

# **TEST REPORT**

## Electrical Appliance and Material Safety Act Appendix 9 : (Lithium Ion Secondary Batteries)

Test Report No	SZ4210804-32667E-SF			
Tested by (printed name and signature):	Julie Lu			
Reviewed by (printed name and signature)	David Yang			
Date of issue:	2021-08-30			
Testing laboratory:	Bay Area Compliance Laborator	Bay Area Compliance Laboratories Corp. (Dongguan)		
Address:	No.12, Pulong East 1st Road, Tangxia, Dongguan, Guangdong, China			
Testing Location:	1/F., No.91, Luyi Road, Tianxin Community, Tangxia, Dongguan, Guangdong, China			
Applicant:	Astera LED Technology GmbH			
Address:	Stahlgruberring 36, 81829 Munich, Germany			
Manufacturer:	Astera Manufacturing Limited			
Address:	Bldg. 3, CLT Science & Technology Park, No. 7, GanLiliu Road, Jihuasubdistrict, Longgang District, Shenzhen, P.C.518112.			
Test item description:				
Sample description	Rechargeable Li-ion Battery			
Trade mark:	N/A			
Model/Type reference::	PB15-BAT			
Ratings::	18V, 3350mAh, 60.3Wh			
Test specification:				
Standard :	METI Electrical Appliance and Material Safety Act Appendix 9: Lithium ion secondary batteries			
Test procedure:	Type test			



### Summary of testing:

Tests performe (name of test and test clause):	Testing location:
Test items: Clause 2.2 Vibration	Bay Area Compliance Laboratories Corp. (Dongguan)
Clause 2.3 Battery enclosure test at high ambient temperature Clause 2.4 Temperature cycling Clause 3.1 External short circuit Clause 3.2 Free fall Clause 3.3 Mechanical shock (crash hazard) Clause 3.11 Function of the overvoltage protection of batteries	1/F., No.91, Luyi Road, Tianxin Community, Tangxia, Dongguan, Guangdong, China
<b>Operation condition:</b> The cell N18650CP inside the battery produced by Zhengzhou BAK Battery CO.,LTD is approved according to Appendix 9.It is based on the project No.: CN21SFEF 001 issued on 2021-03-31 by TÜV Rheinland (Guangdong) Ltd.	

### 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.

<b>Rechargeable Li-ion Battery</b>	
Model: PB15-BAT	
18V, 3350mAh, 60.3Wh	
Manufacturer: Astera Manu	facturing Limited
Red wire(+) Black wire(-)	$\bigcirc$
Date code: YYYY-MM-DD	(PS) 🕱 🖏
Made in China	TTTT基式会社 Li-ion

Date code: YYMMDD YY=Year, MM=Month, DD=Day



Test item particulars:	
Classification of installation and use:	Use in portable appliance
Supply connection:	N/A
Recommend charging method declaired by the manufacturer:	Charging the battery with 1000mA constant current and 21V constant voltage until the current reduces to 65mA at ambient 20°C±5°C.
Discharge current	800mA
Specified final voltage:	15.25V
Maximum charging current:	1600mA
Maximum discharging current	2000mA
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:	2021-08-04
Date (s) of performance of tests:	2021-08-05 to 2021-08-11

#### **General remarks:**

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

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and this information can affect the validity of the result in the test report.

"(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 point is used as the decimal separator.



## General product information:

This battery pack is constructed with five cells and has overcharge, over-discharge, over current and shortcircuits proof circuit.

The cell N18650CP inside the battery produced by Zhengzhou BAK Battery CO.,LTD is approved according to Appendix 9.It is based on the project No.: CN21SFEF 001 issued on 2021-03-31 by TÜV Rheinland (Guangdong) Ltd.

The main features of the battery are shown as below:

Model	Nominal Capacity	Nominal Voltage	Nominal Charge Current	Nominal Discharge Current	Maximum Charge Current	Maximum Discharge Current	Maximum Charge Voltage	Cut-off Voltage
PB15-BAT	3350mAh	18V	1000mA	800mA	1600mA	2000mA	21V	15.25V

Model	Upper Limit	Taper-off	Lowest Test	Highest Test
	Charge Voltage	Current	Temperature	Temperature
PB15-BAT	21V	167.5mA	0°C	45°C

#### Construction: (Unit: mm):



battery T(max.):W(Max):L(Max): =41.0mm:37.6mm:70.5mm

### Schematic Diagram:



Note: The test data was only valid for the test sample(s). This test report is prepared for the customer shown above and for the specific product described herein. It must not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Dongguan).



