**Provider:** a·light

**Length:** 1 Hour

**Program#:** ALI217

**Credits:** 1 LU/HSW Hour

**Program:** LED OPTICAL DESIGN

**Advantages, Opportunities and Challenges**

**HSW:** Yes

**Course Directory:** Design and Design Services, Materials & Methods, Sustainable Design

**Topic:** Lighting

**Description:** This learning unit provides a general overview of the importance of Optical Design using LED light sources. We will review the basic Principles of Optics, LED technologies, Optics for LEDs and the successful integration into luminaire designs. The focus of this presentation is towards interior applications, but many of the principles and concepts carry over to exterior luminaire designs.

**Learning Objectives:** After completion of this course participants will be able to:

1. Understand the basic elements of optical design for lighting.
2. Discuss the differences between the LED package types and understand the technology behind these light sources.
3. Understand the requirements and challenges of designing the optics for LED applications.
4. Understand how these optics are best integrated into high-performance luminaires designs, as well as, visualizing best practices of fixture application.

**Facilitator Qualifications:** a·light’s CES facilitators have been trained on CES guidelines and presentation skills. They have each been in the design field for numerous years and considered industry experts.

**Jason Buckner,** IIDA. Executive sales manager and South Central Regional Sales Manager for a·light. Jason is responsible for a·light sales and managing the RSM sales team as well as continuing to run the south central territory. Jason is based out of Dallas, TX and will continue to manage based out of this territory. With an interior architectural background and degree from Kansas State University, with an emphasis on lighting design, Jason has been in the industry for over 16 years.

**Brent Andrews,** LC. Southeast Regional Sales Manager for a·light. Brent has extensive experience in the architectural lighting industry and the energy retrofit market. Brent brings over 25 years of experience in the lighting industry and a proven track record of success. As a Lighting Certified professional (NCQLP), Brent will be invaluable in offering our customers the best quality service possible.

**Tim Bray,** Pacific Northwest Regional Sales Manager for a·light. Tim has extensive experience in the architectural lighting industry, from the agency side of the business. After graduating from the University of Colorado, Tim went to work as a factory direct agent in the Seattle area. With over eight years of specification sales experience and a proven track record of success, we are thrilled to welcome Tim as our Northwest Regional Sales Manager.

**Marc Pfeiffer,** MIES. Northeast Regional Sales Manager for a·light. Marc has a wealth of experience spanning over 30 years. Marc has held roles within distribution, lighting agencies, as well as manufacturers. Marc has been lighting certified, NCQLP since 2000 and is an active member of the IES.

**Nydia Bonilla,** New York Territory Sales Manager for a·light. With experience spanning almost 20 years, Nydia brings an extensive background in sales and lighting design having previously worked with Vibia Inc. as a Regional Sales Manager and Delta Lighting Solutions as a Senior Designer.

**Ryan Radke,** Northcentral Regional Sales Manager for a·light. A graduate from Hofstra University, Ryan brings an extensive background to a·light having previously worked with both Waldmann Lighting and Contech Lighting. With experience spanning back 5 years, Ryan has worked in many fields in the lighting industry, ranging from tech support / quotations, product development and regional sales.

**How taught:** The CES facilitator utilizes a PowerPoint slide presentation to provide an in-depth overview of LED lighting. It will be an interactive session encouraging feedback and questions. The program ends with a review of several key points and a 10-question informal test will be conducted to help reinforce learning objectives as well as take-home review handouts.

**Cost:** There is no cost to bring this program into your firm or chapter meeting.

**A/V Needs:** Electrical power and screen for the PowerPoint slide presentation. Please coordinate projector if needed. The CES presenter will provide a laptop.

**Target Audience:** Architects, interior designers, lighting designers, electrical engineers, design/build contractors, and other design professionals. The ideal audience size is between 10-40 people. This program is basic and meets the needs of professionals at every experience level.

For more information contact your POC, Roxanna Eke at 760-727-7675 ext 132 or reke@alights.com

www.alights.com