

TEST REPORT**UL 4200A Products Incorporating Button Batteries or Coin Cell Batteries
16 CFR Part 1263 Safety Standard for Button Cell or Coin Batteries and
Consumer Products**

Report Number.....: RHDTL260406006

Tested by (name + signature).....: QiaoLi Chen

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Reviewed by (name + signature): Brian Liu

Brian Liu

Approved by (name + signature)...: Chris zhao

Chris zhao

Date of issue.....: April. 17, 2026

Total number of pages.....: 17 pages

Testing Laboratory.....: Dongguan HDTL Technology Co., Ltd.

Address.....: Room 101, Building 1, No. 5 of Jinzhong Road, Dongcheng Street,
Dongguan City, Guangdong Province, China.

Applicant's name.....: Shenzhen TingRui Technology Co., Ltd.

Address.....: A808, Jieshun Technology Center, No. 5, Guansheng Second
Road, Luhua Community, Guanhu Street, Longhua District,
Shenzhen, Guangdong Province ,China.**Test specification:**Standard.....: UL 4200A-2023
16 CFR Part 1263

Test Report Form No.....: UL 4200A-A

Test procedure: Test report

Non-standard test method.....: N/A

General disclaimer:

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

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Laboratory.

Test item description.....: Alarm Clock Sound Machine

Trade Mark.....: N/A

Manufacturer.....: Shenzhen TingRui Technology Co., Ltd.

Address.....: A808, Jieshun Technology Center, No. 5, Guansheng Second
Road, Luhua Community, Guanhu Street, Longhua District,
Shenzhen, Guangdong Province ,China.Model/Type reference.....: Main test model: NH10
Additional model: SM-09NOTE: NH10 is tested model. Other models are identical in circuit , only different on the model names,
size, So the test data of NH10 and present the remaining models.

Ratings.....: CR2032 DC 3V x 1pcs

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

The sample(s) tested complies with the requirements of UL 4200A-2023

Appendix 1: 16 CFR Part 1263

Appendix 2: UL 4200A-2023

Annex 1: Photos.

Summary of testing:

Tests performed:

The submitted samples were found to comply with requirements of standards:

UL 4200A-2023

Testing location:

Dongguan HDTL Technology Co., Ltd.

Room 101, Building 1, No. 5 of Jinzhong Road,
Dongcheng Street, Dongguan City, Guangdong
Province, China.

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


The product fulfils the requirements of UL 4200A-2023

Copy of marking plate:

Marking on the product:



Marking:

▲ WARNING	
<ul style="list-style-type: none"> • INGESTION HAZARD: This product contains a button cell or coin battery. • DEATH or serious injury can occur if ingested. • A swallowed button cell or coin battery can cause Internal Chemical Burns in as little as 2 hours. • KEEP new and used batteries OUT OF REACH of CHILDREN • Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body. 	

Test item particulars	
-Classification of installation and use..... :	Alarm Clock Sound Machine
-Battery Model..... :	CR2032
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..... :	April. 13, 2026
Date (s) of performance of tests..... :	April. 13, 2026 to April. 17, 2026
General remarks:	
<p>"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input type="checkbox"/> comma / <input checked="" type="checkbox"/> point is used as the decimal separator.</p>	
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies)..... :	Shenzhen TingRui Technology Co., Ltd. A808, Jieshun Technology Center, No. 5, Guansheng Second Road, Luhua Community, Guanhu Street, Longhua District, Shenzhen, Guangdong Province ,China.
General product information and other remarks:	
This product is " Alarm Clock Sound Machine ", powered by CR2032 button battery, no excessive discharge, overcurrent, short circuit and other circuits.	

