



# **NEMA-4X Series**

Certified for Harsh Environment Applications





# **NEMA-4X Family**

The industry standard for emergency lighting in harsh environments is here. Battery units, remote fixtures, exit signage and combination units - Lumacell® 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 remotes 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<sup>®</sup> monitoring system optional

## **CERTIFICATIONS**

- CSA Certified for 30 minutes of emergency operation
- Exit signs meet or exceed C22.2
   No. 141
- 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









#### **LN 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 LN Series
- Same product with exit legend also available



# **LNC SERIES**

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

- Innovative, field-adjustable lamp head assembly
- Choice of MR16 halogen lamps up to 12V, 12W or high-performance, 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)



# **RG-NX 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 highperformance, 6W, MR16 LED lamps
- · Mounting: wall mount
- Unit capacity: up to 108W
- Suitable for cold weather application -40°C (CW option)



#### **MQM-HZ 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 highperformance, 6W, MR16 LED lamps







# **LN Series**

NEMA-4X rated & NSF Certified Pictogram Exit Sign

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

#### **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 (-4°F) for AC/DC and -20°C (-40°F) for Self-Powered models (option: -CW)
- Tamper-resistant, concealed test switch with magnetic action
- Long-life white LED light source is warrantied for ten (10) years
- Supplied standard with two pictogram films per face, for direction selection
- 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
- Meets or exceeds CSA 22.2 No.141-15

See warranty details at: www.tnb.ca/en/brands/lumacell





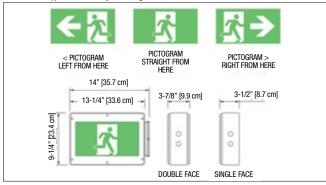






## **DIMENSIONS**

Dimensions are approximate and subject to change.



#### **WIRE GUARDS**

460.0079-L	Wall mount
460.0027-L	End mount
460.0028-L	Ceiling mount

#### TYPICAL SPECIFICATIONS

Supply and install the Lumacell® LN Series pictogram Exit Signs. The equipment shall be certified for NEMA- 4X and designed specifically for high abuse areas, wet location, 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 1 Watt 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 120 minutes 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 CSA 22.2 No.141-15 certified.

The equipment shall be **Lumacell®** Model: \_\_\_\_\_

#### POWER CONSUMPTION AND UNIT RATING

MODEL	AC SPECS		DC S	PECS
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	Ni-Cd battery	120 minutes
Auto test	120 / 347VAC	Less than 3.5W	Ni-Cd battery	120 minutes

#### ORDERING INFORMATION

SERIES	FACES/ MOUNTING	COLOUR	VOLTAGE	OPTIONS
LN= NEMA-4X & NSF pictogram exit sign	1= single face universal mounting 2= double face universal mounting	B= black W= factory white	S= Self-Powered, 120 to 347VAC SD= Self-Powered diagnostic Ni-Cd, 120/347VAC SD2= 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 NEXRF= wireless NEXUS® system interface, 120/347VAC	CW= cold-weather (-20°C for SD, SD2 and NEXUS® only40°C for universal 120 to 347VAC; 6 to 24VDC)

EXAMPLE: LN1BUCW

 $\label{thm:configuration} \textbf{Unlike Exit Signs this pictogram sign is not available in double arrow configuration.}$ 





Туре:	
Project/Location:	
Contractor:	
Prepared By:	
Date:	
Model No.:	

# LNC Series NEMA-4X Rated Pictogram Exit Sign



#### **FEATURES**

- · Certified Nema-4X for wall or ceiling mount
- NSF for use in food processing areas
- 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 is warrantied for 10 years
- Comes standard with two pictogram films per face, for direction selection
- Two high-performance MR16 lamps shielded by a clear polycarbonate cover
- Sealed, maintenance-free Lead-Calcium or Nickel-Cadmium batteries
- Remote load capacity: covers with 4W LED lights 100 feet up to 230 feet of egress illumination
- Comes standard with auto-diagnostic
- Cold-weather option: -40°C (-40°F) with only 14W extra power consumption
- Meets or exceeds CSA 22.2 No.141-15
   See warranty details at: www.tnb.ca/en/brands/lumacell





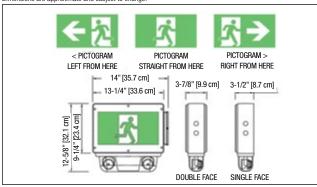






#### **DIMENSIONS**

Dimensions are approximate and subject to change.



