



Cie L\*55 a\*-27.41 b\*-16.50

## Keeping Color in Fashion

Solutions for textile color consistency





## Color is a Difference Maker

What's your favorite color? Which colors sell? Why does it matter so much? Whether establishing a corporate identity, a brand, or a new product, color has the power to illuminate, to excite, to engage...to create a lasting impression that separates your image or product from everyone else's. It is, for many, the defining element of your company and product personality.

Defining your color and ensuring its accuracy every time it appears is fundamental to long-term success. X-Rite is a global leader in quantitative color measurement and visual analysis. We pioneer innovative solutions that are scalable from a single location to a global, multi-facility enterprise. The results are improvements in productivity, time-to-market, and profitability.

X-Rite's product portfolio offers solutions that evaluate color accurately throughout the entire development and production process. Ultimately X-Rite color communication tools contribute to: cost savings through reduced product scrap, minimal production downtime, elimination of off-color product shipments and rework, seamless management of the color process through a global supply chain or multiple locations, and the prevention of bid list exclusions because of poor quality ratings.

*Create a lasting impression that separates your image or product from everyone else's*



## Weaving Color Consistency Into the Global Market

The clothes we wear. The carpets and rugs we walk on. The curtains that provide shade. Textiles are a major element of the fabric of human life. And perhaps as much as anything we use, color is essential to their manufacture and popularity. From designer label clothing to custom home furnishings, color is often the critical factor in a product's success.

What this means for the textile industry is that getting the colors right is as important as getting the right colors. There are a number of key issues to consider when measuring and evaluating color.

**Product development:** Establishing a color palette for a new product or line of products is a critical step. Colorimetric measurement provides the needed consistency from initial design, through process, to finished product.

**New color demands:** Trends seem to shift almost overnight, putting considerable pressure on manufacturers to identify and produce popular colors and patterns, including complementary shades, that must match precisely to satisfy consumers.

**Color accuracy:** Different materials, different processes, and different manufacturing locations have an impact on how color is reproduced. Consistency is fundamental to optimizing material and human resources.

**Repeatable designs:** Can the same color or pattern be consistently reproduced on a carpet, on curtains, on a sofa or chair? The ability to consistently match product color palettes expands opportunities for success.

**Process harmony:** How fibers accept color and individual color processes determine is important to monitor, not just from one location to another but also between batches. The ability to control the process reduces waste and rework.

**Multiple source uniformity:** Materials may often come from different suppliers to a central processing site. A precise color program — from defining color to communicating color — is critical to ensuring that colors match.



Color measurement technology provides a vital solution



The textile market continues to move into areas of specialty products and new process technologies. This means greater demand for innovation and tighter competition for niche product opportunities. Such change requires flexibility. It also demands tighter quality standards able to work in concert with shorter lead times. This is especially true when it comes to maintaining color standards. Without color consistency, product and company reputations can often be irreparably damaged.

Color measurement technology provides a vital solution — a practical, common-sense approach to improving quality control, reducing waste, and increasing overall efficiency. Consider just these advantages:

- Eliminate common visual errors caused by inadequate lighting or human estimate
- Integrate consistent, precise color quality control into your operation
- Reduce scrap and rework caused by mismatched colors
- Achieve color harmony among locations and suppliers
- Reduce production time
- Improve quality analysis and control

### Tools designed to meet a range of process requirements.

**Visual Products.** X-Rite offers two daylight simulation technologies – SpectraLight filtered tungsten halogen technology for critical color decisions, and seven-phosphor fluorescent technology for relative color assessment. Both offer unparalleled precision, enabling your entire supply chain to deploy lighting products and complementary calibration services for maximum reliability and effectiveness.

**Solutions: SpectraLight III, Judge IIS, Munsell Color FM 100 Hue Test**

**Software Applications.** State of the art solutions for quality control, color matching, color management, and instrument profiling. Web-based editions are also available for server-based environments requiring simultaneous data viewing and communication around the globe.

**Solutions: Color iQC, Color iMatch, NetProfiler**

**Benchtop Instruments.** Primarily used in the central lab for validation of incoming goods. They are also often used for research projects and where special requirements exist, such as the need to measure transparent products or confirm the whiteness control of UV-including materials.

**Solutions: Color i7, Color i5, Color-Eye® 7000A**

**Portable Instruments.** Convenient, hand-held units that allow real-time color measurement anywhere in the process. This avoids the need to take samples — and waste material — as well as reduces waiting time.

