

IS 15111 (Part 1 & 2): 2002- Self-Ballasted Lamps for General Lighting Services - Part 1: Safety Requirements & Part 2: Performance Requirements

A Self Ballasted Lamp is a tubular fluorescent or other discharge lamp unit that incorporates, permanently enclosed, all elements that are necessary for starting, and for stable operation, and which does not include any replaceable or interchangeable parts.

IS 15111 (Part 1): 2002 specifies the safety and interchangeability requirements and IS 15111 (Part 2):2002 specifies the performance requirements together with the test methods and conditions, required to show compliance of self-ballasted lamps intended for domestic and similar general lighting purposes having a rated wattage up to and including 26 W, a rated voltage up to and including 250 V, and features Edison screw or bayonet caps ensuring compatibility with common fixtures.

The requirements such as Protection against Electrical Shock, Temperature Rise, Dielectric Properties, Mechanical Strength, Lamp Wattage, Colour, Power factor, Luminous Flux, Lumen Maintenance, Harmonics, Life and Lamp Efficiency are important Safety and Performance parameters of a Self-Ballasted Lamp.

The safety tests i.e. Protection against Electrical Shock, Temperature Rise, Insulation Resistance, Electric Strength, Torsion Resistance, Resistance to heat/flame and ignition, specified in IS 15111 (Part 1):2002 ensures that lamps pose no hazard under normal use or fault conditions. The marking requirements ensures correct installation and handling of the product.

The performance of a self-ballasted lamp are further ensured by tests i.e. Luminous flux, Colour, Wattage, Power factor, Harmonic limits, Luminous Flux, Lamp Efficiency. Moreover, the tests i.e. Lumen maintenance and Average lamp life ensures that these lamps maintain brightness and longevity over time.

IS 15111 (Part 1 & 2):2002 provide robust specifications, guaranteeing safe, high-quality, and efficient lighting solutions for consumers.