



**SLOVENSKI STANDARD**  
**SIST EN 60598-2-3:1995/A2:2003**

**01-marec-2003**

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**Luminaires -- Part 2-3: Particular requirements - Luminaires for road and street lighting**

Luminaires -- Part 2-3: Particular requirements - Luminaires for road and street lighting

Leuchten -- Teil 2-3: Besondere Anforderungen - Leuchten für Straßen- und Wegebeleuchtung

Luminaires -- Partie 2-3: Règles particulières - Luminaires d'éclairage public

**Ta slovenski standard je istoveten z: EN 60598-2-3:1994/A2:2001**

**ICS:**

29.140.40	Svetila	Luminaires
93.080.40	Cestna razsvetljava in pripadajoča oprema	Street lighting and related equipment

**SIST EN 60598-2-3:1995/A2:2003**      **en,fr,de**



EUROPEAN STANDARD

**EN 60598-2-3/A2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2001

ICS 29.140.40; 93.080.40

English version

**Luminaires****Part 2-3: Particular requirements - Luminaires for road and street lighting**  
(IEC 60598-2-3:1993/A2:2000)

Luminaires  
Partie 2-3: Règles particulières -  
Luminaires d'éclairage public  
(CEI 60598-2-3:1993/A2:2000)

Leuchten  
Teil 2-3: Besondere Anforderungen -  
Leuchten für Straßen- und  
Wegebeleuchtung  
(IEC 60598-2-3:1993/A2:2000)

iTeh STANDARD PREVIEW  
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SIST EN 60598-2-3:1995/A2:2003

This amendment A2 modifies the European Standard EN 60598-2-3:1994; it was approved by CENELEC on 2000-12-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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**CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of document 34D/600/FDIS, future amendment 2 to IEC 60598-2-3:1993, prepared by SC 34D, Luminaires, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60598-2-3:1994 on 2000-12-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2001-09-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2007-12-01

Annexes designated "informative" are given for information only. In this standard, annex A is informative.

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## Endorsement notice

The text of amendment 2:2000 to the International Standard IEC 60598-2-3:1993 was approved by CENELEC as an amendment to the European Standard without any modification.

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SIST EN 60598-2-3:1995/A2:2003

<https://standards.iteh.ai/catalog/standards/sist/cb05ced6-9924-4788-b86a-47b678eb3da0/sist-en-60598-2-3-1995-a2-2003>

**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC**

**60598-2-3**

1993

AMENDEMENT 2  
AMENDMENT 2  
2000-12

Amendement 2

**Luminaire –**

**Partie 2-3:  
Règles particulières –  
Luminaire d'éclairage public**

Amendment 2

**Luminaire –**

**Part 2-3:  
Particular requirements –  
Luminaire for road and street lighting**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
PRICE CODE

**F**

*Pour prix, voir catalogue en vigueur  
For price, see current catalogue*

## FOREWORD

This amendment has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

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

FDIS	Report on voting
34D/600/FDIS	34D/610/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 the base publication and its amendments will remain unchanged until 2002-04. At this date, the publication will be

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

Page 11

*Replace the title and text of subclause 3.6.3.1 by the following:*

**3.6.3.1** Static load test for mast arm or post top mounted luminaires

The luminaire is mounted in such a way that the most critical surface is loaded.

The most critical surface is determined by calculating the highest value of  $Cd \times S$

where

$Cd$  is the drag coefficient;

$S$  is the area of the surface to be loaded ( $m^2$ ).

The drag coefficient depends on the shape of the surface. For luminaires for which the  $Cd$  is not measured the value of 1,2 shall be taken.

NOTE 1 See annex A for measurement of  $Cd$ .

The means of attachment shall be secured in accordance with the manufacturer's instructions.

A constant evenly distributed load is applied for 10 min on the most critical surface.

NOTE 2 See figure 1 for methods of equal distribution of the load. In cases where bags are used, these can be filled with sand, lead shot or small balls.

The load shall be equal to

$$F = 1/2 Rh \times S \times Cd \times V^2 \text{ (N)}$$

where

$Rh$  is equal to 1,225 kg/m<sup>3</sup> (air volumic mass);

$V$  is the wind speed (m/s).

The wind speeds relevant to the mounting heights of luminaires shall be

$V = 45$  m/s (163 km/h) for heights up to 8 m;

$V = 52$  m/s (188 km/h) for heights between 8 m and 15 m;

$V = 57$  m/s (205 km/h) for heights of more than 15 m.

NOTE 3 In some countries, the wind speed is determined by national rules (for example Japan).

The drag coefficient is 1,2 (or the exact value measured in annex A).

After the test, there shall be no visible failure impairing the safety, no permanent deformation from the attachment which exceeds a slope of more than 2 cm/m, and no rotation around the point of attachment.

