

Abstract Submitted
for the NWS12 Meeting of
The American Physical Society

NO ν A Far Detector Module Fiber QA Test Analyses AMANDA BOWERS, Linfield College, NOVA COLLABORATION¹ — In an effort to better understand the fiber-optic technology used to read out information regarding neutrino interactions in the NO ν A far detector, various tests are performed at multiple stages of the detector module production. These fiber tests are used to check for and find sources of damaged fibers that may yield faulty readings. Analyses were performed specifically on the Stringing Fiber Test, closed fiber test, and visual inspection test both with and without a card. Cross-analyses were also performed to consolidate the data from these various tests and draw conclusions regarding the location and source of damaged fiber. The goal is to minimize the number of future tests that need be performed on a module while maintaining a high confidence level in the acceptance and rejection of modules to be installed at the detector site.

¹NUMI Off-Axis Electron Neutrino Appearance at the University of Minnesota

Amanda Bowers
Linfield College

Date submitted: 17 Sep 2012

Electronic form version 1.4