

FRAUNHOFER INSTITUTE FOR APPLIED OPTICS AND PRECISION ENGINEERING IOF



 VN accessory for 6°: measurement beam and reference beam in transmission.
VN accessory for 6°: measurement beam and reference beam in reflection.

3 VN accessory for 6° outside the GBOP.

VN-ACCESSORY FOR ABSOLUTE TRANSMITTANCE AND REFLEC-TANCE MEASUREMENT

Motivation

Spectrophotometric measurements of samples on plane substrates with parallel interfaces are essential for optical coating characterization. Thereby, an accurate measurement of the reflectance is a challenging task, because in common configurations a well-known reference is required. Furthermore, an identical sample position for transmittance and reflectance measurements is preferable, but difficult to guarantee in practice.

Our competence

The VN-Accessories developed for use in the GBOP (General Purpose Optical Bench) of Perkin Elmer Lambda 850/900/950 spectraphotometer series allow absolute transmittance and reflectance measurements of coated plane optical substrates. The sample diameter should be in the range between 25 mm and 70 mm, the sample thickness should not exceed 5 mm. Transmittance and reflectance measurements can be performed at incidence angles of 6° and 45° (here with linearly polarized light) without realignment of the sample.

Our offer

- Development of VN accessories (incidence angles 6° and 45°)
- Mesaurement of reflectance and transmittance at 6° in the wavelength range 200 nm...2500 nm
- Measurement of reflectance and transmittance for s- and p-polarized ligth at 45° in the wavelength range 220 nm...2500 nm

Fraunhofer Institute for Applied Optics and Precision Engineering IOF

Albert-Einstein-Straße 7 07745 Jena

Director

Prof. Dr. Andreas Tünnermann Phone +49 3641 807-0 andreas.tuennermann@iof.fraunhofer.de

Contact

Dr. Steffen Wilbrandt Phone +49 3641 807-272 steffen.wilbrandt@iof.fraunhofer.de

www.iof.fraunhofer.de