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Established in 1968, Lumacell (now part of Thomas & Betts Limited), has grown to become Canada's most reliable name in emergency lighting.

Lumacell prides itself on product quality, innovation and customer service. The company has evolved from providing basic emergency lighting products for everyday commercial applications, to the wide range of modern technology inspired equipment available today.

Our reputation has not overshadowed our commitment to continue to offer the best in quality as well as the most current technologies available. Our manufacturing facilities in Dorval, Que., Scarborough, Ont. and Saanichton, B.C. have implemented efficient, employee conscious measures to be able to provide the best certified equipment at competitive international levels.

As an ISO 9001 : 2000 accredited company, our vision of continuous improvement, market focus, short and long term research and development will bring Lumacell to a new level of reliability and efficiency.

Thank-you for your continued support,

Daniel Borsvert

Daniel Boisvert General Manager of Operations Emergency Lighting Business Thomas & Betts

# Exit Signs in a few words.....



Electrical exit signs (connected to a source of power) differ from battery units as they shall be illuminated at all times during normal AC operation, and not only upon loss of AC power. This has a direct impact on the admissible energy consumption referenced in government regulations (National Resources Canada NRCan, CSA C-860), which is a maximum of 5watts per legend. A legend is defined as a single word, either "SORTIE" or "EXIT". There are also bilingual exit signs with: "SORTIE EXIT" or "EXIT SORTIE", quite common in applications such as airports or federal buildings. A bilingual exit sign is acceptable up to a maximum of 10watts per face. The legend must also meet visibility standards including: lettering dimensions (minimum 150mm height, etc.), average brightness, uniformity, and lettering/background contrast ratio. The most popular light source is based upon solid state LED technology, which is capable of meeting both lumen output and energy efficiency requirements. Two different methods are used to illuminate the legend. The most common is found in back-lit signs, which use a light source located behind the legend, illuminated through a red diffuser panel. The other method uses a clear, white or mirrored plastic (acrylic) face panel - on which the legend is etched or silkscreened. The light source is installed in the top portion of the panel. Light is transmitted from the top edge of the panel, which is where the "edge-lit" exit sign gets its name from. In general, back-lit signs are more economical and provide more uniform illumination of the legend. On the other hand, acrylic edge-lit exit signs are considered more high-end, elegant fixtures.

#### **EDGE-LIT EXIT SIGNS**

Three types of fixtures are available for emergency lighting applications. The first type is the self-powered exit sign, with rechargeable battery for emergency mode operation. Next is the remote exit sign, or AC/DC exit sign: in addition to normal AC power supply, it includes DC input (6Vdc, 12Vdc, etc.) for remote power supply from a separate battery backup. Installation of such exit signs requires DC wiring between both fixtures. Finally, the AC only exit signs, for applications where emergency power is supplied from an AC Central System.

In addition to electrical exit signs, there are power free, self-luminous fixtures, which incorporate as light source radioactive materials such as tritium gas. Their brightness level is very low, that is 2-3% the minimum level required for an electrical sign. However, they are safer and easier to install in hazardous/explosion-proof environments such as coal mines, natural gas installations, etc. As these signs are not electrical signs, they are not subject to CSA standard such as C860-07.

#### **OTHER EQUIPMENT – REMOTE FIXTURES**

A well established fixture type, the combination units or "combo", includes both a small battery unit and an AC/DC exit sign. An economical and easy to install alternative (installs to a single electrical box), the combo offers both an exit sign indicating the direction of egress as well as emergency lighting on the path of egress.

# Exit Signs in a few words.....





#### EXPLOSION-PROOF ENVIRONMENT EXIT SIGNS

Several years have passed since the Canadian Energy Efficiency Regulation applicable to Internally Lighted Exit Signs came into effect on November 1, 2004.

The Regulations, published by the Ministry of Natural Resources of Canada (NRCan) Office of Energy Efficiency, limit energy consumption and also address the visibility performance of exit signs. Technical criteria are directly referenced to Canadian Standards Association standard number CAN/CSA C860 standard in effect in Canada. In short, the actual power consumed by an exit sign shall not be greater than 5watts per legend, defined as the single word displayed: specifically "SORTIE" or "EXIT". For double face exit signs, the acceptable power consumption is doubled or not greater than 10watts, and the same rule applies to a bilingual exit sign with the words "SORTIE EXIT" or "EXIT SORTIE". The visibility criteria include minimum dimensions of the legend, ie: letter height, width and stroke (respectively, 150mm, 50mm and 19mm) and average brightness and uniformity levels. Following these new criteria, manufacturing of exit signs using incandescent light sources was practically abandoned and replaced by a new generation of exit signs based on light emitting diode (LED) technology.

Does CSA C860 standard apply to all exit signs, and in all applications? Actually, there are no exceptions: compliance is required in all cases, even though the solution may be hard to find. For example, equipment for use in hazardous locations, such as areas classified under Class I, Division 1 (or Class I, Zones 0 and 1), defined as locations where flammable gases, vapors or liquids are present frequently or under normal operating conditions.

Required luminaires are designed specifically to meet CSA standards for explosion-proof equipment. The heavy-duty luminaires are rated for lamp wattages ranging from 50-250W. Constructed of die-cast aluminum, the units feature a resistant prismatic glass globe providing hemispherical light distribution. Until now, because of these characteristics, traditional exit signs were using 15-25W incandescent lamps in order to provide sufficient illumination of the legend. Conversely, a LED exit sign is typically rectangular and relatively thin (4-8cm). The light source is axial, LEDs forming a line inside the exit sign. Illumination of the legend is indirect and produced through multiple reflexions.

So, how is it possible to develop a LED exit sign that meets NRCan/CSA-C860 using a bulky heavy-duty luminaire dedicated to hazardous locations Class I, Division 1?

Thomas & Betts R&D group has found a solution and developed a special LED lamp series, easy to install in the lamp base of explosion-proof type luminaires. This lamp includes a few dozens of high performance AlInGaP LEDs, configured in a unique pattern: horizontally, distribution is radial, at 360 degrees, while vertically, light is focussed on the sign legend. This innovative design allows meeting the visibility criteria on standard size legends (EXIT 28cm x 15cm, SORTIE 42cm x 15cm), while limiting power consumption to between 3 to 4.7watts per double face sign.

LED lamps are dedicated to various voltage ratings: 6V, 12V, 24V or 120V and operate on DC and AC, supplying power to the exit sign from emergency lighting unit equipment or central AC or DC systems. Lamps are listed/certified CSA C-US to CSA T.I.L. B-69 and UL1993 standards for LED technology based lamps or lamps with integral ballast. This further reinforces the assurance of performance and safety of the exit signs using these lamps. The new exit sign series of Thomas & Betts includes fixtures designed for installation in all hazardous location classifications: Class I Divisions 1 and 2, Groups A, B, C and D; Class II Divisions 1 and 2, Groups E, F, and G; Class III Divisions 1 and 2. Specifiers specialized in industrial lighting are now assured they can specify certified hazardous location equipment also approved and compliant to NRCan/CSA C-860 standards.



### **Selumacell**

#### "An advantage over the competition" Why "AllnGaP" LED Technology Matters?

In recent times, sustained R&D efforts in the optoelectronics industry have lead to a new development in the LED manufacturing: the "AlInGaP" technology. Based on the compound of four elements: Aluminum, Indium, Gallium and Phosphorous, it offers a higher light efficacy, with the lumen/watt ratio 300% to 500 % higher than the traditional GaAs LED. In addition, the new technology also improves significantly the maintained light output of the LED by utilizing materials that operate at lower temperatures than the previous generation of LEDs.

Due to the increased market awareness on the subject, LED manufacturers have started to publish test results and statistical data related to the light degradation phenomenon. Among other data publicly available on the Internet, an article from a leading semiconductor manufacturer (\*Agilent Technologies, Application Brief I-018) describes the results of a High-Temperature Operating Life (HTOL) test carried on AllnGaP LEDs during a 16,000-hour time frame. Based on the test results, the authors estimate that AllnGaP LEDs exposed to 100,000 hours (11.4 years) of continuous use at an ambient temperature of +55°C would exhibit an overall light output degradation of about 27%, which translates to an annual rate 10 times lower than the average light loss of GaAsLEDs.

The outstanding results of the AlInGaP technology have enabled the engineers at Lumacell to design a new generation of Exit signs with sustained lighting performance and reduced power consumption. The AlInGaP LED signs have the initial **level of legend illumination 35 to 50 % higher** than the severe requirements of CSA/C860 and UL924 standards.

This will compensate for the expected 27% light degradation in time, allowing the equipment to still meet the visibility criteria **more than Ten Years After the field installation**.

Unlike other emergency lighting manufacturers, who only guarantee the equipment against functional defects, the Lumacell AllnGaP Exit signs are designed for 10 years+ of CSA/UL photometric compliance.

Make sure your customer writes "AllnGaP LED" in his specification for Exit signs. This represents the best assurance for Energy Efficiency, Long Life and Maintained Performance.

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#### Genesis Series Die-Cast Aluminum Exit Sign

Premium, specification-grade die-cast LED exit sign.

# **Selumacell**

#### Features

- Durable, powder-coated die-cast construction
- Slim contoured body design with brushed aluminum faceplate (single or double face option)
- Diagnostic/self-test feature comes standard on all self-powered units
- Universal mounting wall, end or ceiling mounting
- 100% bright, even illumination in both normal and emergency operation
- Long-life, energy-efficient, AlInGaP technology LED light source reduces maintenance and energy costs

- Energy efficient consumes less than 3watts
- Maintenance-free, long-life sealed nickel cadmium battery
- Normal AC and emergency DC operation 120 to 347volts universal AC input; 6 to 48volts universal DC input
- NEXUS<sup>®</sup> compatible (for more information on NEXUS<sup>®</sup>, please consult the factory)
- CSA certified, meets or exceeds C860 requirements



#### Typical Specification

Supply and install the Lumacell LER800 Series LED exit signs. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 3watts and universal two-wire DC input voltage from 6Vdc to 48Vdc at less than 1.5watts for single and double face signs. The faceplate(s) and the back plate shall snap together and shall be made of die cast aluminum. The light source shall be light emitting diodes (LED). The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit on a plastic frame/reflector.

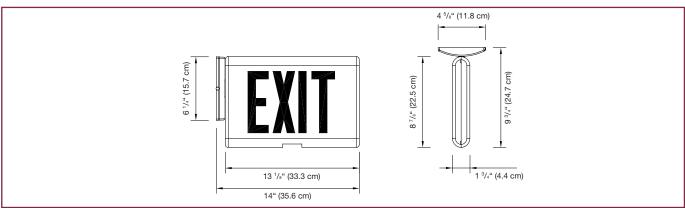
Red LED technology shall be **AlInGaP**. An LEDsensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination. The self-powered model shall stay illuminated during emergency operation for at least 90 minutes (red) and at least 60 minutes (green) upon AC failure. The selfpowered model shall include self-testing and self-diagnostic functions: the equipment shall automatically test itself for 5 minutes every 30 days, 30 minutes every 60 days and 90 minutes annually. A "Service Required" lamp shall be located near the test switch and flash in the case of a fault detection. A two-LED diagnostic display shall be located inside the equipment and shall be capable of identifying the source of failure that may occur (battery, charger circuitry, or LED lamp failure).

The exit sign shall be CSA-C860 approved.

Project/Location	Date	EVIT EX
Contractor	Prepared by	
LUMACELL Model		

#### **GENESIS LER800 SERIES**

#### Dimensions



#### Wire Guards

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

#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/DC red	120 to 347Vac	Less than 3W	6 to 48Vdc	Less than 1.5W
AC/DC green	120 to 347Vac	Less than 3W	6 to 48Vdc	Less than 1.5W
Self-powered red	120 to 347Vac	Less than 3W	NiCad battery	Min. 90 minutes
Self-powered green	120 to 347Vac	Less than 3W	NiCad battery	Min. 60 minutes

#### **Ordering Information**

Series	Faceplates	Housing Faceplates colours	Model	Options
LER= EXIT	850U= single face,	WH= factory white	Blank= 120Vac to	Blank= no options
	universal mount	B= black/black	347Vac, 6Vdc to 48Vdc	TP= tamper proof
	860U= double face,	<b>BA</b> = brushed alum	<b>SPD</b> = 120Vac to	screws
	universal mount	/brushed alum	347Vac self-powered	* <b>VRTP</b> = polycarbonate
		WBA= white/brushed alum	c/w auto diagnostics	shield and tamper proof
		BBA= black/brushed alum	* <b>Nex</b> = NEXUS®	screws
		CH= chrome/chrome	System Interface	GN= green letters
		<b>PB</b> = brass/brass		**990.0119-L= tamper
		BZ= bronze/bronze		proof bit
		Other colours available. Consult your sales representative-	* Consult your sales representative for options available with NEXUS® System.	*Indicate single or double face. **One bit needed per order.

#### **EXAMPLE: LER850UWH**

#### Genesis Series Die-Cast Aluminum Exit Sign

Premium, specification-grade die-cast LED "SORTIE" sign.

# **Selumacell**

#### Features

- Durable, powder-coated die-cast construction
- Slim contoured body design with brushed aluminum faceplate (single or double face option)
- Diagnostic/self-test feature comes standard on all self-powered units
- Universal mounting wall, end or ceiling mounting
- 100% bright, even illumination in both normal and emergency operation
- Long-life, energy-efficient, AlInGaP technology LED light source reduces maintenance and energy costs

- Energy efficient consumes less than 3watts
- Maintenance-free, long-life sealed nickel cadmium battery
- Normal AC and emergency DC operation 120 to 347volts universal AC input; 6 to 48volts universal DC input
- NEXUS<sup>®</sup> compatible (for more information on NEXUS<sup>®</sup>, please consult the factory)
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LSR800 Series LED "SORTIE" exit signs. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 3watts and universal two-wire DC input voltage from 6Vdc to 48Vdc at less than 1.5watts for single or double face signs. The faceplate(s) and the back plate shall snap together and shall be made of die cast aluminum. The exit sign shall have a maximum depth of 1-3/4".

The light source shall be light emitting diodes (LEDs). The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit. Red LED technology shall be **AlInGaP**. A LED-sensitive diffuser shall be mounted behind the legend to provide the 6" (15cm) high by 3/4" (1.9cm) stroke letters with even illumination.

The self-powered model shall stay illuminated during emergency operation for at least 60 minutes upon AC

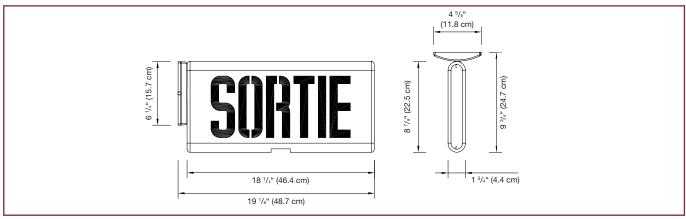
failure. The self-powered model shall include selftesting and self-diagnostic functions: the equipment shall automatically test itself for 5 minutes every 30 days, 30 minutes every 60 days and 90 minutes annually. A "Service" pilot light shall be located near the test switch and flash in the case of a fault detection. A two-LED diagnostic display shall be located inside the equipment and shall be capable of identifying the source of failure (battery, charger circuitry, or LED lamp failure).

The exit sign shall be CSA-C860 approved.

Project/Location		Date	
Contractor	Prepared by		1000
LUMACELL Model			501

#### **GENESIS LSR800 SERIES**

#### Dimensions



#### Wire Guards

460.0057-L	Wall Mount
460.0048-L	End Mount
460.0058-L	Ceiling Mount

#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC/DC	120 to 347Vac	Less than 3W	6 to 48Vdc	Less than 1.5W
Self-powered	120 to 347Vac	Less than 3W	NiCad battery	Min. 60 minutes

#### **Ordering Information**

Series	Faceplates	Housing Faceplates colours	Model	Options
	850U= single face,	WH= factory white	Blank= 120Vac to	Blank= no options
LSR= SORTIE	universal mount	B= black/black	347Vac, 6Vdc to 48Vdc	TP= tamper proof
	860U= double face,	<b>BA</b> = brushed alum	<b>SPD</b> = 120Vac to	screws
	universal mount	/brushed alum	347Vac self-powered	*VRTP= polycarbonate
		WBA= white/brushed alum	c/w auto diagnostics	shield and tamper proof
		BBA= black/brushed alum	* <b>Nex</b> = NEXUS®	screws
		CH= chrome/chrome	System Interface	<b>GN</b> = green letters
				**990.0119-L= tamper
				proof bit
		Other colours available. Consult your sales representative.	Consult your sales representative for options available with NEXUS® System.	*Indicate single or double face. **One bit needed per order.

#### **EXAMPLE: LSR850UWH**

#### Simplicity Series Edge-lit Exit Sign

#### Designer series, premium edge-lit LED exit sign.



#### Features

- Modular design offers great versatility
- Universal back box designed for surface or recessed mounting on ceilings or walls
- Modular retainer clips allow "snap-in" installation of face panel after installation of back box
- LED edge-lit, extruded acrylic face panels with precision-etched lettering
- LED strip design allows for rotation for either ceiling or wall mounting

- Long-life, energy-efficient, AlInGaP technology LED light source reduces maintenance and energy costs
- Energy efficient consumes less than 4.5watts in AC or DC mode
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LER2000 series LED Edge-Lit exit sign. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 4.5watts and universal two-wire DC input voltage from 6Vdc to 48Vdc at less than 2.5watts for single and double face signs. The housing assembly shall be fabricated of die-cast aluminum and consist of a universal die cast aluminum back box. The back box shall be provided with conduit knockouts on top, back, and end. The trim plate shall attach to the housing assembly with two (2) torsion spring retainers thereby eliminating all visible screws or hardware. The LED light strip shall be contained within the trim plate and can be easily rotated to facilitate wall or ceiling mount. Red LED technology shall be AlInGaP. The polished acrylic face panel shall have precision etched 6" high and 3/4" stroke red letters with a white, clear or mirror background.

The equipment shall have included a die cast aluminum trim ring for recessed applications. The equipment shall be provided with bar hangers to facilitate recessed applications. The equipment shall come either with round or angled trim (to be specified by the consultant).

The exit sign in a self-powered configuration shall stay illuminated during emergency operation for at least 90 minutes upon AC failure.

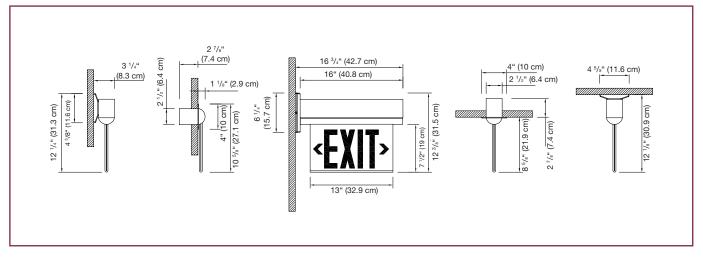
The exit sign shall be CSA-C860 approved.

Project/Location		Date	
Contractor	Prepared by		
LUMACELL Model	- -		L



#### SIMPLICITY LER2000 SERIES

#### Dimensions



#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC/DC red	120 to 347Vac Less than 4.5W		6 to 48Vdc	Less than 2.5W
AC/DC green	120 to 347Vac	Less than 2.5W	6 to 48Vdc	Less than1.5W
Self-powered red	120 to 347Vac	Less than 5W	NiCad battery	Min. 90 minutes
Self-powered green	120 to 347Vac	Less than 4W	NiCad battery	Min. 90 minutes

#### **Ordering Information**

Series	Faces	Chevrons	Housing Colour	Faceplate Colour	Voltage	Options
LER20= EXIT	0= single face	1= no chevrons	W= factory white	* <b>RC</b> = red/clear	Blank= universal	Blank= Pyramid
	3= double face	<b>2</b> = double	A= brushed	RW= red/white	AC/DC	C= round trim
		chevrons	aluminium	RM= red/mirror	SP= self-powered	
		<b>3</b> = chevron right	<b>B</b> = black	*GC= green/clear	SPD=	
		4= chevron left	CH= chrome	GW= green/white		
		<b>3-4</b> = one	PB= polished	GM= green/mirror	with c/w	
		chevron, each	brass		auto-diagnostics	
		side double face	BRZ= bronze			
				* Not available on double face.		

#### EXAMPLE: LER2001WRWSP

#### LER23 Series Aluminum Slim Edge-lit Exit Sign

#### Slim-profile edge-lit LED exit sign.

# **Selumacell**

#### Features

- Slim-profile extruded aluminum housing
- Slim-profile EZ2 die-cast aluminum canopy
- Universal surface mounting: wall, ceiling or end mount
- Click-to-open housing door allows easy access to the panel and electrical wiring
- Acrylic panel with curved contour
- Legend with six-inch letters and easy to add-on directional indicators

- Simple, two-wire universal AC input (120V to 347Vac 60Hz) prevents installation errors
- Simple, two-wire universal DC input: 6V to 24Vdc
- Long-life LED light source of AllnGap technology assures low maintenance costs
- Energy efficient power consumption: less than 1.5watts in AC or DC mode
- Self-powered models provide 90 minutes of emergency illumination
- CSA certified, meets or exceeds C860 requirements



#### Typical Specification

Supply and install the Lumacell LER23 series LED slim-profile edge-lit exit sign. The unit shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 1.5watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 1.5watts for single and double face legends.

The housing assembly shall be fabricated of extruded aluminum with a textured finish and \_\_\_\_\_ color. The canopy shall be of die-cast aluminum and allow for ceiling, wall, or end mount installation. The light source shall be 10 (ten) long-life LEDs installed on a PCB strip. Red LED technology shall be **AlInGaP**. The acrylic panel shall have a curved contour.

The legend shall have six-inch high with <sup>3</sup>/<sub>4</sub>-inch stroke red letters on a clear background, unless otherwise specified. The unit shall be equipped with

stick-on translucent directional indicators, to be installed in the field as required by the code.

The exit sign in a self-powered configuration shall be equipped with sealed Nickel-Cadmium batteries and will provide a minimum of 90 minutes of emergency illumination upon AC failure.

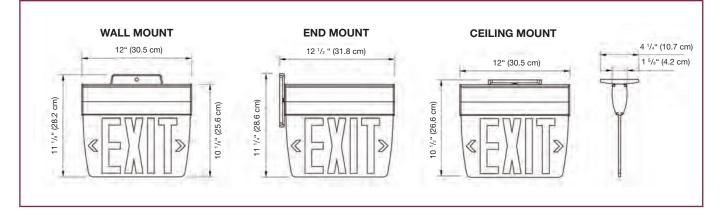
The equipment shall be CSA-C860 approved.

Project/Location			Date
Contractor Prepared by			
LUMACELL Model			



#### **LER23 SERIES**

#### Dimensions



#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC/DC red	120 to 347Vac Less than 1.5W		6 to 24Vdc	Less than 1.5W
AC/DC green	120 to 347Vac	Less than 2W	6 to 24Vdc	Less than1.5W
Self-powered red	120 to 347Vac	Less than 2.5W	NiCad battery	Min. 90 minutes
Self-powered green	120 to 347Vac	Less than 3W	NiCad battery	Min. 90 minutes

#### **Ordering Information**

Series	Housing Colour	Faceplate Colour	Voltage
LER2301 = Single face	<b>TA</b> = Textured	RC= red/clear*	AC= AC only
LER2302= double face	aluminium	<b>RW</b> = red/white	ACD= AC/DC
	OW= Off-White	<b>RM</b> = red/mirror	SP= self-powered
		<b>GC</b> = green/clear*	
		<b>GM</b> = green/mirror	
	Other colours available. Consult your sales representative.	* Not available on double face.	

#### **EXAMPLE: LER2301TARCACD**

#### LSR23 Series Aluminum Slim Edge-lit Exit Sign

#### Slim-profile edge-lit LED exit sign.

### **Selumacell**

#### Features

- Extruded aluminum housing
- Die-cast aluminum canopy
- Universal surface mounting: wall, ceiling or end mount
- Click-to-open housing door allows easy access to the panel and electrical wiring
- Acrylic panel with curved contour
- Legend with six-inch letters and easy to add-on directional indicators

- Simple, two-wire universal AC input (120V to 347Vac 60Hz) prevents installation errors
- Simple, two-wire universal DC input: 6V to 24Vdc
- Long-life LED light source of AllnGap technology assures low maintenance costs
- Energy efficient power consumption: less than 3watts in AC or DC mode
- Self-powered models provide 90 minutes of emergency illumination
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LSR23 series LED slim-profile edge-lit exit sign. The unit shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 2watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 1.5watts for single and double face legends.

The housing assembly shall be fabricated of extruded aluminum with a textured finish and \_\_\_\_\_ color. The canopy shall be of die-cast aluminum and allow for ceiling, wall, or end mount installation. The light source shall be 14 (fourteen) long-life LEDs installed on a PCB strip. Red LED technology shall be **AlInGap**. The acrylic panel shall have a curved contour.

The legend shall have six-inch high with <sup>3</sup>/<sub>4</sub>-inch stroke red letters on a clear background, unless otherwise specified.

The unit shall be equipped with stick-on translucent directional indicators, to be installed in the field as required by the code. The exit sign in a self-powered configuration shall be equipped with sealed Nickel-Cadmium batteries and will provide a minimum of 90 minutes of emergency illumination upon AC failure.

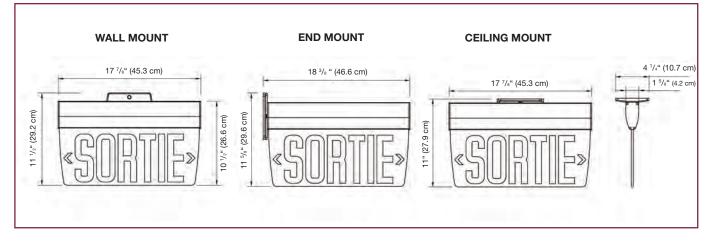
The equipment shall be CSA-C860 approved.

Project/Location			Date
Contractor Prepared by		Prepared by	
LUMACELL Model			



#### **LSR23 SERIES**

#### Dimensions



#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC/DC	120 to 347Vac Less than 2W		6 to 24Vdc	Less than 1.5W
Self-powered	120 to 347Vac	Less than 3W	Ni-Cad battery	Min. 90 minutes

#### **Ordering Information**

Series	Housing Colour	Faceplate Colour	Voltage
LSR2301 = Single face	TA= Textured	RC= red/clear*	AC= AC only
LER2302= double face	aluminium	<b>RW</b> = red/white	ACD= AC/DC
	OW= Off-White	<b>RM</b> = red/mirror	SP= self-powered
	* Other colors available. Consult your sales representative.	* Not available on double face.	

#### **EXAMPLE: LSR2301TARCACD**

#### Simplicity Series Fully Recessed Edge-lit Exit Sign

Designer series, premium edge-lit LED exit sign for recessed ceiling applications.



#### Features

- Low-profile trim enables exit signs to be mounted in areas where space is restricted
- Modular retainer clips allow "snap-in" installation of face panel after installation of back box
- LED edge-lit, extruded acrylic face panels with precision-etched lettering
- Long-life, energy-efficient, AllnGap technology LED light source reduces maintenance and energy costs
- Energy efficient consumes less than 5watts in AC or DC mode
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LER2000FT Series LED Edge-Lit exit sign. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 4.5watts and universal

two-wires DC input voltage from 6Vdc to 48Vdc at less than 2.5watts for single and double face signs. The trim assembly shall be fabricated of die cast aluminum and consist of a universal satin-coated steel back box. The back box shall be provided with conduit knockouts on top, back, and end. The trim plate shall attach to the housing assembly with two (2) torsion spring retainers thereby eliminating all visible screws or hardware. The LED light strip shall be contained within the trim plate. Red LED technology shall be **AllnGaP**. The polished acrylic face panel shall have precision etched 6" high and 3/4" inch stroke red letters with a white, clear or mirror background. The equipment shall be provided with bar hangers to facilitate installation.

The exit sign in a self-powered configuration shall stay illuminated during emergency operation for at least 90 minutes upon AC failure.

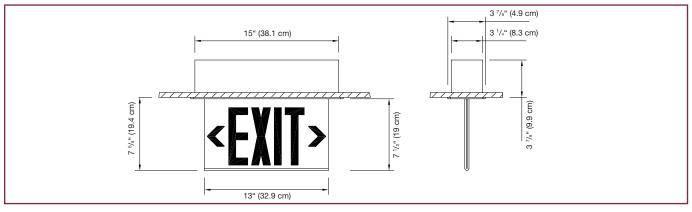
The exit sign shall be CSA-C860 approved.

Project/Location			Date	
Contractor	Contractor Prepared by			
LUMACELL Model				ť.



#### SIMPLICITY LER2000FT SERIES

#### Dimensions



#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC/DC red	120 to 347Vac Less than 4.5W		6 to 48Vdc	Less than 2.5W
AC/DC green	120 to 347Vac	Less than 2.5W	6 to 48Vdc	Less than 1.5W
Self-powered red	120 to 347Vac	Less than 5W	NiCad Battery	Min. 90 minutes
Self-powered green	120 to 347Vac	Less than 4W	NiCad Battery	Min. 90 minutes

#### **Ordering Information**

<b>U</b>						
Series	Faces	Chevrons	Housing Colour	Faceplate Colour	Voltage	Trim
LER20= EXIT	0= single face	1= no chevrons	W= factory white	* <b>RC</b> = red/clear	Blank= universal	FT= flat trim
	3= double face	2= double	A= brushed	RW= red/white	AC/DC	
		chevrons	aluminium	RM= red/mirror	SP= self-powered	
		3= chevron right	<b>B</b> = black	* <b>GC</b> = green/clear	SPD=	
		4= chevron left	CH= chrome	GW= green/white	self-powered	
		<b>3-4</b> = one	PB= polished	GM= green/mirror	with c/w	
		chevron, each	brass		auto-diagnostics	
		side double face	BRZ= bronze	* Not available on		
				double face.		

#### EXAMPLE: LER2001WRCFT

#### Simplicity Series Edge-lit Exit Sign

Designer series, premium edge-lit LED "SORTIE" sign.



#### Features

- Universal back box designed for surface or recessed mounting on ceilings or walls
- Modular retainer clips allow "snap-in" installation of face panel after installation of back box
- LED edge-lit, extruded acrylic face panels with precision-etched lettering provide superior clarity and illumination (compared to molded panels)
- LED strip design allows for rotation for either ceiling or wall mounting

- Long-life, energy-efficient, AlInGaP technology LED light source reduces maintenance and energy costs
- Energy efficient consumes less than 5watts in AC or DC mode
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell SIMPLICITY LSR2000 series LED 'SORTIE" exit sign.

The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 4.5watts and universal two-wire DC input voltage from 6Vdc to 48Vdc at less than 2.5watts for single or double face signs. The housing assembly shall be fabricated of die-cast aluminum and consist of a universal die cast aluminum back box. The back box shall be provided with conduit knockouts on top, back, and end. The trim plate shall have a round shape and attach to the housing assembly with two (2) torsion spring retainers, thereby eliminating all visible screws or hardware. The LED light strip shall be contained within the trim plate.

Red LED technology shall be **AlInGaP**. The polished acrylic face panel shall have precision etched 6" (15cm) high and 3/4" (1.9cm) stroke red letters with a white, clear or mirror background. For recessed applications, please contact your regional sales office. The exit sign in a self-powered configuration shall stay illuminated during emergency operation for at least 30 minutes upon AC failure.

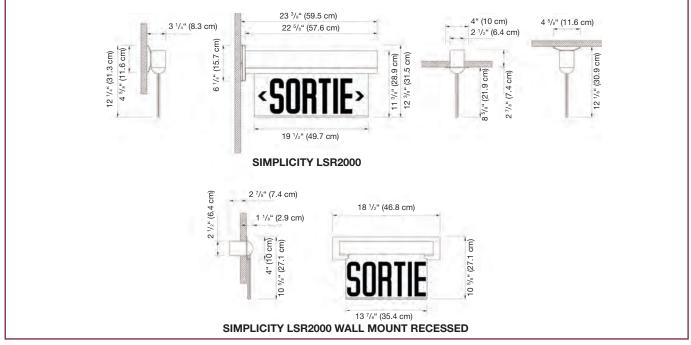
The exit sign shall be CSA-C860 approved.

Project/Location	Date		
Contractor	Prepared by		
LUMACELL Model			5



#### SIMPLICITY LSR2000 SERIES

#### Dimensions



#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/DC red	120 to 347Vac	Less than 4.5W	6 to 24Vdc	Less than 2.5W
Self-powered red	120 to 347Vac	Less than 5W	NiCad Battery	Min. 30 minutes

#### **Ordering Information**

Series	Faces	Chevrons	Approval	Housing Colour	Faceplate Colour	Voltage
LSR20= SORTIE	<b>0</b> = single face <b>3</b> = double face	1= no chevrons 1R= no chevrons,	C860	W= factory white		<b>Blank</b> = universal AC/DC
		wall mount		A= brushed	RW= red/white	SP=
		recessed model*		aluminium		self-powered
		2= double chevrons		<b>B</b> = black		
		3= chevron right				
		4= chevron left				
		3-4= one chevron				
		each side, double				
		face			* Not available on double	
		* Not available on double faces.			faces.	

#### EXAMPLE: LSR2001RC860WRC

#### Simplicity Series Bilingual Edge-lit Exit Sign

#### Architectural design, premium-quality edge-lit LED bilingual exit signs



#### Features

- Universal back box designed for surface or recessed mounting on ceilings or walls
- Modular retainer clips allow "snap-in" installation of face panel after installation of back box
- LED edge-lit, extruded acrylic face panels with precision-etched lettering
- LED strip design allows for rotation for either ceiling or wall mounting
- Long-life, energy-efficient, AlInGaP technology LED light source reduces maintenance and energy costs
- Energy efficient consumes less than 8.6watts in AC or DC mode
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LER2000B6L or LSR2000B6L LED Edge-Lit sign. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 8.6watts and universal 2-wires DC input voltage from 6Vdc to 48Vdc at less than 4.5watts for single and double face signs. The housing assembly shall be fabricated of aluminum and consist of a universal aluminum back box. The back box shall be provided with conduit knockouts on top and back. The trim plate shall have a round shape and shall attach to the housing assembly with two (2) torsion spring retainers thereby eliminating all visible hardware. The LED light strip shall be contained within the trim plate. Red LED technology shall be **AlInGaP**.

The polished acrylic face panel shall have precision-etched 6" high and 3/4" stroke red letters with a white, clear or mirror background, with the words EXIT and SORTIE side by side.

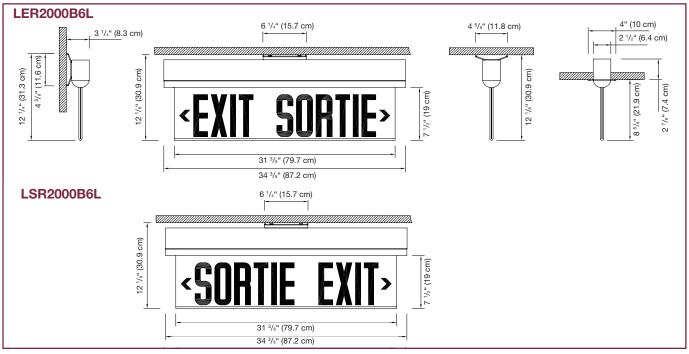
The exit sign in a self-powered configuration shall stay illuminated during emergency operation for at least 30 minutes upon AC failure.

The exit sign shall be CSA-C860 approved.

Project/Location		Date	
Contractor	Prepared	by	
LUMACELL Model	·		SORTIC TWO
			THE EXIT

# SIMPLICITY LER2000B6L & LSR2000B6L SERIES

#### Dimensions



#### Power Consumption

Model	AC Specs		DC Specs	
AC/DC red	120 to 347Vac	Less than 8.6W	6 to 48Vdc	Less than 4.5W
Self-powered red	120 to 347Vac	Less than 8.6W	NiCad battery	Min. 60 minutes

#### **Ordering Information**

Series	Faces	Chevrons	Housing Colour	Faceplate Colour	Approval	Voltage	Option
LER20=	0= single face	1= no chevron	W= factory	*RC=	B6LC860	Blank=	Blank=
EXIT SORTIE	<b>3</b> = double face	2= double	white	red/clear		universal	surface mount
LSR20=		chevrons	A= brushed	RW=		SP=	*R= recessed
SORTIE EXIT		<b>3</b> = chevron	aluminium	red/white		self-powered	mount
		right	<b>B</b> = black	RM=			
		<b>4</b> = chevron		red/mirror			
		left					
		<b>3-4</b> = one					
		chevron each					
		side double					
		face		* Not available on double face.			* Consult your sales representative.

#### EXAMPLE: LER2001WRCB6LC860

#### Simplicity Series Edge-lit Exit Sign

#### Architectural design, premium-quality edge-lit LED bilingual exit signs



#### Features

- LED edge-lit extruded acrylic face panels with precision-etched lettering.
- Long-life, energy efficient, AlInGaP technology LED light source reduces maintenance and energy costs.
- CSA certified, meets or exceeds C860 requirements
- Normal AC operation and emergency DC operation: AC input voltage from 120Vca to 347Vca and DC input voltage from 6Vdc to 48Vdc.
- Self-powered version also available.



#### **Typical Specification**

Supply and install the Lumacell LER2000B12L Series LED Edge-Lit bilingual exit sign. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 4watts and universal two-wire DC input voltage from 6Vdc to 48Vdc at less than 2watts for single or double face signs.

The housing assembly shall be fabricated of die-cast aluminum and consist of a universal die cast aluminum back box. The back box shall be provided with conduit knockouts on top and in the back.

The trim plate shall have an angular (prismatic) shape and attach to the housing assembly with two (2) torsion spring retainers thereby eliminating all visible hardware.

The LED light strip shall be contained within the trim plate. Red LED technology shall be AlInGaP. The polished acrylic face panel shall have precision etched 6" (15cm) high and 3/4" (1.9cm) stroke red letters with a white, clear or mirror background, with the text "EXIT" and "SORTIE" positioned one on top of the other. When directional chevrons are specified, they will be printed next to the word "EXIT". The exit sign specified for recessed applications will be supplied with a flat trim plate.

The bilingual exit sign in a self-powered configuration shall stay illuminated during emergency operation for at least 30 minutes upon AC failure.

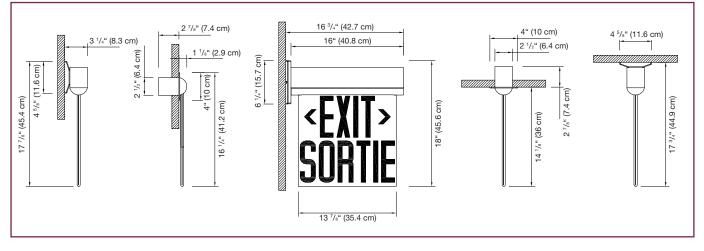
The exit sign shall be CSA-C860 approved.

Project/Location	Date	
Contractor	Prepared by	
LUMACELL Model		



#### SIMPLICITY LER2000B12L SERIES

#### Dimensions



#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC/DC red	120 to 347Vac	Less than 4W	6 to 48Vdc	Less than 2W
Self-powered red	120 to 347Vac	Less than 4.5W	NiCad battery	Min. 30 minutes

#### **Ordering Information**

Series	Faces	Chevrons	Housing Colour	Faceplate Colour	Approval	Voltage	Option
LER20= EXIT SORTIE	0= single face 3= double face	1= no chevron 2= double chevrons 3= chevron right 4= chevron left 3-4= one chevron each side double face	W= factory white A= brushed aluminium B= black	*RC= red/clear RW= red/white RM= red/mirror	B12LC860	Blank= universal SP= self-powered	Blank= universal mount *R= recessed mount
				* Not available on double face.			* Consult your sales representative.

#### EXAMPLE: LER2001WRCB12LC860

#### 900 Series Extruded Aluminum Exit Sign

Architectural, aesthetically-pleasing slim-line LED exit sign.



#### Features

- Thin profile, 2-piece extruded aluminum housing simply slides together
- Available in single or double face
- Pre-specified mounting
- Universal, field-selectable chevrons (knockout)
- Indirect refractive technology provides bright, even illumination
- Long-life, AlInGaP technology energy-efficient LED light source

- Energy efficient consumes less than 3.5watts in AC or DC mode
- Normal AC and emergency DC operation 120, 277 or 347volts AC input; 6 to 24volts DC input
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LER900 Series LED exit sign. The equipment shall operate with universal AC input voltage of 120/277 347Vac at less than 1.5watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 1.5watts for single and double face signs. The exit sign shall consist of a two-piece white extruded aluminum combined body/faceplate with a maximum depth of 1-1/4". The exit shall also include extruded aluminum end caps with white gaskets in order to provide protection to the internal components and eliminate any possible light leaks. The exit fixture shall be either single or double-faced as shown on the drawings. The faceplate shall be of a stencil design and will incorporate 6" high letters with a 3/4" stroke. The canopy shall fasten to the exit body for ease of installation in either ceiling or end to wall mount.

The fixture shall contain a light source, which shall be LED with a long life and shall consist of separate AC and DC LED sources in the case of AC/DC-remote equipment. Red LED technology shall be **AlinGaP**.

The exit sign in a self-powered configuration shall be equipped with a nickel cadmium battery and shall stay illuminated during emergency operation for at least two hours upon AC failure.

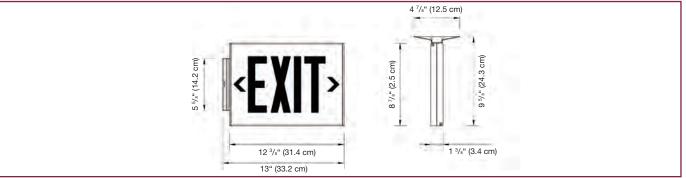
The exit sign shall be CSA-C860 approved.

Project/Location	Date		
Contractor	Prepared by		
LUMACELL Model			



#### **LER900 SERIES**

#### Dimensions



#### Wire Guards

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

#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/DC standard, red	120/277/347Vac Less than1.5W		6 to 48Vdc	Less than 1.5W
AC/special DC, red	120/277/347Vac	Less than1.5W	36 or 48 or 120Vdc	Less than 3W
120Vac/DC two wires, red	120Vac	Less than 3W	120Vdc	Min. 3W
Self-powered red	120/347Vac	Less than 3.5W	NiCad battery	Min. 2 hours

#### **Ordering Information**

Series	Faceplates/Mounting	Colour	Voltage	Options
LER9= EXIT	00= single face,	Blank= polar white	UNIV= 120/277/347Vac,	Blank= no options
	surface wall mount	BK= black	6 to 24Vdc.	TP= tamper proof screws
	10= single face,	BA= brushed aluminium	120VACDC= 120Vac,	*990.0119-L= tamper proof
	surface ceiling mount	TA= textured aluminium	120Vdc, 2 wires	bit
	20= single face,		UNIV36= 120/277/347Vac,	
	surface end mount		36Vdc, 4 wires	
	<b>30</b> = double face,		UNIV48= 120/277/347Vac,	
	surface ceiling mount		48Vdc, 4 wires	
	40= double face,		UNIV120= 120/277/347Vac,	
	surface end mount		120Vdc, 4 wires	
			* <b>240</b> = 240Vac , no dc	
			SP= 120/347Vac, self-powered	
			<b>SP277V</b> = 120/277Vac.,	
			self-powered	
			* Consult your sales representative.	* One bit needed per order.

#### EXAMPLE: LER900UNIV

#### 900 Series Extruded Aluminum Exit Sign

Architectural, aesthetically-pleasing slim-line LED exit sign.



#### Features

- Thin profile, 2-piece extruded aluminum housing simply slides together
- Available in single or double face
- Pre-specified mounting
- Universal, field-selectable chevrons (knockout)
- Indirect refractive technology provides bright, even illumination
- Long-life, AlInGaP technology energy-efficient LED light source

- Energy efficient consumes less than 3.5watts in AC or DC mode
- Normal AC and emergency DC operation 120, 277 or 347volts AC input; 6 to 24volts DC input
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LSR900 Series LED exit sign. The equipment shall operate with universal AC input voltage of 120, 277 or 347Vac at less than 1.5watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 1.5watts for single and double face signs. The exit sign shall consist of a two-piece white extruded aluminum combined body/faceplate with a maximum depth of 1-1/4". The exit shall also include extruded aluminum end caps with white gaskets in order to provide protection to the internal components and eliminate any possible light leaks. The exit fixture shall be either single or double-faced as shown on the drawings. The faceplate shall be of a stencil design and will incorporate 6" high letters with a 3/4" stroke. The canopy shall fasten to the exit body for ease of installation in either ceiling or end to wall mount.

The fixture shall contain a light source, which shall be LED with a long life and shall consist of separate AC and DC LED sources in the case of AC/DC-remote equipment. Red LED technology shall be **AlinGaP**.

The exit sign in a self-powered configuration shall be equipped with a nickel cadmium battery and shall stay illuminated during emergency operation for at least two hours upon AC failure.

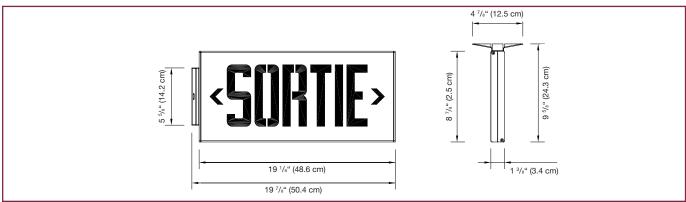
The exit sign shall be CSA-C860 approved.

Project/Location Date				
Contractor		Prepared by		
LUMACELL Model				



#### **LSR900 SERIES**

#### Dimensions



#### Wire Guards

460.0057-L	Wall Mount
460.0048-L	End Mount
460.0058-L	Ceiling Mount

#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/DC standard, red	120/277/347Vac Less than1.5W		6 to 48Vdc	Less than 1.5W
AC/special DC, red	120/277/347Vac	Less than1.5W	36/48/120Vdc	Less than 3W
120Vac/DC two wires, red	120Vac	Less than 3W	120Vdc	Min. 3W
Self-powered red	120/347Vac	Less than 3.5W	NiCad battery	Min. 2 hours

#### **Ordering Information**

Series	Faceplates/Mounting	Colour	Voltage	Options
LSR9= SORTIE	00= single face,	Blank= polar white	<b>UNIV</b> = 120/277/347	Blank= no options
	surface wall mount	<b>BK</b> = black	Vac, 6 to 24Vdc	<b>TP</b> = tamper proof
	10= single face,	<b>BA</b> = brushed	<b>UNIV36</b> = 120/277/347	screws
	surface ceiling mount	aluminium	Vac, 36Vdc, 4 wires	*990.0119-L= tamper
	20= single face,	<b>TA</b> = textured	<b>UNIV48</b> = 120/277/347	proof bit
	surface end mount	aluminium	Vac, 48Vdc, 4 wires	
	<b>30</b> = double face,		UNIV120=	
	surface ceiling mount		120/277/347Vac,	
	40= double face,		120Vdc, 4 wire	
	surface end mount		120VACDC= 120Vac,	
			120 Vdc, 2 wire	
			<b>SP</b> = 120/347Vac,	*One bit needed per order.
			self-powered	

#### EXAMPLE: LSR900UNIV

#### 900 Series Bilingual Extruded Aluminum Exit Sign

Architectural, aesthetically-pleasing slim-line LED exit sign.

## **Selumacell**

#### Features

- Thin profile, 2-piece extruded aluminum housing simply slides together
- Available in single or double face
- Custom wording available on request
- Pre-specified mounting
- Universal, field-selectable chevrons (knockout)
- Indirect refractive technology provides bright, even illumination
- Long-life, AlInGaP technology energy-efficient LED light source
- Energy efficient consumes less than 7watts in AC or DC mode
- Normal AC and emergency DC operation 120, 277 or 347volts AC input; 6 to 24volts DC input
- CSA certified, meets or exceeds C860 requirements



#### Typical Specification

Supply and install the Lumacell LER900B6L or LSR900B6L Series LED exit sign. The equipment shall operate with universal AC input voltage of 120, 277 or 347Vac at less than 1.5watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 2.5watts for single and double face signs. The exit sign shall consist of a two-piece white extruded aluminum combined body/faceplate with a maximum depth of

1 1/4". The exit shall also include extruded aluminum end caps with white gaskets in order to provide protection to the internal components and eliminate any possible light leaks. The exit fixture shall be either single or double-faced as shown on the drawings. The faceplate shall be of a stencil design and will have 6" high letters with a 3/4" stroke indicating both EXIT and SORTIE side by side. The canopy shall fasten to the exit body for ease of installation in either ceiling or wall mount. The fixture shall contain a light source, which shall be LED with a long life and shall consist of separate AC and DC LED sources in the case of AC/DC-remote equipment. Red LED technology shall be **AllnGaP**.

The exit sign in a self-powered configuration shall be equipped with a nickel cadmium battery and shall stay illuminated during emergency operation for at least two hours upon AC failure.

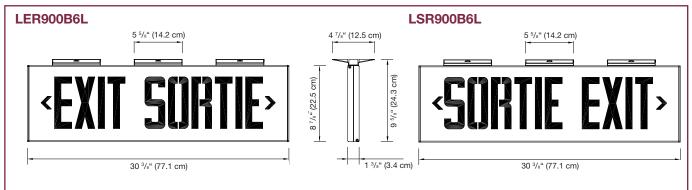
The exit sign shall be CSA-C860 approved.

Project/Location		Date	EXIT SORTIF
Contractor	Prepared by		
LUMACELL Model		Poppin	

#### LER900B6L & LSR900B6L SERIES

nd n

#### Dimensions



#### Wire Guards

460.0059-L	Wall Mount
460.0092-L	Ceiling Mount

#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/DC standard, red	120/347Vac Less than 2W		6 to 48Vdc	Less than 3W
AC/special DC, red	120/277/347Vac	Less than 2W	36 or 48 or 120Vdc	Less than 6W
120Vac/DC, two wires, red	120Vac	Less than 6W	120Vdc	Min. 6W
Self-powered, red	120 or 347Vac*	Less than 7W	NiCad Battery	Min. 2 hours

\*AC/DC input voltage to be specified. For other values, please consult the factory.

#### Ordering Information

Series	Faces	Approval	Colour	Voltage	Options
LER9=	00= single face,	B6LC860	Blank= polar white	UNIV= 120/277/347Vac,	Blank= no options
EXIT SORTIE	wall mount		BK= black	6 to 24Vdc	TP= tamper proof
LSR9=	10= single face,		BA= brushed	UNIV36= 120/277/	screws
SORTIE EXIT	ceiling mount		aluminium	347Vac, 36Vdc	*990.0119-L= tamper
	30= double face,		TA= textured	UNIV48= 120/277/	proof bit
	ceiling mount		aluminium	347Vac, 48Vdc	
				UNIV120= 120/277/	
				347Vac, 120Vdc	
				<b>SP</b> = 120Vac,	
				self-powered	
				120VACDC= 120Vac,	
				120Vdc, 2 wires	
				<b>SP347</b> = 347Vac,	
				self-powered	* One bit needed per order.

#### EXEMPLE: LER900B6LC860UNIV

#### 400 Series Extruded Aluminum Exit Sign

Versatile, highly-efficient, energy-saving illumination.



#### Features

- Durable extruded, one-piece aluminum housing
- Information for complete details.
- Long-life, energy efficient AlInGaP technology red LED light source completely enclosed in acrylic module
- Single illumination module lights both single and double face exit signs
- Highly energy efficient consumes less than 3.5watts in AC or DC mode

- Normal AC and emergency DC operation 120, 277 or 347volts AC input; 6 to 24volts DC input
- Also available with power pack; see 3LER400 catalogue sheet
- Comes with the lumacell EZ2 canopy for quick & easy installation. See page 103 for information.
- CSA certified, meets or exceeds C860 requirements



#### Typical Specification

Supply and install the Lumacell LER400 Series LED exit signs. The equipment shall operate with universal AC input voltage of 120, 277 or 347Vac at less than 1.5watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 1.5watts for single and double face signs. The housing shall be constructed of rugged extruded aluminum and have a maximum depth of 2-1/2". The faceplate(s) shall be constructed of extruded aluminum and come standard with knockout chevrons. The light source shall be light emitting diodes (LED). The red LED technology shall be **AlinGaP**. The LED lamps shall provide illumination in

normal and emergency operation and shall be mounted inside the exit housing, not on the face.

An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination.

The exit sign in a self-powered configuration shall be equipped with a nickel cadmium battery and shall stay illuminated during emergency operation for at least 90 minutes upon AC failure.

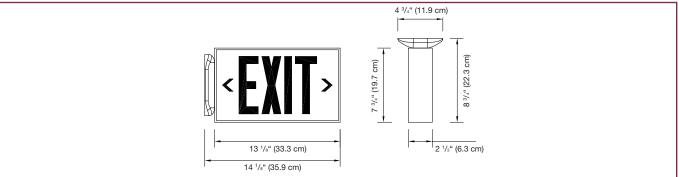
The exit sign shall be CSA-C860 approved.

Project/Location	Date		
Contractor	Prepared by		
LUMACELL Model			



#### **LER400 SERIES**

#### Dimensions



#### Wire Guards

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

#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/standard DC, red	120/277/347Vac	Less than1.5W	6 to 24Vdc	Less than 1.5W
AC/special DC, red	120/277/347Vac	Less than 3W	36 or 48 or 120Vdc	Less than 2.5W
Self-powered, red	120 to 347Vac	Less than 3W	NiCad battery	Min. 90 minutes
AC/standard DC, green	120 to 347Vac	Less than 1.5W	6 to 24Vdc	Less than 1.5W
Self-powered, green	120 to 347Vac	Less than 3.5W	NiCad battery	Min. 90 minutes

#### **Ordering Information**

Series	Faces	Colour	Voltage	Options
LER= EXIT	450= single face	Blank= factory white	<b>UNIV</b> = 120/277/347Vac,	Blank= no options
	460= double face	<b>PW</b> = polar white	6 to 24Vdc	** <b>VRSTP</b> = vandal
		<b>BK</b> = black	UNIV36= 120/277/347Vac,	resistant shield and
		SG= silver grey	36Vdc, 4 wires	tamper proof screws
		BA= brushed	UNIV48=120/277/347Vac,	TP= tamper proof
		aluminium	48Vdc, 4 wires	screws
		TA= textured aluminum	UNIV120=120/277/347Vac,	<b>GN</b> = green letters
			120Vdc, 4 wires	***990.0119-L= tamper
			<b>SP</b> = 120 to 347Vac,	proof bit
			self-powered	
			120VACDC2= 120Vac,	
			120Vdc, 2 wires	
			<b>220</b> = 220Vac, 50HZ,	
			12Vdc	
			<b>240</b> = 240Vac, 60HZ, 12Vdc	** Indicate single or double. *** One bit per order.

