

SPECIFICATIONS



ColorFlex[®] L2 Coffee

MEASUREMENT

Measurement Principle:	Port up dual-beam spectrophotometer
Geometry:	45°a:0° Annular Illuminated Optics, ASTM E1164
Spectrophotometer:	Sealed optics; 256-element diode array and a high resolution concave holographic grating
Port Diameter/View Diameter:	31.8 mm (1.25 in) illuminated/ 25.4 mm (1 in) measured
Specular Component:	Excluded
Spectral Range:	Range: 400 nm - 700 nm
Spectral Resolution:	< 3 nm
Effective Bandwidth:	10 nm equivalent triangular
Reporting Interval:	10 nm
Photometric Range:	0 to 150 %
Light Source:	Full spectrum Xenon Flash Lamp
Measurement Duration:	1 second
Lamp Life:	10 years typical
Illumination:	Factory Calibrated Xenon for Brightness, Whiteness, and Tint
Standards Conformance:	CIE 15:2018, ASTM E1164, DIN 5033, Teil 7 and JIS Z 8722 Condition C
Standards Traceability:	Instrument standard assignment in accordance with National Institute of Standards and Technology (NIST) following practices described in CIE Publication 44 and ASTM E259

PERFORMANCE

Inter-Instrument Agreement:	Color: $\Delta E^*_{2000} < 0.15$ D65/10 (Avg) on BCRA CCSII Tile
Colorimetric Repeatability:	Color: $\Delta E^* < 0.05$ D65/10 (Max) on White Tile



USER INTERFACE

Data Views:	Coffee Roast, Color Data, Spectral Plot, EZ View, Tristimulus Color Plot, Pass/Fail Color Indication, Time, and Date Stamp, Auto-naming, Auto-saving, Data backup, Image Capture via High-resolution Camera
USB Flash Drive Features:	Job Data, Sample Images, Screen Capture and Database Export
Other Features:	Pass/Fail, Average Multiple Measurements, Set Multiple Automatic Measurements
Illuminants:	A, C, D50, D55, D65, D75, F02, F07, F11
Observers:	2° and 10°
Color Scales:	CIE L*a*b*, Hunter Lab, CIE L*C*h, CIE Yxy, CIE XYZ, Rd,a,b
Color Differences:	$\Delta L^*a^*b^*$, ΔLab , ΔL^*C^*h , ΔYxy , ΔXYZ , ΔE , ΔE^* , ΔE^*2000 , ΔH^* , ΔC^* , ΔE_{cmc}
Indices and Metrics:	E313 Whiteness and Tint (C/2°, C/10°, D65/2° or D65/10°), E313 Yellowness (C/2°, C/10°, D65/2° or D65/10°), D1925 Yellowness (C/2°), Y Brightness, Z%, 457 nm Brightness, Opacity, Color Strength (Average and Single Wavelength), Gray Scale, Gray Stain, Metamerism Index
Ground Coffee Indices:	HCCI (HunterLab Coffee Color Index values), SCAA Number, SCAA Roast Classification
Data Storage:	1 million Records max; 8 GB
Languages:	Supports multiple languages—with the option to add more as needed

PHYSICAL / ELECTRICAL

Dimensions:	Height: 16 cm (6.25 in.) Width: 21 cm (8.75 in.) Depth: 24 cm (9.50 in.) Weight: 2.75 kg (6 lbs)
Display:	7" Touch screen, high resolution 1280x800
Interface:	2 USB ports, HDMI Video Output, Foot switch Input, Ethernet connection, USB Service Port, Convenient physical measurement/action button
Power:	90 – 240 VAC, 47 – 63 Hz to universal power supply @ 24 VDC/3.75A
Operating Environment:	10° to 40 °C (50° to 104 °F), 10 % to 90 % RH, noncondensing
Storage Environment:	-20° to 65°C (-4° to 149° F), 10 % to 90 % RH, noncondensing
Standard Accessories:	• HunterLab Reference Standard-Coffee • Diagnostic Check Standard (Green) • Port Plate - 31.8 mm (1.25 in) • A sleeve of 10 disposable polystyrene (100mm) diameter petri dishes • Initial Customer Instruction before Unpacking Guide • USB Flash Drive with Coffee License and User's Manual • Certified Instrument Standard (White) • Black Glass Standard • Certificate of Traceability • Quick Start Guide • Power Supply (90W)

For more information, please contact HunterLab at 703-471-6870, sales@hunterlab.com or visit www.hunterlab.com