Report No.:SZ4210804-32667E-SF





## PCB Front line layer:





Electri	cal Appliance and Material Safety Act Appendix 9 :	(Lithium Ion Secondary	Batteries)
Clause	Requirement – Test	Result - Remark	Verdict
_			_
1.	Basic Design	1	P
1.(1)	Insulation and wiring		Р
	a) The insulation resistance between the positive terminal and a metal surface (excluding electrical contact surfaces and electrical parts having the same potential as the electrode potential of the battery) exposed to outside the battery, and which, as mounted on the equipment, may be touched by a human, shall be $5M\Omega$ or more at 500 VDC. b) Internal wiring and its insulation shall sufficiently		N/A
	withstand anticipated maximum current, maximum voltage, and maximum temperature.		Р
	c) Equipment having connection terminals shall be wired to maintain an appropriate clearance and creepage distance between terminals.		Р
1.(2)	Inner Pressure Reduction Mechanism		Р
	a) Battery cases and cells shall be designed with a gas release mechanism, or shall be designed to reduce excessive internal pressure when the equipment reaches a value or rate set so as to protect against explosion or fire.		Р
	b) If support material is used to fix cells within the battery case, the type of support material and method of fixing cells shall not inhibit pressure relief, and the battery shall not induce overheating during normal use of the battery.		Ρ
1.(3)	Temperature and current management		Р
	The battery shall be designed so that abnormal temperature-rise conditions are prevented. Provided that this does not apply if a current limiter is installed outside the battery to control abnormal temperature- rise during charging and discharging within a safety level.	Overcharge, over-discharge,over current and short-circuit proof circuit used in this battery.	Р
1.(4)	Terminal contacts		Р
	a) The battery shall be marked positive (+) or negative (-) for terminals on its external surface or be designed with no fear of misconnection		Р
	b) Batteries having a terminal contact plate shall be sized and shaped to ensure the flow of maximum current anticipated.		Р
	<ul> <li>c) Batteries having a terminal contact plate shall be designed so that the surface of the terminal contact plate will be a conductive material with good mechanical strength and corrosion resistance.</li> <li>Moreover, the terminal contact plate shall be arranged to minimize the risk of short circuits.</li> </ul>		Р
1.(5)	Assembly of cells into batteries	5S1P	Р



Electri	Electrical Appliance and Material Safety Act Appendix 9 : (Lithium Ion Secondary Batteries				
Clause	Requirement – Test	Result - Remark	Verdict		
	Batteries made of series connected cell blocks shall be designed so that cells are assembled to make the cell blocks the same capacity, and cell polarity reversal is prevented. Provided that this does not apply to the battery controlled by itself or the equipment as cell polarity reversal is prevented.		Ρ		
2.	Intended Use		Р		
2.(1)	Continuous charging at constant voltage	The cell has approved by TÜV Rheinland (Guangdong) Ltd.	N/A		
	Fully charged cells are subjected for 28 days to charge as specified by the manufacturer.		N/A		
	Ambient temperature when testing		N/A		
	Results: No fire, no explosion, no leakage		N/A		
2.(2)	Vibration		Р		
	The measured open circuit voltage of the fullycharged cells or batteries is within anticipated parameters. The cells or batteries are subjected to a vibration sequence with amplitude of 0.76mm and a total maximum excursion of 1.52mm. The frequency was varied at the rate of 1Hz/min between the limits of 10Hz and 55Hz. The entire range of frequencies (10Hz to 55Hz) and return (55Hz to 10Hz) was traversed in 90min±5min for each mounting position. The vibration was applied in each of three mutually perpendicular directions.		Р		
	Results: No fire, no explosion, no leakage	No fire, no explosion, no leakage.	Р		
2.(3)	Battery enclosure test at high ambient temperature		N/A		
	Fully charged batteries were placed in an aircirculating oven at a temperature of 70±2°C for 7hours.Afterwards, they are removed and allowed to return to room temperature.		N/A		
	Results: no physical distortion of the battery casing resulting in exposure if internal components.		N/A		
2.(4)	Temperature cycling		Р		
	Fully charged cells or batteries were subjected to temperature cycling (+75 $^{\circ}$ C, +20 $^{\circ}$ C, -20 $^{\circ}$ C, +20 $^{\circ}$ C) in forced draught chambers according to the procedure After the fifth procedure, the cells or batteries were stored at 20±5 $^{\circ}$ C for 7 days prior to examination.		Ρ		
	Results: No fire, no explosion, no leakage	No fire, no explosion, no leakage.	Р		
3	Reasonably foreseeable misuse		Р		
3.(1)	External short circuit		Р		



