

2L-P-ID

MOD™ 2 LED PENDANT INDIRECT/DIRECT

FEATURES

- Variable Intensity technology provides a range of specifiable outputs and resulting fixture wattages
- 2 SDCM color consistency
- End cap design eliminates visible diffuser seams/gaps



CONTROLS



SPECIFICATIONS

CONSTRUCTION

- Housing constructed from extruded aluminum
- End caps constructed from die cast aluminum with magnetic interface
- End caps overlap diffuser at each fixture end to eliminate gaps and LED visibility
- Dust cover constructed from clear acrylic lens with magnetic interface

OPTICS

- 2 SDCM color consistency, 80 or 90 CRI
- SOF: Soft diffuse acrylic lens
- REG: 1/2" regressed softglo lens with painted steel inserts. Output multiplier (.77)
- BWO: White blade baffle with softglo lens overlay. Output multiplier (.70)
- ASYM: Asymmetric Highly transmissive diffuse acrylic lens with linear prisms
- BAT: "Batwing" distribution created created from highly transmissive diffuse acrylic lens with linear prisms
- DRP: 1/2" protruding soft diffuse "drop" lens

INSTALLATION

- Suspension required at every row joint. 3/64" diameter field-adjustable aircraft cables, ships separately
- Low profile cable gripper limits visibility while providing maximum horizontal balance adjustment
- Pendant locations at ends of rows (or individual fixtures) are 1/2" from fixture ends
- Pendant attachment allows for horizontal adjustment to "fine-tune" side-to-side leveling

INSTALLATION (CONTINUED)

- Illuminated corners available in 90°, 120°, 135°. One piece construction, ready to install, with diffusers that match adjoining fixtures. Corner system connectors must be used to form patterns. The length of each outside or inside illuminated corner is 12"
- Square and Triangle non-illuminated connectors match fixture width for continuous look.
- Fixture weight: 3lbs/ft

ELECTRICAL

- Variable Intensity (VI) technology allows precise specification of fixture output/wattage. Fixture will be programmed and labeled to specification. Indirect and direct hemispheres can be independently specified
- LED boards and drivers can be accessed and removed from fixture, while installed
- Entire LED module can be removed and replaced
- 1C (1 Circuit) Fixture wired for a single circuit
- 2C (2 Circuit uplight/downlight) Uplight and downlight switched/dimmed separately. Two power feeds required
- Non-feed: 2" diameter canopy covers provided (unless 5" non-feed cover is specified)
- Feed Cord: 4-wire, 7 amps max; 5-wire, 5 amps max.
- Emergency Battery: 10W battery powered driver. Provides a minimum of 90 minutes of emergency lighting. Inverter-Compatible. Provided by others. Available in 4'+ fixtures

CONTROLS

- Sensors install between diffusers
- NX Distributed Intelligence™: Supports indoor and outdoor applications, wired, wireless and hybrid networked NX lighting control deployments and enabled emerging applications, such as Hubbell Lighting's SpectraSync™ Color Tuning Technology

MOD[™]X



RELATED PRODUCTS

- Ø [3L-P-ID](#) Ø [4L-P-ID](#) Ø [6L-P-ID](#)

SERVICE PROGRAMS



CONTROLS (CONTINUED)

- SpectraSync™ Color Tuning Technology: Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants

CERTIFICATIONS

- DLC® (DesignLights Consortium) Qualified - see www.designlights.org
- CSA listed for damp location
- IBEW
- AF of L
- UL924
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction. Materials under Trade Agreements effective 8/14/2020. See Buy American Solutions. Contact factory for configurations including SpectraSync, NX, or sensors.

WARRANTY

- LED boards - 5 years
- LED drivers (standard) - 5 years
- LED drivers (Lutron) - 3 years
- See www.litecontrol.com for details

| KEY DATA | |
|------------------------|------------------------------|
| Lumen Range Per Foot | I: 300–1250 D: 300–1000 |
| Wattage Range Per Foot | 2.4–12.8 |
| Efficacy Range (LPW) | 90–139 |
| Rated Life (Hours) | L70: >61,000 L90: >61,000 |

