IEC 62709

Edition 1.0 2014-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Radiation protection instrumentation – Security screening of humans – Measuring the imaging performance of X-ray systems

Instrumentation pour la radioprotection – Contrôle de sécurité des individus – Mesure des performances de l'imagerie des systèmes radiographiques aux rayons X

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International Standard IEC 62709 has been prepared by subcommittee 45B: Radiation protection instrumentation, of IEC technical committee 45: Nuclear instrumentation.

The text of this standard is based on the following documents:

FDIS	Report on voting
45B/780/FDIS	45B/786/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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- amended.

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INTRODUCTION

This standard establishes standard test methods and test objects for measuring the imaging performance of X-ray systems for security screening of humans. For each image quality test, this standard also sets minimum acceptable levels of performance. These procedures and minimum acceptable requirements should not be construed as an all-inclusive measure of performance for any situation. Depending on the circumstances and detection needs, user institutions will continue to generate their own requirements and are encouraged to do so. Rather, it is hoped that this standard will provide a starting point for evaluating systems, provide a uniform set of readily available information to compare equipment, and offer a standard procedure for periodic quality control testing.

Four annexes are included. Annex A (normative) provides mechanical drawings of the imaging test objects. Sample test report forms are given in Annex B (informative). Annex C (informative) provides a generic description of the pentalith, the spatial resolution test object. Annex D (informative) seeks to describe the different types of security systems presently being used for whole-body imaging.