

Brian Smith
Lighting/Electrical Option
University of California, San Diego Cal (IT)²
Advisor: Dr. Moeck
05 October 2005

Executive Summary

This existing lighting conditions report is an analysis of the existing lighting fixtures, layout, and general illuminance maintained within the Cal (IT)² building on the University of California, San Diego campus. This report includes, but is not limited to, design criteria, lighting layouts, luminaire schedules, power density calculations, and basic renderings of each space showing the existing lighting conditions.

To analyze each space, I first obtained the luminaire information along with light loss factors, lamping, and the general layouts provided by the architect. From here, I used AGI32 software to find the horizontal illuminance values for each space to see if the values met ASHRAE/IESNA and California Title 24 standards. Based on my findings, every space met the criteria with room to spare. Power density calculations were also performed where all spaces met the strict Title 24 standards.

From this report, I learned a great deal about the CAL (IT)² building and all the individual spaces I had chosen. I have already commented on the design criteria and have a great deal of information to work with when I redesign each of the spaces.