



## Variolens N / Variolens W

The vario lens N and vario lens W are available as accessories to be fitted to the ilumCURE series of exposure units in order to homogenously and efficiently cure larger surfaces to which adhesive has been applied.

	Variolens N	Variolens W
<b>Art. No.</b>	1600000071	1600000064
<b>Typical max. optical output power*<sup>2</sup> of ilumCURE 1G or ilumCURE 2G*<sup>1</sup> with Variolens N</b>	100 mW @ 365 nm	
<b>Typical max. optical output power*<sup>2</sup> of ilumCURE 1G or ilumCURE 2G*<sup>1</sup> with Variolens W</b>	200 mW @ 365 nm	
<b>Typical optical power density*<sup>3</sup> of ilumCURE 1G or ilumCURE 2G*<sup>1</sup> with Variolens N</b>	95 mW/cm <sup>2</sup> @ 0 mm distance 110 mW/cm <sup>2</sup> @ 5 mm distance 135 mW/cm <sup>2</sup> @ 10 mm distance 150 mW/cm <sup>2</sup> @ 15 mm distance 157 mW/cm <sup>2</sup> @ 20 mm distance 160 mW/cm <sup>2</sup> @ 25 mm distance 157 mW/cm <sup>2</sup> @ 30 mm distance 140 mW/cm <sup>2</sup> @ 40 mm distance 95 mW/cm <sup>2</sup> @ 50 mm distance 50 mW/cm <sup>2</sup> @ 75 mm distance 28 mW/cm <sup>2</sup> @ 100 mm distance 18 mW/cm <sup>2</sup> @ 125 mm distance 13 mW/cm <sup>2</sup> @ 150 mm distance	
<b>Typical optical power density*<sup>4</sup> of ilumCURE 1G or ilumCURE 2G*<sup>1</sup> with Variolens W</b>		183 mW/cm <sup>2</sup> @ 0 mm distance 222 mW/cm <sup>2</sup> @ 5 mm distance 243 mW/cm <sup>2</sup> @ 10 mm distance 247 mW/cm <sup>2</sup> @ 15 mm distance 220 mW/cm <sup>2</sup> @ 20 mm distance 180 mW/cm <sup>2</sup> @ 25 mm distance 140 mW/cm <sup>2</sup> @ 30 mm distance 90 mW/cm <sup>2</sup> @ 40 mm distance 60 mW/cm <sup>2</sup> @ 50 mm distance 26 mW/cm <sup>2</sup> @ 75 mm distance 13 mW/cm <sup>2</sup> @ 100 mm distance 8,5 mW/cm <sup>2</sup> @ 125 mm distance 6 mW/cm <sup>2</sup> @ 150 mm distance
<b>Illuminated area</b>	6 mm x 6 mm @ 25 mm distance 9 mm x 9 mm @ 50 mm distance 13,5 mm x 13,5 mm @ 75 mm distance 20,0 mm x 20,0 mm @ 100 mm distance 24,5 mm x 24,5 mm @ 125 mm distance 27,5 mm x 27,5 mm @ 150 mm distance	8 mm x 8 mm @ 25 mm distance 12,5 mm x 12,5 mm @ 50 mm distance 22 mm x 22 mm @ 75 mm distance 32 mm x 32 mm @ 100 mm distance 41 mm x 41 mm @ 125 mm distance 50 mm x 50 mm @ 150 mm distance
<b>Homogeneity within illuminated area</b>	> 90 %	
<b>Working distance</b>	Unlimited	
<b>Focal distance</b>	25 mm to 125 mm	50 mm to 150 mm
<b>Focusing</b>	By rotating the lens holder	
<b>Adjustment range of the lens holder</b>	3 mm	
<b>Weight / material</b>	Approx. 8 g / glas, anodised aluminium	

Art. No.	Variolens N	Variolens W
	1600000071	1600000064
<b>Dimensions</b>	Total length: 33 mm, diameter 18 mm	
<b>Total dimensions ilumCURE 1G and ilumCURE 2G</b>	Length: max. 157 mm Diameter: max. 27.5 mm	
<b>Total dimensions ilumCURE industrial</b>	Length: max. 157 mm Diameter: max. 25 mm	
<b>Operating / storage temperature</b>	+5 °C to +45 °C / -10 °C to +70 °C	
<b>Humidity</b>	5 % to 95 % r. h. (non-condensing)	
<b>Included accessories</b>	Hexagon wrench (size 0.9 mm) for locking the lens holder	

