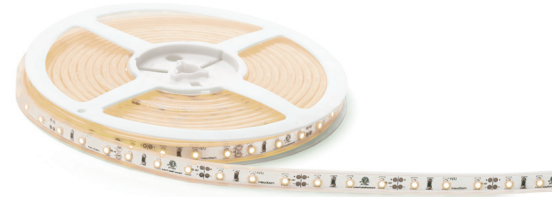


Appendix A // Fixture Cutsheets

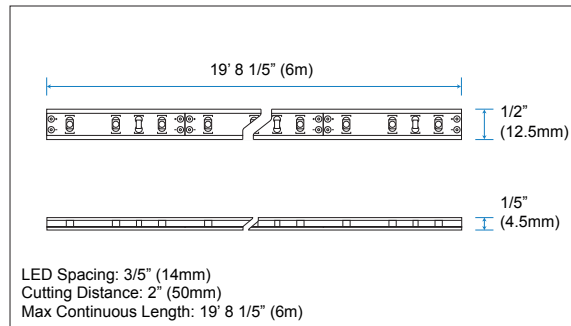
SPECIFICATION

Dimmable Wet Location LED Linear Flex System:

AQUAFLEX provides stable, consistent, energy efficient, ultra flexible solid state lighting. With a super low-profile it is able to meet any custom length at the designated cutting points. AQUAFLEX is housed in a high quality silicone sleeve and is supplied with mounting clips and end caps for simple installation. See MODA Metal for extrusion options.



Dimensions:

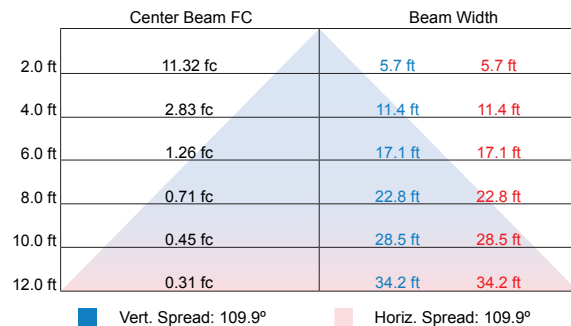


Output:

| | |
|------------------------|--|
| Delivered Lumens | 127.52 lm / ft |
| CCT | 3000k |
| Chromaticity Ordinates | x: 0.4445 y: 0.4288 u: 0.2450 v: 0.5318 |
| Color Bin Tolerance | + 3% / - 3% |
| Efficacy (lm/w) | 86.16 |
| CRI | 82 |
| Lumen Maintenance | 70,000 Hours L70 @ 25°C : 90,000 Hours L50 @ 25°C 50,000 Hours L70 @ 50°C : 70,000 Hours L50 @ 50°C |
| Testing Data | Light Data LM-79-08 & LM-80-08 |

Illuminance at a Distance: Data Shown for 120°

(For lux multiply fc by 10.7)

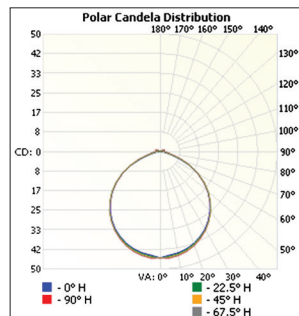


Electrical:

| | |
|-------------------|---|
| Input Voltage | 12v DC |
| Power Consumption | 1.48w / ft (0.12A) - Varies based on length of run & driver |
| Power Factor | ≤ 1 |
| Dimming | 100-277v 0-10v & Magnetic Low Voltage |
| Emergency | N/A |

Polar Candela Distribution:

Data Shown for 120°



Lumens per Zone:

| Zone | Lumens | % Total |
|--------|--------|---------|
| 0-10 | 4.28 | 3.36% |
| 10-20 | 12.30 | 9.65% |
| 20-30 | 18.69 | 14.66% |
| 30-40 | 22.59 | 17.71% |
| 40-50 | 23.29 | 18.26% |
| 50-60 | 20.40 | 16.00% |
| 60-70 | 13.91 | 10.91% |
| 70-80 | 6.27 | 4.92% |
| 80-90 | 2.25 | 1.76% |
| 90-100 | 1.27 | 1.00% |

Physical:

| | |
|-----------------------|--|
| Applications | Wet Locations, Cabinet, Cove, Display, Niches, Perimeter Lighting |
| Dimensions | Length 19' 8 1/5" (6m) Width 1/2" (12.5mm) Height 1/5" (4.5mm) |
| Weight | 14.4 oz (408.2g) Per Reel |
| Construction | Constant Voltage Design Protects LEDs And Prolongs Life. White FPCB Inside a Silicone Sleeve |
| Thermal Management | N/A |
| Optics | N/A |
| Fixture Connections | Solder joints |
| Operating Temperature | -4°F ~ 122°F (-20°C ~ 50°C) |
| Storage Temperature | -40°F ~ 176°F (-40°C ~ 80°C) |
| Humidity | 0-95% Non Condensing |

| | | | | |
|---------------|----------|------|-------|-------|
| Project Name: | Company: | P/O: | Type: | Date: |
| Notes: | | | | |

SPECIFICATION

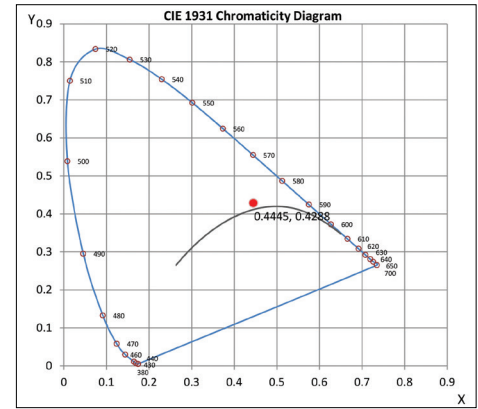
Zonal Lumen Summary:

| Zone | Lumens | % Lamp | % Fixt |
|--------|--------|--------|--------|
| 0-30 | 35.28 | N.A. | 27.70% |
| 0-40 | 57.87 | N.A. | 45.40% |
| 0-60 | 101.55 | N.A. | 79.60% |
| 60-80 | 20.18 | N.A. | 15.80% |
| 0-90 | 123.99 | N.A. | 97.20% |
| 90-180 | 3.53 | N.A. | 2.80% |
| 0-180 | 127.52 | N.A. | 100% |

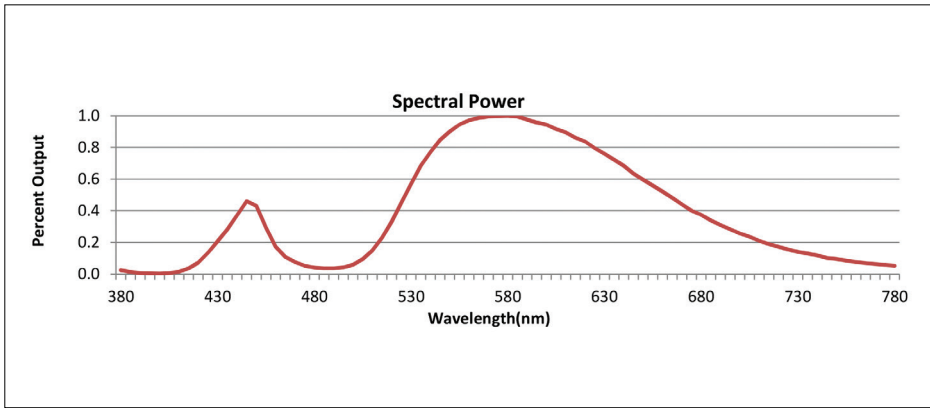
Luminance Data (cd/sq.m):

| Angle in Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|------------------|---------------|----------------|----------------|
| 45 | 12047 | 9044 | 8217 |
| 55 | 11159 | 7593 | 6678 |
| 65 | 9023 | 5416 | 4654 |
| 75 | 4849 | 2698 | 2366 |
| 85 | 3674 | 1272 | 1072 |

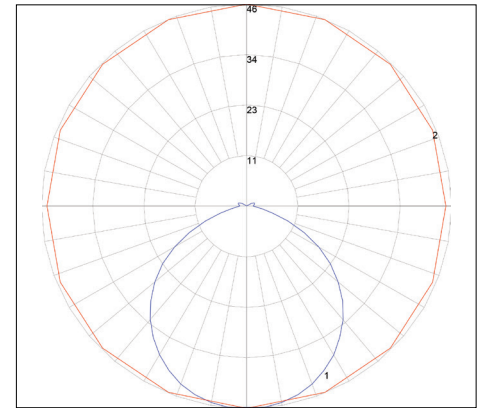
CIE 1931 Chromaticity Diagram:



Spectral Power:



Polar Graph: Data Shown for 120°



Accessories:

| | | | | | | |
|--|---|---|-------------------------------|--------------------------------|------------------------------|---------------------------------|
| | | | | | | |
| MRT50 Mounting Clips | MRT51 Silicon Glue | MRT52 End Cap | MP16 12v DC 132w | MP18 12v DC 50w | MP82 12v DC 150w | MP82-277v 12v DC 150w |
| Screws into Surface To Hold AQUAFLEX | Applied Between AQUAFLEX and Connectors or Caps to Seal From Exposure | Attaches to AQUAFLEX To Protect FPCB From Dust or Water | Wet Location LED Power Supply | 0-10v Dimming LED Power Supply | MLV Dimming LED Power Supply | MLV Dimming LED Power Supply |
| L: 1 1/5" (30mm) W: 1/5" (6mm) H: 1/5" (5mm) 2 Screws 1/2" (13mm) | | L: 3/5" (15mm) W: 1/5" (5mm) H: 1/5" (5mm) | Non-Dimmable | | | |

Standards and Certifications:

| | |
|---------------|--|
| Certification | Tested to UL & CSA by ETL For Use in USA & CANADA, Complies with California Title 24 Requirements, Lighting Facts. Exceeds ANSI C78.377A, CE & RoHS Compliant. |
| Class | Class III |
| Environment | Wet Location - IP67 |
| Warranty | 5 Year Limited Warranty |

Ordering:

| |
|---------------------|
| SKU: AQUAFLEX-3000K |
|---------------------|

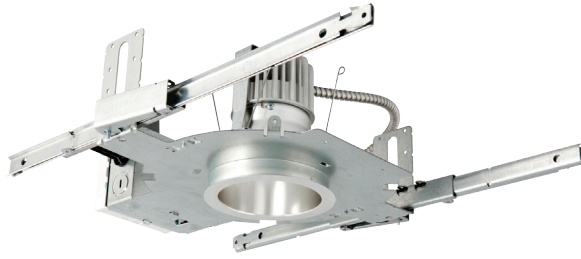


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Luminaire Type:
Catalog Number
(autopopulated):



Gotham Architectural Downlighting
LED Downlights

**4" Evo®
Downlight**

Solid-State Lighting



FEATURES

OPTICAL SYSTEM

- Self-flanged semi-specular, matte-diffuse or specular lower reflector
- Patented Bounding Ray™ optical design (U.S. Patent No. 5,800,050)
- 45° cutoff to source and source image
- Top-down flash characteristic

MECHANICAL SYSTEM

- 16-gauge galvanized steel construction; maximum 1-1/2" ceiling thickness
- Telescopic mounting bars maximum of 32" and minimum of 15", preinstalled, 4" vertical adjustment
- Toolless adjustments post installation
- Junction box capacity: 8 (4 in, 4 out) 12AWG rated for 90°C
- Light engine and driver accessible through aperture

ELECTRICAL SYSTEM

- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours based on IESNA LM-79-2008
- 120-277VAC, 50/60hz power supply with 0-10V dimming (10-100%)
- Overload and short circuit protected
- LEDs tested under LM80

LISTINGS

- Fixtures are CSA certified to meet US and Canadian standards; wet location, covered ceiling

WARRANTY

- 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end user environment and application. All values are design or typical values, measured under laboratory conditions at 25° C.

ORDERING INFORMATION

EXAMPLE: EVO 35/10 4AR 120 AZ10

| Series | Color temperature | Nominal lumen values | Aperture/Trim color | Distribution | Finish | Voltage |
|--------|-------------------|----------------------|------------------------|----------------------|-----------------------|------------------|
| EVO | 27/ 2700 K | 06 600 lumens | 4AR Clear | (blank) 1.0 s/mh | (blank) Semi-specular | 120 |
| | 30/ 3000 K | 10 1000 lumens | 4PR Pewter | MD Medium (0.8 s/mh) | LD Matte diffuse | 277 |
| | 35/ 3500 K | 14 1400 lumens | 4WTR Wheat | WD Wide (1.5 s/mh) | LS Specular | 347 ² |
| | 41/ 4100 K | 18 1800 lumens | 4GR Gold | | | |
| | | 20 2000 lumens | 4WR ¹ White | | | |
| | | | 4BR ¹ Black | | | |

| Driver | Options |
|--|---|
| AZ10³ Philips Xitanium 0-10V dimming driver. Minimum dimming level 10% | SF Single fuse |
| EZB eldoLED SOLOdrive 0-10V dimming driver. Minimum dimming level <1%. 120V or 277V | NPP16D nLight® network relay pack with 0-10V dimming. Refer to TN-602 . |
| EDAB eldoLED SOLOdrive DALI dimming driver. Minimum dimming level <1%. 120V or 277V | NPP16D ER⁶ nLight® network relay pack with 0-10V dimming for emergency circuit operation. Refer to TN-602 . |
| EDXB eldoLED POWERdrive DMX with RDM (remote device management). Minimum dimming level <1%. Includes termination resistor. 120V or 277V | NPS80EZ nLight® dimming pack controls 0-10V eldoLED drivers. |
| ECOS^{2,3,4,5} Lutron® Hi-Lume® 2-wire forward-phase dimming driver. Minimum dimming level 1% | NPS80EZ ER⁶ nLight® dimming pack controls 0-10V eldoLED drivers. ER controls fixtures on emergency circuit. |
| ECOS^{3,4} Lutron® Hi-Lume® 3-wire or EcoSystem® dimming driver. Minimum dimming level 1% | TRW⁷ White painted flange |
| | TRBL⁸ Black painted flange |
| | EL⁹ Emergency battery pack with integral test switch |
| | ELR⁹ Emergency battery pack with remote test switch |
| | CR190 High CRI (90+) |
| | CP¹⁰ Chicago plenum |
| | BGTD Bodine generator transfer device |
| | RRL RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. |

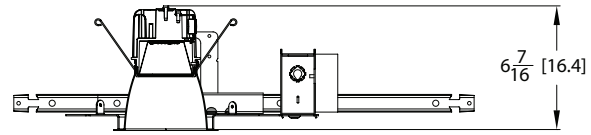
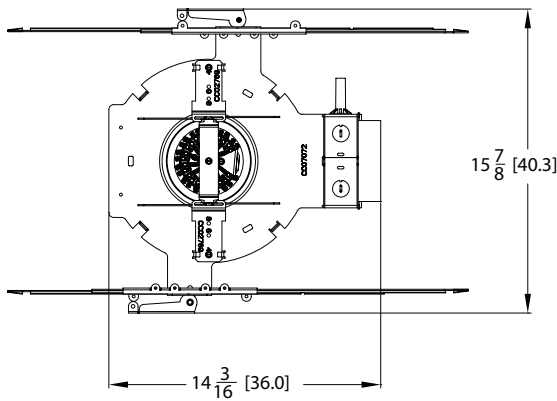
ACCESSORIES order as separate catalog numbers (shipped separately)

| | |
|------------------|--|
| SCA4 | Sloped ceiling adapter. Degree of slope must be specified (10D, 15D, 20D, 25D, 30D). Ex: SCA4 10D. Refer to TECH-190 . |
| CTA4-8 YK | Ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 2"). |
| ISD BC | 0-10V wallbox dimmer. Refer to ISD-BC . |



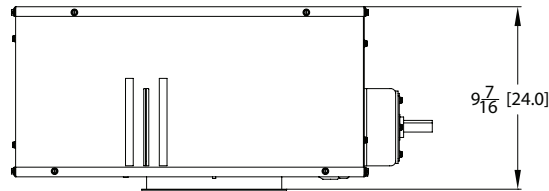
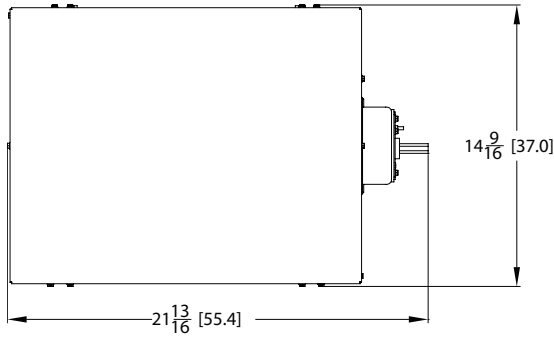
DIMENSIONAL DATA

All dimensions are inches (centimeters) unless otherwise noted.



Aperture: 4-5/16 (11)
 Ceiling Opening: 5-1/8 (13)
 Overlap Trim: 5-7/16 (13.8)

DIMENSIONS FOR CHICAGO PLENUM



ELECTRICAL

| WATTAGE CONSUMPTION MATRIX | | |
|----------------------------|---------|-----------------|
| LUMENS | WATTAGE | LUMENS per WATT |
| 600 | 16 | 49 |
| 1000 | 21 | 51 |
| 1400 | 26 | 55 |
| 1800 | 29 | 58 |
| 2000 | 31 | 65 |

| AVAILABILITY/COMPATIBILITY -- INITIAL LUMENS | | | | |
|--|--------|-------|----------------|-------|
| PRODUCT | LED | | INITIAL LUMENS | |
| | LUMENS | WATTS | EL/ELR | ELRHL |
| EVO 4" | 600 | 18 | 363 | N/A |
| EVO 4" | 1000 | 22 | 379 | N/A |
| EVO 4" | 1400 | 30 | 702 | N/A |
| EVO 4" | 1800 | 38 | 731 | N/A |

nLight® Control Accessories:
 Order as separate catalog number. Visit www.sensorswitch.com/nLight for complete listing of nLight controls.

| | | | |
|---------------------------|---------------------|--|-----------------------------|
| WallPod stations | Model number | Occupancy sensors | Model number |
| On/Off | nPODM [color] | Small motion 360°, ceiling (PIR / dual tech) | nCM 9 / nCM PDT 9 |
| On/Off & Raise/Lower | nPODM DX [color] | Large motion 360°, ceiling (PIR / dual tech) | nCM 10 / nCM PDT 10 |
| Graphic Touchscreen | nPOD GFX [color] | Wide view (PIR / dual tech) | nWV 16 / nWV PDT 16 |
| Photocell controls | Model number | Wall Switch w/ Raise/Lower (PIR / dual tech) | nWSX LV DX / nWSX PDT LV DX |
| On/Off & Dimming | nCM ADCX | Cat-5 cables (plenum rated) | Model number |
| | | 10', CAT5 10FT | CAT5 10FT J1 |
| | | 15', CAT5 15FT | CAT5 15FT J1 |

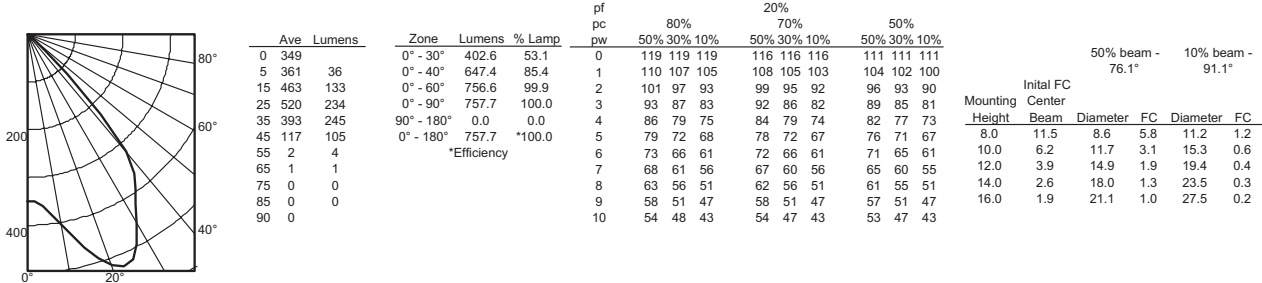
NOTES

ORDERING NOTES

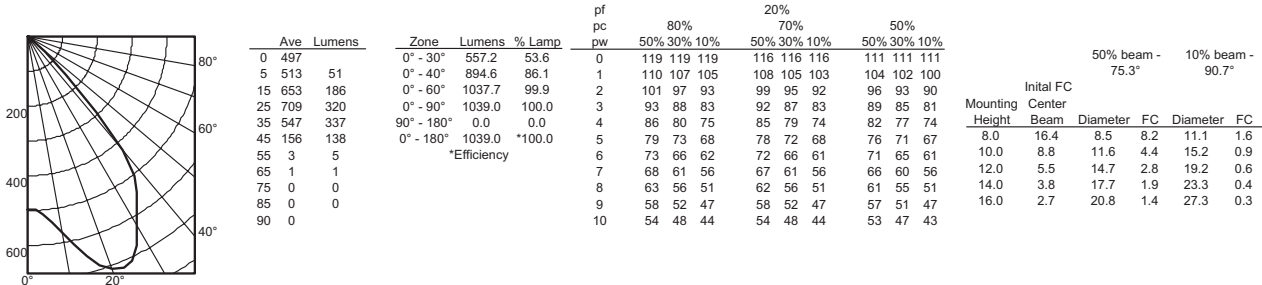
- Not available with finishes.
- Not valid with emergency options, i.e., EL and ELR.
- Refer to [TECH-240](#) for compatible dimmers.
- Not available with nLight® option.
- 120V only.
- For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
- Not available with white reflector.
- Not available with black reflector
- For dimensional changes, refer to [TECH-140](#). Access above ceiling required. Not available with CP option. Specify 120V or 277V. Not available with 347V.
- Not available with EL or ELR options.

Distribution Curve Distribution Data Output Data Coefficient of Utilization Illuminance: Single Luminaire 30" Above Floor

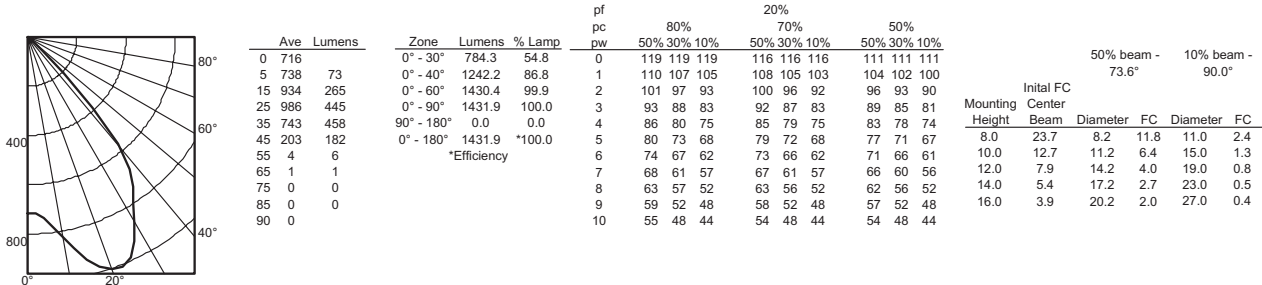
EVO 35/6 4AR LS INPUT WATTS: 15.6, DELIVERED LUMENS: 757.7, LM/W=48.6, 1.6 S/MH, TEST NO. LTL21260



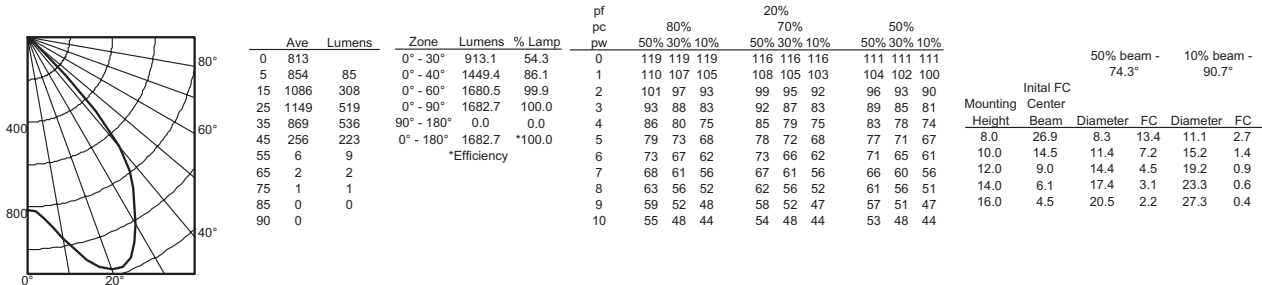
EVO 35/10 4AR LS INPUT WATTS: 20.6, DELIVERED LUMENS: 1039.0, LM/W=50.4, 1.5 S/MH, TEST NO. LTL21209



EVO 35/14 4AR LS INPUT WATTS: 26.2, DELIVERED LUMENS: 1431.9, LM/W=54.7, 1.5 S/MH, TEST NO. LTL21213



EVO 35/18 4AR LS INPUT WATTS: 29.0, DELIVERED LUMENS: 1682.7, LM/W=58.0, 1.5 S/MH, TEST NO. LTL21149



PHOTOMETRY NOTES

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 83 typical.
- Consult factory or IES file for microgroove baffle, black cone or other photometric reports.

Choose Wall Controls.

nLIGHT offers multiple styles of wall controls – each with varying features and user experience.



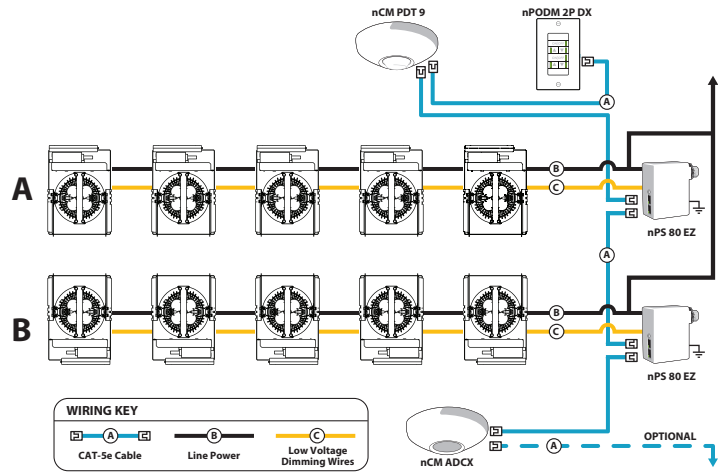
Push-Button WallPod
Traditional tactile buttons and LED user feedback



Touch WallPod
Contemporary capacitive touch style buttons with audible clicker for user feedback



Graphic WallPod
Full color touch screen provides a sophisticated look and feel



EXAMPLE

Group Fixture Control*

*Application diagram applies for fixtures with eldoLED drivers only.

nPS 80 EZ Dimming/Control Pack (qty 2 required)

nPDM 2P DX Dual On/Off/Dim Push-Button WallPod

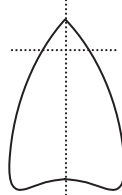
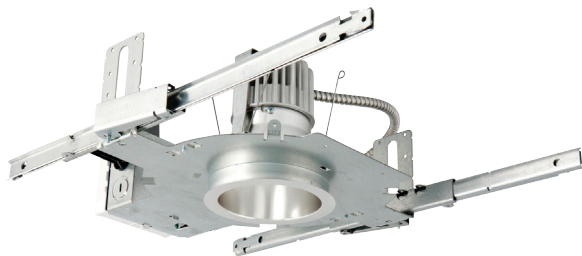
nCM ADCX Daylight Sensor with Automatic Dimming Control

nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.



Luminaire Type:
Catalog Number
(autopopulated):



Gotham Architectural Downlighting
LED Downlights

**4" Evo®
Downlight**

Solid-State Lighting



FEATURES

OPTICAL SYSTEM

- Self-flanged semi-specular, matte-diffuse or specular lower reflector
- Patented Bounding Ray™ optical design (U.S. Patent No. 5,800,050)
- 45° cutoff to source and source image
- Top-down flash characteristic

MECHANICAL SYSTEM

- 16-gauge galvanized steel construction; maximum 1-1/2" ceiling thickness
- Telescopic mounting bars maximum of 32" and minimum of 15", preinstalled, 4" vertical adjustment
- Toolless adjustments post installation
- Junction box capacity: 8 (4 in, 4 out) 12AWG rated for 90°C
- Light engine and driver accessible through aperture

ELECTRICAL SYSTEM

- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours based on IESNA LM-79-2008
- 120-277VAC, 50/60hz power supply with 0-10V dimming (10-100%)
- Overload and short circuit protected
- LEDs tested under LM80

LISTINGS

- Fixtures are CSA certified to meet US and Canadian standards; wet location, covered ceiling

WARRANTY

- 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end user environment and application. All values are design or typical values, measured under laboratory conditions at 25° C.

ORDERING INFORMATION

EXAMPLE: EVO 35/10 4AR 120 AZ10

| Series | Color temperature | Nominal lumen values | Aperture/Trim color | Distribution | Finish | Voltage |
|--------|-------------------|----------------------|------------------------|----------------------|-----------------------|------------------|
| EVO | 27/ 2700 K | 06 600 lumens | 4AR Clear | (blank) 1.0 s/mh | (blank) Semi-specular | 120 |
| | 30/ 3000 K | 10 1000 lumens | 4PR Pewter | MD Medium (0.8 s/mh) | LD Matte diffuse | 277 |
| | 35/ 3500 K | 14 1400 lumens | 4WTR Wheat | WD Wide (1.5 s/mh) | LS Specular | 347 ² |
| | 41/ 4100 K | 18 1800 lumens | 4GR Gold | | | |
| | | 20 2000 lumens | 4WR ¹ White | | | |
| | | | 4BR ¹ Black | | | |

| Driver | Options |
|--|---|
| AZ10³ Philips Xitanium 0-10V dimming driver. Minimum dimming level 10% | SF Single fuse |
| EZB eldoLED SOLOdrive 0-10V dimming driver. Minimum dimming level <1%. 120V or 277V | NPP16D nLight® network relay pack with 0-10V dimming. Refer to TN-602 . |
| EDAB eldoLED SOLOdrive DALI dimming driver. Minimum dimming level <1%. 120V or 277V | NPP16D ER⁶ nLight® network relay pack with 0-10V dimming for emergency circuit operation. Refer to TN-602 . |
| EDXB eldoLED POWERdrive DMX with RDM (remote device management). Minimum dimming level <1%. Includes termination resistor. 120V or 277V | NPS80EZ nLight® dimming pack controls 0-10V eldoLED drivers. |
| ECOS^{23,4,5} Lutron® Hi-Lume® 2-wire forward-phase dimming driver. Minimum dimming level 1% | NPS80EZ ER⁶ nLight® dimming pack controls 0-10V eldoLED drivers. ER controls fixtures on emergency circuit. |
| ECOS^{3,4} Lutron® Hi-Lume® 3-wire or EcoSystem® dimming driver. Minimum dimming level 1% | TRW⁷ White painted flange |
| | TRBL⁸ Black painted flange |
| | EL⁹ Emergency battery pack with integral test switch |
| | ELR⁹ Emergency battery pack with remote test switch |
| | CR190 High CRI (90+) |
| | CP¹⁰ Chicago plenum |
| | BGTD Bodine generator transfer device |
| | RRL RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. |

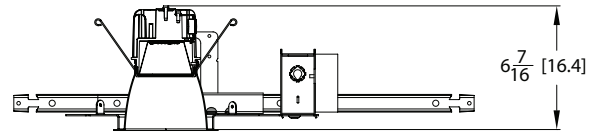
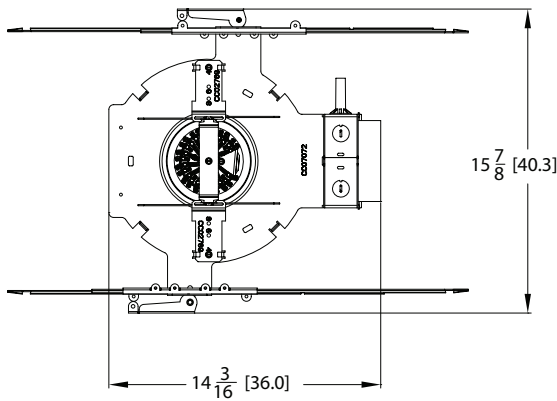
ACCESSORIES order as separate catalog numbers (shipped separately)

| | |
|------------------|--|
| SCA4 | Sloped ceiling adapter. Degree of slope must be specified (10D, 15D, 20D, 25D, 30D). Ex: SCA4 10D. Refer to TECH-190 . |
| CTA4-8 YK | Ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 2"). |
| ISD BC | 0-10V wallbox dimmer. Refer to ISD-BC . |



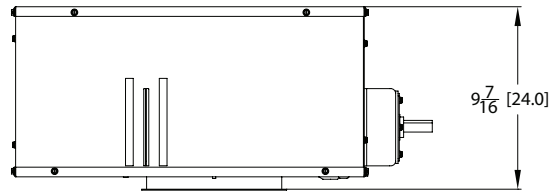
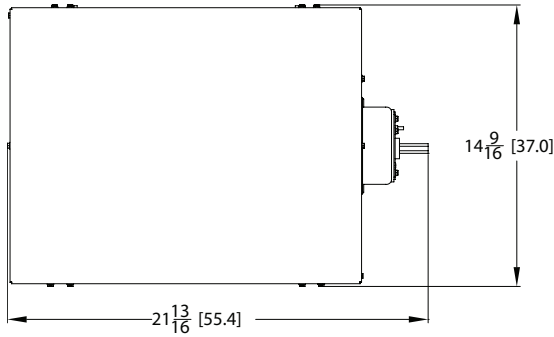
DIMENSIONAL DATA

All dimensions are inches (centimeters) unless otherwise noted.



Aperture: 4-5/16 (11)
 Ceiling Opening: 5-1/8 (13)
 Overlap Trim: 5-7/16 (13.8)

DIMENSIONS FOR CHICAGO PLENUM



ELECTRICAL

| WATTAGE CONSUMPTION MATRIX | | |
|----------------------------|---------|-----------------|
| LUMENS | WATTAGE | LUMENS per WATT |
| 600 | 16 | 49 |
| 1000 | 21 | 51 |
| 1400 | 26 | 55 |
| 1800 | 29 | 58 |
| 2000 | 31 | 65 |

| AVAILABILITY/COMPATIBILITY -- INITIAL LUMENS | | | | |
|--|--------|-------|----------------|-------|
| PRODUCT | LED | | INITIAL LUMENS | |
| | LUMENS | WATTS | EL/ELR | ELRHL |
| EVO 4" | 600 | 18 | 363 | N/A |
| EVO 4" | 1000 | 22 | 379 | N/A |
| EVO 4" | 1400 | 30 | 702 | N/A |
| EVO 4" | 1800 | 38 | 731 | N/A |

nLight® Control Accessories:
 Order as separate catalog number. Visit www.sensorswitch.com/nLight for complete listing of nLight controls.

| | | | |
|---------------------------|---------------------|--|-----------------------------|
| WallPod stations | Model number | Occupancy sensors | Model number |
| On/Off | nPODM [color] | Small motion 360°, ceiling (PIR / dual tech) | nCM 9 / nCM PDT 9 |
| On/Off & Raise/Lower | nPODM DX [color] | Large motion 360°, ceiling (PIR / dual tech) | nCM 10 / nCM PDT 10 |
| Graphic Touchscreen | nPOD GFX [color] | Wide view (PIR / dual tech) | nWV 16 / nWV PDT 16 |
| Photocell controls | Model number | Wall Switch w/ Raise/Lower (PIR / dual tech) | nWSX LV DX / nWSX PDT LV DX |
| On/Off & Dimming | nCM ADCX | Cat-5 cables (plenum rated) | Model number |
| | | 10', CAT5 10FT | CAT5 10FT J1 |
| | | 15', CAT5 15FT | CAT5 15FT J1 |

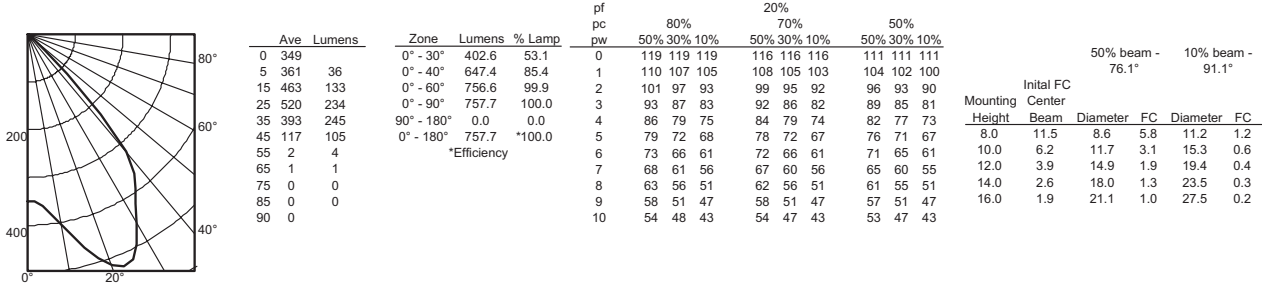
NOTES

ORDERING NOTES

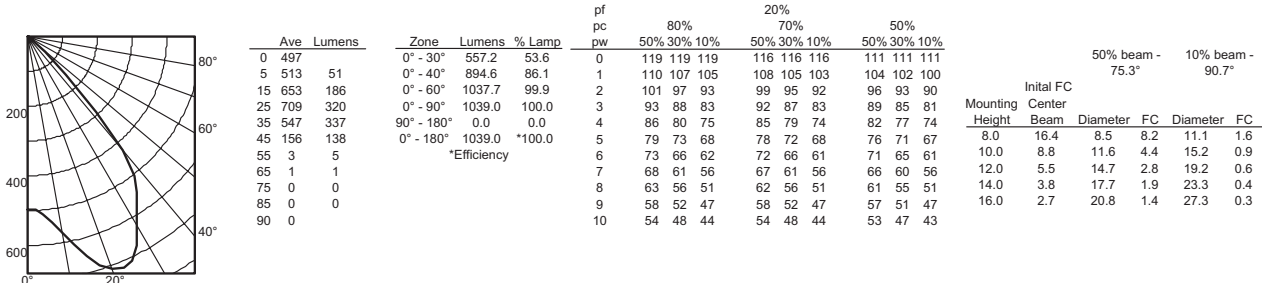
- Not available with finishes.
- Not valid with emergency options, i.e., EL and ELR.
- Refer to [TECH-240](#) for compatible dimmers.
- Not available with nLight® option.
- 120V only.
- For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
- Not available with white reflector.
- Not available with black reflector
- For dimensional changes, refer to [TECH-140](#). Access above ceiling required. Not available with CP option. Specify 120V or 277V. Not available with 347V.
- Not available with EL or ELR options.

