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Standards

Irish Standard
I.S. EN IEC 63073-1:2020

Dedicated radionuclide imaging devices - Characteristics and test conditions - Part 1: Cardiac SPECT

I.S. EN IEC 63073-1:2020

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National Foreword

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EUROPEAN STANDARD

EN IEC 63073-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2020

ICS 11.040.50

English Version

**Dedicated radionuclide imaging devices - Characteristics and
test conditions - Part 1: Cardiac SPECT
(IEC 63073-1:2020)**

Dispositifs d'imagerie par radionucléides dédiés -
Caractéristiques et conditions d'essai - Partie 1: SPECT
pour scintigraphie cardiaque
(IEC 63073-1:2020)

Spezielle Radionuklid-Bildgebungsgeräte - Merkmale und
Prüfbedingungen - Teil 1: Kardiale SPECT
(IEC 63073-1:2020)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 63073-1:2020 (E)

European foreword

The text of document 62C/740/CDV, future edition 1 of IEC 63073-1, prepared by SC 62C "Equipment for radiotherapy, nuclear medicine and radiation dosimetry" of IEC/TC 62 "Electrical equipment in medical practice" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63073-1:2020.

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Annex ZA

(normative)

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NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61675-2	2015	Radionuclide imaging devices - Characteristics and test conditions - Part 2: Gamma cameras for planar, wholebody, and SPECT imaging	EN 61675-2	2015

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IEC 63073-1

Edition 1.0 2020-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Dedicated radionuclide imaging devices – Characteristics and test conditions –
Part 1: Cardiac SPECT**

**Dispositifs d'imagerie par radionucléides dédiés – Caractéristiques et
conditions d'essai –
Partie 1: SPECT pour scintigraphie cardiaque**



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IEC 63073-1

Edition 1.0 2020-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Dedicated radionuclide imaging devices – Characteristics and test conditions – Part 1: Cardiac SPECT

Dispositifs d'imagerie par radionucléides dédiés – Caractéristiques et conditions d'essai – Partie 1: SPECT pour scintigraphie cardiaque

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CONTENTS

CONTENTS	2
FOREWORD	3
INTRODUCTION	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Test methods	7
4.1 General	7
4.2 Detector characteristics	8
4.2.1 General	8
4.2.2 Energy resolution and LOW-ENERGY-TAIL RATIO measurement	8
4.2.3 Shield leakage	9
4.2.4 COUNT RATE performance	10
4.2.5 System sensitivity	12
4.2.6 Non-uniformity for each CARDIAC DETECTOR HEAD	14
4.2.7 SCATTER FRACTION	14
4.3 Characteristics of tomographic images	16
4.3.1 CENTRE OF ROTATION (COR)	16
4.3.2 REFERENCE POINT localization in the reconstructed FOV	16
4.3.3 Accuracy of tomographic system sensitivity modelling	17
4.3.4 Tomographic SPATIAL NON-LINEARITY	19
4.3.5 Tomographic SPATIAL RESOLUTION	21
4.3.6 Image quality assessment using a heart phantom	23
5 Additional testing	26
6 ACCOMPANYING DOCUMENTS	27
Bibliography	28
Index of defined terms	29
Figure 1 – Small shielded liquid source	10
Figure 2 – Transverse slice of phantom used for measuring COUNT RATE performance	11
Figure 3 – Evaluation of SCATTER FRACTION	15
Figure 4 – Calculation of FWHM and measurement of the location of the maximum value	17
Figure 5 – Transaxial view of the 7 LINE SOURCE Phantom	18
Figure 6 – Transaxial view of the 7 LINE SOURCE phantom centred within a 140 mm diameter water-filled cylinder	22
Figure 7 – Placement of ROIs in SHORT AXIS view of myocardium	25
Figure 8 – Placement of ROIs in LONG AXIS view of myocardium	26
Table 1 – Relative ACTIVITY concentration of compartments of the anthropomorphic phantom	24

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**DEDICATED RADIONUCLIDE IMAGING DEVICES –
CHARACTERISTICS AND TEST CONDITIONS –****Part 1: Cardiac SPECT****FOREWORD**

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

CDV	Report on voting
62C/740/CDV	62C/765/RVC

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INTRODUCTION

The test methods specified in this part of IEC 63073 have been selected to reflect as much as possible the clinical use of GAMMA CAMERAS that are dedicated to cardiac SINGLE PHOTON EMISSION COMPUTED TOMOGRAPHY (SPECT). It is intended that the test methods are carried out by manufacturers thereby enabling them to describe the characteristics of the systems on a common basis.

DEDICATED RADIONUCLIDE IMAGING DEVICES – CHARACTERISTICS AND TEST CONDITIONS –

Part 1: Cardiac SPECT

1 Scope

This document specifies terminology and test methods for describing the characteristics of SINGLE PHOTON EMISSION COMPUTED TOMOGRAPHY (SPECT) systems designed specifically for tomographic cardiac imaging. This includes dedicated systems or general purpose systems with dedicated sub-systems which are not included in the scope of IEC 61675-2.

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IEC 61675-2:2015, *Radionuclide imaging devices – Characteristics and test conditions – Part 2: Gamma cameras for planar, wholebody, and SPECT imaging*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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3.1

REFERENCE POINT

defined 3D position in the FOV of the camera, specified by the manufacturer, or, if not specified by the manufacturer, assumed to be the centre of the FOV of the camera

3.2

BAD PIXEL

detector pixel that has been physically or electronically turned off such that gamma rays which interact in that BAD PIXEL are not recorded by the camera

3.3

CARDIAC DETECTOR HEAD

assembly of detector components associated with a single COLLIMATOR

3.4

CARDIAC DETECTOR HEAD ELEMENT

smallest discrete unit of the CARDIAC DETECTOR HEAD that is able to provide distinct energy, spatial, and timing information about detected photons

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