



**READY-LITE**

# NEMA-4X SERIES

Certified for Harsh Environment Applications



***Thomas & Betts***  
A Member of the ABB Group

# NEMA-4X FAMILY

## THE INDUSTRY STANDARD FOR EMERGENCY LIGHTING IN HARSH ENVIRONMENTS IS HERE.



Battery units, remote fixtures, exit signage and combination units - Ready-Lite® is proud to offer a complete family of NEMA-4X Certified emergency lighting products that delivers impressive, state-of-the-art illumination in a visually-appealing package.

A complete emergency lighting solution, these products are designed for use in a wide range of commercial and industrial environments where humidity, dust, water infiltration, and the risk of vandalism are specification criteria.

### FEATURES

- Battery units and remote fixtures deliver unsurpassed pathway illumination — 89 feet, center-to-center (see photometric data on back cover)
- Fully gasketed enclosures prevent water infiltration
- Vandal-resistant enclosures - resist dents, peeling and corrosion
- All units come with tamper-proof screws and bits
- UV resistant enclosures
- Choice of colours - factory white, black and grey
- Continuous self-diagnostic monitoring and monthly self-testing
- Fully automatic, solid state charger
- Non-intrusive magnetic test switch
- Nexus® compatible

### CERTIFICATIONS

- CSA Certified for 30 minutes of emergency operation
- Exit signs meet or exceed C22.2 No. 141-15
- NEMA-4X Certified for high abuse areas, wet locations and cold weather (-40°C) applications
- NSF Certified for use in food processing plants

### APPLICATIONS

- Hosedown areas/ car washes
- Food processing/ preparation facilities
- Marine locations
- Chemical plants
- Schools and other public facilities
- Parking garages
- Transit platforms
- Sports arenas/ swimming pools
- Security areas/ prisons
- Warehouse and cold storage facilities
- Heavy industrial facilities





## RN Series

### NEMA-4X & NSF Certified Pictogram Sign

- Sealed heavy-duty, vandal-resistant polycarbonate faceplate
- Suitable for cold weather application — -40°C (AC/DC model) and -25°C on self-powered model (CW option)
- Energy efficient - consumes less than 2.5W in AC or DC mode NEMA-4X RN Series
- Same product with exit legend also available



## RNC Series

### NEMA-4X & NSF Certified Combination Unit

- Innovative, field-adjustable lamp head assembly
- Choice of MR16 halogen lamps up to 12V, 12W or high-efficiency, 6W, MR16 LED lamps
- Can be wall or ceiling mounted
- Double face available
- Suitable for cold weather application — -40°C (CW option) - Available in 6V only.
- Same product with exit legend also available

### UNRIVALLED PATHWAY ILLUMINATION 89 FEET CENTER-TO-CENTER

(see photometric data on the last page)



## TUF-NM SERIES

### NEMA-4X Certified Battery Unit

- Fully gasketed cast aluminium back plate with clear UV resistant polycarbonate cover
- Long-life maintenance-free sealed Lead-Acid battery
- Choice of MR16 halogen lamps up to 12V, 20W or high-efficiency, 6W, MR16 LED lamps
- Mounting: wall mount
- Unit capacity: up to 108W
- Suitable for cold weather application — -40°C (CW option)



## TUF-NM Series

### NEMA-4X Certified Remote Fixtures

- Choice of single or double head models
- Fully gasketed cast aluminium or polycarbonate back plate with clear UV resistant poly carbonate cover
- Choice of MR16 halogen lamps up to 24V, 20W or high-efficiency, 6W, MR16 LED lamps



# RN SERIES

## NEMA-4X & NSF Certified Pictogram Sign

**new product**



Type: \_\_\_\_\_  
 Project/Location: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Prepared By: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Model No.: \_\_\_\_\_

