



中国汽车信号灯法规精简整合介绍

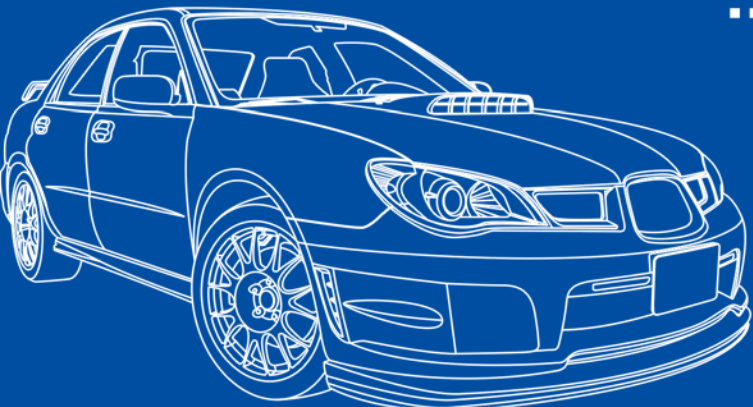
Simplification of The China Light

Signalling Regulations

SLR-22-06

星宇车灯 照亮世界

Xingyu Lighting Brighten the World





目录 Contents

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■ 基于性能 Based on the performance

从使用者角度出发，而不是基于产品。

From the perspective of users, not based on the product.

■ 技术中性 Technology neutral

适应技术进步，不阻碍技术创新。

Adapt to technological progress without hindering technological innovation.

■ 与安全相关 Related to security

严格限定在保障人身健康和生命财产安全、国家安全、生态环境安全和满足社会经济管理基本要求的范围之内。

It is strictly limited to ensuring the safety of personal health and life, national security, ecological environment and social and economic management.

■ 立足国情，与国际协调 Based on China condition, harmonized with UN

考虑中国特色，同时与UN法规充分协调。

Considering the Chinese characteristic, at the same time, fully coordinated with UN regulations.



- 立项工作已经完成;

The project of regulations' simplification has been established;

- 正在编制草案第二稿; The second draft is underway;

现行标准的合并简化的工作已完成, 整合工作还在进行中;

The combination and simplification of current standards has been completed, and the integration work is still in progress;

- 关于整合内容的验证试验工作进行中.

Verification test related to the integration of regulations is carried out.



精简标准清单 Simplification Regulations List

标准号NO.	标准名称Name	UN ECE
GB 5920-XXXX	汽车及挂车前位灯、后位灯、示廓灯和制动灯配光性能	R7
GB 15235-2007	汽车及挂车倒车灯配光性能	R23
GB 11554-2008	机动车和挂车用后雾灯配光性能	R38
GB 17509-2008	汽车及挂车转向信号灯配光性能	R6
GB 18408-2015	汽车及挂车后牌照板照明装置配光性能	R4
GB 18409-2013	汽车驻车灯配光性能	R77
GB 18099-2013	机动车及挂车侧标志灯配光性能	R91
GB 23255-XXXX	汽车昼间行驶灯配光性能	R87
GB 13594-2009	特种车辆标志灯	----





应用车型范围 Scope of application



- M类 ✓
- N类 ✓
- O类 ✓
- L类 ✗



功能合并与删减 Devices removed and combined

- ✓ 删除3类、4类转向灯;

Remove category 3 and category 4 of direction indicator;

- ✓ 取消SM2类侧标志灯，统一用SM1类.

Abolish SM2 classes of side marker lamp, use SM1 classes instead of SM2.



一般要求 General requirements

- ✓ 删除没有具体技术指标的要求;

Remove the requirements that do not have specific technical parameters and test methods;

- ✓ 删除与安全性能无关的要求;

Remove the requirements that are not related to security;

- ✓ 光源要求单独列出.

Light source requirements is listed separately.



