**		N/A
	When formulating new tests, the resistive load is, whenever possible, be as shown in Table 4 together with their decimal multiples or sub-multiples		N/A
6.5	**Time periods**		N/A
	The periods on-discharge and off-discharge are as specified in IEC 60086-2		N/A
	When formulating new tests, whenever possible, one of the following daily periods is adopted from Table 5		N/A
	Other cases are specified in IEC 60086-2, if necessary		N/A
6.6	**Test condition tolerances**		N/A
	Unless otherwise specified, the tolerances given in Table 6 are apply		N/A
6.7	**Activation of 'P'-system batteries**		N/A
	A period of at least 10 min is elapse between activation and the commencement of electrical measurement		N/A
6.8	**Measuring equipment**		P
6.8.1	Voltage measurement	Multimeter	P
6.8.2	Mechanical measurement	Calliper	P
7	**SAMPLING AND QUALITY ASSURANCE**		**P**
	The use of production and incoming inspection sampling plans or product quality indices are agreed between the manufacturer and the purchaser		P
8	**BATTERY PACKAGING**		**P**

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
	A code of practice for battery packaging, shipment, storage, use and disposal can be found in Annex G		P
A	**ANNEX A** (NORMATIVE) **CRITERIA FOR THE STANDARDIZATION OF BATTERIES**		**P**
	Batteries and electrochemical systems are meet the following requirements to justify their initial inclusion or ongoing retention in the IEC 60086 series		P
	a) The battery or batteries of this electrochemical system are in mass production		P
	b) The battery or batteries of this electrochemical system are available in several market places of the world		P
	c) Patent items are conform to the requirements contained in 2.14 of the ISO/IEC Directives, Part 1		N/A
	d) The battery is produced in at least two different countries or, alternatively, if produced in only one country, the battery is purchased by other international and independent battery manufacturers and sold under their company label		P
B	**ANNEX B** (INFORMATIVE) **RECOMMENDATIONS FOR EQUIPMENT DESIGN**		**N/A**
B.1	**Technical liaison**		N/A
	It is recommended that companies producing battery-powered equipment maintain close liaison with the battery industry. The capabilities of existing batteries are taken into account at design inception. Whenever possible, the battery type selected are one included in IEC 60086-2		N/A
	The equipment is permanently marked with the IEC designation, grade and size of battery which give optimum performance		N/A
B.2	**Battery compartment**		N/A
B.2.1	General		N/A
	The dimensions and design of compartments and contacts are such that batteries complying with this standard are accepted		N/A
	The design of the negative contact are make allowance for any recess of the battery terminal		N/A
	Clearly indicate the type of battery to use, the correct polarity alignment and directions for insertion		N/A

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Use the shape and/or the dimensions of the positive (+) and negative (–) battery terminals in compartment designs to prevent the reverse connection of batteries		N/A
	Positive (+) and negative (–) battery contacts are visibly different in form to avoid confusion when inserting batteries		N/A
	Battery compartments are electrically insulated from the electric circuit and positioned so as to minimize possible damage and/or risk of injury		N/A
	Battery compartments with parallel connections are not recommended since a wrongly placed battery result in charging conditions		N/A
	Equipment designed to be powered by air-depolarized batteries of either the "A" or "P" system are provide for adequate air access		N/A
	When the battery compartment cannot be completely isolated from the equipment, it are positioned so as to minimize possible damage		N/A
	The battery compartment are clearly and permanently marked to show the correct orientation of the batteries		N/A
	Battery compartments are designed so that a reversed battery will result in no electrical circuit		N/A
	The associated circuitry do not make physical contact with any part of the battery except at the surfaces intended for this purpose		N/A
	Designers are strongly advised to refer to IEC 60086-4 and IEC 60086-5 for comprehensive safety considerations		N/A
B.2.2	Limiting access by children		N/A
	Apparatus are designed to prevent children from removing the battery		N/A
B.3	**Voltage cut-off**		N/A
	The equipment voltage cut-off is not below the battery manufacturers' recommendation		N/A
C	**ANNEX C** (NORMATIVE) **DESIGNATION SYSTEM (NOMENCLATURE)**		N/A
C.1	**General**		N/A
C.2	**Designation system in use up to October 1990**		N/A
C.2.1	General		N/A
C.2.2	Cells		N/A
C.2.3	Electrochemical system		N/A
C.2.4	Batteries		N/A