#### **EXAMPLE: LER450UNIV**

#### 400 Series Recessed Extruded Aluminum Exit Sign

Versatile, highly-efficient, energy-saving recessed exit sign.

# **Second Second**

#### Features

- Durable extruded, one-piece aluminum housing
- Extruded aluminum faceplate with overlapping trim is standard.
- Universal, field-selectable chevrons (knockout)
- Long-life, energy-efficient AlInGaP LED light source
- Indirect refractive technology provides bright, even illumination
- Energy efficient consumes less than 3.5watts per face in AC or DC mode

- Normal AC and emergency DC operation 120 to 347volts universal AC input; 6 to 24volts two-wire DC input
- Nickel cadmium battery provides at least 90 minutes of emergency operation in DC mode
- CSA certified, meets or exceeds C860 requirements



#### Typical Specification

Supply and install the Lumacell C860 Recessed LER400R Exit. The LER400R exit shall be recessed mount. The equipment shall operate with universal AC input voltage of 120, 277 or 347Vac at less than 1.5watts and universal two wire DC input voltage from 6Vdc to 24Vdc at less than 1.5watts. The face shall be constructed of extruded aluminum and have an overlapping trim allowing for installation in any location. The faceplate shall come standard with knockout chevrons. The recessed back

box shall be of rugged steel construction with baked factory white enamel. The light source shall be light emitting diodes (LED). Red LED technology shall be **AlInGaP**. The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. An LED sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination.

The exit sign in a self-powered configuration shall be equipped with a nickel cadmium battery and shall stay illuminated during emergency operation for at least 90 minutes upon AC failure.

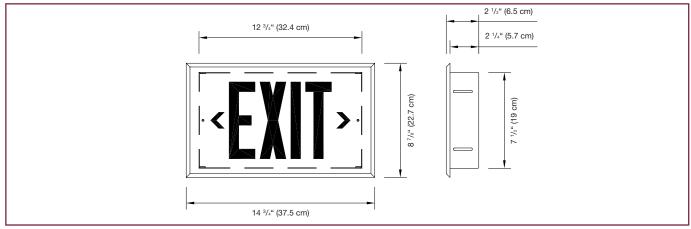
The exit sign shall be CSA-C860 approved.

Project/Location	Date	
Contractor	Prepared by	
LUMACELL Model		



## **LER400R SERIES**

#### Dimensions



#### Wire Guard

460.0091-L	Wall Mount

#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC/standard DC, red	120/277/347Vac Less than 1.5W		6 to 24Vdc.	Less than 1.5W
AC/special DC, red	120/277/347Vac Less than 3W		36 or 48 or 120Vdc	Less than 2.5W
Self-powered, red	120 to 347Vac Less than 3W		NiCad battery	Min. 90 minutes
AC/standard DC, green	120 to 347Vac	Less than 1.5W	6 to 24Vdc	Less than 1.5W
Self-powered, green	120 to 347Vac	Less than 3.5W	NiCad battery	Min. 90 minutes

#### Ordering Information

Series	Colour	Voltage	Options
LER400R= EXIT	Blank= factory white	<b>UNIV</b> = 120/277/347Vac,	Blank= no options
	<b>BK</b> = black	6 to 24Vdc	*VRTP= polycarbonateshield
	SG= silver grey	<b>UNIV36</b> = 120/277/347Vac,	with tamper proof screws
	<b>BA</b> = brushed aluminium	36Vdc, 4 wires	TP= tamper proof screws
	TA= textureded aluminium	UNIV48= 120/277/347Vac,	<b>GN</b> = green letters
		48Vdc, 4 wires	**990.0119-L= tamper proof
		UNIV120= 120/277/347Vac,	bit
		120Vdc, 4 wires	
		<b>SP</b> = 120 to 347Vac,	
		self-powered	
		120VACDC2= 120Vac,	
		120Vdc, 2 wires	** One bit needed per order.

#### EXAMPLE: LER400RUNIV

#### 400 Series Extruded Aluminum Exit Sign

Versatile, highly-efficient, energy-saving illumination.



#### Features

- Durable extruded, one-piece aluminum housing
- Long-life, energy efficient AlInGaP technology red LED light source completely enclosed in acrylic module
- Single illumination module lights both single and double face exit signs
- Highly energy efficient consumes less than 3watts in AC or DC mode
- Normal AC and emergency DC operation 120, 277 or 347volts AC input; 6 to 24volts DC input

- Also available with power pack; see 3LSR400 catalogue sheet
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LSR400 Series LED "SORTIE" exit signs. The equipment shall operate with universal two-wire AC input voltage of 120Vac to 347Vac at less than 1.5watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 1.5watts for single or double face signs.

The housing shall be constructed of rugged extruded aluminum and have a maximum depth of 2-1/2" (6.35cm). The faceplate(s) shall be constructed of extruded aluminum and come standard with knockout chevrons.

The light source shall be light emitting diodes (LED). The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. The red LED technology shall be **AllnGaP**. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" (15cm) high by 3/4" (1.9cm) stroke letters with even illumination. The exit sign in a self-powered configuration shall stay illuminated during emergency operation for at least 60 minutes upon AC failure.

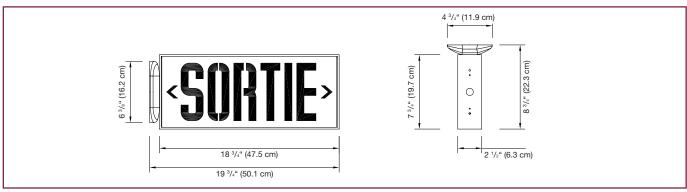
The exit sign shall be CSA-C860 approved.

Project/Location	Date	
Contractor	Prepared by	
LUMACELL Model		



## **LSR400 SERIES**

#### Dimensions



#### Wire Guards

460.0057-L	Wall Mount
460.0048-L	End Mount
460.0058-L	Ceiling Mount

#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC/standard DC, red	120 to 347Vac Less than 1.5W		6 to 24Vdc	Less than 1.5W
AC/special DC, red	120/277/347Vac	Less than 2.5W	36 or 48 or 120Vdc	Less than 2.5W
Self-powered, red	120 to 347Vac	Less than 3W	NiCad battery	Min. 60 minutes

#### Ordering Information

Series	Faces	Approval	Colour	Voltage	Options
LSR= SORTIE	450=	C860	Blank= factory white	UNIV= 120/277/347Vac,	Blank= no options
	Universal mount,		BA= brushed	6 to 24Vdc	* <b>VRSTP</b> = vandal
	single face		aluminium	UNIV36=120/277/347	resistant shield and
	460=		TA= textured	Vac, 36Vdc, 4 wires	tamper proof screws
	Universal mount,		aluminium	UNIV48=120/277/347	<b>TP</b> = tamper proof
	double face		<b>PW</b> = polar white	Vac, 48Vdc, 4 wires	screws
			<b>BK</b> = black	UNIV120=	** <b>990.0119-L</b> = tamper
			SG= silver grey	120/277/347Vac,	proof bit
				120Vdc, 4 wires	
				<b>SP</b> = 120 to 347Vac,	
				self-powered	
				120VACDC2= 120Vac,	*Indicate single or double.
				120Vdc, 2 wires	**One bit per order.

#### EXAMPLE: LSR450C860UNIV

#### 400 Series Extruded Aluminum Exit Sign

Versatile, highly-efficient, energy-saving bilingual exit sign



#### Features

- Durable extruded, one-piece aluminum housing
- Long-life, energy efficient AlInGaP technology red LED light source completely enclosed in acrylic module
- Single illumination module lights both single and double face exit signs
- Highly energy efficient consumes less than 5.5watts in AC or DC mode
- Normal AC and emergency DC operation 120 to 347volts AC input; 6 to 24volts DC input
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell bilingual LER400B6L or LSR400B6L Series LED exit sign. The equipment shall operate with universal AC input voltage of 120 to 347Vac at less than 2watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 3.5watts for single and double face signs. The housing shall be constructed of rugged extruded aluminum and have a maximum depth of 2-1/2". The faceplate(s) shall be constructed of extruded aluminum and come standard with knockout chevrons. The equipment shall have three (3) canopies that shall fasten for installation in either ceiling- or wallmount applications. The light source shall be light emitting diodes (LED). The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. Red LED technology shall be **AllnGaP**. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination.

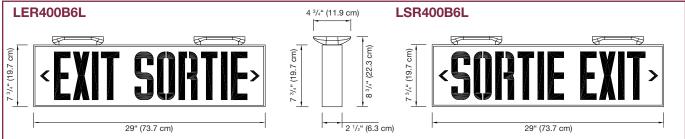
The exit sign in a self-powered configuration shall be equipped with a nickel cadmium battery and shall stay illuminated during emergency operation for at least 60 minutes upon AC failure.

The exit sign shall be CSA-C860 approved.

Project/Location		Date	<b>TVIT CORTE</b>
Contractor	Prepared by	-	
LUMACELL Model			
			SURIE EXI

## LER400B6L & LSR400B6L SERIES

#### Dimensions



#### Wire Guards

460.0059-L	Wall Mount
460.0092-L	Ceiling Mount

#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC/standard DC, red	120 to 347Vac Less than 2W		6 to 24Vdc	Less than 3.5W
AC/special DC, red	120/277/347Vac	Less than 5W	36 or 48 or 120Vdc	Less than 5W
Self-powered, red	120/347Vac	Less than 5.5W	NiCad battery	Min. 60 minutes

#### **Ordering Information**

Series	Faces	Approval	Colour	Tension	Options
LER= EXIT SORTIE	450B6L= single face	C860	Blank= factory white	UNIV=	Blank= 2 canopy
LSR= SORTIE EXIT	460B6L= double face		SG= silver grey	120/277/347Vac,	<b>3C</b> = 3 canopy
			BA= brushed	6 to 24Vdc	* <b>VRSTP</b> = vandal
			aluminium	UNIV36=	resistant shield and
			TA= textured	120/277/347Vac,	tamper proof screws
			aluminium	36Vdc, 4 wires	TP= tamper proof
			<b>BK</b> = black	UNIV48=	screws
				120/277/347Vac,	**990.0119-L= tamper
				48Vdc, 4 wires	proof bit
				UNIV120=	
				120/277/347Vac,	
				120Vdc, 4 wires	
				120VACDC2= 120Vac,	
				120Vdc, 2 wires	
				<b>SP</b> = 120 to 347Vac,	
				self-powered	
				<b>90</b> = 120 to 347Vac,	
				self-powered 90min.	
				<b>120</b> = 120 to 347Vac,	*Indicate single or double. **One bit per order.
				self-powered 120 min.	one bit per order.
			ð		

#### EXAMPLE: LER450B6LC860UNIV

#### 400 Series Extruded Aluminum Exit Sign

Versatile, highly-efficient, energy-saving bilingual exit sign.



#### Features

- Durable extruded, one-piece Aluminum Frame
- Surface or recessed mount available
- Information for complete details.
- Long-life, energy efficient AlInGaP technology red LED light source completely enclosed in acrylic module
- Two illumination modules light both single and double face exit signs

- Highly energy efficient consumes less than 3watts in AC or DC mode
- Normal AC and emergency DC operation 120 to 347volts two-wire AC input; 6 to 24volts two-wire DC input.
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell bilingual LER400B12LC860 Series LED exit sign.

The equipment shall operate with universal AC input voltage from 120 to 347Vac at less than 3watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 3watts for single and double face signs. The housing shall be constructed of rugged extruded aluminum and have a maximum depth of 2-1/2". The faceplate(s) shall be constructed of aluminum and come standard with knockout chevrons. The equipment shall have one (1)

canopy that shall fasten for installation in either ceiling- or wall-mount applications.

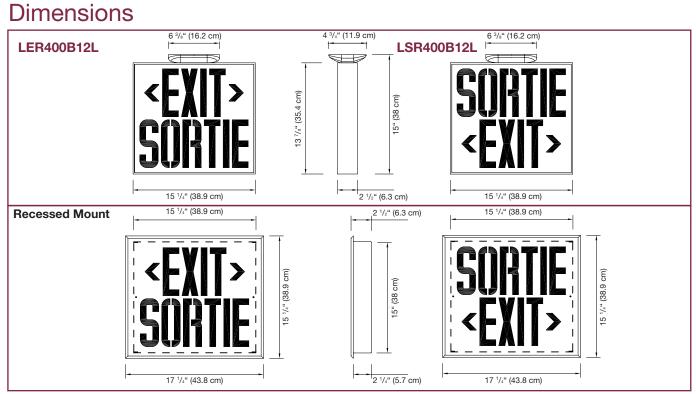
The light source shall be light emitting diodes (LED). The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. Red LED technology shall be **AllnGaP**. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination.

The exit sign shall be CSA-C860 approved.

Project/Location		Date		SORTIF
Contractor	Prepared by		< FYIT>	
LUMACELL Model	·		CONTIC	EVIL'

## LER400B12L & LSR400B12L SERIES

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#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/standard DC, red	120 to 347Vac	Less than 3W	6 to 24Vdc	Less than 3W

#### **Ordering Information**

Series	Faces	Approval	Colour	Tension	Options
LER= EXIT SORTIE	450= single face	B12LC860	Blank= factory	Blank= 120 to	Blank= two
LSR= SORTIE EXIT	460= double face		white	347Vac,	canopies
			<b>BK</b> = black	6 to 24Vdc	R= recessed
			BA= brushed	<b>SP</b> = 120 to 347Vac,	TP= tamper proof
			aluminium	self-powered	screws
			TA= textured		*990.0119-L=
			aluminium		tamper proof bit
			SG= silver grey	]	
			*Other colours available. Consult your sales		
			representative.		*One bit per order.

#### EXAMPLE: LER450B12LC860

#### 400 Series Extruded Aluminum Combo Unit – 6/12V

Multi-purpose, moderately-priced combination unit



#### Features

- Rugged extruded aluminum housing
- Extruded aluminum faceplate with a maximum depth of 2-1/2"
- Universal, field-selectable chevrons (knockout)
- Long-life, energy-efficient LED light source mounted inside exit housing, not on face

- Steel housing, for lamp module (power pack)
- Completely self-contained unit with rechargeable sealed lead battery
- Provides a minimum of 30 minutes of illumination (lamp heads and exit sign) in emergency mode
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LER400 LED exit sign and power pack combination series. The exit housing shall be constructed of rugged extruded aluminum. The faceplate shall be constructed of extruded aluminum. The exit sign shall have a maximum depth of 2-1/2". The faceplate(s) shall come standard with knockout chevrons.

The light source shall be light emitting diodes (LED). The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. An LEDsensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination. The power pack shall be a completely self-contained emergency unit with its own charger and rechargeable battery. The housing shall be made of steel, painted factory white. The unit shall be designed to furnish exit illumination from the normal AC source. When a power failure occurs the mounted heads along with the exit sign are illuminated in emergency mode for a minimum of 30 minutes. The power pack is furnished with a test switch and high charge pilot light and is available as either 18, 36 or 72watts.

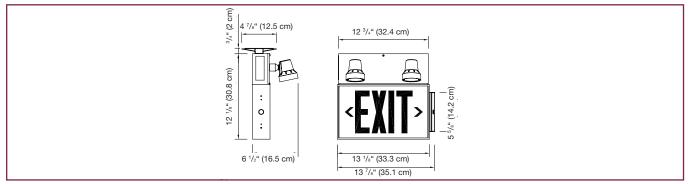
The heads shall require no tools to adjust and aim. The heads will be constructed of a durable thermoplastic construction and use 6volts, 9 watt lamps or as otherwise specified.

The exit sign shall be CSA-C860 approved.

Project/Location		Date
Contractor	Prepared by	
LUMACELL Model		

## **3LER400 SERIES**

#### Dimensions



#### Wire Guards

460.0081-L	Wall Mount
460.0060-L	Ceiling Mount

#### Power Consumption and Unit Rating

Model	AC Specs		Wattage Capacity				
Model			30min	1h00	1h30	2h00	4h00
EXIT Sign Module		Less than 1.5W	-	-	-	-	-
1LER		0.15/0.05 Amp	18	10	7	6	3
3LER	120/347Vac	0.15/0.05 Amp	36	21	15	12	6
5LER	120/347 Vac	0.18/0.07 Amp	72	42	30	24	12
6LER		0.18/0.07 Amp	36	21	15	12	6
7LER		0.15/0.05 Amp	72	42	30	24	12

#### **Ordering Information**

Series	# Faces	# of Heads	Heads Style/Wattage	Colour	Voltage	Options
<b>1LER</b> = 6V-18W	<b>450</b> = single face <b>460</b> = double face		MT9W= micro-tungsten, 9W MQ8W= micro-halogen, 8W	Blank= factory white	<b>Blank</b> = 120/347Vac	Blank= no options AT= Auto-Test
3LER=		1 = one head	MQ12W= micro-halogen, 12W	*SG= silver grey	<b>ZC</b> = 277Vac	<b>TD</b> = time delay
6V-36W		2= two heads	MQM6W= micro-MR16, 6W	BK= black		*RRT= remote test
5LER=			(6V only)	* <b>TA</b> = textured		receiver
12V-72W			<b>MQM10W</b> = micro-MR16, 10W	aluminum		**HHC= Remote test
6LER=			(6V only)			transmitter
12V-36W			<b>MQM12W</b> = micro-MR16, 12W			G= green letters
7LER=			(12V only)			NEX= Nexus®
6V-72W			<b>MQM20W</b> = micro-MR16, 12W			system interface
			(12V only)			
			* Other styles available. Consult your sales representative.	*Heads available in white or black only. Please specify.		*Remote test transmitter needed. **One per order

#### EXAMPLE: 1LER4502MT9W

#### 400 Series Extruded Aluminum Combo Unit – 6/12V

Multi-purpose, moderately-priced combination unit



#### Features

- Rugged extruded aluminum housing, painted factory white
- Extruded aluminum faceplate with a maximum depth of 2-1/2"
- Universal, field-selectable chevrons (knockout)
- Long-life, energy-efficient LED light source mounted inside exit housing, not on face

- Steel housing, for lamp module (power pack)
- Completely self-contained unit with rechargeable sealed lead battery
- Lamp heads require no tools to adjust or aim
- Provides a minimum of 30 minutes of illumination (lamp heads and exit sign) in emergency mode
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell 3LSR400 LED "SORTIE" exit sign with power pack combination series. The exit housing and the faceplate(s) shall be constructed of rugged extruded aluminum. The exit sign shall have a maximum depth of 2-1/2" (6.35cm). The faceplate(s) shall come standard with knockout chevrons.

The light source shall be light emitting diodes (LED). Red LED technology shall be **AlInGaP**. The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" (15cm) high by 3/4" (1.9cm) stroke letters with even illumination.

The power pack shall be a completely self-contained emergency unit with its own charger and rechargeable battery. The housing shall be made of steel. The unit shall be designed to furnish exit illumination from the normal AC source. When a power failure occurs, the mounted heads along with the exit sign are illuminated in emergency mode for a minimum of 30 minutes. The power pack is furnished with a test switch and high charge pilot light and is available as either 36 or 72watts. The heads shall require no tools to adjust and aim. The heads will be constructed of polycarbonate and include 6 volt, 9 watt lamps or as otherwise specified.

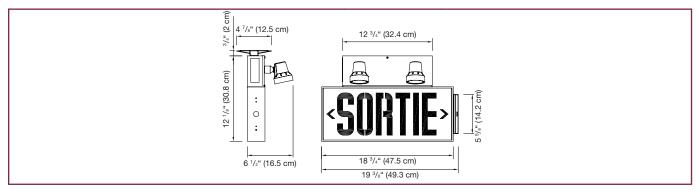
The exit sign shall be CSA-C860 approved.

Project/Location	Date		
Contractor		Prepared by	
LUMACELL Model			



## **3LSR400 SERIES**

#### Dimensions



#### Wire Guards

460.0081-L	Wall Mount
460.0060-L	Ceiling Mount

#### Power Consumption and Unit Rating

Model	AC Specs		Wattage Capacity				
			30min	1h00	1h30	2h00	4h00
SORTIE Sign Module		Less than 2W	-	-	-	-	-
1LSR		0.15/0.05 Amp	18	10	7	6	3
3LSR	120/347Vac	0.15/0.05 Amp	36	21	15	12	6
5LSR	120/34/ Vac	0.18/0.07 Amp	72	42	30	24	12
6LSR		0.18/0.07 Amp	36	21	15	12	6
7LSR		0.15/0.05 Amp	72	42	30	24	12

#### **Ordering Information**

_						
# Faces	Approval	# of Heads	Head Style Wattage	Colour	Voltage	Options
450=	C860	Blank=	MT9W= micro-tungsten, 9W	Blank= factory	Blank=	Blank=
single face		no heads	MQ8W= micro-halogen, 8W	white	120/347Vac	no options
460=		1=	MQ12W= micro-halogen, 12W	*SG= silver grey	<b>ZC</b> =277Vac	AT = Auto-Test
double face		one head	MQM6W= micro-MR16, 6W	BK= black		TD= time delay
		2=	(6V only)	*BA= brushed		*RRT= remote test
		two heads	MQM10W= micro-MR16, 10W	aluminum		receiver
			(6V only)	TA= textured		HHC= remote test
			<b>MQM12W</b> = micro-MR16, 12W	aluminum		transmitter
			(12V only)			NEX= Nexus®
			MQM20W= micro-MR16, 12W			system interface
			(12V only)			*Remote test transmitter
			* Other styles available. Consult your sales representative.	*Heads available in white or black only. Please specify.		needed. **One per order
	450= single face 460= double face	# Faces     C860       single face     460=       double face     1	# Faces     Heads       450=     C860     Blank=       single face     no heads       460=     1=       double face     2=       two heads     1=	# Faces     Heads     Wattage       450= single face     C860     Blank= no heads     MT9W= micro-tungsten, 9W MQ8W= micro-halogen, 8W       460= double face     1= one head     MQ12W= micro-halogen, 12W (6V only)       2= two heads     MQM0W= micro-MR16, 6W (6V only)       MQM10W= micro-MR16, 10W (6V only)       MQM12W= micro-MR16, 12W (12V only)       MQM12W= micro-MR16, 12W (12V only)       MQM20W= micro-MR16, 12W (12V only)       MQM20W= micro-MR16, 12W (12V only)	# Faces       Heads       Wattage       Colour         450= single face       C860       Blank= no heads       MT9W= micro-tungsten, 9W MQ8W= micro-halogen, 8W       Blank= factory white         460= double face       1= one head       MQ12W= micro-halogen, 12W       *SG= silver grey         MQM6W= micro-MR16, 6W       BK= black         2= two heads       MQM10W= micro-MR16, 10W (6V only)       *BA= brushed aluminum         MQM12W= micro-MR16, 10W (12V only)       TA= textured aluminum         MQM20W= micro-MR16, 12W (12V only)       'Heads available in white or black only.	# Faces     Heads     Wattage     Colour     Voltage       450= single face     C860     Blank= no heads     MT9W= micro-tungsten, 9W MQ8W= micro-halogen, 8W     Blank= factory white     120/347Vac       460= double face     1= one head     MQ12W= micro-halogen, 12W     *SG= silver grey     ZC=277Vac       MQM6W= micro-MR16, 6W     BK= black     *BA= brushed aluminum     2= (6V only)     *BA= brushed aluminum       MQM10W= micro-MR16, 10W     MQM12W= micro-MR16, 10W     TA= textured aluminum       MQM12W= micro-MR16, 12W     (12V only)     *Heads available in white or black only.

#### EXAMPLE: 1LSR450C860MT9W

#### LMC Series All Metal Exit Sign

#### Labour-saving, 6 inches steel LED exit sign

# **Second Second**

#### Features

- Now with two-wires universal AC input
- Based on a modular design concept, this exit sign comes pre-assembled for quick, easy installation
- Metal construction using Canadian cold-rolled steel
- Universal mounting end, wall or ceiling
- Supplied standard with two metal stencil plates, red diffusing lenses and back plate
- Easy access to wiring entry for all mounting options
- Canopy mounting system designed specifically for ease of installation

- Universal, field-selectable chevrons (knockout)
- Now with long-life, energy-efficient AlInGaP technology LED light source

Energy efficient – consumes less than 3watts in AC or DC mode

- Normal AC and emergency DC operation 120 to 347 Volt AC input; 6 to 24 Volt DC input
- Also available with power pack; see 8LMCE catalogue sheet
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LMCE exit signs. The equipment shall operate with universal 2-wire AC input voltage of 120 to 347Vac at less than 1.5watts and universal 2-wire DC input voltage from 6 to 24Vdc at less than 1.5watts for single and double face signs. The sign shall be suitable for wall, end, or ceiling mount. The faceplates shall be constructed of steel and shall come standard with knockout chevrons. The frame shall be of a one-piece steel construction.

The light source shall be light-emitting diodes (LED). The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. Red LEDs shall be of **AllnGaP** technology. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination.

The exit sign in a self-powered configuration shall stay illuminated during emergency operation for at least 90 minutes upon AC failure.

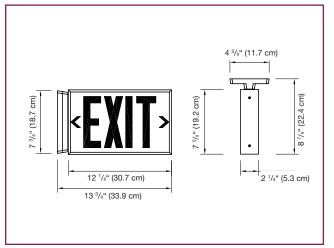
The exit sign shall be CSA-C860 approved.

Project/Location	Date			
Contractor		Prepared by		
LUMACELL Model				



## **LMCE SERIES**

#### Dimensions



#### Wire Guards

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

#### **Power Consumption**

Model	AC Specs		DC Specs	
AC-only, red	120 to 347Vac	Less than 1.5W	-	-
AC/DC standard, red	120 to 347Vac	Less than 1.5W	6 to 24Vdc	Less than 1.5W
AC/special DC, red	120/277/347Vac	Less than 3W	36 or 48 or 120Vdc	Less than 2.5W
Self-powered red	120 to 347Vac	Less than 3W	NiCad battery	Min. 90 minutes
AC-only, green	120 to 347Vac	Less than 1.5W	-	-
AC/DC standard, green	120 to 347Vac	Less than 1.5W	6 to 24Vdc	Less than 2.5W
Self-powered green	120 to 347Vac	Less than 3W	NiCad battery	Min. 90 minutes

#### **Ordering Information**

Series	Colour	Voltage	Options
LMCE= EXIT	Blank= factory white	UN= 120 to 347Vac, 6 to 24Vdc	Blank= no options
	BK= black	* <b>UN00</b> = 120 to 347Vac, no dc	***VRSTP= vandal resistant shield
	SG= silver grey	** <b>UN36</b> = 120/277/347Vac, 36Vdc	and tamper proof screws
		** <b>UN48</b> = 120/277/347Vac, 48Vdc	TP= tamper proof screws
		** <b>UN120</b> = 120/347Vac, 120Vdc	**** <b>990.0119-L</b> = tamper proof bit
		SP= 120 to 347Vac, self-powered	<b>GN</b> = green letters
		120VACDC2= 120Vac, 120Vdc,	
		2 wires	
	Other colours available. Consult your sales representative.	*Supply as single face. **For green letters, please consult your sales representative	***Indicate single or double. ****One bit needed per order.

#### **EXAMPLE: LMCEUN**

#### LMC Series All Metal Exit Sign

#### Labour-saving, 6 inches steel LED exit sign



#### Features

- Now with two-wires universal AC input
- Based on a modular design concept, this exit sign comes pre-assembled for quick, easy installation
- Metal construction using Canadian cold-rolled steel
- Supplied standard with two metal stencil plates, red diffusing lesnses and backplate
- Universal mounting end, wall or ceiling
- Easy access to wiring entry for all mounting options
- Canopy mounting system designed specifically for ease of installation

- Universal, field-selectable chevrons (knockout)
- Now with long-life, energy-efficient AlInGaP technology LED light source

Energy efficient – consumes less than 3watts in AC or DC mode

- Normal AC and emergency DC operation 120 to 347 Volt AC input; 6 to 24 Volt DC input
- Also available with power pack; see LM\*CS catalogue sheet
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LSRLMCSU Series LED 'SORTIE" exit signs. The equipment shall operate with universal two-wire AC input voltage of 120Vac to 347Vac at less than 1.5watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 1.5watts for single or double face signs.

The sign shall be suitable for wall, end or ceiling mount. The faceplates shall be constructed of steel and shall come standard with knockout chevrons. The frame shall be of a one-piece steel construction.

The light source shall be light emitting diodes (LED). The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. Red LED technology shall be **AlInGaP**. An LEDsensitive diffuser shall be mounted behind the legend to provide the 6" (15cm) high by 3/4" (1.9cm) stroke letters with even illumination.

The exit sign in a self-powered configuration shall stay illuminated during emergency operation for at least 60 minutes upon AC failure.

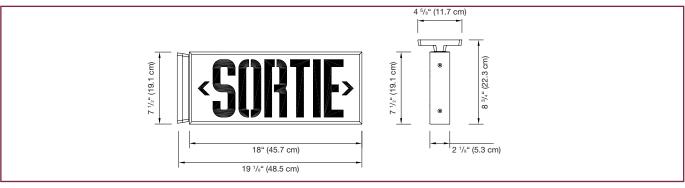
The exit sign shall be CSA-C860 approved.

Project/Location			Date
Contractor		Prepared by	
LUMACELL Model			



## **LSRLMCSU SERIES**

#### Dimensions



#### Wire Guards

460.0057-L	Wall Mount
460.0048-L	End Mount
460.0058-L	Ceiling Mount

#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/DC standard, red	120 to 347Vac	Less than 1.5W	6 to 24Vdc	Less than 1.5W
AC/special DC,red	120/277/347Vac	Less than 2.5W	36 or 48 or 120Vdc	Less than 2.5W
Self-powered red	120 to 347Vac	Less than 3W	NiCad battery	Min. 60 minutes

#### **Ordering Information**

Series	Approval	Colour	Voltage	Options
LSRLMCSU= SORTIE	C860	Blank= factory	UNIV= universal voltage	Blank= no options
		white	120/347Vac, 6 to 24Vdc	*VRSTP= vandal resistant shield
		<b>BK</b> = black	UNIV36= 120/277/347Vac,	and tamper proof screws
		SG= silver grey	36Vdc	TP= tamper proof screws
			UNIV48= 120/277/347Vac,	**990.0119-L= tamper proof bit
			48Vdc	
			UNIV120= 120/277/347Vac,	
			120Vdc	
			<b>SP</b> = 120 to 347Vac,	
			self-powered	
		Other colours available. Consult your sales	120VACDC2= 120Vac,	
		representative.	120Vdc, 2 wires	***Indicate single or double. ****One bit needed per order.
			<b>SP2</b> = 120/347Vac,	
			self-powered, 120 min	

#### EXAMPLE: LSRLMCSUC860UNIV

#### LMC Series All Metal Exit Sign

#### Labor-saving, energy efficient, bilingual all-metal LED exit sign



#### Features

- All-metal construction using Canadian cold-rolled steel
- Consult Ordering Information for complete details.
- Long-life, energy efficient AlInGaP technologie
   LED light source completely enclosed in an acrylic module
- Single illumination module lights both single and double face exit signs
- Highly energy efficient consumes less than 5.5watts
- Normal AC and emergency DC operation
   120 to 347volts AC input; 6 to 24volts DC input
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell bilingual LMCEB6L Series LED exit sign. The equipment shall operate with universal AC input voltage of 120 to 347Vac at less than 3watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 3.5watts for single and double face signs. The frame shall be of a one-piece steel construction and have a maximum depth of 2-1/8". The faceplate(s) shall be steel and come standard with knockout chevrons. The equipment shall have two (2) canopies that shall fasten for installation in ceiling-mount applications. The light source shall be light emitting diodes (LED). The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. Red LED technology shall be AlInGaP.

An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination.

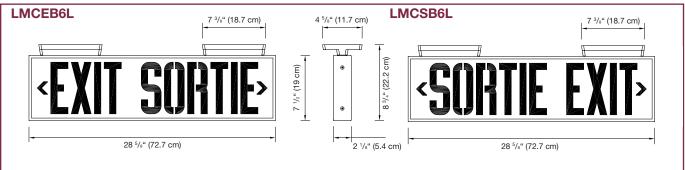
The exit sign in a self-powered configuration shall stay illuminated during emergency operation for at least 60 minutes upon AC failure.

The exit sign shall be CSA-C860 approved.

Project/Location		Date	LEVIT CODTIE
Contractor	Prepared by		EXIT SUMIL
LUMACELL Model			
			SUITIE ENT

## LMCEB6L & LMCSB6L SERIES

#### Dimensions



#### Wire Guards

460.0059-L	Wall Mount
460.0092-L	Ceiling Mount

#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/DC standard, red	120 to 347Vac	Less than 3W	6 to 24Vdc	Less than 3.5W
AC/special DC,red	120/277/347Vac	Less than 5W	36 or 48 or 120Vdc	Less than 5W
Self-powered red	120 to 347Vac	Less than 5.5W	NiCad battery	Min. 60 or 120 minutes

#### **Ordering Information**

Series	Faces	Approval	Colour	Voltage	Options
LMCE=	1B6L=	C860	Blank=	UNIV = 120 to 347Vac, 6 to 24Vdc	Blank= 2 canopies supplied
EXIT/SORTIE sign	single face		factory white	120VACDC2=120Vac,	TP= tamper proof screws
LMCS=	2B6L=		SG= silver	120Vdc, 2 wires	*VRSTP= polycarbonate shield
SORTIE/EXIT sign	double face		grey	<b>UNIV36</b> = 120/277/347Vac,	with tamper proof screws
			<b>BK</b> = black	36Vdc, 4 wires	<b>3C</b> = 3 canopies
				<b>UNIV48</b> = 120/277/347Vac,	**990.0119-L= tamper proof bit
				48Vdc, 4 wires	
				<b>UNIV120</b> = 120/277/347Vac,	
				120Vdc, 4 wires	
			Other colours	<b>SP</b> = self-powered 120 to 347Vac	
			available.	<b>SP2</b> = 120 to 347Vac, 120 min.	*Indicate single or double. ** One bit needed per order
			Consult your sales representative.	duration (self-powered only)	

#### EXAMPLE: LMCE1B6LC860UNIV

#### LMC Series All Metal Exit Sign

#### Labour-saving combination unit

# **Selumacell**

#### Features

- Combination Exit Sign and Power Pack
- Now with dual input voltages 120/347Vac
- Based on a modular design concept, this combo unit comes pre-assembled for quick, easy installation
- Metal stencil plate with red letter panel
- Universal mounting end, wall or ceiling
- Easy access to wiring entry for all mounting options
- Canopy mounting system designed specifically for ease of installation
- Universal, field-selectable chevrons (knockout)

- Long-life, energy-efficient, AlInGaP LED light source
- Energy efficient complete unit consumes less than 3.5watts
- Completely self-contained combo unit with sealed lead battery provides a minimum of 30 minutes of emergency lighting
- Power pack comes standard with test switch and high charge pilot light and is available in either 28, 44 or 72watts
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell 8LMCE LED exit sign and power pack combination series. The exit housing and faceplates shall be constructed of steel. The exit sign shall have a maximum depth of 2-1/2". The faceplate(s) shall come standard with knockout chevrons. The light source for the exit sign shall be light-emitting diodes (LED). The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. Red LEDs shall be of AllnGaP technology. An LED sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination. The power pack shall be a completely self-contained emergency unit with its own charger and rechargeable battery. The housing shall be made of steel. The power pack shall include a test switch and high charge pilot light.

The equipment shall be designed to furnish exit illumination from the normal AC source. When a power failure occurs the exit sign along with the emergency heads shall illuminate for a minimum of 30 minutes. The power available for emergency lights shall be 28watts or as otherwise specified.

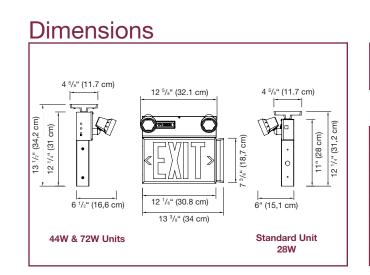
The heads shall require no tools to adjust and aim. The heads will be of a durable thermoplastic construction and use 6volt, 9watt lamps or as otherwise specified.

The exit sign shall be CSA-C860 approved.

Project/Location			Date
Contractor		Prepared by	
LUMACELL Model			



## **8LMCE SERIES**



#### Wire Guards

460.0078-L	Wall Mount
460.0060-L	Ceiling Mount

#### Extra Faceplates

005406-L	Factory white faceplate + red diffuser
005407-L	Black faceplate + red diffuser
005408-L	Silver grey faceplate + red diffuser
005409-L	Factory white faceplate + green diffuser
005410-L	Black faceplate + green diffuser
005411-L	Silver grey faceplate + green diffuser

#### Power Consumption and Unit Rating

-		-					
Model	AC Specs			Watta	age Ca	pacity	
				1h00	1h30	2h00	4h00
EXIT Sign Module	120/347Vac	Less than 1W	-	-	-	-	-
8LMCE	120/347Vac	0.15/0.05 Amp	28	16	12	9	-
10LMCE	120/347Vac	0.15/0.05 Amp	44	26	18	15	7
7LMCE	120/347Vac	0.15/0.05 Amp	72	42	30	24	12

#### Ordering Information

Series	# of Heads	Head style Wattage	Colour	Voltage	Options
8LMCE= 6V-28W 10LMCE= 6V-44W 7LMCE= 6V-72W	Blank= no heads 1= one head 2= two heads	MT9W= micro-tungsten, 9W MQ8W= micro-halogen, 8W MQ12W= micro-halogen, 12W MQM6W= micro-MR16, 6W MQM10W= micro-MR16, 10W	Blank= factory white BK= black SG= silver grey	Blank= 120/347Vac <b>ZC</b> = 277Vac	Blank= no options TD= time delay TP= tamper proof screws GN= green letters *990.0119-L= tamper proof bit NEX= Nexus® system interface
		Consult your sales representative.			*One bit needed per order.

NOTE: Supplied as single face, see extra faceplates ordering information. **EXAMPLE: 8LMCEMT9W** 

#### LM\*C Series All Metal Exit Sign

#### Labour-saving combination unit

# **Second Second**

#### Features

- Combination Exit Sign and Power Pack
- Now with dual input voltages 120/347Vac
- Based on a modular design concept, this combo unit comes pre-assembled for quick, easy installation
- Metal stencil plate with red letter panel
- Universal mounting end, wall or ceiling
- Easy access to wiring entry for all mounting options
- Canopy mounting system designed specifically for ease of installation
- Universal, field-selectable chevrons (knockout)

- Long-life, energy-efficient, AlInGaP LED light source
- Energy efficient complete unit consumes less than 3.5watts
- Completely self-contained combo unit with sealed lead battery provides a minimum of 30 minutes of emergency lighting
- Power pack comes standard with test switch and high charge pilot light and is available in either 28, 44 or 72watts
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell LM\*CS LED "SORTIE" exit sign with power pack series. The exit housing and the faceplate(s) shall be constructed of steel. The exit sign shall have a maximum depth of 2-1/2" (6.35cm). The faceplate(s) shall come standard with knockout chevrons.

The light source shall be light emitting diodes (LED). Red LED technology shall be **AllnGaP**. The LED lamps shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" (15cm) high by 3/4" (1.9cm) stroke letters with even illumination.

The power pack shall be a completely self-contained emergency unit with its own charger and rechargeable battery. The housing shall be made of steel. The unit shall be designed to furnish exit illumination from the normal AC source. When a power failure occurs, the mounted heads along with the exit sign are illuminated in emergency mode for a minimum of 30 minutes. The power pack is furnished with a test switch and high charge pilot light and is available as either 36 or 72watts.

The heads shall require no tools to adjust and aim. The heads will be constructed of durable thermoplastic and use 6volt, 9watt lamps or as otherwise specified.

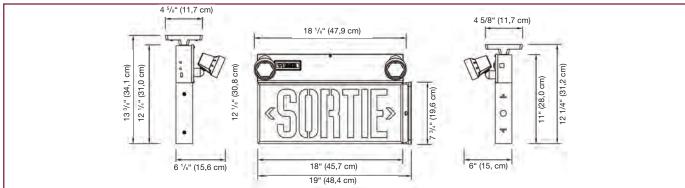
The exit sign shall be CSA-C860 approved.

Project/Location		Date	
Contractor		Prepared by	
LUMACELL Model			



## LMC\*S SERIES

#### Dimensions



#### Wire Guards

460.0078-L	Wall Mount
460.0060-L	Ceiling Mount

#### Power Consumption and Unit Rating

Model	AC Specs		Wattage Capacity				
INIOUEI		AU Opeus		1h00	1h30	2h00	4h00
SORTIE Sign Module	120/347Vac	Less than 2W	-	-	-	-	-
LM27	120/347Vac	0.25/0.08 Amp	27	15	12	9	-
LM50	120/347Vac	0.25/0.08 Amp	50	30	20	16	8
12LM50	120/347Vac	0.25/0.08 Amp	50	30	20	16	8
12LM80	120/347Vac	0.25/0.08 Amp	80	45	36	27	12

#### Ordering Information

Series	Approval	# of Heads	Head style Wattage	Colour	Voltage	Options
LM27= 6V-27W LM50= 6V-50W	CS1= single face wall-or ceiling-mount CSU= universal	Blank= no heads 1= one head 2= two	MT9= micro-tungsten, 9W MQ8= micro-halogen, 8W MQ12= micro-halogen, 12W MQM6= micro-MR16, 6V 6W	W= factory white B= black *G= silver	<b>Blank=</b> 120/347Vac	Blank= no options T1= time delay (5 min)
<b>12LM50</b> = 12V-50W <b>12LM80</b> = 12V-80W	mounting with metalic canopy complete with two face plates	heads	(6V only) MQM10= micro-MR16, 10W (6V only) MQM12= micro-MR16, 12W (12V only) MQM20= micro-MR16, 20W (12V only)	grey *Heads available in white or black only. Please specify. Other colours		T2= time delay (10 min) T3= time delay (15 min) TP= tamper proof screws *990.0119-L= tamper proof bit NEX= Nexus® system interface
			Other styles available. Consult your sales representative.	available, consult your sales representative		*One bit needed per order.

#### EXAMPLE: LM27CS1MT9W

#### RG12S Series High Capacity Combo Units

#### Up to 360watts of Remote Capacity

# **Selumacell**

#### Features

- High capacity battery unit
- High quality steel enclosure with corrosion resistant undercoating
- Fully C860 approved "Exit" legend illuminated with AllnGaP LEDs
- Available in 12volts, 110, 144, 250 and 360watts
- Standard 120/347Vac input

- Optional Auto-test charger (available with 110watts only)
- Long life, maintenance free lead acid battery
- Sealed dust-proof transfer relay
- Solid state pulse type charger standard



#### **Typical Specification**

Supply and install a unit that combines an illuminated LED exit sign with an emergency light battery unit. The housing and faceplate shall be constructed of steel. The faceplate shall come standard with knockout chevrons. The light source for the exit sign shall be LED. The LED lamps shall provide illumination in normal and emergency operation. Red LEDs shall be of **AlInGaP** technology. The charger board, the battery and the LEDs shall be contained in a single housing. A diffuser optimized for LEDs shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination.

The unit shall include a test switch and high charge pilot light. The equipment shall be designed to furnish exit illumination from the normal AC source. When a power

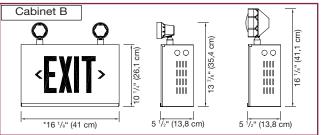
failure occurs, the exit sign along with the emergency heads shall illuminate for a minimum of 30 minutes. The power available for emergency lights shall be at least 110watts or as otherwise specified. The heads shall require no tools to aim and shall be as specified.

The exit sign shall be CSA-C860 approved.

Project/Location			Date	
Contractor		Prepared by		
LUMACELL Model				

# EXIT>

#### Dimensions



## RG12S\*E SERIES

#### Wire Guards

460.0081-L	Wall Mount 110W and 144W
460.0034-L	Wall Mount 250W and 360W

\*Housing width is 23  $1/8^{\rm m}$  (58,8 cm) for 250W and 360W capacity only (cabinet C). For more information, please consult your sales representative.

#### Power Consumption and Unit Rating

Model	ACS	specs	Wattage capacity30min1h001h302h00		acity		
Wieder		,0000			1h30	2h00	4h00
EXIT Sign Module		Less than 2W	-	-	-	-	-
RG12S110E		0,25/0,10 Amp	110	64	45	36	18
RG12S144E	120/347Vac	0,25/0,10 Amp	144	84	60	48	24
RG12S250E		0,45/0,15 Amp	250	144	100	83	42
RG12S360E	-	0,45/0,15 Amp	360	210	150	120	60

#### Ordering Information

	<u> </u>				
Series	# of Heads	Head Style Wattage	Colour	AC Voltage	Options
RG12S110E=	Blank= no	MT9W= mini tungsten, 12V - 9W, wedge base	Blank= factory	Blank=	Blank=
12V - 110watts	heads	MT18W= mini tungsten, 12V - 18W, wedge base	white	120/347Vac	no options
RG12S144E=	1=	<b>MQ8W</b> = mini halogen, 12V - 8W, quartz bi-pin	<b>B</b> = black	<b>ZC</b> = 277Vac	AT = Auto-Test
12V - 144watts	one head	MQ12W= mini halogen, 12V -12W, quartz bi-pin			(110W only)
RG12S250E=	2=	MM12W= mini halogen, 12V - 12W, MR16			
12V - 250watts	two head	MM20W= mini halogen, 12V - 20W, MR16			
RG12S360E=	3=	LH9W= large tungsten, 12V - 9W, wedge base			
12V - 360watts	three head	LH18W= large tungsten, 12V - 18W, wedge base			
		LH25W= large tungsten, 12V - 25W, DCB			
		LQ8W= large halogen, 12V - 8W, quartz bi-pin			
		LQ12W= large halogen, 12V - 12W, quartz bi-pin			
		LQ20W= large halogen, 12V - 20W, quartz bi-pin			
		LQ55W= large halogen, 12V - 55W, quartz bi-pin			
		SB12W= large tungsten, 12V - 12W, sealed beam			
		SB18W= large tungsten, 12V - 18W, sealed beam			
		SB25W= large tungsten, 12V - 25W, sealed beam			
		SQ8W= large halogen, 12V - 8W, quartz sealed beam			
		SQ12W= large halogen, 12V - 12W, quartz sealed			
		beam			
		<b>D12W</b> = déco head DR130, 12V - 12W, MR16			
		<b>D20W</b> = déco head DR130, 12V - 20W, MR16			
		<b>D35W</b> = déco head DR130, 12V - 35W MR16			
		<b>D50W</b> = déco head DR130, 12V - 50W, MR16			
			*Other colours available on demand. Consult your sales representative.		
24volts available. Please consult your sales representative		Other styles available. Consult your sales representative.	Heads available in black or white only. Please specify		

EXAMPLE: RG12S110EMT9W

#### RG12S Series High Capacity Combo Units

#### Up to 360watts of Remote Capacity

# **Selumacell**

#### Features

- High capacity battery unit
- High quality steel enclosure with corrosion resistant undercoating
- Fully C860 approved "SORTIE" legend illuminated with AllnGaP LEDs
- Available in 12volts, 110, 144, 250 and 360watts
- Standard 120/347Vac input

- Optional Auto-test charger (available with 110watts only)
- Long life, maintenance free lead acid battery
- Sealed dust-proof transfer relay
- Solid state pulse type charger standard



#### Typical Specification

Supply and install the Lumacell RG12S-S LED "SORTIE" combo unit. The housing and faceplate shall be constructed of steel. The faceplate shall come standard with knockout chevrons.

The light source shall be light emitting diodes (LED). The LED lamps shall provide illumination in normal and emergency operation. Red LED technology shall be **AllnGaP**.

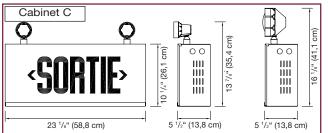
The power pack, rechargeable battery and LEDs shall be contained in a single housing. A diffuser optimized for LEDs shall be mounted behind the legend to provide the 6" (15cm) high by 3/4" (1.9cm) stroke letters with even illumination. The power pack is furnished with a test switch and high charge pilot light. The unit shall be designed to provide exit sign illumination from the normal AC source. When a power failure occurs, the mounted heads along with the exit sign are illuminated in emergency mode for a minimum of 30 minutes. The power available for emergency lights shall be 110watts or as otherwise specified. The heads shall require no tools to adjust and aim. The heads will be constructed of durable thermoplastic and use 6 volt, 9 watt lamps or as otherwise specified.

The exit sign shall be CSA-C860 approved.

Project/Location		Date
Contractor	Prepared by	
LUMACELL Model		



#### Dimensions



## **RG12S\*S SERIES**

#### Wire Guard

460.0034-L

Wall Mount

#### Power Consumption and Unit Rating

Model	AC Specs			Watt	age Capa	acity	
			30min	1h00	1h30	2h00	4h00
SORTIE Sign Module		Less than 2W	-	-	-	-	-
RG12S110S		0.25/0.10 Amp	110	64	45	36	18
RG12S144S	120/347Vac	0.25/0.10 Amp	144	84	60	48	24
RG12S250S		0.45/0.15 Amp	250	144	100	83	42
RG12S360S		0.45/0.15 Amp	360	210	150	120	60

#### **Ordering Information**

Series	# of Heads	Head Style Wattage	Colour	Voltage	Options
RG12S110S =	Blank= no	MT9W= mini tungsten, 12V - 9W, wedge base	Blank= factory	Blank=	Blank=
12V - 110watts		<b>MT18W</b> = mini tungsten, 12V - 18W, wedge base	white	120/347Vac	no options
RG12S144S=	-	MQ8W= mini halogen, 12V - 8W, guartz bi-pin	<b>B</b> = black	<b>ZC</b> = 277Vac	AT = Auto-Test
12V - 144watts		MQ12W= mini halogen, 12V -12W, quartz bi-pin	<b>D</b> - black		(110W only)
RG12S250S=		<b>MM12W</b> = mini halogen, 12V - 12W, MR16			(Trove only)
12V - 250watts		<b>MM20W</b> = mini halogen, 12V - 20W, MR16			
RG12S360S=		LH9W = large tungsten, 12V - 9W, wedge base			
12V - 360watts	-	LH18W= large tungsten, 12V - 18W, wedge base			
		LH25W= large tungsten, 12V - 25W, DCB			
		LQ8W= large halogen, 12V - 8W, quartz bi-pin			
		LQ12W= large halogen, 12V - 12W, quartz bi-pin			
		LQ20W= large halogen, 12V - 20W, quartz bi-pin			
		LQ55W= large halogen, 12V - 55W, quartz bi-pin			
		SB12W= large tungsten, 12V - 12W, sealed beam			
		SB18W= large tungsten, 12V - 18W, sealed beam			
		SB25W= large tungsten, 12V - 25W, sealed beam			
		SQ8W= large halogen, 12V - 8W, quartz sealed beam			
		<b>SQ12W</b> = large halogen, 12V - 12W, quartz sealed			
		beam			
		<b>D12W</b> = deco head DR130, 12V - 12W, MR16			
		<b>D20W</b> = deco head DR130, 12V - 20W, MR16			
		<b>D35W</b> = deco head DR130, 12V - 35W MR16			
		<b>D50W</b> = deco head DR130, 12V - 50W, MR16			
			*Other colours available on demand. Consult your sales representative.		
24volts available. Please consult your sales representative		Other styles available. Consult your sales representative.	Heads available in black or white only. Please specify		

EXAMPLE: RG12S110SMT9W

#### Grande Series Commercial-grade, universal-mount, snap-fit Exit Sign

The GRANDE Series is a compact exit sign with an all-in-one

# **Selumacell**

#### Features

- Durable, injection-molded, made in Canada thermoplastic housing
- -Universal mounting supplied standard with two stencil plates, red diffusing lens and backplate.
- Universal, field-selectable snap in/out chevrons
- Available for wall, end or ceiling mounting
- Indirect refractive technology provides bright, even illumination

- -Long-life, energy-efficient, AllnGap LED light source
- Energy efficient consumes less than 3.5watts
- Normal AC and emergency DC operation with dual AC input of 120V/347V and universal DC input of 6V to 48V
- Comes with the lumacell EZ2 canopy for quick & easy installation. See page 103 for information.
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install the Lumacell Grande exit sign. The standard equipment shall operate with a dual-voltage input of 120/347Vac with less than 2watts of consumption and a universal two-wire DC input voltage from 6Vdc to 48Vdc at less than 2.5watts for single and double face signs. The exit shall be suitable for wall, end, or ceiling mount. The faceplate shall be constructed of a durable high impact thermoplastic. No screws are necessary to hold the faceplate or the back plate to the housing. The faceplates shall come standard with snap in/out chevrons. The frame shall consist of a one-piece factory white thermoplastic. The light source shall be light emitting diodes (LEDs). The LEDs shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing. Red LED technology shall be AllnGap. A LED-sensitive diffuser shall be mounted in front of the LEDs to provide the 6" high by 34" stroke letters with even illumination. The exit sign shall be C860 approved.

The exit sign in a self-powered configuration shall be

equipped with a sealed, maintenance-free Nickel-Cadmium battery. The equipment shall recharge the battery in 24 hours and stay illuminated at least 90 minutes upon AC failure. The self-powered model equipped with advanced diagnostic shall self-test by simulating a power failure for one minute every 30 days, 30 minutes every 60 days and 90 minutes every 360 days. A diagnostic circuit shall continuously monitor the performance of the battery, charger module and LED lamps. Upon failure detection the system shall display the error on the AC pilot lamp, which will change color from green to red and will flash with a specific code. The red light shall be steady-on in case of "Battery Disconnect"; it shall flash with one blink for "Battery failure", two blinks for "Charger failure" and four blinks for "LED lamp failure. A label with the diagnostic legend shall be visible next to the pilot light.