Electri	Electrical Appliance and Material Safety Act Appendix 9 : (Lithium Ion Secondary Batteries)				
Clause	Requirement – Test	Result - Remark	Verdict		
	a) Fully charged cells were subjected to a short circuit test at $55^{\circ}C\pm5^{\circ}C$ . The external resistance did not exceed $80\pm20m\Omega$ . The cells were tested for 24h or until the case temperature declined by 20% of the maximum temperature rise.	The cell has approved by TÜV Rheinland (Guangdong) Ltd.	N/A		
	b) Fully charged batteries were subjected to a short circuit test at 20°C±5°C. The external resistance did not exceed 80±20mΩ. The batteries were tested for 24h or until the case temperature declined by 20% of the maximum temperature rise. (whichever is the sooner ; if the battery incorporates a protective device or protective circuit and the current has stopped, then for one hour after the current stopped).		Ρ		
	Results: No fire, no explosion.	No fire, no explosion.	Р		
3.(2)	Free fall		Р		
	Fully charged cells and batteries were dropped 3 times from a height of 1.0m onto a concrete floor.	1.0m	Р		
	Results: No fire, no explosion	No fire, no explosion.	Р		
3.(3)	Mechanical shock (crash hazard)		Р		
	<ul> <li>Fully charged cells and batteries shall not fire, explode, or leak when tested under the following test conditions:</li> <li>a) The charged cell and battery shall be secured to on an impact testing machine by means of a rigid mount. Then shock of the equal magnitude shall be applied to the battery in each of three mutually perpendicular directions (X, Y, and Z axes).</li> <li>b) The shock applied to the charged cell or battery shall be accelerated so that the minimum average acceleration will be 735m/s<sup>2</sup> during the first 3ms.The peak acceleration was between 1228m/s<sup>2</sup> and 1716m/s<sup>2</sup>.</li> </ul>		Ρ		
	Results: No fire, no explosion, no leakage	No fire, no explosion, no leakage.	Р		
3.(4)	Thermal abuse	The cell has approved by TÜV Rheinland (Guangdong) Ltd.	N/A		
	Fully charged batteries at 20±5°C shall be placed in a gravity or circulating air-convention oven. The oven temperature shall then be increased to 130±2°C at a rate of 5±2°C/min.,left for 10 minutes, and then the battery shall not fire or explode.		N/A		
	Results: No fire, no explosion		N/A		
3.(5)	Crushing of cells	The cell has approved by TÜV Rheinland (Guangdong) Ltd.	N/A		
	Fully charged cells shall not fire or explode when tested under the following test conditions:		N/A		



