

WIDE-ANGLE DIFFUSER (WAD)

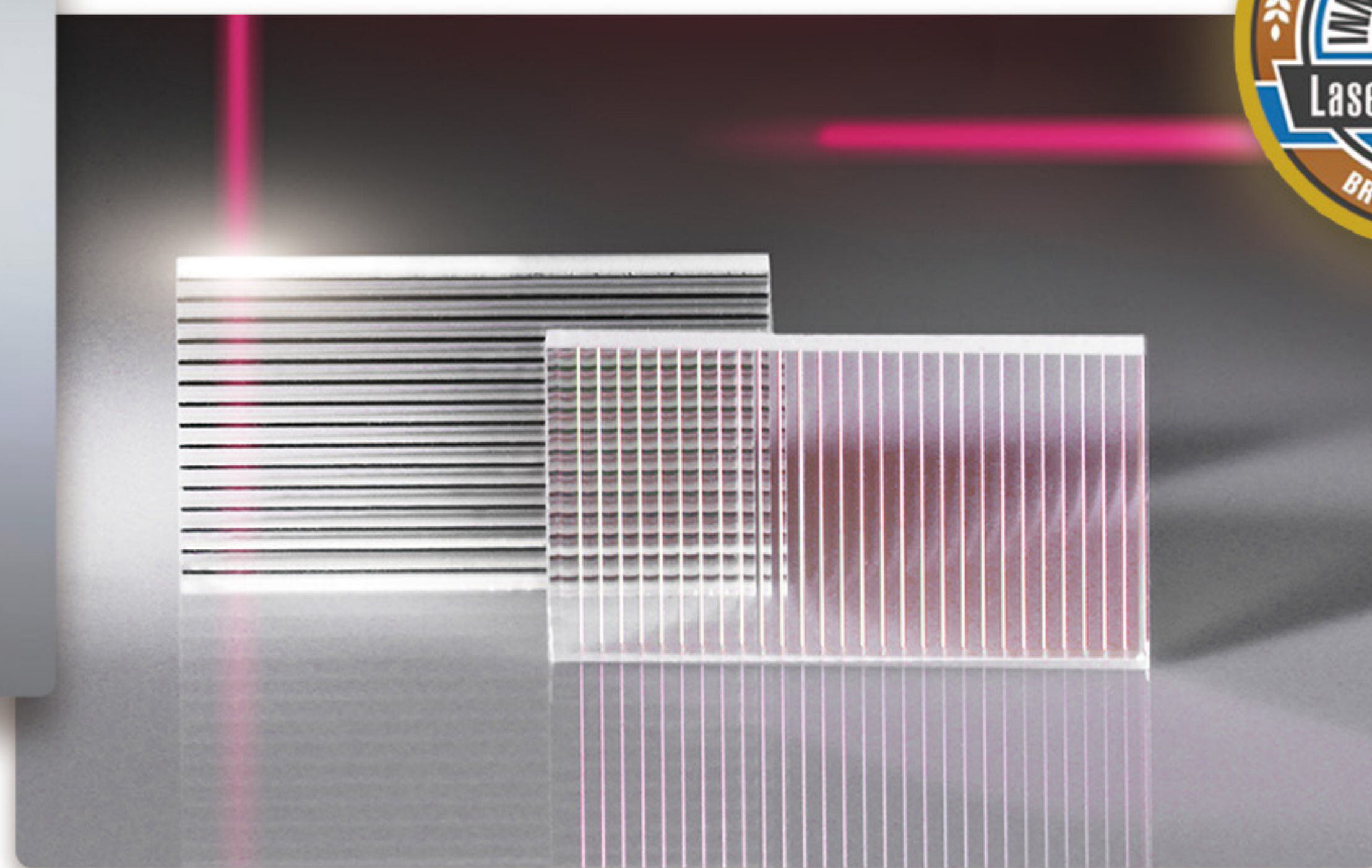
