

ISO 14490-5:2021 (E)

Optics and photonics — Test methods for telescopic systems — Part 5: Test methods for transmittance

Contents

	Foreword
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Test arrangement
5.1	General
5.2	Radiation source and condenser
5.3	Monochromator or set of filters
5.4	Collimator
5.5	Aperture stop
5.6	Specimen mounting
5.7	Integrating sphere
5.8	Radiation detector
5.9	Selectable diaphragm as field stop
6	Procedure
6.1	Preparation of the test arrangement
6.2	Determination of the measurement values
6.3	Further test methods
7	Precision of the measurement
8	Presentation of the results
9	Analysis
9.1	Effective transmittance for photopic vision
9.2	Effective transmittance for scotopic vision
10	Test report
Annex A	(informative) Calibration procedure for the radiation detector/measuring instrument
A.1	Control of proportionality of the photocurrent measured by the instrument to the illuminance on the light-sensitive surface of the radiation detector
A.2	Checking the independence of readings of the indicating device in relation to the size of the illuminated surface of the radiation detector in the case of constant light flux
Annex B	(informative) Trichromatic coefficients and colour contribution index
B.1	Trichromatic coefficients
B.2	Values for the colour contribution index
B.3	CIELAB values
B.4	CIELUV values