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
C.2.5	Modifiers		N/A
C.2.6	Examples		N/A
C.3	**Designation system in use since October 1990**		N/A
C.3.1	General		N/A
C.3.2	Round batteries		N/A
C.3.3	Non-round batteries		N/A
C.3.4	Ambiguity		N/A
D	**ANNEX D** (INFORMATIVE) **STANDARD DISCHARGE VOLTAGE US – DEFINITION AND METHOD OF DETERMINATION**		**N/A**
D.1	**Definition**		N/A
D.2	**Determination**		N/A
D.2.1	General considerations: the C/R-plot		N/A
D.2.2	Determination of the standard discharge resistor Rs		N/A
D.2.3	Determination of the standard discharge capacity Cs and standard discharge time ts		N/A
D.3	**Experimental conditions to be observed and test results**		N/A
E	**ANNEX E** (INFORMATIVE) **PREPARATION OF STANDARD METHODS OF MEASURING PERFORMANCE (SMMP) OF CONSUMER GOODS**		**N/A**
E.1	**General**		N/A
E.2	**Performance characteristics**		N/A
E.3	**Criteria for the development of test methods**		N/A
F	**ANNEX F** (INFORMATIVE) **GUIDANCE FOR PROPOSING VALUE OF MINIMUM AVERAGE DURATION**		**N/A**
F.1	**General**		N/A
F.2	**Sampling**		N/A
F.3	**Calculation method**		N/A
G	**ANNEX G** (NORMATIVE) **CODE OF PRACTICE FOR PACKAGING, SHIPMENT, STORAGE, USE AND DISPOSAL OF PRIMARY BATTERIES**		**P**
G.1	**General**		P
G.2	**Packaging**		P
G.3	**Transport and handling**		P
G.4	**Storage and stock rotation**		P
G.5	**Displays at sales points**		P
G.6	**Selection, use and disposal**		P
G.6.1	Purchase		P

IEC 60086-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.6.2	Installation		P
G.6.3	Use		P
G.6.4	Replacement		P
G.6.5	Disposal		P
H	**ANNEX H** (INFORMATIVE) **COMPLIANCE CHECKLIST**		**N/A**

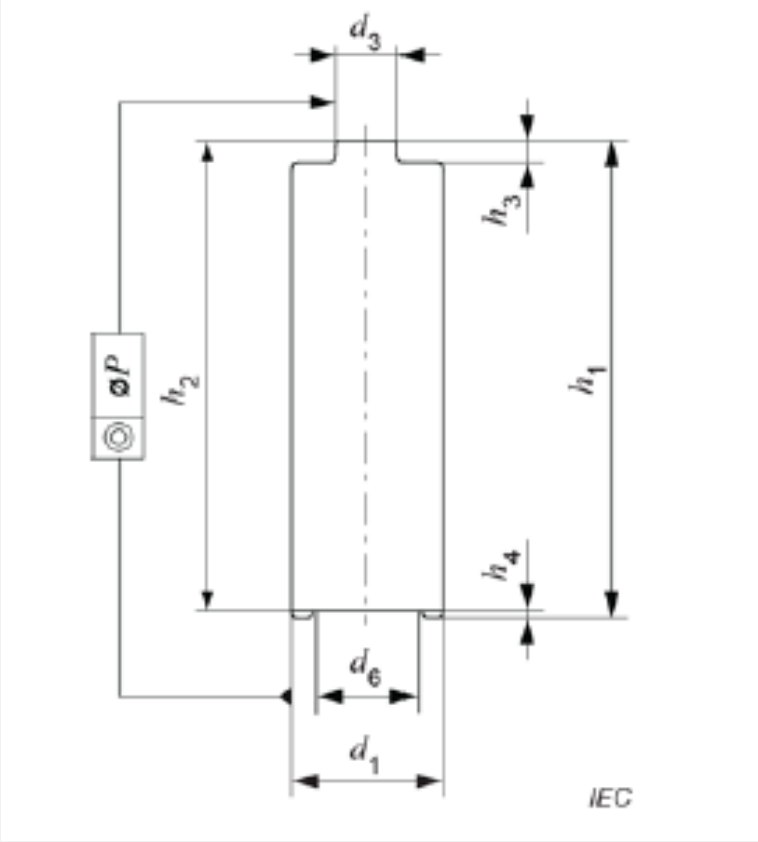
IEC 60086-1 & 2			
Clause	Requirement + Test	Result - Remark	Verdict

