



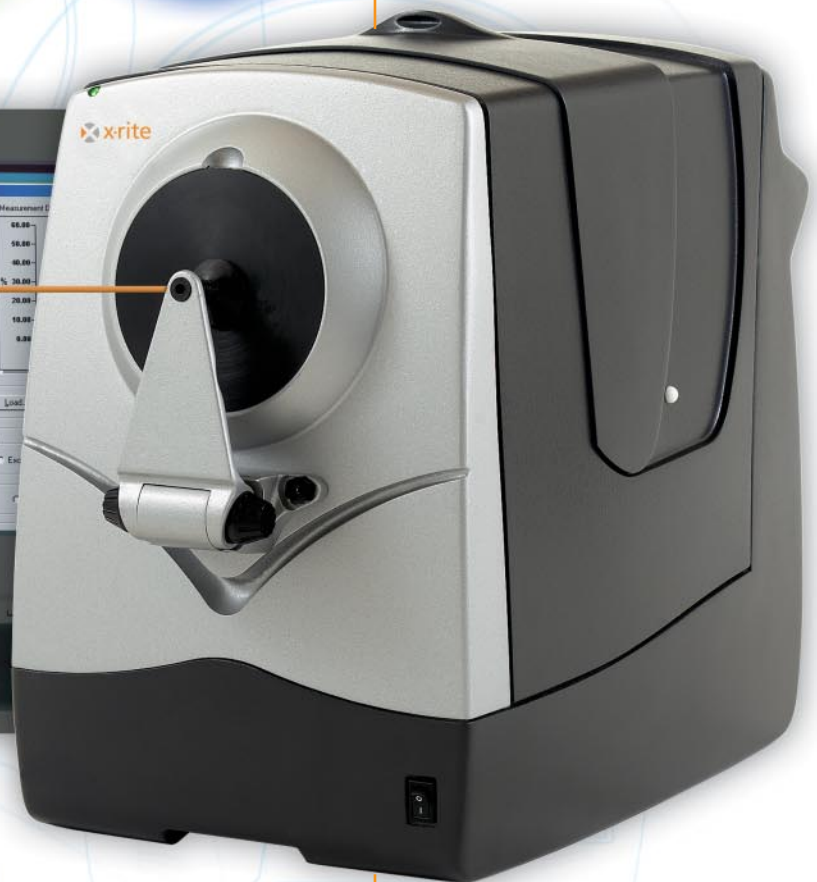
# X-RiteColor® Premier 8000 Series

High-Performance Benchtop Spectrophotometers

Setting Standards  
for Precision, Accuracy  
and Functionality



- Built-in image capture technology – *ensuring accurate sample positioning*
- Horizontal and vertical positioning – *offering the power of two instruments in one*
- Transmission and reflectance measurement – *providing maximum flexibility*



**EXPERIENCE**  
the measurable color difference.™

## ▶ The best benchtop spectrophotometer, inside and out.

X-Rite spoke with current benchtop spectrophotometer users and learned about their unmet needs. We responded by creating an all-new benchtop unit – one that meets customer requirements and reflects our industry-leading position in color measurement.

The new X-RiteColor® Premier 8400 high-performance benchtop spectrophotometer is dramatically different. It sets industry standards for functionality while meeting expectations for precision and accuracy. Together with the new Premier 8200 unit, it is simply better designed and better built than its counterparts – inside and out.

### Top 12 Reasons to Choose X-Rite

#### 1. Accurate sample positioning via image capture – *Save time and eliminate the need for remeasuring*

The Premier 8000 Series is the first benchtop spectrophotometer line to introduce built-in image capture technology. This patented capability lets you capture an image of a sample digitally, and view and verify it on your computer monitor before measuring.

#### 2. Horizontal and vertical positioning – *Get the power of two instruments in one*

This benchtop spectrophotometer is built to work in two positions – vertical and horizontal. In its standard, front-loading position, you can present and measure samples in vertical orientation. In its top-loading position, you can present samples such as powders and liquids horizontally, on the aperture.

