

Darkroom Fog Tests with Kodak MIN-R 2000, Seeing Through the Fog

Conversion to Kodak MIN-R 2000 film, a high-contrast film, requires a routine evaluation concerning its effect on processor QC and clinical techniques. This evaluation should be expanded to include a check of the darkroom fog. At a site, which converted in October, the darkroom had passed the ACR recommendations with MIN-R E in September, but failed the MQSA inspection fog test in November with the MIN-R 2000. No changes had been made to the darkroom so one may be inclined to attribute this to the higher contrast inherent in the MIN-R 2000 film. However, further investigation was initiated to evaluate the test method. To ascertain appropriateness of the method, routine phantom films were obtained and scanned for uniformity in the direction perpendicular to the cathode-anode axis at three different locations on each film. Tests were also conducted rotating the phantom 90 degrees and 180 degrees. Films were evaluated using a standard densitometer as well as a scanning densitometer. A total of six sites, three different film/screen combinations, six ACR phantoms and an acrylic phantom were evaluated for uniformity and corresponding fog tests were performed.

As sites switch film, the checklist of items to be evaluated needs to include the darkroom fog check. Sites may need to modify angulation of lights, reduce bulb wattage or perform more detailed light leak checks when use of MIN-R 2000 film is initiated.