**3.6.5** *Replace the third sentence of the third paragraph and all of the fourth paragraph by the following:*

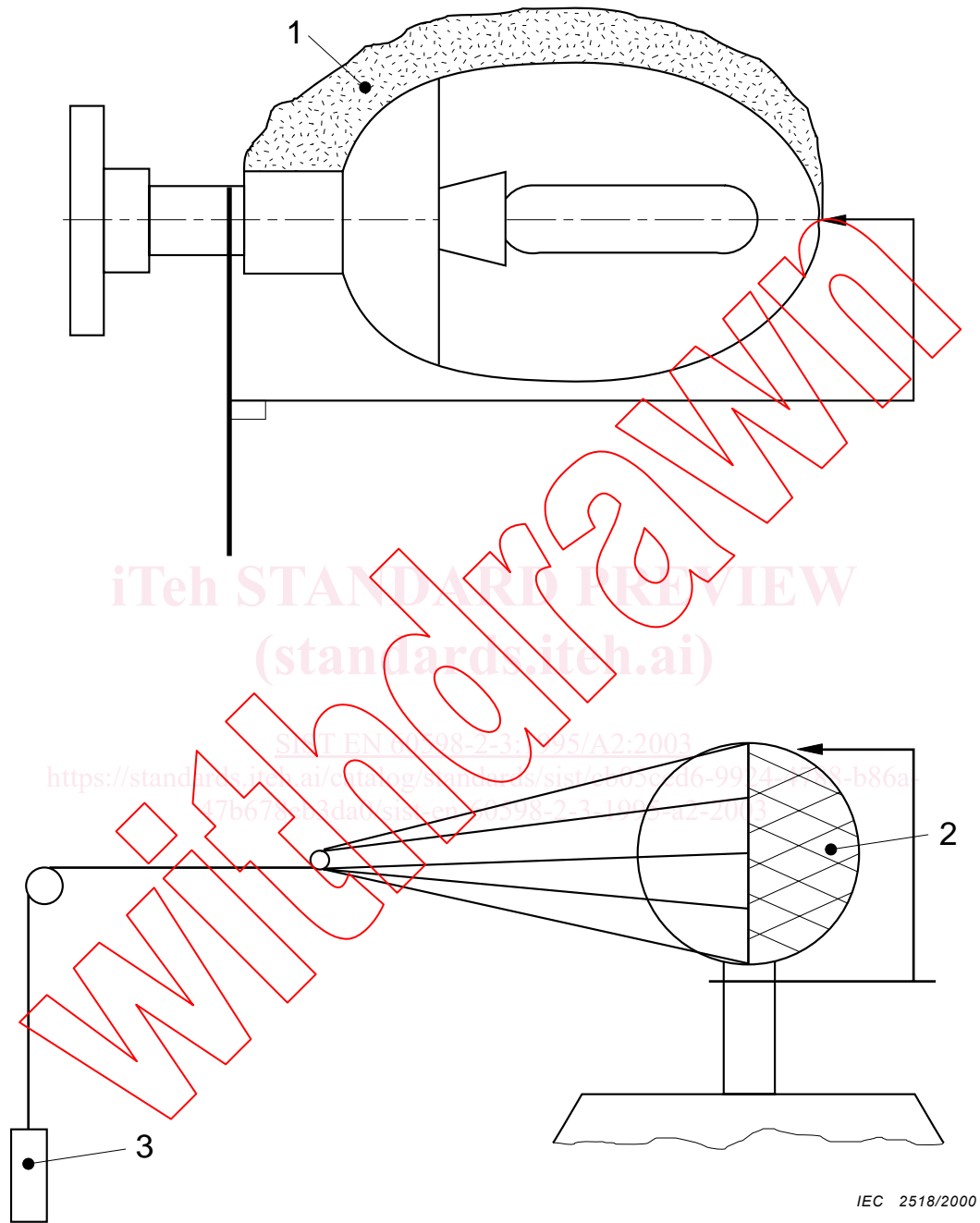
Within 5 min of fracture, count the particles in a 50 mm square, located approximately at the centre of the area of coarsest fracture but always within the confines of the glass.

NOTE Where possible, the area of measurement should not be within 30 mm of any edge, hole or machining of the glass.

A glass is deemed to have passed the test if the number of particles in the 50 mm square is more than 60; glass splinters and pieces less than the full thickness of the glass being excluded from the count. For glass of smaller size where a 50 mm × 50 mm area is not possible, the number of pieces necessary in the count is proportionately reduced.

In the count of the total number of particles in the 50 mm square, the particles in the centre of the square plus those at the edge shall be taken into account. In order to count particles at the edge of the square, it is recommended that all pieces intersected by two adjacent sides be included and all particles intersected by the two other sides be ignored (see figure 2).

