

CS-822 45/0 Bench-top Spectrophotometer

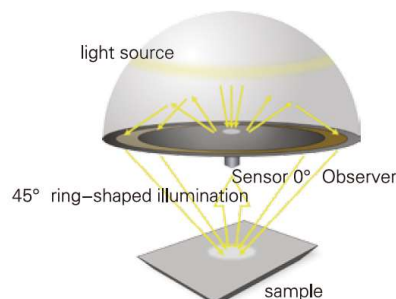


CS-822 bench-top spectrophotometer is with the 45/0 geometry. 45/0 geometry is close to the visual perception color value, which can exclude the specular light on the textured surface. It is suitable for color measurement of automotive interior parts, textiles, coil coatings, plastic products, coatings, packaging and other materials color measurement.

Part 1. Instrument Introduction

1. Instrument adopts 45/0 geometry (45 illumination, 0 degree viewing)

The innovative ring-shaped illumination system eliminates the direction dependence, regardless of changing the sample position, the tilt sample or the rotating instrument can achieve the high accuracy and the repeatability, will reduce the influence which the texture brings to the lowest. The measurement on the surface of abrasive, textured and structured materials has its great advantages.



45/0 Geometry

2). Comply with International Measurement Standards

The instrument complies with all the color measurement standards of CIE, ISO, ASTM, DIN and achieves the international leading level.

3). Every Instrument is with Verification Certification

Every Instrument is with Verification Certification, measuring data traceability to the National Institute of Metrology, to ensure the authority of instrument test data.

4). All for Better User Experience

- a. Seven inches touch screen for simple operation;
- b. It can connect with PC by USD or custom made blue tooth for easier connection
- c. It supports working with micro printer to print test result .

Part 2. Technical Data

	Reflectance:45/0 (45 degree illumination, 0 degree viewing)
Illumination/ Viewing System	Conform to (ISO7724/1, CIE No.15, ASTM E1164, ASTM-D1003-07, DIN5033 Teil7, JIS Z8722 Condition C standard)
Sensor	Silicon Photodiode Array
Grating Method	Concave Grating
Sphere Diameter	152mm
Wavelength	400-700nm
Wavelength Pitch	10nm
Half Band Width	5nm
Reflectance Range	0-200%
Resolution	0.01%
Light Source	Pulse Xenon Lamp and LED
UV Measurement	Include UV, 400nm cut
Measurement Time	About 2s
Measurement Aperture	30 & 18mm (two apertures) or 52mm (one aperture only) (Auto aperture size recognition)
Repeatability	XLAV Spectrum Reflectance standard deviation within 0.1% XLAV Chromaticity value: Standard deviation within ΔE^*_{ab} 0.015 * When a white calibration plate is measured 30 x at 10-second intervals after white calibration
Inter-Instrument Agreement	XLAV ΔE^*_{ab} 0.15 (BCRA Series II, Average measurement of 12 tiles, at 23°C)
Observer	2° and 10°
Illuminants	A,C,D50,D55,D65,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12

	CWF,U30,DLF,NBF,TL83,TL84
Language	English, Russian, Spanish, Portuguese, Japanese, Thai, Korean, German, French, Polish, Chinese (simple and traditional),
Display	Reflectance graph/value, color value, color difference values, pass/fail, color simulation, color assessment, color tendency
Color Spaces	L*a*b, L*C*h, Hunter Lab, Yxy, XYZ
Other Indices	WI(ASTM E313-00,ASTM E313-73,CIE/ISO, AATCC, Hunter, Taube Berger, Stensby) YI(ASTM D1925,ASTM E313-00,ASTM E313-73),Tint(ASTM E313-00),Metamerism index milm, stain fastness, color fastness, ISO brightness, Opacity, Color Strength
Color Difference	ΔE^*ab , ΔE^*CH , ΔE^*uv , ΔE^*cmc , ΔE^*94 , ΔE^*00 , ΔE^*ab (hunter),555 shade sort
Storage Memory	8 GB U Disk for data storage and transfer
Screen Size	7 Inches Touch Screen
Operate System	Android
Power Supply	12V/3A
Operate Temperature	5-40°C (40-104F), relative humidity 80% (at 35°C) no condensation
Storage Temperature	-20-45°C (-4-113F), relative humidity 80% (at 35°C) no condensation
Standard Accessories	Power Adaptor, USB Cable, Black Calibration Cavity, White and Green Calibration Tile, Reflectance Test Support,30mm and 18mm apertures, reflectance sample fixture
Optional Accessories	Vertical Support and Pneumatic ram for downward measurement, Reflectance fixture for small size sample, Reflectance Glass Cell Support, Corrosion-Resistant Protective Plate (non-removable), Sample Holder for Fiber, Film Fixture, Trolley Case, European Standard Plug, American Standard Plug
Interface	USB, USB-B and RS-232
Instrument Size	465x240x260mm (length x width x height)
Weight	10.8kgs
Other Function	1. Support horizontal, vertical and downward measurement method (need optional accessories to support for downward measurement); 2. Auto humidity and temperature compensation function.