The SuperNEMO Light Injection & Monitoring System

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SuperNEMO is the successor of the NEMO-3 experiment and will search for the hypothetical process of $0\nu\beta\beta$ by combining tracking and calorimetric measurements. The SuperNEMO calorimeter consists of 712 optical modules made of scintillator blocks directly coupled to photomultiplier tubes. $^{207}$Bi sources will be used to calibrate the energy scale of the calorimeter in dedicated calibration runs separated by a few weeks. In between these runs, a Light Injection (LI) system will guarantee the stability of the calorimetric response to 1%. The LI system injects pulsed LED light into each scintillator block via optical fibers. A reference optical module is used to monitor the light level against a $^{241}\text{Am}$ source. This poster will describe in detail the LI system and its performance.

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