

# 矩阵大灯技术

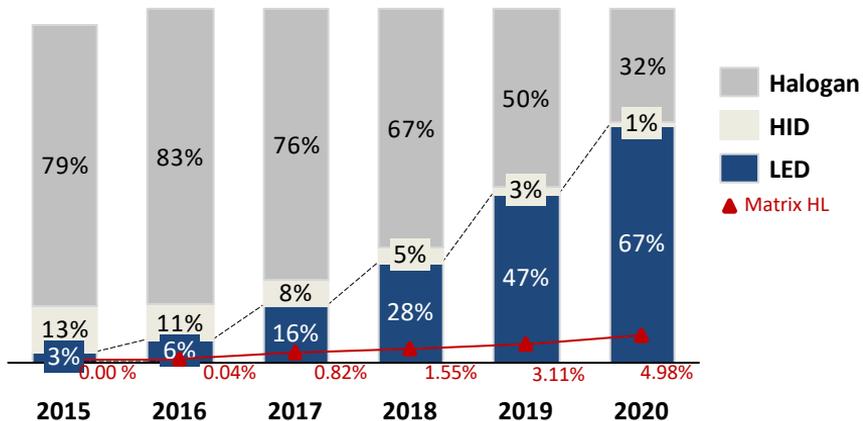
# Matrix Headlamp Technology

# 中国前灯市场现状与需求

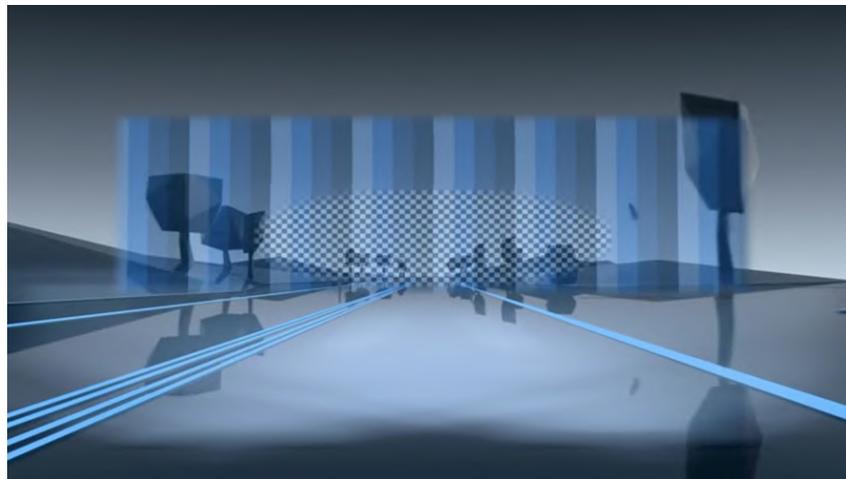
## Current domestic headlight market state and demand



2015-2020国内车灯市场渗透率数据统计/2015-2020 domestic headlight market penetration rate statistics



Source: SIC (Sate Information Centre)



