

## MAX-303 application

## Xenon light source for Photochromic materials research

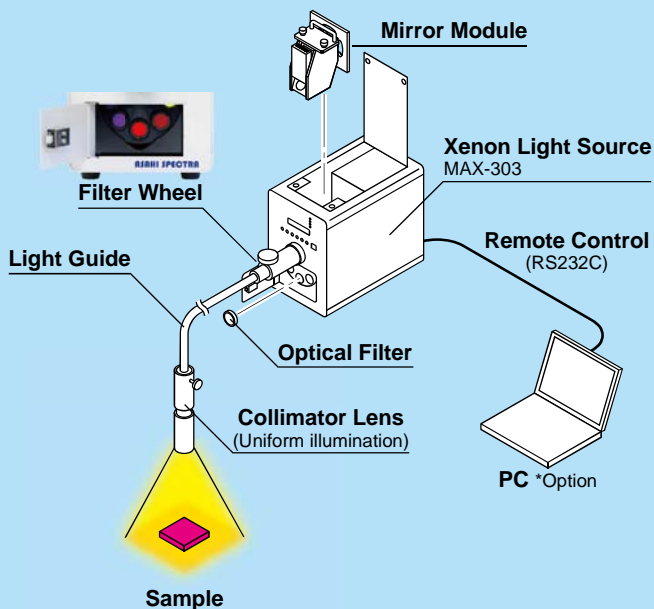
The most suitable illuminator to characterize photochromic behavior

- IR heat blocking by mirror module
- Embedded filter wheel enables to select any desirable wavelength
- High power monochromatic light by bandpass filters
- RS232C remote control

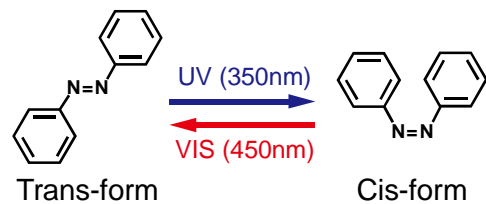
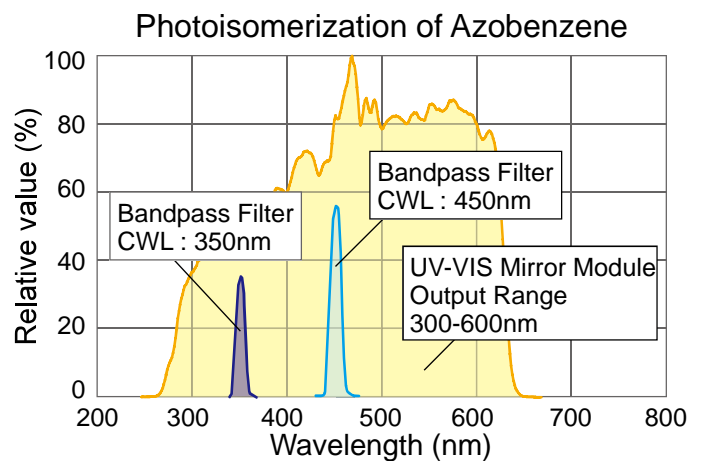
This system can cause reversible transition of a sample by illuminating monochromatic light with desirable wavelength. Thanks to its heat blocking design and a mirror module, the sample is prevented from IR thermal damage.



### System Configuration Example



### Usage Example



### Application Field

- Photoisomerization (Photochromism Element)
- Photocatalysis
- Photopolymer Development

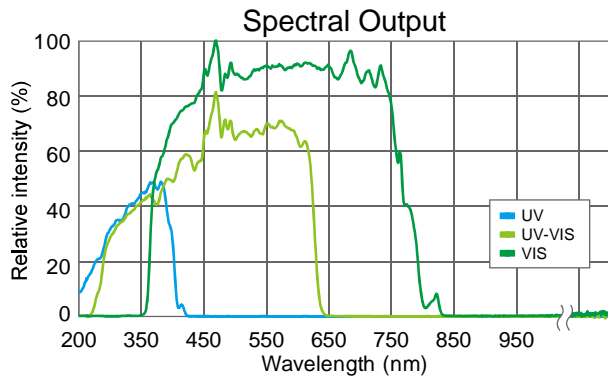
# Accessories

## Mirror Module



The mirror module can specify a pass band with blocking IR range.

