

Measurement of 5° Absolute Reflectance Spectrum of Gold Flat Mirror

INTRODUCTION

Gold flat mirror is a mirror coated with Au film having high reflectance over a wide range of the infrared region. This time, a gold flat mirror and an aluminum flat mirror were analyzed by using the 5° specular reflectance accessory. In the visible region, the aluminum flat mirror showed a high reflectance of more than 80%. Compared with the aluminum flat mirror, the reflectance of the gold flat mirror was low in the visible region, but its reflectance was found to be uniformly high in the near-infrared region. When measuring a relative reflectance, a reflectance standard needs to be prepared. When focusing on the near-infrared region, a spectrum without much interference from the standard can be obtained by using the gold flat mirror with high reflectance over a wide range.

SAMPLE

Sample : Gold flat mirror (Sigma Koki)
 : Aluminum Flat Mirror (Sigma Koki)

INSTRUMENT CONDITIONS

Instrument : U-4100 spectrophotometer (solid sample measurement system)
 Measurement wavelength region : 240 - 2600 nm
 Sampling interval : 1 nm

[UV/VIS]

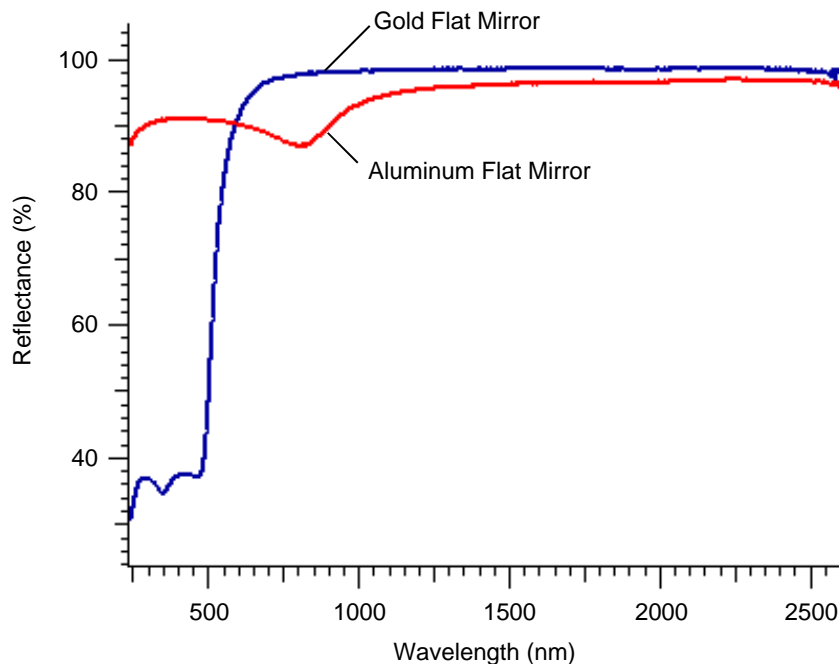
Scan speed : 300 nm/min
 Slit : 8 nm

[NIR]

Scan speed : 750 nm/min
 Slit : Automatic control
 PbS sensitivity : 2

ACCESSORY

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



KEY WORDS

Material/Processing Material Related, Composite Material/Film Crystallization, Gold Flat Mirror, Aluminum Flat Mirror, Reflectance Spectrum, Absolute Reflectance, Relative Reflectance, Spectrophotometer, U-4100

Spectrophotometer (UV)

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