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Standards

Irish Standard  
I.S. EN 50289-4-5:2008

# Communication cables - Specifications for test methods -- Part 4-5: Environmental test methods - Climatic sequence

## I.S. EN 50289-4-5:2008

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English version

**Communication cables -  
Specifications for test methods -  
Part 4-5: Environmental test methods -  
Climatic sequence**

Câbles de communication -  
Spécifications des méthodes d'essais -  
Partie 4-5: Méthodes d'essais  
d'environnement -  
Séquence climatique

Kommunikationskabel -  
Spezifikationen für Prüfverfahren -  
Teil 4-5: Umweltprüfverfahren -  
Klimawechsel

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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.

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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**

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## Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 46X, Communication cables.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50289-4-5 on 2007-09-01.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2008-09-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2010-09-01

This European Standard has been prepared under the European Mandate M/212 given to CENELEC by the European Commission and the European Free Trade Association.

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## 1 Scope

This Part 4-5 of EN 50289 details the method of test to determine the stability of transmission performance of a finished cable used in analogue and digital communication systems when submitted to temperature changes which may occur during use, storage or transportation.

It is to be read in conjunction with Part 4-1 of EN 50289, which contains essential provisions for its application.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50289-4-1	2001	Communication cables - Specifications for test methods Part 4-1: Environmental test methods - General requirements
EN 50290-1-2	2004	Communication cables – Part 1-2: Definitions
EN 60068-2-14	1999	Environmental testing - Part 2: Tests - Test N: Change of temperature (IEC 60068-2-14:1984 + A:1986)

## 3 Definitions

For the purposes of this document, the definitions of EN 50290-1-2 apply.

## 4 Test methods

### 4.1 Equipment

a) Appropriate transmission measuring apparatus for determination of changes in transmission performance.

b) Climatic chamber:

- the climatic chamber shall be of a suitable size to accommodate the sample and its temperature shall be controllable to remain within  $\pm 3$  K of the specified testing temperature. It must incorporate means of admitting water vapour to, or generating water vapour within. One example of a suitable chamber is given in Clause 2, test Nb, of EN 60068-2-14.

### 4.2 Test sample

The sample shall be of sufficient length as indicated in the relevant cable specification to achieve the desired accuracy.

In order to gain reproducible values, it may be necessary for the cable sample to be brought into the climatic chamber as a loose coil or on a reel.

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