

**SIRIM Berhad**  
**(Company No. 367474-V)**  
**MS 141 : Pt. 2 : 1993**

**SPECIFICATION FOR BALLASTS FOR TUBULAR FLUORESCENT  
LAMPS**  
**PART 2 : PERFORMANCE REQUIREMENTS**  
FIRST REVISION

The attached amendment on MS 141 : Pt. 2 : 1993 has been formally approved.

Date : 28 July 1997.

Amd. 1

---

**1. Clause 4. Marking**

Additional clause: Add the following clause after clause 4.3

**4.4** The ballast loss in watts.

**2. Clause 14. Ballast loss**

Add the following clause after clause 13.

**14.** Ballast loss

The ballast loss, when determined by the test method in appendix E, shall not exceed the marked value than 10%, except where a tolerance of less than 10% is marked, in which case, this value shall be used to determined compliance.

**3. Appendix E. Ballast loss test**

Add the following appendix after appendix E.

## Appendix E

### Ballast loss test

- E1.** The circuit shown below shall be used for the determination of ballast loss.
- E2.** The ballast loss is determined by subtracting the lamp power from the total power consumed.

#### **E3. Test method**

##### **E3.1 General**

The sequence described below shall be followed.

##### **E3.2 Reference lamp stability (see clause A1.4)**

With the stabilized power on, position on the Selector Switch 1 and Selector Switch 2 at positions #1.

Allow the lamp to stabilize.

After the lamp has stabilized move Selector Switch 2 to position #2.

Record the readings for the following;

- (i) lamp voltage
- (ii) lamp current, and
- (iii) lamp power.

Check immediately that the readings obtained are the characteristics of a reference lamp.

##### **E3.3 Measurement of lamp power**

Position Selector Switch 1 to position #2. Record the readings for

- (i) lamp voltage
- (ii) lamp current, and
- (iii) lamp power.

##### **E3.4 Measurement of total power consumed**

Position Selector Switch 2 to position #2. Record the readings for the total power consumed.

TEST CIRCUIT FOR DETERMINATION OF BALLAST LOSS

