

AbstractID: 14223 Title: Determining Focal Spot Performance in Mammography Using Self Developing Film

Purpose: The lack of mammography cassettes, film and wet chemistry processing in the ever more common fully digital imaging facilities makes it necessary to facilitate the determination of High Contrast Limit of Resolution focal spot performance with a new system. **Methods and Materials:** Due to the relative insensitivity of commercially available self developing film, it was necessary to have constructed a 5- 20 lp/mm phantom in a support essentially radiolucent at beam energies available in mammography. It was then necessary to assure that the commercially available self developing film did not limit the measured resolution. **Results:** It was determined that this system is easily capable of resolutions through 20 lp/mm and the evaluation of High Contrast Limit of Resolution in a clinical environment without wet chemistry processing is thereby simplified. **Conclusions:** This is a viable process for High Contrast Limit of Resolution which is currently required for ACR accreditation stereotactic and useful in other aspects of mammography system performance. The results are immediately available and easily assessed in a clinical environment. **Statement of Conflict:** At no charge to the authors, the final version of the High Contrast Limit of Resolution was provided for evaluation by the manufacturer and the manufacturer of the self developing film provided for testing film rejected by their QC.