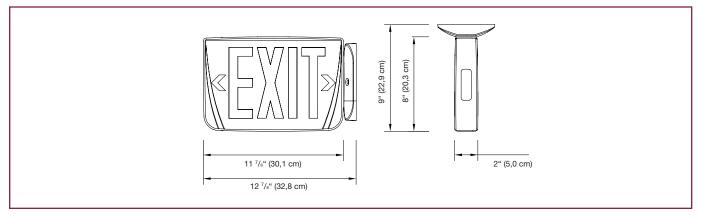
The exit sign shall be Lumacell Model:

Project/Location		Date	
Contractor		Prepared by	
LUMACELL Model			



EXIT

#### Dimensions



#### Wire Guards

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

#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC only	120/347Vac Less than 2.5W		-	-
AC/DC-remote	120/347Vac	Less than 2W	6 to 48Vdc	Less than 1.5W
Self-powered	120/347Vac	Less than 3.5W	NiCad battery	Min. 90 minutes
Self-powewed with diagonstic	120/347Vac	Less than 3W	NiCad battery	Min. 90 minutes

#### Ordering Information

Series	Colour	Unit type	Voltage	Legend colour	Options
GRA= L.E.D. plastic universal exit sign	W= factory white B= black	AC= AC only UNV= 120/277 or 120/347Vac & 6 to 48Vdc SPN= self-powered NiCad SDN= self-powered diagnostic NiCad		R= Red G= Green	FA= fire alarm activated flasher* NEX= Nexus® system interface (not available with FA)

#### **EXAMPLE: GRAWAC2R**

#### Nite Owl Series High Impact, Thermoplastic Adjustable Heads Exit Sign

MR16 quartz halogen lamps with adjustable heads.

# **Selumacell**

#### Features

- Injection-molded thermoplastic housing
- Innovative, snap together design allows for fast installation
- Replaceable lead-calcium (2 x 6v 4.5amp) battery
- Comes complete with 2 faceplates, 1 back plate, and 1 canopy
- Replaceable knockout directional chevron's
- Two adjustable glare free light heads
- Uses halogen MR16 lamps with front glass cover

- Low Energy consumption LED light source
- Field adjustable heads
- 36W remote capability (Standard with 2 x 5.4W MR16 heads)
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

The Contractor will install the Lumacell NH50LER660 Combo. The NH50LER660 Combo shall be suitable for wall end or ceiling mount.

The face shall be constructed of a durable high impact thermoplastic. No screws are necessary to hold the face plate or canopy to the housing. The face plates shall come standard with snap out chevron's. The frame shall be constructed of a one-piece thermoplastic mold and comes completely standard white. This combo shall be universal 120/347 AC input and comply to C860-01.

The combo unit will come complete with 2 adjustable Eyeball, glare free MR16 lamps and front glass cover and remain illuminated in emergency mode for a period of 30 minutes.

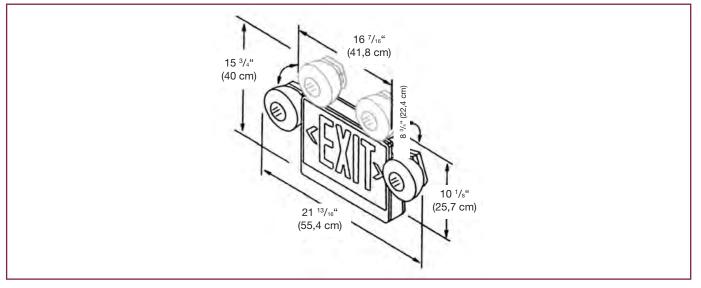
The combo unit shall be CSA-C860 approved.

The combo unit shall be Lumacell Model:

Project/Location		Date	0 10
Contractor	Prepared by		<b>TVIT</b>
LUMACELL Model	·		<b>CVI</b>
· · · · ·			

## **NITE OWL NH50 SERIES**

#### Dimensions



#### Wire Guard

460.0034-L

Wall Mount

#### Power Consumption and Unit Rating

Model	AC Specs		30min	Watta 1h00	ige Ca 1h30	pacity	4h00
NH50	120/347Vac	0.10/0.04 Amp	50	30	20	16	-

#### **Ordering Information**

Unit Capacity	Series	AC Voltage	# of Lamps/Type	Options
			Blank= two 5W	Blank= no options
<b>NH50</b> = 6V 50W	<b>LER660</b> = EXIT	<b>Blank</b> = 120/347Vac	MR16 lamps (standard)	- <b>10W</b> = two 10W MR16 lamps

#### **EXAMPLE: NH50LER660**

#### SOW4T Series NEMA-3R Certified Exit Sign

#### Water, dust and oil resistant "SORTIE" exit sign.



#### Features

- Approved NEMA-3R for wet locations.
- Heavy-duty, gasketed fiberglass reinforced housing, designed specifically for industrial applications.
- Grey finish standard.
- Sealed, vandal resistant polycarbonate front cover.
- Long life, even illumination of the exit sign "SORTIE" legend is provided by an energy efficient, AlInGaP technology LED light source consuming less than 3watts per face.

- Wall, ceiling or end mounted. Mounting brackets available for easy installation.
- Normal AC and emergency DC operation 120 to 347Vac input; 6 to 24Vdc input.
- Also available with power pack.
   Refer to 3LSRSOW4T catalogue sheet.
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install Lumacell LSRSOW4T Series "SORTIE" exit signs. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 1.5watts and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 1.5watts per face.

The sign housing shall be of grey fiberglass, specially designed for industrial environments. The sealed faceplate shall be gasketed, completely transparent, high abuse and vandal resistant, and will feature an even illuminated legend.

The light source illuminating the legend shall be **AllnGaP** technology red LEDs. The exit in a self-powered

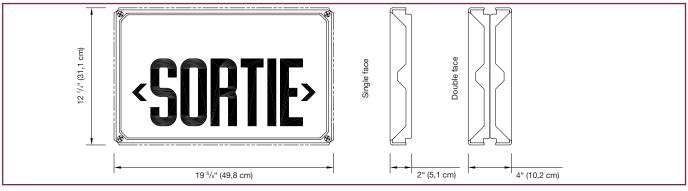
configuration shall include a magnetic test switch and a nickel-cadmium battery. The exit sign shall stay illuminated during emergency operation for at least 60 minutes upon AC failure.

The exit sign shall be CSA-C860 approved.

Project/Location		Date	1
Contractor	Prepared by		CODTIC
LUMACELL Model			1 SUHIL

## LSRSOW4T SERIES

#### Dimensions



#### Wire Guards

460.0103-L	Wall Mount
460.0104-L	Ceiling Mount

#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/DC standard, red	120 to 347Vac Less than 1.5		6 to 24Vdc	Less than 1.5W
AC/special DC, red	120/277/347Vac	Less than 2.5W	36 or 48 or 120Vdc	Less than 2.5W
Self-powered, red	120 to 347Vac	Less than 3W	NiCad battery	Min. 60 minutes

Note: double face models have double the power consumption above.

#### Ordering Information

Series	Approval	Voltage
LSRSO1W4T= SORTIE, single face, wall, ceilind, and end mount.	C860         UNIV= 120 - 347Vac, 6 to 24Vdc           UNIV36= 120/277/347Vac, 36Vdc, 4 wires	
LSRSO2W4T= SORTIE, double face, wall, ceiling, and end mount.		UNIV48= 120/277/347Vac, 48Vdc, 4 wires
		UNIV120= 120/277/347Vac, 120Vdc, 4 wires
		<b>SP</b> = 120 to 347Vac, self-powered <b>120VACDC2</b> = 120Vac, 120Vdc, 2 wires

#### EXAMPLE: LSRSO1W4TC860UNIV

Special wording available. see page 78. Please consult your sales representative.

#### SOW4T Series NEMA-3R Certified Bilingual Exit Sign

Water, dust and oil-resistant exit sign.

## **Second Cell**

#### Features

- Certified NEMA-3R
- Gasketed fiberglass housing designed specifically for industrial applications
- Grey finish is standard
- Sealed, vandal-resistant polycarbonate faceplate
- Long-life, even illumination of "EXIT SORTIE" or "SORTIE EXIT" legend provided by energy efficient, AlInGaP technology LED light source consuming less than 6watts per face
- Wall or ceiling mounting; wall or ceiling brackets available for easy installation
- Normal AC and emergency DC operation 120 to 347volts AC input; 6 to 24 DC input
- CSA certified, meets or exceeds C860 requirements



#### **Typical Specification**

Supply and install Lumacell LEREOB12L or LSRSOB12L Bilingual Led exit sign. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac a less than 3watts per face and universal two-wire DC input voltage from 6Vdc to 24Vdc at less than 3watts per face. The housing shall be of grey fiberglass, gasketed, specially designed for industrial environment. The sealed front

cover shall be constructed of heavyduty vandalresistant transparent polycarbonate of 4mm thickness and shall be bent around the back box for increased rigidity. The front cover will feature an even illuminated legend with the text "EXIT" and "SORTIE" positioned one on top of the other. The light source shall be the new **AlInGaP** technology red LED. The equipment shall be suitable for wall or ceiling mount and be designed specifically for high abuse areas, wet locations, dust and oil-tight applications. The equipment in a self-powered configuration shall stay illuminated during emergency operation for at least 60 minutes upon AC failure.

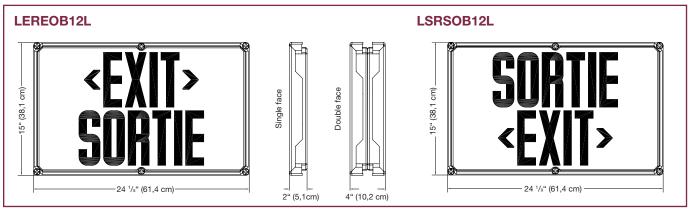
The equipment shall be NEMA-3R and C-860 approved.

Project/Location	Date	
Contractor	Prepared by	SOATE
LUMACELL Model		



## LEREOB12L & LSRSOB12L SERIES

#### Dimensions



#### Wire Guards

460.0103-L	Wall Mount
460.0104-L	Ceiling Mount

#### **Power Consumption**

Model	AC S	pecs	DC Specs		
AC/DC, red	120 to 347Vac	Less than 3W	6 to 24Vdc	Less than 3W	
Self-powered, red	120 to 347Vac Less than 6W		NiCad battery Min. 60 minute		

NOTE: Double-face models have double the power consumption above.

#### Ordering Information

LEREO1W4T= single face       B12L= bilingual       UNIV= 120 - 347Vac, 6 to 24Vdc         NEMA-3R, EXIT/SORTIE       SP= 120 to 347Vac, self-powered         LEREO2W4T= double face       NEMA-3R, EXIT/SORTIE         LSRSO1W4T= single face       HEREO2W4T= single face	Series	Lettering	Voltage
NEMA-3R, SORTIE/EXIT       LSRSO2W4T= double face       NEMA-3R, SORTIE/EXIT	NEMA-3R, EXIT/SORTIE LEREO2W4T= double face NEMA-3R, EXIT/SORTIE LSRSO1W4T= single face NEMA-3R, SORTIE/EXIT LSRSO2W4T= double face	B12L= bilingual	· · · · · · · · · · · · · · · · · · ·

#### EXAMPLE: LEREO1W4TB12LUNIV

#### SOW4T Series NEMA-3R Certified Combo Unit

#### Water, dust and oil resistant "SORTIE" exit sign combo



#### Features

- Certified NEMA-3R for wet locations.
- Heavy-duty, gasketed fiberglass reinforced housing, designed specifically for industrial applications.
- Sealed, vandal resistant polycarbonate faceplate.
- Fully integrated unit with charger and rechargeable battery.
- Solid state charger circuitry capable of full recharge within 24 hours.
- Low voltage disconnect circuitry.
- Sealed, dust-tight transfer relay.

- Long life, uniform illumination of the exit sign "SORTIE" legend is provided by an energy efficient, LED light source consuming less than 3watts per face.
- Illumination is provided by AllnGaP technology LEDs.
- Power pack includes a magnetic test switch and high charge pilot light.
- Compatible with PAR36 lamps or sealed tungsten/ halogen lamps. Teflon coated lenses available in option.
- Upon AC failure, the long life nickel-based sealed battery provides the exit sign and emergency lights a minimum of 30 minutes of operation in emergency mode.



#### Typical Specification

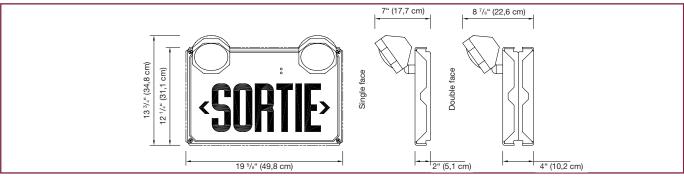
The housing shall be constructed of fiberglass. Gasketed, it will be designed specially for industrial environments. The faceplate shall be constructed of heavy-duty vandal-resistant transparent polycarbonate of 4mm thickness and shall be bent around the back box for increased rigidity. It shall feature a legend with the word "SORTIE" and the light source providing even illumination of the legend shall be the new **AlinGaP** technology red LEDs.

The combo shall be a self-powered emergency unit with its own charger, rechargeable battery and sealed PAR36 emergency lights. It shall be designed to provide normal AC illumination and upon AC failure, the exit sign shall remain illuminated in emergency mode during a minimum 30 minutes. The power pack shall include a magnetic test switch and a high charge pilot light. The combined unit equipment shall be certified NEMA-3 and designed specifically for applications such as high abuse areas, wet locations, environments requiring dust and oil tight equipment, or subject to cold temperatures. This unit is recommended for schools, parking garages, public places, transit platforms and security areas (jails, etc.).

The exit sign shall be CSA-C860 approved.

## **3LSRSOW4T SERIES**

#### Dimensions



#### Wire Guards

460.0034-L	Wall Mount
460.0104-L	Ceiling Mount

#### Power Consumption and Unit Rating

Model	AC Specs			Watta	age Capa	acity	
		AC Opecs		1h00	1h30	2h00	4h00
3LSRSO	120/347Vac	0.15/0.06 Amp	36	21	15	12	6
7LSRSO	120/347 Vac	0.15/0.06 Amp	72	42	30	24	12

#### **Ordering Information**

Series	Approval	# of Heads	Lamp type/Wattage	Voltage	Options
3LSRSO1W4T= 6V-36W, SORTIE, single face 3LSRSO2W4T= 6V-36W, SORTIE, double faces 7LSRSO1W4T= 6V-72W, SORTIE, single face 7LSRSO2W4T= 6V-72W, SORTIE, double faces	C860	1= one head 2= two heads	LH9W= par 36, tungsten, 6V, 9W LH18W= par 36, tungsten, 6V - 18W LH25W= par 36, tungsten, 6V - 25W LHQ8W= par 36, halogen, 6V - 25W LHQ12W= par 36, halogen, 6V - 20W SB9W= tungsten, sealed beam, 6V - 9W SB18W= tungsten, sealed beam, 6V - 18W SB25W= tungsten, sealed beam, 6V - 25W QSB8W= halogen, sealed beam, 6V - 8W QSB12W= halogen, sealed beam, 6V, 12W QSB20W= halogen, sealed beam, 6V, 20W	Blank= 120/347Vac	Blank= no options TC= teflon coated lens

#### EXAMPLE: 3LSRSO1W4TC8601LH9W

#### 3000 Series Polyvinyl Chloride Exit Sign

#### All-climate, all-purpose LED exit sign.

## 

#### – NEMA-4X Certified

- NSF Certified for food processing
- Polymeric enclosure is fully gasketed around lens and canopy to prevent water infiltration
- Sealed faceplate of heavy-duty, vandal-resistant polycarbonate with evenly illuminated legend
- Suitable for cold weather: -40 C on non self-powered sign and -20°C on self-powered ("CW" option)
- Tamper-resistant magnetic test switch
- Self-diagnostic circuitry standard on all self-powered models
- Sealed, maintenance-free, nickel cadmium batteries for superior performance and long life

- Provides 90 minutes of emergency operation (consult factory for longer operation)
- Batteries recharge as per CSA requirements
- Long-life, energy-efficient AlInGaP red LED light source
- Energy efficient consumes less than 3watts in AC or DC mode
- Normal AC and emergency DC operation 120 to 347volts universal AC two-wire; 6 to 48volts universal DC
- Also available with power pack; see 3LER3000 catalogue sheet
- CSA certified, meets or exceeds C860 requirements



#### Typical Specification

Supply and install Lumacell LER3000 Series LED exit signs. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 3watts and universal two-wire DC input voltage from 6Vdc to 48Vdc at less than 2watts for single and double face signs. The equipment frame shall be of industrial grade polyvinyl chloride with a gasket around lenses and canopy designed specifically for hostile environments. The faceplate(s) shall be constructed of heavy-duty vandal-resistant polycarbonate and feature an even illuminated legend. The light source shall be light emitting diodes (LED). Red LED technology shall be AllnGaP. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination. The exit shall be certified for NEMA- 4X and designed specifically for high abuse areas, wet location, and cold weather (-20°C) applications.

SP<sup>®</sup> NEMA-4X

The self-powered model shall stay illuminated during emergency operation for at least 90 minutes upon AC failure and shall include a magnetic test switch and self-testing and self-diagnostic functions. The equipment shall automatically self test for 5 minutes every 30 days, 30 minutes every 60 days and 90 minutes annually. A "Service Required" lamp shall be located near the test switch and flash when a fault is detected. A two-LED diagnostic display shall be located inside the equipment and shall identify the eventual source of failure (battery, charger circuitry, or LED lamps).

The exit sign shall be CSA-C860 approved.

The equipment shall be Lumacell Model:

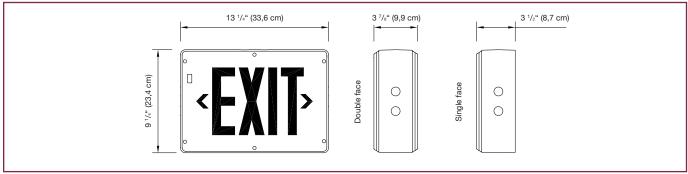
Made in Canada

Project/Location	Date	
Contractor	Prepared by	
LUMACELL Model		



## **LER3000 SERIES**

### Dimensions



### Wire Guards

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

#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/DC, red	120 to 347Vac	Less than 3W	6 to 48Vdc	Less than 2W
AC/DC, green	120 to 347Vac	Less than 3W	6 to 48Vdc	Less than 2W
Sel-powered, red	120 to 347Vac	Less than 3W	NiCad battery	Min. 90 minutes
Sel-powered, green	120 to 347Vac	Less than 3W	NiCad battery	Min. 90 minutes

### **Ordering Information**

Series	Faces/Mounting	Housing Faceplate Colours	Voltage	Options	Approval
LER3= EXIT	500= single face, universal mount 600= double face, universal mount	WH= factory white/factory white BK= black/black BW= black/white WB= factory white /black SG= grey/grey GW= grey/white GB= grey/black GA= grey/aluminum	Blank= 120 - 347Vac, 6 - 48Vdc SPD= 120 - 347Vac self-powered c/w diagnostics (non-audible) 120VACDC2= 120Vac, 120Vdc, 2 wires	Blank= no options GN= green letters FA= fire alarm activated flasher *FB= flasher/buzzer (Self-powered models only) CW= cold weather (-20°C for self-powered, -40°C for AC/DC) NEX= Nexus® system interface (not available with FA, FB &CW)	4X = approved NEMA-4X and NSF

#### EXAMPLE: LER3500WH4X

## 3000 Series NEMA-4X Certified Combo Units

Impressive, state-of-the-art illumination for use in adverse conditions.



#### Features

#### Standard

- NEMA-4X-certified
- NSF for food processing
- CSA certified, meets or exceeds C860 requirements
- Uniform AllnGap technology LED illuminated legend
- Universal mounting: wall, end or ceiling
- Continuous self-diagnostic monitoring and monthly self-testing
- Fully automatic charger is solid state
- Sealed, maintenance-free nickel cadmium battery
- Non-intrusive magnetic test switch
- Comes standard with tamper proof screws

#### Options

- Double face
- Cold weather (-40°C; 6Volt unit)
- No heads (for more remote capacity)
- Fire alarm activated flasher
- Flasher/buzzer (AC power failure)
- Flasher (AC power failure)



Made in Canada

## Typical Specification

Supply and install Lumacell 3LER3000 LED exit sign and power pack series. The equipment shall operate under two input voltage, 120Vac or 347Vac. The equipment frame shall be of industrial grade polyvinyl chloride with a gasket around lenses and canopy designed specifically for hostile environments.

The unit shall be certified for NEMA-4X and designed specially for high abuse areas, wet location, and cold weather (CW option). The faceplate(s) shall be constructed of heavy-duty vandal-resistant polycarbonate and features an even illuminated legend. The legend light source shall be light emitting diodes (LED). Red LED technology shall be **AlInGaP**. Emergency lights shall be fully adjustable and high efficiency MR16 lamps. The Lumacell Advanced Diagnostic Microcontroller board shall supply the rated load for a minimum of a 1/2 hour to 87,5% of the rated battery voltage. The unit shall be rated 120/347 V, 60 Hz and be CSA listed. The unit shall have an output of \_\_\_\_\_volts.

The charger shall at first bulk recharge the battery, then when the battery is at full capacity, the charger will shut-off and thereafter periodically pulse charge to top off the battery. This pulse-type charger promotes long battery life and reduces the potential for grid corrosion.

NEMA-4X

Its charge voltage is factory set to  $\pm$  1% tolerance and is temperature compensated. The charger has the functions of Lockout and Brownout Circuits, and Low Voltage Disconnection. It protects the unit from over-current, short-circuit, and reverse polarity.

The 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 capable of full recharge in compliance with CSA specifications. The unit shall be furnished with a 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 exit sign shall be CSA-C860 approved.

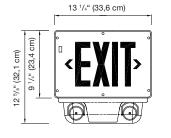
The equipment shall be Lumacell Model:

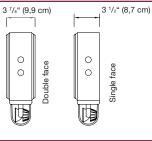
Project/Location		Date
Contractor	Prepared by	
LUMACELL Model		



## **3LER3000 SERIES**

### Dimensions





### Wire Guards with heads

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

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

Without heads

### Power Consumption and Unit Rating

Model	AC Specs			Watta	age Ca	pacity	
				1h00	1h30	2h00	4h00
EXIT Sign Model	120/347Vac	Less than 2W	-	-	-	-	-
3LER3	120/347Vac	0.15/0.05 Amp	36	30	20	15	8
3LER3CW	120/347Vac	0.25/0.08 Amp	36	30	20	15	8
5LER3	120/347Vac	0.27/0.09 Amp	60	40	30	24	12

### Ordering Information

Series	Faces	# of Heads	Lamp/Wattage	Housing/face	Model	Options
3LER3= EXIT 6V - 36W, NEMA-4X 5LER3= EXIT 12V - 60W, NEMA-4X	500= single face 600= double face	Blank= no heads 2= two heads	MI= MR16, 6V - 6W MJ= MR16, 6V - 10W MK= MR16, 12V - 12W L= LED, 12V-5W	WH= white/white WB= white/black WA= white/ aluminium BK= black/black BA= black/ aluminium GA= grey/ aluminium GW= grey /white GB= grey/black	Blank= 120 to 347Vac ZC= 120 to 277 Vac	Blank= no options AT = Auto-Test audible *CW = cold weather (-40°C) FA = flasher (fire alarm activated) **FB = flasher /buzzer (AC power failure) FL = flasher (AC power failure) GN = green letters NEX = Nexus® system interface *Not available with CW, FA, F/B & FL) *Available in 3LER3500 only (add 10W of power consuption for this option) *Not available with "AT" option.

#### EXAMPLE: 3LER3500MIWW

## XP/RSTP Series Hazardous Location Exit Signs & Transfer Panels



#### CSA certified for use in hazardous locations.

The **LERE-XP** Series of remote "EXIT" signs are designed to cover emergency lighting applications for the entire spectrum of hazardous locations, where inflammable gases, vapors, liquids, dust particles or fabrics tissues are permanently present or are likely to exist. The **LERE-XP** remote exit signs can be connected to the **RSTP** transfer panel (see below), the **RG-X** Series of battery equipment, or the **Lumacell DC system**.



#### **Features**

#### **LERE-XP Series of Remote Exit Signs**

- CSA Certified for use in hazardous locations:
  - Class I, Divisions 1 and 2, Groups A, B, C, D
  - Class II, Divisions 1 and 2, Groups E, F, G
  - Class III, Divisions 1 and 2
- Die-cast aluminum body with grey epoxy powder coat finish
- Exit housing and faceplate made of industrial-grade 14-gauge steel and finished in grey enamel
- Faceplate features universal knockout chevrons
- Two-wire input circuit for both AC and DC inputs
- Available in 6, 12, 24 and 120Vac/dc
- LED lamp with AllnGaP LEDs; consumes less than 5watts in AC and DC mode
- New, easy-to-build catalogue number based on the Lumacell Severity Codes
- CSA certified, meets or exceeds C860 requirements

#### **RSTP Series Transfer Panel**

- Available with hazardous location housing (Class I, II and III) or NEMA-1 housing (for use outside the hazardous location area)
- Standard AC input: 120Vac, optional 277Vac, 347Vac; standard DC input: 6, 12 or 24Vdc
- Two-wire output with permanently present AC/DC low voltage
- Output power: 25W, can drive up to five (5) units of the LERE-XP remote exit series
- Also available as self-powered exit sign, battery unit and combo unit; see RG-X catalogue sheet

Project/Location	
Contractor	

LUMACELL Model

Date

Prepared by

EXIT

## XP/RSTP SERIES LERE\*XP

#### **Typical Specification**

#### LERE-XP Series Remote Exit Sign:

Supply and install the Lumacell LERE-XP Series remote exit sign. The exit housing shall be industrial grade 14-gauge steel and finished in grey enamel. The faceplate will be constructed of heavy-duty 14-gauge steel and feature universal knockout chevrons and the red letters shall not be less than 6" (150 mm) in height with a 3/4" (19 mm) stroke. The sign shall come complete with a \_\_\_\_\_ Volt LED lamp, and function from one voltage source only, in AC and DC current. The LED Lamp shall use **AlInGaP** LEDs and shall consume less than 5watts in either AC or DC current.

The exit sign shall be CSA-C860 approved.

The exit sign shall be suitable for Class \_\_\_\_\_, Division \_\_\_\_\_, Group \_\_\_\_\_.

The exit sign shall be Lumacell Mode:

#### **RSTP Series Transfer Panel:**

Supply and install the Lumacell RSTP Series transfer panel for hazardous location remote exit signs. The unit shall have two voltage inputs: \_\_\_\_\_Vac and

\_\_\_\_Vdc and shall be able to maintain an output of \_\_\_Volts 25watts for the permanent supply of a total of five remote LED exit signs.

The transfer panel shall be suitable for Class \_\_\_\_\_, Division \_\_\_\_\_,Group \_\_\_\_\_ or for a NEMA 1 environment.

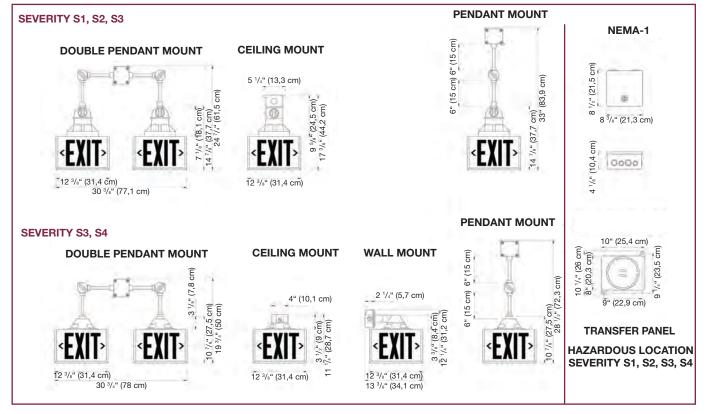
The unit shall be Lumacell Model:

Next >>

## XP/RSTP Series Hazardous Location Exit Signs & Transfer Panels



### Dimensions



#### **Power Consumption**

Model	AC Specs		DC S	pecs
AC/DC, red	6Vac 12Vac 24Vac 120Vac	Less than 5W	6Vdc 12Vdc 24Vdc 120Vdc	Less than 5W

\*NOTE: EXIT signs of 6,12 or 24 V must be connected through transfer panels; maximum five EXIT signs per panel.

Project/Location	Date	
Contractor	Prepared by	
LUMACELL Model		



## XP/RSTP SERIES LERE\*XP

1.	Environment	Severity Code	
	Cl. I, Div. 1, Gr. A, B	S1	
	Cl. I, Div. 1, Gr. C, D	S2	
	Cl. I, Div. 2, Gr. A, B, C, D	S3	
	Cl. II, Div. 1 & 2, Gr. E, F, G	<u>S4</u>	
	Cl. III, Div. 1 & 2	54	

2.	Certification Guide for LERE-XP (40°C ambient)						
	Severity Code	S1	S2	S3	S4		
	Temperature Code	T6	Т6	T3C	T3C (E.G.F.)		
	CSA/UL rating	Max. 85°C	Max. 85°C	Max. 160°C	Max. 160°C		

#### **Ordering Information**

Before ordering, identify the environment of your application: Class\_\_\_\_\_, Division\_\_\_\_\_, Group\_\_\_\_\_. Refer to the table 1 for the Severity Code to use in your catalogue number. For temperature information, please look at the table 2.

#### 3. LERE-XP

Series	Voltage	Lamp Type	Severity Code	Mounting
LERE1X= EXIT LED C860	-L6= 6volts	Blank= LED	S1= see chart	C= ceiling
single face	-L12= 12volts	less than 5watts	<b>S2</b> = see chart	P= pendant
LERE2X= EXIT LED C860	-L24= 24volts		<b>S3</b> = see chart	W= wall*
double face	-L120= 120volts		<b>S4</b> = see chart	

#### **EXAMPLE: LERE1X-L6S1C**

\*NOTE: wall-mount available only for severities S2, S3 and S4.

#### 4. Transfer Panel

Serie	AC Voltage	DC Voltage	Load Wattage	Housing
	<b>120</b> = 120Vac	<b>-6</b> = 6volts	* <b>-25</b> = 25watts	Blank= NEMA 1
<b>RSTP</b> = transfer panel	<b>347</b> = 347Vac	<b>-12</b> = 12volts		<b>XP</b> = hazardous location
		<b>-24</b> = 24volts	* 5 W required per DC Exit load	

#### EXAMPLE: RSTP120-6-25

## XP/RSTP Series Hazardous Location Exit Signs & Transfer Panels



#### CSA certified for use in hazardous locations.

The **LSRS-XP** Series of remote "SORTIE" signs are designed to cover emergency lighting applications for the entire spectrum of hazardous locations, where inflammable gases, vapors, liquids, dust particles or fabrics tissues are permanently present or are likely to exist. The **LSRS-XP** signs can be connected to the **RSTP** transfer panel (see below), the **RG-X** Series of battery equipment, or the **Lumacell DC system**.



#### Features

#### LSRS-XP Series Remote "SORTIE" Signs

- CSA Certified for use in hazardous locations:
  - Class I, Divisions 1 and 2, Groups A, B, C, D
  - Class II, Divisions 1 and 2, Groups E, F, G
  - Class III, Divisions 1 and 2
- Die-cast aluminum body with grey epoxy powder coat finish
- Exit housing and faceplate made of industrial-grade 14-gauge steel and finished in grey enamel
- Faceplate features universal knockout chevrons
- Two-wire input circuit for both AC and DC inputs
- Available in 6, 12, 24 and 120Vac/dc
- LED lamp with AllnGaP LEDs; consumes less than 5watts in AC and DC mode
- New, easy-to-build catalogue number based on the Lumacell Severity Codes
- CSA certified, meets or exceeds C860 requirements

#### **RSTP Series Transfer Panel**

- Available with hazardous location housing (Class 1, Division 1) or NEMA-1 housing (for use outside the hazardous location area)
- Standard AC input: 120Vac, optional 277Vac, 347Vac; standard DC input: 6, 12 or 24Vdc
- Two-wire output with permanently present AC/DC low voltage
- Output power: 25W, can drive up to five (5) units of the LSRS-XP remote "SORTIE" signs series
- Also available as self-powered exit sign, battery unit and combo unit; see RG-X catalogue sheet

Project/Location	

Contractor

LUMACELL Model

Date

Prepared by



## XP/RSTP SERIES LSRS\*XP

#### **Typical Specification**

#### LSRS-XP Series Remote "SORTIE"Sign:

Supply and install the Lumacell LSRS-XP Series remote "SORTIE" sign. The exit housing shall be industrial grade 14-gauge steel and finished in grey enamel. The faceplate will be constructed of heavy-duty 14-gauge steel and feature universal knockout chevrons and the red letters shall not be less than 6" (150 mm) in height with a 3/4" (19 mm) stroke. The sign shall come complete with a \_\_\_\_\_ Volt LED lamp, and function from one voltage source only, in AC and DC current. The LED Lamp shall use **AlinGaP** LEDs and shall consume less than 5watts in either AC or DC current.

The exit sign shall be CSA-C860 approved.

The exit sign shall be suitable for Class \_\_\_\_\_, Division \_\_\_\_\_, Group \_\_\_\_\_.

The exit sign shall be Lumacell Model:

#### **RSTP Series Transfer Panel:**

Supply and install the Lumacell RSTP Series transfer panel for hazardous location remote exit signs. The unit shall have two voltage inputs: \_\_\_\_\_Vac and

\_\_\_\_Vdc and shall be able to maintain an output of \_\_\_Volts 25watts for the permanent supply of a total of five remote LED exit signs.

The transfer panel shall be suitable for Class \_\_\_\_\_, Division \_\_\_\_\_,Group \_\_\_\_\_ or for a NEMA 1 environment.

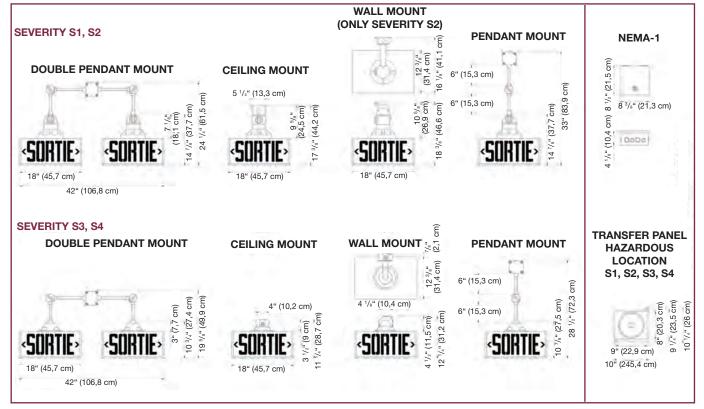
The unit shall be Lumacell Model:

Next >>

## XP/RSTP Series Hazardous Location Exit Signs & Transfer Panels



### Dimensions



#### **Power Consumption**

Model	AC Specs		DC Specs	
AC/DC, red	6Vac 12Vac 24Vac 120Vac	Less than 5W	6Vdc 12Vdc 24Vdc 120Vdc	Less than 5W

\*NOTE: SORTIE signs of 6,12 or 24 V must be connected through transfer panels;

maximum five signs per panel.

Project/Location		Date
Contractor	Prepared by	
LUMACELL Model		



## XP/RSTP SERIES LSRS\*XP

1.	Environment	Severity Code
	Cl. I, Div. 1, Gr. A, B	S1
	Cl. I, Div. 1, Gr. C, D	S2
	Cl. I, Div. 2, Gr. A, B, C, D	S3
	Cl. II, Div. 1 & 2, Gr. E, F, G	S4
	Cl. III, Div. 1 & 2	54

2.	Certification Guide for LSRS-XP (40°C ambient)						
	Severity Code S1 S2 S3 S						
	Temperature Code	T6	Т6	T3C	T3C (E.G.F.)		
	CSA/UL rating	Max. 85°C	Max. 85°C	Max. 160°C	Max. 160°C		

#### Ordering Information

Before ordering, identify the environment of your application: Class\_\_\_\_\_, Division\_\_\_\_, Group\_\_\_\_. Refer to the table 1 for the Severity Code to use in your catalogue number. For temperature information, please look at the table 2.

#### 3. LSRS-XP

Series	Volatge	Lamp Type	Severity Code	Mounting
LSRS1X= SORTIE LED,	-L6= 6volts	Blank= LED	S1 = see chart	C= ceiling
C860 single face	-L12= 12volts	less than 5watts	<b>S2</b> = see chart	P= pendant
LSRS2X= SORTIE LED,	-L24= 24volts		<b>S3</b> = see chart	W= wall
C860 double face	-L120= 120volts		<b>S4</b> = see chart	

#### EXAMPLE: LSRS1X-L6S1C

\*NOTE: wall-mount available only for severities S2, S3 and S4.

#### 4. Transfer Panel

Series	AC Voltage	DC Voltage	Load Voltage	Housing
	<b>120</b> = 120Vac	-6= 6volts	* <b>-25</b> = 25watts	Blank= NEMA 1
<b>RSTP</b> = transfer panel	<b>347</b> = 347Vac	<b>-12</b> = 12volts		<b>XP</b> = hazardous location
		<b>-24</b> = 24volts	* 5 W required per DC SORTIE load	

#### EXAMPLE: RSTP120-6-25

## RG-X Series Battery Units, Self-Powered Exit Signs, Combination Units



#### CSA certified for use in hazardous locations.

The **RG-X** Series of battery equipment is designed to cover emergency lighting applications for the entire spectrum of hazardous locations, where inflammable gases, vapors, liquids, dust particles or fabrics tissues are permanently present or are likely to exist.

The **RG-X** Series combines in one simple-to-order catalogue family three traditional emergency lighting products with battery back-up: battery units with emergency lights, self-powered exit signs, and combination units with emergency lights and exit sign. The equipment is also available with additional emergency power capacity to drive remote heads and exit signs.



#### Features

- CSA Certified for use in hazardous locations:

- Class I, Divisions 1 and 2, Groups A, B, C, D
- Class II, Divisions 1 and 2, Groups E, F, G
- Class III, Divisions 1 and 2
- Die-cast aluminum body with grey epoxy powder coat finish; clear, impact and heat resistant prismatic glass globe
- Long-life, maintenance-free lead-calcium battery
- Battery charger is current limited, temperature compensated, short-circuit proof and reverse polarity protected
- Emergency heads with one or twin lamp design

- Self-powered exit (combo) includes a transfer circuit to drive four remote LED-based remote exit signs
- Exit sign uses a LED lamp with AllnGaP LEDs
- Exit sign is CSA certified, meets or exceeds C860
- CSA certified, meets or exceeds C860 requirements
- Easy-to-build catalogue number based on the Lumacell Severity Codes
- Also available as remote exit signs and remote fixtures; refer to the LERE-XP and RS10XP catalogue sheets

Project/Location	Date
Contractor	Prepared by
LUMACELL Model	



## RG\*X SERIES EXIT

### Typical Specification

Supply and install the Lumacell RG-X Series of hazardous location battery equipment. The battery unit housing will be constructed of die cast aluminum with grey epoxy powder coat finish. The equipment shall be rated for 120, 277 or 347volts, 60 Hz input and be CSA listed. The equipment shall have an output of \_\_\_\_ \_\_volts and \_\_\_\_\_watts and shall supply the rated load for a minimum of a 1/2 hour to 87,5% of the rated battery voltage. The battery shall be a long-life, maintenance-free lead-calcium type. The charger shall be fully computer tested and have its charge voltage set in the factory to  $\pm 1\%$  tolerance. The charger shall be current limited, temperature compensated, shortcircuit proof and reverse polarity protected. The charger shall be furnished with an electronic lockout circuit, which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency heads when the utility power dips below 75% of nominal voltage.

Where required the equipment shall come complete with \_\_\_\_\_ heads, each of them equipped with \_\_\_\_\_lamp(s) of \_\_\_\_\_watts. The head housing shall be die-cast aluminum with grey epoxy powder coat finish. The lenses shall be a clear, impact and heat resistant prismatic glass globe. The head shall be factory sealed, with no need for external seals.

Where required the equipment shall come complete with one exit sign and will include a transfer circuit to maintain the exit sign permanently lighting in both normal and emergency operation. The exit housing shall be industrial grade 14-gauge steel and finished in grey enamel. The faceplate will be constructed of heavy-duty 14-gauge steel and feature universal knockout chevrons and the red letters shall not be less than 6" (150 mm) in height with a 3/4" (19 mm) stroke. The sign shall include a LED lamp with **AllnGap** LEDs and shall consume less than 5watts in either AC or battery mode.

The equipment shall be suitable for Class \_\_\_\_\_, Division \_\_\_\_\_, Group \_\_\_\_\_.

The exit sign shall be CSA-C860 approved.

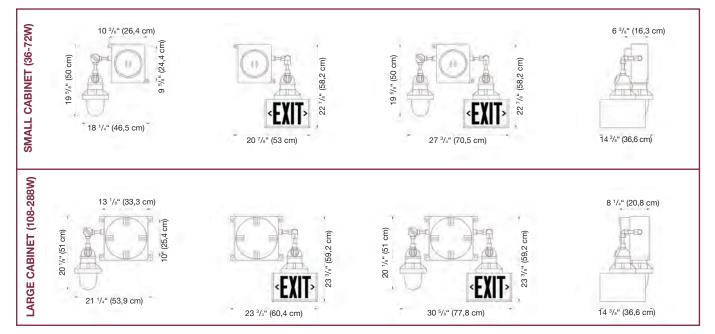
The equipment shall be Lumacell Model:

Next >>

## RG-X Series Battery Units, Self-Powered Exit Signs, Combination Units



### Dimensions



#### Power Consumption and Unit Rating

Model	AC Specs		Wattage Capacity 30min 1h00 1h30 2h00			pacity <sup>2h00</sup>	4h00
RG6V36X	120/347Vac	0.50/0.20 Amp	36	21	15	12	6
RG6V50X	120/347Vac	0.50/0.20 Amp	50	29	36	40	25
RG6V72X	120/347Vac.	0.50/0.20 Amp	72	42	30	24	12
RG6V108X	120/347Vac	0.50/0.20 Amp	108	63	45	36	18
RG12V72X	120/347Vac.	0.50/0.20 Amp	72	42	30	24	12
RG12V144X	120/347Vac	0.50/0.20 Amp	144	84	60	48	24
RG12V200X	120/347Vac	0.50/0.20 Amp	200	117	83	67	33
RG24V144X	120/347Vac	0.50/0.20 Amp	144	84	60	48	24
RG24V288X	120/347Vac	0.50/0.20 Amp	288	168	120	96	48

NOTE : The wattage capacity applies only to the battery unit.

For combo or self-powered EXIT signs one must allocate 5watts of emergency poxer for each sign.

Project/Location	Date				
Contractor		Prepared by			
LUMACELL Model					



## RG\*X SERIES EXIT

1.

•	Environment	Severity Code		
	Cl. I, Div. 1, Gr. A, B	S1		
	Cl. I, Div. 1, Gr. C, D	S2		
	Cl. I, Div. 2, Gr. A, B, C, D	S3		
	Cl. II, Div. 1 & 2, Gr. E, F, G Cl. III, Div. 1 & 2	S4		

2.	Certification Guide for LERE-XP (40°C ambient)								
	Severity Code S1 S2 S3 S4								
	Temperature Code T6		T6	T3C	T3C (E.G.F.)				
	CSA/UL rating	Max. 85°C	Max. 85°C	Max. 160°C	Max. 160°C				

Certification Guide for Lighting Fixture (40°C ambient)							
Severity Code S1 S2 S3 S4							
Temperature Code	T4A	Т6	T1	T3C (E.G.F.)			
CSA/UL rating	Max. 120°C	Max. 85°C	Max. 450°C	Max. 165°C			

#### Ordering Information

Before ordering, identify the environment of your application:

Class\_\_\_\_\_, Division\_\_\_\_\_, Group\_\_\_\_

Refer to the table 1 for the Severity Code to use in your catalogue number. For temperature information, please look at the table 2.

#### 3. RG-X

Series	DC Volatge	Capacity Cabinet Size	Housing	Faces	Head Style	Lamps	Severity Code	Ac Volatge	Options
RG	6=	<b>36</b> = 36watts [P]*	X= hazardous	Blank=	0=	12W= halogen,	S1= see	Blank=	Blank=
	6volts	72= 72watts [P]*	location	no exit sign	no heads	6 V,12V, 12W	chart	120Vac	no options
		108= 108watts [G]*		RE1=	A1=	quartz bi-pin	<b>S2</b> = see	ZC=	<b>TD</b> = time
	12=	72= 72watts [P]*		single face LED	single remote,	20W= halogen,	chart	277Vac	delay
	12volts	144= 144watts [G]*		EXIT sign	1 lamp	12 V, 24 V, 20 W,	<b>S3</b> = see	ZD=	TP=
		200= 200watts [G]*		RE2=	A2=	quartz bi-pin	chart	347Vac	transfer
	24=	<b>144</b> = 144watts [G]*		double face LED	single remote,		<b>S4</b> = see		panel
	24volts	<b>288</b> = 288watts [G]*		EXIT sign	2 lamps		chart		
		* Cabinet size is not part			A3=	For other lamp			*Recieved only
		of the ordering information.			double remote, 1 lamp	options, please consult your sales representative			power remote LERE-XP EXIT sign.

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#### EXAMPLE: RG636XA112WS1

## RG-X Series Battery Units, Self-Powered Exit Signs, Combination Units



#### CSA certified for use in hazardous locations.

The **RG-X** Series of battery equipment is designed to cover emergency lighting applications for the entire spectrum of hazardous locations, where inflammable gases, vapors, liquids, dust particles or fabrics tissues are permanently present or are likely to exist.

The **RG-X** Series combines in one simple-to-order catalogue family three traditional emergency lighting products with battery back-up: battery units with emergency lights, self-powered exit signs, and combination units with emergency lights and exit sign. The equipment is also available with additional emergency power capacity to drive remote heads and exit signs.



#### Features

- CSA Certified for use in hazardous locations:

- Class I, Divisions 1 and 2, Groups A, B, C, D
- Class II, Divisions 1 and 2, Groups E, F, G
- Class III, Divisions 1 and 2
- Die-cast aluminum body with grey epoxy powder coat finish; clear, impact and heat resistant prismatic glass globe
- Long-life, maintenance-free lead-calcium battery
- Battery charger is current limited, temperature compensated, short-circuit proof and reverse polarity protected
- Emergency heads with one or twin lamp design

- Self-powered exit (combo) includes a transfer circuit to drive four LED-based remote exit signs
- Exit sign uses a LED lamp with AlInGaP LEDs
- CSA certified, meets or exceeds C860 requirements
- The self-powered version is also CSA C22.2 No. 141 certified
- New, easy-to-build catalogue number based on the Lumacell Severity Codes
- Also available as remote exit signs and remote fixtures; refer to the LSRS-XP and RS10XP catalogue sheets

Project/Location	Date	
Contractor	Prepared by	
LUMACELL Model		



## RG\*X SERIES "SORTIE"

### **Typical Specification**

Supply and install the Lumacell RG-X Series of hazardous location battery equipment. The battery unit housing will be constructed of die cast aluminum with grey epoxy powder coat finish. The equipment shall be rated for 120, 277 or 347volts, 60 Hz input and be CSA listed. The equipment shall have an output of \_\_\_\_ \_\_volts and \_\_\_\_\_watts and shall supply the rated load for a minimum of a 1/2 hour to 87,5% of the rated battery voltage. The battery shall be a long-life, maintenance-free lead-calcium type. The charger shall be fully computer tested and have its charge voltage set in the factory to  $\pm 1\%$  tolerance. The charger shall be current limited, temperature compensated, shortcircuit proof and reverse polarity protected. The charger shall be furnished with an electronic lockout circuit, which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency heads when the utility power dips below 75% of nominal voltage.

Where required the equipment shall come complete with \_\_\_\_\_ heads, each of them equipped with \_\_\_\_\_lamp(s) of \_\_\_\_\_watts. The head housing shall be die-cast aluminum with grey epoxy powder coat finish. The lenses shall be a clear, impact and heat resistant prismatic glass globe. The head shall be factory sealed, with no need for external seals.

Where required the equipment shall come complete with one exit sign and will include a transfer circuit to maintain the exit sign permanently lighting in both normal and emergency operation. The exit housing shall be industrial grade 14-gauge steel and finished in grey enamel. The faceplate will be constructed of heavy-duty 14-gauge steel and feature universal knockout chevrons and the red letters shall not be less than 6" (150 mm) in height with a 3/4" (19 mm) stroke. The sign shall include a LED lamp with AllnGap LEDs and shall consume less than 5watts in either AC or battery mode.

The equipment shall be suitable for Class \_\_\_\_\_, Division \_\_\_\_\_, Group \_\_\_\_\_.

The exit sign shall be CSA-C860 and approved.

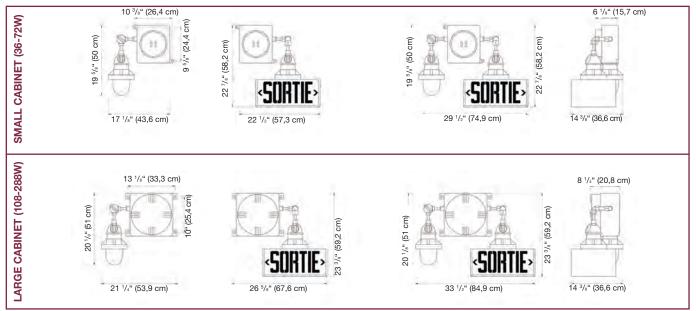
The equipment shall be Lumacell Model:

Next >>

## RG-X Series Battery Units, Self-Powered Exit Signs, Combination Units



#### Dimensions



### Power Consumption and Unit Rating

Model	AC Specs		Wattage Capacity 30min 1h00 1h30 2h00 4h				4h00
RG6V36X	120/347Vac	0.50/0.20 Amp	36	21	15	12	6
RG6V50X	120/347Vac	0.50/0.20 Amp	50	29	36	40	25
RG6V72X	120/347Vac.	0.50/0.20 Amp	72	42	30	24	12
RG6V108X	120/347Vac	0.50/0.20 Amp	108	63	45	36	18
RG12V72X	120/347Vac.	0.50/0.20 Amp	72	42	30	24	12
RG12V144X	120/347Vac	0.50/0.20 Amp	144	84	60	48	24
RG12V200X	120/347Vac	0.50/0.20 Amp	200	117	83	67	33
RG24V144X	120/347Vac	0.50/0.20 Amp	144	84	60	48	24
RG24V288X	120/347Vac	0.50/0.20 Amp	288	168	120	96	48

NOTE : The wattage capacity applies only to the battery unit.

For combo or self-powered SORTIE signs one must allocate 5watts of emergency poxer for each sign.

Project/Location			Date	
Contractor		Prepared by		
LUMACELL Model				



## RG\*X SERIES "SORTIE"

1.

•	Environment	Severity Code
	Cl. I, Div. 1, Gr. A, B	S1
	Cl. I, Div. 1, Gr. C, D	S2
	Cl. I, Div. 2, Gr. A, B, C, D	S3
	Cl. II, Div. 1 & 2, Gr. E, F, G Cl. III, Div. 1 & 2	S4

2.	Certification Guide for LSRS-XP (40°C ambient)								
	Severity Code S1 S2 S3 S4								
	Temperature Code T6		Т6	T3C	T3C (E.G.F.)				
	CSA/UL rating	Max. 85°C	Max. 85°C	Max. 160°C	Max. 160°C				
ĺ									

Certification Guide for remote fixture (40°C ambient)						
Severity Code S1 S2 S3 S4						
Temperature Code	T4A	Т6	T1	T3C (E.G.F.)		
CSA/UL rating	Max. 120°C	Max. 85°C	Max. 450°C	Max. 165°C		

## Ordering Information

Before ordering, identify the environment of your application:

Class\_\_\_\_\_, Division\_\_\_\_\_, Group\_\_\_\_\_

Refer to the table 1 for the Severity Code to use in your catalogue number. For temperature information, please look at the table 2.

#### 3. RG-X

Series	DC Volatge	Capacity Cabinet Size	Housing	Faces	Head Style	Lamps	Severity Code	Ac Volatge	Options
RG	6=	<b>36</b> = 36watts [P]*	X= hazardous	Blank=	0=	12W= halogen,	S1= see	Blank=	Blank=
	6volts	72= 72watts [P]*	location	no exit sign	no heads	6 V, 12V, 12 W,	chart	120Vac	no options
		108= 108watts [G]*		RS1=	A1=	quartz bi-pin	<b>S2</b> = see	ZC=	TD= time
	12=	72= 72watts [P]*	]	single face LED	single remote,	20W= halogen,	chart	277Vac	delay
	12volts	144= 144watts [G]*	1	SORTIE sign	1 lamp	12 V, 24 V, 20 W,	<b>S3</b> = see	ZD=	TP=
		200= 200watts [G]*	]	RS2=	A2=	quartz bi-pin	chart	347Vac	transfer
	24=	<b>144</b> = 144watts [G]*		double face LED	single remote,		<b>S4</b> = see		panel
	24volts	288= 288watts [G]*	1	SORTIE sign	2 lamps		chart		
		* Cabinet size is not part of the ordering information.			<b>A3</b> = double remote, 1 lamp	For other lamp options, please consult your sales representative.			

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#### EXAMPLE: RG636XA112WS1

## LER-HZ Series Hazardous Location LED Exit Sign

#### Class I, Division 2-compliant LED exit sign.



#### Features

- Certified Class I Division 2, Groups A, B, C and D as per CSA C22.2 No.137-M1981 and Class I, Zone 2 and (Groups IIC, IIB, IIA)
- Temperature Code: T6 (maximum 85°C as per Canadian Electrical Code, Part I and CSA C22.2 No.137-M1981)
- CSA certified, meets or exceeds C860 requirements
- Suitable for cold-weather: -20°C (self-powered model, "CW" option) and -40°C (AC-only and AC-DC models)
- Input voltages: 120 to 347Vac universal AC-input; 6 to 48Vdc universal DC-input
- High impact thermoplastic frame, with built-in gasket to prevent water infiltration
- Suited for areas with the risk of presence of flam mable gases, vapors or liquids able to create an explosive atmosphere
  - N EXU S Made in Canada

## Typical Specification

Supply and install Lumacell LER-HZ Series LED exit signs. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 347Vac at less than 3watts and universal two-wire DC input voltage from 6Vdc to 48Vdc at less than 2watts for single and double face signs. Designed specifically for hostile environments, the equipment frame shall be of industrial grade high impact thermoplastic 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. The light source shall be light emitting diodes (LED). Red LED technology shall be AllnGaP. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination.

The equipment shall be certified for Hazardous Locations: Class I Division 2 Groups A, B, C and D with a temperature code T6 (Maximum 85°C). The equipment shall be designed specifically for high

- Sealed faceplate of heavy-duty, vandal-resistant polycarbonate
- Tamper-resistant, hermetically sealed magnetic test switch
- Self-test/self-diagnostic circuitry is standard on self-powered models
- Sealed, maintenance-free, Nickel-Cadmium batteries
- Batteries recharge as per CSA requirements and provide 90 minutes of emergency operation
- Long-life, energy-efficient AlInGaP red LED light source
- Energy efficient consumes less than 3watts in AC or DC mode



abuse areas, wet location, and cold weather (-20°C) applications.

