

## SURVEY RESULTS FOR MAMMOGRAPHIC SYSTEMS

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Performance measurements of 30 mammographic systems from 8 different manufacturers were carried out using the protocols suggested by different organizations in order to see the current level of image quality and breast doses.

X-ray output, reproducibility of exposure, accuracy of kilo voltage calibration and half value layer were tested for all the systems. Beam collimation for different cassette sizes and automatic exposure control calibration were also checked and average glandular doses were calculated from the phantom exposures. Film Sensitometry tests for some installations were carried out in order to see the variations of film characteristics and film processing conditions. The adequacies of film/screen combinations were also investigated.

The half of the systems tested in this survey indicated automatic exposure control and beam collimation problems. Film processing and dark room conditions were not optimum for the majority of the installations.

Image quality phantoms were exposed by the user and team of the survey at each visited center. Lower breast doses were obtained at equal image qualities for the radiographs of the team indicating the importance of adequate handling of some exposure parameters.

Corrective actions were suggested to each installations and necessary guidance were advised for the implementation of routine quality control activities.

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