



SLOVENSKI STANDARD

SIST ENV 50185-3:1999

01-april-1999

Infra-red free air application -- Part 3: Measuring conditions

Infra-red free air application -- Part 3: Measuring conditions

Nichtleitungsgebundene Infrarot-Anwendung -- Teil 3: Meßbedingungen

Application des infrarouges en mode non guidé -- Partie 3: Condition de mesurages

Ta slovenski standard je istoveten z: ENV 50185-3:1995

[SIST ENV 50185-3:1999](https://standards.iteh.ai/catalog/standards/sist/378bc31e-7ccf-4027-a9c1-409adcab7e3c/sist-env-50185-3-1999)

<https://standards.iteh.ai/catalog/standards/sist/378bc31e-7ccf-4027-a9c1-409adcab7e3c/sist-env-50185-3-1999>

ICS:

33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general
-----------	--	---

SIST ENV 50185-3:1999

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ENV 50185-3:1999](#)

<https://standards.iteh.ai/catalog/standards/sist/378bc31e-7ccf-4027-a9c1-409adcab7e3c/sist-env-50185-3-1999>

EUROPEAN PRESTANDARD
PRÉNORME EUROPÉENNE
EUROPÄISCHE VORNORM

ENV 50185-3

October 1995

ICS 33.100

Descriptors: Transmissions, infra-red, measuring conditions

English version

**Infra-red free air application
Part 3: Measuring conditions**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This European Prestandard (ENV) was approved by CENELEC on 1995-05-31 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

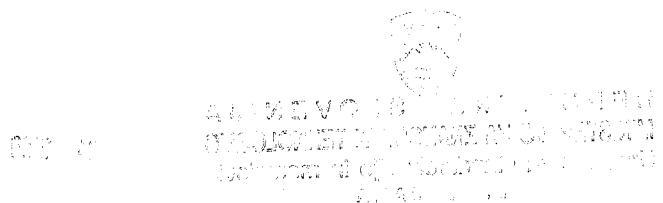
This European Prestandard was prepared by CENELEC BTF 71-3, Infrared free air applications.

The text of the draft was submitted to the vote and approved by CENELEC as ENV 50185-3 on 1995-05-31.

The following date was fixed:

- latest date by which the existence of the ENV has to be announced at national level

(doa) 1996-03-01



iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST ENV 50185-3:1999

<https://standards.iteh.ai/catalog/standards/sist/378bc31e-7ccf-4027-a9c1-409adcab7e3c/sist-env-50185-3-1999>



Introduction

According to ENV 50185-1 for the classification of an Infra-red transmission equipment it is necessary to measure radiation characteristics (criteria 1-5).

1 Scope

This European Prestandard defines conditions for the measurement of the parameters that were introduced in ENV 50185-1 for the classification of infra-red applications and related tolerances.

2 Normative references

This European 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 European Prestandard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ENV 50185-1 Infra-red Free Air Application Part 1: General

<https://standards.iteh.ai/catalog/standards/sist/378bc31e-7ccf-4027-a9c1->

IEC 747-5 Semiconductor devices - Discrete devices and integrated circuits - Part 5: Optoelectronic devices

3 Definitions

For the purposes of this prestandard the definitions of ENV 50185-1 and IEC 747-5 apply. See also annex A.

4 Conditions for the measurement

The data which are required for classification of the product shall be determined under worst case conditions defined by the manufacturer.

The relevant statistical uncertainties shall be taken into account.

5 Requirements for the precision of the measurement

The measurements shall be carried out with sufficient accuracy to allow classification according to the criteria specified in ENV 50185-1.

For the accuracy of the measurements the following requirements apply:

- a) The value of the measured wavelength λ shall not differ by more than ± 5 nm from the nominal value.

Secondary maxima within the band of 700 nm to 1600 nm shall be taken into account (see IEC 747-5).

- b) The difference between the measured frequencies f_1 and f_0 , respectively, and their nominal values shall be within $\pm 5\%$.
- c) The values of the measured radiant intensities I_1 and I_0 , respectively, shall not differ by more than ± 1 dB from their nominal values.
- d) The values of the measured angles of radiation α_1 and α_2 , shall not differ by more than $\pm 5^\circ$ from their nominal values.

These requirements for the accuracy shall be taken into account in interpreting the boundaries of IR product classification shown in the λ/f -diagrams.

Annex A (informative) Bibliography

- | | |
|--------------|---|
| CIE No. 63 | The spectroradiometric measurement of light sources |
| IEC 50 (845) | International lighting vocabulary (1973) |
| DIN 5030-1 | Spektrale Strahlungsmessung, Begriffe, Größen, Kennzahlen
(Spectral measurement of radiation; terminology, quantities, characteristic values) |
| DIN 5030-2 | Spektrale Strahlungsmessung; Strahler für spektrale Strahlungsmessungen, Auswahlkriterien
(Spectral measurement of radiation; radiation sources; selection criteria) |
| DIN 5030-3 | Spektrale Strahlungsmessung; Spektrale Aussonderung; Begriffe und Kennzeichnungsmerkmale
(Spectral measurement of radiation; spectral isolation; definitions and characteristics) |
| DIN 5030-5 | Spektrale Strahlungsmessung; Physikalische Empfänger für spektrale Strahlungsmessungen; Begriffe, Kenngrößen, Auswahlkriterien
(Spectral measurement of radiation; physical detectors for spectral measurement of radiation; terminology, characteristic quantities, selection criteria) |