



REV. 240305

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www.focuslight.com

COMPANY INTRODUCTION

Founded in 2007 and headquartered in Xi'an, China, Focuslight Technologies Inc. is a fast-growing public company (SSE Star Market: 688167) that develops and manufactures high power diode lasers (photon generation), laser optics (photon control), and photonics modules and systems (application solutions) with a focus on automotive, pan-semiconductor, and medical & health application solutions. In 2017, Focuslight successfully acquired LIMO GmbH, and completed the brand unification in January 2022. In January 2024, Focuslight acquired SUSS MicroOptics (now as Focuslight Switzerland). Focuslight owns over 400 patents worldwide and is ISO 14001, ISO 45001, ISO 9001, and IATF 16949 certified. Additional information can be found at www.focuslight.com.

Focuslight Technologies Inc.

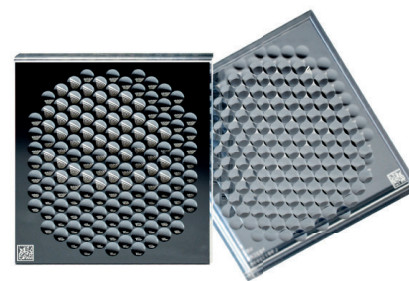
Email: sales@focuslight.com

OPTICAL SOLUTIONS FOR AUTOMOTIVE PROJECTED LIGHTING

Introduction

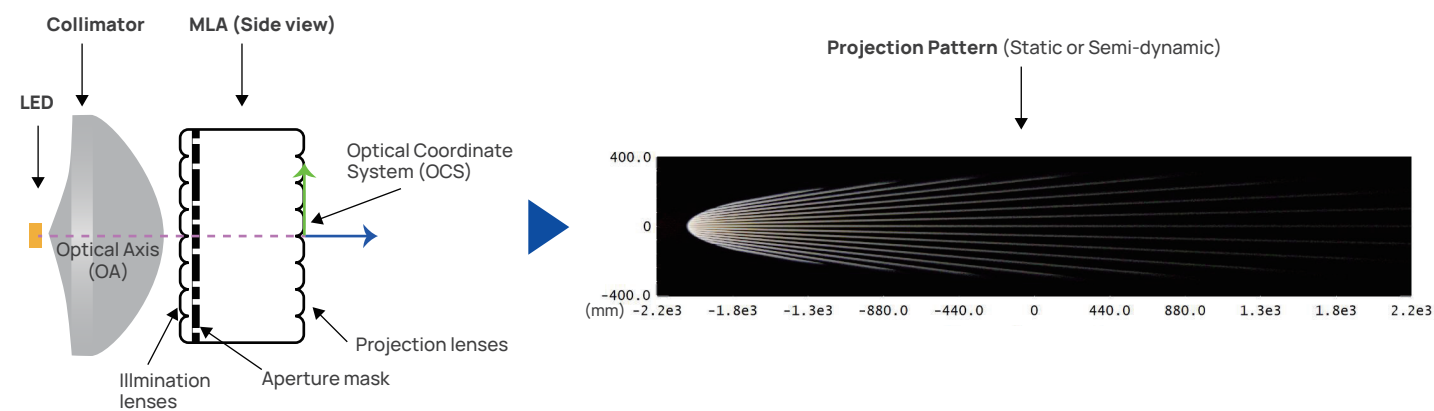
Automotive Projected Lighting projects a custom-designed, bright and easily recognizable light pattern in the cabin or on the street. To achieve such optical performance, our microlens arrays (MLAs) are imprinted on single or multiple bonded glass wafers, which typically incorporate metallic layers to shape the light according to our customer's requirement. Our MLA is illuminated by a collimated light source coming from an LED and a collimator. Below you see a scheme of such a projected lighting system.

In order to achieve technologically advanced system, the MLA design is a critical aspect of the functional performances.



Exterior and Interior Projected Lighting Illustration

MLAs for Projected Lighting



Exterior Projected Lighting System Setup

MLA Advantages for Projected Lighting Application

Slim: Miniaturization (short focal distance) and multiplication

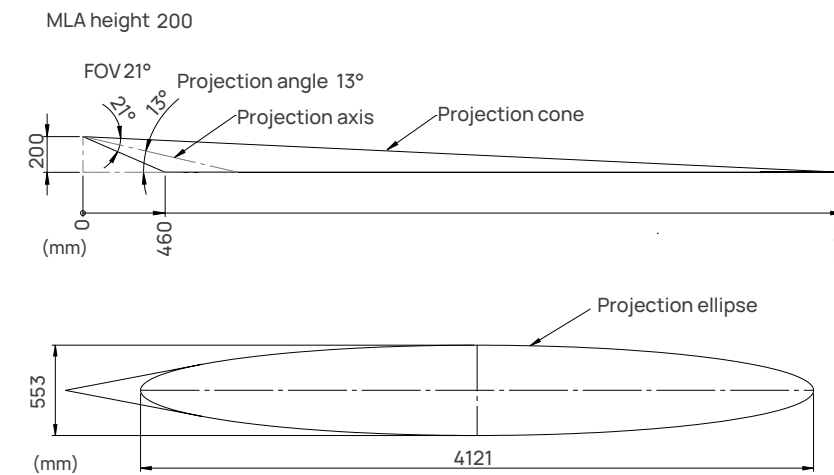
Sharpness: High depth of field compatible with 3D surface