### TYPICAL SPECIFICATIONS

Supply and install the **Ready-Lite® RN Series** pictogram Exit Signs. The equipment shall be certified for NEMA-4X and designed specifically for high abuse areas, wet locations, and cold weather applications. The equipment frame shall be of industrial grade polyvinyl chloride with a gasket around lenses and canopy. The faceplate(s) shall be constructed of heavy-duty vandal-resistant polycarbonate and feature an even illuminated legend. Each face plate shall come standard with two legend films for pictogram and direction selection. The light source shall be white light-emitting diodes (LED). The pictogram Exit Sign shall operate with universal 2-wire AC input voltage of 120 to 347VAC at less than 2.5W and universal 2-wire DC input voltage from 6 to 24VDC at less than 1W for single and double face signs. The Self-Powered model shall include a concealed green pilot light and magnet-sensitive test switch, shall use a sealed Nickel-Cadmium battery of 2.4V nominal voltage and shall stay illuminated during emergency operation for at least two hours upon AC failure. When specified, the Self-Powered model shall include auto-test functions: it shall execute automatic tests for 5 minutes every 30 days, 30 minutes every 60 days and two hours annually. When a fault is detected, the bi-colour pilot light shall turn from green to red and flash following a particular code. The code description shall be visible on a label next to the pilot light to identify the failure type: battery, charger circuitry, or LED lamps.

The pictogram Exit Sign shall be listed CSA 22.2 No.141-15 standard.

The equipment shall be **Ready-Lite®** Model: \_\_\_\_\_

NEMA-4X AND NSF CERTIFIED FAMILY				
RN Combo P. 64-65	TUF Exit P. 63	N-TUF Combo P. 66-67	TUF-NM Battery P. 128-129	TUF-NM Remote P. 160-161

### FEATURES

- NEMA-4X Certified
- NSF compliant for food processing
- Polymeric enclosure is fully gasketed around lens and canopy to secure against water leaks
- Sealed, heavy-duty, vandal-resistant polycarbonate face plate
- Suitable for cold weather: -40°C for AC/DC and -20°C for Self-Powered models (option: -CW)
- Tamper-resistant, concealed test switch with magnetic action
- White LED light source
- Supplied standard with two pictogram films per face, for direction selection
- Meets or exceeds CSA 22.2 No.141-15 standard for pictogram Exit Signs
- Universal AC input: two-wire 120 to 347VAC; Standard DC input: two-wire 6 to 24VDC
- Energy efficient – consumes less than 2.5W in AC or DC-remote mode
- Self-Powered models deliver two hours of back-up lighting

### WIRE GUARDS

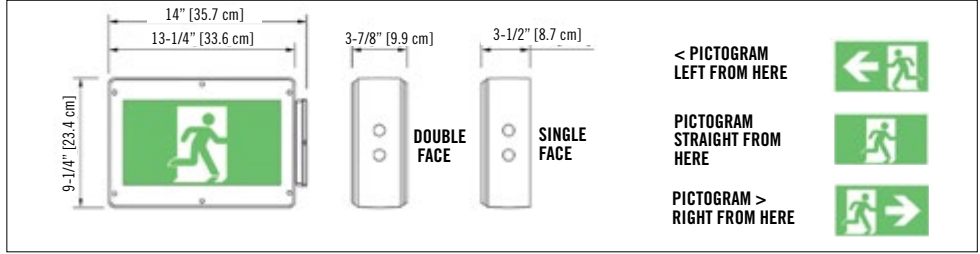
460.0079-RL	wall mount
460.0027-RL	end mount
460.0028-RL	ceiling mount

### POWER CONSUMPTION AND UNIT RATING

MODEL	AC SPECS		DC SPECS	
AC-only	120 to 347VAC	less than 2.5W	-	-
AC/DC standard	120 to 347VAC	less than 2.5W	6 to 24VDC	less than 1W
AC/Special DC	120 to 347VAC	less than 2.5W	36, 48, 120VDC	less than 2.5W
Two-wire 120V AC/DC	120VAC	less than 2.5W	120VDC	less than 2.5W
Self-Powered	120 to 347VAC	less than 3W	nickel-cadmium battery	min. 2 hours
Self diagnostic	120 / 347VAC	less than 3.5W	nickel-cadmium battery	min. 2 hours

### DIMENSIONS

Dimensions are approximate and subject to change.