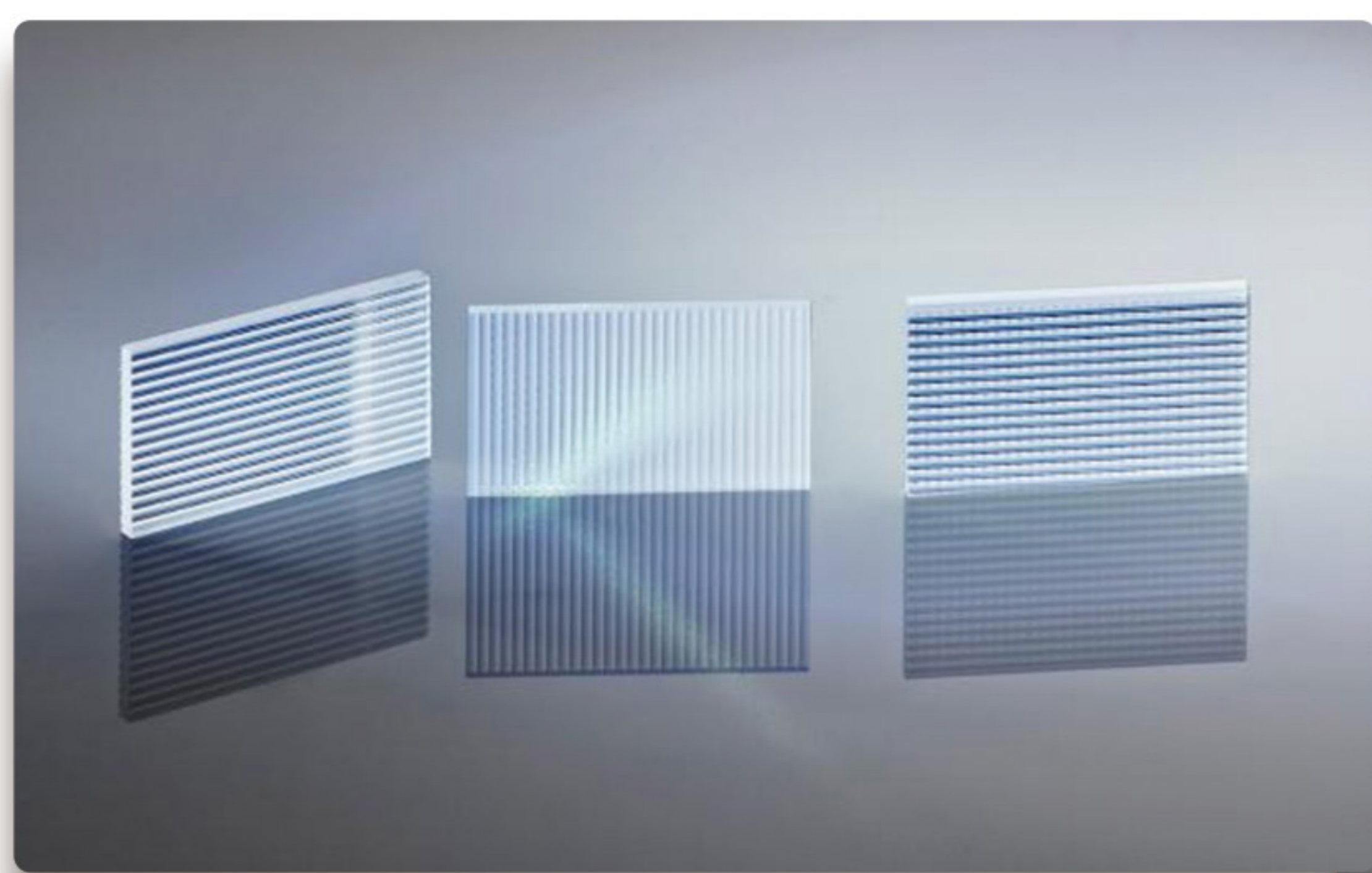
3D SENSING



