

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE  
COMITÉ INTERNATIONAL SPÉCIAL DES PERTURBATIONS RADIOÉLECTRIQUES

AMENDMENT 1  
AMENDEMENT 1

**Limits and methods of measurement of radio disturbance characteristics of  
electrical lighting and similar equipment**

**Limites et méthodes de mesure des perturbations radioélectriques produites  
par les appareils électriques d'éclairage et les appareils analogues**





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## FOREWORD

This amendment has been prepared by subcommittee CISPR F: Interference relating to household appliances tools, lighting equipment and similar apparatus.

The text of this amendment is based on the following documents:

FDIS	Report on voting
CIS/F/654/FDIS	CIS/F/660/RVD

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC website 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- withdrawn,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.

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## 1 Scope

*Add, at the beginning of the second existing list, the following new item:*

- auxiliaries intended to be built into lighting equipment;

*Replace the last existing item of the list and the existing note by the following new text:*

- apparatus for which the electromagnetic compatibility requirements in the radio-frequency range are explicitly formulated in other CISPR standards, even if they incorporate a built-in lighting function.

NOTE 1 Examples of exclusions are:

- built-in lighting devices for display back lighting and signalling;
- range hoods, refrigerators, freezers;
- photocopiers, projectors;
- lighting equipment for road vehicles.

*Add, after the fourth existing paragraph of this subclause starting with "Multi-function equipment..", the following new paragraph and new note:*

For equipment outside the scope of this standard and which includes lighting as a secondary function, there is no need to separately assess the lighting function against this standard, provided that the lighting function was operative during the assessment in accordance with the applicable standard.

NOTE 2 Examples of equipment with a secondary lighting function may be range hoods, fans, refrigerators, freezers, ovens and TV with ambient lighting.

## 2 Normative references

*Add, to the existing list, the following new references:*

IEC 60061-1, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 1: Lamp caps*

IEC 60921:2004, *Ballasts for tubular fluorescent lamps – Performance requirements*

CISPR 16-2-1:2014, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements*

## 3 Terms and definitions

*Add, after the existing definition 3.1, the following new terms and definitions:*

### 3.2

#### **convertor**

electrical device to transform the mains voltages, and/or current levels and/or frequency for light sources

### 3.3

#### **base of the luminaire**

side opposite of the optical window of the luminaire or mounting surface in normal use

### 3.4

#### **optical window**

side of the lighting equipment from which the light emanates

### 3.5

#### **ELV**

##### **extra-low voltage**

voltage which does not exceed 50 V a.c. or 120 V ripple free d.c. between conductors or between any conductor and earth (voltage band 1 of IEC 60449).

Note 1 to entry: Ripple free is conventionally defined for sinusoidal ripple voltage as ripple content of not more than 10 % r.m.s.: the maximum peak value does not exceed 140 V for a nominal 120 V ripple-free d.c. system.

[SOURCE: IEC 61347-1:2007/AMD1:2010, 3.27]

### 3.6

#### **restricted ELV lamp**

ELV lamp with specific restrictions on the type of control gear and the cable length that can be applied to it as provided by the manufacturer

Note 1 to entry: ELV lamps without detailed description of restrictions are non-restricted.

### 3.7

#### **passive circuit**

electronic circuit not containing any active switching electronic components

Note 1 to entry: A passive circuit is not likely to produce any electromagnetic disturbances. E.g. a mains rectifying diode is considered a passive component.

### 3.8

#### **secondary function**

any function of an equipment not being essential for fulfilling the primary function, defined by the manufacturer

### 3.9

#### **primary function**

function of an equipment which is defined as such by the manufacturer

### 3.10

#### **semi luminaire**

devices (sometimes called adaptors) equipped, on the one side, with any IEC-standardised lamp cap system to allow mounting in a standard incandescent lampholder and, on the other side, with a lampholder to allow the insertion of a replaceable light source with a non-standard cap

Note 1 to entry: A semi luminaire is to be treated as a self-ballasted lamp with a replaceable light source.

## 4.1 Frequency ranges

*Delete the existing note of this subclause.*