

INTERNATIONAL STANDARD

COMMENTED VERSION

**Household and similar electrical appliances - Safety -
Part 2-113: Particular requirements for beauty care appliances incorporating
lasers and intense light sources**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Household and similar electrical appliances - Safety -
Part 2-113: Particular requirements for beauty care appliances incorporating
lasers and intense light sources**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <https://patents.iec.ch> shall not be held responsible for identifying any or all such patent rights.

This commented version (CMV) of the official standard IEC 60335-2-113:2025 edition 2.0 allows the user to identify the changes made to the previous IEC 60335-2-113:2016+AMD1:2021 CSV edition 1.1. Furthermore, comments from IEC TC 61 experts are provided to explain the reasons of the most relevant changes, or to clarify any part of the content.

A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text. Experts' comments are identified by a blue-background number. Mouse over a number to display a pop-up note with the comment.

This publication contains the CMV and the official standard. The full list of comments is available at the end of the CMV.

IEC 60335-2-113 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances. It is an International Standard.

This second edition cancels and replaces the first edition published in 2016 and Amendment 1:2021. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) alignment with IEC 60335-1:2020;
- b) deletion or conversion of some notes to normative text (Clause 1, 3.8.101, 3.8.104, 25.14);
- c) addition of instruction to warn against use by or on children (7.12);
- d) addition of instructions for use of appliances intended for use only in beauty salons and similar premises (7.12);
- e) addition of accessible surface temperature limits (Clause 11);
- f) clarification that test probe 18 is not applied for appliances intended only for use in beauty salons and similar premises (8.1.1, 20.2, B.22.3, B.22.4);
- g) updating reference for evaluation of stray optical radiation to IEC 62471-7 (22.109, 32.102);
- h) expansion of Table B.2 and Table B.3 to include more precise specifications for cells with a capacity between 0,2 Ah and 5 Ah;
- i) Adding power supply requirements (21.102, 21.103, 24.2).

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

Draft	Report on voting
61/7487/FDIS	61/7506/RVD

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 International Standard is English.

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.

A list of all parts of the IEC 60335 series, under the general title: *Household and similar electrical appliances – Safety*, can be found on the IEC website.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments unless that edition precludes it; in that case, the latest edition that does not preclude it is used. It was established on the basis of the sixth edition (2020) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for cosmetic and beauty care appliances incorporating lasers and intense light sources.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

NOTE 3 The following print types are used:

- *test specifications: in italic type*;
- Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

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, or
- revised.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations can need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this standard be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

Guidance documents concerning the application of the safety requirements for appliances can be accessed via TC 61 supporting documents on the IEC website

<https://www.iec.ch/tc61/supportingdocuments>

This information is given for the convenience of users of this International Standard and does not constitute a replacement for the normative text in this standard.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules ~~may~~ can differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 2 ~~Horizontal and generic standards~~ Horizontal publications, basic safety publications and group safety publications covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. ~~For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or this part 2 standard. This does not apply to IEC 60825-1, except where specified in this part 2 standard.~~ **1**

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

NOTE 3 Standards dealing with non-safety aspects of household appliances are:

- IEC standards published by TC 59 concerning methods of measuring performance;
- CISPR 11, CISPR 14-1 and relevant IEC 61000-3 series standards concerning electromagnetic emissions;
- CISPR 14-2 concerning electromagnetic immunity;
- IEC standards published by TC 111 concerning environmental matters. **2**

1 Scope

This clause of Part 1 is replaced by the following.

This part of IEC 60335-1 deals with the safety of beauty care appliances incorporating lasers or **intense light sources** for household and similar purposes, where their operation relies on contact with the skin, their **rated voltage** being not more than 250 V including direct current (DC) supplied appliances and **battery-operated appliances**. **3**

~~NOTE 101—Battery-operated appliances and other d.c. supplied appliances are within the scope of this standard. Dual supply appliances, either mains-supplied or battery-operated, are regarded as **battery-operated appliances** when operated in the battery mode.~~

This standard covers appliances with a light emitting surface less than 25 cm². Appliances with a light emitting surface equal to or greater than 25 cm² are within the scope of IEC 60335-2-27.

