

MAX-303 Xenon Light Source 300W Technical Information



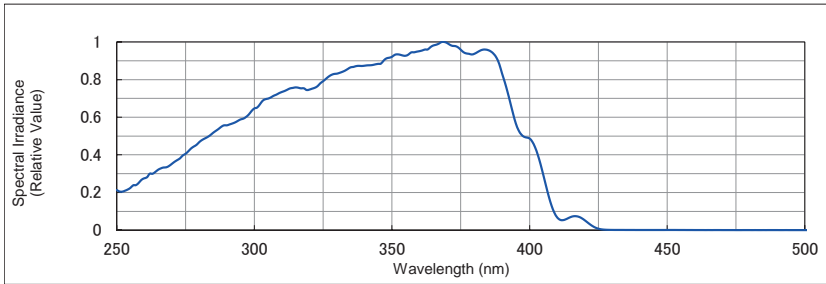
MAX-303

UV
(250 ~ 385nm)

Light Guide
(Quartz)

*Reference data

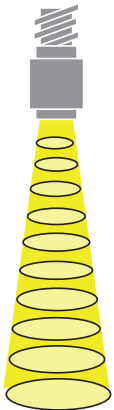
Spectral Distribution



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

- *Detector: A
- *Working distance: 500mm
- *Irradiation using collimator lens

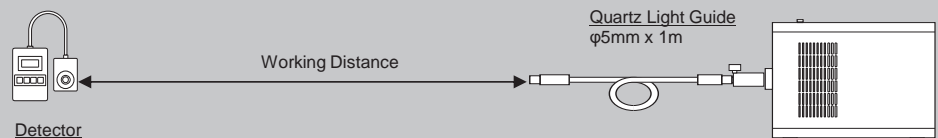
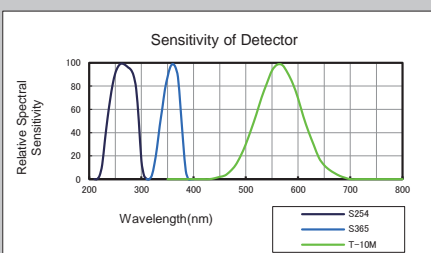
Illuminated Area & Center Illuminance at Different Distance



Distance	Illuminated Area (mm)	Irradiance(mW/cm ²)		Irradiance(mW/cm ²)		
		254	365	XHQA254	XHQA320	XHQA380
10mm	φ9mm	664.00	1699.00	(53.7)	---	---
20mm	φ13mm	309.00	700.00	(28.4)	---	---
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
Detector		B(S254)	B(S365)	D / B(S254) for W.D. 10mm, 20mm		

Reference for XHQA (Bandpass Filter)
https://www.asahi-spectra.com/opticalfilters/bandpass_filters.asp

Measuring Condition



- Detector**
- A. Spectrometer HSU-100S (Asahi Spectra)
 - B. Accumulated UV Power Meter UIT-150 S254/S365 (Ushio)
 - C. Illuminance Meter T-10M (Konica Minolta)
 - D. Power Meter MODEL2835C (Newport)

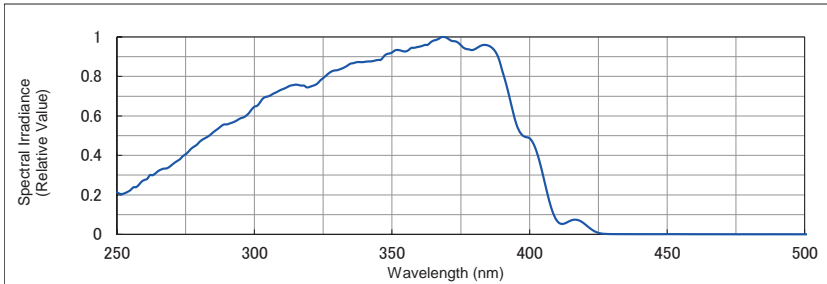
- Xenon Light Source MAX-303**
- UV Lamp
 - UV Mirror Module

