



ELECTRIC LAMP AND COMPONENT MANUFACTURERS' ASSOCIATION OF INDIA

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Specification	EL 1203
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Version	2

SPECIFICATIONS FOR LED SELF BALLASTED LAMPS

1. SCOPE: To promote energy efficiency by phasing-out incandescent lamp with an efficient alternative in the form of retrofit LED lamp
2. Lamp Terminology: Self Ballasted LED Lamp retrofits for GLS lamp, cap size B22 and E27.
3. Technical Requirement: The lamps shall conform to IS 16102(Part 1) for safety requirements. The test method for performance requirements shall be as per IS 16102 (Part 2). The performance of lamps shall be as specified in the following table.
4. LED Chip conformity should be as per LM80 and should be made mandatory
5. Lamp Specifications

Sr.NO	Test Parameters	Requirements	Referred Standard IS/IEC
1	Rated Wattage	Upto and including 60 W	IS 16102 (Part 2)
2	Rated Voltage	Upto and including 250 V, ac	-do-
3	CCT	2700K (2723 ± 82) 3000K (2940 ± 98) 3500K (3397 ± 125) 4000K (4036 ± 154) 5000K (4991 ± 220) 5700K (5665 ± 270) 6500K (6432 ± 340)	-do-
4	Cap Type	B22/E27	IS 16102 (Part 1)
5	Power factor	≤ 5W – no requirement > 5W - 0.85 minimum	IS 16102 (Part 2)
6	Efficacy (lm/w)	Up to 5W - >55 lumen/watt >5 W - >60 lumen/watt	IS 16102 (Part 2)
7	CRI	>80%	IS 16102 (Part 2)
8	Lumen Maintenance	70% at 15000 hrs.	IS 16102 (Part 2)
9	Life	25,000 hrs	IS 16102 (Part 2)
10	Temperature Cycling test and supply voltage switching test	Product must survive one cycle for every hour of rated	IS 16102 (Part 2)
11	Harmonics	Shall comply with Table 5A and 5B	IS 16102 (Part 2) and 14700 (Part3/sec.2)