Appliances not intended for normal household use but which nevertheless ~~may~~ can be a source of danger to the public such as appliances intended to be used in beauty salons and similar premises are also within the scope of this standard.

Appliances covered by the scope of this standard include but are not limited to:

- appliances for control of hair growth;
- appliances for skin and beauty care incorporating lasers or **intense light sources (ILS)**.

~~NOTE 102~~ **NOTE 101** Appliances incorporating lasers or **intense light sources (ILS)** either heat up hair follicles or skin tissue to produce thermal effects or to produce photo-biological effects from specific wavelengths.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account:

- persons (including children) whose physical, sensory or mental capabilities or lack of experience and knowledge prevents them from using the appliance safely without supervision or instruction;
- children playing with the appliance.

~~NOTE 103—Attention is drawn to the fact that~~ In many countries additional requirements are specified by the national health authorities.

~~NOTE 104—This standard does not apply to~~

- appliances for medical purposes (IEC 60601);
- appliances for skin or hair care (IEC 60335-2-23, **IEC 60335-2-115**);
- appliances for nail hardening;
- appliances for skin exposure to optical radiation with a light emitting surface equal to or greater than 25 cm² (IEC 60335-2-27).

2 Normative references

This clause of Part 1 is applicable except as follows:

Addition:

IEC 60584-1, Thermocouples - Part 1: EMF specifications and tolerances

IEC 60825-1:2014, Safety of laser products - Part 1: Equipment classification and requirements

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

IEC 62471-7, *Photobiological safety of lamps and lamp systems - Part 7: Light sources and luminaires primarily emitting visible radiation* 4

ISO 7010:2019, *Graphical symbols - Safety colours and safety signs - Registered safety signs*

ISO 14155, *Clinical investigation of medical devices for human subjects - Good clinical practice*

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Household and similar electrical appliances - Safety -
Part 2-113: Particular requirements for beauty care appliances incorporating
lasers and intense light sources**

**Appareils électrodomestiques et analogues - Sécurité -
Partie 2-113: Exigences particulières pour les appareils destinés aux soins
esthétiques comportant des lasers et des sources de lumière de forte intensité**

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This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for cosmetic and beauty care appliances incorporating lasers and intense light sources.

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This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules can differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

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NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

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An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

NOTE 3 Standards dealing with non-safety aspects of household appliances are:

- IEC standards published by TC 59 concerning methods of measuring performance;
- CISPR 11, CISPR 14-1 and relevant IEC 61000-3 series standards concerning electromagnetic emissions;
- CISPR 14-2 concerning electromagnetic immunity;
- IEC standards published by TC 111 concerning environmental matters.

1 Scope

This clause of Part 1 is replaced by the following.

This part of IEC 60335-1 deals with the safety of beauty care appliances incorporating lasers or **intense light sources** for household and similar purposes, where their operation relies on contact with the skin, their **rated voltage** being not more than 250 V including direct current (DC) supplied appliances and **battery-operated appliances**.

This standard covers appliances with a light emitting surface less than 25 cm². Appliances with a light emitting surface equal to or greater than 25 cm² are within the scope of IEC 60335-2-27.

Appliances not intended for normal household use but which nevertheless can be a source of danger to the public such as appliances intended to be used in beauty salons and similar premises are also within the scope of this standard.

Appliances covered by the scope of this standard include but are not limited to:

- appliances for control of hair growth;
- appliances for skin and beauty care incorporating lasers or **intense light sources (ILS)**.

NOTE 101 Appliances incorporating lasers or **intense light sources (ILS)** either heat up hair follicles or skin tissue to produce thermal effects or to produce photo-biological effects from specific wavelengths.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account:

- persons (including children) whose physical, sensory or mental capabilities or lack of experience and knowledge prevents them from using the appliance safely without supervision or instruction;
- children playing with the appliance.

In many countries additional requirements are specified by the national health authorities.