性能要求 The performance requirements

- ✓ 建议统一最小光分布角范围内的最小值，需试验验证;

We propose to unify the minimum value within the minimum angles required for light distribution of these lamps, but the minimum value should be verified by test;

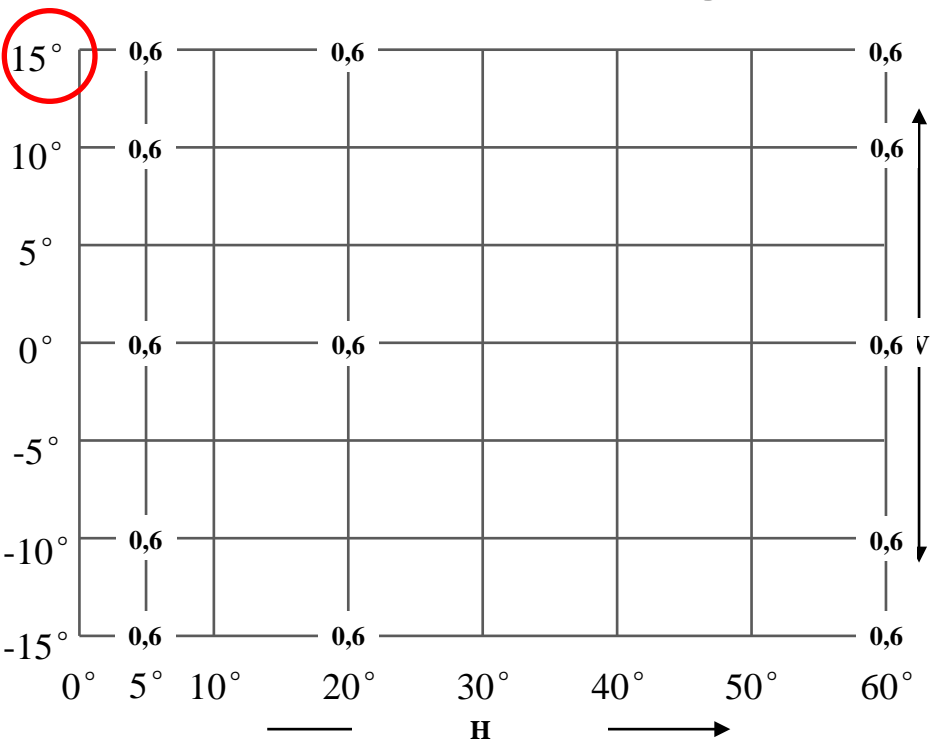
- ✓ 统一测试区域的均匀性要求，建议测试扫描H-H和V-V线.

Unify the homogeneity of the light distribution of these lamps, it is recommended to scan the H-H and V-V line in the test.



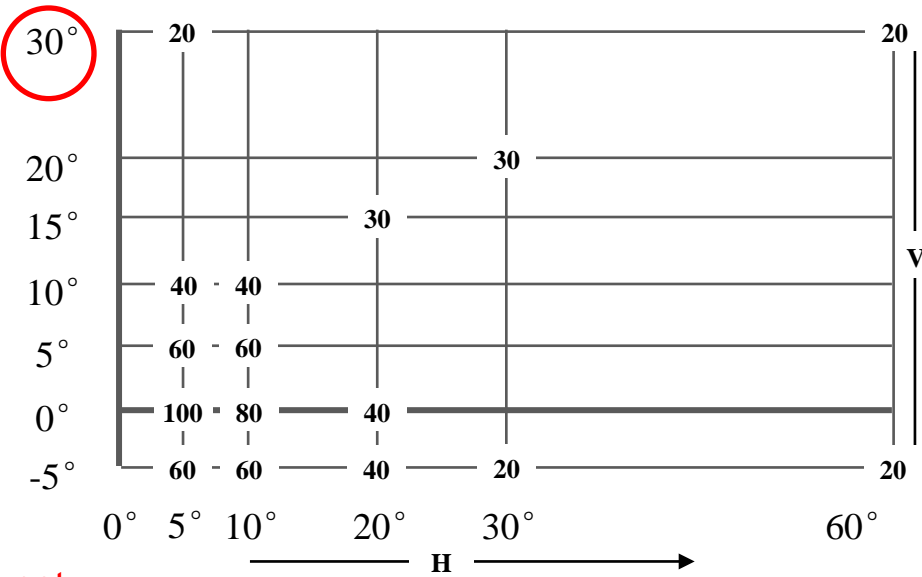
5类、6类侧转向灯配光区域

Distribution areas of categories 5 and 6 of side direction-indicators



垂直方向的配光范围不同，5类上下均为15°，6类向上30°向下5°。

The range of light distribution is different in the vertical direction, categories 5 upwards and downwards is 15°, categories 6 upwards is 30°, downwards is 5°.



问题 Question:

目前道路并不是分车型使用的，如果考虑N类司机视野，向上的角度应该是一样的，目前5类转向灯的角度偏小。

At present, for different vehicles of categories, the road is not used separately. If consider the view of vehicles of categories N drivers, the upward angle should be the same, so current side direction-indicators of categories 5 is small.



