

### **APLAC T088**

# **APLAC Proficiency Testing Program**

## Photometric measurement of Solid State Lighting Products

### **Instructions to Participants**

To ensure that results form this program can be analyzed properly, participants are asked to adhere carefully to the following instructions.

#### 1. Samples

Five PT test artefacts have been supplied to each laboratory. Sample decription is as following.

- a) Incandescent lamp (NLTC-IAC/IDC).
- b) Omnidirectional LED lamp (NLTC-OD)
- c) Directional LED lamp (NLTC-D)
- d) High CCT LED lamp or luminaire (NLTC-HCCT) (> 5000 K, preferably ~6500 K).
- e) Low power-factor LED lamp (NLTC-LPF) (PF < 0.6, preferably PF ~0.5)

When receiving the artefacts, please check the packaging and the artefact in the receiving day, and send the "Receipt Form (for Participants)" electronically to your accreditation body, and <u>zhangwei@nltc.cn</u>.

### 2. Testing Period and Storage Instruction

Testing may commence as soon as samples are received.

Store your samples in the original packaging in room temperature between  $15^{\circ}C$  and  $35^{\circ}C$  and relative humidity less than 75 %.

#### 3. Properties for Measurement

The following properties / quantities will be measured and compared in this proficiency testing.

- a) Total luminous flux (Im)
- b) RMS Voltage (V) and Current (A)
- c) Electrical active power (W)
- d) Luminous efficacy (lm/W)
- e) Chromaticity coordinates x, y
- f) Correlated Colour Temperature (K)
- g) Colour Rendering Index (CRI) Ra
- h) Power factor (pF)

### 4. Measurement Procedure

Please refer to "Measurement Method for the Proficiency Testing Program" for the

detailed description of the Measurement Procedure. If participating laboratory find difficulty meeting all the requirements, it would be allowed not to meet one or more requirements in this Test Method, though it may affect acceptance for specific accreditation programs. In this case, any and all of these deviations must be reported in a space provided in the results sheet.

Please perform two sets of measurements for each artefact and record the test results for these two sets according to "Measurement Results Report Form'.

### 5. Documents Submitting

- a) In four weeks after artefact receipt, send the following to your accreditation body electronically:
  - i. Measurement Results Report Form;
  - ii. Any supporting documentation to assist in the interpretation of the results.
- b) At the same time, please provide the electronic copy of the above to <a href="https://www.heping.com">https://www.heping.com</a> and <a href="https://www.heping.com">zhang.wei@nltc.cn</a> .

The accreditation body is required to ensure that the above information has been supplied by their laboratories in time, and should provide translation into English where necessary.

### 6. General Information

Additional information may be obtained from:

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