Solar Simulator

Features

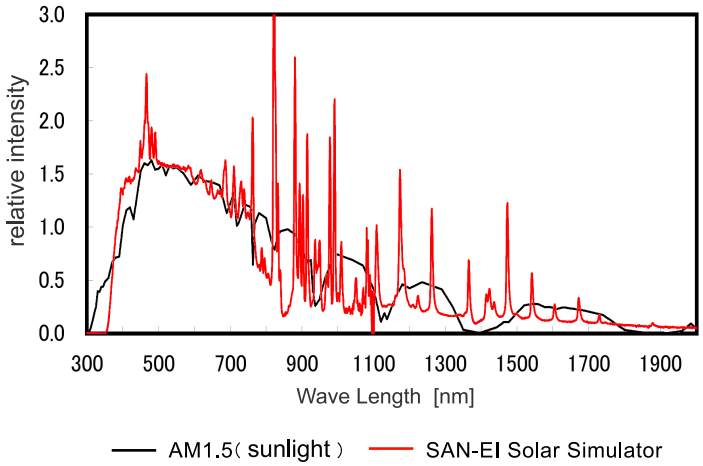
- The spectrum near sunlight.
- Excellent Illumination distribution, uniform and stable.
- Compact body, easy operation and installation.

XES-301S + EL-100

Applications

- For inspection and measurement / experiment of a solar cell.
- For evaluation / measurement of a solar energy power generation system.
- For inspection / evaluation of LCD.
- For the weather resistance test of cosmetics / paint / adhesion material and various material.
- For inspection / experiment of a photocatalyst.
- For other inspections which need natural sunlight.

Spectrum comparison of sunlight and SAN-EI Solar Simulator



Energy Distribution

Wave Length		Relative intensity	JIS	Degree of coincidence
		%	%	Relative/JIS
400	500	20.0	18.5	1.08
500	600	20.7	20.1	1.03
600	700	17.8	18.3	0.97
700	800	14.6	14.8	0.99
800	900	13.1	12.2	1.07
900	1100	13.8	16.1	0.86
		100.0	100.0	

About the other diameters of irradiation,
we correspond to a further high-output lamp and large area separately.

manufactured by

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SAN-EI

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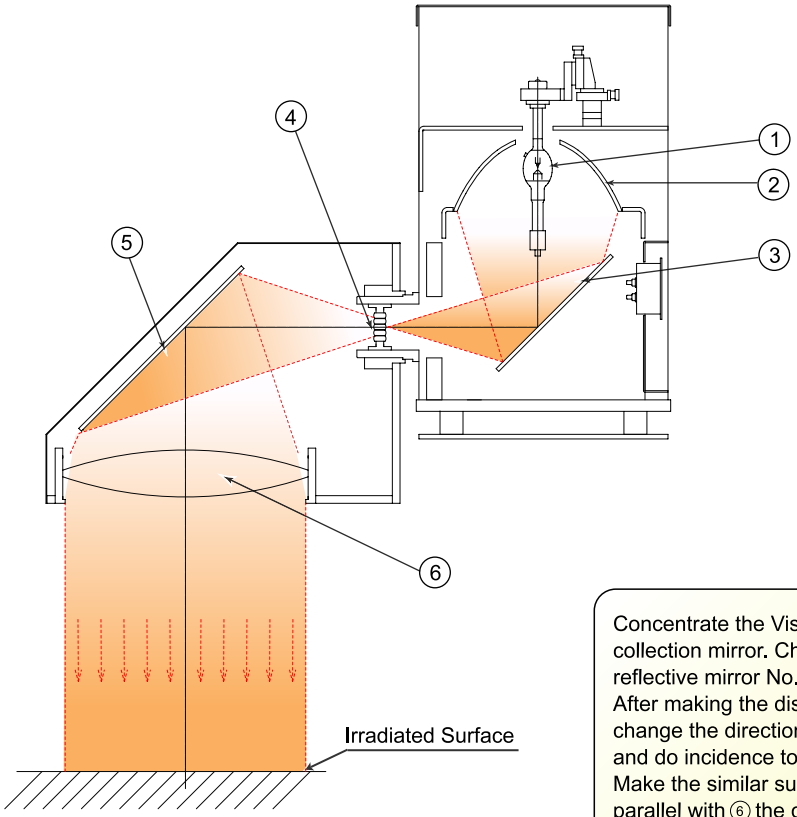
Solar Simulator

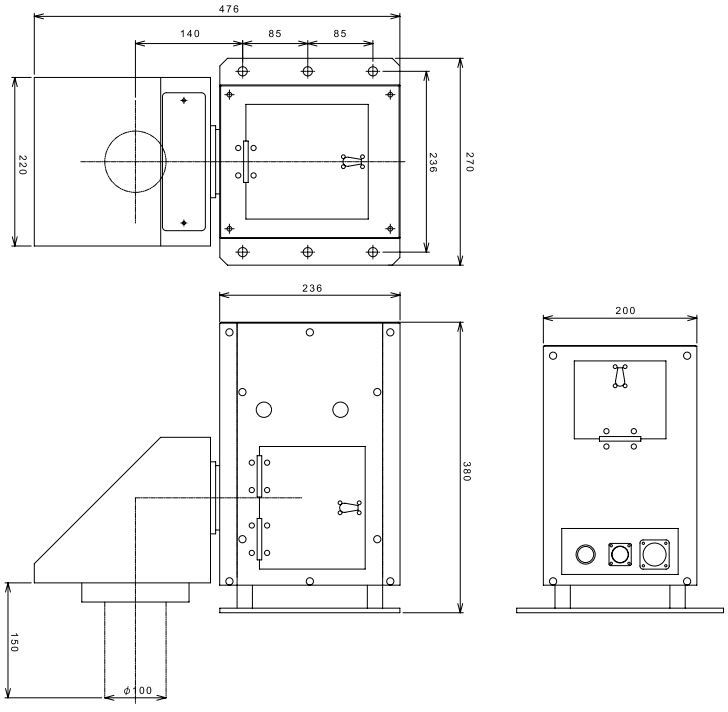
Solar simulator light source optical construction drawing



① Xenon Lamp
② Ellipse Collection Mirror
③ Plane Reflective Mirror 1
④ Integrator Lens
⑤ Plane Reflective Mirror 2
⑥ Collimated Lens

Concentrate the Visible light, radiated from① the Xenon lamp, on② the Ellipse collection mirror. Change the direction of irradiation to the horizontality at③the Flat reflective mirror No.1 and then do the incidence to④ the integrator lens.
After making the distribution of the intensity of illumination uniform on the integrator lens, change the direction of irradiation to the verticality at ⑤ the Flat reflective mirror No. 2 and do incidence to ⑥ the collimated lens.
Make the similar sunlight's distribution of the intensity of illumination uniform and parallel with ⑥ the collimated lens.
When the surface of irradiation is parallel and uniform, do the incidence.

External Dimension XES-301S + EL-100



※ There is also each type of 500W ,1000W, and 2000W as series.

Optical Specifications

Illumination	above 1.5 solar (initial value)
Illumination uniformity	within ±3% (in effective exposure area)
Collimation	both angles within 5° (in effective exposure area)
Effective exposure area	ϕ100mm
Lamp life	average 1,000 hours
Optical Spectrum	Class A

Outline

Light source	XES-301S
Power supply	XEC-301S
Irradiation	Optical unit EL-100 (effective irradiation diameter 100 mm)
Lamp	L3001L (300W)
Others	• Power input cable • External remote A cable • External remote B cable • Power supply-light source connecting cables A,B,C