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ICS 29.140.50
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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 26688-2011

Replacing GB/T 26688-2011

Automatic test systems for battery powered emergency escape lighting

电池供电的应急疏散照明自动试验系统

(English Translation)

Issued on: December 28, 2023 **Implemented on: July 1, 2024**

Issued by: State Administration for Market Regulation, China National Standardization Administration

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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 26688-2011 "Battery-powered emergency evacuation lighting automatic test system" and is consistent with GB/T 26688-2011 in comparison, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

a) Changed the requirements for monitoring of timing circuits (see 4.2, 4:2 of the:2011 edition);

b) Changed the requirements for automatic test systems (ATS) (see 4.3:1, 4:3:1 of the:2011 version);

c) Changed the requirements for internal communication failure (see 4.4:2, 4:4:2 of the:2011 version);

d) Changed the requirements for component failure (see 4.4:4, 4:4:4 of the:2011 edition);

e) Changed the requirements for software failure (see 4.4:7, 4:4:7 of the:2011 version);

f) The requirements for functional testing have been changed (see 5.1, 5:1 of the:2011

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version);

g) The requirements for continuous testing have been changed (see 5.2, 5:2 of the:2011 version);

h) Changed the requirements for timer accuracy (see 6.2:2, 6:2:2 of the:2011 version);

i) Changed the requirements for interactive lamp testing (see 6.3:2:2, 6:3:2:2 of the:2011 edition);

j) The requirements for limited continuous testing have been changed (see 6.3:3:4, 6:3:3:4 of the:2011 edition);

k) Changed general requirements (see 7.1,:2011 version of 7:1):

This document is modified to adopt IEC 62034:2012 "Battery-powered automatic test system for emergency evacuation lighting":

The technical differences between this document and IEC 62034:2012 and their reasons are as follows:

---Replaced IEC 60598-1 with normative reference GB/T 7000.1, and GB/T 7000.222 replaced IEC 60598-2-22, to facilitate the application of series standards:

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Introduction

The emergency lighting system is a safety-related product, and the correctness of its performance needs to be guaranteed through system testing and maintenance: traditional detection techniques the technique relies on manual detection procedures and is susceptible to oversight: Automated detection procedures can overcome the limitations of traditional technologies: important Yes, the automatic test system for emergency lighting can reliably arrange testing and provide real-time reminders of performance failure and performance degradation:

When a fault is discovered, the automatic test system (ATS) will still require manual intervention to correct the fault and set procedures for such intervention: This series the system provides information and supports users in risk management at the place of use:

ATS for emergency evacuation lighting displays test results at predetermined intervals without cutting off any other electrical equipment to help Building managers: In order to restore the emergency evacuation system to full operation, provide early notification of performance failures and degradations that occur is very important: ATS provides information for emergency lighting facilities to ensure that the installed luminaires can function properly when needed:

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ATS is part of the building management system (BMS) for emergency lighting inspection; this document only applies to emergency lighting in the BMS:

Ming detection part:

Visual inspection of system components and indicators is a routine part of the safety officer's job: This inspection needs to be carried out on a daily basis to ensure that the emergency lighting fixtures Ready to use and complete, with lights and indicators functioning properly and clearly visible, i.e. not obscured, or altered:

Battery-powered emergency evacuation lighting automatic test system

1 Scope

This document specifies the automatic testing of independent products and combinations used with emergency lighting systems with a power supply voltage not exceeding 1000V:

Basic performance and safety requirements for components within the system:

This document also specifies the functional requirements for a complete automatic test system for emergency lighting systems:

This document applies to test systems containing self-contained emergency lighting fixtures or a central battery associated with an emergency lighting fixture:

NOTE: Manual test equipment that relies on manual initialization and/or visual inspection of lamp status is outside the scope of this document:

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations for undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document:

GB/T 7000.1 Luminaires Part 1: General requirements and tests (GB/T 7000.1-2023, IEC 60598-1:2020, MOD) GB/T 7000.222 Luminaires Part 2-22: Emergency lighting fixtures with special requirements (GB/T 7000.222-2023, IEC 60598-2-22:2021, MOD) IEC 60073 Basic and safety rules for the marking of human-machine interface signs Coding rules for indicators and operating devices (Basicand torsandactuators) Note: GB/T 4025-2010 Basic and safety rules for human-machine interface sign identification Coding rules for indicators and operating devices (IEC 60073:

2002,IDT)

IEC 61347-1 Lamp control gear Part 1: General and safety requirements

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(Lampcontrolgear-Part 1:

Note: GB/T 19510.1-2023 Light source control device Part 1: General requirements and safety requirements (IEC 61347-1:2017, MOD) Note: GB/T 18595-2014 Electromagnetic compatibility and immunity requirements for general lighting equipment (IEC 61547:2009, IDT)

3 Terms and definitions

The terms and definitions defined in IEC 7000.222 and the following apply to this document:

Automatic test system automatictestsystem;ATS an automatic test system that can be initialized manually: When connected together to form a system, it can perform routine testing requirements and standardize emergency lighting fixtures:

It consists of components that display test results (such as timers, current probes, light probes, and transfer switches):

An emergency lighting fixture with a built-in test device for conducting tests and marking the test results:

Note: Examples of self-contained luminaires are given in Appendix A:

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