MAX-303

UV (250 ~ 385nm)	Light Guide (Quartz)	Collimator Lens (x 1.0)
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*Reference data

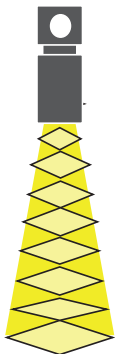
Spectral Distribution



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

*Detector: A
*Working distance: 500mm

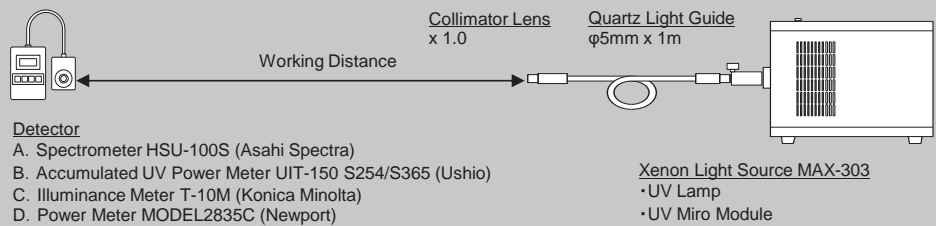
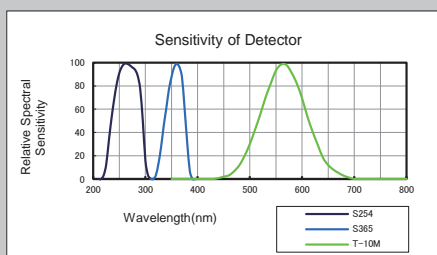
Illuminated Area & Center Illuminance at Different Distance



Distance	Illuminated Area (mm)	Irradiance(mW/cm2)		Irradiance(mW/cm2)		
		254	365	XHQA254	XHQA320	XHQA380
80mm	19x19mm	35.10	73.00	2.13	7.92	8.99
100mm	23x23mm	24.00	49.50	1.49	5.44	6.21
200mm	44x44mm	6.83	13.80	0.48	1.65	1.88
300mm	64x64mm	3.16	6.42	0.23	0.78	0.90
400mm	85x85mm	1.82	3.69	0.13	0.46	0.53
500mm	106x106mm	1.19	2.42	0.09	0.30	0.35
600mm	126x126mm	0.83	1.69	0.06	0.21	0.24
1000mm	208x208mm	0.29	0.59	0.02	0.08	0.09
Detector		B(S254)	B(S365)	D		

Reference for XHQA (Bandpass Filter)
https://www.asahi-spectra.com/opticalfilters/bandpass_filters.asp

Measuring Condition



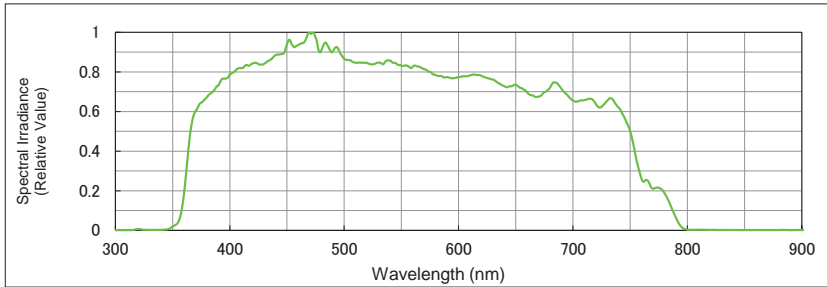
MAX-303

VIS
(385 ~ 740nm)

Light Guide
(Quartz)