#### **WIRE GUARDS WITH HEADS**

460.0078-L	Wall Mount
460.0060-L	End or Ceiling Mount

# **TYPICAL SPECIFICATIONS**

Supply and install **Lumacell® LNC Series** combination of unit equipment and pictogram Exit Sign. Designed specifically for the industrial environment, the equipment frame shall be of industrial grade polyvinyl chloride with gaskets around both sides of the frame contour. The back plate shall be made of 1/8-inch 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 a 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  $6^{\text{th}}$  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 be CSA 22.2 No.141-15 certified.

The equipment shall be **Lumacell®** Model: \_\_

#### POWER CONSUMPTION

MODEL	AC SI	AC SPECS		RGENC L	Y POV AMPS	VER F	OR
			30MIN	1H	1H30	2H	4H
Pictogram sign module	120/347VAC	Less than 2.5W	-	-	-	-	-
LNC-6L36		0.10/0.03A	36	30	20	16	8
LNC-6L36-CW	120/347VAC	0.25/0.08A	36	30	20	16	8
LNC-12N60		0.18/ 0.06A	60	40	30	20	10

#### ORDERING INFORMATION

SERIES	FACES / MOUNTING*	HOUSING COLOUR	BATTERY TYPE AND POWER	HEAD STYLE AND POWER	OPTIONS
LNC= NEMA-4X & NSF pictogram exit combo unit	1= single face 2= double face	B= black W= factory white	<b>6N36</b> = 6V-36W, Ni-Cd <b>12N60</b> = 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 MI= MR16 halogen, 6V-6W MJ= MR16 halogen, 6V-10W MK= MR16 halogen, 12V-12W	Blank= advanced diagnostic non-audible (standard) ZC= 120/277VAC input AT= auto-test NEX= NEXUS® system interface* NEXRE— wireless NEXUS® system interface* CW= cold-weather -40°C only with 6V single face T3= time delay (15 minutes)
	* Universal mounting			* Remote load must be connected.	* Some options are not available with NEXUS®.

EXAMPLE: LNC2W12N60LD7

Unlike Exit Signs this pictogram sign is not available in double arrow configuration.







Туре:	
Project/Location:	
Contractor:	
Prepared By:	
Date:	
Model No.:	

#### **FEATURES**

- Fully gasketed cast aluminum back plate with clear polycarbonate cover — NEMA-4X Certified
- Comes standard with non-audible advanced diagnostic, 10 minute 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
- Standard 120/347VAC input voltage
- Cold weather option -40°C (-40°F)
- NSF Certified for food processing plants
- Meets or exceeds CSA C22.2 No. 141-15

See warranty details at: www.tnb.ca/en/brands/lumacell









**NEMA-4X** 

#### TYPICAL SPECIFICATIONS

Supply and install the Lumacell® NEMA-4X Certified RG-NX 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 with a 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 Lumacell 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 on the 6th month 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 CSA 22.2 No. 141-15 certified.

The unit shall be **Lumacell®** model: \_

#### **WIRE GUARDS**

400.0031-L Wall Mount
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#### **ACCESSORIES**

Additional bit for tamperproof screws	TPB
Universal bracket (for mounting on poles, I-beams)	PMK

#### REPLACEMENT LAMPS

ORDERING CODE	TYPE OF SPECIFICATIONS
580.0079-L	M10W, MR16, 6V-10W FL
580.0080-L	M12W, MR16, 12V-12W FL
580.0097-L	MR16 LED, 6V-4W
580.0093-L	MR16 LED, 12V-5W
580.0104-L	MR16 LED, 12V-5W
580.0106-L	MR16 LED, 12V-6W