Distribution Curve Distribution Data Output Data Coefficient of Utilization Illuminance: Single Luminaire 30" Above Floor

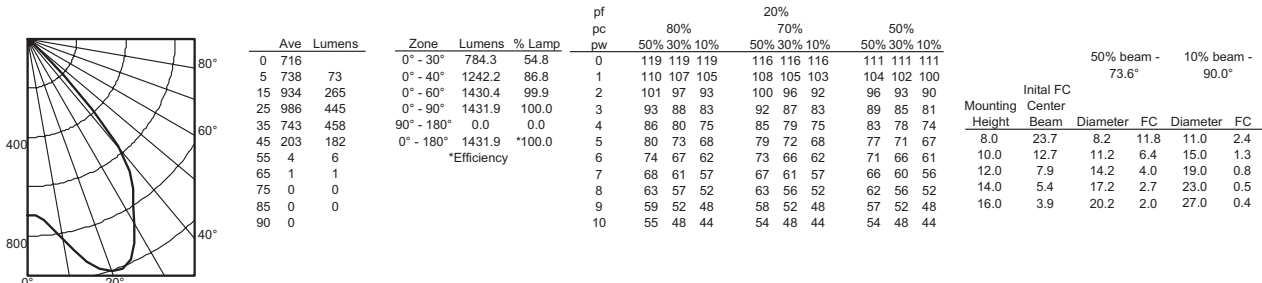
EVO 35/6 4AR LS INPUT WATTS: 15.6, DELIVERED LUMENS: 757.7, LM/W=48.6, 1.6 S/MH, TEST NO. LTL21260



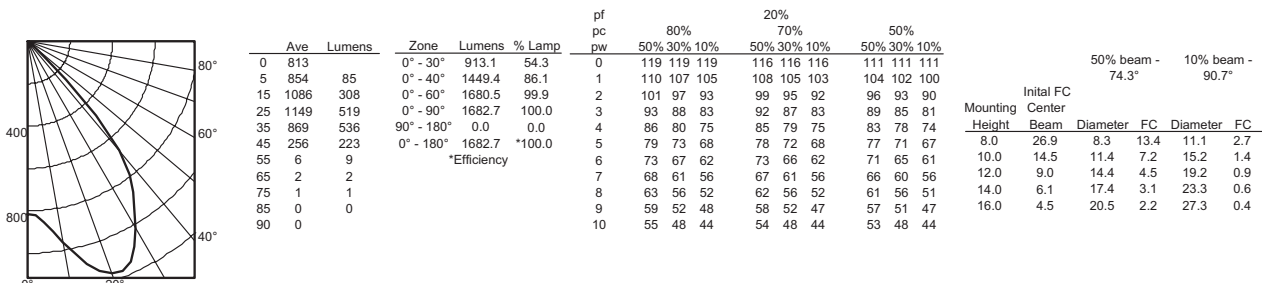
EVO 35/10 4AR LS INPUT WATTS: 20.6, DELIVERED LUMENS: 1039.0, LM/W=50.4, 1.5 S/MH, TEST NO. LTL21209



EVO 35/14 4AR LS INPUT WATTS: 26.2, DELIVERED LUMENS: 1431.9, LM/W=54.7, 1.5 S/MH, TEST NO. LTL21213



EVO 35/18 4AR LS INPUT WATTS: 29.0, DELIVERED LUMENS: 1682.7, LM/W=58.0, 1.5 S/MH, TEST NO. LTL21149



PHOTOMETRY NOTES

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 83 typical.
- Consult factory or IES file for microgroove baffle, black cone or other photometric reports.

Choose Wall Controls.

nLIGHT offers multiple styles of wall controls – each with varying features and user experience.



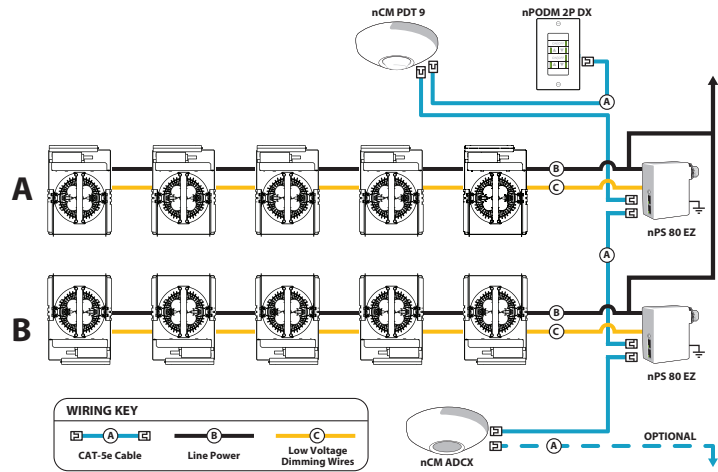
Push-Button WallPod
Traditional tactile buttons and LED user feedback



Touch WallPod
Contemporary capacitive touch style buttons with audible clicker for user feedback



Graphic WallPod
Full color touch screen provides a sophisticated look and feel



EXAMPLE

Group Fixture Control*

*Application diagram applies for fixtures with eldoLED drivers only.

nPS 80 EZ Dimming/Control Pack (qty 2 required)

nPODM 2P DX Dual On/Off/Dim Push-Button WallPod

nCM ADCX Daylight Sensor with Automatic Dimming Control

nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.



Rio 1.1

4W - 24Vdc - 20.1" (510 mm)

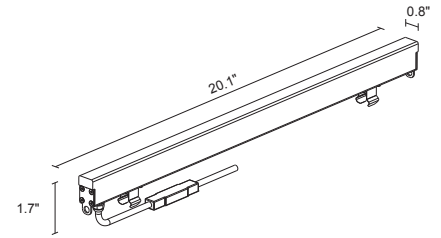
RE1100 **DB**

LED color

9 - 3700K

5 - 2800K

F - 2600K



Rio 1.2

8W - 24Vdc - 39.8" (1010 mm)

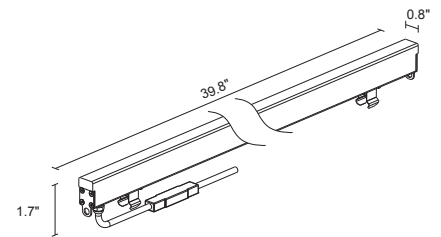
RE1200 **DB**

LED color

9 - 3700K

5 - 2800K

F - 2600K



Rio 1.4

16W - 24Vdc - 79.1" (2010 mm)

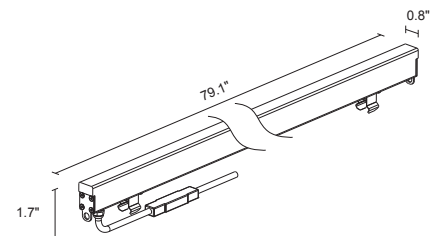
RE1400 **DB**

LED color

9 - 3700K

5 - 2800K

F - 2600K



TECHNICAL DATA

| | |
|-------------------------------|--|
| Application | continuous line for architectural lighting purpose |
| Installation | linear driveover profile for indoor and outdoor application |
| Mounting | recessed (wall, floor) |
| Material | PMMA, stainless steel |
| N° and type of LED | power LED SMD |
| Nom. power consumption | 8W/3.28' |
| Power supply | 24Vdc |
| Power supply unit | Order separately |
| Power supply cables | included a neoprene cable of 4.92' |
| Total Delivered Lumens | 168 lm/3.28' (2800K) |
| Optics | diffused |
| LED colour | white: 2600K, 2800K, 3700K |
| Ingress protection | IP67 |
| Impact resistance | IK10 |
| Features | dimnable, NTC temperature control, tropicalized PCB, driveover, no dark zone between lighting fixtures |

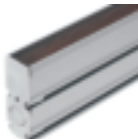
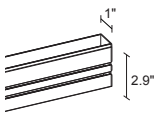

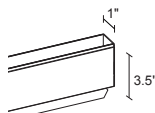
POWER SUPPLY UNIT

24vDC


| | | | 4W | 8W | 16W |
|------------------|---------------------------------------|-----------------------------|---------------|---------------|--------------|
| PPLT00155 | 90-265vAC TO 24vDC 30W | Class 2 | 1-6 Fixtures | 1-3 Fixtures | 1 Fixture |
| PPLT00157 | 90-265vAC TO 24vDC 60W | Class 2 | 1-12 Fixtures | 1-6 Fixtures | 1-3 Fixtures |
| PPLT00158 | 90-265vAC TO 24vDC 100W | Class 2 | 1-20 Fixtures | 1-10 Fixtures | 1-5 Fixtures |
| PPLT00143 | 120-277vAC to 24vDC 96W 0-10vDIM IP64 | Class 2 w/ 0-10vDIM via PWM | 1-20 Fixtures | 1-10 Fixtures | 1-5 Fixtures |

Other power supplies available on request.

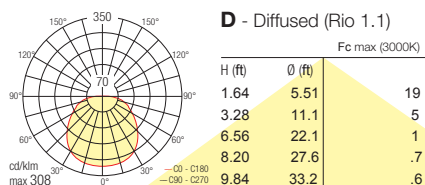
OUTER CASING

| | |
|---|---|
|  <p>Aluminium outer casing</p> <p>WC8111 20.24" per Rio 1.1</p> <p>WC8112 40.00" per Rio 1.2</p> <p>WC8114 79.45" per Rio 1.4</p>  |  <p>Stainless steel outer casing</p> <p>WC8151 20.20" per Rio 1.1</p> <p>WC8152 39.96" per Rio 1.2</p> <p>WC8154 79.41" per Rio 1.4</p>  |
|---|---|

ACCESSORIES

| | |
|---|---|
|  <p>Fixing kit for aluminium outer casing</p> <p>WN8010</p> |  <p>Fixing kit for stainless steel outer casing</p> <p>WN8011</p> |
|  <p>Extractors pair (Rio 1.1 - 1.2 - 1.4)</p> <p>WN8001</p> | |

PHOTOMETRIC DATA



Date: _____ Customer: _____
 Project: _____
 Type: _____ Qty: _____

MTR Column LED



Order Code: _____

| | | | | | |
|----------------------------|---------------------------------|---|--|--------------|--|
| Series | MTRTL Tapered Pole | MTRCL Round 8" Straight Pole | | | |
| Nominal Overall Ht. | MTRTL | 12 12' | 14 14' | 16 16' | |
| | MTRCL | 10 10' | 12 12' | 14 14' | 16 16' |
| Nominal Ht. of Lit Section | 2 2' | 3 3' | 4 4' | | |
| | | | | | |
| Light Engine | 1L35 | 2L35 | 3L35 | 4L35 | See p. 9 for details |
| CCT | 27 2700K | 30 3000K | 35 3500K | 40 4000K | For other CCT please consult factory |
| Finish | WH White | BK Black | BZ Bronze | SV Silver | SP Specify Premium Color |
| Voltage | 120 | 208 | 240 | 277 | 347¹ 480¹ ¹ Requires step down transformer |
| Options | DM Dimming (0-10V) | HL50 ² Hi-Lo Switching | REC ³ GFCI Receptacle | | |
| | | ² 120V, 240V, and 277V only | ³ 120V only | | |

Product Modifications

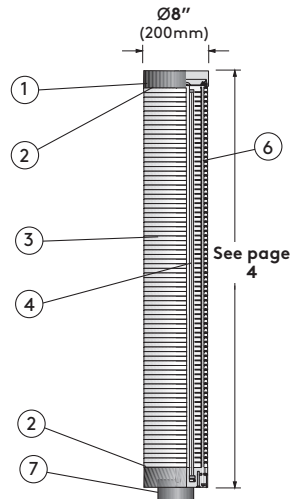
Please list modification requirements for review by factory:

Approvals



Date: _____

MTRTL



Specifications

1. Luminaire Cover - Die-cast aluminum cover, with smooth crisp form to reflect and complement the column design. Removes by loosening three stainless steel set screws for easy access to lamp chamber.

2. Gasketing - Continuous gaskets provide weather-proofing, dust, and insect control at base of column, fixture cover, and between MTR rings.

3. Shielding - Consists of 8" (200mm) diameter injection-molded acrylic multi-prisms for total reflection (MTR). MTR rings have a wall thickness of .591" and are designed after the light-bending characteristics of a prism.

4. LED Light Engine - High efficiency LED light engine equipped with brand-name LEDs, available in 2700K, 3000K, 3500K, or 4000K CCT / Tolerance within a 3-step MacAdams ellipse.

5. Drivers - (not shown) Electronic universal 120-277V, PFC > 0.95

6. Diffuser - LED optimized UV resistant material ensures evenly lit MTR rings at high transmittance.

7. Pole Fitter - Self-leveling, die-cast aluminum, fitter base secured to pole with two stainless steel Allen head set screws. 3 1/2" (89mm) O.D. poles.

8. Column Fitter - (not shown) Die-cast aluminum fitter, with built-in gasketing ridges, for smooth transition to column.

9. Surge Protector - (not shown) Designed to protect luminaire from electrical surge (10kA).

10. Base Cover - (not shown -MTRTL only) Standard two-piece base cover is made from die-cast 356 alloy aluminum, which is heat treated to produce a T6 temper.

11. Hi-Lo Switching - (not shown) For details, please see page 6.

12. Thermal Foldback - (not shown) Integrated Thermal Foldback circuit will reduce the drive current if the ambient temperature exceeds the maximum rated ambient temperature. This ensures maximum light output in various operating conditions, while assuring long-term lumen maintenance.

Exterior Luminaire Finish -

Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultraviolet resistance for color retention. All products are tested in accor-

dance with test specifications for coatings from ASTM and PCI.

Standard exterior colors are White (WH), Black (BK), Bronze (BZ), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide.

5 Year Limited LED Luminaire Warranty -

Selux offers a 5 Year Limited Warranty to the original purchaser that the MTR Column LED luminaire shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers the LED driver and LED array when installed and operated according to Selux instructions. For details, see "Selux Terms and Condition of Sale."

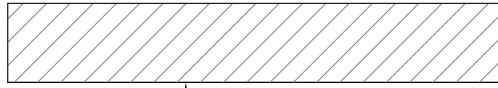
Listings and Ratings: Tested to NRTL Wet Location and IESNA LM-79-08 standards. LED tested to LM-80 standards. Luminaire and LED tested at 25°C (77°F) ambient temperature.

NRTL Listed (i.e. UL, CSA)

Visit selux.us for our LED End of Life recycling policy.

| Ambient Temperature Chart (standard) | |
|--------------------------------------|-------------------|
| Minimum | Maximum |
| -35° C (-31° F) | 45° C (113° F) |

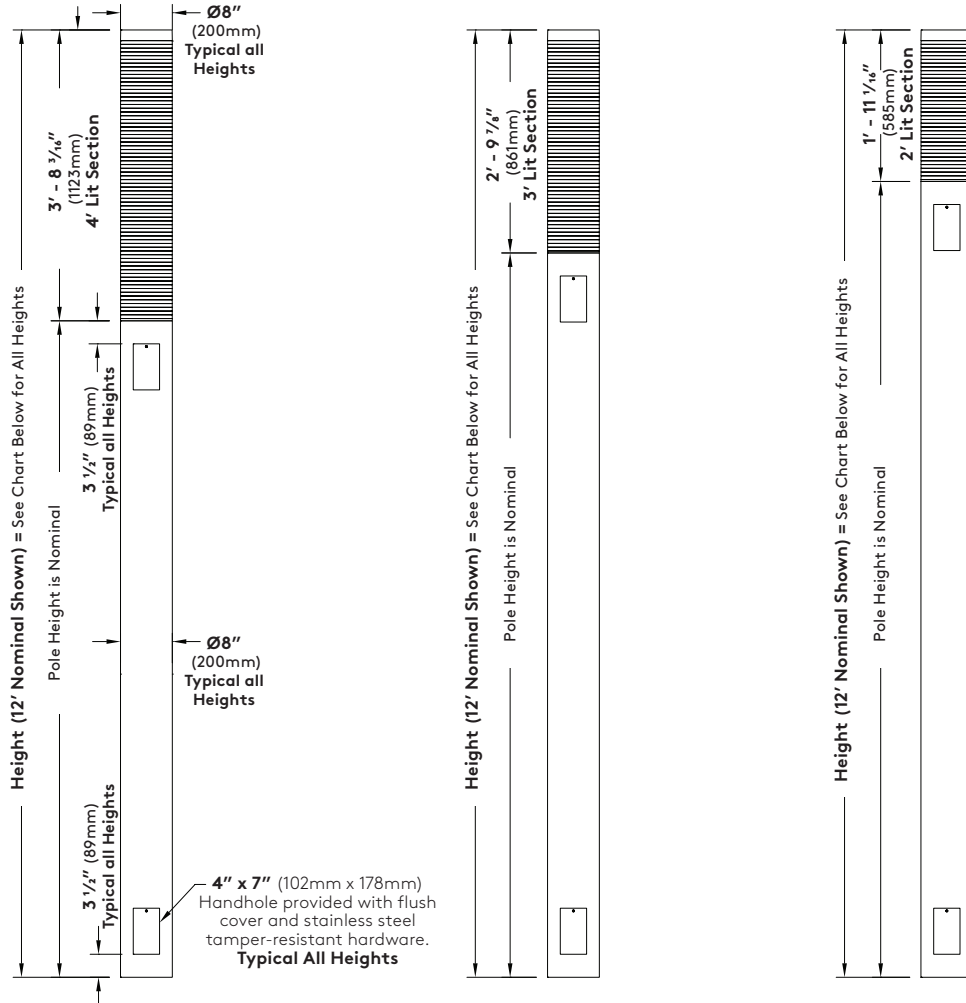
Mounting - MTRCL



*Minimum clearance required
(for maintenance or future upgrades)

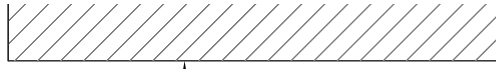
*consult factory for alternative recommendations
if access above fixture is not available

4' head = 60" (1524mm)
3' head = 48" (1219mm)
2' head = 36" (914mm)



| Overall Height Nominal (Actual) | Lit Section Nominal (Actual) | Pole Height Nominal (Actual) | Total Column Weight (lb) | ASSHTO 1994 Max EPA Wind Rating | ASSHTO 2001 Max EPA Wind Rating | ASSHTO 2009 Max EPA Wind Rating |
|------------------------------------|---------------------------------|---------------------------------|-----------------------------|------------------------------------|------------------------------------|------------------------------------|
| 10' (9' - 10 1/16") | 4' (3' - 8 3/16") | 6' (6' - 1 13/16") | 62 (28 kg) | 200mph | 200mph | 200mph |
| 10' (9' - 10 1/4") | 3' (2' - 9 7/8") | 7' (7' - 0 5/16") | 53 (24 kg) | 200mph | 200mph | 200mph |
| 10' (10' - 0 7/8") | 2' (1' - 11 1/16") | 8' (8' - 1 13/16") | 51 (23 kg) | 200mph | 200mph | 200mph |
| 12' (11' - 10 1/16") | 4' (3' - 8 3/16") | 8' (8' - 1 13/16") | 69 (31 kg) | 200mph | 200mph | 200mph |
| 12' (11' - 10 1/4") | 3' (2' - 9 7/8") | 9' (9' - 0 5/16") | 60 (27 kg) | 200mph | 200mph | 200mph |
| 12' (12' - 0 7/8") | 2' (1' - 11 1/16") | 10' (10' - 1 13/16") | 58 (26 kg) | 200mph | 200mph | 200mph |
| 14' (13' - 10 1/16") | 4' (3' - 8 3/16") | 10' (10' - 1 13/16") | 76 (34 kg) | 200mph | 200mph | 200mph |
| 14' (13' - 10 1/4") | 3' (2' - 9 7/8") | 11' (11' - 0 5/16") | 66 (30 kg) | 200mph | 200mph | 200mph |
| 14' (14' - 0 7/8") | 2' (1' - 11 1/16") | 12' (12' - 1 13/16") | 64 (29 kg) | 200mph | 200mph | 200mph |
| 16' (15' - 10 1/16") | 4' (3' - 8 3/16") | 12' (12' - 1 13/16") | 82 (37 kg) | 200mph | 200mph | 200mph |
| 16' (15' - 10 1/4") | 3' (2' - 9 7/8") | 13' (13' - 0 5/16") | 73 (33 kg) | 200mph | 200mph | 200mph |
| 16' (15' - 9 13/16") | 2' (1' - 11 1/16") | 14' (13' - 10 13/16") | 70 (32 kg) | 200mph | 200mph | 200mph |

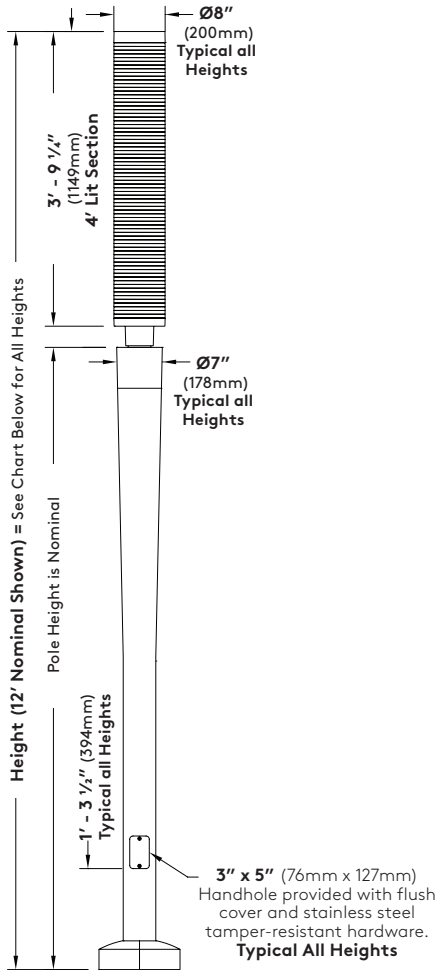
Mounting - MTRTL



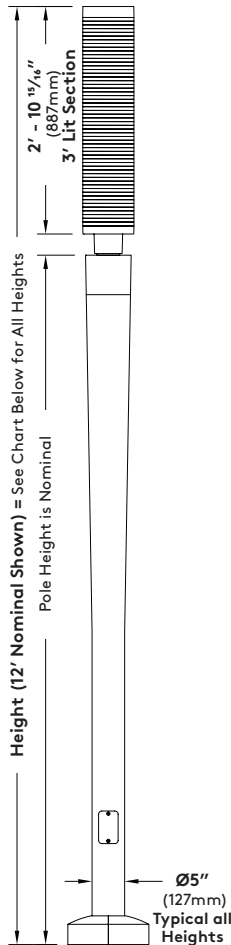
*Minimum clearance required
(for maintenance or future upgrades)

*consult factory for alternative recommendations
if access above fixture is not available

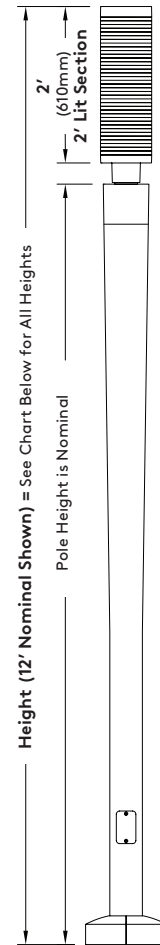
4' head = 60" (1524mm)
3' head = 48" (1219mm)
2' head = 36" (914mm)



Single 4' Lit Section (Fixture Head)
Effective Projected Area = 1.3 ft² (0.120m²)
Weight of Luminaire = 38 lb. (17kg)



Single 3' Lit Section (Fixture Head)
Effective Projected Area = 1 ft² (0.092m²)
Weight of Luminaire = 26 lb. (12kg)

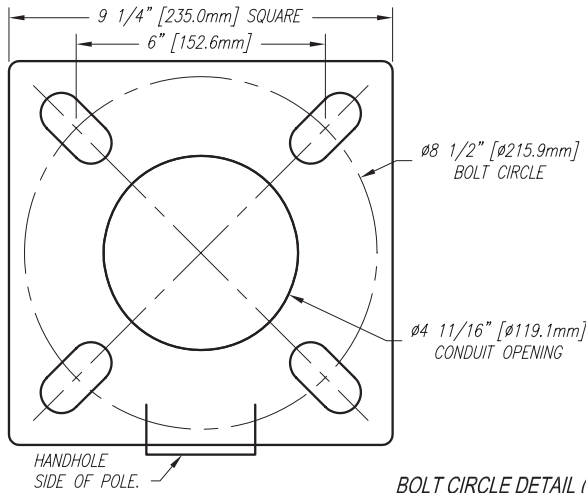


Single 2' Lit Section (Fixture Head)
Effective Projected Area = 0.7 ft² (0.065m²)
Weight of Luminaire = 20 lb. (9kg)

| Overall Height Nominal (Actual) | Lit Section Nominal (Actual) | Pole Height Nominal (Actual) | Total Column Weight (lb) | ASSHTO 1994 Max EPA Wind Rating | ASSHTO 2001 Max EPA Wind Rating | ASSHTO 2009 Max EPA Wind Rating |
|------------------------------------|---------------------------------|---------------------------------|-----------------------------|------------------------------------|------------------------------------|------------------------------------|
| 12' (11' - 9 1/16") | 4' (3' - 9 1/4") | 8' (7' - 9 1/16") | 63 (29 kg) | 110mph | 150mph | 150mph |
| 12' (11' - 9 3/4") | 3' (2' - 10 1/16") | 9' (8' - 7 7/16") | 51 (23 kg) | 110mph | 150mph | 150mph |
| 12' (12' - 0 5/16") | 2' (2') | 10' (9' - 9 1/16") | 50 (23 kg) | 110mph | 150mph | 150mph |
| 14' (13' - 9 9/16") | 4' (3' - 9 1/4") | 10' (9' - 9 1/16") | 68 (31 kg) | 110mph | 150mph | 150mph |
| 14' (13' - 9 3/4") | 3' (2' - 10 1/16") | 11' (10' - 7 7/16") | 56 (25 kg) | 110mph | 150mph | 150mph |
| 14' (14' - 0 5/16") | 2' (2') | 12' (11' - 9 1/16") | 55 (25 kg) | 110mph | 150mph | 150mph |
| 16' (15' - 9 9/16") | 4' (3' - 9 1/4") | 12' (11' - 9 1/16") | 78 (35 kg) | 110mph | 150mph | 150mph |
| 16' (15' - 9 3/4") | 3' (2' - 10 1/16") | 13' (12' - 7 7/16") | 66 (30 kg) | 110mph | 150mph | 150mph |
| 16' (15' - 9 3/8") | 2' (2') | 14' (13' - 6 1/8") | 65 (29 kg) | 110mph | 150mph | 150mph |

Mounting Details

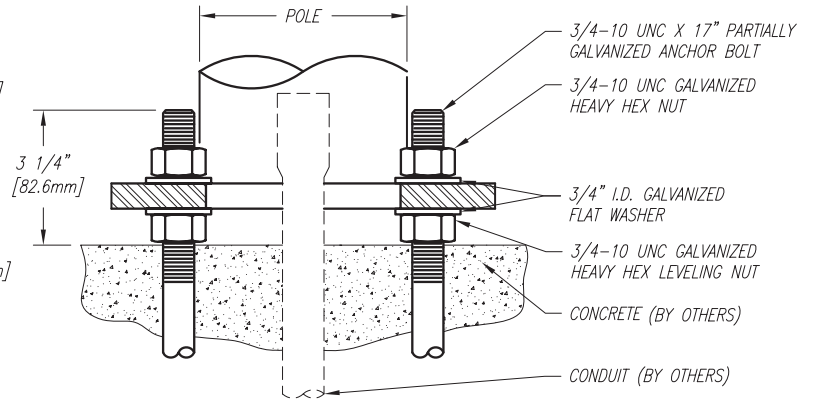
MTRTL Bolt Circle



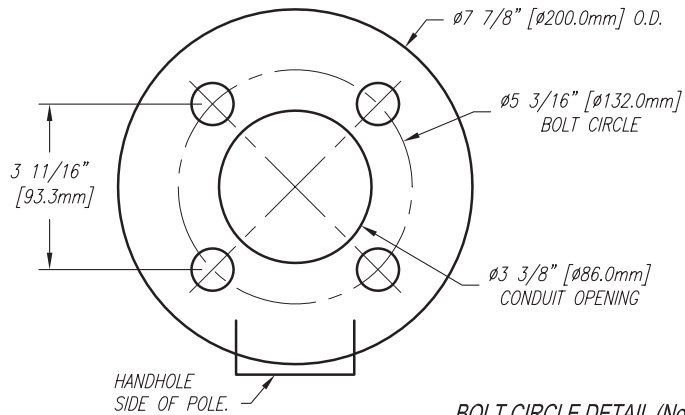
BOLT CIRCLE DETAIL (Not to Scale)

USE CAUTION WHEN SETTING ANCHOR BOLTS. BOLTS MUST BE VERTICALLY STRAIGHT AND CENTERED ON DIMENSIONS SHOWN.

MTRTL Anchor Bolt Detail



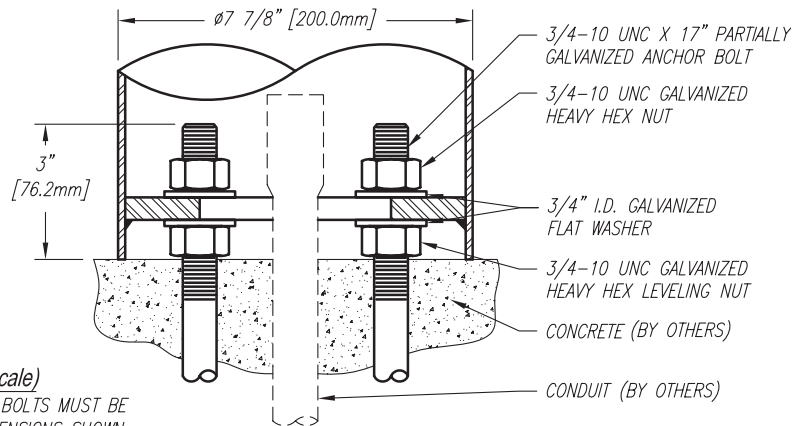
MTRCL Bolt Circle



BOLT CIRCLE DETAIL (Not to Scale)

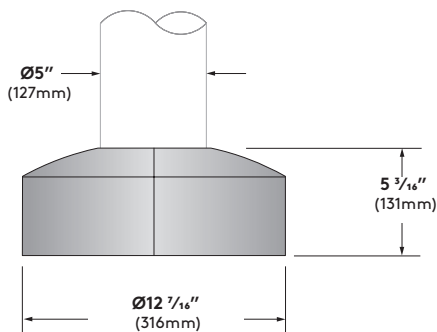
USE CAUTION WHEN SETTING ANCHOR BOLTS. BOLTS MUST BE VERTICALLY STRAIGHT AND CENTERED ON DIMENSIONS SHOWN.

MTRCL Anchor Bolt Detail



BC3 Standard Base Cover (MTRTL only)

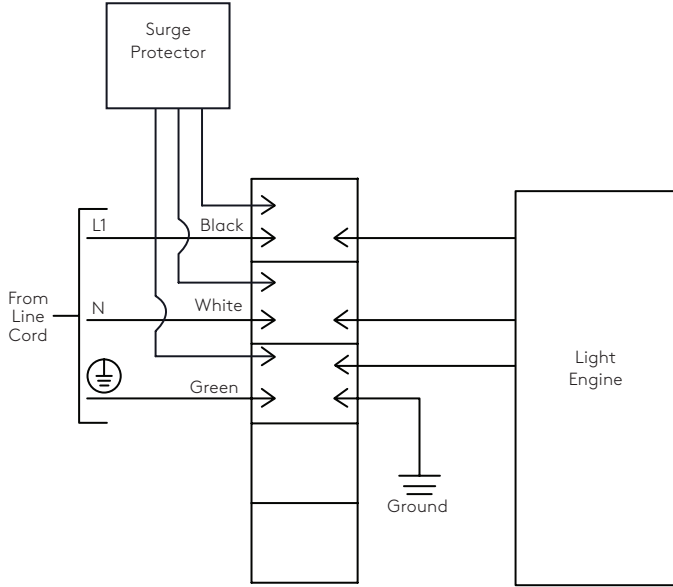
Die cast aluminum, two-piece field installable base cover.



Wiring

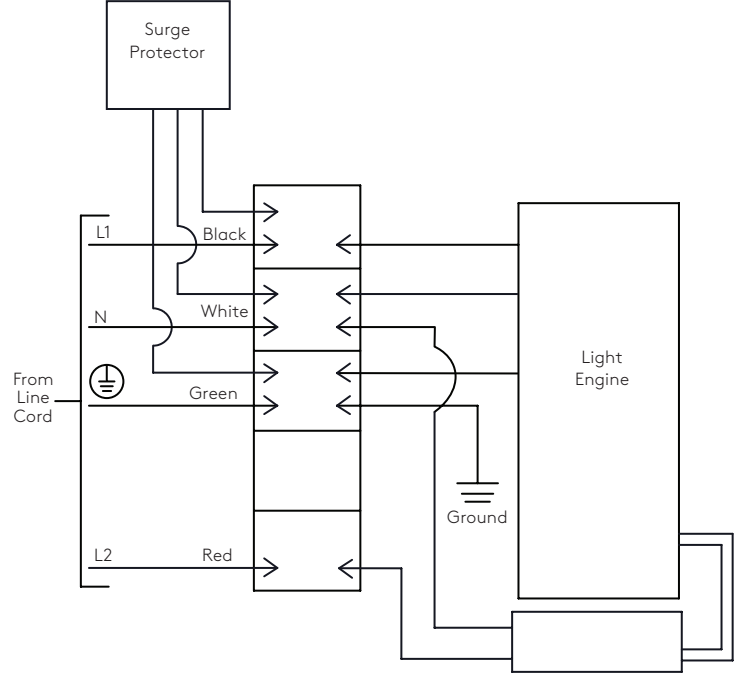
Standard Single Wiring

For 120-277V



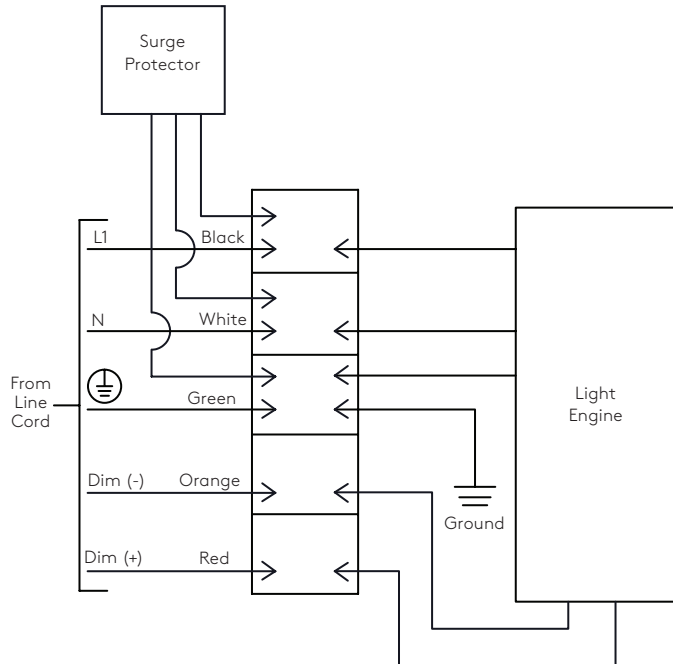
Hi-Lo Switching Option (HL) Wiring

For 120-277V. When red is energized, light output will be at "Lo" level. Standard HL level: HL50 = low output, 50%. For other "Lo" levels, consult factory.



