

TRANSMITTAL



MEJ Marketing and Distribution Inc.

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Concord, ON., L4K 5Y7

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Email: sales@mejmarketing.com

Contact: Joe Guida

DATE: AUGUST 17, 2015.

PROJECT: SQ ALEXANDRA PARK CONDOMINIUMS.

SUBJECT: LIGHTING FIXTURE SHOP DRAWINGS.

CUSTOMER: DELTERA INC.

DRAWINGS ENCLOSED: FOR APPROVAL.

**NOVATREND ENGINEERING
GROUP LTD.**

THIS REVIEW IS MADE ONLY TO VERIFY CONFORMITY WITH THE GENERAL DESIGN CONCEPT AND DOES NOT IMPLY APPROVAL OF THE DETAIL DESIGN INHERENT IN THE SHOP DRAWINGS, RESPONSIBILITY FOR WHICH REMAINS WITH THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ERRORS & OMISSIONS ON THE SHOP DRAWINGS, FOR INFORMATION RELATING SOLELY TO FABRICATION PROCESSES & CONSTRUCTION TECHNIQUES AND FOR MEETING ALL CONTRACTUAL REQUIREMENTS INCLUDING CO-ORDINATION OF FIELD DIMENSIONS & CO-ORDINATION OF THE WORK OF ALL HIS SUB-TRADES.

REVIEWED REVIEWED AS NOTED
 REVISE & RESUBMIT REJECTED

All fixture to be ULC
or CSA rated.

Kevin Chen

REVIEWED BY

2015-09-10

DATE

Illumina100

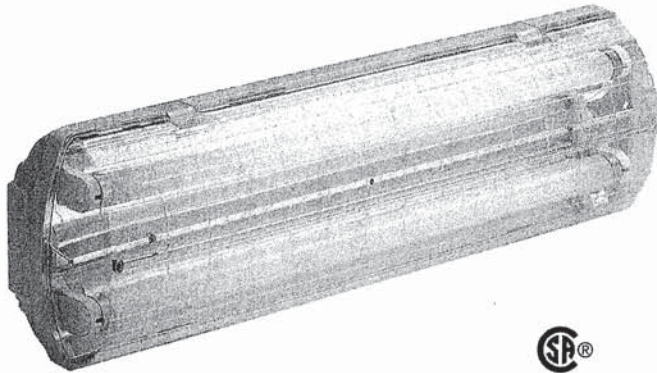
JOB NAME: ALEXANDRA PARK
CONDOMINIUMS



Illumina100

TAG: TYPES
F/F4/F5

MODEL # BS10048T8232AC-120277V C/W
PROGRAMMED START BALLAST



EXTERNAL SPECIFICATIONS

The ILLUMINA 100 series fixtures are manufactured from high quality corrosion, flame and vandal resistant, UV stabilized polycarbonate. Beghelli next generation exterior flush latch clips are constructed from a fiberglass reinforced polyester based resin to ensure the integrity of the ILLUMINA 100 lighting fixture. An aging resistant liquid silicon gasket seals the entire fixture. The housing is designed with conduit knockouts at either end and also through the back. All mounting hardware is constructed of stainless steel.

REFLECTOR

The ILLUMINA 100 reflector is made of injection molded, self-extinguishing, UV stabilized polycarbonate. The reflector supports components including the ballast and lamp holders.

DIFFUSER

The ILLUMINA 100 diffuser is UV stabilized for durability and provides superior light output. The ILLUMINA 100 comes standard with a clear prismatic diffuser. On average, an increase of +10% light output is achieved by using the clear prismatic diffuser.

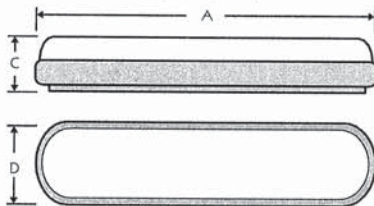
INSTALLATION

Surface ceiling, wall or suspension & rail mount. Suitable for wet location installations.

PRODUCT OVERVIEW

The ILLUMINA 100 series of fluorescent fixtures have been designed to be highly efficient, architecturally pleasing and easy to install. The reflector and diffuser have been designed and optimized for the two (2) T8 or T5 lamps resulting in maximum luminous output. The liquid-silicon sealing gasket combined with the flush lens clips provide superior protection from moisture infiltration. The Illumina is also approved for through wiring application.

DIMENSIONS (mm, in.)



Lamp Length	A	B	C
2x24 inch	673.1mm 26 1/2"	177.8mm 7"	101.6mm 4"
2x48 inch	1295.4mm 51"	177.8mm 7"	101.6mm 4"

ORDERING INFORMATION

Series	Lamps				Operation	Input Voltage	Options
	Length	Type	Number	Wattage			
BS100	48	T8	2	32	AC (AC only electronic ballast standard)	120VAC input	WG (Wireguard)
					optional:	347VAC input	SH (Suspension mount, metal hooks)
	48	T5	2	28	EM (Emergency / AC fail only)		SSC (Stainless steel clips)
					SA (AC & emergency operation		LC (Line cord)
	48	T5	2	54	electronic ballast)		DB (Dimmable ballast)
	24	T8	2	17			
	24	T5	2	24			
	24	T5	2	28			

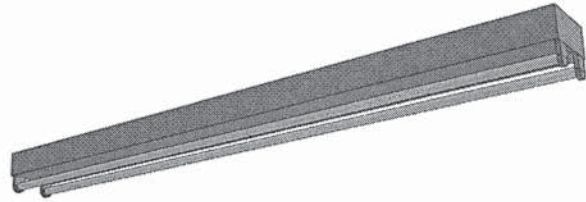
EXAMPLE: BS100-48T8232-AC-347V

DESCRIPTION: Illumina 100 luminaire, two (2) x T8 32W lamps, AC only, 347 volt AC input



ST2 - STRIP 2 LAMPS

Project	ALEXANDRA PARK		
Catalog #	ST 248		
Volts	120	Lamp(s)	2x32
Ballast Type	PROGRAM - T8		
Type	FI	Date	
Approved by			



General
 Surface mount double-lamps commercial fixture for functional applications of general lighting.
 Suitable for surface, pendant, and continuous row mounting.

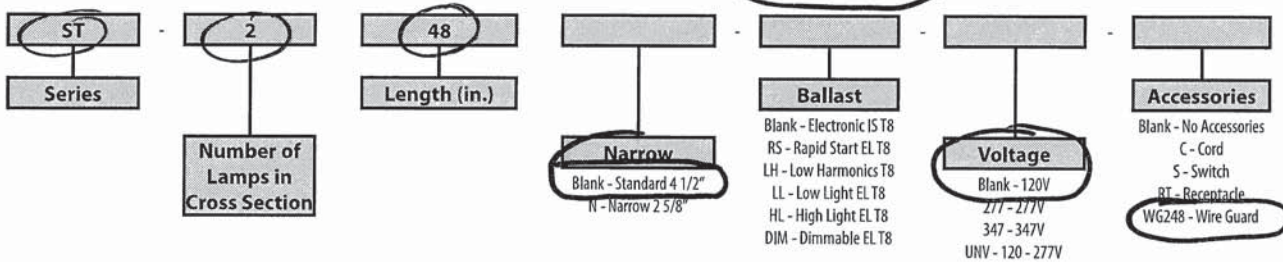
Housing & Finishing
 Die-formed cold rolled steel finished in pre-painted high-gloss white. The body and the ends are riveted, increasing strength and rigidity.

