



Submittal Records

Architect: Snyder Architects Inc.	Date: 29 - 07 - 2024
Attention: Amit Patel, Anil Gokarn, Avinash Garde, Mike Wilding, Jamie Leach, Roberto Vasquez	Project: Gymnasium Addition at Glenview PS
Subcontractor: B-SAFE ELECTRIC	Shop Drawings Lighting, Lighting Controls

Copies	Title /Description	# Pages
1	Lighting, Lighting Controls and Poles	158
1	Exit and Emergency Lighting	Included in above

Method of Delivery: Electronic

The Architect's review is for the sole purpose of ascertaining conformance with the general design concept and for the general arrangement. This review shall not mean approval of the detail design inherent in the shop drawings, responsibility for which shall remain with the Contractor and such review shall not relieve the Contractor of their responsibility for errors or omissions in the shop drawings or of their responsibility for meeting all requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes, quantities or to techniques of construction and installation and for coordination of related work.

sn/der
architects

Date: Aug 21 2024
 By: AP
 Proj. No. 2314
 No exceptions taken
 Comply with notations ✓
 Revise & Resubmit
 Not reviewed



5080 Timberlea Blvd. Unit #1
Mississauga, Ontario
L4W 4M2
Phone: 905-872-7233
Fax: 905-624-6012

Commercial

Industrial

Plant Maintenance

Date: Jul 24, 2024

Shop Drawing Transmittal

To: Golden Gate Contracting, 1038 Cooke Blvd., Unit#1, Burlington

Project Name: HDSB-Gymnasium Addition at Glenview P S, Burlington

Project No: #12402

Submittal drawings issued for:

☒ For Approval

☐ For Record / Info Only

Copies	Supplier	Description
1	Cooper Lighting	Lighting, Lighting Controls and Poles
1	Aimlite	Exit and Emergency Lighting
Notes:	*MATERIAL ON HOLD PENDING APPROVAL AND RELEASE *	

PER: Sumish Azheekkalkadavil



Transmittal

Medgar Lighting & Controls Inc
 1290 Sandhill Drive, Unit 5
 Ancaster ON L9G 0H6
 Phone: (905) 312-1213
From: Jacob Harris

Project HDSB - Glenview Public School Gym

Addition

Quote# ML&C24-119319

Location Burlington ON

Contact:

ATTACHED WE ARE SENDING YOU 1 COPY OF THE FOLLOWING ITEM:

- | | | |
|--|---|--------|
| <input checked="" type="checkbox"/> Drawings | <input type="checkbox"/> Specifications | Other: |
| <input type="checkbox"/> Prints | <input type="checkbox"/> Information | |
| <input type="checkbox"/> Plans | <input type="checkbox"/> Submittals | |

THESE ARE TRANSMITTED FOR:

- | | | |
|--|---|---------------------------------|
| <input type="checkbox"/> Prior Approval | <input type="checkbox"/> Resubmittal for Approval | <input type="checkbox"/> Record |
| <input checked="" type="checkbox"/> Approval | <input type="checkbox"/> Corrections | Bids due on: |
| <input type="checkbox"/> Approval as Submitted | <input type="checkbox"/> Your Use | Other: |
| <input type="checkbox"/> Approval as Noted | <input type="checkbox"/> Review and Comment | |

Remarks:

SENT

Type	MFG	Part	Est. Lead
P	McGraw-Edison	GALN-SA3C-730-1-5MQ-XX-BPC	8-10 weeks
P	VALMONT INDUSTRIES	4SS17-PC-1DR-XX-MBC	8-10 weeks
W	McGraw-Edison	IST-SA1D-730-1-T4FT-XX-BPC	8-10 weeks
W1	McGraw-Edison	IST-SA1E-730-1-T4FT-XX-BPC	8-10 weeks
V	Halo	HC625D010//HM60525830//61MDH	4-6 weeks
A	Metalux	4SNX-SL3-LW-UNV-CC83-CD1-U//AYC-CHAIN/SET-U	4-6 weeks
B	Metalux	14CGTS-NUV	2-4 weeks
	1X4 CGT 35K, 40K,50K SEL CCT AND LUMENS		
B1	Metalux	14CGTS-NUV//DF-14W-U	2-4 weeks
	1X4 CGT 35K, 40K,50K SEL CCT AND LUMENS		
C	Metalux	24CGTS-NUV	2-4 weeks
F	Halo	HC410D010//HM40525840//41MDH	4-6 weeks
G	Metalux	OHB-18SE-MFL-UNV-L840-CD-U//OHB-WG162-U	6-8 weeks
	Item Note: SUSPENSION BY OTHERS.		
SR	Aimlite Emergency	~RMSM1-06-12V3WLJ-WHT	2-4 weeks
	Single Head Small Thermoplastic Remote, 06-12V LED 3W, White		
DR	Aimlite Emergency	~RMSM2-06-12V3WLJ-WHT	2-4 weeks
	Double Head Small Thermoplastic Remote, 06-12V LED 3W, White		
DR-WG	Aimlite Emergency	~WGD630-V2	2-4 weeks
	Wireguard, WIRE GUARD 15.25Lx12.25Wx9.0D		
CU	Aimlite Emergency	~CARPW12361M-2SM3WLJWHT/ATD	2-4 weeks
	WIRE GUARD		
	Combo Running Man Extruded Alum, 12V 36W, 1 Face, Universal Mount, 2 PAR18 3 WATTS LED, White Unit (Standard), Auto-Test Self-Diagnostics		
BU	Aimlite Emergency	~EBST12072-2SM3WLJWHT/ATD	2-4 weeks
	Steel Emergency Low Wattage Battery Unit, 12V 72W, 2 PAR18 3 WATTS LED, White Unit, Auto-Test Self-Diagnostics		
EX	Aimlite Emergency	~RPALWUMWHT-BAT/ATD //WIRE GUARD	2-4 weeks
	Extruded Aluminum Running Man, Universal faces, Universal, White, INTERNAL BATTERY 90 MIN, Auto-test & Self-diagnostics		



Transmittal

Medgar Lighting & Controls Inc
 1290 Sandhill Drive, Unit 5
 Ancaster ON L9G 0H6
 Phone: (905) 312-1213
From: Jacob Harris

Type	MFG	Part	Est. Lead
RCD	Greengate	RC3D-PL	4-6 weeks
OS1	Greengate	OAWC-DT-120W	4-6 weeks
OCC	Greengate	OCC-RJ45	4-6 weeks
PP	Greengate	SP20-MV	4-6 weeks
KP1	Greengate	RC-1TLB-101-W	4-6 weeks
	Item Note: ZONE 1		
KP2	Greengate	RC-1TLB-102-W	4-6 weeks
	Item Note: ZONE 2		
KP3	Greengate	RC-1TLB-103-W	4-6 weeks
	Item Note: ZONE 3		
WGD	Aimlite Emergency Wireguard, WIRE GUARD 8.5Lx6.0Wx7.0D	~WGD550	2-4 weeks
OS2	Greengate	OAC-DT-2000	4-6 weeks
\$WOS	Greengate	ONW-D-1001-MV-W	4-6 weeks
LTG. CTRL.	MLCi Technical Services	DRAWING PACKAGE	

Notes:
 SENT

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features



Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 11

Product Certifications



Quick Facts

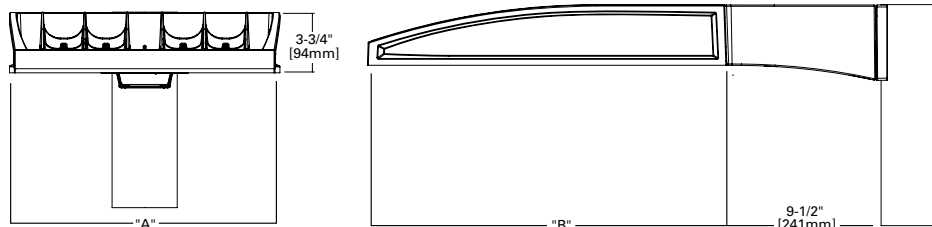
- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 17 optical distributions
- Efficacy up to 159 lumens per watt

Connected Systems

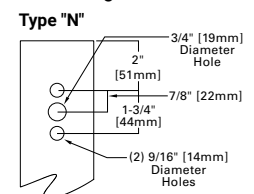
- WaveLinx Lite
- WaveLinx

Dimensional Details

Standard Pole Mount Arm



Pole Drilling Pattern



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	
5-6	22"	22"	39 lb	
7-9	22"	28-1/8"	48 lb	

NOTES:
For arm selection requirements and additional line art, see Mounting Details section.

NOTES:
1. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified (3000K CCT and warmer only, fixed mounting options)



Note: Finish by Architect.



This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

<input type="checkbox"/> Reviewed	<input checked="" type="checkbox"/> Reviewed As Noted
<input type="checkbox"/> Not Reviewed	<input type="checkbox"/> Revise and Resubmit

McGraw-Edison


GALN Galleon II

Ordering Information

SAMPLE NUMBER: GALN-SA4C-740-U-T4FT-GM

Product Family ^{1,2}	Light Engine		Color Temperature	Voltage	Distribution	Mounting	Finish
	Configuration	Drive Current					
GALN =Galleon II BAA-GALN =Galleon II Buy American Act Compliant ²⁶ TAA-GALN =Galleon II Trade Agreements Act Compliant ²⁶	SA1 =1 Square SA2 =2 Squares SA3 =3 Squares SA4 =4 Squares SA5 =5 Squares SA6 =6 Squares SA7 =7 Squares SA8 =8 Squares SA9 =9 Squares	A =600mA B =800mA C =1000mA ^{4,16} D =1200mA ^{4,16} Z =Configured ³²	722 =70CRI, 2200K 727 =70CRI, 2700K 730 =70CRI, 3000K 735 =70CRI, 3500K 740 =70CRI, 4000K 750 =70CRI, 5000K 760 =70CRI, 6000K 827 =80CRI, 2700K 830 =80CRI, 3000K 835 =80CRI, 3500K 840 =80CRI, 4000K 930 =90CRI, 3000K 935 =90CRI, 3500K 940 =90CRI, 4000K 950 =90CRI, 5000K AMB =Amber, 590nm ^{14,16}	U =120-277V H =347V-480V ^{7,29} 1 =120V 2 =208V 3 =240V 4 =277V 8 =480V ^{7,29} 9 =347V ⁷ DV =277V-480V DuraVolt Drivers ^{28,29,30}	T1 =Type I T2 =Type II T2R =Type II Roadway T3 =Type III T3R =Type III Roadway T4FT =Type IV Forward Throw T4W =Type IV Wide 5N0 =Type V Narrow 5MQ =Type V Square Medium 5WQ =Type V Square Wide SL2 =Type II w/Spill Control SL3 =Type III w/Spill Control SL4 =Type IV w/Spill Control SLL =90° Spill Light Eliminator Left SLR =90° Spill Light Eliminator Right RW =Rectangular Wide Type I AFL =Automotive Frontline	[Blank] =Standard Pole Mount Arm QU =Quick Mount Universal Arm QM =Pole Mount Arm with Quick Mount Adaptor PA =Pole Mount, Adjustable SP =3" Slipfitter, Adjustable ⁸ SP2 =2-3/8" Slipfitter, Adjustable ⁸ QMA =Quick Mount Mast Arm, Fixed MA =Mast Arm, Fixed WM =Wall Mount, Fixed WA =Wall Mount, Adjustable UP =Upswept Arm	AP =Grey BZ =Bronze BK =Black DP =Dark Platinum GM =Graphite Metallic WH =White RALXX =Custom Color
Options (Add as Suffix)			Controls and Systems Options (Add as Suffix)		Accessories (Order Separately) ²⁷		
DIM =External 0-10V Dimming Leads ¹⁸ F =Single Fuse (120, 277 or 347V Specify Voltage) FF =Double Fuse (208, 240 or 480V Specify Voltage) 20K =20KV UL 1449 fused surge protective device ¹⁹ 2L =Two Circuits ¹⁸ HA =50°C High Ambient HSS =Installed House Side Shield ¹⁷ GRSBK =Glare Reducing Shield, Black ²² GRSWH =Glare Reducing Shield, White ²² LCF =Light Square Trim Painted to Match Housing ²⁵ TH =Tool-less Door Hardware ⁵ CC =Coastal Construction finish ³ L90 =Optics Rotated 90° Left R90 =Optics Rotated 90° Right AHD145 =After Hours Dim, 5 Hours ²¹ AHD245 =After Hours Dim, 6 Hours ²¹ AHD255 =After Hours Dim, 7 Hours ²¹ AHD355 =After Hours Dim, 8 Hours ²¹ DALI =DALI Drivers			BPC =Button Type Photocontrol. Must specify voltage 120V, 208V, 240V or 277V. ⁶ PR =NEMA 3-PIN Photocontrol Receptacle PR7 =NEMA 7-PIN Photocontrol Receptacle ²⁹ FADC =Field Adjustable Dimming Controller ³¹ PSC =Photocontrol Shorting Cap SPB2 =Dimming Motion Sensor, 9'-20' mounting ²³ SPB4 =Dimming Motion Sensor, 21'-40' mounting ²³ SPB2/X =Dimming Motion Sensor, limited square count, 9'-20' mounting ²³ SPB4/X =Dimming Motion Sensor, limited square count, 21'-40' mounting ²³ MS/DIM-L20 =Motion Sensor for Dimming Operation, 9'-20' Mounting ³³ MS/DIM-L40 =Motion Sensor for Dimming Operation, 21'-40' Mounting ³³ WLS2XX =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{18,12,34} WLS4XX =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{18,12,34} WPS2XX =WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{18,12,34} WPS4XX =WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{18,12,34} DIM10-L20 =Synapse Occupancy Sensor (9'-20' Mounting) ¹⁸ DIM10-L40 =Synapse Occupancy Sensor (21'-40' Mounting) ¹⁸		QA/RA1016 =NEMA Photocontrol Multi-Tap - 105-285V QA/RA1027 =NEMA Photocontrol - 480V QA/RA1201 =NEMA Photocontrol - 347V QA/RA1013 =Photocontrol Shorting Cap QA/RA1014 =120V Photocontrol MA1252 =10kV Surge Module Replacement MA1036-XX =Single Tenon Adapter for 2-3/8" O.D. Tenon MA1037-XX =2@180° Tenon Adapter for 2-3/8" O.D. Tenon MA1197-XX =3@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1188-XX =4@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1189-XX =2@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1190-XX =3@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1191-XX =2@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1038-XX =Single Tenon Adapter for 3-1/2" O.D. Tenon MA1039-XX =2@180° Tenon Adapter for 3-1/2" O.D. Tenon MA1192-XX =3@120° Tenon Adapter for 3-1/2" O.D. Tenon MA1193-XX =4@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1194-XX =2@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1195-XX =3@90° Tenon Adapter for 3-1/2" O.D. Tenon SRA238 =Adapter kit for mounting 3" SP arm to 2-3/8" O.D. vertical tenon FSIR-100 =Wireless Configuration Tool for MS/DIM ³³ LS/HSS =Field Installed House Side Shield ^{9,17} LS/GRSBK-2PK =Glare Reducing Shield, Black ^{9,22} LS/GRSWH-2PK =Glare Reducing Shield, White ^{9,22} LP/PFS =Perimeter Shield, Black ¹⁵ WOLC-7P-10A =WaveLinx Outdoor Control Module ^{11,18}		
NOTES: 1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. 2. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. Not available with TH option. 4. Drive current 1200mA not available with color temperatures 722, 727, 827, 830 or 930 when the HSS option is selected 5. TH option not 3G rated. Not available with Coastal Construction (CC) option. 6. Not available with voltage options H, 8 or 9. 7. Requires the use of an internal step down transformer when combined with sensor options. Not available in combination with the HA high ambient and sensor options at 1A. 8. SP arm limited to 3" O.D. vertical tenon. SP2 limited to 2-3/8" O.D. vertical tenon. 9. One required for each Light Square. 10. 2L is not available with SPB at 347V or 480V. Not available with WaveLinx or Enlighted sensors, or 20kV surge option 11. Requires PR7. 12. Replace XX with sensor color (WH, BZ or BK.) 13. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors. 14. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A; supplied at 500mA drive current only. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option. 15. Set of 4 pcs. One set required per Light Square. 16. Not available with HA option. 17. Not for use with T1, 5N0, 5MQ, 5WQ or RW optics. 18. Cannot be used with other control options. 19. Low voltage control lead brought out 18" outside fixture. Not available with DALI or integrated controls options 20. Not available if any SPB, LWR, or WaveLinx sensor is selected. Motion sensor has an integral photocell. 21. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. 22. Not for use with T1, T4FT, T4W or SL4 optics. 23. Sensor configuration mobile application required for configuration. See controls page for details. 24. Replace X with number of Light Squares controlled by the SPB, referencing the "SPB/X Availability Table" on the controls page. 25. Not available with HSS, GRSWH or GRSBK. 26. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 27. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 28. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signtify.com/duravolt for more information. 29. 480V not to be used with ungrounded or impedance grounded systems. 30. Not available in 1 square configuration at 800mA or below. Not available with any control option except SPB. 31. Cannot be used with PR7 or other motion response control options. 32. Use GALN Product Configurator to specify lumen output, drive current and wattage. Not available with AMB. 33. Uses the FSP-211 motion sensor. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information. 34. Controls system is not available with photocontrol receptacles (PR, PR7) or other controls systems (FADC, SPBx).							

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul
L=LumenSafe Technology 	D=Standard Dome Camera H=Hi-Res Dome Camera Z=Remote PTZ Camera	C=Cellular, No SIM A=Cellular, AT&T V=Cellular, Verizon S=Cellular, Sprint R=Cellular, Rogers W=Wi-Fi Networking w/ Omni-Directional Antenna E=Ethernet Networking

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

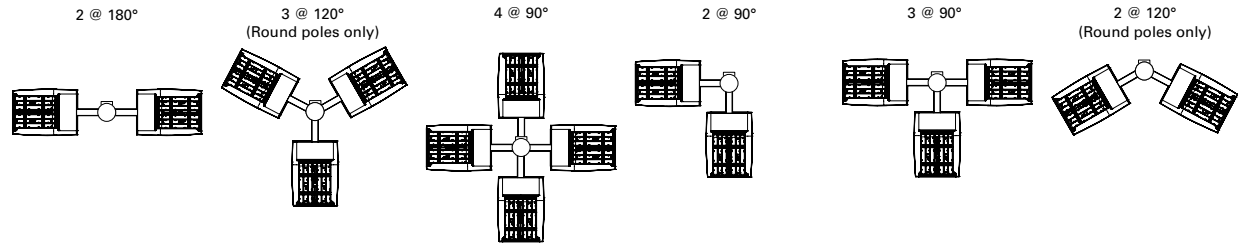
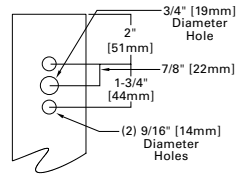
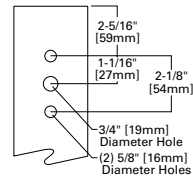
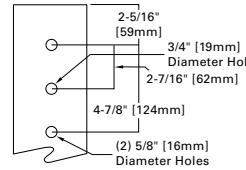
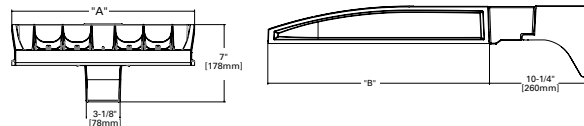
Catalog Number:

GALN-SA3C-730-1-5MQ-XX-BPC

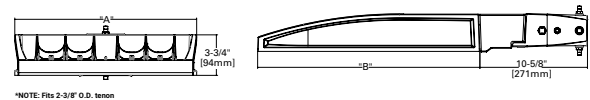
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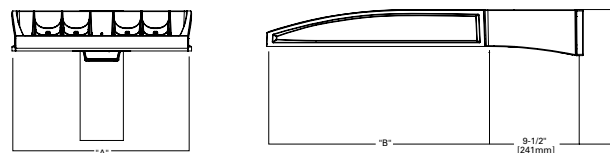
ML&C24-119319

McGraw-Edison**GALN Galleon II****Mounting Details****Pole Configuration Options****Pole Drilling Patterns****Type "N"****Type "R"****Type "M"****Quick Mount Universal Arm (QU)**

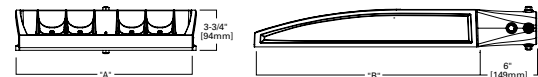
*NOTE: Universal bolt pattern compatible with Type N through Type M drilling patterns

Quick Mount Mast Arm (QMA)

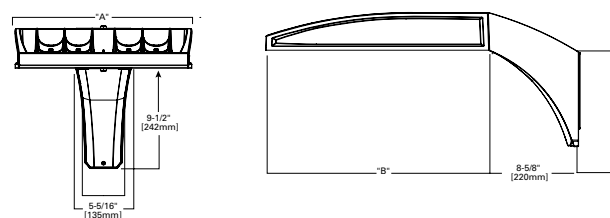
*NOTE: Fits 2-3/8" O.D. tenon

Pole Mount Arm with Quick Mount Adaptor (QM)

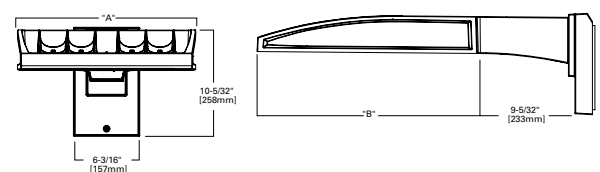
*NOTE: Use Type N drilling pattern

Mast Arm, Fixed (MA)

*NOTE: Fits 2-3/8" O.D. tenon

Upswept Arm (UP)

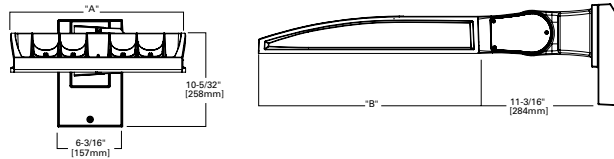
*NOTE: Universal bolt pattern compatible with Type N through Type M drilling patterns

Wall Mount, Fixed (WM)

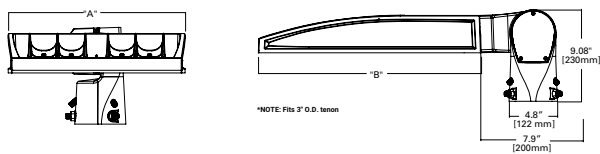
McGraw-Edison
GALN Galleon II

Mounting Details

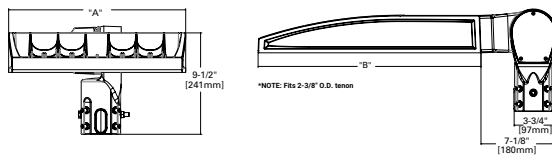
Wall Mount, Adjustable (WA)



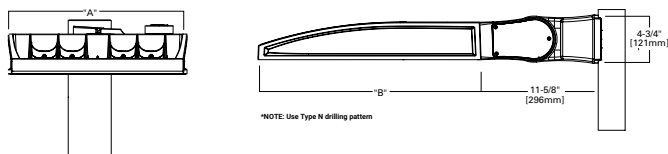
3" Slipfitter, Adjustable (SP)



2-3/8" Slipfitter, Adjustable (SP2)

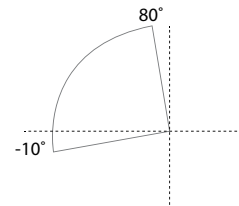


Pole Mount, Adjustable Arm (PA)



Adjustable Arm Range of Motion

- Includes WA, SP, SP2 and PA mounting options
- Adjustable in increments of 5°
- Must maintain downward facing orientation



Fixture Weights and EPAs

Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
0°	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
15°	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
30°	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
45°	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
60°	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

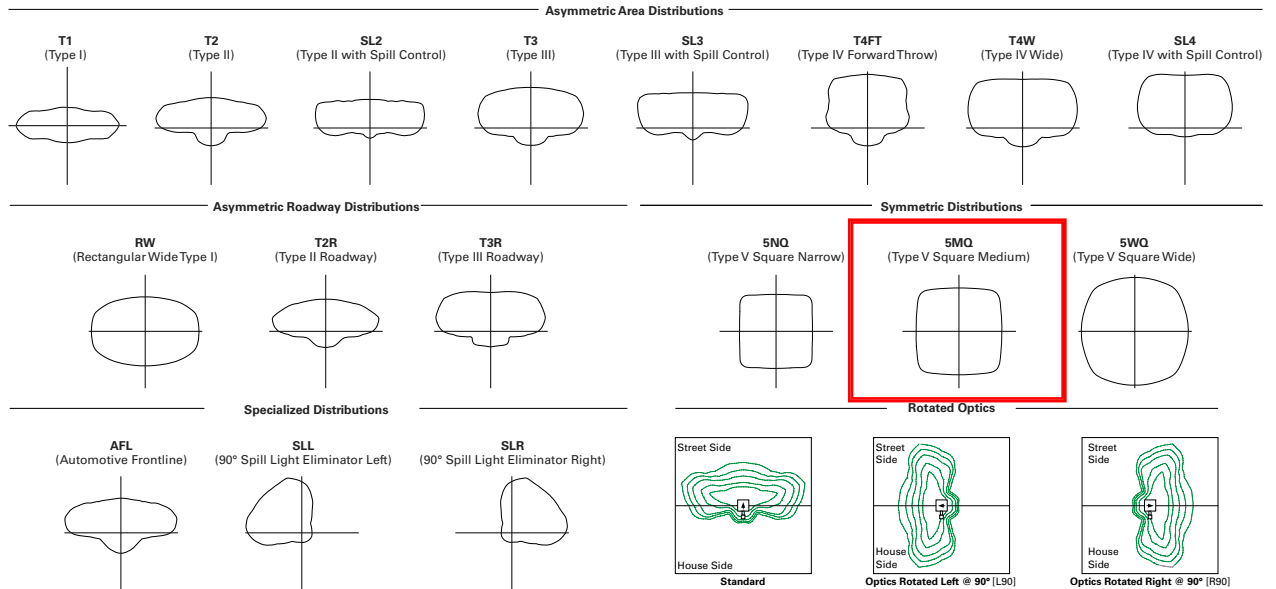
Catalog Number:

GALN-SA3C-730-1-5MQ-XX-BPC

Notes:

Type:**P**

ML&C24-119319

McGraw-Edison**GALN Galleon II****Optical Distributions****Product Specifications****Construction**

- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics

- High-efficiency injection-molded AccuLED Optics technology
- 17 optical distributions for area site and roadway applications
- 3 shielding options include HSS, GRS and PFS
- IDA Certified (3000K CCT and warmer only, fixed mounting options)

Electrical

- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient

environments. Optional 50°C high ambient (HA) configuration

- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

Mounting

- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish

- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available

- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Typical Applications

- Outdoor, Parking Lots, Walkways, Roadways, Building Areas

Warranty

- Five year limited warranty

McGraw-Edison

GALN Galleon II

Energy and Performance Data

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* Supported by IES TM-21 standards
** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

FADC Settings

SA1-SA3 (A, B, C, D Drive Current)

FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: +/-5% typical value

FADC Settings

SA4-SA6 (A, B, C, D Drive Current)

FADC Position	Percent of Typical Lumen Output
1	14%
2	25%
3	32%
4	43%
5	49%
6	57%
7	65%
8	72%
9	80%
10	100%

Note: +/-5% typical value

FADC Settings

SA7-SA9 (A, B, C, D Drive Current)

FADC Position	Percent of Typical Lumen Output
1	19%
2	38%
3	47%
4	63%
5	74%
6	85%
7	95%
8	97%
9	100%
10	100%

Note: +/-5% typical value

McGraw-Edison	GALN Galleon II
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Performance Table, Drive Current "A" (615mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		33	63	93	121	154	182	215	244	274
Input Current @ 120V		0.283	0.529	0.778	1.058	1.310	1.556	1.839	2.089	2.335
Input Current @ 208V		0.165	0.309	0.460	0.618	0.771	0.919	1.082	1.240	1.379
Input Current @ 240V		0.143	0.270	0.398	0.540	0.671	0.796	0.944	1.078	1.194
Input Current @ 277V		0.125	0.237	0.352	0.473	0.581	0.705	0.818	0.962	1.057
Input Current @ 347V		0.098	0.181	0.272	0.362	0.454	0.544	0.636	0.738	0.816
Input Current @ 480V		0.073	0.133	0.200	0.267	0.335	0.400	0.470	0.554	0.600
Optics										
T1	4000K Lumens	4,619	9,180	13,628	18,059	22,861	27,070	31,796	36,863	41,385
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	140	146	147	149	148	149	148	151	151
T2	4000K Lumens	4,654	9,249	13,730	18,194	23,032	27,273	32,034	37,138	41,694
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	141	147	148	150	150	150	149	152	152
T2R	4000K Lumens	4,716	9,372	13,913	18,437	23,340	27,637	32,462	37,634	42,251
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	143	149	150	152	152	152	151	154	154
T3	4000K Lumens	4,589	9,120	13,538	17,940	22,711	26,892	31,587	36,620	41,112
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	139	145	146	148	147	148	147	150	150
T3R	4000K Lumens	4,735	9,411	13,970	18,513	23,436	27,751	32,596	37,790	42,425
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	143	149	150	153	152	152	152	155	155
T4FT	4000K Lumens	4,617	9,176	13,622	18,051	22,851	27,058	31,782	36,847	41,366
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	140	146	146	149	148	149	148	151	151
T4W	4000K Lumens	4,631	9,203	13,662	18,104	22,918	27,138	31,876	36,955	41,488
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	150	149	149	148	151	151
SL2	4000K Lumens	4,619	9,180	13,627	18,058	22,860	27,069	31,795	36,861	41,383
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	149	148	149	148	151	151
SL3	4000K Lumens	4,586	9,115	13,531	17,931	22,699	26,879	31,571	36,602	41,091
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	139	145	145	148	147	148	147	150	150
SL4	4000K Lumens	4,529	9,002	13,363	17,708	22,417	26,544	31,178	36,146	40,580
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	137	143	144	146	146	146	145	148	148
5NQ	4000K Lumens	4,829	9,598	14,247	18,880	23,901	28,301	33,242	38,539	43,266
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
	Lumens per Watt	146	152	153	156	155	155	155	158	158
5MQ	4000K Lumens	4,853	9,645	14,318	18,974	24,020	28,442	33,407	38,731	43,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	147	153	154	157	156	156	155	159	159
5WQ	4000K Lumens	4,843	9,625	14,288	18,934	23,969	28,382	33,337	38,649	43,390
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	147	153	154	156	156	156	155	158	158
SLL/ SLR	4000K Lumens	3,989	7,927	11,768	15,594	19,741	23,375	27,456	31,831	35,736
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	121	126	127	129	128	128	128	130	130
RW	4000K Lumens	4,774	9,488	14,085	18,665	23,628	27,979	32,863	38,100	42,774
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	145	151	151	154	153	154	153	156	156
AFL	4000K Lumens	4,673	9,286	13,785	18,268	23,126	27,384	32,164	37,290	41,864
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	142	147	148	151	150	150	150	153	153

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

McGraw-Edison

GALN Galleon II

Performance Table, Drive Current "B" (800mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		44	82	121	164	204	243	286	325	364
Input Current @ 120V		0.367	0.689	1.014	1.378	1.704	2.027	2.393	2.716	3.041
Input Current @ 208V		0.213	0.401	0.594	0.802	0.997	1.188	1.400	1.605	1.782
Input Current @ 240V		0.184	0.347	0.510	0.694	0.860	1.021	1.210	1.386	1.531
Input Current @ 277V		0.160	0.303	0.449	0.605	0.757	0.898	1.065	1.242	1.347
Input Current @ 347V		0.125	0.235	0.355	0.471	0.592	0.710	0.828	0.958	1.065
Input Current @ 480V		0.092	0.172	0.258	0.344	0.432	0.517	0.605	0.706	0.775
Optics										
T1	4000K Lumens	5,748	11,423	16,957	22,470	28,446	33,683	39,563	45,867	51,494
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	131	139	140	137	139	139	138	141	141
T2	4000K Lumens	5,790	11,508	17,083	22,638	28,658	33,935	39,859	46,210	51,879
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	132	140	141	138	140	140	139	142	143
T2R	4000K Lumens	5,868	11,662	17,311	22,941	29,041	34,388	40,391	46,827	52,572
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
	Lumens per Watt	133	142	143	140	142	142	141	144	144
T3	4000K Lumens	5,710	11,347	16,845	22,322	28,258	33,461	39,303	45,565	51,155
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	130	138	139	136	139	138	137	140	141
T3R	4000K Lumens	5,892	11,710	17,383	23,035	29,161	34,530	40,558	47,020	52,788
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	134	143	144	140	143	142	142	145	145
T4FT	4000K Lumens	5,745	11,418	16,949	22,460	28,433	33,668	39,546	45,847	51,471
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
T4W	4000K Lumens	5,762	11,451	16,999	22,526	28,517	33,767	39,662	45,982	51,622
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	140	140	137	140	139	139	141	142
SL2	4000K Lumens	5,747	11,422	16,956	22,469	28,444	33,681	39,561	45,865	51,491
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
SL3	4000K Lumens	5,707	11,342	16,836	22,311	28,244	33,444	39,283	45,542	51,129
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	130	138	139	136	138	138	137	140	140
SL4	4000K Lumens	5,636	11,201	16,627	22,034	27,893	33,028	38,794	44,976	50,493
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	128	137	137	134	137	136	136	138	139
5NQ	4000K Lumens	6,009	11,942	17,727	23,492	29,739	35,214	41,362	47,953	53,835
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	137	146	147	143	146	145	145	148	148
5MQ	4000K Lumens	6,039	12,001	17,816	23,609	29,887	35,389	41,568	48,191	54,103
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	137	146	147	144	147	146	145	148	149
5WQ	4000K Lumens	6,026	11,976	17,778	23,559	29,824	35,315	41,480	48,090	53,989
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	137	146	147	144	146	145	145	148	148
SLL/ SLR	4000K Lumens	4,963	9,863	14,642	19,403	24,563	29,085	34,163	39,607	44,465
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	113	120	121	118	120	120	119	122	122
RW	4000K Lumens	5,940	11,806	17,526	23,224	29,400	34,813	40,891	47,407	53,222
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	135	144	145	142	144	143	143	146	146
AFL	4000K Lumens	5,814	11,555	17,153	22,730	28,775	34,073	40,021	46,398	52,090
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4
	Lumens per Watt	132	141	142	139	141	140	140	143	143

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

McGraw-Edison	GALN Galleon II
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Performance Table, Drive Current "C" (1050mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		57	108	160	213	269	321	377	429	481
Input Current @ 120V		0.478	0.905	1.338	1.810	2.244	2.675	3.150	3.584	4.013
Input Current @ 208V		0.279	0.532	0.780	1.064	1.313	1.559	1.845	2.093	2.339
Input Current @ 240V		0.243	0.458	0.664	0.916	1.123	1.328	1.582	1.788	1.991
Input Current @ 277V		0.213	0.404	0.582	0.808	0.997	1.164	1.401	1.589	1.745
Input Current @ 347V		0.164	0.322	0.471	0.644	0.795	0.943	1.117	1.269	1.414
Input Current @ 480V		0.121	0.235	0.341	0.469	0.579	0.681	0.814	0.923	1.022
Optics										
T1	4000K Lumens	7,101	14,113	20,950	27,763	35,146	41,616	48,882	56,671	63,623
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	125	131	131	130	131	130	130	132	132
T2	4000K Lumens	7,154	14,219	21,107	27,970	35,408	41,927	49,247	57,094	64,098
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	126	132	132	131	132	131	131	133	133
T2R	4000K Lumens	7,250	14,408	21,389	28,344	35,881	42,487	49,905	57,857	64,954
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	127	133	134	133	133	132	132	135	135
T3	4000K Lumens	7,054	14,020	20,812	27,580	34,914	41,342	48,560	56,297	63,203
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
T3R	4000K Lumens	7,280	14,468	21,477	28,461	36,029	42,663	50,111	58,096	65,222
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	128	134	134	134	134	133	133	135	136
T4FT	4000K Lumens	7,098	14,107	20,941	27,751	35,130	41,598	48,860	56,646	63,594
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
T4W	4000K Lumens	7,119	14,148	21,003	27,832	35,233	41,720	49,004	56,812	63,781
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	131	131	130	130	132	133
SL2	4000K Lumens	7,101	14,112	20,949	27,761	35,144	41,614	48,879	56,668	63,619
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
SL3	4000K Lumens	7,051	14,013	20,802	27,566	34,897	41,321	48,535	56,269	63,172
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
SL4	4000K Lumens	6,963	13,839	20,543	27,223	34,463	40,808	47,932	55,569	62,386
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	122	128	128	128	128	127	127	130	130
5NQ	4000K Lumens	7,424	14,755	21,903	29,025	36,743	43,508	51,104	59,247	66,515
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	130	137	137	136	137	136	136	138	138
5MQ	4000K Lumens	7,461	14,828	22,012	29,169	36,926	43,725	51,359	59,542	66,846
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	138	137	137	136	136	139	139
5WQ	4000K Lumens	7,445	14,797	21,966	29,108	36,849	43,633	51,250	59,417	66,705
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	137	137	137	136	136	139	139
SLL/ SLR	4000K Lumens	6,132	12,187	18,091	23,973	30,348	35,936	42,210	48,935	54,938
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	108	113	113	113	113	112	112	114	114
RW	4000K Lumens	7,340	14,587	21,653	28,694	36,325	43,013	50,522	58,573	65,757
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	129	135	135	135	135	134	134	137	137
AFL	4000K Lumens	7,183	14,276	21,193	28,084	35,552	42,098	49,448	57,327	64,359
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	126	132	132	132	132	131	131	134	134

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

McGraw-Edison	GALN Galleon II
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Performance Table, Drive Current "D" (1200mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		65	125	184	245	309	368	433	493	552
Input Current @ 120V		0.546	1.041	1.535	2.082	2.578	3.070	3.619	4.114	4.605
Input Current @ 208V		0.318	0.610	0.893	1.219	1.504	1.786	2.113	2.397	2.679
Input Current @ 240V		0.276	0.523	0.758	1.046	1.282	1.516	1.806	2.041	2.274
Input Current @ 277V		0.241	0.460	0.662	0.920	1.133	1.325	1.593	1.807	1.987
Input Current @ 347V		0.187	0.370	0.543	0.740	0.915	1.085	1.285	1.459	1.628
Input Current @ 480V		0.138	0.269	0.391	0.537	0.663	0.782	0.932	1.057	1.173
Optics										
T1	4000K Lumens	7,814	15,529	23,053	30,549	38,672	45,793	53,787	62,358	70,007
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	120	124	125	125	125	124	124	126	127
T2	4000K Lumens	7,872	15,645	23,225	30,777	38,962	46,135	54,189	62,824	70,530
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	126	126	125	125	127	128
T2R	4000K Lumens	7,977	15,854	23,535	31,188	39,482	46,751	54,913	63,663	71,472
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	127	128	127	127	129	129
T3	4000K Lumens	7,762	15,427	22,901	30,348	38,418	45,491	53,433	61,947	69,546
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
T3R	4000K Lumens	8,010	15,920	23,632	31,317	39,645	46,944	55,139	63,925	71,767
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	128	128	128	127	130	130
T4FT	4000K Lumens	7,810	15,522	23,043	30,535	38,655	45,772	53,763	62,330	69,976
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
T4W	4000K Lumens	7,833	15,568	23,110	30,625	38,769	45,907	53,921	62,513	70,182
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	125	125	125	125	127	127
SL2	4000K Lumens	7,813	15,528	23,052	30,547	38,670	45,790	53,784	62,354	70,003
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
SL3	4000K Lumens	7,758	15,419	22,889	30,332	38,398	45,468	53,406	61,916	69,511
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
SL4	4000K Lumens	7,662	15,228	22,605	29,955	37,921	44,903	52,742	61,146	68,646
	BUG Rating	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	118	122	123	122	123	122	122	124	124
5NQ	4000K Lumens	8,169	16,235	24,101	31,938	40,431	47,874	56,232	65,193	73,190
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	126	130	131	130	131	130	130	132	133
5MQ	4000K Lumens	8,210	16,316	24,221	32,097	40,632	48,113	56,512	65,517	73,554
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	131	132	131	131	131	131	133	133
5WQ	4000K Lumens	8,192	16,282	24,170	32,029	40,546	48,011	56,393	65,379	73,399
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	130	131	131	131	130	130	133	133
SLL/ SLR	4000K Lumens	6,747	13,410	19,906	26,379	33,394	39,542	46,445	53,846	60,451
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	104	107	108	108	108	107	107	109	110
RW	4000K Lumens	8,076	16,050	23,826	31,574	39,970	47,329	55,592	64,450	72,356
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	124	128	129	129	129	129	128	131	131
AFL	4000K Lumens	7,904	15,709	23,320	30,902	39,120	46,323	54,410	63,079	70,817
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	122	126	127	126	127	126	126	128	128

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

McGraw-Edison

GALN Galleon II

Control Options

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC, PR and PR7)

Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

After Hours Dim (AHD)

This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (SPB and MS/DIM-LXX)

These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB (FSP-321 or FSP-311) or MS/DIM (FSP-211) sensor options are selected, the occupancy sensor is connected to a dimming driver and the luminaire dims when no motion is detected. After a set period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. Both sensors are factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM sensor requires the FSIR-100 programming tool to adjust factory defaults. The SPB sensor default parameters are listed in the table below and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares (See SPB/X Availability Table below.) An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish*
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

*SPB bezel color automatically selected based on luminaire finish

SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 6

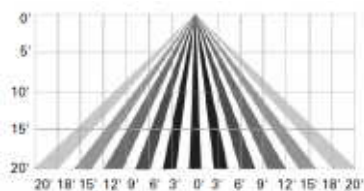
Default Program Settings (Out of the Box Functionality)

Occupancy Sensor				
Setting	MS/DIM	SPB	WaveLinx Lite (WLS4 / WLS2)	WaveLinx (WPS)
High Mode %	100%	100%	100%	100%
Low Mode %	10%	10%	50%	50%
Time Delay	5 min	5 min	15 min	15 min
Cut Off Delay	1 hr	1 hr	Disabled	Disabled
Photocell Enabled	No	No	Yes	Yes

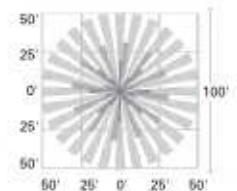
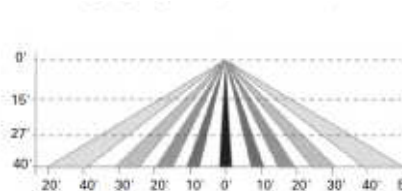
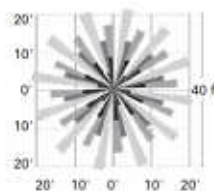
WaveLinx Wireless Control and Monitoring System

Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx (WPS2 to WPS4) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15' (WPS2 and WLS2)



For mounting heights up to 40' (WPS4 and WLS4)

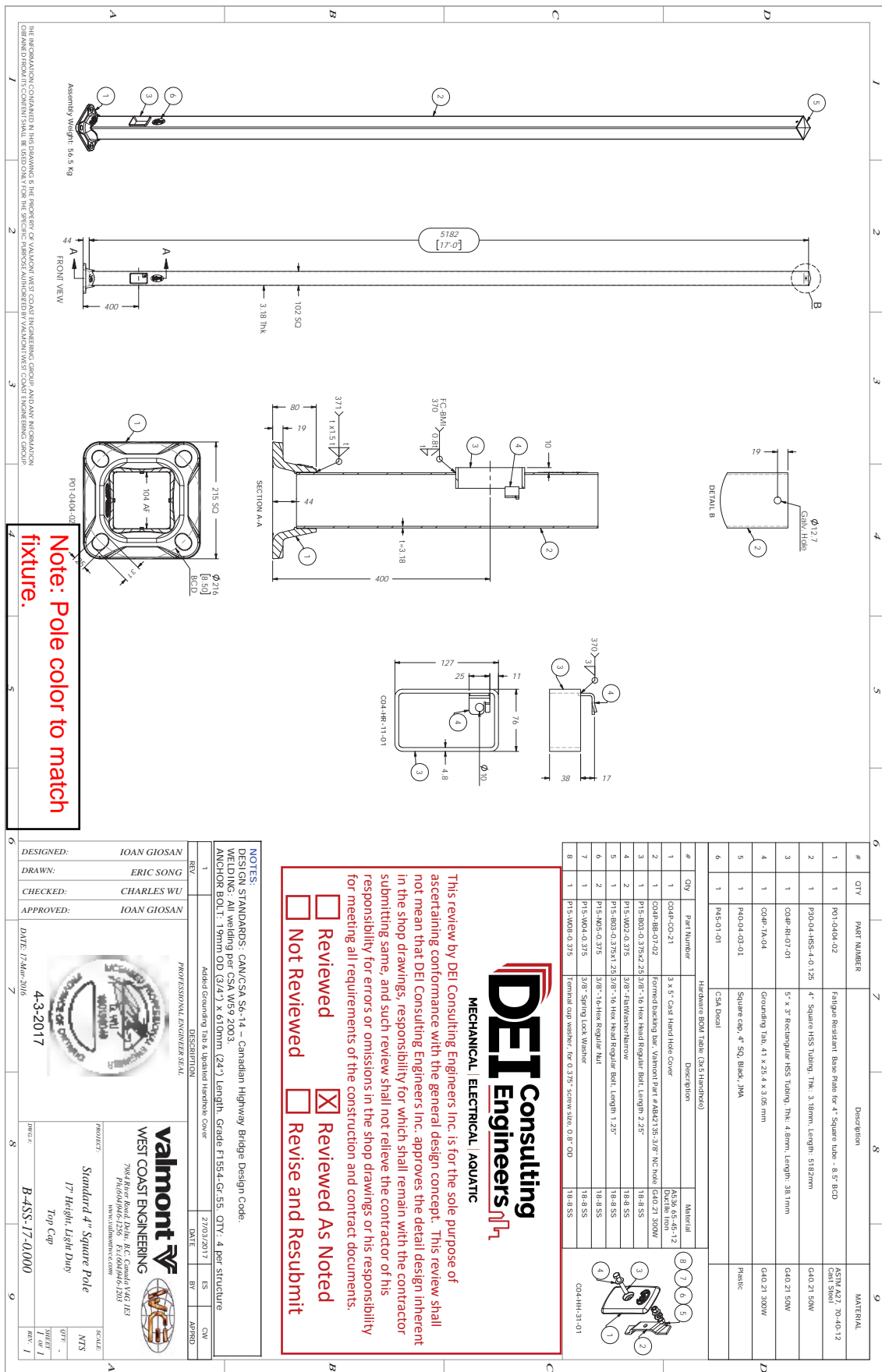


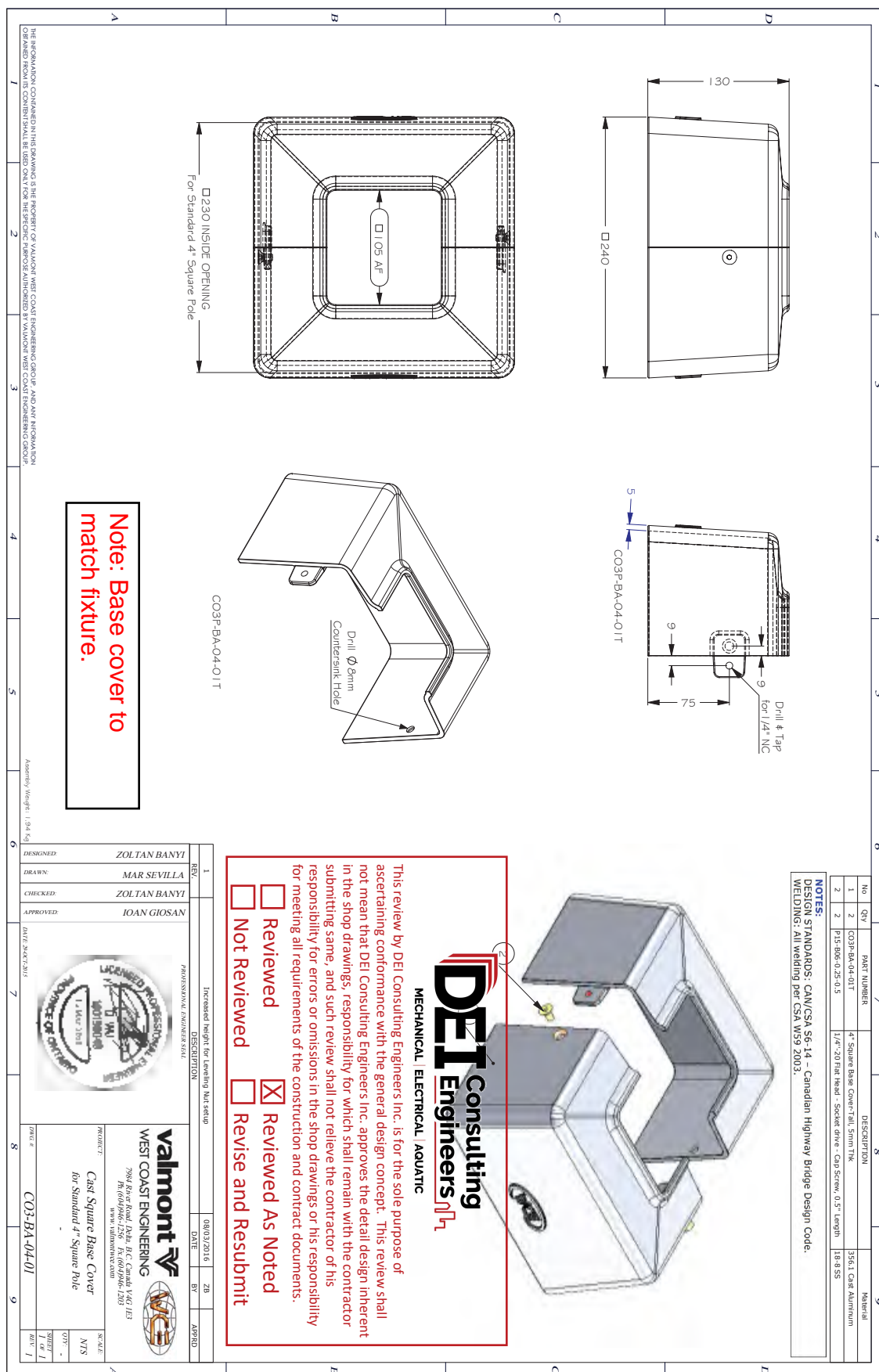
LumenSafe Integrated Network Security Camera (LD)

Cooper Lighting Solutions brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

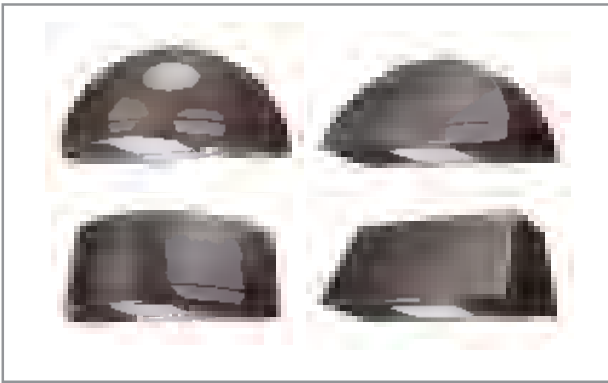
Synapse (DIM10)

SimplySNAP integrated wireless controls system by Synapse. Includes factory installed DIM10 Synapse control module and FSP-201 motion sensor; requires additional Synapse system components for operation. Contact Synapse at www.synapsewireless.com for product support, warranty and terms and conditions.





Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

Impact Elite LED

Wall Mount Luminaire

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3
- Control Options page 4

Product Certifications



Quick Facts

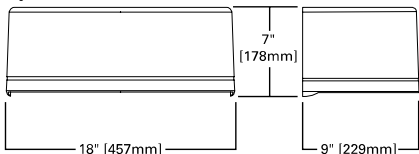
- 15 Optical Distributions
- Lumen packages range from 2,459 to 11,480 (20W - 95W)
- Efficacy up to 149 lumens per watt

Connected Systems

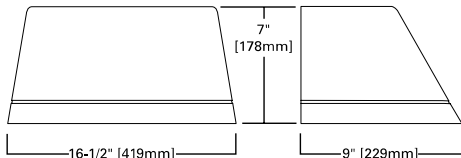
- WaveLinx
- Enlighted

Dimensional Details

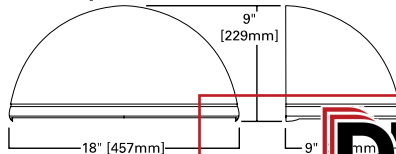
Cylinder



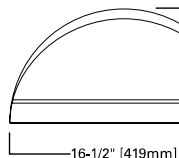
Trapezoid



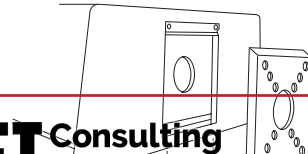
Quarter Sphere




Wedge



Hook -n- Lock



NOTES:
1. IDA Certified for 3000K CCT and warmer only.



MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

<input type="checkbox"/> Reviewed	<input checked="" type="checkbox"/> Reviewed As Noted
<input type="checkbox"/> Not Reviewed	<input type="checkbox"/> Revise and Resubmit

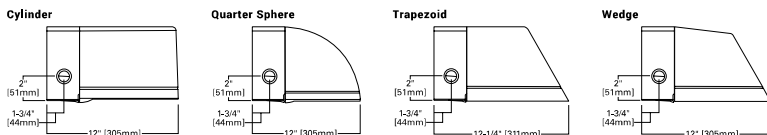
McGraw-Edison

Impact Elite LED

Ordering Information
SAMPLE NUMBER: ISC-SA1F-740-U-T3-BZ

Product Family ¹	Light Engine		Color Temperature	Voltage	Distribution	Finish
	Configuration	Drive Current				
ISC=Impact Elite LED Small Cylinder ISS=Impact Elite LED Small Quarter Sphere IST=Impact Elite LED Small Trapezoid ISW=Impact Elite LED Small Wedge BAA-ISC=Impact Elite LED Small Cylinder Buy American Act Compliant ²³ TAA-ISC=Impact Elite LED Small Cylinder Trade Agreements Act Compliant ²³ BAA-ISS=Impact Elite LED Small Quarter Sphere Buy American Act Compliant ²³ TAA-ISS=Impact Elite LED Small Quarter Sphere Trade Agreements Act Compliant ²³ BAA-IST=Impact Elite LED Small Trapezoid Buy American Act Compliant ²³ TAA-IST=Impact Elite LED Small Trapezoid Trade Agreements Act Compliant ²³ BAA-ISW=Impact Elite LED Small Wedge Buy American Act Compliant ²³ TAA-ISW=Impact Elite LED Small Wedge Trade Agreements Act Compliant ²³	SA1=1 Square (16 LED) PA1=1 Panel (24 LED) ²⁶	A=350mA B=450mA C=600mA D=800mA E=1000mA F=1200mA ²	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 760=70CRI, 6000K 827=80CRI, 2700K 830=80CRI, 3000K AMB=Amber, 590nm ^{3,4}	11=120V ^{27V} 1=120V 2=208V 3=240V 4=277V 8=480V ⁵ 9=347V	SA1 Optics T2=Type II T3=Type III T4FT=Type IV Forward Throw T4W=Type IV Wide SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control SLR=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White RALXX=Custom Color ²⁷
SELECT FINISH						
Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)			Accessories (Order Separately) ²⁴		
X=Driver Surge Protection (6kV) Only ¹⁷ 20K=Series 20kV UL 1449 Surge Protective Device CBP=Battery Pack with Back Box, Cold Weather Rated ^{14,15} CBP-CEC=Battery Pack with Back Box, Cold Weather Rated, CEC compliant ¹⁴ HSS=Factory Installed House Side Shield ¹⁶ ULG=Uplight Glow ^{6,7,28} LCF=Light Square Trim Plate Painted to Match Housing TR=Tamper Resistant Hardware CC=Coastal Construction ²¹ HA=50°C High Ambient ¹⁸ AHD145=After Hours Dim, 5 Hours, 50% ⁹ AHD245=After Hours Dim, 6 Hours, 50% ⁹ AHD255=After Hours Dim, 7 Hours, 50% ⁹ AHD355=After Hours Dim, 8 Hours, 50% ⁹	BPC=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle ^{4,6,7} SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting ^{12,22} SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting ^{12,22} SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting ^{12,22} MS/DIM-LXX=Motion Sensor for Dimming Operation ^{7,18,19,12} LWR-LW=Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height ^{6,12,13} LWR-LN=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height ^{6,12,13} WLS2XX=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{7,18,20} WLS4XX=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{7,18,20} WPS2XX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{7,18,20} WPS4XX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{7,18,20}			MA1253=10kV Circuit Module Replacement MA1254-XX=Thruway Back Box - Impact Elite Trapezoid MA1255-XX=Thruway Back Box - Impact Elite Cylinder MA1256-XX=Thruway Back Box - Impact Elite Quarter Sphere MA1257-XX=Thruway Back Box - Impact Elite Wedge FSIR-100=Wireless Configuration Tool for Occupancy Sensor WOLC-7P-10A=WaveLinx Outdoor Control Module (7-pin) ^{7,19}		
NOTES: 1. DesignLight Consortium® Qualified. Refer to www.designlights.org . Qualified Products List under Family Models for details. 2. Not available with ULG option. 3. Choose Drive Current "A" for Amber 590nm, which is provided at 500mA only. 4. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option. 5. 480V not to be used with ungrounded or impedance grounded systems. 6. Not available with ISS or ISW. 7. Cannot be used in conjunction with other control options. 8. Suitable for 50°C provided no options other than motion sensor are included and driver output set to 1000mA or less. 9. Requires the use of photocontrol. Not available with 350mA drive current. See After Hours Dim supplemental guide for additional information. 10. Replace LXX with L08 (<8' mounting), L20 (8'-20' mounting) or L40W (21'-40' mounting). 11. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information. 12. Includes integral photocell. 13. Enlighted wireless sensors are factory installed and require network components in appropriate quantities. 14. Battery pack operating temperature of -20C to +40C. Operates downlight for 90-minutes. 15. Must specify 120V or 277V. 16. Not for use with 5WQ, 5MQ, 5WQ or RW optics. A black trim plate is used when HSS is selected. 17. Removes additional surge module. 18. Replace XX with sensor color (WH, BZ, or BK). 19. Requires PR7. 20. For WaveLinx applications, WAC Gateway required to enable field-configurability. Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. Gateway not required for WaveLinx Lite Commercial (LC) applications. 21. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 22. Smart device with mobile application required to change system defaults. See controls section for details. 23. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC.PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 24. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 25. Only available in 3000K, 4000K or 5000K CCT. 26. Not available with motion sensor controls, including SPB, MS/DIM, LWR or WaveLinx. 27. Specify RAL number for Custom Color. Custom color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.						

Thruway Back Box



Product Specifications

Construction

- Heavy-wall, die-cast aluminum housing and removable hinged door frame
- Optional tamper-resistant fasteners offer vandal resistant access
- IK10 impact rated

Optics

- High-efficiency injection-molded AccuLED optics technology
- 15 optical distributions
- IDA Certified (3000K CCT and warmer only)

Electrical

- Standard with 0-10V dimming
- Standard with Cooper Lighting Solutions proprietary circuit module designed to withstand 10kV of transient line surge
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration.