This standard does not apply to

- appliances for medical purposes (IEC 60601);
- appliances for skin or hair care (IEC 60335-2-23, IEC 60335-2-115);
- appliances for nail hardening;
- appliances for skin exposure to optical radiation with a light emitting surface equal to or greater than 25 cm² (IEC 60335-2-27).

2 Normative references

This clause of Part 1 is applicable except as follows:

Addition:

IEC 60584-1, *Thermocouples - Part 1: EMF specifications and tolerances*

IEC 60825-1:2014, *Safety of laser products - Part 1: Equipment classification and requirements*

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

IEC 62471-7, *Photobiological safety of lamps and lamp systems - Part 7: Light sources and luminaires primarily emitting visible radiation*

ISO 7010:2019, *Graphical symbols - Safety colours and safety signs - Registered safety signs*

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

Appareils électrodomestiques et analogues - Sécurité - Partie 2-113: Exigences particulières pour les appareils destinés aux soins esthétiques comportant des lasers et des sources de lumière de forte intensité

AVANT-PROPOS

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L'IEC 60335-2-113 a été établie par le comité d'études 61 de l'IEC: Sécurité des appareils électrodomestiques et analogues. Il s'agit d'une Norme internationale.

Cette deuxième édition annule et remplace la première édition parue en 2016 et l'Amendement 1:2021. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) le texte a été aligné sur l'IEC 60335-1:2020;

- b) certaines notes ont été supprimées ou converties en texte normative (Article 1, 3.8.101, 3.8.104, 25.14);
- c) des instructions ont été ajoutées pour mettre en garde contre toute utilisation par ou sur des enfants (7.12);
- d) des instructions ont été ajoutées pour l'utilisation d'appareils destinés uniquement à être utilisés dans des salons de beauté et locaux analogues (7.12);
- e) des limites de température ont été ajoutées pour les surfaces accessibles (Article 11);
- f) une clarification a été ajoutée pour préciser que le calibre d'essai 18 n'est pas appliqué sur les appareils destinés exclusivement aux salons de beauté et locaux analogues (8.1.1, 20.2, B.22.3, B.22.4);
- g) la référence a été mise à jour pour l'évaluation du rayonnement optique parasite selon l'IEC 62471-7 (22.109, 32.102);
- h) le Tableau B.2 et le Tableau B.3 ont été enrichis pour inclure des spécifications plus précises concernant les éléments d'une capacité comprise entre 0,2 Ah et 5 Ah;
- i) des exigences relatives à l'alimentation ont été ajoutées (21.102, 21.103, 24.2).

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
61/7487/FDIS	61/7506/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/publications.

Une liste de toutes les parties de la série IEC 60335, publiées sous le titre général *Appareils électrodomestiques et analogues – Sécurité*, se trouve sur le site web de l'IEC.

La présente partie 2 doit être utilisée conjointement avec la dernière édition de l'IEC 60335-1 et ses amendements sauf si cette édition l'exclut. Dans ce cas, la dernière édition qui n'exclut pas la présente partie 2 est utilisée. Elle a été établie sur la base de la sixième édition (2020) de cette norme.

NOTE 1 L'expression "la Partie 1" utilisée dans le présent document fait référence à l'IEC 60335-1.

La présente partie 2 complète ou modifie les articles correspondants de l'IEC 60335-1, de façon à transformer cette publication en norme IEC: Exigences de sécurité pour les appareils destinés aux soins cosmétiques et esthétiques comportant des lasers et des sources de lumière de forte intensité.

Lorsqu'un paragraphe particulier de la Partie 1 n'est pas mentionné dans cette partie 2, ce paragraphe s'applique pour autant que cela soit raisonnable. Lorsque la présente norme mentionne "addition", "modification" ou "remplacement", le texte correspondant de la Partie 1 doit être adapté en conséquence.

NOTE 2 Le système de numérotation suivant est utilisé:

- les paragraphes, tableaux et figures qui s'ajoutent à ceux de la Partie 1 sont numérotés à partir de 101;
- à l'exception de celles qui sont dans un nouveau paragraphe ou de celles qui concernent des notes de la Partie 1, les notes sont numérotées à partir de 101, y compris celles des articles ou paragraphes qui sont remplacés;
- les annexes qui sont ajoutées sont désignées AA, BB, etc.

