SPECIFICATIONS

LabScan® XE

Measurement

Measurement Principle:Dual-beam spectrophotometer

Geometry: Directional 0° illumination / 45° circumferential viewing with 15-station fiber optic ring

Spectrophotometer: 256 element diode array and high resolution, concave holographic grating

Orientation:Measurement port up or port forward; port down with optional stand

Viewing Apertures

Variable Sample Illumination 44 mm (1.75 in.), 25 mm (1.00 in), 13 mm (0.50 in), 6 mm (0.25 in)

(VSI) Model: and 3 mm (0.13 in) illuminated;

50 mm (2 in.), 30 mm (1.20 in), 17 mm (0.70 in), 10 mm (0.40 in),

and 5 mm (0.20 in) measured

Lens Zoom for VSI: Automatic

Port Sensing for VSI:Automatic sensing of port plate size

Specular Component: Excluded

Spectral Range: 400 nm - 700 nm

Wavelength Resolution: < 3 nm

Effective Bandwidth: 10 nm equivalent triangular

Reporting Interval: 10 nm

Photometric Range: 0% - 150%

Photometric Resolution: 0.003 % (0.01 % reported)

Light Source: Pulsed Xenon lamp, filtered to approximate D65 daylight

Lamp Life: 1 billion flashes

Measurement Time: < 3 seconds (except 3 mm area <10 seconds)

Minimum Interval

between Measurements: 3 seconds



Reference Standardization: Automatic to internal reference standard

Automatic UV Control Option: 420 nm cutoff filter for UV control and UV exclusion

Standards Conformance: CIE No.15:2004, ISO7724/1, ASTM E1164, DIN 5033 Teil 7 and JIS Z 8722 Condition C

Standards Traceability: Instrument standard calibration traceable to the National Institute of Standards

and Technology (NIST).

Performance

Colorimetric Repeatability: For white tile: $\Delta E^* < 0.09$ for 44 mm (1.75 in.)

(20 readings, Max) For blue denim tile: $\Delta E^* < 0.07$ for 44 mm (1.75 in.)

Inter-Instrument Agreement: $\Delta E^* < 0.15$ (Avg) for 44 mm (1.75 in.)

 $\Delta E^* < 0.36$ (Max) for 44 mm (1.75 in.)

Physical / Electrical

Dimensions: Height: 30.5 cm (12 in.)

Width: 19.1 cm (7.5 in.)
Depth: 36.9 cm (14.5 in.)
Weight: 10.4 kg (23 lbs)

Power: 100 to 240 VAC, 47 to 63 Hz

90 watts passive, 180 watts continuous use

Interface: RS-232C, 9,600 baud, D9 (female) terminal

Operating Environment: 10° - 40° C (50° - 104° F), 10 % - 90 % RH, noncondensing

Storage Environment: -21° - 66° C (-5° - 150° F), 10 % - 90 % RH, noncondensing

Standard Accessories:

• Calibrated instrument white tile
• Certificate of traceability
• Black glass

• Green diagnostic tile • White backing tile • LAV port plate • RS-232C cable

• USB-to-Serial adapter • Power cord • EasyMatch QC software

• EasyMatch QC Basic manual