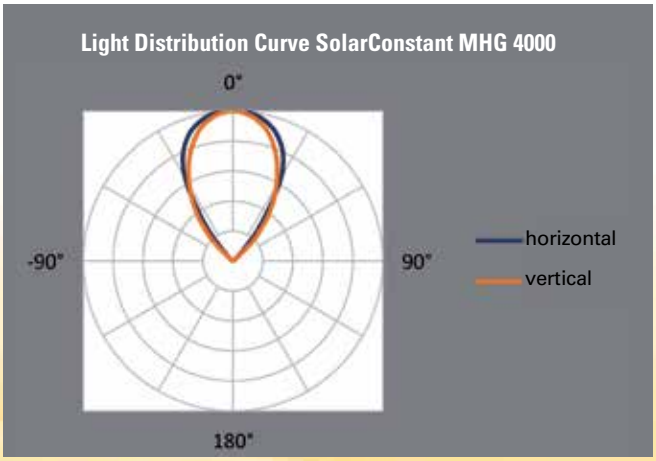
SolarConstant
MHG 4000/2500
Specially designed for solar simulation

Features

- MHG-Lamps with 4000 W / 2500 W
- Global solar radiation according to CIE241
- Optical filters for indoor and outdoor simulations
- Meets global standards DIN, IEC, EPA, MIL and other
- Wide, symmetric beam angle for high-uniformity solutions
- Modular design for customized solar systems of any size

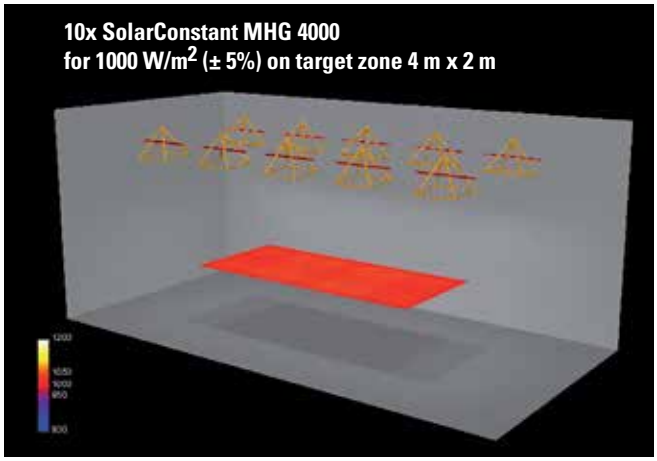
Sunlight can have adverse effects on materials, initiating and accelerating the degradation process as it interacts with temperature, moisture and other environmental effects. A key to the success of solar environmental test equipment is the quality of the solar simulation itself. Key criteria for high quality are a realistic light spectrum as well as optimum uniformity on the target object.

The SolarConstant Series offers luminaires based on metal halide global (MHG) technology for high-class solar simulators. The modular design combined with high power makes the



SolarConstant MHG 4000/2500 unit ideal for solar simulators of any size. Special reflectors guarantee high uniformity on the target area.

For each new custom design, Atlas will determine by means of professional simulation both the lowest number of required SolarConstant MHG 4000/2500 units and the ideal positioning.



SolarConstant MHG 4000/2500 are often used for solar simulators integrated into climatic chambers. The tool of choice to determine thermal heating effects of solar radiation, such as fit and finish, dimensional stability or thermal transmission. Further to identify photodegradation effects of polymers and coatings such as change of color, gloss, haptics or physical strength. Further, testing PV module performance.

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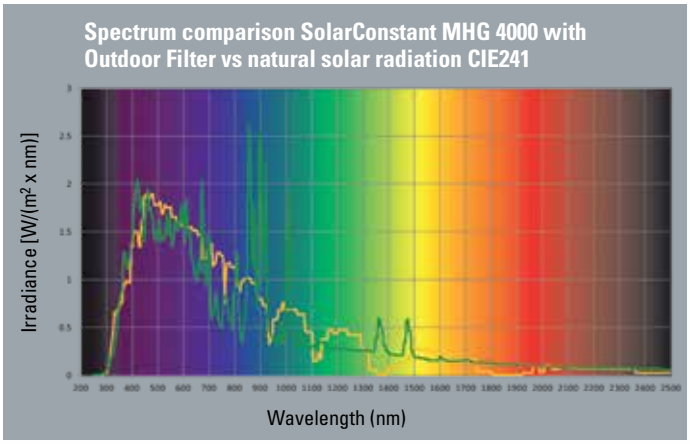
Standards and Test Methods

Atlas SolarConstant light sources produce artificial global radiation according to CIE241. They meet a large number of national and international standard test methods.
The following table lists the most commonly used standards.

Automotive	Defense	PV/Solar	General
DIN 75220	MIL-STD-810H	IEC 61215	CIE241
ISO 12097-2	DEF STAN 0035	IEC 904-9	IEC 904-3
EPA 40 – CFR / SC03	STANAG 2895	IEC 61646	
BMW PR 306.5	STANAG 4370 (M.305')	IEC 86-2-5	
		IEC 60068-2-5	
Renault 32-00-022		ASTM E892	
EPA			



Technical Information Luminaire

Lamp	MHG 4000 W / 2500 W
Mean lamp life	750 h / 1500 starts
Spectrum	Global radiation 280-3000 nm similar CIE241, ASTM E 892-87, Tab. 1, AM1.5
Outdoor Filter (ODF)	UV cut-on ca. 290 nm
Indoor Filter (IDF)	UV cut-on ca. 320 nm
Ambient temperature	-10 °C - +60 °C (Off: -10 °C - +80°C)
Dimensions (B x H x T)	510 mm x 430 mm x 500 mm
Weight	ca. 24 kg

Technical Information EPS Module

Connection	3 NAC 400 V, 50/60 Hz, 7.2 kVA
Output power	1250-2500 W or 2000-4000 W
Protection system	Protected against open circuit; short circuit, max. 50 A
Ambient temperature	10-32 °C (no condensation)
Relative humidity	10-95 % (no condensation)
Dimensions (B x H x T)	19'' x 3HE x 480 mm
Weight	ca. 21,5 kg

Atlas Material Testing Technology LLC
(p) +1.773.327.4520
(f) +1.773.327.5787

Atlas Material Testing Technology GmbH
(p) +49.6051.707.140
(f) +49.6051.707.149
E-Mail: atlas.info@ametek.com
www.atlas-mts.com