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Detection of Čerenkov Light with Wavelength Shifting Plastic – A Beam Test[1] BRIAN BECKFORD, NAIPY PEREZ, JOERG REINHOLD, Florida International University — The collection efficiency for Čerenkov light incident on a wavelength shifting plate has been determined during a beam test at the proton synchrotron at KEK. An efficiency of roughly 50% has been determined for photons created in a fused silica radiator in front of an acrylic plate that contained a wavelength shifting fluorescent substance. The experimental procedure and the results will be presented together with possible applications for Čerenkov detectors.

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