*Reference data

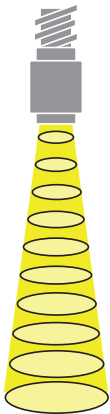
Spectral Distribution



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

- *Detector: A
- *Working distance: 500mm
- *Irradiation using collimator lens

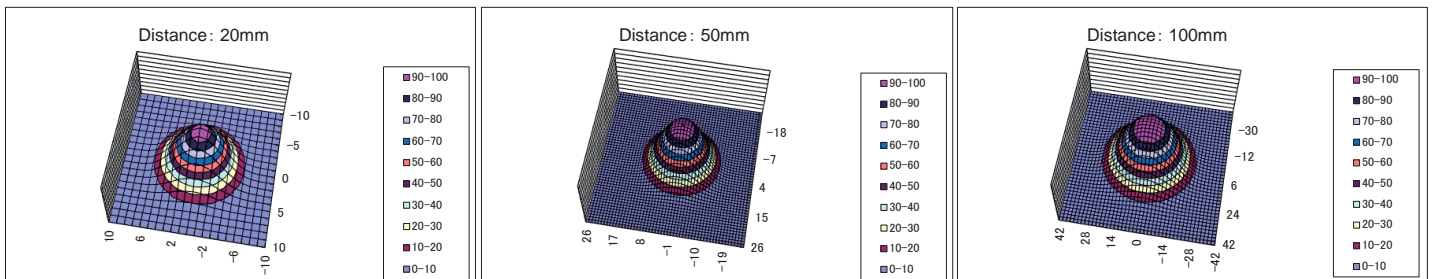
Illuminated Area & Center Illuminance at Different Distance



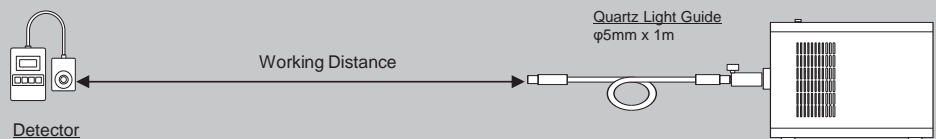
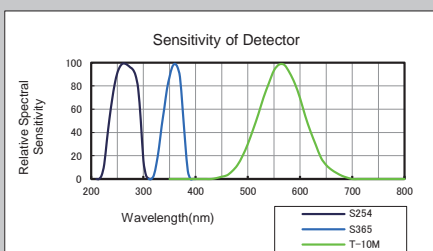
Distance	Illuminated Area (mm)	Center Illuminance(lx)	Irradiance(mW/cm2)		
			380-780	XBPA400	XBPA550
10mm	φ9mm	10,253,000	---	---	---
20mm	φ13mm	6,897,000	---	---	---
30mm	φ18mm	4,474,000	40.00	51.80	41.00
40mm	φ24mm	2,983,000	27.80	36.30	28.90
50mm	φ30mm	2,051,000	19.50	25.50	20.30
60mm	φ35mm	1,491,000	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
Detector		C	D		

Reference for XBPA (Bandpass Filter)
https://www.asahi-spectra.com/opticalfilters/bandpass_filters.asp

Uniformity of Irradiation



Measuring Condition



- Detector**
- A. Spectrometer HSU-100S (Asahi Spectra)
 - B. Accumulated UV Power Meter UIT-150 S254/S365 (Ushio)
 - C. Illuminance Meter T-10M (Konica Minolta)
 - D. Power Meter MODEL2835C (Newport)

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

MAX-303

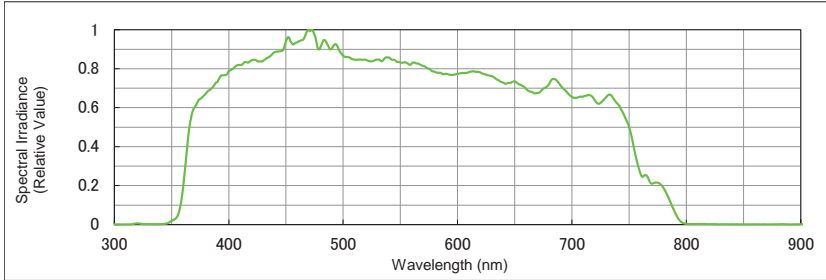
VIS
(385 ~ 740nm)

Light Guide
(Quartz)

Collimator Lens
(x 1.0)

*Reference data

Spectral Distribution

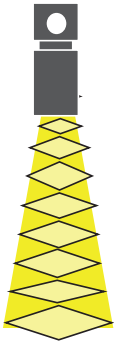


This graph shows the spectral distribution of MAX-303 with UV Lamp and VIS Mirror Module measured by fiber spectrometer.

