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Edition 1.0 2022-10

TECHNICAL SPECIFICATION

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Household electric appliances – Specification of the properties of a digital system for measuring the performance



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CONTENTS

FOREWORD 4
INTRODUCTION 6
1 Scope 7
2 Normative references 7
3 Terms and definitions 7
4 Test setup 8
4.1 Illumination 8
4.2 Measurement environment 9
5 Determination of shade charts 9
5.1 Principals of shade creation 9
5.2 Brown shade charts 10
5.3 Green shade charts 11
6 Measurements 13
6.1 Verification of evenness 13
6.2 Lightness recognition (L* values) 14
6.2.1 Description of the test samples 14
6.2.2 Procedure 14
6.2.3 Evaluation (requirements and tolerances) 14
6.3 Colour recognition (L*, a*, b* values) 14
6.3.1 Description of the test samples 14
6.3.2 Procedure 15
6.3.3 Evaluation (requirements and tolerances) 15
6.4 Verification of the measurement area 15
6.4.1 General 15
6.4.2 Description of the test samples 15
6.4.3 Procedure 15
6.4.4 Evaluation (requirements and tolerances) 15
6.5 Verification of the resolution 15
6.6 Verification of rectilinear projection 16
6.7 Verification of the 3-dimensional shapes 16
7 Data to be recorded (raw data) 17
7.1 Purpose 17
7.2 LAB 17
7.3 HLC 17
7.4 ΔE_{00} for the test sample 17
7.5 Dimensions (in mm) 17
7.6 Specified measurement areas 17
8 Consideration of tolerances 18
8.1 General 18
8.2 Calculation of differences in colour and its components 18
8.3 Distance information 19
Annex A (normative) Colour-measuring instrument 20
Annex B (informative) Brown shade charts 22
Annex C (informative) Green shade charts 24
Annex D (informative) Evaluation program for determining the deviation in colour rendering 26

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Annex E (informative) Examples of shade chart positioning for lightness recognition 27
Bibliography 28

Figure 1 – Cone shape of colour sample 16
Figure 2 – 13 sections of the colour sample 17
Figure A.1 – Colour measuring instrument di:8° 20
Figure A.2 – Colour measuring instrument 45°:0° 21
Figure E.1 – Example with an assessment area of 100 mm × 100 mm – 1 position per row and column 27
Figure E.2 – Example with an assessment area of 150 mm × 150 mm – 2 positions per row and column 27
Figure E.3 – Example with an assessment area of 470 mm × 370 mm – 4 positions per row and column 27

Table 1 – Brown shade charts with class limits 11
Table 2 – Green shade charts 12
Table 3 – Maximum CIELAB hue angle distance inside different ΔE^*_{ab} ranges 19
Table B.1 – CIELAB Values for the brown shade charts 22
Table C.1 – CIELAB Values for the green shade charts 24

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HOUSEHOLD ELECTRIC APPLIANCES –

Specification of the properties of a digital system for measuring the performance

FOREWORD

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IEC 63350 has been prepared by subcommittee SC 59K: Performance of household and similar electrical cooking appliances, of IEC technical committee TC 59: Performance of household and similar electrical appliances. It is a Technical Specification.

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

Draft	Report on voting
59K/350/DTS	59K/356/RVDTS

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 Specification is English.

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In this document, the following print types are used:

- terms defined in Clause 3: **bold type**.

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 https://www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at https://www.iec.ch/standardsdev/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

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

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INTRODUCTION

IEC subcommittee 59K has agreed to make a collection of existing and future requirements on a **digital system** used in testing the performance of appliances under the scope of SC 59K, cooking appliances.

This document bundles the generic requirements given in IEC 60350-1 and IEC 60350-2 that are updated, aligned, and supplemented by further requirements. The reference colour system is changed from a proprietary colour system to the standardized and widely used CIELAB-based reference colour system.

The intention with this publication is to ensure that using a **digital system**, which complies with the stated requirements and described methods, leads to reproducible results.

Currently, this document focuses on test methods described in IEC 60350-1 and IEC 60350-2 but further applications based on visually detectable performance criteria might be supplemented.

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HOUSEHOLD ELECTRIC APPLIANCES –

Specification of the properties of a digital system for measuring the performance

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1 Scope

This document specifies generic requirements for creating a **digital system** that is used for measuring the characteristics of visually detectable performance, such as browning intensity and lightness.

It defines the metrological requirements of this **digital system** and demonstrates the procedures for compliance. The **digital system** contains the measuring instrument, the software, and the reference materials necessary to realize the measurement process.

References to this document can be made by a customer when specifying the **digital system** and by the suppliers when specifying products offered.

Interested parties can agree to use this document as an input for satisfying measurement management system requirements in any activities.

NOTE 1 The principles of ISO 10012 are followed to ensure the capability of the systems.

NOTE 2 Possible suppliers for the recommended **digital system** can be found in the supplementary file located at: https://www.iec.ch/sc59k/supportingdocuments

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.

CIE 15, *Colorimetry*

ISO 12647-7, *Graphic technology – Process control for the production of half-tone colour separations, proof and production prints – Part 7: Proofing processes working directly from digital data*

ISO 15076-1, *Image technology colour management – Architecture, profile format and data structure – Part 1: Based on ICC.1:2010*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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