Optional wire guard protects the fixtures from impact and breakage.

Electrical
 Available in electronic ballasts only.
 Available voltages: 120V/277V/347V and UNV.

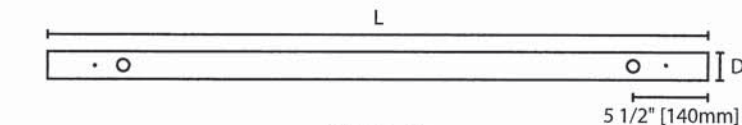
Approval
 CSA and UL certified.

Ordering Information

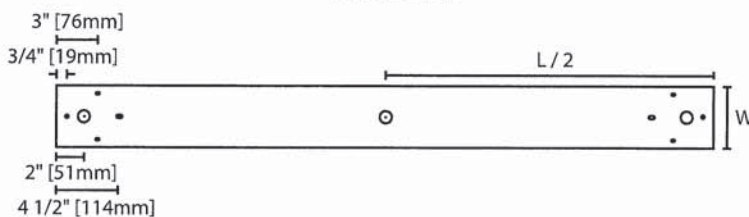


Product Availability

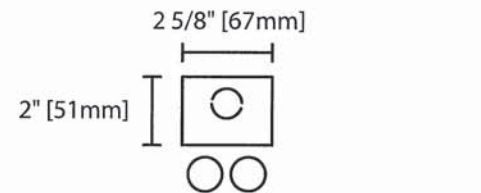
Item	Dimensions (L x W x D)	Lamps/ Cross Section	Lamps/ Fixture	Lamp Watt T8
ST 215	15" x 4 1/2" x 2"	2	2	14
ST 218	18" x 4 1/2" x 2"	2	2	15
ST 224	24" x 4 1/2" x 2"	2	2	17
ST 236	36" x 4 1/2" x 2"	2	2	25
ST 248	48" x 4 1/2" x 2"	2	2	32
ST 260	60" x 4 1/2" x 2"	2	2	40
ST 272T	72" x 4 1/2" x 2"	2	4	25
ST 296T	96" x 4 1/2" x 2"	2	4	32



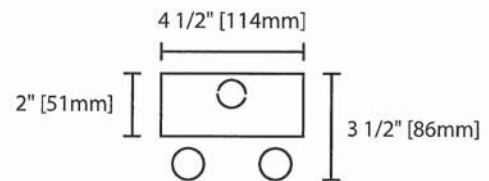
ST2 Side View



ST2 Base View



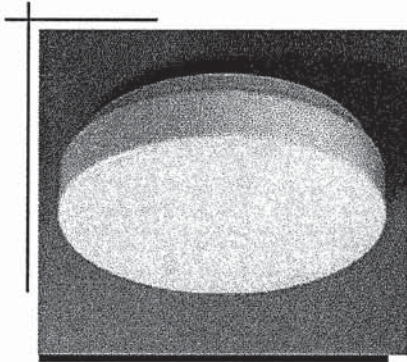
ST2N Cross Section View



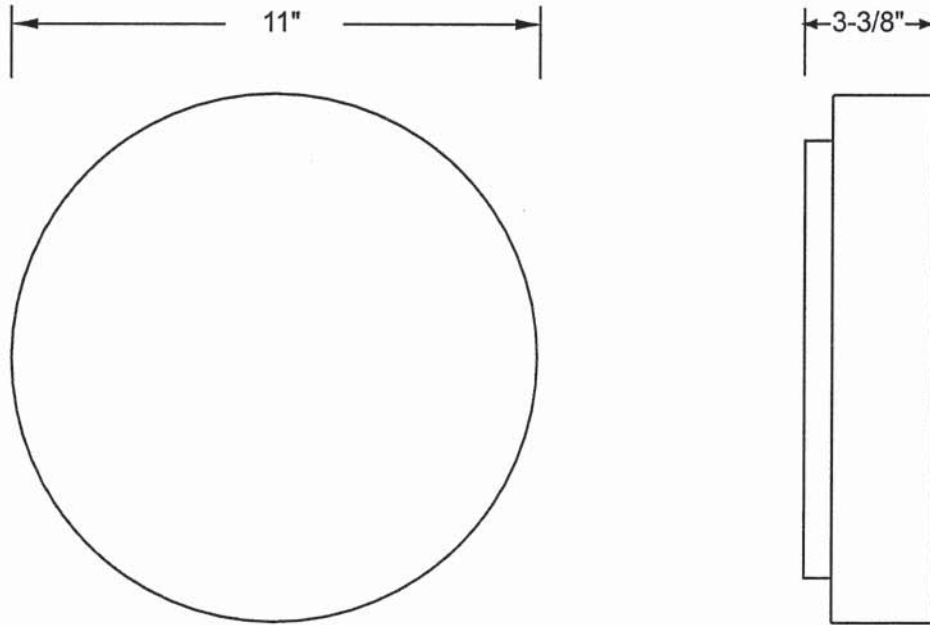
ST2 Cross Section View



Project	ALEXANDRA PARK
Type	F1 - CHUTE



ES650100WH-113



Description: Compact Fluorescent Ceiling or Wall Mount Utility Fixture with Acrylic Lens. ENERGY STAR Qualified.

Finish: White

Wattage: 1 x 13W Max. GU24 Base Self-Ballasted CFL (included)

Size: 11"D x 3-3/8"H



Excel Lighting & Manufacturing Ltd.

13611 Maycrest Way, Richmond B.C. V6V 2J4 Tel: (604) 278-8881 or (604) 278-1919 Fax: (604) 278-2551

WR - WRAPAROUND

Project	ALEXANDRA PARK		
Catalog #	WR 236		
Volts	120	Lamp(s)	2x25W
Ballast Type	ELECTRONIC-T8		
Type	F2	Date	
Approved by			

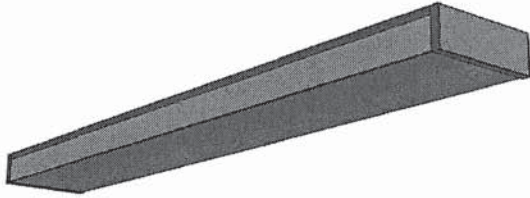
General
 Surface mounted low profile fixture for applications requiring ample lighting with sleek appearance.
 Suitable for surface (wall/ceiling), pendant and continuous row mounting, due to fixed end design.

Lens
 Standard lens is prismatic acrylic K-12. Optional white opal lens is available on request.

