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

GA/T 1548-2019

**Guidelines for setting of active light-emitting traffic signs on
urban roads**

城市道路主动发光交通标志设置指南

(English Translation)

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard is proposed and managed by the Technical Committee of Road Traffic Management Standardization of the Ministry of Public Security.

1 Scope

This standard specifies the requirements for the installation, construction, acceptance, inspection and maintenance of active illuminated traffic signs on urban roads.

This standard is applicable to the setting, construction, acceptance, inspection and maintenance of active illuminated traffic signs on urban roads, and other roads can refer to carried out.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies this document. For undated references, the latest version (including all amendments) applies to this document.

GB 5768 (all parts) Road traffic signs and markings GB/T 18833 road traffic reflective film
GB/T 31446 LED active light road traffic sign GB 51038 Code for Setting of Urban Road
Traffic Signs and Lines GA/T 652 General Requirements for Infrastructure Construction of
Public Security Traffic Management Field Equipment GA/T 870 Acceptance Technical
Specification for Red Light Automatic Recording System

3 Terms and definitions

The following terms and definitions apply to this document.

Active light-emitting traffic signs the sign body has an active luminous light source, and some or all of the traffic signs are illuminated to display information content.

Identification and recognition distance in static state the maximum distance that an observer can accurately read the traffic sign information in a stationary state.

Identification and recognition distance in dynamic state the maximum distance that an observer can accurately read the traffic sign information in the state of movement.

Active light-emitting traffic signs with dot matrix display Active light-emitting traffic signs that consist of continuous luminous pixels to form sign graphics, characters, and outlines to display the content of the sign.

Active light-emitting traffic signs with panel display the light source is arranged in the sign body, the light source is directed to the back of the sign panel to uniformly project light, and the main part of the sign information content through the panel Moving glowing traffic sign.

Active light-emitting traffic signs with transparent panel display Actively illuminated traffic signs that are transparent in color, shape, characters, graphics, and other information.

Active light-emitting traffic signs with semi-transparent panel display semi-transparent panel display Actively illuminated traffic signs with only transparent characters and graphic outlines.

4.1 General provisions

4.1.1

In the case of low visibility and poor visual recognition, active illuminated traffic signs (hereinafter referred to as "active illuminated signs" "). The setting of the active luminous sign shall comply with the provisions of GB 5768.

4.1.2

Active luminous signs should be coordinated with surrounding traffic signals to avoid mutual obstruction, inconsistent information, and visual illusions.

problem.

4.1.3

It is not advisable to set active illuminated signs and retro-reflective traffic signs at the same location.

4.1.4

Active light-emitting signs shall have a retro-reflective function when power is off, and retro-reflective performance shall meet the requirements of GB/T 18833.

4.1.5

The active luminous sign of the grid power supply shall be provided with ground protection.

4.1.6

The mounting fasteners of the active luminous signs shall have anti-theft devices.

4.1.7

The setting process of the active luminous sign shall comply with the provisions of GB 51038.

4.1.8

When the prohibition signs and indication signs are set as active light-emitting signs, they shall be displayed using a full-transmissive panel.

4.1.9

When the guide sign is set as an active luminous sign, it should be displayed with a translucent panel.

4.1.10

When the warning signs and working area signs are set as active light-emitting signs, full-transparent panel display or dot matrix display should be used.

4.2 Setting conditions

4.2.1

Active lighting signs should be set in the following locations.

- a) the frequent occurrence of traffic accidents;
- b) roads with hidden dangers such as frequent rain, fog and snow or poor visibility of signs;
- c) Schools, hospitals, nursing homes and other surrounding roads without lighting facilities or poor lighting conditions at night;
- d) construction areas and roads and railway crossings without lighting facilities or poor lighting conditions at night;
- e) Outside road curves and ramp ramps prone to traffic accidents, as well as road isolation

facilities, canalized island ends, etc.

To set related flags;

4.2.2

Active glow signs should be set in the following locations.

- a) tunnels, underground roads, etc .;
- b) Variable lanes, tidal lanes, dedicated bus lanes, multi-passenger lanes, etc. need to be provided with relevant signs;
- c) Expressway exits, intersections of major and minor roads, etc. need to improve visibility of guidance information;
- d) The roads and curves with a speed limit of 60km/h and above have crosswalks that are not easily detected by the driver.

Sign

- e) All kinds of bridges, tunnels and other important traffic structures need to set prohibition signs such as height restriction, quality restriction and axle load restriction;
- f) Set up traffic signs related to the divergence and confluence of urban expressways;
- g) Intersections or road sections with poor line of sight or poor night lighting conditions;
- h) for transmitting traffic information to pedestrians and non-motorized cyclists;
- i) the sign is placed side by side with the street light and the street lighting affects the visual recognition of the sign;
- j) Removable traffic signs are required for temporary traffic organization and traffic control at night.

4.3 Display requirements

4.3.1

The dot matrix display of active luminous signs shall be outlined or filled with information content such as the shape, graphics and characters of the signs. Dot Matrix Display Master the glowing lines of moving glowing signs shall be continuous.

4.3.2

The color, shape, characters and graphics of the panel display of the active luminous sign shall meet the requirements of GB 5768.

4.3.3

The light-emitting unit displaying the active light-emitting sign on the panel shall be kept intact.