\*1 Operated at 100 % intensity

\*2 Measured with Optometer Gigahertz P9710 and Ulbricht Sphere ISD-5P-SiUV-2

\*3 Measured with Hoenle UV-Meter µC Basic 16501 and Detector Head 16401/UV-AD1 E110

\*4 Measured with EIT SPOTCURE UV Intensity Meter SP365

Subject to technical modifications. As per February 2024

## SAFETY MEASURES AND WARNINGS

- Comply with safety regulations according to currently valid standards! (2006/25/EC, DIN EN 62471-2009, etc.)
- Do not stare directly into the light source. Ultra violet or visible radiation can permanently damage the eyes!
- Take precautions; use protective window or eye protection made of suitable materials!
- Always avoid exposure to skin and eyes!
- Avoid humidity! (excessive air moisture > 95% r. h., splash water, direct immersion in water)
- Do not expose the UV light source to excessive temperatures! (see specifications)
- Operation only by trained personnel! (keep away from children)
- Device contains glass components, so protect from vibrations!

## USAGE

The Variolens N and Variolens W is attached on the handheld light sources of ilumCURE family to harden wide areas of adhesives homogeneously and fast.

## PROPERTIES

By rotating the lens holder the nearly square shaped exposure window is focused in a working distance from approx. 25 mm to 125 mm (Variolens N) / approx. 50 mm to 150 mm (Variolens W). By tightening the screw, the lens holder can be secured against further rotation.

## HOW TO MOUNT THE VARIOLENS N ON THE ILMUCURE DEVICES

1. Remove the standard lighting tip of the ilumCURE by carefully pulling towards the front.
2. **ilumCURE 1G / ilumCURE 2G Series:** Plug the adaptor of the Variolens into the receptacle of the ilumCURE (flattened side is facing upward directing to the push button, see picture) until it snaps into place.
3. By rotating the lens holder the illuminated area can be focused on the desired working distance and locked. If required it can be locked in this position by using the supplied Allen key.



## OPERATION

- |                            |  |
|----------------------------|--|
| <b>ilumCURE 1G series:</b> | Operated by the push button of the handheld light source                 |
| <b>ilumCURE 2G series:</b> | Operated by the push button of the handheld light source or via Software |

## CLEANING

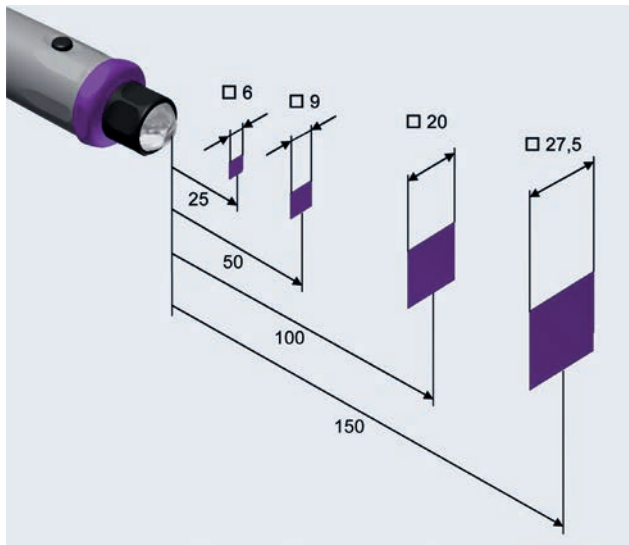
If necessary, the Variolens can be cleaned carefully with a soft lint-free cloth (such as a lens cleaning cloth). Don't use aggressive or abrasive cleansing agents or detergents!

## MAINTENANCE

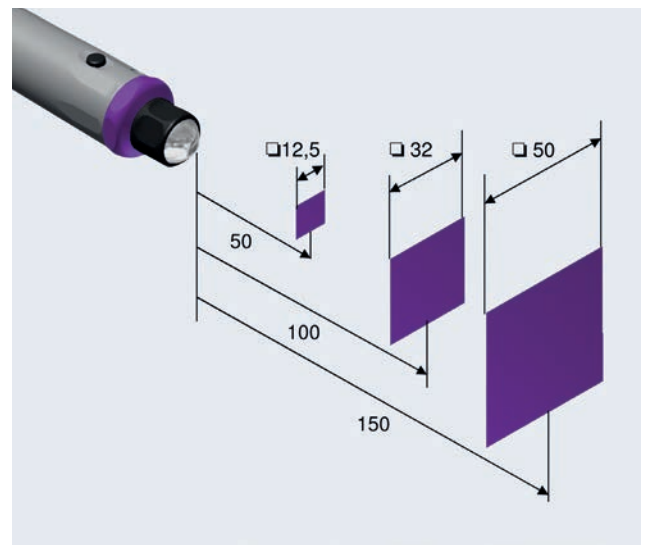
The device is generally maintenance-free. Please avoid fingerprints on the glass surface! If the Variolens is quite dirty (e.g. hardened adhesive residues) it should be replaced by a new one. Otherwise the homogeneity of the beam is no longer warranted.