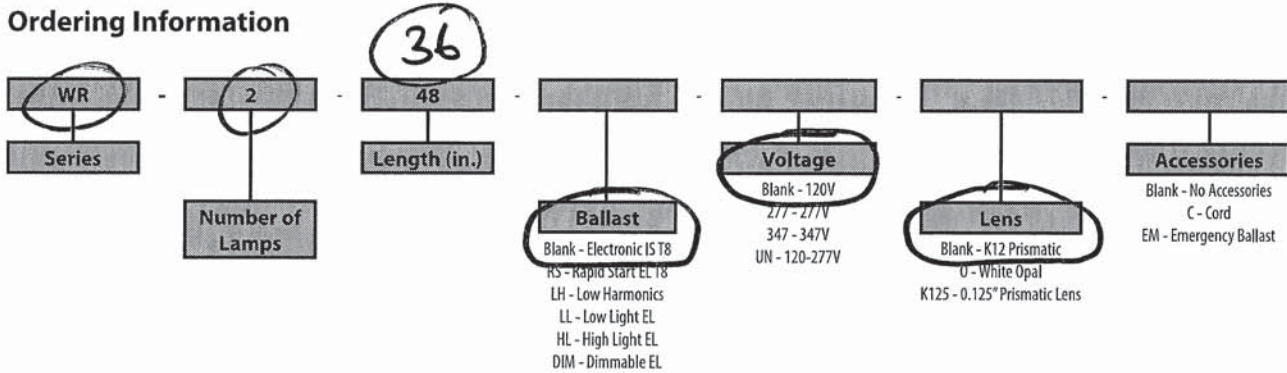
Electrical
 Available in electronic ballasts only.
 Available voltages: 120V/277V/347V and UNV.

Housing & Finishing
 Die-formed cold rolled steel finished in pre-painted high-gloss white. The body and the ends are one piece, increasing strength and rigidity.

Approval
 CSA certified.

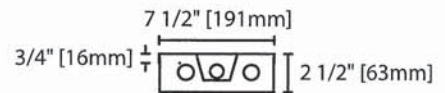


Ordering Information

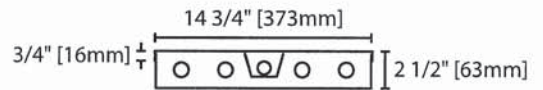


Product Availability

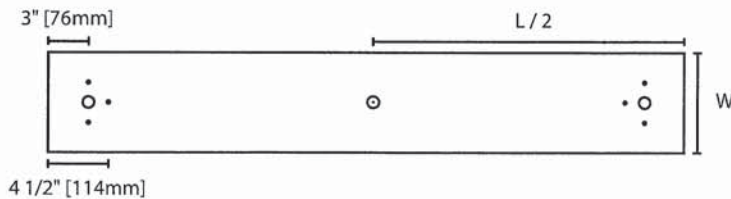
Item	Dimensions (L x W x D)	Lamps/ Cross Section	Lamps/ Fixture	Lamp Watt T8
WR 224	24" x 7 1/2" x 2 1/2"	2	2	17
WR 236	36" x 7 1/2" x 2 1/2"	2	2	25
WR 248	48" x 7 1/2" x 2 1/2"	2	2	32
WR 448	48" x 14 3/4" x 2 1/2"	4	4	32



WR 2 Lamps Cross Section View



WR 4 Lamps Cross Section View



WR Base View

CB - CUBE LIGHT

General

Surface mounted fixture for applications requiring economical decorative lighting.

Only 4" deep. Ideal light for vanities, stairwells and hallways.

Suitable for surface (wall/ceiling) and continuous row mounting, due to fixed end design.

Lens

Standard lens is prismatic acrylic K-12

Optional white opal lens is available on request.

Electrical

Available in electronic ballasts only.

Available voltages: 120V/277V/347V and UNV.

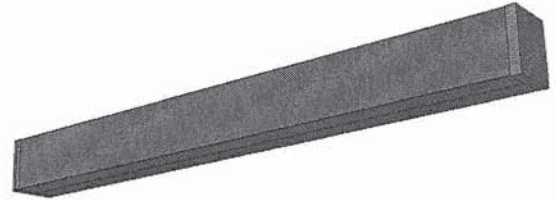
Housing & Finishing

Die-formed cold rolled steel finished in pre-painted high-gloss white.

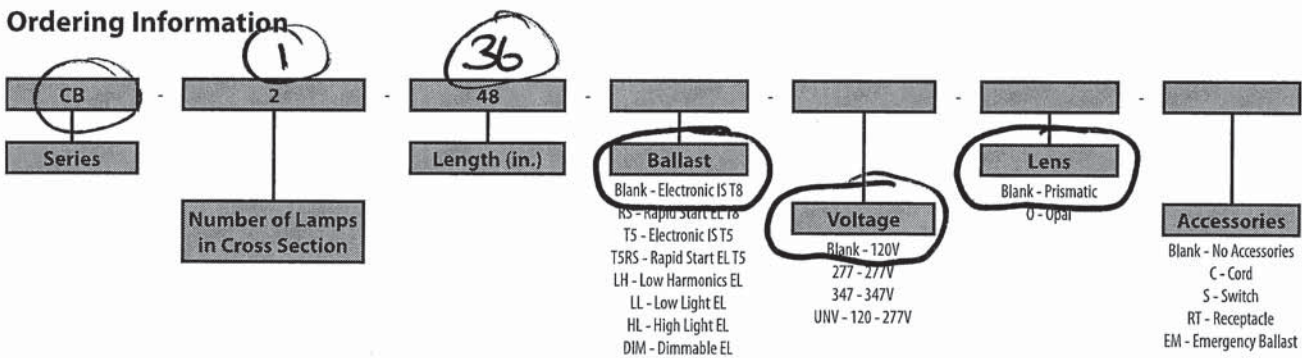
Approval

CSA certified.

Project	ALEXANDRA PARK		
Catalog #	CB 136		
Volts	120	Lamp(s)	1X25W
Ballast Type	ELECTRONIC-T8		
Type	F3	Date	
Approved by			

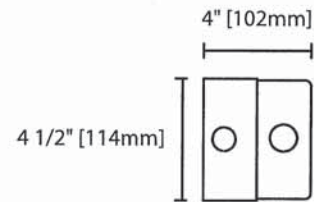


Ordering Information

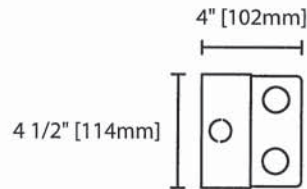


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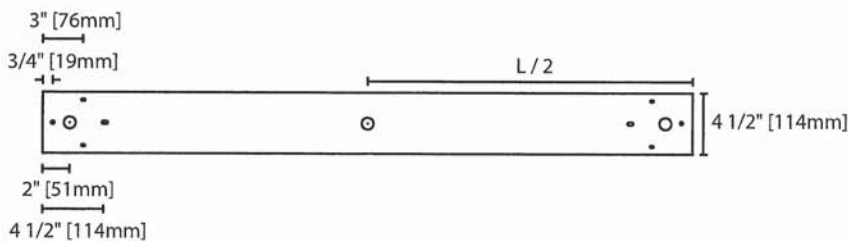
Item	Dimensions (L x W x D)	Lamps/ Cross Section	Lamps/ Fixture	Lamp Watt T8	Lamp Watt T5
CB 124	24 3/8" x 4 1/2" x 4"	1	1	17	14
CB 224	24 3/8" x 4 1/2" x 4"	2	2	17	14
CB 136	36 3/8" x 4 1/2" x 4"	1	1	25	21
CB 236	36 3/8" x 4 1/2" x 4"	2	2	25	21
CB 148	48 3/8" x 4 1/2" x 4"	1	1	32	28
CB 248	48 3/8" x 4 1/2" x 4"	2	2	32	32



