

Reflectance Spectra of Quartz with InGaAs Detector

INTRODUCTION

By using the standard system and near-infrared system of U-4100 spectrophotometer, the spectrum of a quartz wedge plate at 5° specular reflection was analyzed. By the near-infrared system equipped with InGaAs detector, the specular reflectance spectrum with small noise was obtained at the wavelengths of 1000-1700 nm. InGaAs detector allows the measurement in this wavelength range with reduced noise.

SAMPLE

Sample : Quartz wedge plate

INSTRUMENT CONDITIONS

Instrument : U-4100 Spectrophotometer (solid sample analysis system)
 : U-4100 Near-infrared System (solid sample analysis system)

[UV/VIS]
 Scan speed : 300 nm/min
 Slit : 8 nm
 Sampling interval : 1 nm

[NIR]
 Scan speed : 150 nm/min
 Slit : auto-control
 PbS sensitivity : 1

ACCESSORY

5° specular reflectance accessory (P/N : 134-0102)

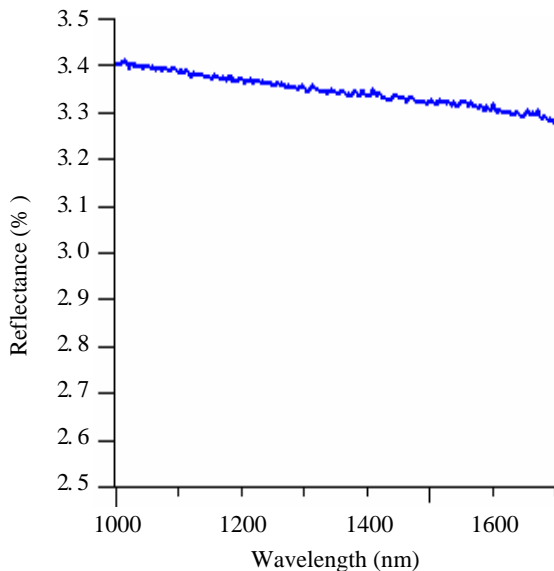


Figure 1 U-4100 Spectrophotometer
(solid sample analysis system)

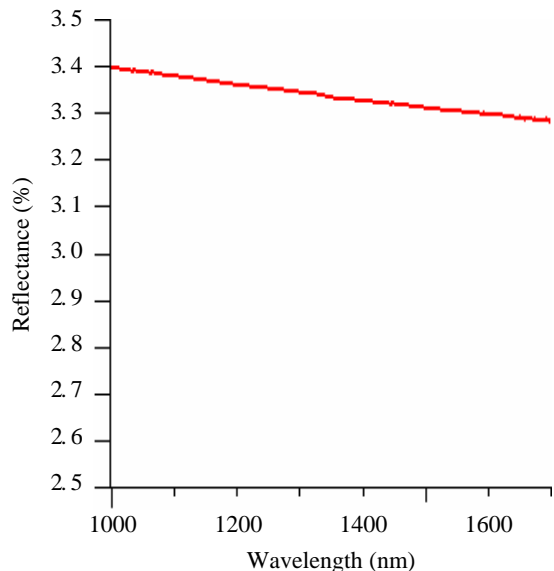


Figure 2 U-4100 Near-infrared System
(solid sample analysis system)

5° Specular Reflectance Spectrum of Quartz Wedge Plate

KEY WORDS

Quartz Wedge Plate, Reflection, 5° Specular Reflectance, Spectrophotometer, Optical Material, Evaporated Film, Quartz, Reflectance Spectrum, UV, U-4100

Spectrophotometer (UV)

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