

Test Report

Report No. : TCT240607C002003-1

Date : Jun. 13, 2024

Page No.: 1 of 4

Applicant:

Address:

The following sample was submitted and identified by/on behalf of the client as:

Sample Name: Li-ion Polymer Cell

Model No.: 1260110-10000mAh. 103450-2000mAh.

505060-2000mAh.955465-5000mAh.105555-5000mAh.105568-5000mAh.

115570-5000mAh. 8870129-10000mAh. 124861-5000mAh. 906090-6000mAh.

606090-4000mAh. 656090-5000mAh. 126090-8000mAh. 104050-2500mAh.

114065-4000mAh. 1160100-10000mAh

Sample Received Date: 2024.06.07

Testing Period: 2024.06.07—2024.06.13

Test Method: Please refer to the following page(s).

Test Result(s): Please refer to the following page(s).

Remark: The report is to supersede test report TCT240607C002003.

Test Requested	Conclusion
As specified by client, to determine the Lead (Pb), Cadmium (Cd), Mercury (Hg) contents of the submitted sample(s) in accordance with Regulation (EU) 2023/1542.	Pass

Checked by

Evan Fang

Evan Fang

Approved by

Ryan Zhang

Ryan Zhang

Technical Manager



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Test Result(s):**Regulation (EU) 2023/1542- Lead, Cadmium and Mercury Content(s)**

Test Method: With reference to IEC62321-4:2013+AMD1:2017, IEC 62321-5:2013

Analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES)

Test Items	Unit	MDL	Labelling Requirement#	Permissible Limit	Result(s)
Lead (Pb)	%	0.0010	> 0.004	0.01*	N.D.
Cadmium (Cd)	%	0.0010	> 0.002	0.002	N.D.
Mercury (Hg)	%	0.0001	-	0.0005	N.D.

Specimen Description:

Battery

Note :

- MDL = Method Detection Limit
- N.D.= Not Detected(<MDL)
- 1mg/kg= 1ppm = 0.0001%
- “-”=Not Regulated
- * = 1. From 18 August 2024, portable batteries, whether or not incorporated into appliances, shall not contain more than 0.01 % of lead (expressed as lead metal) by weight.
- 2. The restriction set out in point 1 shall not apply to portable zinc-air button cells until 18 August 2028.
- 3. Portable batteries, whether or not incorporated into appliances, light means of transport or other vehicles, shall not contain more than 0.002 % of cadmium (expressed as cadmium metal) by weight.
- # = According to Regulation (EU) 2023/1542 Article 13, Batteries containing more than 0,002 % cadmium or more than 0,004 % lead, shall be marked with the chemical symbol for the metal concerned: Cd or Pb.
- According to Regulation (EU) 2023/1542 Article 13, all batteries should be appropriately marked with the crossed-out wheeled bin symbol.

Remark: - Results shown is/are of total weight of the battery sample.

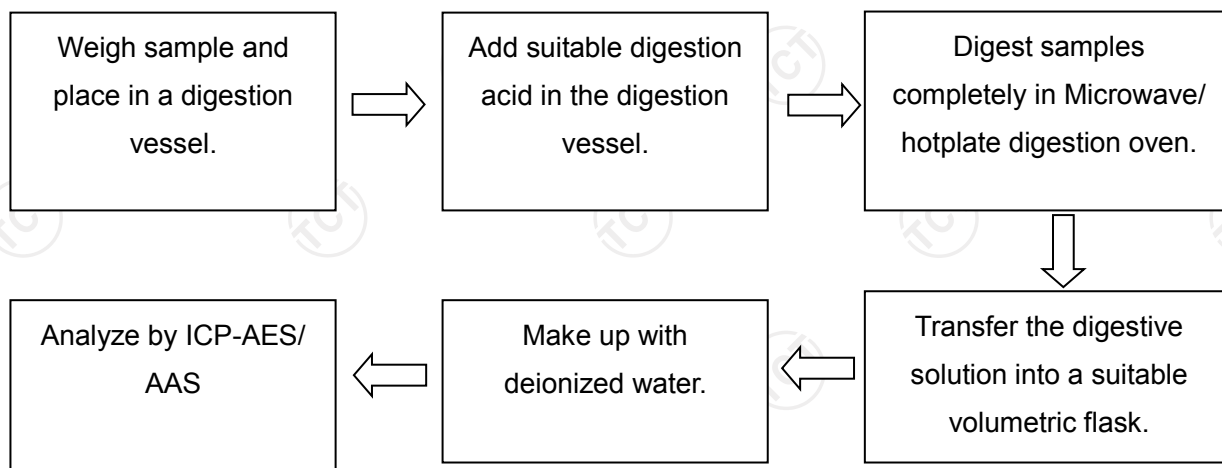
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Test Chart:



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Photo(s) of the sample(s)



*** End of Report ***

Remark: This report is considered invalidated without the Special Seal for Inspection of the TCT. This report shall not be altered, increased or deleted. The results shown in this test report refer only to the sample(s) tested. Without written approval of TCT, this test report shall not be copied except in full and published as advertisement.



