

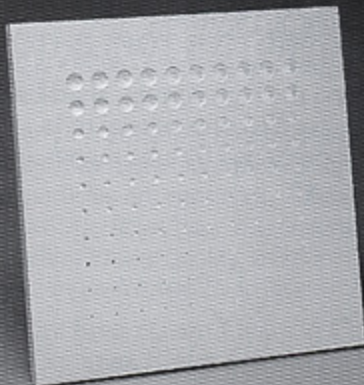
RADIOGRAPHIC CONTRAST/DETAIL PHANTOM

RMI 1151

A useful method of assessing the overall image quality of a fluoroscopy system is by defining its ability to detect small objects with small differences in contrast from the background. The Radiographic Contrast/Detail Phantom RMI 1151 allows the user to determine the threshold contrast of a fluoroscopic system and then monitor it on a routine basis.

The RMI 1151 is constructed of an aluminum plate with a 10 by 10 matrix of holes that vary in diameter and in depth. For a specific hole diameter, the depth of the hole which can just be visualized is defined as the threshold contrast for that diameter. A contrast detail curve of the fluoroscopic system can be established by plotting the diameter of the hole vs. the depth of the hole that is visualized.

Ideally, threshold contrast detection is determined only by the radiation exposure level used; in practice image quality is degraded by physical mechanisms, such as extraneous noise, scatter radiation, unsharpness or blur and final presentation on the monitor or film. As with clinical diagnosis, visual subjectivity of the human observer is integrated in the interpretation of the RMI 1151.



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Construction	6061 Aluminum
Hole Depth 0.13 to 2.29 mm (0.005 to 0.09 in.)
Hole Diameter..... 0.58 to 7.93 mm (0.023 to 0.312 in.)
Size	17.8x17.8x13 mm (7x7x0.512 in.)
Weight	2.2 kg (4.8 lbs.)