Electri	Electrical Appliance and Material Safety Act Appendix 9 : (Lithium Ion Secondary Batteries)				
Clause	Requirement – Test	Result - Remark	Verdict		
	a) Fully charged cells shall be placed between two flat surfaces and a force of 13 ±1kN shall be applied by a crushing apparatus.		N/A		
	b) The force was released when any of the following occurs:		N/A		
	(1) the maximum forces applied		N/A		
	(2) an abrupt voltage drop of one-third of the original voltage has been obtained		N/A		
	(3) There was 10% deformation of battery height		N/A		
	c) Force shall be applied to charged cells so that the longitudinal axis of the cells becomes parallel with the flat surface of the crushing apparatus		N/A		
	For charged cells that are prismatic (hereafter called " the prismatic cells"), a similar test shall be performed by rotating a cell 90° around its longitudinal axis and it shall be ensured that force is applied to both the wide and narrow sides of the prismatic cells. At that time, one sample shall receive force in a single direction.		N/A		
	Ambient temperature when testing		N/A		
	Results: No fire, no explosion.		N/A		
3.(6)	Low pressure	The cell has approved by TÜV Rheinland (Guangdong) Ltd.	N/A		
	Fully charged cells are placed in a vacuum chamber, the chamber shall be closed, and then the chamber shall be gradually reduced to a pressure equal to or less than 11.6kPa. After being kept in that pressure of the value in the vacuum chamber for six hours.		N/A		
	Results: No fire, no explosion, no leakage		N/A		
3.(7)	Overcharge	The cell has approved by TÜV Rheinland (Guangdong) Ltd.	N/A		
	The cell discharged under the conditions specified in Annex Table1-2(including cells equipped with a protective device for use in equipment or batteries; hereafter called "the discharged cells") shall be provided. Then by using a power supply of not less than 10V, the battery shall be energized until it reaches 250% of the rated capacity or the test voltage with the designed charging current, and the battery shall not fire or explode.		N/A		
	Ambient temperature when testing		N/A		
	Results: No fire, no explosion.		N/A		
3.(8)	Forced discharge	The cell has approved by TÜV Rheinland (Guangdong) Ltd.	N/A		



Clause	Poquiroment Test	Booult Bomork	Vordict
Clause	Requirement – Test	Result - Remark	verdict
	When polarity reversely charged at 1 A for 90minutes, the discharged cell shall not fire or explode.		N/A
	Ambient temperature when testing		N/A
	Results: No fire, no explosion		N/A
3.(9)	Cell protection against a high charging rate	The cell has approved by TÜV Rheinland (Guangdong) Ltd.	N/A
	The discharged cells shall not fire or explode when charged at a current three times the designed maximum charging current, thereby fully charging it, or when a protective device used in the equipment or battery cuts off the charge current.		N/A
	Ambient temperature when testing		N/A
	Results: No fire, no explosion		N/A
3.(10)	Forced internal short circuit of cells	The cell has approved by TÜV Rheinland (Guangdong) Ltd.	N/A
	The winding core of a charged cell (except for those whose electrolyte is not liquid) shall not fire when tested according to the test procedure specified below. Note that each test shall use a new sample. Inserted between the positive active material and negative active material Inserted between the uncoated current collector of positive electrode and the active material coated negative active electrode.Test was stopped when voltage drop of over 50mV was obtained, or Stopped when the pressure reached 800N (for Prismatic cells, 400N).		N/A
	Ambient temperature when testing		N/A
	Number of test sample		N/A
	Results: No fire, no explosion		N/A
3.(11)	Function of the overvoltage protection of		Р
	When tested at an ambient temperature of 20±5°C by using any method specified below, the cell block in the battery shall not exceed the upper limited charging voltage specified in Annex Table 1-2.		Р
	a) For batteries made of a one cell block, the voltage applied to the cell block during charging shall be measured		N/A
	b) For batteries consisting of a series of two pieces or more of cell blocks, it shall be charged while measuring the voltage of each cell block and at the same time, one cell block shall forcibly be discharged and the voltages of the other cell blocks shall gradually be measured	5S1P	Ρ



Electrical Appliance and Material Safety Act Appendix 9 : (Lithium Ion Secondary Batteries)			
Clause	Requirement – Test	Result - Remark	Verdict
	c) For batteries consisting of a series of connection of two pieces or more of cell blocks, a voltage exceeding the upper limited charging voltage specified in Annex Table 1-2 shall be applied to the cell block while measuring the voltage of each cellblock. When the charging stops, the voltage shall be measured		N/A
3.(12)	Free fall of appliance		N/A
	The charged batteries shall be installed to be used, and shall be dropped once a concrete floor or iron plate in a direction considered to most likely affect the battery in a negative manner.		N/A
	An equivalent load shall be applied to the battery		N/A
	Kind of equipment		N/A
	Weight of appliance		N/A
	Applicable standard		N/A
	Height in drop testing		N/A
	Results: no short-circuiting		N/A
4	Labeling		Р
	A method shall be used to provide labeling on a surface where it can easily be seen but not easily faded. This may be omitted if such surface labeling proves difficult, and another method can be utilized to provide labeling that will not easily fade on the surface where it is easy to see.	The label of battery meets the requirements.	Ρ
	Rated voltage		Р
	Rated capacity		Р