后雾灯发光强度的限值

The limit of the light intensity of the rear fog lamp

建议更改后雾灯配光最小值改为100cd.

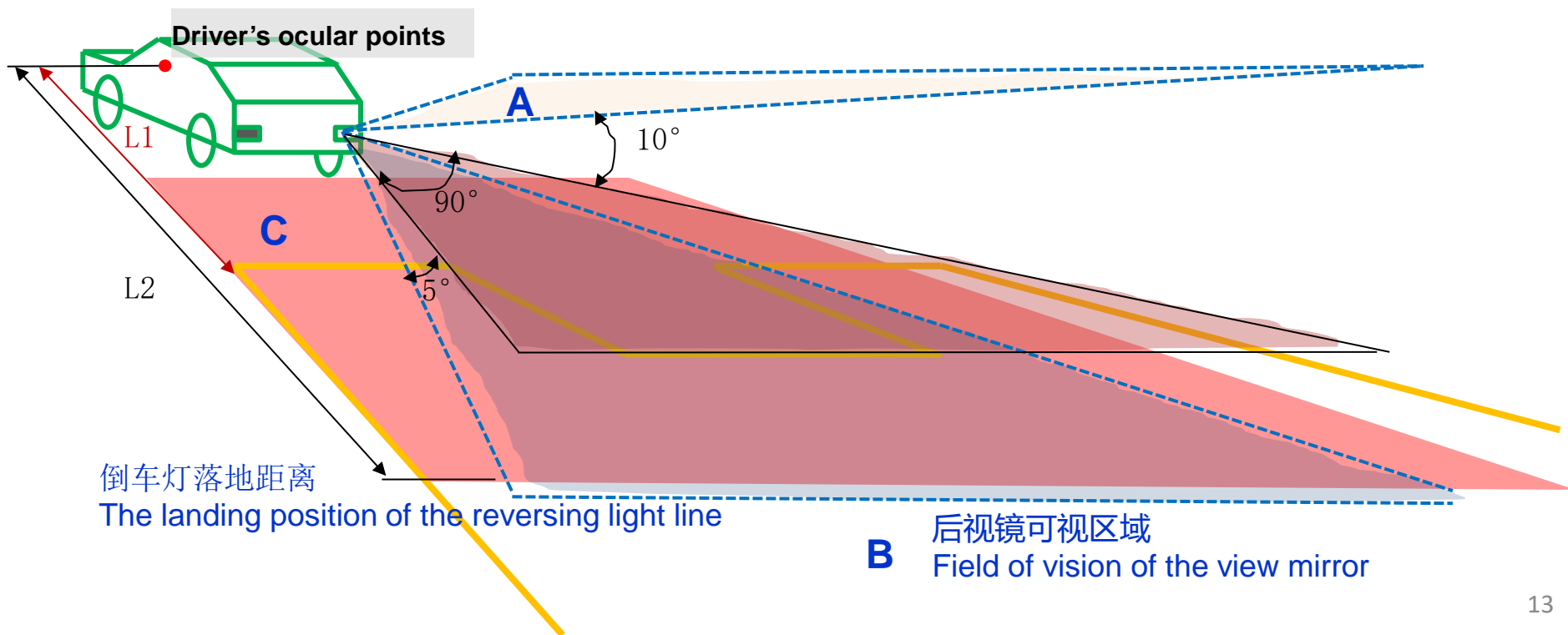
We propose to reduce the minimum light intensity of rear fog lamp to 100cd.



倒车灯照明效果不佳

The illumination effect of reversing lamp is not good

- 倒车灯照明区域(A) The lighting area(A) of the reversing lamp.
- 后视镜可视区域(B) The rearview mirror area(B)
- 红色区域为倒车灯的盲区(C) The red area is the blind area(c) of the reversing lamp.





倒车灯照明效果不佳

The illuminate effect of reversing lamp is not good

建议 Proposal:

- 增加路面照明区域定义;

Increase the definition of road lighting area;

