

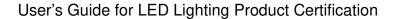
User's Guide

for LED Lighting Product Certification



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1. Introduction

In March 2012, the Hong Kong Electronic Industries Association (HKEIA) invited the Independent LED (Light Emitting Diode) Light Advisory Committee to oversee and provide directions on the development of Product Certification Scheme for LED Lighting Products ("PCS-LED-LP"). The purpose of the PCS-LED-LP Scheme is to ensure all LED lighting products produced by LED Lighting Manufacturers of the Supplier meet the requirements specified in the Scheme, in the area of safety, ElectroMagnetic Compatibility (EMC) and performance.

Under the PCS-LED-LP Scheme, the HKEIA recognizes Certification Bodies (LEDCBs) that are accredited by Hong Kong Accreditation Service (HKAS) or its MultiLateral Recognition Arrangement (MLA) partners in accordance with the Scheme, ISO/IEC 17065 and the corresponding IAF Guidance to perform certification of LED Lighting Products.

Intertek Hong Kong was recognized as a Certification Body by HKEIA. Please visit our web site at: http://www.intertek.com.hk/.

2. Applicability

This scheme is applicable to LED lighting products.

3. Certification Scope

Certification Body can certify the following LED lighting products

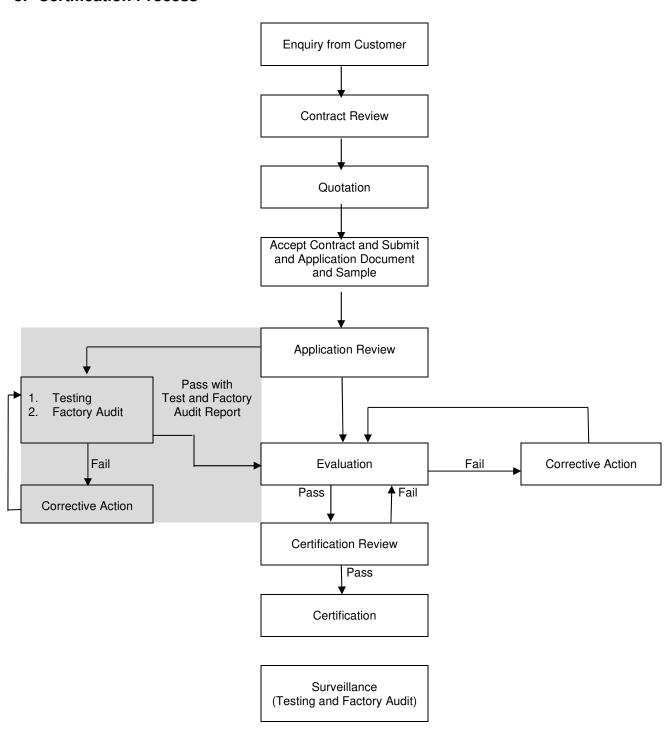
- Bulkhead Type LED Light Fittings
- LED Downlight
- LED Floodlight
- LED Road Light

4. Certification Requirements

The Evaluation covers the area of safety, ElectroMagnetic Compatibility (EMC) and performance, where performance parameters considered include "Lumen", "Luminance efficacy", "Power factor", "Total Harmonic Distortion", "Color rendering index", "Correlated color temperature" and "Chromaticity of LEDs".



5. Certification Process





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Quotation/Contract Review

To request for quotation, please send us the technical specification and user/service manual of the equipment subject to certification.

Applications submittals

To confirm the acceptance of the contract/quotation, please sign back the quotation and pay application fee.

Also, all the following document shall be available during submission of the application.

- (a) Application Form filled out
 Before we undertake any certification work, we must have a signed Intertek LED_LP_CB
 Application Form and Certification Agreement from the supplier and the manufacturer.
 For new supplier, you should submit a copy of business license to Intertek Hong Kong LED_LP_CB.
 Electronic copy is also acceptable.
- (b) Test Report
- (c) Certificate of certified product, accompanied with test report i.e. NCB certificate
- (d) Certificate of critical component e.g. GS mark, ENEC mark, VDE mark etc. other than LED driver, dimmer, filter, LED module, Connector, SELV Wires, SELV Sensor/ Receiver/ Bluetooth Sensor or Sleeving.
- (e) User Manual
- (f) Technical Specification (The technical parameters may be contained in the other document such as user manual.)
- (g) Block diagrams
- (h) Circuit Diagram or circuit description
- (i) ISO 9001 certification of the manufacturer
- (i) Quality manual and related documents of the manufacturer
- (k) Cover letter(s), if any, e.g. letter of Authorization, model declaration letter issued by manufacturer
- (I) Attestation letter, if any

Remark: All documents provided to Intertek Hong Kong for the purpose of PCS-LED-LP certification are handled within our organization with the utmost confidentiality. Please be aware that the relevant information of the certified equipment WILL BE AVAILABLE TO THE PUBLIC ON THE HKEIA WEB SITE. In addition, the equipment information may be disclosed to Hong Kong Accreditation Service (HKAS) for the purpose of accreditation only.

Testing

Test report and other relevant documents and information can be produced by a CBTL/ ISO/IEC 17025 accredited test laboratory as stated in PCS-LED-LP scheme.

Alternatively, Intertek Hong Kong may, within our capacity, perform the necessary tests on the sample against the certification requirement.

Consultancy service (EMC modification service) would not be available for projects involving LED_LP_CB certification.

