

# TECHNICAL REPORT

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**Three-digit code for designation of colour rendering and correlated colour temperature**

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INTERNATIONAL  
ELECTROTECHNICAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**THREE-DIGIT CODE FOR DESIGNATION OF COLOUR RENDERING  
AND CORRELATED COLOUR TEMPERATURE**

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IEC/TR 62732, which is a technical report, has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
34A/1495/DTR	34A/1530/RVC

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

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

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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- withdrawn,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

A bilingual version of this technical report may be issued at a later date.

The contents of the corrigendum of December 2012 have been included in this copy.

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## INTRODUCTION

This Technical Report addresses the well-established means of communicating in a short form approximate values of the general colour rendering index (CRI) and the correlated colour temperature (CCT).

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# THREE-DIGIT CODE FOR DESIGNATION OF COLOUR RENDERING AND CORRELATED COLOUR TEMPERATURE

## 1 Scope

This Technical Report describes how to construct a three-digit code, representing a shorthand string combining the nominal general colour rendering index and the nominal correlated colour temperature.

NOTE The code is established in industry and commerce.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61231:2010, *International lamp coding system (ILCOS)*

## 3 Construction of the code

### 3.1 General

The three-digit code  $xyy$ , with  $x$  = digit for general colour rendering index and  $yy$  = digits for the correlated colour temperature, is to be understood as described in 3.2 and 3.3.

### 3.2 Digit $x$

The general colour rendering index (CRI) nominal value of the lamp is expressed as one figure which is obtained by using the intervals:

CRI = 70 to 79 → code "7"

CRI = 80 to 89 → code "8"

CRI =  $\geq 90$  → code "9"

The highest code is 9. Values below code 7 shall be deduced by analogy.

### 3.3 Digits $yy$

Divide the nominal value of the correlated colour temperature (CCT) of the lamp by 100 and round off the resulting figure to the next integer number (see 5.3.3 of IEC 61231:2010).

The calculation method is valid for CCTs smaller than 10 000 K.

### 3.4 Example

Three-digit code 830 means:

CRI = 80 to 89, nominal CCT 3 000 K

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