



CEU 2020 AIA Course Number: 2020.1

Science + LED Lighting

Learning Unit 1 AIA LU

LED light sources continue to evolve and are providing unique platforms for use in creating indoor environments that promote health and well-being. With the expanding disruption of the human circadian cycle through the continued introduction of solid state technologies, we will present system options for addressing these issues in a commercial lighting environment. In addition we will review the scientific means to address bacterial contamination on interior surfaces through antimicrobial light solutions and provide an understanding of how this technology works. In the end, participants will gain an understanding of how integrating these technologies into architectural lighting solutions can deliver healthy indoor environments without negatively impacting the aesthetics of the space.

Learning Objectives:

- 1) Understand recent advancements in the area of science and LED lighting technology, specifically as it relates to addressing human circadian rhythm and preventing the growth of bacteria, mold, mildew, fungi and yeast on interior surfaces through integrated lighting solutions.
- 2) Identify the root causes of human health problems evolving from the introduction of electric light and solid-state technologies.
- 3) Learn of differing and available LED lighting solutions specifically designed to address issues with the human circadian cycle. Appreciate the challenges in addressing potential health issues related to surface bacterial contamination in commercial applications.
- 4) Understand the science behind antimicrobial lighting and how and where to apply it.

Who Should Attend:

Architects, Interior Designers, Lighting Designers, Engineers, Design-Build Contractors, End-Users, Owners Representatives, Facilities Managers, Operations Managers

