ELECTRIC LAMP AND COMPONENT MANUFACTURERS' ASSOCIATION OF INDIA

202 Tower A, DLF Towers, Jasola, New Delhi – 110 0 India

Specification	EL 1101
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Version	2

SPECIFICATIONS FOR LED STREET LIGHTING LUMINAIRE

1. SCOPE: To promote energy efficiency by phasing-out inefficient Luminaires using Light sources like HPSV, HPMV, Halogen, Metal Halide or other inefficient lamps with an efficient alternative in the form of LED Street Lights

2. Luminaire Terminology: Complete lighting unit, consisting of one or more lamps (bulbs or tubes that emit light), along with the socket and other parts that hold the lamp in place and protect it, wiring that connects the lamp to a power source, and a reflector that helps direct and distribute the light. Fluorescent fixtures usually have lenses or louvers to shield the lamp (thus reducing glare) and redirect the light emitted. Luminaires include both portable and ceiling- or wall-mounted fixtures.

3. Technical Requirement: The LED Module used in the Luminaire should comply with IS 16103 (Part 1) for safety requirements. The test protocol for performance shall be as per IS 16103 (part 2). The performance requirements shall be as specified in the following table.

4. Luminaire Specifications

Sr. No.	Tests Parameters	Requirements	Referred standard IS/IEC
1	Lumen per Watt	Low Output (<9000 lm) 65 lm/W; Mid Output (9000 to <23000 lm) 80 lm/W; High Output (≥23000 lm) 100 lm/W	16103 (Part 2)
2	C R I	≥ 60	16103 (Part 2)
3	Minimum rated life (L70 /B50)	50,000 h	16103 (Part 2)
4	Rated voltage	Upto and including 250 V, Operating range 140V to 270V AC, 50 Hz	IS 16103 (Part 2)
5	Power Factor	> 0.9	IS 16103 (Part 2)
6	T H D	Not more than 20%	14700 (Part 3/Sec 2)
7	Driver	Accessible for easy replacement.	-
8	CCT	3000K (3045±175) 3500K (3465±245) 4000K (3985±275) 5000K (5028±283) 5700K (5665±355) 6500K (6530±510)	IS 16103 (Part 2), IS 16105 and IS 16106
9	Junction Temperature	Less than 90° C @ ambient 25 degrees C. To be calculated by measuring at solder point and adding thermal resistance.	-
10	Capacity to withstand surges	Upto 4 KV	IEC 61000-4-5
11	Warrantee	2 years	–