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Údarás um Chaighdeáin Náisiúnta na hÉireann

IRISH STANDARD

**S.R. CLC TS 50509:2007**

ICS 93.080.30

**USE OF LED SIGNAL HEADS IN ROAD  
TRAFFIC SIGNAL SYSTEMS**

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**CLC/TS 50509**

August 2007

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ICS 93.080.30

English version

## **Use of LED signal heads in road traffic signal systems**

This Technical Specification was approved by CENELEC on 2007-06-01.

CENELEC members are required to announce the existence of this TS in the same way as for an EN and to make the TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force.

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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 Technical Specification was prepared by Working Group 1 'Use of LED signal heads in road traffic signal systems' of CENELEC BTTF 69-3 'Road traffic signal system'.

The text of the draft was submitted to vote in accordance with the Internal Regulations, Part 2, Subclause 11.3.3.3 and was approved by CENELEC as CLC/TS 50509 on 2007-06-01.

The following date was fixed:

- latest date by which the existence of the CLC/TS  
has to be announced at national level (doa) 2007-12-01

This document contains specifications for the use of LED signal heads in road traffic signal systems in the form of information with regard to the interpretation of existing standards and additional specifications, dealing with specific technical properties of LED signal heads, not previously described in the existing standards.

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## **Introduction**

This document gives a specification for the mutual behaviour of traffic signal controllers and *light-emitting diode* (LED) based signal heads in road traffic signal systems. The specification was written to contribute to safe and reliable operation, while at the same time allowing the compatible operation of various types and brands of signals and controllers.

Whilst the performance requirements for LED signals heads, as specified in the standards, remain unchanged, various properties of composite LED signals that were implicit for incandescent lamps now need to be described.

The market for LED signals has developed rapidly; products show considerable national or even regional technical differences. This document intends to give guidance to the market for future development and harmonisation.

It is the aim of this document to establish a minimum set of requirements that would allow both controllers and signal heads to be tested separately. Where a controller or signal has been verified as compatible with a class specified in this document, it would be deemed to function safely and securely in cooperation with a signal or controller verified as compatible with the same class.

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