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

GB/T 47348-2026

**Technical specification for the lightning protection of outdoor
electronic display systems**

室外电子展示系统防雷技术规范

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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. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Technical Committee on Lightning Protection Standardization (SAC/TC258). This document was drafted by: Fuzhou Meteorological Bureau of Jiangxi Province, China Electric Power Research Institute Co., Ltd., and Nanjing Kuanyong Electronic Systems Co., Ltd. Company, Jiangxi Provincial Climate Center, State Grid Electric Power Research Institute Wuhan NARI Co., Ltd., Leyard Optoelectronic Co., Ltd., Hebei Provincial Meteorological Bureau Hou Center, China Association for Standardization, Shanghai Huayun Yangfan Intelligent Engineering Co., Ltd., and Zhejiang Huadian Lightning Protection Technology Co., Ltd. The main drafters of this document are. Yu Jianhua, Wang Tianyi, Li Yuta, Wang Chengfang, Xie Yingpu, Zhu Xuanzhu, Yang Jinfeng, Bai Jianjun, Zeng Yu, and Du Kangyun. Xiao Feng, Zhang Xiaoqin, Gao Yajun, Huang Bizhen. Lightning Protection Technical Specifications for Outdoor Electronic Display Systems

1 Scope

GB/T 47348-2026 is the Chinese national standard covering protecting a large outdoor LED screen from lightning - a tall metal structure full of electronics, with power and signal cables running into a building, which is close to an ideal lightning target. First edition, in force since

1 October 2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, as a first edition. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the basic requirements, lightning protection levels, direct lightning strike protection measures, protection against contact voltage, and protection against step lightning strikes for outdoor electronic display systems. Requirements for voltage protection measures, surge protection measures, and maintenance and management of lightning protection devices are described, along with corresponding testing methods. This document applies to the lightning protection design, construction, and maintenance of newly built, renovated, or expanded outdoor electronic display systems. This document does not apply to outdoor electronic display systems installed on mobile carriers.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 18802.352 Low-voltage surge protection components - Part 352: Surge isolation transformers (SITs) for telecommunications and signaling networks Selection and Use Guidelines

GB/T 21431 Technical Specification for Testing Lightning Protection Devices of Buildings

GB 50057-2010 Code for Design of Lightning Protection of Buildings

GB 50601 Code for Construction and Quality Acceptance of Lightning Protection Engineering for Buildings

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 The system consists of an outdoor electronic display screen, indoor broadcast control facilities, a signal transmission system, and a low-voltage power distribution system. Note

1.Outdoor electronic displays are divided into freestanding and attached types. See Appendix A for a schematic diagram. The corresponding outdoor electronic display systems are freestanding outdoor electronic displays... Display system and attached outdoor electronic display system. Note

2.Common outdoor electronic display systems include electronic information release systems for tourist attractions, electronic advertising systems for buildings, and variable message signs for highways. Etc.

3.2 Electrical appliances used to limit transient overvoltages and discharge inrush currents.

Note 1: A surge protector contains at least one non-linear element. Note

2.The SPD has appropriate connecting devices and is a complete assembly component.
[Source: GB/T 18802.11-2020, 3.1.1]

3.3 Class I test The test was conducted with a peak value equal to 8/20 of the impulse discharge current limp and a peak voltage equal to 1.2/50 of the impulse voltage. [Source: GB/T 18802.11-2020, 3.1.34.1]