



Science & Technology News Release



Sunlite contributes custom lighting ‘*Constellation*’ solution to Kansas college building

December 11, 2012

The University of Kansas' Studio 804 design team utilized LED-based luminaires to achieve the high-end ‘*Constellation*’ in an energy-efficient project on the campus of Johnson County Community College.

KANSAS CITY, KS, USA – Sunlite Science & Technology announces that LED modules and fiber optic cable were utilized to create the custom lighting piece for Studio 804, Inc.’s Galileo Pavilion on the Kansas Johnson County Community College (JCCC) campus.

Studio 804, Inc. is a not-for-profit corporation committed to the continued research and development of sustainable, affordable, and inventive building solutions. The organization is a comprehensive learning opportunity for graduate students at the University of Kansas School of Architecture, Design and Planning by sending students through the experience of design/build.

2012’s project: The Galileo Pavilion houses two classrooms, a student lounge and serves as a teaching tool to any passerby who wanders in. Beyond the unique lighting system, the building includes three green walls, a wind turbine, and forty four photovoltaic panels that illustrate the commitment by the junior college to sustainable buildings and design.

But returning to the custom LED statement piece of this project, Sunlite was able to adapt its LED to Fiber Optic coupling techniques, from previously designing

boroscopes, to achieve over 50% coupling efficiency for the Studio 804 desired design – one of the highest coupling efficiencies for LED to Fiber currently on the market.

The custom light in the main student lounge houses 64 high powered LED modules and the two vestibule each house panels containing 12. Each LED module has an efficacy reaching 70 lm/W. And all 88 modules when coupled with the fibers provide 5,280 Lumens with a 50,000 hour warranty.

“The entire building was designed to take advantage of sun throughout the day, however once the sun set the custom light fixtures created a representation of the starry night sky. Using Leo Villareal’s Microcosm at the Nerman as precedent, the light fixture, Constellation, will not only represent the starry night sky but continue the same characteristics of pin point lights into the project,” said Thomas Nguyen, Architect Intern at Beck Group in Dallas, TX, University of Kansas Studio 804 graduate. “I approached Jeff Chen [Sunlite Science & Technology Vice President of Technology] and proposed my idea and design to him and he was more than willing to help Studio 804 with the custom light fixture. [...] Without Jeff’s and Sunlite’s help, this project would have never come to fruition.”

Contact: [Kirsten Oschwald](#), Sunlite Science & Technology, 785.856.0219