



LINZA 150

ESSENTOPTICS

Spectrophotometer for Lens Measurement

EssentOptics introduce the world's first spectrophotometer designed to measure transmittance and reflectance of lenses and lens assemblies

3 in 1



Transmittance of Lenses



Transmittance of Lens Assemblies



Reflectance of Lenses

Unattended measurement of reflectance at any point on lens surface

PARAMETER	DESCRIPTION
SAMPLE COMPARTMENT	
Lens diameter , mm	Transmittance : 10 - 150 mm Reflectance : 10 - 120 mm
Lens radius, mm	-10 ... ∞ / +10 ... ∞
Focal length, mm	Transmittance : -20 ... ∞ ... +20 Reflectance : -15 ... ∞ ... +15
Lens assembly dimensions, mm*	W 150 x 240 (L)
Sampling pitch for determination of measurement point on lens surface (off-axis reflectance measurement), mm	0,01
Maximum lens tilt angle (off-axis reflectance measurement), deg	55
Angle of incidence (on-axis / off-axis reflectance measurement), deg	12
OPTICAL CONFIGURATION	
Effective wavelength range, nm	380 - 1700, 185 - 1700
Optical scheme of monochromator	Czerny -Turner
Optics	Mirror, Al + SiO ₂ , Al + MgF ₂
Reference channel	Yes
Wavelength sampling pitch, nm	0,5 Δφ 100
Wavelength scanning speed, nm/min	3 000 (at 5 wavelength sampling pitch)
Spot size on measured sample, mm	Transmittance : 4,0 x 2,5 mm Reflectance : 1,0 x 1,0 mm
Photometric functions	%T, %R
Ultimate spectral resolution, nm	
185 – 990 nm	2,0
990 – 1700 nm	4,0
Wavelength accuracy, nm	0,24
Wavelength repeat accuracy, nm	+/- 0,12
Scattered light level, % max (@ 532 nm)	< 0,1
Photometric accuracy	Certified according to NIST SRM 930: +/-0.003 Abs (1 Abs) Certified according to NIST SRM 1930: +/-0.003 Abs (0.33 Abs); +/-0.006 Abs (2 Abs)
Photometric repeat accuracy	Certified according to NIST SRM 930: 0.0006 Abs (1 Abs) Certified according to NIST SRM 1930: 0.0002 Abs (0.33 Abs); 0.005 Abs (2 Abs) Determined using 0,1 second accumulation, maximum deviation for 10 subsequent measurements
Stability of baseline (UV - VIS), %/hour *	< 0,1
Light sources	Halogen lamp, Deuterium lamp, HgAr wavelength calibration verification lamp
INTERFACE, DIMENSIONS AND WEIGHT	
Interface	USB 2.0
Power consumption, Wt	110
Power input	110-220 VAC, 50 -60 Hz
Width x Depth x Height, mm	680 x 440 x 360 (26 3/4 “ x 17 1/3 “ x 14 1/5”)
Weight, kg	50
* 30 minutes warm -up time	