The self-powered model shall stay illuminated during emergency operation for at least 90 minutes upon AC failure and shall include a magnetic test switch and self-testing/self-diagnostic functions.

The equipment shall automatically self test for 5 minutes every 30 days, 30 minutes every 60 days and 90 minutes annually. A "Service required" lamp shall be located near the test switch and flash when a fault is detected. A two-LED diagnostic display shall be located inside the equipment and shall identify the eventual source of failure (battery, charger circuitry, or LED lamps).

The exit sign shall be CSA-C860 approved.

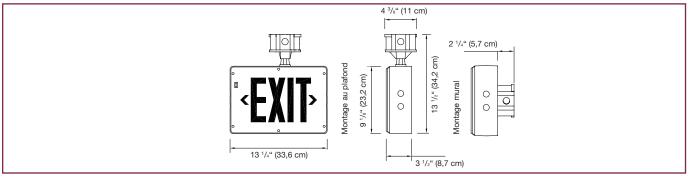
The equipment shall be Lumacell Model:

Project/Location	Date		
Contractor	Prepared by		
LUMACELL Model	-		



## **LER\*HZ SERIES**

#### Dimensions



#### Wire Guard

460.0080-L	Wall Mount
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#### **Power Consumption**

Model	AC S	pecs	DC Specs		
AC/DC, red	120 to 347Vac	Less than 3W	6 to 48Vdc	Less than 2W	
AC/DC, green	120 to 347Vac	Less than 3W	6 to 48Vdc	Less than 2W	
Self-powered, red	120 to 347Vac	Less than 3W	NiCad battery	Min. 90 minutes	
Self-powered, green	120 to 347Vac	Less than 3W	NiCad battery	Min. 90 minutes	
120Vac/Vdc 2 wires, red	120Vac	Less than 3W	120Vdc	Less than 3W	

#### **Ordering Information**

Series	Faces/Mounting	Colour	Voltage	Options
LERHZ= EXIT	500= single face, ceiling or wall mount 600= double face, ceiling mount only	SG= grey/grey	Blank= universal 120-347Vac, 6-48Vdc, SPD= 120-347Vac, self-powered c/w diagnostic (non audible) VACDC2= 120Vac, 120Vdc, 2 wires (AC only) *NEX= NEXUS®® System Interface	Blank= no options GN= green letters *CW= cold weather
			* NEXUS® option with self-powered models only	* -20°C for self-powered, -40°C for AC/DC

#### EXAMPLE: LERHZ500SG

## **3LER-HZ Series** Combination Unit for Hazardous Locations

#### **Combination Unit for Class I Zone 2 Hazardous Locations**

# **Selumacell**

#### Features

- Certified Class I Division 2, Groups A, B, C and D as per CSA C22.2 No.137-M1981 and class I, zone 2, Group IIC, IIB and IIA
- Certified temperature Codes for several types of emergency lamps
- Certified CSA C22.2 No141
- Certified CSA C860
- Polymeric frame, with built-in gasket to prevent water infiltration
- Heavy-duty 1/8-inch thick aluminum back plate with key-holes for secure wall-mount installation
- Sealed faceplate of heavy-duty, vandal-resistant polycarbonate
- Suited for areas with the risk flammable gases, vapors or liquids that can create an explosive atmosphere



#### **Typical Specification**

Supply and install Lumacell 3LER-HZ Series combination of unit equipment and LED exit sign. Designed specifically for hostile environments, the equipment frame shall be of industrial grade polymer 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 knockouts for installation on an electrical box and four keyholes for alternative installation on a wall surface.

The faceplate shall be constructed of heavy-duty vandal-resistant polycarbonate and feature a uniformly illuminated legend. The light source shall be light emitting diodes (LED). Red LED technology shall be **AllnGap**. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination.

When specified, the equipment shall have attached a lower compartment containing two emergency lights with adjustable swivels and long-life MR-16 halogen lamps of \_\_\_\_ V and \_\_\_\_ W. The lamps shall be

- Exit sign module illuminated by long-life, energy-efficient AllnGap red LEDs
- Two MR16 halogen lamps, shielded by a cast aluminum housing and a polycarbonate cover
- Sealed, maintenance-free, Lead-Calcium or Nickel-Cadmium batteries
- Remote load capacity
- Comes standard with self-test/self-diagnostic functions
- Comes standard with industrial-grade, die-cast Aluminum electrical box
- ½-inch electrical conduit entry on both sides and at the top



shielded by cast aluminum housing and protected by a shock-absorbent, transparent polycarbonate cover. The equipment shall be certified for Hazardous Locations: Class I Division 2 Groups A, B, C and D. The standard AC input voltage shall be: 120/347Vac. The equipment shall be equipped with a magnetic test switch located behind the face plate and two LED pilot lights: AC-on and "Service required". The unit shall include self-testing/self-diagnostic functions monitored 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. The "Service required" LED shall light when a fault is detected. A four-LED diagnostic display located inside the equipment shall identify the source of the failure (battery, charger circuitry, or lamp load).

The exit sign module shall be CSA-C860 approved.

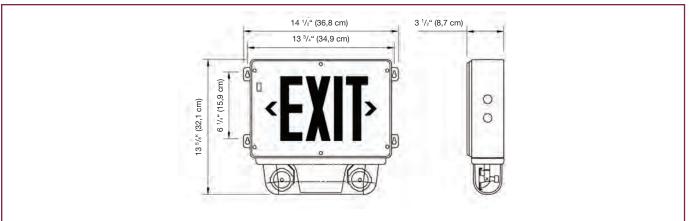
The combination unit shall be Lumacell Model:

Project/Location	Date		
Contractor	Prepared by		
LUMACELL Model			



## **3LER\*HZ SERIES**

#### Dimensions



#### Wire Guard

460.0078-L

Wall Mount

#### **Temperature Codes**

Lamp Rating	Temperature Code	Max. Temperature	Replacement part #
6V 10W	T3C	160 °C	580.0079
12V 12W	T3A	180 °C	580.0080
12V 20W	T2D	215 °C	580.0068

## **Power Consumption**

Madal	Model AC Specs		Wattage Capacity					
IVIODEI			30 min.	1 hr.	1.5 hrs.	2 hrs.	4 hrs.	
<b>3LERHZ</b>	120/347Vac	0.15/0.06 Amp	36	21	15	12	-	
<b>3LERHZN</b>	120/347Vac	0.15/0.06 Amp	36	30	20	15	-	
5LERHZN	120/347Vac	0.30/0.10 Amp	60	40	30	20	10	

### **Ordering Information**

Series	# of Heads	Lamp/Wattage	Housing / Face Color	Voltage	Letters Color	Options
<b>3LERHZ</b> = 6V - 36W, lead acid <b>3LERHZN</b> = 6V - 36W, NiCad <b>5LERHZ</b> = 12V - 60W NiCad	2=	MJ= MR16, 6V - 10W MK= MR16, 12V - 12W MW= MR16 12v- 20W IR	GG= grey/grey	Blank= 120/347vac <b>ZC</b> = 120/277vac	Blank= red letters G= green letters	AT= auto test, audible ATN= auto Test, non-audible NEX= Nexus® system interface

#### **EXAMPLE: 3LERHZ2MJGGAT**



Self-luminous, independent operation exit sign.



#### Features

- Illumination provided by borosilicate glass tubes, internally coated with zinc sulphide phosphor and filled with tritium gas
- Minimum brightness at time of manufacture is 0.132 foot-lambert (0.452 cd/m<sup>2</sup>)
- Decorative, slim-line heavy-duty ABS housing
- Rugged, impact-resistant polycarbonate face
- Spark free construction

- Simple installation universal direction capability, comes complete with universal mounting hardware
- Stands up to extreme temperatures in outdoor or indoor applications
- Standard 12-year life expectancy. 15-year life expectancies available as an option



#### **Typical Specification**

Supply and install Lumacell LTEU (EXIT) or LTSU (SORTIE) Series self-luminous exit signs. The exit shall be constructed of a thermoplastic housing and be corrosion proof. The sealed housing will incorporate no loose or removable parts allowing for easy installation. The standard expected life shall be 12 years with a minimum guaranteed life of 10 years.

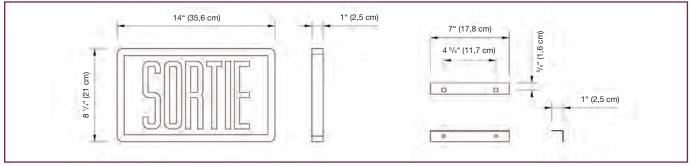
The standard mounting brackets will allow for either end/ceiling or wall mount. Standard signs shall be supplied with red face, grey frame and white letters that are 6" high by 3/4" stroke. The initial average minimum brightness shall be .132 foot-lambert (0.452 cd/m<sup>2</sup>).

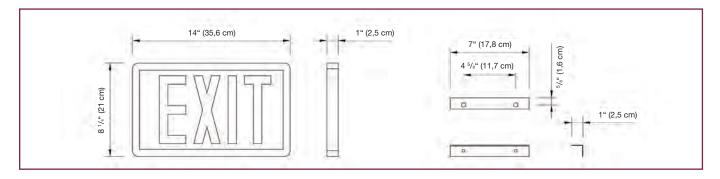
The equipment shall be Lumacell Model:

Project/Location		Date		CONTU
Contractor Prepared by			EVIT	l hiki
LUMACELL Model	•			
· · · · ·				

## **LT SERIES**

### Dimensions





#### Wire Guards

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

## Ordering Information

Series	Faceplates/Mounting	Housing Colours	Life Years	Options
LTEU= EXIT LTSU= Sortie	1= single face, universal mount	Blank= grey WH= white	Blank= 12 years 15= 15 years*	Blank= no options SW= special wording
LTB3LE/S= EXIT SORTIE	<b>2</b> = double face, universal mount	<b>B</b> = black	,	GN= green background
LTB3LS/E= SORTIE/EXIT			*Not available in SORTIE	

#### **EXAMPLE: LTEU1**

## Special Wording Illuminated Signage

# **Second Second**

#### Features

- The same sturdy construction and electrical design used in our exit signs, is used to produce our custom-worded, illuminated signage
- Sign bodies steel, extruded and die-cast aluminum, weatherproof, flame-retardant polycarbonate, high impact thermoplastic, recessed housing
- Also available with self-powered canopy and with emergency lamps

- Custom wording any style of lettering, any language, any alphabet, any special characters
- Graphics logos, standard symbols, custom art
- Colour choices sign bodies, message, faceplate panel
- Illumination LED (light-emitting diodes) other light sources available. Consult factory.
- White-out, black-out and split picture options



### **Typical Specification**

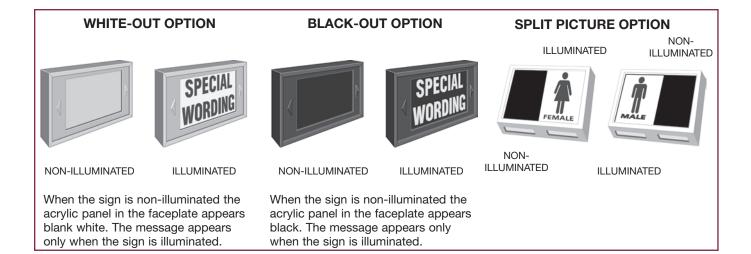
Custom-worded, illuminated signage is available using the same sturdy construction and electrical design as Lumacell exit signage. A wide range of sign body options and colour choices is available to suit any application. Contact your local Lumacell sales representative to discuss your specific requirements.

Project/Location			Date
Contractor		Prepared by	
LUMACELL Model			



## SPECIAL WORDING





## LED Retrofit Kits for EXIT signage



#### Convert high consumption incandescent and fluorescent lamps to energy efficient LED lamps.

Converting existing exit signage from incandescent or fluorescent lamps to LED (light emitting diodes) lamps drastically reduces operating and maintenance costs for building owners and property managers. As part of energy efficiency programs, some Canadian electric utilities are also actively promoting conversion to LED with incentive and rebate programs for installers and building owners/managers.

#### Features

Lumacell offers four retrofit kit options; all based on the long-life AlInGaP LED technology:

- Superstrip Series
- Mini-Wedge LMW Model
- Mini-Wedge LMWXD Model
- LED Lamp

## Here are some of the benefits of using LED lamps in exit signs:

- Exceptional energy efficiency reduces energy consumption by up to 90%
- Extremely long life 10 to 25 years
- Important reduction in maintenance and energy costs
- Average payback is less than two years (see page 6)
- Retrofit kits are easy to install
- Improved visibility and reliability: AlInGap LED technology



#### **Typical Specification**

Converting existing exit signage from incandescent or fluorescent lamps to LED (light emitting diodes) lamps drastically reduces operating and maintenance costs for building owners and property managers. As part of energy efficiency programs, some Canadian electric utilities are also actively promoting conversion to LED with incentive and rebate programs for installers and building owners/managers.

www.lumacel	l.cor

Project/Lc	cation

LUMACELL Model

## LED RETROFIT KITS

## **SUPERSTRIP Series (LMR model)**

Prepared by



- Quick and easy to install

- Long-life, energy-efficient red AllnGap LED technology
- Module features two independent circuits one for AC input; one for DC input
- Universal AC input: 120/277/347Vac; universal two-wire DC input: 6 to 24Vdc
- Power consumption of 1.1W per module

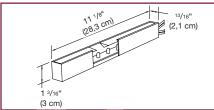
Date

- 10 year limited warranty

#### **Power Consumption**

Model	AC Specs		DC Specs	
LMR	120/277/347Vac	1.1W	6 to 24Vdc	1.3W

#### **Dimensions**



### Ordering Information

Serie	Voltage	Options
	UNIV= 120/277/347Vac, 6/12/24Vdc UNIV36= 120/277/347Vac., 36Vdc	Blank= 11.0" (28cm) long
kit	<b>UNIV48</b> = 120/277/347Vac, 48Vdc	*-9.5= 9.5 "
	UNIV120= 120/347Vac, 120Vdc	(24 cm) long
	120VACDC2= 120Vac,120Vdc, 2 wires	

#### **EXAMPLE: LMRUNIV**

### **MINI-WEDGE Series (LMW model)**

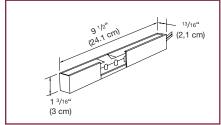


- Easiest to install in its class
- Compact size makes it ideal for virtually all exit signs
- Can be retrofitted directly on fluorescent ballast
- Long-life, energy-efficient red AllnGap LED technology
- Available with AC adaptor for all type of lamp sockets
- 10 year limited warranty

#### **Power Consumption**

Model	AC Specs		DC Specs	
LMW	120Vac; 86Vac step down from 347Vac	1.7W	N/A	N/A

#### **Dimensions**



#### **Ordering Information**

Series	Voltage	Base
LMW= for std applications	<b>120</b> = 120Vac <b>120HW</b> = 120Vac, hardwire <b>240HW</b> = 240Vac, hardwire <b>277HW</b> = 277Vac, hardwire <b>347HW</b> = 347Vac, hardwire	C= candelabra I= intermediate M= medium B= bayonet F= G23 compact fluorescent CIMB= complete set of bases (exclude "F" base) CIMBHQ= Hydro-Québec set for "Efficient Products Program".

#### MINI-WEDGE Series (LMWXD model)

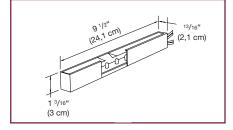


- Easiest to install in its class
- Compact size makes it ideal for virtually all exit signs
- Can be retrofitted directly on fluorescent ballast
- Suitable for all AC line applications including exit signs equipped with in-line diodes
- Long-life, energy-efficient AlInGap LED techonology

### **Power Consumption**

Model	AC Specs		DC Specs	
LMWXD	120Vac; 120Vac with in-line diodes	2.8 W	N/A	N/A

#### Dimensions

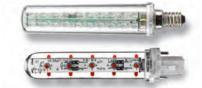


#### **Ordering Information**

Serie	Voltage	Base
LMWXD = with or without in-line diodes	<b>120</b> = 120Vac	C = candelabra I = intermediate M = medium B = bayonet CIMB = complete set of bases

#### EXAMPLE: LMWXD120-C

#### **LED LAMPS**

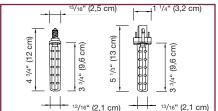


- Quick and easy to install
- Available with wide range of lamp bases for quick lamp to lamp replacement
- Long-life, energy-efficient AllnGap LED techonology
- 120Vac or 120Vac with in-line diode

#### **Power Consumption**

Model	AC Specs		DC Specs	
L11W	120Vac	0.90 W	N/A	N/A
L3	120Vac	2.5 W	120Vdc	2.5 W

#### Dimensions



#### **Ordering Information**

Series	Base	
L11W = standard version	<b>C</b> = candelabra	
L3 = with or without in-line diodes	I = intermédiate	
(2.5W), high brightness	M = medium	
	<b>B</b> = bayonet	
	F = G23 compact fluorescent	
	FXAMPLE: 11-1W-C	

Project/Location			Date	
Contractor		Prepared by		
LUMACELL Model		•		



## LED RETROFIT KITS

#### How much can I save?

The following is an example of the savings you can generate by simply installing an LED retrofit kit in an existing incandescent Exit sign.

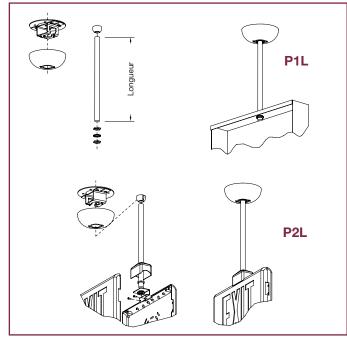
The Retro	fit Kits Cost is : \$70,00	
Installation cost (per unit) for a retrof		
Wattage rating per incandescent lamp in	existing fixture: 15W	
Number of incandescent la	amps per fixture: 2	
Wattage rating of Lumacell LMF	RUNIV retrofit kit: 1.7W	
My existing incandescent ex	it lamps last for: 4 Months	
My replacement	nt labour cost is: \$25.00/Hour	
Estimate lamp replaceme	ent time per exit: 20 Minutes	
The current material cost for each e	exit sign lamp is: \$1.00/Lamp	
My curren	t energy cost is: \$0.060/\$ Per kWh	
The PAYBACK FOR YOUR IN	STALLATION IS: 1.06 Years	
THE ANNUAL RETURN ON I	NVESTMENT IS: 94,50 %	
THE ANN	UAL SAVING IS: \$70.87	

For more information, please do not hesitate to contact us.





#### Dimensions



#### **Ordering Information**

Serie	Length (in)	Colour
P1L	- <b>W</b> = white	
	-	<b>B</b> = black
	-	SG= silver
		grey
*P2L	6	W= white
	12	<b>B</b> = black
	18	<b>SG</b> = silver
*Genesis Series Only.	24	grey

Other length available on demand. Please consult your sales representative

#### **Typical Specification**

Offered in a variety of colors and lengths, Lumacell suspension kits are designed to facilitate the installation of exit signs at regular mounting heights.

Compatible with both horizontal and sloped ceilings, this suspension kit is truly universal and will adapt to any application.

Please consult your sales representative.

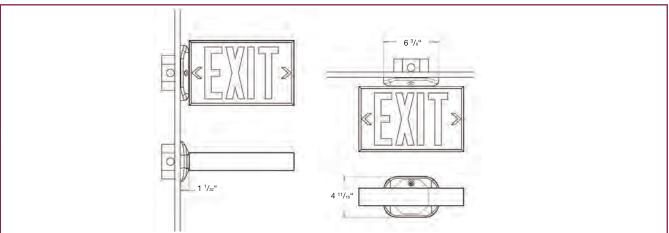


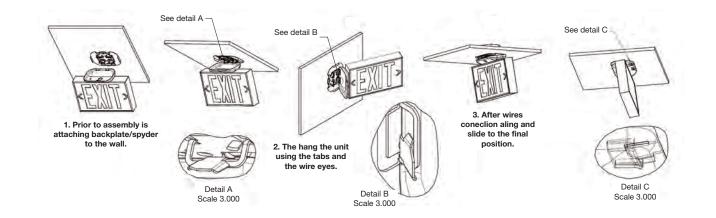


The EZ2 canopy allows the installer to make all of the electrical connections using both hands without having to juggle with the exit sign, making it our most contractor friendly product feature to date.

Simply attach the plate to the junction box, clip the canopy on the EXIT sign, hang the canopy on the back plate, make your connections, using both hands, slide the unit in place, one screw and the job is done!

#### Dimensions





## Glossary

А	ammeter	Used to measure the current being supplied to the battery while in charge mode.
AT	Auto-Test	Automatically tests and continuously monitors your emergency lighting unit. If a problem occurs, the unit will send a visual (flashing or blinking LED indicator) and audible warning. Complies with Fire Code requirements.
ATN	Auto-Test, non-audible	Automatically tests and continuously monitors your emergency lighting unit. If a problem accurs, the unit will send a visual (flashing or blinking LED indicator) warning. Complies with Fire Code requirements.
СТ	Cab-tire	Unit supplied with a cab-tire cable used for special hardwire applications.
CW1	cold weather, 120Vac	120Vac input cold weather protection feature for applications where temperatures can reach -40° C $$
CW3	cold weather, 347Vac	347Vac input cold weather protection feature for applications where temperatures can reach -40° C $$
DPF6	6cct. Fuse panel	Used to facilitate the connection of multiple input load circuits in high power battery units.
ннс	remote test transmitter	Used to perform maintenance tests by means of radio transmitter along with a radio receiver (RRT option) on battery units that are out of reach.
HTR	heather & thermostat	Like a heatblanket, used to keep internal temperature optimal for battery units that are installed in cold environments.
LC	line cord (120V)	When ordering a battery unit with the LC option, we supply and pre-install a line cord with a standard 3 prong 120V plug. Just hang the fixture and plug it in to a standard receptacle! Only available on 120V units.
LD	lamp disconnect	To disconnect the emergency lighting load in an area that is not in use during a prolonged power failure or while area is no longer being occupied.
lS	Laser	Used to remotely test battery units by means of pointing a laser at the battery unit.
LTS	light activated test switch	Used to remotely test battery units by pointing a flashlight at a photocell mounted on the bottom of a battery unit.
тс	teflon coated lens	A protective teflon coating that is applied to the glass lens of a lighting fixture to prevent broken shards from falling in the event the glass is accidently broken or vandalised.
RRT	remote test receiver	Used to perform maintenance tests by means of radio reciever in conjunction with a transmitter(HHC option) on battery units that are out of reach. Simply point the receiver at the unit.
NEX	Nexus system interface	The NEXUS system interface is a computerized maintenance system for emergency lighting that, once programmed, will perform the tests, keep written records and send notification if anything needs to be fixed. One full system can address hundreds of units in as many buildings as you need from a single location.
ТЗ	15 minutes time delay	Normally, when the a.c. is restored, all emergency lighting lamps are turned off. However, in some cases such as when metal halide lamps are used, it is possible that the general lighting will not be availbe for several minutes after the blackout (or brownout) period. Battery units with the T3 option will keep some energy in store to ensure that the emergency lighting stays on or comes back on for at least 15 minutes once the regular a.c. power has been restored.
TD	time delay (programmable)	Same as the T3 option but can be programmed for 5, 10, 15 or 20 minutes delay.
ТР	tamper proof screws	Screws that require a special bit. Can be used on certain units to deny access to unauthorized personnel.
TL	twistlock plug	Used to facilitate the connection and removal of battery units for maintenance purposes.
	a.c./d.c. terminal block	Used to facilitate the connection of large gauge input cables.
<u> </u>	d.c. terminal block	Used to facilitate the connection of large gauge d.c. input cables.
	a.c. terminal block	Used to facilitate the connection of large gauge a.c. input cables.
V	voltmeter	Indicates voltage being supplied to the battery when in charge mode.

## Battery Units in a few words...



#### EMERGENCY ILLUMINATION: OVERVIEW OF EQUIPMENT AVAILABLE

Emergency Lighting, as part of the Life Safety Equipment, is one of the key elements to ensure public safety within buildings. In the event of failure of the normal power supply, self-contained units automatically provide the illumination required to evacuate the building in safe conditions.

#### STANDARDS AND CODES

Considering its importance, installation of such equipment as well as the level and duration of the emergency lighting required in a building are established by national standards: the National Building Code of Canada (CNBC-2005), the Canadian Electrical Code (CEC), and the National Fire Code of Canada (NFC-2005). Concerning the equipment, performance is established by the Canadian Standards Association (CSA), for example: C141.1, C860, etc.

#### TYPES OF EQUIPMENT: SELF-CONTAINED EMERGENCY LIGHTING

Emergency lighting equipment is divided in two main categories: self-contained emergency lighting equipment, also referred to as "unit equipment for emergency lighting", and central emergency power systems (separate emergency electrical power supply).

#### SELF-CONTAINED (OR SELF-POWERED) EQUIPMENT



The most common self-contained unit consists of 6V lead battery and two lamp heads, also referred to as emergency lights, each with a 6V, 9W incandescent lamp. Lamps are normally off; the storage battery has sufficient capacity to actuate and maintain the emergency lighting during at least 30 minutes in the event of a power failure. In some applications described in the National Building Code of Canada, the minimum

emergency lighting period can reach 60 minutes, even 120 minutes. This will require battery units of a greater capacity. Once normal AC power supply is restored, heads turn off (if they were still on), the fixture recharges the batteries to full capacity within 24 hours, then returns to the stand-by mode.

#### BATTERY UNITS AND REMOTE HEADS

Another self-contained type of equipment exists, it contains batteries which will supply power to several remote emergency lights, of different wattages (12W, 20W, 50W, etc.). In this case, remote emergency lights (also referred to as heads or remote heads) are installed in rooms and corridors, connected by wiring installed inside the walls. Some 6V self-contained fixtures can assume a total emergency lighting load up to 150W – 180W. At this level, the battery current (25A to 30A) begins to generate significant losses in the external wiring. For this reason, there are battery units of higher voltages, 12V and 24V, which can respectively supply power to remote heads totalling up to 360W and 720W.

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## Battery Units in a few words...



#### **CENTRAL SYSTEMS**

Are there higher wattage capacity types of equipment ?

Yes, but in this case the battery unit is replaced with another type of equipment: the Central System. In the event of a utility power failure, Central Systems continue to supply power to the emergency lighting equipment as well as other critical loads. They are classified under a special category: Emergency Power Systems. To summarize, there are two types of Central Systems: the Direct Current Central System (DC System) and the Alternating Current Central System (AC inverter, UPS or Uninterruptible Power Supply/System). The electric power supplied by these equipments can vary from a few KVAs to several hundred KVAs.

#### **OTHER EQUIPMENT**

Besides self-contained inverters, another type of inverter is available in the market, the AC/DC inverter. Instead of batteries, these inverters use a DC Input (6V, 12V, etc.) and power is supplied from a remote battery unit.

#### **EMERGENCY LIGHTING ENCLOSURES**

Construction of the emergency lighting fixtures depends on the location where the equipment is to be installed. Of all the components, the enclosure (box or housing) is probably the most affected by the type of environment where it is located.

The enclosure plays many roles: it provides the fixture with a degree of protection against the environmental conditions, while meeting technical, aesthetic and functional requirements. Of course, cost can also be a deciding factor when selecting a fixture.

In general, non-residential lighting is divided in three market segments: commercial, institutional and industrial. This market segmentation still applies in the case of emergency lighting. Typically, the commercial and institutional sectors are more sensitive to costs and aesthetics, whereas the industrial sector is more influenced by the technical aspects (fixture durability, etc.).

#### COMMERCIAL AND INSTITUTIONAL ENVIRONMENTS

Commercial spaces (stores, restaurants, movie theatres, hotels etc.) as well as institutions are generally air conditioned: the equipment operates in normal temperature and humidity conditions. Generally, the main selection criteria is total lighting costs, which include equipment and installation. The most economical design for self-contained units uses sheet metal housings of a neutral color: white or beige. For the most part, Exit signs are housed in a rectangular box fabricated of steel (sheet metal) or extruded aluminum, and illuminated from a light source contained within the assembly (back-lit). Some molded plastic housings also exist (less expensive material, but also less rigid than metal) – mostly used for small battery units (lower wattages) and EXIT signs in anglophone provinces.

Even if aesthetics is a secondary criteria, manufacturers continue to develop products which offer a more contemporary look.

#### **AESTHETICS AND ARCHITECTURE**

Fortunately, price isn't everything in the buying decision process. Some hotel chains, high-end stores and corporate headquarters are excellent examples.



In these situations, the architect and the lighting designer have a great influence in specifying emergency lighting fixtures. The question becomes – what will the architect prefer, a more decorative or a more unobtrusive, discrete look ?

Battery units are becoming increasingly discrete. The specifier can opt for a higher capacity unit (ie: 24V, 720W or a central DC System) installed in a hidden location, and supplying power to remote heads distributed throughout the building. Another option would be to install recessed self-contained units, concealed in the ceiling (T-bar), each with two lamp heads and additional capacity for remote heads. There are also single-lamp battery units (MR16 or PAR36), recessed in the ceiling. As for the remote heads, they are generally fabricated of forged aluminum and contain halogen MR16 lamps. It is also possible to conceal the battery units as well as the lamp heads entirely. For example, both the lamp heads and the housing of the PHANTOM self-contained unit are concealed in the wall or ceiling cavity, behind its door, which rotates 180°. Upon a power failure, an electromechanical device opens the door, and exposes the emergency lamp heads to illuminate the path to safety. At the end of the power failure, this same device retracts the heads and closes the door.

To address the specifiers' needs for aesthetics, manufacturers have developped new products for high end emergency lighting: dual-function decorative luminaires providing both normal lighting and emergency lighting. The same lamps are energized by one of the two independent electrical circuits: AC circuit for normal lighting (including the wall switch), and an uninterrupted AC circuit for the battery charger and control of the emergency lighting. The normal lighting levels being higher than those required for emergency lighting, manufacturers also offer the same type of luminaire for normal lighting only. This option provides the final user with the possibility of alternating self-contained units with standard lighting fixtures, while maintaining consistency of design.

#### INDUSTRIAL ENVIRONMENT

The industrial environment is the most severe in terms of housing and exit sign construction. It is defined by a number of parameters specific to various technical processes within the industry: temperature range, degree of humidity, degree of protection against water and dust, resistance to corrosive chemicals, presence of flammable gases and vapors or combustible particles, etc. An important performance factor is the degree of protection against solid particles (dust, etc.) and liquids. This rating is generally defined and measured as established by the American standard NEMA 250-2003 from the National Electrical Manufacturers Association, or, alternately, the European IP (ingress protection) code of the International Electrotechnical Commission (IEC 60529 standard). In Canada, there are standards issued by EEMAC (Electrical Equipment Manufacturers Association of Canada), which also plays an active role in the harmonization of existing standards. To accomplish the required degree of protection and resistance to corrosive agents, emergency lighting fixtures are designed/fabricated with gasketed, rugged, polycarbonate or fiberglass housings.

A special category exists covering hazardous areas, defined by technological processes generating (or susceptible to generate) in the atmosphere flammable gases, vapors, flammable liquids or combustible dust particles in explosive concentrations. Hydrogen or acetylene plants, gasoline and natural gas refineries, coal or magnesium mines, flour mills, textile factories, are some examples. For more details on definitions and classifications of hazardous areas, consult the Canadian Electrical Code (CSA C22. 1-06).

Considering the risks of explosion or fire, all equipment dedicated to hazardous areas must meet, in addition to standards specific to emergency lighting, special standards such as: CSA C22.2 No. 30-M1986, No. 137-M1981, No. 213-M1987, etc. Based on each respective classification (Class, Division, Group), enclosures and remote heads for hazardous areas are fabricated of materials which must meet stringent requirements (pure forged aluminum, fiberglass, etc.) and may require specific components, such as seals, valves, gasketing, etc. In view of all these additional specific characteristics, it can be expected that emergency lighting equipment approved for hazardous areas will cost more than fixtures classified for general industrial applications.

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- NEMA-4X certified battery u	nit.	- Compact steel battery unit.	
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MINI-PHANTOM	<u>p 116 - 117</u>	SIGNATURE DECO CAB	<u>p 128 - 131</u>
- Fully concealed, easy to retributing system.	ofit emergency	- 6, 12 and 24 volts decorativ	ve battery units.
DIVIDER®	<u>p 118 - 119</u>	RGS*TB	<u>p 132 - 135</u>
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www.lumacell.com

option.

**Selumacell** 

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### **CAMRAY Battery Unit**

Illuminating the dark, decorating the day



### Features

- CAM12 Standard Battery Unit\* : Equipped with sealed lead calcium battery and PulsePlus charger. (+20 °C to +30 °C) Certified to CSA C22.2 N° 141.
- CAMH12 Cold Weather Battery Unit\* : Perfect solution for cold and/or wet locations. Equipped with NiMH\*\* battery and Auto-Test charger. (-20 °C to +40 °C) Certified to CSA C22.2 N° 141.

#### - CAMH20 High Output Battery Unit:

Ideal for applications where the photometrical performance of the 10W Xenon lamp is required. Equipped with NiMH\*\* Battery and Auto-Test charger. Also suitable for wet locations. (+20 °C to +30 °C) Certified to CSA C22.2 N° 141.

- \* CAM12 & CAMH20 packages available with 6W lamps only.
- \*\* Nickel Metal Hydride: State-of-the art battery technology, lead-free and cadmium-free.



### **Typical Specification**

Supply and install the Lumacell CAMRAY Series battery unit. The wall mount unit shall be made of a gasketed die-cast aluminium housing, UV and impact resistant polycarbonate lens which house a resilent vacuum-plated die-cast reflector and two high-output Xenon lamps.

The unit shall be rated 120/347VAC, 60Hz dual input voltage. The battery charger shall include low voltage disconnect to prevent deep discharge. Battery lockout to prevent battery drain prior to energizing the utility power and brownout protection which will automatically switch unit into emergency mode if the utility power falls below 80% of nominal and battery reverse polarity protection. The unit shall provide the nominal load during at least 30 minutes up to 87.5% of the nominal voltage of the battery.

#### In the same family...



Models with Lead-Calcium batteries shall be equipped with a pulse-type charging circuitry that will secure a long life battery and excellent perfomance. This current limiting circuitry will minimize energy consumption and shall be factory set with a charging voltage tolerance of  $\pm 1\%$  to enable a longer battery life. Red LED shall indicate AC power.

Models with Nickel Metal Hydride batteries shall be equipped with the non-audible version of the auto test feature that will monitor and indicate any of the following failures, battery disconnect, lamp failure or charger failure. The pilot light shall be a bi-color LED and shall change from green to flashing red if a failure is detected for: the battery, charger circuit or lamps.

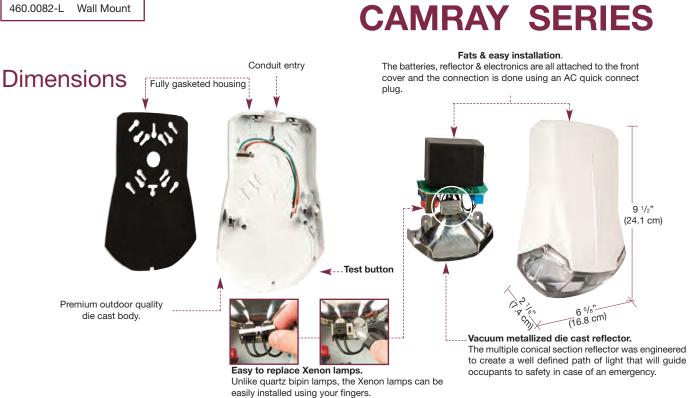
The fixture shall be suitable for wall mounting on various Junction-boxes or surface mount, using rigid conduit entry on the top of the unit. To be supplied in off white, black, platinium gray or dark bronze.

The battery unit shall be CSA Certified to C22.2 No.141.

The unit shall be Lumacell model:

Project/Location		Date	
Contractor		Prepared by	
LUMACELL Model	-		

### Wire Guard



### Power Consumption and Unit Rating

Model	AC Specs DC Specs		pecs		
CAM12, CAM H12	120/347 Vac	0.11/0.04 Amp	Less than 10.5W	6V - 12W	Minimum 90 min.
CAMH20	120/347 Vac	0.11/0.04 Amp	Less than 10.5W	6V - 20W	Minimum 60 min.

### Replacement Lamps

Odering Code	Type Specifications
570.0213-L	<b>X6W</b> , 6V - 6W, Xenon
570.0214-L	X10W, 6V - 10W, Xenon

### **Ordering Information**

Series	Wattage	Colour	Options
CAM12= 6V - 12W, lead	X6W= 6V - 6W, Xenon lamps	OW= off white	<b>T3=</b> Time delay
calcium battery, standard	<b>X10W=</b> 6V - 10W*,	<b>BK</b> = black	(15 minutes)
charger +20°C to +30°C	Xenon lamps	<b>DB</b> = dark bronze	
(+68°F to +86°F)		PG= platinium grey	
CAMH12= 6V - 12W, NiMH			
battery -20°C to +40 °C (-4°F			
to +104°F) comes with ATN*			
CAMH20= 6V - 20W, NiMH			
battery +20°C to +30°C (+68°F			
to +86°F) comes with ATN*			
*ATN=Auto-Test non-audible	*Only available with CAMH20.	Other colors available. Please contact your sales representative.	

#### EXAMPLE: CAM12X6WOWTD15

### RG-NX Series Battery Unit NEMA-4X certified

# **Selumacell**

#### Features

- Delivers great pathway illumination up to 70 feet, center-to-center (with 12V 20W lamp).

- Fully gasketed cast aluminum back plate with clear polycarbonate cover – NEMA-4X Certified.
- Comes standard with non-audible advanced diagnostic charger board, 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-inch junction boxes
- Comes standard with tamper-proof screws and bit
- Standard 120/347Vac input voltage
- Cold weather option (-40°C)
- NSF Certified for food processing plants
- CSA C22.2 No. 141 Certified









### **Typical Specification**

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), the housing shall be fully gasketed with a cast aluminum back plate and 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,

In the same family...



60Hz. The unit shall have an output of \_\_\_\_\_volts. 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 nonintrusive 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 C22.2 No.141. certified. It shall also be NSF Certified for use in food processing plants.

The unit shall be Lumacell model:



Project/Location			Date
Contractor		Prepared by	
LUMACELL model			

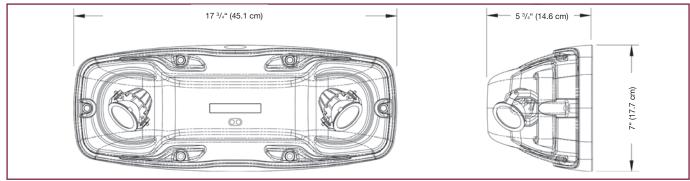


### Wire Guard

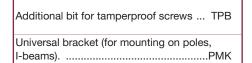
460.0031-L Wall Mount

## **RG-NX SERIES**

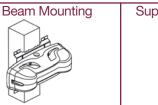
### Dimensions



### Accessories (order as a separate item)



PMK Kit (screws included)





### Power Consumption and Unit Rating

Model			V	/attag	ge Ca	pacit	y
Wieder			30min	1h00	1h30	2h00	4h00
RGNX36		0.15/0.05 Amp		21	15	12	6
RG12NX72	120/347 vac	0.25/0.10 Amp	72	42	30	24	12
RG12NX108		0.25/0.10 Amp	108	63	45	36	18
Cold Weather 36W	0.45/0.20 Amp		36	*			
Cold Weather 72/108W			72/108	*			

### **Replacement Lamps**

Ordering Code		Specifications		
580.0074-L		<b>M6W</b> , MR16, 6V-6W FL		
580.0079-L	N	M10W, MR16, 6V-10W FL		
580.0080-L	М	<b>12W</b> , MR16, 12V-12W FL		
580.0068-L	м	H20W, MR16, 12V-20W FL		
580.0093-L		<b>L</b> , MR16, 12V-5W LED		

\*Note: capacity depends on the ambient temperature

### **Ordering Information**

Series	Capacity	# of heads	Voltage/Wattage/Lamp type	Colour	AC Voltage	Options
RGNX=	<b>36=</b> 6V-36W	<b>2=</b> 2 heads	M6W= mini halogen,	Blank=	Blank=	Blank= no options
6 volts,	<b>72=</b> 12V-72W		6V-6 watts, MR16	factory white	120/347 Vac	CW1= cold weather
NEMA-4X	108= 12V-108W		M10W= mini halogen,	<b>BK=</b> black	<b>ZC=</b> 277 Vac	120Vac
RG12NX=			6V-10 watts, MR16	<b>G=</b> grey		*CW3= cold weather
12 volts,			M12W= mini halogen,			347Vac
NEMA-4X			12V-12 watts, MR16			** <b>NEX=</b> NEXUS®
			M20W= mini halogen,			system interface
			12V-20 watts, MR16			
			MH20W= high output, 12V-20W			
			L= 12V-5W LED			

#### EXAMPLE: RGNX362M6W

\* Available in 6V only. \*\*Not all options available with NEXUS®. Consult Factory.

### **PHANTOM Battery Unit**

#### Recessed cabinet, Emmergency Lighting System



- Fully automatic operation: the unit door opens upon loss of AC power and closes when the power is back or at the end of battery discharge
- Input: Standard AC input 120/347Vac, 0.25/0.09 Amps; optional 120/277Vac
- Battery: maintenance-free, sealed Lead-acid battery, with a 10-year design life
- Charger: micro-controller driven, temperature compensated, high-precision, fast recharge
- Back-box (self-powered unit): made of heavy-duty, galvanized steel
- Remote fixture: version available in 12Vdc or 24Vdc; no back box, no AC wires are required
- Certification: CSA C22.2 No.141



### Typical Specification

Supply and install Lumacell Series Phantom. The unit shall be designed to be concealed in walls or ceilings with a cavity, including T-bar suspended ceilings. Bar hanger brackets shall be provided with the self-powered unit. The equipment shall consist of a metal back box containing the batteries, the lamp assembly and a charging circuitry. The back box shall be constructed of heavy-duty galvanized steel. The unit components: battery assembly, charger circuitry and lamp assembly shall have a modular design and come standard with quick connect plugs for easy installation in the back box. The unit equipment shall be completely concealed in the wall or ceiling during normal power conditions. Upon a power failure the unit will expose the emergency heads by rotating its door 180° and then power the lamps. At the restoration of the AC power or at the end of the battery discharge, the lamps will turn off and the unit will retract the heads in the wall (ceiling) by rotating the door by 180°. Under normal conditions, the only visible parts of the unit shall be the flat door and trim plate, coated with a high-quality off-white finish that can be customized on site with paint or other suitable wall covering. The light source shall be 12V MR16 halogen lamps of specified wattage and light output. The unit shall supply the rated load for a minimum of 30 minutes or until the battery is discharged to 87 1/2% of its nominal

#### In the same family...



voltage (whichever duration is longer). The charger circuitry shall utilize a micro-controller IC that samples the battery in relation to the ambient temperature, state of charge, and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof, and reverse-polarity protected. The circuit will charge in accordance with the CSA C22.2 – 141 requirements. The unit shall be furnished with a recessed, illuminated push button serving as test switch and status indicator light.

Auto-test and diagnostic: the unit will come complete with the LumaceIITM series of auto-test micro-controller circuitry that will ensure the equipment readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, the pilot light located on the front of the unit, will change color from green to red and will flash indicating a fault. A detailed diagnostic legend shall be available on the door back side and shall provide fault identification (battery, charger circuitry, lamps) for the maintenance personnel. The auto-test shall simulate a power loss for one minute monthly, 10 minutes every sixth months, and a full 30minute test every 12 months.

The equipment shall be Lumacell model:

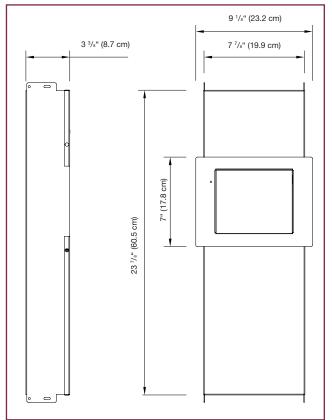
Project/Location		Date	
Contractor	Prepared by		
LUMACELL Model	·		
			Opened

Closed

### **PHANTOM SERIES**

-

### Dimensions



# Power Consumption and Unit Rating

Model	AC S			<b>je C</b> a 1h30		<b>ity</b> 4h00	
PH75	120/347	0.25/0.09	75	40	30	24	15
PH150	Vac	0.25/0.09 Amp	150	80	60	48	30

### **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
580.0080-L	MR16 12W Flood	12V-12W
580.0064-L	MR16 20W Flood	12V-20W
580.0083-L	MR16 35W Flood	12V-35W
580.0076-L	MR16 50W Flood	12V-50W
580.0068-L	MR16 IR* 20W Flood	12V-20W
580.0090-L	MR16 IR* 35W Flood	12V-35W
580.0089-L	MR16 IR* 50W Flood	12V-50W
580.0084-L	MR16	24V-35W
580.0070-L	MR16	24V-12W
580.0077-L	MR16	24V-20W
580.0078-L	MR16	24V-50W

\* High-output (H).

See the complete list p. 196 to 199.

### **Ordering Information**

Series	Unit Capacity	Lamp Wattage	AC Voltage	Options
PH	<b>75=</b> 12V, 75W	12W= 2x 12 watts MR16	Blank= 120/347Vac	AT= Auto-Test
	<b>150=</b> 12V, 150W	20W= 2x 20 watts MR16	<b>ZC=</b> 120/277Vac	ATN= Auto-Test,
		35W= 2x 35 watts MR16		non-audible
		50W= 2x 50 watts MR16		<b>T3=</b> Time delay
		20WH= 2x 20 watts MR16,		(15 minutes)
		High lumen-output lamp		
		<b>35WH=</b> 2x 35 watts MR16,		
		High lumen-output lamp		
		50WH= 2x 50 watts MR16,		
		High lumen-output lamp		

#### EXAMPLE: PH15012WAT

#### www.lumacell.com

### **MINI-PHANTOM Battery Unit**

Unseen solution, The Next Generation

# **Selumacell**

#### Features

- Easy to retrofit in finished walls: the unit slides in through an 8.25-in by 5.75-in hole
- No back-box needed to pre-install
- Fully automatic operation: the unit door opens upon loss of AC power and closes when the power is returned, or at the end of the battery discharge
- Input: Standard AC input 120/347Vac; optional 120/277Vac
- Output: 12Vdc with up to 100 watts of power

- Battery: choice of sealed, maintenance-free Lead-Calcium or Nickel-Metal Hydride
- Remote capacity: can drive several wall or ceiling-mount 12-Vdc remote Phantom fixtures
- **Charger:** micro-controller driven, temperature compensated, high-precision, fast recharge
- Remote AC fixture: direct connection to 120 or 347Vac power generators



### Typical Specification

Supply and install Lumacell Series Mini-Phantom. The unit shall be designed to be completely concealed in walls with a cavity. The equipment shall consist of a metal housing containing two modules joined by a flexible bracket and electric conduit. One module contains the battery, charger circuitry and electrical connection box; the other module contains the emergency lights installed on the back of a door able to rotate several turns of 360°. The unit equipment shall be completely concealed in the wall, after the installation through a rectangular opening not larger than 8.25-in by 5.75-in.

In stand-by mode, the only visible parts of the unit shall be the flat door and trim plate, coated with a high-quality off-white finish that can be customized on site with paint or other suitable wall covering. Upon a power failure the unit will expose the emergency heads by rotating its door 180° and then will power the lamps. At the restoration of the AC power or at the end of the battery discharge, the lamps will turn off and the unit will retract the heads by rotating the door 180° in the same direction.

The unit shall not require the presence of AC power in order to close the door and conceal the lights. The door of the unit shall be easy to force-turn (open or close) by hand, in any rotation direction. The light source shall be 12V MR16 halogen lamps of specified wattage and light output. The unit shall supply the rated load for a minimum of 30 minutes or until the battery is discharged to 87  $\frac{1}{2}$ % of its nominal voltage (whichever duration is longer). The charger circuitry shall utilize a micro-controller IC that samples the battery in relation to the ambient temperature, state of charge, and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof, and reverse-polarity protected. The circuit will charge in accordance with the CSA C22.2 – 141 requirements. The unit shall be furnished with a recessed, illuminated push button serving as test switch and status indicator light.

Auto-test and diagnostic: the unit will come complete with the Lumacell series of auto-test micro-controller circuitry that will ensure the equipment readiness and reliability by continuously monitoring every critical function of the unit. If a component failure occurs, the pilot light located on the front of the unit, will change color from green to red and will flash indicating a fault. A detailed diagnostic legend shall be available on the back side of the door and shall provide fault identification (battery, charger circuitry, lamps) for the maintenance personnel. The auto-test shall simulate a power loss for one minute monthly, 10 minutes every sixth months, and a full 30-minute test every 12 months.

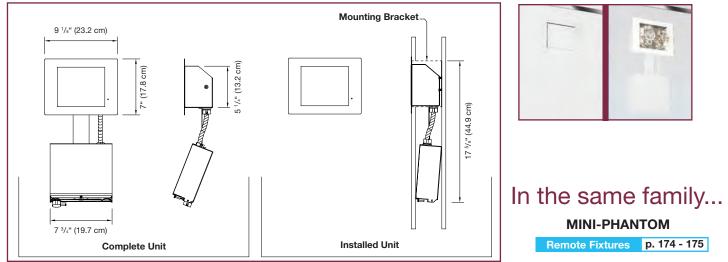
The equipment shall be Lumacell model:

Project/Location			Date
Contractor Prepared b		Prepared by	
LUMACELL Model			



## **MINI-PHANTOM SERIES**

### **Dimensions**



### Power Consumption and Unit Rating Replacement Lamps

Model	AC Specs 120/347 Vac 0.25/0.08 Amp 120/347 Vac 0.25/0.08 Amp		Wa	ttage	Capa	city
			30min	1h00	2h00	3h00
MPS80			80	40	24	-
MPH100			100	70	36	24
MPG	120 Vac Max. 0.95 Amp		Max. 100W load			
MPG-ZC	277 Vac	Max. 0.45 Amp	Max. 100W load			
MPG-ZD	347 Vac	Max. 0.35 Amp		Max. 10	0W load	

Model	Lamp Type	Voltage-Wattage
580.0080-L	MR16 12W Flood	12V-12W
580.0064-L	MR16 20W Flood	12V-20W
580.0083-L	MR16 35W Flood	12V-35W
580.0076-L	MR16 50W Flood	12V-50W
580.0068-L	MR16 IR * 20W Flood	12V-20W
580.0090-L	MR16 IR * 35W Flood	12V-35W
580.0089-L	MR16 IR * 50W Flood	12V-50W
t High and All		and the second stallist in 100 to 100

\* High-output (H).

See the complete list p. 196 to 199.

### **Ordering Information**

Series	Unit Capacity	Lamp Wattage	AC Voltage	Options
MP	<b>S80=</b> Lead-Calcium, 12V, 80W	12W= 2x 12watts MR16	Blank= 120/347Vac	AT= Auto-Test
	H100= Nickel-Metal Hydride,	20W= 2x 20watts MR16	<b>ZC=</b> 277Vac	ATN= Auto-Test,
	12V, 100W	35W= 2x 35watts MR16		non-audible
		50W= 2x 50watts MR16		<b>T3=</b> Time delay
		20WH= 2x 20watts MR16,		(15 minutes)
		High lumen-output lamp		<b>TB</b> = T-Bar mounting unit
		35WH= 2x 35watts MR16,		
		High lumen-output lamp		
		50WH= 2x 50watts MR16,		
		High lumen-output lamp		

#### **EXAMPLE: MPS8035WHAT**

## DIVIDER<sup>®</sup> Battery Unit

### With laser option



### Features

- Injection-molded, impact-, scratch- and corrosion-resistant thermoplastic white housing (also available in black)
- Compact and versatile unit measures only 11" x 5" and can be wall or ceiling mounted
- Fast and easy installation AC quick connect plug, battery lockout feature and snap together design
- Tool less aiming and adjustment of lighting heads
- Maintenance-free, long-life sealed lead calcium battery

- 120/347Vac standard input
- Fully automatic, solid-state Pulse-Guard charger with low voltage battery disconnect, brownout protection, integral test switch and long-life LED AC-On pilot lights
- Charger is temperature compensated and reverse polarity protected
- CSA C22.2 No. 141 certified



### **Typical Specification**

The contractor will install the Lumacell Divider battery unit. The emergency lighting system shall consist of fully automatic equipment with two (2) emergency lighting heads. The emergency lighting heads shall require no tools for adjusting or aiming. Each unit shall contain a fully automatic, solid-state charger with test switch and AC-on pilot lights. The unit shall contain a sealed transfer circuit and low-voltage disconnect circuit. The battery unit may come with laser option designed to guide patrons through the path of egress. The battery shall be 6 volts with capacity of 36 watts for 30 minutes.

The unit shall be CSA C22.2 no 141.

The unit shall be Lumacell model:

### In the same family...



www.lumacell.com

Project/Location		Date	
Contractor	Prepared by		
LUMACELL Model			

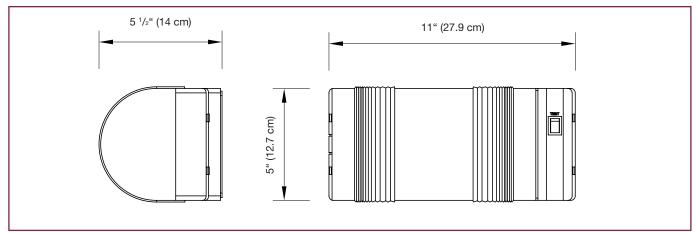


### Wire Guard

460.0080-L Wall Mount

## **DIVIDER® SERIES**

### Dimensions



### Power Consumption and Unit Rating

Model	AC Specs		Wattage Capacity				
			30min	1h00	1h30	2h00	4h00
RG18LXIDIVIDER	120/347 Vac	0.07/0.03 Amp	18	10	7	6	-
RG36LXIIDIVIDER		0.08/0.03 Amp	36	21	15	12	6

### **Replacement Lamps**

Ordering Code	Lamp Type	Voltage - Wattage
570.0016-L	mini tungesten, wedge base	6V - 9W

### **Ordering Information**

Series	Colour	Input Voltage	Options
RG18LXIDIVIDER= 6V, 18W RG36LXIIDIVIDER= 6V, 36W	Blank= factory white BK= black	Blank= 120/347 Vac*	Blank= no option AT= Auto-Test ATNA= Auto-Test non-audible LS= laser V= voltmeter VR= tamper proof screws **990.0179-L= tamper proof

#### **EXAMPLE: RG18LXIDIVIDER**

\*Line cord kit supplied but not installed. \*\*One bit needed per order.