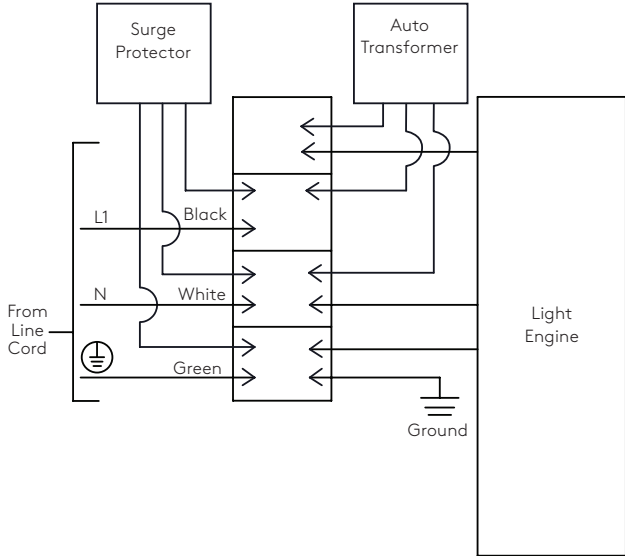
0-10V Dimming Option (DM) Wiring

For 120-277V

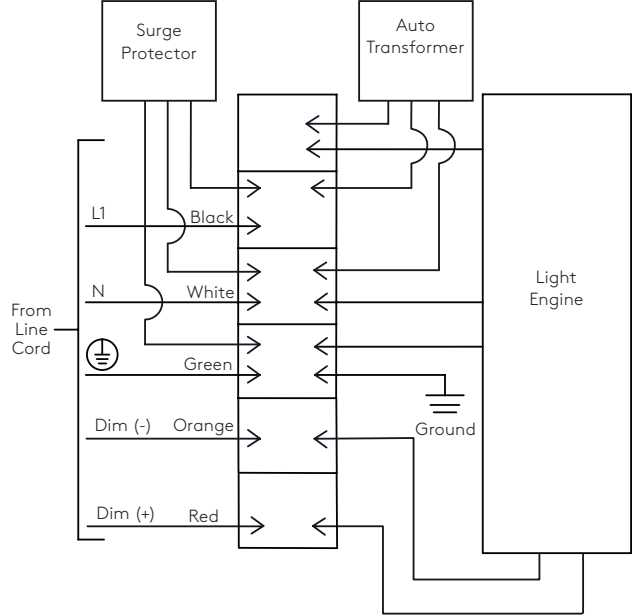


Wiring

347/ 480V (Standard)



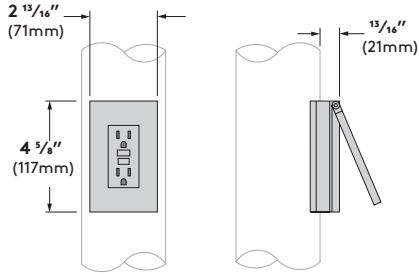
347/480V with 0-10V Dimming Option



Optional Accessories

GFCI Receptacle (REC)

GFCI duplex receptacle with cast base bolted to pole and gasketed, provided with weather-proof, self-closing cover; located 36" (915mm) from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel.



Energy Consumption*

| LED Information | 4000K CCT | | | | | | | | | | | |
|-----------------------|-----------|------|------|------|------|------|------|------|------|------|------|------|
| | 1L35 | | | 2L35 | | | 3L35 | | | 4L35 | | |
| Lit Section Height | 2' | 3' | 4' | 2' | 3' | 4' | 2' | 3' | 4' | 2' | 3' | 4' |
| Delivered Lumens (lm) | 1187 | 1781 | 2374 | 2275 | 3413 | 4551 | 3364 | 5064 | 6728 | 4452 | 6678 | 8904 |
| Wattage (W) | 17 | 25 | 34 | 32 | 48 | 64 | 46 | 69 | 93 | 60 | 90 | 120 |
| Efficacy (lm/W) | 71 | 71 | 71 | 71 | 71 | 71 | 73 | 73 | 73 | 74 | 74 | 74 |

| Conversion Chart (Values based on 4000K) | |
|---|----------|
| CCT | Multiply |
| 2700K | 0.94 |
| 3000K | 0.95 |
| 3500K | 0.98 |
| 4000K | 1.00 |

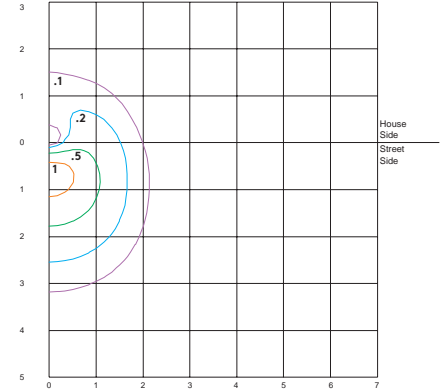
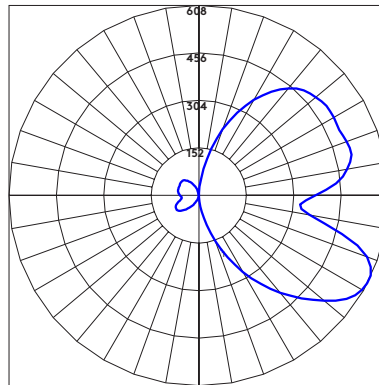
*data based on 350mA LED driver current.

Photometry

MTRTL / 1L35 / 4000K CCT

Catalog #: MTRTL-12-4-1L35-40-120
 Delivered Lumens: 2374
 Input Watts: 34W
 Efficacy: 71 lm/W
 CRI: 84
 Maximum candela of 608 at 62.5° from vertical.
 IES classification: Type IV
 Mounting Height = 12' (3.66 m)
 B0-U4-G2
 Power Factor: 1.0
 Total Harmonic Distortion: 8.69%

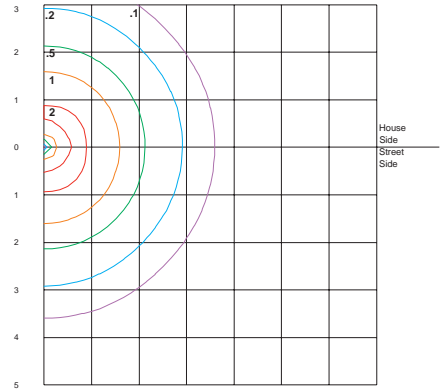
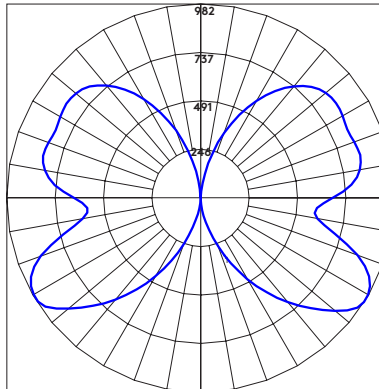
[Link to photometry \(PDF\)](#)
[Link to photometry \(IES\)](#)



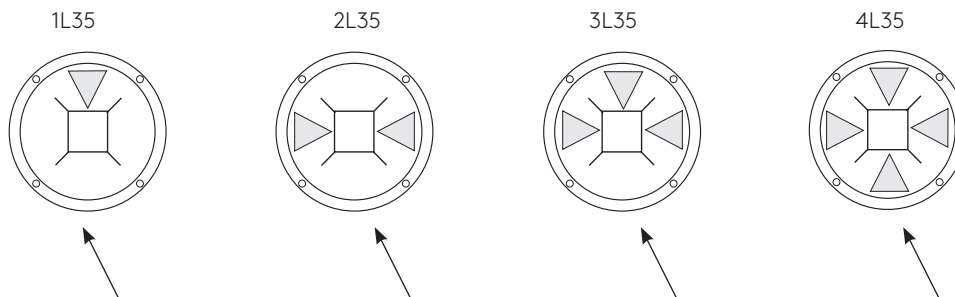
MTRTL / 4L35 / 4000K CCT

Catalog #: MTRTL-12-4-4L35-40-120
 Delivered Lumens: 8904
 Input Watts: 120W
 Efficacy: 74 lm/W
 CRI: 84
 Maximum candela of 982 at 57° from vertical.
 IES classification: Type V
 Mounting Height = 12' (3.66 m)
 B2-U5-G3
 Power Factor: 1.0
 Total Harmonic Distortion: 8.69%

[Link to photometry \(PDF\)](#)
[Link to photometry \(IES\)](#)



LED Light Engine Distribution Guide



Handhole Side - For MTRTL, fixture head orientation in relation to Handhole is field adjustable. MTRCL is NOT field adjustable.

| | | |
|------------------|-------------|-------------|
| PROJECT | TYPE | DATE |
| CATALOG # | | |

CONSTRUCTION

New construction housing, electrical enclosure, and trim assembly constructed in cold rolled steel
 3/4" removable trim assembly features an inner sleeve to conceal hardware
 Housings and trims available in various powder coated finishes
 Housing design includes discrete ventilation slots for cooler fixture operation
 A ceiling thickness of 1/2" to 1 3/4" can be accommodated
 Modified configurations available upon request

LAMP ASSEMBLY

Solid aluminum adjustable double gimbals
 Gimbal adjustment does not require the use of tools
 High performance reflectors available in various beam angles
 Extruded aluminum heat sinks available in Black (Std), White, Silver, or Custom
 Can accept up to 2 optical accessories

LED INFORMATION

LED modules are available in lumen packages from 1000 up to 3000
 Average rated life of 50,000 hours
 Available in color temperatures of 2700K, 3000K, 3500K and 4000K
 XICATO LED modules carry a 5 YEAR warranty and are field-replaceable
 Standard (85+CRI)
 Contact factory for Vibrancy (85+CRI), and Artist (95+CRI) options

ELECTRICAL

Integral electronic driver, field replaceable
 Dimmable driver options available
 Fixtures are thermally protected and rated for through-branch wiring

MOUNTING

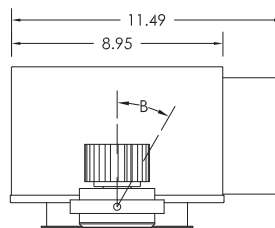
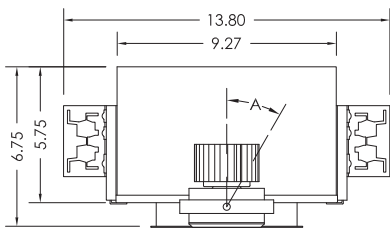
Suitable for drywall, wood, acoustic tile, concrete, stone, or other ceiling types
 Butterfly brackets are compatible with 1/2" x 1 1/2" Channel, 1/2", 5/8", 3/4" Bar Hangers, 1/2" EMT, and Furring Strips (supplied by others)
 Residential Bar Hanger option available

LABELS

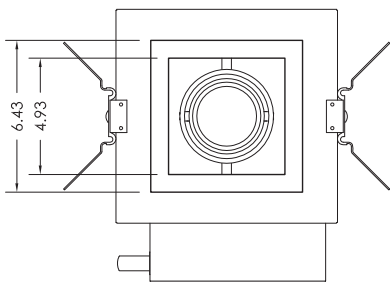
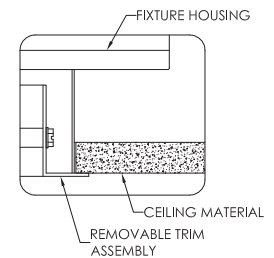
ETL listed, suitable for Damp Locations

WARRANTY

5 Year Color Consistency and Lumen Maintenance



TRIM DETAIL



GIMBAL ADJUSTABILITY

| | | |
|---------------------|-----|-----|
| | A | B |
| 2000lm (MAX) | 40° | 35° |
| 3000lm | 25° | 25° |

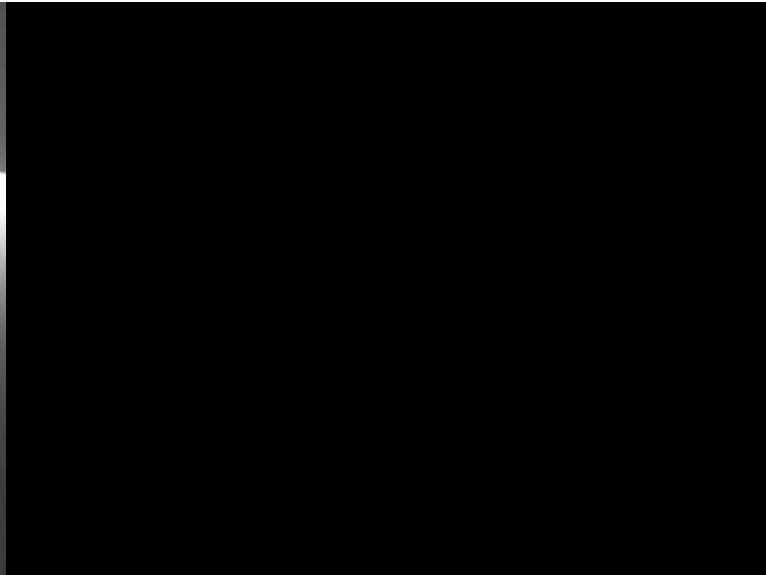


ORDERING INFORMATION

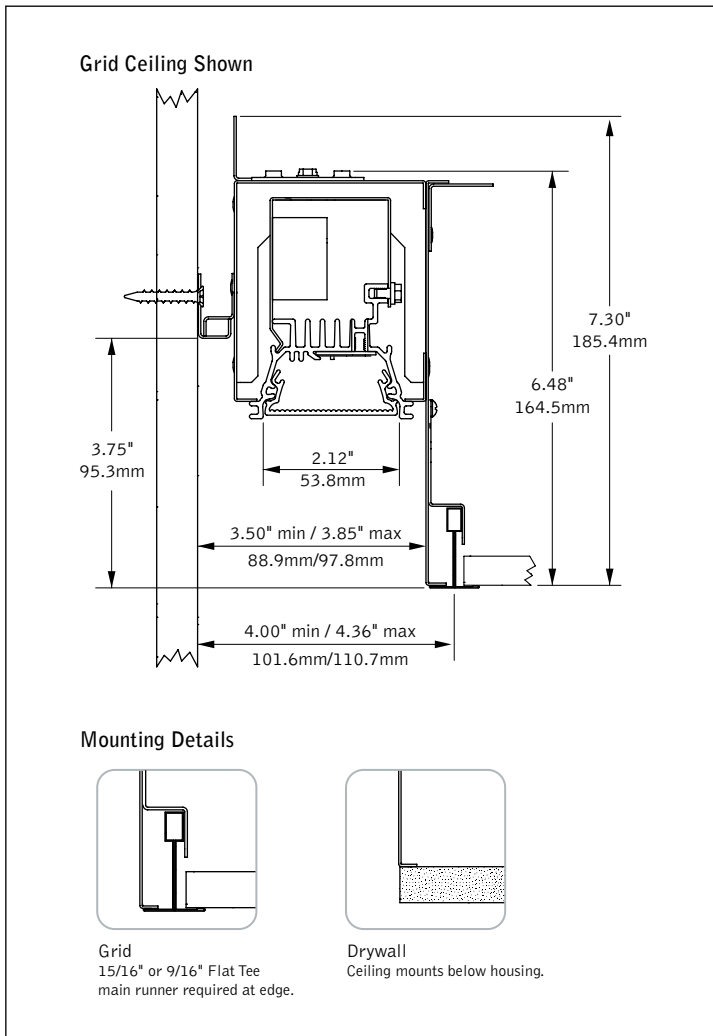
| CAT. NO | WATTAGE | COLOR TEMP | BEAM ANGLE | VOLTAGE | DRIVER TYPE | TRIM FINISH | GIMBAL FINISH | HOUSING INTERIOR | ADDITIONAL |
|------------------|-------------------------|--------------------|------------------|------------|---|-------------------------|---------------------------|-------------------------|--|
| 3G-RC1LED | 8W - 1000 LUMENS | 27K - 2700K | 20D - 20° | 120 - 120V | E - ELECTRONIC | WT - WHITE TRIM | NG - NATURAL (STD) | BK - BLACK (STD) | BH - RESIDENTIAL BAR HANGERS OA - OPTICAL ACCESSORY |
| | 12W - 1300 LUMENS | 30K - 3000K | 40D - 40° | 277 - 277V | DIM - DIMMING 0-10V | ST - SILVER TRIM | BG - BLACK | WH - WHITE | |
| | 19W - 2000 LUMENS | 35K - 3500K | 60D - 60° | | DHL - DIMMING LUTRON HI-LUME 3-WIRE® | BT - BLACK TRIM | WG - WHITE | SV - SILVER | |
| | 29W - 3000 LUMENS | 40K - 4000K | | | DHL2 - DIMMING LUTRON HI-LUME ECO SYSTEM® DALI - DIMMING | CT - CUSTOM | | CF - CUSTOM | |

| | | | | | | | | | |
|------------------|--|--|--|--|--|--|--|--|--|
| 3G-RC1LED | | | | | | | | | |
|------------------|--|--|--|--|--|--|--|--|--|

ORDERING EXAMPLE 3G-RC1LED-19W-30K-40D-120-E-WT-NG-BK



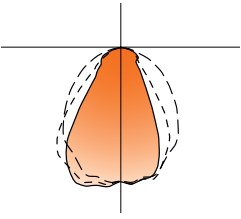
DIMENSIONAL DATA



FEATURES

- Low wattage LED slot provides glowing transition between wall and ceiling.
- Frosted lens with linear micro prism pattern obscures visibility to LED's and provides continuous, shadow-free illumination.
- Housing creates 3" architectural slot.
- Premium LEDs operate efficiently on a solid-core module platform to achieve excellent thermal management and reliable operation.
- L70 at 50,000 hours

PERFORMANCE



PRODUCT OVERVIEW

Lumen Output: 1207lm

Wattage: 23W per 4'

LPW: 53

SDCM: 3

Lumen Maintenance: L70 @ 50,000hrs

4' Luminaire

Delivered Lumens: 1207lm

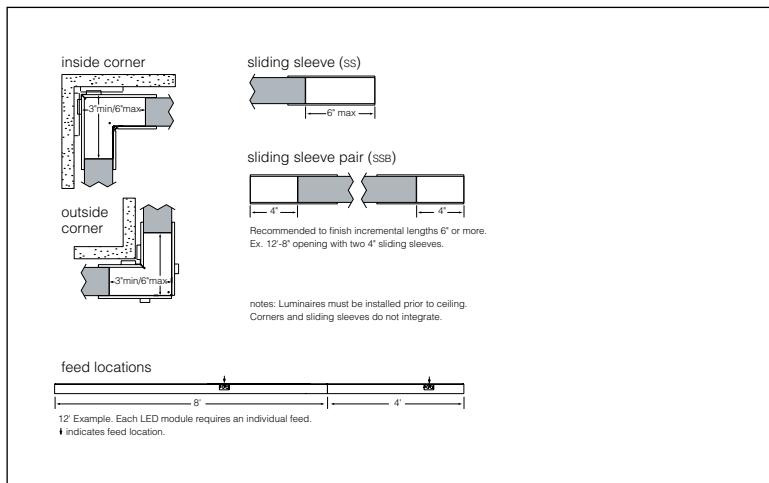
Total System Watts: 22.9W

Photometric performance is measured in accordance with IESNA LM-79. Visit focalpointlights.com for complete photometric data.

fixture:

project:

DETAILS



SPECIFICATIONS

LED System

Proprietary linear LED module incorporates premium LEDs on a solid-core platform to achieve excellent thermal management. Module is available in 3000K, 3500K or 4000K with CRI > 80. 0-10V dimming driver standard. LED module and driver are replaceable from below.

Construction

One piece .07" thick LED module housing of extruded aluminum. 20 Ga. steel outer housing creates floating ceiling effect and adjusts for alignment with walls. 20 Ga. steel internal bulkheads. 20 Ga. steel sliding sleeves and corners. 4' unit weight: 26 lbs.

Optic

Continuous illumination enabled by linear LED modules shielded by ribbed extruded frosted acrylic lens .06" thick with opal satin finish. Extended outer housing provides cutoff to illuminated lens.

Electrical

Standard 120-277V driver includes 0-10V analog dimming. Power factor > .9.

Labels

UL and cUL listed. Suitable for Dry or Damp Locations, indoor use only. Suitable for wood ceiling applications.

Finish

Polyester powder coat applied over a 5-stage pre-treatment.

Lumen Maintenance

L70 at 50,000 hours.

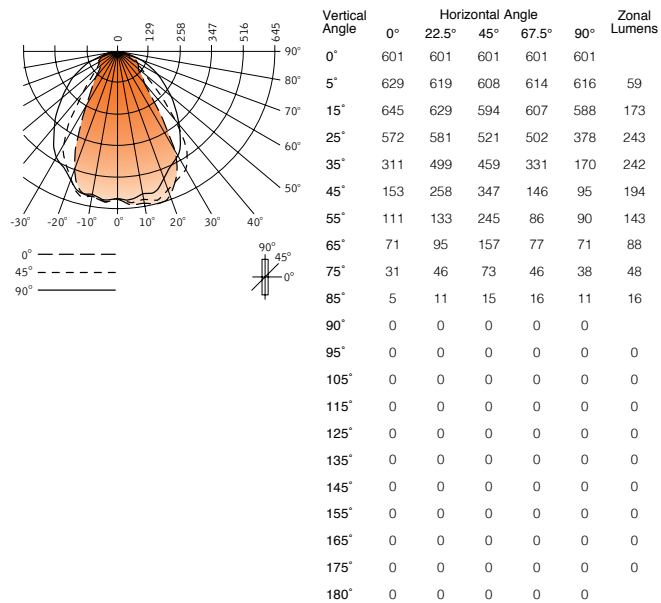
Warranty

LED system rated for operation in ambient environments up to 25°C. 5 year limited warranty.

ORDERING

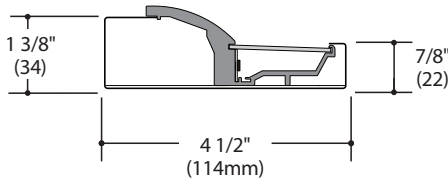
| | | | |
|--------------------------|--|-------------|-------------|
| Luminaire Series | Trace | FTRL | FTRL |
| Shielding | Frosted Acrylic Diffuser | AC | AC |
| LED System | Standard Output | LL1 | LL1 |
| Color Temperature | 3000K | 30K | |
| | 3500K | 35K | |
| Circuits | Single Circuit | 1C | 1C |
| Voltage | 120 Volt | 120 | |
| | 277 Volt | 277 | |
| Driver | 0-10V Dimming | LD1 | |
| Mounting | Grid | G | |
| | Drywall | XF | |
| Factory Options | Chicago Plenum | CP | |
| | Emergency Circuit* | EC | |
| | Flanged Ends | FL | |
| | HLR/GLR Fuse | FU | |
| | Sliding Sleeve | SS | |
| | Sliding Sleeve Pair (3' minimum length) | SSB | |
| Finish | Matte White Housing | WH | WH |
| Luminaire Length | Specify luminaire/row length in 1' increments (2' minimum) | XX' | |
| Corner Options | 90-degree Inside Corner | FTRL-IC90 | |
| | 90-degree Outside Corner | FTRL-OC90 | |

CANDELPWER DISTRIBUTION



LUMEN SUMMARY

| Zone | Lumens | % Fixture |
|-------------------------------|-------------|------------|
| 0-30° | 475 | 39.4 |
| 0-40° | 717 | 59.4 |
| 0-60° | 1054 | 87.3 |
| 0-90° | 1207 | 100 |
| Total Luminaire 0-180° | 1207 | 100 |



Cove-15

CC-AI-L15

LED Concealed Cove
Asymmetric Indirect

Product Description

Small-scale LED concealed cove luminaire using Cree MX-6 LED packages. Available in three output levels and four color temperatures, with an optional high performance specular reflector. Extruded aluminum LED module snaps into steel housing for in-field replacement. CSA Listed.

Ordering Guide

| Product, Lamping, & Length | | | | | | | Options | | | | |
|----------------------------|---------------------------|--------|---|---|--|-------------------------------|---|------------|------------|--------|-------------------------|
| CC - | AI - | L15 | | | | CWM - | | 1CWQ - | | | |
| Mounting | Distribution | Series | Length in feet (mm) | Output | Color Temperature | Finish | Dimming | Circuiting | Voltage | Optics | Other Options |
| CC Concealed Cove | AI Asymmetric Indirect | L15 | 02 (610) 03 (914) 04 (1219) 06 (1829) 08 (2438) see Note | LO* MO HO * Low Output not available in 3' lengths | 35K is standard 27K, 30K, 40K also available see Color Temperature | CWM (matte white) is standard | D10 LEC LHI LTW* NDM see Dimming | 1CWQ | 120 277 | HPR | WKC/WP AMA5 AMA10 |

CC-AI-L1504-MO-30K-CWM-LHI-120-HPR-WKC/WP is a typical catalog number for a 4-foot long LED concealed cove fixture, medium output, 3000K correlated color temperature, matte white finish, with a Lutron Hi-Lume dimming power supply, pre-wired with single-circuit branch wiring, 120 volts, with optional high performance reflector and pre-wired corner wiring kit.

Output

- LO** Low Output - output from LED boards approximately 250 lumens/foot out of the fixture at an input power of approximately 4 Watts/foot. These values may vary based on CCT. Consult test reports for details.
- MO** Medium Output - output from LED boards approximately 500 lumens/foot out of the fixture at an input power of approximately 8 Watts/foot. These values may vary based on CCT. Consult test reports for details.
- HO** High Output - output from LED boards approximately 775 lumens/foot out of the fixture at an input power of approximately 16 Watts/foot. These values may vary based on CCT. Consult test reports for details.

Color Temperature

3500K is standard and available with normal lead times. Other CCTs may require longer lead times; please contact factory for details. Within an individual fixture of 3500K LEDs, color tolerance is limited to $\pm 64K$ (compared to ANSI allowance of $\pm 245K$) and to ± 0.0015 Duv (compared to ANSI ± 0.006). Color variation over life is expected to be < 0.001 ($\Delta u'v'$), compared to Energy Star specification of 0.007. See color statement at litecontrol.com for details and for other CCT tolerances. Minimum CRI 80.

Dimming

- D10** Low-voltage dimming; fixture will be wired for low-voltage 0-10V dimming control. Dimming range is 100% to 5%. See list of tested compatible dimmers on page 4.
- LEC** Lutron Ecosystem dimming; fixture will be wired with a Lutron A-series driver for compatibility with Ecosystem controls. Dimming range is 100% to 5%. Driver provides constant current output and uses constant current reduction dimming. See lutron.com for a list of compatible dimming devices.
- LHI** Lutron Hi-Lume 3-wire dimming; fixture will be wired with a Lutron A-series driver for compatibility with Hi-Lume controls. Dimming range is 100% to 5%. Driver provides constant current output and uses constant current reduction dimming. See lutron.com for a list of compatible dimming devices.
- LTW** Lutron 2-wire forward phase dimming; fixture will be wired with a Lutron A-series driver for compatibility with 2-wire forward phase controls. Dimming range is 100% to 5%. Driver provides constant current output and uses constant current reduction dimming. See lutron.com for a list of compatible dimming devices. **Available in 120V only.**
- NDM** Non-dimming; fixture will be wired for fixed light output.

Contact Litecontrol for additional photometric and control information.

Questions to Ask

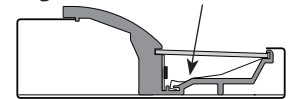
1. Row information, including desired fixture lengths?
2. Output?
3. Color Temperature?
4. Dimming?
5. 120 or 277 volt?
6. Optics?
7. Other options?

Optics

Leave blank for standard optical package, comprised of a high reflectance white painted reflector and a high-efficiency diffuse lens. See photometric reports for details.

HPR High Performance Reflector; fixture will be assembled with a high reflectance specular reflector and clear lens, to provide greater peak intensity at a lower angle. See photometric reports for details.

High Performance Reflector



Other Options

WKC/WP Wiring Kit for Corners, with pre-wired quick-connects.

AMA5 Adjustable Mounting Angle, 5°: fixture is provided with a component that tilts the back of the fixture up by 5°.

AMA10 Adjustable Mounting Angle, 10°: fixture is provided with a component that tilts the back of the fixture up by 10°.

Lumen Maintenance

Lumen maintenance based on LM-80 data and in-situ temperature measurement: L90 calculated at $> 50,000$ hours; L70 calculated at $> 160,000$ hours for Medium Output. Since LM-80 testing ended at 6048 hours, the TM-21 reported L90 and L70 values are $\geq 36,288$ hours. See litecontrol.com for detailed lumen maintenance statement. These fixtures have a five-year warranty, with a detailed warranty statement available at litecontrol.com.

Specifications

HOUSING. Steel housing, finished white. Ends provided with 7/8" diameter hole to accommodate wiring.

LED MODULE. Extruded aluminum, finished matte white for high reflectance, snaps into housing for field replacement. Module has 12 Cree LEDs per foot.


STANDARD OPTICS. The standard optic includes a high-reflectance white painted reflector combined with a lens comprised of highly efficient diffusion film optically bonded to pure acrylic sheet.

HPR OPTICS. The optional High Performance Reflector (HPR) optic includes a die-formed specular aluminum reflector and a strip of high reflectance white film with a clear acrylic lens.

CIRCUITING. Fixtures are wired such that one end will have factory-installed push-in quick-connects. The other end will be stripped back 1/2" for quick connection in field. For fixtures to accommodate special circuits such as night light and emergency in-field wiring may be required. See Pre-wiring Information online for details. Fixture is intended to be wired with 3/8" flexible whip along with flexible push-in connector supplied by contractor.

EMERGENCY. For emergency operation, this product may be connected to a battery inverter with a sinusoidal/sine wave output. Verify compatibility with the inverter manufacturer.

MOUNTING. Fixtures are installed in cove provided by others. See Planning for installation for detailed information.

CERTIFICATION. Fixture is listed by CSA International as certified  for United States and Canada. Fixtures are rated for damp locations. Consult factory for details.

WARRANTY. Five-year product warranty. See litecontrol.com for full warranty details.

Note: Litecontrol reserves the right to change specifications without notice for product development and improvement.

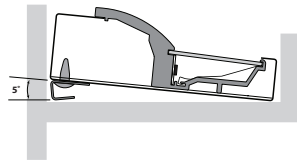
Planning for Installation

Fixture Lengths
 24-1/16" (610 mm), 36-1/32" (914), 48" (1219), 72"(1829), 96"(2438)
 Cove provided by others. Interior cove dimensions should allow for 4 1/2" x 1 1/2" fixture cross-section to fit within cove, taking into consideration as-built tolerances. For maximum efficiency, wall and ceiling above cove should have matte surfaces with high reflectances. See design guidelines below. Maximum fixture weight per foot is 2 1/2 pounds per foot.

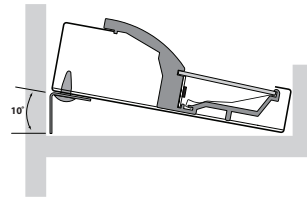
Corner Wiring Kit
 Provides the advantages of pre-wiring around corners. Make connections at each end of the flexible whip, push wires into fixtures, then snap onto headers. Specify **WKC/WP** (with push-in quick-connects).

Adjustable Mounting Angle (AMA) Option
 With this option, you can get an even lower beam throw, projecting light at lower angles resulting in a greater amount of light directed into the space. A simple, snap-on accessory is used to tilt the fixture an additional 5° or 10° above horizontal. Room geometry and cove location are considerations when using this option. A simple cross-section sketch of the space, drawn to scale, will determine the appropriate angle of tilt needed. Use of this option increases the possibility of a direct view of the bright lens and LEDs, so viewing angles within the application should be carefully evaluated.

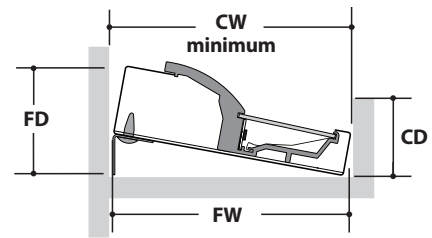
Adjustable Mounting Angle (AMA5)



Adjustable Mounting Angle (AMA10)



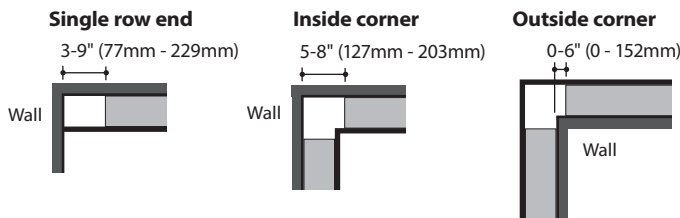
| Angle of Tilt | Ordering Option | Fixture Depth (FD) | Fixture Width (FW) | Cove Depth (CD) to Completely Conceal Fixture at 0° Tilt* | Recommended Cove Width (CW) |
|---------------|-----------------|--------------------|--------------------|---|-----------------------------|
| 0° | standard | 1-1/2" (38 mm) | 4-1/2" (114) | 1-3/4" (44) | 4-3/4" (121) |
| 5° | AMA5 | 1-7/8" (48) | | | |
| 10° | AMA10 | 2-1/4" (57) | | | |



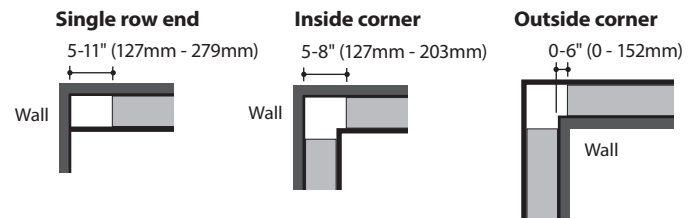
*Note: When using the AMA option, refer to photometric data to ensure that cove height does not interfere with peak output.

Positioning at Ends and Corners

Standard Reflector



High Performance Reflector (HPR)



3500K, Medium Output, Standard Optics

LED lighting facts
A Program of the U.S. DOE

Litecontrol Cove-15

| | |
|----------------------------|------|
| Light Output (Lumens) | 1950 |
| Watts | 32 |
| Lumens per Watt (Efficacy) | 61 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 81 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **3500 (Bright White)**

2700K 3000K 4500K 6500K

Warm White Bright White Daylight

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: 56A7-2PLEZB (2/24/2012)
Model Number: CC-AI-L1504-MO-35K-LHI
Type: Cove light

3500K, Medium Output, High Performance Reflector

LED lighting facts
A Program of the U.S. DOE

Litecontrol Cove-15

| | |
|----------------------------|------|
| Light Output (Lumens) | 2010 |
| Watts | 32 |
| Lumens per Watt (Efficacy) | 63 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 81 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **3500 (Bright White)**

2700K 3000K 4500K 6500K

Warm White Bright White Daylight

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: 56A7-GGFXT (2/24/2012)
Model Number: CC-AI-L1504-MO-35K-LHI-HPR
Type: Cove light

2700K, Medium Output, Standard Optics

LED lighting facts
A Program of the U.S. DOE

Litecontrol Cove-15

| | |
|----------------------------|------|
| Light Output (Lumens) | 1820 |
| Watts | 32 |
| Lumens per Watt (Efficacy) | 57 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 82 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2700 (Warm White)**

2700K 3000K 4500K 6500K

Warm White Bright White Daylight

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: 56A7-65DB8G (2/27/2012)
Model Number: CC-AI-L1504-MO-27K-LHI
Type: Cove light

2700K, Medium Output, High Performance Reflector

LED lighting facts
A Program of the U.S. DOE

Litecontrol Cove-15

| | |
|----------------------------|------|
| Light Output (Lumens) | 1800 |
| Watts | 32 |
| Lumens per Watt (Efficacy) | 56 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 82 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2700 (Warm White)**

2700K 3000K 4500K 6500K

Warm White Bright White Daylight

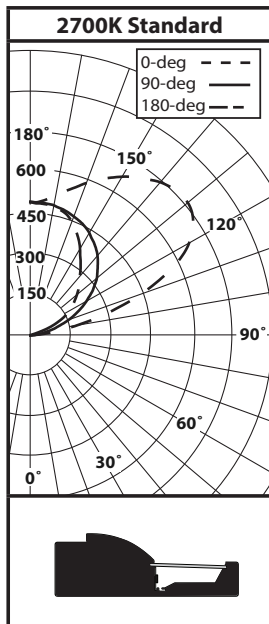
All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

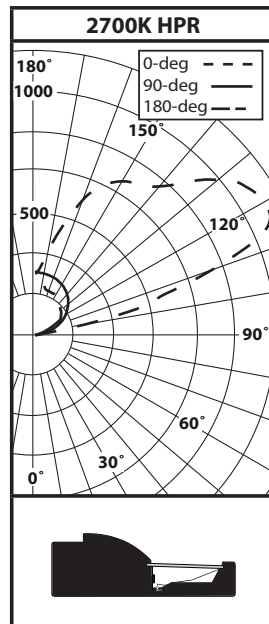
Registration Number: 56A7-LZVE7H (2/27/2012)
Model Number: CC-AI-L1504-MO-27K-LHI-HPR
Type: Cove light

Photometric Data (medium output)

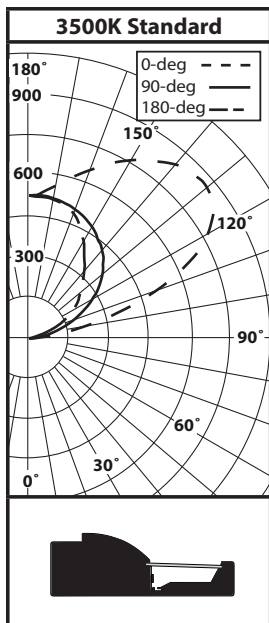
Dimming Compatibility



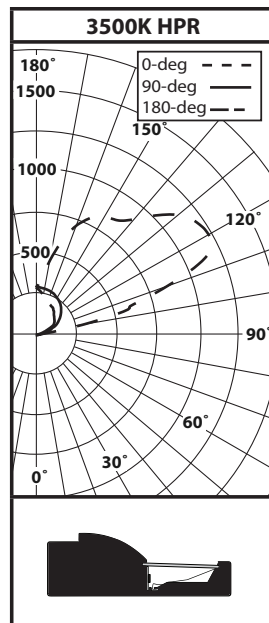
CC-AI-L1504-MO-27K
Peak Candelas 747
Peak Angle 130°



CC-AI-L1504-MO-27K-HPR
Peak Candelas 1120
Peak Angle 120°



CC-AI-L1504-MO-35K
Peak Candelas 822
Peak Angle 130°



CC-AI-L1504-MO-35K-HPR
Peak Candelas 1230
Peak Angle 120°

D10 0-10V analog dimming control. Product includes an internal power supply and a driver with 0-10V dimming interface.

