



Test Report

Application No. : HXT240902521748
Applicant : Shenzhen Choupijiang Electronics Co., LTD
Equipment Under Test (EUT)
EUT Name : Penguin Hand Warmer
Model No. : N03
Serial No. : N/A
Brand Name : N/A
Receipt Date : 2024-09-01
Test Date : 2024-09-01 to 2024-09-13
Issue Date : 2024-09-14
Standards : IEC 60335-2-17:2022
Conclusions : Complied

This report shows that the product technically complies with the Council requirements.

Test/Witness Engineer : *Alan Chen*
Approved & Authorized : *David He*



This test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.



TEST REPORT IEC 60335-2-17 Household and similar electrical appliances - Safety Part 2-17: Particular requirements for blankets, pads and similar flexible heating appliances	
Report Number.....:	HXT240902521748
Name of Testing Laboratory preparing the Report.....:	Shenzhen Huaxu Testing Technology Co., Ltd. 106, building B12, Yintian Industrial Zone, Yantian community, Xixiang street, Bao'an District, Shenzhen
Applicant's name.....:	Shenzhen Choupijiang ElectronicsCo.,LTD
Address.....:	305, Building A1, Huangzhu Third Industrial Zone, Huangzhu Community, Hangcheng Street,Baoan District, Shenzhen
Test specification:	
Standard.....:	IEC 60335-2-17:2022 to be used in conjunction with IEC 60335-1:2020
Test procedure.....:	CB Scheme
Non-standard test method.....:	N/A
TRF template used.....:	IECEE OD-2020-F1:2022, Ed.1.5
Test Report Form No.....:	IEC60335_2_17L
Test Report Form(s) Originator.....:	IMQ S.p.A.
Master TRF.....:	Dated 2023-01-20
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General disclaimer: 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 NCB. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.	
Test item description.....:	Penguin Hand Warmer
Trade Mark.....:	N/A
Manufacturer.....:	Shenzhen Choupijiang ElectronicsCo.,LTD
Address.....:	305, Building A1, Huangzhu Third Industrial Zone, Huangzhu Community, Hangcheng Street,Baoan District, Shenzhen
Model/Type reference.....:	N03
Ratings.....:	DC 5V, 1A

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

Appendix I: Photos.

Summary of testing:**Tests performed (name of test, test clause and date test performed):**

See Report for details.

Testing location: (CBTL, SPTL, CTF, Subcontractor)

Shenzhen Huaxu Testing Technology Co., Ltd.
106, building B12, Yintian Industrial Zone, Yantian community, Xixiang street, Bao'an District, Shenzhen

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

The product fulfils the requirements of IEC 60335-2-17:2022 (insert standard number and Year of publication, and delete the text in parenthesis, leave it blank or delete the whole sentence, if not applicable)

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.



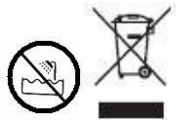
Copy of marking plate:

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.

Penguin Hand Warmer

Model: N03

Input: DC 5V, 1A



Shenzhen Choupijiang ElectronicsCo.,LTD

Made in China



Test item particulars : Penguin Hand Warmer	
Classification of installation and use : Hand-held	
Supply Connection : Not connected to the mains directly :	
Possible test case verdicts: - test case does not apply to the test object..... : N/A or N - test object does meet the requirement..... : P (Pass) - test object does not meet the requirement..... : F (Fail)	
Testing :	
Date of receipt of test item : 2024-09-01	
Date (s) of performance of tests : 2024-09-01 to 2024-09-13	
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 type="checkbox"/> comma / <input checked="" type="checkbox"/> point is used as the decimal separator. <input checked="" type="checkbox"/> This Test Report Form contains requirements according to IEC/ISO Standard dated and includes Corrigendum dated (Note: The above text maybe removed if not applicable)	
Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 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) : Shenzhen Choupijiang ElectronicsCo.,LTD 305, Building A1, Huangzhu Third Industrial Zone, Huangzhu Community, Hangcheng Street,Baoan District, Shenzhen	



General product information and other remarks:

- 1.The application product is the Penguin Hand Warmer.
- 2.According to the requirement of the client,the unit is evaluated according to the clause 11, clause 19, the test result complied with the requirement of the standard.