### ORDERING INFORMATION

SERIES	FACES/MOUNTING	COLOUR	VOLTAGE	OPTIONS
RN= NEMA-4X & NSF pictogram exit sign	1= single face, universal mounting 2= double face, universal mounting	B= black W= factory white	SP= Self-Powered, 120 to 347VAC SPD= Self-Powered diagnostic Ni-Cd, 120/347VAC SPD2= Self-Powered diagnostic Ni-Cd, 120/277VAC U= universal, 120 to 347VAC; 6 to 24VDC U00= 120 to 347VAC only U36= 120 to 347VAC; 36VDC U48= 120 to 347VAC; 48VDC U120= 120 to 347VAC; 120VDC 2120= 2-wires 120VAC/VDC NEX= NEXUS® system interface, 120/347VAC NEX2= NEXUS® system interface, 120/277VAC NEXRF= wireless NEXUS® system interface, 120/347VAC NEXRF2= wireless NEXUS® system interface, 120/277VAC	CW= cold-weather (-20°C for SPD, SPD2 and NEXUS® only)

EXAMPLE: RN1BSPCW



Type: \_\_\_\_\_  
 Project/Location: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Prepared By: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Model No.: \_\_\_\_\_

**new product**

**NSF NEMA-4X nexus**   Made in Canada



## RNC SERIES

NEMA-4X & NSF Certified  
Pictogram Combination Unit

### TYPICAL SPECIFICATIONS

Supply and install **Ready-Lite® RNC Series** combination emergency light battery unit and pictogram Exit Sign. Designed specifically for industrial environments, the equipment frame shall be of industrial grade polyvinyl chloride with gaskets around both sides of frame contour. The back plate shall be made of 1/8" thick aluminum sheet and shall include knock-outs for installation on an electrical box. The faceplate(s) shall be constructed of heavy-duty vandal-resistant clear polycarbonate and feature a uniformly illuminated pictogram legend. Each face plate shall come standard with two legend films for pictogram and direction selection. The light source shall be long-life white light-emitting diodes (LED).

The unit shall have attached a lower compartment containing two emergency heads with adjustable swivels and long-life MR-16 LED lamps of \_\_\_ V and \_\_\_ W. The heads shall be installed on a shield housing made of rigid thermoplastic and shall be protected by a shock-absorbent, clear polycarbonate cover. The standard AC input voltage shall be 120/347VAC. The unit shall be equipped with a magnetic test switch and an LED pilot light protected by the clear face plate.

The unit shall perform auto-test functions managed by a micro-controller and shall automatically self-test for one minute every 30 days, 10 minutes in the 6th month and 30 minutes annually. When a fault is detected, the bi-colour pilot light shall turn from green to red and flash following a particular code. The code description shall be displayed on a label next to the pilot light to identify the failure type: battery, charger circuitry, LED lights for the signage, or emergency lights.

The combination unit shall meet or exceed the standard CSA C22.2 No.141-15.

The equipment shall be **Ready-Lite®** Model: \_\_\_\_\_ .



### WIRE GUARDS WITH HEADS

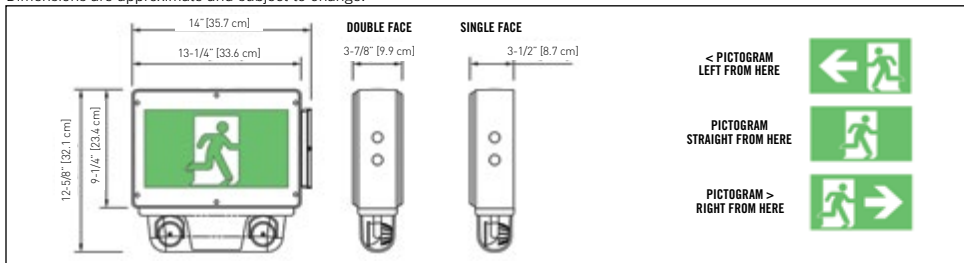
460.0078-RL	wall mount
460.0060-RL	end or ceiling mount

### POWER CONSUMPTION

MODEL	AC SPECS	EMERGENCY POWER FOR LAMPS				
		30MIN	1H00	1H30	2H00	4H00
Pictogram Sign Module	less than 2.5W	-	-	-	-	-
RNC-6N36	120/347VAC 0.10/0.03 A	36	30	20	16	8
RNC-6N36-CW	0.25/0.08 A	36	30	20	16	8
RNC-12N60	0.18/ 0.06 A	60	40	30	20	10

### DIMENSIONS

Dimensions are approximate and subject to change.