The D10 option has been tested for use with the following devices:

- Leviton Illuma Tech IP710-DL(120/277 Volt AC 60Hz)
- Watt Stopper ADF-120277 (120/277 Volt AC 60Hz)
- Lutron DVF-103P
- Lutron DVTV-WH
- Lutron GRX-TVI Interface
- Leviton Power Extender PE300-D0W

Complete LM-79 test reports and IES photometric files are available at litecontrol.com. Lighting Facts Labels are provided on page 3.

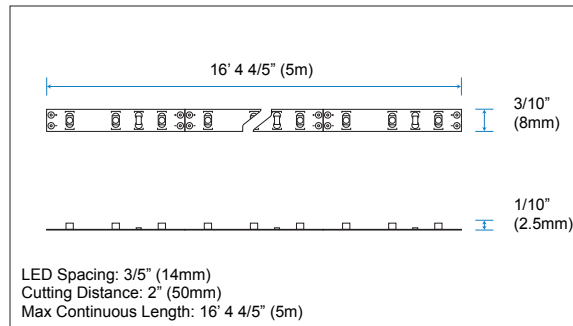
SPECIFICATION

Dimmable Low Profile LED Linear Flex System:

ECOFLEX is a cost effective LED linear flex lighting system. Built from high quality SMD LED's with a unique high copper content FPCB design that allows for stable and consistent thermal management. ECOFLEX is field cuttable every 2" with easy installations thanks to its 3m self adhesive backing and multiple accessories for field customizing. Fully dimmable through use of MODA LIGHT drivers. See MODA Metal for extrusion options.



Dimensions:

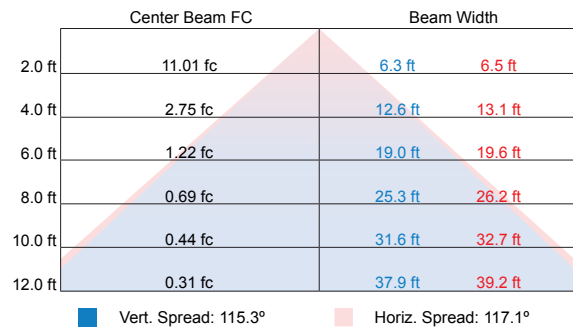


Output:

| | |
|------------------------|--|
| Delivered Lumens | 132.58 lm / ft |
| CCT | 3000k |
| Chromaticity Ordinates | x: 0.4339 y: 0.4024 u: 0.2493 v: 0.5203 |
| Color Bin Tolerance | + 3% / - 3% |
| Efficacy (lm/w) | 94.70 |
| CRI | 82 |
| Lumen Maintenance | 70,000 Hours L70 @ 25°C : 90,000 Hours L50 @ 25°C 50,000 Hours L70 @ 50°C : 70,000 Hours L50 @ 50°C |
| Testing Data | Light Data LM-79-08 & LM-80-08 |

Illuminance at a Distance: Data Shown for 120°

(For lux multiply fc by 10.7)

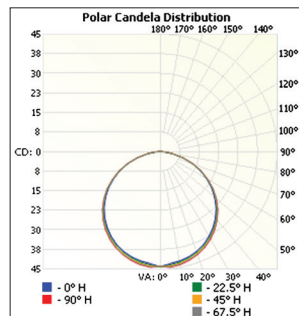


Electrical:

| | |
|-------------------|---|
| Input Voltage | 12v DC |
| Power Consumption | 1.40w / ft (0.12A) - Varies based on length of run & driver |
| Power Factor | ≤ 1 |
| Dimming | 100-277v 0-10v & Magnetic Low Voltage |
| Emergency | N/A |

Polar Candela Distribution:

Data Shown for 120°



Lumens per Zone:

| Zone | Lumens | % Total |
|--------|--------|---------|
| 0-10 | 4.18 | 3.15% |
| 10-20 | 12.04 | 9.08% |
| 20-30 | 18.47 | 13.93% |
| 30-40 | 22.64 | 17.08% |
| 40-50 | 23.93 | 18.05% |
| 50-60 | 22.00 | 16.59% |
| 60-70 | 16.90 | 12.75% |
| 70-80 | 9.67 | 7.29% |
| 80-90 | 2.76 | 2.08% |
| 90-100 | 0.00 | 0.00% |

Physical:

| | |
|-----------------------|---|
| Applications | Cabinet, Cove, Display, Niches, Perimeter Lighting |
| Dimensions | Length 16' 4 4/5" (5m) Width 3/10" (8mm) Height 1/10" (2.5mm) |
| Weight | 3.9 oz (110g) Per Reel |
| Construction | Constant Voltage Design Protects LEDs And Prolongs Life. White FPCB |
| Thermal Management | N/A |
| Optics | N/A |
| Fixture Connections | Push To Fit Connectors |
| Operating Temperature | -4°F ~ 122°F (-20°C ~ 50°C) |
| Storage Temperature | -40°F ~ 176°F (-40°C ~ 80°C) |
| Humidity | 0-95% Non Condensing |

| | | | | |
|---------------|----------|------|-------|-------|
| Project Name: | Company: | P/O: | Type: | Date: |
| Notes: | | | | |

SPECIFICATION

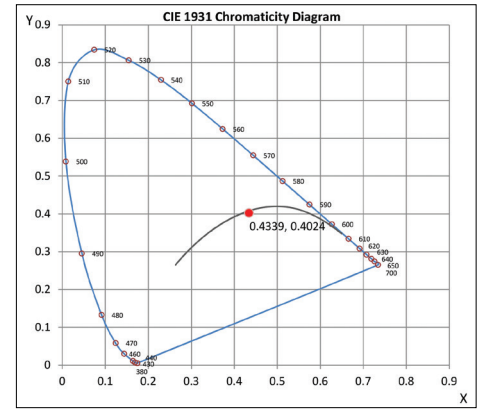
Zonal Lumen Summary:

| Zone | Lumens | % Lamp | % Fixt |
|--------|--------|--------|--------|
| 0-30 | 34.74 | N.A. | 26.20% |
| 0-40 | 57.27 | N.A. | 43.20% |
| 0-60 | 103.28 | N.A. | 77.90% |
| 60-80 | 26.52 | N.A. | 20.00% |
| 0-90 | 132.58 | N.A. | 100% |
| 90-180 | 0.00 | N.A. | 0.00% |
| 0-180 | 132.58 | N.A. | 100% |

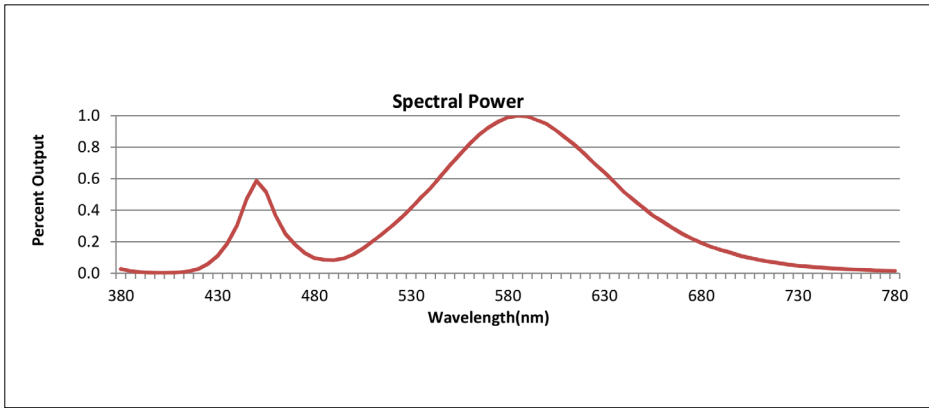
Luminance Data (cd/sq.m):

| Angle in Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|------------------|---------------|----------------|----------------|
| 45 | 49297 | 50317 | 50786 |
| 55 | 48168 | 49405 | 49564 |
| 65 | 45342 | 46452 | 46723 |
| 75 | 39428 | 40533 | 40710 |
| 85 | 30453 | 32290 | 32947 |

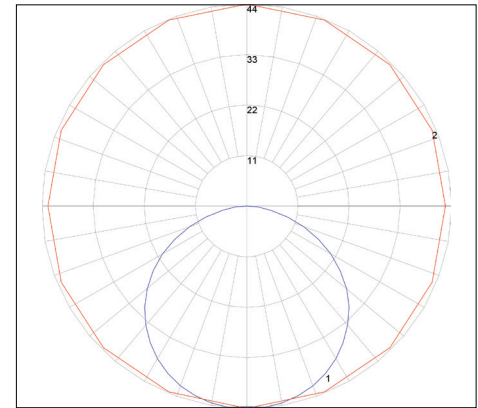
CIE 1931 Chromaticity Diagram:



Spectral Power:



Polar Graph: Data Shown for 120°



Accessories:

| | | | | | | |
|---|--|---|-------------------------------|--------------------------------|------------------------------|---------------------------------|
| | | | | | | |
| MRTA25 10' Leader Cable | MRTA26 EZ - Connector | MRTA27 4' EZ - Connector for ECOFLEX | MP16 12v DC 132w | MP18 12v DC 50w | MP82 12v DC 150w | MP82-277v 12v DC 150w |
| Connects ECOFLEX to Power Supply | Connects Two ECOFLEX Together | Connects Two ECOFLEX And Allows for Flexible Corner Bends | Wet Location LED Power Supply | 0-10v Dimming LED Power Supply | MLV Dimming LED Power Supply | MLV Dimming LED Power Supply |
| Connector Dim. L: 1/2" (13mm) W: 1/5" (6mm) H: 1/10" (2mm) | L: 1/2" (13mm) W: 2/5" (10mm) H: 1/10" (2mm) | Connector Dim. L: 1/2" (13mm) W: 1/5" (6mm) H: 1/10" (2mm) | Non-Dimmable | | | |

Standards and Certifications:

| | |
|---------------|--|
| Certification | Tested to UL & CSA by ETL For Use in USA & CANADA, Complies with California Title 24 Requirements, Lighting Facts. Exceeds ANSI C78.377A, CE & RoHS Compliant. |
| Class | Class III |
| Environment | Dry Location - IP20 |
| Warranty | 5 Year Limited Warranty |

Ordering:

| | |
|------|---------------|
| SKU: | ECOFLEX-3000K |
|------|---------------|



MODA Products are protected under Worldwide Patents. Minimum order quantity may apply. Due to continuous improvements and innovations, specifications may change without notice. Please refer to our website for current technical data. These figures are provided as a guideline only and may vary with differing power supplies and installations. All rights reserved. E. & O.E.

© Copyright 2014 • 955 White Drive, Las Vegas, NV 89119 • T: 702 407 7775 • F: 702 407 7773 • www.modalight.com

Client: _____
 Project name: _____
 Order #: _____
 Type: _____ Qty: _____

FEATURES AND BENEFITS

Physical :

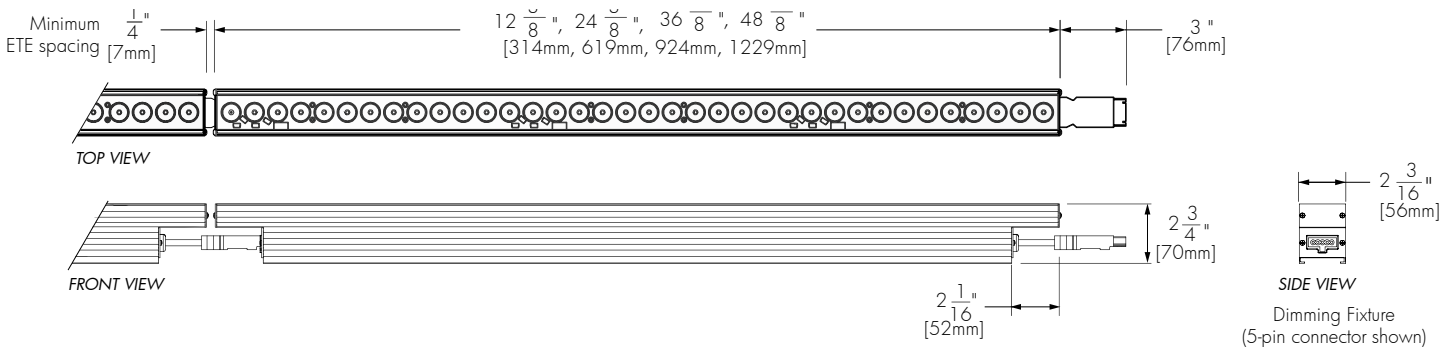
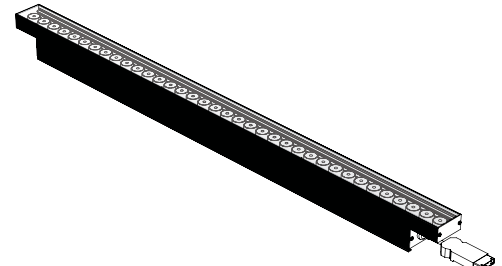
- Low copper content extruded aluminum housing
- Available in 1', 2', 3' or 4' sections
- Electro-statically applied polyester powder coat finish
- Aluminum end caps
- Stainless steel hardware
- Clear acrylic lens
- 10° x 10°, 10° x 60°, 30° x 60° or 60° x 60° optics
- Interior applications only

Performance :

- Dynamic Warm variable color temperature: 12 LEDs/ft (4x 2200K, 4x 2700K, 4x 3000K)
- Dynamic White variable color temperature: 12 LEDs/ft (4x 2700K, 4x 4000K, 4x 6500K)
- Lumen maintenance L70 @ 25°C - 120,000 hrs
- Resolution per foot or per fixture (see page 5)
- Operating temperatures: -25° C to 50° C [-13F to 122F]

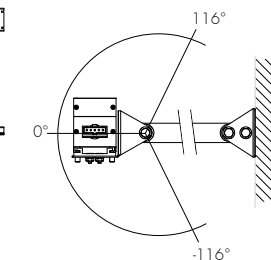
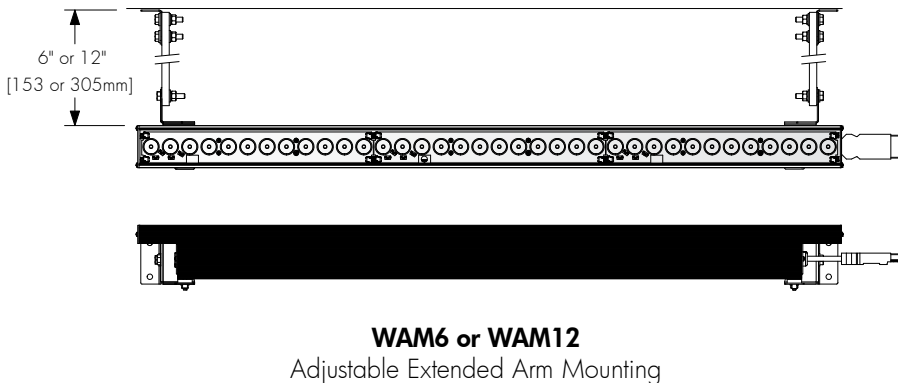
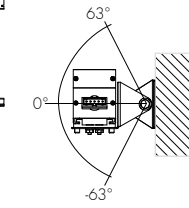
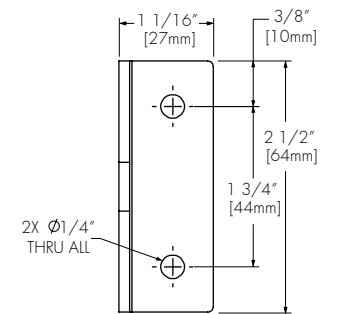
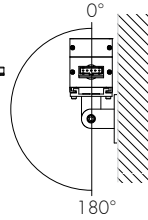
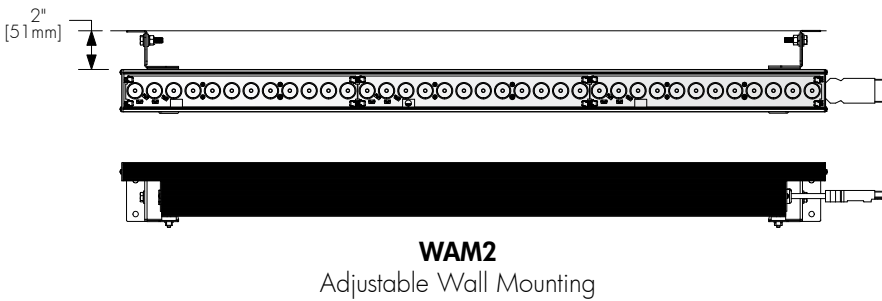
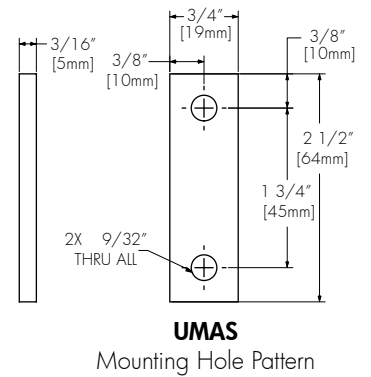
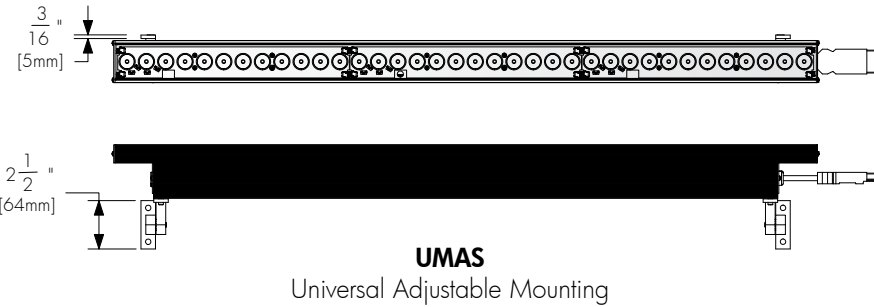
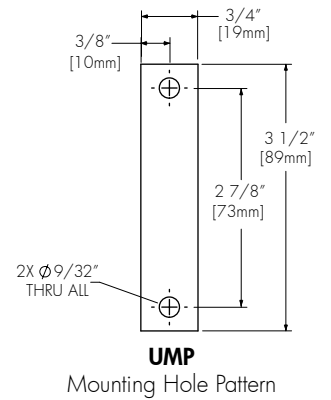
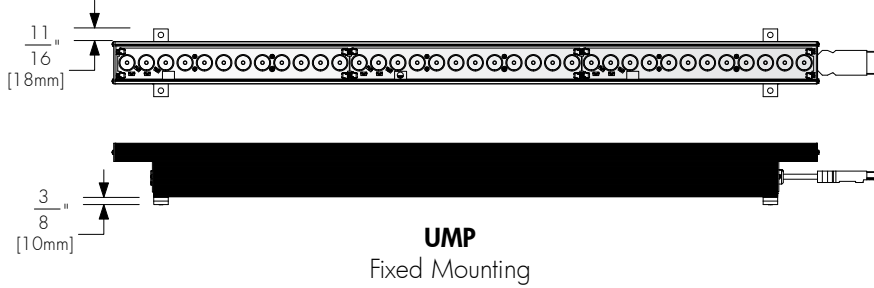
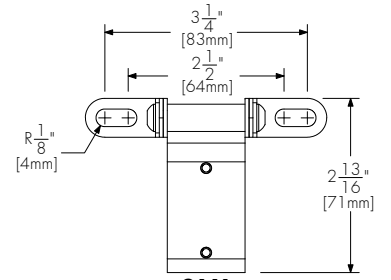
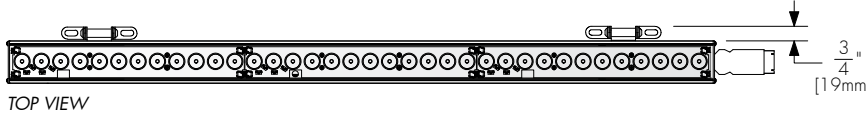
Electrical :

- Line voltage luminaire for 100 to 277 volts
- Power and data in 1 cable (#18-5)
- Up to 112 feet with 1 power/data feed
- 17.25W/ft
- DMX 512 ready

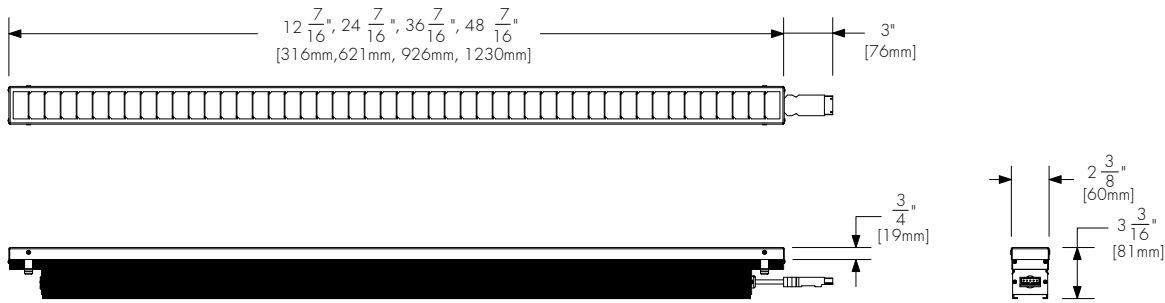


5 year warranty

MOUNTING OPTIONS



LOUVER ACCESSORY INSTALLATION DETAIL



LOGiRD

Radial Louver for Lumenfacade Interior
(see page 4 for ordering code)

ACCESSORIES

Order separately

Control Systems:

- LTO2** Lumentouch is a wall mount DMX 512 controller keypad.
- LCU** Lumencue is a USB / mini SD DMX 512 controller.
- LID** LumenID is a diagnostic and addressing DMX 512 controller.
It must be specified on all DMX applications.
Refer to LID specification sheet for details.
- LTN** Lumentone is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback.

Control Boxes:

- CBX** DMX/RDM control box.
Up to six power and data outputs to fixtures or fixture runs.
Ethernet enabled option.
Refer to CBX specification sheet for details.

Leader Cable :

- LOGiLCD**___ Leader Cable for Lumenfacade interior.
Please add desired cable length : 10, 25 or 50 feet [3m, 7.6m or 15.2m] standard lengths
Sealing endcap is mandatory for any unused connector.
(1) included with every leader cable

Jumper Cable :

- LOGiJCD**___ Jumper Cable for Lumenfacade interior.
Please add desired cable length : 1, 2, 4, 8, 10, 15 or 20 feet
[0.3m, 0.6m, 1.2m, 2.4m, 3m, 4.5m or 6m] standard lengths

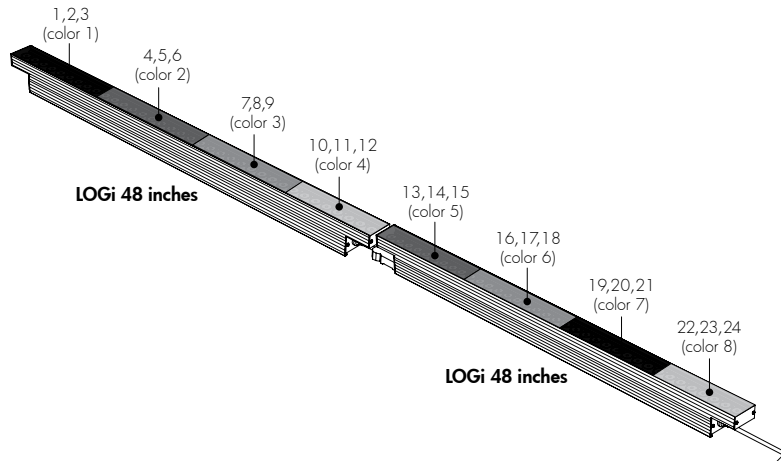
Radial Louver :

- LOGiRD**___-___ Radial louver for Lumenfacade.
 1. Please specify desired nominal length: 1', 2', 3' or 4'.
 2. Please specify finish as BK - Black SandText
(Custom color available on request, please specify as CC together with RAL color : _____)

RESOLUTION DETAILS

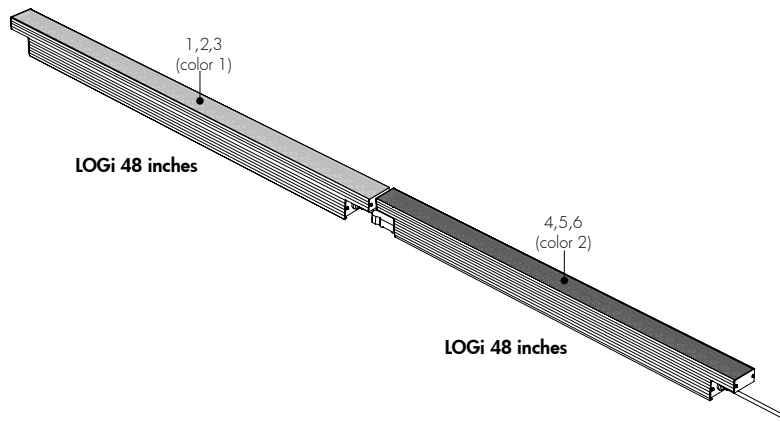
1FT - Resolution per foot: each foot is addressed independently (recommended for most installations).

DMX ADDRESSES:



1FX - Resolution per fixture: each fixture is addressed independently

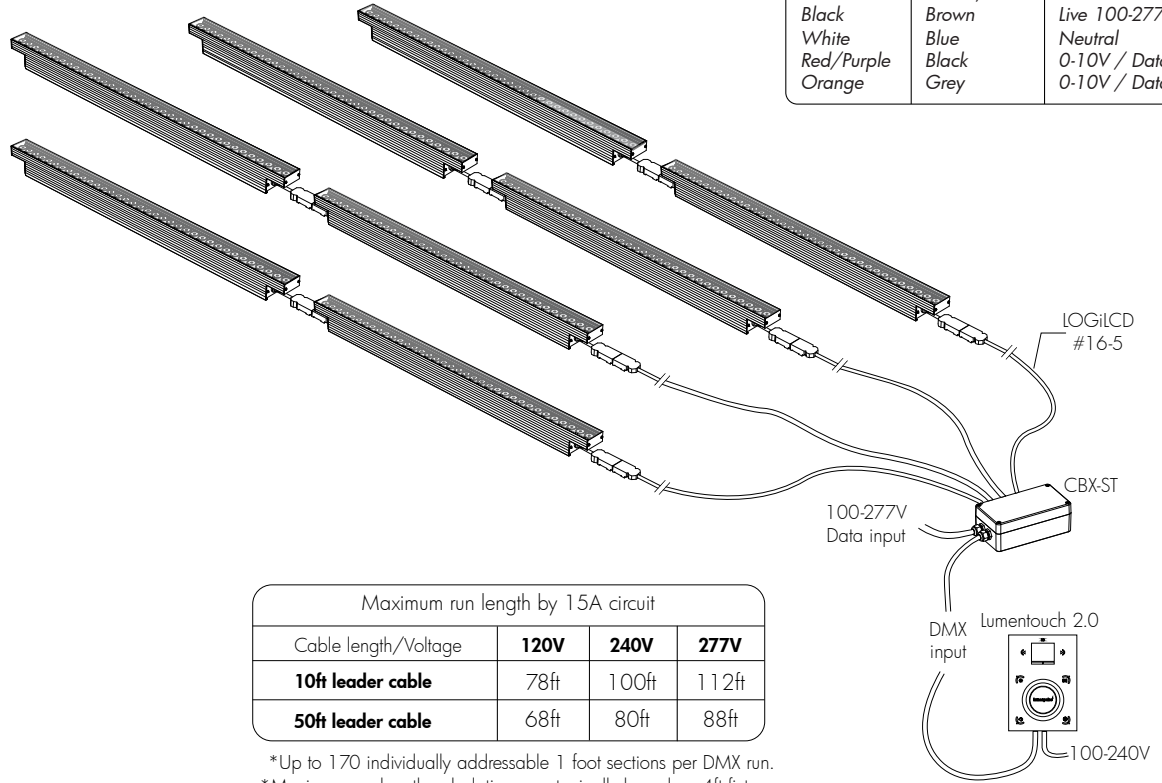
DMX ADDRESSES:



*Warning: resolution is a factory setting and cannot be changed in the field.

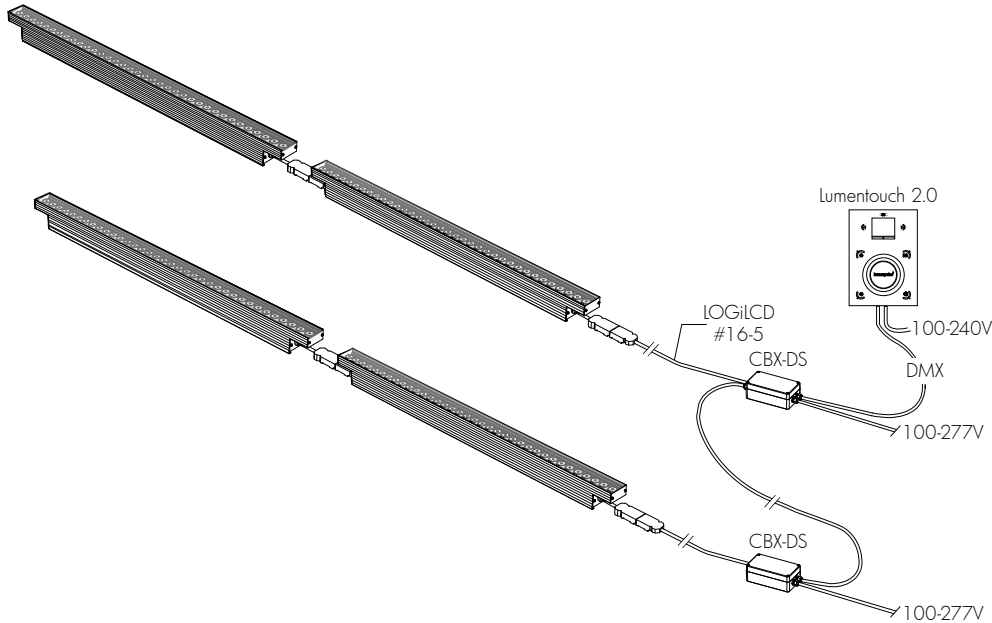
TYPICAL WIRING DIAGRAMS

Star Layout (DMX)









| American Color Code | CE Color Code | USE |
|---------------------|---------------|----------------|
| Green | Yellow/Green | Ground |
| Black | Brown | Live 100-277V |
| White | Blue | Neutral |
| Red/Purple | Black | 0-10V / Data + |
| Orange | Grey | 0-10V / Data - |

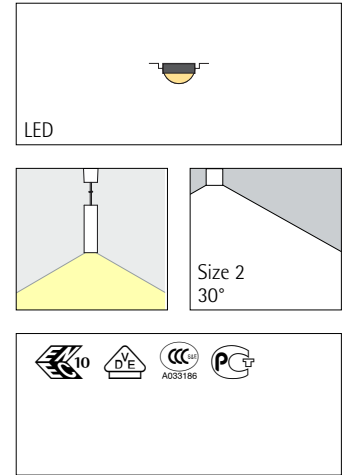
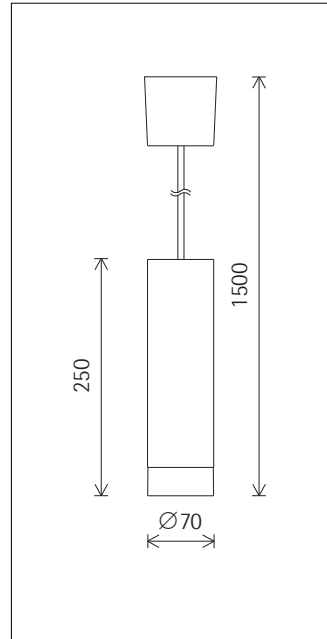
Daisy Chain Layout (DMX)



HOW TO ORDER

| LOGi | | | | | | | | |
|--|--|--|---|--|--|--|--|--|
| Housing | Voltage | Length | Colors and color temperatures | Resolution | Optic | Mounting Option | Finish | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| Housing: LOGi - Lumenfacade™ interior | Voltage: 100 - 100 volts 120 - 120 volts 208 - 208 volts 220 - 220 volts 240 - 240 volts 277 - 277 volts | Length: 12 - 12 3/8 inches (314mm) (0.95 kg/2.1 lbs) 24 - 24 3/8 inches (619mm) (1.68 kg/3.7 lbs) 36 - 36 3/8 inches (924mm) (2.41 kg/5.3 lbs) 48 - 48 3/8 inches (1229mm) (3.08 kg/6.8 lbs) | Colors and Color temperatures: DWW - Dynamic warm white color temperature ranging from 2200K to 3000K. DWH - Dynamic white color temperature ranging from 2700K to 6500K. | Resolution: 1FT - Resolution per foot  1FX - Resolution per fixture  | Optics: 10x10 - 10° x 10° *For best results use 10° x 10° fixtures at a 6-inch (1.5cm) setback from surface. Contact factory for application support. 10x60 - 10° x 60° 30x60 - 30° x 60° 60x60 - 60° x 60° |     | Mounting Option: SAM - Slim Adjustable Mounting UMP - Fixed Mounting UMAS - Universal Adjustable Mounting WAM2 - Adjustable Wall Mounting 2" WAM6 - Adjustable Extended Arm Mounting 6" WAM12 - Adjustable Extended Arm Mounting 12" | Finish: SI - Silver SandText BK - Black SandText WH - White CC - Custom (please specify RAL color) |

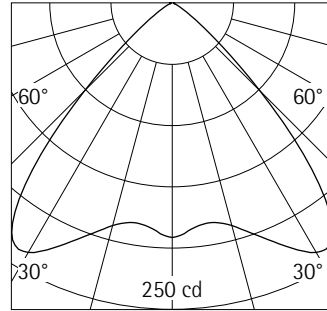
with translucent ring



87685.000 Black
 LED 8W 550lm 3000K warm white
 Dimmable
 Version 1
 Connected load 11W
 Lens system, extra wide flood

Product description

Cylinder: aluminium profile, powder-coated.
 Electronic control gear, dimmable.
 Connection cable, translucent, with strain relief.
 Ceiling fixture with canopy: metal/plastic. 2-pole terminal block.
 LED module: high-power LEDs on metal-core PCB. SDCM<2. CRI>90. L80/B10 50,000h. Lens system made of optical polymer.
 Translucent ring: plastic, clear, external mirror-finish vaporised. Optical cut-off 30°.
 Dimming with external dimmers possible (trailing edge).
 Dimming range 10%-100%
 Weight 1.28kg
 Energy efficiency class EEI A
 LMF E



LED 8W 550lm 3000K warm white

LOR 0.79

| h(m) | E(lx) | D(m) |
|------|-------|-------|
| | | 91° |
| 1 | 191 | 2.04 |
| 2 | 48 | 4.07 |
| 3 | 21 | 6.11 |
| 4 | 12 | 8.14 |
| 5 | 8 | 10.18 |

Planning data

87685.000 LED 8W 550lm 3000K warm white
 Connected load P: 11 W
 Connected load per 100lx P*: 2.6 W/m²
 Number of luminaires per 100lx n*: 23.7 1/100m²

87685.000 LED 8W 550lm 3000K warm white
 Number of luminaires per 100m² for 100lx 200lx 300lx 500lx
 24 48 72 119

87685.000 LED 8W 550lm 3000K warm white
 Module (m) 1.2x1.8 1.8x1.8 1.8x2.4 2.4x2.4
 Illuminance E_n (lx) for module (m) 195 130 98 73

Correction table

| | | | | | |
|---------|------|------|------|------|---|
| Ceiling | 0.70 | 0.70 | 0.70 | 0.50 | 0 |
| Wall | 0.70 | 0.50 | 0.20 | 0.20 | 0 |
| Floor | 0.50 | 0.20 | 0.20 | 0.10 | 0 |

| | | | | | | |
|---|-----|-----|-----|----|----|----|
| k | 0.6 | 73 | 56 | 47 | 47 | 43 |
| k | 1.0 | 96 | 75 | 67 | 66 | 62 |
| k | 1.5 | 113 | 89 | 82 | 80 | 76 |
| k | 2.5 | 127 | 100 | 94 | 90 | 86 |
| k | 3.0 | 132 | 104 | 99 | 94 | 89 |

| | | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Cleaning (a) | 1 | | | | 2 | | | | 3 | | | |
| Ambient conditions | P | C | N | D | P | C | N | D | P | C | N | D |
| LMF | 0.96 | 0.94 | 0.90 | 0.86 | 0.93 | 0.91 | 0.86 | 0.81 | 0.92 | 0.90 | 0.84 | 0.79 |
| | 0.96 | 0.92 | 0.87 | 0.81 | 0.96 | 0.92 | 0.87 | 0.81 | 0.96 | 0.92 | 0.87 | 0.81 |

| | | | | | | | | | | |
|------------------------|------|------|------|------|------|-------|-------|-------|-------|-------|
| Hours of operation (h) | 1000 | 2000 | 4000 | 6000 | 8000 | 10000 | 20000 | 30000 | 40000 | 50000 |
| | 0.99 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.92 | 0.88 | 0.84 | 0.81 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

