

High Performance

Looking for homogeneous light, high efficiency and compact design? Multi-Lens Arrays (MLAs) made of SUPRAX® 8488 borosilicate glass and coatings from Auer Lighting deliver constant optical properties for your application over the entire system life, even at the highest power densities. Free-form lenses and AR coatings optimized to your requirements guarantee you and your customers homogeneous light fields with maximum intensity.

Cost-effectiveness

Auer Lighting manufactures multi-optics on a large industrial scale. Prototypes for your functional tests are part of the service.

Success

Auer Lighting's experts support you in the field of optical design, manufacture and coating of your multi-lens optics such as cluster lenses, fly's eyes or lens arrays. We are the right partner for the best possible beam collimation, light homogenization and projection. Let us write your success story together!

Applications

- Logo projection for interior and exterior automotive lighting
- Welcome lighting for car side mirrors and doors
- Laser collimation in digital projectors
- Beam shaping in light engines for stage and studio

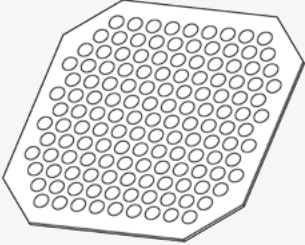
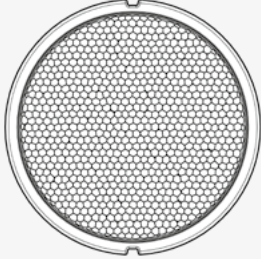
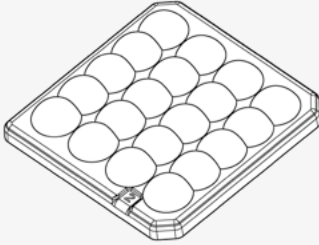
Auer Lighting GmbH
Hildesheimer Straße 35
37581 Bad Gandersheim
Germany
T +49 (0) 5382 701-0
F +49 (0) 5382 701-451
info@auer-lighting.com
www.auer-lighting.com

MULTI-LENS ARRAYS

MADE OF SUPRAX® 8488 GLASS



Product Designs for Multi-Lens Arrays

Performance	Collimation	Homogenization	Projection
Area of application	pre-collimation of HB-LED emission	homogenization of LED emission	projection of multiple logos
Product design	<p>plano-convex lens array for Light Engines</p> 	<p>double-sided mixing lens with irregular lattice for round light distribution</p> 	<p>plano-convex micro-lens array for multiple logo projection</p> 
Applicable LEDs	e.g. Lumileds Altilon Intense 1x1, Luxeon Neo 0.5 mm ² , Osram OSLON® Compact CL, Nichia NJSW170C	pre-collimated beams of LED-arrays or COBs up to Ø 72 mm	e.g. Lumileds Altilon Intense 1x1, Luxeon Neo 0.5 mm ² , Osram OSLON® Compact CL, Nichia NJSW170C, Cree XD16
Material	SUPRAX® 8488 borosilicate glass	SUPRAX® 8488 borosilicate glass	SUPRAX® 8488 borosilicate glass
Process	precision glass pressing, polishing of flat surface	direct pressing or precision glass pressing	precision glass pressing
Coating	double-sided AR	double-sided AR	double-sided AR
Array size	84 mm x 84 mm x 3.5 mm	Ø 86 mm x 6.4 mm	25 mm x 25 mm x 4 mm
Plate thickness (mm)	1	3	2
Lens aperture	round	hexagonal	round, truncated
Arrangement	hexagonal	stochastically distributed	linear, overlapping
Lens radius of curvature (ROC) (mm)	2.61	1.64	asphere ≤ 2
Lens pitch (mm)	6.49	2.51	5.5 / 4
Pitch accuracy (µm across 25 mm)	≤ 10	≤ 10 (front to back side: ±0.15 mm)	≤ 10
Contour accuracy (µm across 25 mm)	≤ 20	≤ 20	≤ 20