

香港特別行政區政府 機電工程署 香港九龍啟成街3號

Electrical and Mechanical Services Department Government of the Hong Kong Special Administrative Region 3 Kai Shing Street, Kowloon, Hong Kong www.ernsd.gov.hk

Telephone 電話號碼: 2808 3220

Facsimile 圖文傳真: 2890 6081

Our reference 本署檔號: EEO/LB/30/37

Your reference 來函檔號:

24 July 2009

To all Specified Persons

Dear Sir/Madam,

Circular No. 2/2009

Mandatory Energy Efficiency Labelling Scheme (EELS) Further Testing after Compliance Monitoring Test

During the compliance monitoring testing carried out by Electrical and Mechanical Services Department (EMSD) under the mandatory EELS, a listed model will be accepted as conformance if the test results meet the criteria stipulated in clauses 7.10.1, 8.10.1 and 9.11.1 of the Code of Practice on Energy Labelling of Products for room air conditioners, refrigerating appliances and compact fluorescent lamps respectively.

EMSD may remove from the record the reference number of a listed model, if the concerned product does not conform with the information submitted. The specified person may provide explanation on the failure of a product to pass the compliance monitoring test and apply for further testing of the concerned model at his own costs for the consideration of EMSD. If further testing is carried out, a listed model will be accepted as conformance if the test results meet the criteria stipulated in the Annex.

Should you have any enquiries, please feel free to contact our Mr. L.C. WONG at 2808 3185 or Mr. Y.K. CHAN at 2808 3295.

Yours faithfully,

(E.C. VY)

for Director of Electrical and Mechanical Services

Room Air Conditioner

Parameters	Criteria of Acceptance in Further Testing
No. of samples for further testing	3 (Note 1)
Tested power consumption	average ≤ 1.1 x rated value
Tested cooling capacity	average ≥ 0.9 x rated value
Maximum cooling test	all pass (for grades 1 to 4)
Energy efficiency grade (EEG)	 the EEG determined by the average of tested energy consumption indices of all samples in further testing equal to or better than the EEG determined by test results submitted to EMSD by the specified person; or the average of tested energy consumption indices of all samples in further testing ≤ 1.1 x measured energy consumption index calculated by test results submitted to EMSD by the specified person

Refrigerating Appliance

Parameters	Criteria of Acceptance in Further Testing
No. of samples for further testing	3 (Note 1)
Tested storage temperature	all within limits specified in the testing standards
Tested compartment volume	• average ≥ 0.97 x rated value; or
	• average ≥ (rated value – 1 litre)
Tested energy consumption	each ≤ 1.15 x rated value
Tested freezing capacity	• average \geq 4.5 kg of test packages per 100-litre of its storage volume in 24-hour, and in no case $<$ 2 kg; and
	• each ≥ 0.85 x rated value
Energy efficiency grade (EEG)	• the EEG determined by the tested energy consumption index of each sample in further testing equal to or better than the EEG determined by test results submitted to EMSD by the specified person; or
	$ullet$ the tested energy consumption index of each sample in further testing ≤ 1.15 x measured energy consumption index calculated by test results submitted to EMSD by the specified person

Compact Fluorescent Lamp

Parameters	Criteria of Acceptance in Further Testing
No. of samples for further testing	20 for initial lumen, power input and lamp life test; minimum 10 for lumen maintenance (Note 2)
Tested initial lumen	average ≥ 0.9 x rated value
Tested power input	• average ≥ 0.85 x rated value; and
	average ≤ 1.15 x rated value
Tested lumen maintenance	For Grade 1 or 2-
	 average ≥ rated value; and
	• both measured value & rated value ≥ 80%
	For Grade 3 or 4-
	average ≥ rated value; and
	• both measured value & rated value ≥ 78%
Tested life to 50% failures (average life)	For Grade 1 or 2-
	• ≥ rated value; and
	• both measured value & rated value ≥ 8,000 hr
	For Grade 3 or 4-
	• ≥ rated value; and
	• both measured value & rated value ≥ 6,000 hr
Energy efficiency grade (EEG)	• equal to or better than the EEG determined by test results submitted to EMSD by the specified person; or
	• if not equal to nor better than the EEG determined by test results submitted to EMSD by the specified person due to decrease in lamp luminous efficacy, the tested lamp luminous efficacy in further testing ≥ 0.85 x measured lamp luminous efficacy calculated by test results submitted to EMSD by the specified person or rated lamp luminous efficacy, whichever is smaller $^{(Note\ 3)}$

Note:

- (1) For room air conditioners and refrigerating appliances, the specified person can choose to accept the results of further tests undertaken on fewer than 3 samples if the results of each sample subsequently tested also do not meet the acceptance criteria.
- (2) All tests (for initial lumen, power input, lumen maintenance and lamp life) shall be conducted on the same set of CFL samples. For determination of lumen maintenance, the lumens of all the tested samples, which are still alive at the end of 2,000-hour, shall be measured.
- (3) The tested lamp luminous efficacy shall be determined by computing the ratio of the average of the measured luminous flux and the average of the measured power consumption of the tested samples.