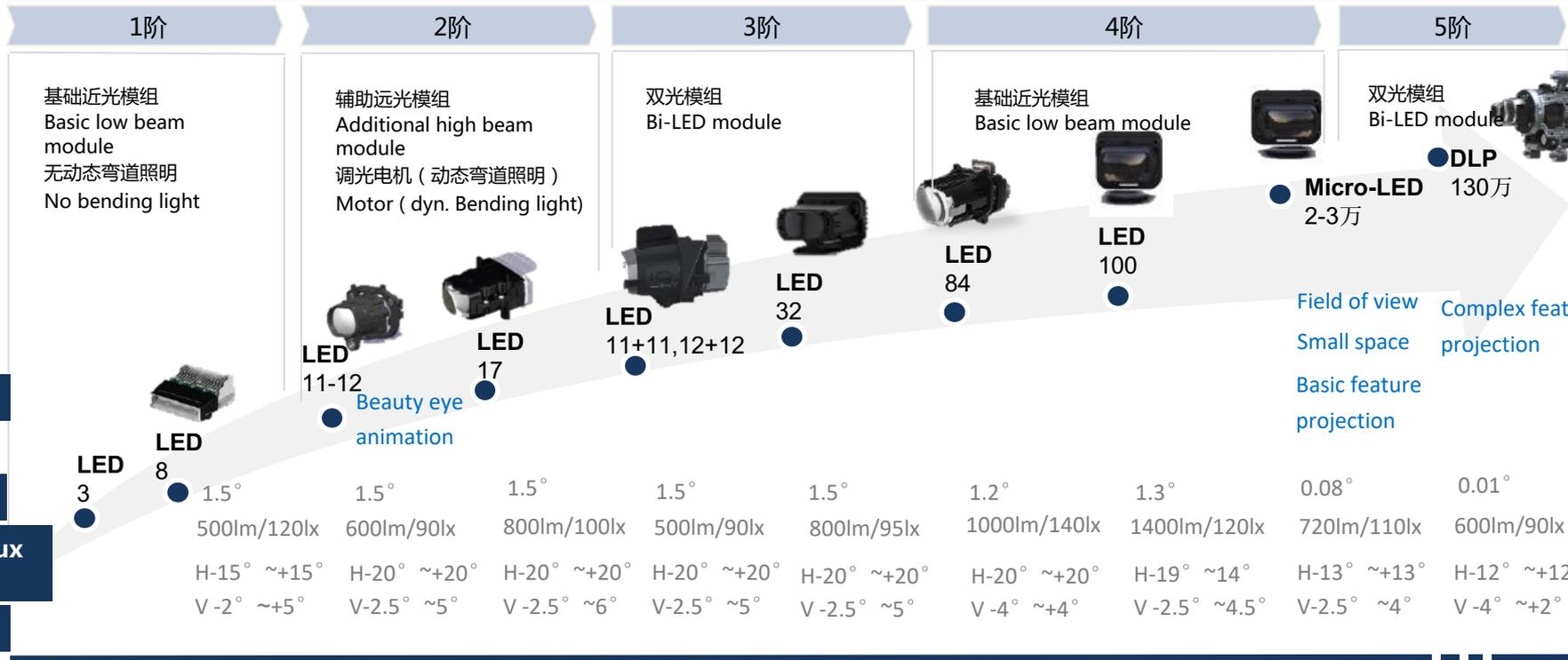
# 行业典型矩阵前灯技术路线

## Industry typical matrix headlamp technology route



系统成本 System Cost

### 功能与硬件基础/Function and hardware foundation



Field of view  
Small space  
Basic feature projection  
Complex feature projection

# 目前最具性价比批量车型方案推荐

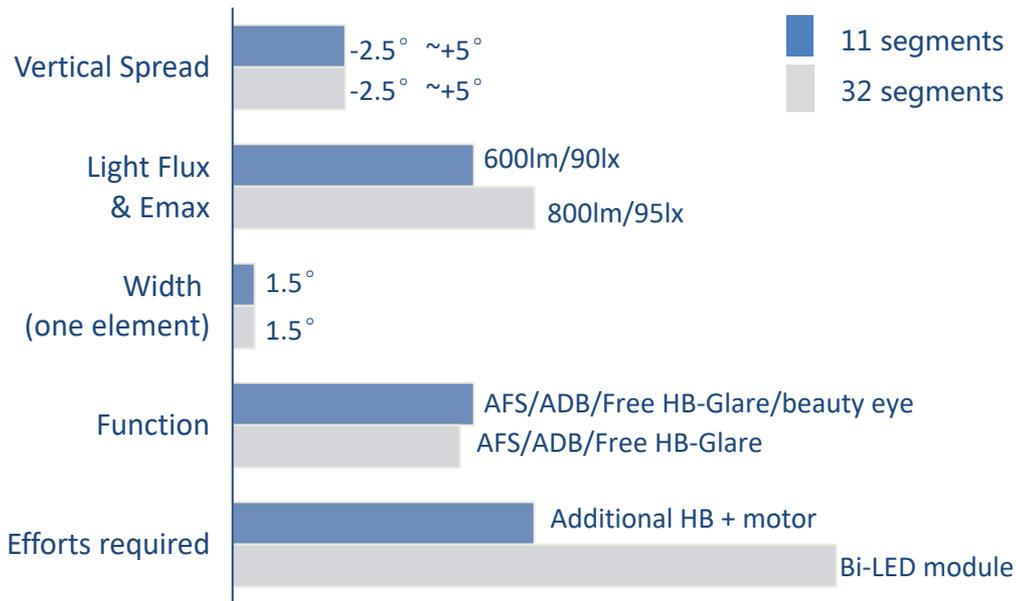
## The present highest cost performance serial model concept recommend



VS



### Conclusion



在范围、照度和精度的相当性能表现下，11分区的前灯系统是低成本矩阵前灯中的最佳推荐方案（电机）。The 11-segments headlight system is the best recommended solution (with motor) for low-cost matrix headlights, with comparable performance in range, illumination and accuracy.

