ANSI C137.6-2021

American National Standard for Lighting Systems— Data Tagging Vocabulary (Semantic Model Elements) for Interoperability

Secretariat:

National Electrical Manufacturers Association

Approved: April 27, 2021

American National Standards Institute, Inc.

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Foreword (This foreword is not a part of ANSI C137.6-2021)

The interconnected nature of lighting and building systems provides great opportunities and great challenges. One pathway forward is through improved usefulness of data, particularly through the metadata, or tags, that are associated with each element of data. This first edition Standard is a controlled vocabulary for lighting terms. With the Standardization of the most critical tags necessary for lighting, as well as the definition of default inferences, this document can serve as a basis for data engineers and organizational 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 Accredited Standards Committee on Lighting Systems, C137. 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 is a Controlled Vocabulary of terms for Lighting Systems. These terms enable the development of semantic model elements, e.g., tags that facilitate the exchange of data and metadata used in control and analytics. The terms contained in this Standard are intended to be used by available semantic models such as, but not limited to, the future ASHRAE 223P Standard, Project Haystack, and Brick.

The Standard DOES NOT define a Data Model, Semantic Model, or Information Model. It additionally DOES NOT define the ontology, or relationships between the defined entries, beyond what is included in this Standard.

2 References

2.1 Normative References

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

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 C78.377 *American National Standard for Electric Lamps—Specifications for the Chromaticity of Solid-State Lighting Products*

ANSI C137.5 *American National Standard for Lighting Systems—Energy Reporting Requirements for Lighting Devices*

ANSI/IES LS-1 *Lighting Science: Nomenclature and Definitions for Illuminating Engineering*

CIE (1931), Commission international de l'Eclairage proceedings, 1931. Cambridge University Press, Cambridge. (See CIE Publication 15-2)

CIE 15-2: 1986, *Colorimetry*

CIE (1976), ISO/CIE 11664-5:2016(E) Colorimetry — Part 5: CIE 1976 L*U*V* Colour space and U', V' uniform chromaticity scale diagram

Digital Illumination Interface Alliance (DiiA) Specifications:

--DALI Part 150 – Aux Power Supply
--DALI Part 252 – Energy Reporting

2.2 Informative References

The following informative documents are referenced, in whole or in part as indicated, in this Standards Publication.

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.