Mounting

- Utilizes "Hook-N-Lock" mounting mechanism, securing to a gasketed and zinc plated mounting attachment

- Two black oxide coated Allen set screws concealed but accessible from below

Finish

- Super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- RAL and custom color matches available
- Coastal Construction (CC) option available

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

McGraw-Edison

Impact Elite LED

Energy and Performance Data

 View Impact Elite IES files

1 Light Square (SA)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120 - 277V	20.1	25.4	34.2	45.2	58.2	66.0	20.1	25.4	34.2	45.2	58.2	66.0
Current (A)	120	0.17	0.22	0.29	0.38	0.48	0.56	0.17	0.22	0.29	0.38	0.48	0.56
	277V	0.09	0.10	0.13	0.17	0.21	0.25	0.09	0.10	0.13	0.17	0.21	0.25
Power (Watts)	347V or 480V	23.3	28.7	36.6	49.5	60.7	70.1	23.3	28.7	36.6	49.5	60.7	70.1
Current (A)	347V	0.07	0.08	0.11	0.15	0.18	0.21	0.07	0.08	0.11	0.15	0.18	0.21
	480V	0.05	0.06	0.08	0.11	0.13	0.16	0.05	0.06	0.08	0.11	0.13	0.16
Optics (4000K, 70 CRI)													
T2	Lumens	2,802	3,500	4,618	5,778	7,231	7,895	2,772	3,475	4,576	5,733	7,175	7,834
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	139	138	135	128	124	120	138	137	134	127	123	119
T3	Lumens	2,778	3,470	4,578	5,729	7,169	7,827	2,731	3,424	4,508	5,648	7,069	7,718
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	138	137	134	127	123	119	136	135	132	125	121	117
T4FT	Lumens	2,751	3,436	4,534	5,673	7,099	7,751	2,762	3,462	4,559	5,712	7,149	7,805
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	137	135	133	126	122	117	137	136	133	126	123	118
T4W	Lumens	2,780	3,473	4,582	5,733	7,174	7,833	2,739	3,434	4,522	5,665	7,089	7,740
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	138	137	134	127	123	119	136	135	132	125	122	117
SL2	Lumens	2,763	3,451	4,554	5,698	7,130	7,785	2,730	3,422	4,507	5,646	7,066	7,715
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	Lumens Per Watt	137	136	133	126	123	118	136	135	132	125	121	117
SL3	Lumens	2,745	3,429	4,524	5,660	7,084	7,734	2,709	3,396	4,472	5,603	7,012	7,655
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	137	135	132	125	122	117	135	134	131	124	120	116
SL4	Lumens	2,680	3,348	4,417	5,526	6,916	7,551	2,666	3,342	4,401	5,514	6,900	7,534
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	133	132	129	122	119	114	133	132	129	122	119	114
SLL	Lumens	2,447	3,057	4,033	5,046	6,315	6,895	2,459	3,083	4,059	5,086	6,365	6,949
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	122	120	118	112	109	104	122	121	119	113	109	105
RW	Lumens	2,883	3,601	4,751	5,945	7,440	8,123	2,818	3,533	4,652	5,828	7,294	7,964
	BUG Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1
	Lumens Per Watt	143	142	139	132	128	123	140	139	136	129	125	121

McGraw-Edison

Impact Elite LED

1 Light Panel (PA)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120 - 277V	28,9	36,4	48,9	63,0	82,4	94,4	28,9	36,4	48,9	63,0	82,4	94,4
Current (A)	120V	0,24	0,31	0,41	0,53	0,69	0,79	0,24	0,31	0,41	0,53	0,69	0,79
	277V	0,11	0,14	0,18	0,23	0,30	0,34	0,11	0,14	0,18	0,23	0,30	0,34
Power (Watts)	347V or 480V	30,5	37,7	49,0	63,9	83,2	95,0	30,5	37,7	49,0	63,9	83,2	95,0
Current (A)	347V OR 480V	0,09	0,11	0,14	0,19	0,24	0,28	0,09	0,11	0,14	0,19	0,24	0,28
	480V	0,07	0,08	0,11	0,14	0,18	0,20	0,07	0,08	0,11	0,14	0,18	0,20
Optics (4000K, 70 CRI)													
T2R	Lumens	4,296	5,369	7,010	8,733	10,721	11,750	4,154	5,211	6,738	8,386	10,329	11,338
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2
	Lumens Per Watt	149	147	143	139	130	124	144	143	138	133	125	120
T2U	Lumens	4,241	5,300	6,920	8,621	10,584	11,600	4,123	5,172	6,688	8,323	10,252	11,253
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	Lumens Per Watt	147	146	142	137	128	123	143	142	137	132	124	119
T3	Lumens	4,193	5,240	6,842	8,524	10,464	11,468	4,079	5,117	6,616	8,235	10,143	11,133
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
	Lumens Per Watt	145	144	140	135	127	121	141	141	135	131	123	118
T4W	Lumens	4,165	5,205	6,796	8,467	10,394	11,392	4,083	5,122	6,623	8,243	10,152	11,144
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens Per Watt	144	143	139	134	126	121	141	141	135	131	123	118
5WQ	Lumens	4,255	5,318	6,943	8,650	10,619	11,638	4,206	5,276	6,822	8,491	10,458	11,480
	BUG Rating	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G3	B4-U0-G3	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G3
	Lumens per Watt	147	146	142	137	129	123	146	145	140	135	127	122

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* Supported by IES TM-21 standards
** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

McGraw-Edison
Impact Elite LED

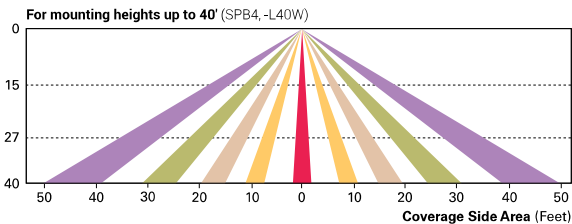
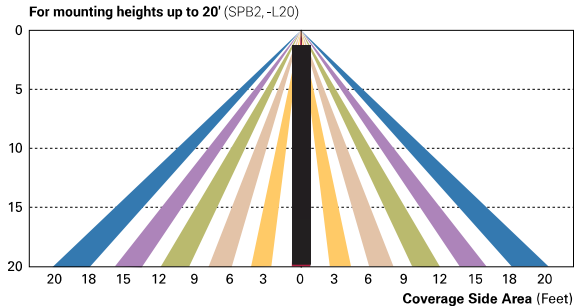
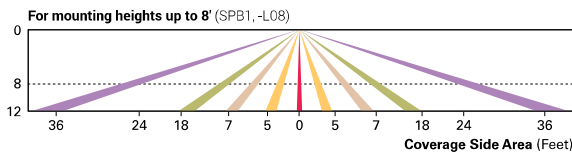
Control Options

0-10V
This fixture is offered standard with 0-10V dimming driver(s).

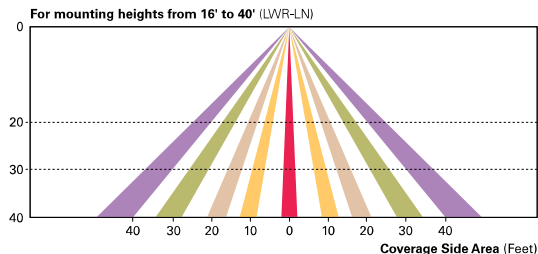
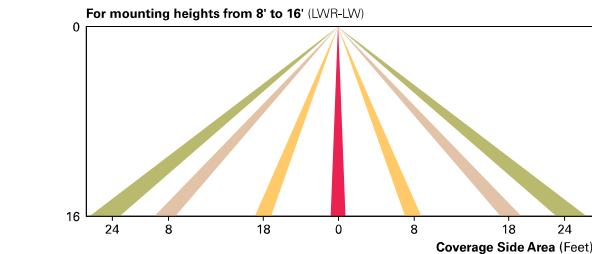
Photocontrol (BPC and PR7)
Optional button-type photocontrol provides a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels.

After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

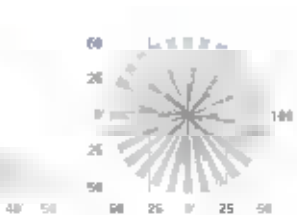
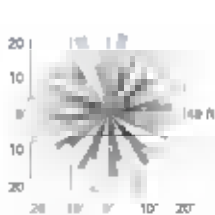
Dimming Occupancy Sensor (SPB, MS/DIM-LXX)
These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.



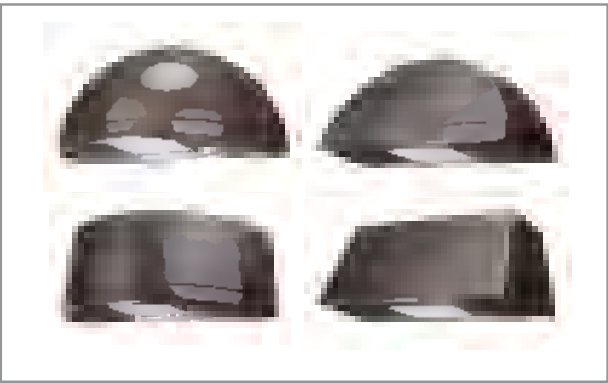
Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN)
Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.



WaveLinX Wireless Control and Monitoring System
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinX (WPS2 to WPS4) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinX mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinX Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinX Lite mobile application for set-up and configuration. WAC not required. WaveLinX Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.



Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison Impact Elite LED

Wall Mount Luminaire

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3
- Control Options page 4

Product Certifications



Quick Facts

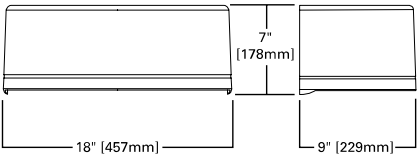
- 15 Optical Distributions
- Lumen packages range from 2,459 to 11,480 (20W - 95W)
- Efficacy up to 149 lumens per watt

Connected Systems

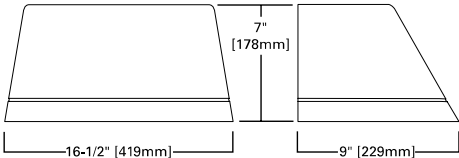
- WaveLinx
- Enlighted

Dimensional Details

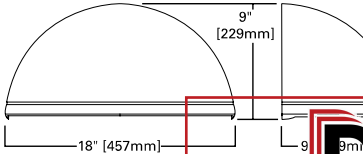
Cylinder



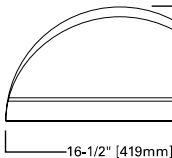
Trapezoid



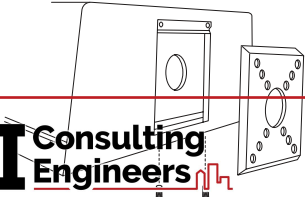
Quarter Sphere



Wedge



Hook -n- Lock



NOTES:
1. IDA Certified for 3000K CCT and warmer only.

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for all requirements in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Reviewed | <input checked="" type="checkbox"/> Reviewed As Noted |
| <input type="checkbox"/> Not Reviewed | <input type="checkbox"/> Revise and Resubmit |

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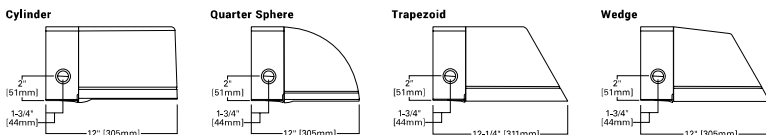
Impact Elite LED

Ordering Information

SAMPLE NUMBER: ISC-SA1F-740-U-T3-BZ

Product Family ¹	Light Engine		Color Temperature	Voltage	Distribution	Finish
	Configuration	Drive Current				
ISC=Impact Elite LED Small Cylinder ISS=Impact Elite LED Small Quarter Sphere IST=Impact Elite LED Small Trapezoid ISW=Impact Elite LED Small Wedge BAA-ISC=Impact Elite LED Small Cylinder Buy American Act Compliant ²³ BAA-ISS=Impact Elite LED Small Cylinder Trade Agreements Act Compliant ²³ BAA-ISS=Impact Elite LED Small Quarter Sphere Buy American Act Compliant ²³ BAA-ISS=Impact Elite LED Small Quarter Sphere Trade Agreements Act Compliant ²³ BAA-IST=Impact Elite LED Small Trapezoid Buy American Act Compliant ²³ BAA-IST=Impact Elite LED Small Trapezoid Trade Agreements Act Compliant ²³ BAA-ISW=Impact Elite LED Small Wedge Buy American Act Compliant ²³ BAA-ISW=Impact Elite LED Small Wedge Trade Agreements Act Compliant ²³	SA1=1 Square (16 LED) PA1=1 Panel (24 LED) ²⁶	A=350mA B=450mA C=600mA D=800mA E=1000mA F=1200mA ³	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 760=70CRI, 6000K 827=80CRI, 2700K 830=80CRI, 3000K AMB=Amber, 590nm ^{3,4}	11=120V ²⁷ 1=120V 2=208V 3=240V 4=277V 8=480V ⁵ 9=347V	SA1 Optics T2=Type II T3=Type III T4FT=Type IV Forward Throw T4W=Type IV Wide SL2=Type II w/Spill Control SL3=Type II w/Spill Control SL4=Type IV w/Spill Control SLR=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White RALXX=Custom Color ²⁷
SELECT FINISH						
Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)			Accessories (Order Separately) ²⁴		
X=Driver Surge Protection (6kV) Only ¹⁷ 20K=Series 20kV UL 1449 Surge Protective Device CBP=Battery Pack with Back Box, Cold Weather Rated ^{14,15} CBP-CEC=Battery Pack with Back Box, Cold Weather Rated, CEC compliant ¹⁴ HSS=Factory Installed House Side Shield ¹⁶ ULG=Uplight Glow ^{6,7,23} LCF=Light Square Trim Plate Painted to Match Housing TR=Tamper Resistant Hardware CC=Coastal Construction ²¹ HA=50°C High Ambient ⁴ AHD145=After Hours Dim, 5 Hours, 50% ⁹ AHD245=After Hours Dim, 6 Hours, 50% ⁹ AHD255=After Hours Dim, 7 Hours, 50% ⁹ AHD355=After Hours Dim, 8 Hours, 50% ⁹	BPC=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle ^{4,6,7} SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting ^{12,22} SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting ^{12,22} SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting ^{12,22} MS/DIM-LXX=Motion Sensor for Dimming Operation ^{7,18,19,12} LWR-LW=Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height ^{6,12,13} LWR-LN=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height ^{6,12,13} WLS2XX=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{7,18,20} WLS4XX=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{7,18,20} WPS2XX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{7,18,20} WPS4XX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{7,18,20}			MA1253=10kV Circuit Module Replacement MA1254-XX=Thruway Back Box - Impact Elite Trapezoid MA1255-XX=Thruway Back Box - Impact Elite Cylinder MA1256-XX=Thruway Back Box - Impact Elite Quarter Sphere MA1257-XX=Thruway Back Box - Impact Elite Wedge FSR-100=Wireless Configuration Tool for Occupancy Sensor WOLC-7P-10A=WaveLinx Outdoor Control Module (7-pin) ^{7,19}		
NOTES: 1. DesignLight Consortium® Qualified. Refer to www.designlights.org . Qualified Products List under Family Models for details. 2. Not available with ULG option. 3. Choose Drive Current "A" for Amber 590nm, which is provided at 500mA only. 4. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option. 5. 480V not to be used with ungrounded or impedance grounded systems. 6. Not available with ISS or ISW. 7. Cannot be used in conjunction with other control options. 8. Suitable for 50°C provided no options other than motion sensor are included and driver output set to 1000mA or less. 9. Requires the use of photocontrol. Not available with 350mA drive current. See After Hours Dim supplemental guide for additional information. 10. Replace LXX with L08 (<8' mounting), L20 (8'-20' mounting) or L40W (21'-40' mounting). 11. The FSR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information. 12. Includes integral photocell. 13. Enlighted wireless sensors are factory installed and require network components in appropriate quantities. 14. Battery pack operating temperature of -20°C to +40°C. Operates downlight for 90-minutes. 15. Must specify 120V or 277V. 16. Not for use with 5WQ, 5MQ, 5WQ or RW optics. A black trim plate is used when HSS is selected. 17. Removes additional surge module. 18. Replace XX with sensor color (WH, BZ, or BK). 19. Requires PR7. 20. For WaveLinx applications, WAC Gateway required to enable field-configurability. Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. Gateway not required for WaveLinx Lite Commercial (LC) applications. 21. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 22. Smart device with mobile application required to change system defaults. See controls section for details. 23. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC.PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 24. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 25. Only available in 3000K, 4000K or 5000K CCT. 26. Not available with motion sensor controls, including SPB, MS/DIM, LWR or WaveLinx. 27. Specify RAL number for Custom Color. Custom color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.						

Thruway Back Box



Product Specifications

Construction

- Heavy-wall, die-cast aluminum housing and removable hinged door frame
- Optional tamper-resistant fasteners offer vandal resistant access
- IK10 impact rated

Optics

- High-efficiency injection-molded AccuLED optics technology
- 15 optical distributions
- IDA Certified (3000K CCT and warmer only)

Electrical

- Standard with 0-10V dimming
- Standard with Cooper Lighting Solutions proprietary circuit module designed to withstand 10kV of transient line surge
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration.

Mounting

- Utilizes "Hook-N-Lock" mounting mechanism, securing to a gasketed and zinc plated mounting attachment

- Two black oxide coated Allen set screws concealed but accessible from below

Finish

- Super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- RAL and custom color matches available
- Coastal Construction (CC) option available

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

McGraw-Edison

Impact Elite LED

Energy and Performance Data

[View Impact Elite IES files](#)

1 Light Square (SA)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120 - 277V	20.1	25.4	34.2	45.2	58.2	66.0	20.1	25.4	34.2	45.2	58.2	66.0
Current (A)	120	0.17	0.22	0.29	0.38	0.48	0.56	0.17	0.22	0.29	0.38	0.48	0.56
	277V	0.09	0.10	0.13	0.17	0.21	0.25	0.09	0.10	0.13	0.17	0.21	0.25
Power (Watts)	347V or 480V	23.3	28.7	36.6	49.5	60.7	70.1	23.3	28.7	36.6	49.5	60.7	70.1
Current (A)	347V	0.07	0.08	0.11	0.15	0.18	0.21	0.07	0.08	0.11	0.15	0.18	0.21
	480V	0.05	0.06	0.08	0.11	0.13	0.16	0.05	0.06	0.08	0.11	0.13	0.16
Optics (4000K, 70 CRI)													
T2	Lumens	2,802	3,500	4,618	5,778	7,231	7,895	2,772	3,475	4,576	5,733	7,175	7,834
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	139	138	135	128	124	120	138	137	134	127	123	119
T3	Lumens	2,778	3,470	4,578	5,729	7,169	7,827	2,731	3,424	4,508	5,648	7,069	7,718
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	138	137	134	127	123	119	136	135	132	125	121	117
T4FT	Lumens	2,751	3,436	4,534	5,673	7,099	7,751	2,762	3,462	4,559	5,712	7,149	7,805
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	137	135	133	126	122	117	137	136	133	126	123	118
T4W	Lumens	2,780	3,473	4,582	5,733	7,174	7,833	2,739	3,434	4,522	5,665	7,089	7,740
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	138	137	134	127	123	119	136	135	132	125	122	117
SL2	Lumens	2,763	3,451	4,554	5,698	7,130	7,785	2,730	3,422	4,507	5,646	7,066	7,715
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	Lumens Per Watt	137	136	133	126	123	118	136	135	132	125	121	117
SL3	Lumens	2,745	3,429	4,524	5,660	7,084	7,734	2,709	3,396	4,472	5,603	7,012	7,655
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	137	135	132	125	122	117	135	134	131	124	120	116
SL4	Lumens	2,680	3,348	4,417	5,526	6,916	7,551	2,666	3,342	4,401	5,514	6,900	7,534
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	133	132	129	122	119	114	133	132	129	122	119	114
SLL	Lumens	2,447	3,057	4,033	5,046	6,315	6,895	2,459	3,083	4,059	5,086	6,365	6,949
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	122	120	118	112	109	104	122	121	119	113	109	105
RW	Lumens	2,883	3,601	4,751	5,945	7,440	8,123	2,818	3,533	4,652	5,828	7,294	7,964
	BUG Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1
	Lumens Per Watt	143	142	139	132	128	123	140	139	136	129	125	121

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Impact Elite LED

1 Light Panel (PA)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120 - 277V	28,9	36,4	48,9	63,0	82,4	94,4	28,9	36,4	48,9	63,0	82,4	94,4
Current (A)	120V	0,24	0,31	0,41	0,53	0,69	0,79	0,24	0,31	0,41	0,53	0,69	0,79
	277V	0,11	0,14	0,18	0,23	0,30	0,34	0,11	0,14	0,18	0,23	0,30	0,34
Power (Watts)	347V or 480V	30,5	37,7	49,0	63,9	83,2	95,0	30,5	37,7	49,0	63,9	83,2	95,0
Current (A)	347V OR 480V	0,09	0,11	0,14	0,19	0,24	0,28	0,09	0,11	0,14	0,19	0,24	0,28
	480V	0,07	0,08	0,11	0,14	0,18	0,20	0,07	0,08	0,11	0,14	0,18	0,20
Optics (4000K, 70 CRI)													
T2R	Lumens	4,296	5,369	7,010	8,733	10,721	11,750	4,154	5,211	6,738	8,386	10,329	11,338
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2
	Lumens Per Watt	149	147	143	139	130	124	144	143	138	133	125	120
T2U	Lumens	4,241	5,300	6,920	8,621	10,584	11,600	4,123	5,172	6,688	8,323	10,252	11,253
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	Lumens Per Watt	147	146	142	137	128	123	143	142	137	132	124	119
T3	Lumens	4,193	5,240	6,842	8,524	10,464	11,468	4,079	5,117	6,616	8,235	10,143	11,133
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
	Lumens Per Watt	145	144	140	135	127	121	141	141	135	131	123	118
T4W	Lumens	4,165	5,205	6,796	8,467	10,394	11,392	4,083	5,122	6,623	8,243	10,152	11,144
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens Per Watt	144	143	139	134	126	121	141	141	135	131	123	118
5WQ	Lumens	4,255	5,318	6,943	8,650	10,619	11,638	4,206	5,276	6,822	8,491	10,458	11,480
	BUG Rating	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G3	B4-U0-G3	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G3
	Lumens per Watt	147	146	142	137	129	123	146	145	140	135	127	122

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* Supported by IES TM-21 standards
** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

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Impact Elite LED

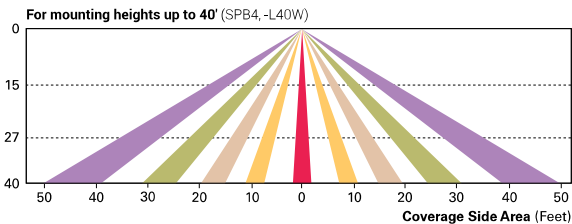
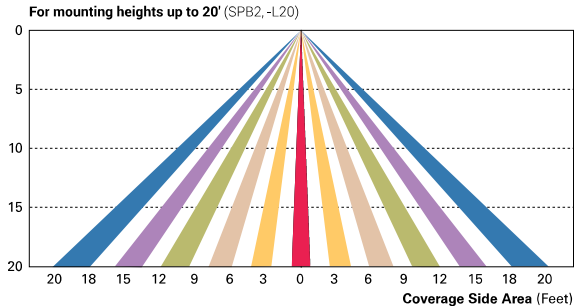
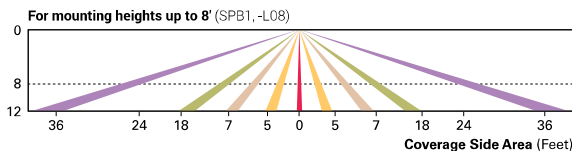
Control Options

0-10V
This fixture is offered standard with 0-10V dimming driver(s).

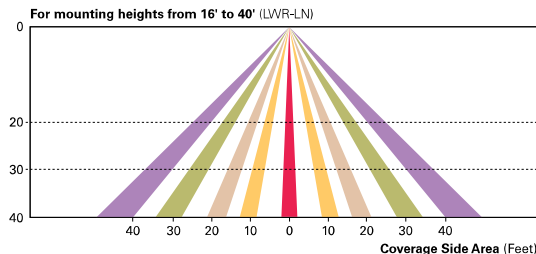
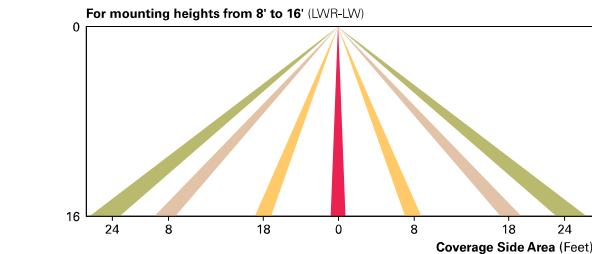
Photocontrol (BPC and PR7)
Optional button-type photocontrol provides a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels.

After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

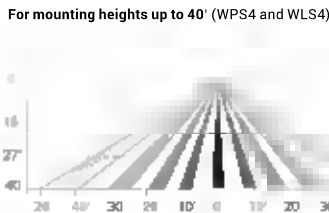
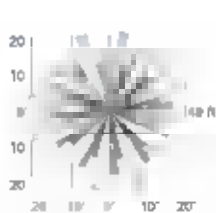
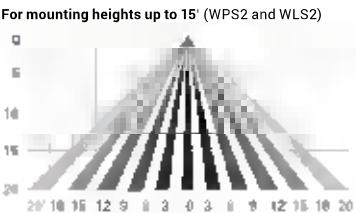
Dimming Occupancy Sensor (SPB, MS/DIM-LXX)
These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.



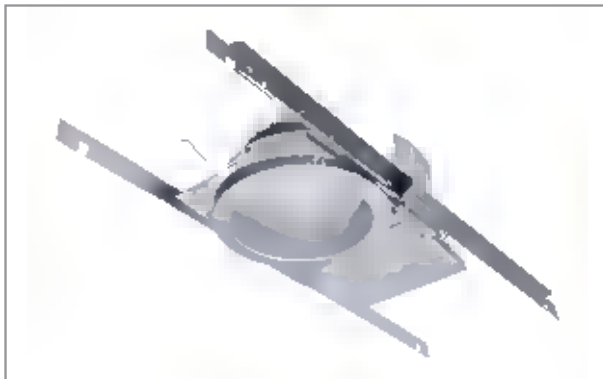
Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN)
Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.



WaveLinX Wireless Control and Monitoring System
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinX (WPS2 to WPS4) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinX mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinX Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinX Lite mobile application for set-up and configuration. WAC not required. WaveLinX Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.



Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO Commercial

HC6 | HM6 | 61 | 61PS

6-inch LED downlight and wall wash

Typical Applications

Office • Healthcare • Hospitality • Institutional • Mixed-Use/Retail

Interactive Menu

- Order Information page 2
- Product Specifications page 4
- Photometric Data page 5
- Energy & Performance Data page 8
- Connected Systems page 10
- Product Warranty

Product Certification



Product Features



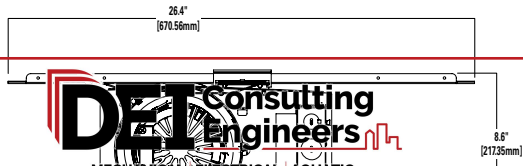
Control Compatibility



Top Product Features

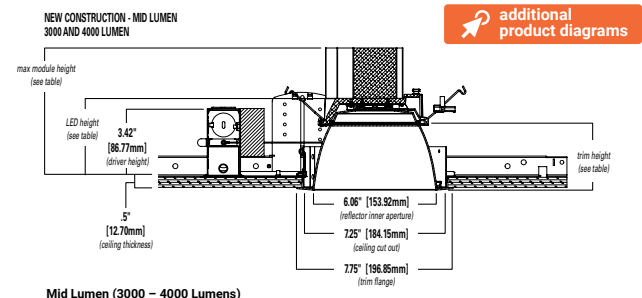
- New construction/remodel series; 500 to 6,000 lumens
- Narrow, Medium and Wide distributions; Wall wash with rotatable linear spread lens
- 2700K, 3000K, 3500K, 4000K, 5000K CCT; 80 or 90 CRI
- Universal voltage 120V-277V; Standard 0-10V driver dims to 1%
- Mounting frame converts to remodel that installs from below the ceiling
- Quick Spec emergency backup mounting frames - fast delivery option

Dimensional and Mounting Details



This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

☒ Reviewed☐ Reviewed As Noted☐ Not Reviewed☐ Revise and Resubmit



Distribution	Max. Module Height	Trim Height	LED Height
Narrow	6.6"	3.4"	3.8"
Medium	6.7"	3.5"	3.9"
Wide	6.5"	3.3"	3.7"
Baffle	6.5"	3.3"	3.7"

HALO Commercial

HC6 | HM6 | 61 | 61PS

Mounting Frame Order Information

Sample Number: HC620D010REM7 - HM60525835 - 61MDC

A complete luminaire consists of a housing frame, LED module, and reflector (ordered separately)

Mounting Frame	Lumens	Driver Options	Factory Installed Emergency & Connected Lighting Options	Accessories (Order & Install Separately)
HC6 = 6" new construction downlight housing HC6CP = 6" new construction housing, Chicago Plenum - CCEA compliant	05 = 500 lm 07 = 750 lm 10 = 1000 lm 15 = 1500 lm 20 = 2000 lm 25 = 2500 lm 30 = 3000 lm 35 = 3500 lm 40 = 4000 lm 45 = 4500 lm ⁽⁷⁾ 50 = 5000 lm ⁽⁷⁾ 55 = 5500 lm ⁽⁷⁾ 60 = 6000 lm ⁽⁷⁾	D010 =UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls Canada Option 500-5000 lumens: D010347 = 347VAC 50/60Hz 0-10V 1%- 100% dimming. For 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000lm models only ⁽¹⁾ Canada Option 5500-6000 lumens: D010X347 = step down transformer factory installed (with standard "D010" 120V-277V LED driver). For 5500, 6000lm models only ⁽¹⁾ DLV = Distributed Low Voltage dimming driver 1%-100%, 1000-4000 lumens only. For use with DLVP system only, refer to DLVP specifications for details. ⁽¹⁾	REM7 = 7 watt emergency battery pack with remote test / indicator light, use with D010 only ^{(1) (2) (6)} REM14 = 14 watt emergency battery pack with remote test / indicator light, use with D010 only ^{(1) (2) (6)} REM7 = 7 watt emergency battery pack with integral test / indicator light, use with D010 only ^{(1) (2) (6)} REM14 = 14 watt emergency battery pack with integral test / indicator light, use with D010 only ^{(1) (2) (6)} BOD7ST = 7.5 watt Bodine self-test emergency battery pack with remote test / indicator light, use with D010 only ^{(1) (2) (6)} WTA = Factory WaveLinX PRO Tilemount Sensor Kit ⁽⁴⁾ WTK = Factory WaveLinX LITE Tilemount Sensor Kit ⁽⁴⁾ WPN = WaveLinX PRO Wireless Node without Sensor ⁽⁹⁾ WLN = WaveLinX LITE Wireless Node without Sensor ⁽¹⁰⁾ REM7 = 7 watt emergency battery pack with remote test / indicator light, use with DLV only ^{(1) (2) (3) (6)} REM14 = 14 watt emergency battery pack with remote test / indicator light, use with DLV only ^{(1) (2) (3) (6)} REM7 = 7 watt emergency battery pack with integral test / indicator light, use with DLV only ^{(1) (2) (3) (6)} REM14 = 14 watt emergency battery pack with integral test / indicator light, use with DLV only ^{(1) (2) (3) (6)}	HB128APK = L channel hanger bar, 26", pair (replacement) RMB22 = Adjustable wood joist mounting bars, pair, extend to 22" long HS46 = Slope Adapter for 6" Aperture Housings, Specify Slope (refer to instructions for installing housing and trim) H347 = 347 to 120V step down transformer, 75VA H347200 = 347 to 120V step down transformer, 200VA WTA = Field WaveLinX PRO Tilemount Sensor Kit ⁽⁴⁾ WTK = Field WaveLinX LITE Tilemount Sensor Kit ⁽⁵⁾
Notes	Notes (7) Marked Spacing: Center to Center of Adjacent Luminaires = 36" Center of Luminaire to Building Member = 18" Minimum overhead = 0.5	Notes (1) Not available with CP models	Notes (1) Not available with CP models (2) Not available with D010347 (347V models) (3) ULus for U.S. only (4) WTA = WaveLinX PRO tilemount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only. (Refer to WaveLinX PRO specifications.) (5) WTK = WaveLinX LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only. (Refer to WaveLinX LITE specifications.) (6) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C (9) WPN = WaveLinX PRO wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. Not compatible with 347V or Chicago plenum. (Refer to WaveLinX PRO specifications.) (10) WLN = WaveLinX LITE wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. Not compatible with 347V or Chicago plenum. (Refer to WaveLinX LITE specifications.)	Notes (4) WTA = WaveLinX PRO tilemount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only. (Refer to WaveLinX PRO specifications.) (5) WTK = WaveLinX LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only. (Refer to WaveLinX LITE specifications.)

Quick Spec Emergency Mounting Frame Order Information

Sample Number:

Quick Spec Emergency Mounting Frame: RR-HC620D010REM7

LED module and reflectors are ordered separately.

Order separately: LED Module: HM60525835 | Reflector: 61MDC

Select from the Quick Spec Mounting
Frame ordering information to receive the
Fast Delivery option for the frame.

Quick Spec Code	Mounting Frame	Lumens	Driver Options	Factory Installed Emergency & Connected Lighting Options	Accessories (Order & Install Separately)
RR = East Region BRR = West Region	HC6 = 6" new construction downlight housing	10 = 1000 lm 15 = 1500 lm 20 = 2000 lm 30 = 3000 lm 40 = 4000 lm	D010 =UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls	REM7 = 7 watt emergency battery pack with remote test / indicator light, use with D010 only ^{(2) (6)} REM14 = 14 watt emergency battery pack with remote test / indicator light, use with D010 only ^{(2) (6)} REM7 = 7 watt emergency battery pack with integral test / indicator light, use with D010 only ^{(2) (6)} REM14 = 14 watt emergency battery pack with integral test / indicator light, use with D010 only ^{(2) (6)}	HB128APK = L channel hanger bar, 26", pair (replacement) RMB22 = Adjustable wood joist mounting bars, pair, extend to 22" long
Notes	Notes	Notes	Notes	Notes (2) Not available with D010347 (347V models) (6) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C	Notes

HALO Commercial

HC6 | HM6 | 61 | 61PS

LED Module Order Information

LED Module	Lumens	CRI/CCT	
HM6 = 6" LED Modules For use with HC6 - HC6CP New Construction housings only	0525 = 500 - 2500 lumen 3040 = 3000-4000 lumen 4560 = 4500-6000 lumen	827 = 80CRI, 2700K 830 = 80CRI, 3000K 835 = 80CRI, 3500K 840 = 80CRI, 4000K 850 = 80CRI, 5000K	927 = 90CRI, 2700K 930 = 90CRI, 3000K 935 = 90CRI, 3500K 940 = 90CRI, 4000K 950 = 90CRI, 5000K
Notes	Notes	Notes	

Trim Order Information

Reflector	Distribution ⁽⁸⁾	Finish	Flange	Accessories
61 = 6" conical reflector	ND = narrow 55° beam angle 0.97 SC MD = medium 60° beam angle 1.10 SC WD = wide 65° beam angle 1.28 SC RWW = rotatable wall wash with linear spread lens	C = Specular clear H = Semi-specular clear W = White	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	61RWWPK = Replacement part kit - wall wash lens insert - for use with 61RWW* only.
Notes	Notes (8) Values are nominal, with specular clear reflector, other finishes and field results may vary.	Notes	Notes	Notes

Baffle	Distribution ⁽⁸⁾	Finish	Flange	Accessories
61 = 6" baffle reflector	WD = wide 65° beam angle 1.28 SC (nominal) RWW = rotatable wall wash with linear spread lens	BB = Black baffle WB = White baffle	Blank = White flange standard with BB, & WB BF = Black flange option available with BB	61RWWPK = Replacement part kit - wall wash lens insert - for use with 61RWW* only.
Notes	Notes (8) Values are nominal, with specular clear reflector, other finishes and field results may vary.	Notes	Notes	Notes

Reflector	Distribution ⁽⁸⁾	Finish	Flange
61PS = 6" non-conductive polymer 'dead front' conical reflector ⁽⁹⁾	MD = medium 60° beam angle 1.10 SC (nominal)	W = White	Blank = White flange standard with W reflector
Notes (9) 61PS is 1000-2000 lumens Non-IC rated. 500 & 750 lumens IC rated. 61PS is not for use over 2000lm in Non-IC or over 750lm in IC.	Notes (8) Values are nominal, with specular clear reflector, other finishes and field results may vary.	Notes	Notes

IEM Reflector	Distribution ⁽⁸⁾	Finish	Flange	Integral Emergency
61 = 6" IEM reflector for integral emergency only	ND = narrow 55° beam angle 0.97 SC MD = medium 60° beam angle 1.10 SC WD = wide 65° beam angle 1.28 SC	C = Specular clear H = Semi-specular clear W = White	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	IEM = Reflector for use with integral emergency housings only. Provides access hole for integral emergency test switch.
Notes	Notes (8) Values are nominal, with specular clear reflector, other finishes and field results may vary.	Notes	Notes	Notes

IEM Baffle	Distribution ⁽⁸⁾	Finish	Flange	Integral Emergency
61 = 6" IEM baffle reflector for integral emergency only	WD = wide 65° beam angle 1.28 SC (nominal)	BB = Black baffle WB = White baffle	Blank = White flange standard with BB, & WB BF = Black flange option with BB	IEM = Reflector for use with integral emergency housings only. Provides access hole for integral emergency test switch.
Notes	Notes (8) Values are nominal, with specular clear reflector, other finishes and field results may vary.	Notes	Notes	Notes

Submitted by Medgar Lighting & Controls Inc	Job Name: HDSB - Glenview Public School Gym Addition Engineer: DEI & Associates (Waterloo)	Catalog Number: HC625D010//HM60525830//61MDH Notes:	Type: V ML&C24-119319
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HALO Commercial

HC6 | HM6 | 61 | 61PS

Product Specifications

Housing Frame

- Boat shaped galvanized steel plaster frame with adjustable plaster lip
- Accommodates 1/2" to 1-1/2" thick ceilings
- Installs in new construction or from below the finished ceiling (non-accessible) for remodeling (with mounting bars removed)
- Provided with two remodel clips to secure the frame to the ceiling

Universal Mounting Bracket

- Adjusts 2" vertically from above and below the ceiling
- Use with the included mounting bars or with 1/2" Electric Metallic Tube (EMT)
- Removable to facilitate remodeling installation from below the finished ceiling

Mounting Bars

- Captive pre-installed No Fuss™ mounting bars lock to T-grid with screwdriver or pliers
- Centering detents allow for consistent positioning of fixtures

LED Module

- Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation
- Available in 80 or 90 color rendering index (CRI)
- Color accuracy within 3 SDCM provides color consistency and uniformity
- 90 CRI option: R9>50 (refer to chromaticity information for details)
- Available in 2700K, 3000K, 3500K, 4000K and 5000K correlated color temperature (CCT)
- Lumen options include 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000 lumens (nominal)
- Passive thermal management achieves 60,000 hours at 70% lumen maintenance (L70) in insulated ceilings (IC) and non-IC applications
- Integral diffuse lens provides visual shielding
- Integral connector allows quick connection to housing flex

Reflector

- Self-flanged aluminum reflectors available in narrow, medium or wide distribution patterns
- Medium distribution polymer non-conductive matte white reflector may be used to meet local codes for 'dead front' applications (500 & 750 lumen max. in IC and 2000 lumen max. in Non-IC)
- Wall wash reflector features a rotatable linear spread lens for alignment of vertical illumination
- Reflectors attach to LED module with three speed clamps
- Available in multiple painted or plated finishes

Reflector/Module Retention

- Reflector/module assembly is securely retained in the housing with two torsion springs

Driver

- Field-replaceable constant current driver provides low noise operation
- Universal 120-277VAC 50/60Hz input standard
- Continuous, 1% to 100% dimming with 0-10V analog control
- Optional low-voltage DC driver for use with Distributed Low Voltage Power (DLVP) system
- Distributed Low Voltage Power (DLVP) system combines power, lighting and controls with ease of installation (refer to DLVP Design Guide at www.cooperlighting.com for details)

Canada Options

- 347VAC 50/60Hz; 1% dimming on 0 -10V analog control, for 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000 lumen models only
- 347V step down transformer factory installed with the standard "D010" 120V-277V, LED driver on 5500, 6000 lumen models only

Emergency Option

- Provides 90 minutes of standby lighting, meeting most life safety codes for egress lighting
- Available with integral or remote charge indicator and test switch
- Available Self-Test (self-diagnostic) with remote charge indicator and test switch
- Quick Spec emergency ordering option for quick-turn projects

Connected Lighting System

Two WaveLinX connected solutions to choose from. Refer to WaveLinX system specifications and application guides for details.

WaveLinX PRO Tilemount Sensor Kit

- WaveLinX PRO WTA tilemount sensor kit offers daylight dimming, PIR motion sensing, scene and zone configuration, automatic commissioning; and optional RLTS - Real Time Location Services available.

WaveLinX PRO Wireless Node

- WaveLinX PRO WPN wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. **Note:** Not compatible with 347V or Chicago plenum.

WaveLinX LITE Tilemount Sensor Kit

- WaveLinX LITE WTK tilemount sensor kit offers daylight dimming and PIR motion sensing, scene and grouping configuration.

WaveLinX LITE Wireless Node

- WaveLinX LITE WLN wireless node provides luminaire level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. **Note:** Not compatible with 347V or Chicago plenum.

WaveLinX Tilemount Sensor Kits Application

- The WTA and WTK tilemount sensor kits include a control module mounted on the luminaire junction box via 1/2" knock-out, and a tilemount sensor on 54-inch whip; for ceiling installation by direct-mount spring clips or via mounting bracket in octagon ceiling boxes.
- The WTA and WTK tilemount sensor kits may be ordered as factory installed on the luminaire, or ordered separately as a field installed accessory kit.
- **Note: WaveLinX PRO devices are only compatible with the WaveLinX PRO system.**
- **Note: WaveLinX LITE devices are only compatible with the WaveLinX LITE system.**

Junction Box

- Galvanized steel junction box
- 20 in³ internal volume excluding voltage barrier
- 25 in³ internal total volume
- Voltage barrier for 0-10V dimming wires (occupies one 1/2" pry-out space)
- Listed for eight #12 AWG (four in, four out) 90°C conductors and feed-thru branch wiring
- Three 1/2" and two 3/4" trade size pry-outs available
- Three 4-port push wire nuts for mains voltage with 1-port for fixture connection

Compliance

- cULus Certified to UL 1598 / C22.2 No. 250.0, suitable for damp locations and wet locations in covered ceilings only
- Emergency options provided with UL Listed emergency drivers to UL 924 / C22.2 No. 141, suitable for indoor/damp locations
- IP20 - Above finished ceiling; IP65 - Below finished ceiling
- Non-Insulated ceiling (Non-IC) rated for 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000 lumen models (insulation must be kept 3" from top and sides)
- Insulated ceiling (IC) rated for 500, 750, 1000, 1500, 2000 lumen models and suitable for direct contact with air permeable insulation* (IC models are also suitable for Non-IC installations)
- Non-IC marked spacing required for 4500, 5000, 5500, 6000 lumen models
 - Marked Spacing Center to Center of Adjacent Luminaires = 36"
 - Center of Luminaire to Building Member = 18"
 - Minimum overhead = 0.5"
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions FCC CFR Title 47 Part 15 Class A at 120/277V
- Contains no mercury or lead and RoHS compliant
- Photometric testing completed in accordance of IES LM-79-08
- Lumen maintenance projection in accordance of IES LM-80-08 and TM-21-11
- 500, 750, 1,000, 1,500 and 2,000 lumen, 90 CRI, ICAT models may be used to comply with State of California Title 24 residential code, per JA8 certification standards
- May be used to comply with State of California Title 24 non-residential code as a dimmable LED luminaire
- ENERGY STAR® certified, reference certified light fixtures database

*Not for use in direct contact with spray foam insulation, consult NEMA LSD57-2013

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

HC625D010//HM60525830//61MDH

Notes:

Type:

V

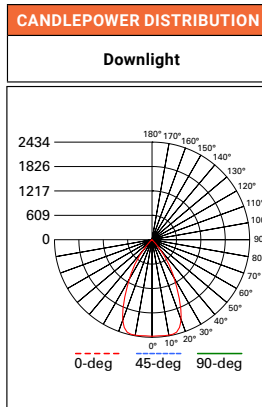
ML&C24-119319

HALO Commercial**HC6 | HM6 | 61 | 61PS****Photometric Data**

View IES files

NARROW DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

NARROW (55° BEAM*)	
Test Number	P581878
Housing	HC620D010
Module	HM60525835
Reflector	61NDC
Lumens	2228 Lm
Efficacy	111.4 Lm/W
SC	0.93
UGR	11.7



CONE OF LIGHT

MH	FC	L	W
5.5'	80.2	5	5
7'	49.5	6.4	6.4
8'	37.9	7.4	7.4
9'	30	8.2	8.2
10'	24.3	9.2	9.2
12'	16.9	11	11

CANDELA TABLE

Degrees Vertical	Candela
0	2427
5	2422
15	2405
25	1621
35	761
45	118
55	12
65	3
75	2
85	0
90	0

ZONAL LUMEN SUMMARY

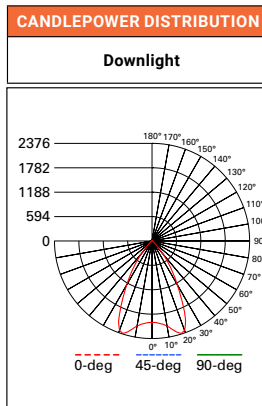
Zone	Lumens	% Fixture
0-30	1636	73.4
0-40	2098	94.2
0-60	2223	99.8
0-90	2228	100
90-180	0	0
0-180	2228	100

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	9187
55	1118
65	376
75	318
85	0

MEDIUM DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

MEDIUM (60° BEAM*)	
Test Number	P581875
Housing	HC620D010
Module	HM60525835
Reflector	61MDC
Lumens	2307 Lm
Efficacy	115.3 Lm/W
SC	1.06
UGR	11.8



CONE OF LIGHT

MH	FC	L	W
5.5'	68.7	5.6	5.6
7'	42.4	7.2	7.2
8'	32.5	8.2	8.2
9'	25.7	9.4	9.4
10'	20.8	10.4	10.4
12'	14.4	12.4	12.4

CANDELA TABLE

Degrees Vertical	Candela
0	1998
5	2022
15	2307
25	1842
35	796
45	126
55	15
65	4
75	2
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	1671	72.4
0-40	2163	93.8
0-60	2301	99.7
0-90	2307	100
90-180	0	0
0-180	2307	100

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	9753
55	1395
65	571
75	318
85	0

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

HC625D010//HM60525830//61MDH

Notes:

Type:

V

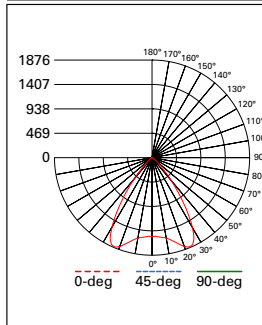
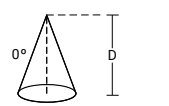
ML&C24-119319

HALO Commercial**HC6 | HM6 | 61 | 61PS****Photometric Data**

View IES files

WIDE DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

WIDE (65° BEAM*)	
Test Number	P581885
Housing	HC620D010
Module	HM60525835
Reflector	61WDC
Lumens	2359 Lm
Efficacy	118 Lm/W
SC	1.28
UGR	11.6

CANDLEPOWER DISTRIBUTION**Downlight****CONE OF LIGHT**

MH	FC	L	W
5.5'	50.5	7	7
7'	31.2	8.8	8.8
8'	23.9	10.2	10.2
9'	18.8	11.4	11.4
10'	15.3	12.8	12.8
12'	10.6	15.4	15.4

CANDELA TABLE

Degrees Vertical	Candela
0	1526
5	1540
15	1685
25	1861
35	1027
45	252
55	32
65	6
75	2
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	1461	61.9
0-40	2105	89.2
0-60	2351	99.6
0-90	2359	100
90-180	0	0
0-180	2359	100

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	19506
55	3078
65	765
75	318
85	0

*Value are nominal with specular clear reflectors, other finishes and field results may vary.
SC = Spacing Criteria
UGR = Unified Glare Rating

Photometric Multipliers (Nominal Lumen Values)

500 Lumen	750 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen	3500 Lumen
0.33	0.44	0.54	0.74	1.00	1.12	1.46	1.76

4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen
1.81	2.17	2.28	2.38	2.65

Multipliers for relative lumen values with other series models.

Color Finish Multipliers

Finish code	C	H	W/WB	BB
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.92	0.91	0.82

Multipliers for relative lumen values with other color finishes.

CCT Multipliers - 80CRI

2700K	3000K	3500K	4000K	5000K
0.92	0.98	1.00	1.03	1.03

Multipliers for relative lumen values with other series color temperatures.

CCT Multipliers - 90CRI

2700K	3000K	3500K	4000K	5000K
0.77	0.84	0.89	0.90	0.90

Multipliers for relative lumen values with other series color temperatures.

Note: Refer to IES files for more product data.

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

HC625D010//HM60525830//61MDH

Notes:

Type:

V

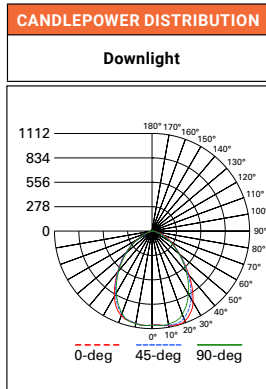
ML&C24-119319

HALO Commercial**HC6 | HM6 | 61 | 61PS****Photometric Data**

View IES files

WALL WASH DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

WALL WASH	
Test Number	P581882
Housing	HC620D010
Module	HM60525835
Reflector	61RWWC
Lumens	2179 Lm
Efficacy	109 Lm/W
SC	1.15



CANDELA TABLE	
Degrees Vertical	Candela
0	1080
5	1081
15	1112
25	1034
35	800
45	514
55	319
65	184
75	85
85	12
90	0

ZONAL LUMEN SUMMARY		
Zone	Lumens	% Fixture
0-30	849	39
0-40	1313	60.2
0-60	1978	90.8
0-90	2179	100
90-180	0	0
0-180	2179	100

LUMINANCE	
Average Candela Degrees	Average 0° Luminance
45	39810
55	30479
65	23907
75	17983
85	7359

SC = Spacing Criteria, nominal for specular clear reflector, other finishes and field results may vary.

SINGLE UNIT FOOTCANDLES

2.5' from wall (distance from fixture along wall)							
	1	2	3	4	5	6	7
1	19.3	13.8	6.1	2.2	0.7	0.3	0.1
2	29.1	22.6	12.3	5.7	2.5	1.2	0.6
3	27.6	22.5	13.8	7.3	3.7	1.9	1
4	21	18.2	12.4	7.4	4.2	2.4	1.4
5	14.4	13.1	9.9	6.6	4.1	2.5	1.6
6	9.7	9.1	7.5	5.5	3.7	2.5	1.6
7	6.7	6.4	5.5	4.3	3.2	2.2	1.5
8	4.7	4.6	4.1	3.4	2.7	2	1.4
9	3.4	3.3	3.1	2.7	2.2	1.7	1.3
10	2.5	2.5	2.4	2.1	1.8	1.4	1.1

MULTIPLE UNIT FOOTCANDLES

2.5' from wall (Distance from fixture along wall)				2.5' from wall (Distance from fixture along wall)		
3'				4'		
1	21.5	19.1	21.5	20	12.1	20
2	34.7	34.4	34.7	31.6	24.6	31.6
3	34.9	36	34.9	31.3	27.6	31.3
4	28.4	30.7	28.4	25.2	24.8	25.2
5	21	23.2	21	18.6	19.8	18.6
6	15.2	16.8	15.2	13.4	15	13.4
7	11	12	11	9.9	11	9.9
8	8.1	8.7	8.1	7.4	8.2	7.4
9	6.1	6.5	6.1	5.6	6.2	5.6
10	4.6	4.9	4.6	4.3	4.7	4.3

Photometric Multipliers (Nominal Lumen Values)

500 Lumen	750 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen	3500 Lumen
0.33	0.44	0.54	0.74	1.00	1.12	1.46	1.76

4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen
1.81	2.17	2.28	2.38	2.65

Multipliers for relative lumen values with other series models.

Color Finish Multipliers

Finish code	C	H	W/WB	BB
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.92	0.91	0.82

Multipliers for relative lumen values with other color finishes.

CCT Multipliers – 80CRI

2700K	3000K	3500K	4000K	5000K
0.92	0.98	1.00	1.03	1.03

Multipliers for relative lumen values with other series color temperatures.

CCT Multipliers – 90CRI

2700K	3000K	3500K	4000K	5000K
0.77	0.84	0.89	0.90	0.90

Multipliers for relative lumen values with other series color temperatures.

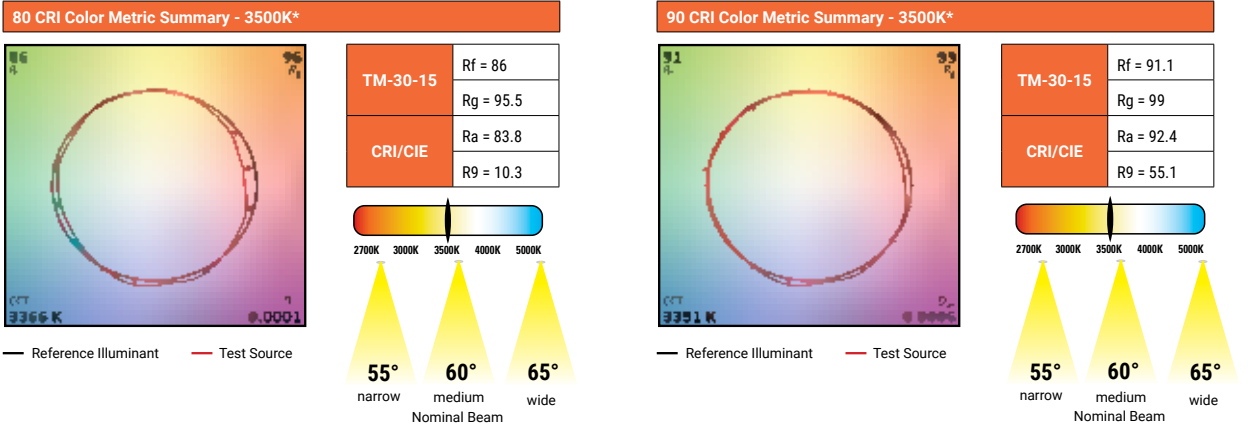
Note: Refer to IES files for more product data.

HALO Commercial

HC6 | HM6 | 61 | 61PS

Energy & Performance Data

COLOR METRICS - TM-30-15 & CRI/CIE (3500K)



* Color values are based on 61WDWB reflector, other finishes and field results may vary.

ENERGY DATA

Series	500 lumen		750 lumen		1000 lumen		1500 lumen		2000 lumen	
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.051	0.026	0.067	0.036	0.083	0.039	0.119	0.053	0.171	0.077
Input Power (W)	6.1	6.5	7.9	8.3	10	10.4	14.5	14.5	20.9	20.6
In-rush (A)	1.9	8.4	2	8.4	2.2	8.5	2.7	8.5	2.1	9.7
Inrush duration (µs)	251	135	237	133	250	134	250	139	245	131
THD (%)	6.2	13.5	7.4	8.8	5.4	10.3	10	6.7	6.5	7.9
PF	≥ 0.99	≥ 0.9	≥ 0.98	≥ 0.92	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.97	≥ 0.99	≥ 0.96

Series	2500 lumen		3000 lumen		3500 lumen		4000 lumen		4500 lumen	
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.23	0.103	0.24	0.107	0.292	0.152	0.351	0.159	0.384	0.172
Input Power (W)	27.5	27.5	28.6	28.5	34.6	35.1	42.1	42.1	45.9	45.6
In-rush (A)	2.5	5.6	2.5	11.6	3.4	13.9	3.1	14.7	3.1	14.8
Inrush duration (µs)	232	123	216	111	183	95	200	98	202	100
THD (%)	6.5	8.1	7.8	8.3	5.6	10	4.1	9.5	4.5	8.5
PF	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.93	≥ 0.99	≥ 0.94	≥ 0.99	≥ 0.95

Series	5000 lumen		5500 lumen		6000 lumen	
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V
Input Current (A)	0.419	0.186	0.457	0.201	0.489	0.214
Input Power (W)	50.1	49.5	54.6	53.7	58.4	57.4
In-rush (A)	3.1	15	3.2	14.8	3.4	14.8
Inrush duration (µs)	202	117	196	131	192	121
THD (%)	5.5	7.6	7	7.2	8.1	7.2
PF	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.97

Minimum starting temperature -30°C (-22°F)* (Nominal input 120-277VAC & 100% of rated output power)
Sound Rating: Class A standards

Notes:
* Emergency Battery packs are rated for a minimum starting temperature of 0°C.

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

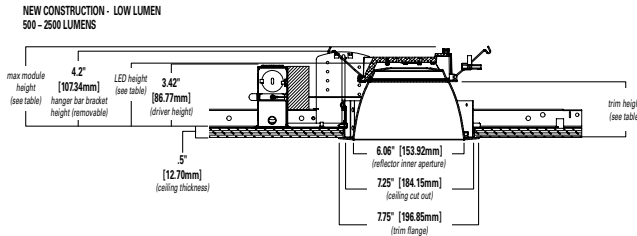
Catalog Number:

HC625D010//HM60525830//61MDH

Notes:

Type:**V**

ML&C24-119319

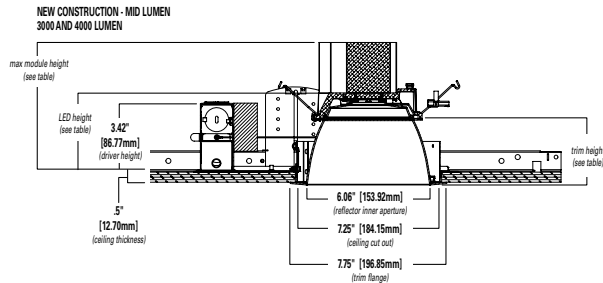
HALO Commercial**HC6 | HM6 | 61 | 61PS****Dimensional and Mounting Details****NEW CONSTRUCTIONS - LOW LUMEN 500 – 2500 LUMENS****Low Lumen (500 – 2500 Lumens)***

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	4.5"	3.4"	3.8"
Medium	4.6"	3.5"	3.9"
Wide	4.4"	3.3"	3.7"
Baffle	4.4"	3.3"	3.7"

*Max. height w/removable hanger bar bracket 4.2"



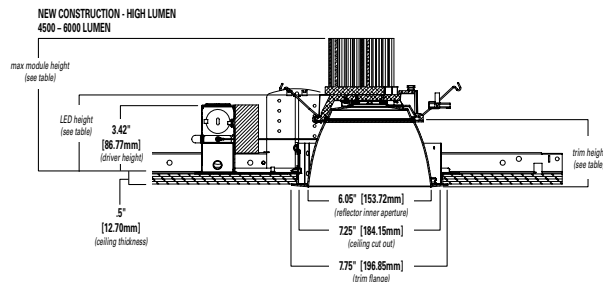
Low Lumen Module

NEW CONSTRUCTIONS - MID LUMEN 3000 – 4000 LUMENS**Mid Lumen (3000 – 4000 Lumens)**

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	6.6"	3.4"	3.8"
Medium	6.7"	3.5"	3.9"
Wide	6.5"	3.3"	3.7"
Baffle	6.5"	3.3"	3.7"



Mid Lumen Module

NEW CONSTRUCTIONS - HIGH LUMEN 4500 – 6000 LUMENS**High Lumen (4500 – 6000 Lumens)**

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	6.9"	3.4"	3.8"
Medium	7.0"	3.5"	3.9"
Wide	6.8"	3.3"	3.7"
Baffle	6.8"	3.3"	3.7"



High Lumen Module

HALO Commercial

HC6 | HM6 | 61 | 61PS

Connected Solutions



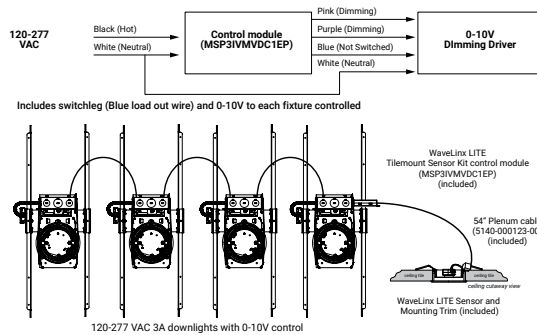
WaveLinx LITE - WTK Tilemount Sensor

WaveLinx LITE devices only compatible with the WaveLinx LITE system.

- Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
- Up to 28 unique areas per project site (WaveLinx LITE Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Automatic occupancy or vacancy, sensor sensitivity, daylight dimming, etc. configurable through the app
- Refer to the WaveLinx system specifications for details



WaveLinx LITE WTK Tilemount Wiring Diagram



WaveLinx LITE Bluetooth Enabled System



WaveLinx PRO – WTA Tilemount Sensor

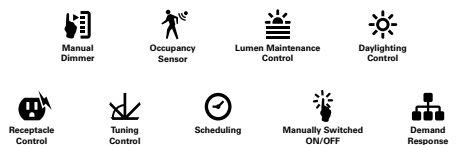
WaveLinx PRO devices only compatible with the WaveLinx PRO system.



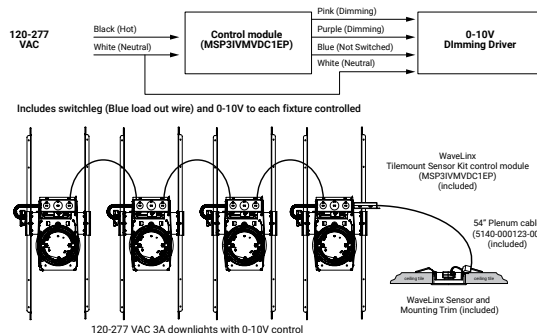
- WaveLinx PRO tilemount functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



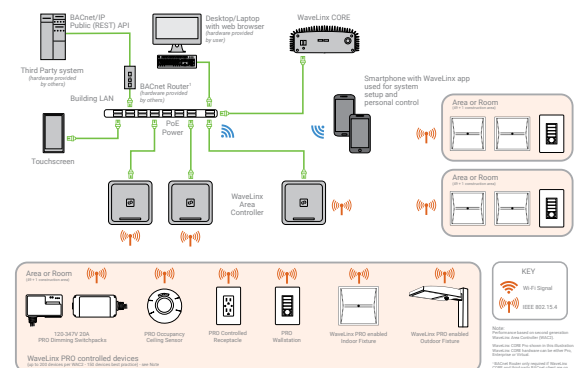
WaveLinx mobile app settings



WaveLinx WTA Tilemount Wiring Diagram



WaveLinx CORE Building Management Integration



HALO Commercial

HC6 | HM6 | 61 | 61PS

Connected Solutions



WaveLinX LITE Wireless Node - WLN

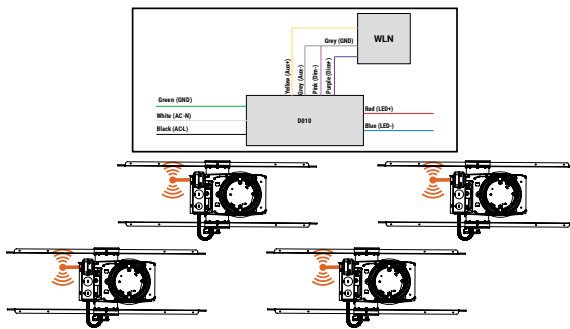
WaveLinX LITE devices only compatible with the WaveLinX LITE system.

- Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
- Up to 28 unique areas per project site (WaveLinX LITE Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Refer to the WaveLinX system specifications for details

WaveLinX mobile app settings



WaveLinX LITE Wireless Node (WLN) Wiring Diagram



WaveLinX LITE Bluetooth Enabled System



WaveLinX PRO Wireless Node - WPN

WaveLinX PRO devices only compatible with the WaveLinX PRO system.

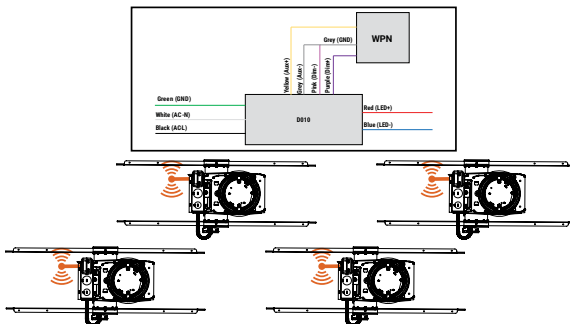
- WaveLinX Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with WaveLinX Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



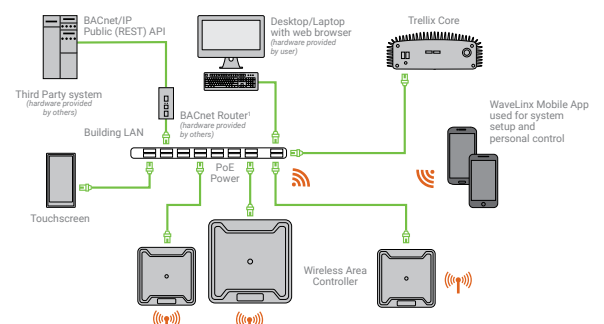
WaveLinX mobile app settings



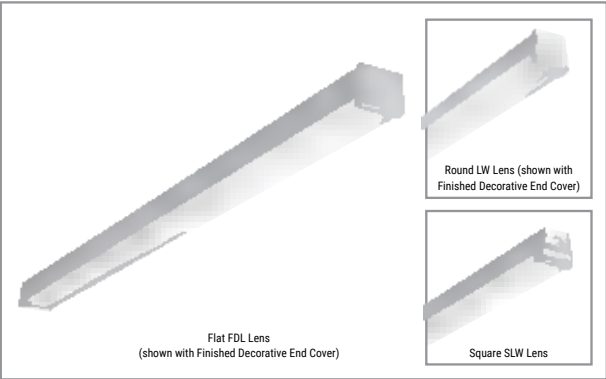
WaveLinX PRO Wireless Node (WPN) Wiring Diagram



WaveLinX CORE Building Management Integration



Project		Catalog #		Type	
Prepared by		Notes		Date	




Metalux

SNX Lensed

Flat, Round and Square Lens Linear LED Striplight

Typical Applications

Commercial • Cove • Warehouse/Distribution • Retail • Industrial • General Aisle
or Open Areas • Utility/Storage Rooms



Interactive Menu

- Order Information [page 2](#)
- Photometrics [page 4](#)
- Energy and Performance Data [page 5](#)
- Control Solutions [page 10](#)
- Product Warranty

Product Certification








Product Features











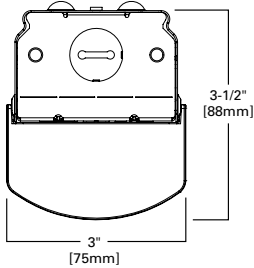
MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

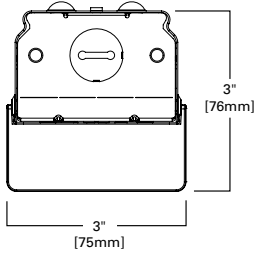
☒ Reviewed
 ☐ Reviewed As Noted
 ☐ Not Reviewed
 ☐ Revise and Resubmit

Dimensional Details

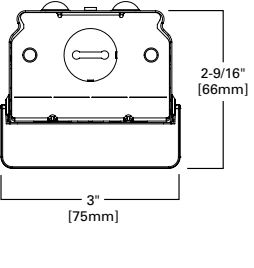
End View - Round Lens



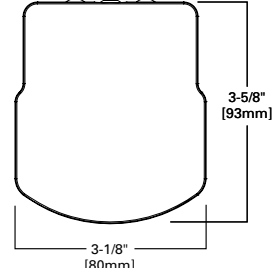
End View - Square Lens



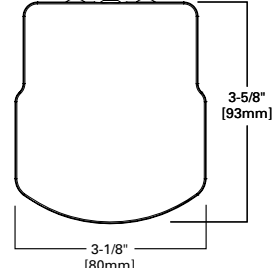
End View - Flat Lens





End View - Round Lens



Finished Decorative End Covers




[additional product diagrams](#)



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 June 7, 2024 8:07 AM

Submitted On: Jul 10, 2024
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Metalux

SNX Lensed

Order Information

SAMPLE ORDER NUMBERS: 4SNX-48SL-LN-UNV-L835-CD1-U or 8TSNX-180HL-SLW-UNV-EL7W-L840-CD2-U

Domestic Preferences ⁽¹⁾	Length		Series
[Blank]=Standard BAA=Buy American Act TAA=Trade Agreements Act	2=2 ft.	4=4 ft. 8T=8 ft.	SNX=Commercial LED Striplight ⁽²⁾

Standard Nominal Lumen Packages ⁽³⁾				
2 ft	4 ft		8 ft	
SL3	SL3	60SL	SL3 ⁽⁵⁾	114SL ⁽⁵⁾
19SL	20SL	63SL	40SL	120SL ⁽⁵⁾
23SL	22SL	67SL	44SL	126SL ⁽⁵⁾
25SL	26SL	74HL	52SL	134SL ⁽⁵⁾
30SL	31SL	81HL	62SL	148HL ⁽⁵⁾
40HL	33SL	84HL	66SL	162HL ⁽⁵⁾
44HL	37SL	87HL	74SL	168HL ⁽⁵⁾
47HL	41SL	90HL	82SL	174HL ⁽⁵⁾
	45SL	93HL	90SL	180HL ⁽⁵⁾
	48SL	100HL	96SL	186HL ⁽⁵⁾
	51SL	104HL	102SL ⁽⁵⁾	200HL ⁽⁵⁾
	57SL			

SL denotes standard lumen output. HL denotes high lumen output.
Additional LEDs to obtain lumen package.
SL3=Low/Med/High output (see performance table for lumen package).

Lens	Voltage ⁽⁴⁾	Color Temp / CCT	Drive Type ⁽⁷⁾	No. of Drivers
Round LC=Clear Lens LN=Semi-Frost Lens - Narrow LW=Full Frost Lens - Wide Square SLW=Square / Frost Lens - Wide Flat FDL=Flat Frost / Diffuse Lens	UNV=Universal Voltage 120-277 347=347V 480=480V ⁽⁹⁾	CCT Select ⁽⁶⁾ CCR3=Switchable CCT, 80CRI 35/4/5000K CC93=Switchable CCT, 90CRI 35/4/5000K CCT/CRI L830=3000K, 80 CRI L835=3500K, 80 CRI L840=4000K, 80 CRI L850=5000K, 80 CRI L930=3000K, 90 CRI L935=3500K, 90 CRI L940=4000K, 90 CRI L950=5000K, 90 CRI	CD=0-10V Dimming Driver (10%-100% Dimming) HCD=0-10V Dimming Driver (1%-100% Dimming) SD=Step-dim (Bi Level) 5LTD=DALI Driver ⁽⁸⁾ LH=Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming ⁽¹⁴⁾	1=1 Driver 2=2 Drivers ⁽⁵⁾

Options		Knockouts	Paint Finish	Packaging
Emergency ^{(9), (10)} EL7W=7-watt 120V-277V emergency battery pack ⁽¹¹⁾ EL10W=10-watt 120V-277V emergency battery pack ⁽¹¹⁾ EL14W=14-watt 120V-277V emergency battery pack ⁽¹¹⁾ EL10WSD=10W emergency battery pack with self-diagnostic installed ^{(11), (15)} EL14WSD=14W emergency battery pack with self-diagnostic installed ^{(11), (15)} GTR2=Bodyline Generator Transfer Relay ⁽¹³⁾ ETRD=Emergency Transfer Relay with dimming control ⁽¹³⁾	Wiring ^{(14), (15)} PI/CP1=Plug in and cross over plug in options ⁽²²⁾ PC6/120=(NEMA 5-15P) 6 ft. Cord with NEMA Straight Plug PC6/277=(NEMA L7-15P) 6 ft. Cord with NEMA Twist Plug C6(1)=1 Circuit, 6 ft. Cord no Plug C3(1)=1 Circuit, 3 ft. Cord no Plug	[Blank]=Clean Channel FKO=Full Side KOs	[Blank]=Standard White PAF=Painted after fab. (White) BLK=PAF Black ⁽¹⁷⁾ GRY=PAF Gray ⁽¹⁷⁾	U=Unit Pack
Sensor ⁽¹⁰⁾ [Blank]=No Sensor WLS (formerly WAB)=WaveLinx LITE Wireless Sensor, Occupancy w/ photocell, Independent & Networked ⁽⁶⁾ WPS (formerly WAA)=WaveLinx PRO Wireless Sensor, Occupancy w/ photocell, Networked ⁽⁶⁾ WLS4=WaveLinx LITE, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{(21), (23), (8)} WPS4=WaveLinx PRO, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ⁽¹⁴⁾ ZW-SWPD3=Integrated Wavelinx Wireless Sensor, 1200 sqft. coverage ^{(21), (23), (8)} Sensor Location MID=Mid-row				

Accessories (Order Separately) ⁽¹⁶⁾				
AYC-CHAIN/SET-U=(2) 36" Chain Hanger (Use 1 set per fixture) SCF=Fixed Stem Set (Specify Length) ⁽¹⁹⁾ SCS=Swivel Stem Set (Specify Length) ⁽¹⁹⁾ SCA=Adjustable 48" Stem Set ⁽¹⁹⁾ EYE-CHAIN/SET-B=Eye Bolt Chain (Use 1 set per fixture) WG-SNX/SN-2FT-B=2 ft Wire Guard WG-SNX/SN-4FT-B=4 ft Wire Guard A-1-B/SPACER-B=Spacer 1-1/2" to 2-1/2" from ceiling (Use 2 per fixture) ⁽¹⁹⁾ TOGGLE=Single Toggle No. 2 (Specify Length) ⁽¹⁹⁾ Y-Toggle-10-2PK=(2) Y-Toggle Cable Kits at 10FT long GRP-SNF-U=Gripper Hanger CLC-SNLED-EXT-B=SN/SNX Long Row Aligner Extension ISHH-01=Integrated SVPDX Sensor Programming Remote	Round Replacement Lenses SNX-LENS-LW-2FT-U=Replacement Lens 2 ft, Full Frost SNX-LENS-LN-2FT-U=Replacement Lens 2 ft, Semi Frost SNX-LENS-LC-2FT-U=Replacement Lens 2 ft, Clear SNX-LENS-LW-4FT-U=Replacement Lens 4 ft, Full Frost SNX-LENS-LN-4FT-U=Replacement Lens 4 ft, Semi Frost SNX-LENS-LC-4FT-U=Replacement Lens 4 ft, Clear	Square Replacement Lenses SNX-SQLENS-SLW-2FT-U=Replacement Lens 2 ft, Full Frost SNX-SQLENS-SLW-4FT-U=Replacement Lens 4 ft, Full Frost	Flat Replacement Lenses SNX-Flat Lens-FDL-2FT-U=Replacement Lens 2 ft, Full Frost SNX-Flat Lens-FDL-4FT-U=Replacement Lens 4 ft, Full Frost	Finished End Cover ⁽²⁰⁾ DECOEND-RND PK=(2) Full end caps, SNX w/ Round Lens DECOEND-FDL PK=(2) Full end caps, SNX w/ Flat FDL Lens DECOEND-SLW PK=(2) Full end caps, SNX w/ Square Lens

Notes: (1) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. (2) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to [www.designlights.org](#) for details. (3) Nominal lumen values. See table for value and fixture length. (4) 347/480V max ambient temp 40C. (5) Requires two drivers. (6) SL3 must be ordered in conjunction w/CCT Select. CC83 or 93 default setting is 4000K and Medium output. (7) 2ft with Sensor limited to CD and HCD drivers only. (8) For a complete listing of Fifth Light products, visit [www.cooperlighting.com](#) (9) 4 ft and 8 ft only. (10) When ordering sensor or EBP option, specify UNV for 120 or 277V, 347 or 480V. (11) Factory installed with integral test switch/indicator. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 7-700 lumens). IES-format photometry for luminaire under emergency operation available. (12) EL10WSD and EL14WSD not available with 347V. (13) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR2 include 2 relays on fixtures with dimming drivers. ETRD option only requires one relay when used on a dimming fixture. Must specify voltage as 120 or 277V when ordering GTR2. (14) Consult tech support on numerous options for this feature. (15) Most common C&P shown. Must specify location for cord. All "end" locations will be on the end with sensor installed. (16) Integral Mid-Row sensor does not apply for ZW-SVPD3. (17) Black or gray fixture and lens ends. Refer to Finish multiplier table for performance. (18) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. (19) Order 2 per fixture. (20) Finished Deco end cover cannot be used with ZW end mount sensor or over any end mount fitting. (21) WLSx provided in separate enclosure. (22) For more information on PI/CP1 options, refer to [022341-pl-10w](#) ([cooperlighting.com](#)) (23) Not available in Mid-Row Configuration. (24) Consult Marketplace Options- Lutron system pages for additional details and compatibility. Compatible only with driver series shown, and may require two or more drivers. Requires field commissioning to operate or dim. Contact Lutron at [www.lutron.com](#)

Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (A) Consult WaveLinx system pages for additional details and compatibility. (B) Consult WaveLinx Lite system pages for additional details and compatibility.

Stock is available in the following catalog numbers:

Catalog Number	Description	Replaces Up To	Selectable CCT	Voltage	Selectable Lumens	Watts	UPC	DLC Product ID
4SNX-SL3-LW-UNV-CC83-CD1-U	4' Single Lens	2-T8 32W, 1-T5HO 54W	3500K-5000K	120-277V	2000-6100	17/33/51	080083265107	S-VF0RKS
8TSNX-SL3-LW-UNV-CC83-CD2-U	8' Single Lens	4-T8 32W, 2-T12 75W	3500K-5000K	120-277V	4100-12000	34/67/101	080083265114	S-7FC8RS

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

4SNX-SL3-LW-UNV-CC83-CD1-U//
AYC-CHAIN/SET-U

Notes:

Type:**A**

ML&C24-119319

Metalux**SNX Lensed****Product Specifications****Construction**

- Die-formed cold rolled steel channel and cover
- Convertible end plate for continuous row alignment
- Tool-less channel/wireway cover and captive electrical assembly
- Groove for Tong Hanger
- Surface, pendant or stem mount capable. See available mounting options.

Controls

- Standard with 0-10V dimming driver (10% standard, 1% optional)
- Integrated WaveLinX sensor options provide wireless individual fixture control and enable code compliance, increased energy savings, grouping of fixtures, and connection to WaveLinX control systems
- DALI 2.0 and step-dimming available
- For motion control, reference sensor locations for both end and middle of the row applications

Emergency Battery Pack Option

- Optional 120V-277V integral emergency battery pack available in 7W or 14W
- 90-minute backup period for code compliance
- Generator transfer options available

Electrical

- Long-life LED system with electrical driver for optimal performance
- LED's available in 3000K, 3500K, 4000K or 5000K with CRI of 80 standard or optional 90 CRI
- Three CCT select option available for 80 or 90CRI in warm to cool color temps, see ordering logic
- Lumen select option available in full, medium or low brightness, see performance table and ordering logic
- Electronic drivers available for 120-277V, 347V and 480 applications
- Operating temperature of -20°C to 50°C
- Default CCT/Lumen setting is 4000K and Med Power

Finish

- Standard baked white enamel finish with multi-stage, iron phosphate pretreatment. Baked white enamel finish is standard
- PAF option for added rust protection
- Other paint finishes available: Black (BLK) and GRAY (GR)

Shielding

- Offered with acrylic lens and molded lens cap
- Flat lens with LED diffuse blend (FDL) for general distribution is recommended option
- Round lens offered in three distributions: Clear with linear ribs (LC), semi-frost for narrow distribution, and frost for wide distribution (LW)
- Square frost lens option for wide distribution (SLW) is available

Compliance

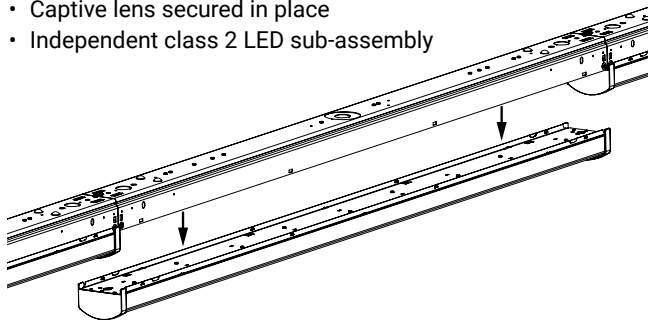
- cULus Listed for damp locations
- RoHS compliant
- Complies with IESNA LM-79 and LM-80 standards
- NEMA 410 compliant (drivers)
- State of California Title 24 high efficacy luminaire
- DesignLights Consortium® Qualified and classified for DLC Standard and DLC Premium (refer to www.designlights.org)
- Suitable for closet use when installed to NEC 410.16 spacings standards

Limited Warranty

- Five year limited warranty

Captive Light Channel Assembly

- Tool-less removal for easy install
- Captive lens secured in place
- Independent class 2 LED sub-assembly



**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

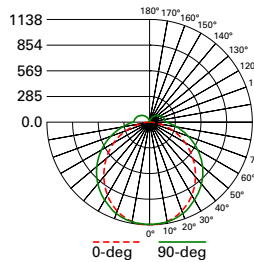
Catalog Number:

4SNX-SL3-LW-UNV-CC83-CD1-U//
AYC-CHAIN/SET-U

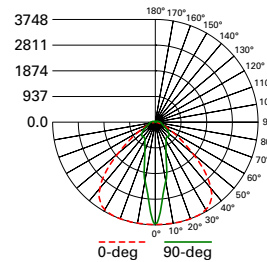
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Type:**A**

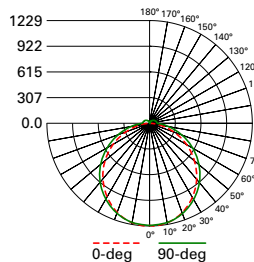
ML&C24-119319

Metalux**SNX Lensed****Photometric Data**
[View IES files](#)
**4SNX-41SL-LW-UNV-L850-CD1-U**

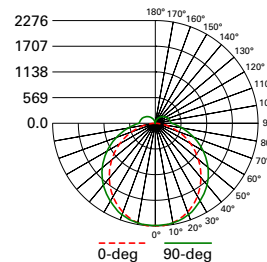
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.23 x mounting height, (L) 1.31 x mounting height
Lumens: 4027
Input Watts: 26.3W
Efficacy: 153 LPW
Test Report: 4SNX-41SL-LW-UNV-L850-CD1.IES

**4SNX-41SL-LC-UNV-L850-CD1-U**

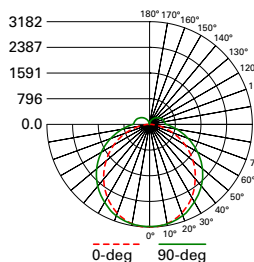
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.45 x mounting height, (L) 0.43 x mounting height
Lumens: 4557
Input Watts: 26.3W
Efficacy: 173 LPW
Test Report: 4SNX-41SL-LC-UNV-L850-CD1.IES

**4SNX-41SL-FDL-UNV-L850-CD1-U**

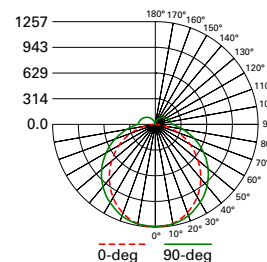
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.24 x mounting height, (L) 1.28 x mounting height
Lumens: 3877
Input Watts: 26.3W
Efficacy: 147 LPW
Test Report: 4SNX-41SL-FDL-UNV-L850-CD1.IES

**8TSNX-82SL-LW-UNV-L850-CD1-U**

Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.23 x mounting height, (L) 1.31 x mounting height
Lumens: 8053
Input Watts: 52.6W
Efficacy: 153 LPW
Test Report: 8TSNX-82SL-LW-UNV-L850-CD1.IES

**8TSNX-104SL-LW-UNV-L850-CD1-U**

Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.23 x mounting height, (L) 1.31 x mounting height
Lumens: 11260
Input Watts: 79.4W
Efficacy: 142 LPW
Test Report: 8TSNX-104SL-LW-UNV-L850-CD1.IES

**2SNX-47HL-LW-UNV-L850-CD1-U**

Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.24 x mounting height, (L) 1.28 x mounting height
Lumens: 4494
Input Watts: 33.7W
Efficacy: 133 LPW
Test Report: 2SNX-47HL-LW-UNV-L850-CD1.IES

Additional Data**CCT Table**

Approximate Color Temperature Multiplier	
2700K	.93
3000K	.98
3500K	1.0
4000K	1.02
5000K	1.02

CRI

Lumen multiplier (80CRI to 90CRI)			
3000K	3500K	4000K	5000K
0.805	0.840	0.846	0.901

Lumen Maintenance

Product Model ⁽¹⁾	Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L90 (Hours)	Theoretical L70 (Hours)
SNX-SL	25C	89	53,000	175,000
	40C and higher	89	49,000	163,000
SNX-HL	25C	89	55,000	180,000
	40C and higher	87	46,000	155,000

Notes: (1) 4ft and 8ft TM-21 data are equivalent.

Shipping Data

Length	Wt.
2 ft.	4.3 lbs.
4 ft.	8.2 lbs.
8 ft.	15.1 lbs.

Metalux

SNX Lensed

Energy and Performance Data - Fixed Output

Lumen Package		Delivered Lumens					Wattage	Efficacy lm/W				
2 ft		LC	LN	LW	SLW	FDL		LC	LN	LW	SLW	FDL
19	SL	2006	1939	1773	1755	1707	12.0	167.2	161.6	147.8	146.3	142.3
23	SL	2429	2347	2146	2124	2066	14.9	163.0	157.5	144.0	142.6	138.7
25	SL	2718	2626	2401	2377	2312	17.5	155.3	150.1	137.2	135.8	132.1
30	SL	3204	3096	2831	2802	2726	21.0	152.6	147.4	134.8	133.4	129.8
40	HL	4347	4200	3727	3689	3725	27.6	157.5	152.2	135.0	133.7	135.0
44	HL	4683	4525	4015	3975	4013	31.1	150.6	145.5	129.1	127.8	129.0
47	HL	5009	4840	4295	4251	4292	33.7	148.6	143.6	127.4	126.1	127.4

Lumen Package		Delivered Lumens					Wattage	Efficacy lm/W				
4 ft		LC	LN	LW	SLW	FDL		LC	LN	LW	SLW	FDL
20	SL	2100	2029	1855	1836	1786	12.1	173.6	167.7	153.3	151.7	147.6
22	SL	2391	2311	2113	2091	2034	13.8	173.3	167.5	153.1	151.5	147.4
26	SL	2823	2728	2494	2469	2401	16.4	172.1	166.3	152.1	150.5	146.4
31	SL	3318	3206	2932	2902	2823	19.5	170.2	164.4	150.4	148.8	144.8
33	SL	3563	3443	3148	3116	3031	21.1	168.9	163.2	149.2	147.7	143.6
37	SL	4013	3877	3545	3509	3413	24.0	167.2	161.5	147.7	146.2	142.2
41	SL	4356	4209	3848	3809	3705	26.3	165.6	160.0	146.3	144.8	140.9
45	SL	4857	4693	4292	4248	4132	29.8	163.0	157.5	144.0	142.6	138.7
48	SL	5191	5015	4586	4540	4416	32.1	161.7	156.2	142.9	141.4	137.6
51	SL	5435	5252	4803	4754	4624	35.0	155.3	150.1	137.2	135.8	132.1
57	SL	6090	5884	5381	5326	5181	39.7	153.4	148.2	135.5	134.2	130.5
60	SL	6408	6192	5662	5605	5452	42.0	152.6	147.4	134.8	133.5	129.8
63	SL	6727	6500	5944	5883	5723	44.4	151.5	146.4	133.9	132.5	128.9
67	SL	7191	6948	6354	6289	6117	47.9	150.1	145.1	132.7	131.3	127.7
74	HL	8015	7745	6873	6803	6669	51.8	154.7	149.5	132.7	131.3	132.6
81	HL	8693	8400	7454	7378	7450	55.1	157.8	152.5	135.3	133.9	135.2
84	HL	9084	8777	7789	7710	7785	57.9	156.9	151.6	134.5	133.2	134.5
87	HL	9366	9050	8031	7949	8026	62.2	150.6	145.5	129.1	127.8	129.0
90	HL	9701	9373	8318	8233	8313	64.4	150.6	145.5	129.2	127.8	129.1
93	HL	10018	9680	8590	8502	8585	67.4	148.6	143.6	127.4	126.1	127.4
100	HL	10765	10402	9231	9137	9226	72.5	148.5	143.5	127.3	126.0	127.3
104	HL	11162	10786	9571	9474	9566	75.5	147.8	142.9	126.8	125.5	126.7

Metalux

SNX Lensed

Energy and Performance Data - Fixed Output

Lumen Package		Delivered Lumens					Wattage	Efficacy lm/W				
8 ft		LC	LN	LW	SLW	FDL		LC	LN	LW	SLW	FDL
40	SL	4200	4058	3711	3673	3573	24.2	173.6	167.7	153.3	151.8	147.6
44	SL	4782	4621	4226	4183	4068	27.6	173.3	167.4	153.1	151.6	147.4
52	SL	5646	5455	4989	4938	4803	32.8	172.1	166.3	152.1	150.5	146.4
62	SL	6637	6413	5864	5805	5646	39.0	170.2	164.4	150.4	148.8	144.8
66	SL	7126	6885	6296	6232	6062	42.2	168.9	163.2	149.2	147.7	143.6
74	SL	8025	7754	7091	7019	6827	48.0	167.2	161.5	147.7	146.2	142.2
82	SL	8711	8417	7697	7619	7410	52.6	165.6	160.0	146.3	144.8	140.9
90	SL	9714	9386	8583	8496	8264	59.6	163.0	157.5	144.0	142.6	138.7
96	SL	10381	10031	9173	9079	8831	64.2	161.7	156.2	142.9	141.4	137.6
102	SL	10871	10504	9605	9507	9248	70.0	155.3	150.1	137.2	135.8	132.1
114	SL	12180	11769	10762	10652	10361	79.4	153.4	148.2	135.5	134.2	130.5
120	SL	12817	12384	11325	11209	10903	84.0	152.6	147.4	134.8	133.4	129.8
126	SL	13454	13000	11888	11767	11445	88.8	151.5	146.4	133.9	132.5	128.9
134	SL	14382	13897	12708	12578	12235	95.8	150.1	145.1	132.7	131.3	127.7
148	HL	16031	15490	13746	13606	13738	103.6	154.7	149.5	132.7	131.3	132.6
162	HL	17386	16800	14908	14757	14900	110.2	157.8	152.5	135.3	133.9	135.2
168	HL	18168	17555	15579	15420	15570	115.8	156.9	151.6	134.5	133.2	134.5
174	HL	18731	18099	16062	15898	16053	124.4	150.6	145.5	129.1	127.8	129.0
180	HL	19401	18747	16636	16467	16627	128.8	150.6	145.6	129.2	127.8	129.1
186	HL	20035	19359	17179	17005	17170	134.8	148.6	143.6	127.4	126.1	127.4
200	HL	21531	20804	18462	18274	18452	145.0	148.5	143.5	127.3	126.0	127.3

Energy and Performance Data - Selectable Output

Default CCT/Lumen Setting: 4000K / Med Power

Lens Type	CRI	Length	Lumen Select	Delivered Lumens			Wattage			Efficacy lm/W		
			CCT Select	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
LC	80	2 ft.	Low	1026	1066	1099	6.9	6.6	6.7	148.7	161.5	164.0
			Med	1990	2198	2133	13.9	13.3	13.2	143.2	165.3	161.6
			High	3016	3232	3331	21	20	20.2	143.6	161.6	164.9
		4 ft.	Low	2275	2405	2270	16.7	16.1	16.9	136.2	149.4	134.3
			Med	4665	4551	4800	33.5	32.3	33.7	139.3	140.9	142.4
			High	6957	7289	6880	50.7	48.9	51.1	137.2	149.1	134.6
		8 ft.	Low	4453	4693	4655	33.5	32.3	33.7	132.9	145.3	138.1
			Med	9383	8909	9364	66.9	64.5	67.5	140.3	138.1	138.7
			High	14575	14220	13468	101.4	97.8	102.2	143.7	145.4	131.8
	90	2 ft.	Low	842	903	904	6.9	6.6	6.7	122.0	136.8	134.9
			Med	1737	1805	1809	13.9	13.3	13.2	125.0	135.7	137.0
			High	2553	2819	2825	21	20.2	20.2	121.6	139.6	139.9
		4 ft.	Low	1944	2036	1926	16.7	16.1	16.9	116.4	126.5	114.0
			Med	3949	3852	4072	33.5	32.3	33.7	117.9	119.3	120.8
			High	5889	6169	5836	50.7	48.9	51.1	116.2	126.2	114.2
		8 ft.	Low	3770	3972	3949	33.5	32.3	33.7	112.5	123.0	117.2
			Med	7704	7540	7943	66.9	64.5	67.5	115.2	116.9	117.7
			High	12338	12035	11425	101.4	97.8	102.2	121.7	123.1	111.8

Metalux

SNX Lensed

Energy and Performance Data - Selectable Output

Lens Type	CRI	Length	Lumen Select	Delivered Lumens			Wattage			Efficacy lm/W		
			CCT Select	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
LN	80	2 ft.	Low	991	1030	1062	6.9	6.6	6.7	143.6	156.1	158.5
			Med	1983	2124	2061	13.9	13.3	13.2	142.7	159.7	156.1
			High	2914	3122	3218	21	20	20.2	138.8	156.1	159.3
		4 ft.	Low	2218	2324	2194	16.7	16.1	16.9	132.8	144.3	129.8
			Med	4508	4398	4638	33.5	32.3	33.7	134.6	136.2	137.6
			High	6722	7043	6648	50.7	48.9	51.1	132.6	144.0	130.1
		8 ft.	Low	4647	4534	4498	33.5	32.3	33.7	138.7	140.4	133.5
			Med	8793	8608	9048	66.9	64.5	67.5	131.4	133.5	134.0
			High	14083	13740	13013	101.4	97.8	102.2	138.9	140.5	127.3
	90	2 ft.	Low	814	899	874	6.9	6.7	6.7	118.0	134.2	130.4
			Med	1679	1744	1748	13.9	13.3	13.2	120.8	131.1	132.4
			High	2467	2724	2730	21	20.2	20.2	117.5	134.9	135.1
		4 ft.	Low	1878	1967	1861	16.7	16.1	16.9	112.5	122.2	110.1
			Med	3816	3722	3934	33.5	32.3	33.7	113.9	115.2	116.7
			High	5691	5782	5639	50.7	48.9	51.1	112.2	118.2	110.4
		8 ft.	Low	3934	3838	3816	33.5	32.3	33.7	117.4	118.8	113.2
			Med	7444	7286	7675	66.9	64.5	67.5	111.3	113.0	113.7
			High	11922	11629	11039	101.4	97.8	102.2	117.6	118.9	108.0

Lens Type	CRI	Length	Lumen Select	Delivered Lumens			Wattage			Efficacy lm/W		
			CCT Select	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
LW	80	2 ft.	Low	907	914	971	6.9	6.6	6.7	131.4	138.5	144.9
			Med	1813	1942	1829	13.9	13.3	13.2	130.4	146.0	138.6
			High	2586	2771	2943	21	20	20.2	123.1	138.6	145.7
		4 ft.	Low	2028	2125	1947	16.7	16.1	16.9	121.4	132.0	115.2
			Med	4000	4058	4241	33.5	32.3	33.7	119.4	125.6	125.8
			High	6147	6062	5900	50.7	48.9	51.1	121.2	124.0	115.5
		8 ft.	Low	4250	4146	4137	33.5	32.3	33.7	126.9	128.4	122.8
			Med	7803	7639	8273	66.9	64.5	67.5	116.6	118.4	122.6
			High	12878	11826	11548	101.4	97.8	102.2	127.0	120.9	113.0
	90	2 ft.	Low	722	822	824	6.9	6.7	6.6	104.6	122.7	124.8
			Med	1535	1547	1551	13.9	13.3	13.2	110.4	116.3	117.5
			High	2189	2491	2497	21	20.2	20.2	104.2	123.3	123.6
		4 ft.	Low	1717	1799	1652	16.7	16.1	16.9	102.8	111.7	97.8
			Med	3386	3434	3598	33.5	32.3	33.7	101.1	106.3	106.8
			High	5204	5131	5005	50.7	48.9	51.1	102.6	104.9	97.9
		8 ft.	Low	3598	3509	3509	33.5	32.3	33.7	107.4	108.6	104.1
			Med	6606	7195	7018	66.9	64.5	67.5	98.7	111.6	104.0
			High	10902	10009	9796	101.4	97.8	102.2	107.5	102.3	95.9

Metalux

SNX Lensed

Energy and Performance Data - Selectable Output

Lens Type	CRI	Length	Lumen Select	Delivered Lumens			Wattage			Efficacy		
			CCT Select	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
SLW	80	2 ft.	Low	845	905	905	6.9	6.6	6.7	122.5	137.1	135.1
			Med	1795	1923	1810	13.9	13.3	13.2	129.1	144.6	137.1
			High	2560	2743	2913	21	20	20.2	121.9	137.2	144.2
		4 ft.	Low	2008	1980	1927	16.7	16.1	16.9	120.2	123.0	114.0
			Med	3959	4017	4198	33.5	32.3	33.7	118.2	124.4	124.6
			High	6084	6000	5840	50.7	48.9	51.1	120.0	122.7	114.3
		8 ft.	Low	4206	4104	4095	33.5	32.3	33.7	125.6	127.1	121.5
			Med	7724	8415	8189	66.9	64.5	67.5	115.5	130.5	121.3
			High	12747	11706	11431	101.4	97.8	102.2	125.7	119.7	111.8
	90	2 ft.	Low	715	814	816	6.9	6.7	6.6	103.6	121.5	123.6
			Med	1519	1532	1536	13.9	13.3	13.2	109.3	115.2	116.4
			High	2167	2465	2326	21	20.2	20.2	103.2	122.0	115.1
		4 ft.	Low	1700	1676	1635	16.7	16.1	16.9	101.8	104.1	96.7
			Med	3352	3400	3561	33.5	32.3	33.7	100.1	105.3	105.7
			High	5151	5079	5151	50.7	48.9	51.1	101.6	103.9	100.8
		8 ft.	Low	3561	3269	3473	33.5	32.3	33.7	106.3	101.2	103.1
			Med	6539	7122	6947	66.9	64.5	67.5	97.7	110.4	102.9
			High	10791	9907	9697	101.4	97.8	102.2	106.4	101.3	94.9

Lens Type	CRI	Length	Lumen Select	Delivered Lumens			Wattage			Efficacy		
			CCT Select	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
FDL	80	2 ft.	Low	853	914	914	6.9	6.6	6.7	123.6	138.5	136.4
			Med	1746	1870	1828	13.9	13.3	13.2	125.6	140.6	138.5
			High	2584	2833	2833	21	20.2	20.2	123.0	140.2	140.2
		4 ft.	Low	1953	1999	1946	16.7	16.1	16.9	116.9	124.2	115.1
			Med	3998	3907	4083	33.5	32.3	33.7	119.3	121.0	121.2
			High	5918	6059	5906	50.7	48.9	51.1	116.7	123.9	115.6
		8 ft.	Low	4092	3900	3892	33.5	32.3	33.7	122.1	120.7	115.5
			Med	7799	8185	7966	66.9	64.5	67.5	116.6	126.9	118.0
			High	12399	11820	12373	101.4	97.8	102.2	122.3	120.9	121.1
	90	2 ft.	Low	722	791	793	6.9	6.7	6.6	104.6	118.1	120.2
			Med	1478	1547	1586	13.9	13.3	13.3	106.3	116.3	119.2
			High	2188	2398	2349	21	20.2	20.2	104.2	118.7	116.3
		4 ft.	Low	1653	1692	1651	16.7	16.1	16.9	99.0	105.1	97.7
			Med	3384	3307	3384	33.5	32.3	33.7	101.0	102.4	100.4
			High	5010	5128	5010	50.7	48.9	51.1	98.8	104.9	98.0
		8 ft.	Low	3464	3301	3301	33.5	32.3	33.7	103.4	102.2	98.0
			Med	6602	6927	6757	66.9	64.5	67.5	98.7	107.4	100.1
			High	10496	10004	10496	101.4	97.8	102.2	103.5	102.3	102.7

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

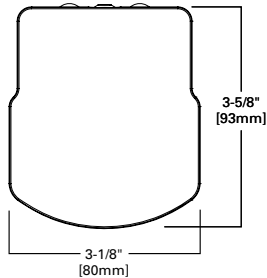
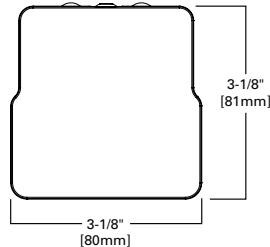
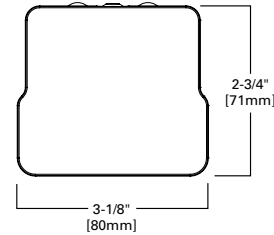
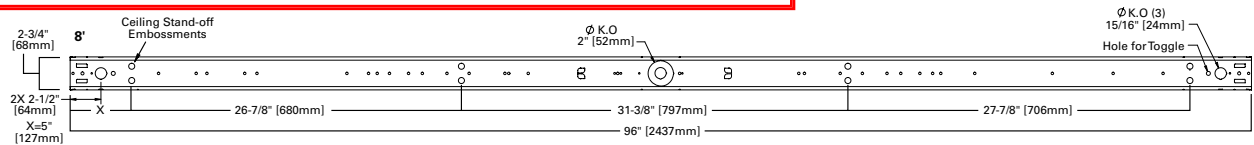
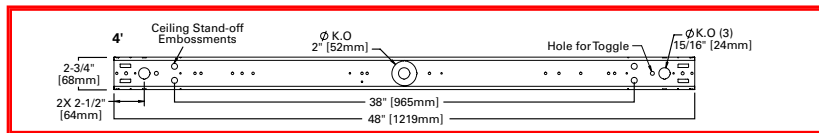
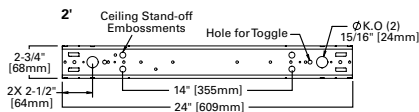
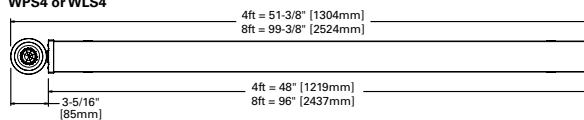
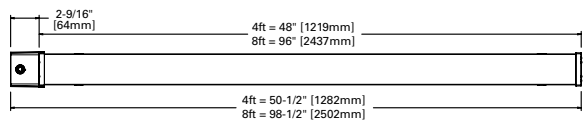
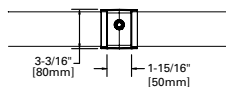
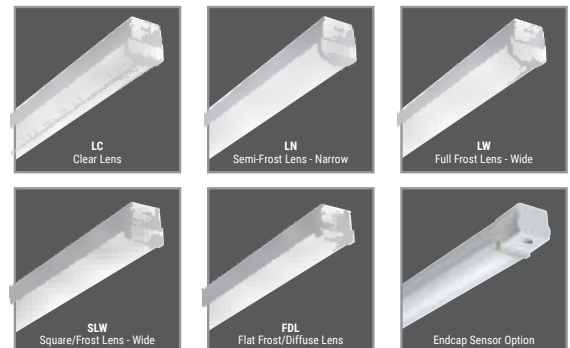
Catalog Number:

4SNX-SL3-LW-UNV-CC83-CD1-U//
AYC-CHAIN/SET-U

Notes:

Type:**A**

ML&C24-119319

Metalux**SNX Lensed****Finished Decorative End Covers****End View - Round Lens****End View - Square Lens****End View - Flat Lens****Dimensional and Mounting Details****Fixture Size with Sensor****WPS4 or WLS4****WPS or WLS****Mid-Row Sensor****Options****Accessories**

Job Name:

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

4SNX-SL3-LW-UNV-CC83-CD1-U//
AYC-CHAIN/SET-U

Notes:

Type:**A**

ML&C24-119319

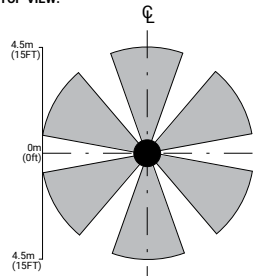
Metalux**SNX Lensed****Control Solutions**

- WaveLinX LITE wireless
- WaveLinX PRO wireless
- WaveLinX CAT wired
- WaveLinX Wired

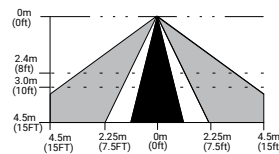
**Integrated Sensor Coverage Pattern**

WaveLinX PRO/LITE Sensor – WLS and WPS

TOP VIEW:



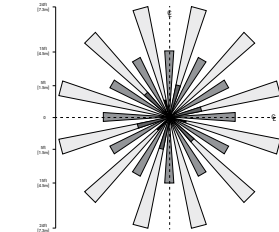
SIDE VIEW:



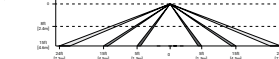
Note: Installation of integrated sensors within 3-ft (1m) of HVAC air vents is not recommended. The pattern shown is intended solely as a general guide and is not to scale.

WaveLinX PRO/LITE Sensor – WLS2 and WPS2

TOP VIEW:

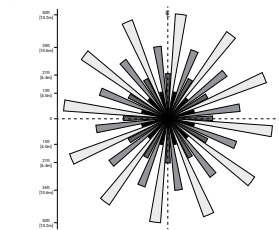


SIDE VIEW:

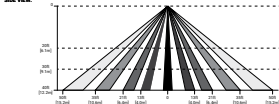


WaveLinX PRO/LITE Sensor – WLS4 and WPS4

TOP VIEW:



SIDE VIEW:



The SNX with WaveLinX offers no-hassle lighting control with multiple luminaire level control solutions.

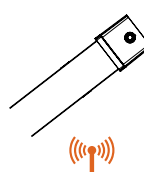


WaveLinX PRO is a wireless lighting control solution, for connected spaces, that significantly reduces a building's energy consumption. From a single floor to an entire campus, WaveLinX PRO connects more than lighting assets; it shares aggregated sensor data with the WaveLinX CORE platform and other building systems, so building owners can improve operations, spaces environment, and tenants' experience. WaveLinX PRO offers a rich portfolio of wireless devices, WaveLinX PRO-enabled luminaires, and an intuitive WaveLinX mobile app for office, education, warehouse, and parking garage applications.

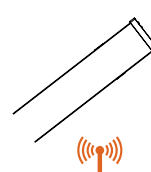


WaveLinX LITE is a cost effective, wireless digital lighting control solution, with out-of-the-box functionality, that saves energy and meets code. It's designed for applications that require occupancy-based, daylighting, or manual light control. Customize installations for office, education, warehouse and parking garages using the secure, simple mobile app.

With Integrated WaveLinX Sensor



With Integrated WaveLinX Node



Add a hidden WaveLinX sensor node (WPN, WLN) to your space lighting design!

Allows to:

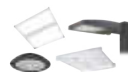
- Keeps luminaire aesthetics
- Connect fixtures without the realstate to include sensor option such as downlights
- Connect sealed fixtures without a standard sensor option such as products for clinical space.

Integrated Controls Options

Option	Out of the Box Functionality	Luminaire Level Lighting Control (LLLC)	Automatic Dimming Photocell	Occupancy Sensing	CCT Control
WLS	X	X	X	X	
WPS		X	X	X	

Systems comparison chart

Cooper Lighting Solutions provides many lighting system solutions designed to satisfy code requirements and meet the unique needs of any project.



Luminaire with standalone sensor



Standalone Spaces
WaveLinX LITE



Standalone Spaces
WaveLinX CAT



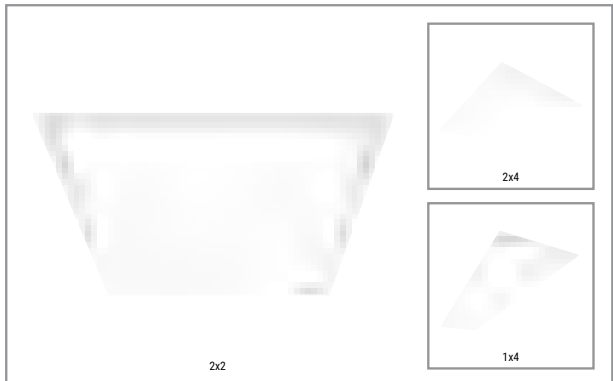
Networked Spaces
WaveLinX PRO



Enterprise
WaveLinX CORE

	Luminaire with standalone sensor	Standalone Spaces WaveLinX LITE	Standalone Spaces WaveLinX CAT	Networked Spaces WaveLinX PRO	Enterprise WaveLinX CORE
Occupancy	Yes	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes	Yes
Wallstations	–	Yes	Yes	Yes	Yes
Gateways	–	–	–	1 WAC	300 WACs
Devices (MAX)	–	40 per Area (1120 per space)	40 per Area	200 per WAC2	32,500 per CORE Enterprise
Software	–	WaveLinX LITE Mobile App	WaveLinX CAT Mobile App	WaveLinX Mobile App	CORE
Areas	–	28 per Space	Unlimited	50 per WAC2	up to 3,000
Zones	–	16 per Area	16 per Area	16 per Area	up to 9,000
Scheduling	–	–	–	Local	Global
VividTune™	–	–	–	Yes	Yes
Plug-Load Control	–	Yes	Yes	Yes	Yes
Low-Voltage Power	–	–	Yes	Yes	Yes
Integration	–	–	–	–	BACnet, API
Dashboards	–	–	–	–	Energy, Occupancy
Configuration	–	Installer	Installer	Technician	Technician / IT

Project		Catalog #		Type	
Prepared by		Notes		Date	



Metalux

CGTS NUV Selectable Lumens and CCT with 120-347V Driver - 2x4/2x2/1x4

LED Backlit Panel
Canada Market Only

Typical Applications
Offices • Education • Healthcare • Retail

Interactive Menu

- Order Information page 2
- Photometric Data page 4
- Product Warranty

Product Certification

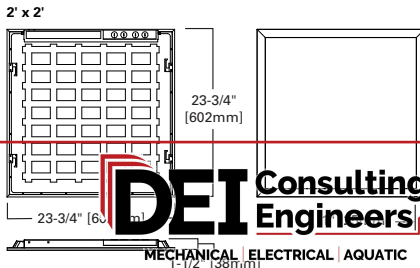
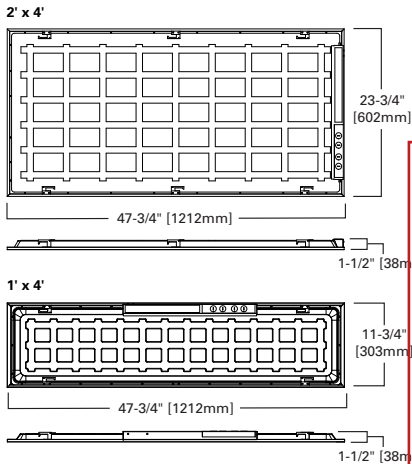


For Canadian Market Only

Top Product Features

- CGTS NUV steel housing is post-painted to increase efficacy, facilitate installation, and inhibit corrosion
- CGTS NUV acrylic micro-optics provide uniform illumination across the entire lens
- CGTS NUV extruded aluminum door frame tightly seals to the housing for optimal performance and aesthetics. Minimum fixture height ideal for shallow plenum.
- CGTS NUV has three color temperature and three lumen package choices for use in a variety of applications
- CGTS NUV selectable switches located on the side of the junction box, for quick and easy adjustment
- NUV 120 - 347V driver with 0-10V dimming, 10% standard

CGTS NUV Dimensions



MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

<input type="checkbox"/> Reviewed	<input checked="" type="checkbox"/> Reviewed As Noted
<input type="checkbox"/> Not Reviewed	<input type="checkbox"/> Revise and Resubmit

See page 3 for Junction Box details for CGTS NUV

additional product diagrams

Metalux

CGTS NUV



CGTS NUV Ordering Information/Performance

Default CCT/Lumen Setting: 5000K/High

Size	Catalog	UPC	Lumen Setting	CCT	CRI (Min)	Delivered Nominal Lumens	Watts	Efficacy (lm/W)
1x4	14CGTS-NUV	80083247806	Low	3500	85	3513	30.5	115
				4000	86	3735	28.8	130
				5000	85	3617	31.0	117
			Medium	3500	85	3934	35.4	111
				4000	86	4232	33.2	128
				5000	85	4067	35.9	113
			High	3500	85	4342	40.3	108
				4000	86	4712	37.6	125
				5000	85	4486	41.0	109
2x2	22CGTS-NUV	80083247837	Low	3500	85	3515	30.2	117
				4000	86	3732	28.7	130
				5000	85	3625	30.5	119
			Medium	3500	85	3953	34.9	113
				4000	86	4228	33.0	128
				5000	85	4060	35.3	115
			High	3500	85	4361	39.8	110
				4000	86	4676	37.5	125
				5000	85	4462	40.3	111
2x4	24CGTS-NUV	80083247851	Low	3500	85	4182	35.0	120
				4000	86	4352	33.6	130
				5000	85	4333	35.1	124
			Medium	3500	85	4612	39.4	117
				4000	86	4787	37.4	128
				5000	85	4753	39.2	121
			High	3500	85	5633	50.1	113
				4000	86	5962	47.6	125
				5000	85	5898	50.3	117

CGTS NUV Shipping Data

	1x4	2x2	2x4
Weight (lb.)	4.7	4.4	8.8
Pallet Qty	75	50	25
Pallet Size (in.)	49x53	30x53	30x53

CGTS NUV Options

Catalog	Description	Example	Notes
A3/8-4/18GDIM	6' Length, 3/8" Cable, 2 Wire, 2 Dimming Leads, Ground	24CGTS-NUV-A3/8-4/18G DIM	

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:
14CGTS-NUV

Notes:

Type:**B**

ML&C24-119319

Metalux**CGTS NUV****CGTS NUV Accessories****Surface Mounting Options ⁽¹⁾**

Catalog No.	Description	UPC
CGTSNUV-SURF24	2x4 CGTS NUV Surface Mount Kit	080083248346
CGTSNUV-SURF22	2x2 CGTS NUV Surface Mount Kit	080083248322
CGTSNUV-SURF14	1x4 CGTS NUV Surface Mount Kit	080083248308

Note: (1) Cannot be used with EL7W or EL14W options.