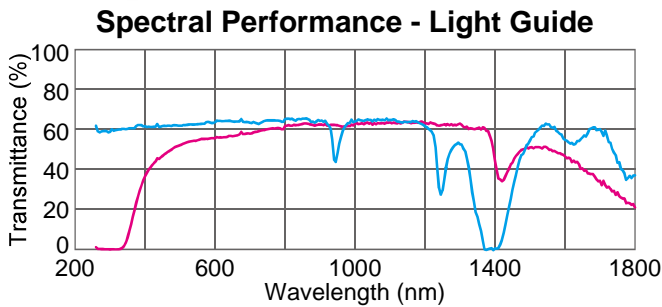
Type	Wavelength
UV	250 - 385nm
VIS	385 - 740nm
UV-VIS	300 - 600nm



## Light Guide



The illuminating light from the MAX-303 is delivered to the point of use by the light guide efficiently.



**Quartz Light Guide**

- Length(L):1m, 2m
- Core dia:200µm dia.
- Numerical aperture:0.22
- Heatproof temp.:<300 deg C (Incident end face)

**Hybrid Light Guide**

- Length(L):1m, 2m
- Core dia:50µm dia.
- Numerical aperture:0.57
- Heatproof temp.:<150 deg C (Incident end face)

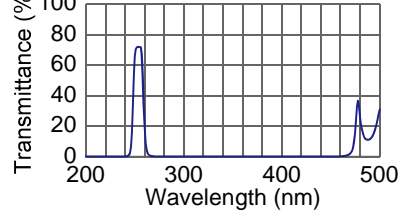
## Optical Filters



Asahi Spectra produces varieties of precise optical filters to help modification of spectral output from the MAX-303.

Our bandpass filter series allow users to obtain the desirable spectral throughput to suit wide variety of applications more precisely while eliminating unwanted energy.

UV Filter Example : XHQA254



FWHM tolerance: 10±2nm  
Min.transmission: 60%  
Size: 25 mm dia.

Wavelength (nm)	Item #	Mirror Module
248	XHQA248	UV <sup>1</sup>
254 - 290	XHQA254 - XHQA290	UV <sup>2</sup>
300 - 390	XHQA300 - XHQA390	
400 - 600	XHQA400 - XHQA450 XBPA460 - XBPA600	UV-VIS <sup>3</sup>
610 - 740	XBPA610 - XBPA740	VIS

\*1 The OUV lamp is required.

\*2 The mirror module transmittance is decreased when XHQA390 is used.

\*3 The new version of XHQA300 - 390 are only available.

\*Contact us for information about a filter which is not listed above.

## Collimator Lens



Collimator lens reduces the divergence of light from the light guide and provide uniform light output to a sample. Focus is adjustable in each working distance.

**x0.5 Type**  
RLQL80-05

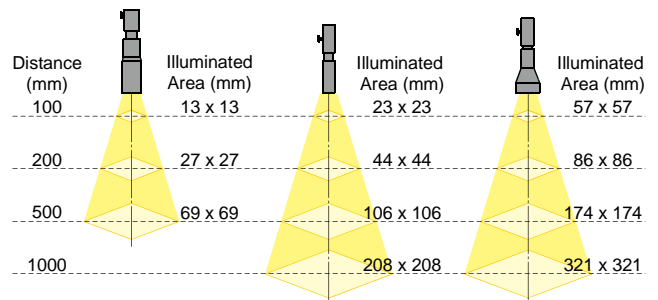
**x1.0 (STD) Type**  
RLQL80-1

**x2.0 Type**  
RLQL80-2

Size: 43mm dia. x 245mm  
Material: Quartz

28mm dia. x 192mm  
Quartz

55mm dia. x 217mm  
Quartz



\*Product specifications are subject to change without notice.

# ASAHI SPECTRA

Gardenia Bldg. 4F, 2-13-1 Kamijujo, Kita-ku, Tokyo 114-0034 Japan  
TEL : +81-3-3909-1151 / FAX : +81-3-3909-1152  
Email : info@asahi-spectra.com

www.asahi-spectra.com

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