MF LMFxRSMFxLLMFxLSF
 MF Maintenance Factor
 LMF Luminaire Maintenance Factor
 RSMF Room Surface Maintenance Factor
 LLMF Lamp Lumens Maintenance Factor
 LSF Lamp Survival Factor
 P Room pure
 C Room clean
 N Room normal
 D Room dirty

Client: _____
 Project name: _____
 Order #: _____
 Type: _____ Qty: _____

FEATURES AND BENEFITS

Physical :

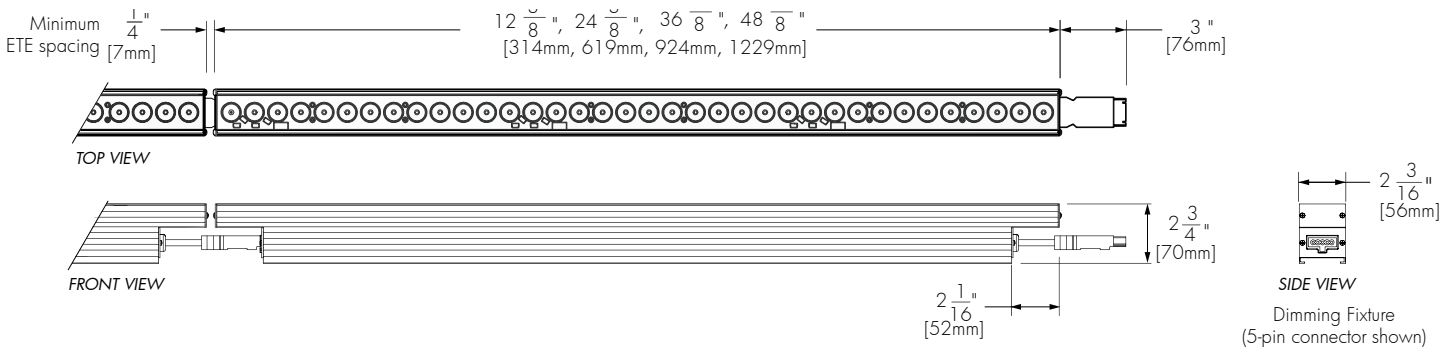
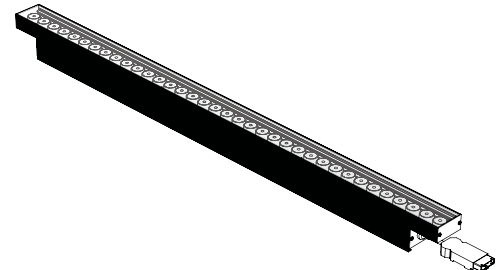
- Low copper content extruded aluminum housing
- Available in 1', 2', 3' or 4' sections
- Electro-statically applied polyester powder coat finish
- Aluminum end caps
- Stainless steel hardware
- Clear acrylic lens
- 10° x 10°, 10° x 60°, 30° x 60° or 60° x 60° optics
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Performance :

- Dynamic Warm variable color temperature: 12 LEDs/ft (4x 2200K, 4x 2700K, 4x 3000K)
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- Operating temperatures: -25° C to 50° C [-13F to 122F]

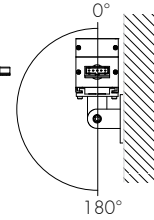
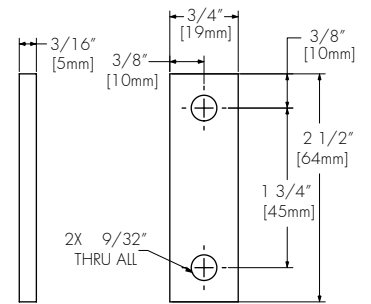
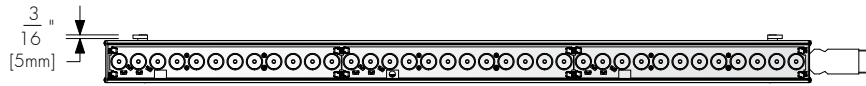
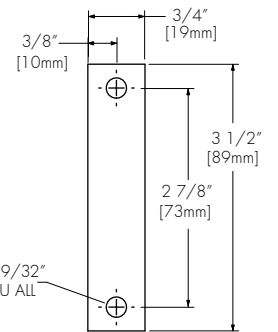
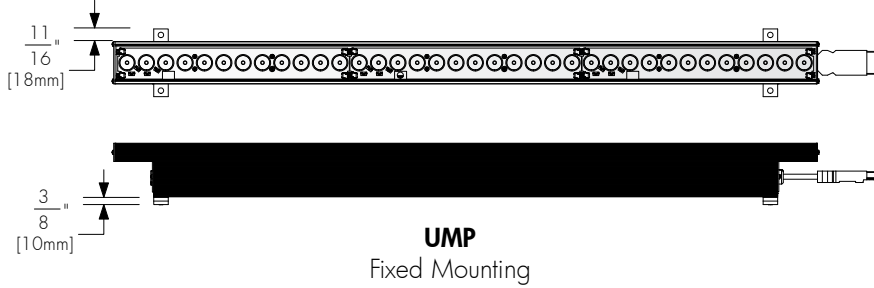
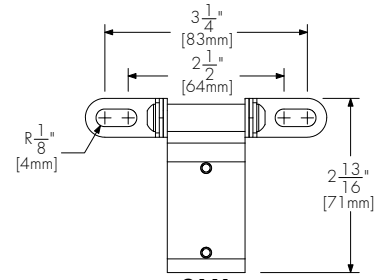
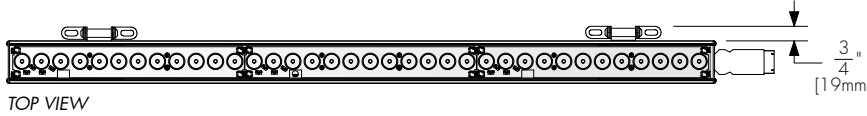
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- Line voltage luminaire for 100 to 277 volts
- Power and data in 1 cable (#18-5)
- Up to 112 feet with 1 power/data feed
- 17.25W/ft
- DMX 512 ready

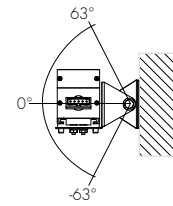
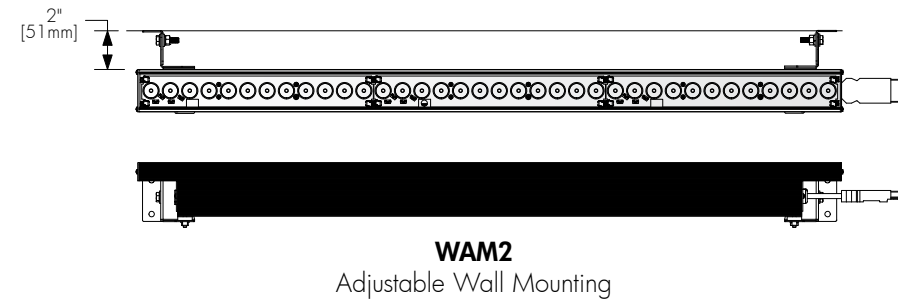
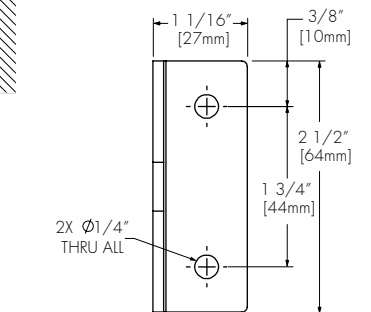


5 year warranty

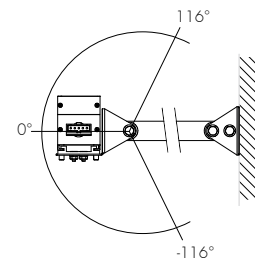
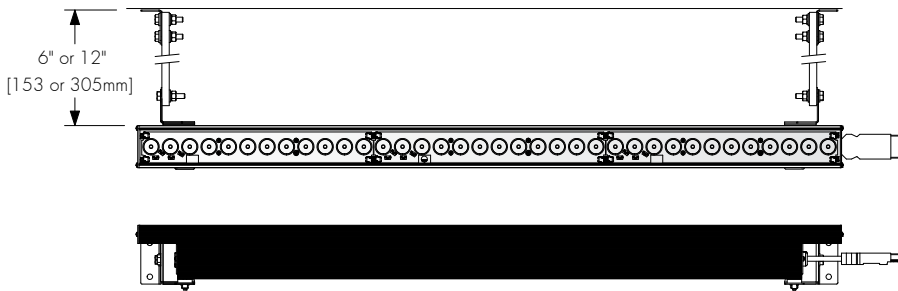
MOUNTING OPTIONS



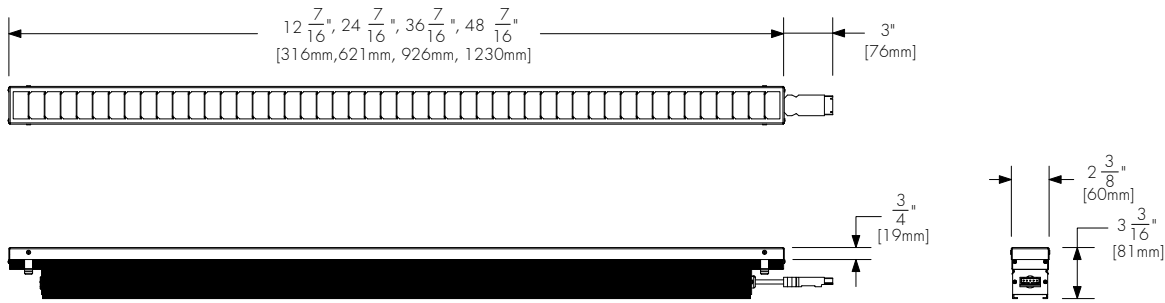
WAM2
Mounting Hole Pattern



WAM6 or WAM12
Mounting Hole Pattern



LOUVER ACCESSORY INSTALLATION DETAIL



LOGiRD

Radial Louver for Lumenfacade Interior
(see page 4 for ordering code)

ACCESSORIES

Order separately

Control Systems:

- LTO2** Lumentouch is a wall mount DMX 512 controller keypad.
- LCU** Lumencue is a USB / mini SD DMX 512 controller.
- LID** LumenID is a diagnostic and addressing DMX 512 controller.
It must be specified on all DMX applications.
Refer to LID specification sheet for details.
- LTN** Lumentone is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback.

Control Boxes:

- CBX** DMX/RDM control box.
Up to six power and data outputs to fixtures or fixture runs.
Ethernet enabled option.
Refer to CBX specification sheet for details.

Leader Cable :

- LOGiLCD**___ Leader Cable for Lumenfacade interior.
Please add desired cable length : 10, 25 or 50 feet [3m, 7.6m or 15.2m] standard lengths
Sealing endcap is mandatory for any unused connector.
(1) included with every leader cable

Jumper Cable :

- LOGiJCD**___ Jumper Cable for Lumenfacade interior.
Please add desired cable length : 1, 2, 4, 8, 10, 15 or 20 feet
[0.3m, 0.6m, 1.2m, 2.4m, 3m, 4.5m or 6m] standard lengths

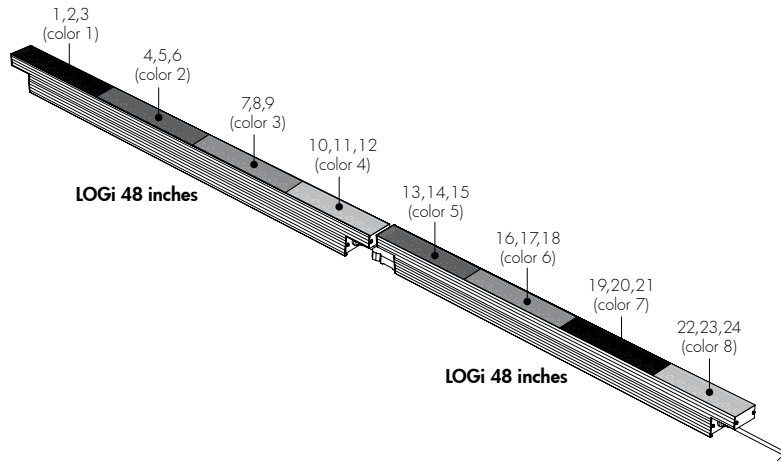
Radial Louver :

- LOGiRD**___-___ Radial louver for Lumenfacade.
 1. Please specify desired nominal length: 1', 2', 3' or 4'.
 2. Please specify finish as BK - Black SandText
(Custom color available on request, please specify as CC together with RAL color : _____)

RESOLUTION DETAILS

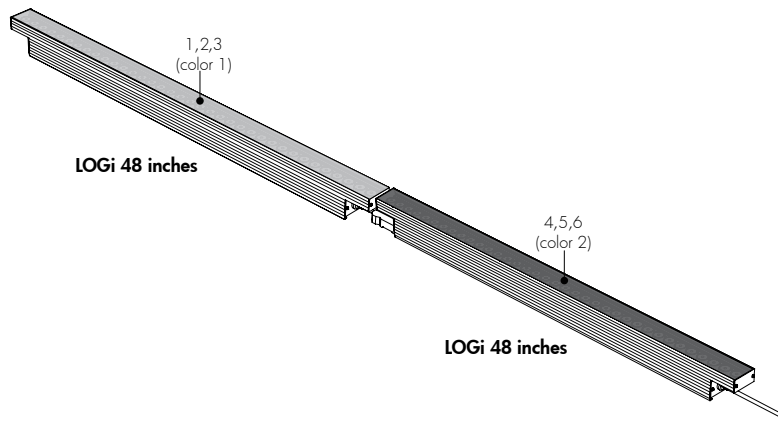
1FT - Resolution per foot: each foot is addressed independently (recommended for most installations).

DMX ADDRESSES:



1FX - Resolution per fixture: each fixture is addressed independently

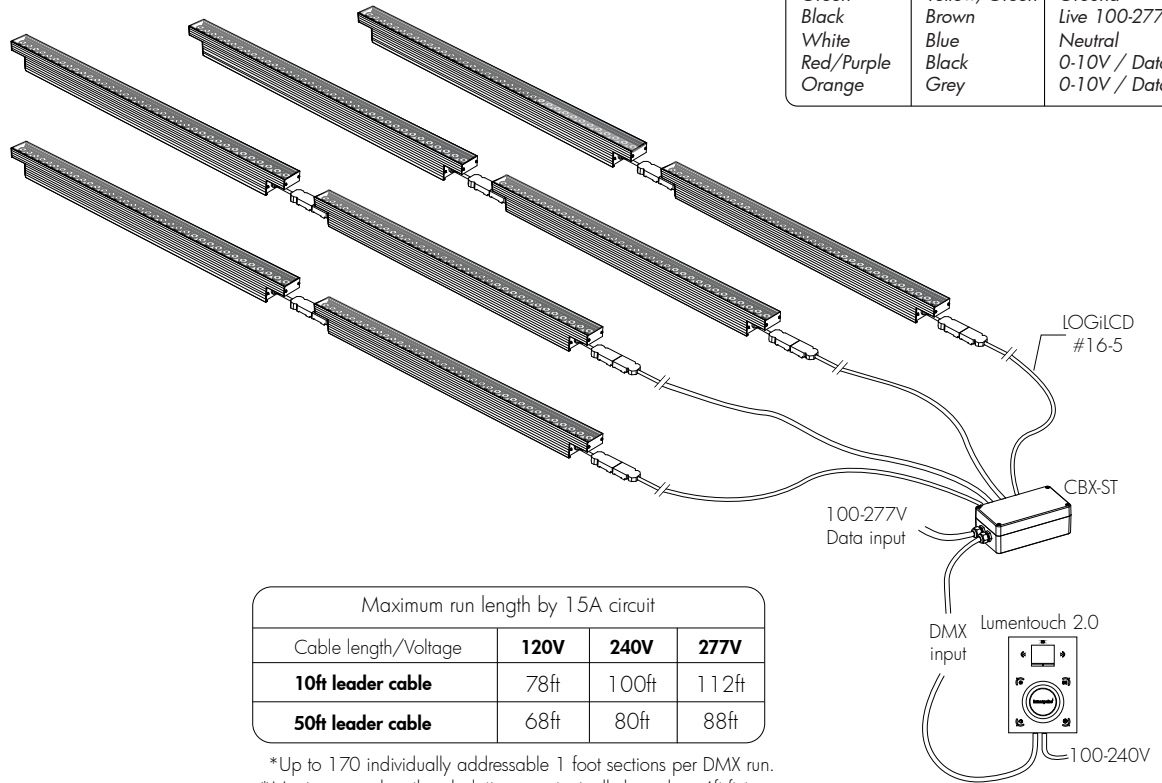
DMX ADDRESSES:



*Warning: resolution is a factory setting and cannot be changed in the field.

TYPICAL WIRING DIAGRAMS

Star Layout (DMX)

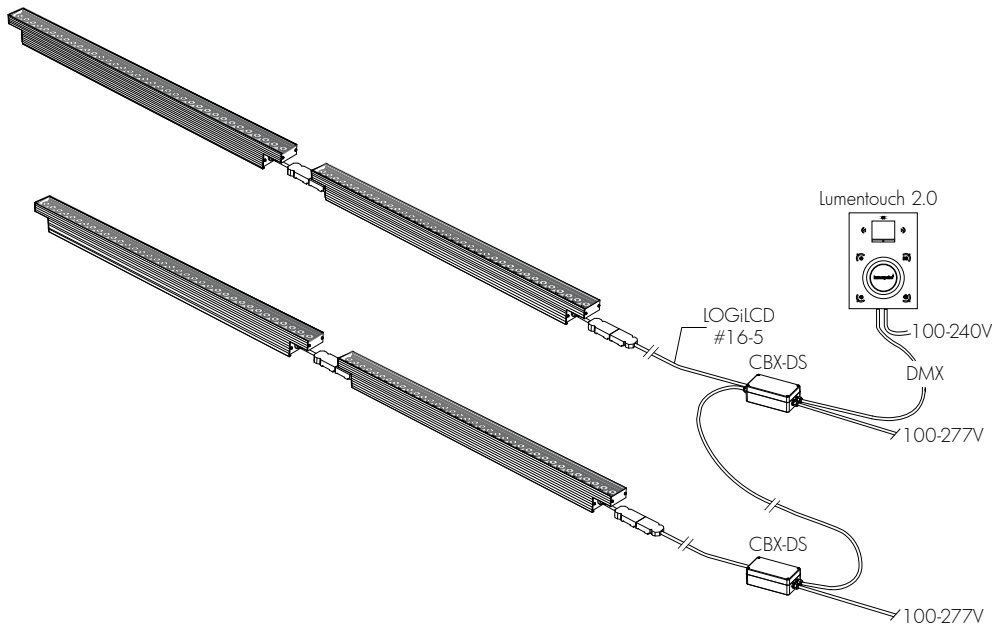


| American Color Code | CE Color Code | USE |
|---------------------|---------------|----------------|
| Green | Yellow/Green | Ground |
| Black | Brown | Live 100-277V |
| White | Blue | Neutral |
| Red/Purple | Black | 0-10V / Data + |
| Orange | Grey | 0-10V / Data - |






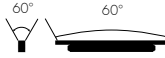
| Maximum run length by 15A circuit | | | |
|-----------------------------------|------|-------|-------|
| Cable length/Voltage | 120V | 240V | 277V |
| 10ft leader cable | 78ft | 100ft | 112ft |
| 50ft leader cable | 68ft | 80ft | 88ft |

*Up to 170 individually addressable 1 foot sections per DMX run.
 *Maximum run length calculations are typically based on 4ft fixtures.
 Consult factory for specific applications.

Daisy Chain Layout (DMX)



HOW TO ORDER

| LOGi | | | | | | | | |
|--|--|--|---|--|--|--|--|--|
| Housing | Voltage | Length | Colors and color temperatures | Resolution | Optic | Mounting Option | Finish | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| Housing: LOGi - Lumenfacade™ interior | Voltage: 100 - 100 volts 120 - 120 volts 208 - 208 volts 220 - 220 volts 240 - 240 volts 277 - 277 volts | Length: 12 - 12 3/8 inches (314mm) (0.95 kg/2.1 lbs) 24 - 24 3/8 inches (619mm) (1.68 kg/3.7 lbs) 36 - 36 3/8 inches (924mm) (2.41 kg/5.3 lbs) 48 - 48 3/8 inches (1229mm) (3.08 kg/6.8 lbs) | Colors and Color temperatures: DWW - Dynamic warm white color temperature ranging from 2200K to 3000K. DWH - Dynamic white color temperature ranging from 2700K to 6500K. | Resolution: 1FT - Resolution per foot  1FX - Resolution per fixture  | Optics: 10x10 - 10° x 10° *For best results use 10° x 10° fixtures at a 6-inch (1.5cm) setback from surface. Contact factory for application support. 10x60 - 10° x 60° 30x60 - 30° x 60° 60x60 - 60° x 60° |     | Mounting Option: SAM - Slim Adjustable Mounting UMP - Fixed Mounting UMAS - Universal Adjustable Mounting WAM2 - Adjustable Wall Mounting 2" WAM6 - Adjustable Extended Arm Mounting 6" WAM12 - Adjustable Extended Arm Mounting 12" | Finish: SI - Silver SandText BK - Black SandText WH - White CC - Custom (please specify RAL color) |

STEP13 • 6 Inch

STEP



Dry Shown

STEP13 6 Inch
QUICK FIND #: QF-2056

STEP13 6 Inch is a surface mount step light with a concealed optic. Five LED white temperatures and six LED colors are available.

Distribution: One light distribution pattern available.

Long: For large area illumination.

Construction: Extruded aluminum with solid aluminum, brass, or stainless steel faceplates.

Mounting: Luminaire is mounted to a standard multi-gang switch box (supplied by others) with four fasteners. Steel City 4G4D or equivalent (by others) recommended.

Integral Driver: Integral drivers available for 120V-277V AC in both dimming and non-dimming versions.

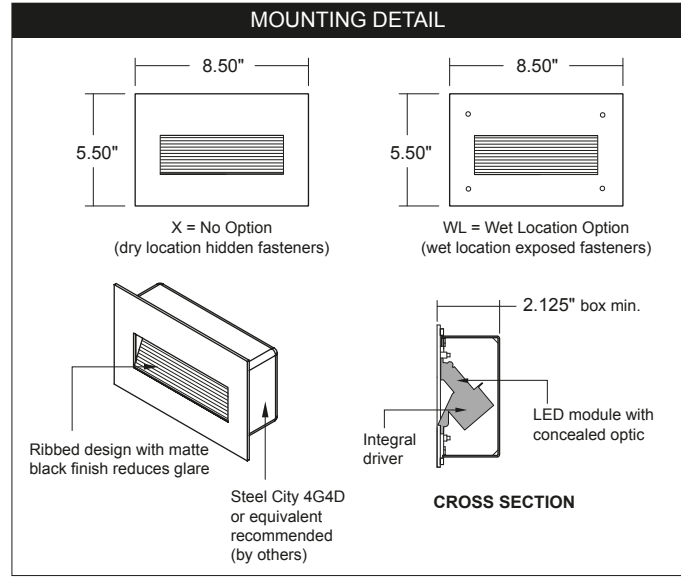
Finish: Recessed surfaces have a ribbed design with a matte black finish to reduce glare. Faceplates in *natural metal finishes* have protective clear top coat. Faceplates in *painted* are finished with a two-part wet paint system. Primer only option allows for field painting.

Dimming: True 0-100% dimming is compatible with 0V-10V fluorescent-type dimmer.

Power Consumption: Non-dimming unit consumes 5.53W. Dimming unit consumes 12W.

ETL Listed: Dry Location, Wet Location optional

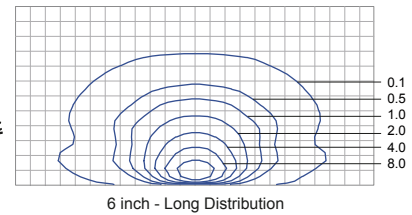
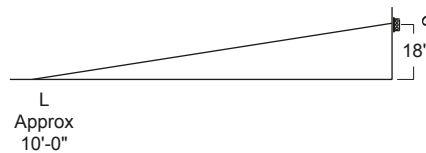
Note: Winona Lighting reserves the right to make design changes without prior notice.



Lumen Output at 30K

| Size | Distribution | Lumens | Watts | LPW |
|--------|--------------|--------|-------|------|
| 6 Inch | Long | 202 | 5.53 | 36.5 |

Typical Distribution Based on 30K
Grid in 1' increments



LED lighting facts[®]

See page 3 for lighting facts label.

PRODUCT SPECIFICATION

| LED - STEP13 | | 6 | | L | | | | | |
|---------------|--------|------------|--------------|---|---|---|--|---|--|
| SOURCE | MOUNT | FACEPLATE | DISTRIBUTION | LED CODE | VOLTAGE | FINISH | OPTIONS | SPECIAL | |
| LED | STEP13 | 6 - 6 inch | L - long | 27K - ANSI-binned 2700K 30K - ANSI-binned 3000K 35K - ANSI-binned 3500K 40K - ANSI-binned 4000K 50K - ANSI-binned 5000K 003 - amber 004 - blue 005 - cyan 006 - green 007 - red-orange 008 - red IES report available on the website. | Non-Dimming ND120V - 277V Dimming DM120V - 277V * * 0-10V dimmer required (by others) | Natural Metal Finishes BAL - brushed aluminum BB - brushed brass BSS - brushed stainless steel PB - polished brass PSS - polished stainless steel CMF - custom metal finish (consult factory) Painted Finishes AB5 - antique brass paint BBP - brushed brass paint LBPS - light bronze paint smooth LSP - light silver paint PGP - pale gold paint SGB - semi-gloss black paint SGW - semi-gloss white paint PRM - primer only CPF - custom paint finish (consult factory) | X - no options WL - wet location | STD - standard MOD - modified | |
| Modification: | | | | | | | | | |

Visit www.winonalighting.com for the most complete and current information.

ETL All fixtures ETL listed, USA and Canada

STEP13 • Wiring and Dimming

STEP

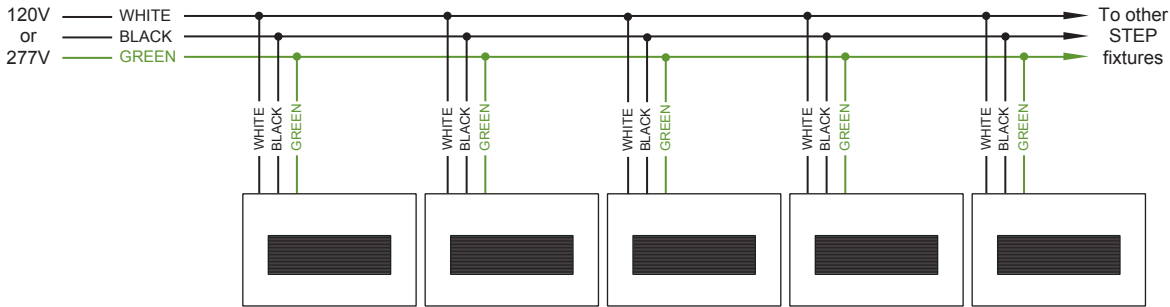
POWER SUPPLY / DIMMING

All STEPS models are available with Dimming and Non-Dimming internal drivers in both 120V and 277V input versions. Dimming drivers require a 0-10V fluorescent-type dimming control.

Read all instructions before installation. Do not make live connections!

NON-DIMMING INSTALLATIONS

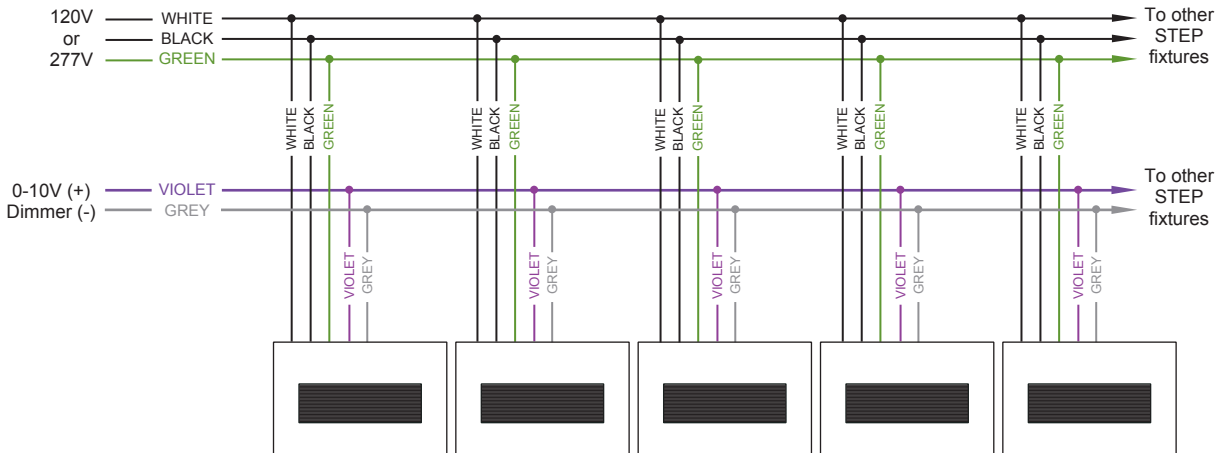
Connect STEP **WHITE** wire to power **NEUTRAL**.
 Connect STEP **BLACK** wire to power **HOT**.
 Connect STEP **GREEN** wire to power **GROUND**.



DIMMING INSTALLATIONS

The integral dimming driver is designed to the 0-10V IEC dimming specification 60929 and is compatible with common 0-10V dimmers and dimming systems. Do NOT connect line voltage to dimming input wires.

Connect STEP **WHITE** wire to power **NEUTRAL**.
 Connect STEP **BLACK** wire to power **HOT**.
 Connect STEP **VIOLET** wire to **POSITIVE INPUT** of Dimming Control.
 Connect STEP **GREY** wire to **NEGATIVE INPUT** of Dimming Control.



STEP13 • Lighting Facts

STEP

LED
Winona


lighting facts®

A Program of the U.S. DOE

| | |
|-----------------------------------|-------------|
| Light Output (Lumens) | 202 |
| Watts | 5.53 |
| Lumens per Watt (Efficacy) | 36 |

| | |
|---|-----------|
| Color Accuracy <small>Color Rendering Index (CRI)</small> | 85 |
|---|-----------|

Light Color
Correlated Color Temperature (CCT) **3019 (Bright White)**



Warm White
Bright White
Daylight

2700K
3000K
4500K
6500K

| | |
|-------------------|------------|
| Warranty** | Yes |
|-------------------|------------|

All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

**** See www.lightingfacts.com/products for details.**

Registration Number: NJSM-FHJUNV (9/20/2012)
 Model Number: Step13-6-L-304-ND120V
 Type: Other

WINONA
solutions | forms | light
AcuityBrands

Winona Lighting • 3760 West Fourth Street • Winona, MN 55987
800-328-5291 • www.winonalighting.com

Version 9/2013

Page 3 of 3

Client: _____
 Project name: _____
 Order #: _____
 Type: _____ Qty: _____

FEATURES AND BENEFITS

Physical :

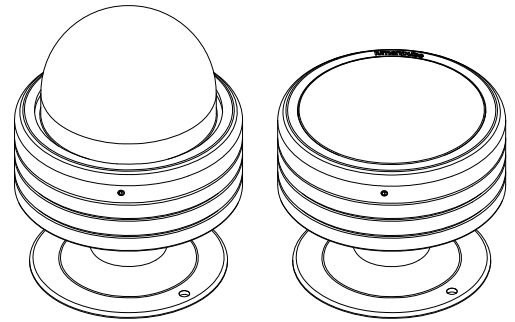
- Low copper content machined aluminum housing
- Electro-statically applied polyester powder coat finish
- High impact UV protected polycarbonate lens
- Sealing gasket included
- Canopy or Wall Mount mounting options
- Flat Lens option
- 1,00 kg / 2,20 lbs
- IP66
- Corrosion-resistant option for marine environments

Performance :

- 42 delivered lumens at full intensity
- 3,322 cd/m² @ 0°
- Lumen maintenance 120,000 hrs [L70 @ 25°C]
- Operating temperatures: -25° C to 50° C [-13F to 122F]

Electrical :

- 48V DC luminaire, remote driver & data supply available for 100-277V AC (not included)
- Power and data in 1 cable, 3ft / 1m cord (#18-5)
- 6 watts DC power (total consumption varies according to remote power supply efficiency)
- DMX 512 ready



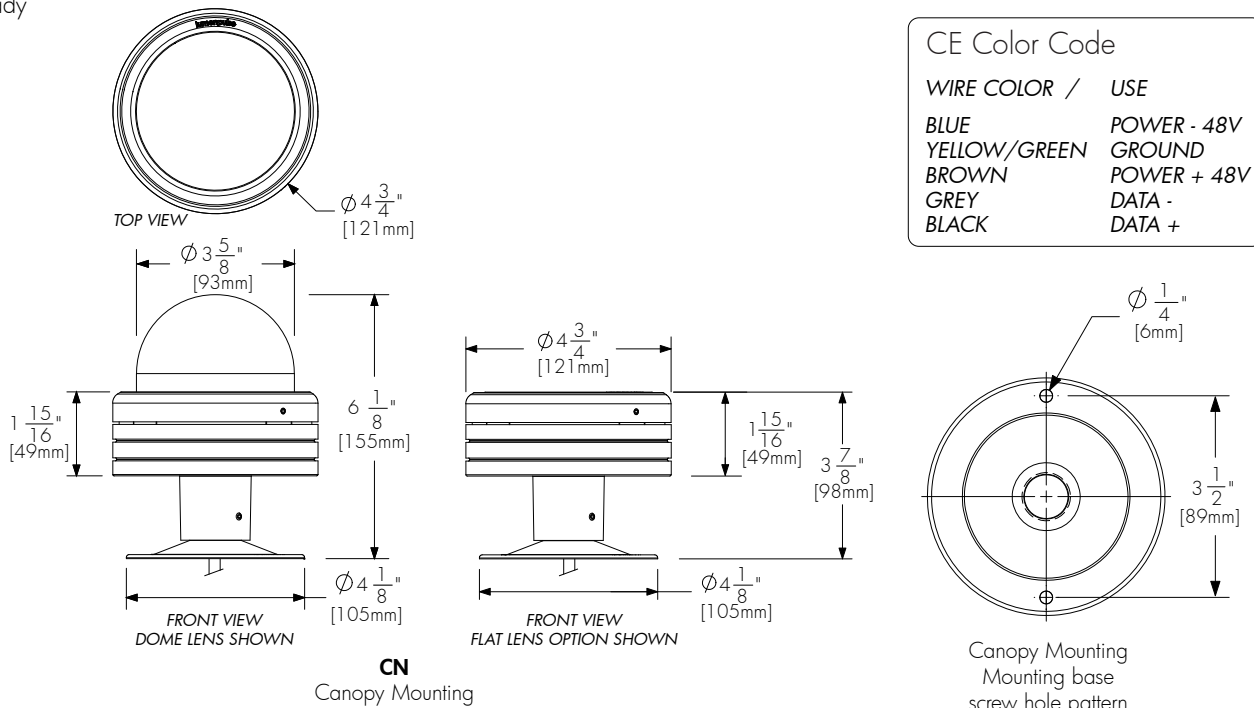
FLAT LENS OPTION SHOWN



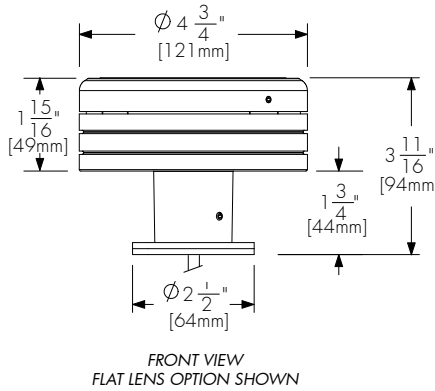
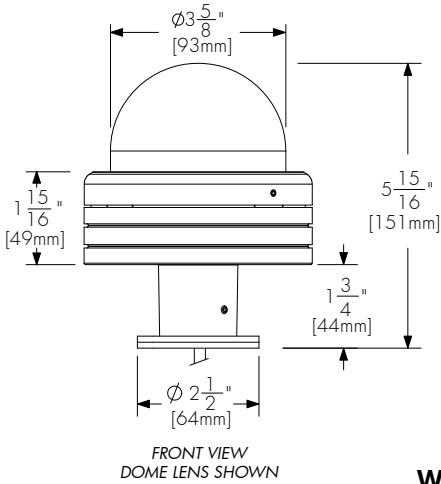
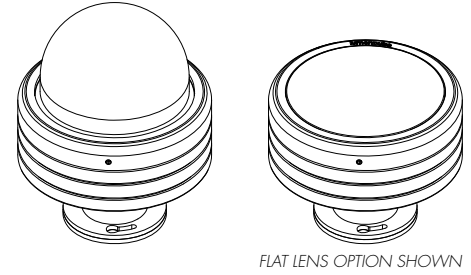
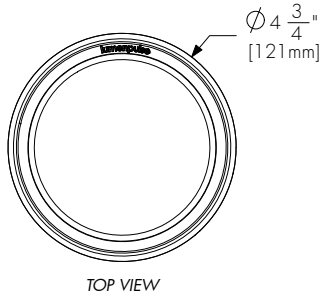
Wiring detail

| WIRE COLOR / USE | |
|------------------|-------------|
| WHITE | POWER - 48V |
| GREEN | GROUND |
| BLACK | POWER + 48V |
| ORANGE | DATA - |
| RED | DATA + |

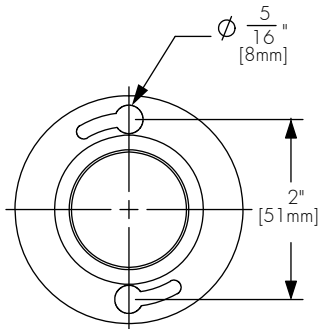
| CE Color Code | |
|------------------|-------------|
| WIRE COLOR / USE | |
| BLUE | POWER - 48V |
| YELLOW/GREEN | GROUND |
| BROWN | POWER + 48V |
| GREY | DATA - |
| BLACK | DATA + |



WALL MOUNT OPTION



WM
Wall Mount Option



Wall Mount Option
Mounting base
screw hole pattern

ACCESSORIES

Order separately

Control Systems:

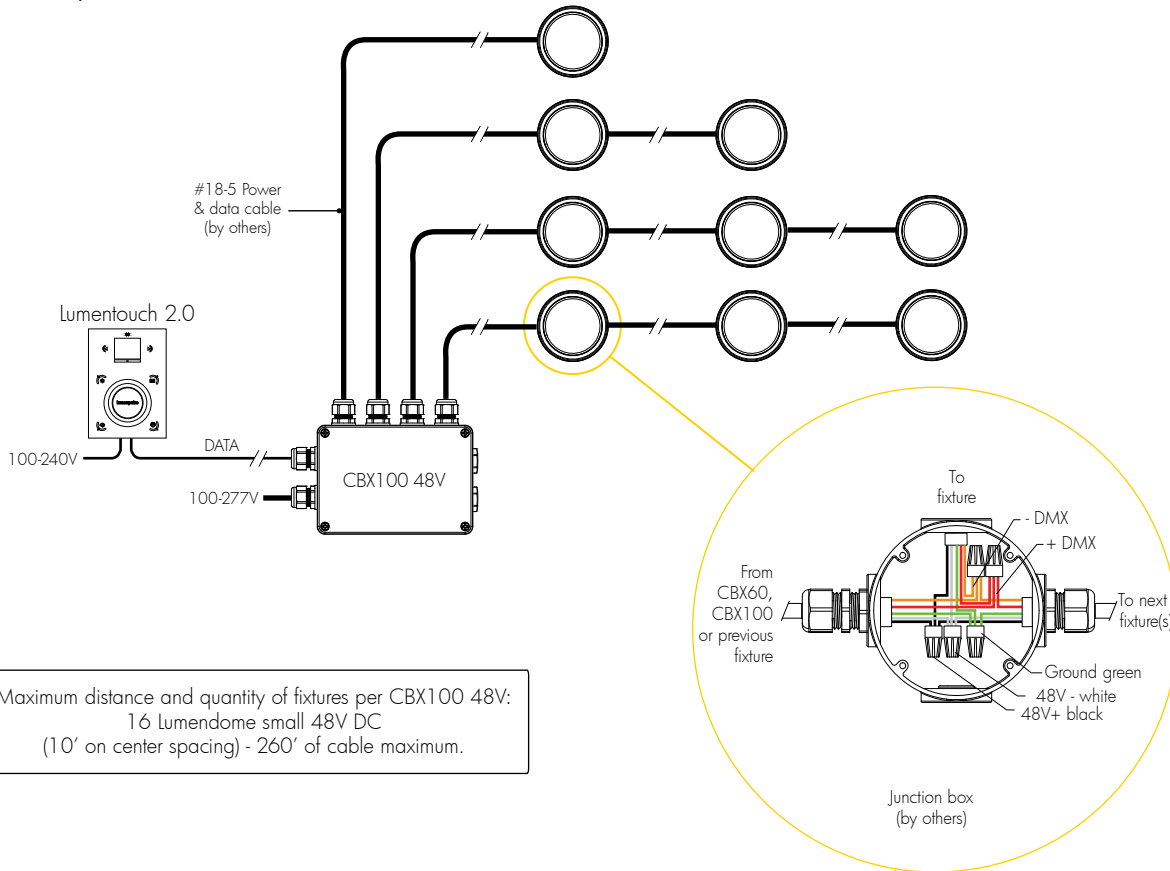
- LTO2** Lumentouch is a wall mount DMX 512 controller keypad.
- LCU** Lumencue is a USB / mini SD DMX 512 controller.
- LID** LumenID is a diagnostic and addressing DMX 512 controller.
It must be specified on all DMX applications.
Refer to LID specification sheet for details.
- LTN** Lumentone is a simple pre-programmed DMX 512 controller
with a push button rotary dial and live feedback.

Control and Power Supply Boxes:

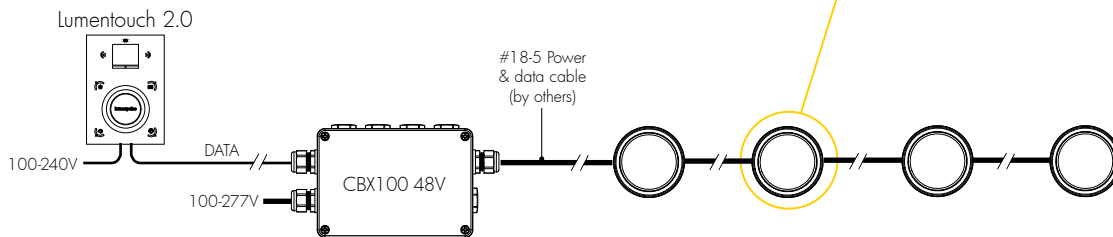
- CBX60, CBX100** DMX/RDM control box.
Up to six low voltage power and data outputs to fixtures or fixture runs.
Ethernet enabled option.
Refer to CBX60, CBX100 specification sheet for details.

TYPICAL WIRING DIAGRAMS

Star Layout (DMX)



Daisy Chain Layout (DMX)



HOW TO ORDER

| LMDS | 48V | RGB | | | |
|---|---------|-------------------------------|--------|-----------------|--|
| Housing | Voltage | Colors and color temperatures | Finish | Mounting Option | Option |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | | | | | 6 |
| Housing: LMDS - lumendome™ Small | | | | | Option: FTL - Flat Lens CRC - Corrosion-resistant Coating |
| 2 | | | | | |
| Voltage: *48V DC fixture. Refer to accessories on page 3 for control & power supply box options. | | | | | |
| 3 | | | | | |
| Colors and Color temperatures: RGB - Additive red, green and blue | | | | | |
| 4 | | | | | |
| Finish: SI - Silver SandText BK- Black SandText WH - White CC - Custom (please specify RAL color) | | | | | |
| 5 | | | | | |
| Mounting Option: Please specify one of the following: CN - Canopy cover mounting WM - Wall Mount option | | | | | |



Luminaire Type:
Catalog Number
(autopopulated):



Gotham Architectural Downlighting
LED Downlights

**4" Incito®
Downlight**

Solid-State Lighting
(US and International Patents Pending)

FEATURES

OPTICAL SYSTEM

- Eleven preset distribution patterns allow designers to achieve various objectives.
- Self-flanged semi-specular or matte-diffuse, metal-clad lower reflector utilized in combination with a highly transmissive lens.
- Patented Bounding Ray™ Optical Principle design (U.S. Patent No. 5,800,050) provides source image for a smooth transition from top of the reflector to bottom.
- Field interchangeable optics.

MECHANICAL SYSTEM

- Light engine and driver are accessible from above or below ceiling.
- 16-gauge black painted steel mounting frame with mounting bars included. Post-installation adjustment possible from above or below ceiling.
- Galvanized steel junction box with hinged access covers and spring latch. Three combination 1/2"-3/4" and one 1/2" knockout for straight-through conduit runs. Capacity: 8 (4in, 4out) No. 12 AWG conductors rated for 90°C.
- Accommodates up to 1½"-thick ceilings.

ELECTRICAL SYSTEM

- IC-rated up to 1250 lumens.
- Solid-state LED light engine available in 2700 K, 3000 K, 3500 K or 4000 K color temperatures. CRI: 83 typical.
- eldoLED SOLOdrive 0-10V driver standard with <1% dimming level.
- eldoLED SOLOdrive DALI driver available with <1% dimming level.
- eldoLED POWERdrive DMX with RDM (remote device management) available with <1% dimming level.
- Rated system life of 50,000 hours at 70% output.
- Emergency battery pack with remote test switch available.

LISTINGS

- Fixtures are CSA certified to meet US and Canadian standards; wet location, covered ceiling.

WARRANTY

- 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

ORDERING INFORMATION

EXAMPLE: ICO 30/20 4AR 20D 120 EZB

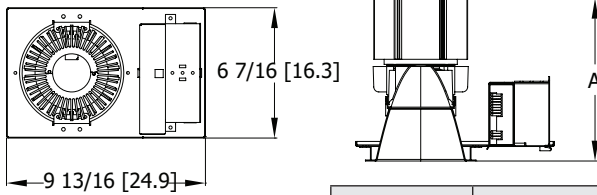
| Series | Color temperature | Nominal lumen values | Aperture/Trim color | Finish | Beam | Voltage |
|--------|-------------------|----------------------|------------------------|-----------------------|---------------------------------|------------------|
| ICO | 27/ 2700 K | 05 500 lumens | 4AR Clear | (blank) Semi-specular | 10D ² 10° beam angle | 120 |
| | 30/ 3000 K | 07 750 lumens | 4PR Pewter | LD Matte diffuse | 15D 15° beam angle | 277 |
| | 35/ 3500 K | 10 1000 lumens | 4WTR Wheat | | 20D 20° beam angle | 347 ³ |
| | 40/ 4000 K | 12 1250 lumens | 4WR ¹ White | | 25D 25° beam angle | |
| | | 15 1500 lumens | 4BR ¹ Black | | 30D 30° beam angle | |
| | | 20 2000 lumens | | | 35D 35° beam angle | |
| | | 25 2500 lumens | | | 40D 40° beam angle | |
| | | 30 3000 lumens | | | 45D 45° beam angle | |
| | | | | | 55D 55° beam angle | |
| | | | | | 60D 60° beam angle | |
| | | | | 65D 65° beam angle | | |

| Driver | Options |
|---|---|
| EZB eldoLED SOLOdrive 0-10V dimming driver. Minimum dimming level <1%. | SF Single fuse TRW⁴ White painted flange TRBL⁵ Black painted flange ELR⁶ Emergency battery pack with remote test switch CP⁷ Chicago plenum |
| EDAB eldoLED SOLOdrive DALI dimming driver. Minimum dimming level <1%. | NPS80EZ nLight® dimming pack controls 0-10V eldoLED drivers. NPS80EZ ER⁸ nLight® dimming pack controls 0-10V eldoLED drivers. ER controls fixtures on emergency circuit. |
| EDXB eldoLED POWERdrive DMX with RDM (remote device management). Minimum dimming level <1%. Includes termination resistor. | RRL RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. |



DIMENSIONAL DATA

All dimensions are inches (centimeters) unless otherwise noted.



Aperture: 4-5/16 [11]
 Ceiling Opening: 5-1/8 [13]
 Overlap Trim: 5-7/16 [13.8]

| LUMENS | A |
|------------|----------|
| Up to 1000 | 6 [15.2] |
| Up to 1500 | 7 [17.8] |
| Above 1500 | 8 [20.3] |

ELECTRICAL

| WATTAGE CONSUMPTION MATRIX | |
|----------------------------|---------|
| LUMENS | WATTAGE |
| 500 | 8 |
| 750 | 12 |
| 1000 | 17 |
| 1250 | 18 |
| 1500 | 23 |
| 2000 | 27 |
| 2500 | 35 |
| 3000 | 42 |

| LUMEN OUTPUT MULTIPLIER PER COLOR TEMPERATURE | |
|---|--------|
| CCT | FACTOR |
| 2700K | 0.938 |
| 3000K | 0.973 |
| 3500K | 1 |
| 4000K | 1.035 |

| EL/ELR AVAILABILITY / COMPATIBILITY – Initial Lumens | | | | |
|--|----------|-------|----------------|-------|
| LED | | | Initial Lumens | |
| Product | Lumens | Watts | EL/ELR | ELRHL |
| ICO 4" | 500-3000 | 7-42 | 530 | N/A |

nLight® Control Accessories:
 Order as separate catalog number. Visit www.sensorswitch.com/nLight for complete listing of nLight controls.

| | | | |
|--|--|---|--|
| WallPod stations On/Off On/Off & Raise/Lower Graphic Touchscreen | Model number nPODM [color] nPODM DX [color] nPOD GFX [color] | Occupancy sensors Small motion 360°, ceiling (PIR / dual tech) Large motion 360°, ceiling (PIR / dual tech) Wide view (PIR / dual tech) | Model number nCM 9 / nCM PDT 9 nCM 10 / nCM PDT 10 nWV 16 / nWV PDT 16 |
| Photocell controls On/Off & Dimming | Model number nCM ADCX | Wall Switch w/ Raise/Lower (PIR / dual tech) Cat-5 cables (plenum rated) 10', CAT5 10FT 15', CAT5 15FT | nWSX LV DX / nWSX PDT LV DX Model number CAT5 10FT J1 CAT5 15FT J1 |

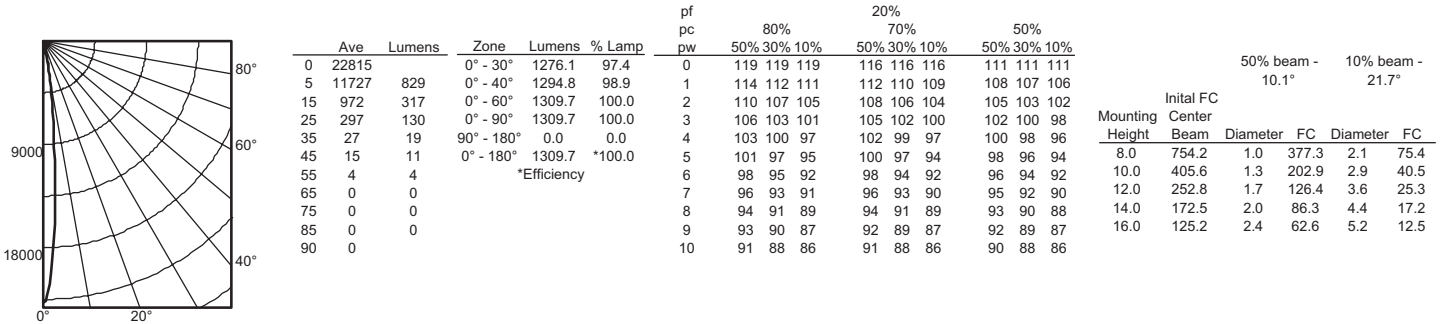
NOTES

ORDERING NOTES

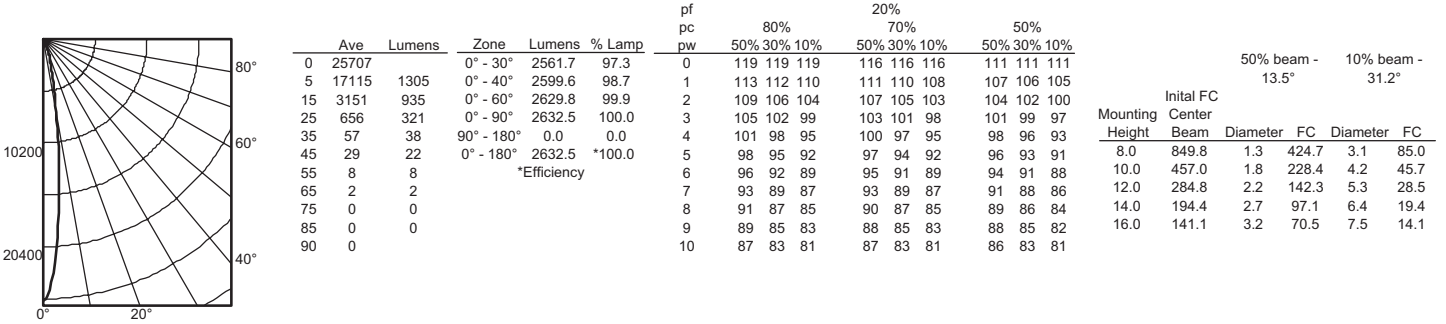
- Not available with finishes.
- Only available 1000lm and below.
- Not available with ELR emergency option.
- Not required for WR reflector.
- Not required for BR reflector.
- Must specify 120 or 277V. Not available with 347V.
- Above ceiling access required for use with ELR option
- For use with generator supply EM power. Will require an emergency hot feed and normal hot feed

Distribution Curve Distribution Data Output Data Coefficient of Utilization Illuminance: Single Luminaire 30" Above Floor

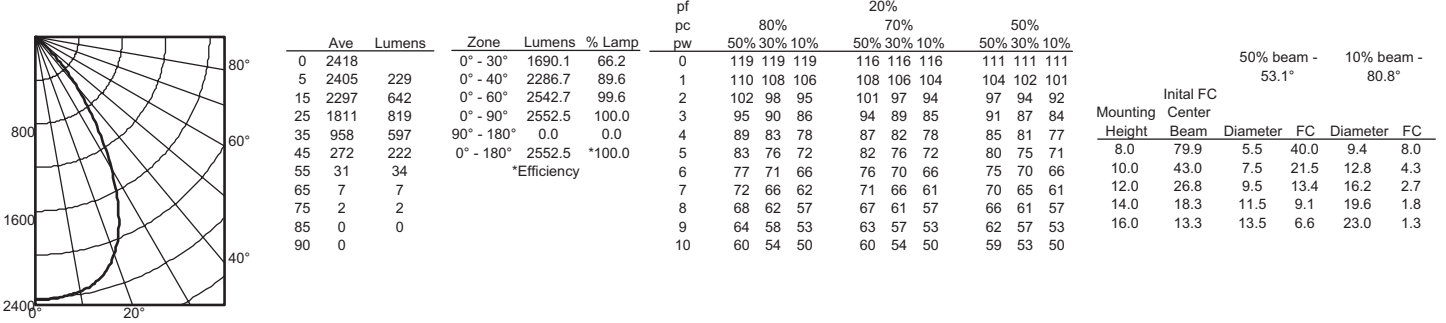
IC0 35/12 4AR 10D 120 INPUT WATTS: 18.4, DELIVERED LUMENS: 1309.6, LM/W=71.2, 0.1 S/MH, TEST NO. LTL25559P



IC0 35/25 4AR 15D 120 INPUT WATTS: 35.45, DELIVERED LUMENS: 2632.5, LM/W=74.26, 0.24 S/MH, TEST NO. LTL25865P



IC0 35/25 4AR 65D 120 INPUT WATTS: 35.45, DELIVERED LUMENS: 2552.4, LM/W=72, 1.01 S/MH, TEST NO. LTL25898P



PHOTOMETRY NOTES

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- Actual performance may differ as a result of end-user environment and application.
- Actual wattage may differ by +/- 10% when operating between 120-277V +/- 10%.
- CRI: 83 typical.
- Consult factory or IES file for microgroove baffle, black cone or other photometric reports.

Choose Wall Controls.

nLIGHT offers multiple styles of wall controls – each with varying features and user experience.



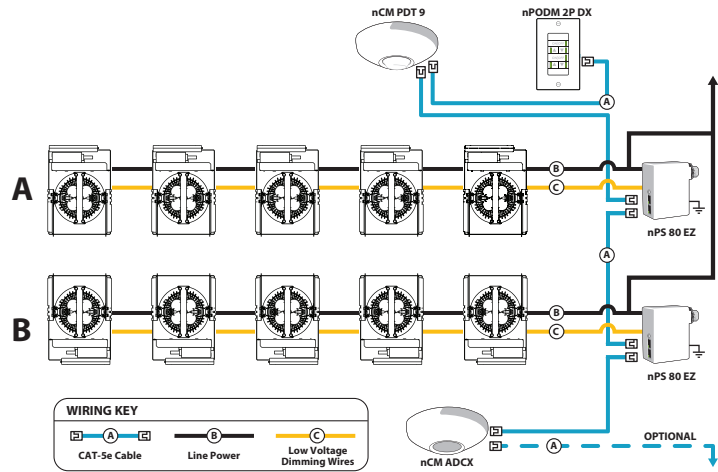
Push-Button WallPod
Traditional tactile buttons and LED user feedback



Touch WallPod
Contemporary capacitive touch style buttons with audible clicker for user feedback



Graphic WallPod
Full color touch screen provides a sophisticated look and feel



EXAMPLE

Group Fixture Control*

*Application diagram applies for fixtures with eldoLED drivers only.

nPS 80 EZ Dimming/Control Pack (qty 2 required)

nPDM 2P DX Dual On/Off/Dim Push-Button WallPod

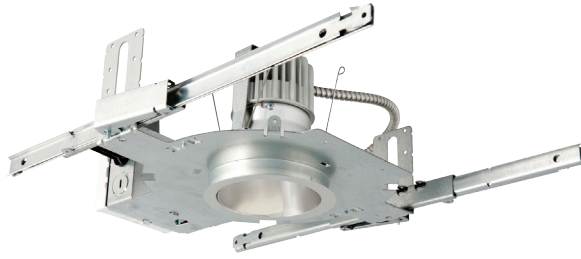
nCM ADCX Daylight Sensor with Automatic Dimming Control

nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.



Luminaire Type:
Catalog Number
(autopopulated):



Gotham Architectural Downlighting
LED Downlights

4" Evo®
Wallwash

Solid-State Lighting

FEATURES

OPTICAL SYSTEM

- Self-flanged semi-specular, matte-diffuse or specular lower reflector
- Patented Bounding Ray™ optical design (U.S. Patent No. 5,800,050)
- 45° cutoff to source and source image
- Anodized kicker reflector

MECHANICAL SYSTEM

- 16-gauge galvanized steel construction; maximum 1-1/2" ceiling thickness
- Telescopic mounting bars maximum of 32" and minimum of 15", preinstalled, 4" vertical adjustment
- Toolless adjustments post installation
- Junction box capacity: 8 (4 in, 4 out) 12AWG rated for 90°C
- Light engine and driver accessible through aperture

ELECTRICAL SYSTEM

- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours based on IESNA LM-79-2008

- 120-277VAC, 50/60hz power supply with 0-10V dimming (10-100%)
- Overload and short circuit protected
- LEDs tested under LM80

LISTINGS

- Fixtures are CSA certified to meet US and Canadian standards; wet location, covered ceiling

WARRANTY

- 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end user environment and application. All values are design or typical values, measured under laboratory conditions at 25° C.

ORDERING INFORMATION

EXAMPLE: EVO WW 35/10 4AR 120 AZ10

| Series | Type | Color temperature | Nominal lumen values | Aperture/Trim color | Finish | Voltage |
|--------|------|-------------------|----------------------|------------------------|-----------------------|---------|
| EVO | WW | 27/ 2700 K | 06 600 lumens | 4AR Clear | (blank) Semi-specular | 120 |
| | | 30/ 3000 K | 10 1000 lumens | 4PR Pewter | LD Matte diffuse | 277 |
| | | 35/ 3500 K | 14 1400 lumens | 4WTR Wheat | LS Specular | 347 |
| | | 41/ 4100 K | 18 1800 lumens | 4GR Gold | | |
| | | | 20 2000 lumens | 4WR ¹ White | | |
| | | | | 4BR ¹ Black | | |

| Driver | Options |
|--|---|
| AZ10² Philips Xitanium 0-10V dimming driver. Minimum dimming level 10% | SF Single fuse |
| EZB eldoLED SOLOdrive 0-10V dimming driver. Minimum dimming level <1%. 120V or 277V | NPP16D nLight® network relay pack with 0-10V dimming. Refer to TN-602 . |
| EDAB eldoLED SOLOdrive DALI dimming driver. Minimum dimming level <1%. 120V or 277V | NPP16D ER⁵ nLight® network relay pack with 0-10V dimming for emergency circuit operation. Refer to TN-602 . |
| EDXB eldoLED POWERdrive DMX with RDM (remote device management). Minimum dimming level <1%. Includes termination resistor. 120V or 277V | NPS80EZ nLight® dimming pack controls 0-10V eldoLED drivers. |
| ECOS2^{3,4} Lutron® Hi-Lume® 2-wire forward-phase dimming driver. Minimum dimming level 1% | NPS80EZ ER⁵ nLight® dimming pack controls 0-10V eldoLED drivers. ER controls fixtures on emergency circuit. |
| ECOS3^{2,3} Lutron® Hi-Lume® 3-wire or EcoSystem® dimming driver. Minimum dimming level 1% | TRW⁶ White painted flange |
| | TRBL⁷ Black painted flange |
| | EL⁸ Emergency battery pack with integral test switch |
| | ELR⁸ Emergency battery pack with remote test switch |
| | CR190 High CRI (90+) |
| | CP⁹ Chicago plenum |
| | BGTD Bodine generator transfer device |
| | RRL RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. |

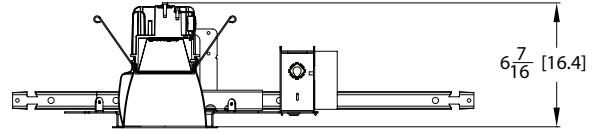
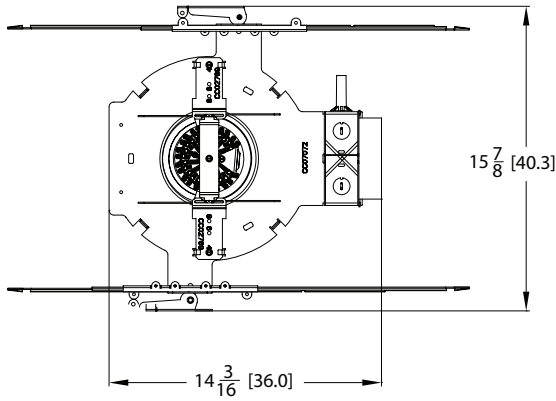
ACCESSORIES order as separate catalog numbers (shipped separately)

- CTA4-8 YK** Ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 2").
- ISD BC** 0-10V wallbox dimmer. Refer to [ISD-BC](#).



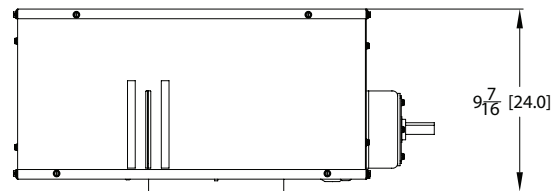
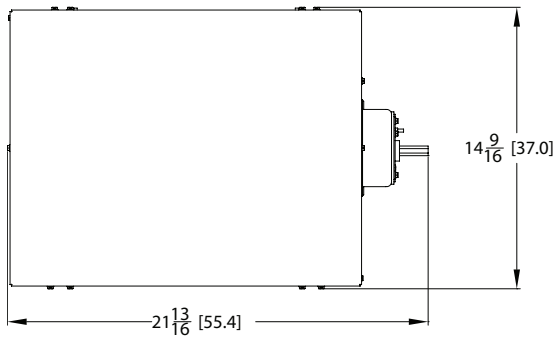
DIMENSIONAL DATA

All dimensions are inches (centimeters) unless otherwise noted.



Aperture: 4-5/16 (11)
 Ceiling Opening: 5-1/8 (13)
 Overlap Trim: 5-7/16 (13.8)

DIMENSIONS FOR CHICAGO PLENUM



ELECTRICAL

| AVAILABILITY/COMPATIBILITY -- INITIAL LUMENS | | | | |
|--|--------|-------|----------------|-------|
| PRODUCT | LED | | INITIAL LUMENS | |
| | LUMENS | WATTS | EL/ELR | ELRHL |
| EVO 4" | 600 | 18 | 363 | N/A |
| EVO 4" | 1000 | 22 | 379 | N/A |
| EVO 4" | 1400 | 30 | 702 | N/A |
| EVO 4" | 1800 | 38 | 731 | N/A |

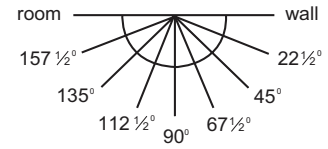
| nLight® Control Accessories: Order as separate catalog number. Visit www.sensorswitch.com/nLight for complete listing of nLight controls. | | | |
|---|---------------------|--|-----------------------------|
| WallPod stations | Model number | Occupancy sensors | Model number |
| On/Off | nPODM [color] | Small motion 360°, ceiling (PIR / dual tech) | nCM 9 / nCM PDT 9 |
| On/Off & Raise/Lower | nPODM DX [color] | Large motion 360°, ceiling (PIR / dual tech) | nCM 10 / nCM PDT 10 |
| Graphic Touchscreen | nPOD GFX [color] | Wide view (PIR / dual tech) | nWV 16 / nWV PDT 16 |
| Photocell controls | Model number | Wall Switch w/ Raise/Lower (PIR / dual tech) | nWSX LV DX / nWSX PDT LV DX |
| On/Off & Dimming | nCM ADCX | Cat-5 cables (plenum rated) | Model number |
| | | 10', CAT5 10FT | CAT5 10FT J1 |
| | | 15', CAT5 15FT | CAT5 15FT J1 |

NOTES

| ORDERING NOTES | |
|--|--|
| 1. Not available with finishes. | 6. Not available with white reflector. |
| 2. Refer to TECH-240 for compatible dimmers. | 7. Not available with black reflector. |
| 3. Not available with nLight® option. | 8. For dimensional changes, refer to TECH-140 . Access above ceiling required. |
| 4. 120V only. | 9. Not available with 347V. Not available with CP option. |
| 5. For use with generator supply EM power. Will require an emergency hot feed and normal hot feed. | |

TECHNICAL INFORMATION

Footcandle values are initial and tables are based on minimum of six units. For fixture-to-wall distance other than those shown, use maximum of one-to-one spacing (distance between fixtures not more than distance to wall) for best results.



Candlepower Data Footcandle values

EVO WW 35/10 4AR

INPUT WATTS: 20.5, DELIVERED LUMENS: 1012.4, LM/W=49.4, TEST NO. LTL21208

| Vertical Angle | Plane angle | | | | | | |
|----------------|-------------|-----|------|-----|-------|-----|-------|
| | Wall 22.5 | 45 | 67.5 | 90 | 112.5 | 135 | 157.5 |
| 0 | 414 | 414 | 414 | 414 | 414 | 414 | 414 |
| 5 | 401 | 407 | 418 | 431 | 442 | 450 | 456 |
| 15 | 390 | 408 | 448 | 499 | 542 | 568 | 573 |
| 25 | 328 | 349 | 419 | 514 | 593 | 628 | 630 |
| 35 | 198 | 217 | 293 | 381 | 461 | 497 | 491 |
| 45 | 143 | 161 | 191 | 194 | 185 | 207 | 208 |
| 55 | 206 | 212 | 181 | 88 | 17 | 14 | 14 |
| 65 | 192 | 184 | 152 | 62 | 7 | 6 | 6 |
| 75 | 113 | 107 | 89 | 32 | 4 | 4 | 7 |
| 85 | 30 | 25 | 20 | 4 | 1 | 1 | 1 |
| 90 | 4 | 1 | 0 | 0 | 0 | 0 | 0 |

| ft. from ceiling | Wallwash Illuminance Study (fc) | | | | | | | | |
|------------------|---------------------------------------|-----|----|-----------------------------------|-----|----|-----------------------------------|-----|----|
| | Illuminance on wall from 6 luminaires | | | | | | | | |
| | Luminaire mounted 3 ft. from wall | | | Luminaire mounted 3 ft. from wall | | | Luminaire mounted 3 ft. from wall | | |
| | 3 ft. between luminaires | | | 4 ft. between luminaires | | | 5 ft. between luminaires | | |
| | 3 | 3.5 | 4 | 3 | 3.5 | 4 | 3 | 3.5 | 4 |
| 1 | 19 | 18 | 19 | 15 | 12 | 15 | 14 | 8 | 14 |
| 2 | 23 | 24 | 23 | 17 | 17 | 17 | 15 | 13 | 15 |
| 3 | 15 | 15 | 15 | 10 | 12 | 10 | 8 | 10 | 8 |
| 4 | 11 | 11 | 11 | 8 | 9 | 8 | 6 | 7 | 6 |
| 5 | 10 | 10 | 10 | 8 | 8 | 8 | 6 | 6 | 6 |
| 6 | 9 | 9 | 9 | 7 | 7 | 7 | 6 | 6 | 6 |
| 7 | 8 | 8 | 8 | 6 | 6 | 6 | 5 | 5 | 5 |
| 8 | 7 | 7 | 7 | 5 | 5 | 5 | 4 | 4 | 4 |
| 9 | 6 | 6 | 6 | 4 | 4 | 4 | 3 | 4 | 3 |
| 10 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 3 |

EVO WW 35/14 4AR

INPUT WATTS: 26.3, DELIVERED LUMENS: 1368.2, LM/W=52.0, TEST NO. LTL21212

| Vertical Angle | Plane angle | | | | | | |
|----------------|-------------|-----|------|-----|-------|-----|-------|
| | Wall 22.5 | 45 | 67.5 | 90 | 112.5 | 135 | 157.5 |
| 0 | 606 | 606 | 606 | 606 | 606 | 606 | 606 |
| 5 | 584 | 588 | 601 | 617 | 632 | 644 | 651 |
| 15 | 553 | 577 | 632 | 698 | 753 | 783 | 790 |
| 25 | 449 | 479 | 578 | 707 | 800 | 837 | 832 |
| 35 | 270 | 286 | 389 | 510 | 609 | 659 | 653 |
| 45 | 203 | 227 | 254 | 262 | 259 | 288 | 291 |
| 55 | 275 | 286 | 251 | 132 | 28 | 26 | 30 |
| 65 | 232 | 227 | 197 | 89 | 11 | 9 | 10 |
| 75 | 133 | 128 | 111 | 44 | 7 | 7 | 8 |
| 85 | 30 | 25 | 22 | 6 | 1 | 1 | 2 |
| 90 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

| ft. from ceiling | Wallwash Illuminance Study (fc) | | | | | | | | |
|------------------|---------------------------------------|-----|----|-----------------------------------|-----|----|-----------------------------------|-----|----|
| | Illuminance on wall from 6 luminaires | | | | | | | | |
| | Luminaire mounted 3 ft. from wall | | | Luminaire mounted 3 ft. from wall | | | Luminaire mounted 3 ft. from wall | | |
| | 3 ft. between luminaires | | | 4 ft. between luminaires | | | 5 ft. between luminaires | | |
| | 3 | 3.5 | 4 | 3 | 3.5 | 4 | 3 | 3.5 | 4 |
| 1 | 23 | 21 | 23 | 18 | 15 | 18 | 17 | 10 | 17 |
| 2 | 31 | 31 | 31 | 23 | 23 | 23 | 20 | 16 | 20 |
| 3 | 20 | 21 | 20 | 15 | 16 | 15 | 11 | 14 | 11 |
| 4 | 15 | 15 | 15 | 11 | 12 | 11 | 9 | 10 | 9 |
| 5 | 14 | 13 | 14 | 10 | 10 | 10 | 8 | 8 | 8 |
| 6 | 12 | 12 | 12 | 9 | 9 | 9 | 7 | 7 | 7 |
| 7 | 11 | 10 | 11 | 8 | 8 | 8 | 7 | 7 | 7 |
| 8 | 9 | 9 | 9 | 7 | 7 | 7 | 6 | 6 | 6 |
| 9 | 8 | 8 | 8 | 6 | 6 | 6 | 5 | 5 | 5 |
| 10 | 6 | 7 | 6 | 5 | 5 | 5 | 4 | 4 | 4 |

EVO WW 35/18 4AR

INPUT WATTS: 29.0, DELIVERED LUMENS: 1682.7, LM/W=58.0, TEST NO. LTL21152

| Vertical Angle | Plane angle | | | | | | |
|----------------|-------------|-----|------|-----|-------|-----|-------|
| | Wall 22.5 | 45 | 67.5 | 90 | 112.5 | 135 | 157.5 |
| 0 | 713 | 713 | 713 | 713 | 713 | 713 | 713 |
| 5 | 683 | 691 | 708 | 729 | 747 | 760 | 769 |
| 15 | 646 | 677 | 745 | 825 | 889 | 923 | 931 |
| 25 | 519 | 560 | 679 | 832 | 945 | 985 | 977 |
| 35 | 298 | 334 | 467 | 615 | 720 | 776 | 775 |
| 45 | 224 | 256 | 301 | 310 | 315 | 351 | 361 |
| 55 | 326 | 338 | 296 | 153 | 38 | 33 | 37 |
| 65 | 267 | 262 | 228 | 103 | 15 | 11 | 12 |
| 75 | 145 | 143 | 126 | 52 | 9 | 9 | 11 |
| 85 | 33 | 28 | 25 | 6 | 1 | 2 | 3 |
| 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| ft. from ceiling | Wallwash Illuminance Study (fc) | | | | | | | | |
|------------------|---------------------------------------|-----|----|-----------------------------------|-----|----|-----------------------------------|-----|----|
| | Illuminance on wall from 6 luminaires | | | | | | | | |
| | Luminaire mounted 3 ft. from wall | | | Luminaire mounted 3 ft. from wall | | | Luminaire mounted 3 ft. from wall | | |
| | 3 ft. between luminaires | | | 4 ft. between luminaires | | | 5 ft. between luminaires | | |
| | 3 | 3.5 | 4 | 3 | 3.5 | 4 | 3 | 3.5 | 4 |
| 1 | 26 | 24 | 26 | 21 | 17 | 21 | 19 | 11 | 19 |
| 2 | 36 | 36 | 36 | 27 | 26 | 27 | 24 | 19 | 24 |
| 3 | 23 | 24 | 23 | 16 | 19 | 16 | 13 | 16 | 13 |
| 4 | 17 | 17 | 17 | 13 | 14 | 13 | 10 | 11 | 10 |
| 5 | 16 | 15 | 16 | 12 | 12 | 12 | 9 | 10 | 9 |
| 6 | 14 | 15 | 14 | 11 | 11 | 11 | 9 | 9 | 9 |
| 7 | 12 | 12 | 12 | 9 | 10 | 9 | 8 | 8 | 8 |
| 8 | 11 | 11 | 11 | 8 | 8 | 8 | 7 | 7 | 7 |
| 9 | 9 | 9 | 9 | 7 | 7 | 7 | 6 | 6 | 6 |
| 10 | 8 | 8 | 8 | 6 | 6 | 6 | 5 | 5 | 5 |

PHOTOMETRY NOTES

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 83 typical.
- Consult factory or IES file for microgroove baffle, black cone or other photometric reports.

