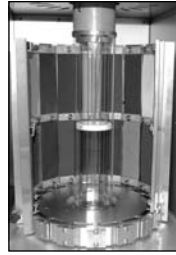


Q-SUN Model B02 Lightfastness Tester



Overview

The Q-Sun Model B02 is a lightfastness tester designed to meet the requirements of ISO 105 B02 and AATCC Test Method 16 standards. It has a rotating specimen rack and provides precise control of critical test parameters including spectrum, irradiance, relative humidity, chamber temperature and black standard temperature. Its capacity is 48% to 92% larger than comparable xenon testers.



The Model B02's rotating rack has 16 large specimen holders.

Specifications

Black Panel (Uninsulated) Temperatures

Light Cycle - B/SL Filter	50 °C - 115 °C
Light Cycle - IR Filter	35 °C - 100 °C
Dark Cycle	25 °C - 45 °C

Black Standard (Insulated) Temperatures

Light Cycle - B/SL Filter	55 °C - 125 °C
Light Cycle - IR Filter	40 °C - 110 °C
Dark Cycle	25 °C - 45 °C

Irradiance

IR Filter	1.10 - 0.20 W/m ² at 420 nm
	42 - 10 W/m ² at TUV 300-400 nm
B/SL Filter	1.10 - 0.20 W/m ² at 420 nm
	48 - 10 W/m ² at TUV 300-400 nm

Relative Humidity

Maximum RH is possible only when BP temperature is less than 60 °C	60% - 20%
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External Dimensions

Height	65.5 in	166 cm
Width	36.0 in	91 cm
Depth	27.0 in	69 cm

Weight

Actual	328 lb	149 kg
Crated	520 lb	236 kg

Chamber Dimensions

Height	15.8 in	40 cm
Width	12.5 in	32 cm
Depth	16.8 in	43 cm

Rack Dimensions

Height	11.9 in	40 cm
Diameter	9.8 in	32 cm
Circumference	30.8 in	101 cm
Area	367 in ²	2362 cm ²

Specimen Holders

Size	1.8 x 10.4 in	46 x 264 mm
Area	18.7 in ²	121 cm ²
Exposure Area (Total)	290 in ²	1882 cm ²

Electrical & Water Requirements

208 or 230 V single phase, 50 - 60 hz, 25 A
Deionized water, 1 liter/hour

LX-5031

SPECIFICATIONS

Xenon Arc Lamp

The B02 uses one air-cooled, full-spectrum, 1800W xenon arc lamp. Q-Lab recommends replacing lamps every 1500 hours.

Optical Filter Lantern

The Optical Filter Lantern consists of an outer borosilicate cylinder and 14 inner filters, arranged in a two-tier heptagon. The exposure application or test protocol dictates which filter should be used; select from Window-IR or Window-B/SL.

Irradiance Control

The B02 is equipped with the Solar Eye Irradiance Control System. See Specifications for irradiance ranges.

Temperature & Relative Humidity Control

The B02 simultaneously controls chamber air and black panel (uninsulated) or black standard (insulated) temperature. An electronic humidity sensor provides precise control of relative humidity. See Specifications for RH ranges.

Calibration

- Irradiance (Auto Cal): Use CR20 Radiometer
- Temperature: Use CT202 Thermometer and disposable chamber air temperature sensor (replace annually)
- Relative Humidity: Use disposable relative humidity sensor (replace annually)

① All calibrations are NIST traceable for ISO compliance.

① CR20 and CT202 must be sent back to Q-Lab for recalibration every year.

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