

LUMeLEX® 2024 SERIES 120/277V • LED • DIM TO WARM



Remote phosphor technology produces high quality, high output light with a consistent, even field for the most demanding applications of museum and retail accent lighting.

- Designed for a Dim to Warm module up to 22 watts
- Natural dimming that approximates the black body curve
- System efficiency up to 59 lumens/watt
- 36,000 hour life to 70% lumen output, L70 at 95°F max ambient
- Halogen mimicking color from 2800K to 2000K
- Color Rendering Index (CRI) of 92 min. at all dimming settings
- Color Fidelity (R_f) 92
- Gamut Area Index (R_g) 102
- Lumen output: 1800 Lumens
- Proprietary mixing optics for smooth even light
- Tested to LM79 and LM80 Protocols, TM-30 available
- Hidden integral electronic driver compatible with reverse phase (ELV compatible) dimmers down to 5%
- Field interchangeable optics (15°- 50°) modify the beam spread distribution
- Optional accessory holder accepts up to two size-AA LSI filters and accessories (M size optics only)
- Integral dimmer available
- Finishes: LSI Black, White, and Silver
- Fixture weight: 2.5 lbs
- All modules are field replaceable

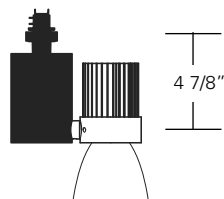
MOUNTING OPTIONS

Please review the **ORDERING INFORMATION** section on the next page on how to specify the following:

- Lumens/CRI/Wattage
- Color Temperature
- Optic - mm/beam spread

LX2024-XXXXX-XXXXXX-00-XXXXXX

Lexan fitting for 1 and 2 circuit LSI track. With On/Off switch.



LX2024-XXXXX-XXXXXX-0E-EDXXXX

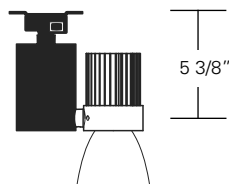
Lexan fitting with integral dimmer (for use with ED dimming driver 10%).

LX2024-XXXXX-XXXXXX-LT-LTXXXX

Lexan fitting with LumenTalk dimmer (for use with LT dimming driver (<1%).

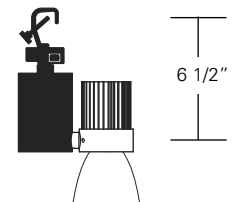
LX2024-XXXXX-XXXXXX-2G-XXXXXX

Universal fitting for Unistrut Systems and any screw or bolt-up applications. With switch, 6-foot 3-wire grounding cord and NEMA 5-15P plug.



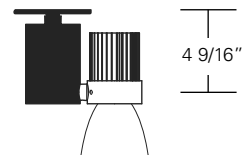
LX2024-XXXXX-XXXXXX-3G-XXXXXX

C-clamp for pipes from 5/8" to 2" O.D. With switch, 6-foot 3-wire grounding cord and NEMA 5-15P plug



LX2024-XXXXX-XXXXXX-5A-XXXXXX

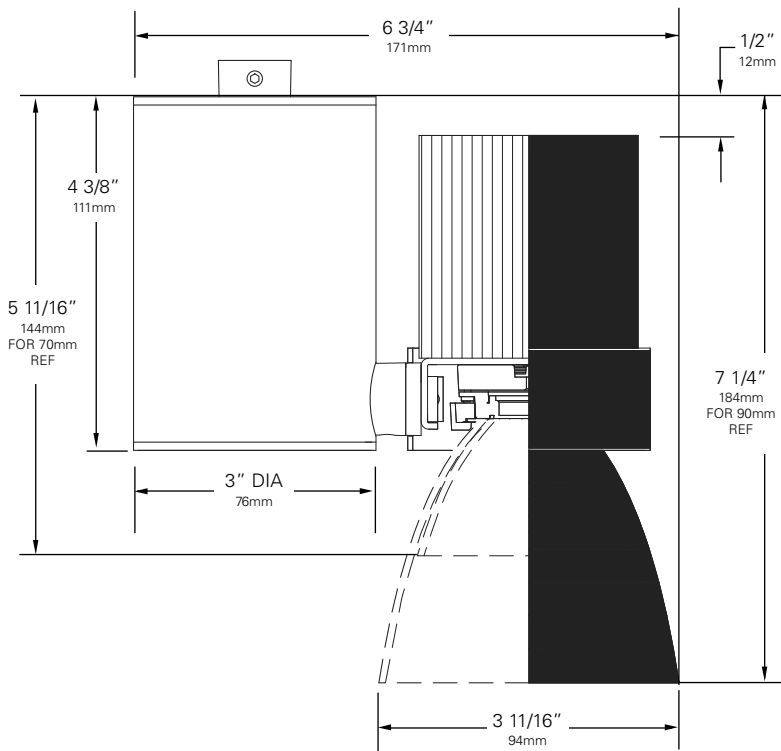
Canopy for permanent mounting on standard 4" octagonal junction boxes.



