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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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European Committee for Electrotechnical Standardization
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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INTERNATIONAL ELECTROTECHNICAL COMMISSION

DEDICATED RADIONUCLIDE IMAGING DEVICES – CHARACTERISTICS AND TEST CONDITIONS –

Part 1: Cardiac SPECT

FOREWORD

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International Standard IEC 63073-1 has been prepared by subcommittee 62C: Equipment for radiotherapy, nuclear medicine and radiation dosimetry, of IEC technical committee 62: Electrical equipment in medical practice.

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

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

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

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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.

2 Normative references

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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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- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

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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