5.5	OCV testing			P
Designation	**OCV measurement (V) <1.68V**			**Verdict**
1#	1.62	11#	1.63	P
2#	1.63	12#	1.62	
3#	1.63	13#	1.62	
4#	1.62	14#	1.63	
5#	1.63	15#	1.63	
6#	1.63	16#	1.62	
7#	1.62	17#	1.62	
8#	1.63	18#	1.63	
9#	1.62	19#	1.62	
10#	1.62	20#	1.63	

5.6	Dimensions									P
Designation	**h1 (mm)**	**h2 (mm)**	**h3 (mm)**	**h4 (mm)**	**d1(mm)**		***d3 (mm)***	***d6 (mm)***	***ΦP***	**Verdict**
	Max. 50.5	**Min. 49.5**	**Min. 1.0**	**Max. 0.5**	**Max. 14.5**	**Min. 13.7**	**Max. 5.5**	**Min. 7.0**	**Max. 0.25**	
1#	50.3	49.9	1.5	0.3	14.2		5.2	8.7	0.22	**P**
2#	50.3	49.9	1.5	0.3	14.2		5.2	8.7	0.22	**P**
3#	50.3	49.9	1.5	0.3	14.2		5.2	8.7	0.22	**P**
4#	50.3	49.9	1.5	0.3	14.2		5.2	8.7	0.22	**P**
5#	50.3	49.9	1.5	0.3	14.2		5.2	8.7	0.22	**P**
6#	50.3	49.9	1.5	0.3	14.2		5.2	8.7	0.22	**P**
7#	50.3	49.9	1.5	0.3	14.2		5.2	8.7	0.22	**P**
8#	50.3	49.9	1.5	0.3	14.2		5.2	8.7	0.22	**P**
9#	50.3	49.9	1.5	0.3	14.2		5.2	8.7	0.22	**P**
10#	50.3	49.9	1.5	0.3	14.2		5.2	8.7	0.22	**P**

IEC 60086-1 & 2			
Clause	**Requirement + Test**	**Result - Remark**	**Verdict**

6.6.5 Category 1 – Specifications:		P
Electrochemical system letter	LR6	
V_n (V)	1.5	
OCV (V)	1.68	
Delayed discharge performance after 12 months (% of MAD)	90	
Applications	EV (V)	MAD (Initial)
High drain application	1.05	40 pulses
Portable lighting (LED)	0.9	230 min
Motor/toy	0.8	5h
Toy, non-motorized	0.9	5h
CD, digital audio, wireless gaming and accessories	0.9	15h
Radio /clock /remote control	1.0	30h



