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JIS

JAPANESE INDUSTRIAL STANDARD

Illuminance Measurements for Lighting Installations

JIS C 7612–1985

Translated and Published

by

Japanese Standards Association

In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

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Illuminance Measurements for Lighting Installations

C 7612-1985

1. Scope

This Japanese Industrial Standard specifies general methods mainly used for measurement of illuminace due to artificial lighting.

This standard applies also to the measurement of illuminance due to daylighting, with some necessary modification.

2. Definitions

For the purposes of this standard, the definitions given in JIS C 1609 and JIS Z 8113 apply.

3. Purposes of Illuminance Measurement

The main purposes of the illuminance measurement are as follows:

(1) To obtain the basic data to decite whether the illuminance of conforms to the appropriate standards or specifications.

(2) To obtain the basic data to decite whether the illuminance conforms to the design conditions.

(3) To obtain the necessary data for maintenance and improvement of lighting level by looking for the change of illuminance due to the lapse of time.

(4) To compare the values of illuminance for various lighting installations.

Applicable Standards:

JIS C 1609-Illuminance Meters

JIS Z 8113-Glossary of Lighting Terms

4. Illuminance Meter

4.1 Choice of Illuminance Meter Use an illuminance meter having a performance to satisfy the accuracy necessary for the importance and the illuminance value for each illuminance measurement. For important illuminance measurements, use Class AA illuminance meter specified in JIS C 1609.

Remark: When a photoelectric pointer type illuminance meter is used in the illuminance measurement intended for transaction or certification, use an illuminance meter passed the verification provided by the Measurement Law, and within the term of validity.

4.2 Understanding of Characteristic of Illuminance Meter For the sake of keeping the precision of illuminance measurements, use correctly the illuminance meter by understanding the following characteristics.

(1) Accuracy

(2) Oblique incident ray characteristics

(3) Relative spectral sensitivity characteristics

(4) Characteristics of indicating part

(5) Fatigue characteristics

(6) Temperature characteristics

(7) Humidity characteristics

(8) Characteristics against intermittent ray

These characteristics and their test methods shall be as specified in JIS C 1609.

5. General Notice on Illuminance Measurement

5.1 Items to be Confirmed before Measurement Before proceeding to measurement, understand the object of illuminance measurements, determine the measuring points in accordance with the method of 6., and confirm the following each item.

(1) Conditions of electric power source and conditions of burning.

(2) Type and size of light source, and if necessary, its cumulative burning hours since it was initially switched on.

(3) Conditions of luminaire

(4) Fitting conditions of light source to luminaire and burning conditions.

(5) Environmental conditions