

## Monochromatic Illuminator System

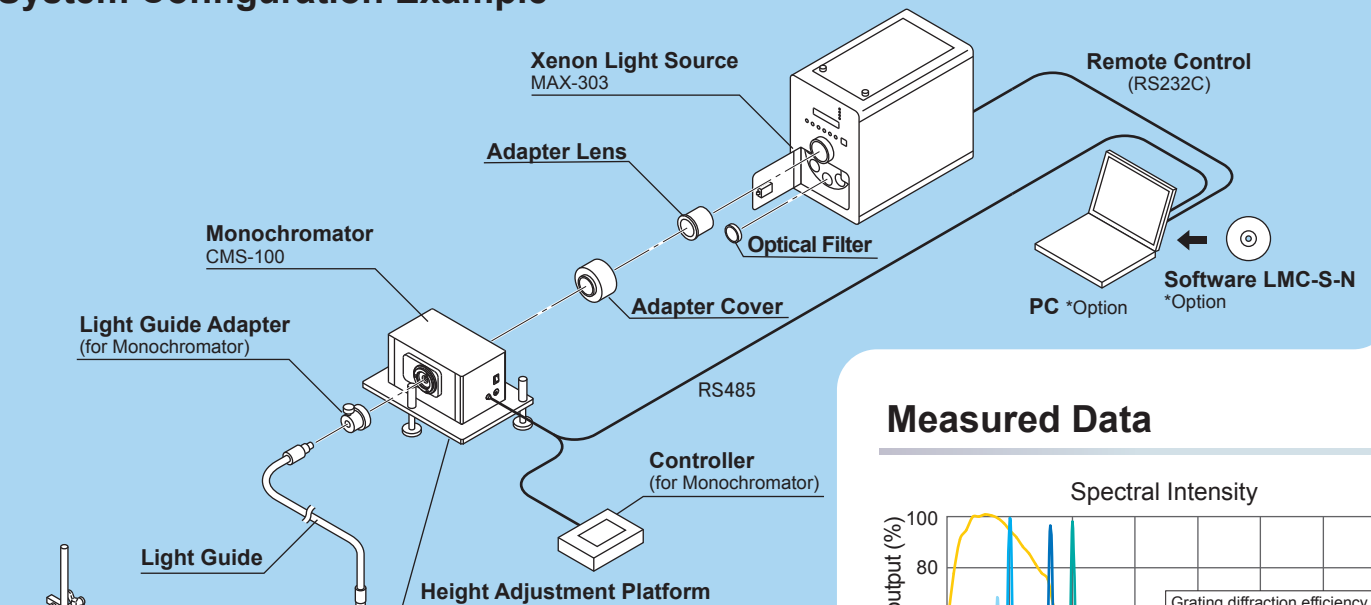
### Tuning wavelength from UV to IR with xenon light source and monochromator

#### Features

- Monochromatic illumination by 0.1nm interval from 250nm to 900nm. \*Depends on configurations
- Resolution: 2.6nm~
- Adjustable light intensity
- Uniform illumination by collimator lens
- Remote control software \*Option



#### System Configuration Example

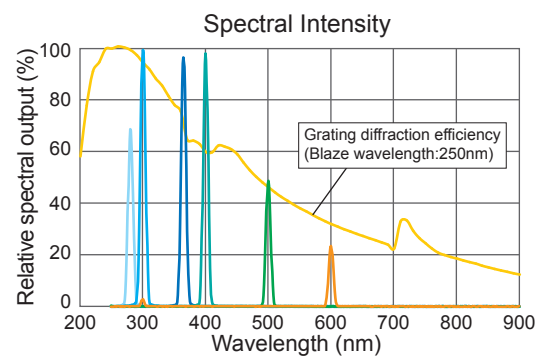


**Light Intensity (Reference value)**

Wavelength (nm)	Light intensity ( $\mu\text{W}/\text{cm}^2$ )	Mirror module
320	170	UV
380	236	
400	184	VIS
550	149	
700	73	
800	50	IR
900	118	

**[Measurement condition]**  
 Illuminated area: 20×20mm  
 Resolution: 8.6nm  
 Grating: 400nm 1200g/mm

#### Measured Data



#### Applications

- CCD characterization
- Photoisomerization
- Photocatalytic reaction

# System Components

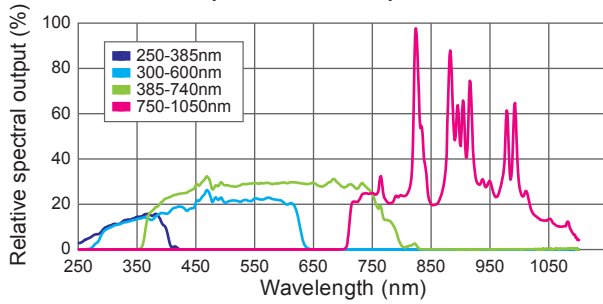
## Xenon Light Source / MAX-303



Xenon light source 300W  
Xenon spectrum is specified by a mirror module.

Type of mirror modules: UV / UV-VIS / VIS / IR

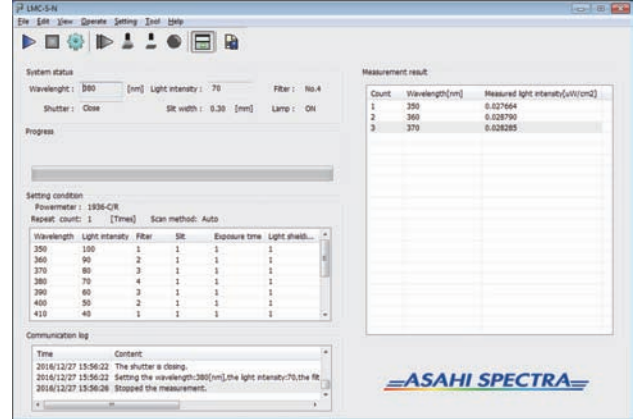
Spectrum Comparison



## Software / LMC-S-N

LMC-S-N enables to control both of a light source and a monochromator at the same time.

Other options are individual control and creating the same level of light intensity in a certain wavelength range.



Operating condition  
Windows7(32bit/64bit)/Windows8.1(32bit/64bit)/Windows10(64bit)

## Monochromator / CMS-100



F-number	F/2.8
Reciprocal linear dispersion	8.3nm/mm (at 550nm)
Resolution	1) 2.6nm 2) 4.3nm 3) 8.6nm *It depends on the slit width. (Calculated value at 546.1nm)
Slit	W x H 1) 0.3 x 3.0mm 2) 0.5 x 3.0mm 3) 1.0 x 3.0mm *It can be selected automatically by controller.

## Collimator Lens



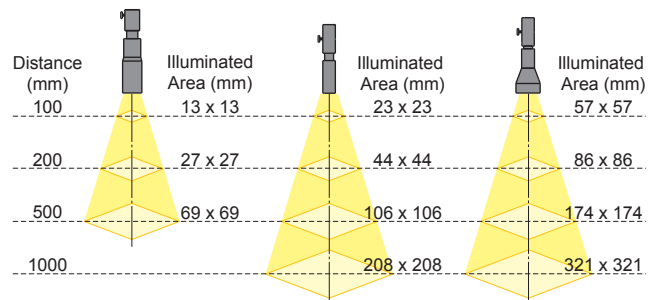
Collimator lens reduces the divergence of light from the light guide and provide uniform light output to a sample. Focus is adjustable in each working distance.

**x0.5 Type**  
RLQL80-05

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

**x2.0 Type**  
RLQL80-2

Size: 43mm dia. x 245mm 28mm dia. x 192mm 55mm dia. x 217mm  
Material: Quartz Quartz Quartz

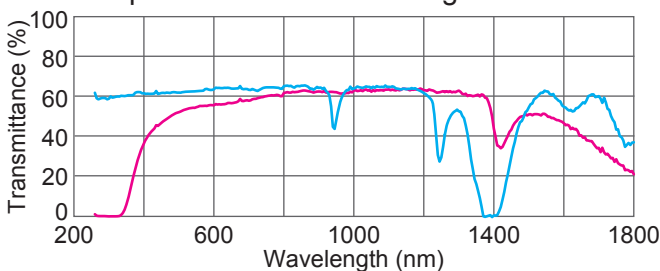


## Light Guide



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

Spectral Performance - Light Guide



- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li><span style="color: blue;">■</span> Quartz Light Guide</li> <li>- Length(L): 1m, 2m</li> <li>- Fiber bundle: 5mm dia.</li> <li>- Core: 200µm dia.</li> <li>- Numerical aperture: 0.22</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: magenta;">■</span> Hybrid Light Guide</li> <li>- Length(L): 1m, 2m</li> <li>- Fiber bundle: 5mm dia.</li> <li>- Core: 50µm dia.</li> <li>- Numerical aperture: 0.57</li> </ul> |
|---|---|

\*Product specifications are subject to change without notice.