

JAPANESE INDUSTRIAL STANDARD

Translated and Published by Japanese Standards Association

JIS Z 4752-2-10:2005

(JSRT/JSA)

Evaluation and routine testing in medical imaging departments—
Part 2-10: Constancy tests—
X-ray equipment for mammography

ICS 11.040.50

Reference number : JIS Z 4752-2-10 : 2005 (E)

Z 4752-2-10: 2005

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Health, Labour and Welfare and the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from Japanese Society of Radiological Technology (JSRT)/Japanese Standards Association (JSA), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This Standard has been made based on IEC 61223-2-10: 1999 Evaluation and routine testing in medical imaging departments—Part 2-10: Constancy tests—X-ray equipment for mammography for the purposes of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

Date of Establishment: 2005-03-25

Date of Public Notice in Official Gazette: 2005-03-25

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Medical Equipment

JIS Z 4752-2-10 : 2005, First English edition published in 2005-08

Translated and published by: Japanese Standards Association 4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents, the original JIS is to be the final authority.

© JSA 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

Page

Contents

Intro	duction	. 1
1	Scope and object	
1.1	Scope	
1.2	Object	. 2
2	Normative references.	. 2
3	Terminology	. 3
3.1	Degree of requirements	. 3
3.2	Use of terms	4
3.3	Definitions	4
4	General aspects of constancy tests	. 4
4.1	General conditions affecting test procedures	4
4.2	Establishment of baseline values	5
4.3	Frequency of constancy tests	5
4.4	Identification of equipment, instrumentation and test conditions	5
5	Performance tests	. 7
5.1	X-ray equipment—Imaging performance	. 7
5.2	Radiation beam—Geometric characteristics	11
5.3	Compression device	12
5.4	Mammographic cassettes and intensifying screens	13
5.5	Mammographic film	L7
6	Statement of compliance	۱7
Anne	x A (normative) Terminology — Index of defined terms	22
Anne	x B (informative) Example of a form for the standardized test report	25
Anne	x C (informative) Guidance on action to be taken	27
Anne	x D (informative) Rationale	29
Anne	x E (informative) Bibliography	32
Anne	x F (normative) Phantoms and test devices	33
Anne	x 1 (informative) Comparison table between JIS and corresponding International Standard	35

JIS Z 4752-2-10: 2005

Evaluation and routine testing in medical imaging departments—Part 2-10: Constancy tests— X-ray equipment for mammography

Introduction This Japanese Industrial Standard has been prepared based on the first edition of IEC 61223-2-10 Evaluation and routine testing in medical imaging departments—Part 2-10: Constancy tests—X-ray equipment for mammography published in 1999 with some modifications of the technical contents. In addition, for the subclauses with marks (*) on the left shoulder of their own in this Standard, these supplements are described in annex D (informative).

The portions underlined with dots are the matters not stated in the original International Standard.

1 Scope and object

- 1.1 Scope This part of JIS Z 4752 applies to those components of X-ray equipment which
- generate, influence the propagation of and detect X-radiation;
- process, record and present radiographic information in radiological installations with mammographic X-ray equipment using intensifying screens with radiographic film.

Special accessories of mammographic X-ray equipment such as biopsy plates and stereotactic devices are not within the scope of this Standard.

This Standard is a part of a series of Particular Publications (international standards and technical reports) which define methods of testing the constancy of operation of various subsystems of diagnostic X-ray equipment.

This Standard gives methods of tests for the constancy of properties of diagnostic X-ray equipment as described in JIS Z 4752-1 (see clause 2).

This part of JIS Z 4752 is designed to be applicable to X-ray equipment for mammography without digital imaging devices.

Remarks: The International Standard corresponding to this Standard is as follows.

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and JIS are IDT (identical), MOD (modified), and NEQ (not equivalent) according to ISO/IEC Guide 21.