

**Compact  
Powerful  
Precise**



# Agera<sup>®</sup> L2

*Level UP your Color Confidence with the new  
Agera L2 Spectrophotometer.*

**As simple as you want, as powerful as you need.**

Agera L2 is now enhanced with Essentials 2.0 software, advanced illumination modes, a sealed spillproof case, stellar product updates and so powerful that no PC is required.



# Explore the Next-Gen Agera®...L2

Meet the Agera L2 Spectrophotometer/Colorimeter, a breakthrough in measuring color the way the human eye perceives it, delivering visually meaningful, lab-grade accuracy with every reading.

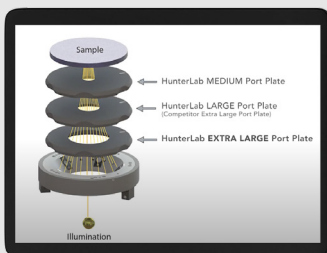


**Explore all the additional features and benefits below.**



## No. 1 Solution for Plastics with Optical Brighteners

**Specialized Accuracy for Plastics:** Combines D65 illumination and UV calibration guidance for accurate measurement of virgin, recycled, and brightened plastics, ensuring consistent quality and compliance.



## Largest area of view

**Extra-Large 50.8 mm (2-inch) Area of Measurement:** Measures 4x the surface area of others in the industry—ensuring superior repeatability and accuracy across all applications, including challenges like textured, directional, and patterned sample types.

## UV Calibration Modes

**Accurate data:** Maintain consistency for products containing optical brighteners or fluorescent materials. Enables accurate measurement of retro-reflective, fluorescent, and safety materials under true daylight conditions.

Sample (UV Included)		Sample (UV Excluded)	
L*	52.57	L*	52.50
a*	1.44	a*	0.68
b*	-18.27	b*	-17.10
YIE	-64.70	YIE	-60.89
WI Ganz	308.86	WI Ganz	291.83
UV Compare dE*	1.40		



## Unmatched Accuracy on Dark Samples

**Ultra Dark Mode:** Achieves high precision when measuring dark, black, or complex materials such as textiles, papers, and plastics.

**TEXTILES**

retroreflectors

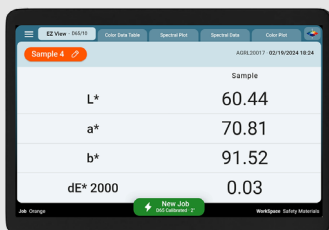
**Neon Clothing**

**DOT signage**

**safety apparel**

**sports brands**

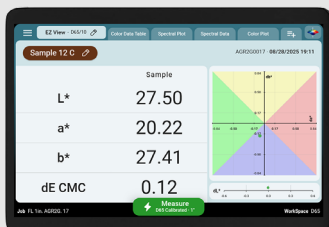
**PLASTICS**

Sample	
L*	60.44
a*	70.81
b*	91.52
dE* 2000	0.03

## Precision for Fluorescent Samples

**D65 Source Mode:** True CIE-quality D65 illumination. Quantify color the way the human eye perceives it, delivering visually meaningful, lab-grade accuracy with every reading.



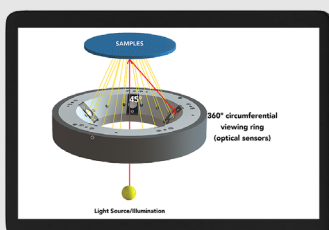
Sample	
L*	27.50
a*	20.22
b*	27.41
dE CMC	0.12

## Simplified Operator Experience

**New & Improved Color Software:** Essentials 2.0 provides trusted lab-quality color data, built into the most intuitive color analysis interface ever, delivering fast, reliable results.

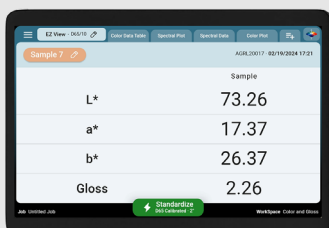
## Rugged, Reliable Performance

**Spill-Proof Case:** Designed to withstand spills and heavy use in busy laboratory or production environments.



## The Best Color Solution for QA

**0°/45° Circumferential Optical Geometry:** Aligns with human visual perception for results that correlate directly with appearance as perceived by the human audience.



