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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 31728-2023

Replacing GB/T 31728-2015

Portable luminaires with charging devices

带充电装置的可移式灯具

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Foreword

This document complies with the provisions of GB/T 1:1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting:

This document replaces GB/T 31728-2015 "Mobile lamps with charging device": Compared with GB/T 31728-2015, except for the structure In addition to adjustments and editorial changes, the main technical changes are as follows:

- a) Changed the definition of "rated working time" (see 3:3, 4:5 of the:2015 version);
- b) Added Type C classification in "Lamp Classification" (see 5:2 and Figure 1);
- c) Added the classification according to the intended use function in the "Lamp

Classification" (see 5:3);

d) Delete the ambient temperature range except for the ta mark (see 6:3 of the:2015 version);

e) Added detailed regulations on marking (see 6:5, 6:6, 6:8~6:11);

f) The mechanical strength test requirements and protective device test requirements are deleted (see 7:2 and 7:3 of the:2015 edition);

g) Changed the requirements for instructions showing full charge (see 7:5, 7:7 of the:2015 version);

h) Added requirements for charging interface (see 7:6);

i) Added relevant requirements for the electronic circuit of the charging device of Class A or Class B lamps (see 7:7);

j) Changes in grounding regulations (see Chapter 9, Chapter 9 of the:2015 edition);

k) Changed the general requirements for durability testing (see 13:1,;2015 version of 13:1);

l) The general requirements and qualification determination requirements for thermal testing have been changed (see 13:3:1, 13:3:3, 13:3:1, 13:3:3 of the:2015 edition);

m) Added thermal test requirements under abnormal conditions (see 13:4);

n) Added safety requirements for lithium-ion battery system protection circuits (see Chapter 19):

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This document is proposed by China Light Industry Federation:

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The previous versions of this document and the documents it replaces are as follows:

- First published as GB/T 31728-2015 in:2015;

- This is the first revision:

Movable light fixture with charging device

1 Scope

This document specifies the use of electric light sources, power supply voltage not exceeding 250V, and removable lamps with charging devices (hereinafter referred to as "lamps") technical requirements:

This document applies to removable luminaires with charging devices for household and similar purposes:

This document does not apply to lamps with batteries that can be removed by hand, and:

- Lamps intended to provide emergency lighting;
- Lamps intended to be used in special places, such as places where corrosive and explosive gases (steam or gas) or explosive dust exist;
- Lamps that are charged with solar charging devices:

2 Normative reference documents

GB/T 4025

GB/T 7000

GB/T 7000

GB/T 9473

GB/T 19510

GB 31241-2022

3 Terms and definitions

The following terms and definitions as defined in GB/T 7000:1-2023, GB 31241-2022 and GB/T 7000:204-2023 apply in this document: 3:1 A removable lamp that uses a charging device to charge the battery in the lamp: 3:2 charging device chargingdevice A device or component for charging a battery:

Note: This device can be a non-detachable part of the lamp, or it can be connected to the lamp body through a special interface: 3:3 Manufacturer's stated normal lighting time on battery power: