

MAX-303 Xenon Light Source 300W Technical Information



MAX-303

UV (250-385nm) Light Guide (Quartz)

*Please regard the following data as a reference.

Measuring Condition

Sensitivity of Detector

Relative Spectral Sensitivity vs Wavelength (nm)

Legend: S254 (blue), S365 (red)

Irradiation Distance

Quartz Light Guide φ5mmx1m

Xenon Light Source MAX-303

- UV Lamp
- UV Mirror Module

Detector

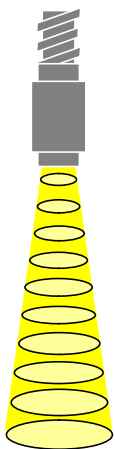
- A. Accumulated UV Power Meter UIT-150 S254 (Ushio)
- B. Accumulated UV Power Meter UIT-150 S365 (Ushio)
- C. Power Meter MODEL2835C (Newport)

Spectral Distribution

Spectral Irradiance (Relative Value) vs Wavelength (nm)

This graph shows the spectral distribution of MAX-303 with UV Lamp and UV Mirror Module measured by fiber spectrometer.

Illuminated Area & Center Illuminance at Different Distance



		Irradiance(mW/cm ²)		Irradiance(mW/cm ²)		
Detector		A	B	C		
Distance	Filter Illuminated area	---	---	XHQA254	XHQA320	XHQA380
		10mm	φ9mm	664.00	1699.00	---
20mm	φ13mm	309.00	700.00	---	---	---
30mm	φ18mm	160.00	342.00	9.10	33.90	36.70
40mm	φ24mm	95.50	196.00	6.74	24.90	27.10
50mm	φ30mm	63.10	128.00	4.91	18.20	20.00
60mm	φ35mm	44.60	90.10	3.75	13.60	15.10
70mm	φ40mm	32.60	65.40	2.89	10.50	11.70
80mm	φ45mm	25.10	50.10	2.30	8.37	9.34
90mm	φ50mm	19.70	39.60	1.87	6.82	7.64
100mm	φ53mm	16.00	32.10	1.54	5.60	6.29

Reference for XHQA (Bandpass Filter)
http://www.asahi-spectra.com/opticalfilters/bandpass_filter.html

MAX-303

UV (250-385nm) **Light Guide (Quartz)** **Collimator Lens (x 1.0)**

*Please regard the following data as a reference.

Measuring Condition

Sensitivity of Detector

Relative Spectral Sensitivity vs Wavelength (nm)

Legend: S254 (blue), S365 (red)

Irradiation Distance

Collimator Lens x 1.0 Quartz Light Guide φ5mmx1m

Detector

A. Accumulated UV Power Meter UIT-150 S254 (Ushio)
 B. Accumulated UV Power Meter UIT-150 S365 (Ushio)
 C. Power Meter MODEL2835C (Newport)

Xenon Light Source MAX-303

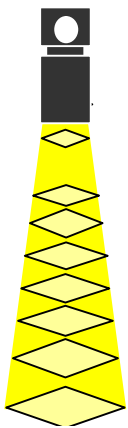
- UV Lamp
- UV Mirror Module

Spectral Distribution

Spectral Irradiance (Relative Value) vs Wavelength (nm)

This graph shows the spectral distribution of MAX-303 with UV Lamp and UV Mirror Module measured by fiber spectrometer.

Illuminated Area & Center Illuminance at Different Distance



Distance	Detector Filter Illuminated area	Irradiance(mW/cm ²)		Irradiance(mW/cm ²)		
		A	B	C	C	C
80mm	19 x 19mm	35.10	73.00	XHQA254	XHQA320	XHQA380
100mm	23 x 23mm	24.00	49.50	2.13	7.92	8.99
200mm	44 x 44mm	6.83	13.80	1.49	5.44	6.21
300mm	64 x 64mm	3.16	6.42	0.48	1.65	1.88
400mm	85 x 85mm	1.82	3.69	0.23	0.78	0.90
500mm	106 x 106mm	1.19	2.42	0.13	0.46	0.53
600mm	126 x 126mm	0.83	1.69	0.09	0.30	0.35
1000mm	208 x 208mm	0.29	0.59	0.06	0.21	0.24
				0.02	0.08	0.09

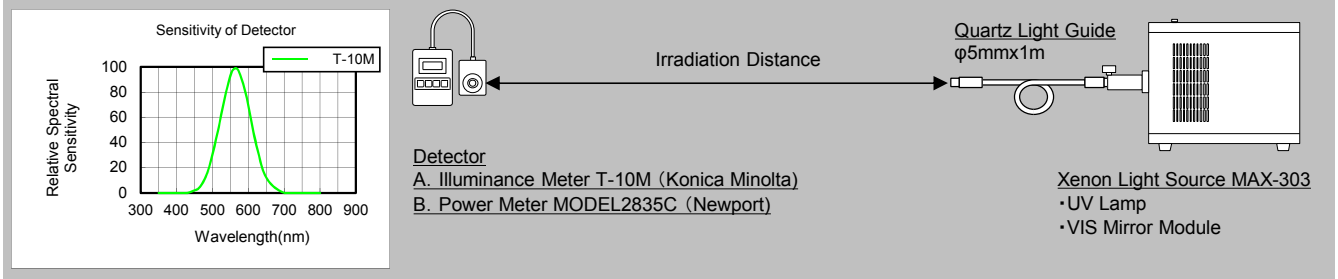
Reference for XHQA (Bandpass Filter)
http://www.asahi-spectra.com/opticalfilters/bandpass_filter.html

MAX-303

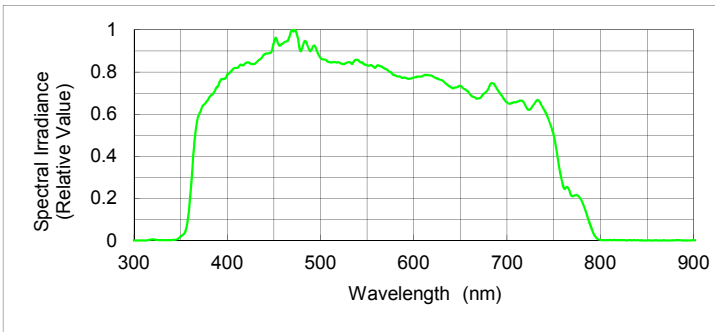
VIS (385-740nm) Light Guide (Quartz)

*Please regard the following data as a reference.

Measuring Condition

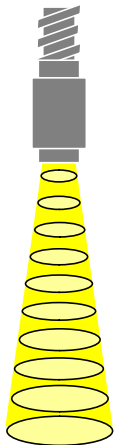


Spectral Distribution



This graph shows the spectral distribution of MAX-303 with UV Lamp and VIS Mirror Module measured by fiber spectrometer.

Illuminated Area & Center Illuminance at Different Distance

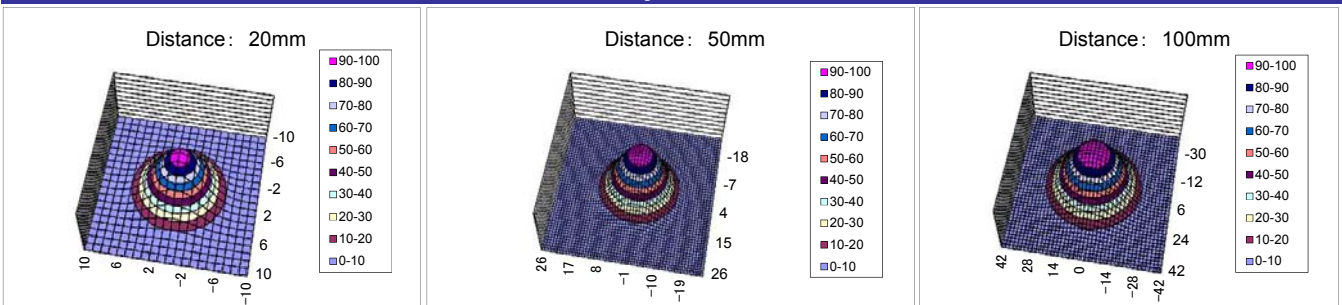


Distance	Detector Filter Illuminated area	Center Illuminance(Ix)	Irradiance(mW/cm ²)		
		A	B		
		---	XBPA400	XBPA550	XBPA700
10mm	φ9mm	10,253,000	---	---	---
20mm	φ13mm	6,897,000	---	---	---
30mm	φ18mm	4,474,000	40.00	51.80	41.00
40mm	φ24mm	2,983,000	27.80	36.30	28.90
50mm	φ30mm	2,051,000	19.50	25.50	20.30
60mm	φ35mm	1,491,000	14.40	18.90	15.10
70mm	φ40mm	1,137,000	10.90	14.30	11.40
80mm	φ45mm	895,000	8.55	11.30	9.02
90mm	φ50mm	713,000	6.93	9.12	7.28
100mm	φ53mm	583,000	5.79	7.63	6.11

Reference for XBPA (Bandpass Filter)

http://www.asahi-spectra.com/opticalfilters/bandpass_filter.html

Uniformity of Irradiation

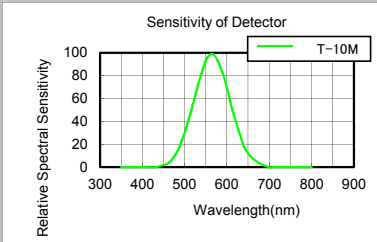


MAX-303

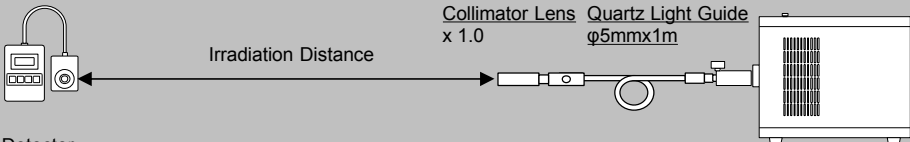
VIS (385-740nm) **Light Guide (Quartz)** **Collimator Lens (x 1.0)**

*Please regard the following data as a reference.

Measuring Condition



Sensitivity of Detector
T-10M



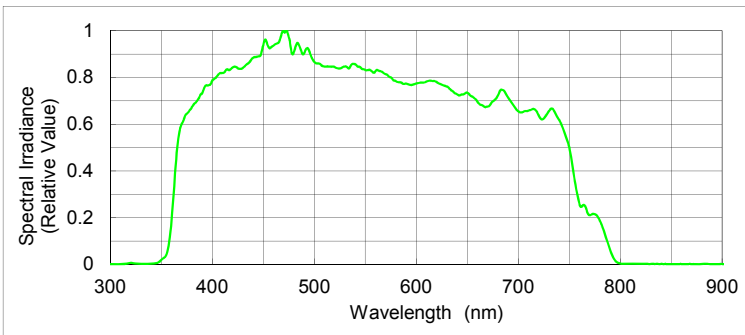
Irradiation Distance

Collimator Lens x 1.0 Quartz Light Guide φ5mmx1m

Detector
A. Illuminance Meter T-10M (Konica Minolta)
B. Power Meter MODEL2835C (Newport)

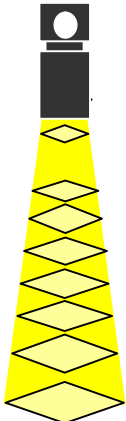
Xenon Light Source MAX-303
·UV Lamp
·VIS Mirror Module

Spectral Distribution



This graph shows the spectral distribution of MAX-303 with UV Lamp and VIS Mirror Module measured by fiber spectrometer.

Illuminated Area & Center Illuminance at Different Distance

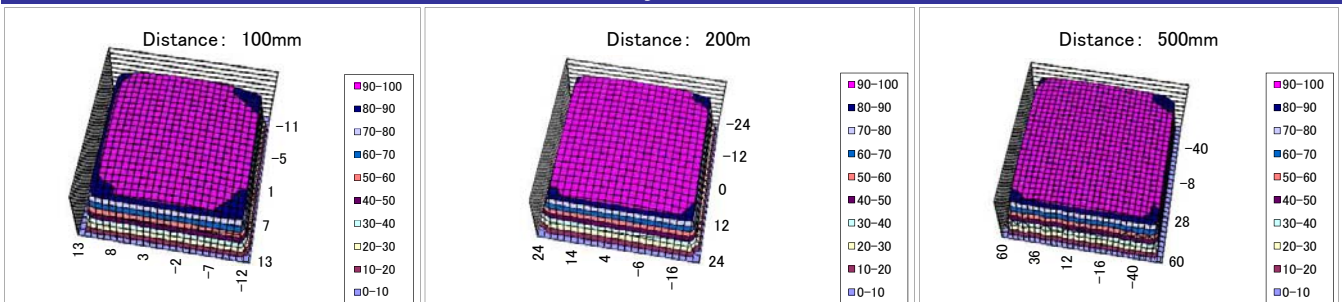


Distance	Detector Filter Illuminated area	Center Illuminance(lx)	Irradiance(mW/cm ²)		
		A	B		
		---	XBPA400	XBPA550	XBPA700
80mm	19 x 19mm	1,318,000	12.70	16.40	13.70
100mm	23 x 23mm	898,000	8.79	11.30	9.56
200mm	44 x 44mm	265,000	2.56	3.30	2.77
300mm	64 x 64mm	122,400	1.20	1.55	1.29
400mm	85 x 85mm	70,800	0.69	0.89	0.74
500mm	106 x 106mm	46,200	0.45	0.58	0.48
600mm	126 x 126mm	32,100	0.31	0.40	0.33
1000mm	208 x 208mm	11,700	0.11	0.15	0.12

Reference for XBPA (Bandpass Filter)

http://www.asahi-spectra.com/opticalfilters/bandpass_filter.html

Uniformity of Irradiation

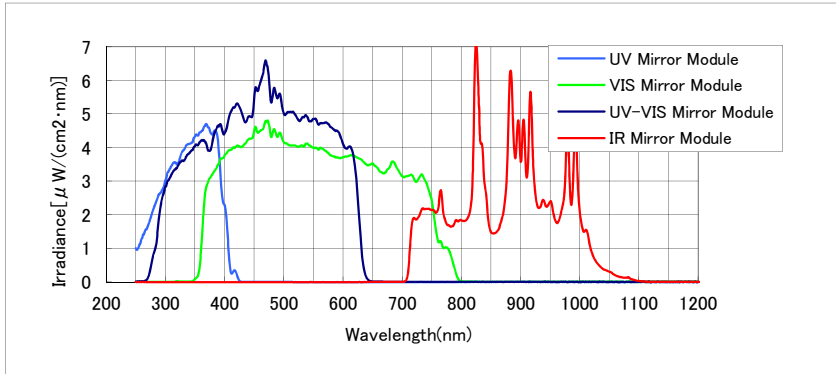


Distance: 100mm

Distance: 200mm

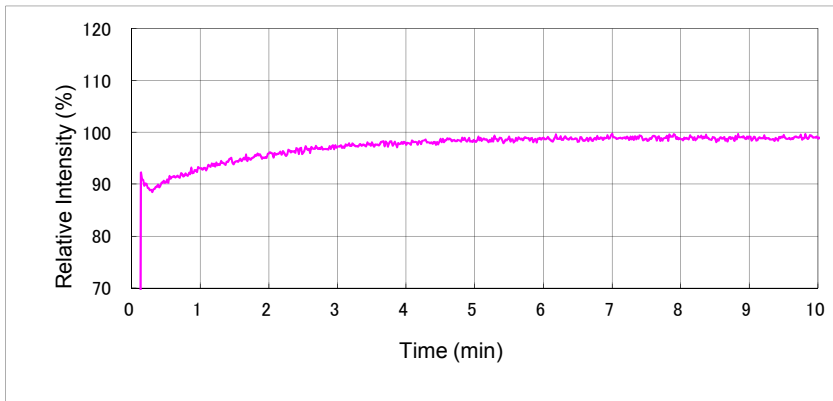
Distance: 500mm

Comparison of Spectrum

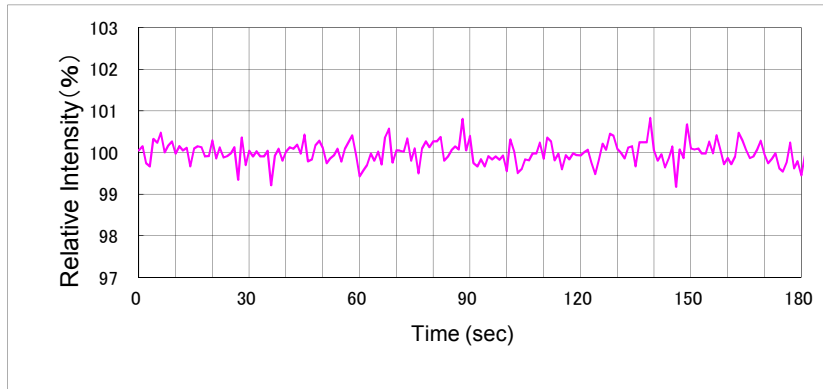


Note:
Irradiated Area: 400 x 400mm

Lamp Start-Up Characteristics

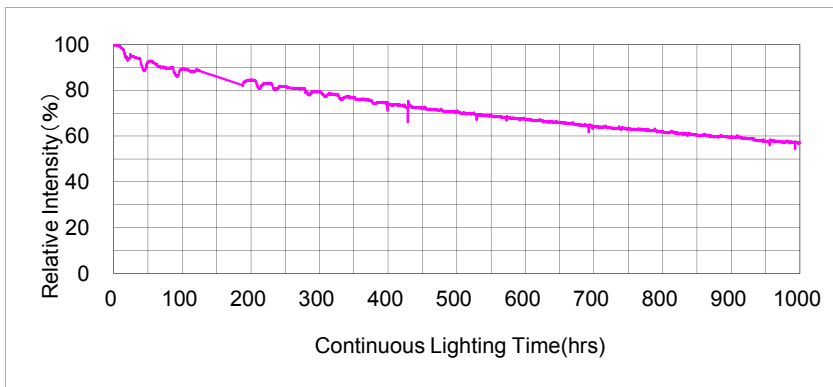


Lamp Fluctuation



Note:
After 2 hours of turning on.
The data was obtained with regulated power supply.

Lamp Life



*Product specifications are subject to change without notice.

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