16 CFR Part 1263

Clause	Requirement + Test	Result - Remark	Verdict
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Appendix 1:

1263.,1	Scope, purpose, effective date, and exemption.		P
	(a) Scope and purpose. As required by Reese's Law (15 U.S.C 2056e, Pub. L. 117-171), this part establishes performance and labeling requirements for consumer products containing button cell or coin batteries to prevent child access to batteries during reasonably foreseeable use and misuse of the consumer product. The part is intended to eliminate or adequately reduce the risk of injury and death to children 6 years old and younger from ingesting these batteries. This part also establishes warning label requirements for packaging of consumer products containing button cell or coin batteries, these consumer products, and instructions and manuals accompanying these consumer products.		P
	(b) Effective date. Except as provided in paragraph (c) of this section, the effective date of § 1263.3 is October 23, 2023.		P
	(c) Exemption for toy products. Any object designed, manufactured, or marketed as a plaything for children under 14 years of age that is in compliance with the battery accessibility and labeling requirements of 16 CFR part 1250 is exempt from the requirements of this part.		P
	(d) Batteries that do not present an ingestion hazard. Button cell or coin batteries that the Commission has determined do not present an ingestion hazard are not subject to this part. These are: zinc-air button cell or coin batteries.		P
1263.2	Definitions		P
	Button cell or coin battery means: (1) A single cell battery with a diameter greater than the height of the battery; or (2) Any other battery, regardless of the technology used to produce an electrical charge, that is determined by the Commission to pose an ingestion hazard.		P
	Consumer product containing button cell or coin batteries means a consumer product containing or designed to use one or more button cell or coin batteries, regardless of whether such batteries are intended to be replaced by the consumer or are included with the product or sold separately.		P

16 CFR Part 1263			
Clause	Requirement + Test	Result - Remark	Verdict
	<p>Ingestion hazard means a hazard caused by a person swallowing or inserting a button cell or coin battery into their body whereby:</p> <p>(1) The button cell or coin battery can become lodged in the digestive tract or airways; and</p> <p>(2) Can potentially cause death or serious injury through choking, generation of hazardous chemicals, leaking of hazardous chemicals, electrical burns, pressure necrosis, or other means.</p>		P
1263.3	Requirements for consumer products containing button cell or coin batteries.		P
	Each consumer product containing button cell or coin batteries shall comply with ANSI/UL 4200A,	See the Appendix 2:	P

UL 4200A-2023

Clause	Requirement + Test	Result - Remark	Verdict
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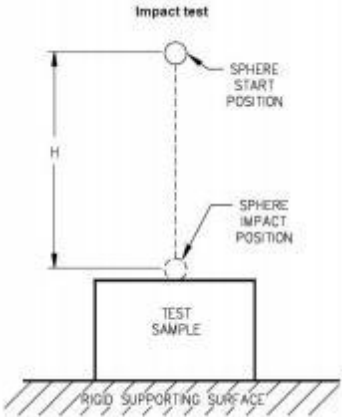
Appendix 2:

	CONSTRUCTION		P
5	Products with Button/Coin Cell Batteries		P
5.1	Products that use button/coin cell batteries shall be designed to minimize the risk of children removing and ingesting or aspirating the batteries. Products that allow user removal or replacement of button/coin cells shall comply with the requirements of 5.2 - 5.6. Products with button/coin cells that are not intended to allow user removal/replacement of the cells shall comply with 5.7.	Users cannot replace the button unit.	N/A
5.2	To reduce the likelihood of unintentional access, products with removable or replaceable button/coin cell batteries shall not allow the button/coin cell to be contacted by Test Probe 11 of the Standard for Protection of Persons and Equipment by Enclosures - Probes for Verification, IEC 61032 when applied as described in 5.3.		N/A
5.3	The probe shall be applied to any depth that the opening will permit and shall be rotated or angled before, during, and after insertion through the opening to any position that is necessary to examine the enclosure. The probe shall be used as a measuring instrument to judge the accessibility provided by an opening, and not as an instrument to judge the strength of a material. The probe shall be applied with the minimum force necessary to determine accessibility.		N/A
5.4	During the examination of a product to determine whether it complies with the requirements in 5.3, a part of the enclosure that may be opened or removed by the user, either without using a tool or with less effort than two independent and simultaneous movements by hand, is to be opened or removed.		N/A