Choose Wall Controls.

nLIGHT offers multiple styles of wall controls – each with varying features and user experience.



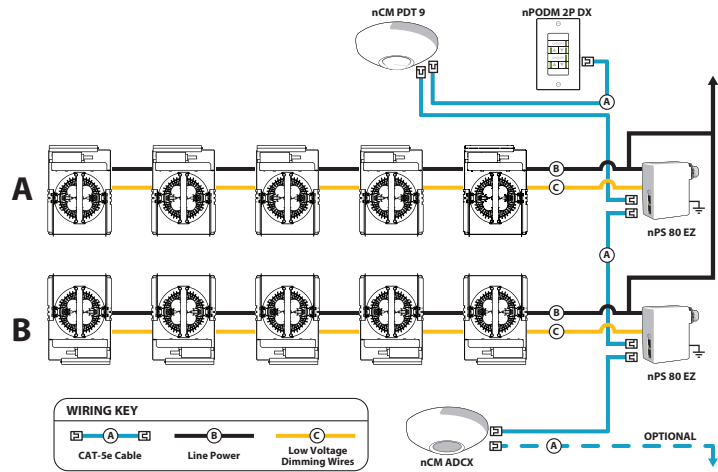
Push-Button WallPod
Traditional tactile buttons and LED user feedback



Touch WallPod
Contemporary capacitive touch style buttons with audible clicker for user feedback



Graphic WallPod
Full color touch screen provides a sophisticated look and feel



EXAMPLE

Group Fixture Control*

*Application diagram applies for fixtures with eldoLED drivers only.

nPS 80 EZ Dimming/Control Pack (qty 2 required)

nPODM 2P DX Dual On/Off/Dim Push-Button WallPod

nCM ADCX Daylight Sensor with Automatic Dimming Control

nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.

ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- Lumen packages suitable for ceiling heights ranging from 8' to over 50'
- Efficacies up to 80 lm/w
- Superior-quality white LED light output using Chip on Board technology
- No harmful ultraviolet or infrared wavelengths
- No lead or mercury



PRODUCT SPECIFICATIONS

Optics

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

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

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

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

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

Electrical

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

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

LED Driver: Power factor >0.9

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

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

Mechanical

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

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

Labels and Listings

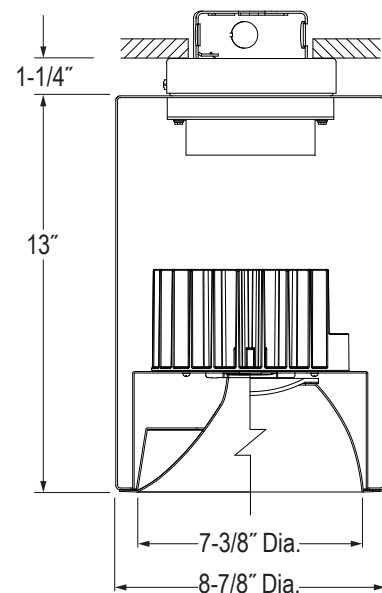
- UL listed for damp locations
- UL and cUL, RoHS compliant • EMI complies with FCC 47, Part 15, Class A
- Energy Star qualified, see back page for designated products
- I.B.E.W. Union made • ARRA Compliant

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

**800 TO 4000 LUMEN
8" LED CYLINDER**
HYPERBOLIC/PARABOLIC/WALLWASH
OPEN APERTURE
LC8 SERIES

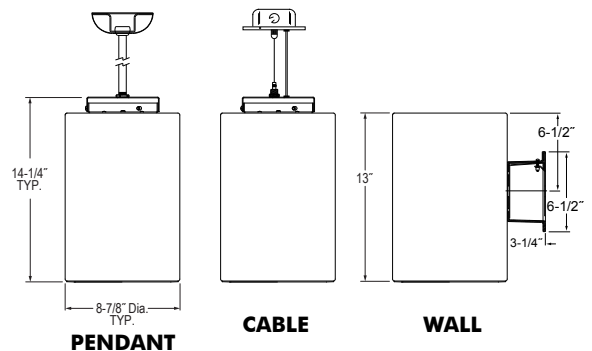
| | |
|----------------|----------|
| Type | Cat. No. |
| _____ | _____ |
| Project: _____ | |
| Notes: _____ | |

DIMENSIONS



SURFACE MOUNT

Mounting Detail:



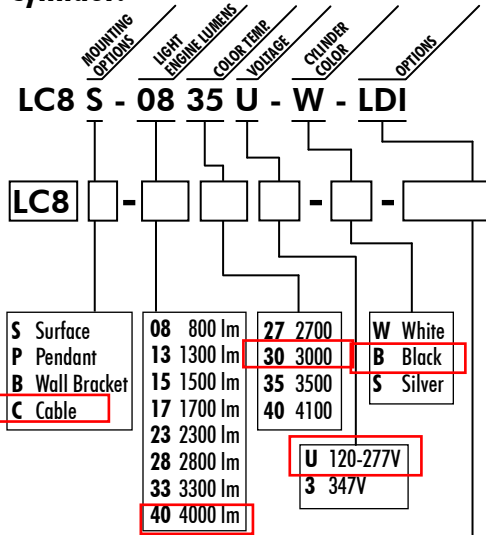
PENDANT

CABLE

WALL



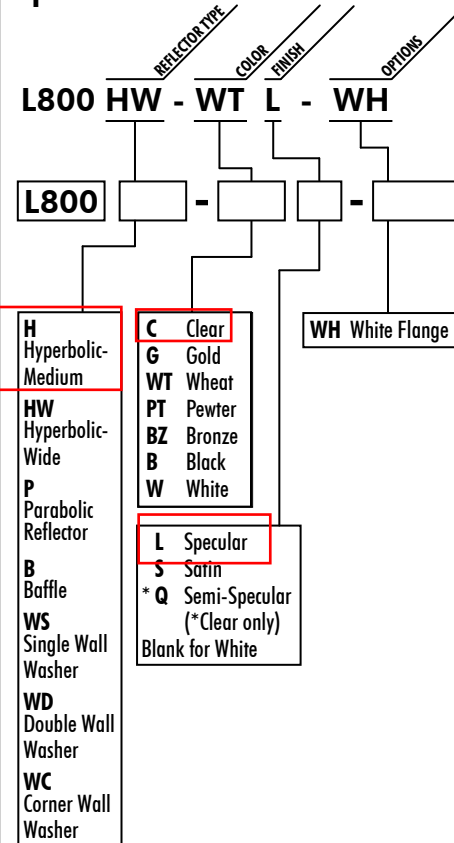
Cylinder:



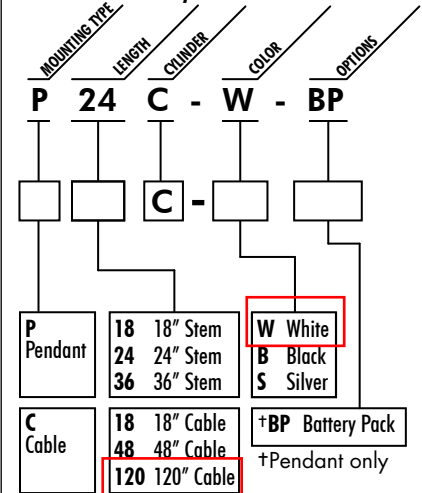
- F** Fuse and Fuse Holder
- † **BR** Emergency Battery Pack W/ Remote Test Switch
- ♦ **PD** Driver compatible with 3-Wire Fluorescent Controls & Lutron Programmable Dimming EcoSystem®
- ♦ **FDL** Forward Phase Dimming Lutron Driver - 120V only (2-wire dimming, neutral wire required)
- LDI** Lumen Depreciation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

- Dimming option not available for cable mount with Emergency Battery Pack
- ♦ Not available for 4000 Lumen units

Optics:



Pendant Kits/Accessories:



ENGINEERING DATA

| Voltage | 120V | | | | | | | | 277V | | | | | | | | 347V | | | | | | | |
|------------------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|-------|-------|-------|--------------------------|-------|-------|-------|-------|-------|-------|-------|
| | Light Engine Lumens | 800 | 1300 | 1500 | 1700 | 2300 | 2800 | 3300 | 4000 | 800 | 1300 | 1500 | 1700 | 2300 | 2800 | 3300 | 4000 | 800 | 1300 | 1500 | 1700 | 2300 | 2800 | 3300 |
| CCT | 2700K/3000K/3500K/4000K | | | | | | | | 2700K/3000K/3500K/4000K | | | | | | | | (270K/3000K/3500K/4000K) | | | | | | | |
| Input Current | 0.074 | 0.12 | 0.148 | 0.174 | 0.238 | 0.302 | 0.315 | 0.368 | 0.041 | 0.063 | 0.075 | 0.086 | 0.123 | 0.15 | 0.161 | 0.179 | 0.03 | 0.047 | 0.057 | 0.065 | 0.082 | 0.082 | 0.117 | 0.123 |
| Input Wattage | 8.8 | 14.3 | 17.6 | 20.7 | 28.2 | 35.7 | 36.9 | 43.6 | 10.2 | 15.3 | 18.4 | 21.2 | 28.4 | 35.5 | 36.9 | 43.1 | 10.4 | 16.0 | 19.2 | 22.4 | 30.7 | 39.4 | 40.7 | 48.4 |
| Input Frequency | 50/60Hz | | | | | | | | 50/60Hz | | | | | | | | 50/60Hz | | | | | | | |
| THD% | 10.59 | 12.34 | 13.53 | 13.08 | 13.73 | 14.41 | 18.52 | 15.65 | 14.81 | 20.26 | 20.42 | 21.56 | 21.09 | 23.33 | 28.86 | 23.92 | 15.18 | 15.95 | 17.15 | 18.08 | 18.3 | 18.02 | 22.69 | 17.96 |
| Power Factor | 0.990 | 0.988 | 0.985 | 0.987 | 0.984 | 0.984 | 0.975 | 0.984 | 0.894 | 0.878 | 0.874 | 0.892 | 0.836 | 0.852 | 0.826 | 0.871 | 0.989 | 0.980 | 0.976 | 0.973 | 0.963 | 0.967 | 0.950 | 0.970 |

Energy Star Qualified: LC8X; L800H/HW

| Product # | Fixture Configurations = Energy Star |
|---|--|
| LC8-(XX)(YY)U; L800H-(CC)(F) L800HW-(CC)(F) | Lumen Package: 800/1300/1500/1700/2300/2800/3300/4000 (XX = 08, 13, 15, 17, 23, 28, 33, 40) CCT: 2700K / 3000K / 3500K / 4000K (YY = 27, 30, 35, 40) Reflector Color: Clear/Gold/Wheat/Pewter/Bronze/Black/White (CC = C, G, WT, PT, BZ, B, W) Reflector Finish: Specular / Satin / Semi-Specular (F = L, S, Q) |
| 347V Only LC8-(XX)(YY)3; L800H-C(F) L800HW-C(F) | Lumen Package: 1500/1700/2300/2800/3300/4000 (XX = 15, 17, 23, 28, 33, 40) CCT: 2700K / 3000K / 3500K / 4000K (YY = 27, 30, 35, 40) Reflector Finish: Specular / Satin / Semi-Specular (F = L, S, Q) |

Energy Star Qualified: LC8X; L800P

| Product # | Fixture Configurations = Energy Star |
|--|--|
| LC8-(XX)(YY)U; L800P-C(F) | Lumen Package: 800/1300/1500/1700/2300/2800/3300/4000 (XX = 08, 13, 15, 17, 23, 28, 33, 40) CCT: 2700K / 3000K / 3500K / 4000K (YY = 27, 30, 35, 40) Reflector Finish: Specular / Satin / Semi-Specular (F = L, S, Q) |
| 347V Only LC8-(XX)(YY)3; L800P-C(F) | Lumen Package: 1500/1700/2300/2800/3300/4000 (XX = 15, 17, 23, 28, 33, 40) CCT: 2700K / 3000K / 3500K / 4000K (YY = 27, 30, 35, 40) Reflector Finish: Specular / Semi-Specular (F = L, Q) |



Catalog Number: LC8S-4035U-W; L800HW-CL
PHOTOMETRIC REPORT
Test Number: PR01121152
Total Lumen Output: 3349 Lumens
Luminaire Efficacy: 73.6 lm/w (35K)
Luminaire Spacing Criteria: 1.07
Luminaire: Clear Specular Alzak® reflector. Open bottom, wide distribution
CIE-Type: Direct



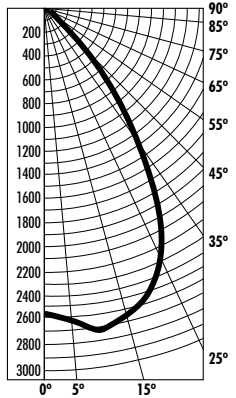
Initial Footcandles

Table with 4 columns: Distance to Illuminated Plane (Feet), Footcandles Beam Center, Footcandles Beam Edge, Beam Diameter. Rows for distances 6' to 15'.

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Table with 4 columns: Luminaire Spacing, RCR1, RCR4, RCR8. Rows for spacings 5' x 5' to 12' x 12'.



CCT MULTIPLIER: (3300-4000 Lumens) 27K 3K 35K 4K .87 .96 Baseline 1.02

Candlepower Distribution (Candelas)

Table with 3 columns: Angle, Candela, Lumens. Rows for angles 0° to 85°.

Lumiance Data

Table with 2 columns: Angle in Degrees, Candela/M². Rows for angles 45° to 85°.

Zonal Lumen Summary

Table with 3 columns: Zone, Lumens, %Fixture. Rows for zones 0-30°, 0-40°, 0-60°, 0-90°, 90-180°, 0-180°.

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

Table with 13 columns: PCC, 80, 70, 50, 30, 10, 0. Rows for PCC values 0 to 10.

Catalog Number: LC8S-1540U-W; L800HW-CL
PHOTOMETRIC REPORT
Test Number: PR01121172
Total Lumen Output: 1431 Lumens
Luminaire Efficacy: 79.0 lm/w (4K)
Luminaire Spacing Criteria: 1.07
Luminaire: Clear Specular Alzak® reflector. Open bottom, wide distribution
CIE-Type: Direct



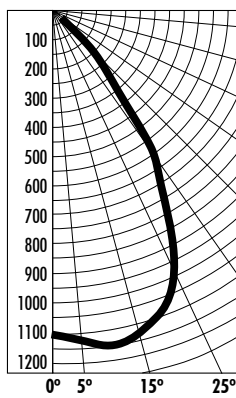
Initial Footcandles

Table with 4 columns: Distance to Illuminated Plane (Feet), Footcandles Beam Center, Footcandles Beam Edge, Beam Diameter. Rows for distances 6' to 15'.

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Table with 4 columns: Luminaire Spacing, RCR1, RCR4, RCR8. Rows for spacings 5' x 5' to 12' x 12'.



CCT MULTIPLIER: (800-2800 Lumens) 27K 3K 35K 4K .83 .92 .93 Baseline

Candlepower Distribution (Candelas)

Table with 3 columns: Angle, Candela, Lumens. Rows for angles 0° to 85°.

Lumiance Data

Table with 2 columns: Angle in Degrees, Candela/M². Rows for angles 45° to 85°.

Zonal Lumen Summary

Table with 3 columns: Zone, Lumens, %Fixture. Rows for zones 0-30°, 0-40°, 0-60°, 0-90°, 90-180°, 0-180°.

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

Table with 13 columns: PCC, 80, 70, 50, 30, 10, 0. Rows for PCC values 0 to 10.

Catalog Number: LC8S-4035U-W; L800P-CL
PHOTOMETRIC REPORT
Test Number: PR01120962
Total Lumen Output: 3131 Lumens
Luminaire Efficacy: 68.8 lm/w (35K)
Luminaire Spacing Criteria: 0.87
Luminaire: Clear specular Alzak® reflector with regressed frosted glass len.
CIE-Type: Direct



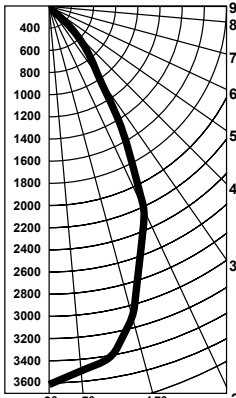
Initial Footcandles

Table with 4 columns: Distance to Illuminated Plane (Feet), Footcandles Beam Center, Footcandles Beam Edge, Beam Diameter. Rows for distances 6' to 15'.

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Table with 4 columns: Luminaire Spacing, RCR1, RCR4, RCR8. Rows for spacings 5' x 5' to 12' x 12'.



CCT MULTIPLIER: (3300-4000 Lumens) 27K 3K 35K 4K .87 .96 Baseline 1.02

Candlepower Distribution (Candelas)

Table with 3 columns: Angle, Candela, Lumens. Rows for angles 0° to 85°.

Lumiance Data

Table with 2 columns: Angle in Degrees, Candela/M². Rows for angles 45° to 85°.

Zonal Lumen Summary

Table with 3 columns: Zone, Lumens%, %Fixture. Rows for zones 0-30°, 0-40°, 0-60°, 0-90°, 90-180°, 0-180°.

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

Table with 13 columns: PCC, 80, 70, 50, 30, 10, 0. Rows for PCC values 0 to 10.

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents a baseline of performance for the fixture. Results may vary in the field.



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Catalog Number: **LC8S-1540U-W; L800P-CL**
PHOTOMETRIC REPORT
 Test Number: PR01121067
 Total Lumen Output: 1279 Lumens
 Luminaire Efficacy: 70.6 lm/w (4K)
 Luminaire Spacing Criteria: 0.89
 Luminaire: Clear specular Alzak® reflector with regressed frosted glass lens.
 CIE-Type: Direct



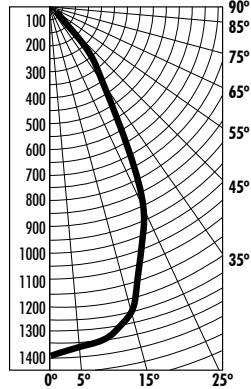
Initial Footcandles

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Footcandles Beam Edge | Beam Diameter |
|--------------------------------------|-------------------------|-----------------------|---------------|
| 6' | 38.8 | 13.0 | 6.6' |
| 7' | 28.5 | 9.6 | 7.7' |
| 8' | 21.8 | 7.3 | 8.8' |
| 9' | 17.2 | 5.8 | 9.9' |
| 10' | 14.0 | 4.7 | 11.0' |
| 11' | 11.4 | 3.9 | 12.1' |
| 12' | 9.7 | 3.3 | 13.2' |
| 13' | 8.3 | 2.8 | 14.3' |
| 14' | 7.1 | 2.4 | 15.4' |
| 15' | 6.2 | 2.1 | 16.5' |

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 20% Floors

| Luminaire Spacing | Room Cavity Ratio | | |
|-------------------|-------------------|------|------|
| | RCR1 | RCR4 | RCR8 |
| 5' x 5' | 57 | 46 | 36 |
| 6' x 6' | 39 | 32 | 25 |
| 7' x 7' | 29 | 23 | 18 |
| 8' x 8' | 22 | 18 | 14 |
| 9' x 9' | 18 | 14 | 11 |
| 10' x 10' | 14 | 12 | 9 |
| 11' x 11' | 12 | 10 | 7 |
| 12' x 12' | 10 | 8 | 6 |



CCT MULTIPLIER:
 (800-2800 Lumens)
 27K 3K 35K 4K
 .83 .92 .93 Baseline

Candlepower Distribution
 (Candelas)

| Angle | Candela | Lumens |
|-------|---------|--------|
| 0° | 1396 | |
| 5° | 1369 | 131 |
| 15° | 1258 | 357 |
| 25° | 915 | 423 |
| 35° | 407 | 256 |
| 45° | 140 | 109 |
| 55° | 0 | 0 |
| 65° | 0 | 0 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |

Luminance Data

| Angle in Degrees | Candela/M ² |
|------------------|------------------------|
| 45° | 6953 |
| 55° | 0 |
| 65° | 0 |
| 75° | 0 |
| 85° | 0 |

Zonal Lumen Summary

| Zone | Lumens | %Fixture |
|---------|--------|----------|
| 0-30° | 911 | 71.2 |
| 0-40° | 1166 | 91.2 |
| 0-60° | 1275 | 99.7 |
| 0-90° | 1278 | 100.0 |
| 90-180° | 0 | 0.0 |
| 0-180° | 1278 | 100.0 |

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

| PCC | 80 | | 70 | | 50 | | 30 | | 10 | | 0 | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| | PW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | | | | |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 105 | 105 | 105 | 101 | 101 | 101 | 99 |
| 1 | 112 | 109 | 107 | 105 | 110 | 107 | 105 | 103 | 103 | 102 | 100 | 100 | 98 | 97 | 96 | 95 | 94 | 92 |
| 2 | 107 | 102 | 98 | 94 | 104 | 100 | 96 | 93 | 97 | 94 | 91 | 94 | 92 | 89 | 91 | 89 | 88 | 86 |
| 3 | 101 | 95 | 90 | 86 | 99 | 94 | 89 | 85 | 91 | 87 | 84 | 88 | 85 | 83 | 86 | 84 | 81 | 80 |
| 4 | 96 | 89 | 83 | 79 | 94 | 87 | 82 | 78 | 85 | 81 | 78 | 83 | 80 | 77 | 82 | 78 | 76 | 74 |
| 5 | 91 | 83 | 77 | 73 | 90 | 82 | 77 | 72 | 80 | 75 | 72 | 79 | 74 | 71 | 77 | 73 | 71 | 69 |
| 6 | 87 | 78 | 72 | 67 | 85 | 77 | 71 | 67 | 75 | 70 | 67 | 74 | 70 | 66 | 73 | 69 | 66 | 64 |
| 7 | 82 | 73 | 67 | 63 | 81 | 72 | 67 | 63 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 65 | 62 | 60 |
| 8 | 78 | 69 | 63 | 59 | 77 | 68 | 62 | 58 | 67 | 62 | 58 | 66 | 61 | 58 | 65 | 61 | 58 | 56 |
| 9 | 74 | 65 | 59 | 55 | 73 | 64 | 59 | 55 | 63 | 58 | 55 | 62 | 58 | 54 | 62 | 57 | 54 | 53 |
| 10 | 71 | 61 | 55 | 52 | 70 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 58 | 54 | 51 | 50 |

WALLWASH PERFORMANCE DATA

LUMINAIRES SPACED 2' FROM WALL

Catalog Number: LC8S-4035U-W; L800WS-CQ

Spread: Single Wall

| Single Unit | Lamp | Multiple Units On 2' Centers* | | Multiple Units On 3' Centers* | | Multiple Units On 4' Centers* | | |
|--|------|-------------------------------|----|-------------------------------|----|-------------------------------|----|--|
| | | Spaced 2' From Wall | | Spaced 2' From Wall | | Spaced 2' From Wall | | |
| Lateral Distance From Fixture 2' From Wall | | BRXA W3500 35K | | | | | | |
| Distance From Ceiling | | CL | | CL | | CL | | |
| 0' 1' 2' 3' 4' 5' | | CL | CL | CL | CL | CL | CL | |
| 26 19 9 4 3 3 | 1' | 46 | 45 | 46 | 35 | 30 | 35 | |
| 43 30 14 7 4 3 | 2' | 74 | 71 | 74 | 56 | 46 | 56 | |
| 52 41 19 8 5 4 | 3' | 94 | 95 | 94 | 68 | 63 | 68 | |
| 32 29 22 11 5 4 | 4' | 78 | 77 | 78 | 53 | 56 | 53 | |
| 22 20 16 12 7 4 | 5' | 61 | 62 | 61 | 44 | 42 | 44 | |
| 16 15 13 11 8 5 | 6' | 51 | 51 | 51 | 37 | 37 | 37 | |
| 13 12 11 9 7 6 | 7' | 43 | 44 | 43 | 32 | 32 | 32 | |
| 11 10 9 8 7 6 | 8' | 37 | 38 | 37 | 29 | 28 | 29 | |
| 8 8 7 6 5 5 | 9' | 30 | 30 | 30 | 23 | 24 | 23 | |

LUMINAIRES SPACED 3' FROM WALL

Catalog Number: LC8S-4035U-W; L800WS-CQ

Spread: Single Wall

| Single Unit | Lamp | Multiple Units On 3' Centers* | | Multiple Units On 4' Centers* | | Multiple Units On 6' Centers* | | |
|--|------|-------------------------------|----|-------------------------------|----|-------------------------------|----|--|
| | | Spaced 3' From Wall | | Spaced 3' From Wall | | Spaced 3' From Wall | | |
| Lateral Distance From Fixture 3' From Wall | | BRXA W3500 35K | | | | | | |
| Distance From Ceiling | | CL | | CL | | CL | | |
| 0' 1' 2' 3' 4' 5' | | CL | CL | CL | CL | CL | CL | |
| 11 10 7 5 3 3 | 1' | 20 | 20 | 20 | 17 | 15 | 17 | |
| 17 15 11 7 5 4 | 2' | 31 | 30 | 31 | 25 | 23 | 25 | |
| 22 18 13 8 6 5 | 3' | 38 | 36 | 38 | 31 | 28 | 31 | |
| 28 24 16 10 6 5 | 4' | 46 | 46 | 46 | 38 | 34 | 38 | |
| 21 20 17 12 7 5 | 5' | 44 | 44 | 44 | 33 | 36 | 33 | |
| 16 16 14 11 9 6 | 6' | 39 | 38 | 39 | 31 | 30 | 31 | |
| 13 13 11 10 9 7 | 7' | 34 | 35 | 34 | 27 | 27 | 27 | |
| 11 11 9 8 7 7 | 8' | 30 | 31 | 30 | 24 | 25 | 24 | |
| 9 8 7 7 6 6 | 9' | 25 | 26 | 25 | 20 | 20 | 20 | |

*Based on minimum of five luminaires. Reflectances: 80, 50, 20. Values are rounded to nearest whole footcandle.

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents a baseline of performance for the fixture. Results may vary in the field.



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WALLWASH PERFORMANCE DATA

LUMINAIRES SPACED 4' FROM WALL

Catalog Number: LC8S-4035U-W; L800WS-CQ

Spread: Single Wall

CCT MULTIPLIER:
(3300-4000 Lumens)
27K 3K 35K 4K
.87 .96 Baseline 1.02

| Single Unit | | | | | | Lamp | Multiple Units On 3' Centers* | | | Multiple Units On 4' Centers* | | | Multiple Units On 6' Centers* | | |
|--|----|----|----|----|----|-----------------------|----------------------------------|----|----|----------------------------------|----|----|----------------------------------|----|----|
| Lateral Distance From Fixture 4' From Wall | | | | | | BRXA W3500 35K | Spaced 3' From Wall | | | Spaced 3' From Wall | | | Spaced 3' From Wall | | |
| 0' | 1' | 2' | 3' | 4' | 5' | Distance From Ceiling | CL | CL | CL | CL | CL | CL | CL | CL | |
| 7 | 6 | 5 | 4 | 4 | 3 | 1' | 15 | 15 | 15 | 12 | 12 | 12 | 10 | 8 | 10 |
| 10 | 10 | 8 | 6 | 5 | 4 | 2' | 22 | 22 | 22 | 18 | 18 | 18 | 14 | 11 | 14 |
| 13 | 12 | 9 | 7 | 6 | 5 | 3' | 27 | 27 | 27 | 22 | 21 | 22 | 16 | 13 | 16 |
| 15 | 13 | 10 | 8 | 7 | 5 | 4' | 31 | 30 | 31 | 25 | 24 | 25 | 19 | 15 | 19 |
| 18 | 17 | 13 | 9 | 7 | 6 | 5' | 37 | 37 | 37 | 29 | 28 | 29 | 22 | 17 | 22 |
| 16 | 15 | 14 | 11 | 8 | 6 | 6' | 38 | 38 | 38 | 29 | 30 | 29 | 20 | 20 | 20 |
| 13 | 13 | 12 | 10 | 9 | 7 | 7' | 35 | 35 | 35 | 28 | 27 | 28 | 18 | 19 | 18 |
| 11 | 11 | 10 | 8 | 8 | 7 | 8' | 31 | 32 | 31 | 25 | 25 | 25 | 18 | 16 | 18 |
| 9 | 8 | 8 | 7 | 7 | 6 | 9' | 26 | 27 | 26 | 21 | 21 | 21 | 15 | 13 | 15 |

*Based on minimum of five luminaires. Reflectances: 80, 50, 20. Values are rounded to nearest whole footcandle.



Appendix B // Equipment Cutsheets



BARZ™ - Saranté®

>Linear Laminate Metal Ceiling System

Description: Barz™ is a linear ceiling system consisting of precision, factory detailed panels attached to a concealed carrier suspended from the structure above. A variety of perimeter and transition details are available with the Barz™ system. Torsion spring attachment of cassette allows for easy access.

Finishes: Ceilings Plus® offers a variety of PVC freelaminates finishes applied to metal. Ceilings Plus® will explore unique finish selections at the request of the specifier. Consult factory for possibilities.
Materials available with:

- Aluminum with up to 85% recycled content.
- Faux Laminates – Saranté®
- No VOCs
- No added urea formaldehyde
- PVC Free

Cassettes: Individual linear members are joined together via factory mounted backer channels to create cassettes. Cassettes are sized for access needs.

- Bar Width: Minimum 1" (consult factory for possibilities).
- Bar Height: Up to 12" maximum.
- Cassette Width: 18" to 36" maximum.
- Cassette Lengths: 8' maximum. Panels can be joined together with internal splices.
- Light Weight: 1.5 lbs per sf (approximately)

Perforations: A variety of perforation patterns are available. Consultation with Ceilings Plus® advised prior to final selection.

Acoustics: Noise reduction may be achieved by perforating the surface and combining with absorptive backing. A variety of sound absorbing backings are available. Ceilings Plus® can supply absorbing material which can achieve NRC values ranging from .65 - .95. Consult factory for guidance. To learn more about acoustics, see Acoustics in the [Learning Center](#) portion of the Ceilings Plus® website.

Suspension System: Barz™ suspension system is ICC approved in accordance with International Building Code standards for Seismic Categories A, B, C, D, E, and F. Calculations to support slotted grid and "heavy duty" ratings are available upon request.

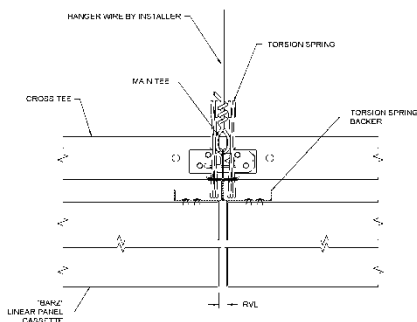
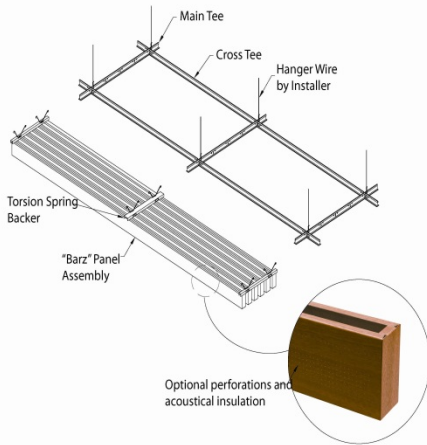
Test Reports

Ceilings Plus has developed The Barz™ ceiling systems to meet ASTM 635, ASTM 636 and typical local building code requirements. Test reports for suspension system performance may be available upon written request.

Integration: Barz™ can accommodate pendant mount, linear, incandescent and nearly all lighting elements. Air distributors, speakers, sprinklers, and other ceiling attached accessories can also be supported.

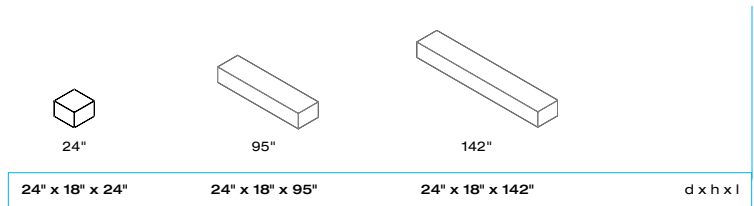
Fire Classification: Barz™ product line is Class I, 0-25 Flame Spread as tested in accordance with ASTM E84.

Exterior: Barz™ can be specified for an exterior application using specific materials as noted in the [Wood Finishes](#) section of the Ceilings Plus® website. Consult the factory regarding specific wind load requirements for exterior applications. Exterior utilizes positive fasteners for required load.



Socrates Specifications

Socrates is a backless Cast Stone bench with a polished finish. Available in three lengths: 24", 95" and 142". Socrates is polished and waterproofed and available in Grey, Black, White and Beige. Socrates can be freestanding, or embedded.



Sense of Place

We believe in the power of design and its ability to elevate public spaces. Landscape Forms provides great design, integrated product collections, and leading edge technology for creating a sense of place in outdoor environments.

Material

Cast Stone is a proprietary mixture of cement, water and aggregate (stone) used for casting thick, heavy pieces. Cast stone has the strength to support massive geometries.

The colors of Escofet cast stone products are neutral, muted and earth-toned and are derived from the aggregates used in casting. No color is added in manufacture and no color is applied to finished products. The color range of every Escofet cast stone product is pre-determined by the formulation used in its manufacture.

Cast stone products do not require any specific maintenance during their estimated lifespan of more than 30 years. Water absorption and freeze-thaw cycles can cause weathering, a reproduction of the process that takes place in natural rock. Escofet applies a waterproof finish to its products to protect against this process.

Escofet cast stone products are large and heavy. Shipping, receiving, staging and installing these pieces is more akin to handling large statuary or pre-fabricated architectural elements. See installation guide for important information.

To Specify

To order Specify Socrates, and bench length. Specify standard color. Select freestanding or embedded. Visit landscapeforms.com for standard color options.

Join the conversation on our blog:
insite.landscapeforms.com

landscapeforms.com

Visit our website for product details, color charts, technical sheets, sales office locations. Download JPG images, brochure PDF, CAD details, CSI specifications.

