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Photobiological safety of lamps and lamp systems – Part 4: Measuring methods

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PHOTOBIOLOGICAL SAFETY OF LAMPS AND LAMP SYSTEMS –

Part 4: Measuring methods

FOREWORD

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IEC TR 62471-4 has been prepared by IEC technical committee 76: Optical radiation safety and laser equipment. It is a Technical Report.

The text of this Technical Report is based on the following documents:

Draft	Report on voting
76/654/DTR	76/707/RVDTR

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

The language used for the development of this Technical Report is English.

A list of all the parts in the IEC 62471 series, under the general title *Photobiological safety of lamps and lamp systems*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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- amended.

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INTRODUCTION

Most lamps and lamp systems are safe and do not pose photobiological hazards except under unusual exposure conditions, whilst a full photobiological safety assessment requires sophisticated instrumentation and detailed analysis.

In order to provide a framework for the application of detailed measurement only where such is necessary, this document introduces two measurement approaches. Level A encompasses high accuracy, laboratory-based techniques whilst level B represents an estimation of the accessible emission using readily available instrumentation.

PHOTOBIOLOGICAL SAFETY OF LAMPS AND LAMP SYSTEMS –

Part 4: Measuring methods

1 Scope

This part of IEC 62471, which is a Technical Report, provides manufacturers, test houses, safety personnel and others with practical guidance on methods to perform radiometric and spectroradiometric measurements to determine the level of accessible optical radiation emitted by lamps and lamp systems in accordance with IEC 62471.

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 62471:2006, *Photobiological safety of lamps and lamp systems*