

Munsell Color

FM 100 Hue Color Vision Test

How well do you see color? This simple test will tell.

Thousands of professionals evaluate and communicate color every day – even though nearly 10% are color deficient... and they don't even know it!

Whether you work in design, production or quality approval, good color vision is essential for making accurate decisions. But how can you know for certain if your color vision is correct or impaired? 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 analyzes how accurately you see color. The easy-to-use scoring software indicates where you have a color vision deficiency such as color blindness. In addition, the program includes a database to track your color assessment abilities.

You can establish and maintain standards for those who make color critical decisions. In addition you will have:

- Higher confidence in the color decisions made by the evaluators
- The ability to track and compare the accuracy of the color evaluators over time
- Compliance with ISO and other quality system requirements



Taking the test is simple

Under controlled lighting,* arrange four sets of precisely colored caps in order from one hue to another. The fewer errors, the better your color discrimination. The caps differ from one another subtly, so that each wrong placement reveals a different type of color vision deficiency.



New software provides immediate results.

The Farnsworth-Munsell 100 Hue Test includes user-friendly scoring software available in multiple languages. Graphs and charts provide at-a-glance determination of your color vision capability. For more in-depth analysis, the software includes a database for storage of everyone's visual color assessment capability.

What does the test reveal?

The results will indicate the following:

1. A numeric score indicating how well you discriminate different colors will be ranked against normal color vision, with a result of low, average or superior.
2. If you have a color vision defect, the software identifies where your color confusion lies. For example, if you showed weak red color discrimination, your results will indicate that your vision is "protan," but if you showed weak green color discrimination, then your score would indicate "deutan."
3. Your test results will also be charted graphically, to help you see the color areas where you have made errors.

Share data with other facilities, suppliers and customers.

Your color capability is a competitive advantage that you can share. The software is network enabled, so whether you're managing the color communication capabilities of your global staff or complying with supplier-mandated color vision testing, your data is readily available on your LAN or WAN.

Comply with color programs and quality system requirements such as ISO.

As leading retailers and brands require suppliers to comply with color control programs as a prerequisite for doing business, many specify color vision testing. The Farnsworth-Munsell 100 Hue Test meets and exceeds most requirements. In fact, for over 50 years, it's been the definitive standard for testing color discrimination.



*A daylight-balanced light or viewing booth such as the Macbeth SpectraLight® or Judge® from X-Rite.



Maintain test certification with automatic updates.

The included software will automatically remind you when it's time to update your color caps – approximately every two years under normal use. You'll also receive a product certification suitable for ISO and other quality system documentation requirements.

Did you know...

Men are more likely to have color vision defects than women. One out of every 12 males has some form of color deficiency, but only one out of every 255 females is affected.

A color vision defect doesn't mean you're color blind. There are varying degrees of color blindness, and some people may not be color blind at all. They simply have a tougher time distinguishing various

hues than someone with sharper color acuity.

Color vision can indicate certain medical conditions. The Farnsworth-Munsell 100 Hue Test is one of the most widely used tests in industries where color decisions are critical. Over the years, the test has also been used in clinical applications for the study of ocular disease and other medical conditions such as diabetes and Parkinson's disease. It has also been used to determine the affects of pharmaceuticals on color vision.



About the Farnsworth-Munsell 100-Hue Test...

The Farnsworth-Munsell 100-Hue Test is specified by the American Society for Testing and Materials in ASTM E 1499, Standard Guide for Selection, Evaluation and Training of Observers; the American Association of Textile Chemists and Colorists AATCC Evaluation Procedure 9; and numerous internal procedures for leading companies in a variety of industries.

The Farnsworth Munsell 100 Hue Test is produced by Munsell Color of X-Rite. The FM 100 hue test produced by Munsell Color is traceable to the National Institute of Standards and Technology (NIST). All Munsell Color products are manufactured to the strictest guidelines in accordance with the above accreditations and their associated practices and procedures.



System requirements

- MAC OS X, Windows® 98, Windows XP or Windows 2000
- 450 MHz or higher Pentium III-compatible CPU processor
- 64 MB of available RAM
- 2 GB hard disk with a minimum of 50 MB available hard disk space
- Color monitor with resolution of 1024 x 768 pixels

Farnsworth-Munsell 100 Hue Test includes:

- Four (4) trays 20" x 1.75" x 1.25"
- Durable protective carrying case 21.5" x 6.12" x 2.5"
- Easy-score numbered color caps 7/16" diameter each

Munsell Color

ISO 17025
Certified

INFORMATION PROVIDED IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE. The user assumes the entire risk as to the accuracy and the use of this information. All text must be copied without modification and all pages must be included. All components of this information must be distributed together. This information may not be distributed for profit. X-Rite® are registered trademarks of X-Rite, Incorporated. Other brand and product names are trademarks of their respective holders. All trademarks may be registered in the United States and/or other countries. Product design and specifications subject to change without notice. © X-Rite, Incorporated 2006.



X-RITE GLOBAL HEADQUARTERS
Grand Rapids, Michigan USA 800.248.9748

xrite.com

L10-301 (12/06)