

THE UNIVERSITY OF TEXAS AT TYLER
COLLEGE OF ENGINEERING

EENG 4315 - SENIOR DESIGN II

Intelligent Lighting Control System

GRIGGS HUTAFF, *Co-Leader*
CHARLES ROBERSON, *Co-Leader*
CHAD DAWILI, *Financial Officer*
EZEQUIEL FUENTES, *Archivist*
OSCAR SURAM, *Acquisition Manager*

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Executive Summary

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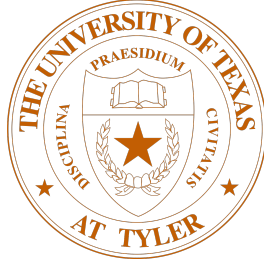


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Table 1: The First Table

1 Project Description

The goal of this project is provide a lighting system which can meet the demands and aid the progression of long-term space flight. Although we have been able to overcome the immediate dangers of short range space flight we must further develop novel solutions to the issues of long-term confinement in artificial environments. Along with water and food, sleep is among the basic necessities for long term human survival.

[?]

The Intelligent Lighting Control System is comprised of two interconnected parts, control system and lighting modules. Our control system includes the Arduino UNO R3 for I/O, 4DUINO development board for GUI, AC to DC conversion power supply, light and temperature sensors. The light modules include 3 LEDs, aluminum heat shield, Infineon RGB driver, and 3D printed housing for all parts.

2 Final Design Specifications

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3 Design Solution

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4 Prototype Design and Fabrication

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5 Testing and Validation

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6 Manufacturing Methods

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7 Broader Impacts of the Project

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8 Conclusions

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9 References

10 Appendices

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10.1 Appendix A: Test Protocols

Include written test protocols used for all testing. The protocols should be given descriptive names. The protocols should include descriptions of how the testing is to be performed and what data are to be collected, and should include sample data collection sheets.

If the "testing" is to be performed with computer simulation, test protocols must describe such things as a description of the model used in the simulation, the parameters to be varied and their ranges, and the boundary or other environmental conditions applied.

10.2 Appendix B: Test Results

Summarize, tabulate, or chart the results of all testing. Results must reference the appropriate test protocols. All test results must include the name(s) of the person(s) responsible for conducting the tests.

10.3 Appendix B: Codes, Standards, Constraints

Use the same table as included in the PDD but now cite the specific Codes and Standards that applied by name and number and state in which sections of the report they were applied. The blank table is reproduced below. An entry is required in Table C for each consideration or constraint. Justifications must be provided for any constraint that is judged to be not applicable.

10.4 Appendix (-ices) D -

Include materials that could not be included in the main body of the report without disrupting its continuity or extending its length to unreasonable limits. Do not copy manufacturers' entire datasheets to appendices.