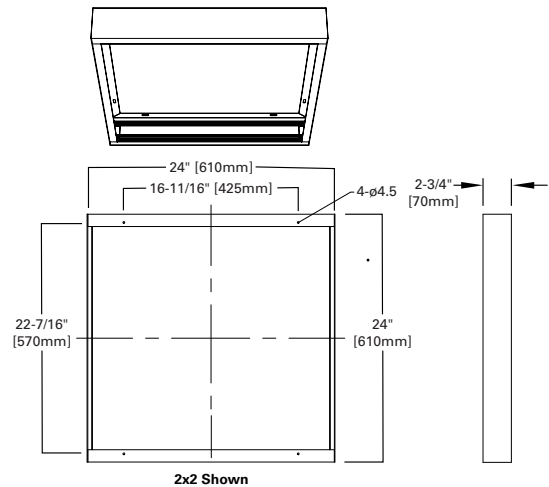
Drywall Frame Kit

Catalog No.	Description	UPC
DF-24W-U	2x4 dry wall frame kit	662401232970
DF-22W-U	2x2 dry wall frame kit	662401232963
DF-14W-U	1x4 dry wall frame kit	662401232949

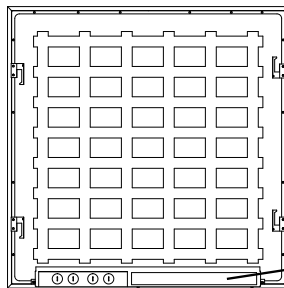
Suspension Kit

Catalog	UPC	Description
FPSUS2-ML	080083277469	2 point Y-hanger suspension kit includes aircraft cable, carabiner, ceiling connection, SO cord, cord connectors and round 4" J-box cover plate

Mounting height from ceiling
Min. = 7-1/4" [184mm]
Max. = 27" [286mm]

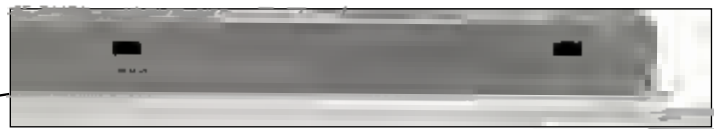
**CGTS NUV Driver Enclosure / Junction Box**


Top View (2' x 2')



Lumen/
Color Select
Switches

**Default CCT/Lumen
Setting: 5000K/High**



Submitted by Medgar Lighting & Controls Inc  Job Name: HDSB - Glenview Public School Gym Addition Engineer: DEI & Associates (Waterloo)	Catalog Number: 14CGTS-NUV Notes:	Type: <div>B</div> ML&C24-119319
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Metalux

CGTS NUV

CGTS NUV Product Specifications

Construction

- Die-formed steel back plate is post-painted to ensure durability
- Housing is constructed absent of holes
- Aluminum door frame miter cut, and mechanically fastened for a precision fit
- Frame weld and ground, for a seamless appearance

Mounting

- Integral grid clips secure fixture to the ceiling structure
- Accessory CGT EQ clips available to mechanically fasten the clips to the fixture, and the fixture to the ceiling system
- Junction box constructed of code gauge galvanized steel with access plate
- Multiple 7/8" KO's provided, suitable for up to 12AWG wiring
- Surface and suspension kits available for use in grid or hard surfaces. Please note that the Suspension kit will be available in early 2023.
- Factory installed flexible cable with dimming leads available

Controls

- NUV 120-347V driver with 0-10V dimming, 10% standard
- Can be used with tile mounted sensor or other remote mount controls
- Selectable driver for three color temperature choices and three lumen package choices

Electrical

- CGTS NUV projected lumen maintenance based on TM21 testing standards is >L82 @60,000 hours
- Driver rated for FCC part 15 Class B for use in residential or commercial applications
- LEDs are 85 CRI (minimum) and switch to 3500K, 4000K, and 5000K

Optical Shielding

- Acrylic micro-optics enable uniform distribution of LEDs for uniform lens illumination
- Smooth, frosted lens delivers uniform illumination across the entire lens
- Durable lens with surface texture to minimize scratch and impact damage

Certifications

- cULus listed for 25C ambient environments, indoor applications
- UL damp location listed
- IC rated for direct insulation contact
- IESNA LM-79 and LM-80 standards compliant
- Qualifies as State of California Title 24 high efficiency luminaire
- FCC part 15 class B (residential) compliant
- DesignLights Consortium® Qualified and classified for DLC standard. Refer to the DLC Qualified Products list at www.designlights.org/QPL to confirm which versions are qualified
- Meets IP5X rating from the room side with no modification needed

Warranty

- Five year standard warranty
- Extended ten year warranty available

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

14CGTS-NUV

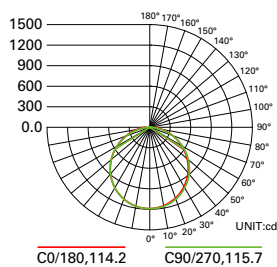
Notes:

Type:**B**

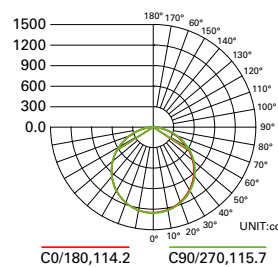
ML&C24-119319

Metalux**CGTS NUV****Photometric Data**

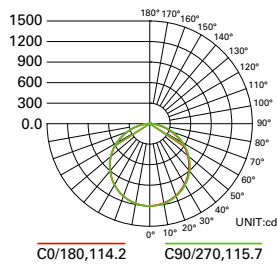
View IES files

**14CGTS-NUV-3035C**

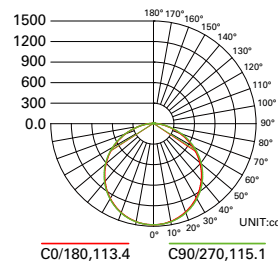
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.28 x mounting height, (L) 1.28 x mounting height
Lumens: 3529
Input Watts: 30W
Efficacy: 119.8 LPW
Test Report: 14CGTS-NUV-3035C.IES

**14CGTS-NUV-3040C**

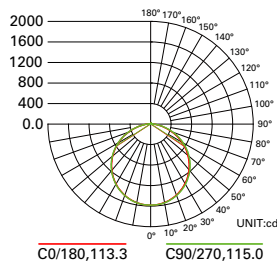
Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.28 x mounting height, (L) 1.28 x mounting height
Lumens: 3716
Input Watts: 30W
Efficacy: 132.1 LPW
Test Report: 14CGTS-NUV-3040C.IES

**14CGTS-NUV-3050C**

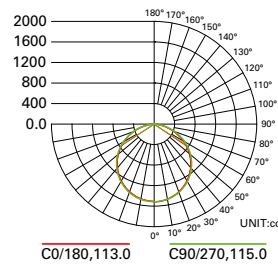
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.28 x mounting height
Lumens: 3568
Input Watts: 30W
Efficacy: 121.8 LPW
Test Report: 14CGTS-NUV-3050C.IES

**22CGTS-NUV-4035C**

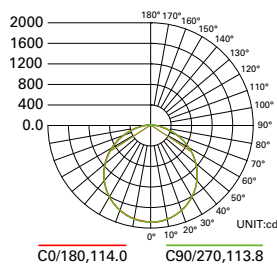
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.28 x mounting height
Lumens: 4320
Input Watts: 40W
Efficacy: 113.3 LPW
Test Report: 22CGTS-NUV-4035C.IES

**22CGTS-NUV-4040C**

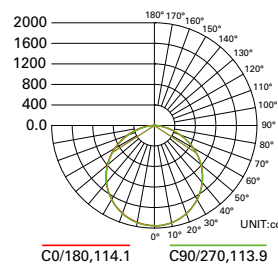
Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 4615
Input Watts: 40W
Efficacy: 126.5 LPW
Test Report: 22CGTS-NUV-4040C.IES

**22CGTS-NUV-4050C**

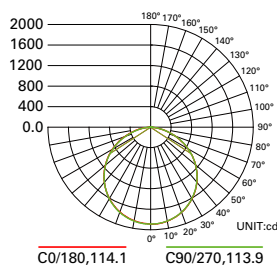
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.26 x mounting height, (L) 1.27 x mounting height
Lumens: 4386
Input Watts: 40W
Efficacy: 114.7 LPW
Test Report: 22CGTS-NUV-4050C.IES

**24CGTS-NUV-5035C**

Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 5483
Input Watts: 50W
Efficacy: 110.1 LPW
Test Report: 24CGTS-NUV-5035C.IES

**24CGTS-NUV-5040C**

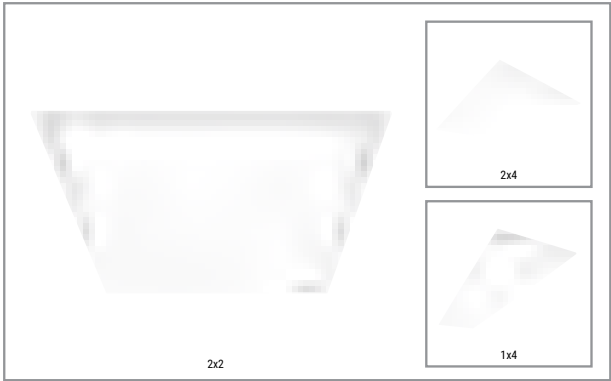
Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 5664
Input Watts: 50W
Efficacy: 119.5 LPW
Test Report: 24CGTS-NUV-5040C.IES

**24CGTS-NUV-5050C**

Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 5469
Input Watts: 50W
Efficacy: 111.3 LPW
Test Report: 24CGTS-NUV-5050C.IES



Project		Catalog #		Type	
Prepared by		Notes		Date	



Metalux

CGTS NUV Selectable Lumens and CCT
with 120-347V Driver - 2x4/2x2/1x4

LED Backlit Panel
Canada Market Only

Typical Applications
Offices • Education • Healthcare • Retail

Interactive Menu

- Order Information page 2
- Photometric Data page 4
- Product Warranty

Product Certification

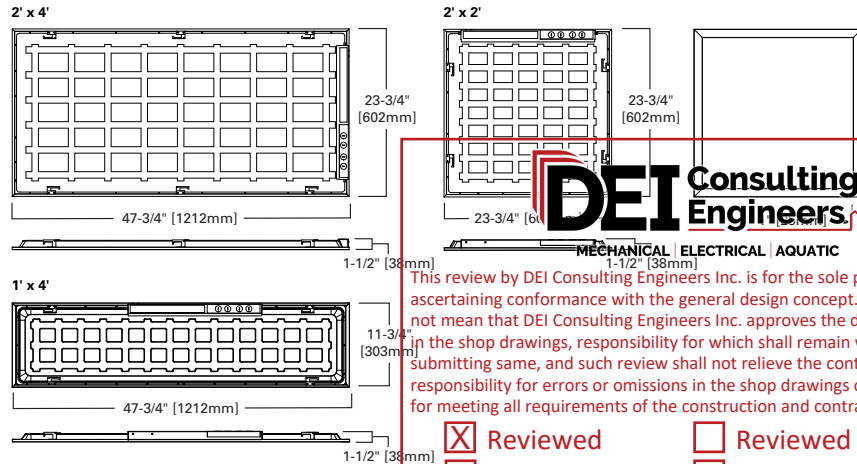



For Canadian Market Only

Top Product Features

- CGTS NUV steel housing is post-painted to increase efficacy, facilitate installation, and inhibit corrosion
- CGTS NUV acrylic micro-optics provide uniform illumination across the entire lens
- CGTS NUV extruded aluminum door frame tightly seals to the housing for optimal performance and aesthetics. Minimum fixture height ideal for shallow plenum.
- CGTS NUV has three color temperature and three lumen package choices for use in a variety of applications
- CGTS NUV selectable switches located on the side of the junction box, for quick and easy adjustment
- NUV 120 - 347V driver with 0-10V dimming, 10% standard

CGTS NUV Dimensions





DEI Consulting Engineers Inc.

MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

<input checked="" type="checkbox"/> Reviewed	<input type="checkbox"/> Reviewed As Noted
<input type="checkbox"/> Not Reviewed	<input type="checkbox"/> Revise and Resubmit

See page 3 for Junction Box details for CGTS NUV

 additional product diagrams

Metalux

CGTS NUV



CGTS NUV Ordering Information/Performance

Default CCT/Lumen Setting: 5000K/High

Size	Catalog	UPC	Lumen Setting	CCT	CRI (Min)	Delivered Nominal Lumens	Watts	Efficacy (lm/W)
1x4	14CGTS-NUV	80083247806	Low	3500	85	3513	30.5	115
				4000	86	3735	28.8	130
				5000	85	3617	31.0	117
			Medium	3500	85	3934	35.4	111
				4000	86	4232	33.2	128
				5000	85	4067	35.9	113
			High	3500	85	4342	40.3	108
				4000	86	4712	37.6	125
				5000	85	4486	41.0	109
2x2	22CGTS-NUV	80083247837	Low	3500	85	3515	30.2	117
				4000	86	3732	28.7	130
				5000	85	3625	30.5	119
			Medium	3500	85	3953	34.9	113
				4000	86	4228	33.0	128
				5000	85	4060	35.3	115
			High	3500	85	4361	39.8	110
				4000	86	4676	37.5	125
				5000	85	4462	40.3	111
2x4	24CGTS-NUV	80083247851	Low	3500	85	4182	35.0	120
				4000	86	4352	33.6	130
				5000	85	4333	35.1	124
			Medium	3500	85	4612	39.4	117
				4000	86	4787	37.4	128
				5000	85	4753	39.2	121
			High	3500	85	5633	50.1	113
				4000	86	5962	47.6	125
				5000	85	5898	50.3	117

CGTS NUV Shipping Data

	1x4	2x2	2x4
Weight (lb.)	4.7	4.4	8.8
Pallet Qty	75	50	25
Pallet Size (in.)	49x53	30x53	30x53

CGTS NUV Options

Catalog	Description	Example	Notes
A3/8-4/18GDIM	6' Length, 3/8" Cable, 2 Wire, 2 Dimming Leads, Ground	24CGTS-NUV-A3/8-4/18G DIM	

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

14CGTS-NUV//DF-14W-U

Notes:

Type:**B1**

ML&C24-119319

Metalux**CGTS NUV****CGTS NUV Accessories****Surface Mounting Options ⁽¹⁾**

Catalog No.	Description	UPC
CGTSNUV-SURF24	2x4 CGTS NUV Surface Mount Kit	080083248346
CGTSNUV-SURF22	2x2 CGTS NUV Surface Mount Kit	080083248322
CGTSNUV-SURF14	1x4 CGTS NUV Surface Mount Kit	080083248308

Note: (1) Cannot be used with EL7W or EL14W options.

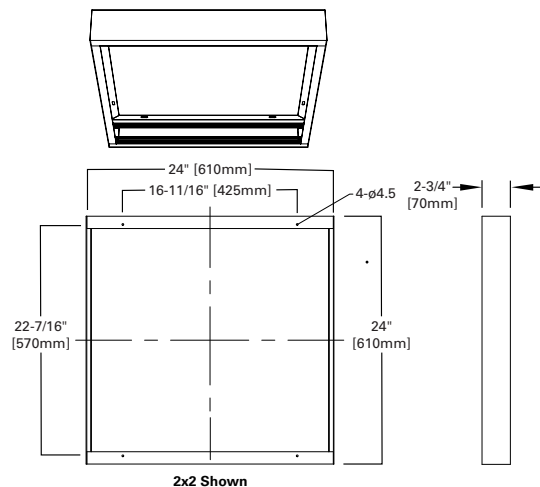
Drywall Frame Kit

Catalog No.	Description	UPC
DF-24W-U	2x4 dry wall frame kit	662401232970
DF-22W-U	2x2 dry wall frame kit	662401232963
DF-14W-U	1x4 dry wall frame kit	662401232949

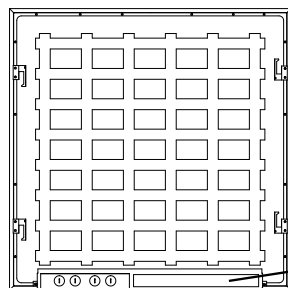
Suspension Kit

Catalog	UPC	Description
FPSUS2-ML	080083277469	2 point Y-hanger suspension kit includes aircraft cable, carabiner, ceiling connection, SO cord, cord connectors and round 4" J-box cover plate

Mounting height from ceiling
Min. = 7-1/4" [184mm]
Max. = 27" [286mm]

**CGTS NUV Driver Enclosure / Junction Box**

Top View (2' x 2')

Lumen/
Color Select
Switches

**Default CCT/Lumen
Setting: 5000K/High**

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

14CGTS-NUV//DF-14W-U

Notes:

Type:**B1**

ML&C24-119319

Metalux**CGTS NUV****CGTS NUV Product Specifications****Construction**

- Die-formed steel back plate is post-painted to ensure durability
- Housing is constructed absent of holes
- Aluminum door frame miter cut, and mechanically fastened for a precision fit
- Frame weld and ground, for a seamless appearance

Mounting

- Integral grid clips secure fixture to the ceiling structure
- Accessory CGT EQ clips available to mechanically fasten the clips to the fixture, and the fixture to the ceiling system
- Junction box constructed of code gauge galvanized steel with access plate
- Multiple 7/8" KO's provided, suitable for up to 12AWG wiring
- Surface and suspension kits available for use in grid or hard surfaces. Please note that the Suspension kit will be available in early 2023.
- Factory installed flexible cable with dimming leads available

Controls

- NUV 120-347V driver with 0-10V dimming, 10% standard
- Can be used with tile mounted sensor or other remote mount controls
- Selectable driver for three color temperature choices and three lumen package choices

Electrical

- CGTS NUV projected lumen maintenance based on TM21 testing standards is >L82 @60,000 hours
- Driver rated for FCC part 15 Class B for use in residential or commercial applications
- LEDs are 85 CRI (minimum) and switch to 3500K, 4000K, and 5000K

Optical Shielding

- Acrylic micro-optics enable uniform distribution of LEDs for uniform lens illumination
- Smooth, frosted lens delivers uniform illumination across the entire lens
- Durable lens with surface texture to minimize scratch and impact damage

Certifications

- cULus listed for 25C ambient environments, indoor applications
- UL damp location listed
- IC rated for direct insulation contact
- IESNA LM-79 and LM-80 standards compliant
- Qualifies as State of California Title 24 high efficiency luminaire
- FCC part 15 class B (residential) compliant
- DesignLights Consortium® Qualified and classified for DLC standard. Refer to the DLC Qualified Products list at www.designlights.org/QPL to confirm which versions are qualified
- Meets IP5X rating from the room side with no modification needed

Warranty

- Five year standard warranty
- Extended ten year warranty available

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

14CGTS-NUV//DF-14W-U

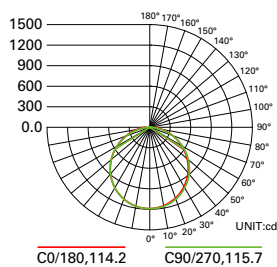
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Type:**B1**

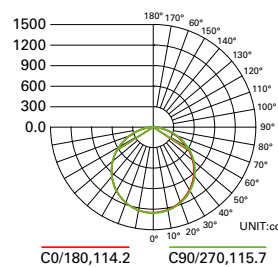
ML&C24-119319

Metalux**CGTS NUV****Photometric Data**

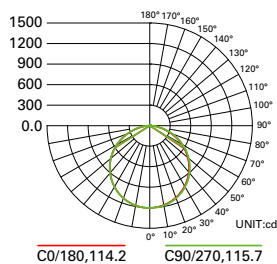
View IES files

**14CGTS-NUV-3035C**

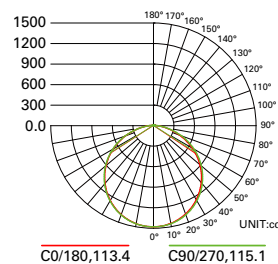
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.28 x mounting height, (L) 1.28 x mounting height
Lumens: 3529
Input Watts: 30W
Efficacy: 119.8 LPW
Test Report: 14CGTS-NUV-3035C.IES

**14CGTS-NUV-3040C**

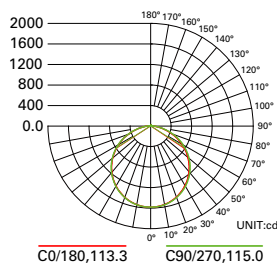
Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.28 x mounting height, (L) 1.28 x mounting height
Lumens: 3716
Input Watts: 30W
Efficacy: 132.1 LPW
Test Report: 14CGTS-NUV-3040C.IES

**14CGTS-NUV-3050C**

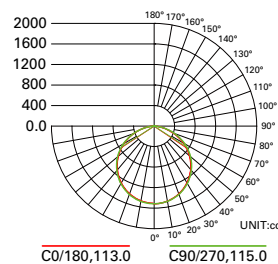
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.28 x mounting height
Lumens: 3568
Input Watts: 30W
Efficacy: 121.8 LPW
Test Report: 14CGTS-NUV-3050C.IES

**22CGTS-NUV-4035C**

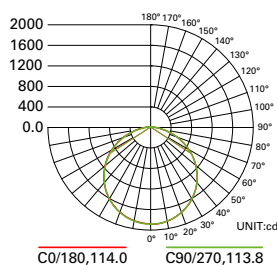
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.28 x mounting height
Lumens: 4320
Input Watts: 40W
Efficacy: 113.3 LPW
Test Report: 22CGTS-NUV-4035C.IES

**22CGTS-NUV-4040C**

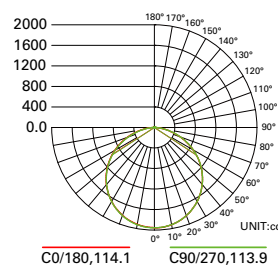
Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 4615
Input Watts: 40W
Efficacy: 126.5 LPW
Test Report: 22CGTS-NUV-4040C.IES

**22CGTS-NUV-4050C**

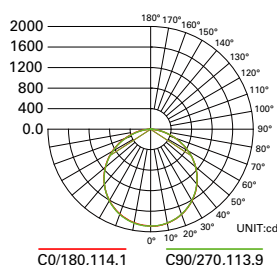
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.26 x mounting height, (L) 1.27 x mounting height
Lumens: 4386
Input Watts: 40W
Efficacy: 114.7 LPW
Test Report: 22CGTS-NUV-4050C.IES

**24CGTS-NUV-5035C**

Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 5483
Input Watts: 50W
Efficacy: 110.1 LPW
Test Report: 24CGTS-NUV-5035C.IES

**24CGTS-NUV-5040C**

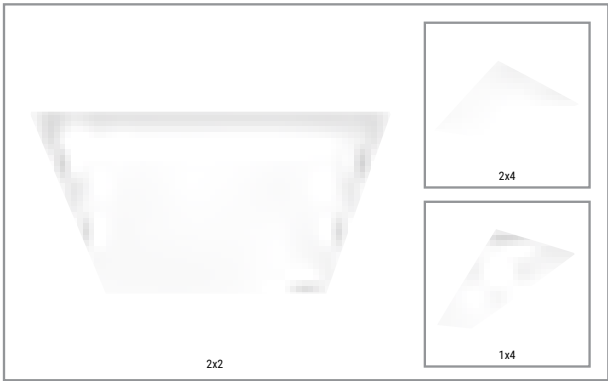
Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 5664
Input Watts: 50W
Efficacy: 119.5 LPW
Test Report: 24CGTS-NUV-5040C.IES

**24CGTS-NUV-5050C**

Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 5469
Input Watts: 50W
Efficacy: 111.3 LPW
Test Report: 24CGTS-NUV-5050C.IES



Project		Catalog #		Type	
Prepared by		Notes		Date	



Metalux

CGTS NUV Selectable Lumens and CCT with 120-347V Driver - 2x4/2x2/1x4

LED Backlit Panel
Canada Market Only

Typical Applications
Offices • Education • Healthcare • Retail

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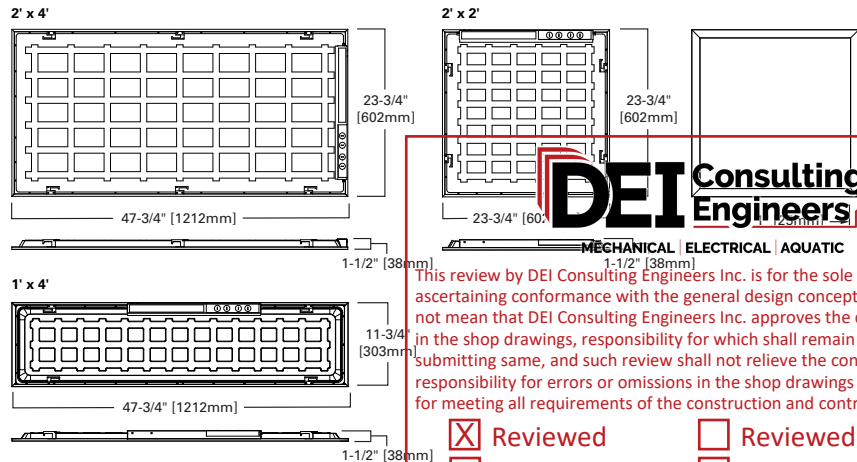



For Canadian Market Only

Top Product Features

- CGTS NUV steel housing is post-painted to increase efficacy, facilitate installation, and inhibit corrosion
- CGTS NUV acrylic micro-optics provide uniform illumination across the entire lens
- CGTS NUV extruded aluminum door frame tightly seals to the housing for optimal performance and aesthetics. Minimum fixture height ideal for shallow plenum.
- CGTS NUV has three color temperature and three lumen package choices for use in a variety of applications
- CGTS NUV selectable switches located on the side of the junction box, for quick and easy adjustment
- NUV 120 - 347V driver with 0-10V dimming, 10% standard

CGTS NUV Dimensions





MECHANICAL | ELECTRICAL | AQUATIC

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<input checked="" type="checkbox"/> Reviewed	<input type="checkbox"/> Reviewed As Noted
<input type="checkbox"/> Not Reviewed	<input type="checkbox"/> Revise and Resubmit

See page 3 for Junction Box details for CGTS NUV

 additional product diagrams

Metalux

CGTS NUV



CGTS NUV Ordering Information/Performance

Default CCT/Lumen Setting: 5000K/High

Size	Catalog	UPC	Lumen Setting	CCT	CRI (Min)	Delivered Nominal Lumens	Watts	Efficacy (lm/W)
1x4	14CGTS-NUV	80083247806	Low	3500	85	3513	30.5	115
				4000	86	3735	28.8	130
				5000	85	3617	31.0	117
			Medium	3500	85	3934	35.4	111
				4000	86	4232	33.2	128
				5000	85	4067	35.9	113
			High	3500	85	4342	40.3	108
				4000	86	4712	37.6	125
				5000	85	4486	41.0	109
2x2	22CGTS-NUV	80083247837	Low	3500	85	3515	30.2	117
				4000	86	3732	28.7	130
				5000	85	3625	30.5	119
			Medium	3500	85	3953	34.9	113
				4000	86	4228	33.0	128
				5000	85	4060	35.3	115
			High	3500	85	4361	39.8	110
				4000	86	4676	37.5	125
				5000	85	4462	40.3	111
2x4	24CGTS-NUV	80083247851	Low	3500	85	4182	35.0	120
				4000	86	4352	33.6	130
				5000	85	4333	35.1	124
			Medium	3500	85	4612	39.4	117
				4000	86	4787	37.4	128
				5000	85	4753	39.2	121
			High	3500	85	5633	50.1	113
				4000	86	5962	47.6	125
				5000	85	5898	50.3	117

CGTS NUV Shipping Data

	1x4	2x2	2x4
Weight (lb.)	4.7	4.4	8.8
Pallet Qty	75	50	25
Pallet Size (in.)	49x53	30x53	30x53

CGTS NUV Options

Catalog	Description	Example	Notes
A3/8-4/18GDIM	6' Length, 3/8" Cable, 2 Wire, 2 Dimming Leads, Ground	24CGTS-NUV-A3/8-4/18G DIM	

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:
24CGTS-NUV

Notes:

Type:**C**

ML&C24-119319

Metalux**CGTS NUV****CGTS NUV Accessories****Surface Mounting Options ⁽¹⁾**

Catalog No.	Description	UPC
CGTSNUV-SURF24	2x4 CGTS NUV Surface Mount Kit	080083248346
CGTSNUV-SURF22	2x2 CGTS NUV Surface Mount Kit	080083248322
CGTSNUV-SURF14	1x4 CGTS NUV Surface Mount Kit	080083248308

Note: (1) Cannot be used with EL7W or EL14W options.

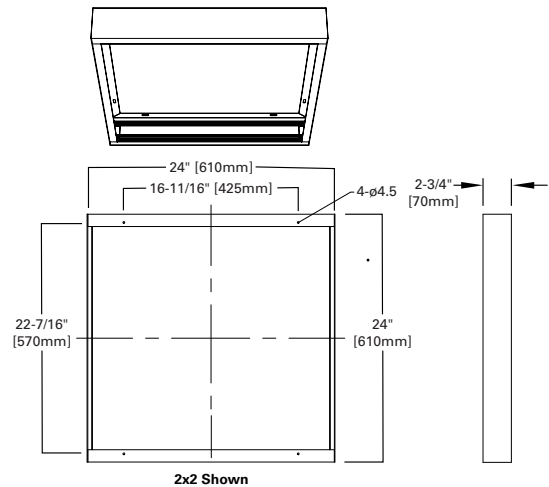
Drywall Frame Kit

Catalog No.	Description	UPC
DF-24W-U	2x4 dry wall frame kit	662401232970
DF-22W-U	2x2 dry wall frame kit	662401232963
DF-14W-U	1x4 dry wall frame kit	662401232949

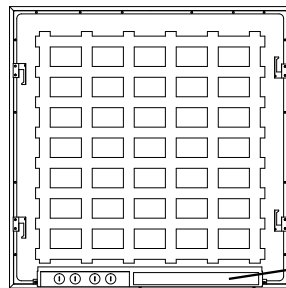
Suspension Kit

Catalog	UPC	Description
FPSUS2-ML	080083277469	2 point Y-hanger suspension kit includes aircraft cable, carabiner, ceiling connection, SO cord, cord connectors and round 4" J-box cover plate

Mounting height from ceiling
Min. = 7-1/4" [184mm]
Max. = 27" [286mm]

**CGTS NUV Driver Enclosure / Junction Box**

Top View (2' x 2')



Lumen/
Color Select
Switches

**Default CCT/Lumen
Setting: 5000K/High**



**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

24CGTS-NUV

Notes:

Type:**C**

ML&C24-119319

Metalux**CGTS NUV****CGTS NUV Product Specifications****Construction**

- Die-formed steel back plate is post-painted to ensure durability
- Housing is constructed absent of holes
- Aluminum door frame miter cut, and mechanically fastened for a precision fit
- Frame weld and ground, for a seamless appearance

Mounting

- Integral grid clips secure fixture to the ceiling structure
- Accessory CGT EQ clips available to mechanically fasten the clips to the fixture, and the fixture to the ceiling system
- Junction box constructed of code gauge galvanized steel with access plate
- Multiple 7/8" KO's provided, suitable for up to 12AWG wiring
- Surface and suspension kits available for use in grid or hard surfaces. Please note that the Suspension kit will be available in early 2023.
- Factory installed flexible cable with dimming leads available

Controls

- NUV 120-347V driver with 0-10V dimming, 10% standard
- Can be used with tile mounted sensor or other remote mount controls
- Selectable driver for three color temperature choices and three lumen package choices

Electrical

- CGTS NUV projected lumen maintenance based on TM21 testing standards is >L82 @60,000 hours
- Driver rated for FCC part 15 Class B for use in residential or commercial applications
- LEDs are 85 CRI (minimum) and switch to 3500K, 4000K, and 5000K

Optical Shielding

- Acrylic micro-optics enable uniform distribution of LEDs for uniform lens illumination
- Smooth, frosted lens delivers uniform illumination across the entire lens
- Durable lens with surface texture to minimize scratch and impact damage

Certifications

- cULus listed for 25C ambient environments, indoor applications
- UL damp location listed
- IC rated for direct insulation contact
- IESNA LM-79 and LM-80 standards compliant
- Qualifies as State of California Title 24 high efficiency luminaire
- FCC part 15 class B (residential) compliant
- DesignLights Consortium® Qualified and classified for DLC standard. Refer to the DLC Qualified Products list at www.designlights.org/QPL to confirm which versions are qualified
- Meets IP5X rating from the room side with no modification needed

Warranty

- Five year standard warranty
- Extended ten year warranty available

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

24CGTS-NUV

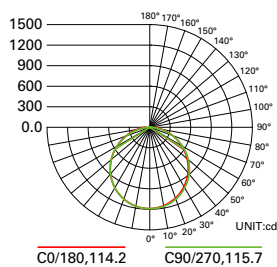
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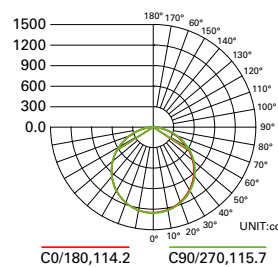
ML&C24-119319

Metalux**CGTS NUV****Photometric Data**

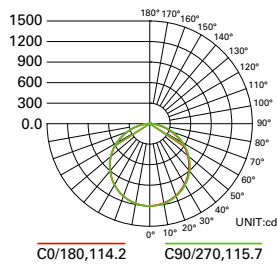
View IES files

**14CGTS-NUV-3035C**

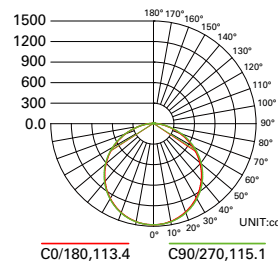
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.28 x mounting height, (L) 1.28 x mounting height
Lumens: 3529
Input Watts: 30W
Efficacy: 119.8 LPW
Test Report: 14CGTS-NUV-3035C.IES

**14CGTS-NUV-3040C**

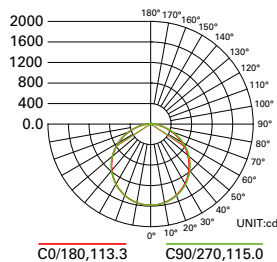
Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.28 x mounting height, (L) 1.28 x mounting height
Lumens: 3716
Input Watts: 30W
Efficacy: 132.1 LPW
Test Report: 14CGTS-NUV-3040C.IES

**14CGTS-NUV-3050C**

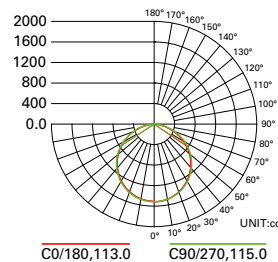
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.28 x mounting height
Lumens: 3568
Input Watts: 30W
Efficacy: 121.8 LPW
Test Report: 14CGTS-NUV-3050C.IES

**22CGTS-NUV-4035C**

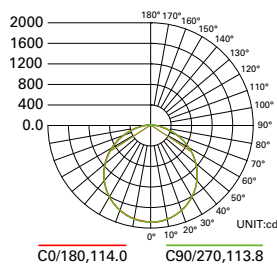
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.28 x mounting height
Lumens: 4320
Input Watts: 40W
Efficacy: 113.3 LPW
Test Report: 22CGTS-NUV-4035C.IES

**22CGTS-NUV-4040C**

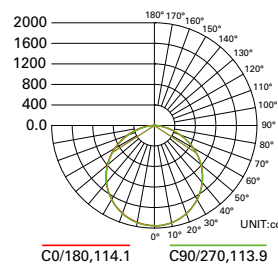
Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 4615
Input Watts: 40W
Efficacy: 126.5 LPW
Test Report: 22CGTS-NUV-4040C.IES

**22CGTS-NUV-4050C**

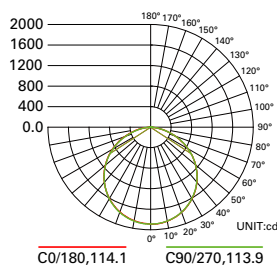
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.26 x mounting height, (L) 1.27 x mounting height
Lumens: 4386
Input Watts: 40W
Efficacy: 114.7 LPW
Test Report: 22CGTS-NUV-4050C.IES

**24CGTS-NUV-5035C**

Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 5483
Input Watts: 50W
Efficacy: 110.1 LPW
Test Report: 24CGTS-NUV-5035C.IES

**24CGTS-NUV-5040C**

Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 5664
Input Watts: 50W
Efficacy: 119.5 LPW
Test Report: 24CGTS-NUV-5040C.IES

**24CGTS-NUV-5050C**

Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.27 x mounting height, (L) 1.27 x mounting height
Lumens: 5469
Input Watts: 50W
Efficacy: 111.3 LPW
Test Report: 24CGTS-NUV-5050C.IES



Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO Commercial

HC4 | HM4 | 41/41PS

4-inch LED downlight and wall wash

Typical Applications

Office • Healthcare • Hospitality • Institutional • Mixed-Use/Retail

Interactive Menu

- Order Information page 2
- Product Specifications page 4
- Photometric Data page 5
- Energy & Performance Data page 8
- Connected Systems page 10
- Product Warranty

Product Certification



Product Features



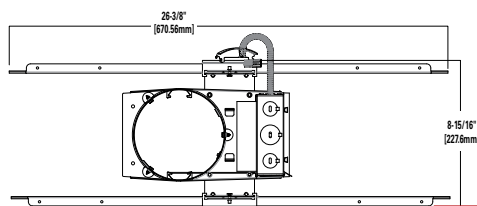
Control Compatibility



Top Product Features

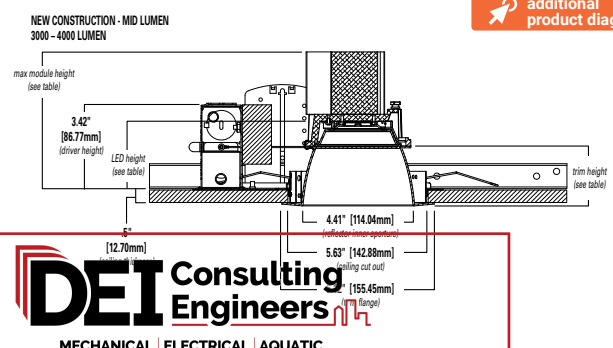
- New construction/remodel series; 500 to 6,000 lumens
- Narrow, Medium and Wide distributions; Wall wash with rotatable linear spread lens
- 2700K, 3000K, 3500K, 4000K and 5000K CCT; 80 or 90 CRI
- Universal voltage 120V-277V; Standard 0-10V driver dims to 1%
- Mounting frame converts to remodel that installs from below the ceiling
- Quick Spec emergency backup mounting frames - fast delivery option

Dimensional and Mounting Details



Mid Lumen (3000 - 4000 Lumens)

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	5.6"	2.5"	2.9"
Medium	5.7"	2.6"	3.0"
Wide	5.5"	2.4"	2.8"
Baffle	5.5"	2.4"	2.8"



This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Reviewed | <input type="checkbox"/> Reviewed As Noted |
| <input type="checkbox"/> Not Reviewed | <input type="checkbox"/> Revise and Resubmit |

HALO Commercial

HC4 | HM4 | 41/41PS

Mounting Frame Order Information

Sample Number: HC420D010REM7 - HM40525930 - 41MDC

A complete luminaire consists of a housing frame, LED module, and reflector (ordered separately)

Mounting Frame	Lumens	Driver Options	Factory Installed Emergency & Connected Lighting Options	Accessories (Order & Install Separately)
HC4 = 4" new construction downlight housing HC4CP = 4" new construction housing, Chicago Plenum - CCEA compliant	05 = 500 lm 07 = 750 lm 10 = 1000 lm 15 = 1500 lm 20 = 2000 lm 25 = 2500 lm 30 = 3000 lm 35 = 3500 lm 40 = 4000 lm 45 = 4500 lm ⁽⁷⁾ 50 = 5000 lm ⁽⁷⁾ 55 = 5500 lm ⁽⁷⁾ 60 = 6000 lm ⁽⁷⁾	D010=UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls Canada Option 500-5000 lumens: D010347 = 347VAC 50/60Hz 0-10V 1%-100% dimming. For 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000lm models only ⁽¹⁾ Canada Option 5500-6000 lumens: D010X347 = step down transformer factory installed (with standard "D010" 120V-277V LED driver). For 5500, 6000lm models only ⁽¹⁾ DLV = Distributed Low Voltage dimming driver 1%-100%, 1000-4000 lumens only. For use with DLVP system only, refer to DLVP specifications for details. ⁽¹⁾	REM7 = 7 watt emergency battery pack with remote test / indicator light, use with D010 only ^{(1) (2) (6)} REM14 = 14 watt emergency battery pack with remote test / indicator light, use with D010 only ^{(1) (2) (6)} REM7 = 7 watt emergency battery pack with integral test / indicator light, use with D010 only ^{(1) (2) (6) (10)} REM14 = 14 watt emergency battery pack with integral test / indicator light, use with D010 only ^{(1) (2) (6) (10)} BOD7ST = 7.5 watt Bodine self-test emergency battery pack with remote test / indicator light, use with D010 only ^{(1) (2) (6)} WTA = Factory WaveLinX PRO Tilemount Sensor Kit ⁽⁴⁾ WTK = Factory WaveLinX LITE Tilemount Sensor Kit ⁽⁵⁾ WPN = WaveLinX PRO Wireless Node without Sensor ⁽¹¹⁾ WLN = WaveLinX LITE Wireless Node without Sensor ⁽¹²⁾ REM7 = 7 watt emergency battery pack with remote test / indicator light, use with DLV only ^{(1) (2) (3) (6)} REM14 = 14 watt emergency battery pack with remote test / indicator light, use with DLV only ^{(1) (2) (3) (6)} REM7 = 7 watt emergency battery pack with integral test / indicator light, use with DLV only ^{(1) (2) (3) (6) (10)} REM14 = 14 watt emergency battery pack with integral test / indicator light, use with DLV only ^{(1) (2) (3) (6) (10)}	HB128APK = L channel hanger bar, 26", pair (replacement) RMB22 = Adjustable wood joist mounting bars, pair, extend to 22" long H347 = 347 to 120V step down transformer, 75VA H347Z00 = 347 to 120V step down transformer, 200VA WTA = Field WaveLinX PRO Tilemount Sensor Kit ⁽⁴⁾ WTK = Field WaveLinX LITE Tilemount Sensor Kit ⁽⁵⁾
Notes	Notes	Notes	Notes	Notes
	(7) Marked Spacing: Center to Center of Adjacent Luminaires = 36" Center of Luminaire to Building Member = 18" Minimum overhead = 0.5	(1) Not available with CP models	(1) Not available with CP models (2) Not available with D010347 (347V models) (3) ULus for U.S. only (4) WTA = WaveLinX PRO tilemount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only (Refer to WaveLinX PRO specifications) (5) WTK = WaveLinX LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinX LITE specifications) (6) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C (10) IEM option requires compatible IEM reflector or baffle trim. See Trim Ordering below. (11) WPN = WaveLinX PRO wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. Not compatible with 347V or Chicago plenum. (Refer to WaveLinX PRO specifications.) (12) WLN = WaveLinX LITE wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. Not compatible with 347V or Chicago plenum. (Refer to WaveLinX LITE specifications.)	(4) WTA = WaveLinX PRO tilemount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only. (Refer to WaveLinX PRO specifications.) (5) WTK = WaveLinX LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only. (Refer to WaveLinX LITE specifications.)

Quick Spec Emergency Mounting Frame Order Information

Sample Number:

Quick Spec Emergency Mounting Frame: RR-HC420D010REM7

LED module and reflectors are ordered separately.

Order separately: LED Module: HM40525835 | Reflector: 41MDC

Select from the Quick Spec Mounting
Frame ordering information to receive the
Fast Delivery option for the frame.

Quick Spec Code	Mounting Frame	Lumens	Driver Options	Factory Installed Emergency Options	Accessories (Order & Install Separately)
RR = East Region BRR = West Region	HC4 = 4" new construction downlight housing	10 = 1000 lm 15 = 1500 lm 20 = 2000 lm 30 = 3000 lm 40 = 4000 lm	D010=UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls	REM7 = 7 watt emergency battery pack with remote test / indicator light, use with D010 only ^{(2) (6)} REM14 = 14 watt emergency battery pack with remote test / indicator light, use with D010 only ^{(2) (6)} REM7 = 7 watt emergency battery pack with integral test / indicator light, use with D010 only ^{(2) (6) (10)} REM14 = 14 watt emergency battery pack with integral test / indicator light, use with D010 only ^{(2) (6) (10)}	HB128APK = L channel hanger bar, 26", pair (replacement) RMB22 = Adjustable wood joist mounting bars, pair, extend to 22" long
Notes	Notes	Notes	Notes	Notes	Notes
				(2) Not available with D010347 (347V models) (6) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C (10) IEM option requires compatible IEM reflector or baffle trim. See Trim Ordering below.	

HALO Commercial

HC4 | HM4 | 41/41PS

LED Module Order Information

LED Module	Lumens	CRI/CCT
LED Module	Lumens	CRI/CCT
HM4 = 4" LED module	0525 = 500 - 2500 lumen	827 = 80CRI, 2700K
	3040 = 3000-4000 lumen	830 = 80CRI, 3000K
	4560 = 4500-6000 lumen	835 = 80CRI, 3500K
		840 = 80CRI, 4000K
		850 = 80CRI, 5000K
927 = 90CRI, 2700K		
930 = 90CRI, 3000K		
935 = 90CRI, 3500K		
940 = 90CRI, 4000K		
950 = 90CRI, 5000K		
Notes	Notes	Notes

Trim Order Information


Reflector	Distribution ⁽⁸⁾	Finish	Flange	Accessories
41 = 4" conical reflector	ND = narrow 50° beam angle 0.84 SC (nominal) MD = medium 60° beam angle 1.00 SC (nominal) WD = wide 75° beam angle 1.24 SC (nominal) RWW = rotatable wall wash with linear spread lens	C = Specular clear H = Semi-specular clear W = White	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	41RWWPK = Replacement part kit - wall wash lens insert - for use with 41RWW* only.
Notes	Notes	Notes	Notes	Notes
	(8) Values are nominal for white reflector, others may vary.			

Baffle	Distribution ⁽⁸⁾	Finish	Flange	Accessories
41 = 4" baffle reflector	WD = wide 75° beam angle 1.24 SC (nominal) RWW = rotatable wall wash with linear spread lens	BB = Black baffle WB = White baffle	Blank = White flange standard with BB, & WB BF = Black flange option available with BB	41RWWPK = Replacement part kit - wall wash lens insert - for use with 41RWW* only.
Notes	Notes	Notes	Notes	Notes
	(8) Values are nominal for white reflector, others may vary.			

Reflector	Distribution ⁽⁸⁾	Finish	Flange
41PS = 4" non-conductive polymer 'dead front' conical reflector ⁽⁹⁾	MD = medium 60° beam angle 1.00 SC (nominal)	W = White	Blank = White flange standard with W reflector
Notes	Notes	Notes	Notes
(9) 41PS* is 1000-3000 lumens Non-IC rated. 500 & 750 lumens IC rated. 41PS is not for use over 3000 lumens in Non-IC or over 750 lumens in IC.	(8) Values are nominal for white reflector, others may vary.		

IEM Reflector	Distribution ⁽⁸⁾	Finish	Flange	Integral Emergency
41 = 4" conical reflector for integral emergency only	ND = narrow 50° beam angle 0.84 SC (nominal) MD = medium 60° beam angle 1.00 SC (nominal) WD = wide 75° beam angle 1.24 SC (nominal)	C = Specular clear H = Semi-specular clear W = White	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	IEM = Reflector for use with integral emergency housings only. Provides access hole for integral emergency test switch.
Notes	Notes	Notes	Notes	Notes
	(8) Values are nominal for white reflector, others may vary.			

IEM Baffle	Distribution ⁽⁸⁾	Finish	Flange	Integral Emergency
41 = 4" baffle reflector for integral emergency only	WD = wide 75° beam angle 1.24 SC (nominal)	BB = Black baffle WB = White baffle	Blank = White flange standard with BB, & WB BF = Black flange option with BB	IEM = Reflector for use with integral emergency housings only. Provides access hole for integral emergency test switch.
Notes	Notes	Notes	Notes	Notes
	(8) Values are nominal for white reflector, others may vary.			

Submitted by Medgar Lighting & Controls Inc  Job Name: HDSB - Glenview Public School Gym Addition Engineer: DEI & Associates (Waterloo)	Catalog Number: HC410D010//HM40525840//41MDH Notes:	Type: <div style="font-size: 2em; font-weight: bold; text-align: center;">F</div> ML&C24-119319
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HALO Commercial

HC4 | HM4 | 41/41PS

Product Specifications

Housing Frame

- Boat shaped galvanized steel plaster frame with adjustable plaster lip
- Accommodates 1/2" to 1-1/2" thick ceilings
- Installs in new construction or from below the finished ceiling (non-accessible) for remodeling
- Provided with two remodel clips to secure the frame to the ceiling

Universal Mounting Bracket

- Adjusts 2" vertically from above and below the ceiling
- Use with the included mounting bars or with 1/2" Electric Metallic Tube (EMT)
- Removable to facilitate remodeling installation from below the finished ceiling

Mounting Bars

- Captive pre-installed No Fuss™ mounting bars lock to T-grid with screwdriver or pliers
- Centering detents allow for consistent positioning of fixtures

LED Module

- Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation
- Available in 80 or 90 color rendering index (CRI)
- Color accuracy within 3 SDCM provides color consistency and uniformity
- 90 CRI option: R9>50 (refer to chromaticity information for details)
- Available in 2700K, 3000K, 3500K, 4000K and 5000K correlated color temperature (CCT)
- Lumen options include 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000 lumens (nominal)
- Passive thermal management achieves 60,000 hours at 70% lumen maintenance (L70) in insulated ceilings (IC) and non-IC applications
- Integral diffuse lens provides visual shielding
- Integral connector allows quick connection to housing flex

Reflector

- Self-flanged aluminum reflectors available in narrow, medium or wide distribution patterns
- Medium distribution polymer non-conductive matte white reflector may be used to meet local codes for 'dead front' applications (500 & 750 lumen max. in IC and 3000 lumen max. in Non-IC)
- Wall wash reflector features a rotatable linear spread lens for alignment of vertical illumination
- Reflectors attach to LED module with three speed clamps
- Available in multiple painted or plated finishes

Reflector/Module Retention

- Reflector/module assembly is securely retained in the housing with two torsion springs

Driver

- Field-replaceable constant current driver provides low noise operation
- Universal 120-277VAC 50/60Hz input standard
- Continuous, 1% to 100% dimming with 0-10V analog control
- Optional low-voltage DC driver for use with Distributed Low Voltage Power (DLVP) system
- Distributed Low Voltage Power (DLVP) system combines power, lighting and controls with ease of installation (refer to DLVP Design Guide at www.cooperlighting.com for details)

Canada Options

- 347VAC 50/60Hz; 1% dimming on 0-10V analog control, for 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000 lumen models only
- 347V step down transformer factory installed with the standard "D010" 120V-277V, LED driver on 5500, 6000 lumen models only

Emergency Option

- Provides 90 minutes of standby lighting, meeting most life safety codes for egress lighting
- Available with integral or remote charge indicator and test switch
- Available Self-Test (self-diagnostic) with remote charge indicator and test switch
- Quick Spec emergency ordering option for quick-turn projects

Connected Lighting System

Two WaveLinx connected solutions to choose from. Refer to WaveLinx system specifications and application guides for details.

WaveLinx PRO Tilemount Sensor Kit

- WaveLinx PRO WTA tilemount sensor kit offers daylight dimming, PIR motion sensing, scene and zone configuration, automatic commissioning; and optional RLTS - Real Time Location Services available.

WaveLinx PRO Wireless Node

- WaveLinx PRO WPN wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. **Note:** Not compatible with 347V or Chicago plenum.

WaveLinx LITE Tilemount Sensor Kit

- WaveLinx LITE WTK tilemount sensor kit offers daylight dimming and PIR motion sensing, scene and grouping configuration.

WaveLinx LITE Wireless Node

- WaveLinx LITE WLN wireless node provides luminaire level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. **Note:** Not compatible with 347V or Chicago plenum.

WaveLinx Tilemount Sensor Kits Application

- The WTA and WTK tilemount sensor kits include a control module mounted on the luminaire junction box via 1/2" knock-out, and a tilemount sensor on 54-inch whip; for ceiling installation by direct-mount spring clips or via mounting bracket in octagon ceiling boxes.
- The WTA and WTK tilemount sensor kits may be ordered as factory installed on the luminaire, or ordered separately as a field installed accessory kit.
- **Note: WaveLinx PRO devices are only compatible with the WaveLinx PRO system.**
- **Note: WaveLinx LITE devices are only compatible with the WaveLinx LITE system.**

Junction Box

- Galvanized steel junction box
- 20 in³ internal volume excluding voltage barrier
- 25 in³ internal total volume
- Voltage barrier for 0-10V dimming wires (occupies one 1/2" pry-out space)
- Listed for eight #12 AWG (four in, four out) 90°C conductors and feed-thru branch wiring
- Three 1/2" and two 3/4" trade size pry-outs available
- Three 4-port push wire nuts for mains voltage with 1-port for fixture connection

Compliance

- cULus Certified to UL 1598 / C22.2 No. 250.0, suitable for damp locations and wet locations in covered ceilings only
 - Emergency options provided with UL Listed emergency drivers to UL 924 / C22.2 No. 141, suitable for indoor/damp locations
 - IP20 - Above finished ceiling; IP64 - Below finished ceiling
 - Non-Insulated ceiling (Non-IC) rated for 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000 lumen models (insulation must be kept 3" from top and sides)
 - Insulated ceiling (IC) rated for 500, 750, 1000, 1500 lumen models and suitable for direct contact with air permeable insulation* (IC models are also suitable for Non-IC installations)
 - Non-IC marked spacing required for 4500, 5000, 5500, 6000 lumen models
 - Marked Spacing Center to Center of Adjacent Luminaires = 36"
 - Center of Luminaire to Building Member = 18"
 - Minimum overhead = 0.5"
 - Airtight per ASTM-E283-04
 - Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
 - EMI/RFI emissions FCC CFR Title 47 Part 15 Class A at 120/277V
 - Contains no mercury or lead and RoHS compliant
 - Photometric testing completed in accordance of IES LM-79-08
 - Lumen maintenance projection in accordance of IES LM-80-08 and TM-21-11
 - 1,000 and 1,500 lumen, 90 CRI, ICAT models may be used to comply with State of California Title 24 residential code, per JA8 certification standards
 - May be used to comply with State of California Title 24 non-residential code as a dimmable LED luminaire
 - ENERGY STAR® certified, reference certified light fixtures database
- *Not for use in direct contact with spray foam insulation, consult NEMA LSD57-2013

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

HC410D010//HM40525840//41MDH

Notes:

Type:**F**

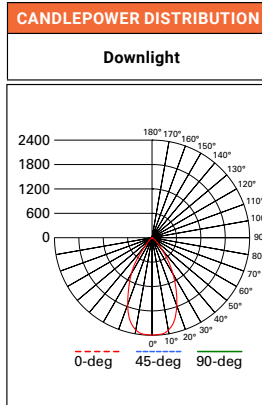
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HALO Commercial**HC4 | HM4 | 41/41PS****Photometric Data**

View IES files

NARROW DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

NARROW (50° BEAM*)	
Test Number	P571728
Housing	HC420D010
Module	HM40525835
Reflector	41NDC
Lumens	2010 Lm
Efficacy	100.5 Lm/W
SC	0.84
UGR	12.2



CONE OF LIGHT

MH	FC	L	W
5.5'	79.3	4.6	4.6
7'	49	5.8	5.8
8'	37.5	6.6	6.6
9'	29.6	7.4	7.4
10'	24	8.4	8.4
12'	16.7	10	10

CANDELA TABLE

Degrees Vertical	Candela
0	2400
5	2387
15	2110
25	1368
35	676
45	152
55	23
65	5
75	1
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	1436	71.5
0-40	1848	92
0-60	2002	99.6
0-90	2010	100
90-180	0	0
0-180	2010	100

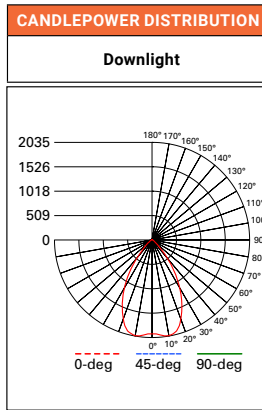
LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	26514
55	4968
65	1576
75	667
85	0

*Value are nominal for specular clear reflectors, other may vary.
SC = Spacing Criteria
UGR = Unified Glare Rating

MEDIUM DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

MEDIUM (60° BEAM*)	
Test Number	P571727
Housing	HC420D010
Module	HM40525835
Reflector	41MDC
Lumens	2096 Lm
Efficacy	104.8 Lm/W
SC	1.0
UGR	13.6



CONE OF LIGHT

MH	FC	L	W
5.5'	65.3	5.4	5.4
7'	40.3	6.8	6.8
8'	30.9	7.8	7.8
9'	24.4	8.8	8.8
10'	19.8	9.8	9.8
12'	13.7	11.8	11.8

CANDELA TABLE

Degrees Vertical	Candela
0	1969
5	1997
15	1974
25	1467
35	800
45	192
55	26
65	4
75	1
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	1408	67.1
0-40	1899	90.6
0-60	2091	99.7
0-90	2096	100
90-180	0	0
0-180	2096	100

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	33405
55	5548
65	1197
75	667
85	0

*Value are nominal for specular clear reflectors, other may vary.
SC = Spacing Criteria
UGR = Unified Glare Rating

Note: Refer to IES files for more product data.

HALO Commercial

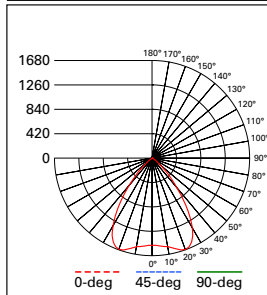
HC4 | HM4 | 41/41PS

WIDE DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

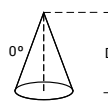
WIDE (75° BEAM*)	
Test Number	P571730
Housing	HC420D010
Module	HM40525835
Reflector	41WDC
Lumens	2304 Lm
Efficacy	115.2 Lm/W
SC	1.25
UGR	15.7

CANDLEPOWER DISTRIBUTION

Downlight



CONE OF LIGHT



MH	FC	L	W
5.5'	49.9	6.8	6.8
7'	30.8	8.6	8.6
8'	23.6	9.8	9.8
9'	18.6	11.2	11.2
10'	15.1	12.4	12.4
12'	10.5	14.8	14.8

CANDELA TABLE

Degrees Vertical	Candela
0	1509
5	1525
15	1630
25	1603
35	1012
45	369
55	44
65	5
75	1
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30	1334	57.9
0-40	1960	85.1
0-60	2296	99.7
0-90	2304	100
90-180	0	0
0-180	2304	100

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	64437
55	9355
65	1576
75	667
85	0

*Value are nominal for specular clear reflectors, other may vary.
SC = Spacing Criteria
UGR = Unified Glare Rating

Photometric Multipliers (Nominal Lumen Values)

500 Lumen	750 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen	3500 Lumen
0.33	0.44	0.54	0.74	1.00	1.24	1.54	1.85

4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen
2.15	2.28	2.44	2.52	2.62

Multipliers for relative lumen values with other series models.

Color Finish Multipliers

Finish code	C	H	W/WB	BB
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.94	0.88	0.76

Multipliers for relative lumen values with other color finishes.

CCT Multipliers - 80CRI

2700K	3000K	3500K	4000K	5000K
0.89	0.96	1.00	1.03	1.03

Multipliers for relative lumen values with other series color temperatures.

CCT Multipliers - 90CRI

2700K	3000K	3500K	4000K	5000K
0.76	0.85	0.89	0.93	0.93

Multipliers for relative lumen values with other series color temperatures.

Note: Refer to IES files for more product data.

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

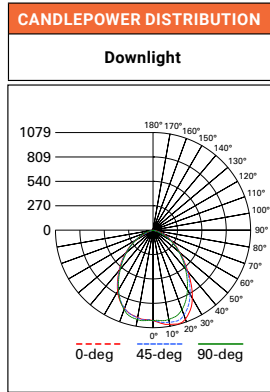
HC410D010//HM40525840//41MDH

Notes:**Type:****F**

ML&C24-119319

HALO Commercial**HC4 | HM4 | 41/41PS****WALL WASH DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K**

WALL WASH	
Test Number	P571729
Housing	HC420D010
Module	HM40525835
Reflector	41RWWC
Lumens	2094 Lm
Efficacy	104.7 Lm/W
SC	1.15



CANDELA TABLE	
Degrees Vertical	Candela
0	1005
5	1041
15	1079
25	980
35	743
45	494
55	312
65	180
75	80
85	10
90	0

ZONAL LUMEN SUMMARY		
Zone	Lumens	% Fixture
0-30	789	37.7
0-40	1221	58.3
0-60	1872	89.4
0-90	2094	100
90-180	0	0
0-180	2094	100

LUMINANCE	
Average Candela Degrees	Average 0° Luminance
45	86207
55	67159
65	52681
75	38173
85	13445

SC = Spacing Criteria, nominal for specular clear reflector, other may vary.

SINGLE UNIT FOOTCANDLES							
2.5' from wall (distance from fixture along wall)							
1	18.7	13.6	6.1	2.3	0.8	0.3	0.1
2	28.4	22.3	12.2	5.7	2.6	1.2	0.6
3	25.9	21.4	13.3	7.2	3.8	2	1.1
4	19.6	16.9	11.6	7	4.1	2.4	1.4
5	13.6	12.3	9.2	6.2	3.9	2.5	1.5
6	9.3	8.6	7	5.1	3.5	2.3	1.6
7	6.4	6.1	5.2	4.1	3	2.1	1.5
8	4.6	4.4	3.9	3.2	2.5	1.8	1.3
9	3.3	3.2	2.9	2.5	2	1.6	1.2
10	2.5	2.4	2.2	2	1.7	1.4	1.1

MULTIPLE UNIT FOOTCANDLES								
2.5' from wall (Distance from fixture along wall)						2.5' from wall (Distance from fixture along wall)		
3						4		
1	21	18.8	21	19.5	12.1	19.5	31	24.4
2	34.1	34.1	34.1	31	24.4	31	29.7	26.5
3	33.1	34.4	33.1	29.7	26.5	29.7	23.7	23.3
4	26.7	28.7	26.7	23.7	23.3	23.7	17.5	18.5
5	19.8	21.7	19.8	17.5	18.5	17.5	12.8	14
6	14.4	15.8	14.4	12.8	14	12.8	9.4	10.4
7	10.5	11.4	10.5	9.4	10.4	9.4	7	7.7
8	7.8	8.3	7.8	7	7.7	7	5.4	5.9
9	5.8	6.2	5.8	5.4	5.9	5.4	4.1	4.5
10	4.4	4.7	4.4	4.1	4.5	4.1		

Photometric Multipliers (Nominal Lumen Values)

500 Lumen	750 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen	3500 Lumen
0.33	0.44	0.54	0.74	1.00	1.24	1.54	1.85

4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen
2.15	2.28	2.44	2.52	2.62

Multipliers for relative lumen values with other series models.

Color Finish Multipliers

Finish code	C	H	W/WB	BB
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.94	0.88	0.76

Multipliers for relative lumen values with other color finishes.

CCT Multipliers - 80CRI

2700K	3000K	3500K	4000K	5000K
0.89	0.96	1.00	1.03	1.03

Multipliers for relative lumen values with other series color temperatures.

CCT Multipliers - 90CRI

2700K	3000K	3500K	4000K	5000K
0.76	0.85	0.89	0.93	0.93

Multipliers for relative lumen values with other series color temperatures.

Note: Refer to IES files for more product data.