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict
11	HEATING		P
11.1	No excessive temperatures in normal use		P
11.2	The appliance is held, placed or fixed in position as described.....:		P
	Underblankets (length less than 1 m), and duvet (not PTC elements) folded (IEC 60335-2-17)		N
	Wraps (not PTC elements) folded (IEC 60335-2-17)		N
11.3	Temperature rises, other than of windings, determined by thermocouples		P
	Temperature rises of windings determined by resistance method, unless		N
	the windings are non-uniform or it is difficult to make the necessary connections		P
	Thermocouples are attached with textile thread over a length at least 10 mm (heating elements) (IEC 60335-2-17)		P
	Thermocouples fixed by means of thin adhesive tape (surface of electro-conductive textiles) (IEC 60335-2-17)		P
	Thermocouples are soldered to plates of copper (pads) (IEC 60335-2-17)		P
11.4	Heating appliances operated under normal operation at 1,15 times rated power input (W).....:		P
	Supply voltage (V) between 0,94 and 1,06 times rated voltage (controlled appliances and class III construction) (IEC 60335-2-17)		P
11.5	Motor-operated appliances operated under normal operation at most unfavourable voltage between 0,94 and 1,06 times rated voltage (V).....:		N
11.6	Combined appliances operated under normal operation at most unfavourable voltage between 0,94 and 1,06 times rated voltage (V).....:		N
11.7	Operation duration corresponding to the most unfavourable conditions of normal use		P
	Appliance outlets and socket-outlets accessible to the user loaded with a resistive load that gives the marked outlet load		N
	For appliances incorporating integral batteries or separable batteries not disconnected from the appliance during charging:		P
	- the fully discharged battery is charged for 1 h, while the appliance is operated continuously performing its intended function		P



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict
	- the fully discharged battery is charged for 24 h or until it is fully charged, without the appliance performing its intended function		P
	Appliances are operated until steady conditions are established (IEC 60335-2-17)		P
11.8	Temperature rises monitored continuously and not exceeding the values in Table 3.....:	(See appended table)	P
	If the temperature rise of a motor winding exceeds the value of Table 3, or		N
	if there is doubt with regard to classification of insulation,		P
	tests of Annex C are carried out		N
	Sealing compound does not flow out		N
	Protective devices do not operate, except		N
	components in protective electronic circuits tested for the number of cycles specified in 24.1.4		N
	Temperatures not exceeding values in table 101 or table 102 (IEC 60335-2-17)		P
	Flexible part with electro-conductive textile, values specified for heating elements applicable to the surface of supplementary insulation or reinforced insulation, or to the conductive surface if there is no insulation (IEC 60335-2-17)		P
	Temperature or temperature rise specified for the surface applies to the accessible surface of the sheath (pads with ends of heating element contained in a plastic sheath attached to the flexible part) (IEC 60335-2-17)		P
11.101	No risk of skin burn or heatstroke to the user (blankets/mattresses) (IEC 60335-2-17)		P
	Controlled appliances surface temperature controllable down to 50 °C or less, during the first hour of operation, and thereafter (IEC 60335-2-17)		P
	45 °C, nearest the foot end of the bed (IEC 60335-2-17)		N
	37 °C, remainder of the flexible part (IEC 60335-2-17)		N
	Other appliances surface temperature rise controllable down to 33 K or less, during the first hour of operation, and thereafter (IEC 60335-2-17)		N
	28 K, nearest the foot end of the bed (IEC 60335-2-17)		N



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict
	20 K, remainder of the flexible part (IEC 60335-2-17)		N
11.102	No excessive surface temperature (pads) (IEC 60335-2-17)		P
	Controlled pads, surface temperature controllable down to 85 °C or less (IEC 60335-2-17)		N
	other pads, surface temperature does not exceed 60 K (IEC 60335-2-17)		N
19	ABNORMAL OPERATION		P
19.1	The risk of fire, mechanical damage or electric shock under abnormal or careless operation obviated		P
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe..... :	(See appended table)	P
	Blankets subjected to the tests of 19.101 and 19.103 (IEC 60335-2-17)		N
	Pads subjected to the tests of 19.103 and 19.105 (IEC 60335-2-17)		N
	Controlled pads also subjected to the tests of 19.104 (IEC 60335-2-17)		N
	Mattresses subjected to the tests of 19.103 and 19.108 (IEC 60335-2-17)		N
	Appliances incorporating a fuse-link or intentionally weak part that ruptures due to a short circuit also subjected to the test of 19.102 (IEC 60335-2-17)		N
	Fuse-links incorporated in an appliance to protect the flexible part against overheating or ignition not subjected to the tests of 19.12 and not required to comply with IEC 60127 (IEC 60335-2-17)		N
	Appliances incorporating electronic circuits also subjected to the tests of 19.11 and 19.12 (IEC 60335-2-17)		N
	Appliance supplied with a voltage (IEC 60335-2-17)		P
	– between 0,9 times and 1,1 times the rated voltage, for controlled appliances..... :		N
	– resulting in a power input between 0,85 times and 1,24 times the rated power input, for other appliances,..... :		N
	unless otherwise specified		N
	Unless otherwise specified, the tests are continued until a non-self-resetting thermal cut-out operates, or		N
	until steady conditions are established		P



