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Semiconductor devices – Part 18-2: Semiconductor bio sensors – Evaluation process of lens-free CMOS photonic array sensor package modules

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The text of this International Standard is based on the following documents:

FDIS	Report on voting
47E/689/FDIS	47E/694/RVD

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

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

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- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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INTRODUCTION

The IEC 60747-18 series on semiconductor bio sensors is composed of the following parts:

- IEC 60747-18-1 defines the test method and data analysis for calibration of lens-free CMOS photonic array sensors
- IEC 60747-18-2 defines the evaluation process of lens-free CMOS photonic array sensor package modules
- IEC 60747-18-3 defines the fluid flow characteristics of lens-free CMOS photonic array sensor package modules with fluidic system

The IEC 60747-18 series includes subjects such as noise analysis, long-term reliability tests, test methods for lens-free CMOS photonic array sensor package modules under patchable environments, test methods under implantable environments, etc.

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KR1020150187389	[SOL]	The method of calibration of packaged photonic sensor pixel array by evaluating its characteristic	Subclause 5.2.1, 5.2.2
PCT/KR2016/006109	[SOL]	METHOD FOR CORRECTING OPTICAL SENSOR ARRAY MODULE THROUGH CHARACTERISTIC EVALUATION	Subclause 5.2.3, 5.2.4, 5.2.5
US15/577586	[SOL]		
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SEMICONDUCTOR DEVICES –

Part 18-2: Semiconductor bio sensors – Evaluation process of lens-free CMOS photonic array sensor package modules

1 Scope

This part of IEC 60747 specifies the evaluation process of lens-free CMOS photonic array sensor package modules. This document includes the measurement environment of each process, statistical analysis of test data, middle layer effect under various user light, evaluation of calibrated lens-free CMOS photonic array sensor package modules, and test report.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60747-18-1:2019, *Semiconductor devices – Part 18-1: Semiconductor bio sensors – Test method and data analysis for calibration of lens-free CMOS photonic array sensors*