## **RGA Battery Unit**

decorative, 6 and 12 volts



### Features

- Rugged steel cabinet with corrosion-resistant undercoating
- Removable front panel on cabinet provides easy access and allows unit to be mounted at ceiling height
- Solid-state pulse-type charger current-limited, temperature-compensated, short-circuit proof and reverse-polarity protected
- Unit comes standard with electronic lockout and brownout circuits

- Sealed dust-proof transfer relay, test switch and LED indicator light(s)
- Long-life, maintenance-free lead acid battery
- Standard 120/347Vac input voltage
- NEXUS<sup>®</sup> compatible (for more information on NEXUS<sup>®</sup>, please consult factory)
- CSA C22.2 No. 141 certified



### **Typical Specification**

Supply and install the Lumacell RGA Series battery units. The battery unit shall come complete with two MR16 emergency light heads.

The unit shall be rated for dual voltage120/347V, 60 Hz. The unit shall provide the nominal load during at least 30 minutes up to 87.5% of the nominal voltage of the battery. The charger shall be factory set with a charging voltage tolerance of  $\pm 1\%$  to enable a longer battery life.

The emergency light heads shall be fully adjustable and protected by an aesthetically pleasing clear cover, made of shock resistant polycarbonate. The protective cover shall be designed to facilitate lamp replacement. The heads shall be installed at the bottom of the unit, providing an illumination in any downward direction.

The emergency light heads shall require no tools for

adjusting or aiming. The metal cabinet shall be made of steel with anti-corrosion undercoating.

The unit equipped with the Auto Test diagnostic micro-controller board shall self-test 1 minute every 30 days, 10 minutes the 6th month and 30 minutes every 12 months. The unit shall be supplied with a test switch and diagnostic LED indicator lights to continuously monitor the status of the unit: Battery Failure, Battery Disconnect, Charger Failure, Lamp Failure, Service Alarm, main voltage AC "ON", Charger High Rate.

The unit shall be CSA Certified to C22.2 no.141.

The unit shall be Lumacell model:

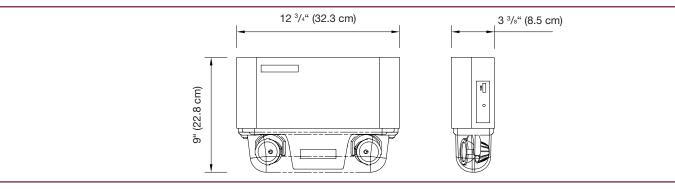
www.lumacell.com

Project/Location		Date
Contractor	Prepared by	
LUMACELL Model		

### Wire Guard

460.0080-L Wall Mount

### Dimensions



### Power Consumption and Unit Rating

Model	AC Specs			Watt	age Capa	acity	
Model			30min	1h00	1h30	2h00	4h00
RGA27		0.06/0.02 Amp	27	15	11	9	-
RGA44		0.18/0.06 Amp	44	26	18	15	7
RGA72	120/347 Vac	0.19/0.07 Amp	72	42	30	24	12
RG12A44		0.31/0.10 Amp	44	26	18	15	7
RG12A72		0.31/0.10 Amp	72	42	30	24	12

### **Replacement Lamps**

Ordering Code	Туре	Voltage- Wattage	Ordering Code	Туре	Voltage- Wattage
580.0074-L	MR16 (MQM6W)	6V-6W	580.0080-L	MR16 (MQM12W)	12V-12W
580.0079-L	MR16 (MQM10W)	6V-10W	580.0068-L	MR16 (MQMH20W)	12V-20W

### **Ordering Information**

Series	Capacity	# of heads	Head Style/Wattage	Colour	AC Voltage	Options
RGA=	*27= 27watts	<b>2</b> = 2 heads	MQM6W= mini halogen,	Blank=	Blank=	Blank= no options
6 volts	44= 44 watts		6V - 6W, MR16	factory white	120/347 Vac	AT= Auto-Test**
RG12A=	72= 72 watts		MQM10W= mini halogen,	<b>BK=</b> black	ZC=	ATN= Auto-Test non-audible**
12 volts			6V - 10W, MR16		277 Vac input	NEX= NEXUS®*** system
			MQM12W= mini halogen,		*ZB=	interface
			12V - 12W, MR16		240 Vac input	CT= cabtire
			MQMH20W=			TL= Twistlock plug
			mini halogen, high output,			LC= line cord (120V only)
			12V - 20W, MR16			
	* Available in 6V only.				* Not CSA approved	** 6V - 72W available in RGS series only. *** Not available in 6V - 72W.

#### EXAMPLE: RGA272MQM6W



**RGA SERIES** 

### **RGC Battery Unit**

### Steel, compact, 6 and 12 volts



#### Features

- Compact steel cabinet with corrosion-resistant undercoating
- Quick and easy installation pre-assembled cordset, no batteries or board to remove before installation
- Universal Spider knockout pattern for junction box mounting
- Fully automatic solid-state charger with test switch and AC-on pilot light
- Sealed dust-proof transfer relay circuit and low-voltage disconnect

- Long-life, maintenance-free sealed lead battery provides 30 minutes of illumination in emergency mode with complete recharge within 24 hours
- Heads requires no tools for adjusting or aiming
- Wide choice of lamps include MR16, tungsten and halogen
- Standard input 120Vac with line cord installed
- 120/347Vac without line cord
- CSA C22.2 No. 141 certified



### **Typical Specification**

The contractor shall install the Lumacell RGC Series battery units. The emergency lighting system shall consist of fully automatic equipment with two emergency lighting heads. The unit shall be \_\_\_\_\_ volts with a capacity of \_\_\_\_ watts for 30 minutes minimum.

The charger shall be factory set with a charging voltage tolerance of  $\pm$  1% to enable a longer battery life. The emergency light heads shall require no tools for adjusting or aiming. The metal cabinet shall be made of steel with anti-corrosion undercoating.

The unit equipped with the Auto Test micro-controller board shall self-test 1 minute every 30 days, 10 minutes the 6th month and 30 minutes every 12 months. The unit shall be supplied with a test switch and diagnostic LED indicator lights to continuously monitor the status of the unit: Battery Failure, Battery Disconnect, Charger Failure, Lamp Failure, Service Alarm, main voltage AC "ON", Charger High Rate.

The unit shall be CSA Certified to C22.2 no.141.

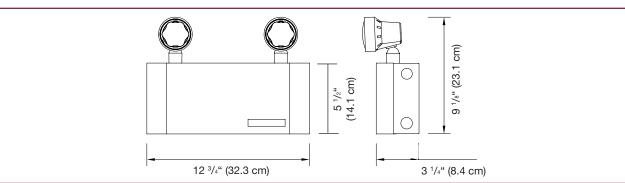
The unit shall be Lumacell model:

Project/Location	Date		
Contractor	Prepared by		
LUMACELL Model			

### Wire Guard

460.0080-L Wall Mount

### Dimensions



### Power Consumption and Unit Rating

Model	AC Specs		Wattage capacity 30min 1h00 1h30 2h00 4h00				
			30min	1h00	1h30	2h00	4h00
RGC27		0.06/0.02 Amp	27	15	11	9	-
RGC44		0.18/0.06 Amp	44	26	18	15	7
RGC72	120/347 Vac	0.19/0.07 Amp	72	42	30	24	12
RG12C44		0.31/0.10 Amp	44	26	18	15	7
RG12C72		0.31/0.10 Amp	72	42	30	24	12

### **Replacement Lamps**

Ordering Code	Туре	Voltage- Wattage
570.0012-L	Mini tungsten (MT9W)	6V - 9W
570.0025-L	Mini tungsten (MT9W)	12V - 9W

For the complete list, please see the lamp chart on page 196 to 199.

### Ordering Information

Series	Capacity	# of heads	Head style/Wattage	Colour	Voltage	Options
RGC=	*27= 27 watts	Blank=	MT9W= mini tungsten, 6V, 12V - 9W, wedge base	Blank=	Blank=	Blank=
6 volts	(6 volts only)	no head	MT18W= mini tungsten, 12V - 18W, wedge base	factory white	120Vac input	no options
RG12C=	44= 44 watts	1= one head	MQ8W= mini halogen, 6V, 12V - 8W, quartz bi-pin	BK= black	with line cord	**AT= Auto-Test
12 volts	72= 72 watts	2= two heads	MQ12W= mini halogen, 6V, 12V, 24V -12W, quartz bi-pin		installed	**ATN= Auto-Test
			MQM6W= mini halogen, 6V - 6W, MR16		ZC=	non-audible
			MQM10W= mini halogen, 6V - 10W, MR16		277Vac input	CT= Cabtire
			MQM12W= mini halogen,12V - 12W, MR16		* <b>ZB</b> =	TL=
			MQM20W= mini halogen, 12V - 20W, MR16		240Vac input	Twistlock plug
			LH9W= large tungsten, 6V, 12V - 9W, wedge base		<b>ZD=</b> 120/347	***NEX= NEXUS®
			LH18W= large tungsten, 12V - 18W, wedge base		Vac input	system interface
			LH25W= large tungsten, 6V, 12V - 25W, DCB			
			LHQ8W= large halogen, 6V, 12V - 8W, quartz bi-pin			
			LHQ12W= large halogen, 6V, 12V - 12W, quartz bi-pin			
			LHQ20W= large halogen, 6V, 12V - 20W, quartz bi-pin			
			SB9W= large tungsten, 6V - 9W, sealed beam			
			SB18W= large tungsten, 6V, 12V - 18W, sealed beam			
			SB25W= large tungsten, 6V, 12V, - 25W, sealed beam			
			QSB8W= large halogen, 6V, 12V - 8W,			** 6V-72W available in
			quartz sealed beam			RGS series only. *** Consult your sales
			QSB12W= large halogen, 6V, 12V - 12W,			representative, not available in
			quartz sealed beam		* Not CSA approved	6V-72W.
	*Available in 6V only.		QSB20W= large halogen, 6V - 20W, quartz sealed beam			

**EXAMPLE: RGC272MT9W** 





# RGS Battery Unit

### 6, 12 and 24 volts



#### 10-year life expectancy, maintenance-free emergency lighting units.

The **RGS** Series battery units combine long-life expectancy, high performance design and a reasonable initial cost outlay. Ideally suited for a range of commercial applications, the long-life lead acid battery is specifically recommended for environments where the unit will be exposed to large variances in ambient temperature.



### Features

- Rugged steel cabinet with corrosion-resistant undercoating – standard colour is factory white, polar white and black available as options
- Removable front panel on cabinet provides easy access and allows unit to be mounted at ceiling height
- Solid-state pulse-type charger current-limited, temperature-compensated, short-circuit proof and reverse-polarity protected.
- Unit comes standard with electronic lockout and brownout circuits

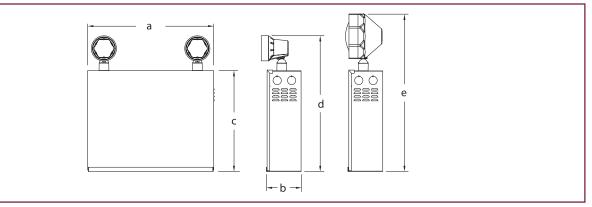
- Sealed dust-proof transfer relay, test switch and LED indicator lights
- Long-life, maintenance-free lead acid battery
- Wide range of lampheads available consult Ordering Information for complete list
- Standard 120/347Vac input voltage with line cord kit
- NEXUS<sup>®</sup> compatible (for more information on NEXUS<sup>®</sup>, please consult factory.)
- CSA C22.2 No. 141 certified

Project/Location		Date
Contractor	Prepared by	
LUMACELL Model		

### Wire Guards

460.0078-L	Wall Mount	" <b>A</b> " Cabinet
460.0081-L	Wall Mount	" <b>B</b> " Cabinet
460.0034-L	Wall Mount	" <b>C</b> " Cabinet

### Dimensions



Cabinet	Dimensions						
Cabinet	а	b	С	d	е		
Α	13 <sup>1</sup> / <sub>4</sub> " (33.4 cm)	3 <sup>5</sup> / <sub>8</sub> " (9.2 cm)	10 <sup>1</sup> / <sub>2</sub> " (26.8 cm)	14 <sup>1</sup> / <sub>4</sub> " (36.0 cm)	16 <sup>1</sup> / <sub>2</sub> " (41.7 cm)		
В	16 <sup>1</sup> / <sub>8</sub> " (41.0 cm)	5 <sup>1</sup> / <sub>2</sub> " (13.8 cm)	10 <sup>1</sup> / <sub>4</sub> " (26.1 cm)	13 <sup>7</sup> / <sub>8</sub> " (35.3 cm)	16 <sup>1</sup> / <sub>8</sub> " (41.0 cm)		
С	23 ¹/₅" (58.8 cm)	5 <sup>1</sup> / <sub>2</sub> " (13.8 cm)	10 <sup>1</sup> / <sub>4</sub> " (26.1 cm)	13 <sup>7</sup> /₃ " (35.3 cm)	16 ¼ " (41.1 cm)		

### **Replacement Lamps**

Ordering Code	Lampe Type	Voltage-Wattage
570.0016-L	Mini tungsten (MT9W)	6V - 9W
570.0025-L	Mini tungsten (MT9W)	12V - 9W
570.0045-L	Mini tungsten (MT9W)	24V - 9W

For the complete list, please see the lamp chart on page 196 to 199.



### **RGS SERIES**

## **RGS Battery Unit**

#### 6, 12 and 24 volts



### **Typical Specification**

Supply and install a complete emergency lighting system as described herein and shown on the drawings.

The Lumacell Smart Diagnostic micro-controller board shall supply the rated load for a minimum of a 1/2 hour to 87.5% of the rated battery voltage. The unit shall be rated 120V or 347V, 60 Hz and be CSA listed. The unit shall have an output of \_\_\_\_\_ volts.

The charger shall be fully computer tested and its charge voltage factory set to  $\pm$  1% tolerance. Chargers with field-adjusted potentiometers are not acceptable. A pulse-type charger shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide a continuous high charge to recharge the battery, when the battery is at full capacity, the charger will shut-off. Periodically the charger shall provide a pulse of energy to keep the battery topped off. The pulse charger shall be precisely regulated by a

micro-controller circuit, which samples the battery in relation to its temperature, state or charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected.

The unit shall be furnished with an electronic lockout circuit, which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency lights when utility power dips below 75% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the load and circuitry form the fused output circuit when the battery reaches the end of discharge. The 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 capable of full recharge in compliance with CSA specifications. The unit shall be furnished with sealed dust tight relay, a test switch and diagnostic LED indicator lights to continuously monitor the status of the unit: Battery Failure, Battery Disconnected, Charger Failure, Lamp Failure, Service Alarm, AC "ON", Charger High Rate. The emergency lighting heads shall require no tools to adjust or aim.

The unit shall be Lumacell model:



Single, regular head



Single, metal head

Project/Location			Date	
Contractor		Prepared by		
LUMACELL Model				



### Power Consumption and Unit Rating

### **RGS SERIES**

Model	ACS	Specs		Watt	age Cap	acity	
		pees	30min	1h00	1h30	2h00	4h00
RGS36		0.10/0.04 Amp	36	21	15	12	6
RGS72		0.22/0.08 Amp	72	42	30	24	12
RGS108		0.22/0.08 Amp	108	63	45	36	18
RGS180		0.22/0.08 Amp	180	105	75	60	30
RG12S36		0.09/0.03 Amp	36	21	15	12	6
RG12S72		0.15/0.06 Amp	72	42	30	24	12
RG12S100		0.34/0.12 Amp	100	58	42	33	17
RG12S144		0.40/0.14 Amp	144	84	60	48	24
RG12S200		0.41/0.14 Amp	200	117	83	67	33
RG12S220		0.41/0.14 Amp	220	120	90	72	36
RG12S250	120/347Vac	0.41/0.14 Amp	250	144	100	83	42
RG12S360		0.43/0.15 Amp	360	210	150	120	60
RG12S360HP		0.43/0.15 Amp	360	210	150	120	60
RG24S144		0.55/0.20 Amp	144	84	60	48	24
RG24S200		0.67/0.23 Amp	200	117	83	67	33
RG24S288		0.67/0.23 Amp	288	168	120	96	48
RG24S350		0.67/0.23 Amp	350	200	144	120	60
RG24S432		0.67/0.23 Amp	432	250	180	144	72
RG24S550		0.88/0.33 Amp	550	320	230	180	90
RG24S720		0.88/0.33 Amp	720	420	300	240	120
RG24S720HP		0.88/0.33 Amp	720	600	300	240	120

### **Ordering Information**

Series	Capacity Cabinet Size	# of heads	Head Style/Lamp Wattage	Colour	AC Voltage	Options
	36= 36 watts (A)*	Blank=	MT9W= mini-tungsten, 6V, 12V, 24V, 9W,	Blank=	Blank=	Blank=no options
6 volts	72= 72 watts (A)*	no head	wedge base	factory	120/347Vac input	A= ammeter
	108= 108 watts (A)*	1=	MT18W= mini-tungsten, 12V, 24V, 18W,	white	ZB=	AT= Auto-Test
	180= 180 watts (B)*	one head		BK=	240 Vac input	ATN= Auto-Test non audible
RG12S=	36= 36 watts (A)*	<b>2=</b> two	MQ8W= mini-halogen, 6V, 12V, 8W,	black	ZC=	CT= cabtire
12 volts	72= 72 watts (A)*	heads 3= three	quartz bi-pin	-	277 Vac input	DPF6= 6cct. fuse panel
	<b>100=</b> 100 watts (A)*	heads	MQ12W= mini-halogen, 6V, 12V, 24V, 12W,		ZE=	LD= lamp disconnect
	<b>144=</b> 144 watts (A)* <b>200=</b> 200 watts (B)*	neaus	quartz bi-pin	-	220 Vac,	LTS= light activated test switch
	<b>200=</b> 200 watts (B)*		MQM6W= mini-halogen, 6V, 6W, MR16 MQM10W= mini-halogen, 6V, 10W, MR16	-	50 Hz input	** <b>NEX=</b> NEXUS <sup>®</sup> system
	<b>250=</b> 250 watts (B)*		<b>MQM12W=</b> mini-halogen, 12 V, 24V, 12W, MR16	1		interface (6 Volts, 12 Volts;
	<b>360=</b> 360 watts (B)*		<b>MQM20W=</b> mini-halogen, 12V, 20W, MR16	1		consult factory)
RG24S=	144= 144 watts (A)*		<b>LH9W</b> = tungsten, 6V, 12V, 24V, 9W, wedge base			<b>BRT</b> = remote test receiver
24 volts	200= 200 watts (B)*		<b>LH18W</b> = tungsten, 12V, 24V, 18W, wedge base			TD= time delay
24 10113	288= 288 watts (B)*		LH25W= tungsten, 6V, 12V, 24V, 25W, DCB			(programmable)
	350= 350 watts (C)*		LHQ8W= halogen, 6V, 12V, 8W, quartz bi-pin			TL= Twistlock plug
	432= 432 watts (C)*		LHQ12W= halogen, 6V, 12V, 12W, quartz bi-pin			TMBB= a.c./d.c. terminal
	550= 550 watts (C)*		LHQ20W= halogen, 6V, 12V, 24V, 20W,			block
	720= 720 watts (C)*		quartz bi-pin			TMBD= d.c. terminal block
			LHQ55W= halogen, 12V, 55W*, quartz bi-pin			TMBK= a.c. terminal block
			LHQ70W= halogen, 24V, 70W**, quartz bi-pin	-		V= voltmeter
			SB9W= tungsten, 6V, 9W, sealed beam	-		*** <b>HHC</b> = remote test
			SB12W= tungsten, 12V, 12W, sealed beam	-		transmitter HP= high power
			SB18W= tungsten, 6V, 12V, 18W, sealed beam SB25W= tungsten, 6V, 12V, 25W, sealed beam	-		<b>HF</b> = high power
			<b>QSB8W=</b> halogen, 6V, 12V, 8W, guartz sealed beam	-		
			<b>QSB12W=</b> halogen, 6V, 12V, 12W, guartz sealed beam			
			<b>QSB20W=</b> halogen, 6V, 20W, guartz sealed beam			**Not all options available with NEXUS <sup>®</sup> . Contact your sales
	* Cabinet size is not part of		* Aluminum heads only.	1		representative.
	the ordering information.		** High temperature heads only.			***Òne per order.
EXA	<b>MPLE: RGS</b>	36M1	<b>19W</b>			

## SIGNATURE DECO CAB Battery Unit

### decorative 6,12 and 24 volts



#### High performance and energy efficiency in a contemporary design.

The **Signature™** Series decorative battery units combine a contemporary design with the latest in high-tech security capability.

Designed to meet the needs of interior design professionals, these battery units are also high performance and energy-efficient.



### Features

- Rugged steel cabinet with corrosion-resistant undercoating
- Removable front panel on cabinet provides easy access and allows unit to be mounted at ceiling height
- Solid-state pulse-type charger current-limited, temperature-compensated,
- short-circuit proof and reverse-polarity protected.
- Unit comes standard with electronic lockout and brownout circuits
- Sealed dust-proof transfer relay, test switch and LED indicator lights continuously monitor unit status

- Long-life, maintenance-free lead acid battery
- Standard 120/347Vac input voltage with line cord kit
- NEXUS<sup>®</sup> compatible (for more information on NEXUS<sup>®</sup>, please consult factory)
- CSA C22.2 No. 141 certified

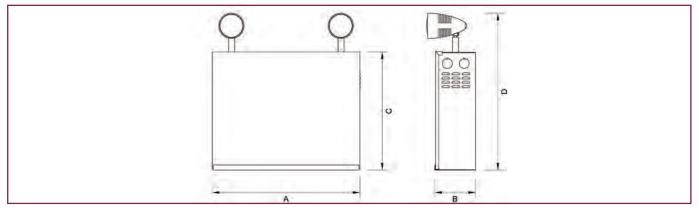
roject/Location		Date	P P
Contractor	Prepared by		
UMACELL Model	·		

### SIGNATURE DECO CAB SERIES

### Wire Guards

460.0078-L	Wall Mount	" <b>A</b> " Cabinet
460.0081-L	Wall Mount	" <b>B</b> " Cabinet
460.0034-L	Wall Mount	" <b>C</b> " Cabinet

### Dimensions



Cabinet		Dimer	nsions	
Cabinet	а	b	с	d
Α	13 <sup>1</sup> / <sub>4</sub> " (33.4 cm)	3 <sup>5</sup> / <sub>8</sub> " (9.2 cm)	10 <sup>1</sup> / <sub>2</sub> " (26.8 cm)	14 <sup>1</sup> / <sub>4</sub> " (36.0 cm)
В	16 <sup>1</sup> / <sub>8</sub> " (41.0 cm)	5 <sup>1</sup> / <sub>2</sub> " (13.8 cm)	10 <sup>1</sup> / <sub>4</sub> " (26.1 cm)	13 <sup>7</sup> /₀ " (35.3 cm)
С	23 ¹/₅" (58.8 cm)	5 <sup>1</sup> / <sub>2</sub> " (13.8 cm)	10 <sup>1</sup> / <sub>4</sub> " (26.1 cm)	13 <sup>7</sup> / <sub>8</sub> " (35.3 cm)

### **Replacement Lamps**

Ordering Code	Lamp Type	Voltage-Wattage
570.0074-L	MR16, FL	6V - 6W
570.0079-L	MR16, FL	6V - 10W
580.0080-L	MR16, FL	12V - 12W

For the complete list, please see the lamp chart on page 196 to 199.

Continue >>

### SIGNATURE DECO CAB Battery Unit

#### decorative 6,12 and 24 volts



### **Typical Specification**

Supply and install the Lumacell Signature Series battery units.

The battery unit will supply the rated load for a minimum of \_\_\_\_\_ hour to 87.5% of the rated battery/voltage. The unit shall be rated 120 or 347V, 60 Hz and be CSA listed. The charger shall be fully computer tested and it's charge voltage factory set to + or - 1% tolerance. A pulse type charger shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide continuous high charge to recharge the battery. When the battery is at full capacity the charger will shut off. The pulse charge shall be current limited and precisely regulated by an electronic circuit which samples the battery in relation to it's temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected.

The unit shall be furnished with an electronic lockout circuit, which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency lights when utility power dips below 75% of nominal voltage.

A low voltage battery protection circuit will disconnect the battery at end of the discharge. The unit will come complete with the Signature Series diagnostics micro-controller board option. The 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 sealed dust tight relay, a selectable test switch 1 minute, 5 minutes, 10 minutes or 20 minutes and diagnostics LED indicator lights to continuously monitor the status of the unit: battery failed, battery disconnect, charger failure, lamp failure, service alarm, AC "ON" and charger "ON".

The unit shall be Lumacell model:

Project/Location
------------------

optractor

Prepared by



LUMACELL Model



## SIGNATURE

Date

### **DECO CAB SERIES**

### Power Consumption and Unit Rating

Model	AC 5	Specs		Watt	age Cap	acity	
Integer		pcc3	30min	1h00	1h30	2h00	4h00
RGS36		0.10/0.04 Amp	36	21	15	12	6
RGS72		0.22/0.08 Amp	72	42	30	24	12
RGS108		0.22/0.08 Amp	108	63	45	36	18
RGS180		0.22/0.08 Amp	180	105	75	60	30
RG12S72		0.15/0.06 Amp	72	42	30	24	12
RG12S100		0.34/0.12 Amp	100	58	42	33	17
RG12S144		0.40/0.14 Amp	144	84	60	48	24
RG12S200		0.41/0.14 Amp	200	117	83	67	33
RG12S220		0.41/0.14 Amp	220	120	90	72	36
RG12S250	120/347Vac	0.41/0.14 Amp	250	144	100	83	42
RG12S360	120/347 vac	0.43/0.15 Amp	360	210	150	120	60
RG12S360HP		0.43/0.15 Amp	360	300	210	170	80
RG24S144		0.55/0.20 Amp	144	84	60	48	24
RG24S200		0.67/0.23 Amp	200	117	83	67	33
RG24S288		0.67/0.23 Amp	288	168	120	96	48
RG24S350		0.67/0.23 Amp	350	200	144	120	60
RG24S432		0.67/0.23 Amp	432	250	180	144	72
RG24S550		0.88/0.33 Amp	550	320	230	180	90
RG24S720		0.88/0.33 Amp	720	420	300	240	120
RG24S720HP		0.88/0.33 Amp	720	600	420	340	160

### Ordering Information

Series	Capacity Cabinet Size	# of heads	Head Style	Lamp Wattage	Colour	AC Voltage	Options
RGS=	<b>36=</b> 36 watts (A)*	1=	DR130=	6W= 6V, 6 watts	Blank=	Blank= 120/347	Blank= no options
6 volts	72= 72 watts (A)	one head	closed	10W= 6V, 10 watts	polar white	Vac input	A= ammeter
	108= 108 watts (A)*	<b>2=</b> two		12W= 12V, 12 watts	BK= black	ZB= 240 Vac input	AT= Auto-Test
	180= 180 watts (B)*	heads		20W= 12V, 24V,		ZC= 277 Vac input	ATN= Auto-Test non-audible
RG12S=	72= 72 watts (A)*	3= three		20 watts		<b>ZE=</b> 220 Vac,	CT= cabtire
12 volts	100= 100 watts (A)*	heads		35W= 12V, 24V,		50 Hz input	DPF6= 6cct. fuse panel
	144= 144 watts (A)*			35 watts			LD= lamp disconnect
	200= 200 watts (B)*			50W= 12V, 24V,			LTS= light activated test
	250= 250 watts (B)*	1		50 watts			switch
	360= 360 watts (B)*	1					** NEX= NEXUS® system
	360HP= 360 watts (B)*						interface
RG24S=	144= 144 watts (A)*	]					(for 6V & 12V units only)
24 volts	200= 200 watts (B)*	1					RRT= remote test receiver
	288= 288 watts (B)*	1					<b>TD</b> = time delay
	350= 350 watts (C)*						(programmable)
	432= 432 watts (C)*						TL= Twistlock plug
	550= 550 watts (C)*	1					<b>TMBB</b> = a.c./d.c. terminal block
	720= 720 watts (C)*						TMBD= d.c. terminal block
	720HP= 720 watts (C)*						TMBK= a.c. terminal block
		1					V= Voltmeter
	* Cabinet size is not part of the ordering information.						<b>HHC</b> = remote test transmitter

#### EXAMPLE: RGS361DR11306W

Not all options available with NEXUS®. Please consult factory.

## **RGS-TB Battery Unit**

### 6, 12 and 24 volts T-Bar Units



#### Fully recessed units for T-Bar mounting in suspended ceilings.

The **RGS-TB** Series battery units are designed for T-bar ceiling grid installation.

This slim-line, unobtrusive unit is ideally suited for any commercial location where there is limited wall space and where the greater directional flexibility of ceiling-mounted heads is needed to provide greater light distribution.



### Features

- Rugged steel cabinet with corrosion-resistant undercoating.
- Battery and charger are concealed above the ceiling level in the unit cabinet
- Removable panel provides easy access to battery and circuitry
- Test switch and LED indicators are mounted on the visible bottom panel
- Units mount quickly and easily in standard 2' x 2' or 2' x 4' grids without any additional hardware
- Solid-state pulse-type charger current-limited, temperature-compensated, short-circuit proof and reverse-polarity protected
- Unit comes standard with electronic lockout and brownout circuits

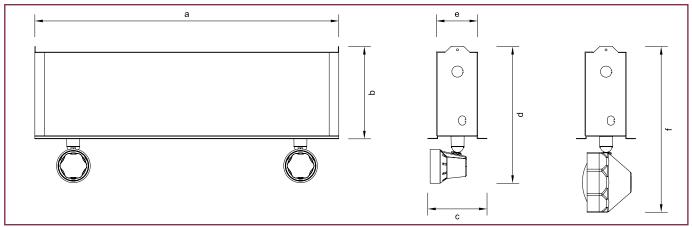
- Sealed dust-proof transfer relay, test switch and LED indicator lights
- Long-life, maintenance-free lead acid battery
- Emergency lighting heads requiring no tools to adjust or aim.
- Standard 120/347Vac input voltage
- NEXUS<sup>®</sup> compatible (for more information on NEXUS<sup>®</sup> , please consult factory.)
- CSA C22.2 No. 141 certified

Project/Location			Date	
Contractor		Prepared by		
LUMACELL Model				



## **RGS\*TB SERIES**

### Dimensions



Cabinet			Dimer	nsions		
	а	b	С	d	e	f
Large Cabinet	23 <sup>3</sup> / <sub>4</sub> "	7 <sup>1</sup> / <sub>4</sub> "	7 ¹/₃ "	10 ⁵/₃ "	5 ⁵/₃ "	13 "
	(60.3 cm)	(18.3 cm)	(18.0 cm)	(27.1 cm)	(14.4 cm)	(32.9 cm)
Small Cabinet	23 <sup>3</sup> / <sub>4</sub> "	7 <sup>1</sup> / <sub>4</sub> "	4 <sup>5</sup> / <sub>8</sub> "	10 ⁵/₅ "	3 <sup>1</sup> / <sub>4</sub> "	13 "
	(60.3 cm)	(18.3 cm)	(11.8 cm)	(27.1 cm)	(8.2 cm)	(32.9 cm)

### **Replacement Lamps**

Ordering Code	Туре	Voltage
570.0016-L	Mini tungsten (MT9W)	6V - 9W
570.0025-L	Mini tungsten (MT9W)	12V - 9W
570.0045-L	Mini tungsten (MT9W)	24V - 9W

For the complete list, please see the lamp chart on page 196 to 199.

Continue >>

### **RGS-TB Battery Unit**

6, 12 and 24 volts T-Bar Units



### **Typical Specification**

Supply and install a complete emergency lighting system as described herein and shown on the drawings.

The Lumacell Smart Diagnostic Micro controller board shall supply the rated load for a minimum of a 1/2 hour to 87.5% of the rated battery voltage. The unit shall be rated 120V or 347V, 60 Hz and be CSA listed. The unit shall have an output of \_\_\_\_\_\_ volts.

The charger shall be fully computer tested and its charge voltage factory set to  $\pm$  1% tolerance. Chargers with field-adjusted potentiometers are not acceptable. A pulse-type charger shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide a continuous high charge to recharge the battery, when the battery is at full capacity, the charger will shut-off. Periodically the charger shall provide a pulse of energy to keep the battery topped off. The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit, which will connect the battery when the AC

circuit is activated, and an electronic brownout circuit, which will activate the emergency lights when utility power dips below 75% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the battery from the fused output circuit at the end of discharge. The 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 capable of full recharge in compliance with CSA specifications. The unit shall be furnished with sealed dust tight relay, a test switch and seven diagnostic LED indicator lights to continuously monitor the status of the unit: Battery Failure, Battery Disconnected, Charger Failure, Lamp Failure, Service Alarm, AC "ON", Charger High Rate. The unit shall be T-bar mounted and come complete with tool-less emergency lighting heads requiring no tools to adjust or aim.

The unit shall be Lumacell model:



regular head



Single, metal head

Project/Location			Date
Contractor		Prepared by	
LUMACELL Model			



## **RGS\*TB SERIES**

### Power Consumption and Unit Rating

Model	AC Specs		30min	Watt	age Capa <sup>1h30</sup>	acity <sup>2h00</sup>	4h00
RG36TB           RG72TB           RG108TB           RG180TB           RG12S36TB           RG12S72TB           RG12S100TB           RG12S144TB           RG12S200TB           RG12S144TB	120/347 Vac.	0.10/0.04 Amp 0.22/0.08 Amp 0.22/0.08 Amp 0.09/0.03 Amp 0.15/0.06 Amp 0.34/0.12 Amp 0.40/0.14 Amp 0.41/0.14 Amp 0.55/0.20 Amp	36 72 108 180 36 72 100 144 200 144	21 42 63 105 21 42 58 84 117 84	15 30 45 75 15 30 42 60 83 60	12 24 36 60 12 24 33 48 67 48	6 12 18 30 6 12 17 24 33 24
RG24S288TB		0.67/0.23 Amp	288	168	120	96	48

### Ordering Information

Series	Capacity Cabinet Size	Housing	# of heads	Head Style Lamp Wattage	Colour	AC Voltage	Options
12 volts RG24S=	36= 36 watts (P)* 72= 72 watts (P)* 108= 108 watts (P)* 36= 36 watts (P)* 72= 72 watts (P)* 100= 100 watts (P)* 144= 144 watts (P)* 200= 200 watts (G)* 220= 220 watts (G)* 144= 144 watts (G)* 288= 288 watts (G)*	TB= T-Bar	Blank= no head 1= one head 2= two heads 3= three heads	MT9W= mini-tungsten, 6V, 12V, 24V, 9W, wedge base MT18W= mini-tungsten, 12V, 24V, 18W, wedge base MQ8W= mini-halogen, 6V, 12V, 8W, quartz bi-pin MQ12W= mini-halogen, 6V, 12V, 24V, 12W, quartz bi-pin LH9W= tungsten, 6V, 12V, 24V, 9W, wedge base LH18W= tungsten, 12V, 24V, 18W, wedge base LH2SW= tungsten, 6V, 12V, 24V, 25W, DCB LHQ8W= halogen, 6V, 12V, 24V, 25W, DCB LHQ2W= halogen, 6V, 12V, 12W, quartz bi-pin LHQ12W= halogen, 6V, 12V, 24V, 20W, quartz bi-pin LHQ55W= halogen, 12V, 55W*, quartz bi-pin LHQ55W= halogen, 24V, 70W**, quartz bi-pin MQM6W= mini-halogen, 6V, 10W, MR16 MQM10W= mini-halogen, 6V, 10W, MR16 SB9W= tungsten, 6V, 9W, sealed beam SB18W= tungsten, 6V, 12V, 28W, quartz sealed beam QSB2W= halogen, 6V, 12V, 28W, quartz sealed beam QSB20W= halogen, 6V, 12V, 28W, quartz sealed beam QSB20W= halogen, 6V, 12V, 24V, 20W, MR16 DR13020W= mini deco, halogène, 12V, 24V, 12W, MR16 DR13050W= mini deco, halogène, 12V, 24V, 35W, MR16*** DR13050W= mini deco, halogen, 12V, 24V,	Blank= factory white BK= black *PW= polar white	Blank= 120/347 Vac input ZB= 240 Vac input ZC= 277	Blank= no option A= ammeter AT = Auto-Test ATN= Auto-Test non-audible CT = cabtire DPF6= 6cct. fuse panel LC = line cord (120V only) LD = lamp disconnect. *NEX = NEXUS® system interface (for 6V & 12V units only) RRT = remote test reciever TD = time delay TL = Twistlock plug TMBB = a.c./d.c. terminal block TMBD= d.c. terminal block TMBK = a.c. terminal block V = voltmeter **HHC= remote test transmitter
	*Cabinet size is not part of the ordering information.			50W, MR16***	*With DR head only.		*Not all options available with NEXUS®. Contact your sales representative. **One per order.

### Q-BIC RGS-QB Battery Unit

6, 12 and 24 volts, thermoplastic cube units



#### Features

- Impact-resistant steel center cabinet contains the battery and charger
- Frosted, thermoplastic light cubes protect light modules against vandalism while providing visual masking and light diffusion
- Units can be wall or ceiling mounted
- Choice of lamps include mini tungsten wedge base, mini halogen quartz bi-pin and halogen MR16
- Maintenance-free, sealed lead calcium battery
- 120/347Vac standard input
- Fully automatic, solid-state charger with low voltage battery disconnect, brownout protection, integral test switch and LED AC-On pilot lights
- Also available as a remote fixture; see Remote Fixtures section of this catalogue
- CSA C22.2 No. 141 certified





### Typical Specification

Supply and install a complete emergency lighting system as described herein and shown on the drawings.

The Lumacell Smart Diagnostic micro-controller board shall supply the rated load for a minimum of a 1/2 hour to 87.5% of the rated battery voltage. The unit shall be rated 120V or 347V, 60 Hz and be CSA listed.

The unit shall have an output of \_\_\_\_\_\_ volts.

The charger shall be fully computer tested and its charge voltage factory set to  $\pm$  1% tolerance. Chargers with field-adjusted potentiometers are not acceptable. A pulse-type charger shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide a continuous high charge to recharge the battery, when the battery is at full capacity, the charger will shut-off. Periodically the charger shall provide a pulse of energy to keep the battery topped off. The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected. The unit shall be furnished with an electronic lockout

#### In the same family...

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#### SURFACE MOUNTED

Remote Fixture p. 182 - 183

circuit, which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency heads when utility power dips below 75% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the battery from the fused output circuit at the end of discharge. The 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 capable of full recharge in compliance with CSA specifications. The unit shall be furnished with a sealed, dust-tight relay, a test switch and diagnostic LED indicator lights to continuously monitor the status of the unit: Battery Failure, Battery Disconnected, Charger Failure, Lamp Failure, Service Alarm, AC -"ON", Charger High Rate. The unit shall come complete with fully adjustable 12V or 24V/12 watts or 20 watts quartz halogen lamps. Each lamp shall be housed in an impact-resistant polycarbonate cube. The cube lens shall be frosted to diffuse light.

The unit shall be Lumacell model:

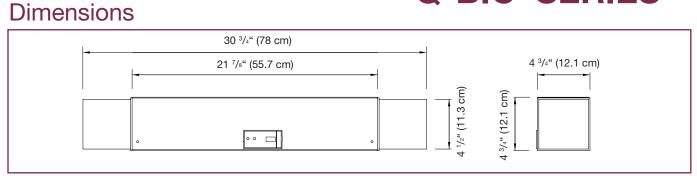
Project/Location	Date		
Contractor	Prepared by		
LUMACELL Model			

#### Wire Guard

460.0097-L Wall or Ceiling Mount

### **Q\*BIC SERIES**

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### Power Consumption and Unit Rating

Model	AC S	Wattage Capacity					
		30min	1h00	1h30	2h00	4h00	
RG36QB		0.10/0.04 Amp	36	21	15	12	6
RG72QB		0.22/0.08 Amp	72	42	30	24	12
RG108QB		0.22/0.08 Amp	108	63	45	36	18
RG180QB		0.22/0.08 Amp	180	105	75	60	30
RG1236QB	120/347 Vac	0.10/0.04 Amp	36	21	15	12	6
RG1272QB	120/347 Vac	0.15/0.06 Amp	72	42	30	24	12
RG12144QB		0.41/0.14 Amp	144	84	60	48	24
RG12200QB		0.41/0.14 Amp	200	117	83	67	33
RG24144QB	1	0.55/0.20 Amp	144	84	60	48	24
RG24288QB		0.67/0.23 Amp	288	168	120	96	48

### Replacement Lamps

Ordering Code	Lamp Type	Voltage
570.0016-L	Mini tungsten	6V - 9W
570.0025-L	Mini tungsten	12V - 9W
570.0045-L	Mini tungsten	24V - 9W

For the complete list, please see the lamp chart on page 196 to 199.

### **Ordering Information**

Series	Capacity	Housing	AC Voltage	# of Lamps	Lamp style/Wattage	Options
RG=	<b>36=</b> 36 watts	QB=	Blank=	2=	<b>9W=</b> mini tungsten, 6V, 12V, 24V, 9W,	Blank= no options
6 volts	<b>72=</b> 72 watts	Q-Bic	120/347 Vac input	two	wedge base	AT= Auto-Test
	108= 108 watts		ZB=	lamps	18W= mini tungsten, 12V, 24V, 18W,	*ATN= Auto-Test non-audible
	<b>144=</b> 144 watts		240 Vac input		wedge base	CT= cabtire
	<b>180=</b> 180 watts		ZC=		<b>8W=</b> mini halogen, 6V, 12V, 8W,	LC= line cord (120V only.)
RG12=	<b>36=</b> 36 watts		277 Vac input		quartz bi-pin	LD= lamp disconnect
12 volts	72= 72 watts		<b>ZE=</b> 220 Vac,		<b>12W=</b> mini halogen, 6V, 12V, 12W,	**RRT= remote test receiver
	<b>144=</b> 144 watts		50 Hz input		quartz bi-pin	TD= time delay
	<b>200=</b> 200 watts				<b>20W=</b> mini halogen, 6V, 12V, 24V, 20W,	TL= twistlock plug
	288= 288 watts				quartz bi-pin	TMBK= ac terminal bloc
RG24=	144= 144 watts	1			M6W= mini halogen, 6V, 6W, MR16	TP= tamper-proof screws
24 volts	288= 288 watts				M10W= mini halogen, 6V, 10W, MR16	***HHC= remote test transmitter
					M12W= mini halogen, 12V, 12W, MR16	***990.0119-L= tamper-proof bit
					M20W= mini halogen, 12V, 24V, 20W, MR16	NEX= NEXUS <sup>®</sup> system interface
					M35W= mini halogen, 12V, 24V, 35W, MR16	*Not available for 6V-72W, 12V-144W, 200W. **Remote transmitter needed.
					<b>M50W=</b> mini halogen, 12V, 24V, 50W, MR16	***One per order
EXA	MPLE: R	<b>G36</b>	QB29W			

#### www.lumacell.com

### **IPL** Series

IP65 linear fluorescent fixture

# **Second Second**

### Features

- IP65 rated
- Polycarbonate enclosure and lens, vandal resistant and UV stabilized
- Rust-proof hardware
- Ceiling, surface or pendant mounting
- Low profile, less than 4" deep
- Ultra efficient specular reflector with optimized shape
- 32W T8 or 54W T5HO
- 90 minutes of emergency operation when installed with our RSFSP or AM inverters

### **Typical Specification**

Supply and install Lumacell IPL Series of fluorescent fixtures as specified. The luminaire shall operate from 120Vac to 277Vac and use high quality instant start or 3-step programmed rapide start high efficiency electronic ballasts.

The housing and lens shall be constructed of UVindustrial stabilized arade vandal-resistant polycarbonate. A durable formed gasket shall be provided between the enclosure and the lens and shall be designed specifically for hostile environments. The reflector shall be made of highly specular material and formed to maximize light output efficiency. All parts shall be corrosion resistant. A metal plate used to retain the ballast and reflector also serves to dissipate heat, therfore lengthening ballast life.

- Emergency operation from external low voltage DC power source when installed with our RSF Series inverters
- Certified for AC or DC, 120Voperation
- High efficiency and reliable electronic ballast, instant start or 3-step programmed rapid start
- 120 Vac to 277 Vac universal and 347 Vac input voltage available
- CSA certified to CAN/CSA-E60598-1:02
- Certified for wet and damp locations

Lamps shall be as specified, either T8 or T5 HO linear fluorescent lamps, 32W or 54W. The lamps shall not be supplied with the luminaire. Models with an inverter from the RSFSP/AM series and illuminate one or two lamps during emergency operation for at least 90 minutes upon AC failure. During power outage, dual voltage source (AC/DC) models with an inverter from RSF series, shall illuminate one lamp while the DC voltage is present.

The fixture shall be CSA approved and meet IP65 requirements.

The inverters of RSF Series shall be CSA approved.

The inverters of RSFSP/AM Series shall be CSA or cUL approved.

The fixture shall be Lumacell model:

Project/Location	Date	
Contractor	Prepared by	
LUMACELL Model		

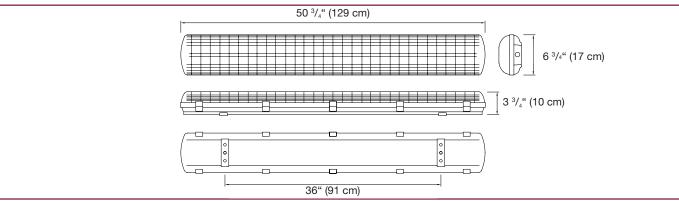


**IPL SERIES** 

### Wire Guard

460.0105-L Wall or Ceiling Mount

### Dimensions



### **Power Consumption**

Model	AC Specs				
IPL8	120/277 Vac	0.54/0.23 Amp	PF > 0.9		
IPL83	347 Vac	0.19 Amp	PF > 0.9		
IPL5	120/277 Vac	1.03/0.143 Amp	PF > 0.9		
IPL53	347 Vac	0.35 Amp	PF > 0.9		

### **Ordering Information**

Series	Lamp Type*	AC Voltage	Accessories		
IPL=	<b>8=</b> 2x lamps	Blank= AC only	Blank= no accessories		
48" (122cm)	32 watts T8	120/277 Vac	Self-powered, one lamp emergency		
linier fluorescent	<b>5=</b> 2x lamps	3= AC only 347 Vac	AM32-L= inverter for IPL8 (complete code	= IPL8AM32-L)	
	54 watts T5HO**	DC=	RSFSP/U/1100= inverter for IPL83 (comple	te code= IPL8RSFSP/U/1100)	
		120/277Vac/Vdc	AM12= inverter for IPL5 (complete code=	IPL5AM12)	
			Self-powered, two lamps emergency		
			AM7= inverter for IPL8 (complete code= IF	PL8AM7)	
			RSFSP/U/1100= inverter for IPL83 (comple	te code= IPL8-3 RSFSP/U/1100)	
			Two lamps model not av	ailable for T5 bulb (IPL5)	
			AC/DC option, using a remote battery, one lamp only in emergency mode:		
			<b>RSF3200=</b> 6 volts, 120Vac		
			<b>RSF3200ZD=</b> 6 volts, 347Vac		
			<b>RSF123200=</b> 12 volts, 120Vac		
			RSF123200ZD= 12 volts, 347Vac		
			<b>RSF243200=</b> 24 volts, 120Vac		
			RSF243200ZD= 24 volts, 347Vac		
			RSF323200= 32 volts, 120Vac		
			RSF323200ZD= 32 volts, 347Vac For more information on the RSF		
			RSF483200= 48 volts, 120Vac Series, please refer pages 156 to		
	*Lamps not included **Consult your sales		RSF483200ZD= 48 volts, 347Vac 157 in this catalogue.		
	representative for DC		RSF1203200= 120 volts, 120Vac		
	operation.		RSF2103200ZD= 120 volts, 347Vac.		

#### **EXAMPLE: IPL8**

### **SIPL Series**

# Sturdy construction, easy installation, wet location fluorescent fixture in 2' version



### Features

- Normally On fluorescent fixture
- IP65 rated
- Polycarbonate enclosure and lens, vandal resistant and UV stabilized
- Rust proof hardware
- Ceiling, surface or pendant mounting
- Low profile, less than 4" deep
- Ultra efficient specular reflector with optimized shape

- 17W T8 or 24W T5HO
- High efficiency and reliable electronic ballast
- 120Vac to 277Vac universal and 347Vac input voltage available
- CSA certified to CAN/CSA-E60598-1:02
- Certified for wet and damp locations
- Certified for AC or DC, 120V operations



### **Typical Specification**

Supply and install Lumacell SIPL Series of fluorescent fixtures as specified.

The luminaire shall operate from 120Vac to 277Vac or 347Vac and use high quality instant start or 3-step programmed rapid start high efficiency electronic ballasts.

The body and lens shall be constructed of UV stabilized industrial grade vandal resistant polycarbonate. A durable formed gasket shall be provided between the enclosure and the lens and shall be designed specifically for hostile environments. The reflector shall be made of highly specular material and formed to maximize light output efficiency. All parts shall be corrosion resistant. A metal plate used to retain the ballast and reflector also serves to dissipate heat, therefore lengthening ballast life.

Lamps shall be as specified, either T8 or T5 HO linear fluorescent lamps, 17W or 24W. The lamps shall not be supplied with the luminaire.

Models with an inverter from the RSFSP/AM series will illuminate one or two lamps during emergency operation for at least 90 minutes upon AC failure. During power outage, dual voltage source (AC/DC) models with an inverter from the RSF series, shall illuminate one lamp while the DC voltage is present.

The fixture shall be CSA approved and meet IP65 designation requirements. The inverters of RSF series shall be CSA approved. The inverters of the RSFSP/AM series shall be CSA or cUL approved.

The fixture shall be Lumacell Model:

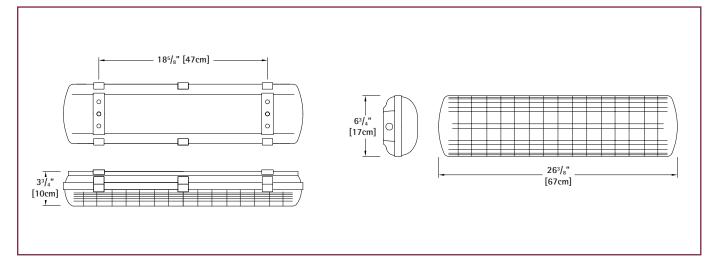
Project/Location	Date		
Contractor	Prepared by		
LUMACELL Model			



### Wire Guard

## SIPL SERIES

### Dimensions



### Input Rating

Unit #	Input	Current	
SIPL8	120 - 277/347Vac	0.47/0.20/0.1A	
SIFLO	120Vdc	0.3A	
SIPL5	120-277/347Vac	0.5/0.22A	

### **Ordering Information**

Series	Lamp Type*	Voltage
SIPL= Vapour Proof 24"	8= 2 F17T8 17W T8 lamps	Blank= 120/277Vac
	5= 2 T5HO 24W T5 lamps**	<b>3</b> = Ac only 347Vac
		<b>DC</b> = 120/277Vac/Vdc
	* Lamps not included	
	** Consult your sales representative	
	for DC operation	

#### **EXAMPLE: SIPL8**

### **SIGNATURE Recessed Pot-Lites**

### **Decorative Recessed Fixture**



### Features

- Durable, powder-coated or electro plated die-cast construction
- Maintenance-free, sealed nickel cadmium battery has a life expectancy of five years
- Quick disconnect feature for easy trim installation; easy to access for maintenance
- Fully automatic, solid-state Pulse-Guard charger with low voltage battery disconnect, brownout protection, integral test switch and long-life LED AC-On pilot lights
- Charger is designed for NiCad continuous trickle charge and is reverse polarity protected
- 120/347Vac standard input
- CSA C22.2 No. 141 certified



### **Typical Specification**

#### **Recessed heads and housings:**

The contractor will supply and install Lumacell Signature Collection<sup>™</sup> internally self-powered series. The unit will have a dual input 120/347Vac 60Hz. Recessed heads will be constructed of a durable powder coated, or electro plated die cast aluminum construction and use MR16 halogen light sources and a 5 year NiCad battery.

The recessed head will be adjustable to 0-90° vertical and 0-350° horizontal angle. The light source will be 6 volts 6 watts MR16 halogen narrow beam or otherwise specified. The unit shall be equipped with a sealed, high-temperature Ni-Cad battery which will supply the emergency lamp for minimum 30 minutes of illumination in case of power failure.

The unit shall be Lumacell model:

### In the same family...



Remote Fixture p. 186 - 187

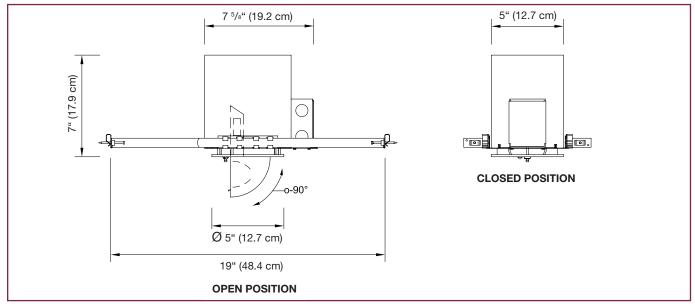
www.lumacell.com

Project/Location	Date	
Contractor	Prepared by	
LUMACELL Model		



## SIGNATURE SERIES

## Dimensions



## Power Consumption and Unit Rating

Model AC		Specs	Wattage Capacity				
Weder		peoo	30min	1h00	1h30	2h00	4h00
RSTH24	120/347 Vac	0.08/0.03 Amp	10	-	6	-	-

## **Replacement Lamps**

Ordering Code	Lamp Type	Voltage-Wattage
580.0074-L	MR16	6V-6W
580.0079-L	MR16	6V-10W

## **Ordering Information**

Series	Colour	Standard	Lamp Wattage
RSTH24	WH= white	SP-C= self-powered	Blank= 6 watts, MR16
	<b>BK</b> = black		-10= 10 watts, MR16
	BN= brushed nickel		
	CH= chrome		
	PB= polished brass		

#### **EXAMPLE: RSTH24WHSP-C**

## NITE OWL Battery Unit

## Thermoplastic



### Features

- Injection-molded thermoplastic housing
- Innovative, snap together design allows for fast installation
- Replaceable lead-calcium ( 6v 4.5AH ) battery
- Universal 120/347 AC input
- Two adjustable glare free light heads

- Uses halogen MR16 lamps with front glass cover
- CSA C22.2 No. 141 certified
- Test switch and charge rate indicators
- Standard model comes with two 5.4 watts MR16 heads
- Emergency mode: min. 90 minutes



## **Typical Specification**

The Contractor will install the Lumacell NH362MH Battery unit. The emergency lighting system shall consist of fully automatic equipment with 2 MR16 glare free halogen heads. Each unit shall contain a fully automatic, solid state charger with test switch and AC on pilot lights. The unit shall contain a sealed transfer circuit and low voltage disconnect circuit. The battery shall be 6 volts with a capacity of 29 watts for 30 minutes.