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

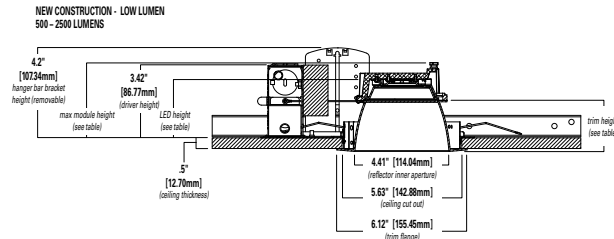
Catalog Number:

HC410D010//HM40525840//41MDH

Notes:

Type:**F**

ML&C24-119319

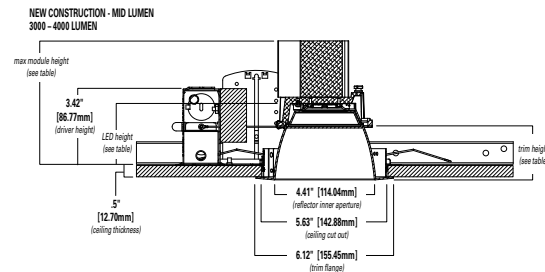
HALO Commercial**HC4 | HM4 | 41/41PS****Dimensional and Mounting Details****NEW CONSTRUCTIONS - LOW LUMEN 500 – 2500 LUMENS****Low Lumen (500 – 2500 Lumens)***

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	3.6"	2.5"	2.7"
Medium	3.7"	2.6"	2.8"
Wide	3.5"	2.4"	2.6"
Baffle	3.1"	2.4"	2.6"

*Max. height w/removable hanger bar bracket 4.2"



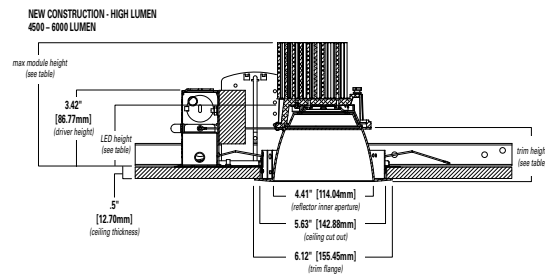
Low Lumen Module

NEW CONSTRUCTIONS - MID LUMEN 3000 – 4000 LUMENS**Mid Lumen (3000 – 4000 Lumens)**

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	5.6"	2.5"	2.9"
Medium	5.7"	2.6"	3.0"
Wide	5.5"	2.4"	2.8"
Baffle	5.5"	2.4"	2.8"



Mid Lumen Module

NEW CONSTRUCTIONS - HIGH LUMEN 4500 – 6000 LUMENS**High Lumen (4500 – 6000 Lumens)**

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	5.9"	2.5"	2.9"
Medium	6.0"	2.6"	3.0"
Wide	5.8"	2.4"	2.8"
Baffle	5.8"	2.4"	2.8"



High Lumen Module

HALO Commercial

HC4 | HM4 | 41/41PS

Connected Solutions



WaveLinX LITE Wireless Node - WLN

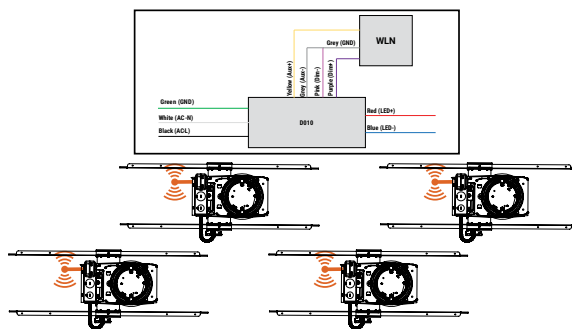
WaveLinX LITE devices only compatible with the WaveLinX LITE system.

- Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
- Up to 28 unique areas per project site (WaveLinX LITE Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Refer to the WaveLinX system specifications for details

WaveLinX mobile app settings



WaveLinX LITE Wireless Node (WLN) Wiring Diagram



WaveLinX LITE Bluetooth Enabled System



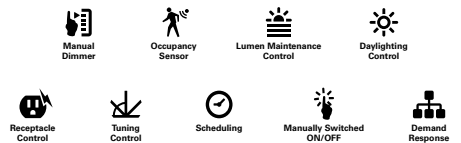
WaveLinX PRO Wireless Node - WPN

WaveLinX PRO devices only compatible with the WaveLinX PRO system.

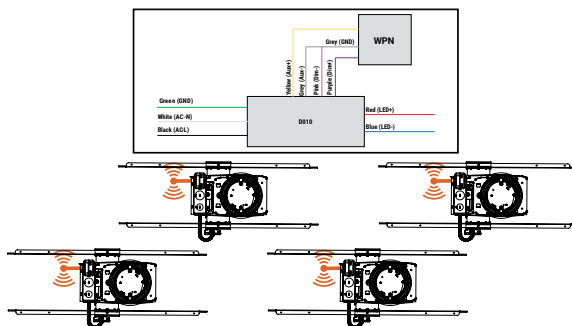
- WaveLinX Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with WaveLinX Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



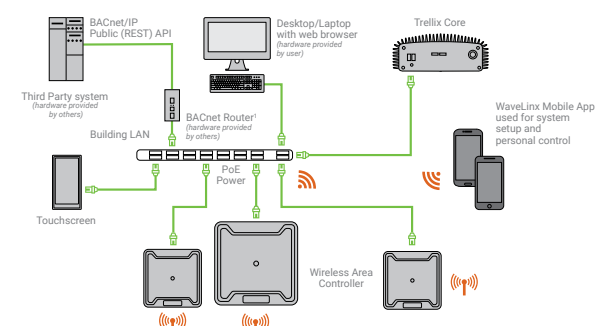
WaveLinX mobile app settings



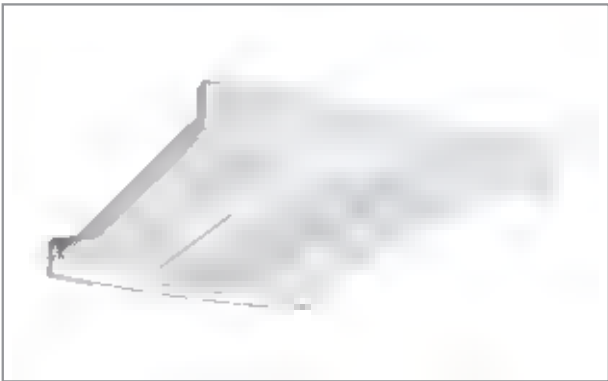
WaveLinX PRO Wireless Node (WPN) Wiring Diagram



WaveLinX CORE Building Management Integration



Project		Catalog #		Type	
Prepared by		Notes		Date	



Metalux

OHB LED

LED High Bay Efficiency Luminaire
2' Length

Typical Applications

Industrial • Commercial • Manufacturing • Food Processing •
Sports / Multi-Purpose

Interactive Menu

- Order Information page 2
- Photometric Data page 3
- Control Solutions page 6
- Product Warranty

Product Certification



Product Features

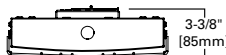
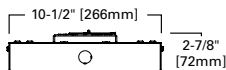


Top Product Features

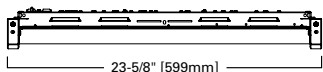
- Precision designed optical performance
- Offered in both standard and high efficacy versions
- High performance efficacy up to 200 lm/W
- Efficient 1-for-1 replacement of linear fluorescent & HID fixtures
- Lumen packages – 9K, 12K, 15K, 18K, 24K, 30K, 36K
- Narrow, medium, and wide distribution
- Options to meet Buy American and other domestic preference requirements

Dimensional and Mounting Details

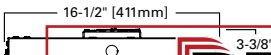
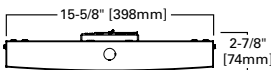
OHB-9SE, 12SE, 15SE



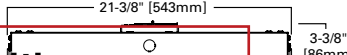
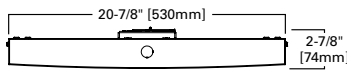
2' Side View



OHB-9HE, 12HE, 15HE, 18HE, 18SE, 24SE, 30SE



OHB-24HE, 30HE, 36SE



MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Reviewed | <input type="checkbox"/> Reviewed As Noted |
| <input type="checkbox"/> Not Reviewed | <input type="checkbox"/> Revise and Resubmit |

additional product diagrams

Metalux

OHB

Order Information

SAMPLE ORDER NUMBER: **OHB-24SE-MFL-UNV-L840-CD-WLS4-U** Includes V Hangers for rapid installation

Domestic Preferences ⁽¹⁾	Series ⁽²⁾	Lumen Package	Efficacy	Distribution/ Shielding	Voltage ^{(4), (5), (6)}	CCT/CRI
[Blank]=Standard BAA=Buy American Act TAA=Trade Agreements Act	OHB=Optimized High Bay, 2 ft.	9=9,000 Lumens 12=12,000 Lumens 15=15,000 Lumens 18=18,000 Lumens 24=24,000 Lumens 30=30,000 Lumens 36=36,000 Lumens	SE=Standard Efficacy HE=High Efficacy ⁽³⁾	A=Aisle N=Narrow MFL=Medium Frosted MCL=Medium Clear W=Wide NL=No Lens	120V=120 Volt 277V=277 Volt 347V=347 Volt 480V=480 Volt UNV=Universal Voltage 120-277 UNC=Universal Voltage 347/480	L730=70CRI / 3000K L735=70CRI / 3500K L740=70CRI / 4000K L750=70CRI / 5000K L830=80CRI / 3000K L835=80CRI / 3500K L840=80CRI / 4000K L850=80CRI / 5000K L930=90CRI / 3000K L935=90CRI / 3500K L940=90CRI / 4000K L950=90CRI / 5000K
Notes (1) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.	Notes (2) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.		Notes (3) HE not available for 36K lumens.		Notes (4) Voltage must be specified when ordered with plugs or emergency drivers. (5) When ordering sensor or EBP/TO option, specify as UNV (for 120V or 277V), 347V or 480V. (6) Ambient temperatures limited to 40C when using emergency, sensors, or SLTD in conjunction with 347V or 480V.	

Options	Driver Type	Wiring	Options / Integrated Sensor	Packaging
UPL =Uplight (Select lumens from 12, 15, 18, 24, 30, 36) Refer to compatibility chart below ⁽¹⁵⁾ Emergency * EL20W =20-watt 120V-277V emergency battery pack installed ^{(7), (8), (10), (11), (12), (14)} EL20-W-REM =20-watt 120V-277V emergency battery pack remote mounted ^{(7), (8), (11), (12), (14)} ETRD = 120-277V Emergency Transfer Relay with dimming control ^{(9), (10), (13)}	CD=Standard Dimming Driver SLTD=DALI Driver ^{(16), (17), (18)}	C3 (1)=1 Circuit, 3' Cord with no Plug C3 (2)=2 Circuits, 3' Cord with no Plug C6 (1)=1 Circuit, 6' Cord with no Plug C6 (2)=2 Circuits, 6' Cord with no Plug C10 (1)=1 Circuit, 10' Cord with no Plug C10 (2)=2 Circuits, 10' Cord with no Plug PC3/120=(NEMA L5-15P) 3' Cord with NEMA Plug PC3/277=(NEMA L7-15P) 3' Cord with NEMA Plug PC3/347=(NEMA L24-20P) 3' Cord with NEMA Plug PC3/480=(NEMA L8-20P) 3' Cord with NEMA Plug PC6/120=(NEMA L5-15P) 6' Cord with NEMA Plug PC6/277=(NEMA L7-15P) 6' Cord with NEMA Plug PC6/347=(NEMA L24-20P) 6' Cord with NEMA Plug PC6/480=(NEMA L8-20P) 6' Cord with NEMA Plug	MP=Modular Plug ⁽²⁰⁾ PAF=Painted After Fabrication HA=High Ambient ^{(21), (22)} IP5X=Optics IP5X rated Integrated Sensors MS=360° or 180° Motion Sensor Installed, (specify voltage) ^{(19), (23), (27)} OEPF010VMV=Occupancy Sensor with Integrated Photocell ^{(19), (23), (28)} FSP-211/L7=PIR Occupancy Sensor with integral 0-10V Dimming ^{(19), (23), (24), (27)} FSP-321/L7=PIR Occupancy Sensor with Integral 0-10V dimming ^{(19), (24), (26)} LWR=Enlightened Wireless Sensor system ^{(19), (27)} WLS4=WaveLinX LITE, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{(19), (27), (29), (31)} WPS4=WaveLinX PRO, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{(19), (27), (31)} ZLD1Z=Leviton 120-277V PIR Occupancy Sensor with integral 0-10V Dimming ^{(24), (26)} ZLDUZ=Leviton 347-480V PIR Occupancy Sensor with integral 0-10V Dimming ^{(19), (24), (25), (27)}	U=Unit Pack PALC=Job Pack, in carton
Notes * Emergency and transfer devices are UL924 listed. (7) For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack. (8) EM options available in 0°C - 45°C ambient. (9) Used to transfer fixture to secondary power during outage. Must be used in conjunction with UL 1008 device (provided by others). (10) OHB-SPM mounting not available with EL20W or ETRD options. (11) Refer to Ambient Chart for temperature ratings. (12) Ambient temperatures limited to 40C when using emergency, sensors, or SLTD in conjunction with 347V or 480V. (13) Not available with 36SE lumen package. (14) Not available with UNC (347V or 480V) for 36K lumens due to space constraints. (15) Uplight not available in 70CRI, 480v or UNC, 9k lumens. Not available when combining 36SE and ETRD. *Ambient temp limited to 40C.	Notes (16) Sensor or UNC not available in conjunction with SLTD driver. (17) SLTD not available for 36SE Lumen Package. (18) UPL12 not available in conjunction with SLTD	Notes (19) When ordering sensor or EBP/TO option, specify as UNV (for 120V or 277V), 347V or 480V. (20) Requires use of MC or MPC cord accessories, specify voltage for plugs (MP). (21) High Ambient not available with integrated emergency. (22) HA not offered for 9HE, 9SE, 12HE, 12SE, 15HE, 24HE, 24SE, 30HE, and 36SE. (23) Available for UNV (for 120V or 277V) only. (24) Available for UNC (for 347V or 480V) only. (25) UNV and 347V only. (26) Sensor requires sidcar when specified in 36K lumen package. (27) Sensor option not available for 36K lumen package with 347V or 480V. (28) Sensor option not available for 36K lumen package with 480V.		

Accessories (order separately) ⁽³¹⁾
OHB-WG112=Wire guard for 9SE, 12SE and 15SE OHB-WG162=Wire guard for 12HE, 12HE, 15HE, 18HE, 18SE , 24SE, and 30SE OHB-WG222=Wire guard for 24HE, 30HE, and 36SE Y-TOGGLE...-2PK=(2) Y-Toggle Cable Kits (Specify 10 or 30 for length in feet) FH-1=Fixture Hook ⁽³⁰⁾ FL-1=Fixture Loop ⁽³⁰⁾ OHB-SPM=Single Point Mounting Hub ⁽²⁹⁾ MPC3=3' Modular Power Cord & Plug (Specify Voltage) MPC6=6' Modular Power Cord & Plug (Specify Voltage) MC3=3' Modular Power Cord MC6=6' Modular Power Cord
Notes (29) Single Point Mounting not available with integrated emergency. (30) Must be used in conjunction with OHB-SPM accessory for proper installation. (31) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

Downlight Lumens SE & HE		Uplight Lumens and Wattage					
		UPL12	UPL15	UPL18	UPL24	UPL30	UPL36
		1200	1500	1800	2400	3000	3600
OHB	12	12,000	X	X			
	15	15,000		X	X		
	18	18,000	X		X		
	24	24,000	X			X	X
	30	30,000		X			
	36	36,000			X		X

Notes: Uplight not available in 70 CRI

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

OHB-18SE-MFL-UNV-L840-CD-U//
OHB-WG162-U

Notes: SUSPENSION BY OTHERS.

Type:**G**

ML&C24-119319

Metalux**OHB****Product Specifications****Construction**

- Rugged and durable scalable design with rigid, steel center channel
- Mechanically attached end caps provide strength and durability
- Suspension mounting with optional wire hook and chain set or cable; Single monopoint mounting with SPM tong hanger

Electrical

- Long-Life LED system coupled with electrical driver for optimal performance
- LED's available in 3000K, 3500K, 4000K and 5000K with 70 CRI, 80 CRI and 90 CRI options
- Electronic drivers are available for 120-277V, 347V and 480V applications
- 0-10V dimming control (standard)
- Operating temperature of -40°C to 55°C (refer to chart)

Emergency Battery Pack Option

- 20-watt, 120-277V integral emergency battery pack available to meet critical life-safety lighting requirements

- 90-minute batteries provide constant power to the LED system, ensuring code-compliance
- Integral emergency transfer relay available for generator equipped power systems

Optics

- Precision designed optics deliver even illumination
- Offered in narrow, medium and wide distributions

Shielding

- Standard lensing provides additional LED protection and optical control
- Optional wire guards available for more complex environments

Controls

- Integrated WaveLinX sensor options provide wireless individual fixture control and enable code compliance, increased energy savings, grouping of fixtures, and connection to WaveLinX control systems
- WaveLinX industrial sensors offer installation heights up to 40 feet (45ft major motion) and have coverage patterns up to 5000 square feet (see sensor specifications - field of view)

Finish

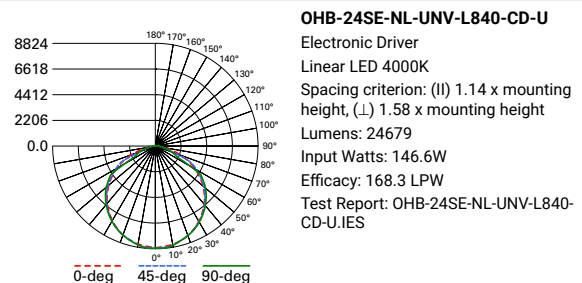
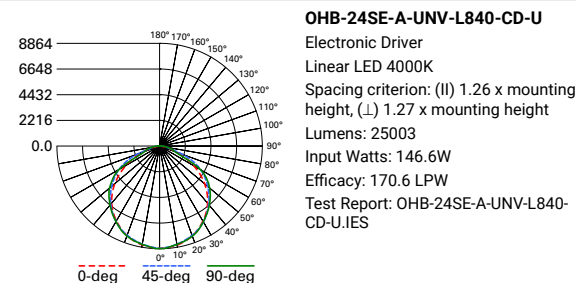
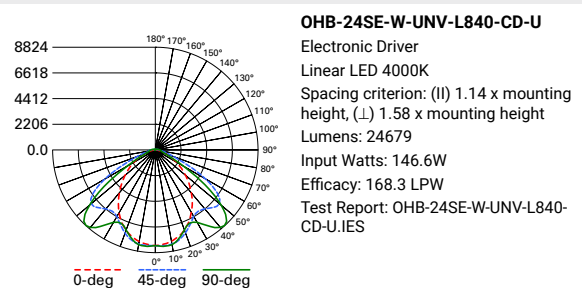
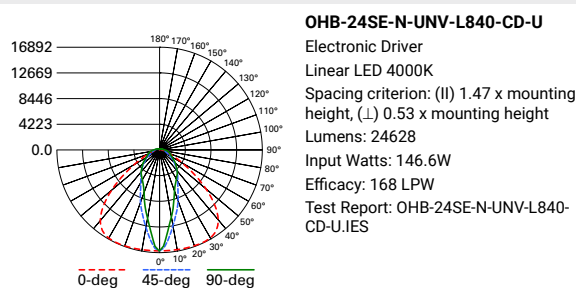
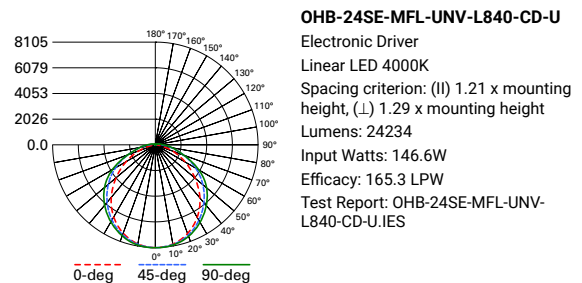
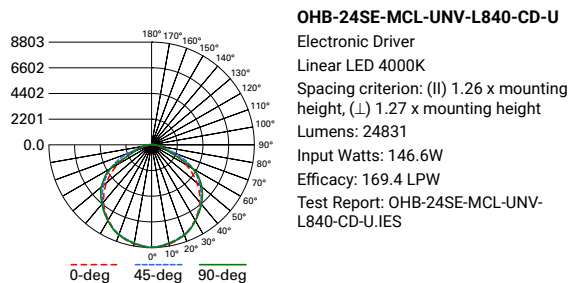
- White enamel finish preceded by a multistage cleaning cycle
- Iron phosphate coating with rust inhibitor protects against contaminants and oxidation

Compliance

- cULus listed for damp locations
- LED modules comply with IESNA LM-79 and LM-80 standards
- DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium (refer to www.designlights.org for details)

Warranty

- Five year warranty standard.

Photometric Data
[View IES files](#)


Metalux

OHB

Energy and Performance Data by Catalog Number

OHB SE- 5000K 70CRI													
Catalog Number	Lumen Output						Watts	Efficacy (LPW)					
	A	N	MFL	MCL	W	NL	277V	A	N	MFL	MCL	W	NL
OHB-9SE	9041	8905	8762	8978	8923	9365	54	167	165	162	166	165	173
OHB-12SE	12554	12366	12168	12468	12392	13005	75.6	166	163	161	165	164	172
OHB-15SE	15869	15631	15381	15760	15663	16439	97	164	161	159	162	161	169
OHB-18SE	19978	19678	19363	19840	19719	20695	108	185	182	179	184	183	192
OHB-24SE	26323	25927	25513	26142	25982	27268	147	179	176	174	178	177	185
OHB-30SE	31485	31012	30516	31268	31076	32615	181	174	171	169	173	172	180
OHB-36SE	37793	37226	36630	37533	37303	39150	226	167	165	162	166	165	173

OHB - SE 5000K 80CRI													
Catalog Number	Lumen Output						Watts	Efficacy (LPW)					
	A	N	MFL	MCL	W	NL	277V	A	N	MFL	MCL	W	NL
OHB-9SE	8612	8483	8347	8553	8501	8922	54	159	157	155	158	157	165
OHB-12SE	11960	11780	11592	11877	11805	12389	75.6	158	156	153	157	156	164
OHB-15SE	15117	14890	14652	15013	14921	15660	97	156	154	151	155	154	161
OHB-18SE	19031	18745	18445	18900	18784	19714	108	176	174	171	175	174	183
OHB-24SE	25076	24699	24304	24903	24751	25976	147	171	168	165	169	168	177
OHB-30SE	29993	29542	29070	29786	29604	31070	181	166	163	161	165	164	172
OHB-36SE	36003	35462	34895	35755	35536	37295	226	159	157	154	158	157	165

OHB - HE 5000K 70CRI													
Catalog Number	Lumen Output						Watts	Efficacy (LPW)					
	A	N	MFL	MCL	W	NL	277V	A	N	MFL	MCL	W	NL
OHB-9HE	9533	9390	9240	9468	9410	9876	52	183	181	178	182	181	190
OHB-12HE	12424	12237	12041	12338	12262	12870	70	177	175	172	176	175	184
OHB-15HE	15610	15375	15129	15502	15407	16170	80	195	192	189	194	193	202
OHB-18HE	18747	18465	18170	18618	18504	19420	105	179	176	173	177	176	185
OHB-24HE	24648	24278	23890	24478	24328	25533	128.6	192	189	186	190	189	199
OHB-30HE	30904	30440	29953	30691	30503	32014	166.6	185	183	180	184	183	192

OHB - HE 5000K 80CRI													
Catalog Number	Lumen Output						Watts	Efficacy (LPW)					
	A	N	MFL	MCL	W	NL	277V	A	N	MFL	MCL	W	NL
OHB-9HE	9082	8945	8802	9019	8964	9408	52	175	172	169	173	172	181
OHB-12HE	11835	11657	11471	11754	11682	12260	70	169	167	164	168	167	175
OHB-15HE	14870	14647	14412	14768	14677	15404	80	186	183	180	185	183	193
OHB-18HE	17858	17590	17309	17736	17627	18500	105	170	168	165	169	168	176
OHB-24HE	23480	23128	22758	23319	23176	24323	128.6	183	180	177	181	180	189
OHB-30HE	29440	28998	28534	29237	29058	30497	166.6	177	174	171	175	174	183

Optional Uplight will increase input wattages - refer to Uplight Chart for added wattage.

Metalux

OHB

Energy and Performance Data by Catalog Number

Ambient Ratings				Energy Data		Shipping Data	
Lumen Package	Standard	(HA) High Ambinet	EM	Input Watts:		Catalog No.	Wt.
OHB-9SE	65°C	–	45°C	9SE (9,000 lumens)=54W		OHB-9SE	10 lbs.
OHB-9HE	65°C	–	45°C	9HE (9,000 lumens)=52W		OHB-9HE	13 lbs.
OHB-12SE	55°C	–	45°C	12SE (12,000 lumens)=76W		OHB-12SE	10 lbs.
OHB-12HE	55°C	–	45°C	12HE (12,000 lumens)=70W		OHB-12HE	10 lbs.
OHB-15SE	45°C	55°C	45°C	15SE (15,000 lumens)=97W		OHB-15SE	13 lbs.
OHB-15HE	55°C	–	45°C	15HE (15,000 lumens)=80W		OHB-15HE	13 lbs.
OHB-18SE	45°C	55°C	45°C	18SE (18,000 lumens)=108W		OHB-18SE	13 lbs.
OHB-18HE	45°C	55°C	45°C	18HE (18,000 lumens)=105W		OHB-18HE	13 lbs.
OHB-24SE	55°C	–	45°C	24SE (24,000 lumens)=147W		OHB-24SE	13 lbs.
OHB-24HE	55°C	–	45°C	24HE (24,000 lumens)=130W		OHB-24HE	13 lbs.
OHB-30SE	45°C	50°C	45°C	36SE (30,000 lumens)=181W		OHB-30SE	16 lbs.
OHB-30HE	55°C	–	45°C	30HE (30,000 lumens)=169W		OHB-30HE	16 lbs.
OHB-36SE	50°C	–	45°C	36SE (36,000 lumens)=226W		OHB-36SE	20 lbs.

Optional Uplight will increase input wattages - refer to Uplight Chart for added wattage.

Modular Power Supply Option

Modular Power Supply option is available for use with all F-Bay products. The modular power supply allows external fixture access for safe and easy servicing. There is no need to remove lamps or reflectors to disconnect fixture power with Modular Power Supply. Access to the individual fixture's power supply allows servicing without turning off all the fixtures, disrupting occupants. F-Bay Modular Power Supply is a time saver in installation – **simply plug & power.**



1. Modular Power Supply Receptacle supplied mounted into fixture Access Plate.
2. Modular Power Cord & Plugs in 120, 277, 347, & 480V configurations for easy plug & power into existing supply.

No internal fixture access required for installation or disconnecting power.

Code Compliance

- UL/cUL Certified for Make/Break under load (UL2549)
- Meets NEC requirements for ballast disconnect (NEC 410.73G)
- Receptacle complete with insulating/dust cap

Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
25°C	> 89%	> 182,000

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

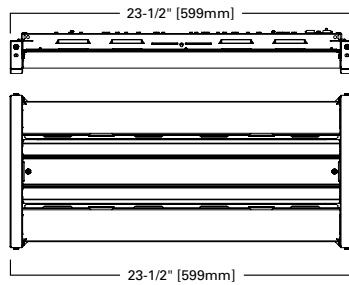
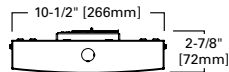
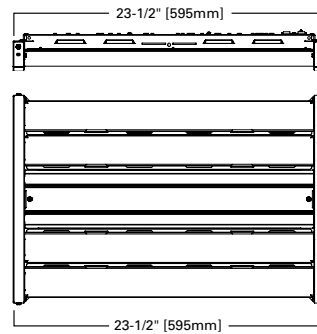
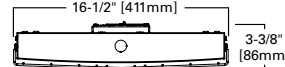
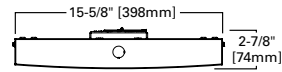
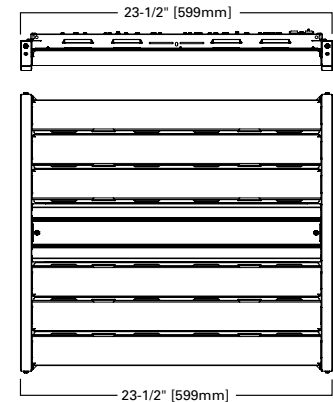
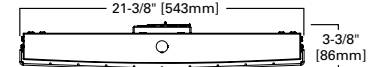
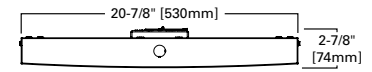
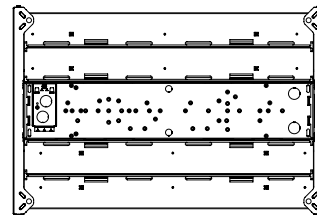
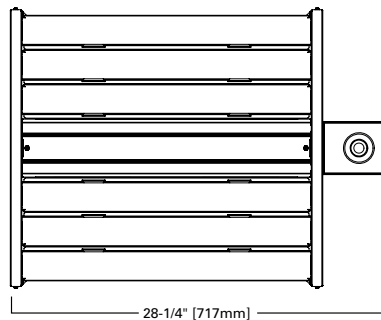
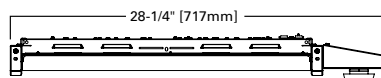
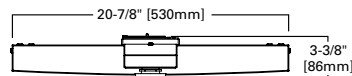
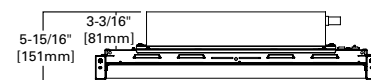
Catalog Number:

OHB-18SE-MFL-UNV-L840-CD-U//
OHB-WG162-U

Notes: SUSPENSION BY OTHERS.

Type:**G**

ML&C24-119319

Metalux**OHB****Dimensional and Mounting Details****OHB-9SE, 12SE, 15SE****OHB-9HE, 12HE, 15HE, 18HE, 18SE, 24SE, 30SE****OHB-24HE, 30HE, 36SE****OHB 36SE with Sidecar****OHB with EBP**

Metalux

OHB



Control Solutions

- WaveLinX LITE wireless
- WaveLinX PRO wireless
- WaveLinX CAT wired
- WaveLinX Wired



The OHB with WaveLinX offers no-hassle lighting control with multiple luminaire level control solutions.



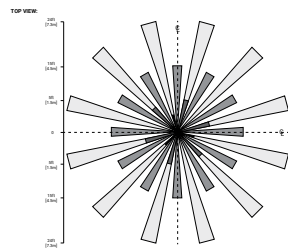
WaveLinX PRO is a wireless lighting control solution, for connected spaces, that significantly reduces a building's energy consumption. From a single floor to an entire campus, WaveLinX PRO connects more than lighting assets; it shares aggregated sensor data with the WaveLinX CORE platform and other building systems, so building owners can improve operations, spaces environment, and tenants' experience. WaveLinX PRO offers a rich portfolio of wireless devices, WaveLinX PRO-enabled luminaires, and an intuitive WaveLinX mobile app for office, education, warehouse, and parking garage applications.



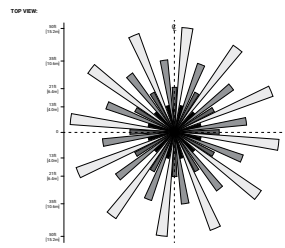
WaveLinX LITE is a cost effective, wireless digital lighting control solution, with out-of-the-box functionality, that saves energy and meets code. It's designed for applications that require occupancy-based, daylighting, or manual light control. Customize installations for office, education, warehouse and parking garages using the secure, simple mobile app.

Integrated Sensor Coverage Pattern

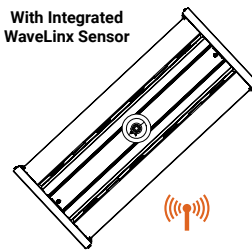
WaveLinX PRO/LITE Sensor – WLS2 and WPS2



WaveLinX PRO/LITE Sensor – WLS4 and WPS4



With Integrated WaveLinX Sensor



Integrated Controls Options

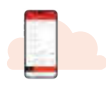
Option	Out of the Box Functionality	Luminaire Level Lighting Control (LLLC)	Automatic Dimming Photocell	Occupancy Sensing	CCT Control
WLS	X	X	X	X	
WPS		X	X	X	

Systems comparison chart

Cooper Lighting Solutions provides many lighting system solutions designed to satisfy code requirements and meet the unique needs of any project.



Luminaire with standalone sensor



Standalone Spaces
WaveLinX LITE



Standalone Spaces
WaveLinX CAT



Networked Spaces
WaveLinX PRO



Enterprise
WaveLinX CORE

Occupancy	Yes	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes	Yes
Wallstations	–	Yes	Yes	Yes	Yes
Gateways	–	–	–	1 WAC	300 WACs
Devices (MAX)	–	40 per Area (1120 per space)	40 per Area	200 per WAC2	32,500 per CORE Enterprise
Software	–	WaveLinX LITE Mobile App	WaveLinX CAT Mobile App	WaveLinX Mobile App	CORE
Areas	–	28 per Space	Unlimited	50 per WAC2	up to 3,000
Zones	–	16 per Area	16 per Area	16 per Area	up to 9,000
Scheduling	–	–	–	Local	Global
VividTune™	–	–	–	Yes	Yes
Plug-Load Control	–	Yes	Yes	Yes	Yes
Low-Voltage Power	–	–	Yes	Yes	Yes
Integration	–	–	–	–	BACnet, API
Dashboards	–	–	–	–	Energy, Occupancy
Configuration	–	Installer	Installer	Technician	Technician / IT

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

~RMSM1-06-12V3WLJ-WHT

Notes:**Type:****SR**

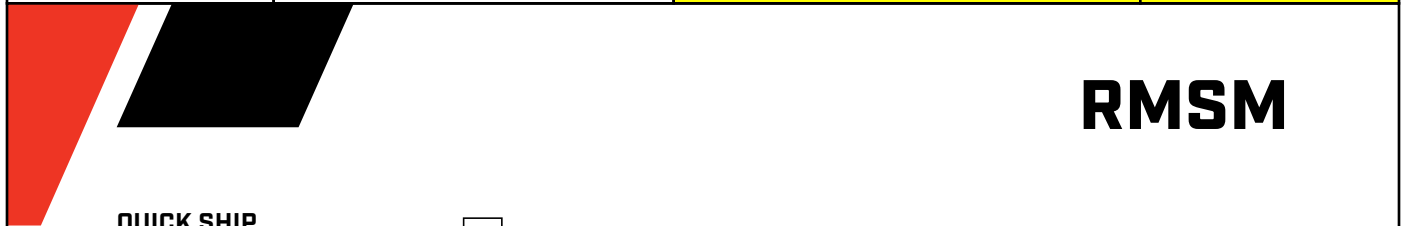
ML&C24-119319

RMSM

TYPICAL SPECIFICATION

**TYPICAL SPECIFICATION**

Remote head shall be () V, () W, () lumens, fully adjustable for maximum spacing, injection molded, impact resistant, flame retardant thermoplastic. The LED's, lens and circuit boards shall be fully integrated in the molded shell to ensure extended life and maximum performance. Fixture shall be supplied with a canopy for installation on any four-inch octagon box. The remote fixtures shall be certified to CSA 22.2 No.141-15 and be ICES005 compliant. The remote unit shall be Aimlite model: RMSM _____



RMSM

QUICK SHIP ORDERING GUIDE



PART NO	DC VOLTS [V DC]	NBR OF HEADS	HEAD	LAMP [W]	LIGHT SOURCE	COLOR
RMSM1-06V2WLJWHT	6	1	RMSM	2	LED	WHITE
RMSM1-12V2WLJWHT	12	1	RMSM	2	LED	WHITE
RMSM1-06-12V3WLJ	6-12	1	RMSM	3	LED	WHITE
RMSM1-06-12V4WLJ	6-12	1	RMSM	4	LED	WHITE
RMSM1-06V09WT	6	1	RMSM	9	TUNGSTEN	WHITE
RMSM1-12V09WT	12	1	RMSM	9	TUNGSTEN	WHITE
RMSM1-24V09WT	24	1	RMSM	9	TUNGSTEN	WHITE
RMSM2-06V2WLJWHT	6	2	RMSM	2	LED	WHITE
RMSM2-12V2WLJWHT	12	2	RMSM	2	LED	WHITE
RMSM2-06-12V3WLJ	6-12	2	RMSM	3	LED	WHITE
RMSM2-06-12V4WLJ	6-12	2	RMSM	4	LED	WHITE
RMSM2-06V09WT	6	2	RMSM	9	TUNGSTEN	WHITE
RMSM2-12V09WT	12	2	RMSM	9	TUNGSTEN	WHITE
RMSM2-24V09WT	24	2	RMSM	9	TUNGSTEN	WHITE


QUICK SHIP: Product availability is subject to change without notice. Please contact your AimLite customer service representative to confirm inventory levels at time of order.


ORDERING GUIDE - LED

RMSM		-				/	
SERIES	NBR OF HEADS	VOLTS [V DC OPERATIONAL]	WATTAGE [W]	LAMP TYPE	COLOR	OPTIONS	
RMSM	1 - SINGLE HEAD	06-12 V - 6 TO 12	3W - 3	LJ - LED	WHT - WHITE (STANDARD)	LCP, VDR, WGD	
	2 - DOUBLE HEAD		4W - 4		BLK - BLACK		
	3 - TRIPLE HEAD		5W - 5				
	4 - QUAD HEAD (REQUIRE 12" DIA. CANOPY)	12-24 V - 12 TO 24	6W - 6	LA - LED			
			7W - 7				
		24 V - 24	4W - 4	LR - LED			
			5W - 5	LA - LED			
	1 - SINGLE HEAD	NUC - NUCLEUS DRIVER	5W - 5				
2 - DOUBLE HEAD	NUC - NUCLEUS DRIVER	2.5W - 2.5 5W - 5	LJ - LED				

ORDERING GUIDE - INCANDESCENT

RMSM		-			/	
SERIES	NBR OF HEADS	VOLTS [V DC]	LAMP	COLOR	OPTIONS	
RMSM	1 - SINGLE HEAD	06V - 6	SEE LAMP	WHT - WHITE	LCP - LESS CANOPY	
	2 - DOUBLE HEAD	12V - 12	SELECTION	(STANDARD)	WGD - WIREGUARD (ORDER SEPARATELY)	
	3 - TRIPLE HEAD	24V - 24	CHART BELOW	BLK - BLACK		
	4 - QUAD HEAD (REQUIRE 9.53" DIA. CANOPY)					





LAMP SELECTION - INCANDESCENT

PAR18 • SMALL HEAD	6 V	12 V	24 V
QUARTZ HALOGEN		10WQ	
TUNGSTEN	09WT	9WT	9WT, 18WT

WIREGUARD¹

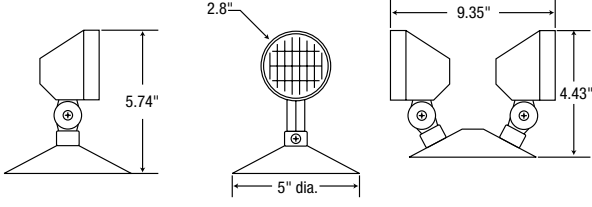
	PART NUMBER	DIMENSIONS (IN)
1 HEAD	WGD550-V2	11 X 8.75 X 6.75
2 HEADS	WGD630	12 X 9 X 9

¹ Please contact AimLite customer service representative for more information

PHOTOMETRY PERFORMANCE

LED		LUMEN OUTPUT (LM)	LM/W	CCT	BEAM ANGLE (°)
2W	LJ	216	63	5000	20
2.5W [NUCLEUS]	LJ	254	102	5000	20
3W	LJ	313	104	5000	20
4W	LJ	429	107	5000	28
5W [NUCLEUS]	LJ	473	95	5000	28
5W	LJ	591	118	5000	28
4W	LR	320	80	5000	24
5W	LA	438	87	5000	24
6W	LA	505	84	5000	24
7W	LA	631	90	5000	24

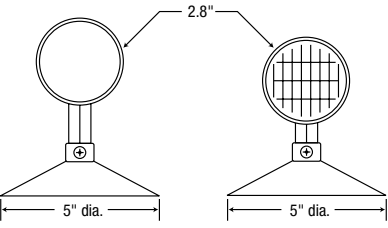
DIMENSIONS




LEXAN GUARD

	PART NUMBER	DIMENSIONS (IN)
1 HEAD	PGD103	7 X 7.25 X 8.5
2 HEADS	PGD104	14 X 7.25 X 7.5
3 HEADS	PGD104	14 X 7.25 X 7.5

LED





RMSM • REV. 2023-11-8

T 514 227-1288 TF 1 866 348-2374 aimlite.com

Submitted On: Jul 10, 2024

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**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

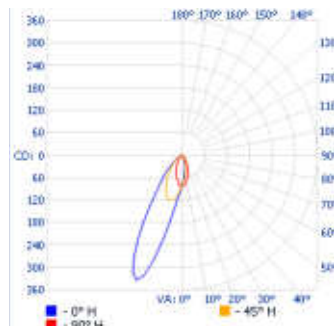
~RMSM1-06-12V3WLJ-WHT

Notes:

Type:**SR**

ML&C24-119319

RMSM

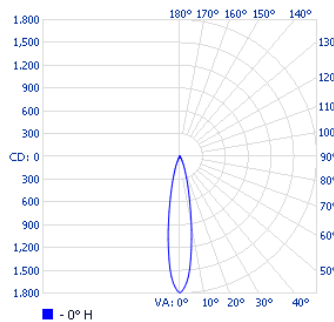
PHOTOMETRIC DATA¹**PAR18-6V2WLJ • 124.0 LM****POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	68.9	55.6%
0-40	93.3	75.3%
0-60	116.1	93.6%
60-90	7.9	6.4%
0-90	124.0	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
2.0'	19.75	0.7'	0.8'
4.0'	4.94	1.5'	1.6'
6.0'	2.19	2.2'	2.4'
8.0'	1.23	3.0'	3.2'
10.0'	0.79	3.7'	4.1'

■ Vert. Spread: 21.2° ■ Hor. Spread: 22.9°

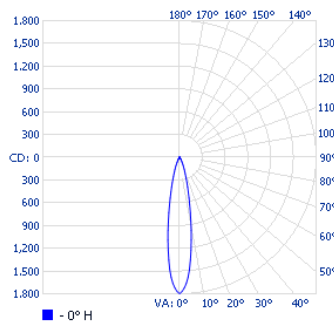
PAR18-06-12V3WLJ • 309.0 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	282.9	91.6%
0-40	297.5	96.3%
0-60	306.9	99.3%
60-90	2.1	0.7%
70-100	0.3	0.1%
90-120	0	0%
0-90	309.0	100%
90-180	0	0%
0-180	309.0	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	622	0.6'	
3.3'	165	1.1'	
5.0'	71.8	1.7'	
6.7'	40.0	2.3'	
8.3'	26.1	2.8'	
10.0'	18.0	3.4'	

■ Vert. Spread: 19.3°

PAR18-06-12V4WLJ • 429.5 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	325.3	75.7%
0-40	369.4	86%
0-60	410.4	95.5%
60-90	19.2	4.5%
0-90	429.5	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	402	0.8'	8.2'
3.3'	107	1.6'	16.4'
5.0'	46.4	2.4'	24.6'
6.7'	25.9	3.2'	32.8'
8.3'	16.9	3.9'	41.0'
10.0'	11.6	4.7'	49.2'

■ Vert. Spread: 26.6° ■ Hor. Spread: 27.1°

¹ Complete IES files available on our website.

Job Name:

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

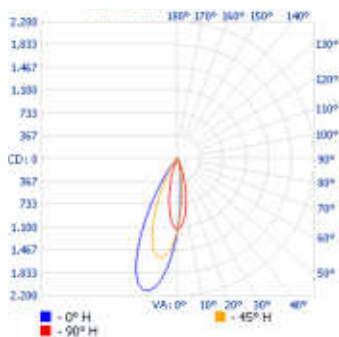
~RMSM1-06-12V3WLJ-WHT

Notes:

Type:**SR**

ML&C24-119319

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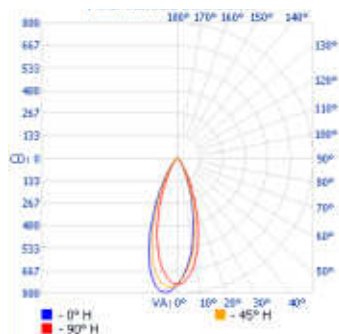
PHOTOMETRIC DATA¹**PAR18-06-12V5WLJ • 655.3 LM****POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	515.6	78.7%
0-40	595.7	90.9%
0-60	637.2	97.2%
60-90	18.0	2.8%
0-90	655.3	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC	BEAM WIDTH
1.7'	396
3.3'	105
5.0'	45.8
6.7'	25.5
8.3'	16.6
10.0'	11.5

■ Vert. Spread: 28.6° ■ Hor. Spread: 29.4°

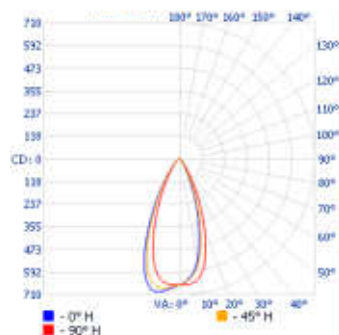
MR16-06-24V4WLR • 228.7 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	164.4	71.9%
0-40	182.0	79.6%
0-60	214.8	93.9%
60-90	13.9	6.1%
70-100	4.1	1.8%
90-120	0	0%
0-90	228.7	100%
90-180	0	0%
0-180	228.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC	BEAM WIDTH
1.7'	168
3.3'	44.5
5.0'	19.4
6.7'	10.8
8.3'	7.04
10.0'	4.85

■ Vert. Spread: 35.4°

MR16-06-24V5WLA • 440.7 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	352.6	80%
0-40	391.8	88.9%
0-60	427.2	96.9%
60-90	13.5	3.1%
70-100	4.3	1%
90-120	0	0%
0-90	440.7	100%
90-180	0	0%
0-180	440.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC	BEAM WIDTH
1.7'	407
3.3'	108
5.0'	47.0
6.7'	26.2
8.3'	17.1
10.0'	11.8

■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°

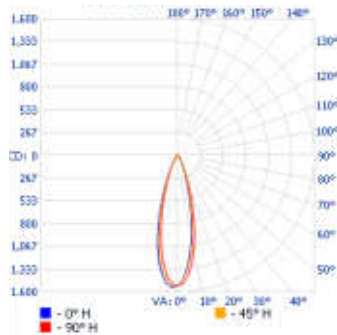
¹ Complete IES files available on our website.

RMSM

PHOTOMETRIC DATA¹

MR16-12-24V6WLA • 508.7 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

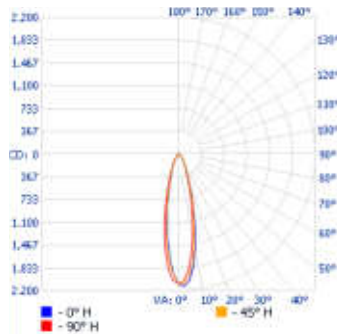
ZONE	LUMENS	% FIXTURE
0-30	407.0	80%
0-40	452.3	88.9%
0-60	493.1	96.9%
60-90	15.6	3.1%
70-100	4.9	1%
90-120	0	0%
0-90	508.7	100%
90-180	0	0%
0-180	508.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	470	0.9'	1.0'
3.3'	125	1.7'	1.9'
5.0	54.3	2.6'	2.8'
6.7	30.2	3.5'	3.8'
8.3	19.7	4.3'	4.7'
10.0	13.6	5.2'	5.7'
■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°			

MR16-12-24V7WLA • 635.2 LM

POLAR CANDELA DISTRIBUTION




ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	508.2	80%
0-40	564.7	88.9%
0-60	615.7	96.9%
60-90	19.5	3.1%
70-100	6.1	1%
90-120	0	0%
0-90	635.2	100%
90-180	0	0%
0-180	635.2	100%


ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	587	0.9'	1.0'
3.3'	156	1.7'	1.9'
5.0	67.8	2.6'	2.8'
6.7	37.8	3.5'	3.8'
8.3	24.6	4.3'	4.7'
10.0	16.9	5.2'	5.7'
■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°			

¹ Complete IES files available on our website.



Project _____ Type _____
Catalogue n° _____ Date _____



RMSM

PAR18/MR16 MINI REMOTE

PLASTIC CONSTRUCTION

SINGLE, DOUBLE, TRIPLE, OR QUAD

6 V, 12 V & 24 V LAMPS


LED, & TUNGSTEN



The RMSM series of commercial thermoplastic PAR18/MR16 remotes provides the perfect balance of value and performance. The heads are fully adjustable and both tilt and swivel are lockable. The standard canopy is designed to mount directly to typical electrical junction boxes. Available in 6 V, 12 V and 24 V models, utilizing either LED or tungsten lamps

FEATURES & SPECIFICATIONS

- UV stabilized, high impact thermoplastic, composite head construction
- Fully adjustable - both tilt and swivel
- 5" diameter thermoplastic canopy standard
- Two surface canopy mounting holes designed to match standard electrical junction boxes
- White color is standard, black is optional
- Variety of lamp options:
 - 6 V DC, 12 V DC or 24 V DC
 - Tungsten lamps
 - LED lamps
- AimLite's LED current technology ensures the lumens output remains constant throughout the battery's discharge whether at 6 V, 12 V, or 24 V applications.



MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

☒ Reviewed
☐ Not Reviewed






☐ Reviewed As Noted
☐ Revise and Resubmit

NUCLEUS

- This unit can be connected to Nucleus's smart battery unit. Please view the Nucleus brochure for more details on this technology.

APPROVALS

- CSA Certified to C22.2 #141-15
- Meets requirements of ICES-005

OVERVIEW			
LIGHT SOURCE	LED OR INCANDESCENT	DC VOLTAGE [V DC]	6, 12, 24
 NUCLEUS COMPATIBLE	 QUICKSHIP	 LED	 ICES 005 

For complete warranty details, please see our terms and conditions on our website.

Data is based upon tests performed in a controlled environment. Actual performance can vary depending on operating conditions.
All products are subject to change or may be discontinued any time without notice.

AimLite

RMSM • REV. 2023-11-8

T 514 227-1288

TF 1 866 348-2374

aimlite.com

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

~RMSM2-06-12V3WLJ-WHT

Notes:**Type:****DR**


ML&C24-119319

RMSM

TYPICAL SPECIFICATION

**TYPICAL SPECIFICATION**

Remote head shall be () V, () W, () lumens, fully adjustable for maximum spacing, injection molded, impact resistant, flame retardant thermoplastic. The LED's, lens and circuit boards shall be fully integrated in the molded shell to ensure extended life and maximum performance. Fixture shall be supplied with a canopy for installation on any four-inch octagon box. The remote fixtures shall be certified to CSA 22.2 No.141-15 and be ICES005 compliant. The remote unit shall be Aimlite model: RMSM _____



RMSM

LAMP SELECTION - INCANDESCENT

PAR18 • SMALL HEAD	6 V	12 V	24 V
QUARTZ HALOGEN		10WQ	
TUNGSTEN	09WT	9WT	9WT, 18WT

WIREGUARD¹

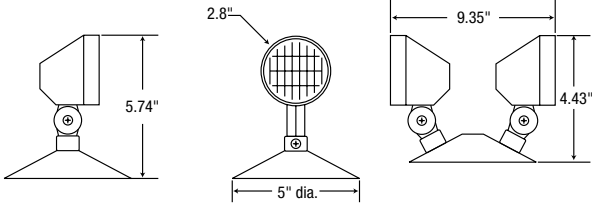
	PART NUMBER	DIMENSIONS (IN)
1 HEAD	WGD550-V2	11 X 8.75 X 6.75
2 HEADS	WGD630	12 X 9 X 9

¹ Please contact AimLite customer service representative for more information

PHOTOMETRY PERFORMANCE

LED		LUMEN OUTPUT (LM)	LM/W	CCT	BEAM ANGLE (°)
2W	LJ	216	63	5000	20
2.5W [NUCLEUS]	LJ	254	102	5000	20
3W	LJ	313	104	5000	20
4W	LJ	429	107	5000	28
5W [NUCLEUS]	LJ	473	95	5000	28
5W	LJ	591	118	5000	28
4W	LR	320	80	5000	24
5W	LA	438	87	5000	24
6W	LA	505	84	5000	24
7W	LA	631	90	5000	24

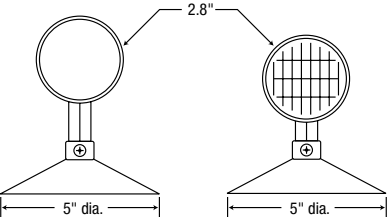
DIMENSIONS



LEXAN GUARD

	PART NUMBER	DIMENSIONS (IN)
1 HEAD	PGD103	7 X 7.25 X 8.5
2 HEADS	PGD104	14 X 7.25 X 7.5
3 HEADS	PGD104	14 X 7.25 X 7.5

LED



T 514 227-1288 TF 1 866 348-2374 aimlite.com

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

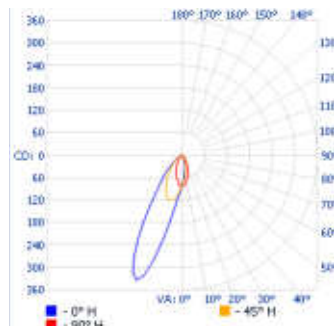
~RMSM2-06-12V3WLJ-WHT

Notes:

Type:**DR**

ML&C24-119319

RMSM

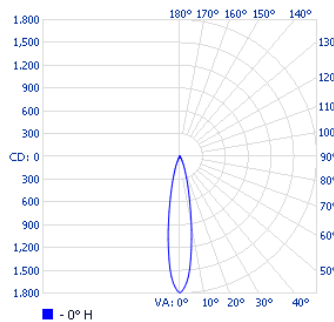
PHOTOMETRIC DATA¹**PAR18-6V2WLJ • 124.0 LM****POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	68.9	55.6%
0-40	93.3	75.3%
0-60	116.1	93.6%
60-90	7.9	6.4%
0-90	124.0	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
2.0'	19.75	0.7'	0.8'
4.0'	4.94	1.5'	1.6'
6.0'	2.19	2.2'	2.4'
8.0'	1.23	3.0'	3.2'
10.0'	0.79	3.7'	4.1'

■ Vert. Spread: 21.2° ■ Hor. Spread: 22.9°

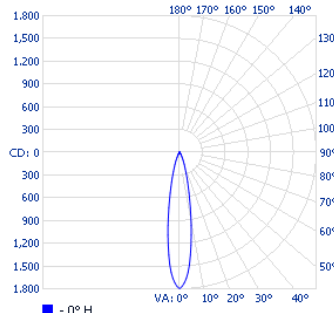
PAR18-06-12V3WLJ • 309.0 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	282.9	91.6%
0-40	297.5	96.3%
0-60	306.9	99.3%
60-90	2.1	0.7%
70-100	0.3	0.1%
90-120	0	0%
0-90	309.0	100%
90-180	0	0%
0-180	309.0	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	622	0.6'	
3.3'	165	1.1'	
5.0'	71.8	1.7'	
6.7'	40.0	2.3'	
8.3'	26.1	2.8'	
10.0'	18.0	3.4'	

■ Vert. Spread: 19.3°

PAR18-06-12V4WLJ • 429.5 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	325.3	75.7%
0-40	369.4	86%
0-60	410.4	95.5%
60-90	19.2	4.5%
0-90	429.5	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	402	0.8'	8.2'
3.3'	107	1.6'	16.4'
5.0'	46.4	2.4'	24.6'
6.7'	25.9	3.2'	32.8'
8.3'	16.9	3.9'	41.0'
10.0'	11.6	4.7'	49.2'

■ Vert. Spread: 26.6° ■ Hor. Spread: 27.1°

¹ Complete IES files available on our website.

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

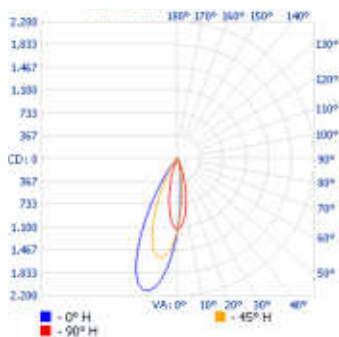
~RMSM2-06-12V3WLJ-WHT

Notes:

Type:**DR**

ML&C24-119319

RMSM

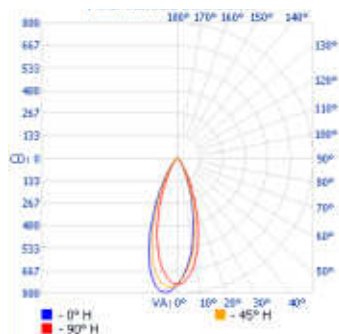
PHOTOMETRIC DATA¹**PAR18-06-12V5WLJ • 655.3 LM****POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	515.6	78.7%
0-40	595.7	90.9%
0-60	637.2	97.2%
60-90	18.0	2.8%
0-90	655.3	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	396	0.9'	0.9'
3.3'	105	1.7'	1.7'
5.0	45.8	2.5'	2.6'
6.7	25.5	3.4'	3.5'
8.3	16.6	4.2'	4.3'
10.0	11.5	5.1'	5.2'

■ Vert. Spread: 28.6° ■ Hor. Spread: 29.4°

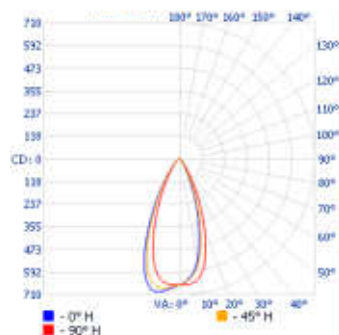
MR16-06-24V4WLR • 228.7 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	164.4	71.9%
0-40	182.0	79.6%
0-60	214.8	93.9%
60-90	13.9	6.1%
70-100	4.1	1.8%
90-120	0	0%
0-90	228.7	100%
90-180	0	0%
0-180	228.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	168	1.1'	
3.3'	44.5	2.1'	
5.0	19.4	3.2'	
6.7	10.8	4.3'	
8.3	7.04	5.3'	
10.0	4.85	6.4'	

■ Vert. Spread: 35.4°

MR16-06-24V5WLA • 440.7 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	352.6	80%
0-40	391.8	88.9%
0-60	427.2	96.9%
60-90	13.5	3.1%
70-100	4.3	1%
90-120	0	0%
0-90	440.7	100%
90-180	0	0%
0-180	440.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	407	0.9'	1.0'
3.3'	108	1.7'	1.9'
5.0	47.0	2.6'	2.8'
6.7	26.2	3.5'	3.8'
8.3	17.1	4.3'	4.7'
10.0	11.8	5.2'	5.7'

■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°

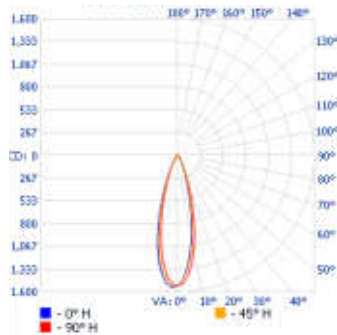
¹ Complete IES files available on our website.

RMSM

PHOTOMETRIC DATA¹

MR16-12-24V6WLA • 508.7 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

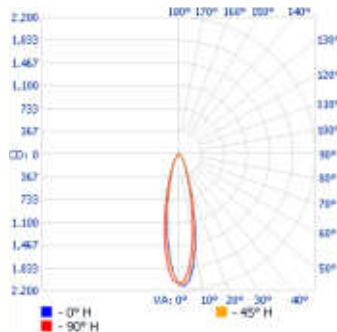
ZONE	LUMENS	% FIXTURE
0-30	407.0	80%
0-40	452.3	88.9%
0-60	493.1	96.9%
60-90	15.6	3.1%
70-100	4.9	1%
90-120	0	0%
0-90	508.7	100%
90-180	0	0%
0-180	508.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	470	0.9'	1.0'
3.3'	125	1.7'	1.9'
5.0	54.3	2.6'	2.8'
6.7	30.2	3.5'	3.8'
8.3	19.7	4.3'	4.7'
10.0	13.6	5.2'	5.7'
■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°			

MR16-12-24V7WLA • 635.2 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	508.2	80%
0-40	564.7	88.9%
0-60	615.7	96.9%
60-90	19.5	3.1%
70-100	6.1	1%
90-120	0	0%
0-90	635.2	100%
90-180	0	0%
0-180	635.2	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	587	0.9'	1.0'
3.3'	156	1.7'	1.9'
5.0	67.8	2.6'	2.8'
6.7	37.8	3.5'	3.8'
8.3	24.6	4.3'	4.7'
10.0	16.9	5.2'	5.7'
■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°			


¹ Complete IES files available on our website.

Project _____

Catalogue n° _____

Type _____

Date _____



CARPW

ALUMINUM COMBO

NBC2015 COMPLIANT

The CARPW series of commercial combination extruded signs and battery units features a fully modern appearance. The extruded aluminum design provides for a rigid, durable and lightweight sign. Two PAR18 small style, front mounted heads are standard, MR16 type are optional. Available with either 6 V DC or 12 V DC.