NOTE 3 Les caractères d'imprimerie suivants sont utilisés:

- *modalités d'essais: caractères italiques;*
- les termes en **gras** dans le texte sont définis à l'Article 3. Lorsqu'une définition concerne un adjectif, l'adjectif et le nom associé figurent également en gras.

Le comité a décidé que le contenu de ce document ne sera pas modifié avant la date de stabilité indiquée sur le site web de l'IEC sous webstore.iec.ch dans les données relatives au document recherché. À cette date, le document sera

- reconduit,
- supprimé, ou
- révisé.

NOTE 4 L'attention des Comités nationaux est attirée sur le fait que les fabricants d'appareils et les organismes d'essai peuvent avoir besoin d'une période transitoire après la publication d'une nouvelle publication IEC, ou d'une publication amendée ou révisée, pour fabriquer des produits conformes aux nouvelles exigences et pour adapter leurs équipements aux nouveaux essais ou aux essais révisés.

Le comité recommande que le contenu de cette norme soit adopté pour application nationale (obligatoire) au plus tôt 12 mois et au plus tard 36 mois après la date de publication.

INTRODUCTION

Il a été admis par hypothèse, en établissant la présente Norme internationale, que l'exécution de ses dispositions était confiée à des personnes expérimentées et ayant une qualification appropriée.

Les documents de recommandations concernant l'application des exigences de sécurité pour les appareils peuvent être consultés dans les documents de support du CE 61, accessibles sur le site web de l'IEC à l'adresse:

<https://www.iec.ch/tc61/supportingdocuments>

Cette information est donnée à l'intention des utilisateurs de la présente Norme internationale et ne constitue nullement un remplacement du texte normatif de la présente norme.

La présente norme reconnaît le niveau de protection internationalement accepté contre les dangers électriques, mécaniques, thermiques, liés au feu et au rayonnement des appareils, lorsqu'ils fonctionnent comme en usage normal en tenant compte des instructions du fabricant. Elle couvre également les situations anormales auxquelles on peut s'attendre dans la pratique et elle tient compte de la façon dont les phénomènes électromagnétiques peuvent altérer le fonctionnement sûr des appareils.

Cette norme tient compte autant que possible des exigences de l'IEC 60364, de façon à rester compatible avec les règles d'installation quand l'appareil est raccordé au réseau d'alimentation. Cependant, des règles d'installation nationales peuvent être différentes.

Si un appareil relevant du domaine d'application de la présente norme comporte également des fonctions couvertes par une autre partie 2 de l'IEC 60335, la partie 2 correspondante est appliquée à chaque fonction séparément, dans la limite du raisonnable. Si cela s'applique, l'influence d'une fonction sur les autres fonctions est prise en compte.

Lorsqu'une partie 2 ne comporte pas d'exigences complémentaires pour couvrir les dangers traités dans la Partie 1, la Partie 1 s'applique.

NOTE 1 Cela signifie que les comités d'études responsables pour les parties 2 ont déterminé qu'il n'était pas nécessaire de spécifier des exigences particulières pour l'appareil en question en plus des exigences générales.

Cette norme est une norme de famille de produits traitant de la sécurité d'appareils et a préséance sur les normes horizontales et génériques couvrant le même sujet.

NOTE 2 Les publications horizontales, les publications fondamentales de sécurité et les publications groupées de sécurité couvrant un danger ne s'appliquent pas, parce qu'elles ont été prises en considération lorsque les exigences générales et particulières ont été étudiées pour la série de normes IEC 60335.

Un appareil conforme au texte de la présente norme ne sera pas nécessairement jugé conforme aux principes de sécurité de la norme si, lorsqu'il est examiné et soumis aux essais, il apparaît qu'il présente d'autres caractéristiques qui compromettent le niveau de sécurité visé par ces exigences.

Un appareil utilisant des matériaux ou présentant des modes de construction différents de ceux décrits dans les exigences de la présente norme peut être examiné et soumis aux essais en fonction de l'objectif poursuivi par ces exigences et, s'il est jugé pratiquement équivalent, il peut être estimé conforme aux principes de sécurité de la présente norme.

