ANSI/IES LM-63-19

Illuminating ENGINEERING SOCIETY

APPROVED METHOD:
IES STANDARD FILE FORMAT FOR THE ELECTRONIC TRANSFER OF PHOTOMETRIC DATA AND RELATED INFORMATION

AN AMERICAN NATIONAL STANDARD

Approved American National Standard ANSI

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1.0 Introduction

This is the fifth revision of this Standard. Since its introduction in 1986 (IES LM-63-1986), this Standard has proved to be very useful and powerful. This revision further clarifies the standard to make its use as simple as possible. This update is intended as the final update to LM-63, which will put this file format into a long-term stability mode, ensuring it remains available as a reference. This Standard will eventually be replaced by a new XML-based file format, *ANSI/IES TM-33-18, Standard Format for the Electronic Transfer of Luminaire Optical Data* (see **Informative References**). However both Standards are valid until this transition is complete and this Standard has been deprecated.

2.0 Scope

This document describes the standard data system and how to build a file using this system. This document addresses photometric data file formats specifically for data transfer, data storage and retrieval, and other data usage purposes.

3.0 Definitions

3.1 absolute (or direct) photometry
Consists of the direct measurement of a source of light.

3.2 delimiter
Used to delineate data in a file. Acceptable delimiters are a comma, a space, multiple spaces, or a carriage-return and line-feed character sequence.

3.3 goniophotometer
A photometer for measuring the directional light distribution characteristics of sources, luminaires, media, and surfaces.

3.4 horizontal angles
Measurements in degrees of angular displacement, measured counterclockwise in a horizontal plane for Type C photometry and clockwise for Type A and B photometry.

3.5 keyword
Square bracketed word(s) used in IES LM-63 to label data.

3.6 photometric horizontal
The direction directly in front of the source relative to its testing position. This direction is coincident with horizontal angle 0° and vertical angle 90° for Type B and C photometry. For Type A photometry, the direction is coincident with horizontal angle 0° and vertical angle 0°.

3.7 photometric plane
A plane, not a cone, upon which photometric data are measured. In Types A and C photometry, the planes are all vertical and share a common vertical axis. In Type B photometry, the planes share a common horizontal axis.