

QUV Accelerated Weathering Tester



QUV Overview:

All testers include: Programmable Microprocessor Controller; Automatic Fault Recognition and Alarms; Automatic Shut-down Timer. The dimensions and weights indicated apply to all models. Strip chart recorder optional.

Size: 54" x 21" x 53" H
(137 x 53 x 135 cm)

Weight:
Equipment weight 300 lbs. (136 kg.)
Shipping weight 400 lbs. (181 kg.)

Recognition: The QUV meets test methods of the following organizations: ASTM, ISO, DIN, JIS, SAE, BS, ANSI, GM, U.S. GOV'T. For a full list of QUV test methods ask for Bulletin L-8012.

LU-0819.2

QUV Model Capabilities:

See QUV Brochure LU-0801.1 for a full discussion of capabilities.

Model Number:	QUV/se	QUV/spray	QUV/basic	QUV/cw
UV Exposure	•	•	•	cool white fluorescent
Condensation	•	•	•	1
Irradiance Control	•	•		•
Water Spray		•		
ISO Calibrations	•	•		•

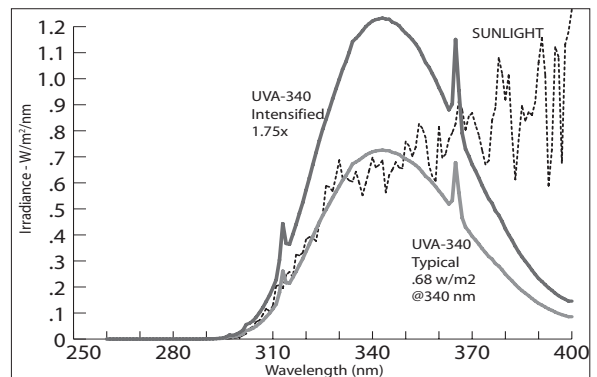
¹ The QUV/cw is able to perform condensation cycles; however, the use of condensation is usually not applicable for testing indoor materials.

SPECIFICATIONS

Irradiance Control:

The Solar Eye continuously monitors and precisely maintains the programmed irradiance by adjusting the power to the lamps. This compensates for variations such as lot-to-lot differences in lamps, ambient temperature changes and changes in output do to lamp aging. Irradiance control is very important because changes in intensity and light wavelength may affect both speed and type of material degradation.

Models with the Solar Eye Irradiance Controller feature programmable irradiance set-points. For example, with UVA-340 lamps, an irradiance of 0.68 W/m²/nm@340nm is a good match with noon summer sunlight. For faster results, the QUV can be programmed to operated at an irradiance that is 75% higher than noon summer sunlight, see spectral power distribution below. An Irradiance Set Point Guide is available in the QUV Operating Manual.



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QUV Model Operating Specifications:

Model Number:	QUV/se	QUV/spray	QUV/basic	QUV/cw
Temperature Ranges:				
Light Cycle Temp.*	45°C-80°C	45°C-80°C	45°C-80°C	35°C-80°C
Condensation Cycle Temp.	40°C-60°C	40°C-60°C	40°C-60°C	-
Specimen Capacity:	48 Specimens (75 x 150 mm)	48 Specimens (75 x 150 mm)	50 Specimens (75 x 150 mm)	48 Specimens (75 x 150 mm)
Electrical:	120/60, 16A; or 230/50, 8A; or 230/60, 8A (1800 W maximum)	120/60, 20A; or 230/50, 9A; or 230/60, 9A (1800 W maximum)	120/60, 14A; or 230/50, 7A; or 230/60, 7A (1800 W maximum)	120/60, 16A; or 230/50, 8A; or 230/60, 8A (1800 W maximum)
Water:				
Condensation (tap or DI):	8 liters/day	8 liters/day	8 liters/day	NA
Spray (DI WATER ONLY):	-	7 liters/minute	-	NA
Lamp Life:	5000 hours (average)	5000 hours (average)	1600 hours (average)	5000 hours (average)

*minimum and maximum cycle temperatures are dependent on irradiance settings and ambient temperatures.

Test Specimen Mounting:

The standard test specimen holder accommodates 2 panels 3" x 6" (75 x 150 mm). The test panels are actually the side wall of the chamber. To properly seal the chamber, it is important to have every panel holder filled with specimens or blank panels and to have all panel holders in place.

Odd shaped and thicker specimens can be mounted in a QUV as well. Further information is available in Technical Bulletin LU-8001, Specimen Mounting.



ISO Calibrations:

Solar Eye calibrations with the CR-10 Radiometer are traceable to the U.S. National Institute of Standards and Technology and comply with ISO 9000 requirements. Each CR-10 is set at the factory to measure fluorescent UV-A and UV-B lamps; note, a separate radiometer is required for QUV/cw.

To ensure ISO compliance, the CR-10 Radiometer must be returned to Q-Lab Corporation every year for re-calibration.



Warranty:

The QUV is guaranteed against defects in workmanship or materials for one year. Liability is limited to replacing or repairing any part or parts which are defective in materials or workmanship and are returned to our factory, shipping costs prepaid. Liability in all events is limited to the purchase price paid. Damage due to accident or abuse is not covered. Labor cost is not covered. Q-Lab Corporation makes no other warranties, including implied warranties of merchantability or fitness for a particular purpose, except as may be expressly provided by Q-Lab Corporation in writing. Q-Lab Corporation shall not be liable for any incidental, consequential, special, or contingent damages arising out of the sale or use of any product.

The contents of this sheet are accurate as of April 2006. All information is subject to change.

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QUV/se,
QUV/spray,
QUV/basic,
QUV/cw,
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