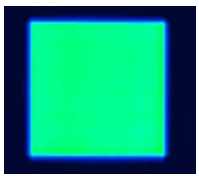
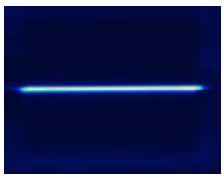
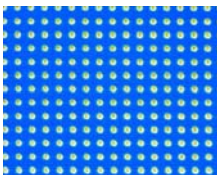
SMO TECHINFO SHEET 14 - FLAT-TOP-GENERATOR: SQUARE, LINE, SPOT



Square-Flat-Top-Generator



Line-Flat-Top-Generator (single line)



Spot-Generator

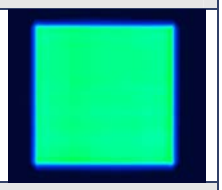
SUSS MicroOptics has recently developed a new generation of Square-Flat-Top-Generators, Spot-Generators and Line-Flat-Top-Generators.

In these generators, high quality Fly's Eye condensers with a high uniformity and an efficiency > 98 % are used for the creation of highly uniform flat-tops. The illuminated field is related to the focal length of the Fourier-lens and can be therefore easily adjusted.

Please contact us for a customized solution.

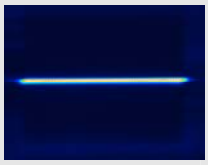
Homogenizer (2D): Square Flat-Top

- Various working distances,
- Various flat-top sizes,
- Optional: AR-Coating.



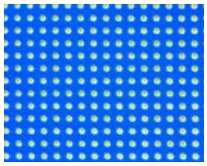
Homogenizer (1D): Line Flat-Top

- Various working distances,
- Various line lengths,
- Various line thicknesses,
- Optional: AR-Coating.



Spot-Generator: Point Matrix

- Various working distances,
- Various spot sizes,
- Various spot distances,
- Optional: AR-Coating.



Applications

Optical Metrology
Laser Beam Shaping
Laser Pump Optics
Dermatology
Microscopy
Illumination
Micro Manufacturing
Laser Welding, Cutting, Drilling

Short introduction to the Flat-Top fly´s eye condensers

Fly´s Eye condensors are well known components in applications where a homogenous illumination field is required. Nowadays such systems are used as key components in **lithography, laser micro manufacturing, life sciences and optical metrology**.

Flat-Top fly´s eye condensers consist of two identically micro structured surfaces on a Fused Silica substrate based on 8" wafer technology. The monolithic assembly allows a very easy handling and alignment.

Flat-Top 5		**Flat-Top 10**		**Flat-Top 14**	
Product N°	**19-0225-100-000**	Product N°	**19-1200-100-000**	Product N°	**19-1000-100-000**
Substrate:	**Fused Silica ***	Substrate:	**Fused Silica ***	Substrate:	**Fused Silica ***
Pitch:	**250 µm**	Pitch:	**300 µm**	Pitch:	**354 µm**
ROC:	**750 µm**	ROC:	**385 µm**	ROC:	**370 µm**
Divergence:	**+/-5°**	Divergence:	**+/-10°**	Divergence:	**+/-14°**
Lens shape:	**cylindrical**	Lens shape:	**cylindrical**	Lens shape:	**cylindrical**
Wavelength:	**193 nm – 3 µm**	Wavelength:	**193 nm – 3 µm**	Wavelength:	**193 nm – 3 µm**
Size:	**10mm x 10mm****	Size:	**10mm x 10mm****	Size:	**10mm x 10mm****
Thickness:	**2,25 mm +/-0,05mm**	Thickness:	**1.20 mm +/-0,05mm**	Thickness:	**1.00 mm +/-0,05mm**

* SMO uses several Fused Silica substrates depending on the operation wavelength

** Other sizes available on request