

Lighting Sciences' Lamp Life Test Station determines the life of lamps (burning hours) and are supplied to test the following types of lamps:

- Filament lamps
- High intensity discharge lamps (mercury, metal halide or high pressure sodium)
- Low pressure sodium
- Single-ended fluorescent lamps
- Double-ended fluorescent lamps

Specifications

Lamp Life Test Stations are constructed in accordance with the appropriate IES of North America procedures for the particular lamp type (LM49-2001, LM47-2001, LM60-2001, LM40-2001 and LM65-2001).

- Each Lamp Life Test Station is capable of operating up to 20 lamps simultaneously, with a maximum total lamp power of 10 kilowatts.
- The Lamp Life Test Station is equipped with an hour counter for total on-hours counting and a cycle timer for power on/off switching. Lamps are automatically cycled on and off per test specifications.
- Lamp sockets for the 20 test lamps are provided, suitable for the particular lamp type under test, along with mounts for the lamp sockets (lamp socket type to be specified by customer).
- The station is provided with two electrical connection outlets not connected to the lamp power.
- The unit incorporates a display clock for 24-hour time.
- The station incorporates a line voltage meter.
- The station is equipped with anti-vibration feet and removable lamp mounting rails.
- Storage compartments are provided for ballasts (ballasts are not part of the station specification and will be supplied by the customer).
- "Lamp Out" monitors (transducer operated) connected to an elapsed time indicator (one per rack) are provided.
- Lamp Life Test Stations are designed for operation in an ambient temperature of 25 degrees C, \pm 10 degrees C.



Principle of Operation

The lamp life test station is a multiple lamp device using hour counting and hour display instruments to determine the number of burning hours for the desired type of lamps to be tested. An example of lamp test would proceed as follows:

- Operator sets up the lamp and ballast combination in accordance with the appropriate IES test procedure.
- Operator sets up one lamp on/off device for each of the lamps to be tested.
- Operation verification of each device is performed.
- Operator resets the total on time hour counting clock for the rack of lamps to be tested.
- Operator sets the on/off cycle clock for the 24 hours cycle needed for the lamps to be tested.
- Operator starts the data-logging sheet for the lamps to be tested.
- Operator sets the voltage adjustment for the rack of lamps to be tested.
- Once a day the operator visually inspects the lamp rack for lamp outages, voltage setting, and fills in the data-logging sheet.

In case of a lamp failure, the operator notes the elapsed time from the lamp fail, resets the fail counter, and removes the monitoring device from the system.

The failed lamp(s) are then examined for failure cause. Operator inspection is done in accordance with the appropriate IES test procedure.

Computerized System

An automated computerized system is available which uses an IBM compatible PC system to monitor the lamps, perform timing

functions and act as a data logger. The computer rapidly scans all lamps to determine whether any lamp failures have occurred, and builds a file to display the required information. This eliminates mechanical time clocks and manual operations such as the need to perform inspections to detect lamp outages.

Procedures

Illuminating Engineering Society of North America procedures supplied with station

- LM-47-2001 IESNA Approved Method for Life Testing of High Intensity Discharge (HID) Lamps
- LM-49-2001 IESNA Approved Method for Life Testing of Incandescent Filament Lamps
- LM-40-2001 IESNA Approved Method for Life Testing of Fluorescent Lamps
- LM-65-2001 IESNA Approved Method for Life Testing of Compact Fluorescent Lamps
- LM-60-2001 IESNA Approved Method for Life Testing of Low Pressure Sodium Lamps

Ordering Information

To order the Lamp Life Test Station or obtain more information, telephone our corporate headquarters at (480) 991-9260. If your requirements are more detailed in nature, feel free to fax us your question at (480) 991-0375, or email us.

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