

Summary: Appendices on the CD-ROM

This book entitled “Daylight in Buildings: A Source Book on Daylighting Systems and Components” is duplicated in entirety within the directory “Source Book” on the CD-ROM attached to the back of this book.

Additional appendices that supplement this book, but could not be included in the printed version of this book, are included in additional folders on the CD-ROM. This additional content includes the following reports which are explained in brief below:

- 8.3. Optical Characteristics of Daylighting Materials (Complete)
Performance Data

- 8.5. Monitoring Procedures for the Assessment of Daylighting Performance of Buildings (Complete)
Scale Model Daylighting Systems Evaluation
Scale Model Validation Data

- 8.7. Survey of Architectural Daylight Solutions

- 8.8. Applications Guide for Daylight Responsive Lighting Control Systems Summary

- 8.9. Results of Subtask C: Daylighting Design Tools
Survey: Simple Design Tools
Daylight Simulation: Methods, Algorithms, and Resources
ADELINE 3.0 Software Description
LESO DIAL Software description

- 8.10. Daylight in Building: 15 Case Studies from Around the World Summary
Example Case Study: Bayer Nordic Headquarters, Lyngby, Denmark
Daylighting Monitoring Protocols and Procedures for Building

8.3. Optical Characteristics of Daylighting Materials

The directory “8.3 Report” contains a more complete explanatory version of the source book’s Appendix 8.3 on the optical characteristics of daylighting materials. Three-dimensional graphical depictions of the bi-directional properties of these optically-complex materials are also included.

The directory “8.3 Performance Data” contains raw and graphed optical data for various daylighting materials. The format of these data are explained in Appendix 8.3 of the source book and in the more complete report above.

8.5. Monitoring Procedures

Within the directory “8.5 Monitoring Procedures”, the file “8.5.1 Monitoring Procedures” contains a more complete version of the source book’s Appendix 8.5, which explains the procedures used to evaluate daylighting systems in full-scale test rooms and buildings.

The file “8.5.2 Scale Model Evaluation” explains the protocols for evaluating daylighting systems using scale models under an artificial sky. An example of these measurements is given in the file “8.5.3 Scale Model Validation Data”.

8.7. Survey of Architectural Daylight Solutions

This survey presents and reviews daylighting strategies of 25 commercial and institutional buildings located around the world in a variety of climates. Each two-page survey, rich with drawings and photographs, is linked from the introduction page, allowing the reader to easily navigate throughout the document. This survey is included in completion on the CD-ROM.

8.8. Application Guide for Daylight Responsive Lighting Control Systems

This summary explains the content and intent of the IEA Task 21 Subtask B product entitled: Application Guide for Daylight Responsive Lighting Control Systems. The application guide consists of two parts. The first part addresses general design considerations involving electric lighting and shading controls, installation procedures, and the prediction of energy savings and costs. The second part consists of the monitoring procedures used and the results of performance evaluations of lighting controls installed in test rooms. Information on how to obtain a copy of this book can be found on the IEA SHC Web site: <http://www.iea-shc.org/task21/>.

8.9. Daylighting Design Tools

This directory contains many of the final reports of the IEA Task 21 Subtask C. The objective of Subtask C: Daylighting Design Tools is to improve the capability, accuracy, and ease-of-use of daylighting design and analysis tools for building design practitioners covering all phases of the design process. The practitioners will be able to predict the performance of different daylighting systems and control strategies and to evaluate the impact of the integration of daylighting in the overall building energy concept by using these design tools. The following reports are included:

- 8.9.1 Results of Subtask C: Daylighting Design Tools
- 8.9.2 Survey: Simple Design Tools
- 8.9.3 Daylight Simulation: Methods, Algorithms, and Resources
- 8.9.4 ADELIN 3.0 Software Description
- 8.9.5 LESO DIAL Software Description

8.10. Monitored Case Studies

This directory contains a summary of the main IEA Task 21 Subtask D product: a book entitled *Daylight in Building: 15 Case Studies from Around the World*. Information on how to obtain a copy of this book can be found on the IEA SHC Web site: <http://www.iea-shc.org/task21/>.

While the “Survey of Architectural Solutions” given in Appendix 8.7 describes daylighting strategies, 14 selected case study buildings and one design case study have been monitored and evaluated in detail in this book. An example of a case study is included on the CD-ROM: “8.10.2 Example Case Study: Bayer Nordic Headquarters, Lyngby, Denmark”.

The monitoring campaign in all 14 buildings was based on common monitoring procedures. These procedures are described in the report: “8.10.3 Daylighting Monitoring Protocols and Procedures for Buildings” which is also included on the CD-ROM. In five buildings, post occupancy evaluations have also been performed.