CB 1 Lamp Cross Section View



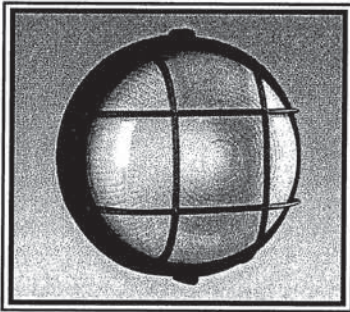
CB 2 Lamps Cross Section View



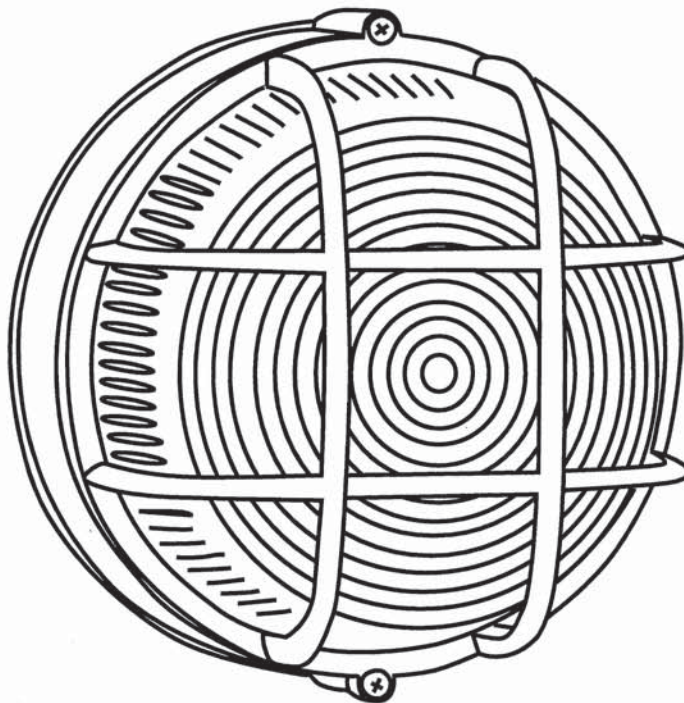
CB Base View



PRJOECT: ALEXANDRA PARK
TYPE: X - ELEVATOR PIT



305011 BLK

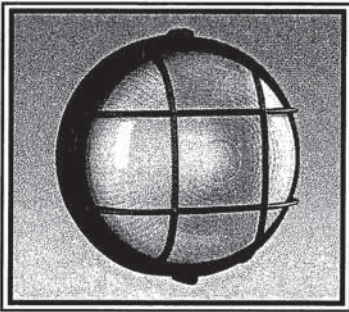


MODEL NO. : 305011 BLK
DESCRIPTION : ROUND CAST ALUMINUM GASKETED MARINE LIGHT WITH GUARD
POWDER COATED FINISH WITH SANDBLASTED PRISMATIC GLASS
FINISH : BLACK
SIZE : 10-1/4"D X 5-3/4"E
LAMPS : C/W CF15WATT MED BASE LAMP

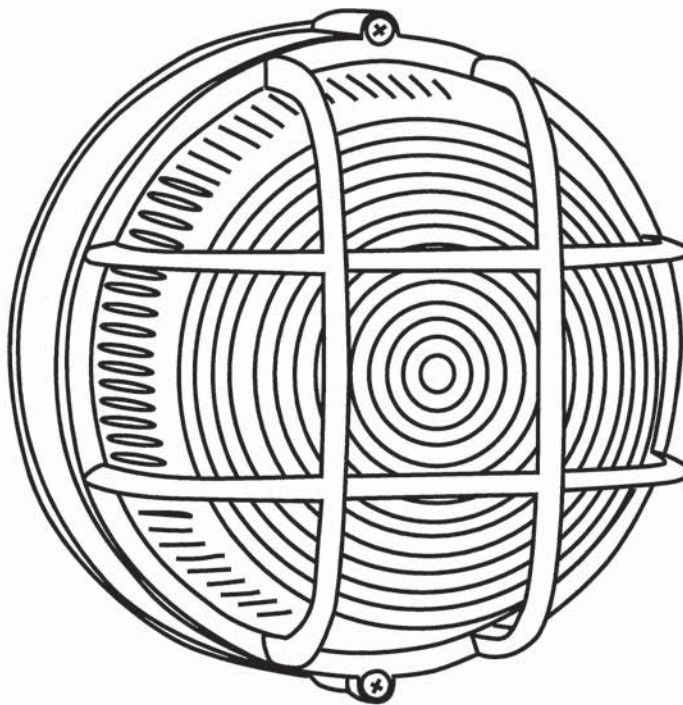
EXCEL LIGHTING & MANUFACTURING LTD.
OFFICE: 13611 MAYCREST WAY, RICHMOND B.C. V6V 2J4
TEL: (604) 278-8881 or 278-1919 FAX: (604) 278-2551



PRJOECT: ALEXANDRA PARK
TYPE: WS - COOLING TOWER



305011 BLK



MODEL NO. : 305011 BLK
DESCRIPTION : ROUND CAST ALUMINUM GASKETED MARINE LIGHT WITH GUARD
POWDER COATED FINISH WITH SANDBLASTED PRISMATIC GLASS
FINISH : BLACK
SIZE : 10-1/4"D X 5-3/4"E
LAMPS C/W CF18WATT MED BASE LAMP

EXCEL LIGHTING & MANUFACTURING LTD.
OFFICE: 13611 MAYCREST WAY, RICHMOND B.C. V6V 2J4
TEL: (604) 278-8881 or 278-1919 FAX: (604) 278-2551

ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- Lumen packages suitable for ceiling heights ranging from 8' to over 50'
- Efficacies up to 85 lm/w
- Superior-quality white LED light output using Chip on Board technology
- No harmful ultraviolet or infrared wavelengths
- No lead or mercury



PRODUCT SPECIFICATIONS

Optics

Hyperbolic Reflector: Unique hyperbolic shape optimized for small, directional LED source, maximizes fixture efficiency while reducing lamp image and aperture brightness • Geometry of hyperbolic curve provides unique aperture appearance and smoother light distribution • Medium and wide distributions available

Parabolic Cone/Lens: Computer-optimized parabolic cone with frosted convex lens regressed into cone provides uniform distribution with no striations • Concealed LED array provides superior aesthetic appeal both on and off

