

WIDE-ANGLE DIFFUSER (WAD)

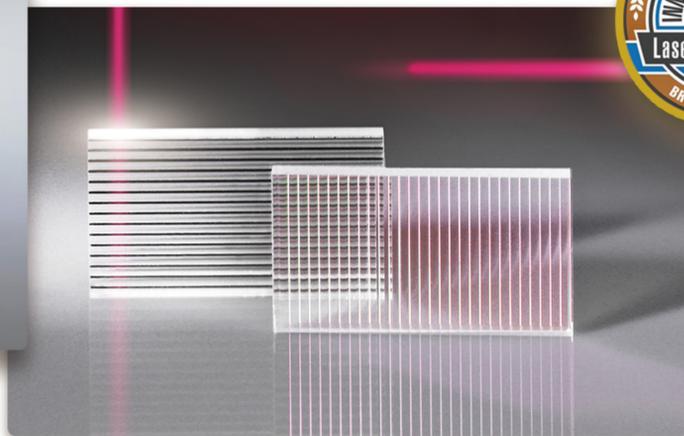
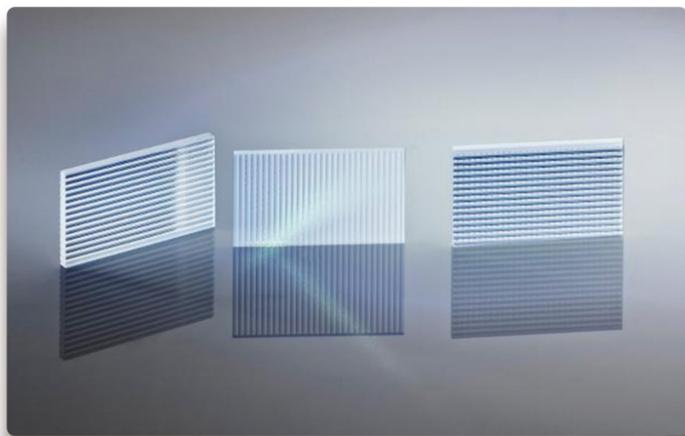
3D SENSING



LiDAR



DMS



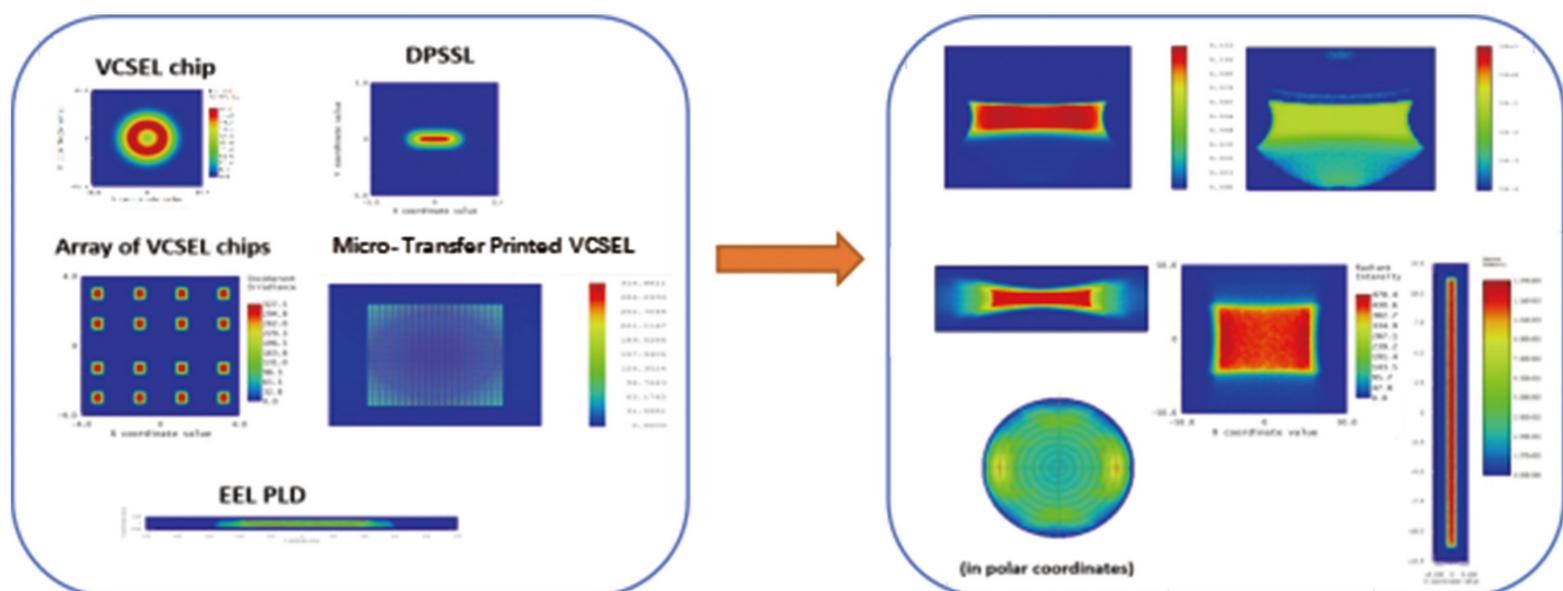
Focuslight designs and produces wide angle diffusers (WAD) with 1D/2D FOV up to 160° FW, which can provide a wide selection of profiles from flat-top, batwing, stepped profile, offset to customized homogeneous intensity distribution. With two diffusers, 2D field distributions are created, to enable one-shot 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 is a fast-growing company that develops and manufactures high-power diode laser components and materials (photon generation), laser optics (photon control), photonic application modules, assemblies, and sub-systems (photonics application solutions) with a focus on automotive, pan-semiconductor, and medical & health application solutions. In 2017, Focuslight acquired LIMO, one of the leading manufacturers of micro-optics and beam shaping solutions, and a pioneer in groundbreaking photonics production technologies. After the successful IPO at the Shanghai Stock Exchange Star Market (Ticker Symbol: 688167) in December 2021, Focuslight has unified its brand globally in January 2022. Focuslight has over 400 patents worldwide and is ISO 14001, ISO 45001, ISO 9001, and IATF 16949 certified.