NOTE 3 Les normes traitant des aspects non relatifs à la sécurité des appareils électrodomestiques sont:

- les normes IEC publiées par le comité d'études 59 concernant les méthodes de mesure d'aptitude à la fonction;
- les normes CISPR 11 et CISPR 14-1, ainsi que les normes applicables de la série IEC 61000-3 concernant les émissions électromagnétiques;
- la norme CISPR 14-2 concernant l'immunité électromagnétique;
- les normes IEC publiées par le comité d'études 111 concernant l'environnement.

1 Domaine d'application

L'article de la Partie 1 est remplacé par le texte suivant.

La présente partie de l'IEC 60335-1 traite de la sécurité des appareils de soins esthétiques comportant des lasers ou des **sources de lumière de forte intensité** pour usages domestiques et analogues, dont le fonctionnement dépend du contact avec la peau et dont la **tension assignée** est inférieure ou égale à 250 V, y compris les appareils alimentés en courant continu et les **appareils alimentés par batteries**.

La présente norme couvre les appareils dont la surface électroluminescente est inférieure à 25 cm². Les appareils dont la surface électroluminescente est supérieure ou égale à 25 cm² relèvent du domaine d'application de l'IEC 60335-2-27.

Les appareils non destinés à un usage domestique normal, mais qui peuvent néanmoins constituer une source de danger pour le public, tels que les appareils destinés à être utilisés dans des salons de beauté et locaux analogues, sont également compris dans le domaine d'application de la présente norme.

Les appareils couverts par le domaine d'application de la présente norme incluent notamment:

- les appareils pour favoriser la pousse des cheveux;
- les appareils destinés aux soins de la peau et aux soins esthétiques comportant des lasers ou des **sources de lumière de forte intensité (ILS)**.

NOTE 101 Les appareils qui comportent des lasers ou des **sources de lumière de forte intensité (ILS)** chauffent les follicules capillaires ou les tissus cutanés afin de produire des effets thermiques ou des effets photobiologiques à partir de longueurs d'ondes spécifiques.

Dans la mesure du possible, la présente norme traite des dangers courants que présentent les appareils et auxquels sont exposés tous les individus situés à l'intérieur et autour de l'habitation. Cependant, elle ne tient en général pas compte:

- des personnes (y compris des enfants) dont les capacités physiques, sensorielles ou mentales ou le manque d'expérience et de connaissance les empêchent d'utiliser l'appareil en toute sécurité sans surveillance ou instruction; et
- des enfants qui jouent avec l'appareil.

Dans de nombreux pays, des exigences supplémentaires sont spécifiées par les organismes nationaux de la santé.

La présente norme ne s'applique pas

- aux appareils destinés à des usages médicaux (IEC 60601);
- aux appareils destinés aux soins de la peau ou des cheveux (IEC 60335-2-23, IEC 60335-2-115);
- aux appareils destinés au durcissement des ongles;
- aux appareils d'exposition de la peau aux rayonnements optiques dont la surface électroluminescente est supérieure ou égale à 25 cm² (IEC 60335-2-27).

2 Références normatives

L'article de la Partie 1 s'applique, avec les exceptions suivantes:

Addition:

IEC 60584-1, *Couples thermoélectriques - Partie 1: Spécifications et tolérances en matière de FEM*

IEC 60825-1:2014, *Sécurité des appareils à laser - Partie 1: Classification des matériels et exigences*

IEC 62471:2006, *Sécurité photobiologique des lampes et des appareils utilisant des lampes*

IEC 62471-7, *Sécurité photobiologique des lampes et des appareils utilisant des lampes - Partie 7: Sources de lumière et luminaires qui émettent principalement un rayonnement visible*

ISO 7010:2019, *Symboles graphiques - Couleurs de sécurité et signaux de sécurité - Signaux de sécurité enregistrés*

ISO 14155, *Investigation clinique des dispositifs médicaux pour sujets humains - Bonnes pratiques cliniques*