

Accelerated Photostability Testing

Q-Panel's laboratory test chambers allow you to perform photostability tests in accordance with ICH Guidelines, Option 1 and Option 2. Several models are available. All are affordable and easy to use. Q-Panel testers control the critical exposure environments to allow repeatable and reproducible results.

ICH Guidelines: Option 1

Q-SUN Xenon Test Chamber

- Affordable to Purchase and Operate
- Room Temperature Exposures
- Quick & Easy Calibration with AutoCal

Xenon Arc for D65/ID65 Spectrum. Test materials for photostability by exposing them to filtered xenon arc light for the ultimate correlation to the full spectrum of sunlight, as specified in D65/ID65.

Precise Irradiance Control. Choose any light intensity level, up to the equivalent of noon summer sunlight. Continuously monitor and maintain the irradiance with the Solar Eye Irradiance Control System.

3D Specimens. Easily mount bottles, test tubes and petri dishes with the Q-Sun's unique slide out specimen tray. The Q-Sun is also ideal for testing packaging for temperature, heat and moisture resistance.

Reproducible and Repeatable. Minimize spectral shift due to lamp/filter aging with the Q-Sun's long-life filter system. Together, the Solar Eye Irradiance Control system and the CR-20 calibration system allow an unprecedented level of reproducibility to photostability testing.

Easy to install. Easy to Use. Practically Maintenance Free. Low cost lamps are very quick and easy to replace, while long-life filters maintain the required spectrum.

Calibrate On Your Own. Use the Q-Sun's radiometer to calibrate the Solar Eye Irradiance controller. It is easy to do and calibration takes only about a minute. The patented AutoCal system automatically transfers the calibration measurements to the controller, eliminating operator error and costly service visits. Calibrations as NIST traceable.



The full size Q-Sun Xe-3 has a footprint of only 36" x 36", while the tabletop Xe-1 requires only 25.5" x 30.5" of counter space.

Two Sizes - All the Features. All Q-Sun models meet ICH guidelines. Choose the economical table-top Q-Sun Xe-1 or the full-sized Q-Sun Xe-3. Depending on the model, you can have all the features you need in a xenon arc:

- Full Spectrum Light
- Solar Eye Irradiance Control
- Relative Humidity Control
- Chamber Air Temperature Control
- Black Panel Temperature Control
- 3D Specimen Mounting
- ISO Calibration for All Systems

ICH Guidelines: Option 1

Q-SUN Xenon Test Chamber

Current ICH guidelines do not mandate relative humidity control or temperature control; however, light, heat and moisture work synergistically, causing drug substances, excipients and even pharmaceutical packaging to degrade.

Low Temperatures. Q-Sun models with Chiller (Xe-1-BC and Xe-3-HC) allow photostability testing at chamber air temperatures as low as 15°C.

RH Control. Model Xe-3-HC also offers control of relative humidity, another factor that can be critical in the photodegradation process.



The Q-Sun Xe-1-BC allows testing at temperatures as low as 15°C. The chiller unit serves as a stand for the xenon chamber.

ICH Guidelines: Option 2

QUV Cool White Photostability Tester

- Affordable to Purchase and Operate
- Irradiance Control of Cool White Light Intensity
- Quick and Easy Calibration with AutoCal

Cool White Spectrum. The QUV, long known as “the world’s most widely used weathering tester,” has been modified to operate as a Cool White Light Stability Tester to meet the ICH Option 2 conditions.

Precise Irradiance Control. Achieve repeatable and reproducible results with the QUV/cw’s precise, feed-back-loop control of fluorescent Cool White irradiance. Cool White intensity can be increased by up to 20 times the typical office illuminance of 1 klux. The illuminance range is 4-20 klux.

Control of Temperature. The initial photochemical reactions are not usually temperature sensitive. However, the rate of subsequent reactions can be affected by temperature. Consequently, it is important to control the test temperature. Many researchers prefer to match the maximum temperature the material will be exposed to in a service environment. In the QUV/cw, the temperature can be set at any point between 35°C-80°C depending on the irradiance and ambient room temperature.



The QUV is trusted in thousands of labs around the world; the tester requires 54"x21" of floor space.

Calibrate On Your Own. Use the QUV/cw’s radiometer to calibrate the Solar Eye Irradiance controller. It is easy to do and calibration takes only about a minute. The patented AutoCal system automatically transfers the calibration measurements to the controller, eliminating operator error and costly service visits. Calibrations are NIST traceable.