



ANSI C137.1-2019

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American National  
Standard for Lighting  
Systems-0-10V  
Dimming Interface for  
LED Drivers,  
Fluorescent Ballasts,  
and Controls



**National Electrical Manufacturers Association**  
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*American National Standard for Lighting Systems—  
0-10V Dimming Interface for LED Drivers,  
Fluorescent Ballasts, and Controls*

Secretariat:

**National Electrical Manufacturers Association**

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**American National Standards Institute, Inc.**

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**Foreword** (This foreword is not a part of ANSI C137.1-2019)

This is a new Standard and not a revision of a previous Standard.  
Suggestions for improvement of this Standard are welcomed. They should be sent to:

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This Standard was processed and approved for submittal to ANSI by the Accredited Standards Committee on Lighting Systems, C137. Approval of the Standard is not meant to imply that all Committee members voted to approve it.

## **1 Scope**

- 1.1** This Standard specifies the 0-10 volt control interface method and performance requirements for dimmable LED drivers, fluorescent ballasts and dimming control units where output power is adjustable between minimum/off and maximum via a control input signal. The interface may be from one or more control units to one or more drivers or ballasts. Note: Dimmable LED drivers, and fluorescent ballasts are hereinafter referred to together as driver/ballast(s).
- 1.2** Applications include, but are not limited to, commercial, residential, industrial, roadway and area, and hospitality. Applicable devices include, but are not limited to, dimmable drivers and ballasts that may be internal or external to luminaires, dimming controls, and daylighting controls.
- 1.3** This Standard does not specify control by pulse-width modulation (PWM).

Note: Compliance with this Standard provides a documented means for manufacturers to specify values that designers and specifiers can use to assess interoperability.