Agilent Cary WinUV Color Software

Elevate your Agilent Cary UV-Vis/NIR spectrophotometer to a high precision color measurement tool

Agilent Cary WinUV Color software ensures precise color measurement under various lighting and illumination conditions. Color measurements are vital for applications such as:

- Brand recognition
- Perceived product quality
- Overall aesthetics
- Color specific quality control of products like cosmetics

Color measurements and automatic color reporting

Agilent Cary WinUV Color is an optional application for use with Agilent Cary UV-Vis and UV-Vis-NIR spectrophotometers. It extends the versatile Cary spectrophotometers into a color measurement tool for highly accurate QA/QC or deeper color investigations of liquids or solids.

Cary WinUV Color includes the major internationally accepted color calculations in a simple, configurable package. Color reports are automatically generated based on the user-selected color coordinate system. The systems quickly produce routine QA/QC reports—and have the power to investigate subtle color differences in applications that require highly accurate spectrophotometry measurements.

Select one or many Color Space numbers or Color Numbers

The Cary WinUV Color allows users to select from various color measurement options such as CIELAB, Hunter Lab, Chromaticity, Haze, Whiteness, Yellowness, Garder Calculations (Figure 1). Once the spectral data has been acquired, the results are generated and reported automatically.

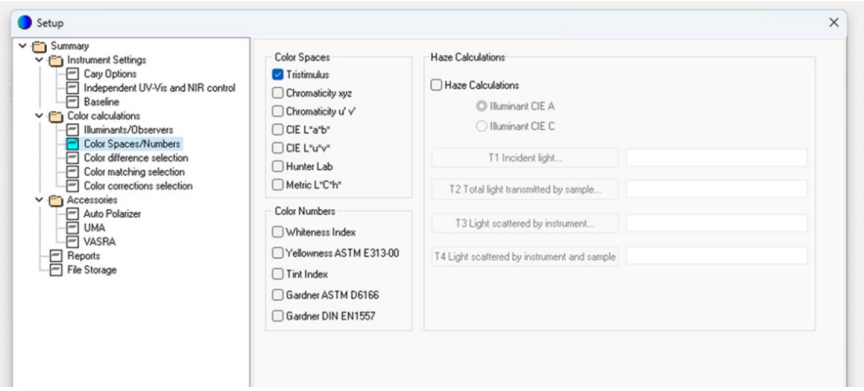

Figure 1. Color calculation options within the Agilent Cary WinUV Color application software. See a full list of color measurement options and choose from a range of color coordinates, difference measurement, illuminants, observers, and graphical display options.

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Hue and chromaticity measurements

In many industries, colorimetry—the process of monitoring color hue and color consistency of a product—is essential for quality control. Hue is expressed in a 3D coordinate system with lightness and darkness represented on one axis, red/green on a second axis, and blue/yellow hue on the third axis. Examples of the L*a*b* system and chromatic sample data in a CIE triangle graph format are shown in Figure 2.

The Cary WinUV Color software user interface displays collected spectra with a primary hue color indicator along the top of the screen, as shown in Figure 3. Generated reports are displayed below the spectra. Accessible START and STOP buttons provide straightforward control of the spectrophotometer, allowing users to begin or halt data collection from within the software.

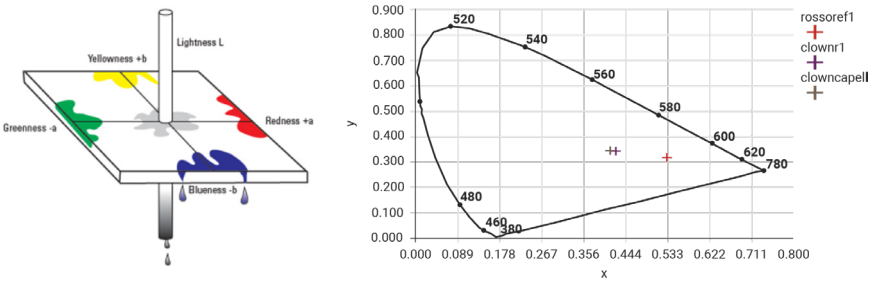

Figure 2. Left: L*a*b* color coordinates system, also known as the CIELAB color space, is a standardized model that was developed by the International Commission on Illumination (CIE) in 1976. **Right:** Chromaticity plot in Cary WinUV Color. Chromaticity is expressed in a 2D coordinate system, with dominant wavelength captured around the perimeter of the space. Individual samples are represented by individual + symbols.

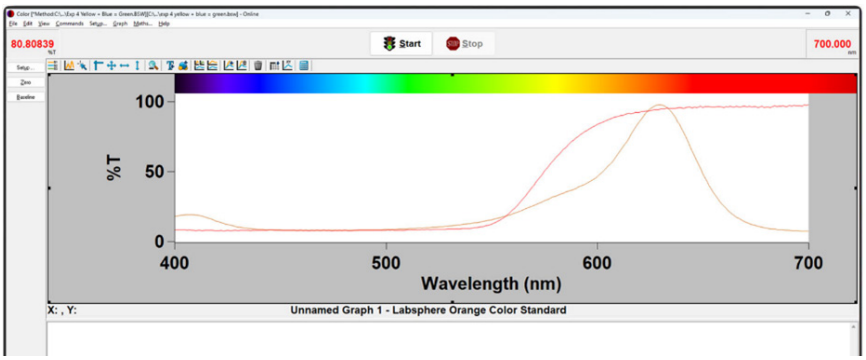

Figure 3. Enhance your spectrophotometer capabilities with Agilent Cary WinUV Color software.

A choice of spectrophotometers

Agilent offers a range of Cary UV-Vis and UV-Vis-NIR instruments for color measurements. Plus a complete suite of sampling accessories for the analysis of liquid or solid sample types.

- All Cary instruments are all controlled by Agilent Cary WinUV software.
- Cary instruments address a variety of analytical needs such as high throughput, ease of use, and sample accessibility.
- Cary instruments provide a versatile solution for diverse color-based applications.

A list of instruments and accessory options is provided in our Color Measurements White Paper.

Further information

Agilent Cary 60 UV-Vis Spectrophotometer

Agilent High-Performance Cary 5000 UV-Vis-NIR spectrophotometer

Cary WinUV Software for UV-Vis Applications

Agilent Cary WinUV Software for UV-Vis-NIR Applications

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UV-Vis Spectroscopy and Spectrophotometer FAQs

UV-Vis Spectrophotometer Uses and Applications

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