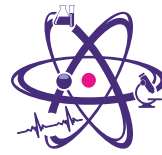


Multiplelabs
Turnkey Laboratories Solutions

Spectro-9801

Reflectance Spectrophotometer





Spectro-9801 is a high performance spectrophotometer with sideward test aperture. It could be widely used for printing, textile, plastic, food, medicine, automobile industries to meet customers' color measurement requirement.

►► INTRODUCTION

Instrument adopts geometric of D/8 which is highly recommend by CIE, integration of the full band LED composite light source, double beam optical system, ETC every-test calibration technology, spectral reflectance standard deviation within 0.08, maximum of chromaticity values ΔE^*_{ab} is 0.03.

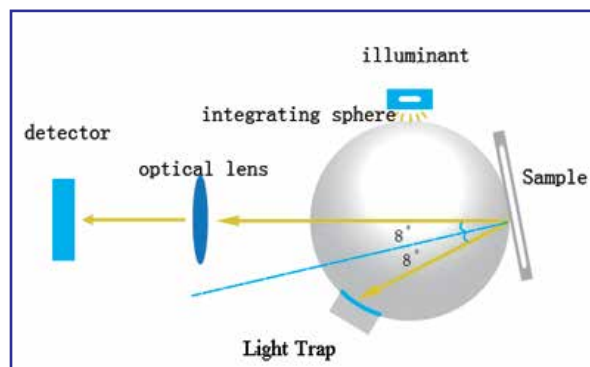
Brief Introduction

1. Its test caliber is in the sideward which is more convenient to fix the sample. Solid samples (plastic sheet, cloth) can be placed directly on the test aperture. Paste objects can be placed in a glass cell/cuvette, and then placed in the measurement port. It is very suitable for powder material measurement in case of material falling into the integrating sphere.



D\8 Structure

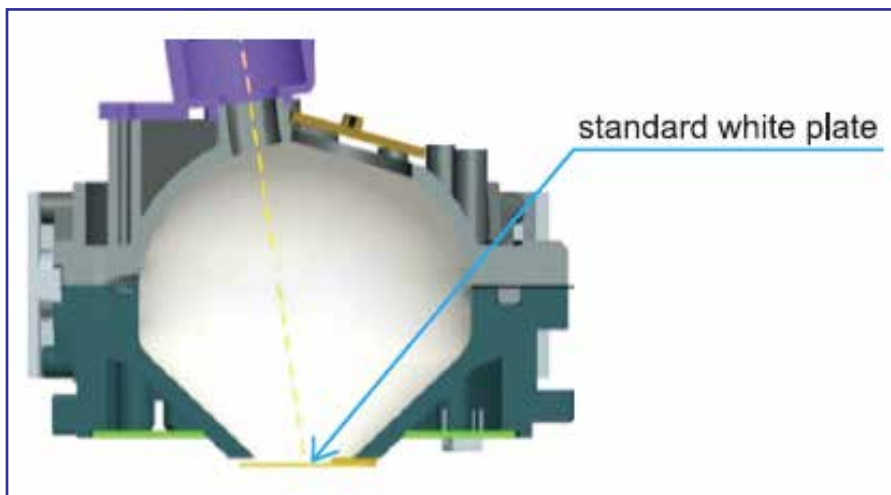
Our device adopts internationally agreed observe condition D/8 (Diffused illumination, 8 degrees observer) and SCI(specular component included)/SCE(specular component excluded).