Test Report issued under the responsibility of:



**TEST REPORT
IEC 62133-2**

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 Number. : QG2401773
Date of issue..... : 2024-09-04, Amendment 01: 2025-01-02
Total number of pages : 6 Pages

Name of Testing Laboratory preparing the Report : Guangdong Testing Institute of Product Quality Supervision

Applicant's name..... :

Address..... :

Test specification:

Standard : IEC 62133-2:2017, IEC 62133-2:2017/AMD1:2021
Test procedure : CB Scheme
Non-standard test method : N/A

TRF template used : IECEE OD-2020-F1:2021, Ed.1.4

Test Report Form No. : IEC62133_2C

Test Report Form(s) Originator.... : DEKRA Certification B.V.

Master TRF..... : Dated 2022-07-01

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This report is not valid as a CB Test Report unless signed by an approved IECEE Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.

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Test item description	Li-ion Cell	
Trade Mark(s)	--	
Manufacturer	Same as applicant	
Model/Type reference	105555-5000mAh	
Ratings	Rated Voltage: 3,85 V d.c. Rated Capacity: 5000 mAh	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
<input checked="" type="checkbox"/>	CB Testing Laboratory:	Guangdong Testing Institute of Product Quality Supervision
Testing location/ address		No.10, Science Avenue, Huangpu District, Guangzhou, Guangdong, China
Tested by (name, function, signature)		Meng Ling Yu / Engineer <i>Meng Ling Yu</i>
Approved by (name, function, signature) ..		Liang Jing Zhi / Laboratory Chief <i>Liang Jingzhi</i>
<input type="checkbox"/>	Testing procedure: CTF Stage 1:	N/A
Testing location/ address		
Tested by (name, function, signature)		
Approved by (name, function, signature) ..		
<input type="checkbox"/>	Testing procedure: CTF Stage 2:	N/A
Testing location/ address		
Tested by (name + signature)		
Witnessed by (name, function, signature) ..		
Approved by (name, function, signature) ..		
<input type="checkbox"/>	Testing procedure: CTF Stage 3:	N/A
<input type="checkbox"/>	Testing procedure: CTF Stage 4:	N/A
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: 1 page of Photos.

Summary of testing:

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Tests performed (name of test and test clause):

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Testing location:

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Summary of compliance with National Differences (List of countries addressed):

EU Group Differences, GB, KR

☒ The product fulfils the requirements of EN 62133-2:2017+A1:2021, BS EN 62133-2:2017+A1:2021 and KC62133-2(2020-07).

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:

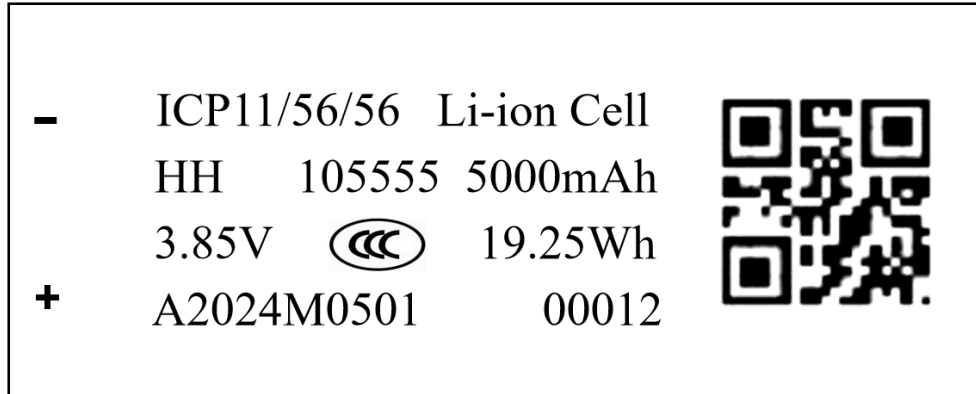
The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

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. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