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□ = Service Program



Click icon for a list of Quick-Ship options

ORDERING GUIDE

Example: 2L-P-ID-STD-8-08-SOF-C1-27K-I030-D030-D01-1C-UNV-FA1

CATALOG #

| 2L | Mounting | Fixture Distribution | Indirect Optical Distribution | Row Length (In Feet) | Max Length In Row | Direct Optical Distribution |
|---------------|------------------|---|--|-----------------------------|--|---|
| Series | P Pendant | ID Indirect/Direct IAD Indirect/ Asymmetric Direct | STD Standard LPAD Low Peak Angle with Diffuser | —' Enter in foot increments | 02 2', 609mm 03 3', 914mm 04 4', 1219mm 05 5', 1524mm 06 6', 1829mm 08 8', 2438mm | SOF Soft Diffuse Lens, Lambertian REG Regressed Diffuse Lens ¹ BWO Blade Baffle with Overlay ¹ ASYM Asymmetric Diffuse Lens ^{1,2} BAT Batwing Lens DRP Drop Lens ^{1,3} |

| Finish/Color ⁴ | Color Temperature | Indirect Output/ft ⁶ | Direct Output/ft ⁶ | Driver | Circuiting |
|------------------------------------|---|---|---|---|---|
| C1 Matte White (Default) | 27K 2700K ³ 30K 3000K 35K 3500K 40K 4000K | I030 300 (min) I090 900 (LPAD max) I125 1250 (STD max) | D030 300 (min) to D100 1000 (max) | D01 1% Dimming, 0-10V D00 1% Dim-to-Off, 0-10V D05 SpectraSync 5% Dimming, 0-10V ⁷ DS1 1% Dimming w/ Soft Start, 0-10V DS0 1% Dim-to-Off w/ Soft Start, 0-10V LEC Hi-lume 1% Ecosystem LED Driver DALI DALI ³ DALIP Powered by DALI (2.0) ³ NDM Non-Dimming | 1C 1 Circuit 2C 2 Circuit - Uplighting / Downlight |
| C2 Textured Matte White | 50K 5000K ³ | | | | |
| C3 Light Silver | 27K9 2700K, 90 CRI ³ 30K9 3000K, 90 CRI 35K9 3500K, 90 CRI 40K9 4000K, 90 CRI | | | | |
| C4 Machined Aluminum | 50K9 5000K, 90 CRI ³ | | | | |
| C5 Carbon Black | 2230TD 2200K-3000K SpectraSync™ Dim-to-Warm ⁵ 2750T 2700K-5000K SpectraSync™ Tunable White ⁵ 2765T 2700K-6500K SpectraSync™ Tunable White ⁵ | | | | |
| C6 Textured Camera Black | | | | | |
| CC Custom Color | | | | | |

OPTIONAL

| Voltage | Suspension Kit ⁹ | Nightlight | Emergency | Thru-wiring | Patterns ^{3,12} | Dust Cover | T-Bar Clips ¹³ |
|--|--|---|---|---|---|---|--|
| UNV Universal Voltage (120V through 277V) 347 347 Volt ^{3,8} | FA1 Suspension Kit, 51" FA2 Suspension Kit, 87" FA3 Suspension Kit, 219" FA4 Suspension Kit, 363" | NL Nightlight Circuit Required. Enter quantity. 2NL = 2 nightlight circuits/ row | EF 10W Emergency Battery Pack. Enter quantity. 2EF = 2 emergency batteries/ row. ¹⁰ | W1 No Thru Wire W2 Provide Normal and Emergency/ Nightlight Thru Wiring ¹¹ W3 Provide Normal Thru Wiring Only | C90L Illuminated 90° Corner C120L Illuminated 120° Corner C135L Illuminated 135° Corner CNL Non-Illuminated Square 90° Connector TNL Non-Illuminated Square T Connector XNL Non-Illuminated Square X Connector VNL Non-Illuminated Square 120° Connector YNL Non-Illuminated Square Y Connector | L1 Clear Acrylic Dust Cover Lens | CB1 T-bar clip - 15/16" CB2 T-bar clip - 9/16" CB3 T-bar clip - 9/16" SS |

Notes:

- Not Available with Patterns.
 - Must be ordered with IAD.
 - Additional lead time may be applicable. Contact factory.
 - Visit www.litecontrol.com/finishes for details.
 - Must be ordered with D05 Driver option; excludes 2' lengths and patterns.
 - Specifiable in 50 lumen increments. Reference the Performance Data Table for full performance offering and exceptions.
 - Must be ordered with 2230TD, 2750T or 2765T Option
 - Excludes Emergency Battery Pack 'EF' Option. Excludes DALI, DALIP and Lutron (LEC) Dimming Drivers
 - Add suffix /V to replace all 2" non-feed canopy covers with 5" canopy covers. FA1/V = 51" suspension kit w/ 5" canopies; canopies and feed cord are supplied in white regardless of fixture color unless otherwise specified.
 - EF - 10W battery powered driver. Provides a minimum of 90 minutes of emergency lighting. Inverter- Compatible. Provided by others. Available in 4+ fixtures.
 - Only applicable when specified with Emergency/Nightlight.
 - Contact Factory for pattern configurations. Approval drawings required.
 - Includes Luminaire Canopy Box.
- NX In-Fixture Control Options:**
- Not available for row mounting. Only available with 0-10V Driver options. Contact factory for Length restrictions.
 - Refer to [NX Integrated Controls Reference Table](#) for Functionality of Options.
 - NX Sensors with Bluetooth, BLE, provides remote commission only.