Sample	
L*	73.26
a*	17.37
b*	26.37
Gloss	2.26

## Simultaneous Color & Gloss Measurement

**Color + 60° Gloss in One Step:** Captures both measurements simultaneously, streamlining workflows and reporting by eliminating the need for separate instruments.

## Advanced Data Export and Communication

**Full Suite of Data Communication Options:** Features Ethernet and USB port for easy data export and printing. HDMI and additional USB port for mouse, keyboard and other accessories.



PLASTICS

safety apparel

sports brands

Neon Clothing

DOT signage

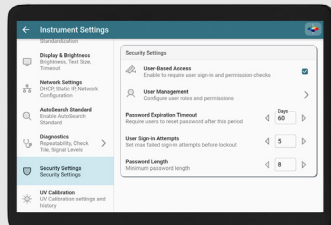
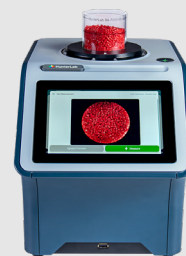
TEXTILES

retroreflectors



## Built-in Camera for Sample Viewing and Screen Recording

**Precision and Communication:** Ensures accurate sample positioning to eliminate measurement discrepancies and allows easy sharing of recordings for swift quality control decisions.



## Secure User Management System

**Workflow Management:** Role-based accounts (operator/admin) ensure secure data handling.

## Multi-Industry Versatility

**Broad Application Range:** Serves diverse industries including plastics, safety apparel, neon clothing, DOT signage, retroreflectors, textiles, and sports brands.



# CONTACT US

We've worked with thousands of companies, but you'll feel like our one and only. If color accuracy is crucial to your business, you've come to the right place—with the right people. Let's get in touch. Ask a question, Request a quote or just say hello!

## OUR OFFICES & DISTRIBUTION CENTERS



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# SPECIFICATIONS

# Agera®

Patent #US 11,002,676 B2

## MEASUREMENT

<b>Measurement Principle:</b>	Dual-beam Reflectance Spectrophotometer / Glossmeter
<b>Geometry Color:</b>	0°/45°c (circumferential) ASTM E1164
<b>Gloss:</b>	60°
<b>Measurement Method:</b>	Port up or Port forward
<b>Read Time:</b>	< 3 sec.
<b>Image Capture:</b>	High-resolution, D65 illuminated, 45°/0° image viewing, image capture and image recall
<b>Port Plate Opening:</b>	<b>Color:</b> XL - 53.97 mm (2.125 in), L - 28.57 mm (1.125 in), M - 17.47 mm (0.688 in)
<b>Area Measured:</b>	<b>Color:</b> XLAV - 50.80 mm (2 in), LAV - 25.40 mm (1 in), MAV - 15.89 mm (0.625 in) <b>Gloss:</b> 8 mm (5/16 in)
<b>Illumination Range:</b>	360 nm - 700 nm
<b>Detection Range:</b>	400 nm - 700 nm
<b>Specular Component:</b>	Excluded
<b>Spectral Resolution:</b>	< 3 nm
<b>Effective Bandwidth:</b>	10 nm equivalent triangular
<b>Reporting Interval:</b>	10 nm
<b>Photometric Range:</b>	0 to 150 %
<b>UV Control:</b>	UV Included and UV Excluded with automated comparative data viewing and reporting. Factory calibrated with user option to calibrate to their specific fluorescent standard.
<b>Light Source:</b>	Full spectrum, balanced LED array
<b>LED Life:</b>	5 years typical
<b>Spectrophotometer:</b>	Sealed optics; 256-element diode array; high resolution concave holographic grating
<b>Standards Conformance:</b>	<b>Color:</b> CIE 15:2018, ASTM E1164, DIN 5033, Teil 7 and JIS Z 8722 Condition C; <b>Gloss 60°:</b> ASTM D523, ASTM D2457, ISO 2813, ISO 7668, JIS Z 874

## PERFORMANCE

<b>Inter-Instrument Agreement:</b>	<b>Color:</b> $\Delta E_{2000} < 0.20$ CIE L*a*b* (Avg) on CCSII (CERAM) Tile Set <b>Gloss:</b> 0 - 100 $\leq 0.5$ GU
<b>Repeatability:</b>	<b>Color:</b> $\Delta E^* < 0.03$ CIE L*a*b* (Max) on white tile <b>Gloss:</b> 0 - 100 GU: $\leq 0.1$ GU