# ILLUMINATED AREA VS. WORKING DISTANCE

## Variolens N

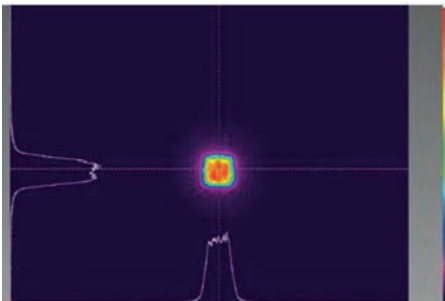


## Variolens W



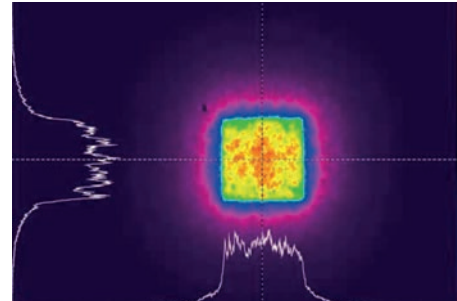
# BEAM PROFILES

## Variolens N

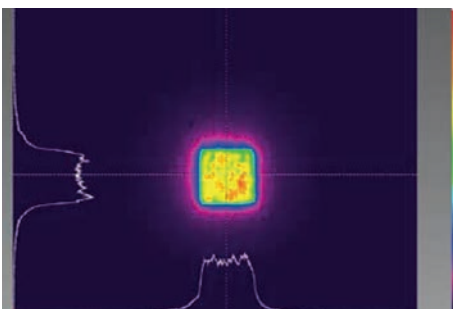


Beam profile at a distance of 25 mm

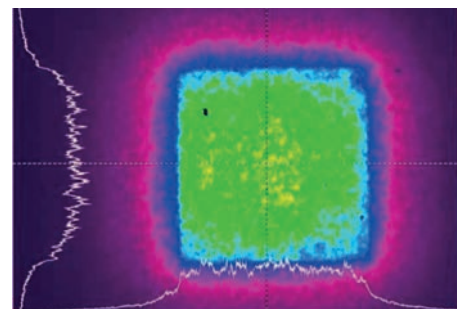
## Variolens W



Beam profile at a distance of 50 mm

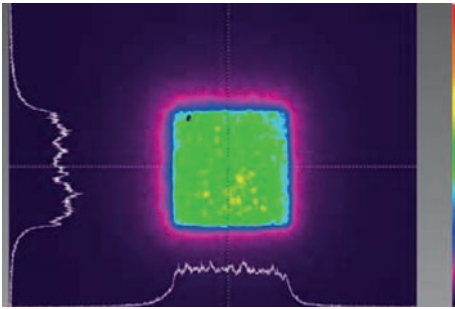


Beam profile at a distance of 50 mm



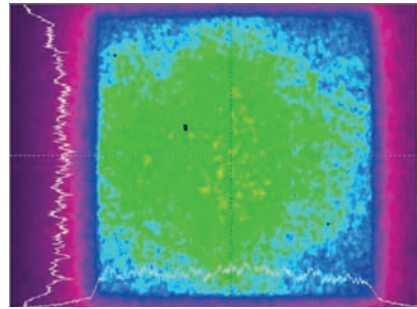
Beam profile at a distance of 100 mm

## Variolens N

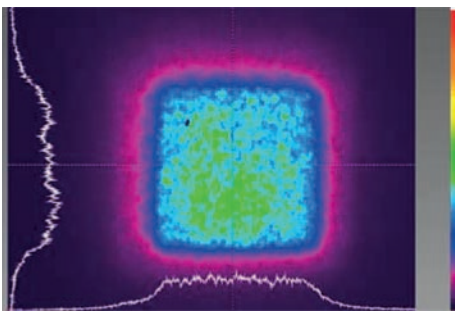


Beam profile at a distance of 125 mm

## Variolens W



Beam profile at a distance of 150 mm



Beam profile at a distance of 150 mm

## NOTES

The above product specifications are subject to change without notice.  
Release 02/2024

[imm-photonics.de](http://imm-photonics.de)