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict
	If a heating element or an intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample, and		P
	that same part on the second sample does also become permanently open-circuited in the second test,		N
	unless a non-self-resetting thermal cut-out operates, or steady conditions are established		N
19.11	Electronic circuits, compliance checked by evaluation of the fault conditions specified in 19.11.2 for all circuits or parts of circuits, unless		P
	they comply with the conditions specified in 19.11.1		N
	Appliances incorporating an electronic circuit that relies upon a programmable component to function correctly, subjected to the test of 19.11.4.8, unless		N
	restarting does not result in a hazard		N
	Appliances having a device with an off position obtained by electronic disconnection, or a device placing the appliance in a stand-by mode, subjected to the tests of 19.11.4		
	If the safety of the appliance under any of the fault conditions depends on the operation of a miniature fuse-link complying with IEC 60127, the test of 19.12 is carried out		N
	During and after each test the following is checked:		N
	- the temperature of the windings does not exceed the values specified in Table 8		N
	- the appliance complies with the conditions specified in 19.13		N
	- any current flowing through protective impedance not exceeding the limits specified in 8.1.4		N
	If a conductor of a printed board becomes open-circuited, the appliance is considered to have withstood the particular test, provided both of the following conditions are met:		N
	- the base material of the printed circuit board withstands the test of normative Annex E		N
	- any loosened conductor does not reduce clearance or creepage distances between live parts and accessible metal parts below the values specified in clause 29		N
19.11.1	Fault conditions a) to g) in 19.11.2 are not applied to circuits or parts of circuits meeting both of the following conditions:		N



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict
	- the electronic circuit is a low-power circuit, that is, the maximum power at low-power points does not exceed 15 W according to the tests specified		N
	- the protection against electric shock, fire hazard, mechanical hazard or dangerous malfunction of other parts of the appliance does not rely on the correct functioning of the electronic circuit		N
19.11.2	Fault conditions applied one at a time, the appliance operating under conditions specified in clause 11, but supplied at rated voltage, duration of the tests as specified:		P
	a) short circuit of functional insulation if clearances or creepage distances are less than the values specified in clause 29		P
	b) open circuit at the terminals of any component		P
	c) short circuit of capacitors, unless		P
	they comply with IEC 60384-14:2013 including IEC 60384-14:2013/AMD:2016		P
	d) short circuit of any two terminals of an electronic component, other than integrated circuits		P
	This fault condition is not applied between the two circuits of an optocoupler		P
	e) failure of triacs in the diode mode		P
	f) failure of microprocessors and integrated circuits		P
	g) failure of an electronic power switching device		N
	Each low power circuit is short-circuited by connecting the low-power point to the pole of the supply source from which the measurements were made		N
	Any cord between a battery-operated appliance consuming more than 15 W and the detachable power supply part short-circuited as specified		N
19.11.3	If the appliance incorporates a protective electronic circuit that operates to ensure compliance with clause 19, the appliance is tested as specified		N
	The test of 19.106 is not repeated (IEC 60335-2-17)		N
19.11.4	Appliances having a device with an off position obtained by electronic disconnection, or		N
	a device that can be placed in the stand-by mode,		N
	subjected to the tests of 19.11.4.1 to 19.11.4.7, the device being set in the off position or in the stand-by mode		N