## USER INTERFACE

<b>Data Views:</b>	EZ View, Color Data Table, Color Plot, Spectral Data, Spectral Plot, Chromaticity Plot
<b>Other Features:</b>	Pass/Fail Color Indication, time and date stamp, Auto-naming, auto-saving, Image Capture via high-resolution camera, average multiple measurements, time-based automatic measurements, data backup and recovery
<b>USB Flash Drive Features:</b>	Data Export: Job Data, Sample Images, Screen Capture and Database
<b>Illuminants:</b>	A, C, D50, D55, D65, D75, F02, F07, F11
<b>Observers:</b>	2° and 10°
<b>Color Scales:</b>	CIE L*a*b*, Hunter Lab, CIE L*C*h, CIE Yxy, CIE XYZ
<b>Color Difference Scales:</b>	$\Delta L^*a^*b^*$ , $\Delta Lab$ , $\Delta L^*C^*h$ , $\Delta Yxy$ , $\Delta XYZ$
<b>Indices and Metrics:</b>	E313 Whiteness Index, Ganz Whiteness Index, E313 Tint, Ganz Tint, E313 Yellowness, D1925 Yellowness Index, Y Brightness, Z%, 457 nm Brightness, Baking Contrast Units, ASTM E1349, ISO 18314-3 Blackness (My, Mc, dM) and Greyness (Gy, Gc, dG)
<b>Color Difference Indices:</b>	$\Delta E^*$ , $\Delta E$ , $\Delta C^*$ , $\Delta E$ CMC, $\Delta E$ 2000, , $dC^*$ , $dH^*$ , Strength at Max. Absorbance, Strength weighted, Metamerism, Grey Scale Color, Grey Scale Stain, Shade Number 555
<b>Languages:</b>	Supports multiple languages—with the option to add more as needed
<b>Data Storage:</b>	8 GB (> 1 million data records with images)

## COMMUNICATIONS I/O

<b>USB Connections:</b>	Connectivity to printer, keyboard, mouse- Front panel (1); Rear panel (2)
<b>Ethernet RJ45:</b>	Print directly to standalone or network printers Stream data to LIMS and SPC systems
<b>External Inputs:</b>	Remote Footswitch or similar closed contact switching device
<b>Remote Access Support:</b>	Enabled via internet-based support tool

## PHYSICAL / ELECTRICAL

<b>Sensor Dimensions:</b>	Height: 28 cm (11 in) Width: 22 cm (8.75 in) Depth: 31 cm (12.25 in) Weight: 7.7 kg (17 lb)
<b>Display:</b>	7" Capacitive touch screen, high-resolution (1280 x 800)
<b>Interface:</b>	3 USB ports, HDMI Video Output, Foot switch Input, Ethernet connection, USB Service Port, Convenient physical measurement/action button
<b>Power:</b>	Input: 100 to 240 VAC, 47 to 63 Hz to universal power supply @ 24 VDC (3.75A 90W)
<b>Operating Environment:</b>	10° to 40° C (50° to 104° F), 10 % to 90 % RH, noncondensing
<b>Storage Environment:</b>	-20° to 65° C (-5° to 150° F), 10 % to 90 % RH, noncondensing
<b>System Components:</b>	<ul style="list-style-type: none"> <li>• Agera L2 sensor</li> <li>• XL - 53.97 mm (2.125 in), L - 28.57 mm (1.125 in), M - 17.47 mm (0.688 in) port plates</li> <li>• Calibrated white tile (NIST Certificate of Traceability)</li> <li>• Calibrated Black Glass standard used for both color and gloss standardization</li> <li>• Diagnostic Check Tile (Green Tile)</li> <li>• 100V - 240V universal power supply</li> <li>• Agera L2 Quick Start Guide</li> <li>• Agera L2 User's Guide (electronic)</li> </ul>

For more information, please contact HunterLab at 703-471-6870, [sales@hunterlab.com](mailto:sales@hunterlab.com) or visit [www.hunterlab.com](http://www.hunterlab.com)