Evaluation

Evaluation includes a factory audit and review of the product and received report against all applicable PCS-LED-LP requirements, internal consistency of data, and presence of all required supporting documentation/exhibits.



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In case of any incomplete test report and the associated certificates, or supporting documentation/required exhibits, we will notify the client to provide supplemental information before performing the certification. If the certified product contains specific non-recognized critical component that is LED driver, dimmer, filter, LED module, Connector, SELV Wires, SELV Sensor/ Receiver/ Bluetooth Sensor or Sleeving, type test is required. Additional testing fee will be requested accordingly.

The certified product would be audited including product and production process checked. The manufacturer shall inform us when the certified product is scheduled for the production and endeavour to arrange the certified product can be inspected as per PCS-LED-LP Certificate Scheme requirement during the factory audit.

When the evaluation outcome is negative, any non-conformity(ies) will be provided to you. Presence of all required corrective supporting documentation/exhibits will be required.

Certification Review

Certification review includes a review of the product against all applicable requirements from HKEIA, internal consistency of data, and presence of all required supporting documentation/exhibits.

In case of any incomplete test report and the associated certificates, or supporting documentation/required exhibits, we will notify the client to provide supplemental information before performing the certification.

When the certification review outcome is negative, any non-conformity(ies) will be provided to you. Presence of all required corrective supporting documentation/exhibits will be required.

Certification

When the certification review is completed with positive result i.e. the product concerned complies with the relevant PCS-LED-LP requirements, Certificate of Conformity will be issued and will be e-mailed to the client in PDF format.

Surveillance

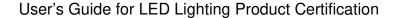
After Certification, Intertek Hong Kong shall conduct periodic Surveillance annually of the certified products. It generally carry out on the production process including annual quality management system audit and certified product review and testing on every production on the basis of the requirements of the relevant Standard and on the basis of the elements or requirements of PCS-LED-LP scheme. Normally three (3) but at least one (1) certified samples from factory are reminded to retain for assessment of the production process and testing.

Certification Body would document each production log of certified product that have been checked. The log would not be recognized as certified if no relevant document from certification body as proof.

In case, under the Extraordinary circumstances such as COVID 19 pandemic situation or else, in order to maintain the validity of current certification, the ICT means may be adopted for the surveillance and remote inspection/audit.

Besides, for certified product with non-recognized critical component, the evident data or document for below items shall be prepared for surveillance factory audit checking,

- 1. Locate the hottest LED, then measure the LED's in situ temperature and the LED's drive current against the Annex B of the LED Light Product Certification Scheme. Measure the LED driver's case temperature (Refer to Table A.3.1.3 Surveillance Assessment for LED lighting products.)
- 2. Initial photometric measurement.





6. Directory of Certified Products

Each model of certified product (including Certification Number, Name of Supplier, Product Name, LED Lighting Product Type, Model Number(s), Cert. issue Date, Rated Max. Ambient Temp (ta), situ TMP_{LED} Temp and certificate status of the certified product) as per the certification scheme will be posted onto the HKEIA directory at website: https://www.hkeia.org/ledlpc/

7. Complaints, Appeals and Disputes Procedure

Complaints Certification Body

Customer may file a complaint against Intertek Hong Kong Certification Body (LED_LP_CB) and details of complaint shall be submitted in writing by fax or by email.

Following the receipt of complaint, the complainant will be acknowledged forthwith the receipt of the complaint. Internal investigation will be carried out.

Within two weeks upon receipt of the complaint, follow-up action will be determined and will be implemented within a suitable time scale. The complainant will be provided with a written response to the complaint (if necessary).

Appeals and Disputes to Certification Body

After a complaint has been recorded and investigated and a decision or conclusion has been reached, an effected party may choose to appeal LED LP CB's decision.

The investigation will be carried out by a higher level of LED_LP_CB management. During investigation, a review of client's documented dispute, related reports, and consultation with the client may be included.

After investigation, LED_LP_CB will provide the appellant with report showing the findings and reasons for the decision reached.

In the event that discussions within the representatives within Intertek do not resolve the dispute/appeal, HKEIA should be consulted for resolution.

Complaints to Suppliers

You are required to:

- a) keep a record of all complaints together with relevant information/document made known to the supplier relating to a product's compliance with requirements of the certification, and to make these records available to the LED_LP_CB when requested;
- b) take appropriate action with respect to such complaints and any deficiencies found in products that affect compliance with the requirements for certification. In this context "appropriate action" shall depend upon the nature of the complaint or deficiency, and may range from a notice issued to the supplier to notification of the HKEIA.



8. Price Scheme

| Services | | | |
|--|---|--|--|
| | Safety evaluation | | |
| | EMC evaluation | | |
| Type test | Performance evaluation – LM 79:2008 with IES file | | |
| | Performance evaluation – TM 21 calculation based on LM 80:2008 and in-situ temperature test | | |
| Report Check | Applicable for the Safety ,EMC or Performance evaluation on reports from an ISO/IEC 17025 accredited Lab., other than LED_LP_CB | | |
| Initial Plant Production Assessment | | | |
| Certification Fee | | | |
| Surveillance Assessment (Plant Production Surveillance Factory Audit & Sample Testing) | | | |
| Close-out Fee (Sample Testing and/or Report Amendment), if required | | | |
| Annual Certificate Renew Fee | | | |

For quotation or any services promotion, please contact:

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