FEATURES & SPECIFICATIONS




- CIRCUITRY**

- LED ultra bright light source
 - 120/347 V AC field select-able, or 277 V AC
 - 1.8 W power consumption for LED exit portion of combination sign
 - LED Emergency DC wattages as follows:
6 V DC = 0.9 W
12 V DC = 0.86 W
 - Wattage capacities from 36 to 72 W
 - 30 minutes emergency power duration standard
- MECHANICAL**

- Extruded aluminum construction
 - Slide in/out captive faceplate(s) and backplate for rapid and simplified installation
 - Universal spider knock-out pattern stamped into backplate for junction box mounting
 - Universal models include ceiling or end mount, field installable canopy kit c/w spider plate
- COMPLIANCES**

- Multiple conduit entry knockouts
 - White powder coat finish standard, other finishes and colors optional
 - Front head mounted is standard, side mount is optional
 - CSA Certified to C22.2 #141-15
 - CSA Certified to C860-11
 - Meets requirements of ICES-005
- FEATURES & SPECIFICATIONS**


- Momentary push button test switch
 - Pilot LEDs for AC ON and CHARGE
 - Fully automatic, constant voltage current limited charger
 - Solid state design and construction with brownout and short circuit protection
 - Temperature compensated
 - Maintenance free, sealed lead acid battery

OVERVIEW			
LIGHT SOURCE	LED	SIGN DC VOLTAGE/WATTAGE	6 V DC = 0.9 12 V DC = 0.86
INPUT VOLTAGE [V AC]	120/347, 277	OUTPUT VOLTS [V DC]	6, 12
SIGN POWER CONSUMPTION	120 V = 1.80 W 347 V = 1.70 W 277 V = 1.40 W	POWER CAPACITY [W]	36 - 72
<div><div>LED</div><div>ICES 005</div><div>SP® Energy Verified Energie Verifiee</div></div>			

For complete warranty details, please see our terms and conditions on our website.

Data is based upon tests performed in a controlled environment. Actual performance can vary depending on operating conditions.

All products are subject to change or may be discontinued any time without notice.

DEI Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for meeting all requirements of the construction and contract documents.

☒ Reviewed

☐ Not Reviewed


☐ Reviewed As Noted

☐ Revise and Resubmit

514 227-1288

1 866 348-2374

aimltd.com

Submitted by Medgar Lighting & Controls Inc <div>  </div> <div> Job Name: HDSB - Glenview Public School Gym Addition Engineer: DEI & Associates (Waterloo) </div>	Catalog Number: ~CARPW12361M-2SM3WLJWHT/ ATD WIRE GUARD Notes:	Type: <div>CU</div> <div>ML&C24-119319</div>
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CARPW

TYPICAL SPECIFICATION



TYPICAL SPECIFICATION

Supply and install Aimlite's Extruded CARPW Running Man and Battery combination unit. The sign shall be Extruded Aluminum Running Man Exit Signs. The sign shall operate with AC/DC field selectable 120/277/347 V AC. The face shall be illuminated by using Nichia LED ultra-bright light source. The sign shall be suitable for wall, end, or ceiling mount and come complete with 3 Running Man fibers for universal direction. The sign shall be CSA C22.2 141-15 and ICES complaint. The battery unit shall be rated 120 V, 277 V or 347 V, 60 Hz constructed of durable 18-gauge steel and be CSA listed to C22.2 141-15 and be ICES 005 compliant. The unit shall have an output of: ___V and ___W and come complete with (0), (1) or (2) x ___ W LED heads producing (___) lumens each. The charge voltage factory set to ± 1% tolerance. High efficiency, rapid recovery, precision control charging system 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 at full voltage. The pulse charger shall be precisely regulated and shall charge 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 when the battery reaches the end of discharge.

The Aimlite Sign and Battery combination unit shall be CARPW _____

CARPW

ORDERING GUIDE

CARPW										
SERIES	VOLTS [V]	WATTS [W]	NBR OF FACES	MOUNTING	NBR OF HEADS	HEAD/LAMP	LAMP	COLOR	INPUT VOLTAGE [V AC]	OPTIONS
CARPW	06 - 6	036 - 36 050 - 50	1 - SINGLE FACE 2 - DOUBLE FACE	M - UNI-VER-SAL	00 - NO HEADS 1 - ONE HEADS 2 - TWO HEADS	BLANK - NO HEADS SM - PAR18 MD - MR16 LG - PAR36 MB - MR16	SEE LAMP SELECTION CHART BELOW	WHT - WHITE BLK - BLACK GRY - GREY	BLANK - 120/347 277 - 277	ATD ¹ AUD ¹ , AUE, LPD, RDS, SMH, TDL ¹ 0 - NO INDICATORS (DOUBLE FACE ONLY) ↓ ↑ ↗ ↘ ↙ ↘ D U UR DR DL UL
	12 - 12	036 - 36 050 - 50 072 - 72								

¹Only available with ATD.

OPTIONS

DESCRIPTION	DESCRIPTION
ATD AUTOMATIC TEST SELF-DIAGNOSTIC	RDS RADIO FREQUENCY SUPPRESSION
AUD AUDIBLE ALARM	SMH SIDE MOUNTED HEADS
AUE AUDIBLE EMERGENCY	TDL TIME DELAY
LPD LAMP DISCONNECT (INTERNAL)	

LAMP SELECTION

	6 V	12 V
PAR18 - Small head		
LED	3WLJ, 4WLJ, 5WLJ	3WLJ, 4WLJ, 5WLJ, 6WLA, 7WLA
Quartz halogen		10WQ
Tungsten	09WT	09WT
MR16 - Small head c/w MR16		
LED	4WLR, 5WLA	4WLR, 5WLA, 6WLA, 7WLA
Quartz halogen	10WQ	10WQ, 35WQ

LUMEN TABLE

WATTS	LUMENS
3W LJ	313
4W LJ	388
5W LJ	590
4W LR	388
5W LA	435
6W LA	507
7W LA	652

MODEL RATINGS

MODEL	VOLTS [V]	WATTAGE CAPACITIES [W]			
		30 MIN.	60 MIN.	90 MIN.	120 MIN.
CARPW0636	6	36	18	12	9
CARPW0650		50	25	16	12
CARPW1236	12	36	18	12	9
CARPW1250		50	25	16	12
CARPW1272		72	36	24	18

LEXAN GUARD

	PART NUMBER	DIMENSIONS (IN)
WALL MOUNT	PGD111	19.75 X 14 X 8
CEILING MOUNT	PGD100	16 X 10 X 13.5

WIREGUARD¹

		PART NUMBER	DIMENSIONS (IN)
WITHOUT HEAD	WALL MOUNT	WGD590-V2	16.75 X 17.75 X 6.5
	CEILING MOUNT	WGD650-V2	17.75 X 17.75 X 16.50
	END MOUNT	WGD650-V2	17.75 X 17.75 X 16.50
WITH HEAD(S)	WALL MOUNT	WGD510-V2	19.75 X 19.75 X 7.25
	CEILING MOUNT	WGD650-V2	17.75 X 17.75 X 16.50
	END MOUNT	WGD650-V2	17.75 X 17.75 X 16.50

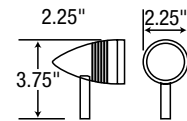
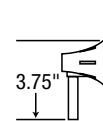
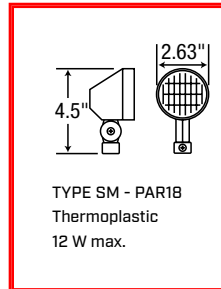
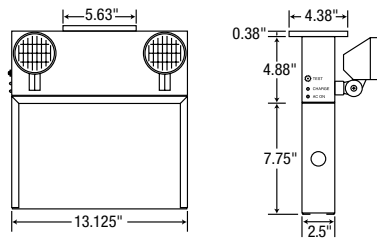
¹ Please contact your AimLite customer service representative for more information.

SELECT WIRE GUARD

ADVISE EITHER
WALL, CEILING OR END MOUNT

CARPW

DIMENSIONS



CONFIGURATIONS



Comes standard (single face) with three pictogram legends for direction selection.



Comes standard (double face) with two pictogram legends.

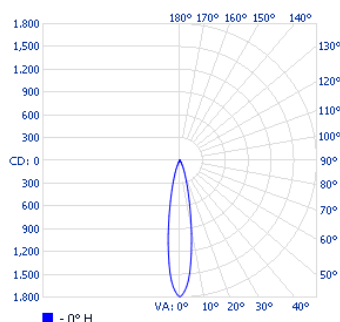


For double face no arrow options, select "0" on the options column.

PHOTOMETRIC DATA¹

PAR18-06-12V3WLJ • 309.0 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	282.9	91.6%
0-40	297.5	96.3%
0-60	306.9	99.3%
60-90	2.1	0.7%
70-100	0.3	0.1%
90-120	0	0%
0-90	309.0	100%
90-180	0	0%
0-180	309.0	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC	BEAM WIDTH
1.7'	0.6'
3.3'	1.1'
5.0'	1.7'
6.7'	2.3'
8.3'	2.8'
10.0'	3.4'

■ Beam Spread: 19.3°

¹ Complete IES files available on our website.

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

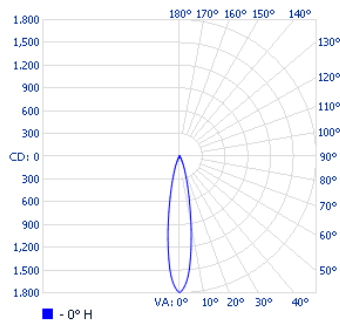
~CARPW12361M-2SM3WLJWHT/
ATD WIRE GUARD

Notes:

Type:**CU**

ML&C24-119319

CARPW

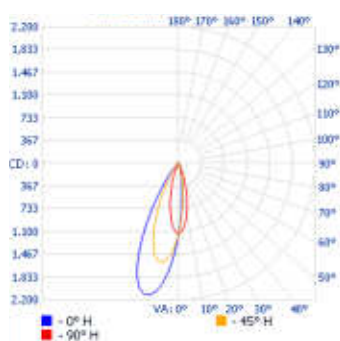
PHOTOMETRIC DATA¹**PAR18-06-12V4WLJ • 429.5 LM****POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	325.3	75.7%
0-40	369.4	86%
0-60	410.4	95.5%
60-90	19.2	4.5%
0-90	429.5	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	402	0.8'	8.2'
3.3'	107	1.6'	16.4'
5.0'	46.4	2.4'	24.6'
6.7'	25.9	3.2'	32.8'
8.3'	16.9	3.9'	41.0'
10.0'	11.6	4.7'	49.2'

■ Vert. Spread: 26.6° ■ Hor. Spread: 27.1°

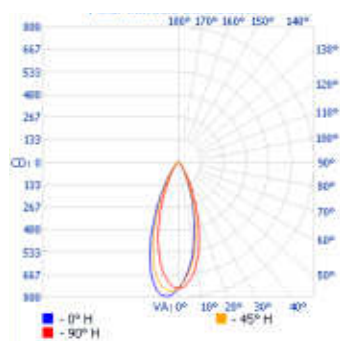
PAR18-06-12V5WLJ • 655.3 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	515.6	78.7%
0-40	595.7	90.9%
0-60	637.2	97.2%
60-90	18.0	2.8%
0-90	655.3	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	396	0.9'	0.9'
3.3'	105	1.7'	1.7'
5.0'	45.8	2.5'	2.6'
6.7'	25.5	3.4'	3.5'
8.3'	16.6	4.2'	4.3'
10.0'	11.5	5.1'	5.2'

■ Vert. Spread: 28.6° ■ Hor. Spread: 29.4°

MR16-06-24V4WLR • 228.7 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	164.4	71.9%
0-40	182.0	79.6%
0-60	214.8	93.9%
60-90	13.9	6.1%
70-100	4.1	1.8%
90-120	0	0%
0-90	228.7	100%
90-180	0	0%
0-180	228.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	168	1.1'	
3.3'	44.5	2.1'	
5.0'	19.4	3.2'	
6.7'	10.8	4.3'	
8.3'	7.04	5.3'	
10.0'	4.85	6.4'	

■ Beam Spread: 35.4°

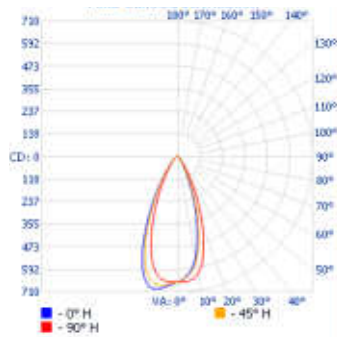
¹ Complete IES files available on our website.

CARPW

PHOTOMETRIC DATA¹

MR16-06-24V5WLA • 440.7 LM

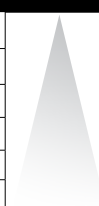
POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

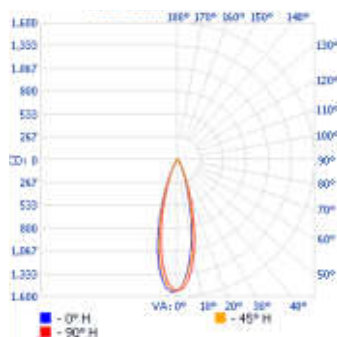
ZONE	LUMENS	% FIXTURE
0-30	352.6	80%
0-40	391.8	88.9%
0-60	427.2	96.9%
60-90	13.5	3.1%
70-100	4.3	1%
90-120	0	0%
0-90	440.7	100%
90-180	0	0%
0-180	440.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC			BEAM WIDTH	
1.7'	407		0.9'	1.0'
3.3'	108		1.7'	1.9'
5.0	47.0		2.6'	2.8'
6.7	26.2		3.5'	3.8'
8.3	171		4.3'	4.7'
10.0	11.8		5.2'	5.7'
■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°				

MR16-12-24V6WLA • 508.7 LM

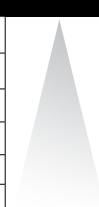
POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

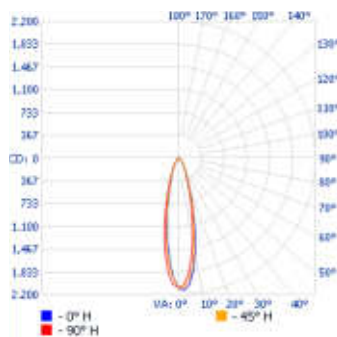
ZONE	LUMENS	% FIXTURE
0-30	407.0	80%
0-40	452.3	88.9%
0-60	493.1	96.9%
60-90	15.6	3.1%
70-100	4.9	1%
90-120	0	0%
0-90	508.7	100%
90-180	0	0%
0-180	508.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC			BEAM WIDTH	
1.7'	470		0.9'	1.0'
3.3'	125		1.7'	1.9'
5.0	54.3		2.6'	2.8'
6.7	30.2		3.5'	3.8'
8.3	19.7		4.3'	4.7'
10.0	13.6		5.2'	5.7'
■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°				

MR16-06-24V7WLA • 635.2 LM


POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	508.2	80%
0-40	564.7	88.9%
0-60	615.7	96.9%
60-90	19.5	3.1%
70-100	6.1	1%
90-120	0	0%
0-90	635.2	100%
90-180	0	0%
0-180	635.2	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC			BEAM WIDTH	
1.7'	587		0.9'	1.0'
3.3'	156		1.7'	1.9'
5.0	67.8		2.6'	2.8'
6.7	37.8		3.5'	3.8'
8.3	24.6		4.3'	4.7'
10.0	16.9		16.9'	5.7'
■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°				


¹ Complete IES files available on our website.

Project _____

Catalogue n° _____

Type _____


Date _____



EBST

STEEL BATTERY UNIT

The EBST series of commercial steel battery units is designed to provide efficient and reliable emergency lighting. Utilizing a sturdy, all steel housing, the EBST presents a modern and unobtrusive design. On higher capacity models, the cabinet front is sloped to allow better internal access and superior low angle light distribution. The EBST series is available in 6 V DC, 12 V DC and 24 V DC versions in a range of wattage capacities between 18 and 720W, for 30 minutes duration.

**DEI Consulting Engineers Inc.**
MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

☒ Reviewed

☐ Reviewed As Noted

☐ Not Reviewed

☐ Revise and Resubmit

FEATURES & SPECIFICATIONS

CIRCUITRY

- 120/347 or 277 V AC 60 Hz Input
- 6 V DC, 12 V DC or 24 V DC emergency power output versions (as specified)
- Wattage capacities from 18 to 720 W
- 30 Minutes emergency power duration standard

- Momentary push button test switch
- Diagnostic/pilot LEDs for AC ON and CHARGE
- Maintenance free, sealed lead acid battery
- Optional automatic-testing, self-diagnostic charger board

MECHANICAL




- Rugged steel cabinet with ultraguard rust-coating
- 120 V AC line cord supplied standard
- Universal spider knockout pattern and keyhole mounting slots stamped into back of cabinet
- Multiple conduit entry knockouts
- White powder coat finish standard, other finishes and colors optional

- Lamp heads include PAR18/ MR16 small style, die cast metal MR16 type, and high output industrial type
- Top head mounting is standard, side mount is optional

COMPLIANCES

- Meets requirements of ICES-005
- CSA Certified to C22.2 #141-15


OVERVIEW	
INPUT VOLTAGE [V AC]	120/347, 277
OUTPUT VOLTAGE [V DC]	6, 12, 24
OUTPUT POWER [W]	UP TO 720



For complete warranty details, please see our terms and conditions on our website.

Data is based upon tests performed in a controlled environment. Actual performance can vary depending on operating conditions.

All products are subject to change or may be discontinued any time without notice.

 **AimLite**

EBST • REV. 2024-2-26

T 514 227-1288 TF 1 866 348-2374 aimlite.com

Submitted On: Jul 10, 2024

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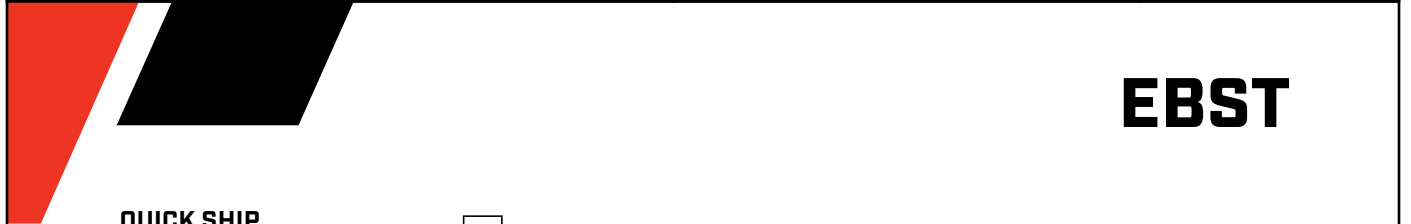
EBST

TYPICAL SPECIFICATION



TYPICAL SPECIFICATION

Supply and install Aimlite EBST. The unit shall be rated 120 V, 277 V or 347 V, 60 Hz constructed of durable 18 gauge steel and be CSA listed to C22.2 141-15 and be ICES 005 compliant. The unit shall have an output of: ___V and ___W and come complete with (0), (1) or (2) x ___ W LED heads producing (___) lumens each. The charge voltage factory set to $\pm 1\%$ tolerance. High efficiency, rapid recovery, precision control charging system 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 at full voltage. The pulse charger shall be precisely regulated and shall charge 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 when the battery reaches the end of discharge. The Aimlite battery shall come complete with an auto diagnostic micro-controller board and shall supply the rated load for a minimum of a 1/2 hour to 87.5% of the rated battery voltage. The Aimlite battery unit shall come complete with the Auto Test function. The automated testing performed by the Aimlite auto test system has been designed to comply with all of the requirements of the National Fire Code. Every month a 5 minute discharge and diagnostic test checks the operational status of the unit. Every 12 months, this test is extended to the full 30 minute, code required duration. This ensures that the battery charger is recharging the battery in accordance with code requirements. The unit shall be Aimlite model: _____



QUICK SHIP
ORDERING GUIDE



PART NUMBER	DC VOLTS [V DC]	WATTS [W]	NBR OF HEADS	HEAD	LAMP [W]	LIGHT SOURCE	INPUT VOLTS [V AC]	COLOR
EBST-1L	6	27	2	SM	2	LED	120/347	WHITE
EBST-2L	6	36	2	SM	2	LED	120/347	WHITE
EBST-3L	6	36	2	SM	3	LED	120/347	WHITE
EBST12-2L	12	72	2	SM	2.5	LED	120/347	WHITE
EBST06036-2SM09T	6	36	2	SM	9	TUNGSTEN	120/347	WHITE
EBST06072-2SM09T	6	72	2	SM	9	TUNGSTEN	120/347	WHITE
EBST12036-2SM09T	12	72	2	SM	9	TUNGSTEN	120/347	WHITE
EBST12072-2SM09T	12	72	2	SM	9	TUNGSTEN	120/347	WHITE
EBST12100-2SM09T	12	100	2	SM	9	TUNGSTEN	120/347	WHITE
EBST12160-2SM09T	12	160	2	SM	9	TUNGSTEN	120/347	WHITE
EBST12200-2SM09T	12	200	2	SM	9	TUNGSTEN	120/347	WHITE
EBST12250-2SM09T	12	250	2	SM	9	TUNGSTEN	120/347	WHITE
EBST12360-2SM09T	12	360	2	SM	9	TUNGSTEN	120/347	WHITE

QUICK SHIP: Product availability is subject to change without notice. Please contact your AimLite customer service representative to confirm inventory levels at time of order.

ORDERING GUIDE

EBST							
SERIES	VOLTS [V DC]	WATTS	HEAD/LAMP	LAMP TYPE	COLOR	INPUT VOLTAGE [V AC]	OPTIONS
EBST	06 - 6 12 - 12 24 - 24	SEE MODEL RATING BELOW	0 - NO HEADS 1SM - ONE PAR18/MR16 2SM - TWO PAR18/MR16 3SM - THREE PAR18/MR16 1MD - ONE MR16 2MD - TWO MR16 3MD - THREE MR16 1MB - ONE MR16 2MB - TWO MR16 3MB - THREE MR16 1HD - ONE INDUSTRIAL 2HD - TWO INDUSTRIAL	SEE LAMP LIST BELOW	WHT - WHITE (STANDARD) BLK - BLACK GRY - GREY	BLANK - 120/347 277 - 277	AMP, ACT ¹ , ATD ² , AUD ³ , AUE, BTD, DCT, FS6, RMT, K5, LPD, NLC, RDS, TDL, TLP ¹ , VDR, VLT

¹ Only available with AT

² Only available in 120 VAC

OPTIONS


DESCRIPTION	DESCRIPTION
AMP AMMETER	K5 1/2" KNOCKOUT FOR PENDANT MOUNT
ACT ¹ AC TERMINAL BLOCK (LINE CORD DELETE)	LPD LAMP DISCONNECT (INTERNAL)
ATD ² AUTOMATIC TEST SELF-DIAGNOSTIC	NLC OCTAGON BOX MOUNT (LINE CORD DELETE)
AUD ³ AUDIBLE ALARM	RDS RADIO FREQUENCY SUPPRESSION
AUE AUDIBLE EMERGENCY	TDL TIME DELAY
BTD BATTERY DISCONNECT	TLP ¹ TWIST LOCK PLUG
DCT DC TERMINAL BLOCK	VDR TAMPER PROOF SCREWS
FS6 6 CIRCUIT FUSED INTERNAL DISTRIBUTION	VLT VOLTMETER
RMT INFRARED REMOTE TEST	

¹ ACT & TLP are incompatible together.

² ATD features may overlap with the following options: VLT, TDL, AMP & RDS. Contact customer service for more information.

³ Only available with ATD.

Submitted by Medgar Lighting & Controls Inc



Job Name:
HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:
~.EBST12072-2SM3WLJWHT/ATD

Notes:

Type:
BU

ML&C24-119319

EBST

WIREGUARD

		PART NUMBER	DIMENSIONS (IN)
WITHOUT HEAD	CABINET 1	WGD520-V2	15.75 x 11.5 x 4.5
	CABINET 2	WGD520-V2	15.75 x 11.5 x 4.5
	CABINET 3	WGD590-V2	16.75 x 17.75 x 6.5
	CABINET 4	WGD650-V2	17.75 x 17.75 x 16.50
	CABINET 5	WGD600-V2	23 x 20 x 12
WITH HEAD(S) ¹	CABINET 1	WGD590-V2	16.75 x 17.75 x 6.5
	CABINET 2	WGD590-V2	16.75 x 17.75 x 6.5
	CABINET 3	WGD590-V2	16.75 x 17.75 x 6.5
	CABINET 4	WGD650-V2	17.75 x 17.75 x 16.50
	CABINET 5	WGD600-V2	23 x 20 x 12

LUMEN TABLE

WATTS	LUMENS
3W LJ	313
4W LJ	388
5W LJ	590
4W LR	388
5W LA	435
6W LA	507
7W LA	652

¹ For HO heads, please contact your customer service representative for more information.

LEXAN GUARD

MOUNTING TYPE	NUMBER OF HEADS	INPUT VOLTAGE	PART NUMBER	DIMENSIONS (IN)
WALL MOUNT	1,2	12V036W	PGD107	14.5x11.25x5.5
		12V050W	PGD107	14.5x11.25x5.5
		12V072W	PGD107	14.5x11.25x5.5
		12V160W	PGD111	19.75x14x8
		12V200W	PGD111	19.75x14x8
		24V144W	PGD111	19.75x14x8
		24V200W	PGD111	19.75x14x8

MOUNTING TYPE	NUMBER OF HEADS	INPUT VOLTAGE	PART NUMBER	DIMENSIONS (IN)
WALL MOUNT	0	06V018W	PGD107	14.5x11.25x5.5
		06V036W	PGD107	14.5x11.25x5.5
		06V050W	PGD107	14.5x11.25x5.5
		06V072W	PGD107	14.5x11.25x5.5
		06V100W	PGD107	14.5x11.25x5.5
		06V160W	PGD107	14.5x11.25x5.5
		06V180W	PGD107	14.5x11.25x5.5
		12V036W	PGD107	14.5x11.25x5.5
		12V050W	PGD107	14.5x11.25x5.5
		12V072W	PGD107	14.5x11.25x5.5
		12V100W	PGD107	14.5x11.25x5.5
		12V144W	PGD107	14.5x11.25x5.5
		12V160W	PGD107	14.5x11.25x5.5
		12V200W	PGD107	14.5x11.25x5.5
		24V144W	PGD107	14.5x11.25x5.5
		24V200W	PGD107	14.5x11.25x5.5

LAMP SELECTION

	6 VOLTS	12 VOLTS	24 VOLTS
PAR18 • SMALL HEAD OR LED LAMP			
LED	3WLJ, 4WLJ, 5WLJ	3WLJ, 4WLJ, 5WLJ, 6WLA, 7WLA	4WLR, 5WLA, 6WLA, 7WLA
QUARTZ HALOGEN		10WQ	
TUNGSTEN	09WT	09WT	09WT, 18WT
MR16 • SMALL HEAD C/W MR16 OR LED LAMP			
LED	4WLR, 5WLA	4WLR, 5WLA, 6WLA, 7WLA	4WLR, 5WLA, 6WLA, 7WLA
QUARTZ HALOGEN	10WQ	20WQ, 35WQ	20WQ
INDUSTRIAL			
LED		5WLJ, 9WLJ, 14WLJ, 30WLJ	5WLJ, 9WLJ, 14WLJ, 30WLJ

Note: Due to cabinet/space limitations, not all options are available for all models in any given combination. Please consult with your factory representative regarding specific options and exact cabinet dimension information.

AimLight

EBST • REV. 2024-2-26

T 514 227-1288

TF 1866 348-2374

aimlite.com

Submitted On: Jul 10, 2024

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Job Name:

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

~.EBST12072-2SM3WLJWHT/ATD

Type:**BU**

Notes:

ML&C24-119319

EBST

MODEL RATINGS

WATTAGE CAPACITIES (W)²

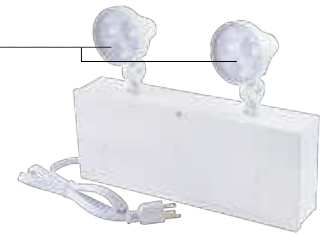
MODEL	VOLTS (V)	30 MIN.	60 MIN.	90 MIN.	120 MIN.	CABINET ¹
EBST06018	6	18	18	12	10	1
EBST06036	6	36	18	12	9	1
EBST06050	6	50	25	16	12	1
EBST06072	6	72	36	24	18	2
EBST06100	6	100	50	33	25	2
EBST06160	6	160	80	53	40	3
EBST06180	6	180	126	87	72	3
EBST12036	12	36	36	24	20	1
EBST12050	12	50	36	24	20	1
EBST12072	12	72	36	24	18	1
EBST12100	12	100	50	33	25	2
EBST12144	12	144	84	48	36	3
EBST12160	12	160	80	53	40	3
EBST12200	12	200	100	66	50	3
EBST12250	12	250	219	169	136	4
EBST12360	12	360	233	164	144	4
EBST24144	24	144	72	48	36	3
EBST24200	24	200	100	66	50	4
EBST24320	24	320	160	106	80	4
EBST24350	24	350	175	116	88	5
EBST24550	24	550	438	338	272	5
EBST24720	24	720	466	328	288	5

¹ The size of the cabinet might change depending of the chosen options.

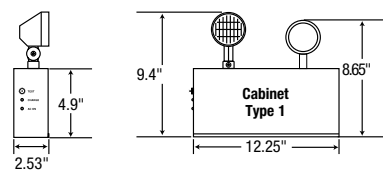
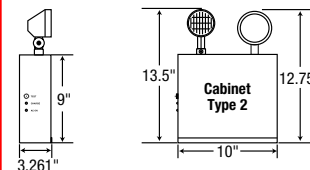
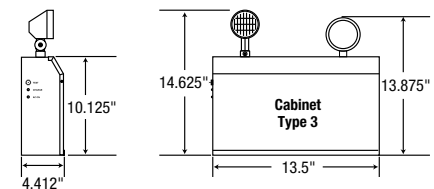
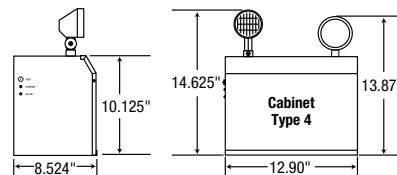
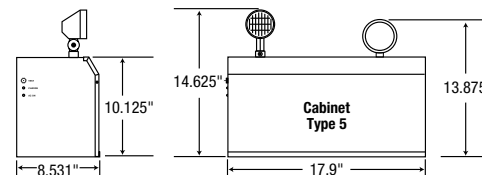
Please consult with your factory representative regarding exact cabinet dimension information.

² It is recommended to load battery pack 20% under their maximum load

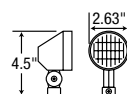
LED lamps



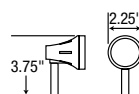
DIMENSIONS

CABINET TYPE 1**CABINET TYPE 2****CABINET TYPE 3****CABINET TYPE 4****CABINET TYPE 5****TYPE SM - PAR18**

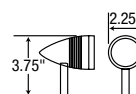
Thermoplastic
18 W max.

**TYPE MD - MR16**

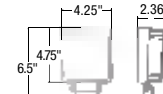
Die cast
35 W max.

**TYPE MB - MR16**

Die cast
35 W max.

**TYPE HO - INDUSTRIAL**

Die cast
14 W max.

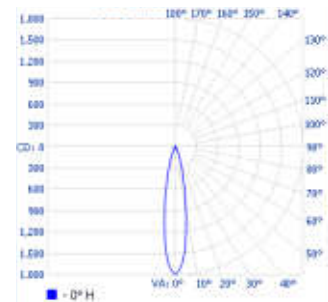


EBST

PHOTOMETRIC DATA¹

PAR18-06-12V3WLJ • 309.0 LM


POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

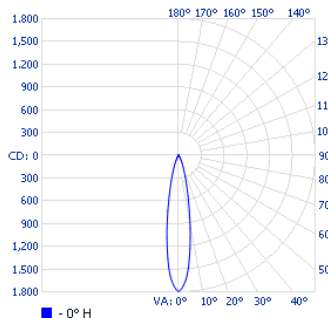
ZONE	LUMENS	% FIXTURE
0-30	282.9	91.6%
0-40	297.5	96.3%
0-60	306.9	99.3%
60-90	2.1	0.7%
70-100	0.3	0.1%
90-120	0	0%
0-90	309.0	100%
90-180	0	0%
0-180	309.0	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC			BEAM WIDTH	
1.7'	622		0.6'	
3.3'	165		1.1'	
5.0	71.8		1.7'	
6.7	40.0		2.3'	
8.3	26.1		2.8'	
10.0	18.0		3.4'	
■ Beam. Spread: 19.3°				

PAR18-06-12V4WLJ • 429.5 LM

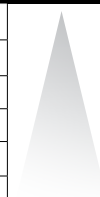
POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

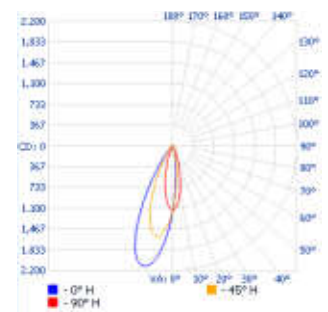
ZONE	LUMENS	% FIXTURE
0-30	325.3	75.7%
0-40	369.4	86%
0-60	410.4	95.5%
60-90	19.2	4.5%
0-90	429.5	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC			BEAM WIDTH	
1.7'	402		0.8'	8.2'
3.3'	107		1.6'	16.4'
5.0	46.4		2.4'	24.6'
6.7	25.9		3.2'	32.8'
8.3	16.9		3.9'	41.0'
10.0	11.6		4.7'	49.2'
■ Vert. Spread: 26.6° ■ Hor. Spread: 27.1°				

PAR18-06-12V5WLJ • 655.3 LM

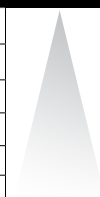
POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	515.6	78.7%
0-40	595.7	90.9%
0-60	637.2	97.2%
60-90	18.0	2.8%
0-90	655.3	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC			BEAM WIDTH	
1.7'	396		0.9'	0.9'
3.3'	105		1.7'	1.7'
5.0	45.8		2.5'	2.6'
6.7	25.5		3.4'	3.5'
8.3	16.6		4.2'	4.3'
10.0	11.5		5.1'	5.2'
■ Vert. Spread: 28.6° ■ Hor. Spread: 29.4°				

¹ Complete IES files available on our website.

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

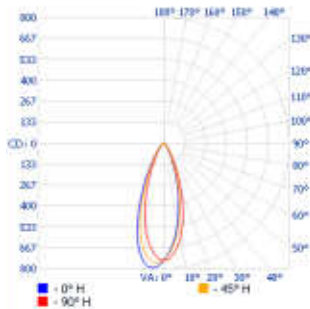
Catalog Number:

~.EBST12072-2SM3WLJWHT/ATD

Notes:

Type:**BU**

ML&C24-119319

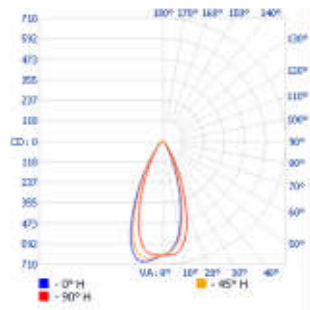
EBST**PHOTOMETRIC DATA¹****MR16-06-24V4WLR • 228.7 LM****POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	164.4	71.9%
0-40	182.0	79.6%
0-60	214.8	93.9%
60-90	13.9	6.1%
70-100	4.1	1.8%
90-120	0	0%
0-90	228.7	100%
90-180	0	0%
0-180	228.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	168	1.1'	
3.3'	44.5	2.1'	
5.0	19.4	3.2'	
6.7	10.8	4.3'	
8.3	7.04	5.3'	
10.0	4.85	6.4'	

■ Beam. Spread: 35.4°

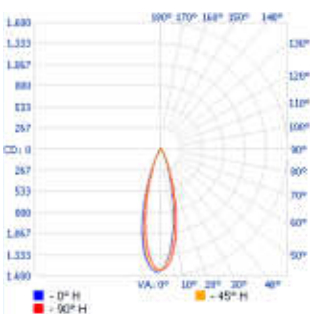
MR16-06-24V5WLA • 440.7 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	352.6	80%
0-40	391.8	88.9%
0-60	427.2	96.9%
60-90	13.5	3.1%
70-100	4.3	1%
90-120	0	0%
0-90	440.7	100%
90-180	0	0%
0-180	440.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	407	0.9'	1.0'
3.3'	108	1.7'	1.9'
5.0	47.0	2.6'	2.8'
6.7	26.2	3.5'	3.8'
8.3	17.1	4.3'	4.7'
10.0	11.8	5.2'	5.7'

■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°

MR16-12-24V6WLA • 508.7 LM**POLAR CANDELA DISTRIBUTION****ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% FIXTURE
0-30	407.0	80%
0-40	452.3	88.9%
0-60	493.1	96.9%
60-90	15.6	3.1%
70-100	4.9	1%
90-120	0	0%
0-90	508.7	100%
90-180	0	0%
0-180	508.7	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	470	0.9'	1.0'
3.3'	125	1.7'	1.9'
5.0	54.3	2.6'	2.8'
6.7	30.2	3.5'	3.8'
8.3	19.7	4.3'	4.7'
10.0	13.6	5.2'	5.7'

■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°

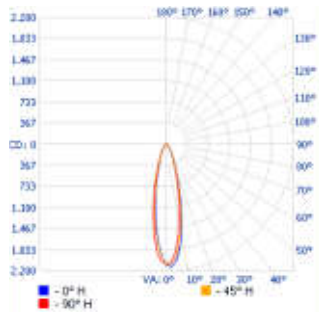
¹ Complete IES files available on our website.

EBST

PHOTOMETRIC DATA¹

MR16-12-24V7WLA • 635.2 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

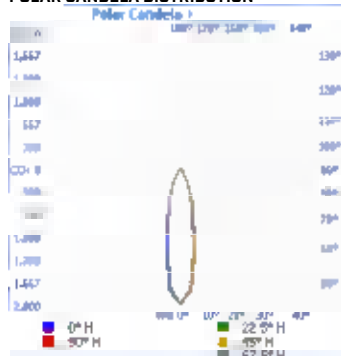
ZONE	LUMENS	% FIXTURE
0-30	508.2	80%
0-40	564.7	88.9%
0-60	615.7	96.9%
60-90	19.5	3.1%
70-100	6.1	1%
90-120	0	0%
0-90	635.2	100%
90-180	0	0%
0-180	635.2	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	587	0.9'	1.0'
3.3'	156	1.7'	1.9'
5.0'	67.8	2.6'	2.8'
6.7'	37.8	3.5'	3.8'
8.3'	24.6	4.3'	4.7'
10.0'	16.9	16.9'	5.7'
■ Vert. Spread: 29.3° ■ Hor. Spread: 31.7°			

SQ-12V-5W • 642.1 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

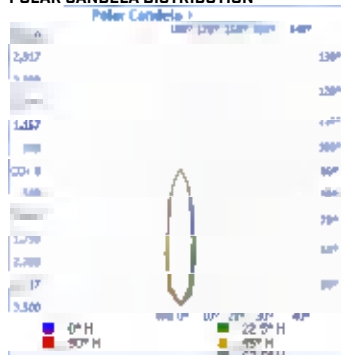
ZONE	LUMENS	% FIXTURE
0-30	481.0	74.9
0-40	548.2	85.4
0-60	611.0	95.1
60-90	31.1	4.8
70-100	12.2	1.9
90-120	0.0	0
0-90	642.1	100
90-180	0.1	0
0-180	642.1	100

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
2.0"	489.9	0.8	0.8
4.0"	122.5	1.7	1.7
6.0"	54.4	2.5	2.5
8.0"	30.6	3.3	3.4
10.0"	19.6	4.1	4.2
■ Vert. Spread: 23.4° ■ Hor. Spread: 23.8°			

SQ-12V-9W • 1105.1 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	835.2	75.6
0-40	948.6	85.8
0-60	1051.8	95.2
60-90	53.1	4.8
70-100	20.9	1.9
90-120	0.1	0
0-90	1104.9	100
90-180	0.2	0
0-180	1105.1	100

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
2.0"	856.3	0.8	0.8
4.0"	214.1	1.7	1.6
6.0"	95.1	2.5	2.4
8.0"	53.5	3.4	3.2
10.0"	34.3	4.2	4.1
■ Vert. Spread: 23.8° ■ Hor. Spread: 22.9°			

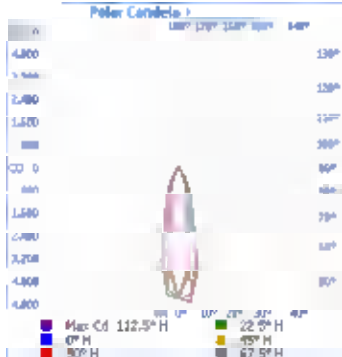
¹ Complete IES files available on our website.

EBST

PHOTOMETRIC DATA¹

SQ-12V-14W • 1 460.7 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	1 142.6	78.2
0-40	1 289.7	88.3
0-60	1 407.8	96.4
60-90	52.7	3.6
70-100	18.7	1.3
90-120	0.0	0
0-90	1 460.6	100
90-180	0.1	0
0-180	1 460.7	100

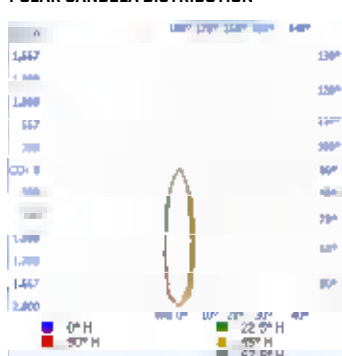
ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
2.0"	1 143.8	0.8	0.8
4.0"	285.9	1.6	1.7
6.0"	127.1	2.4	2.5
8.0"	71.5	3.2	3.3
10.0"	45.8	4.0	4.2

■ Vert. Spread: 22.6° ■ Hor. Spread: 23.5°

SQ-24V-5W • 659.0 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	493.6	74.9
0-40	562.7	85.4
0-60	627.1	95.2
60-90	31.8	4.8
70-100	12.4	1.9
90-120	0.0	0
0-90	658.9	100
90-180	0.1	0
0-180	659.0	100

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
2.0"	499.7	0.8	0.9
4.0"	124.9	1.6	1.8
6.0"	55.5	2.4	2.7
8.0"	31.2	3.2	3.6
10.0"	20.0	4.0	4.5

■ Vert. Spread: 22.6° ■ Hor. Spread: 25.3°

SQ-24V-9W • 1 114.7 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	835.1	74.9
0-40	954.7	85.7
0-60	1 060.8	95.2
60-90	53.8	4.8
70-100	21.1	1.9
90-120	0.1	0
0-90	1 114.6	100
90-180	0.1	0
0-180	1 114.7	100

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
2.0"	820.9	0.9	0.8
4.0"	205.2	1.7	1.6
6.0"	91.2	2.6	2.4
8.0"	51.3	3.5	3.2
10.0"	32.8	4.4	4.0

■ Vert. Spread: 24.5° ■ Hor. Spread: 22.6°

¹ Complete IES files available on our website.

EBST

PHOTOMETRIC DATA¹

SQ-24V-14W • 1 487.4 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	1 164.1	78.3
0-40	1 313.4	88.3
0-60	1 433.6	96.4
60-90	53.7	3.6
70-100	19.1	1.3
90-120	0.0	0
0-90	1 487.3	100
90-180	0.1	0
0-180	1 487.4	100

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
2.0"	1 166.4	0.8	0.8
4.0"	291.6	1.6	1.7
6.0"	129.6	2.4	2.5
8.0"	72.9	3.2	3.3
10.0"	46.7	4.0	4.2

■ Vert. Spread: 22.8° ■ Hor. Spread: 23.5°

SQ-12-24V-30W • 2 578 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	2 112.3	82
0-40	2 315.1	90
0-60	2 491.9	97
60-90	83.7	3
0-90	2 575.7	100

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
17.0"	33.7	6.1	6.3
34.0"	8.42	12.1	12.5
51.0"	3.47	18.2	18.8
68.0"	2.10	24.3	25.1
85.0"	1.35	30.4	31.3
102.0"	0.94	36.4	37.6

■ Vert. Spread: 20.3° ■ Hor. Spread: 20.9°

¹ Complete IES files available on our website.

Project _____ Type _____
Catalogue n° _____ Date _____



RPALW EXTRUDED ALUMINIUM

The clean lines of the RPALW series of commercial extruded aluminum signs present a fully modern appearance. The extruded aluminum provides for a rigid, durable and lightweight sign. Available in AC only, AC/DC and internally self-powered versions.

FEATURES & SPECIFICATIONS

CIRCUITRY - AC & AC/DC

- LED ultra bright light source
- 120/277/347 V AC Input, field selectable
- 1.9 W power consumption single or double face
- Emergency DC wattages as follows:
6 V DC = 0.9 W
12 V DC = 0.9 W
24 V DC = 0.9 W

CIRCUITRY - SELF-POWERED

- LED ultra bright light source
- 120/277/347 V AC Input, field selectable
- 2 W power consumption single or double face
- High-performance, Ni-Cad battery
- 90 or 120 minutes emergency duration
- Solid state transfer and battery charger

CIRCUITRY - NUCLEUS

- Emergency DC wattage as follow:
24 V DC = 0.10 A/2.4 W
- This unit can be connected to Nucleus's smart battery unit. Please view the Nucleus brochure for more details on this technology.

patterns stamped into backplate for junction box mounting

- Universal models include ceiling or end mount , field installable canopy kit c/w spider plate
- White powder coat finish standard, other finishes and colours optional

MECHANICAL

- Extruded aluminium construction
- Slide in/out captive face-plate(s) and backplate for rapid and simplified installation
- Universal spider knockout





COMPLIANCE

- Meets requirements of ICES-005

APPROVALS

- CSA Certified to C22.2 #141-15, C860

☒ Reviewed ☐ Reviewed As Noted
☐ Not Reviewed ☐ Revise and Resubmit

OVERVIEW	
LIGHT SOURCE	LED
INPUT VOLTAGE [V AC]	120/277/347
INPUT POWER	1.9 W AC & AC/DC single or double face 2 W self-powered single or double face
DC VOLTAGE [VDC]	6, 12, 24
DC POWER [W]	0.9
DC POWER/VOLTAGE [NUCLEUS]	24 V = 2.4 W
<div> NUCLEUS COMPATIBLE</div> <div> LED</div> <div> ICES 005</div> <div> CSA® Energy Verified Energie Vérifiée</div>	

For complete warranty details, please see our terms and conditions in our website.



RPALW • REV. 2024-4-17

T 514 227-1288

TF 1 866 348-2374

aimlite.com

RPALW

TYPICAL SPECIFICATION



TYPICAL SPECIFICATION

Supply and install Aimlite RPALW Series, Extruded Aluminum Running Man Exit Signs. The sign shall operate with AC/DC field selectable 120/277/347 V AC Input, field selectable Emergency DC voltage as follows 6 V 0.9 W, 12 V 0.9 W, 24 V DC 0.9 W. The Self powered configuration shall be AC field selectable 120/277/347v and consist of a long lasting Nickel-Cadmium battery and shall stay illuminated for a minimum of 120 minutes upon AC failure. The face shall be illuminated by using Nichia LED ultra-bright light source. The sign shall be suitable for wall, end, or ceiling mount and come complete with 3 Running Man fibers for universal direction. The frame and back plate shall each be of a one-piece extruded aluminium construction. The Exit Running Man Sign shall be CSA 22.2 No.141-15 certified, ICES 005 compliant and be Aimlite model number RPALW_____.

RPALW

ORDERING GUIDE

RPALW		M		-		/	
SERIES	NBR OF FACES	MOUNTING	COLOR	DC VOLTAGE*	OPTIONS		
RPALW	1 - SINGLE FACE 2 - DOUBLE FACE U - UNIVERSAL FACE	M - UNIVERSAL	WHT - WHITE (STANDARD) BLK - BLACK GRY - GREY BSH - BRUSHED ALUMINIUM CUS - CUSTOM COLOR (PLEASE SPECIFY)	UNVDC - UNIVERSAL DC BACKUP VOLTAGE 6, 12 AND 24 VDC BAT- SELF-POWERED FOR 90 MINUTES BAT1 - SELF-POWERED FOR 120 MINUTES NUC - NUCLEUS DRIVER	ATD ¹ , BKO, BNO, K5, LXS ² , PGD ² , SPW, VDR, WGD ² , LBN 0 - NO INDICATORS (DOUBLE FACE ONLY) ↓ ↑ ↗ ↘ ↙ ↘ D U UR DR DL UL		

* If AC only is required, select the UNVDC option and do not connect the DC wires when installing.

¹ ATD available with BAT and BAT1.

² Specify mounting.

OPTIONS

DESCRIPTION		DESCRIPTION	
ATD	AUTOMATIC TEST SELF-DIAGNOSTIC	PGD	LEXAN GUARD [SEPARATE ORDER]
BKO	BLACK OUT OPTION (SPECIAL WORDING)	SPW	SPECIAL WORDING
BNO	WHITE OUT OPTION (SPECIAL WORDING)	VDR	VANDAL RESISTANT SCREWS
K5	1/2" KNOCKOUT FOR PENDANT MOUNT	WGD	WARD [SEPARATE ORDER]
LXS	VANDAL RESISTANT SHIELD	LBN	LOW BRIGHTNESS

WIREGUARD¹

	PART NUMBER	DIMENSIONS (IN)
WALL MOUNT	WGD520-V2	15.75 X 11.5 X 4.5
CEILING MOUNT	WGD540	14.5 X 6.25 X 10.5
END MOUNT	WGD650-V2	17.75 X 17.75 X 16.50

¹ Please contact your AIMLITE customer service representative for more information.

WIREGUARD¹

	PART NUMBER	DIMENSIONS (IN)
WALL MOUNT	PGD109	14 X 9.75 X 3.5
CEILING MOUNT	PGD110	14 X 5.75 X 10
END MOUNT	PGD106	5.5 X 9.25 X 18.5

ADVISE EITHER
WALL, CEILING OR END MOUNT



Comes standard [single and universal face] with three pictogram legends for direction selection.

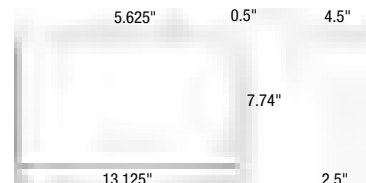


Comes standard [double face] with two pictogram legends.



For double face no arrow options, select "0" on the options column.

DIMENSIONS



Project		Catalog #		Type	
Prepared by		Notes		Date	



Greengate

Room Controller

Provides code compliant automatic lighting, emergency and plug load control

Interactive Menu

- Order Information page 2
- Additional Resources page 2
- Wiring Diagrams page 4
- Connected Systems page 4
- Product Warranty

Product Certification



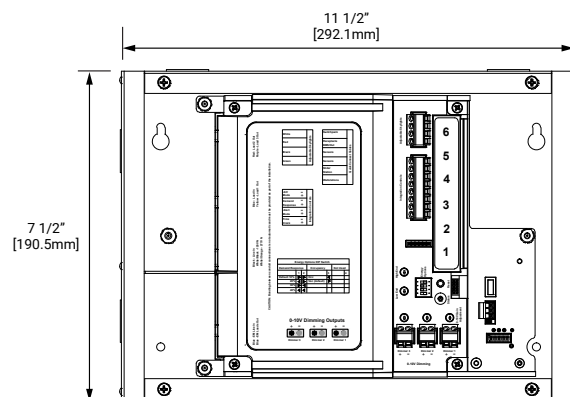
Product Features



Top Product Features

- The system includes three relays and up to three 0-10 VDC dimming outputs to control compatible dimmable ballasts. Providing a code compliant automatic lighting, emergency and plug load control out-of-the-box when connected to Room Controller low voltage devices. Network up to 254 ControlKeeper and Room Controller Network panels.
- Click & Go ready, RJ45 connections
- Preconfigured for automatic functionality upon power-up
- Manual or Automatic On, bi-level, tri-level and dimming control strategies
- Integral Demand Response input with four levels of preconfigured energy reduction
- Built in tubular lighting control with preconfigured wallstation controls
- Options to meet Buy American Act requirements

Dimensional and Mounting Details



MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Reviewed | <input type="checkbox"/> Reviewed As Noted |
| <input type="checkbox"/> Not Reviewed | <input checked="" type="checkbox"/> Revise and Resubmit |

 additional product diagrams

Greengate

Room Controller

Order Information

Catalog Number

Domestic Preferences ⁽¹⁾	Catalog Number	Description	Voltage	Ballast/Incandescent
[Blank] =Standard	RC3-PL	3 Relays, Plenum	120-277 VAC, 50/60Hz	Maximum Combined Load 20A
	RC3D-PL	3 Relays, 3 0-10V dimming, Plenum	120-277 VAC, 50/60Hz	Maximum Combined Load 20A
	RC3D-PL-CP	3 Relays, 3 0-10V dimming, Chicago Plenum Room Controller	120-277 VAC, 50/60Hz	Maximum Combined Load 20A
	RC3DE-PL-CP	3 Relays, 3 0-10V dimming, UL924, Chicago Plenum Room Controller	120-277 VAC, 50/60Hz	Maximum Combined Load 20A
	RC3DEHC-PL-CP	3 Relays, 3 0-10V dimming, UL924 for healthcare, Chicago Plenum Room Controller	120-277 VAC, 50/60Hz	Maximum Combined Load 20A
[Blank] =Standard BAA = Buy American Act	RC3DE-PL	3 Relays, 3 0-10V dimming, UL 924, Plenum	120-277 VAC, 50/60Hz	Maximum Combined Load 20A
	RC3DEHC-PL	3 Relays, 3 0-10V dimming, UL 924 for healthcare, Plenum	120-277 VAC, 50/60Hz	Maximum Combined Load 20A
Note (1) Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.				

Additional Options

Catalog Number

Catalog	Description
GGRC-COUPLER	RJ45 Coupler
GGRC-SPLITTER	RJ45 Splitter
GGRJ45-006-G	RJ45 cables 6 inches
GGRJ45-03-G	RJ45 cables 3 feet
GGRJ45-10-G	RJ45 cables 10 feet
GGRJ45-25-G	RJ45 cables 25 feet
GGRJ45-50-G	RJ45 cables 50 feet
GGRJ45-100-G	RJ45 cables 100 feet
GGRJ45-10P-G	RJ45 cables 10 feet plenum rated
GGRJ45-25P-G	RJ45 cables 25 feet plenum rated
GGRJ45-50P-G	RJ45 cables 50 feet plenum rated
GGRJ45-100P-G	RJ45 cables 100 feet plenum rated
Note Please refer to the Room Controller page on our website for more information. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.	

Product Specifications

Mechanical

Size: 11 1/2" W x 7 1/2" H x 2 1/4" D (292.1mm x 190.5mm x 57.15mm)

Environment:

- **Operating temperature:** 32°F to 104°F (0°C to 40°C)
- For indoor use only

Electrical

Input Requirements:

- 120-277 VAC 50/60Hz
- Maximum 20A combined load per Room Controller

Ballast load: 20A @ 120/277 VAC (LED)

Incandescent load: 15A @ 120 VAC

Motor load: 1HP @ 120 VAC

LED Drivers: Requires isolated LED drivers for optimal performance

LED, Ballast or Incandescent Load: 3A

Class 2 Dimming Output:

- 0-10 VDC, sinks up to 100mA per (40 µA max per circuit leakage to line)
- Each 0-10V output supports up to 50 ballasts / drivers that draw the standard 2mA each

Emergency Output (RC3DE/RC3DEHC only): UL 924


Installation: Install in accordance with National Electrical Code and any other codes that may apply

Standards/Ratings

- UL Approved
- UL 508 Listed
- UL 924 Listed
- cULus Listed

Warranty

Five year warranty standard

Submitted by Medgar Lighting & Controls Inc		Catalog Number: RC3D-PL	Type:
	Job Name: HDSB - Glenview Public School Gym Addition Engineer: DEI & Associates (Waterloo)	Notes:	RCD ML&C24-119319

Greengate

Room Controller

Overview

The Room Controllers are connected to a 120 VAC through 277 VAC 20 Amp circuit to provide unit power and input power to the individual relays. The wallstations, occupancy sensors, daylight sensors and receptacle control devices connect via QuickConnect cables (ordered separately) providing a Class 2 connection. Upon power up the pre-engraved wallstation automatically controls the On/Off relays adjust the dimming outputs. The daylight sensor will immediately adjust the lighting levels based on natural light.

The line voltage section of the Room Controller provides the installing contractor space to make all line voltage connections and direct conduit access, reducing the need for additional junction boxes, while providing easy access to line voltage circuits. Low voltage devices are connected using Cat5 cables (ordered separately).

UL 924 relay is provided on some units for automatic emergency lighting control. The UL 924 relay automatically tracks with output 1 and can be connected to any of the three 0-10V dimmers. The UL 924 relay automatically closes and disconnects the 0-10V control open loss of normal power providing adequate egress lighting control. Ladderless maintenance testing of the UL 924 relay can be achieved by pressing the ALL OFF button four times.

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

RC3D-PL

Notes:

Type:**RCD**

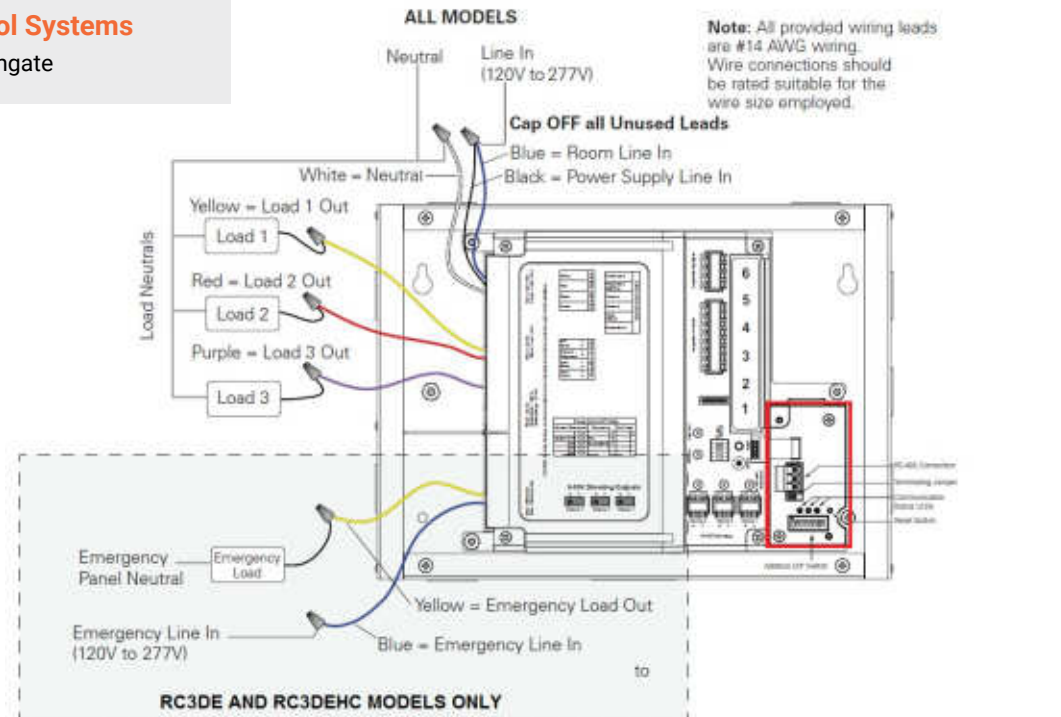
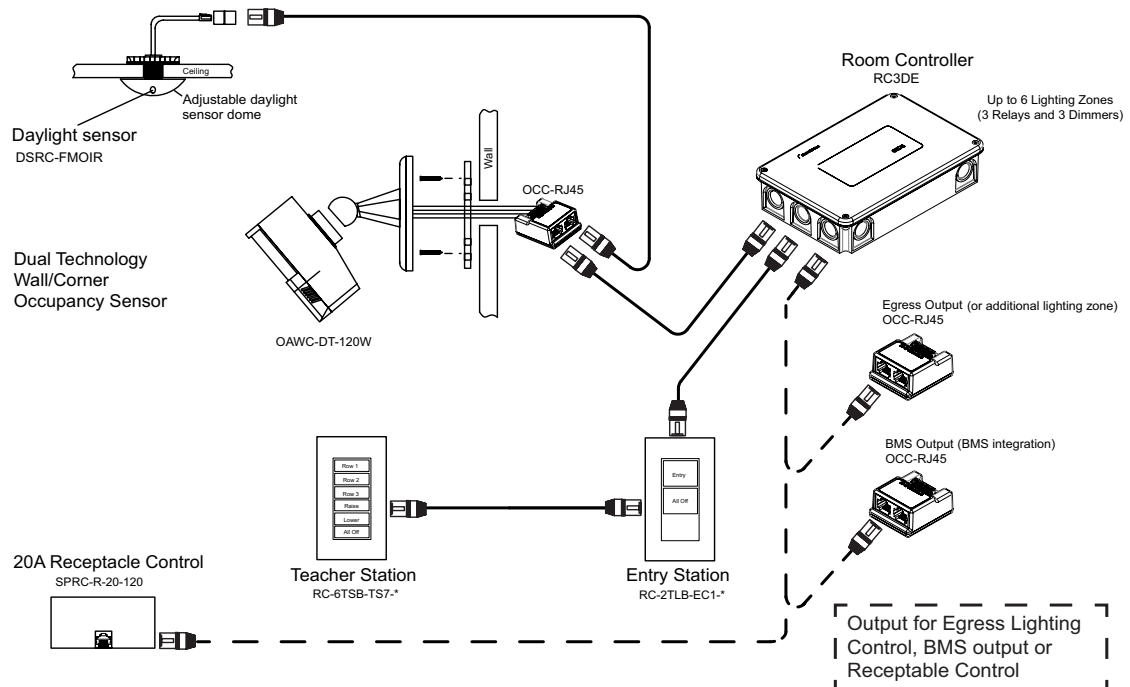
ML&C24-119319

Greengate**Room Controller****Wiring Diagrams**

Sample Wiring Diagram

**Control Systems**

- Greengate

**Room Connections**

Project		Catalog #		Type	
Prepared by		Notes		Date	



Greengate

OAWC-DT-120W Dual Technology

Wall / Corner Sensor

Typical Applications

Classrooms • Conference Rooms • Large Offices • Common Areas • Computer Rooms • Break Rooms

Interactive Menu

- Order Information page 2
- Additional Resources page 2
- Wiring Diagrams page 2
- Connected Systems page 3
- Product Warranty

Product Certification



Product Features



Overview

The Dual Technology sensor's combination of Ultrasonic and Passive Infrared technologies offers the most complete sensing equipment available today. Self-adjusting Dual Technology sensors drastically simplify and reduce a contractor's installation and adjustment time period.