### ORDERING INFORMATION

SERIES	FACES / MOUNTING*	HOUSING COLOUR	BATTERY TYPE AND POWER	HEAD STYLE AND WATTAGE	OPTIONS
RNC= NEMA-4X & NSF pictogram exit combo unit	1= single face 2= double face  *Universal mounting	B= black W= factory white	6N36= 6V-36W, Ni-Cd 12N60= 12V-60W, Ni-Cd	Blank= no heads* LD1= MR16 LED, 6V-4W LD7= MR16 LED, 12V-4W LD9= MR16 LED, 12V-5W LD10= MR16 LED, 12V-6W M1= MR16 halogen, 6V-6W M1= MR16 halogen, 6V-10W MK= MR16 halogen, 12V-12W  * Remote load must be connected.	Blank= auto-diagnostics, non-audible (standard) AD= auto-diagnostics U2= 120/277VAC input CW= cold-weather -40°C, only with 6V single face D3= time delay (15 mins.) NEX= NEXUS® system interface* NEXRF= wireless NEXUS® system interface*  * Not all options available with NEXUS® System. Please consult your sales representative

EXAMPLE: RNC1B12N60LD7

### FEATURES

- Certified NEMA-4X for wall or ceiling mount
- NSF certified for use in food processing areas
- Meets or exceeds CSA 22.2 No.141-15 standard for pictogram Exit Signs
- Polyvinyl chloride frame, with built-in gasket to prevent water infiltration
- Sealed, vandal-resistant faceplate of polycarbonate
- Legend illuminated by long-life white LED's
- Comes standard with two pictogram films per face, for direction selection
- Two high-performance MR16 LED lamps shielded by a clear polycarbonate cover
- Optional 5W LED emergency lights provide 60' of egress illumination on a 6-foot wide path
- Sealed, maintenance-free Lead-Calcium or Nickel-Cadmium batteries
- Remote load capacity: covers with 4W LED lights 100' up to 230' of egress illumination
- Comes standard with auto-diagnostic
- Cold-weather option: -40°C (-40°F) with only 14W extra power consumption



# TUF-NM SERIES

NEMA-4X Certified



Type: \_\_\_\_\_  
 Project/Location: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Prepared By: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Model No.: \_\_\_\_\_

## TYPICAL SPECIFICATIONS

Supply and install the **Ready-Lite® NEMA-4X Certified TUF-NM Series** battery unit. Specifically designed for high abuse areas, wet locations, and cold weather (CW option -40°C (-40°F)), the housing shall consist of a fully gasketed Die-Cast aluminum back plate and a clear heavy-duty UV resistant polycarbonate cover. The heads shall be fully adjustable without tools and the lamps shall be high efficiency halogen MR16. The standard unit shall be equipped with tamper-proof screws and bits. The **Ready-Lite® Advanced Diagnostic** Micro-controller charger board shall supply the rated load for a minimum of 30 minutes to 87.5% of the rated battery voltage. The charger incorporates lockout and brownout circuits, and low voltage disconnection. It protects the unit from over-current, short-circuit, and reverse polarity.

The unit shall be rated 120/347V, 60Hz. The unit shall have an output of \_\_\_\_\_ V. This unit shall self-test for 1 minute every 30 days, 10 minutes every 6 months and 30 minutes every 12 months. The unit shall be furnished with a non-intrusive magnetic test switch. A "Service Required" lamp shall be located near the test switch and flash when a fault is detected. A four-LED diagnostic display shall be located inside the equipment and shall identify the source of failure (battery, charger, circuitry, or lamps).

