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

GB/T 44474-2024

**Determination of inrush current characteristics of lighting
products**

照明产品浪涌电流特性的测定

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is modified to adopt IEC 63129:2020 "Determination of surge current characteristics of lighting products".

The technical differences between this document and IEC 63129:2020 and their reasons are as follows.

---Change AC 230V 50/60Hz to AC 220V 50Hz to suit my country's voltage.

1 Scope

This document describes a method based on measurement and calculation to determine the surge current of single and/or multiple lighting products of the same type.

Specific characteristics of the flow. Lighting products include.

--- Light sources with integrated control devices;

---Control device;

---Lighting fixtures.

The surge current characteristics that have been determined are.

---Peak surge current;

---Surge current pulse duration.

This document applies to lighting products connected to a low voltage power grid of AC 220V 50Hz.

NOTE: In clause 6, the method applies reference values of reference (line) inductance and reference (short-circuit) peak current, which reflect the voltage at 220 VAC.

Typical situation in installation.

2 Normative references

This document has no normative references.

3 Terms and Definitions

The following terms and definitions apply to this document.

A two-terminal thyristor having substantially the same switching characteristics in the first and third quadrants of the current-voltage characteristic curve body tube.

A three-terminal thyristor having substantially the same switching characteristics in the first and third quadrants of the current-voltage characteristic.

body tube.

circuit-breaker

It can connect, carry and disconnect current under normal circuit conditions; carry the specified overcurrent within the specified time and can A mechanical switching device that connects and disconnects current under circuit conditions (such as various short-circuit conditions).

source)

A unit connected between a power source and at least one light source for providing a rated voltage or rated current to the light source, which may consist of one or more Independent components.

Note 1: The control device may include triggering, dimming, power factor correction, radio interference suppression and more control functions.