# HANDHELD SPECTROPHOTOMET ER SPE72-780

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Handheld Spectrophotometer is suitable for transmission of various solids colour analysis, fluorescent sample and scientific research.

## **SPE72-780** HANDHELD SPECTROPHOTOMETER

Silicon photodiode array (double row 32 groups)

Adopt D/8 structure and SCI/SCE mode

Combination of full spectrum LED light source and UV light source

Equipped with five apertures

Camera positioning

Non-contact automatic calibration, professional imported white board, more wear-resistant, dirty, stable

Place the base safely to ensure that the whiteboard is not dirty.

Offer 10 kinds of color measurement space and 41 kinds of observation light source

Support Huawei Harmony OS, Android, IOS, Wechat applets, Windows programs

## SPECIFICATIONS

| Model | SPE72-780 |
|---|---|
| Optical Geometry | Reflectance: D/8(Diffuse illumination, 8° acceptance) SCI&SCE; Include UV/Exclude UV |
| Standards compliant | CIE No.15,GB/T 3978,GB 2893,GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7 |
| Integrating Sphere Size | Φ 40mm |
| Light Source | Combined full spectrum LED light source, UV light source |
| Spectroscopic Method | Flat Grating |
| Silicon Photodiode array | Double row 32 groups |
| Spectral Range | 360~780nm |
| Wavelength Pitch | 10 nm |
| Photometric range | 0-200 % |
| Measurement Aperture | 5 apertures: MAV:Φ8mm/Φ10mm;SAV:Φ4mm/Φ5mm;LAV:1x3mm |
| Specular Component | SCI&SCE |
| color spaces | CIE LAB,XYZ,Yxy,LCh,CIE LUV,s-RGB,HunterLab,βxy,DIN Lab99,Munsell(C/2) |
| Color Difference Formula | ΔE*ab,ΔE*uv,ΔE*94,ΔE*cmc(2:1),ΔE*cmc(1:1),ΔE*00, DINΔE99,ΔE(Hunter) |
| Other Colorimetric Index | Spectral reflectance,WI(ASTM E313,CIE/ISO, AATCC, Hunter, TaubeBergerStensby),YI(ASTM D1925,ASTM 313), Metamerism Index MI,Staining Fastness, Color Fastness, Color Strength, Opacity,8° Glossiness,555 tone classification, Carbon (My,dM), color density CMYK(A,T,E,M), Tint, Munsel chroma index (part of the function is realized by PC software) |
| Observer angle | 2° / 10° |

| | |
|---|---|
| Illuminant | D65,A,C,D50,D55,D75,F1,F2(CWF),F3,F4,F5,F6,F7(DLF),F8,F9,F10(TPL5),F11(TL84),F12(TL83/U30),B,U35,NBF, ID50,ID65,LED-B1,LED-B2,LED-B3,LED-B4,LED-B5,LED-BH1,LED-RGB1,LED-V1,LED-V2,LED-C2,LED-C3,LED-C5, able to customized light source (total 41 kinds of light source, Partially realize through the PC software /APP software) |
| Displayed Data | Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color simulation, Color bias |
| Measurement Time | About 1.5s |
| Repeatability | Chromaticity value: MAV/SCI, within ΔE*ab 0.02 ( When a white calibration plate is measured 30 times at 5 second intervals after white calibration) Spectral reflectance: MAV/SCI, Standard deviation within 0.08% (400 nm to 700 nm: within 0.18%) |
| Inter-instrument agreement | MAV/SCI, Within ΔE*ab 0.15 (Average for 12 BCRA Series II color tiles) |
| Display accuracy | 0.01 |
| Measurement mode | Single measurement, Average measurement (2-99 times) |
| Locating Method | Camera Locating,stabilizer cross position |
| Battery | Lithium battery, 8800 measurements within 8 hours |
| Life lamp | More than 1.5 million measurements in 10 years |
| Screen | 3.5-inch TFT color LCD, Capacitive Touch Screen |
| Interface | USB, Bluetooth |
| Data Storage | Standard 1000 Pcs, Sample 30000 Pcs(one data can include SCI/SCE at the same tome), APP/PC mass storage |
| Software support | Andriod,IOS,Windows,Harmony OS,Wechat applets |
| Language | Simplified Chinese, English, traditional Chinese |
| Standard Accessories | Power Adapter, User Guide, PC Software(Download from office website), USB cable, White and Black Calibration Cavity, Protective Cover, Wrist strap, five aperture |
| Dimension | 129(L)X76(W)X217(H)mm |
| Weight | Approx 600g |