Baffle: White or black painted deep multi-groove aluminum baffle insert with integral white painted flange and frosted convexed glass lens

Wallwash Cone/Lens: Computer-optimized parabolic trim with integral wall wash kicker and frosted convexed lens regressed into cone provides uniform distribution with no striations • Concealed LED array provides superior aesthetic appeal both on and off

Finishes: Low iridescent specular, semi-specular and satin Alzak® finishes available with integral flange of same finish • See reflector options for other colors and finishes

Electrical

LED Light Engine: Compact light source delivers uniform illumination without pixilation, enabling excellent beam control • Consistent fixture-to-fixture color temperature within 3 SDCM • CRI > 80 • Light engine mounts directly to heat sink and is easily replaceable

Passive Cooling: Cast aluminum heat sink integrated directly with housing provides superior thermal management to ensure the long life of LED

LED Driver: Power factor >0.9

Dimming: Dimmable via 0-10V protocol standard • Optional drivers available for use with Lutron EcoSystem or 2-wire dimmers • For a list of compatible dimmers, see LED-DIM.

Life: Rated for 50,000 hours at 70% lumen maintenance • Available with optional Lumen Depreciation Indicator (LDI)

Mechanical

Housing: one piece heavy gauge aluminum with white, black or silver baked textured powder coat finish.

Mounting: Available for surface, pendant, cable or wall mounting • Pendant mounting features hang straight pendant mounting kits that allows for mounting on to sloped ceilings with an angle up to 45°

Labels and Listings

- UL listed for damp locations
- UL and cUL, RoHS compliant • EMI complies with FCC 47, Part 15, Class A
- Energy Star qualified, see back page for designated products
- I.B.E.W. Union made • ARRA Compliant 

Warranty: 5 years when used in accordance with manufacturing guidelines. Product specifications subject to change without notice.

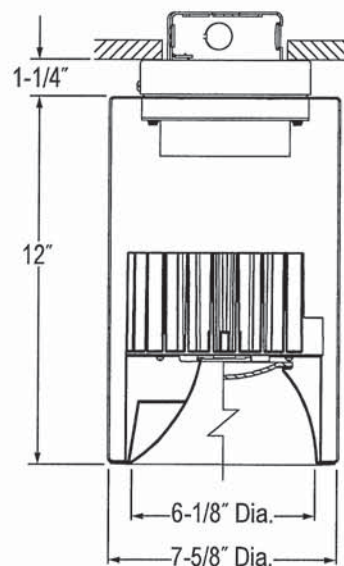
**800 TO 4000 LUMEN
6" LED CYLINDER**

HYPERBOLIC/PARABOLIC/WALLWASH
OPEN APERTURE

LC6 SERIES

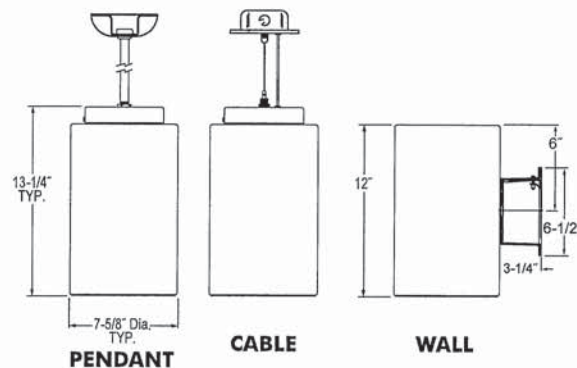
Type	Cat. No.
WS-EXTERIOR	
Project:	ALEXANDRA PARK
Notes:	

DIMENSIONS



SURFACE MOUNT

Mounting Detail:



PENDANT

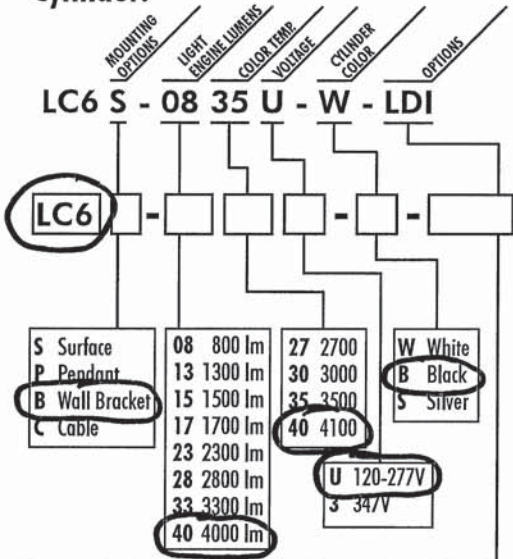
CABLE

WALL

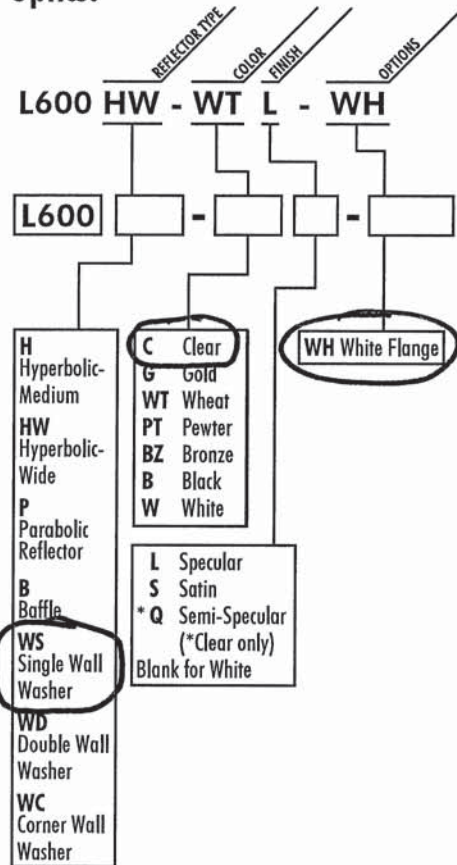


1300 South Wolf Rd • Des Plaines, Illinois 60018
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www.junolightinggroup.com

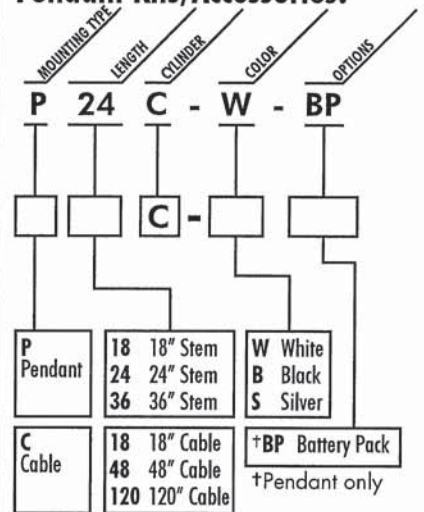
Cylinder:



Optics:



Pendant Kits/Accessories:



