

# Reflectance Measurement System

BIX-8811 Series

Reflectance is a fundamental optical property of materials and a key parameter in spectral measurements. Different sample types exhibit primarily two reflection modes: specular reflection and diffuse reflection.

- Specular reflection occurs on perfectly smooth surfaces
- Diffuse reflection dominates on rough/textured surfaces
- Most real-world materials exhibit mixed reflection characteristics

Reflectance measurements serve multiple purposes:

- Determining optical component reflectivity
- Analyzing surface color properties
- Identifying chemical composition in samples

Measurement Methodology Selection:

- For highly polished surfaces (predominantly specular) Fiber optic sampling probes recommended
- For curved/irregular surfaces Integrating sphere measurement preferred



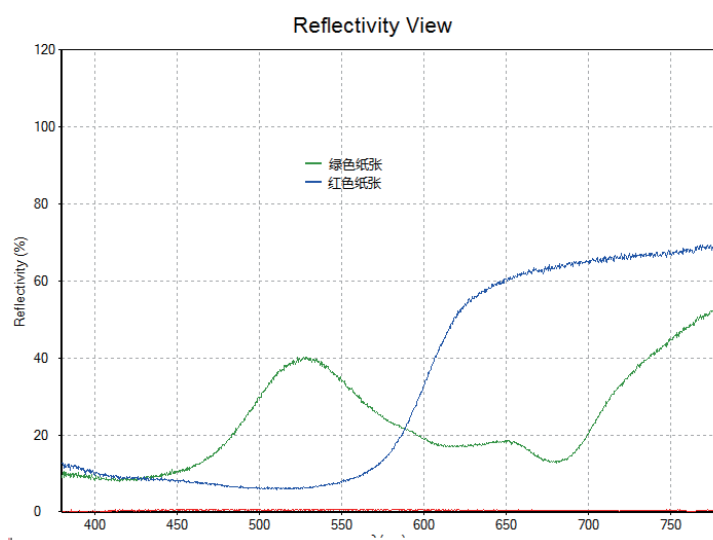
## Features

- Easy Sample Handling - Minimal fixture requirements for versatile sample placement
- User-Friendly Operation - Simple protocols with excellent repeatability and rapid detection
- Comprehensive Spectral Data - Full-spectrum reflectance values and curves for complete analysis
- Advanced Color Measurement - Integrated sphere sampling for precise material color characterization

## Applications

- Specular Reflectance Measurement - For polished surfaces and mirror-like materials
- Diffuse Reflectance Analysis - Ideal for rough/textured surfaces and coatings
- Precision Color Characterization - Accurate color measurement of materials and finishes

## Typical Spectrum



## Specifications

Model	BIX-8811-0X1X (Model Note: 0X- Spectrometer option, 1X- Sample fixture option )
Spectrometer	01: 200nm~1100nm (BIM-6002S-22-S03L02F06G13)
	02: 200nm~900nm (BIM-6002A-01-S03L02F06G01)
	03: 400nm~1100nm (BIM-6002A-13-S03L01F05G02)
Sample Fixture	11: 1 to 1 fiber (SIM-6102-1010-S/S-P) *2ea Double-point Reflection Stage (BIM-6303) *1ea
	12: Y type fiber (SIM-6102Y-061016-T/SS-M) *1ea Double-point Reflection Stage (BIM-6303) *1ea
	13: Integrating Sphere for Reflection (SIM-3003-02501) *1ea Integrating sphere Stage (BIM-6316-25) *1ea
Light Source	Deuterium Tungsten Light Source (BIM-6203) *1ea
Standard	Mirror Reflectance Standard (SIM-6326-30) *1ea Diffuse Reflectance Standard (SIM-6304-30) *1ea