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict
	Appliances incorporating a protective electronic circuit subjected to the tests of 19.11.4.1 to 19.11.4.7, the tests being carried out after the protective electronic circuit has operated as specified, however		N
	tests of electromagnetic phenomena not applied to protective electronic circuits operating during 19.7 in appliances that are used while attended		N
	Surge protective devices disconnected, unless		N
	they incorporate spark gaps		N
19.11.4.1	The appliance is subjected to electrostatic discharges in accordance with IEC 61000-4-2, test level 4		N
19.11.4.2	The appliance is subjected to radiated fields in accordance with IEC 61000-4-3, at frequency ranges as specified		N
19.11.4.3	The appliance is subjected to fast transient bursts in accordance with IEC 61000-4-4, test level 3 or 4 as specified		N
19.11.4.4	The power supply terminals of the appliance subjected to voltage surges in accordance with IEC 61000-4-5 as specified		N
	An open circuit test voltage of 2 kV is applicable for the line-to-line coupling mode		N
	An open circuit test voltage of 4 kV is applicable for the line-to-earth coupling mode		N
	Earthed heating elements in class I appliances disconnected		N
	For appliances having surge arresters incorporating spark gaps, tests repeated at 95 % of the flashover voltage		N
19.11.4.5	The appliance is subjected to injected currents in accordance with IEC 61000-4-6, test level 3		N
19.11.4.6	Appliances having a rated current not exceeding 16 A are subjected to the class 3 voltage dips and interruptions in accordance with IEC 61000-4-11:2020		N
	Appliances having a rated current exceeding 16 A are subjected to the class 3 voltage dips and interruptions in accordance with IEC 61000-4-34:2005 including IEC 61000-4-34:2005/AMD1:2009		N



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict
19.11.4.7	The appliance is subjected to mains signals in accordance with IEC 61000-4-13:2002 including IEC 61000-4-13:2002/AMD1:2009 and IEC 61000-4-13:2002/AMD2:2015, test level class 2		N
19.11.4.8	The appliance is supplied at rated voltage and operated under normal operation. After 60 s the power supply is reduced to a level such that the appliance ceases to respond or parts controlled by the programmable component cease to operate		N
	The appliance continues to operate normally, or		N
	requires a manual operation to restart		N
19.12	If the safety of the appliance for any of the fault conditions specified in 19.11.2 depends on the operation of a miniature fuse-link complying with IEC 60127, the test is repeated, measuring the current flowing through the fuse-link; measured current (A); current rating of the fuse-link (A).....:		N
19.13	During the tests the appliance does not emit flames, molten metal, poisonous or ignitable gas in hazardous amounts		N
	Temperature rises not exceeding the values shown in table 9.....:	(See appended table)	P
	Compliance with clause 8 not impaired		P
	If the appliance can still be operated, it complies with 20.2		P
	Test of 15.101 is carried out before the test of 16.3 (IEC 60335-2-17)		P
	Insulation, other than of class III appliances or class III constructions that do not contain live parts, withstands the electric strength test of 16.3, the test voltage as specified in Table 4:		N
	- basic insulation (V).....:		N
	- supplementary insulation (V).....:		N
	- reinforced insulation (V).....:		N
	After operation or interruption of a control, clearances and creepage distances across the functional insulation withstand the electric strength test of 16.3, the test voltage being twice the working voltage		N
	The appliance does not undergo a dangerous malfunction, and		N
	no failure of protective electronic circuits, if the appliance is still operable		N



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict
	For accessible safety extra-low voltage outlets, connectors, or USB outlets, no increase of the no-load output voltage by more than 3 V or 10 % of the voltage in normal use, whichever higher, with a maximum/peak of 42,4 VDC/VAC		N
	Appliances tested with an electronic switch in the off position, or in the stand-by mode:		N
	- do not become operational, or		N
	- if they become operational, do not result in a dangerous malfunction during or after the tests of 19.11.4		N
	Failure of an electronic switch in the off position or stand-by mode and the appliance becomes permanently energized, the temperatures or temperature rises specified in 19.106 not exceeded (IEC 60335-2-17)		N
	If the appliance contains lids or doors that are controlled by one or more interlocks, one of the interlocks may be released provided that both:		N
	- the lid or door does not move automatically to an open position when the interlock is released, and		N
	- the appliance does not start after the cycle in which the interlock was released		N
	Flexible part in contact with thermal insulation: (IEC 60335-2-17)		N
	165 °C for controlled appliances	(see appended table)	N
	150 K for other appliances	(see appended table)	N
	Heating elements or electro-conductive textiles: (IEC 60335-2-17)		N
	160 °C for controlled appliances	(see appended table)	N
	145 K for other appliances	(see appended table)	N
	unless the appliance is no longer in an operating condition		N
19.101	Blankets, five- thickness fold (IEC 60335-2-17)		N
	If the blanket cannot be folded with five thicknesses, tested as a mattress in accordance with 19.108 (IEC 60335-2-17)		N
	Appliance supplied with a voltage at the upper limit of the range specified in 19.1.....: (IEC 60335-2-17)		N
19.102	Tests of 19.101, 19.105 or 19.108 repeated with the point of maximum impedance of the protection circuit included in the most unfavourable part (IEC 60335-2-17)		N



