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GA

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

GA/T 414-2003

Road traffic warning lights

道路交通危险警示灯

(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 replaces the GA/T 414-2003 Road Traffic Hazard Warning Light. In addition to editorial changes compared to GA/T 414-2003 the main technical changes are as follows.

- Revised scope applies (see Chapter 1, Chapter 1 of the 2003 edition);
- Removed the terminology and definition of "road work" (see 3.2 of the 2003 edition);
- Removed the terminology and definition of "job site" (see 3.3 of the 2003 edition);
- Removed the terms and definitions of the "working area" (see 3.4 of the 2003 version);
- Removed the terminology and definition of "all-round warning light 360 °" (see 3.5 of the 2003 edition);
- Removed the terminology and definition of "partial position warning light" (see 3.6 of the 2003 edition);
- Removed the terminology and definition of "vertical axis" (see 3.7 of the 2003 edition);
- Removed the terminology and definition of "horizontal axis" (see 3.8 of the 2003 edition);
- Revised the terminology and definition of "road traffic hazard warning lights" (see 3.1, 3.1 of the 2003 edition);
- Added the terminology and definition of "reference axis" (see 3.2);
- Increased the term and definition of "effective light intensity" (see 3.3);
- Increased the term and definition of "full working time" (see 3.4);
- Modified classification and naming (see Chapter 4, Chapter 4 of the 2003 edition);
- Removed the structure (see 6.1.2 of the 2003 edition);
- Modified the shape size (see 5.2, 6.1.3 of the 2003 version);

- Modified optical performance (see 5.3, 6.3 of the 2003 edition);
- Modified chroma performance (see 5.4, 6.5 of the 2003 edition);
- Modified the flash characteristics (see 5.5, 6.6 of the 2003 edition);
- Modified the automatic switching function (see 5.6, 6.8 of the 2003 version);
- Increased electrical performance (see 5.7);
- Remove continuous work performance (see 6.9 of the 2003 version);
- Modified the degree of protection of the enclosure (see 5.8, 6.13, 6.14 of the 2003 edition);
- Modified mechanical strength properties (see 5.13, 6.15 of the 2003 edition);
- Removed structural stability (see 6.16 of the 2003 edition);
- Modified weather resistance (see 5.14, 6.17 of the 2003 edition);
- Modified test methods (see Chapter 6, Chapter 7 of the 2003 edition);
- Revised inspection rules (see Chapter 7, Chapter 8 of the 2003 edition);
- Modified the setup requirements (see Chapter 8, Chapter 5 of the 2003 edition);
- Modified packaging, transportation and storage (see Chapter 9, Chapter 9, Chapter 10 of the 2003 edition);
- Revised the shape of road traffic hazard warning lights (see Appendix A, Appendix B of the 2003 edition);
- Revised the road traffic hazard warning light color chromaticity diagram (see Appendix B, Appendix A of the 2003 edition).

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

1 Scope

This standard specifies the classification and naming, technical requirements, test methods, inspection rules, installation requirements and packages of road traffic hazard warning lights.

Loading, transport and storage.

This standard is applicable to road traffic hazard warning lights set in road traffic safety hidden danger road sections, road traffic incident scenes and other places.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 2423.1 Environmental testing of electrical and electronic products - Part 2. Test methods Test A. Low temperature GB/T 2423.2 Environmental testing of electrical and electronic products - Part 2. Test methods Test B. High temperature GB/T 2423.3 Environmental testing of electric and electronic products - Part 2. Test method test Cab. constant damp heat test GB/T 2423.17 Environmental testing of electric and electronic products - Part 2. Test method test Ka. salt spray GB/T 4208-2017 enclosure protection grade (IP code) GB/T 8417-2003 light signal color GB/T 16422.2 Test methods for exposure of plastics - Part 2. Xenon arc lamps GB/T 24970-2010 outline mark

3 Terms and definitions

The following terms and definitions apply to this document.

Road traffic hazard warning light roadtrafficwarninglight Installed in road traffic safety hazard sections, road traffic incidents, etc., emitting yellow or red and blue combined light colors, working status flashes Sparkling, a lighting device used to alert traffic participants to safety.

Reference axis A line perpendicular to the horizontal projection surface of the exit surface and passing through the geometric center of the exit surface.

[GB 14887-2011, definition 3.2] 3.3 Effective light intensity effectiveintensityoflight the luminous intensity calculated by equation (1).

Idt

In the formula.

le---effective light intensity in candela (cd);

I --- instantaneous light intensity in candela (cd);