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Measurements of the relative transmission properties of optical fiber for use on Proto-MPEX¹ T.M. BIEWER, Oak Ridge National Laboratory, Oak Ridge, TN, USA, K. COLLINS, Monroe County High School, Tompkinsville, KY, USA, B. JOHNSON, Wilkes Central High School, Wilkes County, NC, USA, A. LANCASTER, Allegany High School, Cumberland, MD, USA, R. MOSBY, Oak Ridge High School, Oak Ridge, TN, USA, H. RAY, G. SHAW, Oak Ridge National Laboratory, Oak Ridge, TN, USA, B. YOUNG, Clay County High School, Clay, WV, USA — The prototype Material Plasma Exposure eXperiment (Proto-MPEX) is a linear plasma device being developed at Oak Ridge National Laboratory (ORNL). This machine plans to study plasma-material interaction (PMI) physics relevant to future fusion reactors. Measurements of plasma emission will be made on Proto-MPEX using spectrometers and filterscopes, which are coupled to the plasma by fiberoptic cables. The transmission properties of these fiberoptics are critical to the accurate estimation of the plasma emission levels. This presentation will highlight some of the issues encountered during calibration of hardware for use on Proto-MPEX.

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