The OAWC-DT combines Ultrasonic (US) and Passive Infrared (PIR) sensor technologies to monitor a room for occupancy to deliver maximum energy savings and ensure the greatest sensitivity and coverage for tough application without the threat of false triggers. PIR is used to turn the lights ON and then either or both technologies are used to keep the lights ON. The sensor includes MicroSet self-adaptive technology that continuously self-adjusts sensitivity and time delay in real-time, maximizing the potential energy savings that are available in particular application. In Automatic On Mode, the lights turn ON when a person enters the room. In Manual-On Mode, the lights are turned ON by activating a momentary switch (model # GMDS-*) that is connected to the sensor. When used with 2 level lighting (-R model only), Bi-level Automatic On can be achieved which allows Zone 1 to come on automatically upon occupancy. Zone 2 does not come on unless the occupant presses the optional momentary switch. When enabled, the daylighting feature (-R models only) prevents lights from turning ON when the room is adequately illuminated by natural light.

Top Product Features

- MicroSet self-adjusting time delay and sensitivity
- Optional built-in light level sensor
- Optional BAS/HVAC isolated relay
- NEMA WD7 Guide robotic method utilized to verify coverage patterns
- Manual On feature for use with 1 or 2 momentary switches controlling 1 or more Switchpacks
- Selectable Walk-Through Mode



MECHANICAL | ELECTRICAL | AQUATIC

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☒ Reviewed
☐ Reviewed As Noted
☐ Not Reviewed
☐ Revise and Resubmit

Greengate

OAWC-DT-120W

Order Information

Catalog Number

Catalog Number	Coverage	Field of View	Features
OAWC-DT-120W-R	1,200 sq. ft.	Wide Angle (120°)	w/ BAS Relay & Daylight Sensor
OAWC-DT-120W	1,200 sq. ft.	Wide Angle (120°)	

Product Specifications

Technology

- Passive Infrared (PIR) and Ultrasonic (US)

Mechanical

Size: 4.4"H x 3.4"W x 2"D (112mm x 86.4mm x 50.8mm)

Mounting: Mounts directly to ceiling tile, to a 4" square box and round mud ring or to 4" octagon box

Environment:

- Operating temperature: 32°F to 104°F (0°C to 40°C)
- Relative humidity operating: 20% to 90% non-condensing
- For indoor use only

Housing:

- Durable, injection molded housing
- Polycarbonate resin complies with UL 94V-0

Electrical

Power Requirements:

- Input
 - 0-30 VDC from Greengate Switchpack or Greengate System
 - Maximum current needed is 25mA per sensor
- Output
 - Open collector output to switch up to ten Greengate Switchpacks
 - Isolated Form C Relay in (-R models)
 - Isolated Form C Relay Ratings: 1A 30 VDC/VAC

Hardware Specifications

LED Indicators:

- Red LED for PIR detection; Green LED for Ultrasonic detection

Controls and Performance

Time delays:

- Self-Adjusting, 15 seconds/test, 5, 10, 15, 30 minutes

Light sensing level (-R Models):

- 0 to 300 foot candles

Standards/Ratings

- cULus Listed - Energy Management Equipment (UL916)
- FCC Compliant
- RoHS Compliant

Warranty

Five year warranty standard

Wiring Diagrams

OAWC-DT-120W-R Model

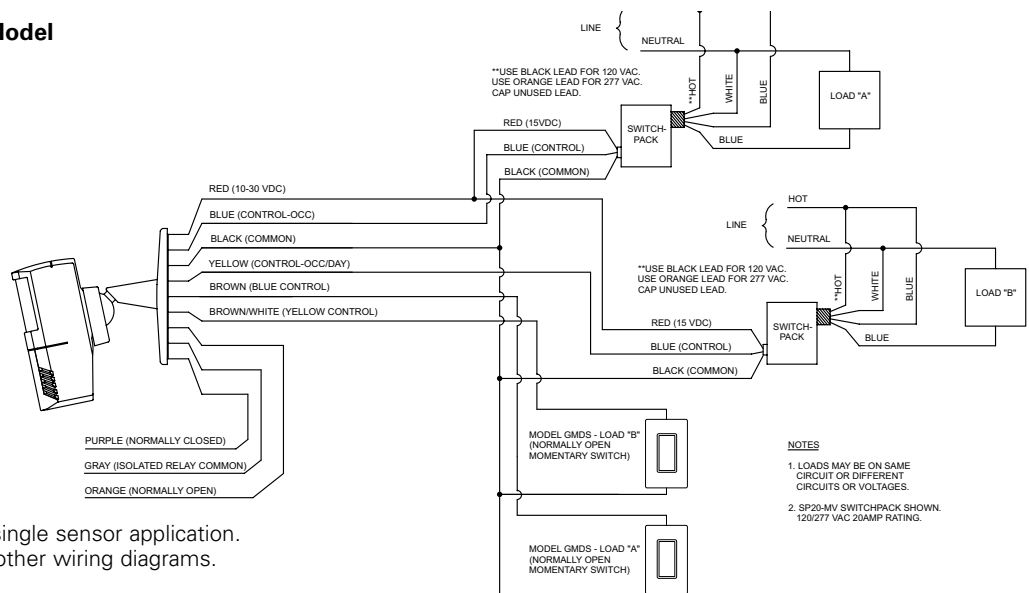
MANUAL MODE OPERATION:

- SWITCHES ARE REQUIRED TO TURN CORRESPONDING LOADS ON.
- LOADS TURN OFF WHEN SENSOR TIMES OUT OR WITH SWITCHES.

AUTOMATIC MODE OPERATION:

- WHEN SENSOR ACTIVATES, BOTH LOADS TURN ON.
- SWITCHES CAN BE USED TO TURN LIGHTS ON OR OFF.
- IF DAYLIGHT SENSOR IS ENABLED AND LIGHT LEVEL IS ABOVE SETPOINT, SWITCHPACK CONNECTED TO YELLOW LEAD WILL NOT TURN LOAD ON.

RECOMMENDED WIRE:
18-3 AWG STRANDED WIRE SHIELDED OR NONSHIELDED



*Wiring diagram for single sensor application.
Visit our website for other wiring diagrams.

Greengate

OAWC-DT-120W

Controls

DIP Switch Legend

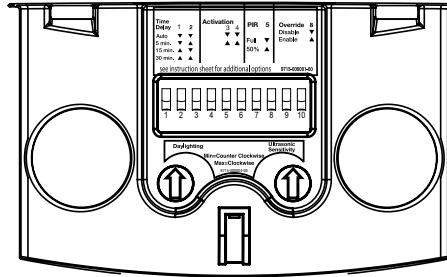
DIP Switch	Time Delay		Activation	Activation	PIR Sensitivity	Walk-Through Mode	LEDs	Override	Lighting Sweep	Daylighting Mode
			Power Pack One	Power Pack Two						
	1	2	3	4	5	6	7	8	9	10
Auto*	▼	▼	Auto ▼	Auto ▼	Full ▼	Disable ▼	Enable ▼	Disable ▼	Disable ▼	Half ▼
5 Minutes	▼	▲	Manual ▲	Manual ▲	50% ▲	Enable ▲	Disable ▲	Enable ▲	Enable ▲	Full ▲
15 Minutes	▲	▲								
30 Minutes	▲	▲								

(-R model only)

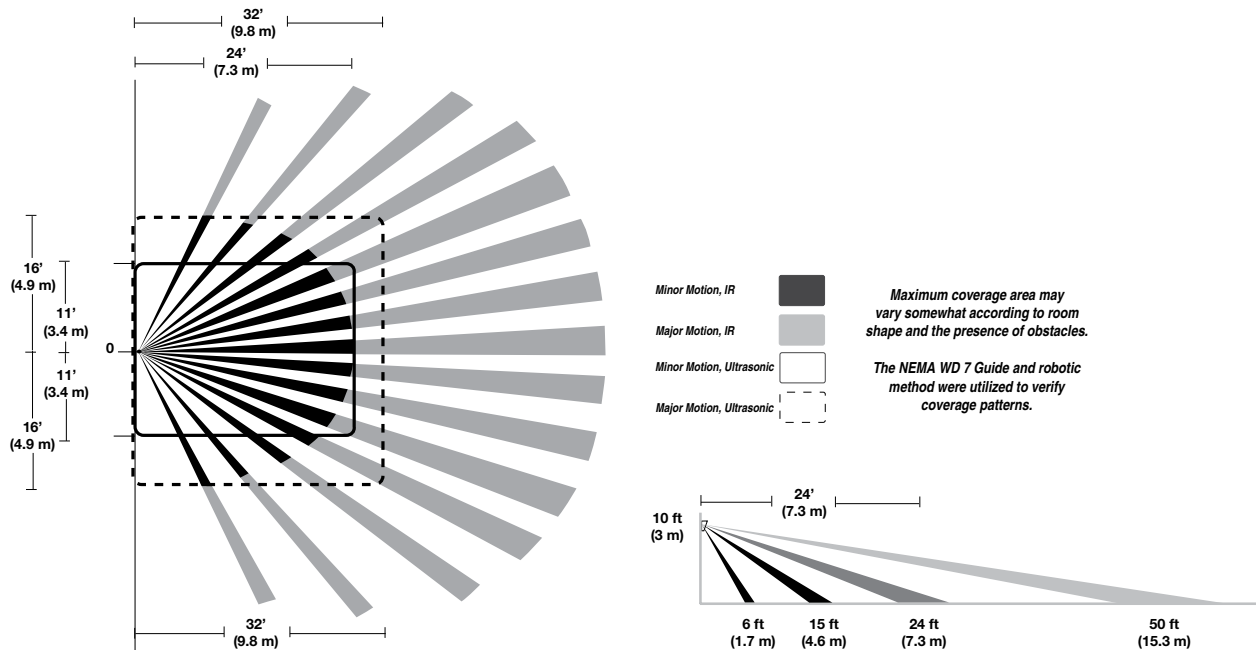
(-R model only)

*Self-Adjusts to
10 min. user
mode

Default =



Field of View



Control Systems

- Greengate

Project		Catalog #		Type	
Prepared by		Notes		Date	



Greengate

Input / Output Device

Provides connection of any Greengate low voltage occupancy sensor, or other low voltage maintain closure, to the Room Controller or DLVP power module

Typical Applications

Office • Education • Healthcare • Hospitality • Retail

Interactive Menu

- Order Information page 2
- Additional Resources page 3
- Wiring Diagrams page 3
- Connected Systems page 6
- Product Warranty

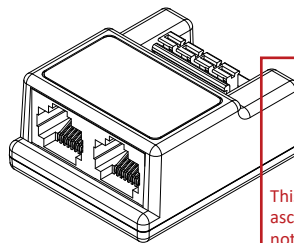
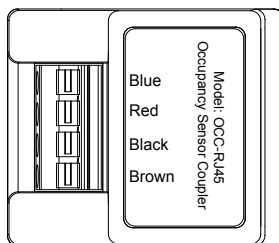
Product Certification



Top Product Features

- Input/Output integration
- Automatically provide Egress or HVAC integration based on room occupancy junction box
- Allows connection of standard switchpacks
- Plenum Rated

Dimensional Details



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**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

OCC-RJ45

Notes:

Type:**OCC**

ML&C24-119319

Greengate**Input / Output Device****Order Information**

Catalog Number

Catalog Number	Description
OCC-RJ45	Input/Output Device
Notes (1) One OCC-RJ45 is automatically included with each occupancy sensor when the Room Controller is ordered as a QuickKit. (2) See Greengate low voltage occupancy sensor spec sheet for occupancy sensor information.	

Product Specifications**Key Features**

- The Input/Output Device (OCC-RJ45) provides connection of any Greengate low voltage occupancy sensor, or other low voltage maintain closure, to the Room Controller or DLVP power module to define the occupancy state of the space. The OCC-RJ45 also can be used as an output to the HVAC system, third party systems or switchpacks based upon room occupancy status.
- The Input/Output Device (OCC-RJ45) is ready and works immediately upon power up, providing Occupancy based inputs or outputs out-of-the-box, removing the need for field programming and reducing installation time
- Low-voltage devices are connected using provided pre-terminated control cables (ordered separately)

Electrical

Voltage: 24 VDC supplied from Room Controller, DLVP power module or Switchpack

Electrical Rating: Class 2, LPS

Standards/Ratings

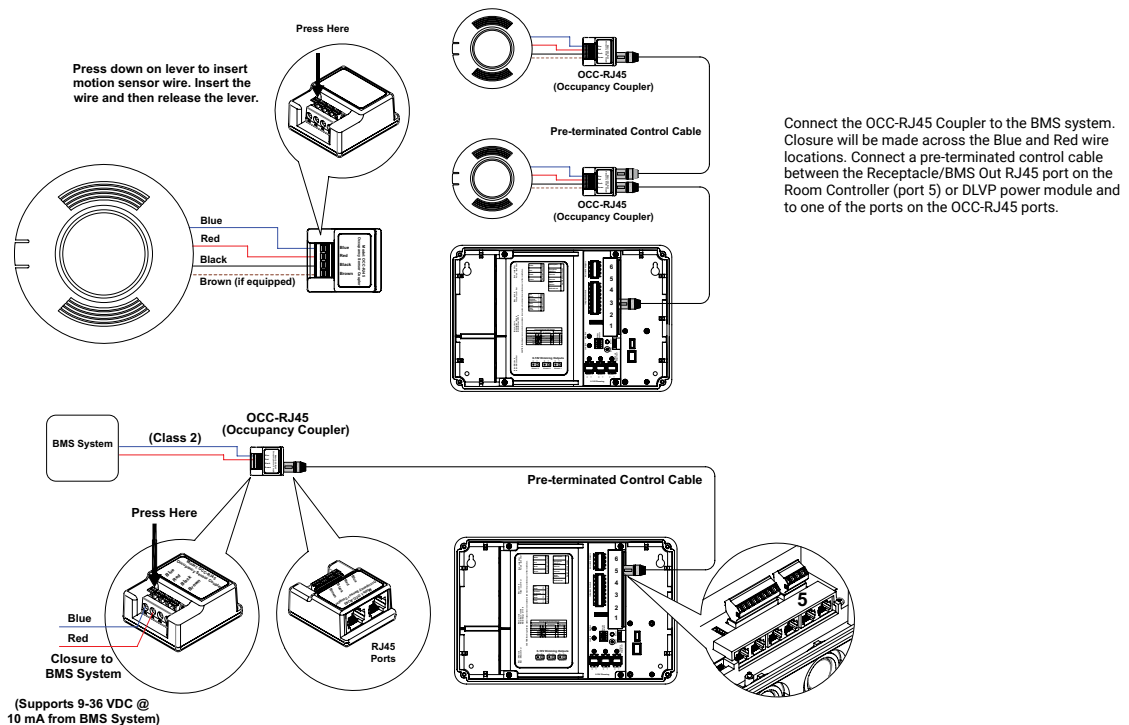
- cULus Listed
- UL 508 Listed

Warranty

Consult website for warranty information

Mechanical**Environment:**

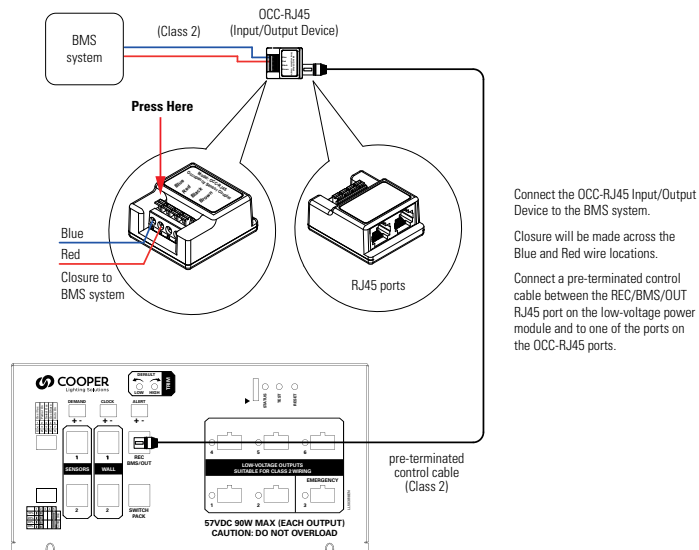
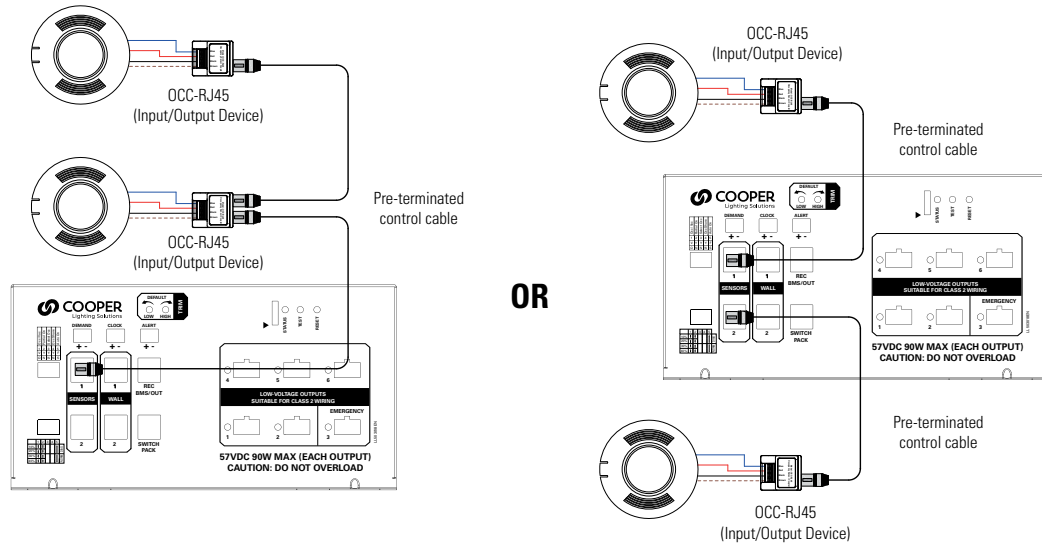
- Operating temperature:** 32°F to 104°F (0°C to 40°C)
- Less than 95%, non-condensing
- For indoor use only

Wiring Diagrams**Sample Room Controller Wiring Diagram**

Greengate

Input / Output Device

Sample DLVP Wiring Diagram



Connect the OCC-RJ45 Input/Output Device to the BMS system.

Closure will be made across the Blue and Red wire locations.

Connect a pre-terminated control cable between the REC/BMS/OUT RJ45 port on the low-voltage power module and to one of the ports on the OCC-RJ45 ports.

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

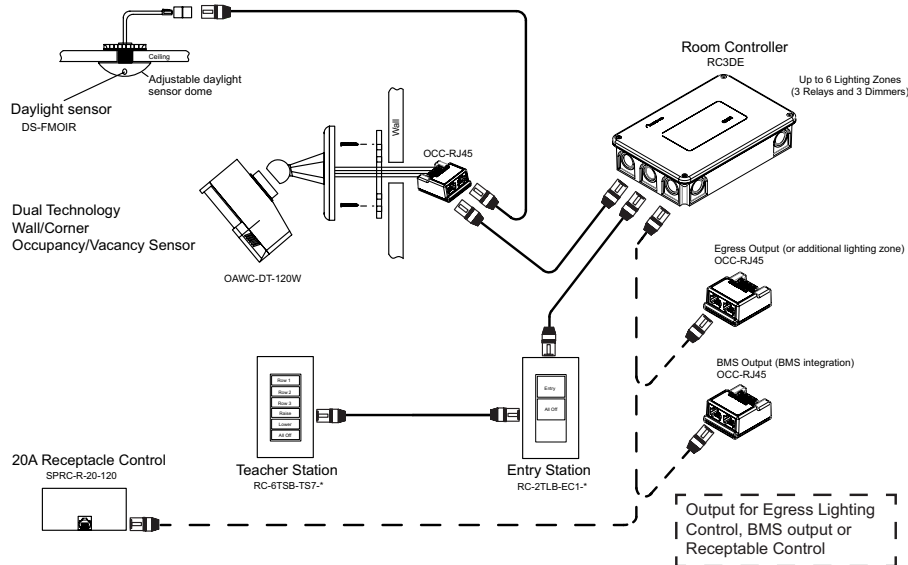
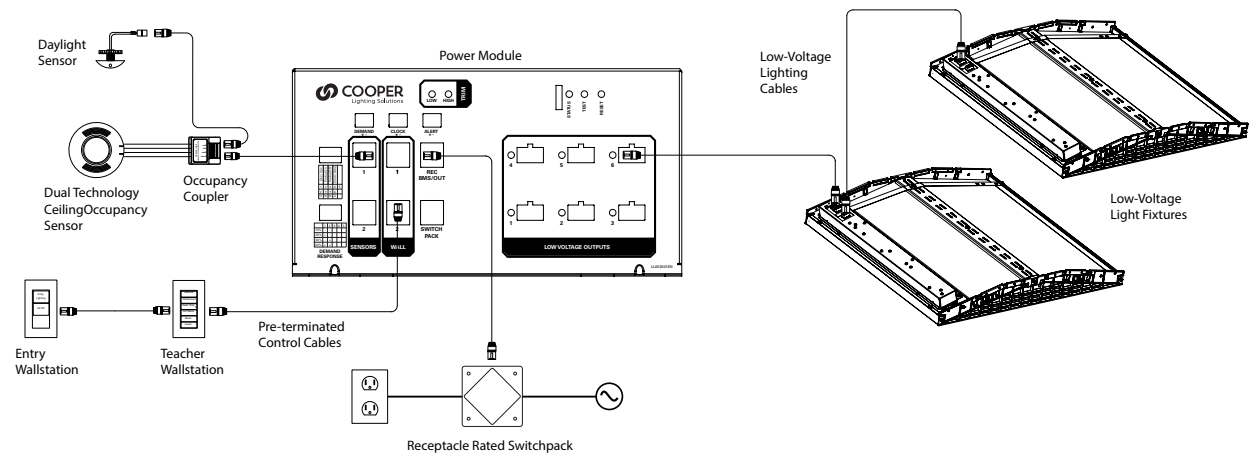
Catalog Number:
OCC-RJ45

Notes:

Type:

OCC

ML&C24-119319

Greengate**Input / Output Device****Sample System Topology****Sample Room Controller System Topology****Sample DLVP System Topology**

Project		Catalog #		Type	
Prepared by		Notes		Date	



Greengate

SP15 & SP20 Heavy Duty Switchpacks

Provide 15 VDC operating voltage to all low voltage, 15 VDC occupancy sensors and daylighting controllers

Interactive Menu

- Order Information [page 2](#)
- Wiring Diagrams [page 3](#)
- Mounting Diagrams [page 3](#)
- Connected Systems [page 3](#)
- Product Warranty

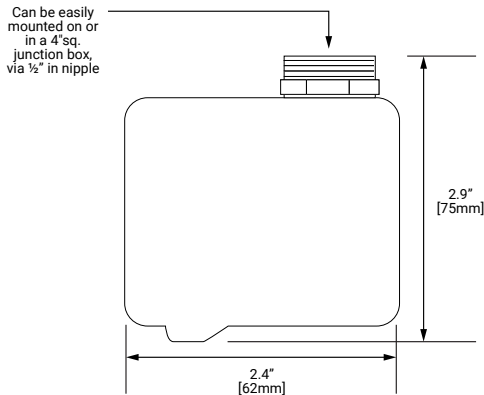
Product Certification



Top Product Features

- Replaces separate transformers and relays
- Zero-crossing circuit provides increased durability, especially with today's high inrush loads
- Capable of switching up to 20 Amps
- Suitable for Plenum use
- Rated for Ballast, Tungsten and Motor Loads
- LED ready

Dimensional and Mounting Details



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 additional product diagrams

Greengate Heavy Duty Switchpack

Order Information

Catalog Number

Catalog Number	Ratings	(LED) Ballast	Tungsten	Motor (HP)	Output
SP20-MV	120/277 VAC, 50/60 Hz	20A	15A, 120V	1HP-120V, 2HP-250V	15 VDC, 125mA
SP15-347	347 VAC, 50/60 Hz	15A	NR	NR	15 VDC, 125mA

Product Specifications

Key Features

Switchpacks provide 15 VDC operating voltage to all low voltage, 15 VDC occupancy sensors and daylighting controllers. A single switchpack can provide power for up to five sensors. Up to ten switchpacks can be connected to one sensor for control of multiple circuits. Isolated contacts may also be used to control HVAC, contactors, motors, etc.

- Replaces separate transformers and relays
- Zero-crossing circuit provides increased durability, especially with today's high inrush loads
- Capable of switching up to 20 Amps
- Suitable for Plenum use
- Rated for Ballast, Tungsten and Motor Loads
- LED ready

Mechanical

Size: 2.94"H x 2.44"W x 1.69"D (74.67mm x 61.97mm x 42.92mm)

Environment:

- **Operating temperature:** 32°F - 104°F (0°C - 40°C)
- **Relative humidity operating:** Less than 95%, non-condensing
- For indoor use only

Mounting: Mounts to the side of a 4" square box via 1/2" knockout

Housing:

- Medium impact injection molded housing.
- ABS resin complies with UL 94V-0. Plenum rated for external junction box mounting, with Teflon coated leads

Electrical

Input:

- (120/277 VAC-SP20-MV), (347 VAC-SP15-347), 50/60 Hz operation
- Contacts are isolated and may be used to control low voltage circuits

Output:

- 15 VDC 125mA to operate up to five Greengate sensors

Control: Connecting the 22 AWG red and blue control leads to each other will close the relay contacts

Load: 1 HP 120-240 VAC; 2 HP 250 VAC

Ballast compatibility:

- LED loads
- Magnetic and Electronic ballasts
- NOTE: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with the CFL and ballast manufacturer to determine effects of cycling

Standards/Ratings

- UL Listed
- CSA Listed

Warranty

Consult website for warranty information

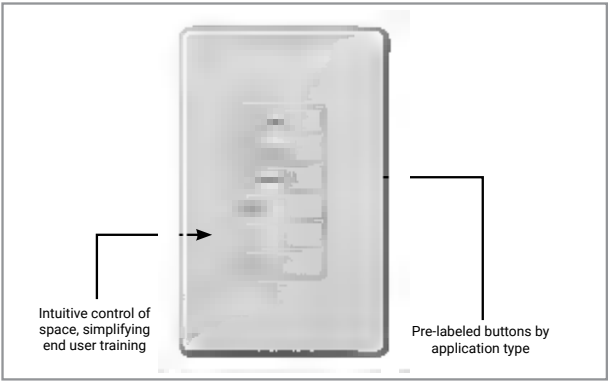
Description/Operation

The switchpack has two main components: a transformer and one high current relay. The transformer has a primary line voltage input and a secondary low voltage output. The low voltage output, 15 VDC, provides operating power to connected low voltage Greengate occupancy sensors. When an occupancy sensor detects motion, it electrically closes an internal circuit, pulling up the control signal between the sensor and the switchpack. This signals the switchpack to close its high current relay, turning the connected load on.

Applications

The switchpack is designed to work with low voltage sensors which require switchpacks. It cannot be used with sensors designed for use with any other low voltage relay systems. Consult sensor spec sheets for other sensor relay combinations.

Project		Catalog #		Type	
Prepared by		Notes		Date	



Greengate

Zone Wallstation

Note: Provide Wavelink CAT for review.

Interactive Menu

- Order Information page 2
- Additional Resources page 3
- Wiring Diagrams page 4
- Connected Systems page 5
- Product Warranty

Product Certification

Product Features

MECHANICAL | ELECTRICAL | AQUATIC

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☐ Reviewed
☐ Reviewed As Noted

☐ Not Reviewed
☒ Revise and Resubmit

Dimensional Details

Mounting Height

additional product diagrams

Submitted by Medgar Lighting & Controls Inc		Catalog Number: RC-1TLB-101-W	Type: KP1
	Job Name: HDSB - Glenview Public School Gym Addition Engineer: DEI & Associates (Waterloo)	Notes: ZONE 1	ML&C24-119319

Greengate Zone Wallstation

Order Information

SAMPLE ORDER NUMBER: **RC-6TSB-OS3-W**

One single gang color matching wallplate is included in the package. Standard button engraving shown below. Engraving appears as black text on white, ivory, and gray buttons. Engraving appears as gold text on black buttons. If white engraved text is desired on black buttons use the configurator tool with the FlashPro software.

Domestic Preferences	Catalog Number	Number of Buttons	Button Engraving	Command Reference Table	Insert Color
Domestic Preferences ⁽¹⁾	Catalog Number	Number of Buttons	Button Engraving ⁽²⁾	Command Reference Table ⁽³⁾	Insert Color
Blank = Standard BAA = Buy American Act	RC	1, 2, 3 = Large Buttons - TLB 4, 5, 6 = Small Buttons - TSB	101 = Zone 1 (1 TLB) 102 = Zone 2 (1 TLB) 103 = Zone 3 (1 TLB) 221 = Zone 1, Zone 2 (2TLB) 321 = Zone 1, Zone 2, All Off (3TLB) 331 = Zone 1, Zone 2, Zone 3 (3TLB) 531 = Zone 1, Zone 2, Zone 3, Raise, Lower (5TSB) 621 = All On, Raise 1, Lower 1, Raise 2, Lower 2, All Off (6TSB) 623 = Zone 1, Raise 1, Lower 1, Zone 2, Raise 2, Lower 2 (6TSB) 631 = Zone 1, Zone 2, Zone 3, Raise, Lower, All Off (6TSB) ES1 = Entry, All Off (2TLB) TS1 = General, Whiteboard, Quiet Time, A/V Mode, Raise, Lower (6TSB) TS2 = General, Whiteboard, Quiet Time, Raise, Lower All Off (6TSB) TS3 = General, Whiteboard, Quiet Time, A/V Mode, All Off (5TSB) TS4 = General, Whiteboard, A/V Mode, Raise, Lower, All Off (6TSB) TS5 = Entry, General, Whiteboard, All Off (4TSB) TS6 = Entry, General, Whiteboard, Raise, Lower, All Off (6TSB) TS7 = Row 1, Row 2, Row 3, Raise, Lower, All Off (6TSB) TS8 = Uplights, Downlights, Accent, Raise, Lower, All Off (6TSB) TS9 = Entry, General, Quiet Time, Whiteboard, A/V Mode, All Off (6TSB) TS10 = Main, Whiteboard, A/V Mode, Raise, Lower, All Off (6TSB) HC1 = General, Exam, Reading, All Off (4TSB) HC2 = General, Exam, Reading, Raise, Lower, All Off (6TSB) OS1 = Half Lights, Full Lights, All Off (3TLB) OS2 = Half Lights, Full Lights, Raise, Lower, All Off (5TSB) OS3 = Half Lights, Full Lights, Undercabinet, Raise, Lower, All Off (6TSB) OS4 = All ON, All Off (2 TLB) ZAD = Zone 1 UP, Zone 1 DN, Zone 2 UP, Zone 2 DN, Zone 3 UP, Zone 3 DN (6TSB) Z1D = Zone 1, Raise, Lower (3TLB) Z2D = Zone 2, Raise, Lower (3TLB) Z3D = Zone 3, Raise, Lower (3TLB)	101 = 1 102 = 2 103 = 11 221 = 1, 2 321 = 1, 2, 8 331 = 1, 2, 11 531 = 1, 2, 11, 6, 7 621 = 16, 17, 18, 19, 20, 8 623 = 1, 17, 18, 2, 19, 20 631 = 1, 2, 11, 6, 7, 8 ES1 = 1, 8 TS1 = 2, 3, 5, 4, 6, 7 TS2 = 2, 3, 5, 6, 7, 8 TS3 = 2, 3, 5, 4, 8 TS4 = 2, 3, 4, 6, 7, 8 TS5 = 1, 2, 3, 8 TS6 = 1, 2, 3, 6, 7, 8 TS7 = 1, 2, 3, 6, 7, 8 TS8 = 1, 2, 3, 6, 7, 8 TS9 = 1, 2, 5, 3, 4, 8 TS10 = 1, 3, 4, 6, 7, 8 HC1 = 1, 2, 3, 8 HC2 = 1, 2, 3, 6, 7, 8 OS1 = 12, 13, 8 OS2 = 12, 13, 6, 7, 8 OS3 = 12, 13, 11, 6, 7, 8 OS4 = 10, 8 ZAD = 17, 18, 19, 20, 21, 22 Z1D = 1, 17, 18 Z2D = 2, 19, 20 Z3D = 3, 21, 22	W = White B = Black V = Ivory G = Gray

Notes

- (1) Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
- (2) For custom configurations or custom engraving, use the configurator tool within the FlashPro tool.
- (3) For reference only. Commands will not be engraved onto station.

Greengate
Zone Wallstation

For Reference Only

Command #	Action
1	Toggle Load/Zone 1 (Also influences Receptacle Switchpack, Solatube, and Emergency)
2	Toggle Load/Zone 2 (Also influences Receptacle Switchpack)
3	Toggle Load/Zone 3
4	Toggle A/V mode B Scene 5
5	Disable/Re-enable Occupancy Sensor (After being disabled 60 minutes, the sensor automatically re-enables)
6	Raise all
7	Lower all
8	All Loads/Zones OFF
9	All Dimmers 50%, Relay 1 ON, Relay 2 OFF, Relay 3 unaffected DLVP-Zone 1=50%, Zone 2=OFF, Zone 3=unaffected
10	All Loads/Zones to 100% (Solatube closed)
11	Toggle Load/Zone 3 (influences Receptacle Switchpack)
12	Go to Scene 1
13	Go to Scene 2
14	Go to Scene 3
15	Go to Scene 4
16	All Loads/Zones ON
17	Raise Zone 1
18	Lower Zone 1
19	Raise Zone 2
20	Lower Zone 2
21	Raise Zone 3
22	Lower Zone 3

Product Specifications

Mechanical

Size: 4.75" H x 3.25" W (121mm x 83mm)

Environment:

- **Operating temperature:** 32°F to 104°F (0°C to 40°C)
- **Relative humidity operating:** Less than 95%, non-condensing
- For indoor use only

Connection Ports: Two RJ45 ports

Button Configurations:

- Large buttons: 2 or 3
- Small buttons: 2, 4, 5, 6

Installation:

- Standard decorator opening

Electrical

Input Requirements: Class 2, LPS

Voltage: 24 VDC supplied from Room Controller

Standards/Ratings

- UL 508 Listed

Warning

- This product is not intended to be used in applications involving the use of ammonia-based or VOC cleaners.
- Use of ammonia-based or VOC cleaners on this device must be avoided. Prolonged use may cause loss of integrity and expose electrified components. If this occurs, turn OFF power to the unit and replace.
- For detailed cleaning guidelines please refer to: Controls Care and Maintenance instructions at the end of this document.

Warranty

Five year warranty standard

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:
RC-1TLB-101-W

Notes: ZONE 1

Type:**KP1**

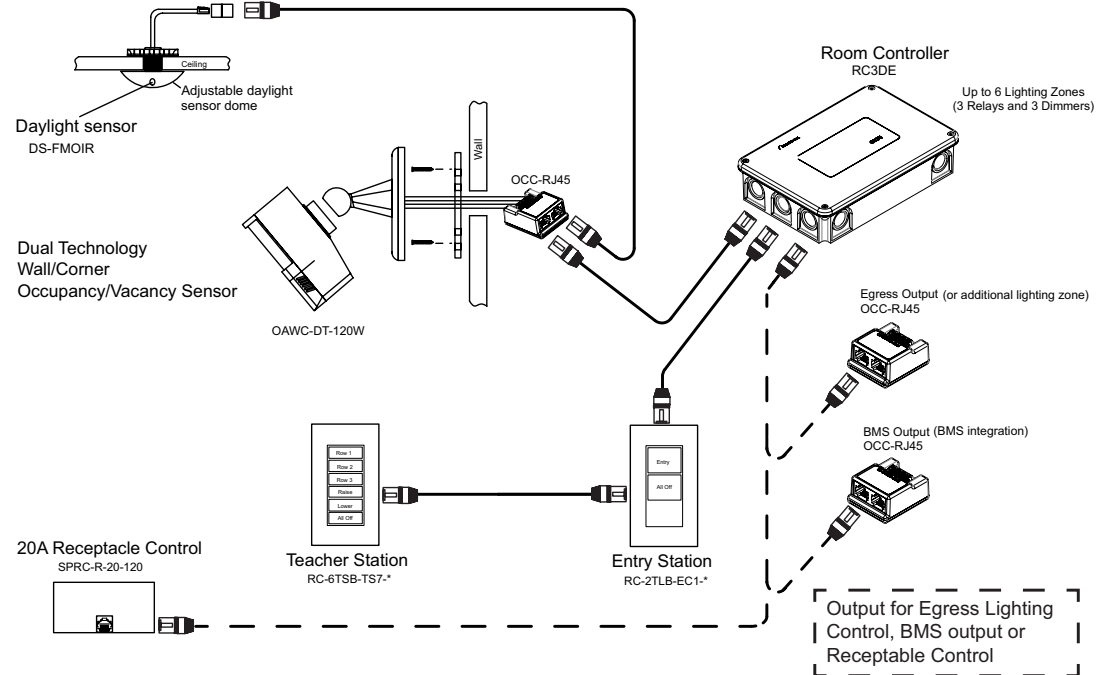
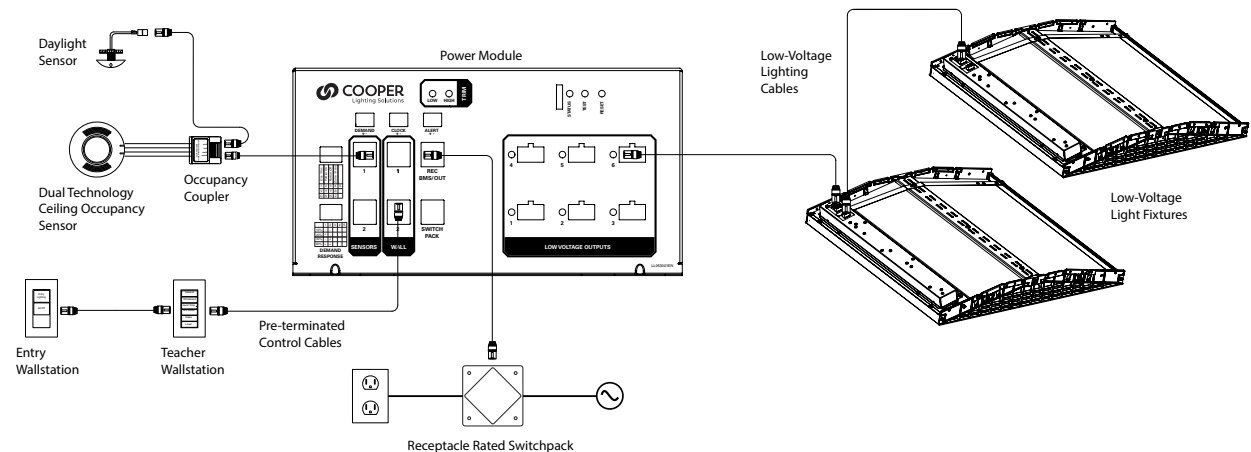
ML&C24-119319

Greengate**Zone Wallstation****Overview**

The zone wallstations are pre-engraved low-voltage switches that operate on 24 VDC power supplied by the Room Controller or DLVP power module. Each wallstation is designed to fit in a standard decorator opening and has two RJ45 ports for local network connections to eliminate wiring errors.

The zone wallstations are pre-terminated control cable (ordered separately) ready and work immediately upon power up. Zone wallstations for office, classroom, patient room, conference room and general areas are available and are fully functional out-of-the-box removing the need for field programming and reducing installation time.

Low-voltage devices are connected using provided pre-terminated control cables (ordered separately).

Wiring Diagrams**Sample Room Controller System Topology****DLVP System Topology**

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

RC-1TLB-101-W

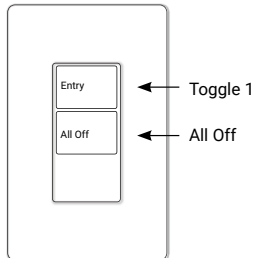
Notes: ZONE 1

Type:**KP1**

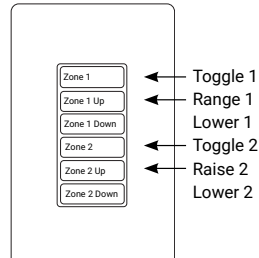
ML&C24-119319

Greengate**Zone Wallstation****Sample Wallstations**

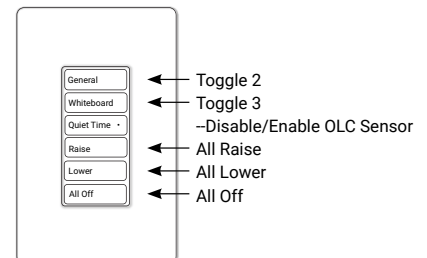
* Not All Configurations Shown



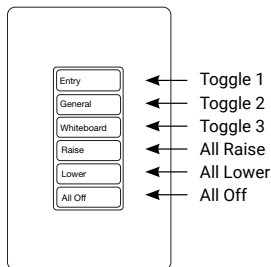
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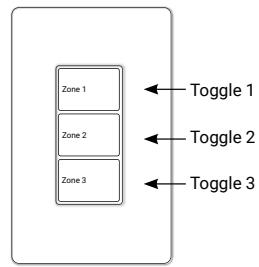
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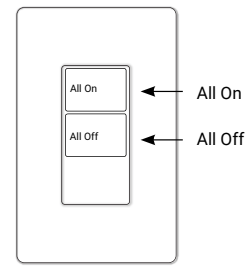
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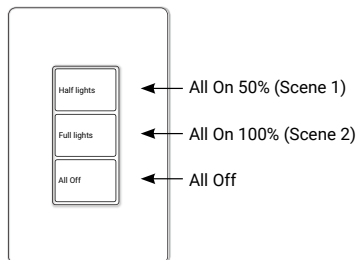
RC-6TSB-TS6



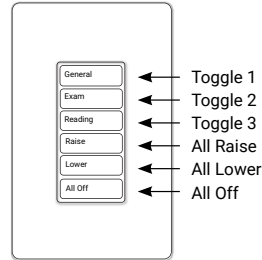
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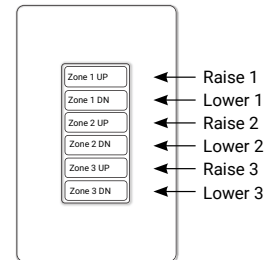
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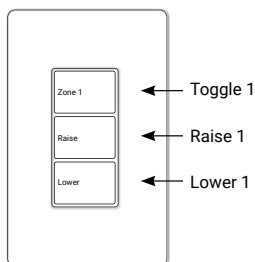
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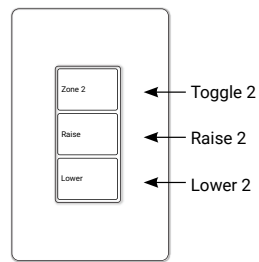
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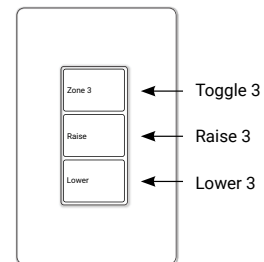
RC-6TSB-ZAD



RC-3TLB-Z1D




RC-3TLB-Z2D



RC-3TLB-Z3D

Control Systems
• Greengate

Submitted by Medgar Lighting & Controls Inc 	Job Name: HDSB - Glenview Public School Gym Addition Engineer: DEI & Associates (Waterloo)	Catalog Number: RC-1TLB-101-W Notes: ZONE 1	Type: KP1 ML&C24-119319
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Cooper Lighting Solutions has developed recommended guidelines for cleaning our products that will not impact the operation or finish of the product.

Recommended cleaning tips:

- **Never spray any fluids directly into the device.**
- **Use of ammonia-based or VOC cleaners on this device must be avoided.** Prolonged use may cause loss of integrity and expose electrified components. If this occurs, turn OFF power to the unit and replace.
- **Use a damp rag or single-use wipe** to avoid excess liquid penetrating the device.
- Be sure to wipe up remaining excess liquid after cleaning.
- Ensure the cleaning agent used does not have harsh chemicals such as bleach, ammonia, highly alkaline or concentrated acids (such as hydrochloric acid that can be found inhousehold cleaners such as toilet bowl cleaners, bathroom tile and porcelain cleaners) as they could damage the device, causing them to become brittle and discolored.
- Cooper Lighting Solutions recommends the use of a mild liquid detergent and water to clean the devices. Single use wipes (e.g. Lysol brand or equivalent) are acceptable to use for cleaning the devices, however the single-use wipes **cannot contain bleach, ammonia, highly alkaline or concentrated acids.**

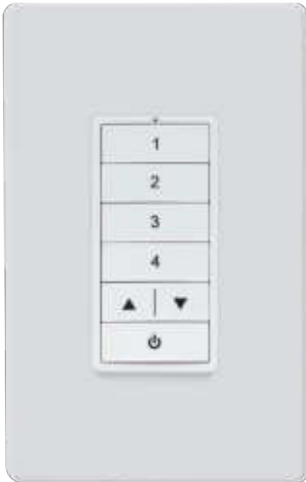



image for reference only


WARNING

This product is not intended for use in applications involving the use of ammonia-based or VOC cleaners.

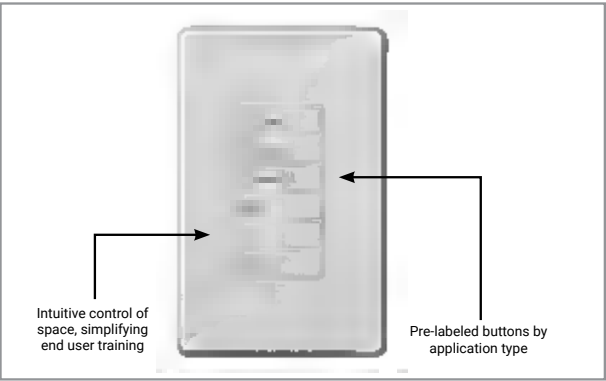
Prolonged use may cause loss of integrity and expose electrified components.

If this occurs, turn OFF power to the unit and replace.

Recommended cleaning instructions:

- **Never spray any fluids directly into the device.**
- Apply the mild liquid detergent to a damp cloth or paper towel. Single use wipes (e.g. Lysol brand or equivalent) are acceptable to use for cleaning the devices, however single-use wipes cannot contain bleach, ammonia, highly alkaline or concentrated acids.
- If excess liquid is present, remove by wringing out the cloth or paper towel to avoid liquid penetration into the device.
- Clean the Cooper Lighting Solutions device by wiping over the surface with the damp cloth.
- Remove an excess liquid remaining on the device with a dry cloth or paper towel.

Project		Catalog #		Type	
Prepared by		Notes		Date	



Greengate

Zone Wallstation

Note: Provide Wavelink CAT for review.

Interactive Menu

- Order Information page 2
- Additional Resources page 3
- Wiring Diagrams page 4
- Connected Systems page 5
- Product Warranty

Product Certification





Product Features

DEI Consulting Engineers

MECHANICAL | ELECTRICAL | AQUATIC


This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

☐ Reviewed
☐ Not Reviewed

☐ Reviewed As Noted
☒ Revise and Resubmit

Dimensional Details

Mounting Height

 additional product diagrams

Greengate

Zone Wallstation

Order Information

SAMPLE ORDER NUMBER: **RC-6TSB-OS3-W**

One single gang color matching wallplate is included in the package. Standard button engraving shown below. Engraving appears as black text on white, ivory, and gray buttons. Engraving appears as gold text on black buttons. If white engraved text is desired on black buttons use the configurator tool with the FlashPro software.

Domestic Preferences	Catalog Number	Number of Buttons	Button Engraving	Command Reference Table	Insert Color
Domestic Preferences ⁽¹⁾	Catalog Number	Number of Buttons	Button Engraving ⁽²⁾	Command Reference Table ⁽³⁾	Insert Color
Blank = Standard BAA = Buy American Act	RC	1, 2, 3 Large Buttons – TLB 4, 5, 6 Small Buttons – TSB	101 = Zone 1 (1 TLB) 102 = Zone 2 (1 TLB) 103 = Zone 3 (1 TLB) 221 = Zone 1, Zone 2 (2TLB) 321 = Zone 1, Zone 2, All Off (3TLB) 331 = Zone 1, Zone 2, Zone 3 (3TLB) 531 = Zone 1, Zone 2, Zone 3, Raise, Lower (5TSB) 621 = All On, Raise 1, Lower 1, Raise 2, Lower 2, All Off (6TSB) 623 = Zone 1, Raise 1, Lower 1, Zone 2, Raise 2, Lower 2 (6TSB) 631 = Zone 1, Zone 2, Zone 3, Raise, Lower, All Off (6TSB) ES1 = Entry, All OFF (2TLB) TS1 = General, Whiteboard, Quiet Time, A/V Mode, Raise, Lower (6TSB) TS2 = General, Whiteboard, Quiet Time, Raise, Lower All OFF (6TSB) TS3 = General, Whiteboard, Quiet Time, A/V Mode, All OFF (5TSB) TS4 = General, Whiteboard, A/V Mode, Raise, Lower, All OFF (6TSB) TS5 = Entry, General, Whiteboard, All OFF (4TSB) TS6 = Entry, General, Whiteboard, Raise, Lower, All OFF (6TSB) TS7 = Row 1, Row 2, Row 3, Raise, Lower, All OFF (6TSB) TS8 = Uplights, Downlights, Accent, Raise, Lower, All OFF (6TSB) TS9 = Entry, General, Quiet Time, Whiteboard, A/V Mode, All OFF (6TSB) TS10 = Main, Whiteboard, A/V Mode, Raise, Lower, All OFF (6TSB) HC1 = General, Exam, Reading, All OFF (4TSB) HC2 = General, Exam, Reading, Raise, Lower, All OFF (6TSB) OS1 = Half Lights, Full Lights, All OFF (3TLB) OS2 = Half Lights, Full Lights, Raise, Lower, All OFF (5TSB) OS3 = Half Lights, Full Lights, Undercabinet, Raise, Lower, All OFF (6TSB) OS4 = All ON, All OFF (2 TLB) ZAD = Zone 1 UP, Zone 1 DN, Zone 2 UP, Zone 2 DN, Zone 3 UP, Zone 3 DN (6TSB) Z1D = Zone 1, Raise, Lower (3TLB) Z2D = Zone 2, Raise, Lower (3TLB) Z3D = Zone 3, Raise, Lower (3TLB)	101 = 1 102 = 2 103 = 11 221 = 1, 2 321 = 1, 2, 8 331 = 1, 2, 11 531 = 1, 2, 11, 6, 7 621 = 16, 17, 18, 19, 20, 8 623 = 1, 17, 18, 2, 19, 20 631 = 1, 2, 11, 6, 7, 8 ES1 = 1, 8 TS1 = 2, 3, 5, 4, 6, 7 TS2 = 2, 3, 5, 6, 7, 8 TS3 = 2, 3, 5, 4, 8 TS4 = 2, 3, 4, 6, 7, 8 TS5 = 1, 2, 3, 8 TS6 = 1, 2, 3, 6, 7, 8 TS7 = 1, 2, 3, 6, 7, 8 TS8 = 1, 2, 3, 6, 7, 8 TS9 = 1, 2, 5, 3, 4, 8 TS10 = 1, 3, 4, 6, 7, 8 HC1 = 1, 2, 3, 8 HC2 = 1, 2, 3, 6, 7, 8 OS1 = 12, 13, 8 OS2 = 12, 13, 6, 7, 8 OS3 = 12, 13, 11, 6, 7, 8 OS4 = 10, 8 ZAD = 17, 18, 19, 20, 21, 22 Z1D = 1, 17, 18 Z2D = 2, 19, 20 Z3D = 3, 21, 22	W = White B = Black V = Ivory G = Gray
Notes (1) Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. (2) For custom configurations or custom engraving, use the configurator tool within the FlashPro tool. (3) For reference only. Commands will not be engraved onto station.					

Greengate

Zone Wallstation

For Reference Only

Command #	Action
1	Toggle Load/Zone 1 (Also influences Receptacle Switchpack, Solatube, and Emergency)
2	Toggle Load/Zone 2 (Also influences Receptacle Switchpack)
3	Toggle Load/Zone 3
4	Toggle A/V mode B Scene 5
5	Disable/Re-enable Occupancy Sensor (After being disabled 60 minutes, the sensor automatically re-enables)
6	Raise all
7	Lower all
8	All Loads/Zones OFF
9	All Dimmers 50%, Relay 1 ON, Relay 2 OFF, Relay 3 unaffected DLVP-Zone 1=50%, Zone 2=OFF, Zone 3=unaffected
10	All Loads/Zones to 100% (Solatube closed)
11	Toggle Load/Zone 3 (influences Receptacle Switchpack)
12	Go to Scene 1
13	Go to Scene 2
14	Go to Scene 3
15	Go to Scene 4
16	All Loads/Zones ON
17	Raise Zone 1
18	Lower Zone 1
19	Raise Zone 2
20	Lower Zone 2
21	Raise Zone 3
22	Lower Zone 3

Product Specifications

Mechanical

Size: 4.75" H x 3.25" W (121mm x 83mm)

Environment:

- **Operating temperature:** 32°F to 104°F (0°C to 40°C)
- **Relative humidity operating:** Less than 95%, non-condensing
- For indoor use only

Connection Ports: Two RJ45 ports

Button Configurations:

- Large buttons: 2 or 3
- Small buttons: 2, 4, 5, 6

Installation:

- Standard decorator opening

Electrical

Input Requirements: Class 2, LPS

Voltage: 24 VDC supplied from Room Controller

Standards/Ratings

- UL 508 Listed

Warning

- This product is not intended to be used in applications involving the use of ammonia-based or VOC cleaners.
- Use of ammonia-based or VOC cleaners on this device must be avoided. Prolonged use may cause loss of integrity and expose electrified components. If this occurs, turn OFF power to the unit and replace.
- For detailed cleaning guidelines please refer to: Controls Care and Maintenance instructions at the end of this document.

Warranty

Five year warranty standard

**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:

RC-1TLB-102-W

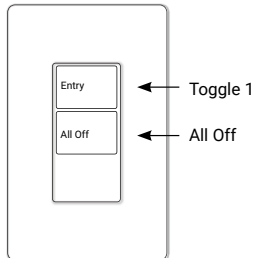
Notes: ZONE 2

Type:**KP2**

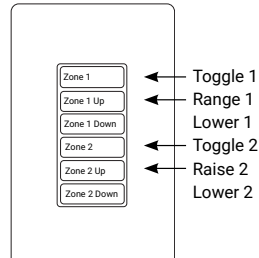
ML&C24-119319

Greengate**Zone Wallstation****Sample Wallstations**

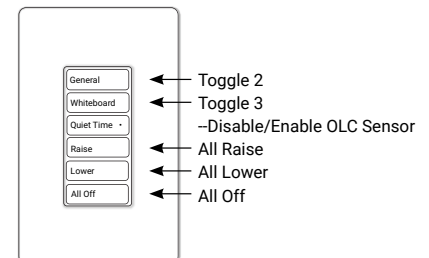
* Not All Configurations Shown



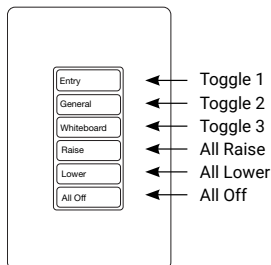
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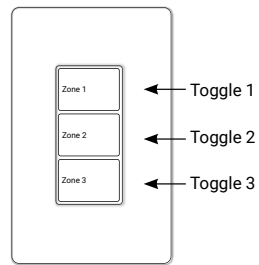
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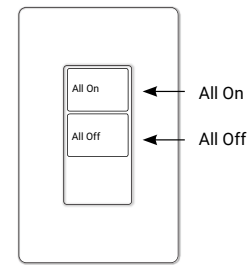
RC-6TSB-TS2



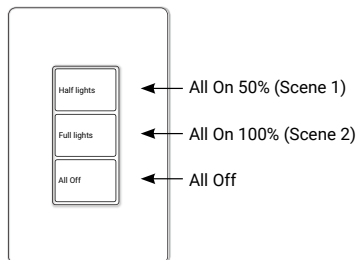
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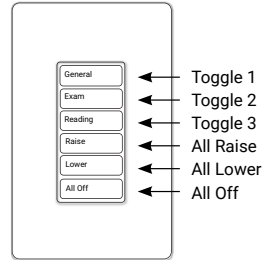
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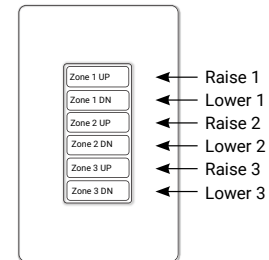
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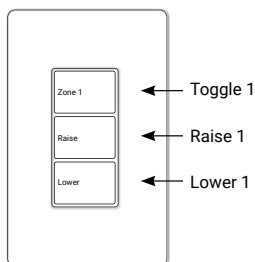
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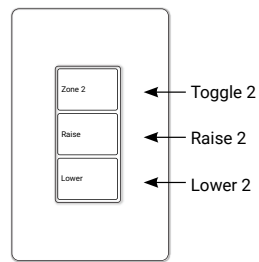
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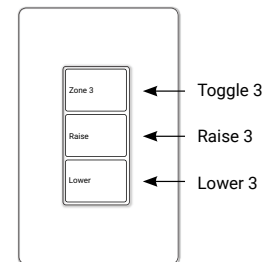
RC-6TSB-ZAD



RC-3TLB-Z1D



RC-3TLB-Z2D



RC-3TLB-Z3D

Control Systems
• Greengate

Controls
Care & Maintenance

Cooper Lighting Solutions



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Recommended cleaning tips:

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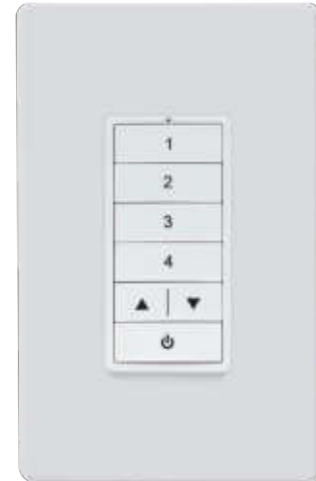


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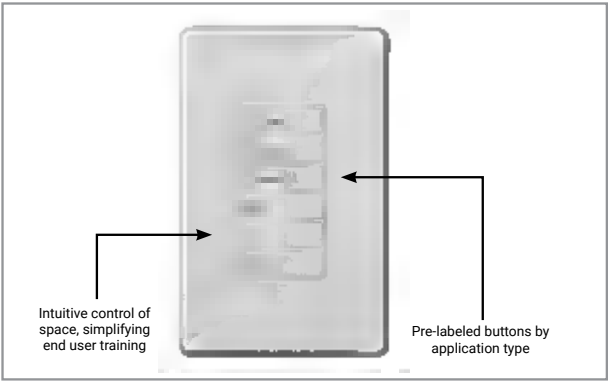
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Project		Catalog #		Type	
Prepared by		Notes		Date	



Greengate

Zone Wallstation

Note: Provide Wavelink CAT for review.