# 面向未来的用户需求调研

## Demand research on facing future

### 你的大灯\_你来定义\_问卷调查

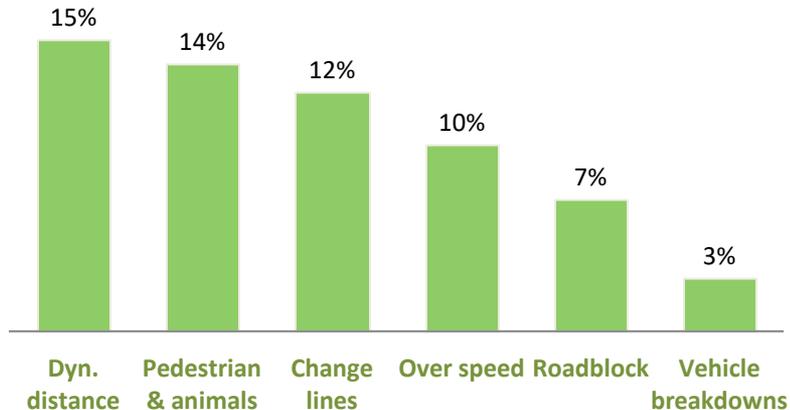
Your Headlights, You Define

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3.对于以上两种场景的投影前灯应用,您更倾向、需求哪一种应用?  单选

Which one would you prefer for two headlights projection applicate scenes?		Percentage
		占比
静态前灯投影	Static projection	10.96%
动态前灯投影	Dynamic projection	31.51%
两种都期待	both projection	57.53%

### Dynamic projection requirements Top6



### Static projection requirements Top3



### Text, animation in different scenes

- Coming-home and leaving-home animation
- Adore a star
- Confess/propose
- Party, Picnics
- Holiday
- Welcome animation



### Static warning

- Special Days
- Lock a car (door)
- Severe weather
- Alerts
- Clock project
- Fuel quantity

# 满足未来需求的前景方案

## The prospect concept, Meet future requires



### ➤ *DLP (Digital Light Procession)*

微镜投影芯片(DMD)+数字化处理  
DMD + digital processing



### 1.3million pixel (1152x1152) high cost

- Highest resolution of ADB module creates glare-free High Beam. Projection of signs and symbols, to achieve V2X, as well as animating effects and Coming-Home Leaving-Home function.



### ➤ *Micro-LED*

Micro-LED(40μm)+ 数字化处理  
Micro-LED + digital processing

### 20,000+ pixels ( 320x80 ) accepted cost

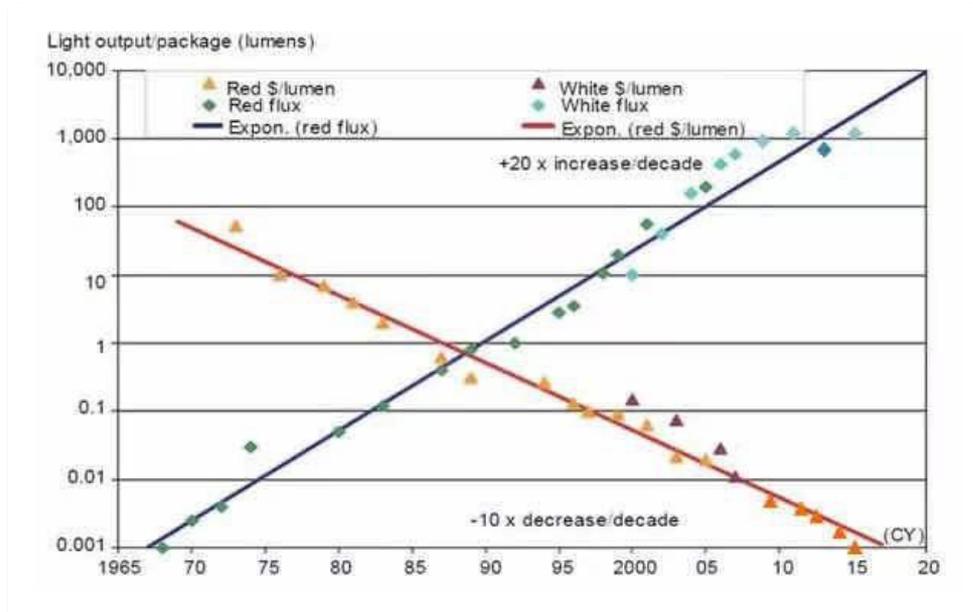
- Lighting platform approach by coverage of full field of view. Easy implementation of new attractive features. Long term customer engagement via software updates and functions on demand.



# LED海兹定律

## Haitz's Law in LED industry

- LED的价格每10年将为原来的1/10
- The price of LEDs will be 1/10 every 10 years.
- 输出流明则增加20倍
- The output luminesces will increase 20 times.



汽车照明时代未来无限可能！

Automotive lighting has unlimited possibilities in the future !



# 創·享 高品质

## Advance together

市场导向、管理创新、质量至上、技术领先  
Market orientation, management innovation, quality priority, technology leadership