*Detector: A

*Irradiation using collimator lens

Illuminated Area & Center Illuminance at Different Distance

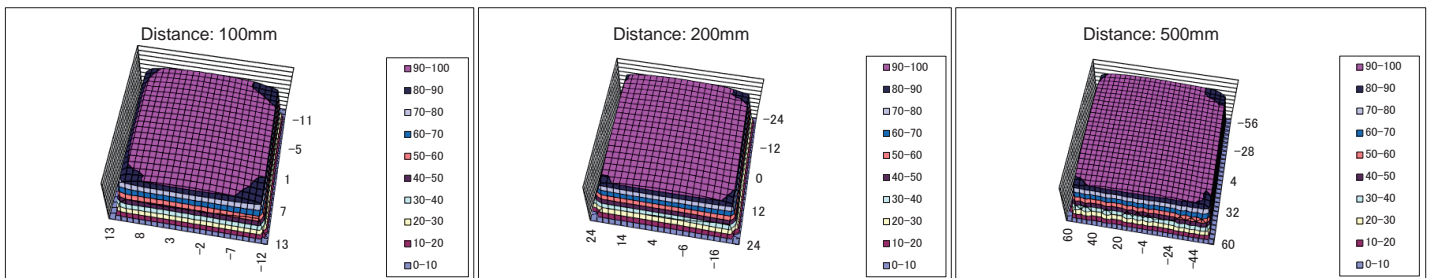


Distance	Illuminated Area (mm)	Center Illuminance(Ix)	Irradiance(mW/cm2)		
		380-780	XBPA400	XBPA550	XBPA700
80mm	19x19mm	1,318,000	12.70	16.40	13.70
100mm	23x23mm	898,000	8.79	11.30	9.56
200mm	44x44mm	265,000	2.56	3.30	2.77
300mm	64x64mm	122,400	1.20	1.55	1.29
400mm	85x85mm	70,800	0.69	0.89	0.74
500mm	106x106mm	46,200	0.45	0.58	0.48
600mm	126x126mm	32,100	0.31	0.40	0.33
1000mm	208x208mm	11,700	0.11	0.15	0.12
Detector		C	D		

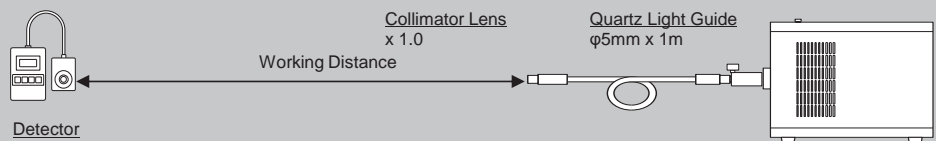
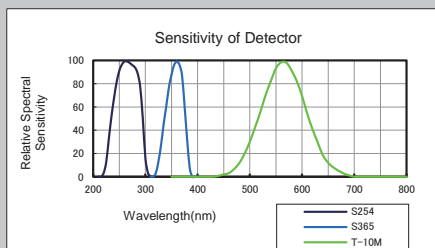
Reference for XBPA (Bandpass Filter)