The unit shall be CSA C22.2 no 141.

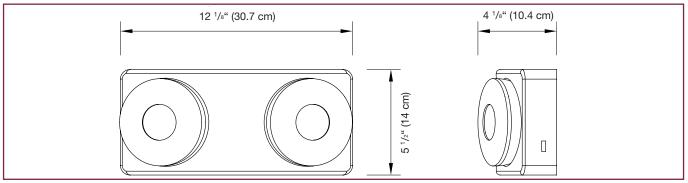
The unit shall be Lumacell model:

Project/Location		Date	
Contractor	Prepared by		
LUMACELL Model			



## NITE OWL SERIES

## Dimensions



## Wire Guard

460.0100-L Wall or Ceiling Mount

## Power Consumption and Unit Rating

Model		AC Specs		DC S	Specs
NH362MH	120/347V a.c.	0.06/0.03 Amp	Less than 6W	6V - 10.8W	Min. 90 minutes
NH362MH-10W	120/347V a.c.	0.06/0.03 Amp	Less than 6W	6V - 20W	Min. 30 minutes

## **Replacement Lamps**

Ordering Code	Lamp Type	Voltage-Wattage
580.0072-L	MR16	6V-5W
580.0079-L	MR16	6V-10W

## **Ordering Information**

Series	Unit Capacity	AC Voltage	# of Lamps/Type	Options
NH	<b>36=</b> 6V - 29W	<b>Blank=</b> 120/347 Vac	<b>2MH=</b> two 5.4 watts MR16 lamps (standard)	Blank= no options -10W= 10Watts MR16 lamps

#### EXAMPLE: NH362MH

## **PRISM Battery Unit**

## Rapid installation, decorative thermoplastic



#### Features

- Impact-resistant thermoplastic construction
- Pre-wired AC Quick connect plug for fast and easy installation
- Wall or ceiling mount
- 6 volts, 7.2 watts high-intensity, wedge-based lamps
- 120Vac standard input

- Fully automatic, solid-state charger with low voltage battery disconnect, brownout protection, integral test switch and long-life LED AC-On pilot lights
- Instantaneous transfer
- Maintenance-free, sealed lead calcium battery with life expectancy of 5 years
- CSA C22.2 No. 141 certified



## **Typical Specification**

The contractor will install the Lumacell Prism<sup>™</sup> RZ Series battery unit. The emergency lighting system shall consist of fully automatic equipment with two 7.2 watts emergency lighting lamps. Each unit shall contain a fully automatic, solid-state charger with test switch and AC-on pilot lights. The unit shall contain a sealed transfer circuit and low-voltage disconnect circuit. The battery shall be 6 volts with design life of 5 years with a capacity of \_\_\_\_ watts for 30 minutes. The unit shall be CSA C22.2 no 141.

The unit shall be Lumacell model:

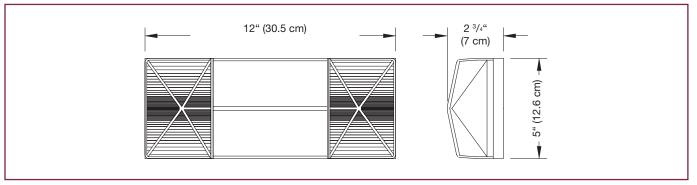
Project/Location		Date
Contractor	Prepared by	
LUMACELL Model		

### Wire Guard

460.0100-L Wall or Ceiling Mo
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## **PRISM RZ SERIES**

## Dimensions



## Power Consumption and Unit Rating

Model	AC Specs			Watt	age Cap	acity	
luiodei			30min	1h00	1h30	2h00	4h00
RZ4	120/347 Vac	0.06/0.02.4mp	18	10	7	6	-
n2 <del>4</del>	120/347 Vac	0,06/0.02 Amp	29	17	12	10	-

## **Replacement Lamp**

Ordering Code	Lamp Type	Voltage-Wattage
570.0012	Tungsten, wedge base	6V - 5.4W

## **Ordering Information**

Series	Unit Capacity	AC Voltage	Options
RZ4	<b>6V=</b> 6V - 29W	Blank= 120/347 Vac	Blank= no options LC= line cord (120V only) *One bit needed per order.

#### EXAMPLE: RZ46V

## **RGS-DT Battery Unit**

## 6, 12 and 24 volts, NEMA-12 classified



#### Harsh environment emergency lighting unitssteel, thermoplastic or fiberglass cabinets

The **RGS-DT** Series battery units are specifically designed for use in industrial facilities where equipment is exposed to dust, water, oil or corrosive substances. NEMA-12 classified to protect circuitry fromharmful dust or liquid sprays, sealed and gasketed unit cabinets are available in steel, thermoplastic or fiberglass in a variety of sizes.



### Features

- Solid-state pulse-type charger current-limited, temperature-compensated, short-circuit proof and reverse-polarity protected.
- Unit comes standard with electronic lockout and brownout circuits
- Sealed dust-proof transfer relay, test switch and LED indicator lights
- Long-life, maintenance-free sealed lead acid battery

- Wide range of lampheads available
   Consult Ordering Information for complete list
- Standard 120/347Vac input voltage with line cord kit
- NEXUS<sup>®</sup> compatible (for more information on NEXUS<sup>®</sup>, please consult the factory)
- CSA C22.2 No. 141 certified

Project/Location			Date
Contractor		Prepared by	
LUMACELL Model			

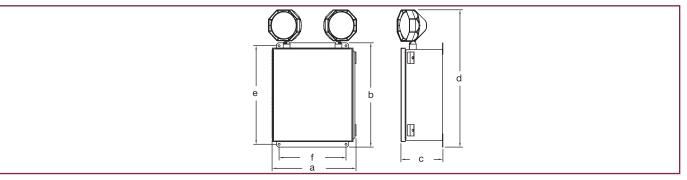


## **RGS\*DT SERIES**

## Wire Guard

460.0034-L Wall Mount

## Dimensions



Cabinet			Dimensions			
Cabillet	а	b	С	d	е	f
Thermoplastic Cabinet – size 1	11 <sup>5</sup> / <sub>8</sub> " (29.5 cm)	13 " (32.9 cm)	5 " (12.7 cm)	18 ¹/₄ " (46.4 cm)	13 ³/₄ " (35.0 cm)	8 " (20.3 cm)
Fiberglass Cabinet – size 2	11 ³/8 " (29.0 cm)	13 <sup>1</sup> / <sub>2</sub> " (34.4 cm)	5 <sup>1</sup> / <sub>4</sub> " (13.2 cm)	18 <sup>7</sup> / <sub>8</sub> " (47.9 cm)	13 <sup>1</sup> / <sub>2</sub> " (34.3 cm)	8 <sup>1</sup> / <sub>8</sub> " (20.5 cm)
Fiberglass Cabinet – size 3	13 <sup>1</sup> / <sub>2</sub> " (34.3 cm)	15 <sup>1</sup> / <sub>2</sub> " (39.4 cm)	6 <sup>1</sup> / <sub>4</sub> " (15.9 cm)	20 <sup>7</sup> / <sub>8</sub> " (52.9 cm)	-	-
Fiberglass Cabinet – size 4	17 <sup>5</sup> / <sub>8</sub> " (44.7 cm)	19 <sup>5</sup> /₃ " (49.8 cm)	8 <sup>7</sup> / <sub>8</sub> " (22.4 cm)	25 " (63.5 cm)	-	-
Steel Cabinet – size 5	10 ³/₄ " (27.4 cm)	13 <sup>7</sup> / <sub>16</sub> " (34.1 cm)	5 1/4 " (13.4 cm)	18 <sup>1</sup> / <sub>2</sub> " (47.1 cm)	12 <sup>5</sup> / <sub>8</sub> " (32.0 cm)	9 " (22.7 cm)
Steel Cabinet – size 6	12 <sup>1</sup> / <sub>2</sub> " (31.9 cm)	15 <sup>5</sup> / <sub>8</sub> " (39.6 cm)	6 <sup>1</sup> / <sub>4</sub> " (15.9 cm)	20 <sup>1</sup> / <sub>2</sub> " (52.1 cm)	14 <sup>3</sup> / <sub>4</sub> " (17.5 cm)	10 " (25.4 cm)

## **Replacement Lamps**

Model	Lampe Type	Voltage
570.0016-L	Tungsten (LH9W)	6V - 9W
570.0025-L	Tungsten (LH9W)	12V - 9W
570.0045-L	Tungsten (LH9W)	24V - 9W

Continue >>

## **RGS-DT Battery Unit**

6, 12 and 24 volts, NEMA-12 classified



### **Typical Specification**

Supply and install a complete emergency lighting system as described herein and shown on the drawings.

The Lumacell Smart Diagnostic Micro controller board shall supply the rated load for a minimum of a 1/2 hour to 87.5% of the rated battery voltage. The unit shall be rated 120V or 347V, 60 Hz and be CSA listed. The unit shall have an output of \_\_\_\_\_ volts.

The charger shall be fully computer tested and its charge voltage factory set to  $\pm 1\%$  tolerance. Chargers with field-adjusted potentiometers are not acceptable. A pulse-type charger shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide a continuous high charge to recharge the battery, when the battery is at full capacity, the charger will shut-off. Periodically the charger shall provide a pulse of energy to keep the battery topped off. The Pulse charge shall be current limited and precisely regulated by a micro-processing circuit, which samples the battery in relation to its temperature, state or charge

and input voltage fluctuations. The charger shall be current limited, temperature compensated, shortcircuit proof and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit. which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency lights when utility power dips below 75% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the battery form the fused output circuit at the end of discharge. The 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 capable of full recharge in compliance with CSA specifications. The unit shall be furnished with sealed dust tight relay, a test switch and diagnostic LED indicator lights to continuously monitor the status of the unit: Battery Failure, Battery Disconnected, Charger Failure, Lamp Failure, Service Alarm, AC "ON", Charger High Rate.

The unit shall be Lumacell model:

Project/Location		Date
Contractor	Prepared by	
LUMACELL Model		



# Power Consumption and Unit Rating RGS\*DT SERIES

Model	ACS	Specs		Watt	age Cap	acity	
		pcoo	30min	1h00	1h30	2ĥ00	4h00
RGS36DT		0.10/0.01.0	00	01	45	10	C
		0.10/0.04 Amp	36	21	15	12	6
RGS72DT		0.22/0.08 Amp	72	42	30	24	12
RGS108DT		0.22/0.08 Amp	108	63	45	36	18
RGS180DT		0.22/0.08 Amp	180	105	75	60	30
RG12S36DT		0.09/0.03 Amp	36	21	15	12	6
RG12S72DT		0.15/0.06 Amp	72	42	30	24	12
RG12S100DT		0.34/0.12 Amp	100	58	42	33	17
RG12S144DT		0.40/0.14 Amp	144	84	60	48	24
RG12S200DT	100/047 \/aa	0.41/0.14 Amp	200	117	83	67	33
RG12S220DT	120/347 Vac	0.41/0.14 Amp	220	120	90	72	36
RG12S250DT		0.41/0.14 Amp	250	144	100	83	42
RG12S360DT		0.43/0.15 Amp	360	210	150	120	60
RG24S144DT		0.55/0.20 Amp	144	84	60	48	24
RG24S288DT		0.67/0.23 Amp	288	168	120	96	48
RG24S350DT		0.67/0.23 Amp	350	200	144	120	60
RG24S432DT		0.67/0.23 Amp	432	250	180	144	72
RG24S550DT		0.88/0.33 Amp	550	320	230	180	90
RG24S720DT		0.88/0.33 Amp	720	420	300	240	120

## **Ordering Information**

Series	Capacity	Housing	# of Heads	Head Style/ Lamp Wattage	A.C. Voltage	Options
<b>RGS</b> = 6V	<b>36</b> = 36 watts	DT= metal	Blank= no head	LH9W= large tungsten , 6V, 12V, 24V - 9 watts, wedge base	Blank= 120/347Vac	A= ammeter
	72= 72 watts	DTF=	1= one head	LH18W= large tungsten, 12V, 24V - 18 watts, wedge base	input	AT= autotest
	108= 108 watts	thermoplastic	2= two heads	LH25W= large tungsten, 6V, 12V, 24V - 25 watts, DCB	ZB= 240Vac input	CT= cabtire
	180= 180 watts	DTFG= fiberglass		LHQ8W= large halogen, 6V, 12V - 8 watts,quartz bi-pin	ZC= 277Vac input	DPF6= 6cct. fuse panel
RG12S= 12V	<b>36</b> = 36 watts			LHQ12W= large halogen, 6V, 12V - 12 watts, quartz bi-pin	<b>ZE</b> = 220Vac, 50hz	HHC= remote test transmitter*
	72= 72 watts			LHQ20W= large halogen, 6V, 12V, 24V - 20 watts, quartz bi-pin	input	HTR= heater & thermostat
	100= 100 watts	1		LHQ55W= large halogen, 12V - 55 watts, quartz bi-pin		LC= line cord
	144= 144 watts			LHQ70W= large halogen, 24V - 70 watts, quartz bi-pin		LD= lamp disconnect
	200= 200 watts	1		SB9W= large tungsten, 6V - 9 watts, sealed beam		LTS= light activated test switch
	250= 250 watts	1		SB18W= large tungsten, 6V, 12V - 18 watts, sealed beam		NEX= NEXUS system interface
	360= 360 watts	1		SB25W= large tungsten, 6V, 12V, - 25 watts, sealed beam		(6 &12V only)
RG24S= 24V	144= 144 watts			QSB8W= large halogen, 6V, 12V - 8 watts, quartz sealed beam		RRT= remote test receiver**
	288= 288 watts	1		QSB12W= large halogen, 6V, 12V - 12 watts, quartz sealed beam		TC= teflon coated lens
	350= 350 watts	1		QSB20W= large halogen, 6V - 20 watts, quartz sealed beam		TD= time delay (programmable)
	432= 432 watts	1		RB9W= large rubber tungsten, 6V, - 9 watts, sealed beam		TL= twist lock plug
	550= 550 watts	1		RB18W= large rubber tungsten, 6V, 12V - 18 watts, sealed beam		TMBB= AC/DC terminal block
	720= 720 watts	1		RB25W= largerubber tungsten, 6V, 12V, - 25 watts, sealed beam		TMBD= DC terminal block
		1		RBQ8W= large rubber halogen, 6V, 12V - 8 watts, quartz sealed beam		TMBK= AC terminal block
				RBQ12W= large rubber halogen, 6V, 12V - 12 watts, quartz sealed beam		V= voltmeter
	* Cabinet size is not part of the ordering			RBQ20W= large rubber halogen, 6V - 20 watts, quartz sealed beam		ATN= non-audible
	information.					* One per order.
						** Remote test transmitter needed.

#### EXAMPLE: RGS36DT2LH9W

## **RG\*HZ** Series

## Hazardous Locations Battery Unit



#### Features

- Certified Class I Division 2, Groups A, B, C and D as per CSA C22.2 No.137-M19811
- Certified Class I Zone 2, Group IIA, B and C
- Certified temperature Codes for several types of emergency lamps
- Suited for areas with the risk of flammable gases, vapors or liquids that can create an explosive atmosphere
- Certified CSA C22.2 No141
- Polymeric frame, with built-in gasket to prevent water infiltration

- Heavy-duty 1/8-inch thick aluminum back plate with key-holes for secure wall-mount installation
- Two MR16 halogen lamps, shielded by a cast Aluminum housing and a polycarbonate cover
- Sealed, maintenance-free, Lead-Calcium batteries with up to 120W emergency power
- Built-in microcontroller-based battery charger and self-test/self-diagnostic circuitry
- ½-inch electrical conduit entry on both sides and at the top



## **Typical Specification**

Supply and install Lumacell RG-HZ Series of battery units. Designed specifically for hostile environments, the equipment frame shall be of industrial grade polymeric metal with gaskets around both sides of the frame contour. The frame shall be fixed between two plates made of 1/8-inch thick aluminum sheet. The back plate shall include four keyholes for wallmount installation. The front plate shall include two water-tight lenses for pilot lights: AC-on and "Service required". When specified, the equipment shall have attached a lower compartment containing two emergency lights with adjustable swivels and MR-16 halogen lamps. The lamps shall be shielded by cast aluminum housing and protected by a shockabsorbent, transparent polycarbonate cover. The equipment shall be certified for Hazardous Locations: Class I Division 2 Groups A, B, C and D. The standard equipment shall have a dual AC input voltage: 120/347Vac and shall be equipped with a magnetic test switch located on the left side of the frame.

The unit shall include self-testing/self-diagnostic functions monitored 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. The "Service required" LED shall light when a fault is detected. A four-LED diagnostic display located inside the equipment shall identify the source of the failure (battery, charger circuitry, lamp load).

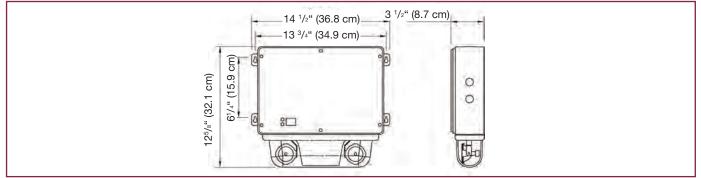
The battery unit shall be Lumacell model:

Project/Location		Date
Contractor	Prepared by	
LUMACELL Model		



## **RG\*HZ SERIES**

## Dimensions



## **Temperature Codes**

Lamp Rating	Temperature Code	Max. Temperature	Replacement part #
6V 10W	T3C	160 °C	580.0079
12V 12W	T3A	180 °C	580.0080
12V 20W	T2D	215 °C	580.0068

Note: Use qualified replacement lamps to avoid risk of over-heating

## Power Consumption and Unit Rating

Model	AC Specs			Wa	ittage Capao	city	
			30 min.	1 hr.	1.5 hrs.	2 hrs.	4 hrs.
RGHZ36	120/347 Vac	0.15/0.06 Amp	36	21	15	12	-
RG12HZ72	120/347 Vac	0.30/0.10 Amp	72	42	30	24	12
RG12HZ120	120/347 Vac	0.30/0.10 Amp	120	70	50	40	20

## Ordering Information

Series	Capacity	# of Heads	Lamps	Colour	A.C. Voltage	Options
RGHZ=	<b>36=</b> 6V-36W	Blank=	M10W=	Blank=	Blank= 120/347vac	AT= auto test,
6 volts	<b>72=</b> 12V-72W	no heads	6V - 10W, MR16	grey, standard	<b>ZC</b> = 277vac	audible
RG12HZ=	<b>120=</b> 12V-120W	2=	M12W=			ATN= auto Test,
12 volts		2 heads	12V - 12W, MR16			non-audible
			M20W=			** NEX= NEXUS®
			12V - 20W, MR16 high			system interface
			output			

#### EXAMPLE: RGHZ362M10WATN

## **RGSW4T Battery Unit**

6 and 12 volts, NEMA-4X classified



### Features

- Fully gasketed fiberglass cabinet with clear polycarbonate cover
- Solid-state pulse-type charger current-limited, temperature-compensated, short-circuit proof and reverse-polarity protected
- Unit comes standard with electronic lockout and brownout circuits
- Sealed dust-proof transfer relay, test switch and LED indicator light(s)
- Long-life, maintenance-free sealed lead acid battery
- Standard 120/347 Vac input voltage with line cord kit
- CSA C22.2 Nº141 certified



## **Typical Specification**

Supply and install a complete emergency lighting system as described herein and shown on the drawing.

The Lumacell Smart Diagnostic Micro-controller board shall supply the rated load for a minimum of a 1/2 hour to 87,5% of the rated battery voltage. Th unit shall be rated dual input voltage 120/347V, 60 Hz and be CSA listed. The unit shall have an output of volts.

The charger shall be fully computer tested and its charge voltage factory set to ± 1% tolerance. Charger potentiometers with field-adjusted are not acceptable. A pulse-type charger shall be employed to promote long battery life and reduce the potencial for a grid corrosion. The charger shall provide a continuous high charge to recharge the battery, when the battery is at full capacity, the charger will shut-off. Periodically the charger shall provide a pulse of energy to keep the battery topped off. The pulse charger shall be current limited and precisely regulated by a micro-controller circuit, which samples the battery in relation to its temperature, state or charge and input voltage fluctuations.

The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit, which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency lights when utility power dips below 75% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the battery from the fused output circuit at the end of discharge. The 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 capable of full recharge in compliance with CSA specifications. The unit shall be furnished with sealed dust tight relay, a test switch and diagnostic LED indicator lights to continuously monitor the status of the unit: Battery Failure, Battery Disconnected, Charger Failure, Lamp Failure, Service Alarm, AC "ON", Charger High Rate. The unit shall be NEMA-4X and suited for water, oil and dust tight applications.

The unit shall be Lumacell model:

Project/Location		Date		
Contractor	Prepared by	Prepared by		
LUMACELL Model				

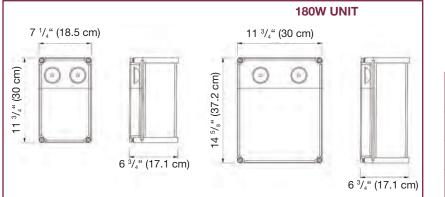


### Wire Guards

460.0082-L	Wall Mount	Small Cabinet
460.0081-L	Wall Mount	Medium and Large Cabinet

## **RGSW4T SERIES**

## Dimensions



## Replacement Lamps

Model	Lamp Type	Voltage
570.0016-L	Tungsten	6V - 72W
580.0013-L	Halogen bi-pin	6V - 8W
580.0015-L	Halogen bi-pin	12V - 12W

## Power Consumption and Unit Rating

Model	AC S	Wattage Capacity           30min         1h00         1h30         2h00         4h0					
RG36W4T		0.10/0.04 Amp	36	21	15	12	6
RG72W4T		0.22/0.08 Amp	72	42	30	24	12
RG108W4T		0.22/0.08 Amp	108	63	45	36	18
RG180W4T	100/247 \/aa	0.22/0.08 Amp	180	105	75	60	30
RG12S36W4T	120/347 Vac	0.09/0.03 Amp	36	21	15	12	6
RG12S72W4T		0.15/0.06 Amp	72	42	30	24	12
RG12S144W4T		0.40/0.14 Amp	144	84	60	48	24
RG12S180TB		0.80/0.33 Amp	180	105	75	60	30

## **Ordering Information**

Series	Capacity	Housing	# of heads	Style/Wattage	AC Voltage	Options		
RGS=	36= 36 watts	W4T=	2= two heads	9W= mini tungsten, 6V, 12V, 9W,	Blank=	AT = Auto-Test		
6 volts	72= 72 watts	NEMA-4X		wedge base	120/347 Vac input	CT= cabtire		
	108= 108 watts			18W= mini tungsten, 12V, 18W, to	ZC= 277 Vac input	HTR= heather &		
	180= 180 watts			wedge base		thermostat		
RG12S=	<b>36</b> = 36 watts			Q8W= mini halogen, 6V, 12V, 8W,		LC= line cord		
12 volts	72= 72 watts			quartz bi-pin		LD= lamp disconnect		
	144= 144 watts			Q12W= mini halogen, 6V, 12V, 12W,		(internal)		
	180= 180 watts			quartz bi-pin		LTS= light activated		
				<b>Q20W=</b> mini halogen, 6V, 12V, 20W,		test switch		
				quartz bi-pin		*RRT= remote test		
						receiver		
						TD= time delay		
						TL=Twistlock plug		
						** <b>HHC=</b> remote test transmitter		
EXEN	/IPLE: RG	S36W4	<b>T29WA</b>	Т		* Remote test transmitter needed. **One per order.		

## RSF & RSFSP

Fluorescent inverters

# **Selumacell**

### Features

- Converts new or exsiting fluorescent fixtures into emergency lighting units
- All RSFSP Series are fully load tested prior to shipment
- Inverter is 100% solid state, short and open circuit proof
- Polarized DC input (RSF Series only)

- 120Vac 60Hz input is standard, 277 and 347 Vac available as options
- 25%, 50% or 80% lamp lumen output
- Mounts directly in ballast channel, remote or optional T-Bar fixture
- CSA listed



## **Typical Specification**

**RSF Series**: The electrical contractor shall supply and install Lumacell RSF Series remote

fluorescent inverter ballasts for each fixture as shown on plans. The inverter shall operate on \_\_\_Vdc input for \_\_\_\_ minutes during a power failure. The fluorescent lamp shall be

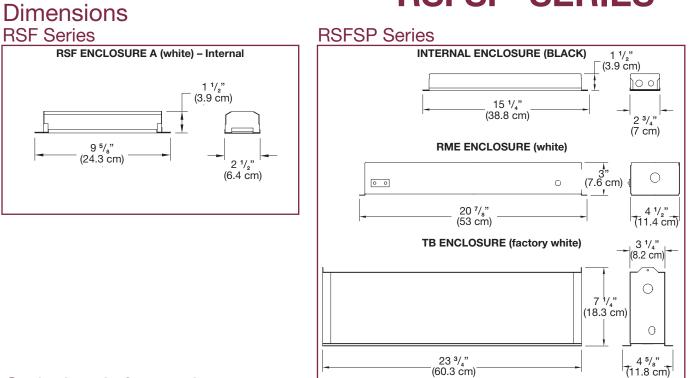
maintained at \_\_\_\_% lumen output for one lamp only. The inverter is to be connected to the

remote battery unit as shown on plans (battery unit to be selected according to voltage/wattage and duration required). The inverter shall be capable of illuminating the fluorescent lamp even when it is burned out under normal AC operation. **RSFSP Series**: The electrical contractor shall supply and install Lumacell RSFSP Series fluorescent inverters for each fixture as shown on plans. The RSFSP Series inverter shall operate for \_\_\_\_\_ minutes during a power failure. The fluorescent lamp shall be maintained at \_\_\_\_\_% of nominal lumen output. The RSFSP Series inverter shall be capable of illuminating the fluorescent lamp even when it is out under normal AC operations.

Project/Location	Date		
Contractor	Prepared by		
LUMACELL Model			



# RSF & RSFSP SERIES



## Ordering Information

**RSF** Series

Series	Lumens / (%) for 48" Tube	AC Voltage
RSF= 6 volts	<b>800=</b> 800 lumens (25%)	Blank= 120 Vac
RSF12= 12 volts	<b>1600=</b> 1600 lumens (50%)	<b>ZC=</b> 277 Vac
RSF24= 24 volts	* <b>3200=</b> 2560 lumens (80%)	<b>ZD</b> = 347 Vac
RSF32= 32 volts		
RSF48= 48 volts		
<b>RSF120=</b> 120 volts	*Not available in 6 volts .	

#### **EXAMPLE: RSF800**

#### RSFSP Series

Series	Lumens / (%) for 48" Tube	Min. Runtime	Enclosure	AC Voltage
RSFSP	800= 800 lumens (25%)	<b>30=</b> 30 minutes	*Blank= internal	Blank= 120 Vac
	1600= 1600 lumens (50%)	<b>60=</b> 60 minutes	RME= remote mounting enclosure	<b>ZC=</b> 277 Vac
	3200= 2560 lumens (80%)	<b>90=</b> 90 minutes	<b>TB=</b> T-Bar	<b>ZD=</b> 347 Vac
		* <b>120=</b> 120 minutes		
		*RSFSP3200 in T-Bar cabinet only.	*Not available for RSFSP3200.	

#### EXAMPLE: RSFSP80030

Lumens outputs based on averages.

```
24" / 20W= 1260
```

48" / 40W= 3200 96" / 75W= 6300

Inverters will operate T12, T8 or "U" type lamps.

## RSFSP/U/1100 Series Fluorescent inverters

Convert fluorescent fixtures into emergency lighting units.



## Features

- Converts new or existing fluorescent fixtures into emergency lighting units
- Each unit is fully computer tested and comes with a 3-year full warranty
- Self-contained in one compact housing for easy installation and maximum mounting flexibility
- Can be wired to operate with switched, unswitched and normally off fixtures without affecting normal operation
- Compatible with standard, energy saving, dimming and electronic AC ballasts
- Maintains operation of one or two lamps when switched to emergency mode
- When AC power is restored, automatically returns the fluorescent lamps to normal operating mode and solid state charger begins recharging the battery
- Sealed maintenance-free nickel cadmium batteries
- CSA listed



## **Typical Specification**

The contractor will supply and install Lumacell model RSFSP/U/1100 self-powered fluorescent emergency inverter as shown on plans. The fluorescent emergency inverter shall contain a charger, high frequency inverter, and sealed nickel cadmium battery designed for high-temperature operation. The unit shall be able to operate one or two fluorescent lamps and provide not less than 1100 lumens initial light output in emergency mode. The duration of emergency backup shall be at least 90 minutes. Standard input voltage shall be 120V/347Vac 60Hz.

The unit shall be Lumacell Model: RSFSP/U/1100

Project / Location			Date	
Contractor		Prepared by		
LUMACELL Model				



## **RSFSP/U/1100**

#### **Dimensions** А в υ Dimensions Catalogue **Electrical Input** Number С А В D RSFSP/U/1100 120/347V 60 Hz 4W 13-3/8" (34.0 cm) 13" (33.0 cm) 2-3/8" (6.0 cm) 1-1/2" (3.8 cm)

## Lamp Operation

RSFSP Series should be used for Octron\* Power Groove\*, VHO and SHO lamps. \*Octron is a registered trademark of Sylvania. \*Power Groove is a registered trademark of G.E.

Unit Type Emergency Illumination Time		Lumens	Lamps Able to Operate	Lamps Operated
RSFSP/U/1100	90	1300 *	2	2 to 4 ' (20 to 40 W)**
	90	1300 *	1	2 to 4 ' (20 to 40 W)**

\*Depending on the number of lamps, wattage, and type of lamps selected: The RSFSP produces 1100 to1300 lumens initial emergency light output. \*\* Voltage maximum: 40W ( 2 x 20W or 1 x 40W)

## **Ordering Information**

Series	Option
RSFSP/U/1100= 1100 lumens for 90 minutes 120/347Vac	R= texternal mounting kit

#### EXAMPLE : RSFSP/U/1100

## Glossary

А	ammeter	Used to measure the current being supplied to the battery while in charge mode.
		Automatically tests and continuously monitors your emergency lighting unit. If a problem occurs, the
		unit will send a visual (flashing or blinking LED indicator) and audible warning. Complies with Fire
AT	Auto-Test	Code requirements.
		Automatically tests and continuously monitors your emergency lighting unit. If a problem accurs, the
		unit will send a visual (flashing or blinking LED indicator) warning. Complies with Fire Code
ATN	Auto-Test, non-audible	requirements.
СТ	Cab-tire	Unit supplied with a cab-tire cable used for special hardwire applications.
CW1	cold weather, 120Vac	120Vac input cold weather protection feature for applications where temperatures can reach -40° C
CW3	cold weather, 347Vac	347Vac input cold weather protection feature for applications where temperatures can reach -40° C $$
DPF6	6cct. Fuse panel	Used to facilitate the connection of multiple input load circuits in high power battery units.
		Used to perform maintenance tests by means of radio transmitter along with a radio receiver (RRT
ннс	remote test transmitter	option) on battery units that are out of reach.
		Like a heatblanket, used to keep internal temperature optimal for battery units that are installed in
HTR	heather & thermostat	cold environments.
		When ordering a battery unit with the LC option, we supply and pre-install a line cord with a standard
		3 prong 120V plug. Just hang the fixture and plug it in to a standard receptacle! Only available on
LC	line cord (120V)	120V units.
		To disconnect the emergency lighting load in an area that is not in use during a prolonged power
LD	lamp disconnect	failure or while area is no longer being occupied.
LS	Laser	Used to remotely test battery units by means of pointing a laser at the battery unit.
		Used to remotely test battery units by pointing a flashlight at a photocell mounted on the bottom of a
lts	light activated test switch	battery unit.
<b>T</b> C	toflen control long	A protective teflon coating that is applied to the glass lens of a lighting fixture to prevent broken
тс	teflon coated lens	shards from falling in the event the glass is accidently broken or vandalised.
		Used to perform maintenance tests by means of radio reciever in conjunction with a transmitter(HHC
RRT	remote test receiver	option) on battery units that are out of reach. Simply point the receiver at the unit.
		The NEXUS system interface is a computerized maintenance system for emergency lighting that,
		once programmed, will perform the tests, keep written records and send notification if anything
		needs to be fixed. One full system can address hundreds of units in as many buildings as you need
NEX	Nexus system interface	from a single location.
		Normally, when the a.c. is restored, all emergency lighting lamps are turned off. However, in some
		cases such as when metal halide lamps are used, it is possible that the general lighting will not be
		availbe for several minutes after the blackout (or brownout) period. Battery units with the T3 option
		will keep some energy in store to ensure that the emergency lighting stays on or comes back on for
Т3	15 minutes time delay	at least 15 minutes once the regular a.c. power has been restored.
TD	time delay (programmable)	Same as the T3 option but can be programmed for 5, 10, 15 or 20 minutes delay.
		Screws that require a special bit. Can be used on certain units to deny access to unauthorized
ТР	tamper proof screws	personnel.
TL	twistlock plug	Used to facilitate the connection and removal of battery units for maintenance purposes.
	a.c./d.c. terminal block	Used to facilitate the connection of large gauge input cables.
	d.c. terminal block	Used to facilitate the connection of large gauge d.c. input cables.
TMBK	a.c. terminal block	Used to facilitate the connection of large gauge a.c. input cables.
V	voltmeter	Indicates voltage being supplied to the battery when in charge mode.

## Remote heads in a few words...



#### **EMERGENCY LIGHTING HEADS:**

#### **PERFORMANCE & TECHNOLOGY**

Emergency Lighting Heads represent a key element of an emergency lighting system performance. During a power failure, these lamp heads must provide adequate lighting levels for the safe evacuation of humans from buildings.

Which level of illumination is necessary to ensure a safe evacuation? Minimum levels are established by the National Building Code of Canada:

"3.2.7.3. Emergency Lighting

- 1- Emergency lighting shall be provided to an average level of illumination not less than 10 lx at floor or tread level
- 2-Emergency lighting to provide an average level of illumination of not less than 10 lx at floor or catwalk level shall be included in a service space referred to in Sentence 3.2.1.1.7).
- 3- The minimum value of the illumination required by Sentences (1) and (2) shall not be less than 1 lx."

During a power failure, the emergency power supply is provided to the heads from batteries. Equipment manufacturers and customers should use high intensity light sources, with efficient light levels and distributions. Let's examine which light sources are used for emergency lighting and which are the best ones?

#### MINIATURE LAMPS: TUNGSTEN AND QUARTZ HALOGEN

Most commonly used emergency heads are fabricated of an injection-molded thermoplastic housing containing a miniature lamp, a metallic reflector and a polycarbonate lens. Lamps use a tungsten filament enclosed in a filling gas mixture of argon and nitrogen and are generally referred to as incandescent lamps.

A better performance is obtained with quartz halogen lamps, which are still incandescent lamps, but the filling gas (iodide/chloride) allows the tungsten filament to operate at higher temperatures. This results in higher luminous intensity, 20 to 30% superior to standard incandescent lamps of same wattage and lamp life.

Table 1 shows a comparison between miniature incandescent lamps and quartz halogen lamps. The luminous intensity is measured in MSCP (mean spherical candle power).

## Remote heads in a few words...



#### TABLE 1

Lamp Type	Application	Voltage (V)	Wattage (W)	Average Life (hrs)	Luminous Intensity (MSCP)	Relative Luminous Intensity
INCANDESCENT	Emergency Lighting	6	12	50	15	100%
HALOGEN	Emergency Lighting	6	12	50	19	127%

You have probably already noticed the short lamp life of these light sources. Who would be interested in using a bulb which only lasts 50 hours? The answer is simple: such a lamp produces 25% to 30% more light than a lamp of the same wattage but longer lamp life (ie. 1,000 hours).

By design, the filament is used at higher temperatures, increasing light output.

However, using high temperatures also increases vaporization of the filament, which in turns shortens its life. As power failures are relatively scarce (let's say 4 to 6 per year) and duration of emergency lighting between 30 minutes to 2 hours, lamp heads are only used between 3 to 12 hours per year. A lamp with an average life of 50 hours should therefore be functional during over four years.

Lamp manufacturers offer two types of miniature lamps : long life and high light output. Table 2 shows a few examples.

#### TABLE 2

Lamp Type	Application	Voltage (V)	Wattage (W)	Average Life (hrs)	Luminous Intensity (MSCP)	Relative Luminous Intensity
	Specialty	12	8	1 000	10	100%
INCANDESCENT	Emergency Lighting	12	8	50	13	130%
	Emergency Lighting	6	8	50	13	130%
HALOGEN	Automobile, Rough Service,	12,8	12,8	1 000	12	100%
	Emergency Lighting	6	12	50	15	120%



#### PAR36 SEALED BEAM LAMPS

Emergency head performance also depends on lamp optics: the reflector and the lens. This is especially critical in damp areas where vapors and water condensation can deteriorate the electrical contacts and the reflector performance.

Sealed beam lamps are recommended for such applications.

Sealed beam lamp construction includes a metal coated glass reflector and a lens, designed to provide a light beam of a certain opening: narrow, medium, large, etc. The most common lamps used are those with a 4.5" diameter (PAR36), available in both incandescent and halogen versions. As for miniature lamps, there are sealed beam lamps dedicated for long life applications (4,000 hours, 7-8 lumens/Watt) and for emergency lighting (50 to 300 hours, 12-20 lumens/Watt).

Originally, lamp life wasn't an issue. However, this has become increasingly important in recent years, with the introduction of sophisticated emergency lighting fixtures with periodic self-test and self-diagnostic features.

Such a system includes a micro-controller board which automatically simulates a power failure and forces the fixture in emergency lighting mode every 30 days for at least 30 seconds and tests both the batteries and the lamps. Even if the duration of the self-test is minimal compared to the lamp life, the repetitive connection and disconnection cycle of the lamps increases the risk of a premature failure caused by the initial high current applied.

#### **MR16 GENERATION**

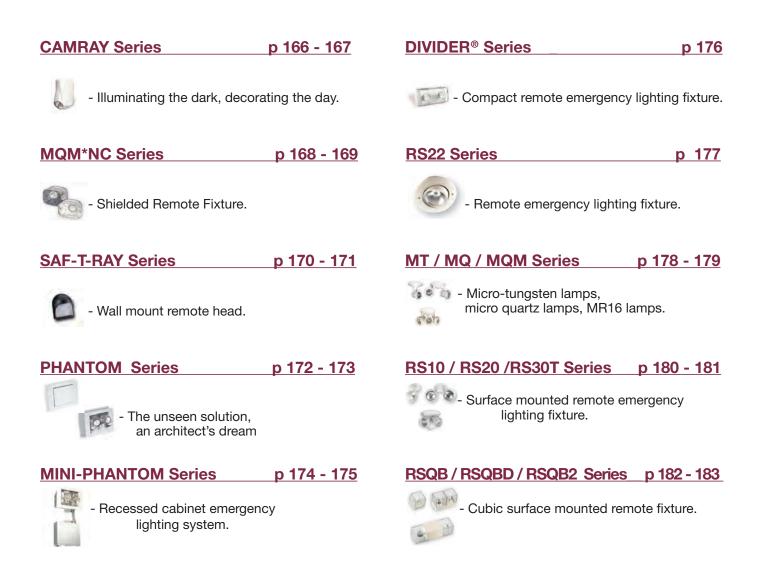
Fortunately, the lamp life issue was resolved with a new generation of lamps: the MR16 technology (MR16 stands for Multi-facetted Reflector, 16/8" diameter). Increasingly popular, the MR16 contains everything in one: miniature halogen lamp, metal coated glass reflector and, for the most part, a glass lens cemented to the reflector. Easy to install, MR16 lamps are popular in both residential and commercial applications, and increasingly specified for emergency lighting. Why?

In addition to their bright directional beam, these lamps offer a good efficacy (11 to 18 lumens/Watt), as well as long life (2,000 to 6,000 hrs). How is this possible?

First, the use of a glass lens which is clear and thin, absorbing much less light than standard diffuser lens, and second: an efficient light distribution, accomplished by the multi-facetted reflector.

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www.lumacell.com



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- NEMA-4X and NSF certified remote fixture.

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- Explosion proof remote lighting fixture.

MQM\*HZ Series

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- Hazardous Class I Div 2 remote fixture.

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- Codes Description

www.lumacell.com

## CAMRAY Remote Fixture Illuminating the dark, decorating the day

# **Solumacell**

## Features

- Suitable for wet and cold locations. (-40°C à +60°C)
- Premium quality die cast body.
- Xenon lamps with patent pending vacuum metallized die cast reflector.
- Suitable for indoor and outdoor applications.
- Fast and easy installation.
- Fully gasketed housing.
- CSA certified to C22.2 N°50.

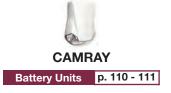


## **Typical Specification**

Supply and install Lumacell Camray remote head. The remote head shall include two lamps of \_\_\_\_\_ Watts. The fixture shall be made of a fully gasketed die cast aluminum housing, a UV stabilized and shock resistant polycarbonate lens, and a rugged vacuum metallized die cast reflector containing two Xenon lamps. The fixture shall be suited for universal mounting on a variety of junction boxes. The remote unit shall be certified to CSA standard C22.2 N $^{\circ}$ . 50.

The remote head shall be Lumacell model: CAM\_\_\_\_\_

## In the same family...



Project / Location		Date	
Contractor	Prepared by	-	
LUMACELL Model			
Wire Guard			CAMRAY
460.0082-L Wall Mount	]		
Dimensions	ed Interview Int		91/2" (24.1cm)
Premium outdoor quality die cast body			Vacuum metallized die cast reflector. The multiple conical section reflector was engineered to create a well defined path of light that will guide

Easy to replace Xenon lamps. Unlike quartz bipin, Xenon lamps can be easily installed using your fingers.

Replacement Lamps

Model	Lamp Type	Voltage-Wattage
570.0213-L	Xenon, wedge base	6V-6W
570.0214-L	Xenon, wedge base	6V-10W

See the complete list p. 196 to 199.

occupants to safety in case of an emergency.

## **Ordering Information**

Series	Lamp Wattage	Colour	Options
CAMR= remote fixture -40°C to +60°C (-40°F to +140°F)	6V6W 6V10W	OW= off white BK= black	6= 6V 12= 12V
	12V6W 12V10W	DB= dark bronze	
	1201000	PG= platinium grey	
	Xenon lamps	Other colours available. consult your sales representative	

#### EXAMPLE: CAM6V6WOW6

## MQM-NC Series Remote Fixture Shielded remote fixture



## Features

- Quality illumination requires fewer fixtures.
- Modern design will blend into surrroundings.
- Shielded to prevent tampering.

- Easy installation.
- Available in 6V, 12V, 24V or 120V.
- CSA certified to C22.2 N°50.



## **Typical Specification**

Supply and install Lumacell MQM-NC series remote emergency lighting. These remote fixtures will consist of either single or double lamp configurations according to the design and include a die cast aluminum back plate and a clear heavy-duty UV resistant polycarbonate light cover.

The remote fixture shall be certified to CSA C22.2 N°.50.

The head(s) shall be fully adjustable and be equipped with high efficiency MR16 halogen lamp(s) of \_\_\_\_\_ volts, \_\_\_\_\_ watts.

The remote unit shall be Lumacell model: MQM \_\_\_\_\_.

### In the same family...



Battery Units p. 120 - 121



MQM-NX NEMA-4X Remote Fixtures p. 190 - 191



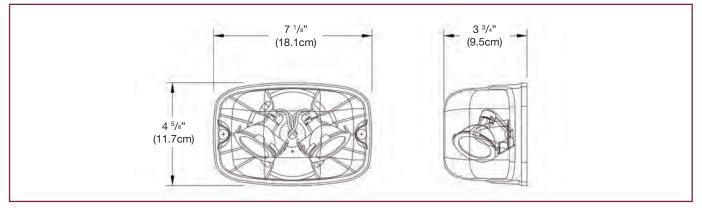
MQM-HZ Class I, Div. 2 Remote Fixtures p. 194 - 195

Project / Location	Date		
Contractor	Prepared by	Prepared by	
LUMACELL Model			



## **MQM-NC**

## Dimensions



## **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
580.0079-L	MR16 Flood	6V-10W
580.0080-L	MR16 Flood	12V-12W
580.0077-L	MR16 Flood	24V-20W

See the complete list p. 196 to 199.

## Ordering Information

Series	Voltage/Wattage/Lamp	Colour	Options
MQM1NC= one lamp	<b>6V6W</b> = 6V-6W, MR16	Blank= factory white	Blank= no options
MQM2NC= two lamps	<b>6V10W</b> = 6V-10W, MR16	<b>BK</b> = black	TP= tamper proof screws
	12V12W= 12V-12W, MR16	SG= grey	*690.0454-L= tamper proof bit
	12V20WH= 12V-20W, MR16, high output		
	<b>24V12W</b> = 24V-12W, MR16		
	<b>24V20W</b> = 24V-20W, MR16		
	120V20W= 120V-20W, GU10	* Other colours available.	*One bit needed per order
	<b>L</b> = 12V-5W, LED	consult your sales representative	(must be ordered separately)

#### EXAMPLE: MQM1NC6V6W

## SAF-T-RAY Series Wall mount remote head

# **Selumacell**

## Features

- Compact wall sconce unit for indoor and outdoor use
- High impact resistant polycarbonate diffuser
- Die-cast aluminum housing
- For outdoor and indoor use

- Adjustabe lamps
- Vandal resistant option
- CSA Certified to C22.2 N° 50



## **Typical Specification**

Wall mount unit shall be gasketed die-cast aluminum housing, impact resistant polycarbonate diffuser. The lamps shall be in adjustable for aisle or area distribution. Fixture shall be supplied with gasket and shall be suitable for installation on any four inch octogonal box.

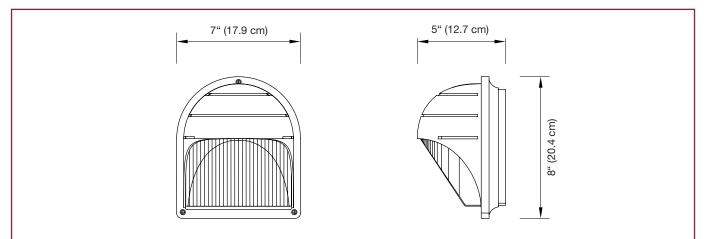
The remote unit shall be Lumacell model: SAF\_\_\_\_\_

Project / Location	Date	
Contractor	Prepared by	
LUMACELL Model		



## **SAF-T-RAY**

## Dimensions



## Replacement Lamps

Model	Lamp Type	Voltage-Wattage
580.0079-L	MR16 Flood	6V-10W
580.0080-L	MR16 Flood	12V-12W
580.0068-L	MR16 Flood	12V-20W
580.0077-L	MR16 Flood	24V-12W
580.0070-L	MR16 Flood	24V-20W

See the complete list p. 196 to 199.

## Ordering Information

Series	Lamp Type	Voltage/Wattage	Colour	Options
SAF= exterior remote	Blank= (1) med. base socket only (max. 60W), no lamp included, for non low-voltage can be used for generator emergency M= MR16	Blank= no lamp 6V10W= (2) MR16 6V-10W 12V12W= (2) MR16 12V-12W 12V20WH= (2) MR16 12V-20W high output 24V12W= (2) MR16 24V-12W 24V20W= (2) MR16 24V-20W	Blank= factory white BK= black DG= dark grey DB= dark bronze	Blank= no options VR= vandal resistant screws 990.0119-L= tamper proof bit

### **EXAMPLE: SAF**

## PHANTOM Series Remote Fixture The unseen solution, an architect's dream

# **Selumacell**

## Features

- Fully automatic operation: the unit door opens upon supply with DC voltage from battery and closes after the voltage disconnect
- DC input: 12Vdc or 24Vdc;
- AC line voltage is NOT required
- Emergency lights: two high-efficacy MR16 halogen lamps; power range: 2x12 ... 2x50 Watts
- Installation: finished dry-wall or un-insulated ceiling (after the dry-wall put-in)
- Accessories: include electrical junction box and "U"shape bracket for concealed installation
- Options: hardware kit for T-Bar mounting; high-lumen output lamps (20, 35 and 50W)
- Warranty: five-year limited warranty
- Certification: CSA C22.2 Nº 50



### **Typical Specification**

Supply and install Lumacell Phantom Series of remote fixture: The unit shall be designed to be concealed in walls or ceilings with a cavity. The unit equipment shall be completely concealed in the wall or ceiling in the absence of remote power. Upon DC power supply the unit will rotate its door by 180° to expose the emergency lamps and then will power them. After the DC power disconnect the lamps will turn off and the unit will conceal the heads in the wall (ceiling) by rotating the door by 180°. The DC-remote unit shall not require the presence of AC power in order to open or close the door. Under normal conditions, the only visible parts of the unit shall be the off-white flat door and trim plate, that can be customized on site with paint or other suitable wall covering. The light source shall be 12V MR16 halogen lamps of specified wattage and light output.

The remote unit shall be the Lumacell model: PHAR \_\_\_\_\_\_.

## In the same family...

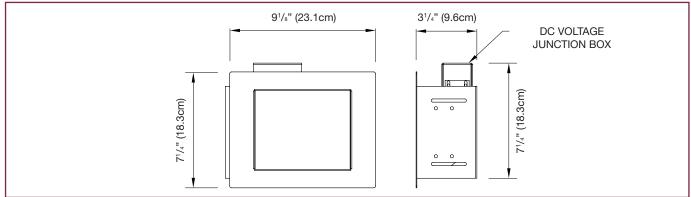


Project / Location		Date	
Contractor	Prepared by		LOP 1
LUMACELL Model			
			Oper

## PHANTOM

Closed

## Dimensions



The opening of the wall/ceiling mounted remote head is 5 3/4" (14.6cm) x 8" (20.3cm). Dimensions are approximate and subject to modifications.

## **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
580.0080-L	MR16 12W Flood	12V-12W
580.0064-L	MR16 20W Flood	12V-20W
580.0083-L	MR16 35W Flood	12V-35W
580.0076-L	MR16 50W Flood	12V-50W
580.0068-L	MR16 IR* 20W Flood	12V-20W
580.0090-L	MR16 IR* 35W Flood	12V-35W
580.0089-L	MR16 IR* 50W Flood	12V-50W
580.0084-L	MR16	24V-35W
580.0070-L	MR16	24V-12W
580.0077-L	MR16	24V-20W
580.0078-L	MR16	24V-50W

\* High-output (H).

See the complete list p. 196 to 199.

## Ordering Information

Series	Remote Voltage	Lamp Wattage (MR16)	Options
PHAR= remote fixture	<b>12V</b> = 12Vdc	12W= 12 watts, MR16	<b>TB</b> = T-Bar mounting kit
	<b>24V</b> = 24Vdc	20W= 20 watts, MR16	
		35W= 35 watts, MR16	
		50W= 50 watts, MR16	
		20WH= 20 watts, MR16 high output	
		35WH= 35 watts, MR16 high output	
		50WH= 50 watts, MR16 high output	

#### **EXAMPLE: PHAR12V12WTB**

## MINI-PHANTOM Remote Fixture For AC power generator

# **Selumacell**

## Features

- Easy to retrofit in finished walls: the unit slides in through an 8.25-in by 5.75-in hole
- No back-box needed to pre-install
- Fully automatic operation: the unit door opens upon supply with AC power and closes at the end of power back-up
- Output: 12Vac with up to 100 watts of power
- Direct connection to 120 or 347Vac power generators
- Emergency lights: MR16 halogen lamps; power range from 12 to 50 Watts
- Certification: CSA C22.2 Nº.50



## **Typical Specification**

Supply and install Lumacell Series Mini-Phantom. The unit shall be designed to be completely concealed in walls with a cavity. The equipment shall consist of a metal housing containing two modules joined by a flexible bracket and electric conduit. One module contains the power transformer and electrical connection box; the other module contains the emergency lights installed on the back of a door able to rotate several turns of 360°. The unit equipment shall be completely concealed in the wall, after the installation through a rectangular opening not larger than 8.25-in by 5.75-in.

In stand-by mode, the only visible parts of the unit shall be the off-white flat door and trim plate that can be customized on site with paint or other suitable wall





covering. Upon AC power supply the unit will expose the emergency heads by rotating its door 180° and then will power the lamps. At the end of the AC power, the lamps will turn off and the unit will retract the heads by rotating the door 180° in the same direction.

The unit shall not require the presence of AC power in order to close the door and conceal the lights. The door of the unit shall be easy to force-turn (open or close) by hand. The light source shall be 12V MR16 halogen lamps of specified wattage and light output.

The remote unit shall be the Lumacell model:

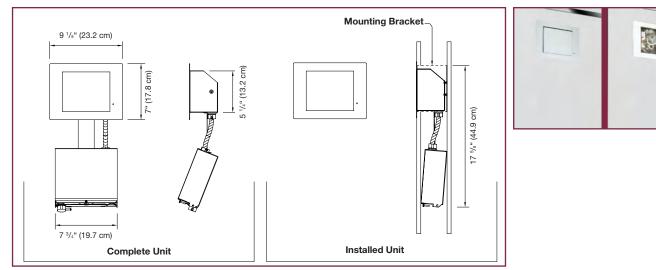
MPG \_\_\_\_\_

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lodel	



## **MINI-PHANTOM**

## Dimensions



## **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
580.0080-L	MR16 12W Flood	12V-12W
580.0064-L	MR16 20W Flood	12V-20W
580.0083-L	MR16 35W Flood	12V-35W
580.0076-L	MR16 50W Flood	12V-50W
580.0068-L	MR16 IR * 20W Flood	12V-20W
580.0090-L	MR16 IR * 35W Flood	12V-35W
580.0089-L	MR16 IR * 50W Flood	12V-50W

\* High-output (H).

See the complete list p. 196 to 199.