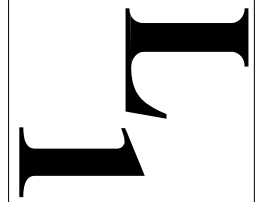
Socrates is designed by Garcés-Soria/Escofet. Specifications are subject to change without notice. Landscape Forms supports the Landscape Architecture Foundation at the Second Century level.
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Appendix C // Lighting Design CDs



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LUBIN-O'DONNELL CENTER

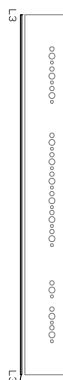
CENTER FOR PERFORMING ARTS, ATHLETICS AND WELLNESS
BOSTON, MASSACHUSETTS

LANDSCAPE LIGHTING PLAN

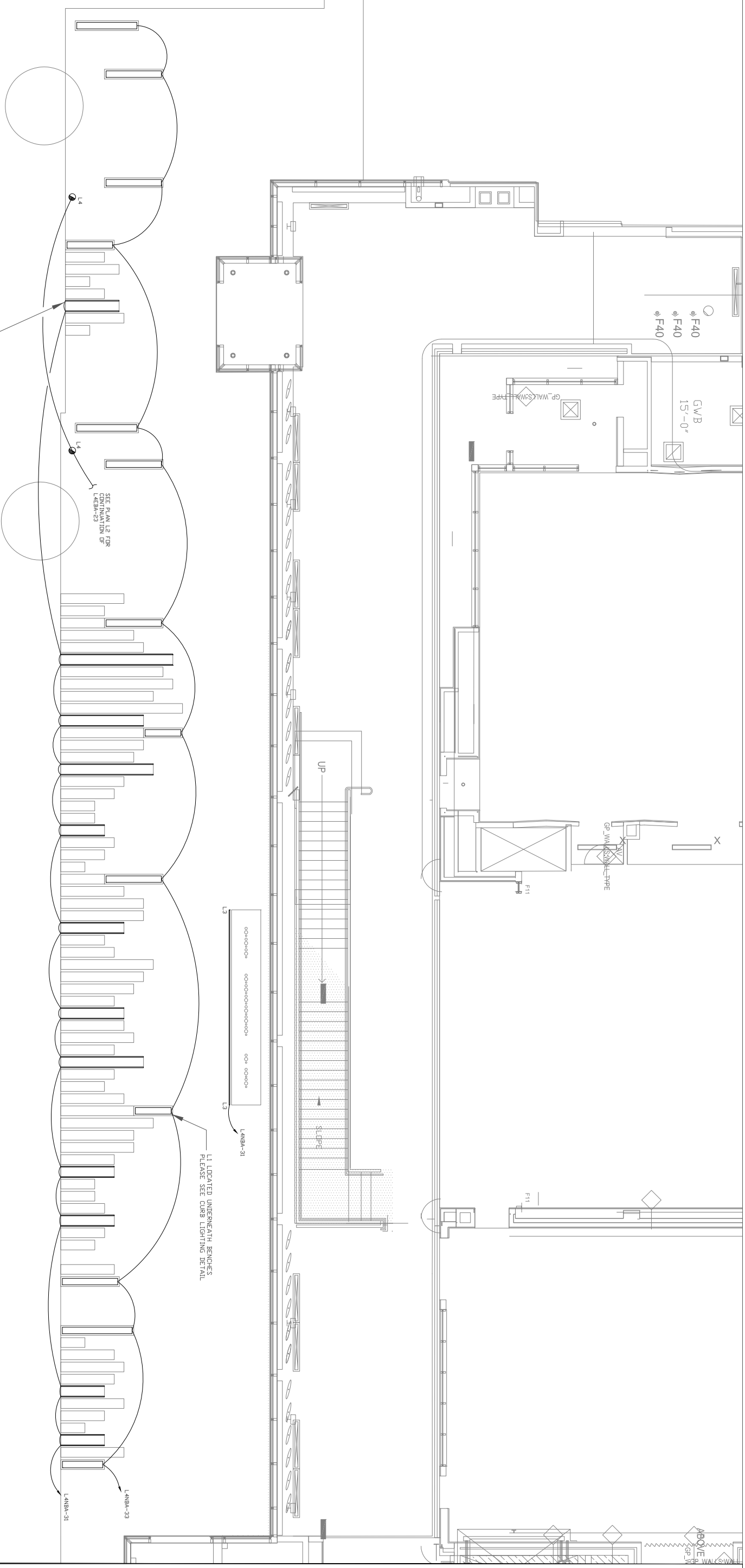
L3 LOCATED IN-GRADE
PLACE IN FRONT OF PERENNIALS
SEE LANDSCAPE PLAN FOR INFORMATION

SEE PLAN L2 FOR
LUMINAIR LAYOUT
L2

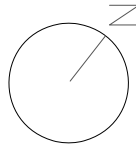
L1 LOCATED UNDERNEATH BENCHES
PLEASE SEE CURB LIGHTING DETAIL

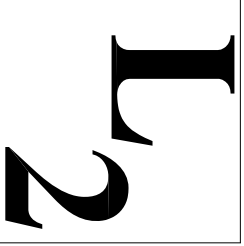
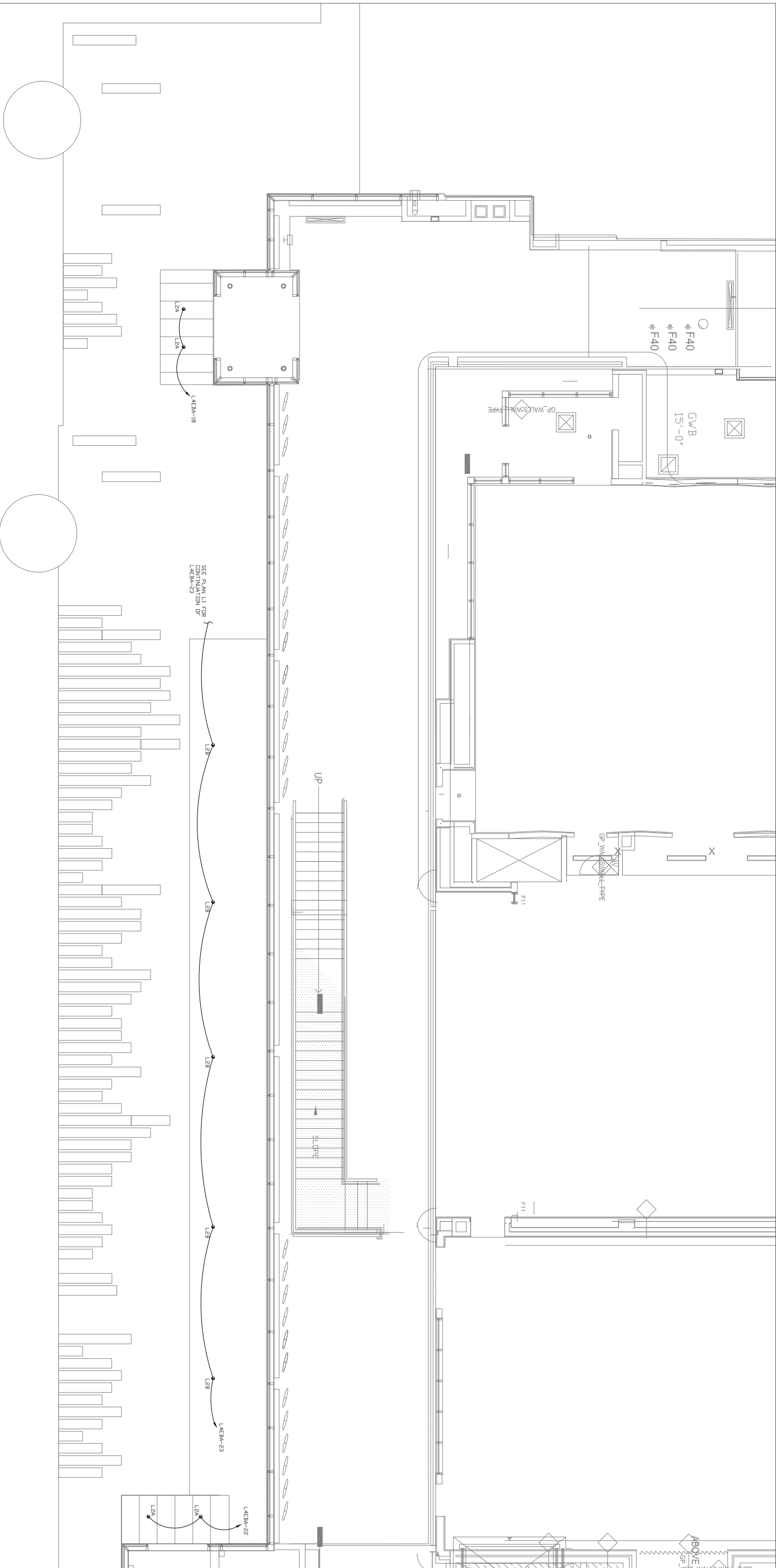


L3
L1



SCALE : 3/32" = 1'

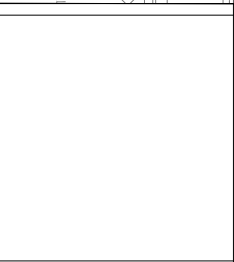
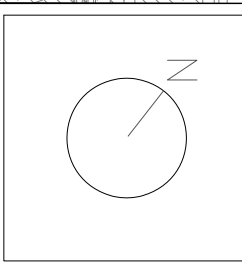


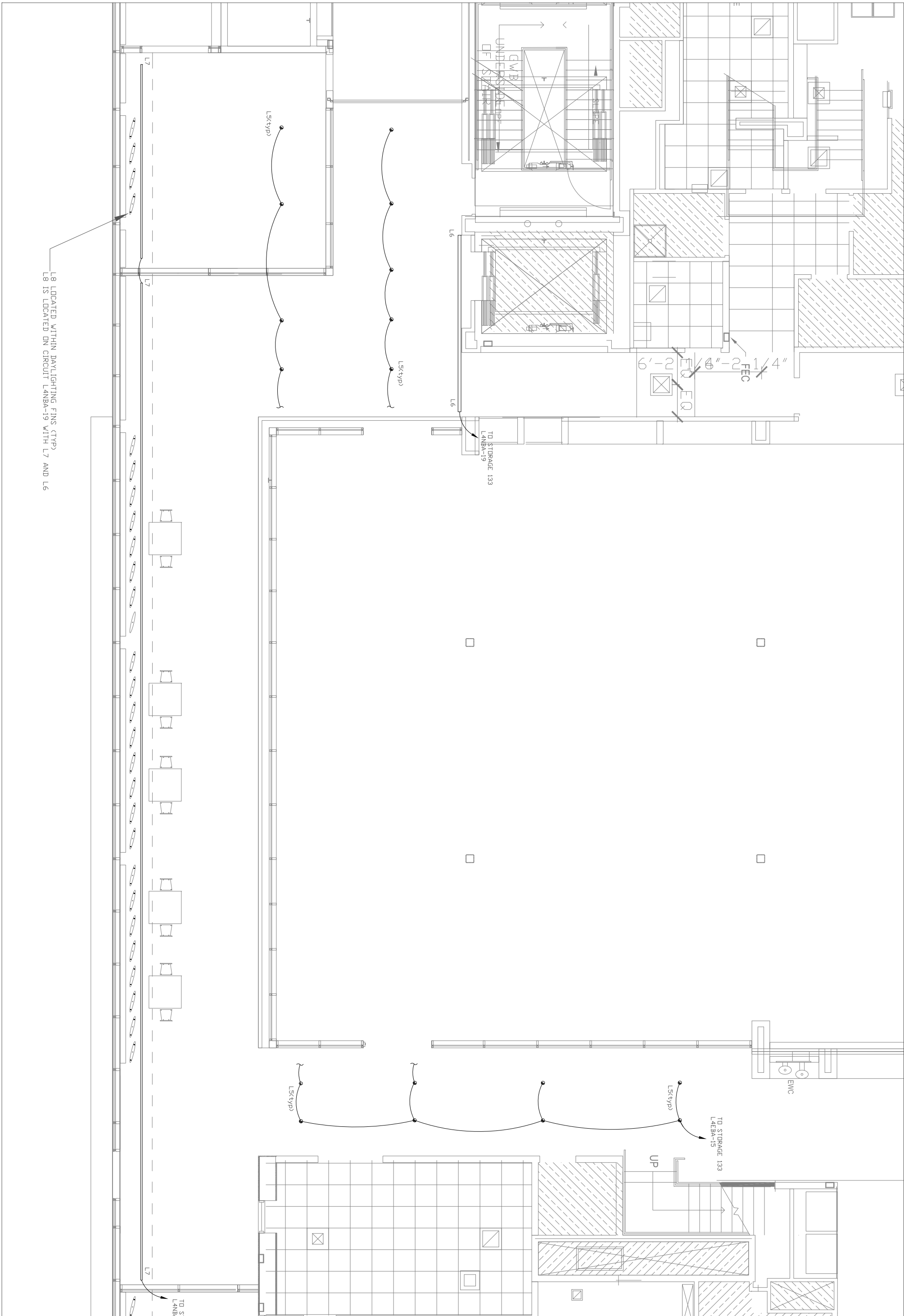


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LUBIN-O'DONNELL CENTER
 CENTER FOR PERFORMING ARTS, ATHLETICS AND WELLNESS
 BOSTON, MASSACHUSETTS
 LANDSCAPE LIGHTING RCP

SCALE : 3/32" = 1'



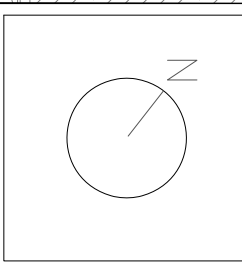


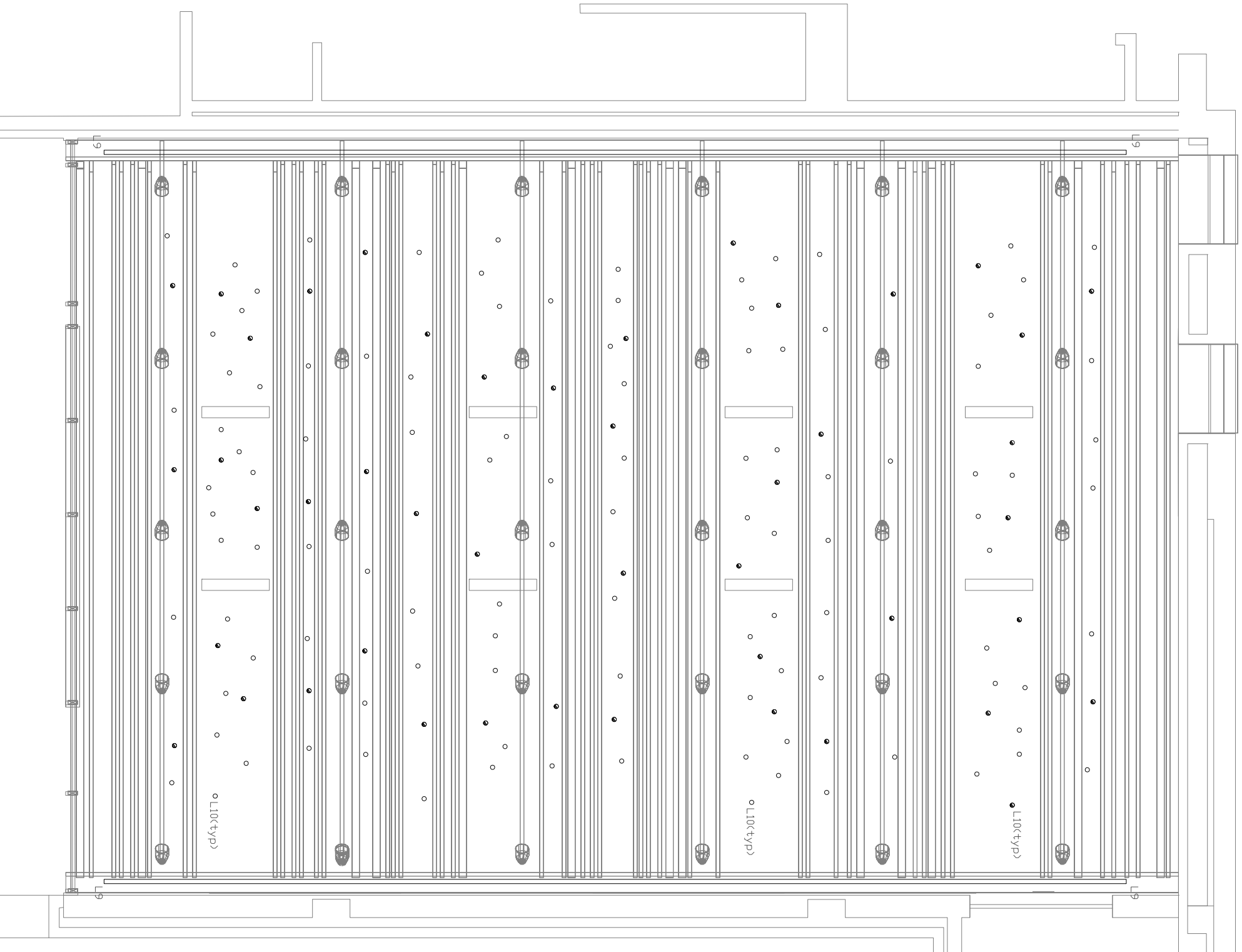
L3

4 • 8 • 15

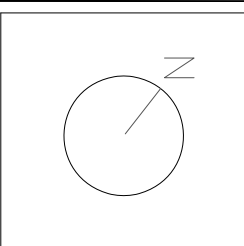
LUBIN-O'DONNELL CENTER
 CENTER FOR PERFORMING ARTS, ATHLETICS AND WELLNESS
 BOSTON, MASSACHUSETTS
 WELLNESS CORRIDOR LIGHTING RCP

SCALE : 1/8" = 1'





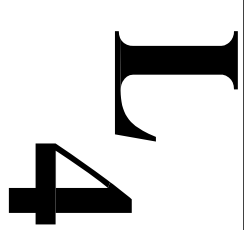
- ① ALL EMERGENCY L10 FIXTURES WILL BE CIRCUITED TOGETHER ON CIRCUIT L4EBA-17 TO THE DANCE/DRAMA STORAGE 114A
- ② ALL NON-EMERGENCY L9 FIXTURES WILL BE CIRCUITED TOGETHER ON CIRCUIT L4NBA-28 TO THE DANCE/DRAMA STORAGE 114A
- ③ ALL NON-EMERGENCY L10 FIXTURES WILL BE CIRCUITED TOGETHER ON CIRCUIT L4NBA-24 TO THE DANCE/DRAMA STORAGE 114A

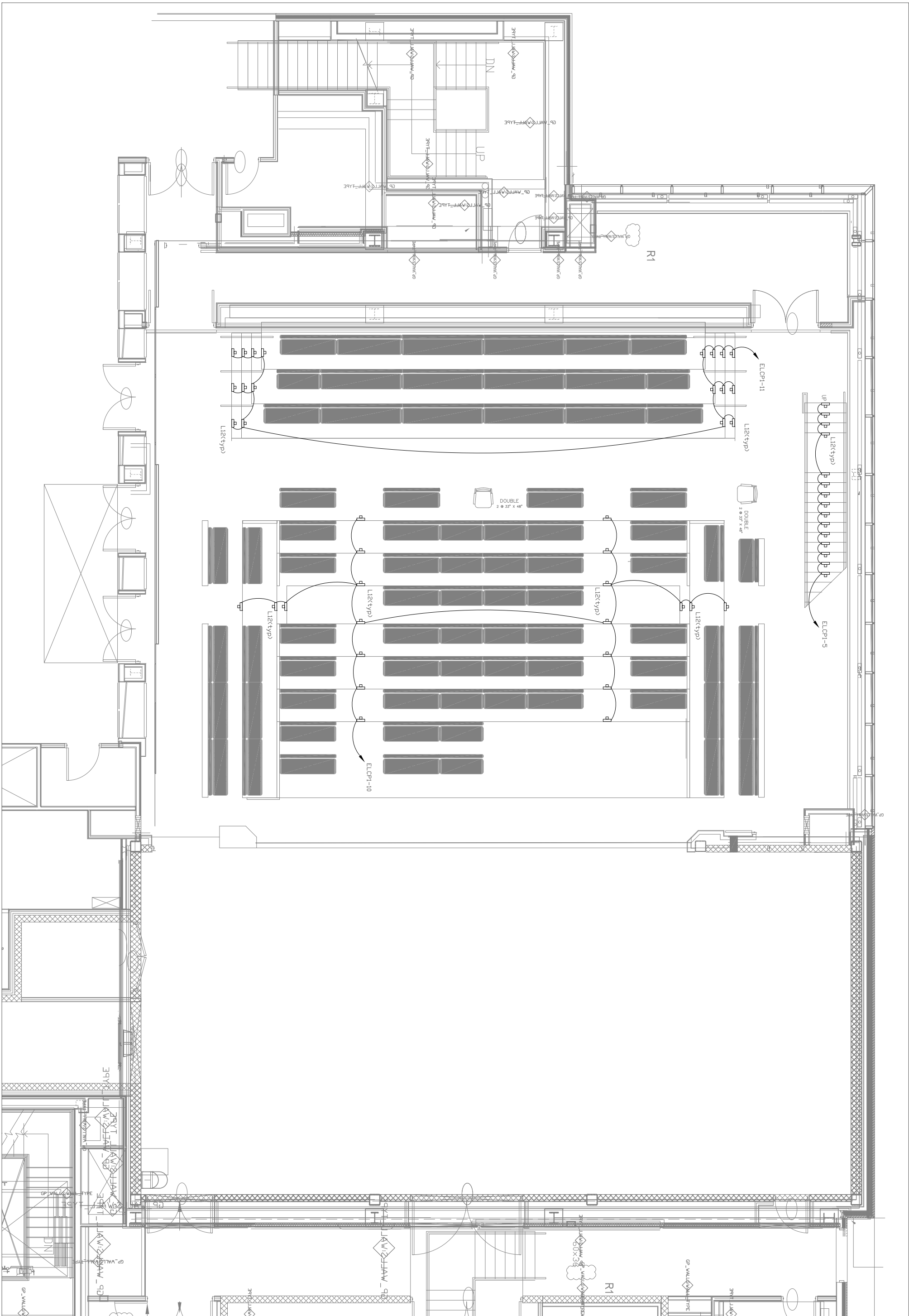


SCALE : 3/16" = 1'

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 CENTER FOR PERFORMING ARTS, ATHLETICS AND WELLNESS
 BOSTON, MASSACHUSETTS
 DANCE REHEARSAL LIGHTING RCP

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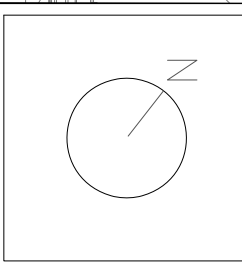


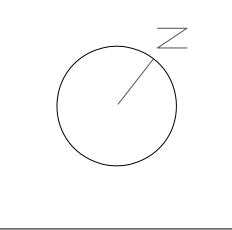
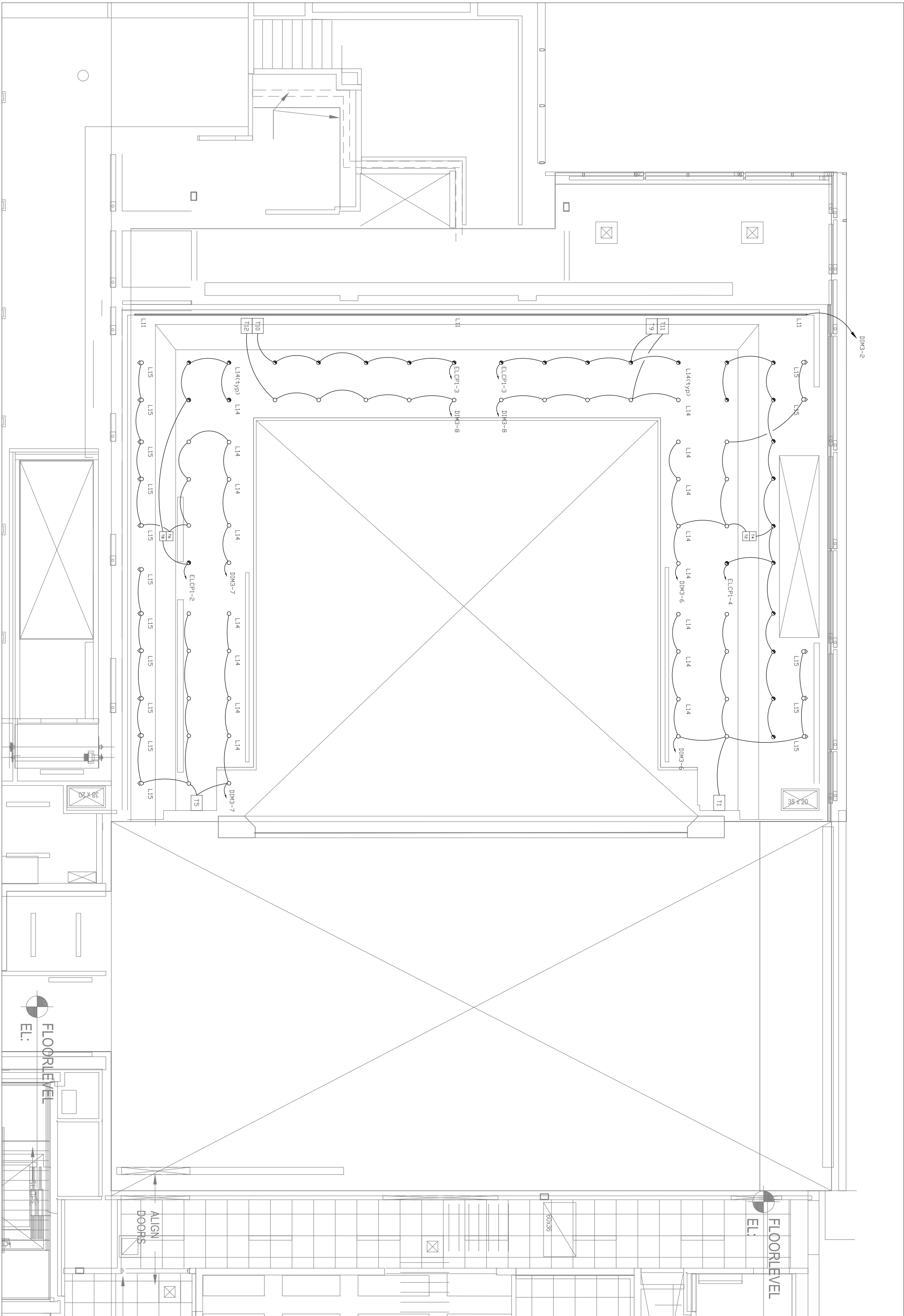
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 BOSTON, MASSACHUSETTS
 ORCHESTRA LIGHTING PLAN

SCALE : 1/8" = 1'

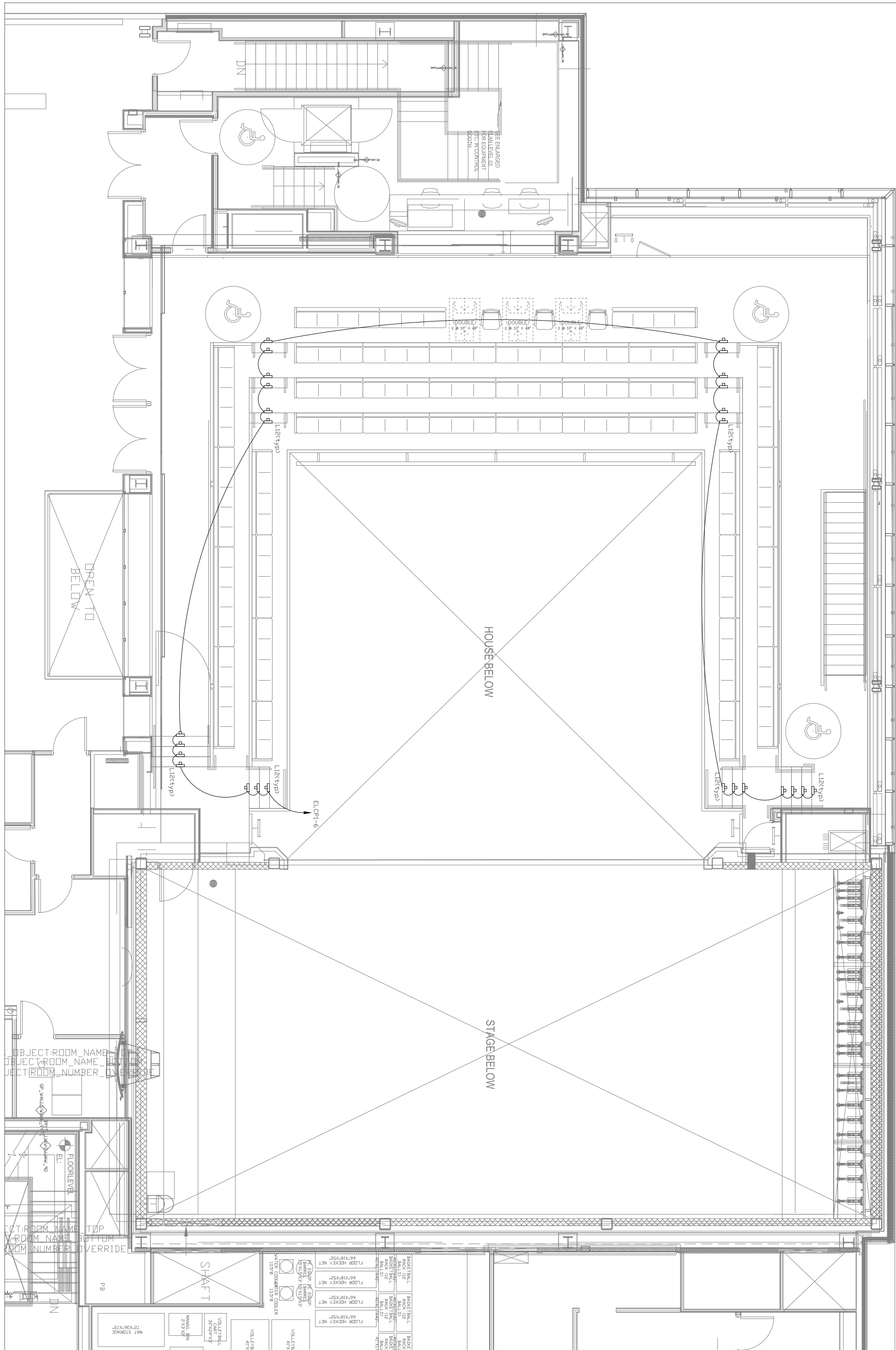




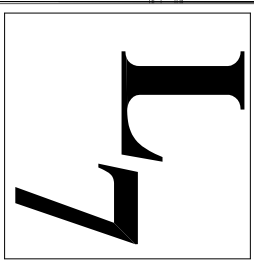
FLOORLEVEL
EL:

FLOORLEVEL
EL:

ALIGN
DOORS

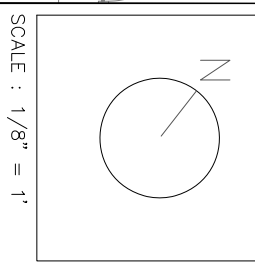


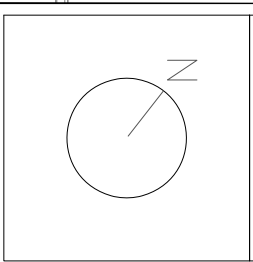
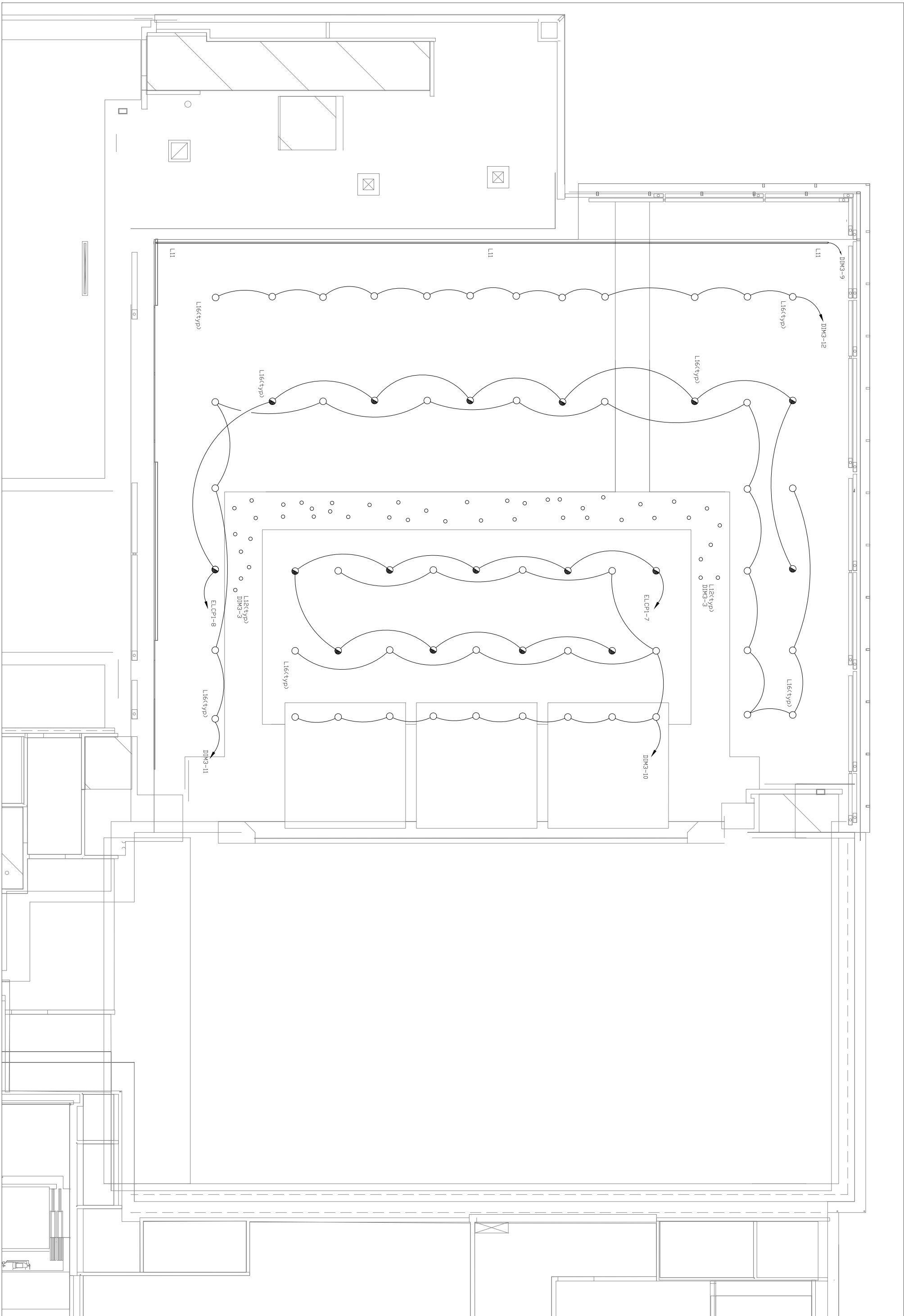
OBJECT:ROOM_NAME
 OBJECT:ROOM_NAME
 OBJECT:ROOM_NUMBER_OVERRIDE
 gr_valued
 EL:
 FLOORLEVEL
 OBJECT:ROOM_NAME TOP
 OBJECT:ROOM_NAME BOTTOM
 OBJECT:ROOM_NUMBER_OVERRIDE



4 • 8 • 15

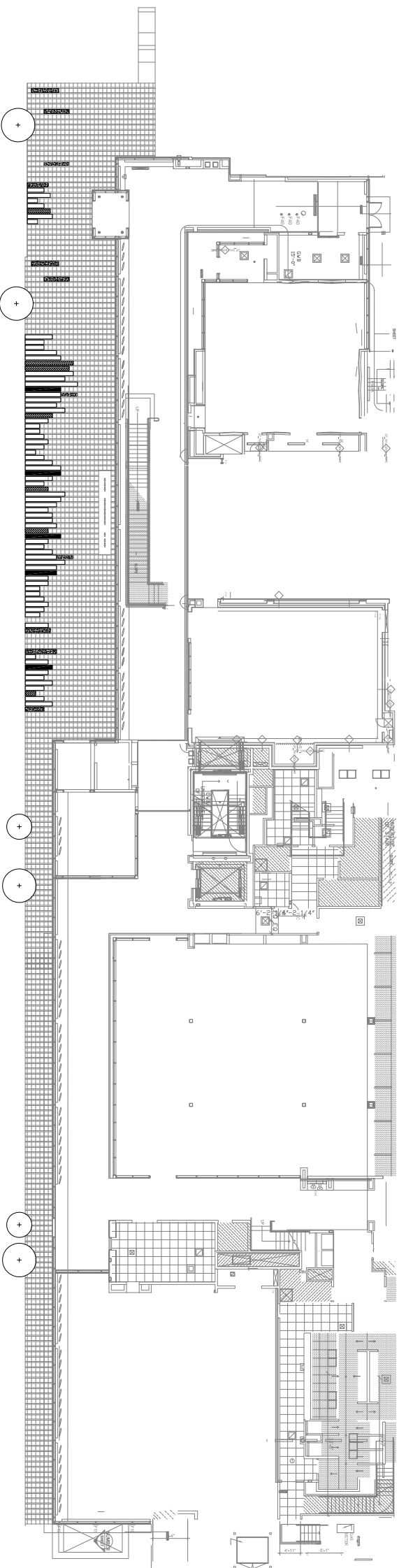
LUBIN-O'DONNELL CENTER
 CENTER FOR PERFORMING ARTS, ATHLETICS AND WELLNESS
 BOSTON, MASSACHUSETTS
 MEZZANINE LIGHTING PLAN





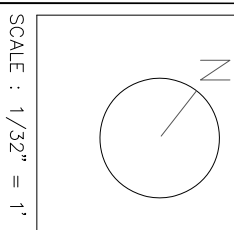
Appendix D // Existing Riser Diagram

Appendix E // Landscape Design CDs



PLAZA MATERIALS AND PLANTINGS KEY:

| | | | | | |
|--|---|---|--|---|--|
| <p>PLANTING A SAGINA SUBULATA "IRISH MOSS"</p> | <p>PLANTING B HEUCHERA CORAL BELLS "PLUM PUDDING PERENNIAL"</p> | <p>PLANTING C SCHIZACHYRIUM SCOPARIUM "LITTLE BLUESTEM GRASS"</p> | <p>PLANTING D CAPRINUS CAROLINIANA "AMERICAN HORNBLEW"</p> | <p>MATERIAL 1 SDCRATES CONCRETE BENCH LANDSCAPE FORMS</p> | <p>MATERIAL 2 CONCRETE PAVINGS CAST-IN-PLACE</p> |
|--|---|---|--|---|--|



SCALE : 1/32" = 1'

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