Other Options (Consult Factory):

- Stems, specify length (4" – 48")
- Custom color, RAL palette
- Security/Worklite Fixture, use **—EF** as mounting option (track mount only)

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ORDERING INFORMATION

Dim to Warm Fixture

1. Choose the desired LED Module (**D15**) for Dim to Warm (15mm)
2. Choose the numeric code to designate the desired LED Rating **Lumens/CRI/Wattage (18-92)** for 1800/92/22
3. Choose the code to designate the desired **Color Temperature (DW)** for 2800K to 2000K
4. Use the following alpha-numeric code to designate the **Optic (W2)** for 72mm/20° **(WR)** for 70mm/15° (Field Reducer) **(W3)** for 72mm/30° **(W4)** for 72mm/40° **(W5)** for 72mm/50°
5. Select your **Mounting Option (00)** Track Fitting **(OE)** Track Fitting with Integral Dimmer **(LT)** Lumentalk Fitting **(2G)** Unistrut Fitting **(3G)** C-clamp Fitting **(5A)** Canopy Fitting
6. Choose other fixture Options:
 - Coiled Cord is available only with **2G** and **3G** mounting options. Change 2G to **2C** and 3G to **3C**. (When a coiled cord is not specified, a straight cord is provided.)
7. Choose the letter code for **Dimming Type: (TE)** Trailing Edge (Reverse Phase) (5%) **(ED)** Integral Dimming (10%) (0E & 5A fitting only) **(LT)** Lumentalk (<1%) (LT fitting only) **(10)** 0-10V (10%) (5A fitting only)
8. Choose the desired **Voltage: (120)** for 120V **(230)** for 220-240V **(277)** for 277V
9. Choose a **Finish** for your fixture: Black (**B**) White (**W**) Silver (**S**)

Example: **LX2024 - D15 18-92 DW W2-00 - TE 120 B**
FIXTURE LED MODULE LED RATING COLOR TEMP OPTIC FITTING DIMMING VOLTAGE FINISH

10. Don't forget your Accessories!

ACCESSORIES

Note: suffix "W" = 72mm diameter reflector

- **LX2024-Holder**
- **LX2024 Barndoor**
- **Hood 2IN AA***
- **ANG Hood 2IN AA***
- **Backer Ring AAB***
- **Louver Hex AA***
- **Spread Lens AA990, AA992, AA995, AA996***
- **Beam Softener AA998***
- **Light Blocking Screens AA801S, AA802S, AA803S***
- **Spread Gels AA**
- **LX-WRD-REF (70mm/15°) Field Reducer**
- **LX-W20-REF (72mm/20°)**
- **LX-W30-REF (72mm/30°)**
- **LX-W40-REF(72mm/40°)**
- **LX-W50-REF (72mm/50°)**

* LX2024-Holder or Barndoor required for use with size AA accessories.

Chromaticity Specifications

| LED | R _a -CRI | R _f -Fidelity | R _g -Gamut Area |
|-----|---------------------|--------------------------|----------------------------|
| D15 | 92 | 92 | 102 |

LUMELX® 2024 SERIES • DIM TO WARM PERFORMANCE

The performance characteristics of the Dim to Warm LumeLEX family of products can be customized based on the optic (reflector) selected.

The behavior of the Dim to Warm modules links the color of the light to the dimmed output of the fixture just like a halogen or incandescent source. Therefore the four characteristics defining the color — the color rendering index (CRI), the correlated color temperature (CCT) range, the power that it uses (watts), and its “available lumens” — are linked to the dim setting. Note that available lumens is a theoretical value that represents the light output of the module on its own — no fixture or optic attached. Also note that the CRI of this fixture is a minimum of 92 at any dimming setting.

In the LSI part number, the LED module is specified with a letter and a number that immediately follow the product series number. For example, in the part number LX2024-D1518-92DWW2-00-TE120B, the “D1518-92DW” represents a Dim to Warm LED module with an output of 1800 lumens, a CRI of 92, a power usage of 22 watts and a color temperature range of 2800K – 2000K that is tied to the dimming setting.

The available optics (reflectors) are characterized by size, beam angle, and in some cases the characteristics of the field angle (narrow or wide). The optic is specified by the two characters that follow the LED designation in the part number. For example, the “W2” in LX2024-D1518-92DWW2-00-TE120B is a 70mm diameter optic that has a 20-Degree beam.

Additional parameters, such as Center Beam Candle Power (CBCP), Delivered Lumens, and Efficiency (Lumens per Watt) are all shown in a table that is organized by LED module and optic combination.

| CBCP = Center Beam Candle Power | | | | | |
|---------------------------------|-------------------|------|------|------|------|
| LED Module | Optic (Reflector) | | | | |
| Lumens/CRI/Wattage | W2 | WR | W3 | W4 | W5 |
| 1800/92/22 | 7350 | 5512 | 4201 | 2991 | 2292 |

| Delivered Lumens | | | | | |
|--------------------|-------------------|-----|------|------|------|
| LED Module | Optic (Reflector) | | | | |
| Lumens/CRI/Wattage | W2 | WR | W3 | W4 | W5 |
| 1800/92/22 | 1265 | 506 | 1212 | 1226 | 1305 |

