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

GB/T 34846-2017

**Classification and interface technical requirements for
specialized modules for LED road and tunnel lighting**

LED道路/隧道照明专用模块规格和接口技术要求

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard proposed by the China Light Industry Federation. This standard by the National Lighting Standardization Technical Committee electric light source and its accessories Technical Committee (SAC/TC224/SC1) Focused. This standard was drafted by: Hangzhou Maple Yongming Photoelectric Co., Ltd., Chaoyang District, Beijing efficient lighting technology center, Source Co., Ltd., Nanjing Panda Lighting Co., Ltd., Foshan Electrical and Lighting Co., Ltd., Jiangsu Yaxi Lighting Group Co., Ltd. Division, Jiangsu Hao US Optoelectronics Technology Co., Ltd., Shaanxi Airlines route traffic Technology Co., Ltd., the national semiconductor light source product quality supervision and inspection Heart (Guangdong), Huizhou NVC Optoelectronics Technology Co., Ltd., Shanghai Feile Audio Co., Ltd., Shanghai Think Electronic Engineering Co., Ltd., Foshan City, the whole Electric Lighting Co., Ltd., Deqing Yi Te Electronics Co., Ltd. The main drafters of this standard. Huang Jianming, Liu Qian, Wang Zhiqiang, Chen Shixiong, Wei Bin, Shen Qingyue, Luo Yong, Cheng Sheng, Valley Valley, Song Shuwen, Tong Min, Chen Chungeng, Ke Baiquan, Shao Wei.

The issuing authority of this document draws attention to the fact that statements that conform to this document may relate to

7.1 and Appendix A with the following 2 items and LED road / Tunnel lighting module specifications and interface technology requirements related to the use of patents. The name of the patent is as follows: CN201310192447.9, Connection structure between light emitting modules, mounting method and LED lighting device; ZL201330194649.8, LED Use of module related patents. The issuing authority of this document has no position whatsoever about the truthfulness, validity and scope of this patent. The patentee has assured the issuing authority of this document that he is willing to work with any applicant on reasonable and non-discriminatory terms and conditions, Negotiate a patent license. The patent holder's statement has been filed with the issuing authority of this document. Related information can be passed below Contact to get. Name of patent holder Hangzhou Maple Yongming Optoelectronics Co., Ltd. Address. Gongshu District, Hangzhou, Zhejiang Kang Road 18, 3rd Floor, 2nd Floor, North Zip code Email.hlm @ hpwin.com Phone

.0571-88396053 Fax .0571-88042207 Please note that in addition to the above patents, some of the contents of this document may still involve patents. The issuing agencies of this document are not responsible for identifying these specializations Lee's responsibility. LED road/tunnel lighting module specifications and specifications Interface technical requirements

1 Scope

China's national standard classifying the LED modules used in road and tunnel lighting and specifying their interfaces. Road lighting was the first mass application in which LED replaced an established technology outright, and it created a problem the older technology did not have. A sodium lamp was a standardised item: any lamp of a given type fitted any luminaire, from any maker, and a maintenance crew carried a box of them. An LED luminaire has no lamp - the light source is a module built into the fitting, and for a decade every manufacturer built their own. That meant a failed module could only be replaced by its original maker, if they still existed and still made it, and a city with tens of thousands of luminaires had bought a maintenance liability rather than an asset. Standardising the module and its mechanical, electrical and thermal interface restores what the sodium lamp had: a replaceable part with a defined shape, a defined driver interface and a defined mounting.

This standard specifies the road lighting or tunnel lighting with independent LED module specifications and interface of the technical requirements. This standard applies to integrated LED module, semi-integrated LED module or non-integrated LED module.

2 Normative references

The following documents for the application of this document is essential. 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 7000.1 lamps Part 1. General requirements and tests General requirements for luminosity measurement of luminaire distribution GB/T 9468-2008

GB 17625.1 electromagnetic compatibility limit harmonic current emission limit (equipment input current per phase $\leq 16A$)

GB/T 17625.2 electromagnetic compatibility limits for each phase rated current $\leq 16A$ and unconditional access to the equipment in the public low-voltage power supply Voltage changes in the system, voltage fluctuations and flicker limitations

GB/T 17743 Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

GB/T 18595 General lighting equipment EMC immunity requirements

GB 24819 General lighting LED module safety requirements Test methods for LED modules for general lighting GB/T 24824-2009

GB/T 24826-2016 General lighting LED products and related equipment - Terms and definitions

GB/T 24827 Road and street lighting performance requirements

IEC 61984 Connector Safety Requirements and Tests
(Connectors-Safetyrequirementsandtests)

3 Terms and definitions

GB/T 24826-2016 and GB/T 24824-2009 as defined by the following terms and definitions apply to this document.

3.1 Road lighting roadlighting Provision of lighting fixtures on urban roads, highways and venues connected to roads, to provide vehicle drivers and pedestrians necessary at night Visibility.

3.2 Tunnel lighting tunnellingighting Lighting fixtures are provided on the tunnels and the venues connected to the tunnels to provide drivers and pedestrians with the necessary visibility.

3.3 tp-point tp-point Measure the temperature of the LED module on the surface.