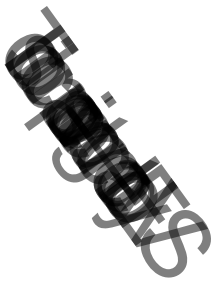

Aeronautical ground lighting electrical installation - Flashing lights: Equipment specifications and tests

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-ENV 50234:2008 sisaldab Euroopa standardi ENV 50234:1997 ingliskeelset teksti.	This Estonian standard EVS-ENV 50234:2008 consists of the English text of the European standard ENV 50234:1997.
Standard on kinnitatud Eesti Standardikeskuse 19.08.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 19.08.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 05.02.1997.	Date of Availability of the European standard text 05.02.1997.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 93.120

Võtmesõnad:

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Descriptors: Electrical installation, lighting, aerodrome, flashing light, characteristics, classification, test, compatibility, maintainability

English version

Aeronautical ground lighting electrical installation
Flashing lights: Equipment specifications and tests

This European Prestandard (ENV) was approved by CENELEC on 1996-07-02 as a prospective standard for provisional application. The period of validity of this ENV is limited initially to three years. After two years the members of CENELEC will be requested to submit their comments, particularly on the question whether the ENV can be converted into a European Standard (EN).

CENELEC members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

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CENELEC

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

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Foreword

This European Prestandard was prepared by the CENELEC BTTF 72-3, Lighting fittings for aerodromes.

The text of the draft was submitted to the CENELEC questionnaire and vote and was approved as ENV 50234 on 1996-07-02.

The following date was fixed:

- latest date by which the existence of the ENV has to be announced at national level (doa) 1996-12-01

Contents

1 Scope

This prestandard specifies general requirements for classification of flashing light systems used on airports or for ground based aviation lighting systems, for the luminaries, for the control cabinets and for their mechanical and electrical construction erection, together with the related tests.

This prestandard is applicable to flashing light systems used for:

- Sequential flashing approach lighting systems;
- Runway threshold identification lights;
- Runway lead-in lighting systems;
- Medium and high intensity obstruction lighting systems.

Alternately flashing lights used as runway guard lights are excluded from this prestandard. Attention is drawn to the fact that this prestandard covers all aspects of safety (electrical, thermal and mechanical).

The purpose of this prestandard is to provide a set of requirements and tests which are applicable to the luminaries and their control equipment. In general, this prestandard covers safety requirements for all components of the system.

2 Normative references

This prestandard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this prestandard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 50081-2	Electromagnetic compatibility - Generic emission standard Part 2: Industrial environment
EN 50082-2	Electromagnetic compatibility - Generic immunity standard Part 2: Industrial environment
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
EN 60204	Safety of machinery - Electrical equipment of machines
EN 60529	Degrees of protection provided by enclosures (Code IP) (IEC 529)
EN 60598-1	Luminaires - Part 1: General requirements and tests
EN 60742	Isolating transformers and safety isolating transformers - Requirements
EN 60950	Safety of information technology equipment, including electrical business equipment
EN 60984	Sleeves of insulating material for live working
EN 61000-3-2	Electromagnetic compatibility (EMC) - Part 3: Limits Section 2: Limits for harmonic current emissions (equipment input current up to and including 16 A per phase)

EN 61000-3-3	Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current up to 16 A
EN 61547	Equipment for general lighting purposes EMC immunity requirements
HD 384	Electrical installations of buildings
ICAO	International standards and recommended practices Aerodromes Annex 14 to the Convention on International Civil Aviation, Volume 1 and 2, Aerodrome Design and Operations (Issued by International Civil Aviation Organisation)

3 Definitions

For the purposes of this prestandard the following definitions apply, as well as those given in ICAO Annex 14 and HD 384, EN 60598-1 and EN 60950.
Where the terms voltage and current are used, they imply true RMS values unless otherwise stated.

3.1 flashing light system

System including one or several flashing lights together with their electrical wiring used as an aid either during en route phase and during the approach to an airport.

3.2 flashing light

Luminaire including its control cabinet and part of a flashing light system.

4 Assessment of general characteristics

4.1 General test requirements

4.1.1 Tests according to this prestandard are type tests

4.1.2 Unless otherwise stated, luminaries and their associated control equipment shall be tested at ambient temperature (between 10 °C and 30 °C). Each flashing light submitted to the test shall be tested "as delivered" and as installed in normal use, including one lamp.

Each sample shall satisfy all the relevant tests. In order to reduce the time of testing and to allow for any test which may be destructive, the manufacturer may submit additional components provided that these are of the same material and design as the one used in the original equipment and that the results of tests are the same as if carried out on an identical piece of equipment.

Where the test for compliance is shown as being "by inspection" this shall include any necessary handling.