High efficiency: Etendue conservation through multichannel

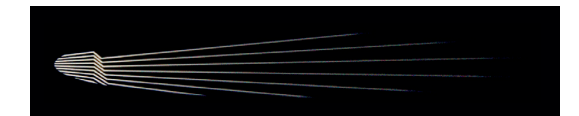
Freedom of design:

- Modular construction
- Less weight compared to conventional systems

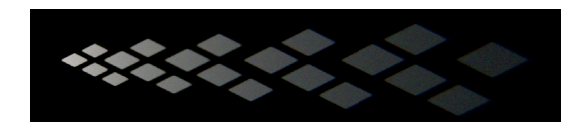
Projection Pattern Examples



TS-00030 Open

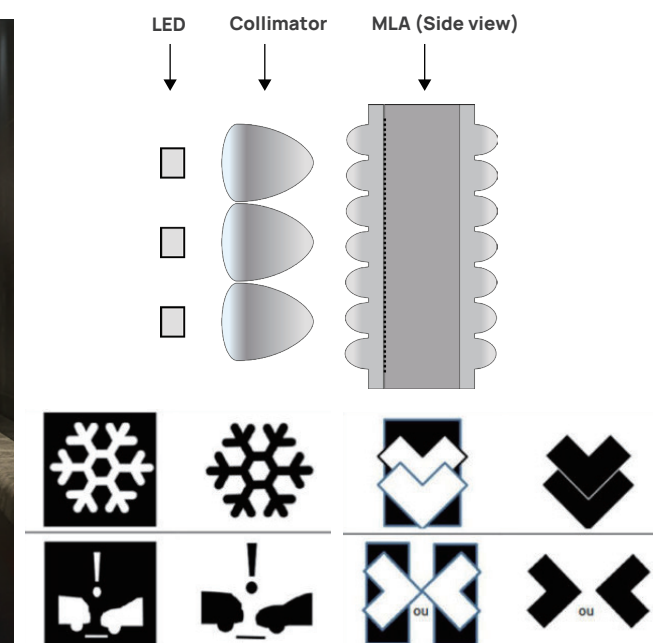
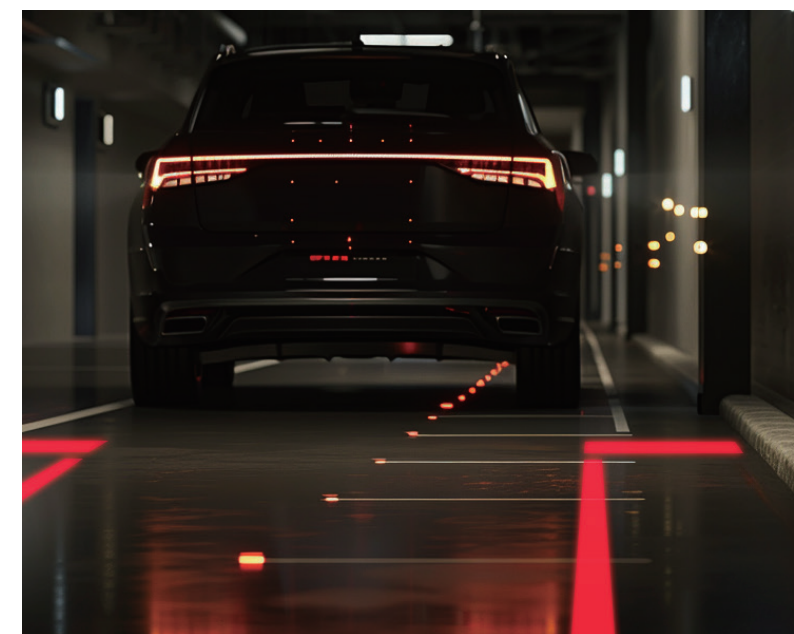


TS-00032 Comet



TS-00027 Confetti

Application Example: Safety Projection



Services Offered by Focuslight

If you have a custom pattern that you want to project, Focuslight can support you in various details:

BASIC	INTERMEDIATE	ADVANCED
✓ Aperture Mask Design	✓ MLA Optimized Design	✓ Ghost Image Estimation
✓ MLA Functional Design	✓ Pattern Optimization	✓ System Tolerancing