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Clause	Requirement + Test	Result - Remark	Verdict
5.4A	If a part of the battery compartment enclosure is protected by pliable material such as fabric, paper, foam, or vinyl, or a pliable material with a seam, apply the Tension Test for Seams in Stuffed Toys and Beanbag-Type Toys test in the Standard Consumer Safety Specification for Toy Safety, ASTM F963, to determine whether the battery compartment enclosure can become exposed or accessible, using a force of at least 70.0N (15.7 lbf). If a new part of the battery compartment enclosure becomes exposed or accessible, repeat 5.4 and remove any further pliable material that is then exposed until no new part of the battery compartment enclosure becomes exposed or accessible, and then conduct the test in 5.3.		N/A
5.5	Products that locate removable or replaceable button/coin cell batteries inside a battery compartment shall be designed to prevent children from removing the battery by one of the following methods in (a) or (b) below. Compliance is checked by the tests of Section 6.		N/A
	a) A tool, such as a screwdriver or coin, is required to open the battery compartment.i 1) For a battery compartment secured by a screw, the screw shall engage a minimum of two full threads. 2) For a twist-on access cover, a minimum torque of 0.5Nm and a minimum angle of 90 degrees of rotation shall be required to open the compartment.		N/A
	b) The battery compartment door or cover requires the application of a minimum of two independent and simultaneous movements to open by hand.		N/A
5.6	If screws or similar fasteners are used to secure the door or cover providing access to a battery compartment, the fasteners shall be captive to the door, cover, or device.		N/A
	This requirement does not apply to large panel doors on large devices which are not likely to be discarded or left off the equipment.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.7	Products that incorporate button/coin cells that are not intended for user removal or replacement shall effectively prevent removal of the battery by the user or children. The button/coin cell shall be: a) Made inaccessible by an enclosure or similar means that passes the applicable tests of 6.2 and 6.3; or b) Held fully captive by the use of soldering, fasteners such as rivets, or equivalent means. The securement method shall pass the Secureness Test of 6.4.		P
	PERFORMANCE		P
6	Protection from Ingestion or Aspiration of Button/Coin Cell Batteries		P
6.1	General		P
6.1.1	Products shall not present a risk of unintentional access by children to button/coin cells. Button/coin cell batteries shall not be accessible or liberated from the product as a result of mechanical abuse tests in applicable safety standards for the product, and products with button/coin cells shall comply with the tests in 6.2 –6.4.		P
6.2	Pre-conditioning		P
6.2.1	One test sample shall be subjected to the following pre-conditioning conditions in sequence prior to testing in 6.3 and 6.4, as applicable:		P
	a) Stress Relief Test –A product with an enclosure, battery compartment door/cover or battery compartment door/cover opening mechanism made of molded or formed thermoplastic materials shall be subjected to a stress relief test. A sample of the complete product is to be placed in a circulating air oven for a period of 7 h. The oven temperature is to be set to the higher of (1) or (2) below. After removal from the oven, the sample is permitted to cool to room temperature.		P
	1) 70°C (158°F); or 2) 10°C (18°F) higher than the maximum temperature of thermoplastic enclosures, battery compartment door/covers, or battery compartment door/cover mechanisms during the most stringent normal operation of the device.	70°C , 7h	P




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Clause	Requirement + Test	Result - Remark	Verdict
	b) Battery Replacement Test – The battery compartment door/cover shall be opened and closed, and the battery removed and replaced, for a total of ten cycles. The process shall simulate replacement according to the manufacturer’s instructions. If the battery compartment is secured with a screw (s), the screw (s) is to be loosened and then tightened by means of a suitable screwdriver, applying a continuous linear torque according to the Torque to be Applied to Screws table, Table 20, of the Standard for Audio, Video and Similar Electronic Apparatus – Safety Requirements, UL 60065.	Users cannot replace the button unit.	N/A
6.3	Abuse tests		P
6.3.1	General		P
6.3.1.1	The tests in 6.3.2 – 6.3.4 shall be performed sequentially, as applicable, on one pre-conditioned sample of the product. After all test conditions have been completed, compliance is checked by 6.3.5.		P
6.3.2	Drop test for portable devices and hand-held products		P
6.3.2.1	Portable devices are subjected to drop tests from a height of 1.0 m (39.4 in) onto a horizontal hardwood surface in positions likely to produce the maximum force on the battery compartment or enclosure. Portable devices are subjected to three drops, except hand-held products are subjected to ten drops. The hardwood surface shall be at least 13-mm (1/2-in) thick, mounted on two layers of nominal 19- mm (3/4-in) thick plywood, placed on a concrete or equivalent non-resilient surface.	Portable devices drop test: 10 times, 1m No damaged.	P
6.3.3	Impact test		P

