



Nikon's Analysis and Measurement

Nikon's analytical measurement technologies have been developed for the inspection of optical glass materials for camera, stepper, microscope, etc...

We can satisfy your various requirements; for example, basic chemical analysis, measurement of optical properties and measurement of VUV region with cutting edge.

We also take on difficult processing as we have high processing skills and technologies based on manufacturing precise optical components.

Item	Wavelength range, condition, usage, equipment
Refractive Index	193-1083nm
Homogeneity	at 193nm,633nm
Birefringence	at 193nm,248nm,633nm
Stress-optical coefficient	(Automatic Birefringence System)
Transmittance	120-6000nm
Laser durability	(use i-line lamp, KrF excimer laser, ArF excimer laser)
Reflectance	150nm-10 μm
Raman spectroscopy	Hydrogen concentration, OH concentration, fictive temperature (ONLY Silica glass evaluation)
Fluorescence	Spectrophotofluorometer, Time-resolved fluorescence spectroscopy
Strain	(Crossed nicols)
Specific gravity	(Archimedes method)
Thermal Properties	Transformation Temperature, Deformation Point, Thermogravimetric analysis, Differential thermal analysis, DSC (0~1500°C), Thermal expansion (0~1000°C)
Mechanical Properties	Young's modulus, Torsional rigidity modulus, Poisson's ratio, Abrasion, Knoop microhardness, etc...
Chemical Properties	Climate resistance, Water resistance, Resistance to acids, Resistance to alkalis, etc...

Analytical instruments	ICP-MS, ICP-AES, SEM, EDX, Ion chromatographs, X-ray fluorescence spectrometer, ESR, etc...
------------------------	--

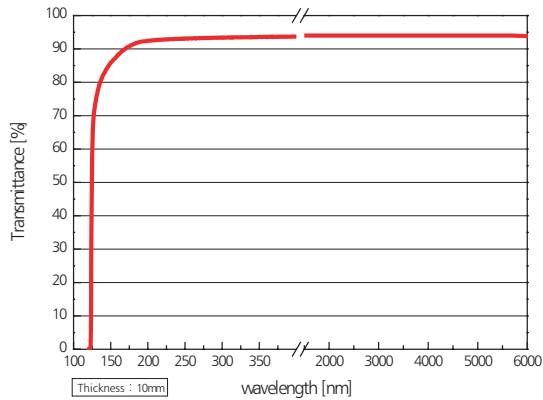
○ Sometimes samples need to be processed because of the measurement. Please contact us.

○ Please contact us about measurement conditions or simulation of results.

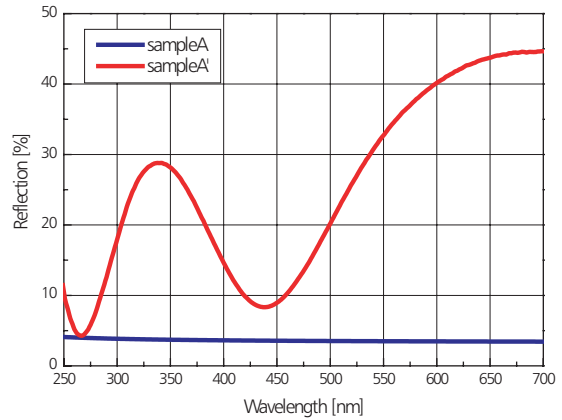
※ There are a few cases which need time for sample preparation.

Measurement Examples

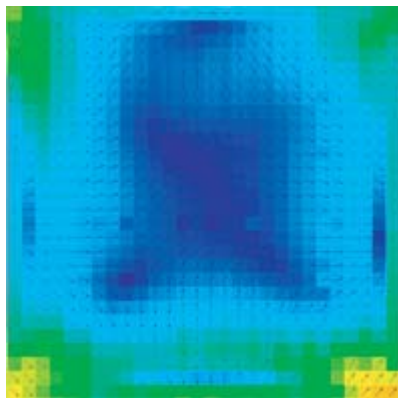
- Transmittance properties
(measuring sample of Calcium Fluoride)



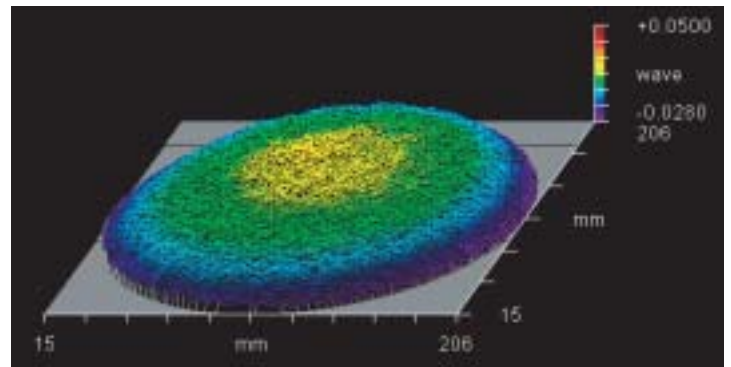
- Reflectance
(measuring sample of silica glass)



- Birefringence



- Homogeneity



Various Analysis

We can also take your order of chemical analysis. Please contact to our company.



NIKON CORPORATION
Glass Division
10-1 Asamizodai 1-chome, Sagami-hara-city,
Kanagawa 228-0828 Japan
Tel +81-042-740-6376 Fax +81-042-740-6336