Control Options³

NX Standalone

NXS NX, PIR BT Occupancy/Daylight Sensor, Slide Mount^{14, 15, 16}

NX Networked – Wired

NXE NX, Dual SmartPorts^{14, 15}

NXES NX, PIR BT Occupancy/Daylight Sensor, Slide Mount, Dual SmartPORTs^{14, 15}

NX Networked – Wireless

NXSW NX Wireless, PIR BT Occupancy/Daylight Sensor^{14, 15, 16}

NXWE NX Wireless Wireless Enabled^{14, 15}

NX Networked – Wired/Wireless

NXSWD NX Wireless, PIR BT Occupancy/Daylight Sensor, Dual SmartPORTs^{14, 15, 16}

NXWD NX Wireless, Dual Smart Ports^{14, 15}

Sensors

SD1 Daylight Sensor Required. Enter quantity. 2SD1 = 2 daylight sensors/row

SO1 Occupancy Sensor Required. Enter quantity. 2SO1 = 2 occupancy sensors/row

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CONTROLS

NX Distributed Intelligence™ Lighting Controls:

Supports both indoor and outdoor applications in a variety of deployment options- wired, wireless, hybrid. Integrates with and enables a wide array of luminaires including those with SpectraSync Color Tuning Technology.

| NX INTEGRATED CONTROLS REFERENCE | | | | | | | | |
|--------------------------------------|-----------|-------------|------------|-----------|---------------------|---------------|----------------|---|
| NX Option | Sensor | Networkable | Scheduling | Occupancy | Daylight Harvesting | 0-10V Dimming | On/off Control | Bluetooth® App Programming |
| NX Standalone | | | | | | | | |
| NXS | NXSMP-SMI | No | Yes | Yes | Yes | Yes | Yes | Yes |
| NX Networked – Wired | | | | | | | | |
| NXE | N/A | Yes | Yes | No | No | Yes | Yes | Requires NXBTC/R ¹ |
| NXES | NXSMP-SMI | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| NX Networked – Wireless | | | | | | | | |
| NXSW | NXSMP-SMI | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| NXWE ² | N/A | Yes | Yes | No | No | Yes | Yes | No ³ |
| NX Networked – Wired/Wireless | | | | | | | | |
| NXSWD | NXSMP-SMI | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| NXWD | N/A | Yes | Yes | No | No | Yes | Yes | Requires NXBTC/R ^{1,3} |

- 1 NXBTC/R needs to be plugged into an available NX SmartPort™ on the fixture network
- 2 Programming via App requires factory assistance
- 3 To program NXWE option, need to consult factory. If connected to an area controller, programming can be done from that

SpectraSync™ Color Tuning Technology:

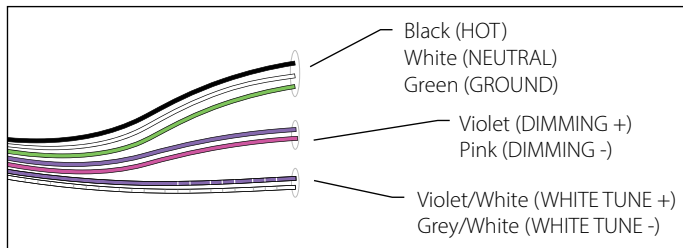
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.



| SPECTRASYNCH COLOR TUNING TECHNOLOGY | | |
|--------------------------------------|----------------------------|--|
| Mode | Kelvin Range | Description |
| Dim to Warm | 2200K-3000K | Mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed |
| Tunable White | 2700K-5000K 2700K-6500K | Offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors or the aesthetics of the space |
| Scheduled White | 2700K-5000K 2700K-6500K | Mimics the rhythm of natural light or follows an alternative user-defined schedule throughout the day, enhancing an occupant's mood and well-being |

SpectraSync Tunable White

Available in two options: 2750T (2700K–5000K) or 2765T (2700K–6500K). Requires two 0–10V controllers, one for intensity and one for CCT. Minimum 5% dimming.