The unit shall be **Ready-Lite®** model: \_\_\_\_\_.

## FEATURES

- Fully gasketed cast aluminum back plate with clear polycarbonate cover – NEMA-4X Certified
- Comes standard with non-audible advanced diagnostic, 10 minutes time delay and lamp disconnect
- Audible warning and time delay functions can be enabled or disabled during installation
- Micro-controller diagnostic system tests, detects and indicates battery, charger circuitry or MR16 lamp failures
- Non-intrusive magnetic test switch
- Long-life, maintenance-free sealed lead-acid battery
- 1/2" rigid conduit entry on top and back
- Can be installed on 4" junction boxes
- Comes standard with tamper-proof screws and bit
- Cold weather option -40°C (-40°F)
- NSF Certified for food processing plants
- CSA C22.2 No. 141-15 Certified
- NEXUS® compatible
- Standard 120/347VAC input voltage

## REPLACEMENT LAMPS

ORDERING CODE	LAMP TYPE	VOLTAGE/ WATTAGE
580.0079-RL	MR16 halogen	6V-10W
580.0080-RL	MR16 halogen	12V-12W
580.0097-RL	MR16, LED	6V-4W
580.0093-RL	MR16, LED	12V-4W
580.0104-RL	MR16, LED	12V-5W
580.0106-RL	MR16, LED	12V-6W

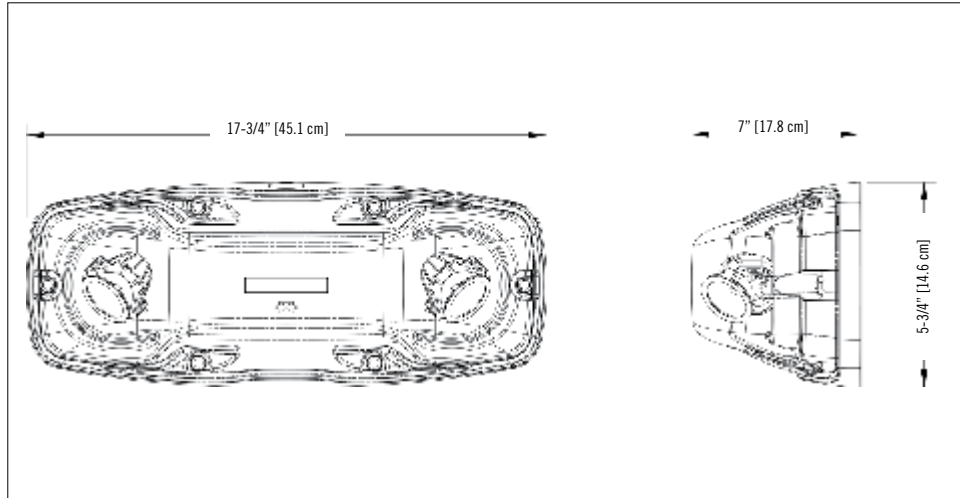
**NEMA-4X AND NSF CERTIFIED FAMILY**

				
RNC Combo P. 64-65	TUF Exit P. 63	N-TUF Combo P. 66-67	RN P. 62	TUF-NM Remote P. 160-161

Type: \_\_\_\_\_  
 Project/Location: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Prepared By: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Model No.: \_\_\_\_\_

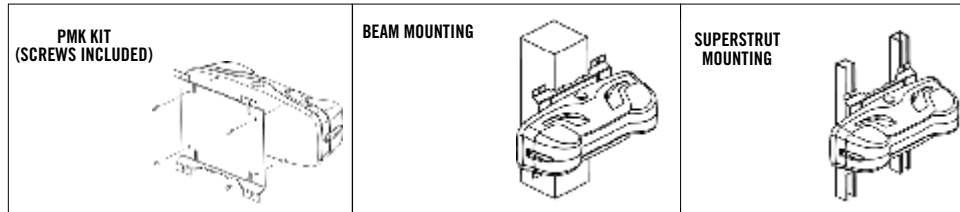
## DIMENSIONS

Dimensions are approximate and subject to change. Not suitable for ceiling installation.



