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Angle-dependent transport behavior near the magnetic-field tuned superconductor-insulator transition MIN-SOO KIM, TAI-LUNG WU, Department of Physics, University at Buffalo-SUNY, L.W. ENGEL, National High Magnetic Field Laboratory, G. SAMBANDAMURTHY, Department of Physics, University at Buffalo-SUNY — Thin films of superconducting, amorphous indium oxide were driven insulating by the application of magnetic field and their transport behavior at different magnetic field values are studied. Well below the critical field of the transition, the current-voltage characteristics follow a power law $V \propto I^p$, where p depends on the magnetic field. The dependence of the power p on magnetic field and the angle between the sample plane and the magnetic field direction will be presented. In particular, we find two distinct magnetic field values, well above the critical field, where the sample resistance is independent of the angle. Implications of these results in improving our current understanding of the transition will be presented.

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