

IS 10322 Part 5/Sec 2

This Indian Standard (IS 10322 Part 5/Sec 2) specifies requirements for recessed luminaires used with various lamp types at supply voltages up to 1000V. Recessed luminaires, also known as downlights or can lights, are lighting fixtures that are installed into a ceiling or wall and sit flush with the surface. They are designed to create a sleek, unobtrusive look and can be used for a variety of lighting needs.

It covers safety and photometric requirements but excludes air-handling or liquid-cooled luminaires. Key points include:

- Classification and marking requirements, including for insulating ceiling suitability
- Construction and wiring specifications
- Protection against electric shock
- Endurance and thermal testing procedures
- Dust/moisture resistance testing
- Insulation and electrical strength requirements
- Photometric testing guidelines

The standard provides details on ambient temperature measurement in installations and photometric data to be supplied by manufacturers. It is to be used in conjunction with IS 10322 Part 1 on general luminaire requirements. The document includes specific clauses on topics like creepage distances, earthing provisions, terminals, and resistance to heat/fire/tracking.

Overall, it aims to ensure the safety and performance of recessed luminaires through standardized requirements and testing procedures. Safety is ensured through specific requirements regarding electric shock protection, thermal limits, and the use of appropriate materials for construction and wiring. Compliance is verified through testing, inspection, and adherence to detailed requirements set forth in the standard, including marking and classification provisions.