

# Spectrophotometer NS800



features with stable performance □  
precise measurement and powerful  
functions in the leading position of  
the same industry.

## SPECTROPHOTOMETER **INCOMPARABLE ACCURACY**

**Milestone**

SCM ISO9001

CE

RoHS

**CALRIGHT  
INSTRUMENTS**

*The Right Source For Your Test & Measurement Needs*

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**Color So Different in Measurement**

## PRODUCT FEATURES

1. Aesthetic design perfectly combined with ergonomics structure.
2. 45°/0° geometrical optics structure, comply with CIE, ISO, ASTM, DIN standard.
3. 3.5 inch large capacitive touch screen.
4. Two standard observer perspectives, multiple light sources modes, a variety of color systems.
5. The repeatability  $\Delta E^*ab$  is within 0.04, the errors between each instrument is less than  $0.2\Delta E^*ab$ .
6. Large capacity storage, save more than 10000 data.
7. PC software with powerful extension functions.
8. High hardware configured with a number of innovative technologies.
9. Oversized integrating sphere, more effective homogenization ray of lights and precise measurement.
10. 15° oblique angle screen, in line with the human eye observation.



## APPLICATION INDUSTRY

NS800 spectrophotometer is widely used in plastic, electronic, paint, ink, textile, garment, printing and dyeing, food, medical cosmetic industries, scientific research institutes, schools and laboratories. It can measure reflectance spectrum and other color index precisely. NS800 spectrophotometer not only can help to perform color matching and color management studies, but also can control product quality management accurately. The instrument is equipped with high-end color management software which can connect PC to achieve more extension functions.



## SPECIFICATION PARAMETER

### Complete spectrum reflectance curve

Input L, a, b value manually

Display Screen: TFT 3.5inch Capacitive Touch Screen

Illumination/observation system: 45°/0°

Integrating sphere Size:  $\Phi 58mm$

Light Source: combined LED sources

Sensor: silicon photodiode array

Wavelength range: 400~700nm

Wavelength interval: 10nm

Reflectance range: 0~100%

Color Space: CIE LAB, XYZ, Yxy, LCh, CIE LUV

Color difference Formula:  $\Delta E^*ab$ ,  $\Delta E^*uv$ ,  $\Delta E^*94$ ,  $\Delta E^*cmc(2:1)$ ,  $\Delta E^*cmc(1:1)$ ,  $\Delta E^*00$

Other Chromaticity Data: Whiteness - WI(ASTM E313, CIE/ISO, AATCC, Hunter), Yellowness - YI(ASTM D1925, ASTM 313), TI(ASTM E313, CIE/ISO), Metamerism Index (Mt) Colour Stain, Color Fastness, Color Strength, Opacity

Illuminant: D65, A, C, D50, D55, D75, F2, F6, F7, F8, F10, F11, F12

Measuring Aperture:  $\Phi 8mm$

Observer: 2°/10°

Display Data: Spectral Value/Graph, Colorimetric Value, Color Difference Value/Graph, PASS/FAIL Result, Color Offset, Color Simulation

Repeatability: Spectral Reflectance: standard deviation within 0.1% (400~700nm: within 0.2%), Colorimetric Value: Standard deviation within  $\Delta E^*ab$  0.04

Errors between each instrument: Within  $\Delta E^*ab$  0.2

Dimension: (L\*W\*H) 90\*77\*230mm

Battery: Li-ion battery, 5000 times within 8 hours.

Lamp Life: 5 years, more than 1.6 million measurements

Storage: 1000 Standards, 10000 Samples

Optional Accessory: Universal test components for liquid, powder, particle, Micro Printer, Powder Test Box