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Clause	Requirement + Test	Result - Remark	Verdict
6.3.3.1	The enclosure or battery compartment door/cover shall be subject to three, 2-J (1.5-ft·lbf) impacts. This impact is to be produced by dropping a steel sphere, 50.8 mm (2 inches) in diameter, and weighing approximately 0.5 kg (1.1 lb) from the height required to produce the specified impact, as shown in Figure 6.1, or the steel sphere is to be suspended by a cord and swung as a pendulum, dropping through the vertical distance required to cause it to strike the surface with the specified impact as shown in Figure 6.2. The steel sphere is to strike the battery compartment door/cover perpendicular to the enclosure surface.	Impact 3 time, 2J, The battery cover without damaged.	P
			P
6.3.4	Crush test		P
6.3.4.1	The sample is to be supported by a fixed rigid supporting surface, in positions likely to produce the most adverse results as long as the position can be self-supported. A crushing force of 330 ± 5 N (74.2 ± 1.1 lbf) is applied for a period of 10 s to the exposed surfaces. The force is to be applied by a flat surface measuring approximately 100 by 250 mm (3.9 by 9.8 in)	After test, the battery cover cannot be open.	P
6.3.4A	Torque test		P
	If a child can grasp any part of the battery compartment enclosure on a consumer product, including the door or cover, with at least the thumb and forefinger, or using teeth, apply the Torque Test for Removal of Components from the Standard Consumer Safety Specification for Toy Safety, ASTM F963, to the battery compartment enclosure, using a torque of at least 0.50 Nm (4.4 in-lbf).	After test, the battery cover cannot be open.	P
6.3.4B	Tension test		P

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Clause	Requirement + Test	Result - Remark	Verdict
	If a child can grasp any part of the battery compartment enclosure on a consumer product, including the door or cover, with at least the thumb and forefinger, or using teeth, apply the Tension Test for Removal of Components from the Standard Consumer Safety Specification for Toy Safety, ASTM F963, to the battery compartment enclosure, using a force of at least 72.0 N (16.2 lbf).	After test, the battery cover cannot be open.	P
6.3.4C	Compression test		P
	If any surface of the battery compartment enclosure is accessible to a child and inaccessible to a flat surface contact during the Drop test in 6.3.2, apply the Compression Test from the Standard Consumer Safety Specification for Toy Safety, ASTM F963, to that surface, using a force of at least 136 N (30.6 lbf).	After test, the battery cover cannot be open.	P
6.3.5	Compliance		P
6.3.5.1	After the tests of 6.3.2 – 6.3.4B, a force of 50+10/-0N (11.2+2.2/-0lbf) is applied for 10 s to the battery compartment door/cover or enclosure by a rigid test finger according to Test Probe 11 of the Standard for Protection of Persons and Equipment by Enclosures – Probes for Verification, IEC 61032. The probe is applied at the most unfavorable place and in the most unfavorable direction. The force shall be applied in only one direction at a time. A battery compartment door/cover shall not open and shall remain functional. The battery shall not be accessible.		P
6.4	Secureness test	After test in 70°C, 7h.	P
6.4.1	Button/coin cells that are not intended for user removal or replacement, and are accessible based on 5.3 and 5.4, shall comply with the following test. Compliance is checked by application of a test hook as shown in Figure 6.3, with a force of 20 ±2 N (4.5 ±0.4 lbf), directed outwards, applied for 10 s at all points where this is possible. During the test, the button/coin cell shall not become separated from the product.	After test, the battery cover cannot be open.	P
7	MARKINGS		P
7A	General		P