https://www.asahi-spectra.com/opticalfilters/bandpass_filters.asp

Uniformity of Irradiation



Measuring Condition



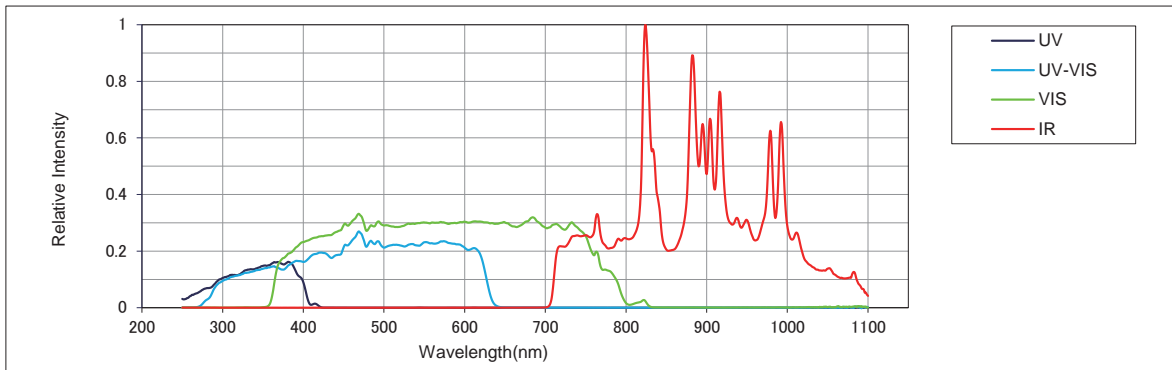
Detector

- A. Spectrometer HSU-100S (Asahi Spectra)
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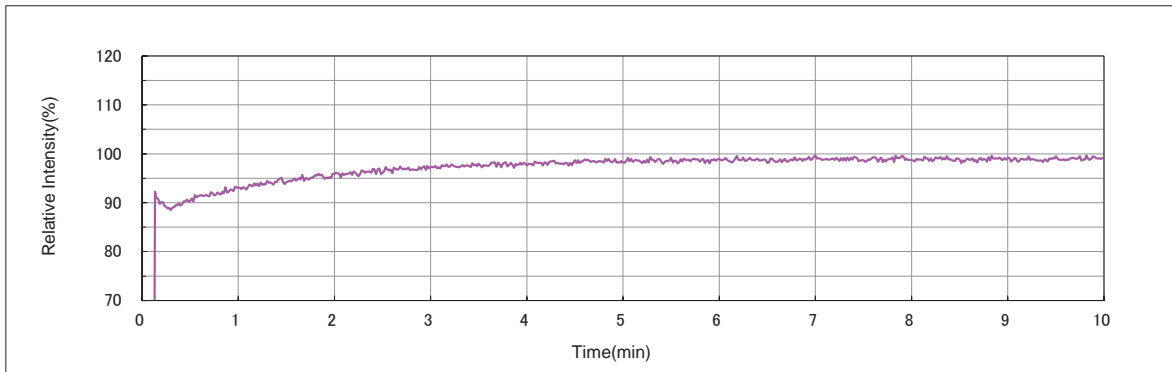
Xenon Light Source MAX-303

- UV Lamp
- VIS Mirror Module

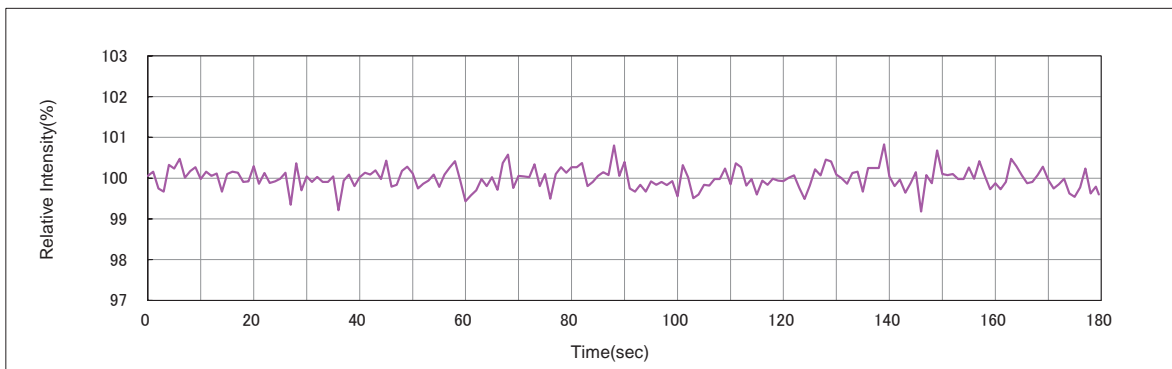
Comparison of Spectrum



Lamp Start-Up Characteristics



Lamp Fluctuation



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

*Product specifications are subject to change without notice.

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