

ISO 9050:2026-07 (E)

Glass in building - Determination of luminous and solar characteristics of glazing

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols	3
5 Determination of characteristics	5
5.1 General	5
5.2 Insulating glass unit optical calculation	5
5.3 Light transmittance and reflectance	9
5.4 Solar direct transmittance, reflectance and absorptance	9
5.5 Total solar energy transmittance	10
5.5.1 Calculation	10
5.5.2 Division of incident solar radiant flux	10
5.5.3 Secondary heat transfer factor towards the inside	12
5.6 Shading coefficient	16
5.7 UV transmittance	16
5.8 CIE damage factor	16
5.9 Skin damage factor	17
5.10 Colour rendering	17
6 Expression of results	20
7 Test report	20
Annex A (normative) Procedures for calculation of the spectral characteristics of glass plates with a different thickness, colour or both	34
Annex B (informative) Procedure for calculation of the spectral characteristics of laminated glass ..	39
Annex C (informative) Procedure for calculation of the spectral characteristics of screen printed glass	60
Annex D (informative) Matrix method for non-scattering incoherent optical systems - Total solar energy transmittance for multi-pane glazing units	61
Annex E (informative) Modifications to the formulae to permit calculation and declaration of the luminous and solar properties of BIPV glazing	83
Annex F (informative) Example of calculation of colour rendering index in transmission	91
Bibliography	94