

GUIDELINE FOR OBTAINING THE CERTIFICATE OF APPROVAL (COA) FOR LED LAMPS UNDER MINIMUM ENERGY PERFORMANCE STANDARDS (MEPS)

1.0 BACKGROUND

- 1.1 The Electricity Regulations 1994 (Amendment 2013) enable the Energy Commission to regulate electrical appliances according to their energy performance and such appliances must meet the Minimum Energy Performance Standards (MEPS) and the efficiency ratings as prescribed in the Regulations.
- 1.2 Five electrical appliances including lamps, have been prescribed in the regulations to be regulated under this amendment. Lamps that will be regulated are tubular Fluorescent lamps, Compact Fluorescent Lamps (CFL), Light Emitting Diode (LED) lamps and Incandescent lamps.
- 1.3 This guideline applies only for self ballasted LED lamps for general lighting services.

2.0 TESTING STANDARDS

The Table below shows the safety and performance testing standards for each of the lamp categories to be used for this purpose.

LAMP TYPE	CATEGORY	SAFETY STANDARD	PERFORMANCE STANDARDS
LIGHT EMITTING DIODE (LED)	SINGLE CAPPED SELF BALLASTED	MS IEC 62560	MS 62612 (P) IEC 62612 LM 79
	DOUBLE CAPPED SELF BALLASTED	MS IEC 62031 MS IEC 60061-1	MS 62612 (P) IEC 62612 LM 79

3.0 GENERAL APPROVAL CRITERIA

3.1 All LED lamps must be tested and fulfill the following requirements:-

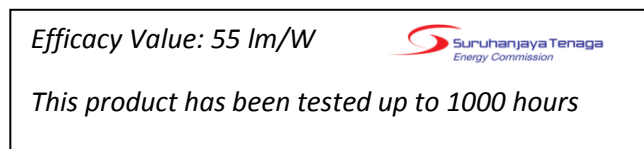
- i) Efficacy value (lumens/watt value prescribed in MEPS)
- ii) Lumens maintenance criteria of 70% after 6000 hours or 80% after 1000 hours
- iii) Failure rate of 10% after 6000 hours and 1000 hours

4.0 APPROVAL CRITERIA FOR LED

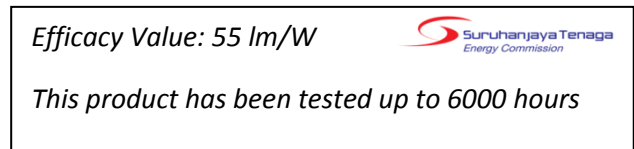
4.1 For Light Emitting Diode (LED) Lamps, the Lumens maintenance test will be carried out every 1,000 hours until the completion of 6,000 hours. An interim report will be issued after completing the first 1,000 hours. The interim report can be used for COA application. The test will be continued to complete the 6,000 hours. A final full test report will then be issued to supersede the interim report.

4.2 Once the COA has been issued, the applicant is required to state the Efficacy value onto the packaging of the product together with the number of hours the LED has been tested as per example below:-

i) After completing first 1,000 hours test



ii) After completing 6,000 hours test



4.3 If the product fails after the first 1,000 hours before completing the 6,000 hours, the testing body is required to inform Energy Commission of such failure. The Energy Commission will then not approve the application for the renewal of the COA.

4.4 The approval process of LED lamps is described as per Appendix 1.

4.5 This procedure will only apply to the products tested according to MS 62612 (P) standard in local labs accredited by Standards Malaysia i.e SIRIM QAS International Sdn Bhd and QAV Technologies Sdn Bhd. For LED lamps tested according to IEC 62612 in overseas accredited labs, only full test reports will be accepted for COA application.

- 4.6 If the LED lamp already has a LM 79 report, it must also be tested for performance in accordance to MS 62612 (P) or IEC 62612 and the above procedure still applies for COA application.
- 4.7 The type test report for LED lamps produced by an overseas first party lab or manufacturer's lab, which fall under the following category, will be recognised by the Energy Commission:
- a. Laboratories under the IECCE CB Scheme. The list of the laboratories is available from the website <http://www.cbscheme.org>. The CB test report needs to be accompanied by a CB test certificate; or
 - b. Laboratories (in the scope of its accreditation) which are accredited by the accreditation body that have signed the Asia Pacific Laboratory Accreditation Cooperation (APLAC) MRA – <http://www.aplac.org>. The test report needs to be accompanied with a conformation letter from the Department of Standards Malaysia;
 - c. Laboratories (in the scope of its accreditation) listed as Designated Testing Laboratory under ASEAN Sectoral Mutual Recognition Agreement for Electrical and Electronic Equipment (ASEAN EEE MRA).

However, the test must be witnessed by the local (Malaysian) lab representative to maintain the integrity of the test.

For any inquiry, please contact:

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APPROVAL TIMELINE OF LED LAMP FOR MS 62612(P) TESTING