UL 4200A-2023			
Clause	Requirement + Test	Result - Remark	Verdict
7A.1	All warning statements or icons shall be prominent, legible, easily discernable under normal lighting conditions, and permanently marked.		P
7A.2	Unless otherwise specified, instructional safeguards do not have to be in multiple colors. If an instructional safeguard is present in more than one color to indicate hazard severity, the color shall be in accordance with the ISO 3864 series.		P
7A.3	Printed or screened markings shall also be permanent.		P
7A.4	Legibility of markings is determined by inspection. Permanency is determined by the tests of Section 7D, Permanence of Markings.		P
7A.5	Markings must be in the official language(s) of the country where the product is sold or in English if there is no official language(s).		P
7A.6	The safety alert symbol, an exclamation mark in a triangle, when used with the signal word, must precede the signal word. The base of the safety alert symbol must be on the same horizontal line as the base of the letters of the signal word. The height of the safety alert symbol must equal or exceed the signal word letter height.		P
7A.7	Certain text in the message panel must be in bold and in capital letters as shown in the example warning labels to get the attention of the reader.		P
7A.8	For labels that are provided on a sticker, hang tag, instructions or manual, the safety alert symbol and the signal word "WARNING" must be at least 0.2 in (5 mm) high. The remainder of the text must be in characters whose upper case must be at least 0.1 in (2.5 mm), except where otherwise specified.		P
7A.9	For labels that are required to be on the packaging of consumer products and directly on consumer products, text size shall be dependent on the area of the principal display panel. Text size shall be determined based on Table 7A.1		P
7B	Packaging Markings		P
			P

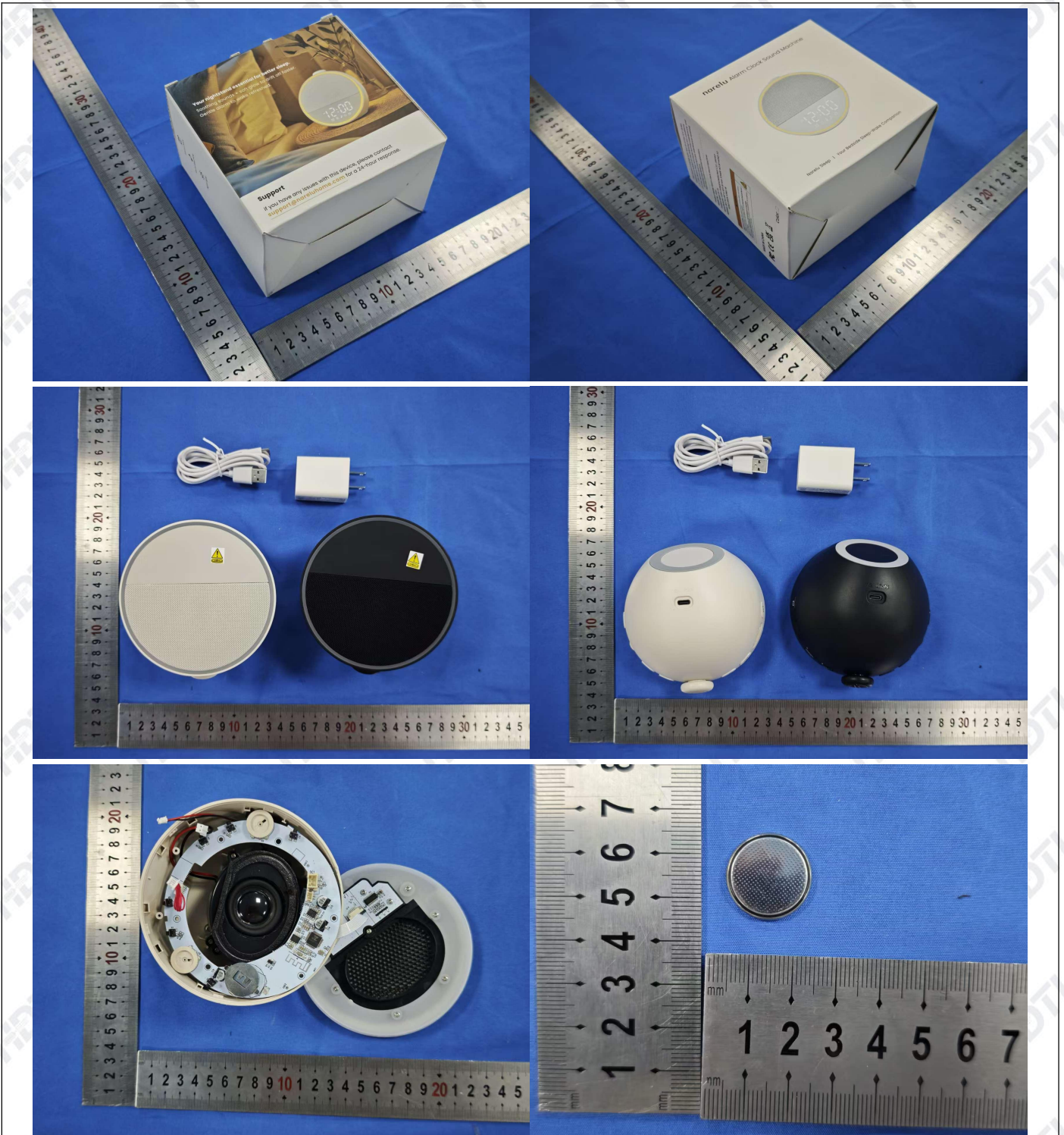
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Clause	Requirement + Test	Result - Remark	Verdict
	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; background-color: #FFA500; margin: 0;">⚠ WARNING</p> <ul style="list-style-type: none"> INGESTION HAZARD. This product contains a button cell or coin battery. DEATH or serious injury can occur if ingested. A swallowed button cell or coin battery can cause Internal Chemical Burns in as little as 2 hours. KEEP new and used batteries OUT OF REACH of CHILDREN Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body.  </div>		--
	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; background-color: #FFA500; margin: 0;">⚠ WARNING</p> <ul style="list-style-type: none"> INGESTION HAZARD. This product contains a button cell or coin battery. DEATH or serious injury can occur if ingested. A swallowed button cell or coin battery can cause Internal Chemical Burns in as little as 2 hours.  </div>		--
	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; background-color: #FFA500; margin: 0;">⚠ WARNING</p> <ul style="list-style-type: none"> KEEP new and used batteries OUT OF REACH of CHILDREN Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body. </div>		--
7C	Product Marking		P
	<div style="border: 1px solid black; padding: 5px;"> <p style="background-color: #FFA500; margin: 0;">⚠ WARNING INGESTION HAZARD. This product contains a button cell or coin battery.</p> </div>		--
			P
7D	Permanence of Markings		P
7D.1	General		P
7D.1.1	Each required printed or screened marking shall be tested. However, if the data sheet for a label confirms compliance with the test requirements, the test need not be performed.		P
7D.2	Testing procedure		P