- F** Fuse and Fuse Holder
- BR** Emergency Battery Pack W/ Remote Test Switch
- PD** Driver compatible with 3-Wire Fluorescent Controls & Lutron Programmable Dimming EcoSystem®
- FDL** Forward Phase Dimming Lutron Driver - 120V only (2-wire dimming, neutral wire required)
- LDI** Lumen Depreciation Indicator (Cannot Be Used w/ BR Option)

* Dimming option not available for cable mount with Emergency Battery Pack
 † Not available for 4000 Lumen units

ENGINEERING DATA

Voltage	120V								277V								347V							
	800	1300	1500	1700	2300	2800	3300	4000	800	1300	1500	1700	2300	2800	3300	4000	800	1300	1500	1700	2300	2800	3300	4000
Light Engine Lumens	2700K/3000K/3500K/4000K								2700K/3000K/3500K/4000K								2700K/3000K/3500K/4000K							
CCT																								
Input Current	0.074	0.12	0.148	0.174	0.238	0.302	0.315	0.368	0.041	0.063	0.075	0.086	0.123	0.15	0.161	0.179	0.03	0.047	0.057	0.065	0.082	0.082	0.117	0.123
Input Wattage	8.8	14.3	17.6	20.7	28.2	35.7	36.9	43.6	10.2	15.3	18.4	21.2	28.4	35.5	36.9	43.1	10.4	16.0	19.2	22.4	30.7	39.4	40.7	48.4
Input Frequency	50/60Hz								50/60Hz								50/60Hz							
THD%	10.59	12.34	13.53	13.08	13.73	14.41	18.52	15.65	14.81	20.26	20.42	21.56	21.09	23.33	28.86	23.92	15.18	15.95	17.15	18.08	18.3	18.02	22.69	17.96
Power Factor	0.990	0.988	0.985	0.987	0.984	0.984	0.975	0.984	0.894	0.878	0.874	0.892	0.836	0.852	0.826	0.871	0.989	0.980	0.976	0.973	0.963	0.967	0.950	0.970

Energy Star Qualified: LC6X; L600H/HW

Product #	Fixture Configurations = Energy Star
LC6S-(XX)(YY)(Z); L600H-(CC)(F) L600HW-(CC)(F)	Lumen Package: 800/1300/1500/1700/2300/2800/3300/4000 (XX = 08, 13, 15, 17, 23, 28, 33, 40) CCT: 2700K / 3000K / 3500K / 4000K (YY = 27, 30, 35, 40) Voltage: 120V / 277V (Z = 1, 2) Reflector Color: Clear/Gold/Wheat/Pewter/Bronze/Black/White (CC = C, G, WT, PT, BZ, B, W) Reflector Finish: Specular / Satin / Semi-Specular (F = L, S, LS)
347V Only LC6S-(XX)(YY)3; L600H-C(F) L600HW-C(F)	Lumen Package: 1500/1700/2300/2800/3300/4000 (XX = 15, 17, 23, 28, 33, 40) CCT: 2700K / 3000K / 3500K / 4000K (YY = 27, 30, 35, 40) Reflector Finish: Specular / Satin / Semi-Specular (F = L, S, Q)

Energy Star Qualified: LC6X; L600P

Product #	Fixture Configurations = Energy Star
LC6S-(XX)(YY)(Z); L600P-C(F)	Lumen Package: 800/1300/1500/1700/2300/2800/3300/4000 (XX = 08, 13, 15, 17, 23, 28, 33, 40) CCT: 2700K / 3000K / 3500K / 4000K (YY = 27, 30, 35, 40) Voltage: 120V / 277V (Z = 1, 2) Reflector Finish: Specular / Satin / Semi-Specular (F = L, S, Q)
347V Only LC6S-(XX)(YY)3; L600P-C(F)	Lumen Package: 1500/1700/2300/2800/3300/4000 (XX = 15, 17, 23, 28, 33, 40) CCT: 2700K / 3000K / 3500K / 4000K (YY = 27, 30, 35, 40) Reflector Finish: Specular / Semi-Specular (F = L, Q)



1300 S. Wolf Road • Des Plaines, IL 60018 • Phone (800) 367-5866 • Fax (888) 708-6578
 Visit us at www.junolightinggroup.com

RMP

PLASTIC RUNNING MAN LED 120/347VAC Input

Approvals:
 CSA Certified to C22.2 #141 and C860



DESCRIPTION

The RMP series of commercial plastic running man signs is designed using durable and lightweight high impact thermoplastic. Signs and canopy quick snap together for speedy installations. Available in AC only, AC/DC and internally self-powered versions.

CIRCUITRY - AC & AC/DC

- LED ultra bright light source
- 120/347VAC Input, field selectable
- 1.9W power consumption single or double face
- Emergency DC wattages as follows:
6VDC = 0.9W 12VDC = 0.9W 24VDC = 0.9W

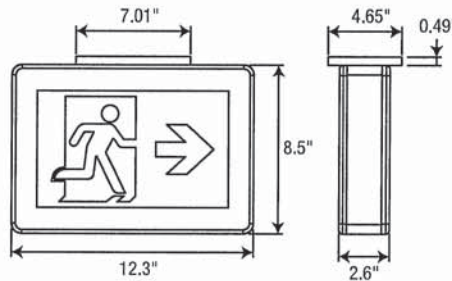
CIRCUITRY - SELF-POWERED

- LED ultra bright light source
- 120/347VAC Input, field selectable
- 2.2W power consumption single or double face
- High-performance, sealed Ni-Cad battery
- 90 minutes emergency duration (standard)
 120 minutes emergency duration is optional
- Solid state transfer and battery charger

MECHANICAL

- High impact, UV stabilized, thermoplastic construction
- Quick snap faceplates, backplate and universal canopy for rapid and simple installation
- Universal spider knockout pattern stamped into backplate for junction box mounting
- Universal models include ceiling or end mount, field installable canopy kit c/w spider plate
- White color is standard

DIMENSIONS



ORDERING GUIDE

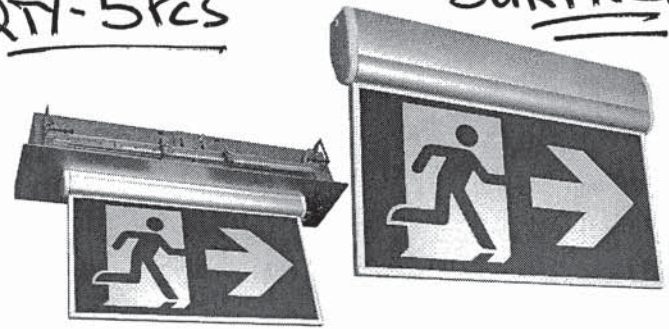
RMP	0	WH		
Series	Nbr of faces	Color	DC Voltage	Options†
RMP	0 - Universal faces	WH - White	NDC - AC only JDC - Universal DC backup voltage 6, 12 or 24VDC selectable IB - Self-powered for 90 minutes IB1 - Self-powered for 120 minutes	K5, OP, B0, W0, PG, WG*

† For detailed options descriptions, please consult the options page.
 * Specify mounting.

