

# NFDL1 Series

# Recessed LED Downlight Emergency Lighting

Optimized high-performance LEDs make this architectural downlight an ideal choice for indoor installation in long corridors and open spaces. With 55' spacing in 9' ceilings, this is a prime choice for exceptional light output without affecting the appearance of the ceiling layout.

#### **FEATURES**

- 55' On-center spacing
- · Compact, flush-mount, 4" recessed downlight for new construction
- 7 or 10.5 Watt LED options
- Pure white light output at 5600K
- Optical LED lens coupled with a prismatic polycarbonate lens for optimal light output and protection
- · Maintenance-free NiCad battery, standard
- Optional PathSafe security/night lighting (SEC) allows the fixture to be used as an emergency lighting and as security/night lighting fixture
- Optional Guardian (G2) Self-test/Self-diagnostics available
- · Optional Damp Location Rating (DR) available
- · Standard finish: White
- External LED status indicator and test button
- 120/277VAC, 50/60Hz input
- · Made in the U.S.A.
- ETL Listed for Damp Locations

# WARRANTY

Any component that fails due to a manufacturing defect is guaranteed for five years with a separate five year pro-rated warranty on the battery. The warranty does not cover physical damage, abuse or instances of uncontrollable natural forces. See the full Exitronix warranty document for detailed information.













# ORDERING INFORMATION Example: NFDL1-WB-10L-WH-G2

Series	Power Source	LED Wattage	Finish	Options (Factory Installed)
NFDL1	WB = With Battery	7L = (2) 3.5 Watt LEDs	WH = White	DR = Damp Location Rated
		10L = (3) 3.5 Watt LEDs		G2 <sup>1</sup> = Self-test/Self-diagnostics
Notes				SEC 120 = Security Lighting/Night Light - 120VAC
<sup>1</sup> SEC 120/277VAC is automatically included with this option				SEC 277 = Security Lighting/Night Light - 277VAC

#### CONSTRUCTION

New Construction Housing: The NFDL1 downlights offer a 4" trim ring with galvanized steel can, standard backplate and universal hanger bars. Heat and impact-resistant, polycarbonate, prismatic lens resists discoloration. Non-IC Rated.

#### ILLUMINATION

Fixtures are supplied with high powered Luxeon LEDs offering 7 or 10.5 Watts of light output with a pure white color temperature of 5600K. Optical lenses on the LED module combined with the prismatic polycarbonate lens produce an optimized elongated pattern of light throughout the path of egress. The high-performance LEDs have an expected life over 50,000 hours with normal life.

Lamps are connected in parallel – if one lamp fails, the balance of the lamps will continue to operate.

### **ELECTRICAL**

# Input

120/277VAC, 50/60Hz.

# Nickel Cadmium Battery - NiCad (Standard)

Exitronix NiCad batteries are maintenance-free and perform optimally in temperatures ranging from 0°C to 40°C (32°F to 104°F).

# **Emergency**

The NFDL1 downlight will operate for a minimum of 90 minutes during a loss of power with a 24 hour minimum recharge time for the battery. The power supply delivers a regulated current and voltage to LED lamps to optimize lamp life. A momentary test switch and LED charge indicator are included.

#### Brownout Circuit

The brownout circuit monitors the line voltage. As the line voltage sags and can no longer provide adequate voltage, the emergency lighting circuit will turn on to supply power to the emergency lamps for 90 minutes until the line voltage is restored.

#### Low Voltage Disconnect

Low Voltage Disconnect (LVD) measures the battery terminal voltage and if it should fall below a preset voltage threshold, the LVD will disconnect the load. When the battery is recharging and voltage is raised above another preset threshold, the load is automatically reconnected.

#### Solid-State Transfer

The circuit features Solid-state switching for emergency lamps, eliminating concerns of damaged contact or mechanical failures associated with relays. The switching circuit detects a loss of line voltage and automatically switches to emergency mode.

#### **Overload and Short Circuit Protection**

The overload monitoring system in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made.

#### **INSTALLATION**

This NFDL1 downlight is supplied with integral bar hangers, standard recessed can, backplate and 4" trim ring.

#### MADE IN THE USA

Made in the U.S.A. The product is in full compliance with the American Recovery and Reinvestment Act of 2009 (ARRA) requirements and Buy American provisions.

# DAMP LOCATION RATED (Option: DR)

Damp Location Rated fixture that is normally or periodically subject to condensation of moisture in, on or adjacent to, and includes partially protected locations.

#### **GUARDIAN SELF-TEST/SELF-DIAGNOSTICS (Option: G2)**

The Guardian circuit continuously monitors the operating condition of the AC power, battery supply voltage, emergency lamp continuity and charging circuit.

The purpose of this option is to provide visual signaling in response to a possible fault. If a failure is detected, visual status will occur immediately via the CHARGER LED. The LED will remain in this state until the fault is corrected.

Refer to installation instructions for detail of operation.

The Guardian circuit also monitors the transfer circuit and performs automatic code compliant testing. The Guardian circuit will perform self-tests in accordance to NPPA 10.

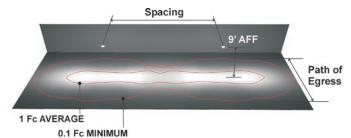
#### PATHSAFE SECURITY LIGHTING/NIGHT LIGHT (Option: SEC)

The PathSafe option allows the fixture to be used both as an emergency lighting fixture and security/night lighting fixture. Models with battery backup and the PathSafe option will operate each LED at 2 Watts (SEC) offering 50% output when in security lighting mode when connected to the active building AC supply and wired according to the installation instructions. The security lighting circuit is independent of emergency lighting and may be switched manually by exterior photocell (supplied by others) or other automatic means.

### **CONFORMANCE TO CODES & STANDARDS**

The NFDL1 downlight Series is ETL Listed and meets or exceeds the following: UL 924, NEC requirements and NFPA 101.

#### **SPACING GUIDE**



Spacing Mounting LED Path of Egress Width Height 3' 6 10' 50' 7L 9' 40 25 10L 9' 55' 50 40'

Spacing guidelines are designed to achieve a 1 foot-candle average and a 0.1 foot-candle minimum with a 40:1 or less max/min ratio. Guidelines are intended to be used as a design aid and are not a guarantee of code compliance. Manufacturer assumes no responsibility for local requirements or specific project variables.

# **DIMENSIONS**