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Clause	Requirement + Test	Result - Remark	Verdict
7D.2.1	The test is conducted by rubbing the marking by hand without appreciable force for 15 s with a piece of cloth soaked with water and at a different place or on a different sample for 15 s with a piece of cloth soaked with the petroleum spirit specified in 7D.3.		P
7D.3	Petroleum spirit		P
7D.3.1	Petroleum spirit is a reagent grade hexane with a minimum of 85 % n-hexane.		P
7D.4	Compliance criteria		P
7D.4.1	After each test, the marking shall remain legible. If the marking is on a separable label, the label shall show no curling and shall not be removable by hand.		P
	INSTRUCTIONS		P
9	General		P
9.1	<p>Instructions and manuals, if provided, shall include all of the applicable markings in Figure 7B. 1 or Figure 7B.2 and the statements noted below. If instructions and manuals are not provided, the statements shall be present on the principal display panel or secondary display panel of the consumer product packaging, or if there is no consumer product packaging, the accompanying hang tag or sticker label.</p> <p>a) The statement “Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.”</p> <p>b) The statement “Even used batteries may cause severe injury or death.”</p> <p>c) The statement “Call a local poison control center for treatment information.”</p> <p>d) A statement indicating the compatible battery type (e.g., CR2032, CR2032).</p> <p>e) A statement indicating the nominal battery voltage.</p> <p>f) The statement “Non-rechargeable batteries are not to be recharged.”</p> <p>g) The statement “Do not force discharge, recharge, disassemble, heat above (manufacturer’s specified temperature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.</p>		P

UL 4200A-2023			
Clause	Requirement + Test	Result - Remark	Verdict
9.2	Products with replaceable button/coin cell batteries shall additionally include: a) The statement "Ensure the batteries are installed correctly according to polarity (+ and -)." b) The statement "Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries." c) The statement "Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations." d) The statement "Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children."		P
9.3	Products with non-replaceable button/coin cell batteries shall additionally include a statement indicating the product contains non-replaceable batteries.		P

Photos of product:





--- End of Report ---