**Solutions: SP64, SP62, SP60, 964, 962**

**Non-Contact In-Line Solutions.** Used directly in-line, ranging from economical color verification systems to robot-based multi-angle devices to ensure color quality.

**Solutions: TeleFlash, TeleFlash Compact, Color iScan**

### Visual Products



#### SpectraLight® III Color Viewing Booth

The most accurate simulation of natural daylight available, this patented filtered tungsten halogen light source is available in single, dual, or multiple overhead luminaire configurations.

#### The Judge® IIS Color Viewing Booth

A patented seven-phosphor design that provides the closest match to natural daylight available in a fluorescent source.

#### Harmony Rooms

Sometimes referred to as fit and finish areas, these custom-designed viewing rooms simulate the consumer experience and allow for the evaluation of final product for color harmony between parts and components coming from multiple vendors.

#### Munsell Color FM 100 Hue Test

The Farnsworth-Munsell 100 Hue Test from Munsell Color is the industry standard for determining color discrimination and identifying color deficiencies. This portable, 15-minute test and scoring software analyze how accurately your visual evaluators see color.

### Software Applications



#### Color iQC Color Quality Control Software

A flexible, job-oriented software package that streamlines color measurement, reporting and recording to maintain a centralized, cost-efficient process. Whether approving lab dips, production samples, or finished goods, Color iQC adapts to workflow to make color fast and easy.

#### Color iMatch

Match more samples from opaque to transparent or from coatings to plastics to textiles. Multiple match engines provide more color formulation latitude. Available in a choice of three versions to optimize formulas for cost and color accuracy and make best use of lab resources.

#### NetProfiler

An exclusive advance in color measurement, NetProfiler enables customers to exchange spectral color data with confidence. By minimizing the variance between color measurement data — either from one instrument to the next or from one year to the next — NetProfiler controls the critical variable in managing the color reproduction process.

### Benchtop Instruments



#### Color i7 Benchtop Spectrophotometer

A full-featured reference instrument for reliable digital workflow and error-free measurement of textile, plastic, coated, liquid, and brightened samples. An embedded NetProfiler system combines with self-diagnostic, and auto-configure functions ensuring consistent, precise performance.

#### Color i5 Benchtop Spectrophotometer

A flexible instrument for accurate, high-volume production measurement of a wide variety of samples sizes, shapes, textures, and opacity levels. An embedded NetProfiler system combines with self-diagnostic, and auto-configure functions ensures consistent, precise performance.

#### Color-Eye 7000A Benchtop Spectrophotometer

Color-Eye 7000A is a premium reference grade spectrophotometer known for its superior inter-instrument agreement and reliability. Used by leading color suppliers worldwide, Color-Eye 7000A makes the ideal foundation for a color management system, especially for those who want to establish digital color standards for their supply chains.

## Portable Instruments



### **SP Series of Portable Sphere Spectrophotometer**

The SP series offers a full line of spherical hand held spectrophotometers designed to meet the performance and feature capabilities necessary for diverse color measurement applications.

### **900 Series of Portable 0/45 Spectrophotometer**

A series of 0/45 handheld spectrophotometers designed to address a wide range of industry specific color needs, ensuring consistent color quality in the plant, laboratory or field.

## Non-Contact In-Line Solutions



### **TeleFlash Non-Contact Spectrophotometer**

Eliminate costly production line color errors with this automated online quality control system that provides non-contact measurement and continuous reporting.

### **TeleFlash Compact Non-Contact Spectrophotometer**

Accurately measure color and evaluate color deviation through an exclusive instrument design that accommodates textured, finely patterned, dry, or wet samples.

## Comprehensive Laboratory Service

For evaluating color performance and measurement standards and X-Rite maintains fully accredited laboratories throughout the world. Each is accredited in accordance with the recognized International Standard ISO / IEC 17025 and also meets additional program requirements in the field of calibration.

In accordance with the A2LA evaluation process, accreditation is granted to laboratories to perform a wide range of units, including:

- Model 962, 964, 939 968, 948, 938
- Model SP61, SP62, SP64
- Model 504, 508, 518, 528, 530
- Model MA68 & MA68II
- Model Color i7, Color i5
- Optical Radiation for 2300 K and 2856 K lightboxes (SPL family)



## The Color of Success

The textiles industry presents both challenges and opportunities. Color continues to play a significant role. X-Rite offers you the expertise and technology to make the most of your color opportunities...right from the start.

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For more information, visit [xrite.com](http://xrite.com).

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