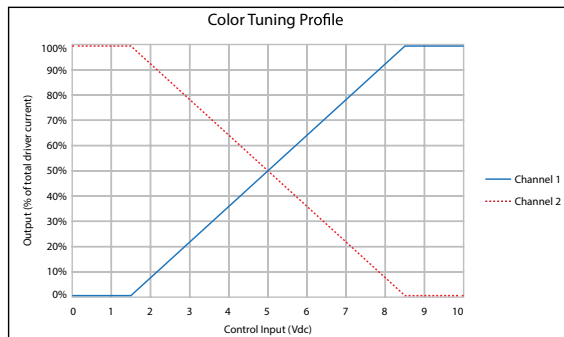


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and pink circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and grey/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

Controller Manufacturer Data

SpectraSync Tunable White was designed to be used with sinking style dimmers (provided by others) and is compatible with:

- Hubbell Control Solutions (HCS): NX Distributed Intelligence™ Room Controllers (NXRC) and In-fixture Controllers (NXFM)
- Lutron: DDTV, DVSTV, and NDTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers



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PERFORMANCE DATA TABLE

The table below shows the delivered lumens for the various lumen outputs. Use this chart in connection with the output multiplier capability to deliver any output required.

| Nomenclature | Lumens/Ft | W/Ft | Efficacy |
|-----------------------------------|-----------|------|----------|
| Uplight (STD Distribution) | | | |
| I030 (min) | 300 | 2.4 | 126 |
| I075 | 750 | 5.4 | 139 |
| I115 | 1150 | 9.0 | 128 |
| I125 (max) | 1250 | 12.8 | 117 |
| Uplight (LPA Distribution) | | | |
| I030 (min) | 300 | 2.8 | 106 |
| I050 | 500 | 5.2 | 96 |
| I085 | 850 | 8.7 | 98 |
| I090 (max) | 900 | 12.2 | 90 |
| Downlight | | | |
| D030 (min) | 300 | 3.0 | 102 |
| D050 | 500 | 5.2 | 96 |
| D085 | 850 | 8.6 | 99 |
| D100 (max) | 1000 | 12.1 | 91 |

(wattage may vary up to 5% from published)

Output Restrictions

Driver options listed below are not available for the output and length as shown.

| Restrictions - Indirect | | Output STD | |
|-------------------------|---|---------------|---------------|
| | | 300 | 350 |
| Length (feet) | 2 | Not Available | Not Available |

Output Multiplier Table

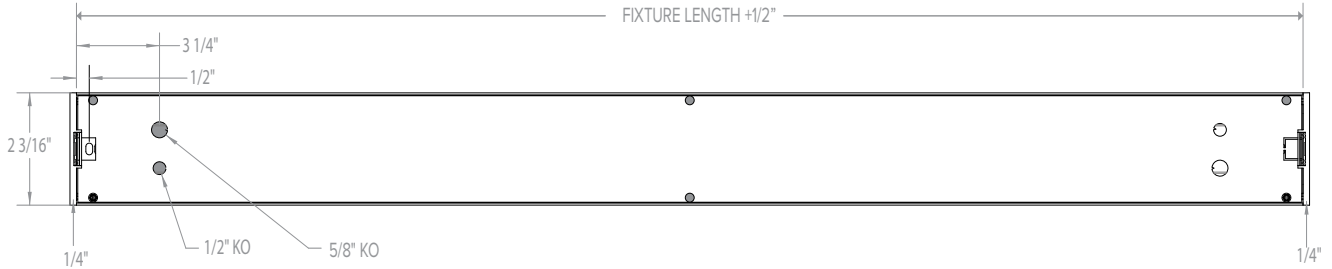
Photometrics for the 4L are published here at a nominal 3500K temperature. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

| Option | 2700K | 3000K | 3500K | 4000K | 5000K | 2700K 90 CRI | 3000K 90 CRI | 3500K 90 CRI | 4000K 90 CRI | 5000K 90 CRI |
|--------|-------|-------|-------|-------|-------|--------------|--------------|--------------|--------------|--------------|
| SOF | 0.95 | 0.98 | 1.00 | 1.03 | 1.05 | 0.83 | 0.85 | 0.88 | 0.90 | 0.93 |
| REG | 0.73 | 0.75 | 0.77 | 0.79 | 0.81 | 0.64 | 0.65 | 0.68 | 0.69 | 0.72 |
| BWO | 0.67 | 0.69 | 0.70 | 0.72 | 0.76 | 0.63 | 0.53 | 0.47 | 0.42 | 0.39 |
| ASYM | 0.95 | 0.98 | 1.00 | 1.03 | 1.05 | 0.83 | 0.85 | 0.88 | 0.90 | 0.93 |
| BAT | 0.95 | 0.98 | 1.00 | 1.03 | 1.05 | 0.83 | 0.85 | 0.88 | 0.90 | 0.93 |
| DRP | 0.95 | 0.98 | 1.00 | 1.03 | 1.05 | 0.83 | 0.85 | 0.88 | 0.90 | 0.93 |
| LPAD | 0.86 | 0.88 | 0.90 | 0.93 | 0.95 | 0.75 | 0.77 | 0.79 | 0.81 | 0.84 |

