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**Photometry of white light emitting diode
for general lighting — Part 3: Measure-
ment methods for lumen maintenance**

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by Japan Lighting Manufacturers Association (JLMA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

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JIS C 8152 series consists of the following three parts under the general title “*Photometry of white light emitting diode for general lighting*”:

Part 1: LED packages

Part 2: LED modules and LED light engines

Part 3: Measurement methods for lumen maintenance

Photometry of white light emitting diode for general lighting — Part 3 : Measurement methods for lumen maintenance

1 Scope

This Japanese Industrial Standard specifies the measurement methods for the lumen maintenance factor and the chromaticity change of a white light emitting diode (LED) for general lighting. This method is also applicable to LED luminaires.

NOTE 1 There are an LED package, LED module, LED light engine, bulb-shaped LED lamp, etc. in the light sources to be tested.

NOTE 2 The measurement conditions for the lumen maintenance factor of LED module are specified in **JIS C 8155**, and these for the lumen maintenance factor of bulb-shaped LED lamp are specified in **JIS C 8157**, individually.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS C 8152-1 *Photometry of white light emitting diode for general lighting — Part 1 : LED packages*

JIS Z 8103 *Glossary of terms used in measurement*

JIS Z 8113 *Lighting vocabulary*

3 Terms and definitions

For the purposes of this Standard, the terms and definitions given in **JIS C 8152-1**, **JIS Z 8103** and **JIS Z 8113**, and the following apply.

3.1 white LED for general lighting

LED of which the light colour in relation to the luminous flux or CIE averaged LED intensity meets the following conditions

In this Standard, unless otherwise stated, an LED refers to white LED for general lighting.

- The spectrum spreads out over almost entire visible region with no missing parts.
- The range of correlated colour temperature is 2 500 K to 10 000 K.
- The chromaticity at correlated colour temperature given in **b)** is in the range within 0.02 in deviation (d_{uv}) from the blackbody radiation locus on the CIE 1960 UCS chromaticity coordinate [see number 03077 (uv chromaticity diagram) of **JIS Z**