

SimuLight

Solar Simulator Xe/MH/PLS/LD Series

Electrical, Optical & Thermal
Imaging & Test Systems

Standard Component for Solar Cell Testing

Solar simulator is essential as well-defined light source similar to sun-light for basic solar cell testing. Standard solar conversion efficiency measurement requires sun-level light irradiation with high class spectrum matching, uniformity as well as temporal stability.

Class AAA

Controllable

Spectrum

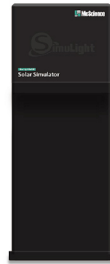
Irradiance



LD50



LD300



Xe55



Xe170



Xe300



PLS300



Xe1000

XeF220



XeF2600



Class AAA Solar Simulator

Lamp Type : Xenon / Metal Halide / Plasma / LED

Lamp Wattage : 150 ~ 4000 W

Light Pulse Duration : Continuous / Flash type

Effective Irradiated Area : 20 ~ 2000mm²

Lamp Long Lifetime : > 10,000 hour (Plasma Lamp/LED Lamp)

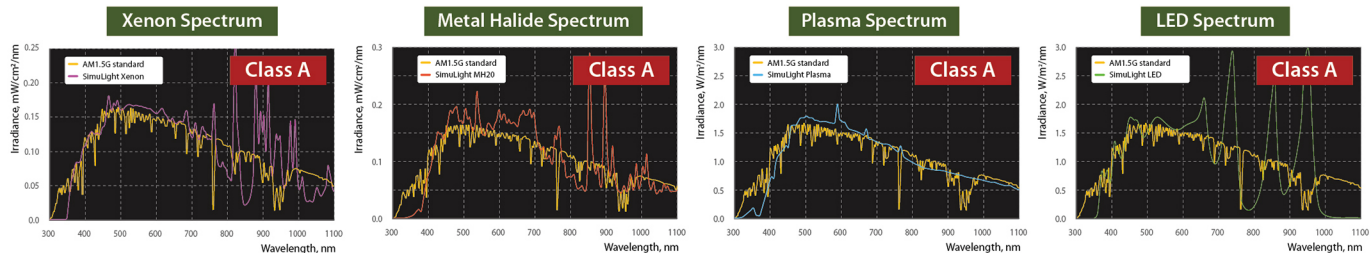


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Spectral Data

Solar Simulator Spectral Irradiance, Spectral Match $\pm 25\%$ (0.75~1.25), IEC 60904-9;2020 Developing



Product Specification

Classification	LAB										Pro	
Model Name	LD50	LD300	Xe55	Xe100	Xe170	Xe300	Xe1000	PLS300	PLS600	PLS2000	XeF220	XeF2600
Type of Lamp	LED		Xenon Short Arc					Plasma			Xenon Flash	
Light Pulse Duration	Continuous										Flash	
Lamp Wattage (W)	160	2500	150	500	1,000	3,000	3,000	1,800	1,800	1,800	1,600	2,700
Lamp Number	12 CH	12 CH	1	1	1	1	4	1	4	8	1	2
Effective Irradiated Area (mm²)	50x50	300x300	55x55	100x100	170x170	300x300	1,000x1,000	300x300	600x600	2,000x2,000	170x170	2,000x2,000
Lamp Lifetime (hour)	10,000	10,000	1,000	1,000	1,000	1,000	1,000	10,000	10,000	10,000	400,000 shot	100,000 shot
Spectral Coincidence	Approx. AM1.5G Standard											
Irradiance Intensity (W/m²)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Simulator IEC Class	AAA	AAA	AAA	AAA	AAA	AAA	AAA	ABA	ABA	AAA	AAA	AAA
Spectral Match	±25% (0.75~1.25), A											
Non-uniformity of Irradiance	±2%, A	±2%, A	±2%, A	±2%, A	±2%, A	±2%, A	±2%, A	±5%, B	±5%, B	±2%, A	±2%, A	±2%, A
Temporal Instability of Irradiance	STI = within±0.5%, A / LTI = within±2.0%, A											
Dimensions (WxDxH)	370	800	418	546	1,075	1,454	2,800	700	800	2,000	600	2,000
	245	620	210	300	650	750	1,200	1,000	1,100	1,500	500	2,500
	440	550	542	840	1,600	1,900	2,200	1,850	2,100	2,500	1,000	900