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict
	Appliance supplied with a voltage at the lower limit of the range specified in 19.1.....: (IEC 60335-2-17)		N
19.103	Appliances with controls that limit the temperature during the test of Clause 11 short-circuited (IEC 60335-2-17)		N
19.104	Controlled pads tested with two-thirds of flexible part positioned so that it overhangs the edge of the plywood support (IEC 60335-2-17)		N
19.105	Pads, three-thickness fold (IEC 60335-2-17)		N
19.106	Blankets and mattresses, test of 11.101 repeated with simulated single component failure, other than heating elements and internal wiring (IEC 60335-2-17)		N
	Inherently controlled blankets and mattresses, max. surface temperature does not exceed 60 °C (IEC 60335-2-17)		N
	Other blankets and mattresses, max. surface temperature rise does not exceed 43 K (IEC 60335-2-17)		N
	Pads operated under normal condition with control adjusted for continuous use with simulated single component failure, other than heating elements and internal wiring (IEC 60335-2-17)		N
	Inherently controlled pads, max. surface temperature does not exceed 85 °C (IEC 60335-2-17)		N
	Other pads, max. surface temperature rise does not exceed 60 K (IEC 60335-2-17)		N
19.107	Heating elements and internal wiring do not attain excessive temperature if a strand or strands are broken (tests 19.112.1- 19.112.3) (IEC 60335-2-17)		N
19.107.1	Test of internal wiring/heating elements without integral insulation, having individual strands not insulated from each other (IEC 60335-2-17)		N
	Number of strands left intact for the test; number of strands: (IEC 60335-2-17)		N
	No scorching of enclosure or material in contact (IEC 60335-2-17)		N
19.107.2	Test of internal wiring/heating elements without integral insulation, having individual strands not insulated from each other (IEC 60335-2-17)		N



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict
	Number of strands left intact for the test; number of strands: (IEC 60335-2-17)		N
	No scorching of enclosure or material in contact (IEC 60335-2-17)		N
19.107.3	Test of internal wiring/heating elements having individual strands which are electrically insulated from each other (IEC 60335-2-17)		N
	Measured insulation resistance ($M\Omega$) at 500 V d.c. between any two strands: (IEC 60335-2-17)		N
	0,1 $M\Omega$ min. for Class III appliances (IEC 60335-2-17)		N
	1 $M\Omega$ min. for other appliances (IEC 60335-2-17)		N
19.108	Mattresses, five runs of the heating element bunched together in the most unfavourable way over a length of 150 mm (IEC 60335-2-17)		N
	If the construction does not allow the heating element runs to be bunched together, the heating element assembly removed from the mattress and subjected to the test of 19.102 (IEC 60335-2-17)		N



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict

11.8	TABLE: Heating test				P
	Test voltage (V)	5Vdc			—
	Ambient (°C)	24.2°C			—
	Thermocouple locations:	Max. temperature measured, (°C)	Max. temperature rise measured, ΔT (K)	Max. temperature limit, (°C)	Max. temperature rise limit, ΔT (K)
	PCB near charging port	--	3.2	--	105
	PCB near U1	--	9.6	--	105
	PCB near heating element	--	13.8	--	105
	Battery surface	--	4.0	--	Ref.
	Plastic enclosure near heating element, inside	--	6.2	--	95
	Plastic enclosure near heating element, outside	--	3.5	--	Cl.30
	Test corner	--	2.6	--	65
Supplementary information:					