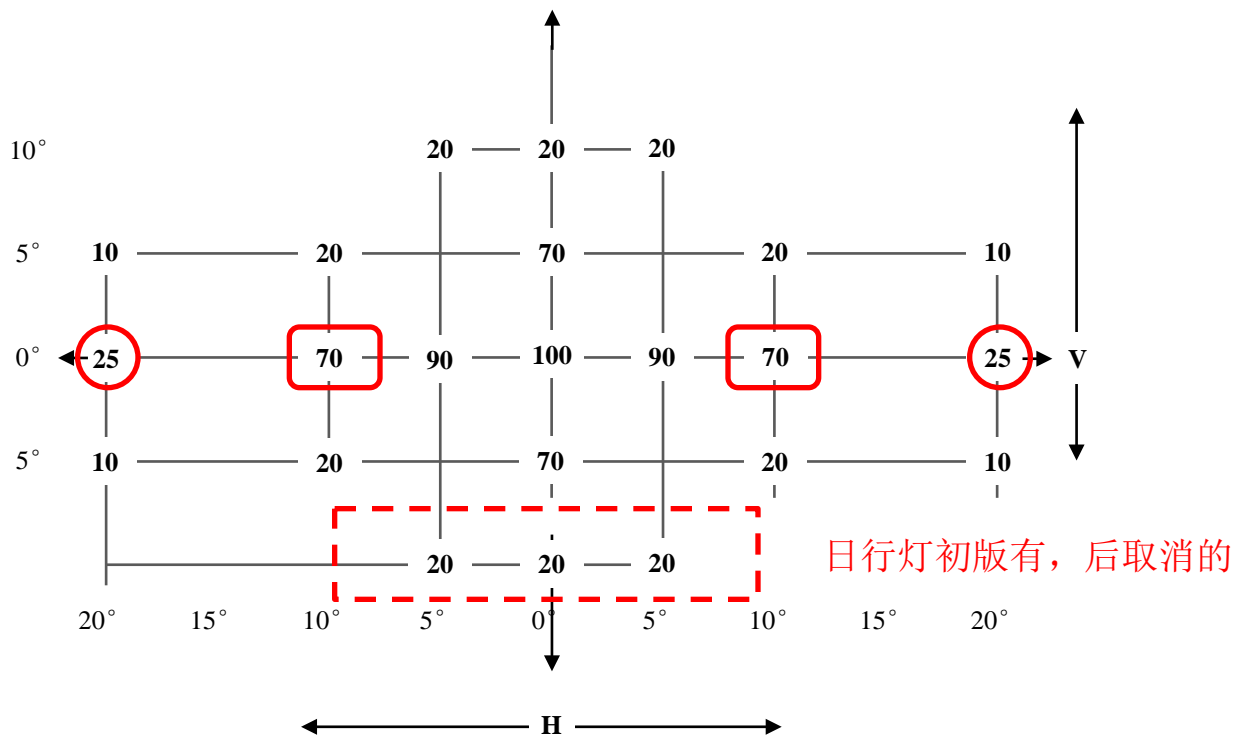
- 定义路面照明区域的最小值。

Define the minimum value of road lighting area.



转向、位置、制动和DRL配光区域的合并

Direction, position, braking and DRL light distribution are consistent and adapted to the range of DRL 00 series.



○ 转向灯、位置、制动增加测试点
Add test points

□ 转向、位置、制动测试点值提高
Improve the luminous intensity of test points



位置灯、制动灯、后雾灯眩目问题

The glare problem of position lamp, brake lamp, rear fog lamp (in leading traffic)

原因分析 Reason

- The brake lights are always on, Because China's urban roads are more congested.
- Some Chinese drivers are used to turning on fog lamps.
- The apparent surface of lamps is getting smaller and smaller.
- The maximum luminous intensity is located in the rear driver's eye position, which can easily cause the glare of the rear driver.

建议 Proposal

- Establish the surface brightness evaluation of glare, or
- Redefine the minimum area.



外部氛围灯 External ambient light

因为外部氛围灯具有个性以及显示品牌特性的功能，所以未来，外部氛围灯的运用会越来越广泛。

现在的法规是规定汽车静止状态能使用外部氛围灯（新GB4785），移动状态不能使用。

The external ambient light has the function of displaying individuality and being the brand symbol, so, in the future, the application of the external ambient light will be more and more extensive.

The current regulation is that an external ambient light can be used with vehicle's static state (new GB4785) and cannot be used in mobile state.

建议在信号灯法规中增加以下要求：

Proposal that the following requirements should be added in Light signalling standard :

- 定义外部氛围灯可使用的光色或不允许使用的颜色；

Define the light color that the external ambient light is allowed or not allowed to use.

- 规定不允许有向前、向后、及侧面朝外的直射光；或

Direct light is not allowed to forward, backward, and sideways; or

- 定义最大发光强度值

Define maximum luminous intensity values.



谢谢聆听

THANK YOU FOR YOUR ATTENTION

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