Interactive Menu

- Order Information page 2
- Additional Resources page 3
- Wiring Diagrams page 4
- Connected Systems page 5
- Product Warranty

Top Product Features

- Low-voltage control for ON/OFF and dimming loads
- Pre-terminated control cable ready with RJ45 ports eliminate wiring errors
- Available in 2, 3, 4, 5, 6 button models designed to fit in decorator wallplates (included)
- Wallstations can be used for multi-way control
- Options to meet Buy American Act requirements

Product Certification



Product Features

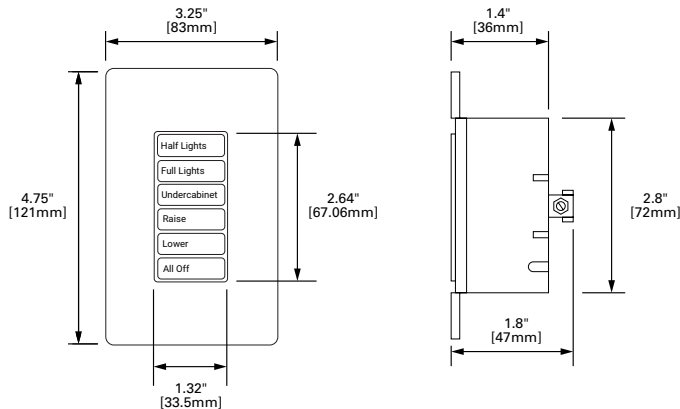


DEI Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

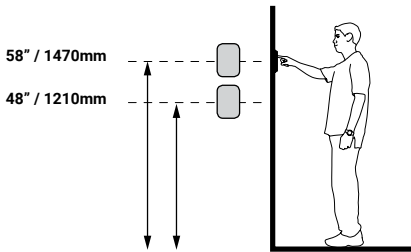
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- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Reviewed | <input type="checkbox"/> Reviewed As Noted |
| <input type="checkbox"/> Not Reviewed | <input checked="" type="checkbox"/> Revise and Resubmit |

Dimensional Details



Mounting Height



additional product diagrams

Greengate

Zone Wallstation

Order Information

SAMPLE ORDER NUMBER: **RC-6TSB-OS3-W**

One single gang color matching wallplate is included in the package. Standard button engraving shown below. Engraving appears as black text on white, ivory, and gray buttons. Engraving appears as gold text on black buttons. If white engraved text is desired on black buttons use the configurator tool with the FlashPro software.

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Domestic Preferences ⁽¹⁾	Catalog Number	Number of Buttons	Button Engraving ⁽²⁾	Command Reference Table ⁽³⁾	Insert Color
[Blank] =Standard BAA = Buy American Act	RC	1, 2, 3 Large Buttons – TLB 4, 5, 6= Small Buttons – TSB	101 = Zone 1 (1 TLB) 102 = Zone 2 (1 TLB) 103 = Zone 3 (1 TLB) 221 = Zone 1, Zone 2 (2TLB) 321 = Zone 1, Zone 2, All Off (3TLB) 331 = Zone 1, Zone 2, Zone 3 (3TLB) 531 = Zone 1, Zone 2, Zone 3, Raise, Lower (5TSB) 621 = All On, Raise 1, Lower 1, Raise 2, Lower 2, All Off (6TSB) 623 = Zone 1, Raise 1, Lower 1, Zone 2, Raise 2, Lower 2 (6TSB) 631 = Zone 1, Zone 2, Zone 3, Raise, Lower, All Off (6TSB) ES1 = Entry, All OFF (2TLB) TS1 = General, Whiteboard, Quiet Time, A/V Mode, Raise, Lower (6TSB) TS2 = General, Whiteboard, Quiet Time, Raise, Lower All OFF (6TSB) TS3 = General, Whiteboard, Quiet Time, A/V Mode, All OFF (5TSB) TS4 = General, Whiteboard, A/V Mode, Raise, Lower, All OFF (6TSB) TS5 = Entry, General, Whiteboard, All OFF (4TSB) TS6 = Entry, General, Whiteboard, Raise, Lower, All OFF (6TSB) TS7 = Row 1, Row 2, Row 3, Raise, Lower, All OFF (6TSB) TS8 = Uplights, Downlights, Accent, Raise, Lower, All OFF (6TSB) TS9 = Entry, General, Quiet Time, Whiteboard, A/V Mode, All OFF (6TSB) TS10 = Main, Whiteboard, A/V Mode, Raise, Lower, All OFF (6TSB) HC1 = General, Exam, Reading, All OFF (4TSB) HC2 = General, Exam, Reading, Raise, Lower, All OFF (6TSB) OS1 = Half Lights, Full Lights, All OFF (3TLB) OS2 = Half Lights, Full Lights, Raise, Lower, All OFF (5TSB) OS3 = Half Lights, Full Lights, Undercabinet, Raise, Lower, All OFF (6TSB) OS4 = All ON, All OFF (2 TLB) ZAD = Zone 1 UP, Zone 1 DN, Zone 2 UP, Zone 2 DN, Zone 3 UP, Zone 3 DN (6TSB) Z1D = Zone 1, Raise, Lower (3TLB) Z2D = Zone 2, Raise, Lower (3TLB) Z3D = Zone 3, Raise, Lower (3TLB)	101 = 1 102 = 2 103 = 11 221 = 1, 2 321 = 1, 2, 8 331 = 1, 2, 11 531 = 1, 2, 11, 6, 7 621 = 16, 17, 18, 19, 20, 8 623 = 1, 17, 18, 2, 19, 20 631 = 1, 2, 11, 6, 7, 8 ES1 = 1, 8 TS1 = 2, 3, 5, 4, 6, 7 TS2 = 2, 3, 5, 6, 7, 8 TS3 = 2, 3, 5, 4, 8 TS4 = 2, 3, 4, 6, 7, 8 TS5 = 1, 2, 3, 8 TS6 = 1, 2, 3, 6, 7, 8 TS7 = 1, 2, 3, 6, 7, 8 TS8 = 1, 2, 3, 6, 7, 8 TS9 = 1, 2, 5, 3, 4, 8 TS10 = 1, 3, 4, 6, 7, 8 HC1 = 1, 2, 3, 8 HC2 = 1, 2, 3, 6, 7, 8 OS1 = 12,13, 8 OS2 = 12,13, 6, 7, 8 OS3 = 12, 13, 11, 6, 7, 8 OS4 = 10, 8 ZAD = 17, 18, 19, 20, 21, 22 Z1D = 1, 17, 18 Z2D = 2, 19, 20 Z3D = 3, 21, 22	W= White B= Black V= Ivory G= Gray
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Greengate
Zone Wallstation

For Reference Only

Command #	Action
1	Toggle Load/Zone 1 (Also influences Receptacle Switchpack, Solatube, and Emergency)
2	Toggle Load/Zone 2 (Also influences Receptacle Switchpack)
3	Toggle Load/Zone 3
4	Toggle A/V mode B Scene 5
5	Disable/Re-enable Occupancy Sensor (After being disabled 60 minutes, the sensor automatically re-enables)
6	Raise all
7	Lower all
8	All Loads/Zones OFF
9	All Dimmers 50%, Relay 1 ON, Relay 2 OFF, Relay 3 unaffected DLVP-Zone 1=50%, Zone 2=OFF, Zone 3=unaffected
10	All Loads/Zones to 100% (Solatube closed)
11	Toggle Load/Zone 3 (influences Receptacle Switchpack)
12	Go to Scene 1
13	Go to Scene 2
14	Go to Scene 3
15	Go to Scene 4
16	All Loads/Zones ON
17	Raise Zone 1
18	Lower Zone 1
19	Raise Zone 2
20	Lower Zone 2
21	Raise Zone 3
22	Lower Zone 3

Product Specifications

Mechanical

Size: 4.75" H x 3.25" W (121mm x 83mm)

Environment:

- **Operating temperature:** 32°F to 104°F (0°C to 40°C)
- **Relative humidity operating:** Less than 95%, non-condensing
- For indoor use only

Connection Ports: Two RJ45 ports

Button Configurations:

- Large buttons: 2 or 3
- Small buttons: 2, 4, 5, 6

Installation:

- Standard decorator opening

Electrical

Input Requirements: Class 2, LPS

Voltage: 24 VDC supplied from Room Controller

Standards/Ratings

- UL 508 Listed

Warning

- This product is not intended to be used in applications involving the use of ammonia-based or VOC cleaners.
- Use of ammonia-based or VOC cleaners on this device must be avoided. Prolonged use may cause loss of integrity and expose electrified components. If this occurs, turn OFF power to the unit and replace.
- For detailed cleaning guidelines please refer to: Controls Care and Maintenance instructions at the end of this document.

Warranty

Five year warranty standard

Greengate

Zone Wallstation

Overview

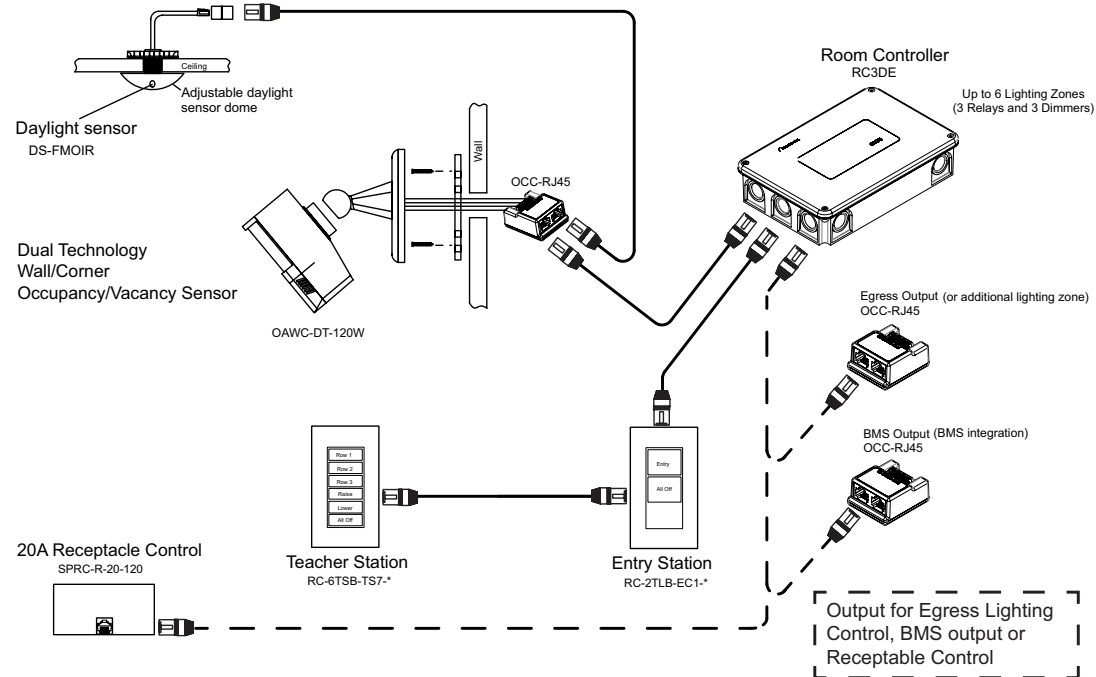
The zone wallstations are pre-engraved low-voltage switches that operate on 24 VDC power supplied by the Room Controller or DLVP power module. Each wallstation is designed to fit in a standard decorator opening and has two RJ45 ports for local network connections to eliminate wiring errors.

The zone wallstations are pre-terminated control cable (ordered separately) ready and work immediately upon power up. Zone wallstations for office, classroom, patient room, conference room and general areas are available and are fully functional out-of-the-box removing the need for field programming and reducing installation time.

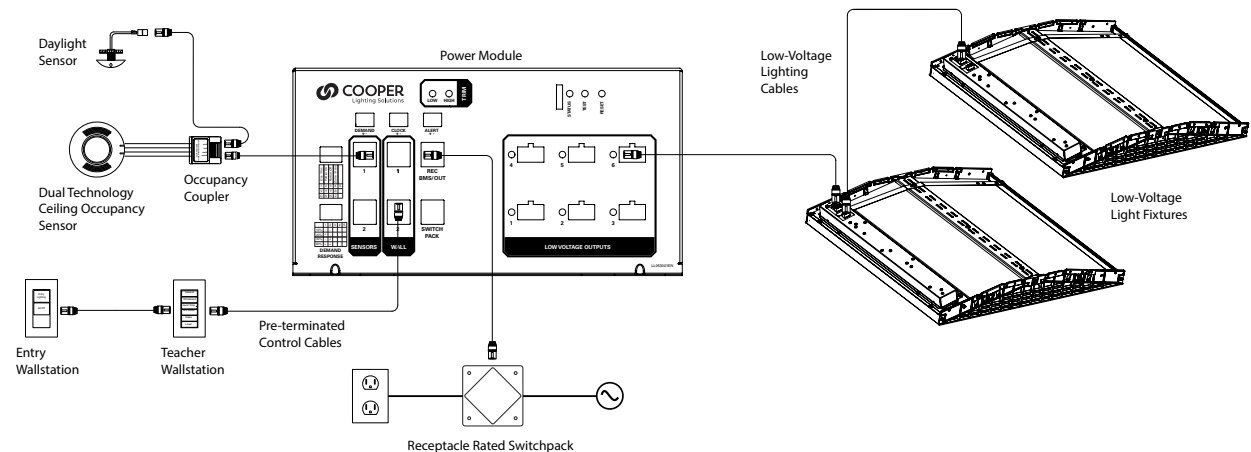
Low-voltage devices are connected using provided pre-terminated control cables (ordered separately).

Wiring Diagrams

Sample Room Controller System Topology



DLVP System Topology



**Job Name:**

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:
RC-1TLB-103-W

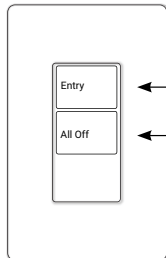
Notes: ZONE 3

Type:**KP3**

ML&C24-119319

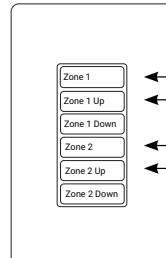
Greengate**Zone Wallstation****Sample Wallstations**

* Not All Configurations Shown



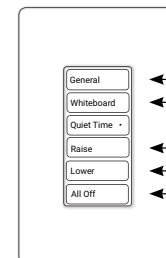
RC-2TLB-ES1

← Toggle 1
← All Off



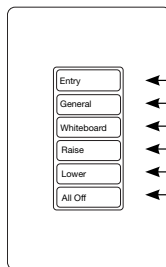
RC-6TSB-623

← Toggle 1
← Range 1
← Lower 1
← Toggle 2
← Raise 2
← Lower 2



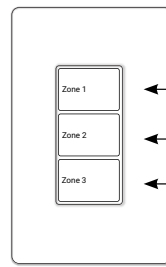
RC-6TSB-TS2

← Toggle 2
← Toggle 3
← -Disable/Enable OLC Sensor
← All Raise
← All Lower
← All Off



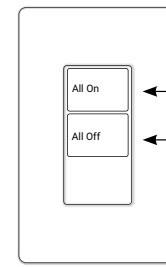
RC-6TSB-TS6

← Toggle 1
← Toggle 2
← Toggle 3
← All Raise
← All Lower
← All Off



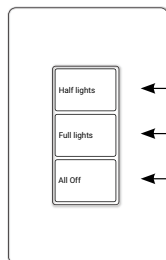
RC-3TLB-331

← Toggle 1
← Toggle 2
← Toggle 3



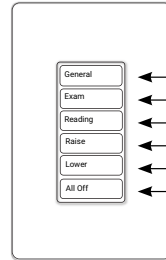
RC-2TLB-OS4

← All On
← All Off



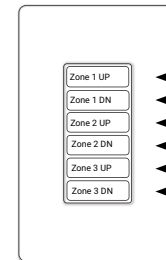
RC-3TLB-OS1

← All On 50% (Scene 1)
← All On 100% (Scene 2)
← All Off



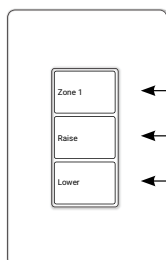
RC-6TSB-HC2

← Toggle 1
← Toggle 2
← Toggle 3
← All Raise
← All Lower
← All Off



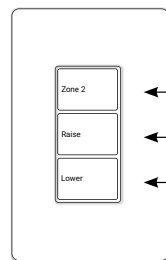
RC-6TSB-ZAD

← Raise 1
← Lower 1
← Raise 2
← Lower 2
← Raise 3
← Lower 3



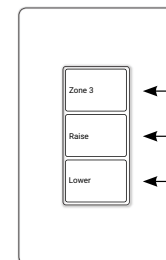
RC-3TLB-Z1D

← Toggle 1
← Raise 1
← Lower 1



RC-3TLB-Z2D

← Toggle 2
← Raise 2
← Lower 2



RC-3TLB-Z3D

← Toggle 3
← Raise 3
← Lower 3

Control Systems
• Greengate

Controls Care & Maintenance

Cooper Lighting Solutions

Cooper Lighting Solutions has developed recommended guidelines for cleaning our products that will not impact the operation or finish of the product.

Recommended cleaning tips:

- **Never spray any fluids directly into the device.**
- **Use of ammonia-based or VOC cleaners on this device must be avoided.** Prolonged use may cause loss of integrity and expose electrified components. If this occurs, turn OFF power to the unit and replace.
- **Use a damp rag or single-use wipe** to avoid excess liquid penetrating the device.
- Be sure to wipe up remaining excess liquid after cleaning.
- Ensure the cleaning agent used does not have harsh chemicals such as bleach, ammonia, highly alkaline or concentrated acids (such as hydrochloric acid that can be found in household cleaners such as toilet bowl cleaners, bathroom tile and porcelain cleaners) as they could damage the device, causing them to become brittle and discolored.
- Cooper Lighting Solutions recommends the use of a mild liquid detergent and water to clean the devices. Single use wipes (e.g. Lysol brand or equivalent) are acceptable to use for cleaning the devices, however the single-use wipes **cannot contain bleach, ammonia, highly alkaline or concentrated acids.**

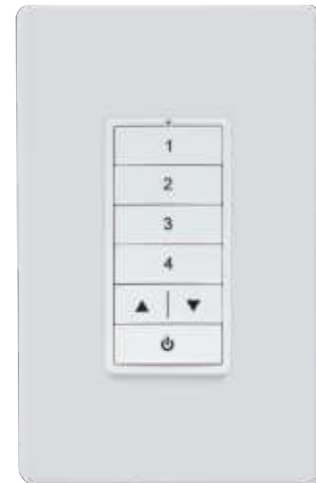


image for
reference only

WARNING

This product is not intended for use in applications involving the use of ammonia-based or VOC cleaners.

Prolonged use may cause loss of integrity and expose electrified components.

If this occurs, turn OFF power to the unit and replace.

Recommended cleaning instructions:

- **Never spray any fluids directly into the device.**
- Apply the mild liquid detergent to a damp cloth or paper towel. Single use wipes (e.g. Lysol brand or equivalent) are acceptable to use for cleaning the devices, however single-use wipes cannot contain bleach, ammonia, highly alkaline or concentrated acids.
- If excess liquid is present, remove by wringing out the cloth or paper towel to avoid liquid penetration into the device.
- Clean the Cooper Lighting Solutions device by wiping over the surface with the damp cloth.
- Remove an excess liquid remaining on the device with a dry cloth or paper towel.

WGD

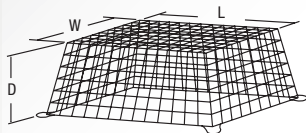
Project:

Contractor:

WIREGUARD & MOUNTING SHELVES

WIREGUARD

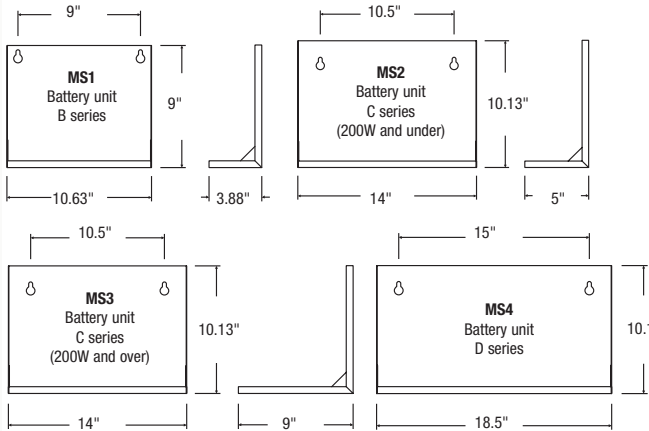
The AimLite series of steel wire guards is designed to protect valuable emergency lighting equipment from damage and abuse. The welded steel construction provides an exceptionally rigid cage and the integrated mounting loops ensure a reliable installation. Standard finish is white baked powder coat finish. Custom colours are available, please contact your AimLite representative for details.



Model	Length	Width	Depth	Description
WGD510	17.25"	17.25"	7"	Battery units 144W to 200W
WGD520	14"	10"	4.75"	Battery units 18W to 72W, wallmount EXST & EXAL
WGD540	14.5"	6.25"	10.5"	Ceiling mount EXST & EXAL
WGD550	8.5"	6"	7"	RMS1, RMS2, RMMD1, RMMD2, RMMB1 & RMMB2
WGD560	25.5"	8.5"	8"	Wallmount EXST & EXAL
WGD590	15.25"	14.25"	6.75"	Battery units 80W to 100W, wallmount CXST & CXAL
WGD600	20.25"	17.25"	8.5"	Battery units 250W to 720W
WGD620	8.5"	6"	8.5"	Remotes RMLG1, RMLW1, RMRB1
WGD630	12"	9"	9"	Remotes RMLG2, RMLW2, RMRB2
WGD660	13.75"	12.25"	16.5"	End mount EXST & EXAL, ceiling or end mount CXST & CXAL
WGD680	29.5"	6.5"	10"	Ceiling or wallmount EXST-B6L, EXAL-B6L, VP4

MOUNTING SHELVES

The AimLite series of steel mounting shelves provides a stable and durable platform for the installation of emergency lighting units. The shelves are made with heavy gauge steel and finished standard with a white baked powder coat finish. Custom colours are available, please contact your AimLite representative for details.



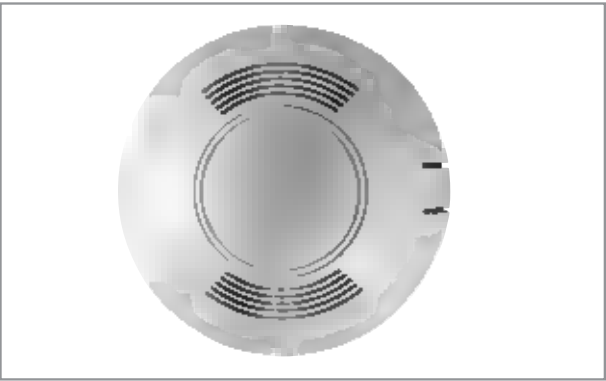


MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

☒ Reviewed ☐ Reviewed As Noted
☐ Not Reviewed ☐ Revise and Resubmit

Project		Catalog #		Type	
Prepared by		Notes		Date	



Greengate

OAC-DT-MicroSet Dual Tech

Low Voltage Ceiling Sensor

Typical Applications

Classrooms • Conference Rooms • Office Spaces • Common Areas • Computer Rooms • Break Rooms • Hallways • Other Indoor Office Spaces

Interactive Menu

- Order Information page 2
- Additional Resources page 2
- Wiring Diagrams page 3
- Connected Systems page 4
- Product Warranty

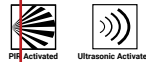
Top Product Features

- MicroSet self-adjusting Time Delay and sensitivity
- Optional built-in light level sensor
- Optional BAS/HVAC isolated relay
- Products tested to NEMA WD 7 - 2011 Occupancy Motion Sensors Standard
- Selectable Walk-Through Mode
- Dual Relay control

Product Certification



Product Features

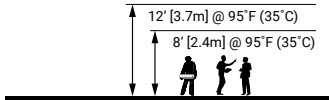
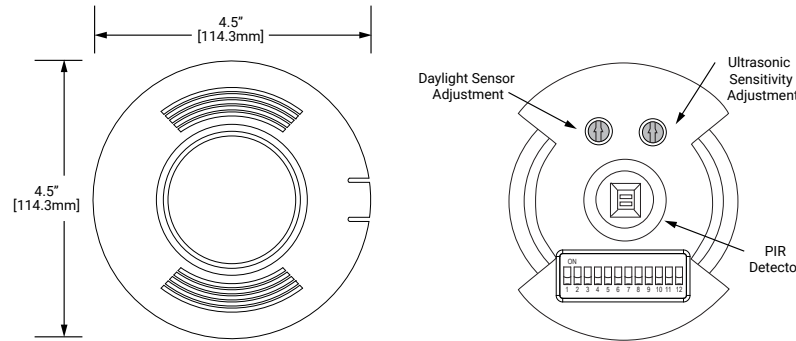


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- ☒ Reviewed
☐ Reviewed As Noted
- ☐ Not Reviewed
☐ Revise and Resubmit

Dimensional and Mounting Details

Scale or Mounting Height



 additional product diagrams

Submitted by Medgar Lighting & Controls Inc		Catalog Number: OAC-DT-2000	Type: OS2
	Job Name: HDSB - Glenview Public School Gym	Notes:	ML&C24-119319
	Addition Engineer: DEI & Associates (Waterloo)		

Greengate

OAC-DT-MicroSet

Order Information

SAMPLE ORDER NUMBER: **OAC-DT-2000-R, OAC-DT-2000, OAC-DT-1000-R, OAC-DT-1000, OAC-DT0501-R, OAC-DT-0501**

One single gang wallplate included

Catalog Number	Maximum Room Size	Field of View	Frequency	Features
OAC-DT-2000-R	2,000 sq. ft.	Two Way (360°)	30 kHz	w/ BAS Relay & Daylight Sensor
OAC-DT-2000	2,000 sq. ft.	Two Way (360°)	32 kHz	
OAC-DT-1000-R	1,000 sq. ft.	Two Way (360°)	32 kHz	w/ BAS Relay & Daylight Sensor
OAC-DT-1000	1,000 sq. ft.	Two Way (360°)	32 kHz	
OAC-DT-0501-R	500 sq. ft.	One Way (180°)	40 kHz	w/ BAS Relay & Daylight Sensor
OAC-DT-0501	500 sq. ft.	One Way (180°)	40 kHz	

Product Specifications

Technology

- Passive Infrared (PIR) and Ultrasonic (US)

Mechanical

Size: 1.42" H x 4.5" W (36.068mm x 114.3mm)

Mounting: Mounts directly to ceiling tile, to a 4" square box and round mud ring or to 4" octagon box

Environment:

- Operating temperature:** 32°F to 104°F (0°C to 40°C)
- Relative humidity operating:** 20% to 90% non-condensing
- For indoor use only

Housing: Durable, injection molded housing. Polycarbonate resin complies with UL 94V-0

Electrical

Power Requirements:

- Input
 - 10-30 VDC from Greengate Switchpack or Greengate system
 - Maximum current needed is 25mA per sensor
- Output
 - Open collector output to switch up to ten Greengate Switchpacks
 - BAS with Isolated Form C Relay in (-R) model
 - Isolated Form C Relay Ratings: 1A 30 VDC/VAC

Hardware Specifications

LED Indicators:

- Red LED for PIR detection; Green LED for Ultrasonic detection

Controls and Performance

Time delays:

- Self-adjustable, 15 seconds/test (10 minutes Auto), or Selectable 5, 15, 30 minutes, or Zero Time Delay

Coverage:

- 500, 1000, and 2000 sq. ft.

Light sensing level (-R Models):

- 0 to 300 foot candles

Standards/Ratings

- cULus Listed - Energy Management Equipment (UL916)
- FCC Compliant
- RoHS Compliant

Warranty

Five year warranty standard

Overview

The Dual Technology sensor's combination of Ultrasonic and Passive Infrared technologies offers the most complete sensing equipment available today. MicroSet self-adjusting Dual Technology sensors drastically simplify and reduce a contractor's installation and adjustment time period.

The MicroSet self-adjusting technology continuously monitors multiple sub-frequencies in the event that if a continuous Doppler shift occurs, such as those created by airflow from an air duct, the sensor will identify the noise as continuous and then block it out of view at a select sub-frequency. It will continue to monitor other sub-frequencies for human motion. This avoids false-activation, while still maintaining the high level of sensitivity that is necessary for sensing minor motion in a changing environment. Separate concurrent time delays for both Passive Infrared and Ultrasonic technologies avoid false activations or deactivations. In Automatic On Mode, the lights turn ON when a person enters the room. In Manual On Mode (-R model only), the lights are turned ON by activating a momentary switch (model # GMDS-*) that is connected to the sensor. When enabled, the daylighting feature (-R models only) prevents lights from turning ON when the room is adequately illuminated by natural light.

Greengate

OAC-DT-MicroSet

Wiring Diagrams

OAC-DT-2000-R Model

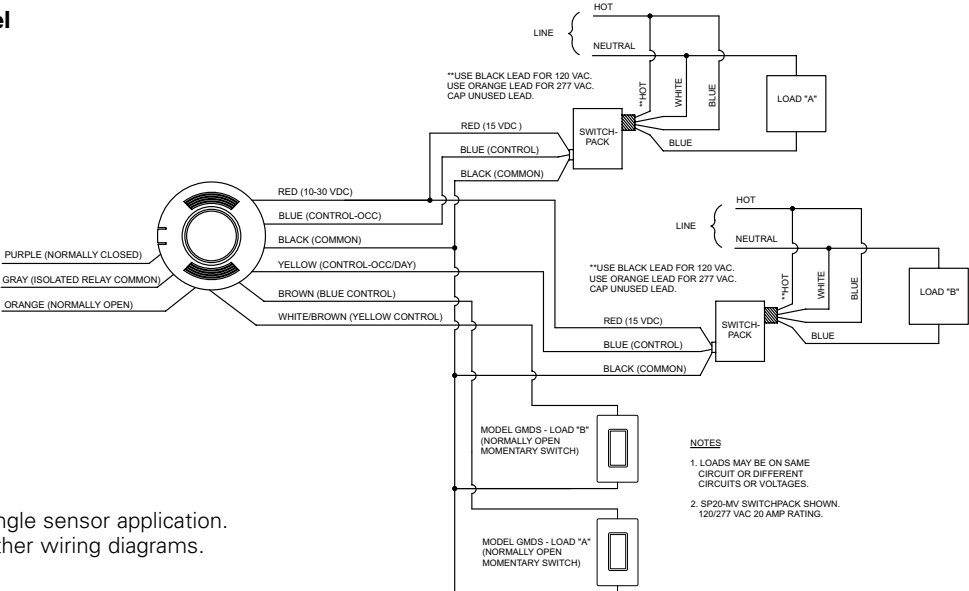
OAC AND VAC MANUAL MODE OPERATION:

- SWITCHES ARE REQUIRED TO TURN CORRESPONDING LOADS ON.
- LOADS TURN OFF WHEN SENSOR TIMES OUT OR WITH SWITCHES.
- IF DAYLIGHT SENSOR IS ENABLED AND LIGHT LEVEL IS ABOVE SETPOINT, SWITCHPACK CONNECTED TO YELLOW LEAD WILL NOT TURN LOAD ON.

OAC AUTOMATIC MODE OPERATION:

- WHEN SENSOR ACTIVATES, BOTH LOADS TURN ON.
- SWITCHES CAN BE USED TO TURN LOADS ON OR OFF.
- IF DAYLIGHT SENSOR IS ENABLED AND LIGHT LEVEL IS ABOVE SETPOINT, SWITCHPACK CONNECTED TO YELLOW LEAD WILL NOT TURN LOAD ON.

RECOMMENDED WIRE:
18-3 AWG STRANDED WIRE SHIELDED OR NONSHIELDED



*Wiring diagram for single sensor application.
Visit our website for other wiring diagrams.

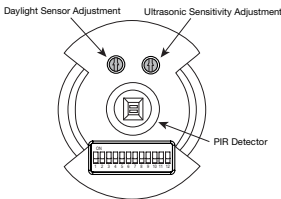
Controls

DIP Switch Legend

DIP Switch	Time Delay		Activation		PIR Sensitivity	Walk-Through Mode	LEDs	Override	Sweep	Full/Half Logic	HVAC/Tracking	Zero Time Delay
	1	2	Relay 1	Relay 2	5	6	7	8	9	10	11	12
Auto*	▼	▼	Auto ▼	Auto ▼	Full ▼	Disable ▼	Enable ▼	Disable ▼	Disable ▼	Full ▼	Disable ▼	Disable ▼
5 Minutes	▼	▲	Manual ▲	Manual ▲	50% ▲	Enable ▲	Disable ▲	Enable ▲	Enable ▲	Half ▲	Enable ▲	Enable ▲
15 Minutes	▲	▼	(-R model only)		(-R model only)		(-R model only)		(-R model only)		(-R model only)	
30 Minutes	▲	▲	(-R model only)		(-R model only)		(-R model only)		(-R model only)		(-R model only)	

*Self-Adjusts to 10 min. user mode

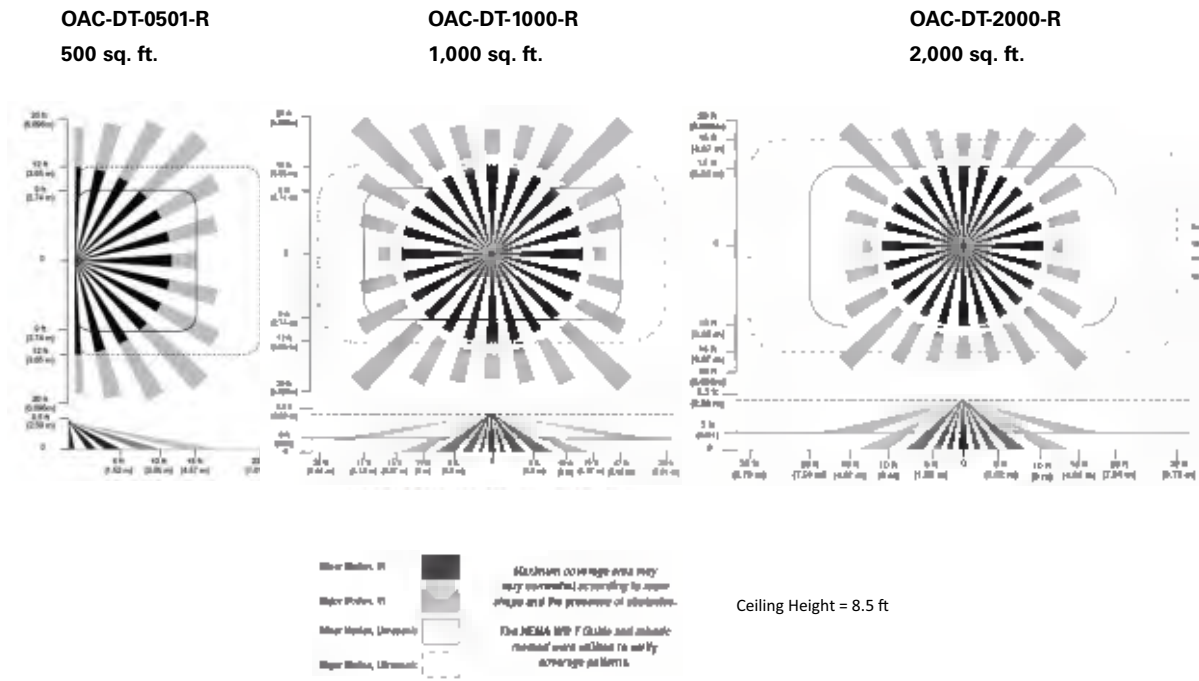
Default =



Greengate

OAC-DT-MicroSet

Field of View



Project		Catalog #		Type	
Prepared by		Notes		Date	



Greengate

ONW-D-1001 Wall Switch Sensor with Ground Required

Dual Tech, Single Pole, 120/277/347 VAC
Wall Switch Occupancy Sensor
(Ground Required)

Typical Applications

Office • Small Conference Rooms • Lunch/Break Rooms • Classrooms •
Restrooms (1-2 Stalls) • Lounges • Waiting Rooms • Closets • Storage Areas

Interactive Menu

- Order Information [page 2](#)
- Additional Resources [page 2](#)
- Wiring Diagrams [page 3](#)
- Product Warranty

Product Certification



Product Features



Overview

The Dual Technology Single Level Occupancy Sensing Wall Switch is a motion sensing lighting control and conventional wall switch all-in-one that is used to for energy savings and convenience. It does not require a neutral wire for installation making it ideal for retrofit applications.

The ONW-D-1001-MV combines Ultrasonic (US) and Passive Infrared (PIR) sensor technologies to monitor a room for occupancy to deliver maximum energy savings and ensure the greatest sensitivity and coverage for tough applications without the threat of false triggers. PIR is used to turn the lights ON and then either or both technologies are used to keep the lights ON. In Automatic On Mode, the lights turn ON automatically when a person enters the room. In Manual On Mode, the lights are turned ON by pressing the universally recognized light icon pushbutton. The sensor includes self-adaptive technology that continuously self-adjusts sensitivity and time delay in real-time, maximizing the potential energy savings that are available in the particular application.


Top Product Features

- Air-gap switch ensures no leakage current to load
- Selectable built-in light level sensor
- NEMA WD7 Guide robotic method utilized to verify coverage patterns
- LED Rated



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- | | |
|--|--|
| <input checked="" type="checkbox"/> Reviewed | <input type="checkbox"/> Reviewed As Noted |
| <input type="checkbox"/> Not Reviewed | <input type="checkbox"/> Revise and Resubmit |

Submitted by Medgar Lighting & Controls Inc		Catalog Number: ONW-D-1001-MV-W	Type: \$WOS
	Job Name: HDSB - Glenview Public School Gym Addition Engineer: DEI & Associates (Waterloo)	Notes:	ML&C24-119319

Greengate

ONW-D-NeoSwitch

Order Information

SAMPLE ORDER NUMBER: **ONW-D-1001-MV-W**

One single gang wallplate included.

Catalog Number

Catalog Number	Ratings	Coverage	Voltage	Color
ONW-D-1001-MV-* (*=W, V, LA, G, B, R)	Incandescent: 0-800W @ 120V Fluorescent: 0-1200W @ 120V Fluorescent: 0-2700W @ 277V Max Load/Relay	180"; 1000 sq. ft.	120/277 VAC, 50/60 Hz	W=White, V=Ivory, LA=Light Almond, G=Gray, B=Black, R=Red
				Notes Not all colors are available in stock and some color options may have extended lead times.

SAMPLE ORDER NUMBER: **ONW-D-1001-347-W**

One single gang wallplate included. Wallplate not included with 347 VAC Model.

Catalog Number

Catalog Number	Ratings	Coverage	Voltage	Color
ONW-D-1001-347-* (*=W, V, LA, G, B, R)	Incandescent: 0-1500W @ 347V Fluorescent: 0-1500W @ 347V Max Load/Relay	180"; 1000 sq. ft.	347 VAC, 50/60 Hz	W=White, V=Ivory, LA=Light Almond, G=Gray, B=Black, R=Red
				Notes Not all colors are available in stock and some color options may have extended lead times.

Product Specifications

Technology

- Passive Infrared (PIR) and Ultrasonic (US) technology

Mechanical

Mounting Plate/Strap Dimensions: 4.195" H x 1.732" W (106.55mm x 44mm)

Mounting Plate/Strap Dimensions: ONW-D-1001-347: 4.35" H x 1.732" W (110.49mm x 44mm)

Product Housing Dimensions: 2.618" H x 1.752" W x 1.9" D (66.5mm x 44.5mm x 48.26mm)

Environment:

- Operating temperature:** 32°F to 104°F (0°C to 40°C)
- Relative humidity operating:** 20% to 90% non-condensing
- For indoor use only

Housing: Durable, injection molded housing. ABS resin complies with UL 94V-0

Mounting: Fits in a standard 3.5" deep back box Can be mounted in multiple gang back box Refer to NEC box calculation for properly sized mounting box

Electrical

Electrical ratings (per relay):

- 120 VAC
 - Incandescent / Tungsten max load: 6.7 amps, 800W, 50/60 Hz
 - Fluorescent / Ballast max load: 10 amps, 1200W, 50/60 Hz
 - Electronic Ballast (LED): 3A
 - Motor Load: 1/4 HP @ 125 VAC
- 277VAC
 - Fluorescent / Ballast max load: 9.8 amps, 2700W, 50/60 Hz
 - Electronic Ballast (LED): 3A
- 347VAC
 - Fluorescent / Ballast max load: 4.3 amps, 1500W, 50/60 Hz
 - Electronic Ballast (LED): 3A

Ballast compatibility:

- LED loads
- Magnetic and Electronic ballasts

Hardware Specifications

LED Indicators:

- Red LED = PIR detection
- Green LED = Ultrasonic detection

Controls and Performance

Time delays:

- Self adjusting 15 seconds/test (10 min. Auto)
- Selectable 5, 15, 30 minutes

Coverage:

- Major motion: 36' x 30'
- Minor motion: 20' x 16'

Light sensing level:

- 0 to 200 foot candles

Standards/Ratings

- cULus Listed - Energy Management Equipment (UL916)
- FCC Compliant
- RoHS Compliant

Warranty

Five year warranty standard

Job Name:

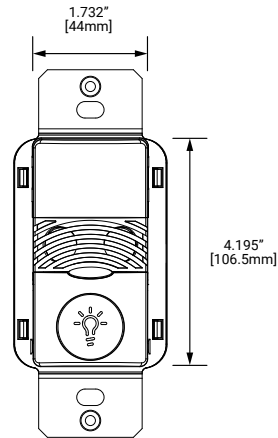
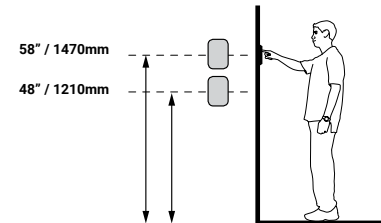
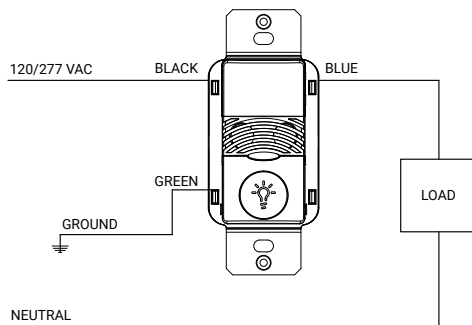
HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:
ONW-D-1001-MV-W

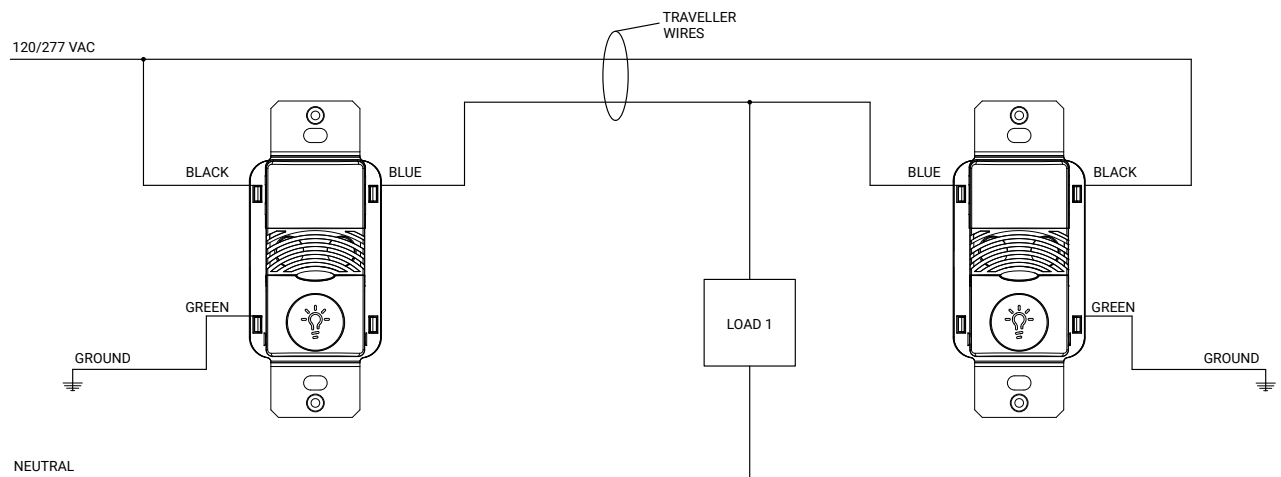
Notes:

Type:**\$WOS**

ML&C24-119319

Greengate**ONW-D-NeoSwitch****Dimensional and Mounting Details****Scale or Mounting Height****Wiring Diagrams****Single Level Switching - Single Circuit**

Three-way wiring diagram: Lights will turn OFF automatically when sensor that detected motion last, times out.



*** For 347 VAC wiring diagrams refer to Installation Instructions**



Job Name:
HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:
ONW-D-1001-MV-W

Notes:

Type:

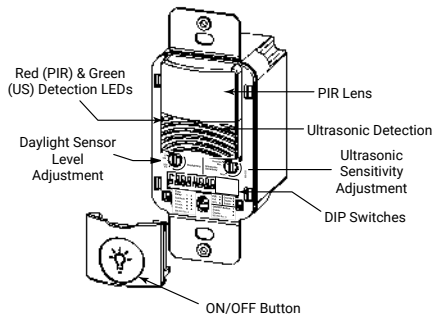
\$WOS

ML&C24-119319

Greengate

ONW-D-NeoSwitch

Controls

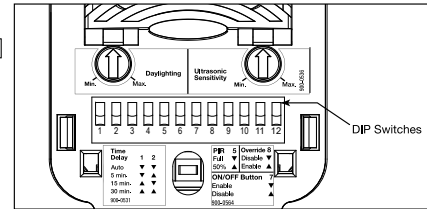


DIP Switch Legend

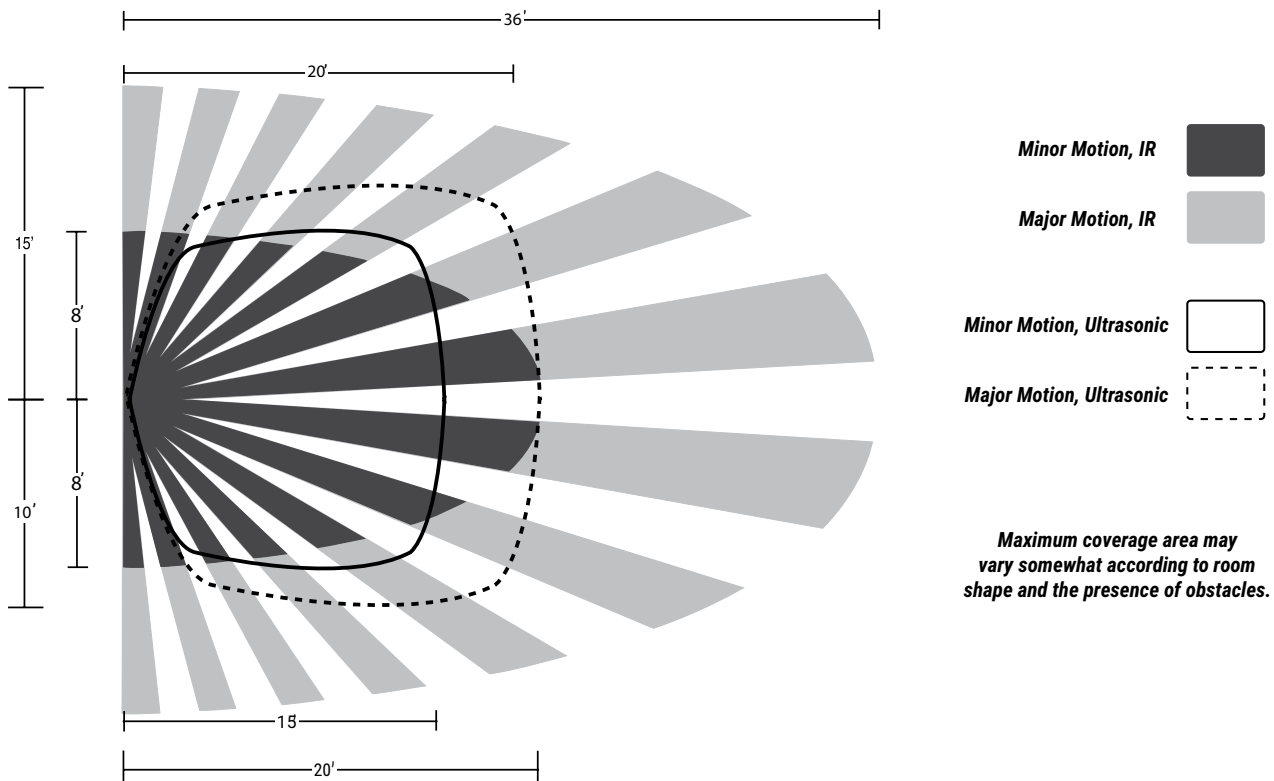
DIP Switch	Time Delay	Activation		PIR Sensitivity	Walk-Through Mode	ON/OFF Button	Override	Not Used	Maintain Lights On	Not Used
		Relay 1	Relay 2							
15 Sec Test/Auto*	1	2	Auto	3	4	5	6	7	8	9
5 Minutes	1	2	Manual	3	4	5	6	7	8	9
15 Minutes	1	2	Manual	3	4	5	6	7	8	9
30 Minutes	1	2	Manual	3	4	5	6	7	8	9

*Self Adjusts to 10 min. user mode

Default =



Field of View



Control Systems
• Greengate

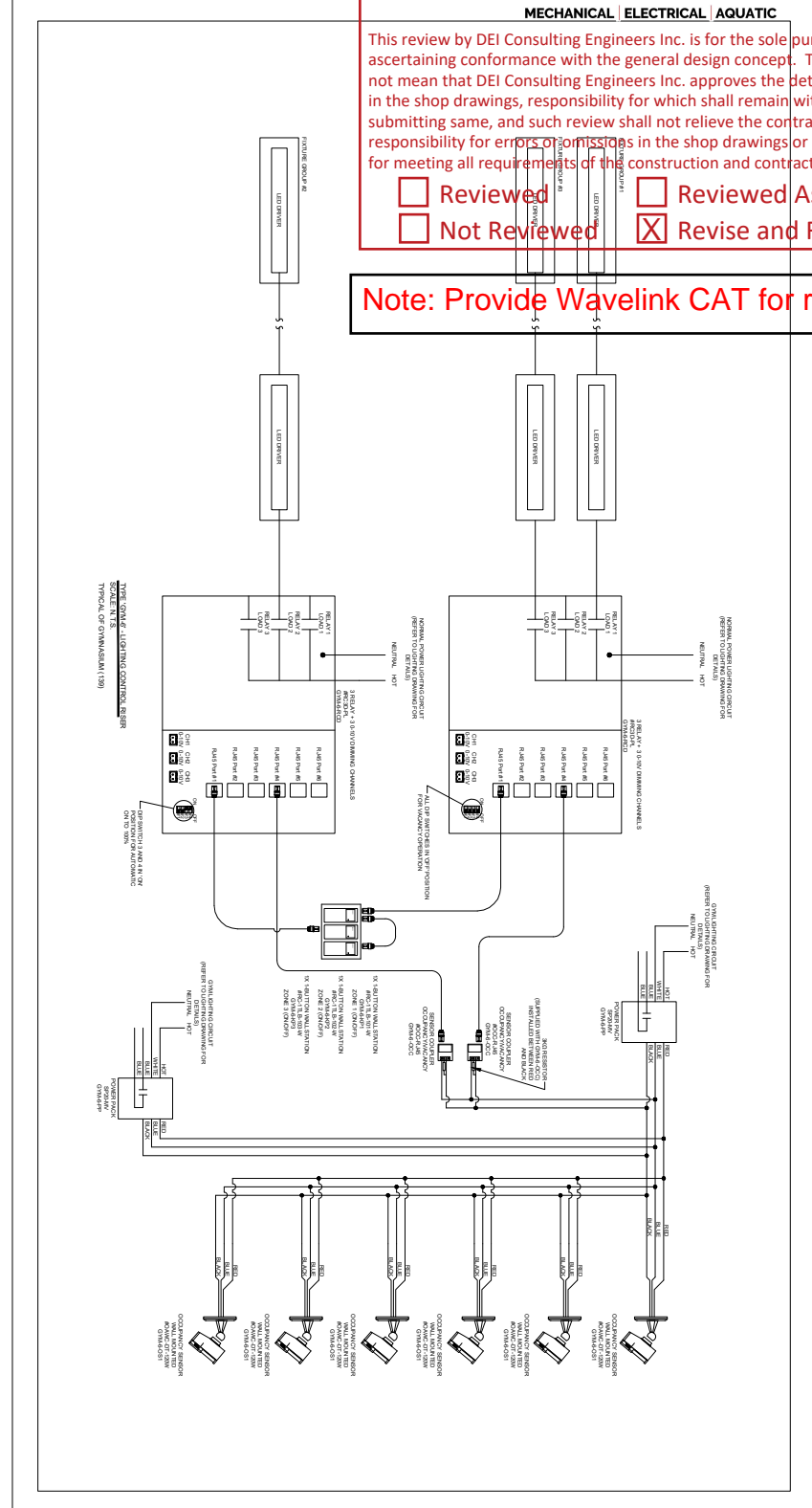


MECHANICAL | ELECTRICAL | AQUATIC

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Reviewed | <input type="checkbox"/> Reviewed As Noted |
| <input type="checkbox"/> Not Reviewed | <input checked="" type="checkbox"/> Revise and Resubmit |

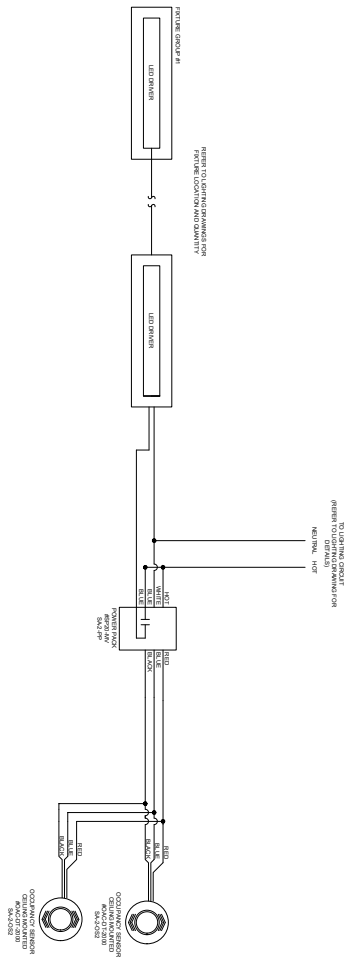
Note: Provide Wavelink CAT for review.



Project number: ML&C24-119319	Revision number: 0
Drawing title: LC1	

Project name: GLENVIEW PUBLIC SCHOOL GYMNASIUM HDSB 143 TOWNSEND AVENUE, BURLINGTON, ON DEI	Drawing title: PROJECT SPECIFIC LIGHTING CONTROL RISER DIAGRAMS
---	---

drawn by: AS	checked by: AS	scale: N.T.S.	date: JULY 2024
THESE DOCUMENTS ARE NOT TO BE SCALED. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL QUANTITIES SHOWN ON DRAWING PRIOR TO ORDERING. CONTRACTOR IS RESPONSIBLE FOR ITEMS NOT INCLUDED IN CONTRACTOR COUNTS.			
NO.	DATE	ISSUE	
0	2024.07.23	APPROVAL DRAWINGS	



TYPE SA-2 - LIGHTING CONTROL RISER
SCALE: N.T.S.
TYPICAL OF CHANGE ROOMS (137 & 138)

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings of his responsibility for meeting all requirements of the construction and contract documents.

<input checked="" type="checkbox"/>	Reviewed	<input type="checkbox"/>	Reviewed As Noted
<input type="checkbox"/>	Not Reviewed	<input type="checkbox"/>	Revise and Resubmit



Job Name:

HDSB - Glenview Public School Gym
Addition
Engineer: DEI & Associates (Waterloo)

Catalog Number:
DRAWING PACKAGE

Notes:

Type:

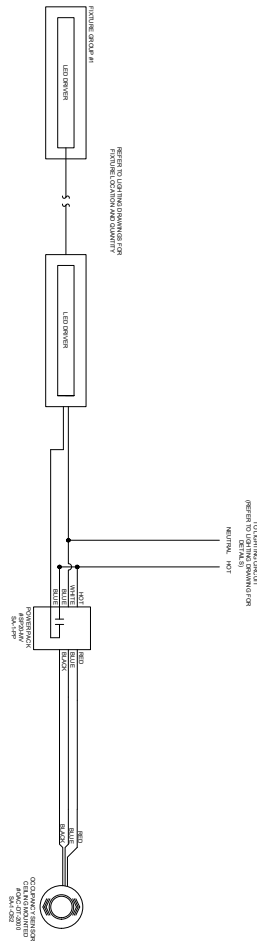
LTG. CTRL.

ML&C24-119319


project number: ML&C24-119319	revision number: 0
drawing number:	
LC3	

project name
GLENVIEW PUBLIC SCHOOL GYMNASIUM
HDSB
143 TOWNSEND AVENUE, BURLINGTON, ON
D6L
drawing title
PROJECT SPECIFIC
LIGHTING CONTROL RISER DIAGRAMS

drawn by:	AS		NO.	DATE	ISSUE
checked by:	AS		0	2024-07-23	APPROVAL DRAWINGS
scale:	N.T.S.				
THESE DOCUMENTS ARE NOT TO BE SCALED. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL QUANTITIES SHOWN ON DRAWING PRIOR TO ORDERING. MEDGAR LIGHTING & CONTROLS INC. WILL NOT BE RESPONSIBLE FOR ITEMS NOT INCLUDED IN CONTRACTOR COUNTS.					
date:	JULY 2024				



TYPE SA-1 - LIGHTING CONTROL RISER
SCALE: N.T.S.
TYPICAL OF CORRIDOR (136)



MECHANICAL ELECTRICAL PLUMBING

This review by DEI Consulting Engineers Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that DEI Consulting Engineers Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the contractor submitting same, and such review shall not relieve the contractor of his responsibility for errors or omissions in the shop drawings or his responsibility for meeting all requirements of the construction and contract documents.

<input checked="" type="checkbox"/> Reviewed <input type="checkbox"/> Not Reviewed	<input type="checkbox"/> Reviewed As Noted <input type="checkbox"/> Revise and Resubmit
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