#### 3. Easy-access transmission measurement chamber – *Achieve maximum flexibility*

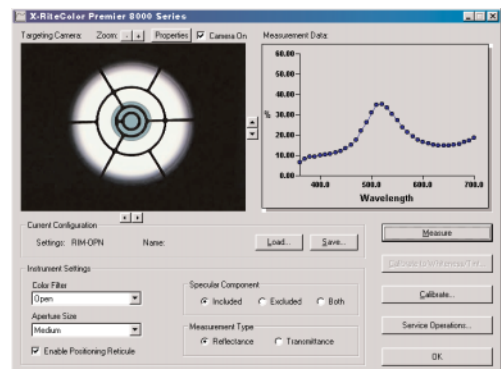
The instrument has an extra-wide transmission chamber to accommodate larger samples, including various-sized sample holders and cuvettes. In addition, the unit is capable of both direct and total transmission measurement. Whether you're working with transparent plastics, glass, dyes, petroleum or other liquids, you'll find it easy to get precise, accurate measurements of transmitted and absorbed light – without time-consuming adjustments.

#### 4. Inter-instrument agreement – *Share color data across the supply chain*

The Premier 8400 model complements all X-Rite industrial color-measurement solutions. It provides excellent inter-instrument agreement, as well as agreement with X-Rite portable sphere instruments. This allows you to share color data throughout your enterprise – from lab to lab, or lab to production floor. For a global corporate standard solution, choose the Premier 8400.

#### 5. User-selectable illumination filters – *Attain maximum flexibility*

UV exclusion filters (400 nm and 420 nm) and Illuminant A simulation filters are standard on the 8400 (only the 400 nm filter is standard on the 8200). UV exclusion filtration identifies the presence of fluorescent materials, while Illuminant A simulation filters ensure agreement on fluorescent samples with X-Rite portable spectrophotometers.



Built-in image capture technology allows you to view and verify the sample target before measurement.

#### 6. Durable, maintenance-free Spectralon® sphere – *Save on maintenance, improve measurement capability*

This is the only benchtop spectrophotometer whose sphere interior is made of machined Spectralon. Patented by X-Rite, Spectralon is a rugged, scientific-grade reflectance material – not a coating. It won't corrode, flake, peel or yellow with age, and it eliminates the need for costly, time-consuming recoating. Spectralon also offers the highest level of reflectance available, maximizing measurement results.

#### 7. Versatile sample holder – *Appreciate the convenience*

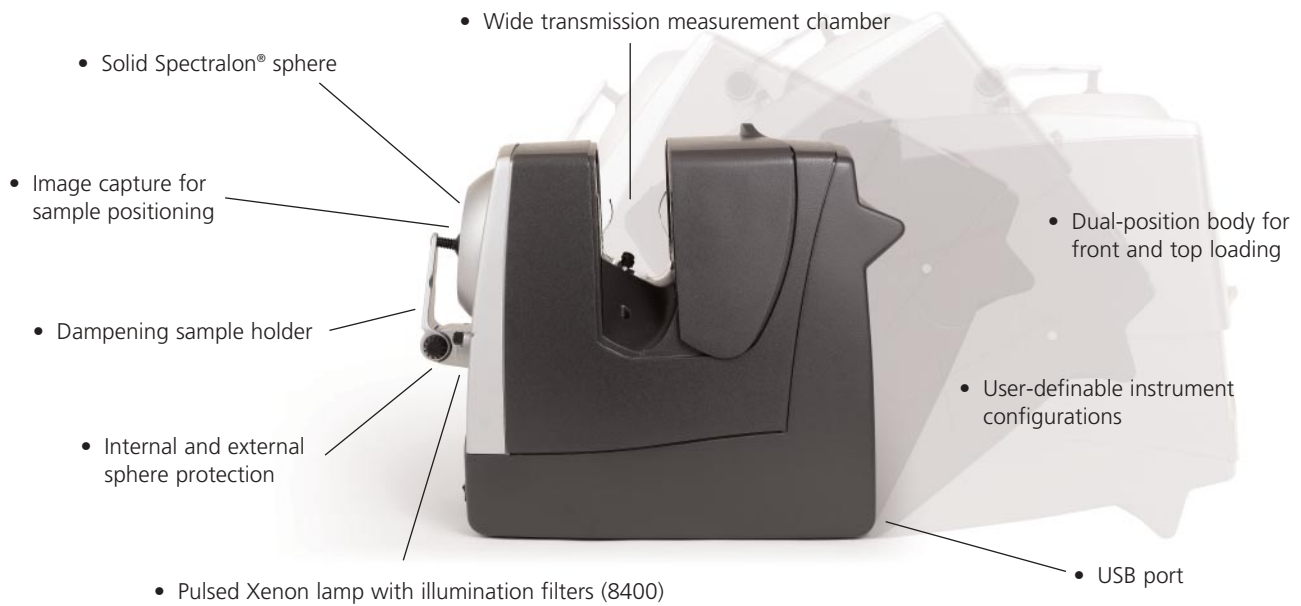
The sample holder offers a number of intelligent features to make your job easier:

- Dampening action: Controlled closing action protects the sample and the instrument.
- Adjustable sample alignment platform: Provides support that helps you place repetitive samples consistently.
- Detent lever: Allows you to prop the holder open, if necessary.

#### 8. Internal and external protection – *Prevent costly contamination*

The instrument has built-in protection from contamination. An optically pure glass plate shields the lamp from damage. And a second, optional protection plate is available to guard against spills when the instrument is in horizontal position.





## Setting new standards

### 9. USB interface – *Enjoy the convenience*

This is the first benchtop with a USB interface to the software, providing plug-and-play convenience.

### 10. Auto UV calibration for fluorescence – *Save setup time and eliminate errors*

X-Rite's software allows you to include automatic UV calibration points for measuring fluorescence. This timesaving feature is valuable for industries that control fluorescence.

### 11. Multiple aperture accommodation – *Achieve exceptional accuracy*

The Premier 8000 Series gives you the flexibility to choose from three view aperture sizes with their corresponding illumination spot sizes. This allows you to match the aperture to the sample size, maximizing your accuracy in fewer measurements. You'll especially like this feature when measuring several different-sized samples.

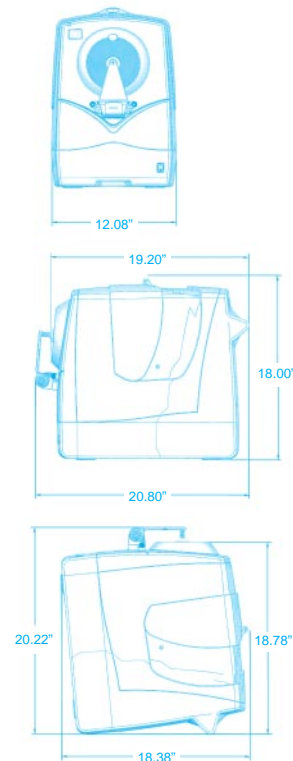
### 12. User-defined instrument configurations – *Save time each time you measure*

X-RiteColor® Master software – which manages both quality assurance and color formulation – controls all Premier 8000 Series functions, so there's no need to interact with an instrument keypad. The software lets you save and store frequently used instrument configurations for quick selection. This time-saving feature allows you to measure samples under various settings. It is also valuable for companies whose instruments are used by multiple people.