## TUF-NM SERIES

NEMA-4X Certified



## POWER CONSUMPTION AND UNIT RATING

MODEL	AC SPECS		WATTAGE CAPACITY				
			30MIN	1H00	1H30	2H00	4H00
LDX6-36NM	120/347VAC	0.15/0.06 A	36	21	15	12	6
LDX12-72NM		0.25/0.10 A	72	42	30	24	12
LDX12-108NM		0.25/0.10 A	108	63	45	36	18
Cold Weather 36W	120VAC	0.45/0.20 A	36	-	-	-	-
Cold Weather 72/108W		0.85 A	72/108	-	-	-	-

\*Note: capacity depends on the ambient temperature

## ORDERING INFORMATION

SERIES	CAPACITY	CABINET	# OF HEADS	LAMP TYPE	COLOUR	AC VOLTAGE	OPTIONS
LDX6= 6V LDX12= 12V	-36= 6V-36W -72= 12V-72W -108= 12V-108W	NM= NEMA-4X	2= 2 heads	LD1= MR16 LED, 6V-4W* LD7= MR16 LED, 12V-4W* LD9= MR16 LED, 12V-5W LD10= MR16 LED, 12V-6W RM6= MR16 mini halogen, 6V-6W RM10= MR16 mini halogen, 6V-10W RM12= MR16 mini halogen, 12V-12W RM20= MR16 mini halogen, 12V-20W RMH20= MR16-IR, 12V-20W, high-output	Blank= white BK= black GY= grey	Blank= 120/347VAC 277= 277VAC	Blank= no options NEX= NEXUS® system Interface* NEXRF= wireless NEXUS® system interface* CW1= cold weather 120VAC CW3= cold weather 347VAC** PMK= universal bracket (sold separately)  PMK-RL= universal bracket (sold separately)  *Not all options available with NEXUS® System. Please consult your sales representative **Available in 6V only

EXAMPLE: LDX6-36NM2RM6

**new product**



**NEMA-4X**



Type: \_\_\_\_\_  
 Project/Location: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Prepared By: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Model No.: \_\_\_\_\_



# TUF-NM SERIES

NEMA-4X  
 Certified Remote Fixture

## FEATURES

- Fully gasketed with a selection of cast aluminum or polycarbonate back plate
- Clear polycarbonate UV and impact resistant lens
- Choice of single or double lamp models
- Available in 6, 12 and 24V models MR16 or LED
- Easy lamp replacement
- Comes standard with tamper-proof screws and bit
- NSF Certified for food processing plants
- NEMA-4X Certified\*
- CSA Certified to C22.2 No. 141
- Suitable for indoor/outdoor installation

\*For NMMP, units are NEMA-4X Certified when installed using a circular NEMA-4X rated junction box (sold separately by Thomas&Betts under P/N CE365D-CAR or CE365DW-CAR and with plugs P/N P7701W-CAR).

## TYPICAL SPECIFICATIONS

Supply and install **Ready-Lite® TUF-NM Series** remote emergency lighting fixtures. These remote fixtures will consist of either single or double lamp configurations according to the design. These fixtures shall be fully gasketed with a UV resistant and fire retardant polycarbonate back plate with a clear heavy-duty UV resistant polycarbonate lens. The unit shall be equipped with two emergency heads with tool-less adjustable swivels. Units shall be NEMA-4X and NSF certified and specifically designed for high abuse areas, wet and cold weather locations, food processing plants, as well in applications requiring a resistance to corrosive agents. The standard unit will come with stainless steel tamper-proof screws and bit. The remote fixture shall be certified to CSA C22.2 No. 141. The head(s) shall be fully adjustable without tools and should be equipped with MR16 halogen lamp(s) of \_\_\_\_\_ V \_\_\_\_\_W.

The remote unit shall be the **Ready-Lite®** model: \_\_\_\_\_.