11.8	TABLE: Heating test, resistance method					N
	Test voltage (V)					—
	Ambient, t₁ (°C)					—
	Ambient, t₂ (°C)					—
	Temperature rise of winding:	R₁ (Ω)	R₂ (Ω)	ΔT (K)	Max. ΔT (K)	Insulation class
Supplementary information:						



IEC 60335-2-17			
Clause	Requirement + Test	Result - Remark	Verdict

19		Abnormal operation conditions						P
Operational characteristics			YES/NO	Operational conditions				
Are there electronic circuits to control the appliance operation?			Yes	--				
Are there "off" or "stand-by" position?			Yes	--				
The unintended operation of the appliance results in dangerous malfunction?			No	--				
Sub-clause	Operating conditions description	Test results description	PEC description	EMP 19.11.4	Software type required	19.11.3 PEC	Final result	
19.11.2	See clause 19.11.2	No hazards, pass	--	--	--	--	--	
19.11.4.8	--	--	--	--	--	--	--	
19.102	--	--	--	--	--	--	--	
19.107	--	--	--	--	--	--	--	
19.108	--	--	--	--	--	--	--	
19.109	--	--	--	--	--	--	--	
19.110	--	--	--	--	--	--	--	
19.111	--	--	--	--	--	--	--	
19.112	--	--	--	--	--	--	--	
19.113	--	--	--	--	--	--	--	
Supplementary information:								

19.13		TABLE: Abnormal operation, temperature rises			P
Thermocouple locations:	Max. temperature measured, (°C)	Max. temperature rise measured, ΔT (K)	Max. temperature limit, (°C)	Max. temperature rise limit, ΔT (K)	
Battery surface	--	20.2	--	Ref.	
Test corner	--	10.2	--	150	
Supplementary information:					

Photos of the product:

Photo 1 Appearance of EUT



Photo 2 Appearance of EUT



Photo 3 Appearance of EUT



Photo 4 Inside of EUT



Photo 5 Inside of EUT



Photo 6 Appearance of PCB

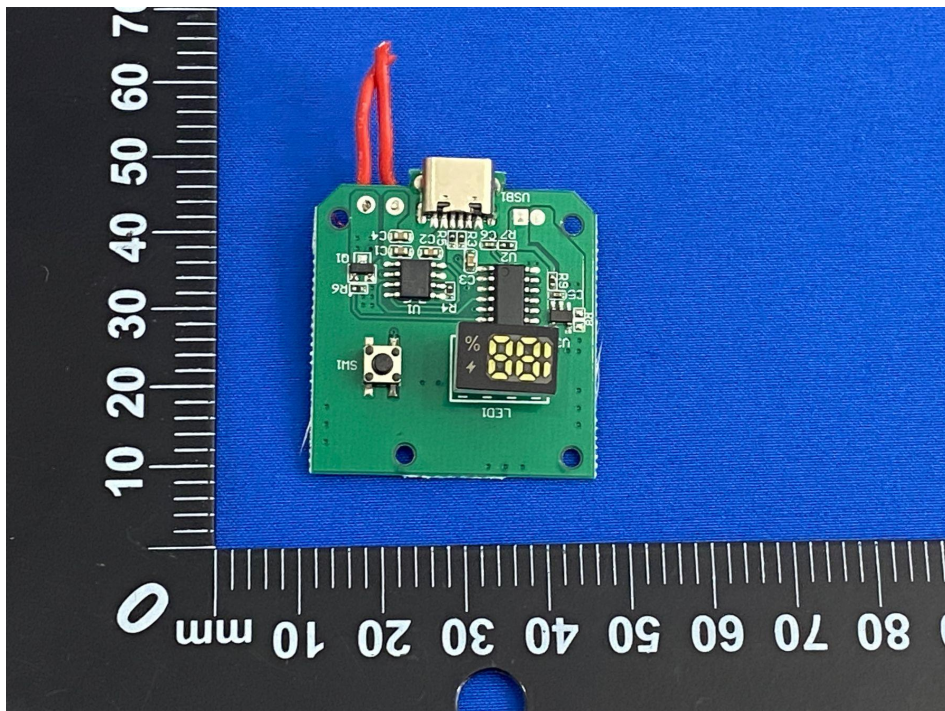


Photo 7 Appearance of PCB

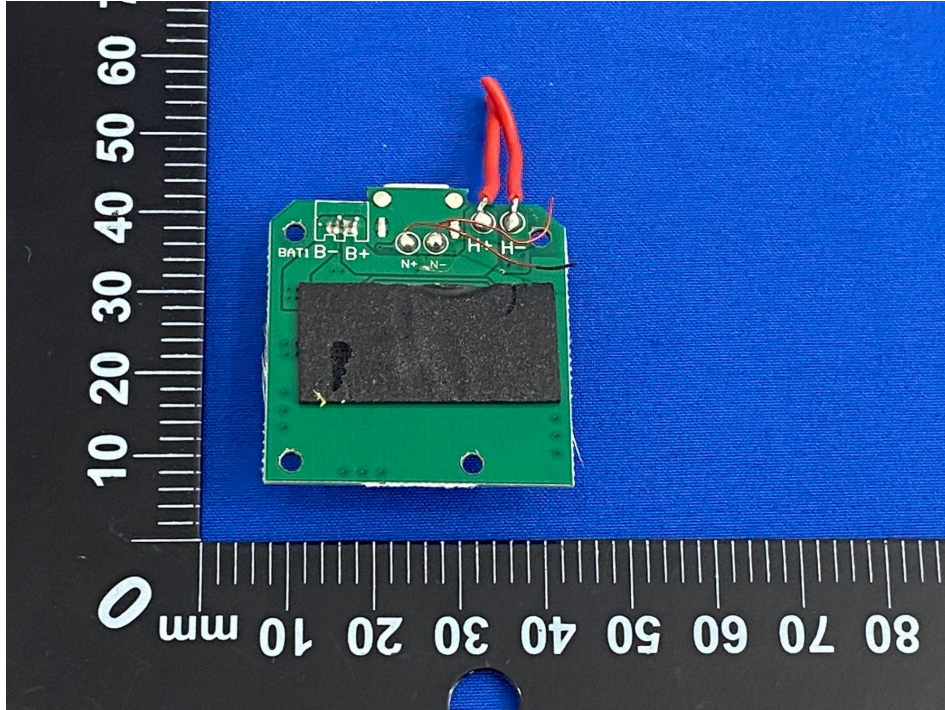
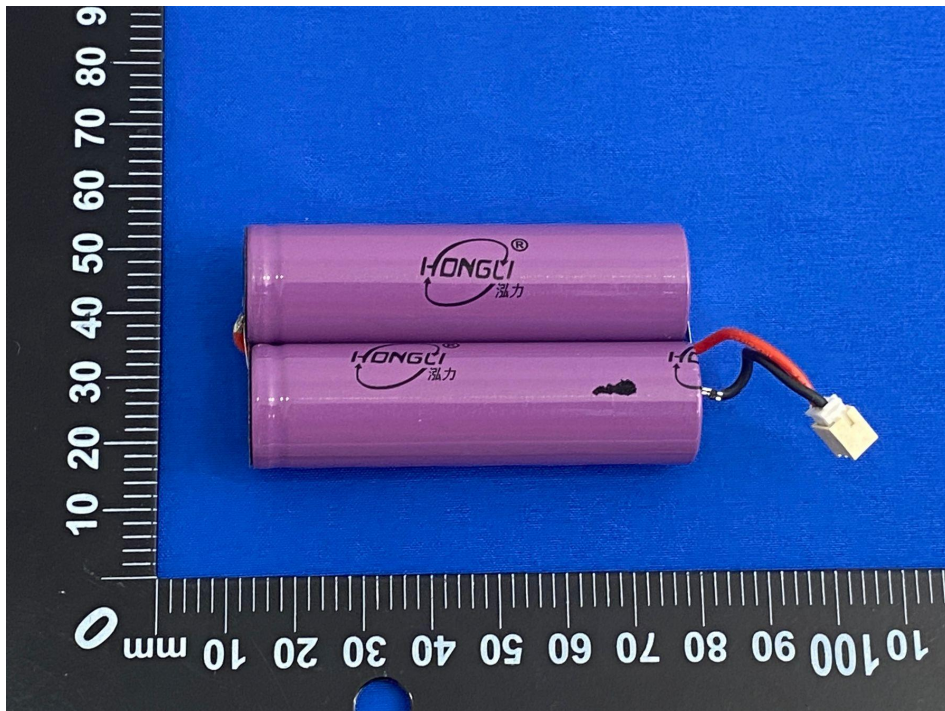


Photo 8 Appearance of Battery



END OF REPORT