## **Ordering Information**

Series	Unit Capacity	Lamp Wattage	AC Voltage
MP	G= Remote AC generator, max. 100W	12W= 2x 12 watts MR16	Blank= 120Vac
		20W= 2x 20 watts MR16	<b>ZC</b> = 277Vac
		35W= 2x 35 watts MR16	<b>ZD</b> = 347Vac
		50W= 2x 50 watts MR16	
<b>20WH</b> = 2x 20 wat		20WH= 2x 20 watts MR16, High output	]
		35WH= 2x 35 watts MR16, High output	]
		50WH= 2x 50 watts MR16, High output	

#### **EXAMPLE: MPG35WH**

## DIVIDER<sup>®</sup> Series Remote Fixture Compact emergency lighting

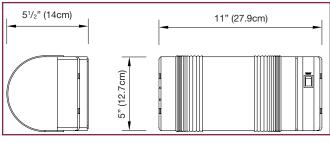
## **RS22** Series

## **Recessed Mounted series**



## **DIVIDER**®

## Dimensions



#### Wire Guard

460.0100-L

Wall Mount



#### Features

- Injection molded, impact-, scratch- and corrosion-resistant thermoplastic housing.
- Compact unit measures only 11" x 5", wall or ceiling mount.
- Available with tungsten lamps, 9 Watts, 6V, 12V, or 24V.
- Certification: CSA C22.2 Nº.50

## **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
570.0016-L	Mini tungsten, wedge base	6V-9W
570.0025-L	Mini tungsten, wedge base	12V-9W
570.0045-L	Mini tungsten, wedge base	24V-9W

See the complete list p. 196 to 199.

## Ordering Information

Series	Voltage/Wattage/Lamp Type	Colour	Options
R-DIVIDER= remote fixture	6V9W= 6V-9W, tungsten, wedge base	Blank= factory white	Blank= no options
	12V9W= 12V-9W, tungsten, wedge base	<b>BK</b> = black	VR= vandal resistant screws
	24V9W= 24V-9W, tungsten, wedge base		*990.0119-L= tamper proof bit
			* One bit needed per order.

### **EXAMPLE: R-DIVIDER6V9W**

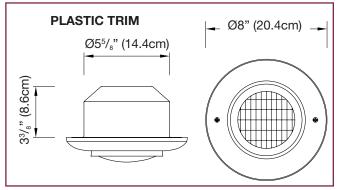
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## **DIVIDER® / RS22**

## **RS22** Dimensions



## Wire Guard

460.0033-L Wa

Wall Mount

## Ordering Information





#### Features

- PAR 36, recess mounted fixtures with gimbal ring
- Durable thermoplastic trim ring standard; metal trim available as an option
- Gimbal ring adjustable on two planes to 45°
- No extra housing needed
- CSA certified to C22.2 N°50.

## **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
570.0016-L	Tungsten	6V-9W
570.0025-L	Tungsten	12V-9W
570.0045-L	Tungsten	24V-9W

See the complete list p. 196 to 199.

Series	Voltage/Wattage/Lamp Type	Colour	Options
RS22= par 36 recessed	6V9W= 6V-9W, tungsten, wedge base	Blank= factory white	Blank= no options
with plastic trim	<b>6VW</b> = 6V-18 or 25W, tungsten, DCB	<b>BK</b> = black	M= metal trim
	12V_W= 12V-9 ou 18W, tungstène, wedge base		
	24V, 12V25W= 12V, 24V-25W, tungsten, DCB		
	24 V_W= 24V-9 or 18W, tungsten, wedge base		
	24 V_25W= 24V-25W, tungsten, DCB		
	Q6VW= 6V-8, 12 or 20W, halogen, quartz bi-pin		
	Q12V_W= 12V-8, 12, 20 or *55W, halogen, quartz bi-pin		
	Q24V_W= 24V-20 or *70W, halogen, quartz bi-pin		
	QSB6V_W= 6V-8, 12 or 20W, halogen, quartz sealed beam		
	QSB12V_W= 12V-8 or 37W, halogen, quartz sealed beam		
	SB6V_W= 6V-9, 12, 18 or 25W, tungsten, sealed beam		
	SB12V_W= 12 V-12, 18 or 25W, tungsten, sealed beam		
	32V_W= 32V-18 or 25W, tungsten, DCB		
	<b>120VW</b> = 120V-10, 15W, tungsten, DCB		
	Q120V35W= 120V-35W, halogen, DCB		
	Q120V50W= 120V-50W, halogen, DCB*		
	* Available with metal trim only. NOTE : "" insert wattage required Other types available, consult your sales representative		

**EXAMPLE: RS226V9W** 

## MT / MQ / MQM Series Remote fixtures micro tungsten lamps, micro-quartz lamps or MR16 lamps



## Features

- Compact design
- 6, 12 and 24 volts with various wattages
- Variable light patterns using adjustable lens
- Fire-retardant thermoplastic

- Available with tungsten, quartz lamps or MR16
- 300° rotation
- CSA certified to C22.2 N°50.



## **Typical Specification**

Lamp head and stem shall be injection molded, impact resistant, flame retardant thermoplastic and shall require no tool for aiming or adjustment. The lens shall be inverse concave design and fully adjustable for aisle or area distribution during installation without the need to energize the lamp. Visual identification of distribution shall be provided through position of adjustment pins. Fixture shall be supplied with a canopy for installation on any four inch octagon box. Housing shall be so designed to allow for lamp replacement if required.

The remote unit shall be the Lumacell model: M

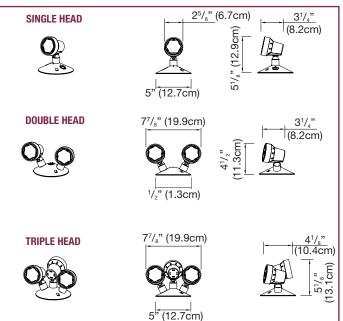
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LUMACELL Model			

# Wire Guard

460.0029-L

Wall Mount

# Dimensions



# **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
570.0016-L	Tungsten	6V-9W
570.0045-L	Tungsten	24V-9W
570.0015-L	Halogen (quartz)	12V-12W

MT / MQ / MQM

See the complete list p. 196 to 199.

# **Ordering Information**

Series	Lamp Type	# of Heads	Voltage/Wattage/Lamp Type	Colour
M= micro, PAR 18	T= tungsten, wedge base	1= single head	6V9W= 6V-9W, wedge base	Blank= factory white
	<b>Q</b> = halogen, quartz bi-pin	2= double head	12V9W= 12V-9W, wedge base	<b>BK</b> = black
	<b>QM</b> = halogen, MR16	3= triple head	12V18W= 12V-18W, wedge base	
			24V9W= 24V-9W, wedge base	
			24V18W= 24V-18W, wedge base	
			6V8W= 6V-8W, quartz bi-pin	
			6V12W= 6V-12W, quartz bi-pin	
			12V8W= 12V-8W, quartz bi-pin	
			<b>12V12W</b> = 12V-12W, quartz bi-pin	
			<b>6V6W</b> = 6V-6W, MR16	
			6V10W= 6V-10W, MR16	
			12V12W= 12V-12W, MR16	
			12V20W= 12V-20W, MR16	
			<b>24V12W</b> = 24V-12W, MR16	1
			<b>24V20W</b> = 24V-20W, MR16	

### EXAMPLE: MT16V9W

# RS / RS20 / RS30T Remote Fixtures Surface Mounted Series



# Features

- PAR36, surface-mounted, large remote fixtures
- Single, double or triple head
- Positive aim swivel
- CSA certified to C22.2 N°50.





Single, regular head Single, metal head



# **Typical Specification**

Base and remote head are injection-molded thermoplastic, shockproof and flame retardant. Shall be supplied factory white or black. The setting point shall provide visual indication of the light distribution.

The fixture shall be supplied with a canopy to be installed on any standard octogonal box. The housing

shall be designed to allow lamp replacement when required.

The remote unit shall be the Lumacell model: RS \_\_\_\_\_\_.

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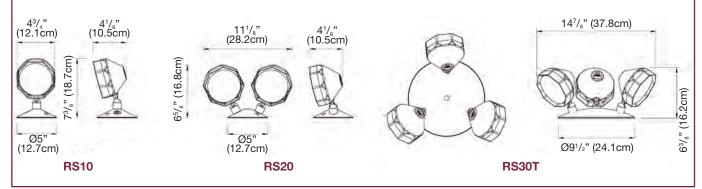


**RS10 / RS20 / RS30T** 

# Wire Guards

460.0035-L	Wall Mount (RS10)
460.0082-L	Wall Mount (RS20)
460.0078-L	Wall Mount (RS30T)

# Dimensions



# Replacement Lamps

Model	Lamp Type	Voltage-Wattage
570.0016-L	Mini tungsten, wedge base	6V-9W
570.0025-L	Mini tungsten, wedge base	12V-9W
580.0023-L	Mini Halogen (quartz), bi-pin	24V-20W

#### See the complete list p. 196 to 199.

# **Ordering Information**

Series	# of Heads	Voltage/Wattage/Lamp Type	Colour	Options
RS= PAR36	10= single head	6V9W= 6V-9W, tungsten, wedge base	Blank= factory white	Blank= no options
	<b>20</b> = doublehead	6V W= 6V-18 or 25W, tungsten, DCB	<b>BK</b> = black	TC= teflon coated lens
	30T = triple head	12V _ W= 12V-9 or 18W, tungsten, wedge base		M= metal head
		12V25W= 12V-25W, tungsten, DCB		
		24V W= 24V-9 or 18W, tungsten, wedge base		
		24V25W= 24V-25W, tungsten, DCB		
		<b>Q6V W</b> = 6V-8, 12 or 20W, halogen quartz bi-pin		
		Q12V W= 12V-8, 12, 20 or 55W, halogen quartz bi-pin*		
		<b>Q24V W</b> = 24V-20 or 70W,** halogen quartz bi-pin		
		SB6V W= 6V-12, 18 or 25W, tungsten, sealed beam		
		SB12V W= 12V-12, 18 or 25W, tungsten, sealed beam		
		<b>QSB6V W</b> = 6V-8, 12 or 20W, halogen quartz sealed beam		
		QSB12V W= 12V-8, 12 or 37W, halogen quartz sealed beam		
		<b>32V W</b> = 32V-18 or 25W, tungsten, DCB		
		<b>120V W</b> = 120V-10 or 15W, tungsten, DCB		
		Q120V35W= 120V-35W, halogen, DCB		
		<b>Q120V50W</b> = 120V-50W, halogen, DCB**		
		* Only available in high temp heads, grey only **Only available in metal heads		

### **EXAMPLE: RS106V9W**

# Q-BIC Remote Fixtures Surface Mounted Series



# Features

- Cubic, vandal-resistant surface-mounted fixture
- Single, double or twin cube with center body
- CSA certified to C22.2 N°50.



# **Typical Specification**

Remote heads Series Q-BIC shall be comprised of one (single) or two (double ou twin) 12-Watt adjustable halogen lamps. Each lamp shall be housed in an impact-resistant polycarbonate cube. The cube lens shall be frosted to diffuse the light. Heads shall provide mounting holes for installation to a standard octogonal box.

The remote unit shall be the Lumacell model: RSQ\_X \_\_\_\_\_.

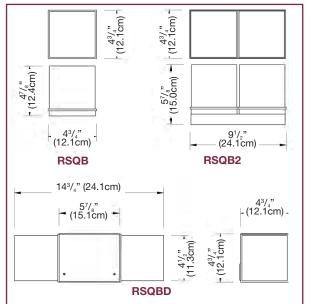
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			RSQB	RSQB2	

# **RSQB / RSQBD / RSQB2**

# Dimensions



# Wire Guards

460.0035-L	Wall Mount (RSQB)
460.0100-L	Wall Mount (RSQBD)
460.0032-L	Wall Mount (RSQB2)

# **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
570.0016-L	Mini tungsten, wedge base	6V-9W
580.0011-L	Mini Halogen (quartz) , bi-pin	6V-12W
580.0079-L	MR16, flood	6V-10W

See the complete list p. 196 to 199.

# Ordering Information

			<b>•</b>
Series	Voltage/Wattage/Lamp Type	Colour	Options
RSQB= single cube	T6V9W= 6V-9W, tungsten, wedge base	Blank= factory white	Blank= no options
RSQBD= double cube	T12V9W= 12V-9W, tungsten, wedge base	<b>BK</b> = black	<b>TP</b> = tamper proof screws
RSQB2= twin cube	T12V18W= 12V-18W, tungsten, wedge base		*690.0454-L= tamper proof bit
	T24V9W= 24V-9W, tungsten, wedge base		
	T24V18W= 24V-18W, tungsten, wedge base		
	T32V15W= 32V-15W, tungsten, wedge base		
	6V8W= 6V-8W, quartz bi-pin		
	<b>6V12W</b> = 6V-12W, quartz bi-pin		
	<b>12V8W</b> = 12V-8W, quartz bi-pin		
	12V12W= 12V-12W, quartz bi-pins		
	<b>24V20W</b> = 24V-20W, quartz bi-pin		
	120V20W= 120V-20W, GU10		
	120V35W= 120V-35W, GU10		
	<b>M6V6W</b> = 6V-6W, MR16		
	<b>M6V10W</b> = 6V-10W, MR16		
	M12V12W= 12V-12W, MR16	]	
	M12V20W= 12V-20W, MR16		
	M12V35W= 12V-35W, MR16	]	
	M12V50W= 12V-50W, MR16		
	M24V20W= 24V-20W, MR16		
	M24V35W= 24V-35W, MR16		
	M24V50W= 24V-50W, MR16		*One bit needed per order.

### EXAMPLE: RSQBT6V9W

# SIGNATURE Collection Remote Fixture Surface designer Series

# WP series

# Weatherproof MR16 powder coated cast aluminum light head



5" (12.7cm)

\$320°

5" (12.7cm)

8" (20.3cm)

Ordering Information

**DR2130** 

4<sup>1/8</sup>" (10.4cm

<sup>5/</sup>8" (11.7cm)

**DR1130** 

(10.2cm)

800

95/8" (24.6cm)

9<sup>3</sup>/<sub>4</sub>" (24.9 cm)

**DR3130** 

# **RS\*WP**

**Dimensions** 



### **Features**

- Remote head: 1, 2 or 3 head configurations
- A selection of styles and shades
- Highly resistant powder-coated, die cast aluminum construction
- 6W, 10W, 12W, 20W, 35W, and 50W availability
- Narrow beam light source
- CSA certified to C22.2 N°50.

# Wire Guards

460.0029-L	Wall Mount (DR1130 / DR1160 / DR1161)
460.0032-L	Wall Mount (DR2130 / DR2160 / DR2161)
460.0078-L	Wall Mount (DR3130 / DR3160 / DR3161)

# **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
570.0074-L	MR16 flood	6V-6W
580.0080-L	MR16 flood	12V-12W
580.0077-L	MR16 flood	24V-20W

See the complete list p. 196 to 199.

<u></u>					
Series	# of Heads	Head Style	Colour	Lamp Style	Voltage / Wattage
DR= decorative remote	1= single head 2= double head 3= triple head	130= closed	WH= white BK= black	-MR16= MR16 lamp	6V6W= 6V-6W 6V10W= 6V-10W 12V12W= 12V-12W 12V20W= 12V-20W 12V35W= 12V-35W 12V50W= 12V-50W 24V12W= 24V-12W 24V20W= 24V-20W 24V35W= 24V-35W 24V50W= 24V-50W

### EXAMPLE: DR1130WH-MR166V6W

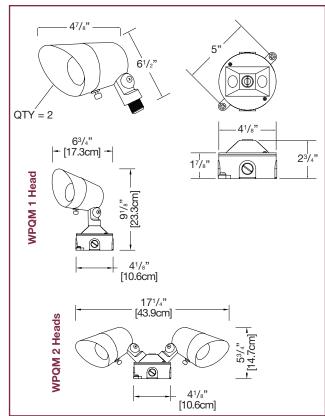
#### www.lumacell.com

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# **SIGNATURE / WP**

## WP

# Dimensions



# **Ordering Information**

## Features

- Weatherproof MR16 powder coated cast aluminum light head
- Up to 24Volts 50Watts
- Available single or double head
- Preinstalled on a Red Dot® weather proof junction box:
  - Five Outlets, 4 1/8" Diameter
  - Copper-free\* aluminum provides increased corrosion resistance.
  - Precision cast and machined surfaces permit safer wire pulling.
  - Clean cover edges provide good gasket sealing.
  - Precision NPT threads allow trouble-free field installation for rigid, IMC or EMT conduit.
  - Deep slotted stainless steel cover screws for faster installation.
- For use with 6V, 12V or 24V DC MR16 lamps

# Replacement Lamps

Model	Lamp Type	Voltage-Wattage
580.0079-L	MR16 flood	6V-10W
580.0080-L	MR16 flood	12V-12W
580.0070-L	MR16 flood	24V-12W

See the complete list p. 196 to 199.

Series	# of Heads	Voltage	Wattage	Colour
WP= weather proof	Blank= single head	<b>-6V</b> = 6 Vdc	10W= 10 watts, MR16 (6V only)	Blank= black head/grey
remotes, complete	<b>D</b> = double head	<b>-12V</b> = 12Vdc	12W= 12 watts, MR16 (12&24V)	junction box
with Red Dot junction box		<b>-24V</b> = 24Vdc	20W= 20 watts, MR16 (12&24V)	
			<b>30W</b> = 35 watts, MR16 (12&24V)	
			50W= 50 watts, MR16 (12&24V)	
			20WH= 20 watts, MR16, IR* (12V only)	
			<b>35WH</b> = 35 watts, MR16, IR* (12V only)	-
			<b>50WH</b> = 50 watts, MR16, IR* (12V only)	
			*IR= high output lamp	

### **EXAMPLE: WP6V10W**

# RSTH SIGNATURE Remote Collection Recessed designer series

# **Selumacell**

# Features

- Contemporary, enduring designs
- 6W, 10W, 12W, 20W, 35W, and 50W lamps
- Wide beam MR16 (flood) light source
- RSTH18NB and RSTH18R are made of power coated or electro-plate steel
- RSTH19 and RSTH24 are made of die-cast
- Will blend in with regular decorative recessed fixtures
- Choice of housing for new construction or insulated ceiling
- Certified CSA C22.2 Nº250







**RSTH18NB** 

RSTH19

# Typical Specification

The contractor will supply and install Lumacell Signature Collection recessed heads and housing. Recessed heads will be constructed of durable powder coated, metal and use MR16 halogen lamps. The RSTH18 series shall be made of steel. The RSTH 19 and RSTH24 series shall be made of die-cast aluminum.

The light source will be \_\_\_\_\_ volts, \_\_\_\_ watts MR16 halogen wide beam (flood) or otherwise specified.



RSTH18R



RSTH24

The recessed heads RSTH series shall be installed only with the LU-GRHR series of recessed cabinets (to order separately).

The remote unit shall be the Lumacell model: RSTH \_\_\_\_\_\_,

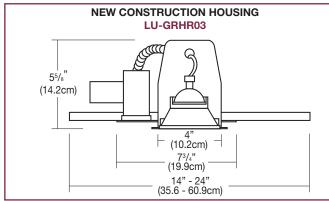
and the housing shall be the Lumacell model: LU-GRHRO \_\_\_\_\_.

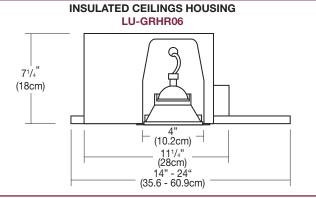
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LUMACELL Model		



# **SIGNATURE RSTH**

# Dimensions





# Cabinet

LU-GRHR03	Uninsulated ceiling 6-24V	New construction
LU-GRHR04	Uninsulated ceiling 6-24V	Old construction
LU-GRHR05	Uninsulated ceiling 120V GU10	New construction
LU-GRHR06	Insulated ceiling 6-24V	New construction

# **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
580.0079-L	MR16 flood	6V-10W
580.0080-L	MR16 flood	12V-12W
580.0077-L	MR16 flood	24V-20W

See the complete list p. 196 to 199.

# Ordering Information

Series	Head Style	Colour	Lamp Type	Voltage / Wattage
RSTH= decorative	18NB= flat	WH= white	-MR16= MR16 lamp	<b>6V6W</b> = 6V-6W
recessed remote	18R= concave	BK= black (18R, 19 & 24 series only)		<b>6V10W</b> = 6V-10W
	19= concave	BN= brushed nickel		<b>12V12W</b> = 12V-12W
	<b>24</b> = pop-out	(18R, 18NB & 24 series only)		12V20W= 12V-20W
		CH= chrome (24 series only)	1	<b>12V35W</b> = 12V-35W
		PB= polished brass (24series only)	1	<b>12V50W</b> = 12V-50W
				<b>24V12W</b> = 24V-12W
				<b>24V20W</b> = 24V-20W
				<b>24V35W</b> = 24V-35W
				<b>24V50W</b> = 24V-50W
				120V20W= 120V-20W, GU10*
				120V35W= 120V-35W, GU10*
				120V50W= 120V-50W, GU10*
				* Available only with 18R and 19 series and with LU-GRHR05 cabinet

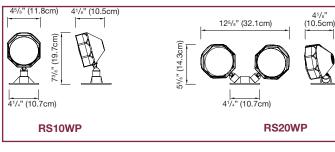
### EXAMPLE: RSTH18NBWH-MR166V6W

# RS\*WP / RS\*WPRB/ RS\*QWPBH Weatherproof Remote Fixture Series

# **Selumacell**

# **RS\*WP**

# Dimensions



# Wire Guards

460.0035-L	Wall Mount (RS10WP)
460.0082-L	Wall Mount (RS20WP)

# Ordering Information





# Features

- PAR 36, surface-mounted industrial remote fixtures
- Available in single, double or triple head fixtures
- Durable thermoplastic construction suitable for industrial or high abuse areas
- CSA certified to C22.2 N°50.

# **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
570.0016-L	Tungsten	6V-9W
570.0025-L	Tungsten	12V-9W
570.0079-L	Tungsten	24V-9W

See the complete list p. 196 to 199

Series	# of Heads	Voltage/Wattage/Lamp Type	Colour	Options
<b>RS</b> = PAR 36	10= single head	WP6V9W= 6V-9W, tungsten, wedge base	Blank= black	Blank= no options
	<b>20</b> = double head	<b>WP6V_W</b> = 6V-18 or 25W, tungsten, D.C.B.	WH= factory white	TC= teflon coated lens
		WP12V_W= 12V-9 or 18W, tungsten, wedge base		
		WP12V25W= 12V-25W, tungsten, D.C.B.		
		WP24V_W= 24V-9 or 18W, tungsten, wedge base		
		WP24V25W= 24V-25W, tungsten, D.C.B.		
		QWP6V_W= 6 V-8, 12 or 20W, halogen, quartz bi-pin		
		QWP12V_W= 12V-8, 12, 20 or *55W, halogen, quartz bi-pin		
		QWP24V_W= 24V-20 or *70W, halogen, quartz bi-pin		
		SBWP6V_W= 6V-9, 12, 18 or 25W, tungsten, sealed beam	1	
		SBWP12V_W= 12V-12, 18 or 25W, tungsten, sealed beam		
		QSBWP6V_W= 6V-8, 12 or 20W, halogen, quartz, sealed beam	1	
		QSBWP12V_W= 12V-8, 12 or 37W, halogen, quartz, sealed beam		
		WP32V_W= 32V-18 or 25W, tungsten, D.C.B.		
		WP120V_W= 120V-10 or 15W, tungsten, D.C.B.	1	
		Q120V35W= 120V-35W, halogen, DCB		
		Q120V50W= 120V-50W, halogen, DCB**		
		*Only available in high temp heads		
		**Only available in metal heads		

### EXAMPLE: RS10WP6V9W

#### www.lumacell.com

Project / Location	

Date

Prepared by

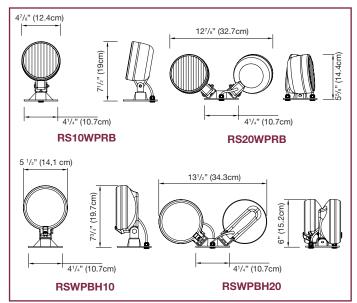
LUMACELL Model



# **RS\*WP / RS\*WPRB / RS\*QWPBH**

# **RS\*WPRB**

# Dimensions



# Made in Canada

# Features

- Sealed beam, PAR 36, surface-mounted, rubber coated industrial remote fixture
- For use in high pressure hose down areas
- Available only in black
- CSA certified to C22.2 N°50.

# **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
550.0026-L	Tungsten	12V-12W
550.0027-L	Tungsten	12V-18W
550.0023-L	Tungsten	12V-25W
*580.0030-L	Halogen	12V-55W
*580.0031-L	Halogen	24V-70W

\* Lamps for RS10QWPBH

See the complete list p. 196 to 199.

# Ordering Information Series # of Heads Voltage/Watta

Series	# of Heads	Voltage/Wattage/Lamp Type	Options
<b>RS</b> = PAR 36	10= single head	SBWPRB6V_W= 6V-9, 12, 18 or 25W, tungsten, sealed beam	Blank= no options
	20= double head	SBWPRB12V_W= 12V-12, 18 or 25W, tungsten, sealed beam	TC= teflon coated lens (RB only)
		QSBWPRB6VW= 6V-8, 12 or 20W, halogen, quartz, sealed beam	
		QSBWPRB12V_W= 12V-8, 12 or 37W, halogen, quartz, sealed beam	
RS	10= single head	QWPBH24V70W= 24V-70W, halogen, quartz, H3	Blank= no options
	20= double head	QWPBH12V55W= 12V-55W, halogen, quartz, H3	
		NOTE : " "insert wattage required	

## EXAMPLE: RS10SBWPRB6V9W

# MQM\*NX Series Remote Fixture NEMA-4X certified

# **Selumacell**

# Features

- Delivers unsurpassed pathway illumination up to 70 feet, center-to-center (with 12V-20W high-output lamp)
- Fully gasketed cast aluminum back plate with clear polycarbonate cover
- UV and impact resistant cover
- Choice of single or double lamp models
- Available in 6, 12 and 24 Volt models with various wattages

- High efficiency MR16 lamps up to 20W
- 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 N°. 50





NEMA-4X

# **Typical Specification**

Supply and install Lumacell MQM-NX 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 die cast aluminum back plate and a clear heavy-duty UV resistant polycarbonate light cover. Units shall be NEMA-4X and NSF certified and specifically designed for high abuse areas, wet and cold weather locations as well as for use in food processing plants. The standard unit will come with stainless steel tamper-proof screws and bit. The remote fixture shall be certified to CSA C22.2 N°.50. The head(s) shall be fully adjustable without tools and should be equipped with MR16 halogen lamp(s) of \_\_\_\_\_ volts \_\_\_\_\_ watts.

The remote unit shall be the Lumacell model: MQM\_NX \_\_\_\_\_.

# In the same family...



RG-NX
Battery Units p. 112 - 113



MQM-NC Remote Fixtures p. 168- 169



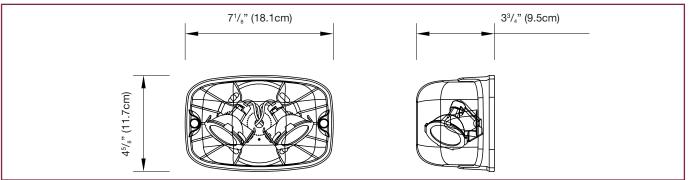
MQM-HZ Class I, Div. 2 Remote Fixtures p. 194 - 195

#### www.lumacell.com

Date
/



# Dimensions



# **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
580.0079-L	MR16 flood	6V-10W
580.0080-L	MR16 flood	12V-12W
580.0070-L	MR16 flood	24V-12W

See the complete list p. 196 to 199.

# **Ordering Information**

Series	Lamp Type/Voltage/Wattage	Colour
MQM1NX= NEMA-4X, one lamp	<b>6V6W</b> = 6V-6W, MR16	Blank= factory white
MQM2NX= NEMA-4X, two lamps	<b>6V10W</b> = 6V-10W, MR16	<b>BK</b> = black
	<b>12V12W</b> = 12V-12W, MR16	SG= grey
	12V20WH= 12V-20W, MR16 high output	
	<b>24V12W</b> = 24V-12W, MR16	
	<b>24V20W</b> = 24V-20W, MR16	
	<b>120V20W</b> = 120V-20W, GU10	*Other colours available on demand.
	<b>L</b> = 12V-5W, LED	Consult your sales representative.

### EXAMPLE: MQM1NX6V6W

# RS10XP Series Remote Fixture Hazardous Location



# Features

- CSA Certified for use in hazardous locations:
  - Class I, Divisions 1 and 2, Groups A, B, C, D
  - Class II, Divisions 1 and 2, Groups E, F, G
  - Class III, Divisions 1 and 2
- -Die-cast aluminum body with gray epoxy powder coat finish
- Clear, impact and heat resistant prismatic glass globe
- Available in 6, 12 and 24V
- Available with single-lamp or twin-lamp combination
- New, easy-to-build catalogue number based on the Lumacell Severity Codes



# **Typical Specification**

Supply and install the Lumacell RS10XP Series of hazardous location remote heads. The head housing will be die cast aluminum with gray epoxy powder coat finish. The lens shall be a clear, impact and heat resistant prismatic glass globe. The head shall be factory sealed. External seals shall not be required. The remote shall come complete with a \_\_\_\_\_ mounting connection and include \_\_\_\_\_ lamp(s) rated volts watts.

The remote head shall be suitable for Class \_\_\_\_\_, Division \_\_\_\_\_, Group \_\_\_\_\_.

The remote unit shall be the Lumacell model: RS \_\_\_\_\_\_ .

# **Replacement Lamps**

Model	Lamp Type	Voltage-Wattage
580.0011-L	Halogen	6V-12W
580.0015-L	Halogen	12V-12W
580.0027-L	Halogen	12V-20W
580.0023-L	Halogen	24V-20W

See the complete list p. 196 to 199.

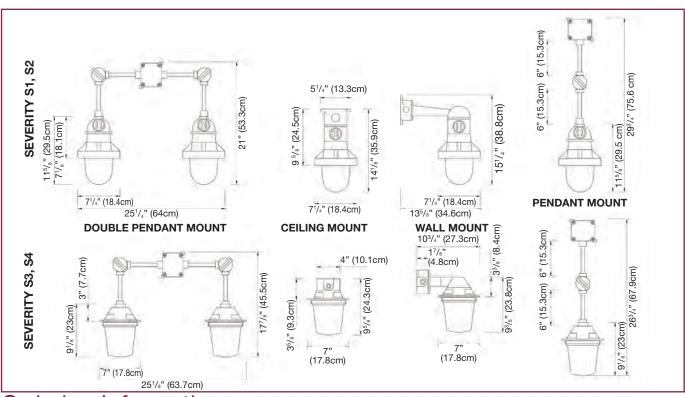
# In the same family...



Project / Location		Date
Contractor	Prepared by	
LUMACELL Model	-	



# Dimensions



# Ordering Information

Before ordering, identify the environment of your application: Class \_\_\_\_\_, Division \_\_\_\_\_, Group \_\_\_\_\_. Refer to the following chart for the Severity Code (1) to use in your catalogue number:

1.	Environment	Severity Code
	Cl. I, Div. 1, Gr. A, B	S1
	Cl. I, Div. 1, Gr. C, D	S2
	Cl. I, Div. 2, Gr. A, B, C, D	S3
	Cl. II, Div. 1 & 2, Gr. E, F, G Cl. III, Div. 1 & 2	S4

For additional information, please look at the table below(2):

2.	Certification Guide for Remote Lighting Fixtures (40°C ambient)				
	Severity Code	S3	S4		
	Temperature Code	T4A	Т6	T1	T3C (E.G.F.)
	CSA/UL rating	Max. 120°C	Max. 85°C	Max. 450°C	Max. 160°C

#### 3. RS10-XP

Series	Voltage	Lamp Type/ Wattage/Type	Severity Code	Mounting
RS10XP= single remote 1 lamp	6V= 6 volts	<b>12W</b> = halogen, 6V, 12V-12W, quartz bi-pin	S1= see chart	C= ceiling mount
RS20XP= single remote 2 lamps	12V= 12 volts	20W= halogen, 12, 24V-20W, quartz bi-pin	S2= see chart	P= pendant mount
*RS20FXP= double remote 1 lamp	24V= 24 volts		<b>S3</b> = see chart	W= wall mount
*Pendant mount only.			<b>S4</b> = see chart	

### EXAMPLE: RS10XP6V12WS1C

# MQM\*HZ Series Remote Fixture Hazardous Location

# **Selumacell**

# Features

- Certified Class I Division2, Groups A, B, C and D as per CSA C22.2 N°. 50 and N°.137-M1981, Class I, Zone 2, Groups IIC, IIB and IIA
- Temperature Codes: T3B (10W and 12W MR16 lamps) and T2C (20W MR16 lamps), as per Canadian Electrical Code, Part I and CSA C22.2 N°.137-M1981)
- Extreme operational temperature range: -40°C to +40°C.
- Choice of single- or double-lamp models.

- High-efficacy MR16 halogen lamps of 10W, 12W and 20W (see specification table)
- Input voltage: 6V, 12V, 24V or 120V
- Fully gasketed die-cast aluminum back plate
- Clear polycarbonate cover, UV and impact resistant
- Easy installation on a 4-inch octagonal box (included)
- Comes standard with tamper-proof screws and bit



**Typical Specification** 

Supply and install Lumacell MQM-HZ Series remote emergency lighting fixture. The fixture shall have a single- or double-lamp configuration (as specified) and shall include a fully gasketed die-cast aluminum back plate and a clear heavy-duty UV resistant polycarbonate cover. The fixture shall come standard with a 4-inch octagonal box, stainless steel tamperproof screws and dedicated screwdriver bit.

The fixture shall be certified for use in hazardous locations Class I, Division 2, Groups A, B, C and D

and shall be listed to CSA C22.2 N°. 50 and CSA C22.2 N°.137-M1981. The fixture shall be rated with a temperature code for the selected lamps as in the table below.

Each lamp in the fixture shall be able to be oriented without tools and should be equipped with MR16 halogen lamp(s) of \_\_\_\_\_Volts \_\_\_\_\_ Watts.

The remote unit shall be the Lumacell model: MQM \_\_ HZ \_\_\_\_\_.

# In the same family...



Battery Units p. 120 - 121



MQM-NC Remote Fixtures p. 168 - 169



MQM-NX NEMA-4X Remote Fixtures p. 190 - 191

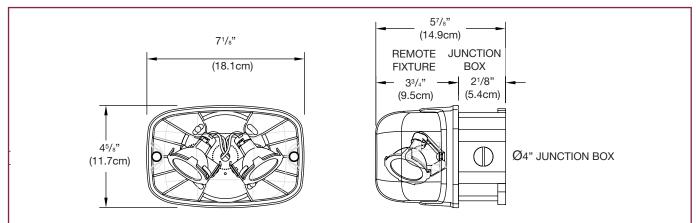
#### www.lumacell.com

Project / Location	Date	
Contractor	Prepared by	
LUMACELL Model		



# **MQM\*HZ**

# Dimensions



# Replacement Lamps

Model	Lamp Type	Voltage-Wattage
580.0079-L	MR16 flood	6V-10W
580.0068-L	MR16-IR flood (High output)	12V-20W
580.0070-L	MR16 flood	24V-20W

See the complete list p. 196 to 199.

# **Ordering Information**

Series	Voltage/Wattage/Lamp Type	Colour
MQM1HZ= single lamp	<b>6V10W</b> = 6V-10W, MR16	SG= grey
MQM2HZ= double lamp	<b>12V12W</b> = 12V-12W, MR16	
	12V20W= 12V-20W, MR16	
	12V20WH= 12V-20W, MR16 high output	
	<b>24V12W</b> = 24V-12W, MR16	
	<b>24V20W</b> = 24V-20W, MR16	
	<b>120V20W</b> = 120V-20W, MR16	

### EXAMPLE: MQM1HZ6V10WSG

# Lamp Chart

# **Second Second**

	LAMP	TYPE	CODE	VOLTAGE	CAMRAY	MQM*NC	SAF-T-RAY	PHANTOM	DIVIDER®	MT / MQ MQM
			570.0040-L	24V - 18W			]			
	$\square$		570.0037-L	6V - 18W						
ωш		S-8	570.0031-L	12V - 25W						
MP; BAS		•••	570.0061-L	24V - 25W						
N LA			570.0120-L	120V - 15W						
YON			570.0010-L	6V - 9W						
HIGH INTENSITY TUNGSTEN LAMPS DOUBLE CONTACT BAYONET BASE			570.0015-L	32V - 15W						
ACT			570.0025-L	32V - 25W						
LTIS TNC	$\square$		570.0020-L	6V - 13W						
N N N		RP-11	570.0011-L	12V - 9W						
IN T		111 - 11	570.0038-L	6V - 25W						
lē∃			570.0022-L	12V - 13W						
± -			570.0030-L	12V - 18W						
			570.0058-L	24V - 9W						
			580.0012-L	6V - 6W						
			580.0017-L	6V - 10W						
	$\frown$		580.0013-L	6V - 8W						Х
			580.0011-L	6V - 12W						X
		T-2 1/4	580.0022-L	6V - 20W						
MPS	T		580.0014-L	12V - 8W						Х
P			580.0015-L	12V - 12W						X
EN 1			580.0023-L	24V - 20W						
ALOG	$\square$		580.0016-L	12V - 14W						
BI-PIN HALOGEN LAMPS		T-2 3/4	580.0027-L	12V - 20W						
	Â	НЗ	580.0030-L	12V - 55W						
		-0	580.0031-L	24V - 70W						
			570.0026-L	6V - 7.2W						
MPS			570.0016-L	6V - 9W					Х	Х
SE LAI	$\square$		570.0025-L	12V - 9W					Х	Х
INCANDESCENT LAMPS WEDGE BASE	$    \Omega  $		570.0028-L	12V - 8W						
lig ig	KJ.	T-5	570.0029-L	12V - 18W						Х
Ŭ E			570.0045-L	24V - 9W					Х	Х
AN	ا سر		570.0046-L	24V - 18W						Х
N N			570.0012-L	6V - 5.4W					Х	



RS10 RS20 RS30T	RSQB RSQBD RSQB2	SIGNATURE	SIGNATURE RSTH	RS22	oro RS*WP	RS*WPRB	WP	MQM*NX	RS10XP	MQM*HZ
X				X	X					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х				Х	Х					
Х	Х			Х	Х					
Х	Х			Х	Х				Х	
Х				Х	Х				Х	
Х	Х			Х	Х					
Х	Х			Х	Х				Х	
Х	Х			Х	Х					
Х				Х	Х					
Х				Х	Х				Х	
Х				Х	Х					
Х				Х	Х				Х	
X										
Х										
Х	Х			Х	Х					
Х	Х			Х	Х					
Х	Х			Х	Х					
Х				Х	Х					
Х	Х			Х	Х					
Х	Х			Х	Х					
Х	Х			Х	Х					
Х				Х	Х					

# Lamp Chart

# **Second Second**

		00055			<b>P</b>	0	Pore.	60	80%
	LAMP TYPE	CODE	VOLTAGE	CAMRAY	MQM*NC	SAF-T-RAY	PHANTOM	<b>DIVIDER®</b>	MT / MQ MQM
		580.0074-L	6V - 6W		Х				Х
		580.0079-L	6V - 10W (flood)		Х	Х			Х
		580.0080-L	12V - 12W (flood)		Х	Х	Х		Х
		580.0075-L	12V - 20W *						Х
		580.0064-L	12V - 20W (flood)			Х	Х		
R		580.0068-L	12V - 20WH (flood)		Х	Х	Х		
AN		580.0090-L	12V - 35WH (flood)				Х		
MR16 HALOGEN LAMPS	X S	580.0089-L	12V - 50WH (flood)				Х		
0GI	and the second s	580.0083-L	12V - 35W (flood)				Х		
IAL	MR16	580.0076-L	12V - 50W (flood)				Х		
16 F		580.0077-L	24V - 20W (flood)		Х	Х	Х		
MB		580.0070-L	24V - 12W (flood)		Х	Х	Х		Х
		580.0084-L	24V - 35W (flood)				Х		
		580.0078-L	24V - 50W (flood)				Х		
		580.0065-L	120V - 20W (flood)		Х	Х			
		580.0066-L	120V - 35W (flood)						
		580.0067-L	120V - 50W (flood)						
LED LAMPS	MR16 Shape	580.0093-L	12V - 5W		х				x
		550.0036-L	6V - 8W						
SEALED BEAM HALOGEN LAMPS		550.0037-L	6V - 10W						
BE		550.0021-L	6V - 20W						
GED		550.0024-L	12V - 8W						
SEA	PAR36	550.0025-L	12V - 12W						
Ť	PAR30	550.0030-L	6V - 12W						
۲ ۲		550.0018-L	6V - 8W						
AM		550.0016-L	6V - 18W						
NT BE	$\langle$	550.0017-L	6V - 25W						
		550.0026-L	12V - 12W						
SEALED BEAM INCANDESCENT LAMPS		550.0027-L	12V - 18W						
INC/	PAR36	550.0023-L	12V - 25W						
	$\bigcirc$	570.0213-L	6V - 6W	Х					
N S		570.0214-L	6V - 10W	Х					
XENON LAMPS		570.0215-L	12V - 6W	Х					
	T-3 1/4	570.0216-L	12V - 10W	Х					



RS10 RS20 RS30T	RSQB RSQBD RSQB2	SIGNATURE	SIGNATURE RSTH	RS22	oro RS*WP	RS*WPRB	WP	MQM*NX	RS10XP	MQM*HZ
,	X	X	X		X		X	X		X
	Х	Х	Х		Х		Х	Х		Х
	Х	Х	Х		Х		Х	Х		Х
					Х					
		Х	Х				Х	Х		Х
	Х	Х	Х				Х	Х		Х
	Х	Х	Х				Х	Х		Х
	Х	Х	Х				Х	Х		Х
		Х	Х				Х	Х		Х
		Х	Х				Х	Х		Х
	Х	Х	Х				Х	Х		Х
	X	Х	Х		Х		X	Х		Х
	Х	Х	Х				X	Х		X
	Х	X	X				Х	Х		X
		X X	X X					X X		X
		×	X					X		X X
			~					~		~
	х	х	х					Х		x
Х				Х	Х	Х				
Х				Х	Х	Х				
Х				Х	Х	Х				
Х				Х	Х	Х				
Х				Х	Х	Х				
Х				Х	Х	Х				
Х				Х	Х	Х				
Х				Х	Х	Х				
Х				Х	Х	Х				
X				X	X	X				
X X				X X	X X	X X				
X				X	X	X				

# Glossary

А	ammeter	Used to measure the current being supplied to the battery while in charge mode.
AT	Auto-Test	Automatically tests and continuously monitors your emergency lighting unit. If a problem occurs, the unit will send a visual (flashing or blinking LED indicator) and audible warning. Complies with Fire Code requirements.
		Automatically tests and continuously monitors your emergency lighting unit. If a problem accurs, the unit will send a visual (flashing or blinking LED indicator) warning. Complies with Fire Code
	Auto-Test, non-audible	requirements.
СТ	Cab-tire	Unit supplied with a cab-tire cable used for special hardwire applications.
CW1	cold weather, 120Vac	120Vac input cold weather protection feature for applications where temperatures can reach -40 $^{\circ}$ C
CW3	cold weather, 347Vac	347Vac input cold weather protection feature for applications where temperatures can reach -40 $^\circ$ C
DPF6	6cct. Fuse panel	Used to facilitate the connection of multiple input load circuits in high power battery units.
ннс	remote test transmitter	Used to perform maintenance tests by means of radio transmitter along with a radio receiver (RRT option) on battery units that are out of reach.
HTR	heather & thermostat	Like a heatblanket, used to keep internal temperature optimal for battery units that are installed in cold environments.
LC	line cord (120V)	When ordering a battery unit with the LC option, we supply and pre-install a line cord with a standard 3 prong 120V plug. Just hang the fixture and plug it in to a standard receptacle! Only available on 120V units.
LD	lamp disconnect	To disconnect the emergency lighting load in an area that is not in use during a prolonged power failure or while area is no longer being occupied.
LS	Laser	Used to remotely test battery units by means of pointing a laser at the battery unit.
LTS	light activated test switch	Used to remotely test battery units by pointing a flashlight at a photocell mounted on the bottom of a battery unit.
тс	teflon coated lens	A protective teflon coating that is applied to the glass lens of a lighting fixture to prevent broken shards from falling in the event the glass is accidently broken or vandalised.
RRT	remote test receiver	Used to perform maintenance tests by means of radio reciever in conjunction with a transmitter(HHC option) on battery units that are out of reach. Simply point the receiver at the unit.
NEX	Nexus system interface	The NEXUS system interface is a computerized maintenance system for emergency lighting that, once programmed, will perform the tests, keep written records and send notification if anything needs to be fixed. One full system can address hundreds of units in as many buildings as you need from a single location.
ТЗ	15 minutes time delay	Normally, when the a.c. is restored, all emergency lighting lamps are turned off. However, in some cases such as when metal halide lamps are used, it is possible that the general lighting will not be availbe for several minutes after the blackout (or brownout) period. Battery units with the T3 option will keep some energy in store to ensure that the emergency lighting stays on or comes back on for at least 15 minutes once the regular a.c. power has been restored.
TD	time delay (programmable)	Same as the T3 option but can be programmed for 5, 10, 15 or 20 minutes delay.
		Screws that require a special bit. Can be used on certain units to deny access to unauthorized
TP	tamper proof screws	personnel.
TL	twistlock plug	Used to facilitate the connection and removal of battery units for maintenance purposes.
<u> </u>	a.c./d.c. terminal block	Used to facilitate the connection of large gauge input cables.
	d.c. terminal block	Used to facilitate the connection of large gauge d.c. input cables.
	a.c. terminal block	Used to facilitate the connection of large gauge a.c. input cables.
V	voltmeter	Indicates voltage being supplied to the battery when in charge mode.

# Table of contents



#### LUMASOURCE

#### p 202 - 205



- 120 Vdc central single source emergency lighting system.

#### DC Central Systems

#### <u>p 206 - 209</u>



- Fully automatic charger, battery and specified transfer and distribution features.

# Central Systems

## 120 VDC central single source emergency lighting system

#### Time and labour saver only one conduit required!

In an existing or new installation where exit signs and emergency lighting may be supplied by a single 120VDC source using a common negative wire, one normally on positive and one normaly off positive. 3 wire output from the system reduces the number of conductors by up to 40%. It also eliminates 50% of the conduit, EMT or BX runs by using a single common conduit for LED exits and emergency lighting remotes.



# Features

- Single-source 120 VDC supply for both exit and emergency lights
- Reduced number of conductors
- Eliminates 50% of conduit, BX or EMT runs for exit and emergency lighting
- Control and supervision functions on single modular board
- Complete package of full supervisory functions and alarms included in standard unit

- Battery is sealed maintenance free lead calcium
- All LumaSource Series systems are designed and manufactured in Canada
- CSA and Ontario Hydro approved
- BMEC (Building Materials Evaluation Commission) approved for compliance to the Ontario Building Code
- Overall reduction on power consumption using LED exit signs.

- Floor-mount cabinet



# Operations

**LUMASOURCE** Series Central Emergency Lighting Systems are available in free-standing cabinet style enclosures.

- Heavy duty, sheet-steel cabinet.
- Cabinets are painted ASA No. 61 grey electrolyte resistant enamel.
- Locking and hinged front door.
- Front access to battery charger for ease
- of inspection and servicing.

## Charger / Controls

Lumacell's solid state fully automatic charger features single module control board design. This feature provides cost effective superior performing equipment, with ease of maintenance and service ability.



### Standard Features and Controls

- LVD at 91% of nominal
- Temperature Compensation
- Ground Fault Alarm (Audible & Visual)
- DC Volt & Ammeter (2% Accuracy)
- AC present LED indicator
- Float level Charge LED indicator
- Equalize level Charge LED indicator
- Charger Failure Alarm
- AC Failure Alarm
- High Battery Voltage Alarm
- Test Switch
- Remote Monitor Alarm Panel
- Brownout Protection
- Dry Contacts
- BMEC Ontario Building Materials Evaluation Commission Approved
- SPF sprinkler-proof cabinet comes with drip shield

### **Optional Features Code**

– Time Delay	TD
– 3 Phase Sensing	3PH
– 12 Hour Recharge	12HR
<ul> <li>Battery exerciser</li> </ul>	CYC
<ul> <li>Input battery circuit breaker</li> </ul>	BCB
– Common Zone sensing	ZSC

### Application

New construction or retro-fit, the **LUMASOURCE** Series utilizes the latest technology and engineering to reduce the cost of emergency lighting installations. The unique 3 wire design allows for the use of just one conduit. With one positive dc normally energized conductor and a common negative conductor the LED exits are supplied constant power. With the same common negative conductor and another positive DC conductor the remote emergency lights are powered on demand. Available in sizes from 4120 watts to 22520 watts for 30 minutes. Other runtimes available. Please consult factory.

### Electrical

are available upon request.

Input: 120V, 208V, 240V, 277V, 347V, 600V AC 60 HZ Single Phase Output: 120V DC (3 wire (normally on positive, common and normally off positive)) Systems have been designed for minimum 1/2 hour operation time and are capable of full recharge in 24 hours. For systems rating chart and ordering guide please see Page 4 of this brochure. Other discharge times

# **Central Systems**

120 VDC central single source emergency lighting system



# Warranty

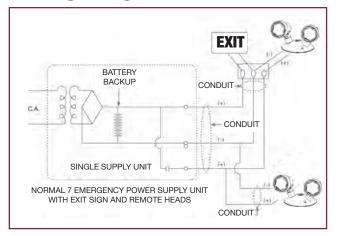
The **LUMASOURCE** system is warranted for one year against defects in workmanship and all electronic components.

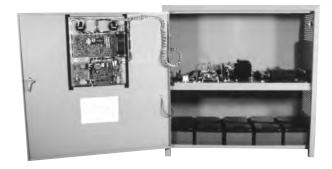
The batteries are warranted 1 year complete and 9 years pro-rata against defects in workmanship and materials. Battery warranty is subject to proper testing and inspection as described in the Canadian Electrical Code, Section 46-102 & 46-104.

### Approvals

- CSA Certified
- Ontario Hydro: Rule 46-108 (3)

## Typical Interconnection Wiring Diagram





CAD Drawing illustrates how the **LUMASOURCE** Series is applied, saving time, material and money. Call your local Lumacell Representative for further information, or application assistance.



# LUMASOURCE

# **Enclosure Dimensions**

System Series	Console H x W x D
LS 4120	38" (96,5 cm) x 38" (96,5 cm) x 18" (45,7 cm)
LS 9390-11260	38" (96,5 cm) x 38" (96,5 cm) x 28" (71,1 cm)
LS 13140-22520	56" (142,2 cm) x 38" (96,5 cm) x 28" (71,1 cm)

# Units rating

**SL Series batteries** : maintenance free, sealed lead-calcium. Watts at 91% of nominal voltage.

System Series	30 min.	1h00	1h30	2h00
LS4120	4120	2450	1790	1440
LS9390	9390	5590	4080	3290
LS11260	11260	6700	4890	3940
LS13140	13140	7820	5710	4600
LS18780	18780	11180	8160	6580
LS22520	22520	13480	9780	7880

Develop a Model Number as shown in the following chart

System Designation	Single Phase Input Voltage	Battery Type	Capacity in Watts*	Quantity of Exit Signs	Mounting	Output Voltage	Discharge Time (Minutes)	Optional Equipment
LS	120 Vac	SL	Select from	100E	C = Console	120Vdc	30	TD
	208 Vac	Sealed	Battery				60	3PH
1 [	240 Vac	Lead	Capacity chart				90	12HR
	277 Vac	Calcium	in folder				120	CYC
[	347 Vac							ZSC
	600 Vac							BCB
							For other discharge times please contact factory.	See page 2 for option details

# DC Central System

#### Fully automatic charger, battery and specified transfer and distribution features

Lumacell's Central DC Systems are utilized where a large number of remote heads or standard 120 Volt incandescent fixtures may be supplied from a single source. The systems offer the advantage of a central location for maintenance with full supervision of all operating functions. Contact your Lumacell representative for information.



## Features

- 24, 36 and 120 VDC systems sealed lead acid batteries
- Control and supervision functions on single modular board
- Complete package of full supervisory functions and alarms included in standard system
- Battery selection of totally sealed maintenance free lead acid batteries
- All systems are designed and manufactured in Canada
- CSA certified
- BMEC (Building Materials Evaluation Commission) approved for compliance to the Ontario Building Code



Made in Canada

# **Charger Features**

Lumacell has developed a unique modular charger design in which all electronic control functions and pilot lights are mounted on a single control board. This is connected to the operating power components using screw type connectors– making the circuit board easily removable by means of only four screws. Any required field service, consequently, is faster and significantly simpler than with older style multiple board designs.

All chargers include a contactor which automatically disconnects the batteries from the load when battery bank voltage falls below 91% of nominal, in order to prevent over-discharge of batteries. The operating temperature for the system is from 0°C to 40°C. The control board is temperature compensated in order to meet the battery required float voltage at temperatures below and above 25°C, as recommended by battery manufacturers. Internal control allows for spark free battery bank connection during installation and scheduled maintenance procedures.

## **Charging Operations**

The charger will fully recharge the battery within twenty four hour period from a full discharge. The charger maintains regulation of  $\pm 0.5\%$  of voltage for a  $\pm 10\%$  input voltage variation. The charger provides automatic equalize cycle whenever the charge current is more than a preset value. The charger operates in an equalize mode after each utility power return. This ensures maximum battery capacity at all times, with maintained life expectancy.

## **Batteries**

# Sealed Maintenance-Free Lead Acid Gas Recombination (SL Series)

Uses gas recombination to eliminate the escape of hydrogen. Thick plates are constructed of high strength material which resists shedding, flaking, or mechanical failure. Design Life; 10 years under normal operating conditions.



# **DC CENTRAL**

# Standard Controls

The front panel includes the following controls:

- DC Battery Voltmeter (2% Accuracy)
- DC Charge Rate Ammeter (2% Accuracy)
- Green "ac on" LED (on at all times except during power failure)
- Green "float" LED (indicates that the battery is receiving float charge to maintain the battery at full charge at all times)
- Amber "equalize" LED (indicates that the charger is in the high charge equalize mode, balancing the charge level in the individual battery cells)
- Brown-out protection
- Test switch.

# Standard Alarms

- AC Failure LED and Alarm
- High Battery Voltage LED and Alarm
- Charger Failure LED and Alarm
- Ground Leakage Alarm
- An audible alarm and a common LED shall indicate "Ground Leakage" and/or Fuse/Circuit Breaker open/trip alarm.

# **Distribution Options**

A separate distribution panel is available for all systems.

A choice of fuses or circuit breakers is available. **Fuse Distribution Panel** 

Select -DPF () for separate distribution fuse panel. Select -DPFF () for separate distribution fuse panel with visual and audible alarm on main console for failure of any fuse.