RMEA

EDGELIT
 NEW NBC2010 compliant
 Universal mounting
 LED 120/347VAC Input

SP Approvals:
 CSA Certified to C22.2 #141 and C860



DESCRIPTION

The RMEA series of commercial edgelit signs provides interiors with a clean, distinguished appearance. Mounting is universal: recessed wall or ceiling, surface ceiling, surface wall and surface end. The RMEA series is available in AC only, AC/DC and internally self-powered versions.

CIRCUITRY - AC & AC/DC

- LED ultra bright light source
- 120/347VAC Input, field selectable
- 2.6W power consumption
- Emergency DC wattages as follows:
6VDC = 1W 12VDC = 2W 24VDC = 4W

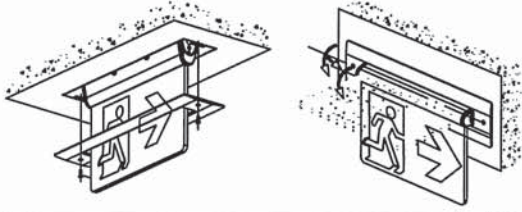
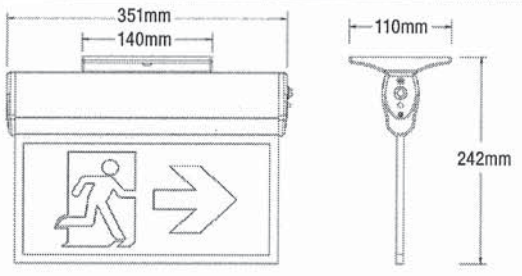
CIRCUITRY - SELF-POWERED

- LED ultra bright light source
- 120/347VAC Input, field selectable
- 3.0W power consumption
- High-performance, sealed Ni-Cad battery
- 90 minutes emergency duration (standard)
 120 minutes emergency duration is optional
- Solid state transfer and battery charger

SPECIFICATIONS

- Chassis, backbox and painted finish trims are constructed of steel; other finish trims and backboxes are made from high grade aluminum
- All electronics and faceplate mounted to single chassis for rapid and simple installation
- Separate backbox/housing can be pre-installed at any time prior to faceplate and electronics
- Hanger bars for drywall ceilings or walls included. Maximum extension of 540mm
- White powder coat finish standard
- Every unit come standard with multiple running man legends

DIMENSIONS



Recessed mounting conversion kit

To convert from surface mount to recessed mount, please order appropriate Coloured mounting conversion kit separately.

BBX-ALEL-WH - Recessed backbox with white trim
BBX-ALEL-BK - Recessed backbox with black trim
BBX-ALEL-BA - Recessed backbox with brushed aluminum trim



ORDERING GUIDE

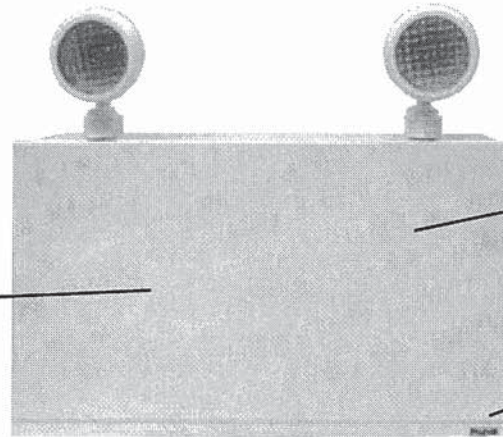
RMEA	0			
Series	Nbr of faces	Colour	DC Voltage	Options†
RMEA	0 - Universal	WH - White BK - Black BA - Brushed aluminum*	JDC - Universal DC backup voltage 6, 12 or 24VDC selectable NDC - AC only IB - Self-powered for 90 minutes IB1 - Self-powered for 120 minutes	CCWH (for brushed aluminum only)

† For detailed options descriptions, please consult the options page.
 * Black end caps and canopy (standard).

Nova 6, 12 & 24V Steel Battery Units

Job/Location: ALEXANDRA PARK
 Contractor: TYPE-BU Prepared By: _____
 Model Number: _____ Date: _____

Universal mounting plate for effortless installation



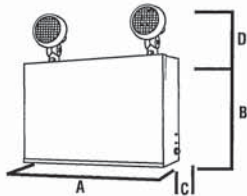
6V, 12V or 24V up to 720W

High-efficiency two stage charger

120VAC removable line cord is supplied standard

20 gauge steel cabinet

DIMENSIONS



Unit Size	A	B	C
(6V 18-50W) (12V 36-72W)	12" (305mm)	4 3/4" (119mm)	2 1/2" (64mm)
(6V 72-90W) (12V 90W)	10" (254mm)	9" (229mm)	3 1/4" (83mm)
(6V 100-180W) (12V 120-180W) (24V 144-180W)	15" (385mm)	9 1/2" (241mm)	4 1/4" (105mm)
(12V 200-360W) (24V 320W)	13" (330mm)	10" (254mm)	8" (203mm)
(24V 360-720W)	18" (457mm)	10" (254mm)	8 3/8" (213mm)

NOTE: Dimension D (see drawing) will vary based on heads supplied

ORDERING INFORMATION

Series	Operation	Capacity (W)	Heads	Lamp Type	Options	Options (cont'd)
NV	6 (Volt DC) 12 (Volt DC) 24 (Volt DC)	See model rating guide	0 (None) 1SR (PAR18, 1 head) 2SR (PAR18, 2 heads) BTMR1 (MR16, 1 head) BTMR2 (MR16, 2 heads) 1LR (PAR36, 1 head) 2LR (PAR36, 2 heads)	See lamp selection	NC (Ni-Cd batteries, see guide) CC (Custom colour - specify) TLP (Twist lock plug - 120V only) CT (Cabtire cord set, 120V only) OBM (Octagon box mount-no LC) FD5 (5 circuit fuse distribution) AT (Auto-test self-diagnostics) *RFS (Radio frequency suppression) *IRT (Infra-red remote test) MS (Mounting shelf) HHC (Hand held controller) SMH (Side Mount Heads) A (Ammeter)	*TD (Time delay - specify 5, 10, 20 mins) LD (Lamp disconnect) WG (Wireguard) ACTB (Terminal block AC) DCTB (Terminal block DC) BD (Battery disconnect) CPS (Constant power supply) ADA (Audible alarm) FAI (Fire alarm interface - specify type) RB (Rubber heads) TC (Teflon coated lenses - SB only) TP (Tamper proof screws) V (Voltmeter)

DESCRIPTION: Nova battery unit, 120/277/347VAC Input, 12VDC Output, 72W for 30 minutes 2 PAR18-9W lamps, voltmeter



INDOOR ARCHITECTURAL EMERGENCY

ALEXANDRA PARK

TYRE-BU

CSA Certified **TECHNICAL**

LAMP SELECTION: (SEALED BEAM ONLY IN LR PAR36 STYLE HEAD)

	6V	12V	24V
Composite Tungsten	9, 12W (18W - PAR36 only)	9, 12, 18W (25W - PAR36 only)	9, 18W
Composite Quartz (Q)	8, 10, 12, 20W	8, 12, 10, 20W (35, 55W PAR36 only)	10, 12, 20, 50W (70W AR only)
Sealed Beam Tungsten (SB)	9, 12, 18, 25, 30W	12, 18, 25, 30, 35W	N/A
Sealed Beam Quartz (QSB)	8, 12, 20W	8, 12, 30W	N/A
MR16	10W	10, 12, 20, 35, 50W	12, 20, 35, 50W
LED-MR16 (SR or BTMR)	5W	5, 7W	5, 7W

NOTE: MR16 max 12W in SR head

LAMP HEAD FEATURES

The **NOVA** series unit emergency lighting heads are supplied with two [2] top mounted PAR18 small style 9 watt thermoplastic heads. LR PAR36 large style thermoplastic or BTMR white steel heads utilizing MR16 lamps are also an available option. Lamp heads can be mounted either on the top or on the sides of the unit allowing for up to four [4] heads to be mounted on the largest units (up to 3 top, 2 sides).