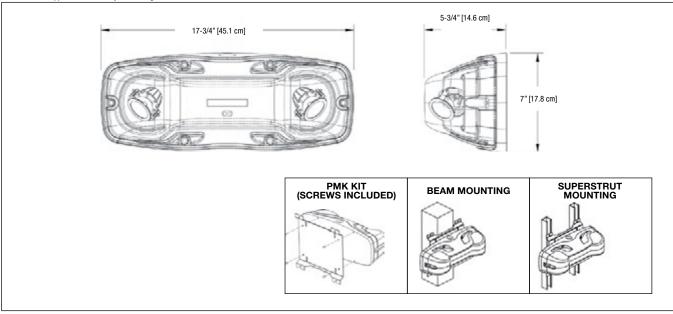


Туре:	
Project/Location:	
Contractor:	
Prepared By:	
Date:	
Model No.:	



#### **DIMENSIONS**

Dimensions are approximate and subject to change.



# POWER CONSUMPTION AND UNIT RATING

MODEL		AC SPECS		WATTAGE CAPACITY				
MODEL		AC SPECS	30MIN	1H00	1H30	2H00	4H00	
RGNX36		0.15/0.06A	36	21	15	12	6	
RG12NX72	120/347VAC	0.25/0.10A	72	42	30	24	12	
RG12NX108		0.25/0.10A	108	63	45	36	18	
Cold Weather 36W		0.45/0.20A	36	-	-	-	-	
Cold Weather 72/108W	120VAC	0.85A	72/108	-	-	-	-	

<sup>\*</sup>Note: capacity depends on the ambient temperature

#### **ORDERING INFORMATION**

SERIES	CAPACITY	NUMBER OF HEADS	LAMP TYPES AND WATTAGE	COLOUR	AC VOLTAGE	OPTIONS
RGNX= 6V, NEMA-4X RG12NX= 12V, NEMA-4X	<b>36</b> = 6V-36W <b>72</b> = 12V-72W <b>108</b> = 12V-108W	<b>2</b> = 2 heads	LD1= MR16 LED, 6V-4W* LD7= MR16 LED, 12V-4W* LD9= MR16 LED, 12V-5W LD10= MR16 LED, 12V-6W M6W= MR16 halogen, 6V-6W M10W= MR16 mini-halogen, 6V-10W M12W= MR16 mini-halogen, 12V-12W M20W= MR16 mini-halogen, 12V-20W MH20W= MR16-IR, 12V-20W, high output  * Minimum lamp load required: 20% of unit capacity.	Blank= white BK= black SG= grey	Blank= 120/347VAC ZC= 277VAC input	Blank= no options NEX= NEXUS® system interface* NEXRF= wireless NEXUS® system interface* CW1= cold weather 120VAC CW3= cold weather 347VAC**  PMK-L= universal bracket (sold separetely) * Not all options are available with NEXUS® System. Please consult your sales representative. ** Available in 6V only.

EXAMPLE: RGNX362M6W







Туре:	
Project/Location:	
Contractor:	
Prepared By:	
Date:	
Model No.:	

#### **FEATURES**

- Fully gasketed with a selection of Die-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\*
- Suitable for indoor/outdoor installation
- CSA Certified to C22.2 No. 141-15

See warranty details at: www.tnb.ca/en/brands/lumacell









#### TYPICAL SPECIFICATIONS

Supply and install **Lumacell® MQMP 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 Die-Cast aluminum or polycarbonate back plate with a clear heavy-duty UV resistant polycarbonate light cover. The unit shall be equipped with two emergency heads with tool-less adjustable swivels (lamps of 12W or less). 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 certifi	ied to CSA	A C22.2	No. 141	-15. T	he h	nead(s)
shall be fully adjustable	without	tools and	should	be equip	ped v	with	MR16
halogen lamp(s) of	V	W.					

The remote fixtures shall be certified to CSA 22.2 No.141-15.

The remote unit shall be the Lumacell® model: \_\_\_

#### REPLACEMENT LAMPS: MQMP

MODEL	LAMP TYPE	VOLTAGE/ WATTAGE
580.0074-L	MR16 flood	6V-6W
580.0079-L	MR16 flood	6V-10W
580.0080-L	MR16 flood	12V-12W
580.0070-L	MR16 flood	24V-12W
580.0097-L	MR16 LED	6V-4W
580.0093-L	MR16 LED	12V-4W
580.0104-L	MR16 LED	12V-5W
580.0106-L	MR16 LED	12V-6W
580.0098-L	MR16 LED	24V-4W

See the complete list p. 152-154.