	TAE	BLE: List of Critical	Components(#)				Р	
Object / p No.	oart	Manufacturer / trademark	Type / model	Technical data	Standard	Mark( confo	s) of rmity <sup>1)</sup>	
РСВ		AUSON CO LTD	BPU4-T5	FR4,UL94- V0,65*40*1.0mm	UL796	UL E3	21575	
IC (U6)		Texas Instruments Incorporated	BQ78350	V <sub>CC</sub> :2.4-2.6V V <sub>O</sub> :5.5V V <sub>IN</sub> :5.5V T <sub>OPR</sub> :-40 TO 85℃		Testeo applia	d with nce	
IC (U5)		Texas Instruments Incorporated	BQ76920	V <sub>BAT</sub> :6-25V V <sub>IN</sub> :2-5V V <sub>OUT</sub> :0-3.6V T <sub>OPR</sub> :-40 TO 85℃		Testeo applia	d with nce	
MOSFET (Q4/Q5)		Alpha & Omega Semiconductors	AOD4185	V <sub>DS</sub> :40V V <sub>GS</sub> :±20V I <sub>D</sub> :50A T <sub>J</sub> ,T <sub>STG</sub> :-55 to 175℃		Tested with appliance		
MOSFET (Q6/Q7)		SIEMENS	BSS123	V <sub>DS</sub> :100V V <sub>GS</sub> :±14V I <sub>D</sub> :0.17A(T <sub>A</sub> = 28 °C) T <sub>J</sub> ,T <sub>STG</sub> :-55 to +150℃		Testeo applia	d with nce	
MOSFET (Q15)		NXP	BSS84	V <sub>DS</sub> :-50V V <sub>GS</sub> :±20V I <sub>D</sub> :-130mA T <sub>J</sub> ,T <sub>STG</sub> :-565 to +150℃		Testeo applia	d with nce	
FU1		LITTELFUSE INC	2016L260	24V / 2.6A		UL E1	83209	
Lead Wire		SHENZHEN HUIKE ELECTRONIC WIRE & CABLE FACTORY	1007	VW-1,26AWG, 80℃,300V	UL758	UL E4	93105	
Cell		ВАК	N18650CP	3.6V, 3350mAh		TÜV approv report no.:CN 001.	Rheinland ved, N21SFEF	
Supplementary information: <sup>1)</sup> Provided evidence ensures the agreed level of compliance. See OD-CB2039.								

(#): The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.



2.(1)	TABLE: - Continuous charging at constant voltage (Cell)								
Sample number	Recommended Charging Method, CC, CV, or CC/CV	Recommended Charging Voltage Vc, (Vdc)	Recommended Charging Current Irec, (mA)	OCV at Start of Test, (Vdc)	Re	sults			
Supplementary information:									
-No fire,no explosion									
-No leakage	-No leakage								

3.(1) TABLE:- External Short Circuit Test (Cell)					N/A			
Sample number	Ambient, (°C)	OCV at start of test, (Vdc)	Resistance of Circuit,( mΩ)	Maximum surface temperature, (°C)	Re	sults		
Samples charged at the highest test temperature								
Samples charged at the lowest test temperature								
Supplementar	<b>y information:</b> losion							

3.(1)	TABLE: - Exter		Р						
Sample	Ambient,	OCV at start of test, (Vdc)	Resistance of Circuit, (mΩ)	Maximum surface temperature, (°C)	Results				
number	(*C)			,					
Samples charged at the highest test temperature (45 $^\circ \!$									
B-01	22.4	20.51	92.1	24.6.		Ρ			
B-02	22.4	20.54	90.5	23.7		Р			
B-03	22.4	20.53	92.4	23.5		Р			
B-04	22.4	20.56	93.6	23.4	Р				
B-05	22.4	20.52	91.8	23.5	Р				
	Samples charged at the lowest test temperature (-5°C)								
B-06	22.3	20.54	92.1	24.5		Р			
B-07	22.3	20.34	90.5	24.8		Р			
B-08	22.3	20.44	92.4	23.5		Р			
B-09	22.3	20.37	93.6	23.0		Р			
B-10	22.3	20.53	91.8	23.6		Р			
Supplementary information:									