# X-RiteColor® Premier 8000 Series High-Performance Benchtop Spectrophotometers

Specifications	X-RiteColor Premier 8400 (High-Performance Unit)	X-RiteColor Premier 8200 (Mid-Range Unit)
Spectrophotometer	Horizontal and vertical	Horizontal and vertical
Geometry	d/8°	d/8°
Sphere diameter	6" (Spectralon®)	6" (Spectralon®)
Specular component	Included/excluded	Included/excluded
Detector	Photodiode array with holographic grating (x2)	Photodiode array with holographic grating (x2)
Light source	Pulsed Xenon	Pulsed Xenon
Photometric range	0-200%	0-200%
Spectral range	360-740 nm	360-740 nm
Wavelength interval	10 nm	10 nm
Reflectance resolution	0.001%	0.001%
Inter-instrument agreement	0.08 ΔE* avg. (19.0 mm aperture) 0.30 ΔE* max. (13-BCRA tiles)	0.15 ΔE* avg. (19.0 mm aperture) 0.35 ΔE* max. (13-BCRA tiles)
Repeatability (white)	0.01 ΔE* avg.	0.02 ΔE*
Status indicator	LED	LED
Measurement time	Approx. 2 sec.	Approx. 2 sec.
Weight	47 lbs.	47 lbs.
Software interface	USB	USB
Transmission measurement	Direct and total	Direct and total
Fluorescent measurement	Auto UV calibration	Auto UV calibration
UV exclusion filtration	400 nm and 420 nm Illuminant A filter	400 nm
View aperture size	4.0/8.0/19.0 mm	4.0/8.0/19.0 mm
Illumination spot size	6.5/12.7/25.4 mm	6.5/12.7/25.4 mm
Required computer	IBM compatible	IBM compatible
Required software	X-RiteColor® Master	X-RiteColor® Master
Sample holder	Dampening, with adjustable sample alignment platform	Dampening, with adjustable sample alignment platform
Sample positioning	Computer imaging with physical reticle	Computer imaging with physical reticle
Sphere protection	Internal sphere protection plus optional cover for horizontal sample presentation	Internal sphere protection plus optional cover for horizontal sample presentation
Standard warranty	1 year	1 year
Purchasable options	<ul style="list-style-type: none"> <li>Sphere protection aperture plate</li> <li>Transmission cell holder</li> </ul>	<ul style="list-style-type: none"> <li>Illuminant A simulation filters</li> <li>420 nm UV exclusion filter</li> <li>Sphere protection aperture plate</li> <li>Transmission cell holder</li> </ul>
Power	110V 50/60 Hz. 230V 50/60 Hz.	110V 50/60 Hz. 230V 50/60 Hz.
Environment	Operating temperature 50° to 104°F (10° to 40°C) 85% RH non-condensing	Operating temperature 50° to 104°F (10° to 40°C) 85% RH non-condensing



## System Requirements

- Windows 98SE, 2000 or higher
- USB port
- CD-ROM drive

## System Components

- Benchtop spectrophotometer
- Calibration standards
- Line cord
- Operation manual
- USB cable
- Three (3) port reducers

## Service and Support

X-Rite leads the market in service, providing phone/web/e-mail support, instrument recertification and flat-rate service contracts, as well as hands-on training classes worldwide.

## More Information

To learn more about the X-RiteColor Premier 8000 Series, visit [www.xrite.com](http://www.xrite.com) or call 1-888-826-3042.



[xrite.com](http://xrite.com)

**X-Rite World Headquarters**  
Grandville, Michigan USA  
(616) 534-7663  
(800) 248-9748  
FAX (616) 534-8960

**X-Rite Latin America**  
Hollywood, Florida USA  
954-927-4979  
FAX 954-927-4979

**X-Rite Ltd.**  
Poynton, Cheshire  
United Kingdom  
44 (0) 1625 871100  
FAX 44 (0) 1625 871444

**X-Rite Méditerranée**  
Massy, France  
33 1-6953-6620  
FAX 33 1-6953-0052

**X-Rite Italy S.R.L.**  
Origgio (VA), Italy  
(39) 02-967-34266  
FAX (39) 02-967-30681

**X-Rite GmbH**  
Köln, Germany  
(49) 2203-91450  
FAX (49) 2203-914519

**X-Rite International Trading Limited**  
Shanghai, PR China  
86-21-6427-2426  
FAX 86-21-6427-5816

**X-Rite Asia Pacific Ltd.**  
Quarry Bay, Hong Kong  
(852) 2-568-6283  
FAX (852) 2-885-8610

**Vyskov, Czech Republic**  
(00) 420 517-320-331  
FAX (00) 420 517-320-335

**X-Rite K.K.**  
Tokyo, Japan  
81-3-5439-5971  
FAX 81-3-5439-5972

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