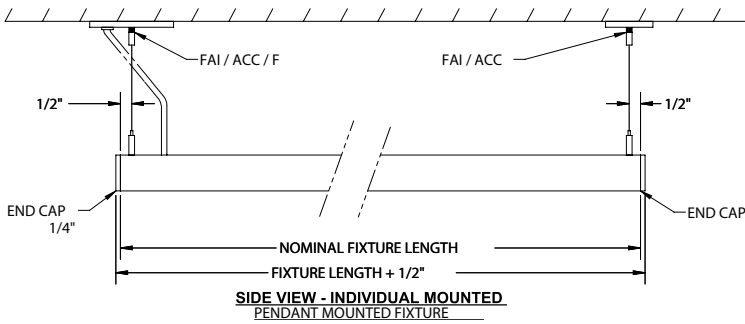
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DIMENSIONS

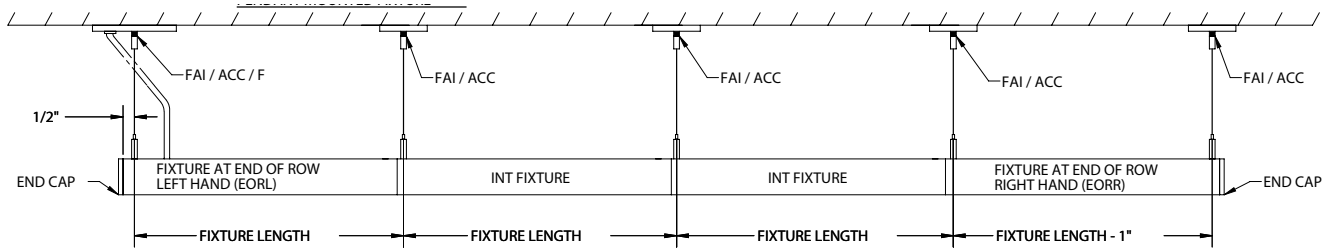


INDIVIDUAL MOUNTING



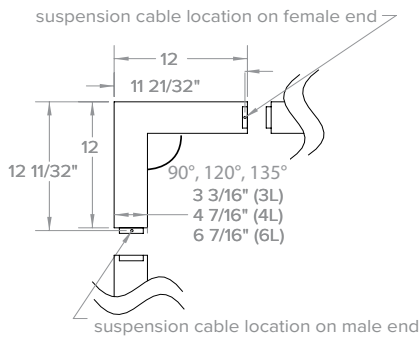
**SIDE VIEW - INDIVIDUAL MOUNTED
PENDANT MOUNTED FIXTURE**

Row Mounting:

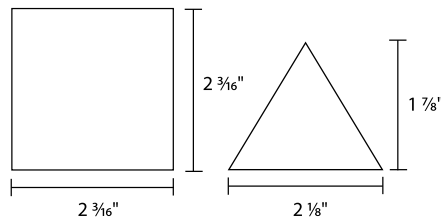


**SIDE VIEW - ROW MOUNTED
PENDANT MOUNTED FIXTURE**

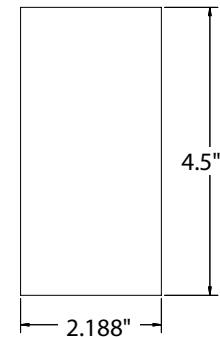
ROW MOUNTING



PATTERNS



NON-ILLUMINATED CONNECTORS



END CAP VIEW

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PHOTOMETRY

2L-P-ID-STD-4-SOF-IND-CX-35K-I100-D100

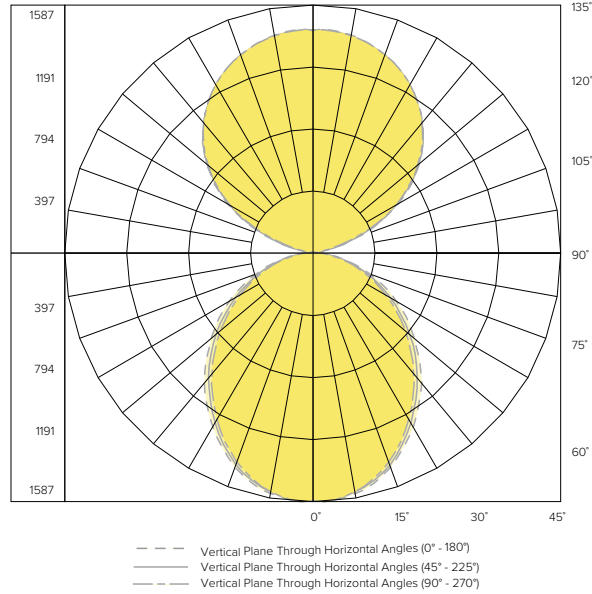
LUMINAIRE DATA

| | |
|------------------|---|
| Description | 2L Pendant Indirect, Standard Uplight, Soft Diffuse Lens, 3500K |
| Delivered Lumens | 3999 |
| Watts | 73 |
| Efficacy | 108 |
| Mounting | Pendant |

ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|-------|---------|-------------|
| 0-40 | 1905.97 | 23.8 |
| 0-60 | 3229.26 | 40.4 |
| 0-90 | 3999.61 | 50.0 |
| 0-180 | 3999.61 | 100.0 |

POLAR GRAPH



2L-P-ID-LPA-4-SOF-IND-CX-35K-I090-D100

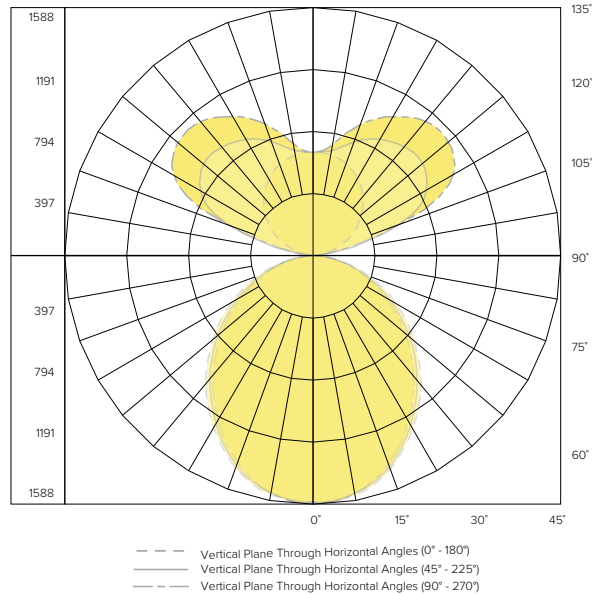
LUMINAIRE DATA

| | |
|------------------|---|
| Description | 2L Pendant Indirect, Low Peak Angle Uplight, Soft Diffuse Lens, 3500K |
| Delivered Lumens | 7599.32 |
| Watts | 80 |
| Efficacy | 94 |
| Mounting | Pendant |

ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|-------|---------|-------------|
| 0-40 | 1906.16 | 25.1 |
| 0-60 | 3229.58 | 42.5 |
| 0-90 | 4000 | 52.6 |
| 0-180 | 7599.32 | 100.0 |

POLAR GRAPH



2L-P-ID

MOD™ 2 LED PENDANT INDIRECT/DIRECT

PHOTOMETRY CONTINUED

2L-X-D-4-DRP-CX-35K-D050

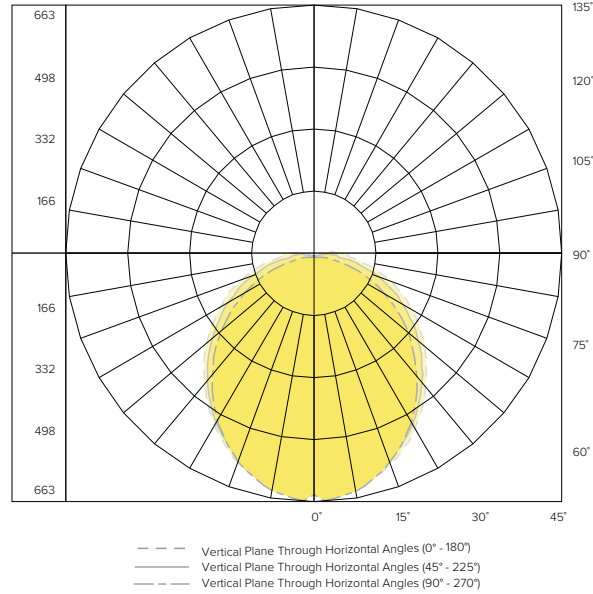
LUMINAIRE DATA

| | |
|------------------|---------------------------------------|
| Description | 2L Pendant Indirect, Drop Lens, 3500K |
| Delivered Lumens | 1999.98 |
| Watts | 21 |
| Efficacy | 95 |
| Mounting | Pendant |

ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|-------|---------|-------------|
| 0-40 | 801.88 | 40.1 |
| 0-60 | 1408.37 | 70.4 |
| 0-90 | 1904.98 | 95.2 |
| 0-180 | 1999.98 | 100.0 |

POLAR GRAPH



2L-P-D-4-BAT-X-CX-35K-D100

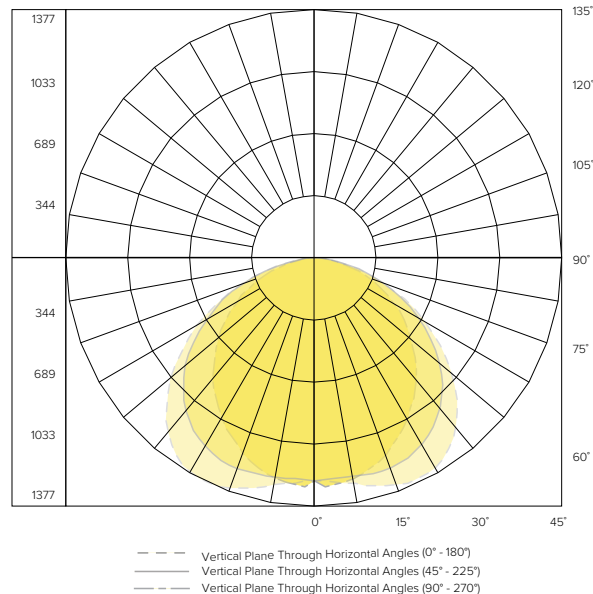
LUMINAIRE DATA

| | |
|------------------|--|
| Description | 2L Pendant Indirect, Batwing Lens, 3500K |
| Delivered Lumens | 3999.29 |
| Watts | 42 |
| Efficacy | 95 |
| Mounting | Pendant |

ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|-------|---------|-------------|
| 0-40 | 1744.72 | 43.6 |
| 0-60 | 3180.69 | 79.5 |
| 0-90 | 3999.29 | 100.0 |
| 0-180 | 3999.29 | 100.0 |

POLAR GRAPH

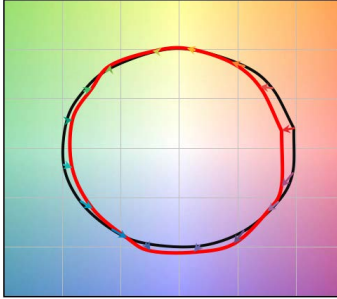


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TM-30 DATA

COLOR VECTOR GRAPHIC



COLOR DISTORTION GRAPHIC



| TEST RESULTS - 3500K | |
|----------------------|---------|
| Value | 80+ CRI |
| CCT (K) | 3494 |
| CIE R _a | 83 |
| D _{uv} | -0.0004 |
| R _f | 82 |
| R _g | 96 |
| x | 0.4052 |
| y | 0.3898 |

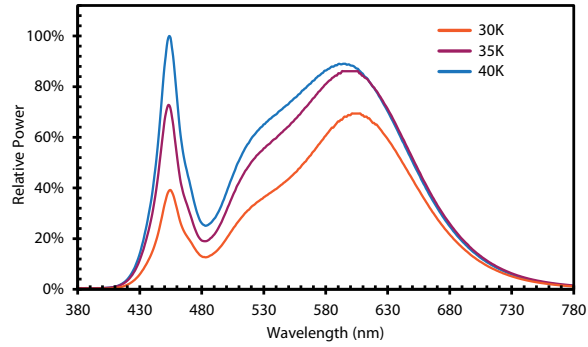
*Graphics shown are at 35K

— Reference Illuminant — Test Source

COLOR CHARACTERISTICS:

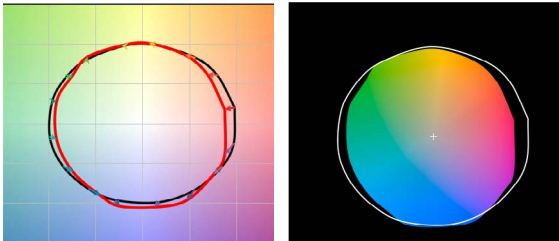
| Value | Ordering Code | | |
|-----------------|---------------|---------|---------|
| | 30K | 35K | 40K |
| R _f | 83 | 82 | 82 |
| R _g | 96 | 96 | 96 |
| CCT (K) | 3009 | 3494 | 3975 |
| D _{uv} | -0.0009 | -0.0004 | -0.0003 |
| x | 0.435 | 0.4052 | 0.3814 |
| y | 0.4012 | 0.3898 | 0.3768 |
| CIE Ra | 83 | 83 | 84 |