BEGHELLI AUTO-TEST (AT) - OPTIONAL

The Beghelli auto-test system automatically performs one 5 minute discharge test monthly and every 6 months it performs two 30 minute discharge tests, 24 hours apart. This tests both full battery capacity and recharge capability. The information is communicated simply and intuitively to maintenance personnel via a single multi-colour LED.

BATTERY TECHNOLOGY

The **NOVA** series is designed with a maintenance free, sealed valve regulated lead acid battery that provides a minimum emergency duration of 30 minutes (for the listed rating). Ni-Cd batteries are optional. Recharge time of the battery is twenty-four [24] hours. The maximum battery operating temperature is +40°C and the minimum is +10°C.

CHARGER SPECIFICATIONS

The **NOVA** series utilizes a high-efficiency two stage charger providing precise float voltage control with low voltage disconnect protection. All components used in the circuitry are temperature compensated. The charger also has brownout and short circuit protection. Charger status is easily determined via a dual diagnostic LED display which indicates AC/ON and High Charge. An external push button test switch allows maintenance personnel to quickly determine the operational status of the unit and lamp load.

EXTERNAL SPECIFICATIONS

The **NOVA** series is constructed with a 20 gauge steel cabinet. Terminal connectors allow for larger gauge wires to be connected for remote loads. The universal mounting pattern stamped into the back of the unit allows for direct mounting to various conduit boxes. Stamped conduit knockouts and a 120VAC removable line cord are supplied standard on all **NOVA** units,.

MECHANICAL SPECIFICATIONS

Remote lamp loads are connected to the emergency power supply with sturdy terminal connectors. CSA 22.2 No. 141 Performance Certified.

MODEL RATING GUIDE

Model	Wattage Rating	
	30 Minutes	90 Minutes
NV-6-18	18	n/a
NV-6-36	36	12
NV-6-40	40	18
NV-6-50	50	18
NV-6-50-NC	50	22
NV-6-72	72	27
NV-6-80	80	27
NV-6-90	90	36
NV-6-100-NC	100	42
NV-6-160	160	60
NV-6-180	180	72
NV-6-180-NC	160	90
NV-12-36	36	n/a
NV-12-50	50	n/a
NV-12-72	72	27
NV-12-90	90	36
NV-12-100-NC	100	45
NV-12-120	120	65
NV-12-150	150	65
NV-12-180	180	72
NV-12-200-NC	200	90
NV-12-200	200	72
NV-12-250	250	108
NV-12-360	360	140
NV-24-144	144	60
NV-24-180	180	72
NV-24-200-NC	200	100
NV-24-320	320	136
NV-24-360	360	144
NV-24-550	550	220
NV-24-720	720	360

INDOOR ARCHITECTURAL EMERGENCY

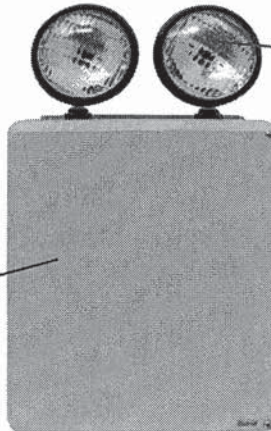
Aqua Unit 6, 12 & 24V NEMA 4 & 4X Battery Units

Job/Location: ALEXANDRA PARK
 Contractor: TYPE: BATTERY Prepared By: _____
 Model Number: W/P Date: _____

High-efficiency two stage charger

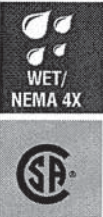
6, 12 or 24V up to 720W

Durable and corrosion-resistant fiberglass



Weather proof PAR36 heads are standard

Fully gasketed NEMA 4X housing



EXTERNAL SPECIFICATIONS

The **AQUA UNIT** series is constructed with a durable molded NEMA 4 and 4X rated fiberglass cabinet. Industrial grey finish is standard. Weatherproof emergency lighting heads are available in PAR36 (LR) style molded from black, high impact thermoplastic. Four [4] integrated mounting holes ensure simple and secure installation. External test switch and monitor LED are standard.

INSTALLATION

The **AQUA UNIT** unit is suitable for surface wall mounting. Suitable for NEMA 4 and 4X installations.

LAMP SELECTION: (ONLY LR PAR36 STYLE HEAD AVAILABLE)

	6V	12V	24V
Composite Tungsten	9, 12, 18W (PAR36 Only)	9, 12, 18W	9, 18W
Composite Quartz (Q)	8, 10, 12, 20W	8, 12, 20, 35, 55W (PAR36 Only)	10, 12, 20, 50W (70W AR only)
Sealed Beam Tungsten (SB)	8, 12, 18, 20, 25, 30W	12, 18, 25, 30, 35W	N/A
Sealed Beam Quartz (QSB)	8, 12, 20W	8, 12, 30W	N/A

ORDERING INFORMATION

Series	Operation	Capacity (Wattage)	Heads	Lamp Type	Options
AQ-U	6 (Volt DC) 12 (Volt DC) 24 (Volt DC)	See model rating guide	0 (None) **1LR (One head) **2LR (Two heads) 1RBSB (Rubber - one head sealed beam) 2RBSB (Rubber - two head sealed beam) 1AR (One aluminum head) 2AR (Two aluminum heads)	See lamp guide above	NC (Ni-Cd batteries, see guide) AT (Auto-test self diagnostics) A (Ammeter) V (Voltmeter) LD (Lamp disconnect) *TD (Time delay - specify 5, 10, 20 mins) WG (Wireguard) OBM (Octagon box mount) TLP (Twist lock plug, 120V only) *HTR (Internal heater - specify AC input) ***TC (Teflon® coated lamp lens)

*NOTE: AC input must be specified
 EXAMPLE: AQ-U-12-72-2LR-9W-V

Heads are supplied standard weatherproof *Teflon® is a registered trademark of DuPont™

DESCRIPTION: Aqua emergency only battery unit, 120/347AC Input, 12VDC Output, 72W for 30 minutes 2 x PAR36, 2 x 9W lamps weatherproof heads, voltmeter.