Abstract Submitted for the DNP12 Meeting of The American Physical Society

**Data Acquisition and Calibration for MiniLENS**<sup>1</sup> MATTHEW AMRIT<sup>2</sup>, Louisiana State University, LENS COLLABORATION — The Low-Energy Neutrino Spectroscopy (LENS) Collaboration aims to precisely measure the entire energy spectrum of solar neutrinos through charged-current neutrino interactions using indium-loaded scintillator in a novel, optically-segmented detector architecture. The collaboration is currently constructing a prototype, miniLENS, that will demonstrate the performance and selectivity of the full-scale LENS instrument. Crucial to success of miniLENS is to develop a system and program of measurements to calibrate the performance of the instrument. We have performed measurements using a smaller prototype microLENS and developed a system for relative calibration of PMTs by injecting externally generated light from LEDs over fiber optic cables directly to each of the miniLENS PMTs. Here we present the design and testing of the calibration system.

 $^1{\rm This}$  work supported by the National Science Foundation.  $^2{\rm on}$  behalf of the LENS Collaboration

Matthew Amrit Louisiana State University

Date submitted: 03 Aug 2012

Electronic form version 1.4