

ACKNOWLEDGEMENTS

Throughout this whole experience, there were many people the helped me in this long process of senior thesis. Fist I would like to thank my family for their constant support and acknowledgement. Without them, I would not have been able to accomplish my five years at Penn State.

The Architectural Engineering Department has given me the tools to complete my senior thesis and has guided me through this rough process. A special thank you goes to Dr. Moeck, Dr. Mistrick, and Ed Wunderly (Burt Hill Engineering) for their helpful advice with all my questions and lighting/electrical concerns.

I would also like to thank HLB Lighting Design for supporting me through this process and providing me a wonderful project to work on. Angela Mcdonald and Lillian Rodriguez really helped me out last minute when things didn't go as planned. Another thanks goes to Heather Lion for her help with my questions throughout.

Ofcourse, I could not have gotten through this thesis without the help of my fellow classmates. Everyone helped out in their own way from their support to their guidance and distractions. A special thanks to Mark Miller, Lindsey Beane, Jenn Curley, Benjamin Noggle, Dave Maino, and Steve Puchek for their help with all my lighting and electrical questions.

Lastly, I would like to thank all my brothers and friends for being there when I wasn't doing work or in the lab. Their support was always there.