SPECTRAL DISTRIBUTION:

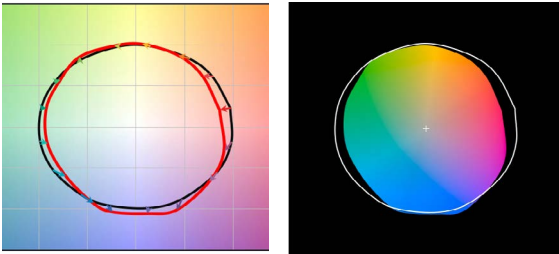


COLOR VECTOR GRAPHIC:

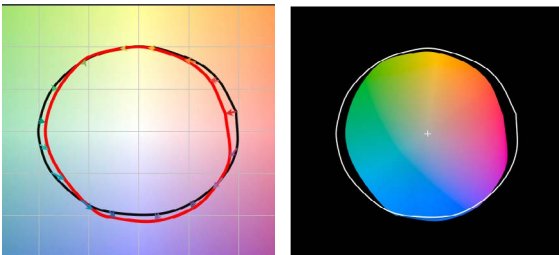
30K



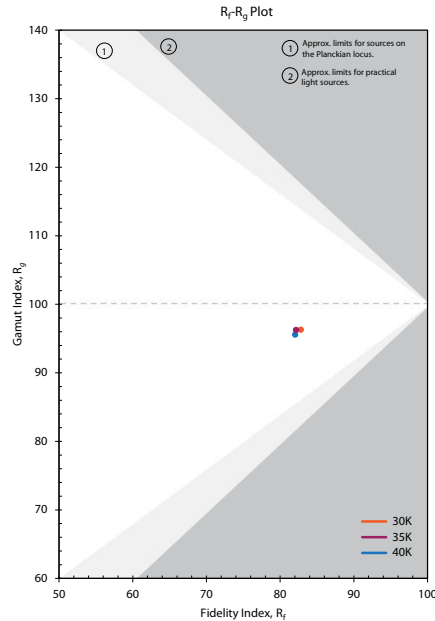
35K



40K



COLOR GAMUT/FIDELITY PLOT:



CRI: 80 MINIMUM

| CCT | CRI | R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 |
|-----|-----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| 30K | 83 | 82 | 91 | 97 | 81 | 82 | 89 | 84 | 62 | 13 | 79 | 79 | 69 | 84 | 99 |
| 35K | 83 | 81 | 89 | 95 | 81 | 81 | 85 | 86 | 65 | 13 | 73 | 79 | 62 | 83 | 97 |
| 40K | 84 | 82 | 90 | 94 | 82 | 82 | 85 | 87 | 68 | 17 | 74 | 80 | 60 | 84 | 97 |

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DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

ADDITIONAL INFORMATION

Driver

| | |
|-------|---|
| D01 | 100%- 1% dimming range. Fixture will be wired for low voltage 0-10V dimming control. |
| D00 | Dim-to-Off 100%-1% dimming range. Fixture will be wired for low voltage 0-10V dimming control. |
| D05 | 100%-5% dimming range, Fixture will be wired for low voltage 0-10V dimming control. Only applicable if either 2230TD, 2750T or 2765T is selected. |
| DS1 | Soft-Start 100%-1% dimming range. Fixture will be wired for low voltage 0-10V dimming control. |
| DS0 | Soft-Start Dim-to-Off 100%-1% dimming range. Fixture will be wired for low voltage 0-10V dimming control. |
| LEC | Hi-Lume 1% EcoSystem LED Driver with Soft-On, Fade-to-Black dimming technology. |
| DALI | DALI compatible. |
| DALIP | Self-Powered DALI bus (e.g. DEXAL) |
| NDM | Non-dimming. Fixture will be wired for fixed light output. |

Rated Life

Tested in accordance to LM79-2008 & derived from EPA TM-21 calculator

L70: 280,000 (calculated per TM-21 extrapolated curve)

L70: >61,000 (reported per TM-21/LM80 6x's limitation)

L90: 72,000 (calculated per TM-21 extrapolated curve)

L90: >61,000 (reported per TM-21/LM80 6x's limitation)

Rated Life (Driver)

Standard = 100,000 hours

Lutron = 50,000 hours