

SPECIFICATIONS

ColorFlex[®] EZ

Measurement

Measurement Principle:	Port up or Port forward dual-beam spectrophotometer
Geometry:	Directional annular 45° illumination / 0° viewing
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:	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:	Pulsed Xenon Lamp
Flashes per Measurement:	1 flash
Lamp Life:	> 1 million flashes
Measurement Time:	< 1 second from button push to measurement 2 seconds from button push to data display
Minimum Interval between Measurements:	3 seconds
Standards Conformance:	CIE 15:2004, ISO 7724/1, 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:	$\Delta E^* \leq 0.15$ CIE L*a*b* (Avg) on BCRA II Tile Set $\Delta E^* \leq 0.25$ CIE L*a*b* (Max) on BCRA II Tile Set
Colorimetric Repeatability: (20 Readings)	$\Delta E^* \leq 0.05$ CIE L*a*b* on white tile

Firmware

Data Views:	Color Data, Color Difference Data, Tristimulus Color Plot, Spectral Data, Spectral Difference Data, Spectral Plot, Spectral Difference Plot
USB Flash Drive Features:	Backup of Setups and Data, Setup Transfer to Multiple Units, Data Export to Excel
Other Features:	Pass/Fail, Average Multiple Readings, Search for Closest Standard
Illuminants:	A, C, D50, D55, D65, D75, F2, F7, F11
Observers:	2° and 10°
Color Scales:	CIE L*a*b*, Hunter Lab, CIE L*C*h, CIE Yxy, CIE XYZ
Color Difference Scales:	$\Delta L^*a^*b^*$, ΔLab , ΔL^*C^*H , ΔL^*C^*h , ΔYxy , ΔXYZ
Color Difference Indices:	ΔE^* , ΔE , ΔC^* , ΔC and ΔE_{cmc}
Indices and Metrics:	E313 Whiteness and Tint (C/2° or D65/10°), E313 Yellowness (C/2° or D65/10°), D1925 Yellowness (C/2°), Y Brightness, Z%, 457 nm Brightness, Opacity, Color Strength (Average and Single Wavelength), Gray Change, Gray Stain, Metamerism Index, Shade Number
Tomato Color Model Only:	Tomato Color Scores: TPS - Tomato Paste Score TSS - Tomato Sauce Score TCS - Tomato Catsup Score TJS - Tomato Juice Score Tomato a/b Ratio Lycopene Index
Citrus Color Model Only:	Citrus Number, Citrus Redness, Citrus Yellowness
Data Storage:	As Standard - 250 spectral or tristimulus with Pass/Fail tolerances as Working, Physical, Numeric and Hitch As Sample - 2000 spectral
Languages:	Chinese, English, French, German, Italian, Japanese, Spanish

Physical / Electrical

Dimensions:	Height: 16 cm (6.3 in.) Width: 13 cm (5.1 in.) Depth: 36 cm (14.2 in.) Weight: 4.5 kg (9.9 lbs)
Display:	7.1 cm x 5.4 cm (2.8 in. x 2.1 in.) backlit color LCD
Interface:	3 USB 2.0 ports
Power:	100 to 240 VAC 47 to 63 Hz
Operating Environment:	10° to 40°C (50° to 104° F), 10 % to 90 % RH, noncondensing
Storage Environment:	-20° to 65°C (-5° to 150° F), 10 % to 90 % RH, noncondensing
Standard Accessories:	<ul style="list-style-type: none">• Calibrated instrument white tile• Certificate of traceability• Black glass• Green diagnostic tile• Universal AC adaptor• Computer interface cable• USB flash drive• ColorFlex EZ User guide

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