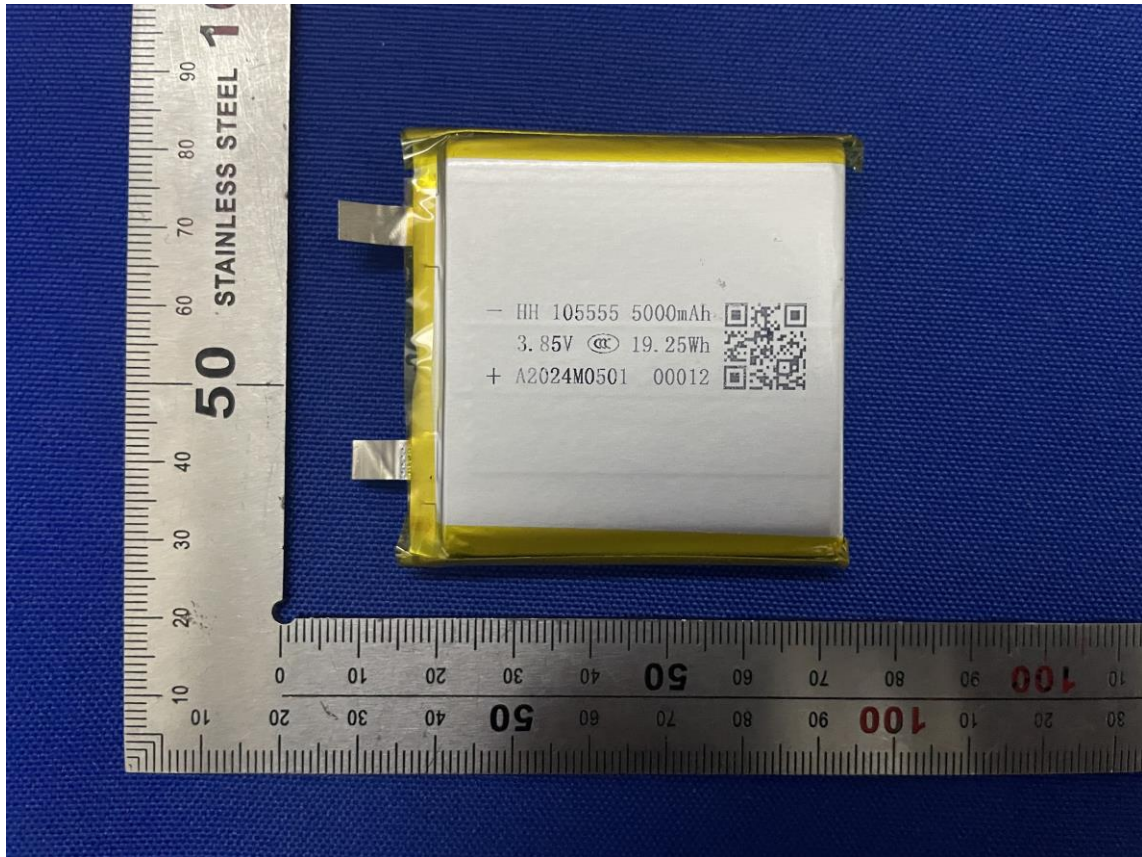


Remark: By agreement between the cell manufacturer and battery and/or end product manufacturer, cells used in the assembly of a battery need not be marked.

Test item particulars	--
Classification of installation and use.....	--
Supply Connection	--
Recommend charging method declared by the manufacturer.....	CC/CV
Discharge current (0,2 It A)	1,0 A
Specified final voltage.....	3,0 V
Upper limit charging voltage per cell.....	4,4 V
Maximum charging current.....	5000 mA
Charging temperature upper limit.....	55°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"/> N/A
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.....	2024-12-18
Date (s) of performance of tests	N/A
General remarks:	
"(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 <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.	

Manufacturer's Declaration per sub-clause 4.2.5 of IEC60086-02:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies)..... : Same as applicant	
General product information and other remarks:	
Product description:	Li-ion Cell
Model of cell:	105555-5000mAh
Designation of cell:	ICP11/56/56
Rated voltage of cell:	3,85 V d.c.
Rated capacity of cell:	5000 mAh
Maximum charge current of cell:	5000 mA
Max. Charge Voltage:	4,4 V
Discharge Cut-off Voltage:	3,0 V
Nominal Charge Current:	1000 mA
Nominal Discharge Current:	1000 mA
Cut-off current of Charge:	100 mA
Amendment 01: The original CB Test Report Ref. No. QG2401773 dated 2024-09-04 was additional modified on 2025-01-02 to include the following additions and/or changes: - Updated marking plate, see attachment 1 and page 4 for details; After comparison, no additional test was considered necessary. CB Test Report Ref. No. QG2401773 Amendment 01 dated 2025-01-02, is not valid without original CB Test Report Ref. No. QG2401773 dated 2024-09-04.	

---End report---

Attachment 1 Photo documentation

--- End of Attachment 1 ---