Can Measure SCI and SCE at the same time

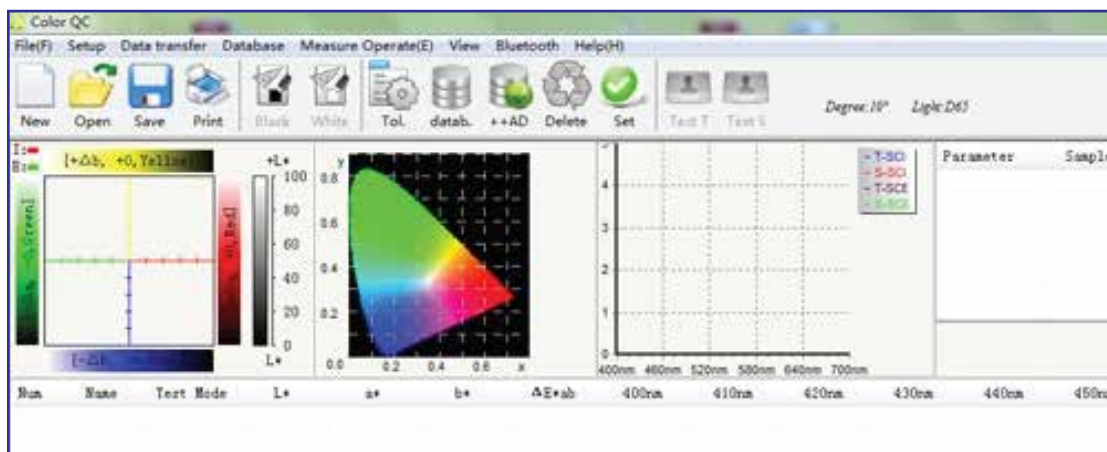


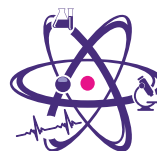
ETC Technology (Every Test Calibration)



Color QC Software

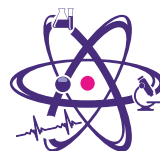
Our spectrophotometer comes with PC color QC software, which is applicable in various industries for management of color data. It is used for store test result, generate test report and print test report after connect with printer.



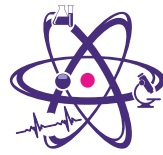


►► **TECHNICAL DATA**

Type	Spectro-9801
Geometry	d/8(Diffused lighting, 8 degrees observe angle)(conform to CIE 7No.15, ISO 7724/1, ASTM E1164, DIN 5033 Teil7, JIS Z8722 Condition c standards)
Size of integrating sphere	Φ40mm
Illumination Light source	CLEDs(entire wavelength balanced LED light source)
Sensor	dual light path sensor array
Wavelength range	400-700nm
Wavelength interval	10nm
Half spectral width	5nm
Reflectivity range	0-200%
Reflectivity resolution	0.01%
Observation angle	2°/10°
Measurement light source	A,C,D50,D55,D65,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12,DLF,TL83,TL84,NBF,U30,CWF
Data being displayed	sample's color values, reflectance, color difference values/graph, pass/fail results, color error tendency, color simulation, display measurement area, bhistory data color simulation, manual input standard sample, generate measurement report
Measurement time	About 1 second
Measurement time interval	0.5 second
Measuring caliber	Φ11mm
Color space	CIE-L*a*b,L*C*h,L*u*v, XYZ, Yxy, reflectance, Hunterlab, Munsell MI, CMYK,RGB,HSB
Color difference formulas	$\Delta E^*ab, \Delta E^*CH, \Delta E^*uv, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*94, \Delta E^*00, \Delta Eab(Hunter), 555color$ classification
Other colorimetric 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,CIE,Ganz),metamerism index Milmm, adhesive/changing color fastness, ISO luminance,8 gloss, A density, T density, E density, M density

**►► TECHNICAL DATA**

Repeatability	Chromaticity values: $\Delta E^*ab \leq 0.015$ (After calibration, standard deviation of 30 measurements on test white board, 5 second intervals), Maximum:0.03
Battery capacity	rechargeable, 20000 continuous tests, 7.4V/6000mAh
Interface	USB
Data storage	40000 test results
Light source longevity	5 years, 1.5 million tests
Inter-instrument agreement	ΔE^*ab within 0.2(BCRA color charts II, average of the 12 charts)
Size	350*300*200mm(L*W*H)
Weight	4.5kg
Display	5 inches True color screen
Work temperature range	0~45°C, relative humidity 80% or below (at 35°C), no condensation
Storage temperature range	-25°C to 55°C, relative humidity 80% or below (at 35°C), no condensation
Standard accessories	AC power line, operating manual, color management software, drive software, electronic operating manual, color management guide, USB cable, black/white calibration tube, measurement and test report
Optional accessories	powder molding device,40*10 cuvette
Color matching system	Matches
UV light source	without



▶▶ **APPLICATION**

Fabric Color Measurement



Opaque Liquid Color Measurement

