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Phototube Testing for the MiniBooNE Experiment LAURA GLADSTONE, Columbia Univ., STEVE BRICE, FNAL, LEN BUGEL, JANET CONRAD, Columbia Univ., BONNIE FLEMING, Yale Univ., ERIC HAWKER, Western Illinois Univ., Macomb, PHILLIP KILLEWALD, Univ. of Michigan, JUSTIN MAY, SLAC, SHAWN MCKENNEY, LNAL, PAUL NIENABER, St. Mary's Univ. of Minnesota, Winona, RYAN PATTERSON, Princeton Univ., BYRON ROE, Univ. of Michigan, VERN SANDBERG, LNAL, DARREL SMITH, Embry Riddle Aeronautical Univ., MATT WYSOCKI, Univ. of Michigan, MINIBOONE COLLABORATION — The MiniBooNE experiment at FNAL is a neutrino $\nu_\mu \rightarrow \nu_e$ oscillation search whose detector is a 12 m spherical oil tank lined with 1520 8 inch photomultiplier tubes, Hamamatsu models R1408 and R5912, with custom–designed bases. Tests were performed on all the phototubes to determine the dark rate, charge and timing resolutions of the response, double–pulsing rate, and desired operating voltage for each tube, so that they could be sorted for optimal use in the detector. Eight additional phototubes were tested to find the angular dependance of their response, and these results for the R1408 and R5912 phototubes were fit to 5– and 6–degree polynomials, respectively. This test was performed again at various voltages. These fits were incorporated into the MiniBooNE Monte Carlo. After the Super–K phototube implosion accident, an analysis was performed to determine the risk of a similar accident with MiniBooNE, and the risk was found to be negligible.
*MiniBooNE is an experiment at Fermi National Accelerator Laboratory

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