

# Reflectance Spectra of AR Coating Glass with InGaAs Detector

## ABSTRACT

By using the standard system and NIR (near-infrared) system for U-4100 spectrophotometer, the 5° specular reflectance spectrum of an AR (anti-reflection) coating glass was analyzed. When the NIR system with InGaAs detector was used, the reflectance spectrum at the wavelengths of 950-1200 nm was obtained with less noise. InGaAs detector enables the analysis with reduced noise in this wavelength region.

## SAMPLE

Sample name : AR coating glass

## INSTRUMENT CONDITIONS

Instrument : U-4100 Spectrophotometer (solid sample measurement system)  
 : U-4100 NIR system (solid sample measurement system)

UV/VIS : NIR

Scan speed : 300 nm/min                      Scan speed : 750 nm/min

Slit : 8 nm    Slit : auto-control

Sampling interval : 1 nm                      PbS sensitivity : 2

## ACCESSORY

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

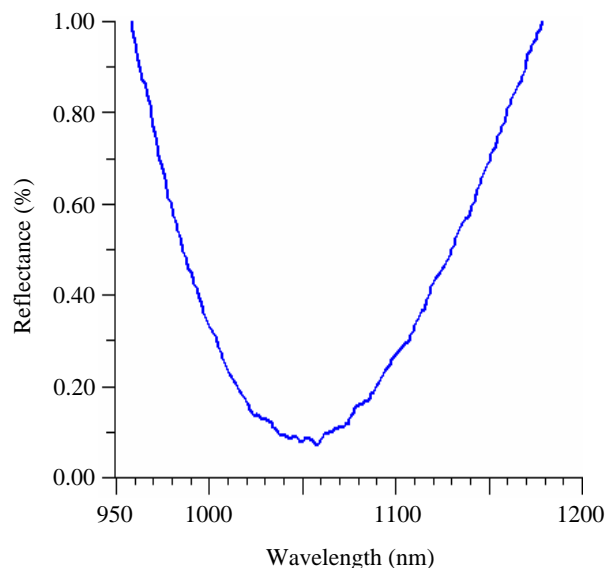


Fig. 1 U-4100 Spectrophotometer  
 (solid sample measurement system)

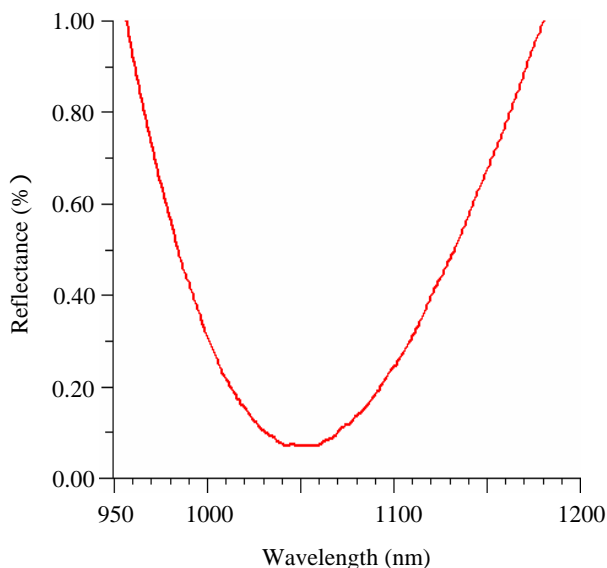


Fig. 2 U-4100 NIR System  
 (solid sample measurement system)

5° Specular Reflectance Spectrum of AR Coating Glass at 1064 nm

## KEY WORDS

Spectrophotometer, Specular Reflectance Spectrum, AR Coating Glass, Material, InGaAs Detector, Reflectance Spectra, UV, U-4100

UV Spectrophotometer

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## Reflectance Spectra of AR Coating Glass with InGaAs Detector

### ABSTRACT

By using the standard system and NIR (near-infrared) system for U-4100 spectrophotometer, the 5° specular reflectance spectrum of an AR (anti-reflection) coating glass was analyzed. When the NIR system with InGaAs detector was used, the reflectance spectrum at the wavelengths of 1400-1650 nm was obtained with less noise. InGaAs detector enables the analysis with reduced noise in the above wavelength region.

### SAMPLE

Sample name : AR coating glass

### INSTRUMENT CONDITIONS

Instrument : U-4100 Spectrophotometer (solid sample measurement system)  
 : U-4100 NIR system (solid sample measurement system)

UV/VIS : NIR

Scan speed : 300 nm/min                      Scan speed : 750 nm/min

Slit : 8 nm    Slit : auto-control

Sampling interval : 1 nm                      PbS sensitivity : 2

### ACCESSORY

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

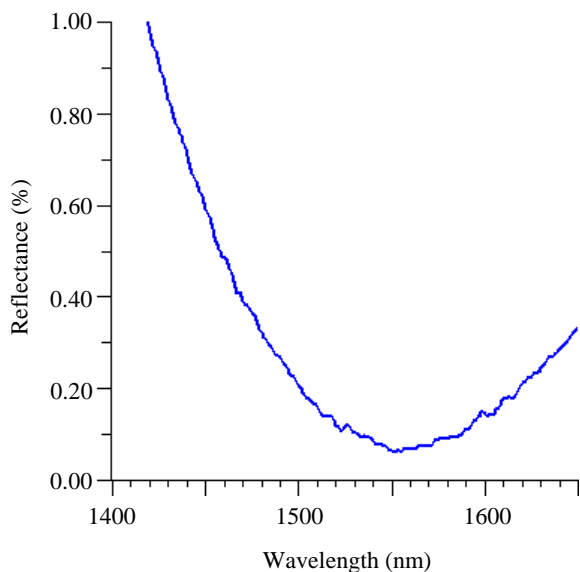


Fig. 1 U-4100 Spectrophotometer  
 (solid sample measurement system)

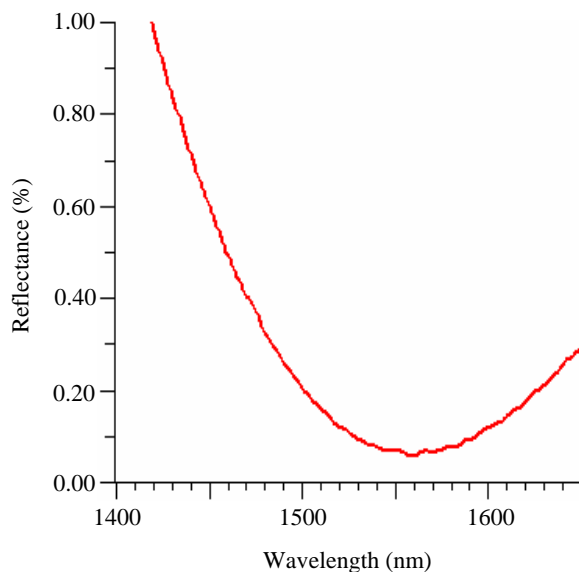


Fig. 2 U-4100 NIR System  
 (solid sample measurement system)

5° Specular Reflectance Spectrum of AR Coating Glass at 1550 nm

### KEY WORDS

Spectrophotometer, Specular Reflectance Spectrum, AR Coating Glass, Material, InGaAs Detector, Reflectance Spectra, UV, U-4100

UV Spectrophotometer

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