### भारतीय मानक ब्यूरो (केंद्रीय मुहर विभाग III)

हमारा संदर्भ : सी एम डी - III/16 : IS 2418 21 अगस्त 2018

विषय : आई एस IS 2418 (Part 1):2018 एवं IS 2418(Part 2):2018 के अनुपालन हेतु एस आई टी

सभी क्षेत्रीय और शाखा कार्यालयों से अनुरोध है की एस आई टी DOC:SIT/IS 2418(Part 2)/ 1/ August 2018 का अनुपालन सुनिश्चित करें।

अलिस्मिता खाग वैज्ञानिक बी (सी एम डी-III)

## प्रमुख (सी एम डी-॥।)

सभी क्षेत्रीय /शाखा कार्यालय

प्रतिलिपि : आई टी एस विभाग - बी आई एस इंट्रानेट पर डालने हेत्

#### **CENTRAL MARKS DEPARTMENT III**

Our Ref: CMD III/16: IS 2418 21 August 2018

Subject: SIT for implementation of IS 2418 (Part 1):2018 and IS 2418(Part 2):2018

All ROs/BOs are requested to ensure implementation of the SIT DOC:SIT/IS 2418(Part 2)/ 1/ August 2018.

Alismita Khag Sc B(CMD III)

#### **Head (CMD III)**

Circulated to: All ROs/BOs

Copy to: ITS for hosting on Intranet

# SCHEME OF INSPECTION AND TESTING FOR CERTIFICATION OF TUBULAR FLUORESCENT LAMPS FOR GENERAL LIGHTING SERVICE ACCORDING TO IS 2418 (PART 2):2018

- **1. LABORATORY** A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.
- **1.1** The manufacturer shall prepare a calibration plan for the test equipment.
- **2. TEST RECORDS** The manufacturer shall maintain test records for the tests carried out to establish conformity.
- **3. LABELLING AND MARKING** As per the requirements of IS 2418(Part 2):2018.
- **4. CONTROL UNIT** Lamps of any one rating manufactured in a day shall constitute a control unit.
- **5. LEVELS OF CONTROL** The tests as indicated in column 1 of <u>Table 1</u> and the levels of control in column 3 of <u>Table 1</u>, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.
- **5.1** All the production which conforms to the Indian Standard and covered by the licence should be marked with Standard Mark.
- **6. REJECTIONS** Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1

(1)				(2)	(3)			
Test Details				Test equipment	Levels of Control			
Cl.	Requirement	Tes Clause	t Methods Reference	R: required (or) S: Sub- contracting permitted	No. of Sample	Frequency	Remarks	
4.2	Marking	4.2	IS 2418(Part 1)	R			_	
4.3.1.1(a)	Torsion test for unused lamps	4.3.1.1(a)	IS 2418(Part 1)	R				
4.3.2	Dimension of caps	4.3.2	IS 2418(Part 1)	R				
4.4	Insulation resistance	4.4	IS 2418(Part 1)	R	Each Lamp			
4.5	Electric Strength	4.5	IS 2418(Part 1)	R				
4.6	Parts which can become accidentally live	4.6	IS 2418(Part 1)	R				
4.10	Overall length	4.10	IS 2418(Part 1)	R				
4.7	Resistance to heat & fire	4.7	IS 2418(Part 1)	R				
4.3.1.1(b)	Torsion test- at 2000h	4.3.1.1(b)	IS 2418(Part 1)	R	One	Once in six months for each rating		
4.8	Creepage distance for caps	4.8	IS 2418(Part 1)	R				
4.9	Lamp cap temperature rise	4.9 & Annex-B	IS 2418(Part 1)	R	Five			

TABLE 1

(1)				(2)	(3)			
Test Details				Test equipment	Levels of Control			
Cl.	Requirement	Test Methods		requirement	No. of Sample	Frequency	Remarks	
		Clause	Reference	R: required (or) S: Subcontracting permitted				
7.3	Visual Examination and checking for marking	6,7.3	IS 2418(Part 2)	R	Each Lamp	_	In case of any failure, action shall be taken to rectify the defects. The improved sample shall be tested and the marking shall be resumed if the sample passes.	
7.4	Burning Test	7.4	IS 2418(Part 2)	R	Each Lamp			
5.1.1	Glass Tubing		IS 5081	R			In case of any failure, marking shall be suspended and sample size shall be doubled for subsequent control units. The original frequency may be restored if samples from three consecutive control units pass.	
5.1.2	Caps	5.1.2	IS 2418(Part 2)	R	Twenty	Each Control		
5.1.3	Dimensions	5.1.3	IS 2418(Part 2)	R		Unit		
5.2	Starting characteristics test	7.5 & Annex-A	IS 2418(Part 2)	R	Twenty		In case of any failure marking shall be suspended and samples from every control unit shall be tested. The original frequency may be restored if samples from three consecutive control units pass.	
7.6	Test for electrical, luminous characteristics	Annex-B	IS 2418(Part 2)	R	Fifteen	Once a week for each rating		
	Colour characteristics			R	Three			
7.8	Life Test	7.8	IS 2418(Part 2)	R	Ten	Once a year for each rating		

Note- 1: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.