## WIRE GUARDS

460.0029-RL	wall mount or ceiling mount
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## REPLACEMENT LAMPS: MR16 TUF-NMMP

ORDERING CODE	LAMP TYPE	VOLTAGE
580.0074-RL	MR16 flood	6V-6W
580.0079-RL	MR16 flood	6V-10W
580.0080-RL	MR16 flood	12V-12W
580.0070-RL	MR16 flood	24V-12W
580.0097-RL	MR16, LED	6V-4W
580.0093-RL	MR16, LED	12V-4W
580.0104-RL	MR16, LED	12V-5W
580.0106-RL	MR16, LED	12V-6W
580.0098-RL	MR16, LED	24V-4W

## REPLACEMENT LAMPS: MR16 TUF-NMM

ORDERING CODE	LAMP TYPE	VOLTAGE
580.0068-RL	MR16 IR flood	12V-20WH
580.0077-RL	MR16 flood	24V-20W
580.0100-RL	MR16 LED	24V-6W
580.0113-RL	MR16, LED	120V-4W

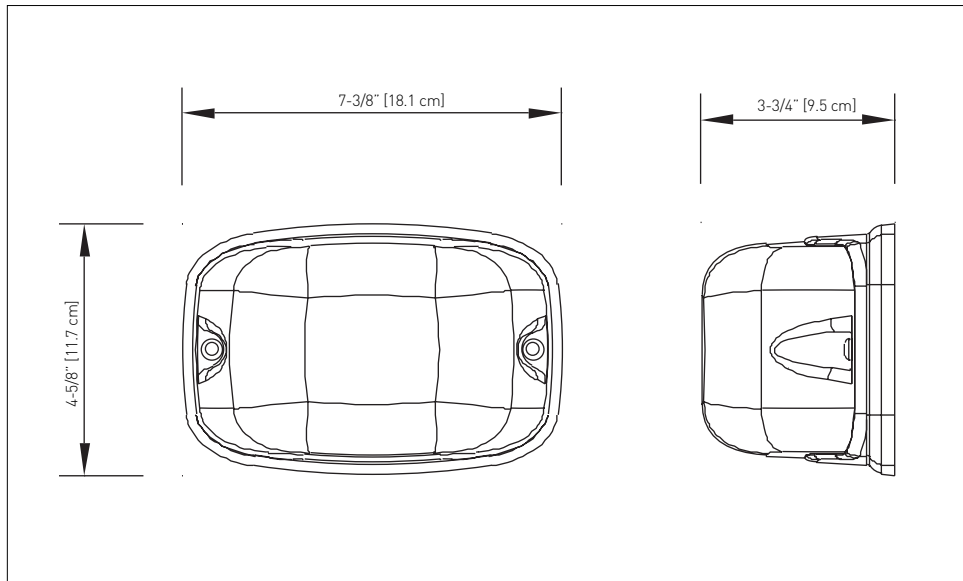


Type: \_\_\_\_\_  
 Project/Location: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Prepared By: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Model No.: \_\_\_\_\_



## DIMENSIONS

Dimensions are approximate and subject to change.



## TUF-NM SERIES

NEMA-4X  
 Certified Remote Fixture

## ORDERING INFORMATION: TUF-NMMP

SERIES	NUMBER OF LAMPS	LAMP TYPE/VOLTAGE/WATTAGE	COLOUR	OPTIONS
<b>NMMP</b> = polycarbonate NEMA 4X back plate	1= one lamp 2= two lamps	-LD1= MR16 LED, 6V-4W -LD7= MR16 LED, 12V-4W -LD9= MR16 LED, 12V-5W -LD10= MR16 LED, 12V-6W -LD13= MR16 LED, 24V-4W -6/6= MR16 halogen, 6V-6W -6/10= MR16 halogen, 6V-10W -12/12= MR16 halogen, 12V-12W -24/12= MR16 halogen, 24V-12W	<b>Blank</b> = factory white <b>BK</b> = black <b>GY</b> = grey	<b>-SM</b> = surface mount*  *Surface plastic junction box included.