Attachment 1 Photo Documentation

Product: Alkaline Zinc-Manganese Dry Cell

Type Designation: LR6

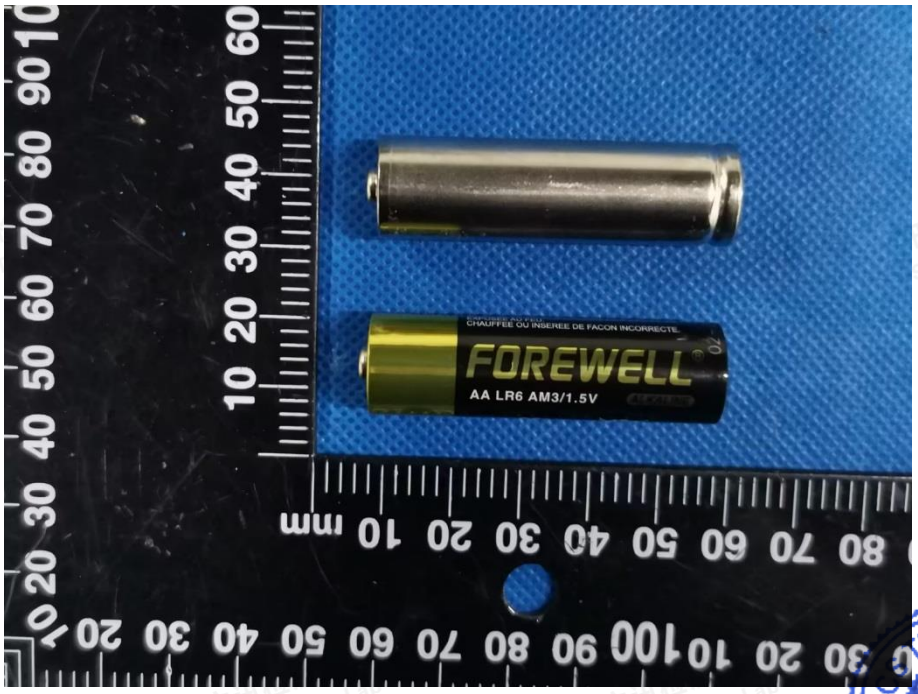


Figure 1 Front view of cell

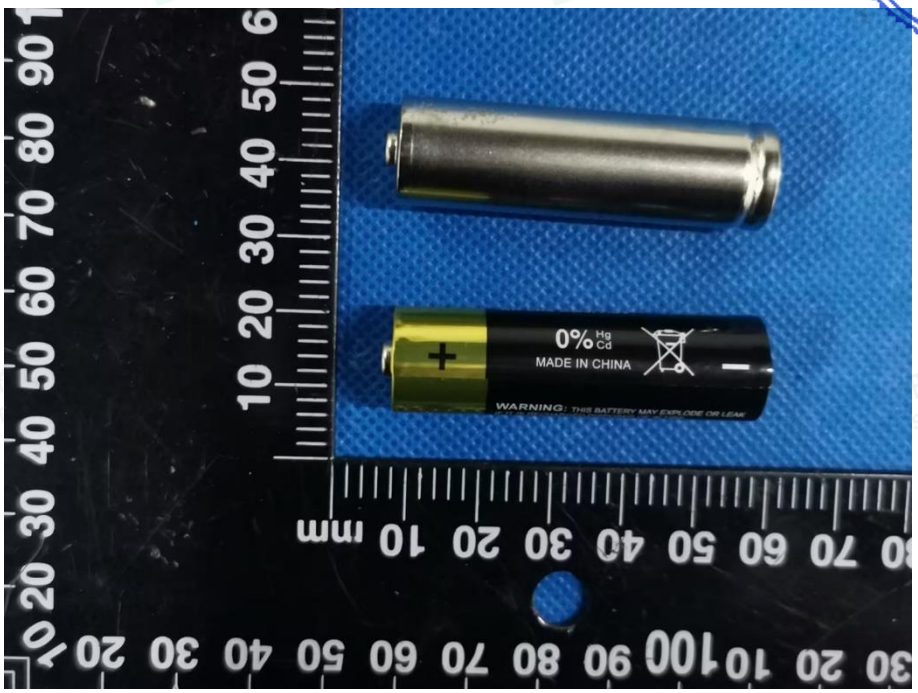


Figure 2 Side view of cell

-- End of report --