Delete the existing figure 1 and insert the following new figures 1 and 2:

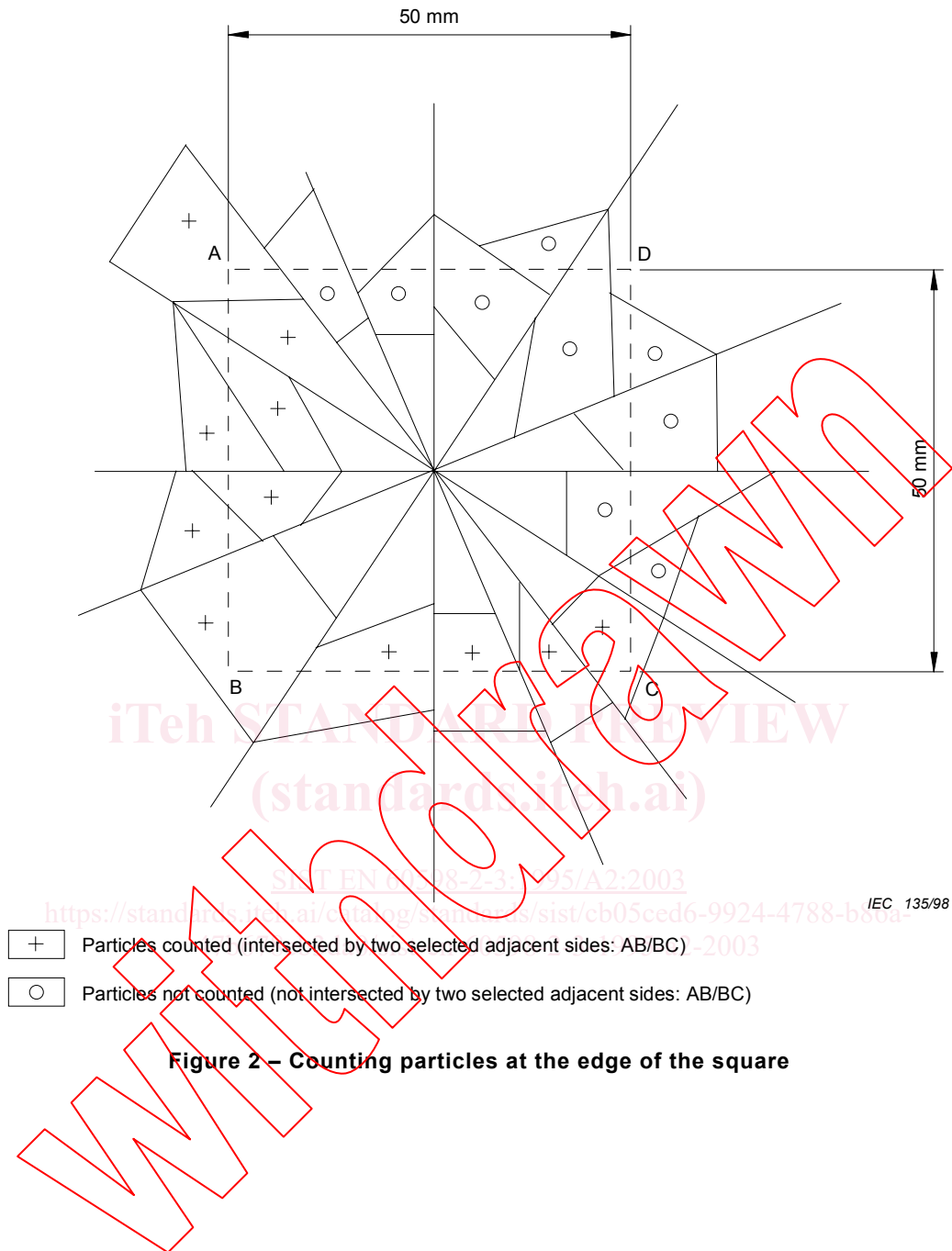


**Key**

- 1 Sandbag
- 2 Net
- 3 Weight

**Figure 1 – Different procedures for the static wind force test**





Page 17

*Insert, after figures 1 and 2, the following new annex A:*

## **Annex A** (informative)

### **Drag coefficient measurement**

The drag coefficient measurement is performed in the same way as the method used to determine the drag coefficient values introduced in ISO 4354.

The luminaire measurement is easier than measurement on a complicated structure (motionless tested luminaire representing the actual size of the luminaire).

The common practice is to place the luminaire as indicated by the manufacturer's installation rules in a wind tunnel.

The wind tunnel should be as such the surface  $S$  of the luminaire representing 5 % maximum of the cross-sectional area of the wind tunnel.

The wind speed used in the measurement should represent as far as possible the reality, according to 3.6.3.1. A speed of 25 m/s should be considered as a minimum.

After the measurement, no visible failure must impair the safety of the luminaire.

Add, after annex A, the following new bibliography:

#### **Bibliography**

ISO 4354:1997, *Wind actions on structures*

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