# Color-Eye® 2180UV Spectrophotometer

## Precisely Measure The Effects Of Optical Brighteners In An Affordable Benchtop System

The GretagMacbeth Color-Eye 2180UV spectrophotometer sets new standards for price/performance in an entry level color measurement system. This sphere-based, compact instrument combines affordability with true measurement accuracy and integrity. It's ruggedly constructed to stand up to the production floor environment and provide years of uncompromising performance.

The Color-Eye 2180UV is the only instrument in its class with adjustable UV control, making it a good value in applications where optical brighteners are used. Adjustable to the UV content found in natural D65 daylight, you can maintain accurate measurements between optically brightened samples.

The Color-Eye 2180UV provides excellent agreement with other Color-Eye 2180 systems, as well as with the ColorEye XTH hand-held spectrophotometer and the Color-Eye 7000A, the premier reference instrument in the industry. This compat-ibility throughout the line makes the Color-Eye 2180UV the perfect choice for a color management network. You can build a network system in which color formulation labs, QC departments, separate production facilities, as well as suppliers all get the same values and speak the same color language.

**Pulsed Xenon Light Source, The Ultimate In Reliability**

The high-intensity pulsed xenon light source provides the finest illumination available, requires minimal maintenance, and ensures superior consistency when measuring dark or saturated colors. Additionally, the pulsed xenon source will not change the properties of some samples, whereas the heat and light intensity of tungsten halogen systems may.

**Extra Convenience With Motorized SCE/SCI**

Effortlessly measure pure color with SCI (specular component included), or simulate how the human eye responds to surface effects such as gloss or texture with SCE (specular component excluded).

**Measurement Precision Instills Confidence**

Reading accuracy is ensured time after time with the unit's built-in reference against which all samples are measured. The instrument automatically adjusts to fluctuations in voltage and changes in temperature to further ensure measurement consistency and long-term reliability.

**Increase Efficiency From A Little Space**

The exceptional performance of the Color-Eye 2180UV is a result of GretagMacbeth's unmatched experience with sphere instrument technology. Numerous features make the unit easy to operate, including a convenient drop-down preview window that simplifies the reading of difficult-to-position samples. The Color-Eye 2180UV requires just a little bit of space, but its measurement accuracy and repeatability can mean a big boost in productivity.

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# Specifications

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| Repeatability (white tile) | |
| (typical) | 0.04 RMS ΔE CIEL*a*b* |
| (maximum) | 0.15 RMS ΔE CIEL*a*b* |
| Interinstrument Agreement | |
| (typical) | 0.12 Avg. ΔE CIEL*a*b*† |
| (maximum) | 0.25 Avg. ΔE CIEL*a*b*† |
| Illumination | Pulsed xenon |
| Spectral Range | 360 nm to 750 nm |
| Wavelength | 10 nm |
| Photometric Range | 0% to ≈ 180% |
| Photometric Resolution | 0.01% |
| Aperture | |
| Physical | 0.55" (14 mm) circular diameter |
| Illuminated | 0.55" (14 mm) circular diameter |
| Measured | 0.39" (10 mm) circular diameter |
| Small Area of View (SAV) | 5 mm circular diameter |
| Optical Configurations | Diffuse/8° (illumination/measurement) |
| Dimensions | 9.38" high, 7.13" wide, 14.75" deep (23.8 cm, 18.1 cm, 37.5 cm) |
| Weight | 15 lbs. (6.8 kg) |
| Temperature (operating) | 60°F to 90°F (15°C to 32°C) |
| Relative Humidity | 10% to 80%, non-condensing |
| Electrical Requirements | 117 VAC / 50 - 60 Hz<br>230 VAC / 50 - 60 Hz |

† Average ΔE of BCRA ceramic standards relative to GretagMacbeth standardized values under lab conditions.
Specifications subject to change without notice.

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**For more information about the Color-Eye 2180UV spectrophotometer, please contact**

CCS **Color Control Systems, Inc.**

*Solutions for all your Color Control needs.*

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