

Abstract Submitted
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A Study of the Anode Heel Effect at Beam Energies of 75kV and 140kV JACOB GOOSLIN, IGNACIO BIRRIEL, Morehead State University — The *anode heel effect* refers to a decrease of the intensity of an x-ray beam from the cathode side to the anode side. This variation is measured along the longitudinal axis of the x-ray tube and is a result of the geometry of the anode head. This experiment, conducted at the Tri-State Regional Cancer Center in Ashland, KY, used a quality assurance, detector array called an ArcCHECK. The array is a cylindrical imaging phantom containing 1386 n-type silicon diodes arranged in a helix over the apparatus. Using ArcCHECK, beam profiles and dose distribution plots for x-ray beam energies of 75kV and 140kV were produced. This talk will focus on the plots and the noticeable effects at both 75kV and 140kV.

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