#### REPLACEMENT LAMPS: MQM

MODEL	LAMP TYPE	VOLTAGE/ WATTAGE
580.0068-L	MR16 IR flood	12V-20W
580.0077-L	MR16 flood	24V-20W
580.0100-L	MR16 LED	24V-6W
580.0113-L	MR16 LED	120V-4W



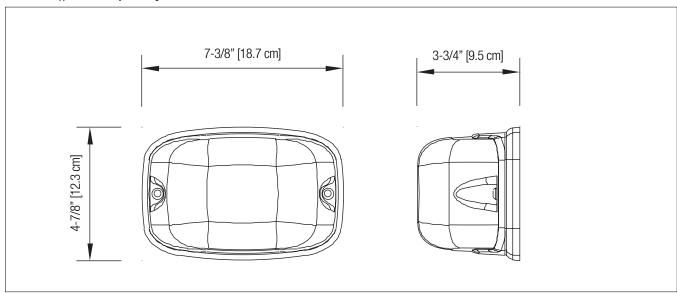






# **DIMENSIONS**

Dimensions are approximate and subject to change.



# **ORDERING INFORMATION: MQMP**

SERIES	LAMP TYPE/V	OLTAGE/WATTAGE	COLOUR	OPTIONS
MQMP2NX= polycarbonate, 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	6V6W= MR16 halogen, 6V-6W 6V10W= MR16 halogen, 6V-10W 12V12W= MR16 halogen, 12V-12W 24V12W= MR16 halogen, 24V-12W	Blank= factory white BK= black SG= grey	-SM= surface mount*  * Surface plastic junction box included

EXAMPLE: MQMP1NX6V6WBK

# **ORDERING INFORMATION: MQM**

MQM1NX= Die-Cast, one lamp MQM2NX= Die-Cast, two lamps  12V20WH= MR16-IR, 12V-20W, high output 24V20W= MR16 halogen, 24V-20W LD14= MR16 LED, 24V-6W  Blank= factory white BK= black SG= silver/ grey	SERIES	LAMP TYPE/VOLTAGE/WATTAGE	COLOUR
LD26= MR16 LED, 120V-4W		<b>24V20W</b> = MR16 halogen, 24V-20W <b>LD14</b> = MR16 LED, 24V-6W	<b>BK</b> = black

EXAMPLE: MQM2NX12V20W





# **Photometrics**

The Lumacell® 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.

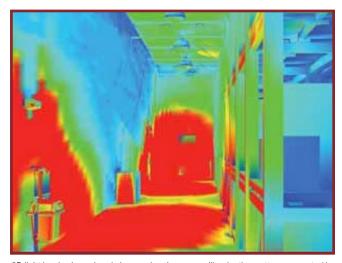
Photometric data based on a 7-foot mounting height, minimum 80-50-20 reflectance values and 12V-6W MR16 LED lamps.



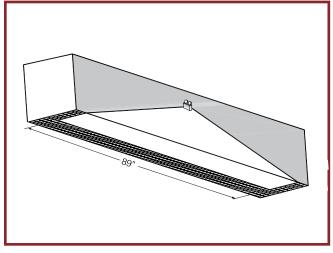
3D image showing installation of two RG-NX Series battery units and a LNC combination unit in an industrial application under normal lighting conditions.



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



3D light level coloured scale image showing egress illumination pattern generated by two RG-NX battery units and a LNC combination unit.



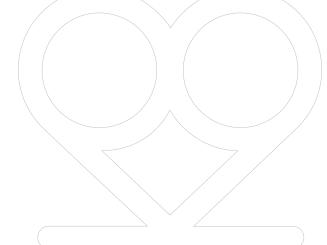
ISO curve on a point-by-point of two RG-NX Series battery units.

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. Lumacell® 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.









www.lumacell.com



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