1. Record Nr. UNINA9910794231803321 Autore **Dunning Scott** Titolo Efficient lighting applications and case studies // Scott C. Dunning, Albert Thumann Pubbl/distr/stampa London:,: Routledge, Taylor & Francis Group,, 2020 **ISBN** 1-00-315174-4 87-7022-305-X 1-003-15174-4 1-000-35593-4 Edizione [First edition.] Descrizione fisica 1 online resource (290 pages) Disciplina 621.320286 Soggetti Commercial buildings - Lighting Electric lighting - Energy conservation Electric power - Conservation COMPUTERS / Networking / General TECHNOLOGY / Electricity TECHNOLOGY / Electronics / Circuits / General Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "River Publishers" Nota di contenuto Cover -- Half Title -- Title Page -- Copyright Page -- Table of Contents -- Acknowledgements -- Section I: Lighting Systems Design -- Chapter 1 How to Design a Lighting System -- Chapter 2 Selection Criteria for Lighting Energy Management -- Chapter 3 Practical Selection of Fluorescent Lamps with Emphasis on Efficiency and Color -- Chapter 4 Ideal Task Lighting -- Chapter 5 Efficient and Effective Lighting Design -- Section II: Lighting Control Considerations --Chapter 6 Review of Lighting Control Equipment and Applications --Chapter 7 Energy vs. Quality of Light -- Section III: Reflectors --Chapter 8 Fluorescent Reflectors: The Main Considerations -- Chapter 9 Specular Retrofit Reflectors for Fluorescent Troffers -- Section IV Ballast Selection -- Chapter 10 Matching Fluorescent Lamps and Solid

State Ballasts to Maximize Energy Savings -- Section V Natural Daylighting -- Chapter 11 Natural Daylighting -- An Energy Analysis -- Chapter 12 Windows and Daylighting -- Section VI Wireless Lighting

Control -- Chapter 13 Wireless Lighting Controls in Parking Garages -- Chapter 14 Energy Savings with Zigbee Wireless in China -- Section VII Case Studies -- Chapter 15 Mesopic Outdoor Lighting -- Chapter 16 Assessment of the Lighting Systems for the Oil Sector Complex Building in Kuwait-Before and After Commissioning -- Chapter 17 Intelligent Lighting -- Chapter 18 New Lighting Technologies Demonstsrated at Defense Commissaries -- Chapter 19 Innovative Lighting Contest: Small Actions Add up to Big Savings in Schools -- Index.

Sommario/riassunto

With the increased concern for energy conservation in recent years, much attention has been focused on lighting energy consumption and methods for reducing it. Along with this concern for energy efficient lighting has come the realization that lighting has profound effects on worker productivity as well as important aesthetic qualities. This book presents an introduction to lighting design and energy efficiency which can be utilized while maintaining the quality of illumination. Topics include lighting energy management, selection of lamps, task lighting, lighting design, lighting control, reflectors, ballast selection, natural daylighting, wireless lighting control, and case studies.