LiDAR



DMS



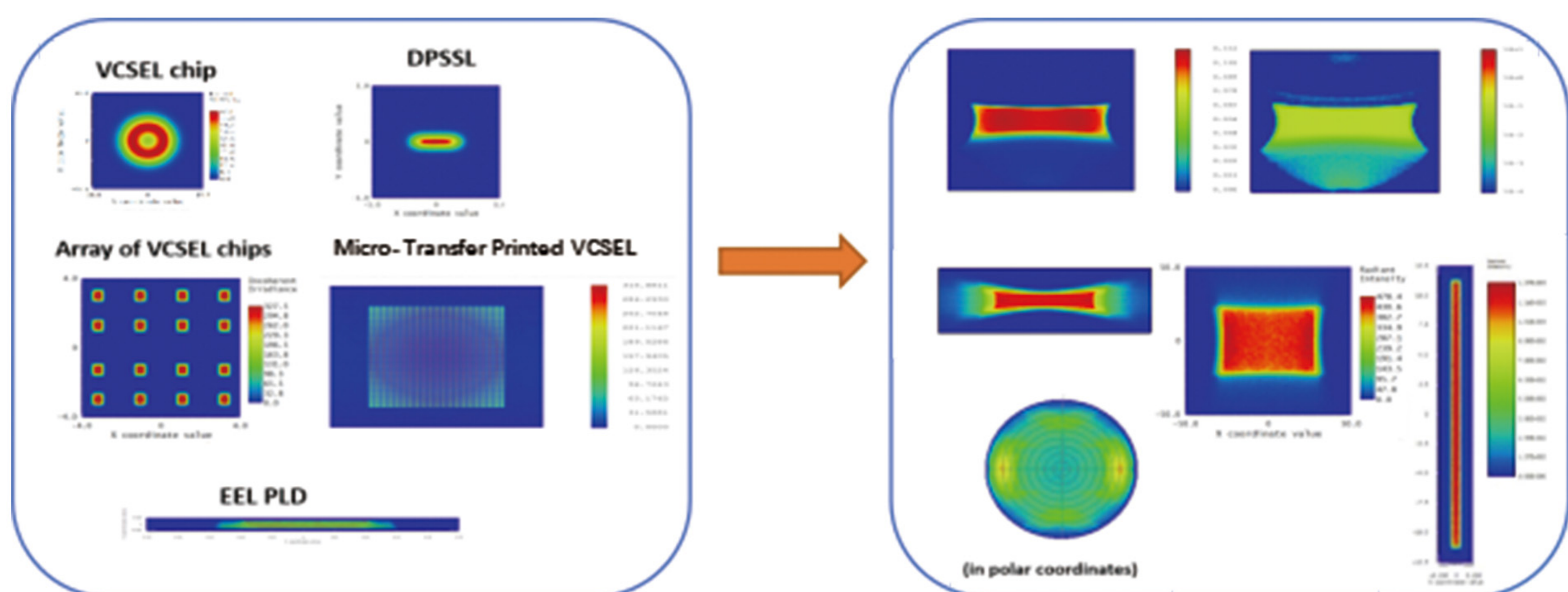
Focuslight designs and produces wide angle diffusers (WAD) with 1D/2D FOV up to 160° FW, which can provide a wide selection of profiles from flat-top, batwing, stepped profile, offset to customized homogeneous intensity distribution. With two diffusers, 2D field distributions are created, to enable one-shot illumination of the surrounding, optimized for LiDAR or machine vision. These wide angles are possible by using high refractive index glasses in combination with our unique wafer processing technology with complementary polishing, delivering smallest scattering, highest performance stability and maximum transmission.

Refractive optical element (ROE) 1D micro lens array (MLA) diffusers

- Freedom on combinations of 1D diffusers for an 2D FOV: H x V angles (e.g. 60° x 45°, 120° x 20°, 150° x 150°, 120° x 100°)
- High transmission efficiency up to 99.8% (AR coated)
- NO zero-order, NO 'hot spot', eye safety
- Large FOV angles (e.g., 160°)
- High uniformity >90%
- Automotive-grade glass material

Applicable to various light source: collimated, less collimated, diverging, such as DPSSL, EEL, VCSEL, etc.

Laser source + Diffusers = 2D FOV profile of radiant intensity



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.