-No fire,no explosion



3.(5)	TABLE: – Crush (Cell-wide side)							
Sample number	OCV at start of test, (Vdc)The forced applied for crush, (kN)Testing applied force for crush, (kN)		Results					
Samples charged and tested at the highest test temperature								
	Samples charg	ed and tested at the low	est test temperature					
					-			
Supplementary	Supplementary information:							
-No fire,no explo	-No fire,no explosion							
3.(5)	TABLE: - Crush (C	TABLE: – Crush (Cell-narrow side)						
Sample number	OCV at start of test, (Vdc)	Required deformation for crush, (mm)	Tested deformation for crush, (mm)	Res	ults			
Samples charged and tested at the highest test temperature								
Samples charged and tested at he lowest test temperature								
				-	_			
Supplementary	information:							
-No fire,no explosion								

No fire, no explosior

3.(7) TABLE: – Overcharge (Cell)							
Sample number	OCV at start of test, (Vdc)	Testing Current, (mA)	Testing Voltage, (Vdc)	Results			
Samples tested at the highest test temperature							
		-					
Samples tested at the lowest test temperature							
Supplementary information: -No fire,no explosion							

3.(8) TABLE: – Forced discharge (Cell)								
Sample number	OCV before application of reverse charge, (Vdc)	Measured Reverse Charge It,( mA)	Total Time for Reversed Charge Application, (Min)	e for harge Res , (Min)				
Samples tested at the highest test temperature								
Samples tested at the lowest test temperature								
Supplementary information: -No fire,no explosion								



3.(9) TABLE: – Cell Protection Against a High Charging Rate								
Sample number	OCV at start of test, (Vdc)	Testing Current, (mA)	Maximum Charging Voltage, (Vdc)	Res	sults			
Samples tested at the highest test temperature								
Samples tested at the lowest test temperature								
Supplementar -No fire,no exp	<b>y information:</b> losion							

3.(10) TABLE: – Forced internal short circuit of cells						N/A		
Sample number	Test Temperature, (°C)	OCV at start of test, (Vdc)	Particle location <sup>1)</sup>	Maximum applied pressure, (N)	Resi	ults		
	Samples charged and tested at the highest test temperature							
			-					
Samples charged and tested at the lowest test temperature								
			_					
Supplementary information:								

<sup>1)</sup> Identify one of the following:

1: Nickel particle inserted between positive and negative (active material) coated area.

2: Nickel particle inserted between positive aluminium foil and negative active material coated area.

-No fire



### List of test equipment used:

Instrument Name	No.	Manufacturer	Calibration Date	Due Date	Equipment status
Drop Tester	T-08-BT006	GAOXIN	2021/03/09	2022/03/08	⊠Yes ⊡No
Battery Charge- Discharge Testing System	T-08-BT011	NEWARE	2021/02/24	2022/02/23	⊠Yes ⊡No
Electric Vibration Test Machine	T-08-BT012	DONGLING	2021/07/22	2022/07/21	⊠Yes ⊡No
Hydraulic Shock Test Machine	T-08-SF275	LABTONE	2021/07/04	2022/07/03	⊠Yes ⊡No
Digital Multimeter	T-08-BT017	FLUKE	2021/02/24	2022/02/23	⊠Yes ⊡No
Multipath Temperature Tester	T-08-BT025	RONGXIN	2021/04/28	2022/04/27	⊠Yes ⊡No
Milliohmmeter	T-08-BT026	ViCi	2021/04/28	2022/04/27	⊠Yes ⊡No
High-low Temperature Test Chamber	T-08-BT034	BACL	2021/04/28	2022/04/27	⊠Yes □No
High-Low Temperature Short- Circuit Tester	T-08-BT037	GAOXIN	2021/04/28	2022/04/27	⊠Yes ⊡No
Fast Temperature Change Chamber	T-08-BT022	BACL	2021/07/09	2022/07/08	⊠Yes ⊡No
High-low Temperature Test Chamber	T-08-SF269	BACL	2021/02/25	2022/02/24	⊠Yes ⊡No



## **Sample Photos**













## **Directions**

- 1. The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.
- 2.Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
- 3.Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
- 4.The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.
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