



# Automatic Solutions

**The Self-Testing Solution to Code-Required Testing**  
The Philips Bodine REDiTEST

**PHILIPS**  
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# The Automatic Solution

## Regular testing of emergency lighting equipment is vital to life safety and code-required.

The NFPA® National Electrical Code® and Life Safety Code® require periodic testing, visual inspections and written records of the test results for all emergency lighting. Fire officials, specifiers and building owners and operators want to know that life safety equipment is functioning properly at all times. **Philips Bodine REDiTEST is the automatic solution to code-required testing and operational assurance.**

**REDiTEST** emergency ballasts save time and money by eliminating the need for maintenance personnel to manually test emergency lighting.

**REDiTEST** self-testing/self-diagnostic fluorescent emergency ballasts automatically perform code-required testing for unit equipment. Designed with a preprogrammed microcontroller, these emergency ballasts test themselves monthly (30 seconds) and annually (90 minutes) and continuously monitor their performance. During automated testing, **REDiTEST** ballasts simulate an AC power failure by causing the unit to switch to emergency mode. They then run a discharge test to check battery voltage and discharge current. Should **REDiTEST** detect a problem, the indicator light flashes and, if selected, the audible alarm sounds.

With **REDiTEST**, code requirements are met and those concerned with building safety can feel confident that emergency lighting will be available whenever normal power fails.

### NFPA 101® Life Safety Code® (2009)

7.9.3.1.2 Testing of required emergency lighting systems shall be permitted to be conducted as follows:

- (1) Self-testing/self-diagnostic battery-operated emergency lighting equipment shall be provided.
- (2) Not less than once every 30 days, self-testing/self-diagnostic battery-operated emergency lighting equipment shall automatically perform a test with a duration of a minimum of 30 seconds and a diagnostic routine.
- (3) Self-testing/self-diagnostic battery-operated emergency lighting equipment shall indicate failures by a status indicator.
- (4) A visual inspection shall be performed at intervals not exceeding 30 days.
- (5) Functional testing shall be conducted annually for a minimum of 1½ hours.
- (6) Self-testing/self-diagnostic battery-operated emergency lighting equipment shall be fully operational for the duration of the 1½ test.
- (7) Written records of visual inspections and tests shall be kept by the owner for inspection by the authority having jurisdiction.





## Models

**B30ST** *Specification Grade.* High-lumen (1800-3500), one- or two-lamp operation for most fluorescent 17-215 W (2'-8") T5-T12 lamps. Suitable for damp locations. *UL Listed.*

**B50ST** *Specification Grade.* High-lumen (1100-1400), one- or two-lamp operation for most fluorescent 17-215 W (2'-8") T8-T12 lamps. *UL Listed, CSA Certified.*

**LP600STU** *Specification Grade.* High-lumen (600-1325), one-lamp operation for standard and HO T5 and T8 lamps. Suitable for low-profile, universal input and damp location applications. *UL Listed, CSA Certified.*

**B74CST** *Specification Grade.* 700-1000 lumen output, one- or two-lamp operation for 4-pin compacts. Suitable for damp locations. *UL Listed.*

*Refer to individual product specification sheets for a complete listing of REDiTEST lamp compatibility. Specification sheets may be obtained by contacting Philips Emergency Lighting at 800-223-5728. They are also available on our website: [www.philips.com/bodine](http://www.philips.com/bodine).*

## Operation

During normal operation, AC power is present and the **REDiTEST** indicator light is illuminated. **REDiTEST** emergency ballasts monitor charging current and battery voltage continuously. When AC power fails, **REDiTEST** ballasts automatically switch to emergency mode, keeping either one or two lamps illuminated at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the emergency ballasts return to the charging mode. Note: For end-user convenience, a test switch is provided. Manual tests may be conducted at any time.

## End-of-Lamp-Life Compatibility

**REDiTEST** emergency ballasts are compatible with the EOL (end-of-lamp-life) detection circuitry common to AC ballasts. It is our ELC (end-of-lamp-life compatible) circuit that allows our emergency ballasts to be paired with EOL circuitry without the bothersome shutdown issue often seen in this pairing.

The shutdown problem occurs because EOL circuitry interprets the transition from emergency to normal power as an end-of-lamp-life condition and, in response, directs the AC ballast to shut down. This does not happen when the ELC circuit is in use.

The ELC circuit delays AC ballast operation for approximately three seconds. Because AC ballast operation is delayed, EOL circuitry in the AC ballast cannot "see" the transition and, therefore, cannot misinterpret the transition as an end-of-life condition.



**REDiTEST** units are ideal for schools, institutional facilities, public buildings, healthcare establishments, industrial plants and any other location with difficult-to-test fixtures. Difficulty may be due to locations, traffic patterns or the number of fixtures to be tested.

## REDiTEST emergency ballasts:

### Test and monitor performance automatically.

**REDiTEST** emergency ballasts carry out a preprogrammed schedule of code-compliant testing and monitor emergency ballast performance on an ongoing basis.

The emergency ballasts test emergency operation for a minimum of 30 seconds every 30 days and 90 minutes once a year, and they continuously monitor charging current and battery voltage.

### Communicate results easily.

**REDiTEST** emergency ballasts alert users if a unit requires service. A flashing indicator light and audible alarm tell maintenance personnel when emergency lighting requires attention. The audible alarm feature is user selectable.

### Avoid interruptions to end-user activity.

**REDiTEST** emergency ballasts have been designed to avoid interrupting end-user activity. They track the optimum time to initiate a scheduled test.

**REDiTEST** emergency ballasts provide a method of interrupting a test in progress if a room is occupied and then delay the test for 8 hours. For applications where lights remain illuminated, the emergency ballasts postpone a scheduled test for a maximum of 72 hours, then execute testing to ensure code requirements are met.



### Are ideal for hard-to-test fixtures.

**REDiTEST** emergency ballasts automate the preset test sequence, eliminating the need for manually pushing test switches or buttons on hard-to-reach fixtures.

No ladders or extension devices are needed to test emergency operation.

### Require no extra installation.

**REDiTEST** emergency ballasts can be easily installed inside, on top of or remote from the fixture, depending upon fixture and **REDiTEST** model.

Microcontroller and electronic circuitry fit inside the ballast case. An indicator light flashes and audible alarm sounds at half-second intervals to notify the installer of improper voltage.

### Offer rapid payback.

**REDiTEST** emergency ballasts save time and money by eliminating the need for maintenance personnel to manually test emergency lighting equipment.

**REDiTEST** emergency ballasts are exempt from the 30-day functional test, provided a visual inspection is performed every 30 days.



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