

Image quality in diagnostic radiology

Digital imaging systems for plain radiography

Springer; 2013. p. 63-77. DOI: 10.1007/978-1-4614-5067-2_6

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Abstract

This chapter provides a theoretical background about image quality in diagnostic radiology. Digital image representation and also image quality evaluation methods are here discussed. An overview of methods for quality evaluation of diagnostic imaging procedures is provided. Digital image representation and primary physical image quality parameters are also discussed, including objective image quality measurements and observer performance methods.

Keywords: Image quality; Diagnostic radiology; Image representation; Evaluation methods; Imaging procedures; Primary physical image; Quality parameters; Objective image quality; Observer performance methods.