Portable Spectrophotometer CWD 4580 PLUS
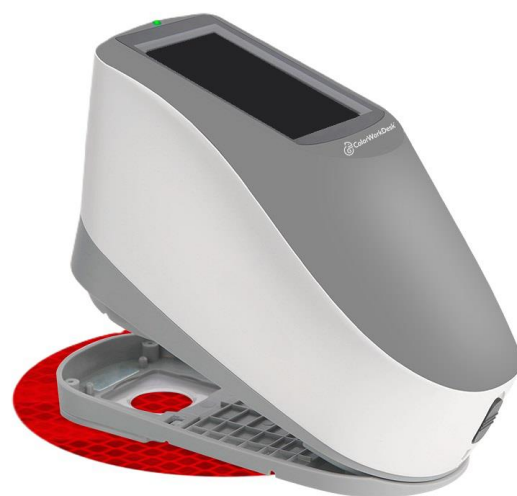
Portable Spectrophotometer CWD 4580 PLUS

The portable spectrophotometer model CWD 4580 PLUS belongs to the new generation of color measurement instruments with LED technology.

Instrument with 45°/0° geometry with compact and ergonomic design equipped with a 3.5 inch TFT color touch screen display. Special design with 20 mm aperture for road signs, it is used to measure the brightness factor and color coordinates of road signs, marking lines, signage and reflective films.

For irregular samples with stripes or granular samples, the instrument has high precision and high stability. It is used for accurate analysis and transmission of laboratory color, also for color measurement of fluorescence sample.

MAIN FEATURES

45°/0° geometry compliant with CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO7724/1, ASTM E1164, DIN5033 Teil7

The instrument is equipped with a sophisticated 3.5-inch TFT color LCD display with capacitive touch screen

The measurement area is single 20 mm

Data communication with the PC is via USB port and Bluetooth

The internal memory can store over 30,000 measurements

Built-in standard polygon tolerance setting and specific range of the road sign, especially suitable for the brightness factor of the road sign and the judgment of chromaticity performance

For more information:
www.urai.it • cwd@urai.it
Tel. +39 02 892399.1

ColorWorkDesk®

Portable Spectrophotometer CWD 4580 PLUS

TECHNICAL CHARACTERISTICS OF THE INSTRUMENT

Optical Geometry	45°/0° (45 ring-shaped illumination, vertical viewing)
Light Source	Combined LED Light, UV Light
Color space	CIE Lab, XYZ, Yxy,LCh, CIE LUV, HunterLab
Color Difference Formula	ΔE*ab,ΔE*uv,ΔE*94,ΔE*cmc(2:1),ΔE*cmc(1:1),ΔE*00, DINΔE99,ΔE(Hunter)
Observer Angle	2°/10°
Colorimetric Index	WI(ASTM E313， CIE/ISO,AATCC,Hunter)， YI(ASTM D1925， ASTM 313), MI (Metamerism Index), Staining Fastness, Color Fastness, Color Strength, Opacity,Supporting Colorimetric Polygon Tolerance
Illuminant	D65,A,C,D50,D55,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12
Displayed Data	Spectrogram/Values, Chromaticity Values, Color Difference Values/Graph, Pass/Fail Result, Color Offset
Spectrophotometric Mode	Concave Grating
Wavelength Range	400nm~700nm
Wavelength Interval	10 nm
Semiband Width	10 nm
Measured Reflectance Range	0~200%
Sensor	256 Image Element Double Array CMOS Image Sensor
Measuring Time	About 1.5s
Measuring Aperture	Φ 20mm
Repeatability	ΔE*≤0.1 (400 nm - 700 nm)
	Chromaticity value:within ΔE*ab 0.04 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration)
Inter-instrument Error	Within ΔE*ab 0.2 (Average for 12 BCRA Series II color tiles)
Data Port	USB, Bluetooth
Data Storage	Standard 1000 Pcs, Sample 30000 Pcs
Language	Chinese,English
Power	LI-Li-ion battery. 5000 measurements within 8 hours
Illuminant Life Span	5 years, more than 3 million times measurements
Display	3.5-inch TFT color LCD, Capacitive Touch Screen
Operating Environment	Temperature: 0~40℃; Humidity: 0~85% (No Condensation)
Storage Environment	Temperature: -20~50℃; Humidity: 0~85% (No Condensation)
Dimension	184 × 77 × 105 mm
Weight	600 gr.
Standard Accessory	Power Adapter, USB Cable, User Manual,White and Black Calibration Board
Optional Accessory	Micro printer