ISO 9845-1:2022-08 (E)

Solar energy - Reference solar spectral irradiance at the ground at different receiving conditions - Part 1: Direct normal and hemispherical solar irradiance for air mass 1,5

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Application of the spectral data for deriving effective solar irradiances and spectrum weighted quantities 2
4.1 Spectrally modified total solar irradiance 2
4.2 Solar spectrum weighted property 3
4.3 Integrated irradiance 3

5 Validation of accuracy 3

6 Reference solar spectral irradiance 4
6.1 SMARTS model code 4
6.2 Spectral table 4
6.3 Columns in each table 4

7 Subordinate solar spectral irradiance 5

Annex A (informative)SMARTSconfigurationofreferencespectra 6

Annex B (informative) Plots of reference solar irradiance 8

Annex C (informative)SMARTSconfigurationofsubordinatespectra 9

Bibliography 11