

C137.9-2024

American National Standard for Lighting Systems—
Indoor Networked Lighting Control Systems Configuration Report

Secretariat:

National Electrical Manufacturers Association

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American National Standards Institute, Inc.

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Foreword

(This foreword is not part of ANSI C137.9-2024)

This standard provides a consistent, dynamic, and comparable way to communicate how networked lighting control (NLC) systems have been programmed after hardware installation and startup. It provides NLC stakeholders with a means to understand how a lighting system is configured at the point in time the report is generated. It also provides data to calculate the NLC energy efficiency savings provided by the configured lighting control strategies broken down by building space utilization type. The report will help utility programs be more easily validated and administered, and allow a simplified review of system functioning for periodic verification, maintenance, or retro-commissioning. The report centralizes key information to make it digestible for facility professionals and owner's representatives who must manage various categories of building systems.

The intended audience for these reports is energy efficiency program implementers and administrators. Having this report will provide energy efficiency programs with verifiable data to support energy savings claims made on incentivized projects, thus removing a barrier to expansion of incentives for NLC systems.

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 C137 Consensus Body on Lighting Systems. Approval of the standard is not meant to imply that all committee members voted to approve it.

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1 Scope

This standard defines a configuration report generated by a networked lighting control (NLC) system, giving stakeholders the ability to quickly understand how the NLC system is configured when the report is generated. This standard is limited to NLC systems intended for interior use with luminaire or zone level wattage data availability. Room-based systems that are designed to control lighting only of a single room or space are excluded from the scope of this standard; however, such systems that are part of larger building systems may have all the elements needed to meet this standard and can be optionally declared as compliant. The report is exportable to a common data format that provides the minimum required information for confirmation of control strategies programming, key system information, and data necessary for the report user to calculate energy saving estimates. This standard does not include support for demand response settings or energy monitoring data.

2 References

2.1 Normative References

The following normative documents contain provisions, which through reference in this text, constitute provisions of this standard. By reference herein, these publications are adopted, in whole or in part as indicated, in this standard.

All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ANSI/ASHRAE/IES Standard 90.1, *Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings*

3 Definitions and Abbreviations

3.1 Definitions

logical organization unit: a group of luminaires or lighting controllers that operate together for the purposes of lighting control strategies.

luminaire level lighting control (LLLC): A lighting control implementation where the functional capability of an occupancy sensor, ambient light sensor, continuous dimmability, and networked communication is directly integrated into each general lighting luminaire.

networked lighting control system (NLC): NLC systems are defined for the purposes of these requirements as the combination of sensors, network interfaces, and controllers that affect lighting changes in luminaires, retrofit kits, or lamps and allow for two-way communication between network devices.

space type: Indoor areas within a building that is classified by the function of its use and the activities performed within that area. For the purpose of this standard, the space type classifications come from ANSI/ASHRAE/IES 90.1, Tables 9.5.2.1-1 and 9.5.2.1-2.

system programming interface device (SPID): The human interface device (e.g., server, laptop, smartphone, tablet, web interface, NLC software) from which the NLC system is programmed. The SPID functionality can be provided as an integral capability of the NLC system itself. This is also the device that will generate the configuration report.

wattage granularity: An indication of the smallest unit at which wattage values are measured or input. Possible values include luminaire, zone, branch circuit, or circuit.

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