EXAMPLE: NMMP1-6/6

## ORDERING INFORMATION: TUF-NMM

SERIES	NUMBER OF LAMPS	LAMP TYPE/VOLTAGE/WATTAGE	COLOUR
<b>NMM</b> = die-cast NEMA 4X back plate	1= one lamp 2= two lamps	-12/20H= MR16-IR, 12V-20W, high output -24/20= MR16 halogen, 24V-20W -LD14= MR16 LED, 24V-6W -LD26= MR16 LED, 120V-4W	<b>Blank</b> = factory white <b>BK</b> = black <b>GY</b> = grey

EXAMPLE: NMM1-12/20H

# PHOTOMETRICS

The Ready-Lite® NEMA-4X Series of emergency lighting sets an impressive new standard for center-to-center path of egress illumination. Battery units and fixtures illuminate an egress path 89-feet long and 6-feet-wide.

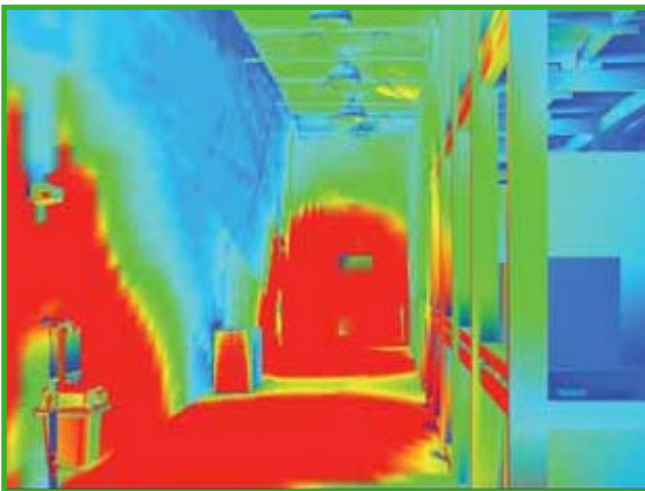
Photometric data based on a 7-foot mounting height, minimum 80-50-20 reflectance values and 12V-6W MR16 LED lamps.



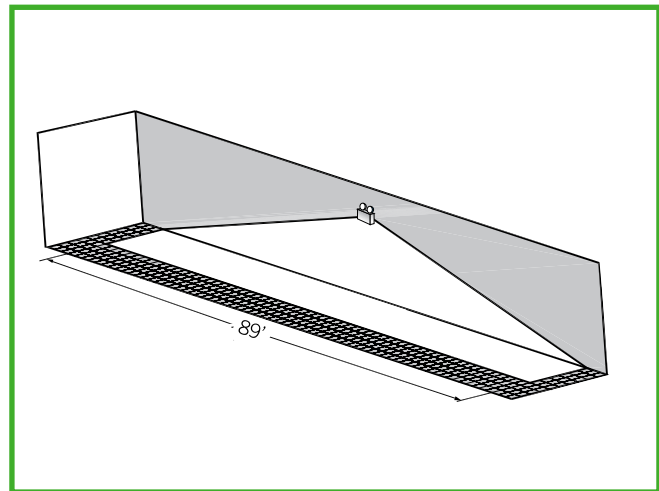
3D image showing installation of two TUF-NM Series battery units and a RNC combination unit in an industrial application under normal lighting conditions.



3D image lighting rendering showing installation of two TUF-NM Series battery units and a RNC combination unit in an industrial application under emergency lighting conditions.



3D light level coloured scale image showing egress illumination pattern generated by two TUF-NM battery units and a RNC combination unit.



ISO curve on a point-by-point of two TUF-NM Series battery units.

NOTE: Photometric results shown are based on a simulation using the AGI32 software with a 1 foot-candle average and 0.1 foot-candle minimum with a 40:1 maximum-minimum ratio. Ready-Lite® assumes no responsibility for local requirements or specific project variables. This is a guideline to be used as a design aid, not a guarantee of any code compliances.





**READY-LITE**

[www.ready-lite.com](http://www.ready-lite.com)

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