Note: "()" indicates the number of circuits required. Circuit Breaker Distribution Panel

Specify - DPCB () for separate circuit breaker panel. Specify - DPCAB () for separate circuit breaker panel with visual and audible alarm on main console for tripping or opening of any breaker.

Note: "()" indicates the number of circuits required.

# **SYSTEMS**

# Transfer Options

rmally stems,

maintain a normally" on" load.

#### Normally "off" (DC load): (TPD)

If the lamp load is going to be turned on in the event of power failure add suffix –TPD to the model number.

# Normally "on" (AC/DC load): (TPA) 120 V DC systems only:

The 120 V incandescent load shall have 120 VAC power normally supplied to it and the load shall be transferred to 120 VDC upon failure. Add suffix –TPA to the model number. For other AC input voltages please contact factory.

Both Normally "on" & "off" loads: (TPA/TPD) Both of the above apply.

# **Other Options**

Time delay	TD
• 3 phase sensing	3PH
<ul> <li>Input battery circuit breaker</li> </ul>	BCB
Battery exerciser	CYC
Common Zone Sensing	ZSC()*
<ul> <li>Individual zone sensing,</li> </ul>	ZSI( )*
specify number of zones	

\* Zone explanation: each specified zone relay monitors an individual lighting circuit in a building. Should the monitored circuits lose AC power, the connected lighting load will automatically illuminate:

a - all zones if ZSC is specified

b - that zone only if ZSI is specified.

# Cabinets

Systems are available in a free standing floor mount cabinet. The cabinet shall be constructed of not less than 14 gauge steel with corrosion resistant undercoating. Standard finish is ASA61 grey baked enamel.

www.lumacell.com

# DC Central System

# **Second Second**

## Warranty

The complete system is guaranteed for a period of one (1) year against defects in workmanship and materials. The battery portion of the equipment carries a ten (10) year pro-rata warranty during its useful service life against defects in workmanship and materials. The battery warranty is subject to the provision of normal testing and inspection as specified in the Canadian Electrical Code, Section 46-102, and National Fire Code of Canada. Limit room ambient temperature between 0°C to 35°C (32°F to 95°F). Optimum system performance occurs at 25°C (77°F). A battery service life is defined as the period which the battery could still provide at least 80% of its rated capacity.

## **Typical Specification**

Provide and install a complete emergency lighting system as described herein and shown on the drawings.

The system shall consist of a charger, battery and specified transfer and distribution features.

The charger shall be fully automatic solid state type using integrated circuit control. The output voltage

variation shall be  $\pm 0.5\%$  for input variation of  $\pm 10\%$ . The charger shall recharge the battery within 24 hours after a power failure. The charger shall include a contactor to automatically disconnect the battery from the load when the battery voltage falls below 91% of nominal.

The charger shall be of a modular design with all pilot lights and electronic control functions on a single

board mounted behind the front panel. The single control board shall have LED pilot lights for the following functions (which shall show through the front panel):

- Green "ac on" LED
- Green "float" Charge LED
- Amber "equalize" LED

The single control board shall also include LED and an audible alarm with call-back function for the following alarms:

- AC Failure
- High Battery Voltage
- Charger Failure
- Battery Ground Leakage

#### **OPTIONAL ALARMS**

• Fuse/Circuit Breaker Open/Trip

#### SELECT SL BATTERY

Select battery bank voltage, capacity and duration of required backup time.

Select AC input voltage.

Select system transfer option from TPD(), TPA(), or TPA()/TPD() where the load watts are shown in brackets.

#### SELECT OPTIONS.

The equipment shall be provided with a separate distribution panel with \_\_\_\_\_\_ fuses or circuit breakers (select one) rated at \_\_\_\_\_\_ Amps.

**Optional:** All distribution fuse or circuit breaker panels shall be alarmed so that if a fuse or circuit breaker has

failed during operation, a visual and audible alarm is activated. The system shall be –Lumacell System LM (Select Model Number from chart below). Select Remote Fixture from fixture section of Catalogue.



# **SL Series:** Sealed Maintenance Free Lead Acid Battery Capacity Chart 25°C

		Nominal Backup Capacity			
м	odel	30 min.	60 min.	90 min.	120 min.
А	LM24SL35	820W	490W	355W	285W
В	LM24SL65	1130W	800W	585W	470W
С	LM24SL90	1875W	1115W	815W	655W
D	LM24SL100	2250W	1340W	975W	785W
E	LM24SL120	2625W	1560W	1140W	920W
F	LM24SL180	3755W	2235W	1630W	1315W
G	LM36SL35	1230W	730W	537W	432W
Н	LM36SL65	1695W	1205W	880W	705W
1	LM36SL90	2815W	1675W	1220W	985W
J	LM36SL100	3375W	2010W	1465W	1180W
Κ	LM36SL120	3940W	2345W	1710W	1380W
L	LM120SL35	4120W	2450W	1790W	1440W
M	LM120SL60	5660W	4015W	2935W	2355W
Ν	LM120SL90	9390W	5590W	4080W	3290W
0	LM120SL100	11260W	6700W	4890W	3940W
Ρ	LM120SL120	13140W	7820W	5710W	4600W
Q	LM120SL180	18780W	11180W	8160W	6580W
R	LM120SL200	22520W	13400W	9780W	7880W

All capacities are in watts to 91% of nominal voltage.

Note: For other voltages and capacities contact your sales representative.

# **Product Code Construction**

#### Operating Distribution Other Transfer DC Voltage Battery Type Serie Capacity Time AC Voltage Options Options Options minutes LM 24 Blank = SLSelect from 30 120 Vac \*TPD \*DPF \*ZSC 36 Battery 60 208 Vac \*TPA \*DPFF \*ZSI Capacity chart \*\*TD 120 90 240 Vac \*TPA/TPD \*DPCB in folder 120 277 Vac \*DPCAB BCB 347 Vac 3PH 600 Vac CYC \* Specify Watts for each type of load. \* Specify Nº of Specify number of circuits. zones. \*\* Specify time.

# **Standard Features**

CODE GL	DESCRIPTION Ground leakage.
FC	One set of dry contacts for remote fault sensing.
RAP	Remote alarm panel.
SPF	Drip shield (2.5" overhang on console).
BRO	Brownout.
BMEC	Ontario Building Materials Evaluation Commission approved.

### Cabinet dimensions

Series	Cabinet Type	Dimensions HxWxD
LM24SL 35-180 LM36SL 35-100	5C	25" X 29" X 14"
LM36SL 110-120 LM36SL 160-180 LM120SL 35	LM15	38" X 38" X 18"
LM120SL 90-100 LM120SL 120-200	LM18 LM28	38" X 38" X 28" 56" X 38" X 28"

Electronics and batteries are in the same cabinet.





# Notes









# Notes










## Notes







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N EXU S- Network Management System

## LED Retrofit Kits for EXIT signage



#### Convert high consumption incandescent and fluorescent lamps to energy efficient LED lamps.

Converting existing exit signage from incandescent or fluorescent lamps to LED (light emitting diodes) lamps drastically reduces operating and maintenance costs for building owners and property managers. As part of energy efficiency programs, some Canadian electric utilities are also actively promoting conversion to LED with incentive and rebate programs for installers and building owners/managers.

## Features

#### Lumacell offers four retrofit kit options:

- Superstrip Series
- (red AlInGaP technology)
- Mini-Wedge LMW Model
- (red AlInGaP technology)
- Mini-Wedge LMWXD Model
- LED Lamp

## Here are some of the benefits of using LED lamps in exit signs:

- Exceptional energy efficiency reduces energy consumption by up to 90%
- Extremely long life 10 to 25 years
- Important reduction in maintenance and energy costs
- Average payback is less than two years (see page 6)
- Retrofit kits are easy to install
- Improved visibility and reliability



## **Typical Specification**

Converting existing exit signage from incandescent or fluorescent lamps to LED (light emitting diodes) lamps drastically reduces operating and maintenance costs for building owners and property managers. As part of energy efficiency programs, some Canadian electric utilities are also actively promoting conversion to LED with incentive and rebate programs for installers and building owners/managers.

\_\_\_\_\_

LUMACELL Model



# LED RETROFIT KITS

## **SUPERSTRIP Series (LMR model)**

Prepared by



- Quick and easy to install

- Long-life, energy-efficient red ALINGAP LED technology
- Module features two independent circuits one for AC input; one for DC input
- Universal AC input: 120/277/347Vac; universal DC input: 6 to 24Vdc
- Power consumption of 1.1W per module

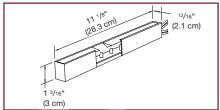
Date

- 10 year limited warranty

## **Power Consumption**

Model	AC Specs		DC Specs	
LMR	120/277/347Vac 1.1 W 6 to 24Vdc 1.3 W			

## Dimensions



## Ordering Information

Series	Voltage	Options
		Blank= 11.0"
hardwire retro-fit	<b>UNIV36</b> = 120/277/347Vac., 36Vdc	(28cm) long
kit	<b>UNIV48</b> = 120/277/347Vac, 48Vdc	* <b>-9.5</b> = 9.5 "
	<b>UNIV120</b> = 120/347Vac, 120Vdc	(24 cm) long
	120VACDC2 = 120Vac, 120Vdc, 2 wires	

## **EXAMPLE: LMRUNIV**

## **MINI-WEDGE Series (LMW model)**



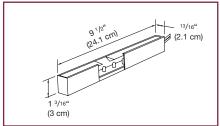
– Easiest <sup>•</sup>	to install	in its class

- Compact size makes it ideal for virtually all exit signs
- Can be retrofitted directly on fluorescent ballast
- Long-life, energy-efficient red ALINGAP LED technology
- Available with AC adaptor for all type of lamp sockets
- 10 year limited warranty

## Power Consumption

Model	AC Specs		DC Specs	
LMW	120Vac; 86Vac step down from 347Vac	1.7 W	N/A	N/A
LMW	120Vac; 86Vac step down from 347Vac	1.7 W	N/A	N/A

## Dimensions



## Ordering Information

Series     Voltage     Base       LMW = for std applications     120 = 120Vac 120HW = 120Vac, hardwire     C = candelabra       120HW = 120Vac, hardwire     I = intermediate       240HW = 240Vac, hardwire     B = bayonet       277HW = 277Vac, hardwire     CIMB = complete set of bases (exclude "F" base)       242HW = 242Vac     CIMB = complete set of bases (exclude "F" base)	U		
applications     120HW = 120Vac, hardwire     I = intermediate       240HW = 240Vac, hardwire     M = medium       240HW = 240Vac, hardwire     B = bayonet       277HW = 277Vac, hardwire     F = G23 compact fluorescent       277HW = 277Vac, hardwire     CIMB = complete set of bases (exclude "F" base)	Series	Voltage	Base
hardwire (CIMBHQ = Hydro-Quebec set for "Efficient Products Program".		120HW = 120Vac, hardwire 240HW = 240Vac, hardwire 277HW = 277Vac, hardwire 347HW = 347Vac,	I = intermediate M = medium B = bayonet F = G23 compact fluorescent CIMB = complete set of bases (exclude "F" base) CIMBHQ = Hydro-Québec set for

## EXAMPLE: LMW120C

## **MINI-WEDGE Series (LMWXD model)**

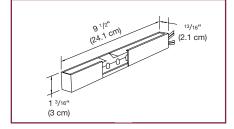


- Easiest to install in its class
- Compact size makes it ideal for virtually all exit signs
- Can be retrofitted directly on fluorescent ballast
- Suitable for all AC line applications including exit signs equipped with in-line diodes

## **Power Consumption**

Model	AC Specs		odel AC Specs DC Specs	
LMWXD	120Vac; 120Vac with in-line diodes	2.8 W	N/A	N/A

## Dimensions



## **Ordering Information**

Series	Voltage	Base
LMWXD = with or without in-line diodes. high brightness	<b>120</b> = 120 Vac	C = candelabra I = intermediate M = medium B = bayonet CIMB = complete set of bases

## **EXAMPLE: LMWXD120-C**

## **LED LAMPS**

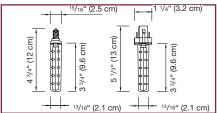


- Quick and easy to install
- Available with wide range of lamp bases for quick lamp to lamp replacement
- 120Vac or 120Vac with in-line diode

## **Power Consumption**

Model	AC Specs		DC S	pecs
L11W	120Vac	0.90 W	N/A	N/A
L3	120Vac	2.5 W	120Vdc	2.5 W

## **Dimensions**



## **Ordering Information**

	EXAMPLE: L1-1W-C
	F = G23 compact fluorescent
· · ·	<b>B</b> = bayonet
(2.5W)	M = medium
L3 = with or without in-line diodes	I = intermédiate
L11W = standard version	C = candelabra
Series	Base

Project / Location		Date	A million and the state of the
Contractor	Prepared by		(Free contraction of the
LUMACELL Model	-		

# LED RETROFIT KITS

## How much can I save?

The following is an example of the savings you can generate by simply installing an LED retrofit kit in an existing incandescent Exit sign.

The Retrofit Kits Cost is :	\$70.00
Installation cost (per unit) for a retrofit kit is (Labour):	\$5.00
Wattage rating per incandescent lamp in existing fixture:	15W
Number of incandescent lamps per fixture:	2
Wattage rating of Lumacell LMRUNIV retrofit kit:	1.7W
My existing incandescent exit lamps last for:	4 Months
My replacement labour cost is:	\$25.00 / Hour
Estimate lamp replacement time per exit:	20 Minutes
The current material cost for each exit sign lamp is:	\$1.00 / Lamp
My current energy cost is:	\$0.060 / \$ Per kWh
The PAYBACK FOR YOUR INSTALLATION IS:	1.06 Years
THE ANNUAL RETURN ON INVESTMENT IS:	94.50 %
THE ANNUAL SAVING IS:	\$70.87

For more information, please do not hesitate to contact us.

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## RSF & RSFSP Series Fluorescent inverters

### **RSF** Series remote inverters and **RSFSP** Series self-powered inverters.



## Features

- Converts new or existing fluorescent fixtures into emergency lighting units
- All RSFSP Series are fully load tested prior to shipment
- Inverter is 100% solid state, short and open circuit proof
- Polarized DC input (RSF Series only)

- 120Vac 60Hz input is standard, 277 and 347Vac available as options
- 25%, 50% or 80% lamp lumen output
- Mounts directly in ballast channel, remote or optional T-Bar fixture
- CSA listed



## **Typical Specification**

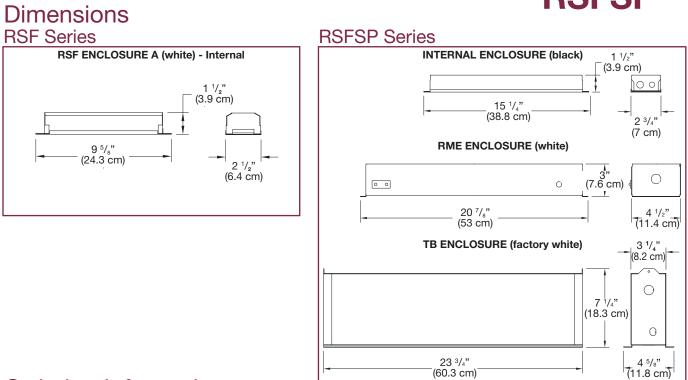
**RSF Series:** The electrical contractor shall supply and install Lumacell RSF Series remote fluorescent inverter ballasts for each fixture as shown on plans. The inverter shall operate on \_\_\_\_\_ Vdc input

for \_\_\_\_\_ minutes during a power failure. The fluorescent lamp shall be maintained at \_\_\_\_% lumen output for one lamp only. The inverter is to be connected to the remote battery unit as shown on plans (battery unit to be selected according to voltage/wattage and duration required). The inverter shall be capable of illuminating the fluorescent lamp even when it is burned out under normal AC operation. **RSFSP Series:** The electrical contractor shall supply and install Lumacell RSFSP Series fluorescent inverters for each fixture as shown on plans. The RSFSP Series inverter shall operate for \_\_\_\_\_ minutes during a power failure. The fluorescent lamp shall be maintained at \_\_\_\_\_ % of nominal lumen output. The RSFSP Series inverter shall be capable of illuminating the fluorescent lamp even when it is out under normal AC operations.

Project / Location			Date
Contractor		Prepared by	
LUMACELL Model			



# RSF & RSFSP



## Ordering Information

**RSF** Series

Series	Lumens / % for 48" Tube	A.C. Voltage
RSF = 6Volts	800 = 800 lumens (25%)	Blank = 120Vac
RSF12 = 12Volts	<b>1600</b> = 1600 lumens (50%)	<b>ZC</b> = 277Vac
RSF24 = 24Volts	<b>3200</b> = 2560 lumens (80%)	<b>ZD</b> = 347Vac
RSF32 = 32Volts		
<b>RSF48</b> = 48Volts		
<b>RSF120</b> = 120Volts		

## EXAMPLE : RSF800

#### **RSFSP Series**

Series	Lumens/% for 48" Tube	Min. Runtime	Enclosure	A.C. Voltage
RSFSP	800 = 800 lumens (25%)	90 = 90 minutes *Blank = internal E		Blank = 120Vac
	1600 = 1600 lumens (50%)	* <b>120</b> = 120 minutes	<b>RME</b> = remote mounting enclosure	<b>ZC</b> = 277Vac
	3200 = 2560 lumens (80%)		<b>TB</b> = T-Bar	<b>ZD</b> = 347Vac
		*RSFSP3200 in T-Bar cabinet only.		
			*Not available for RSFSP3200.	

## EXAMPLE : RSFSP80090

Lumen outputs based on averages.

Inverters will operate T12, T8, or "U" type lamps.

## RSFSP/U/1100 Series Fluorescent inverters

Convert fluorescent fixtures into emergency lighting units.



## Features

- Converts new or existing fluorescent fixtures into emergency lighting units
- Each unit is fully computer tested and comes with a 3-year full warranty
- Self-contained in one compact housing for easy installation and maximum mounting flexibility
- Can be wired to operate with switched, unswitched and normally off fixtures without affecting normal operation
- Compatible with standard, energy saving, dimming and electronic AC ballasts
- Maintains operation of one or two lamps when switched to emergency mode
- When AC power is restored, automatically returns the fluorescent lamps to normal operating mode and solid state charger begins recharging the battery
- Sealed maintenance-free nickel cadmium batteries
- CSA listed



## **Typical Specification**

The contractor will supply and install Lumacell model RSFSP/U/1100 self-powered fluorescent emergency inverter as shown on plans. The fluorescent emergency inverter shall contain a charger, high frequency inverter, and sealed nickel cadmium battery designed for high-temperature operation. The unit shall be able to operate one or two fluorescent lamps and provide not less than 1100 lumens initial light output in emergency mode. The duration of emergency backup shall be at least 90 minutes. Standard input voltage shall be 120V/347Vac 60Hz.

The unit shall be Lumacell Model: RSFSP/U/1100

Project / Location		Date		
Contractor		Prepared by		
LUMACELL Model				



# **RSFSP/U/1100**

#### **Dimensions** А в υ Dimensions Catalogue **Electrical Input** Number С А В D RSFSP/U/1100 120/347V 60 Hz 4W 13-3/8" (34.0 cm) 2-3/8" (6.0 cm) 13" (33.0 cm) 1-1/2" (3.8 cm)

## Lamp Operation

RSFSP Series should be used for Octron\* Power Groove\*, VHO and SHO lamps. \*Octron is a registered trademark of Sylvania. \*Power Groove is a registered trademark of G.E.

Unit Type	Emergency Lumens Illumination Time		Lamps Able to Operate	Lamps Operated
RSFSP/U/1100	90	1300 *	2	2 to 4 ' (20 to 40 W)**
	90	1300 *	1	2 to 4 ' (20 to 40 W)**

\*Depending on the number of lamps, wattage, and type of lamps selected: The RSFSP produces 1100 to1300 lumens initial emergency light output. \*\* Voltage maximum: 40W ( 2 x 20W or 1 x 40W)

## **Ordering Information**

Series	Option
RSFSP/U/1100= 1100 lumens for 90 minutes 120/347Vac	R= texternal mounting kit

## EXAMPLE : RSFSP/U/1100

# Wire Guards



## Exit Signs

		Ciano			Dimensions	3
Part #	Mounting	Signs		W	Н	D
460.0027-L	End Mount	LSR800 Exit LER400 Exit 700 Exit Series 3000 Series - Nema-4X Exit LTEU Exit	LER900 Exit LMCE Exit LER660 Exit LTSU Sortie	10 1/2" (26.7 cm)	6" (15.2 cm)	16" (40.6 cm)
460.0028-L	Ceiling Mount	LER800 Exit LER400 Exit 700 Exit Series 3000 Series - Nema-4X Exit LTEU Exit	LER900 Exit LMCE Exit LER660 Exit LTSU Sortie	14 1/2" (36.8 cm)	6 1/4" (15.9 cm)	10 1/2" (26.5 cm)
460.0034-L	Wall Mount	RG12S Sortie NH50	RG12S Exit (cab "B")	28 1/4" (7.5 cm)	21 1/8" (53.7 cm)	10" (25.4 cm)
460.0048-L	End Mount	LSR800 Sortie LSR400 Sortie	LSR900 Sortie LSRLMCSU Sortie	10 1/2" (26.7 cm)	6" (15.2 cm)	21" (53.3 cm)
460.0057-L	Wall Mount	LSR800 Sortie LSR400 Sortie	LSR900 Sortie LSRLMCSU Sortie	21" (53.3 cm)	10" (25.4 cm)	4" (10.2cm)
460.0058-L	Ceiling Mount	LSR800 Sortie LSR400 Sortie	LSR900 Sortie LSRLMCSU Sortie	21 3/4" (55.2 cm)	5 1/2" (14 cm)	10 1/2" (26.7cm)
460.0059-L	Wall Mount	900B6L bilingual Series LMCSB6L Sortie	400B6L bilingual Series LMCEB6L Exit	31" (86.4 cm)	10" (25.4 cm)	4 1/2" (14 cm)
460.0060-L	End Mount	3LSRLMCSU series Sortie Combo 3000 Series-Nema-4X Exit Combo	8LMCSU Sortie Combo	20" (50.8 cm)	12" (30.5 cm)	15" (38.1 cm)
460.0060-L	Wall Mount	3LSR400 Sortie Combo	3LER400 Exit Combo	20" (50.8 cm)	12" (30.5 cm)	15" (38.1 cm)
460.0060-L	Ceiling Mount	3000 Series-Nema-4X Exit Combo		20" (50.8 cm)	12" (30.5 cm)	15" (38.1 cm)
460.0078-L	Wall Mount	3LSRLMCSU Sortie Combo 3000 Series-Nema-4X Exit Combo 3LSR400 Sortie Combo	8LMCSU Exit Combo 3LER400 Exit Combo	18" (45.7 cm)	18" (45.7 cm)	7" (17.8 cm)
460.0079-L	Wall Mount	LER800 Exit LER400 Exit 700 Exit Series 3000 Series-Nema-4X Exit LTEU Exit	LER900 Exit LMCE Exit LER660 Exit LTSU Sortie	14" (36.6 cm)	10" (25.4 cm)	4 1/2" (11.4 cm)
460.0080-L	Wall Mount	LER-HZ combo (class1 Div2)	LER-HZ Exit	15 1/4" (38.7 cm)	14 1/8" (35.9 cm)	6 1/2" (16.5 cm)
460.0081-L	Wall Mount	RG12S Exit (cab "A")		20" (50.8 cm)	17 1/8" (43.6 cm)	8 1/2" (21.6 cm)
460.0091-L	Wall Mount	LER400R Exit Series		15" (38.1 cm)	10 1/2" (26.7 cm)	1" (2.5 cm)
460.0092-L	Ceiling Mount	3LSRLMCSU Sortie Combo Series	8LMCSU Sortie Combo	31" (53.3 cm)	4.5" (11.4 cm)	10" (25.4 cm)

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Prepared by



# WIRE GUARDS &

## **Battery Units**

Commercial, Deco Unit

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W

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Bert # Mounting		Commercial, Deco Unit		Dimensions		
Part #	Wounting		W	Н	D	
460.0078-L	Wall Mount	"A" Cabinet - 6V, 12V, 24V - Max. 144watts	17" (43.2 cm)	17" (43.2 cm)	7" (17.8 cm)	
460.0081-L	Wall Mount	"B" Cabinet - 6V - 180watts 12V - 200 to 360watts 24V - 200 to 288watts	20" (50.8 cm)	17 1/8" (43.6 cm)	8 1/2" (21.6 cm)	
460.0034-L	Wall Mount Wall Mount	"C" Cabinet - 12V - 650watts 24V - 350 to 720watts "D" Cabinet - 12V - 360watts HP, 900watts 24V - 720watts HP	28 1/8" (71.5 cm)	21 1/8" (53.7 cm)	10" (25.4 cm)	
460.0097-L	Wall Mount	Q-BIC	31" (53.3cm)	6.0" (15.2 cm)	7.0"(17.8 cm)	

#### Small, 6Volt

		460.0080-L	Wall Mount	6V, 12V - 18 to 72watts	15 1/4" (38.7 cm)	14 1/8" (35.9 cm)	6 1/2" (16.5 cm)
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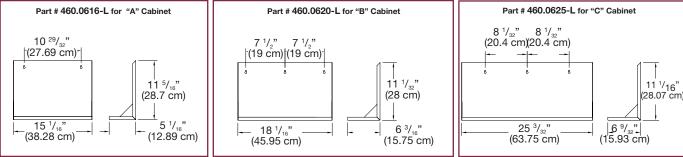
Industrial	N4T
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460.0081-L Wall Mount Medium and Largel Cabinet 20" (50.8 cm) 17 1/8" (43.6 cm) 8 1/2" (21.6 cm	ſ	460.0082-L	Wall Mount	Small Cabinet	12" (30.5 cm)	9" (3.5 cm)	9" (3.5 cm)
		460.0081-L	Wall Mount	Medium and Largel Cabinet	20" (50.8 cm)	17 1/8" (43.6 cm)	8 1/2" (21.6 cm)

## Remote Heads

Devit #	Demote Lleade	Dimensions				
Part #	Remote Heads	W	D			
440.0029-L	MT1, MT2, DR1130, DR2130, MQ, MQM	6 1/4" (15.9cm)	8 1/4"(21.0cm)	6 3/4"(17.2cm)		
440.0031-L	RSQBD, RG-NX	28"(71.1cm)	8 1/2"(21.5cm)	8 1/2"(21.5cm)		
440.0032-L	RSQB2	9 1/2"(24.1cm)	9 1/2"(24.1cm)	6 1/8"(15.6cm)		
440.0033-L	RS22, RS34	9 1/2"(24.1cm)	9 1/2"(24.1cm)	4"(10.2cm)		
440.0035-L	RS10, RS10WP, RS10WPRB, RSQB, MQM-NX, MQM-NC, RS40 MQM-HZ	8 7/16"(21.5cm)	6"(15.2cm)	8 7/16"(21.5cm)		
440.0082-L	RS20, RS20WP, RS20WPRB, SAF-T-RAY, CAMRAY	12"(30.5cm)	9"(22.9cm)	9"(22.9cm)		
440.0010-L	DIVIDER®	14"(35.6cm)	5.8"(14.7cm)	5.6"(14.2cm)		

## **Mounting Shelves**



## NEXUS<sup>®</sup> System Network Management System

**NEXUS**<sup>®</sup> is a real-time emergency lighting monitoring and control system which offers building owners/managers control over their public safety obligations, and helps manage installation and the maintenance of an emergency lighting system. A Nexus network enables the user to -

- Manage the installation and removal of components Ensure tests are preformed properly
- Cost effectively test and monitor the system
- Assign fittings to groups

- Prepare reports
- Log test results and print as required

- Manage maintenance activities

## Advantages of **NEXUS®**

Labor Saving - Nexus<sup>®</sup> enables the user to remotely activate emergency lighting units and retrieve status information.

This information is then automatically stored in an electronic log book. Maintenance personnel need only attend to units that require maintenance.

Maximize System Availability – Nexus<sup>®</sup> can test and report on the status of an entire emergency lighting system within a building individually, in groups or all together.

**Self Monitoring – Nexus<sup>®</sup>** is self-monitoring. In an event of cable damage, **Nexus**<sup>®</sup> can indicate the location of the fault down to the particular branch, which could potentially save hours of manual fault finding

**Independent System** – The operation of emergency lighting is not impeded by nor dependant upon Nexus<sup>®</sup>. A Nexus light fitting can be removed from or added anywhere within the Nexus network without interruption to the operation of the system.

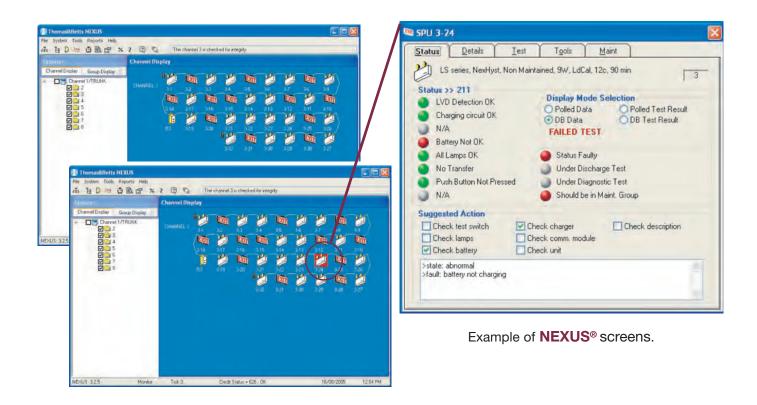
Data Integrity – Nexus<sup>®</sup>s can minimize human errors which affect the validity of data, by automating processes and logging maintenance data.

**Bus Topology** – Nexus<sup>®</sup> fittings are connected by a twisted pair data cable in a double terminated multi-drop bus topology.

Single Twisted Pair Cable – The Nexus® system requires a single shielded twisted pair cable as the network medium. The cable offers high communication speed and high resistance to external interference.



Easy to use Graphic User Interface – The **Nexus**<sup>®</sup> software contains an easy to use graphic user interface which guides the user through a series of functions



**Nexus**<sup>®</sup> Warranty – Lumacell emergency lighting equipment units with the **Nexus**<sup>®</sup> options are fully warranted to be free of defects in material and workmanship under normal use for a period of five (5) years. The full warranty period begins on the date of installation or ninety (90) days from the date of shipment, whichever date is earlier.

Wherever you are, you can depend on  $N \in \mathcal{K} \cup S$  to get the job done!

For more information please contact us at: 1-866-857-5711 (ext. 7515) nexus-info@tnb.com








## Notes







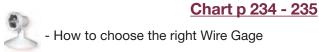




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#### Wire Size Guide & Battery Unit Capacity



#### Electrical Code p 236 - 239

- Extracts from the Canadian Electical Code

#### Building Code p 240 - 245

- Extracts from the National Building Code of Canada (2005).

#### Fire Code p 246

- Extracts from the National Fire Code of Canada (2005).

#### Generator Room Code p 247

- Extracts from the Canadian Standards Association

# Wire Size Guide

When remote fixtures and exit signs are connected to emergency lighting units of less than 50 volts, circuit runs must be sufficient size to maintain a proper operating voltage to all lamps. The maximum allowable voltage drop should not exceed 5%. Proper wire size can be selected from the following table or by use of the following formula:



 $CM = \frac{22 \times W \times L}{.05 \times E^2}$ 

CM= Wire size in circular millsW= Emergency load in wattsL= Length of circuit in feet

E= Line Voltage
22= Constant
.05= Factor for max. allowable voltage drop

	Length of Wire Run (in feet)														
								watts							
	wire size	13	18	25	30	35	50	60	75	100	150	200	250	300	400
	12	41	30	21	18	15	11	9	8	6	4	_	_	_	
6	10	65	47	32	28	24	17	14	11	9	6			_	
volts	8	110	75	54	45	39	27	22	18	14	9	7		_	
	6	165	120	86	71	62	43	36	29	22	15	11	9		
	12	165	110	85	71	61	42	35	29	21	14	10	8	_	
12	10	260	190	136	112	97	68	52	45	34	23	17	14	11	
volts	8	415	300	215	180	154	108	90	72	54	36	27	21	18	
VOILS	6	660	475	340	285	245	170	140	114	86	57	43	34	28	
	4	1050	760	540	455	390	275	225	182	137	91	68	55	45	
	12	660	440	340	284	244	168	140	116	84	56	40	32	26	21
24	10	1040	760	544	448	388	272	208	180	136	92	68	52	44	34
volts	8	1668	1200	860	720	616	432	360	288	216	144	108	84	72	54
VOILS	6	2640	1900	1360	1140	980	680	560	456	344	228	172	136	112	85
	4	4200	3040	2160	1810	1560	1100	900	728	548	364	272	220	180	100
	12	1160	840	600	500	435	300	250	200	150	100	75	60	50	42
32	10	_	1340	960	800	690	480	400	320	240	160	120	96	80	63
volts	8	_		1540	1280	1110	770	640	510	385	255	192	154	128	100
Voito	6	—		—	—	1740	1220	1020	815	610	405	305	240	200	163
	4	-				_		1620	1300	970	650	485	390	325	260
	12	_	1899	1367	1139	949	680	_	455	341	227	170	136	113	68
48	10	_	_		1811	1509	1085	_	724	543	362	271	217	181	108
volts	8	—		_	—		1729	_	1152	864	576	432	345	288	172
	6	_		—		—	—	—	1832	1374	916	687	549	458	274
100	12	14964		7792		_	3896	_		1945	1300	977	720	650	608
120	10	23787		12367			6193	_		3093	2067	1553	1238	1033	966
volts	8	37810		19705	—		9852	_		4820	3289	2471	1970	1644	1538
	6	60159		31327	—	—	15663	—		7822	5229	3929	3132	2614	2445

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# BATTERY UNIT CAPACITY CHART

Battery Unit		Wattag	e Capacity			
	0.5 hr	1 hr	1.5 hrs	2 hrs	4 hrs	
6V - 36W	36	21	15	12	6	
6V - 72W	72	42	30	24	12	
6V - 108W	108	63	45	36	18	
6V - 180W	180	105	75	60	30	
12V - 36W	36	21	15	12	6	
12V - 72W	72	42	30	24	12	
12V - 100W	100	58	42	33	17	
12V - 144W	144	84	60	48	24	
12V - 200W	200	117	83	67	33	
12V - 250W	250	144	100	83	42	
12V - 288W	288	168	120	96	48	
12V - 360W	360	210	150	120	60	
24V - 144W	144	84	60	48	24	
24V - 200W	200	117	83	67	33	
24V - 288W	288	168	120	96	48	
24V - 350W	350	200	144	120	60	
24V - 432W	432	250	180	144	72	
24V - 550W	550	320	230	180	90	
24V - 720W	720	420	300	240	120	



# Electrical Code

## Extracts from the Canadian Electrical Code



#### Section 46 — Emergency Systems, Unit Equipment, and Exit Signs

#### 46-000 Scope

- This section applies to the installation, operation, and maintenance of emergency systems and unit equipment intended to supply illumination and to emergency systems intended to supply power, in the event of failure of the normal supply, where required by the National Building Code of Canada.
- 2) The Section applies to the wiring of exit signs.
- 3) The requirements of this section are supplementary to, or amendatory of, the general requirements of this Code..

#### 46-100 Capacity

Emergency systems and unit equipment shall have adequate capacity and rating to ensure the satisfactory operation of all connected equipment when the principal source of power fails.

#### 46-102 Instructions

- Complete instructions for the operation and care of an emergency system or unit equipment which shall specify testing at least once every month to ensure security of operation shall be posted on the premises in a frame under glass.
- 2) The form of instructions and their locations shall be in compliance with the National Building Code of Canada.

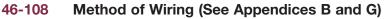
#### 46-104 Maintenance

- 1) Where batteries are used as a source of supply, the batteries shall be kept :
  - a) in proper condition, and
  - b) fully charged at all times.

#### 46-106 Arrangement of Lamps

- 1) Emergency lights shall be so arranged that the failure of any one lamps will not leave in total darkness the area normally illuminated by it.
- 2) No appliance or lamp, other than those required for emergency purposes, shall be supplied by the emergency circuits.

# **ELECTRICAL CODE**



- 1) Except as permitted by Subrule (2) and Rule 46-304(3), all conductors of systems, equipment, and devices installed in accordance with this Section shall be :
  - a) installed in metal raceway of the totally enclosed type or
  - b) incorporated in a cable, having a metal armour or sheath or
  - c) installed in rigid nonmetallic conduit where embedded in at least 50mm of masonry or poured concrete or
  - d) installed in electrical nonmetallic tubing where embedded in at least 50mm of masonry or poured concrete.
- Conductors installed in buildings of combustible construction in accordance with Rules 12-506 to 12-520 shall be permitted to be incorporated in a nonmetallic sheathed cable.
- 3) Conductors of emergency systems and conductors between unit equipment and remote lamps shall be kept entirely independent of all other conductors and equipment and shall not enter a fixture, raceway, box, or cabinet occupied by other conductors except where necessary :
  - a) in transfer switches and
  - b) in exit signs and emergency lighting fixtures supplied from two sources.

#### 46-200 Emergency Systems (See Appendix B)

1) Rules 46-202 to 46-210 apply to emergency systems from central standby supplies only.

#### 46-202 Supply (See Appendix G)

- 1) The emergency supply shall be a standby supply consisting of :
  - a) a storage battery of the rechargeable type having sufficient capacity to supply and maintain at not less then 91% of full voltage the total load of the emergency circuits for the time period required by the National Building Code of Canada, but in no case less than 1/2 h, and equipped with a charging means to maintain the battery in a charge condition automatically or
  - b) a generator driven by a dependable prime mover.
- 2) Automobile batteries and lead batteries not of the enclosed glass-jar type are not considered suitable under Subrule (1) and shall only be used where a deviation has been allowed in accordance with Rule 2-030.
- 3) Where a generator is used, it shall be :
  - a) of capacity sufficient to carry the load and
  - b) arranged to start automatically without failure and without undue delay upon the failure of the normal power supply of the equipment connected to this generator.

## Electrical Code Extracts from the Canadian Electrical Code

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#### 46-204 Control

- 1) The current supply for emergency systems shall be controlled by automatic transfer equipment that energizes the emergency system upon failure of the normal current supply and that is accessible only to authorized persons.
- 2) An automatic light-actuated device, approved for the purpose, shall be permitted to be used to control separately the lights located in an area that is adequately illuminated during daylight hours without the need for artificial lighting.

#### 46-206 Overcurrent Protection

- 1) No device capable of interrupting the circuit, other than the overcurrent device for the current supply of the emergency system, shall be placed ahead of the branch circuit overcurrent devices.
- 2) The branch circuit overcurrent devices shall be accessible only to authorized persons.

#### 46-208 Audible and Visual Trouble-Signal Devices

- 1) Every emergency system shall be equipped with audible and visual trouble-signal devices that give warning of derangement of the current source or sources and that indicate when the emergency load is supplied from batteries of generators.
- 2) Audible trouble signals shall be permitted to be wired so that :
  - a) they can be silenced, but a red warning or trouble light shall continue to provide the protective function and
  - b) when the system is restored to normal, the audible signal will :
    - (i) sound, thus indicating the necessity of restoring the silencing switch to its normal position or
    - (ii) reset automatically so as to sound for any subsequent operation of the emergency system.

#### 46-210 Remote lamps

Lamps shall be permitted to be mounted at some distance from the current supply that feeds them, but the voltage drop in the wiring feeding such lamps shall not exceed 5% of the applied voltage.

#### 46-300 Unit Equipment (see Appendix B)

Rules 46-302 to 46-306 apply to individual unit equipment for emergency lighting only.

#### 46-302 Mounting of Equipment

Each unit equipment shall be mounted with the bottom of the enclosure not less than 2 m above the floor wherever practicable.

# **ELECTRICAL CODE**

#### 46-304 Supply Connections

- 1) Receptacles to which unit equipment is to be connected shall be not less than 2,5 m above the floor, where practicable, and shall be not more than 1,5 m from the location of the unit equipment.
- 2) Unit equipment shall be permanently connected to the supply if:
  - a) the voltage rating exceeds 250V or
  - b) the marked input rating exceeds 24 A.
- 3) Where the ratings in Subrule (2) are not exceeded, the unit equipment shall be permitted to be connected using the flexible cord and attachment plug supplied with the equipment.
- 4) Unit equipment shall be installed in such a manner that it will be automatically actuated upon failure of the power supply to the normal lighting in the area covered by that unit equipment.

#### 46-306 Remote lamps (see Appendix B)

- The circuit conductors to remote lamps shall be of such size that the voltage drop does not exceed 5% of the marked output voltage of the unit equipment, or such other voltage drop for which the performance of unit equipment is certified when connected to the specific remote lamp being installed.
- 2) Remote lamps shall be suitable for remote connection and shall be included in the list of lamps provided with the unit equipment.
- 3) The number of lamps connected to a single unit equipment shall not result in a load in excess of the watts output rating marked on the equipment for the emergency period required by the National Building Code of Canada, and the load shall be computed from the information in the list of lamps referred to in Subrule (2).

#### 46-400 Exit signs (See Appendices B and G)

- 1) Where exit signs are connected to an electrical circuit, that circuit shall be used for no other purpose.
- 2) Notwithstanding Subrule (1), exit signs shall be permitted to be connected to a circuit supplying emergency lighting in the area where these exit signs are installed.
- 3) Exit signs in Subrule (1) and (2) shall be illuminated by an emergency power supply where emergency lighting is required by the National Building Code of Canada.

# Building Code

## Extracts from the National Building Code of Canada - 2005



## 3.2.6. Additional Requirements for High Buildings (see Appendix B)

#### 3.2.6.1. Application

- 1) This Subsection applies to a building
  - a) of Group A, D, E or F major occupancy classification that is more than
    - (i) 36 m high, measured between grade and the floor level of the top storey, or
    - (ii) 18 m high, measured between grade and the floor level of the top storey, and in which the cumulative or total occupant load on or above any storey above grade, other than the first storey, divided by 1.8 times the width in metres of all exit stairs at that storey, exceeds 300,
  - b) containing a Group B major occupancy in which the floor level of the highest storey of that major occupancy is more than 18 m above grade,
  - c) containing a floor area or part of a floor area located above the third storey designed or intended as a Group B, Division 2 occupancy, and
  - d) containing a Group C major occupancy whose floor level is more than 18 m above grade.

#### 3.2.7. Lighting and Emergency Power Systems

#### 3.2.7.3. Emergency Lighting

1) Emergency lighting shall be provided to an average level of illumination not less than 10 lx at floor

- or tread level in
- a) exits,
- b) principal routes providing access to exit in open floor areas and in service rooms,
- c) corridors used by the public,
- d) corridors serving patients' sleeping rooms,
- e) corridors serving classrooms,
- f)underground walkways,
- g) public corridors,
- h) floor areas or parts thereof where the public may congregate
  - i) in Group A, Division 1 occupancies, or
  - ii) in Group A, Division 2 and 3 occupancies having an occupant load of 60 or more,
  - i) floor areas or parts thereof of daycare centres where persons are cared for, and
  - j) food preparation areas in commercial kitchens.
- 2) Emergency lighting to provide an average level of illumination of not less than 10 lx at floor or catwalk level shall be included in a service space referred to in Sentence 3.2.1.1.(8).
- 3) The minimum value of the illumination required by Sentences (1) and (2) shall be not less than 1 lx.
- 4) In addition to the requirements of Sentences (1) to (3), the installation of battery-operated emergency lighting in health care facilities shall conform to the appropriate requirements of CSA Z32, "Electrical Safety and Essential Electrical Systems in Health Care Facilities."

# BUILDING CODE

#### 3.2.7.4. Emergency Power for Lighting

1) An emergency power supply shall be

- a) provided to maintain the emergency lighting required by this Subsection from a power source such as batteries or generators that will continue to supply power in the event that the regular power supply to the building is interrupted, and
- b) so designed and installed that upon failure of the regular power it will assume the electrical load automatically for a period of
  - i) 2 h for a building within the scope of Subsection 3.2.6.,
  - ii) 1 h for a building of Group B major occupancy classification that is not within the scope of Subsection 3.2.6., and
  - iii) 30 min for a building of any other occupancy. (See Appendix A.)
- 2) If self-contained emergency lighting units are used, they shall conform to CSA C22.2 No. 141, "Unit Equipment for Emergency Lighting."

#### 3.4.5. Exits

#### 3.4.5.1. Exit Signs

- 1) Every exit door shall have an exit sign placed over or adjacent to it if the exit serves
  - a) a building more than 2 storeys in building height,
  - b) a building having an occupant load of more than 150, or
  - c) a room or floor area that has a fire escape as part of a required means of egress.
  - 2) Every exit sign shall
    - a) be visible from the exit approach,
    - b) have the word EXIT or SORTIE displayed in plain legible letters, and
    - c) be illuminated continuously while the building is occupied.
  - 3) Exit signs shall consist of
    - a) red letters on a contrasting background or contrasting letters on a red background, with the letters not less than 114 mm high and having a 19 mm stroke, if the sign is internally illuminated, and
    - b) white letters on a red background or red letters on a contrasting background that is white or a light tint, with letters not less than 150 mm high and having a 19 mm stroke, if the sign is externally illuminated.
  - 4) If illumination of an exit sign is provided from an electrical circuit, that circuit shall
    - a) serve no equipment other than emergency equipment, and
    - b) be connected to an emergency power supply as described in Sentence 3.2.7.4.(1).
  - 5) If necessary, the direction of egress in public corridors and passageways shall be indicated by a sign conforming to Sentence (3) with a suitable arrow or pointer indicating the direction of egress.
  - 6) Except for egress doorways described in Sentence 3.3.2.4.(4), an exit sign conforming to Sentences (2), (3) and (4) shall be placed over or adjacent to every egress doorway from rooms with an occupant load of more than 60 in Group A, Division 1 occupancies, dance halls, licensed beverage establishments, and other similar occupancies that, when occupied, have lighting levels below that which would provide easy identification of the egress doorway.

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## Building Code Extracts from the National Building Code of Canada - 2005



#### 3.4.5.2. Signs for Stairs and Ramps at Exit Level

1) In a building more than 2 storeys in building height, any part of an exit ramp or stairway that continues up or down past the lowest exit level shall have a posted sign clearly indicating that it does not lead to an exit.

#### 9.9.10. Signage

#### 9.9.10.1. Application

1) This Subsection applies to all exits except those serving not more than one dwelling unit.

#### 9.9.10.2. Visibility of Exits

1) Exits shall be located so as to be clearly visible or their locations shall be clearly indicated.

#### 9.9.10.3. Required Exit Signs

1) Every exit door in a building that is 3 storeys in building height or in a building having an occupant load greater than 150 shall have an exit sign over it or adjacent to it.

#### 9.9.10.4. Exit Direction Signs

1) Exit direction signs shall be placed in corridors and passageways where necessary to indicate the direction of exit travel.

#### 9.9.10.5. Visibility of Exit Signs

1) Exit signs shall be installed so as to be visible from the exit approach and shall be illuminated continuously while the building is occupied.

#### 9.9.10.6. Lettering

- Exit signs shall have the word EXIT or SORTIE in red letters on a contrasting background or a red background with contrasting letters when the sign is internally lighted, and white letters on a red background or red letters on a white background when the sign is externally lighted.
- 2) Lettering referred to in Sentence (1) shall be made with not less than 19 mm wide strokes and be not less than 150 mm high when the sign is externally lighted, and not less than 114 mm high when the sign is internally lighted.

#### 9.9.10.7. Illumination

- 1) Illumination of exit signs required in Article 9.9.10.3. shall conform to Sentences 9.9.11.3.(2) and (3).
- 2) Where illumination of exit signs required in Article 9.9.10.3. is provided by an electrical circuit, that circuit shall serve no equipment other than emergency equipment.

#### 9.9.10.8. Signs for Stairs and Ramps at Exit Level

1) In buildings that are 3 storeys in building height, any part of an exit ramp or stairway that continues up or down past the lowest exit level shall be clearly marked to indicate that it does not lead to an exit, if the portion beyond the exit level may be mistaken as the direction of exit travel.

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# BUILDING CODE

#### 9.9.11. Lighting

#### 9.9.11.3. Emergency Lighting

- 1) Emergency lighting shall be provided in
  - a) exits,
  - b) principal routes providing access to exit in an open floor area,
  - c) corridors used by the public,
  - d) underground walkways, and
  - e) public corridors.
- 2) Emergency lighting required in Sentence (1) shall be provided from a source of energy separate from the electrical supply for the building.
- 3) Lighting required in Sentence (1) shall be designed to be automatically actuated for a period of at least 30 min when the electric lighting in the affected area is interrupted.
- 4) Illumination from lighting required in Sentence (1) shall be provided to average levels of not less than 10 lx at floor or tread level.
- 5) Where incandescent lighting is provided, lighting equal to 1 W/m2 of floor area shall be considered to meet the requirement in Sentence (4).
- 6) Where self-contained emergency lighting units are used, they shall conform to CSA C22.2 No. 141, "Unit Equipment for Emergency Lighting."

## **Building Code** Extracts from the National Building Code of Canada - 2005

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## Classification by Group **Examples**

Examples	. (	Group	Group
Motion picture theatres Opera houses	Television studios admitting a viewing audience Theatres, including experimental theatres	А	1
Art Galleries Auditoria Bowling alleys Churches and similar places of worship Club, non-residential Community halls Court rooms Dance halls Exhibition halls (other than classified in Group E) Gymnasia	Lecture halls Librairies Licensed beverage establishments Museums Passenger stations and depots Recreational piers Restaurants Schools and colleges, non-residential Undertaking premises	A	2
Arenas Rinks	Indoor swimming pools with or without spectator seating	A	3
Amusement park structures (not elsewhere classified) Bleachers	Grandstands Reviewing stands Stadia	А	4
Jails Penitentiaries Police stations with detention quarters	Psychiatric hospitals with detention quarters Reformatories with detention quarters Prisons	В	1
Children's custodial homes Convalescent homes Hospitals Infirmaries Orphanages	Psychiatric hospitals without detention quarters Reformatories without detention quarters quarters Sanitoria without detention Nursing homes	В	2
Apartment Hotels Boarding houses Clubs, residential Colleges, residential Convents Dormitories	Houses Loading houses Monasteries Motels Schools, residential	С	
Banks Barber and hairdressing shops Beauty parlors Dental offices Dry Cleaning establishments Self-service, not using flammable or explosive solvents or cleaners	Laundries, self-service Medical offices Offices Police stations without detention quarters Radio stations Small tool and appliance rental and service establishment	D	
Department stores Exhibition halls Markets	Shops Stores Supermarkets	E	
Bulk plants for flammable liquids Bulk storage warehouses for hazardous substances	Flour mills Grain elevators Lacquer factories		

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# BUILDING CODE

Examples		Group	Group
Cereal mills Chemicals manufacturing or processing plants Distilleries Dry Cleaning plants Feed Mills	Mattress factories Paint, varnish and pyroxylin product factories Rubber processing plants Spray painting operations Waste paper processing plants	F	1
Aircraft hangars Box factories Candy plants Cold storage plants Dry Cleaning establishments not using flammable or explosive solvents for cleaners Electrical substations Factories Freight depots Helicopter landing areas on roofs Laboratories Workshops	Mattress factories Planning mills Printing plants Repair garages Salesroom Services stations Storage rooms Television studios admitting a viewing audience Warehouses Wholesale rooms Woodworking factories Laundries except self-service	F	2
Creameries Factories Laboratories Power plants Salesrooms Workshops	Storage garages including open air Parking garages Storage rooms Warehouses Samples display rooms	F	3

# FIRE CODE

## Extracts from the National Fire Code of Canada - 2005



#### 2.7.3 Safety to Life

#### 2.7.3.1. Installation and Maintenance

- 1) Exit lighting, exit signs and emergency lighting shall be provided in buildings in conformance with the NBC. (See Appendix A.)
- 2) Exit lighting and exit signs shall be illuminated during times when the building is occupied.
- 3) Emergency lighting shall be maintained in operating condition, in conformance with Section 6.5.

#### Section 6.5 Emergency Power Systems and Unit Equipment for Emergency Lighting

#### 6.5.1.1. Inspection, Testing and Maintenance

- 1) Except as provided in Articles 6.5.1.2. to 6.5.1.5., emergency power systems shall be inspected, tested and maintained in conformance with CAN/CSA-C282, "Emergency Electrical Power Supply for Buildings."
- 2) An emergency electrical power supply system for emergency equipment for health care facilities shall be inspected, tested and maintained in conformance with CAN/CSA-Z32, "Electrical Safety and Essential Electrical Systems in Health Care Facilities." (See Appendix A.)

#### 6.5.1.6. Inspection of Unit Equipment

- 1) Self-contained emergency lighting unit equipment shall be inspected at intervals not greater than one month to ensure that
  - a) pilot lights are functioning and not obviously damaged or obstructed,
  - b) the terminal connections are clean, free of corrosion and lubricated when necessary,
  - c) the terminal clamps are clean and tight as per manufacturer's specifications, and
  - d) the battery surface is kept clean and dry.

#### 2) Self-contained emergency lighting unit equipment shall be tested

- a) at intervals not greater than one month to ensure that the emergency lights will function upon failure of the primary power supply, and
- b) at intervals not greater than 12 months to ensure that the unit will provide emergency lighting for a duration equal to the design criterion under simulated power failure conditions.
- 3) After completion of the test required in Clause (2)(b), the charging conditions for voltage and current and the recovery period shall be tested to ensure that the charging system is functioning in accordance with the manufacturer's specifications.

#### 6.5.1.7. Inspection of Emergency Lights

1) Except as provided in Article 6.5.1.6., emergency lights shall be inspected at intervals not greater than 12 months to ensure that they are functional.

# **GENERATOR ROOM CODE**

## Extracts from the Canadian Standard Association



#### Section 6.11 Emergency Lighting

#### 6.11.1 General

**6.7.1.1.** The emergency electrical power supply room and the automatic transfer switch room, where separate, shall be equipped with unit equipment for emergency lighting that complies with CSA C22.2 N°. 141. Sufficient lamps shall be provided to ensure that a minimum lighting level of 50 lx for 2 h is available at all equipment locations requiring adjustment or service.

Note: This illumination level is significantly greater than that specified in the NBC, which requires 10 lx for egress route emergency lighting.

6.11.2 Emergency lighting units shall be tested in accordance with Table 2 and CSA C22.2 N°. 141.

#### 6.11.3 The emergency lighting unit shall include

- (a) automatic self-diagnostic circuitry; and
- (b) a transient voltage surge suppressor on the supply side of power to the unit.






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