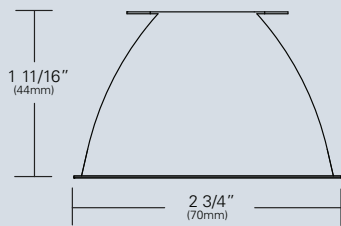
| Efficiency = Lumens Per Watt | | | | | |
|------------------------------|-------------------|----|----|----|----|
| LED Module | Optic (Reflector) | | | | |
| Lumens/CRI/Wattage | W2 | WR | W3 | W4 | W5 |
| 1800/92/22 | 57 | 23 | 55 | 56 | 59 |

Absolute range of values are +/- 10% of typical value, and are for all color temperatures

| LED Module Lumens/CRI/Wattage SKU Code | 1800/92/22 18-92 |
|----------------------------------------------|---------------------|
| Nominal Fixture Power (+/- 20%), Watts | 22 |
| Maximum Inrush Current Amps | 10 |
| Minimum Power Factor | 0.92 |

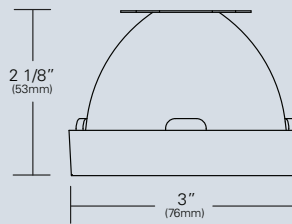
Inrush current is instantaneous current drawn by the LED only when fixture is initially powered on or instantaneously changed from full dim to full bright. For more details see Dimming Application Sheet, IS-0119.

LUMELX® 2024 SERIES • DIM TO WARM OPTICS



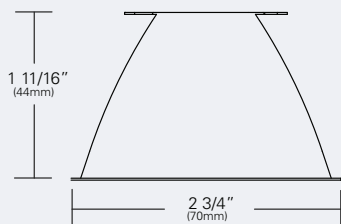
LX-W20-REF (W2) (72mm/20°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Black (B), White (W) or Aluminized (CLR) finish.



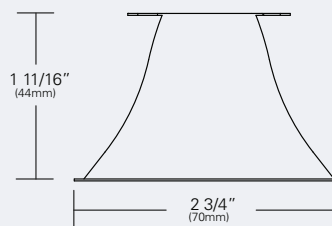
LX-WRD-REF (WR) (70mm/15°)

Field reducer. Proprietary field reducing baffle (black) with aluminized reflector. Reflector can be painted with Black (B), White (W), or Aluminized (CLR) finish. Tool-less, twist and lock installation.



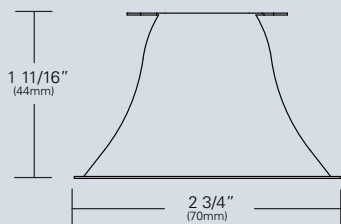
LX-W30-REF (W3) (72mm/30°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Black (B), White (W) or Aluminized (CLR) finish.



LX-W40-REF (W4) (72mm/40°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Black (B), White (W) or Aluminized (CLR) finish.



LX-W50-REF (W5) (72mm/50°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Black (B), White (W) or Aluminized (CLR) finish.

LUMeLEX® 2024 SERIES • DIM TO WARM PHOTOMETRIC DATA

LED RATING: 18-92

WR-70mm DIA Optic

Beam Spread (minimum)
(FR: Field Reducer)
Center Beam Candlepower
CRI

15°
5572
92

W2-72mm DIA Optic

Beam Spread (minimum)
Center Beam Candlepower
CRI

20°
7350
92

W3-72mm DIA Optic

Beam Spread (minimum)
Center Beam Candlepower
CRI

30°
4201
92

W4-72mm DIA Optic

Beam Spread (minimum)
Center Beam Candlepower
CRI

40°
2991
92

W5-72mm DIA Optic

Beam Spread (minimum)
Center Beam Candlepower
CRI

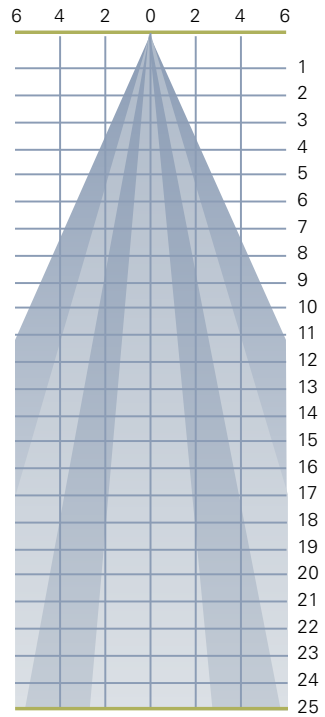
50°
2292
92

LED RATING: 25-92

All Max. Footcandles at 0° Beam Axis

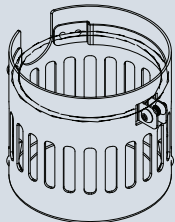
| | W5 (50°) | W4 (40°) | W3 (30°) | W2 (20°) | WR (15°) FR |
|------|-------------|-------------|-------------|-------------|-------------------|
| 2292 | 2991 | 4201 | 7350 | 5572 | |
| 573 | 748 | 1050 | 1838 | 1393 | |
| 255 | 332 | 467 | 817 | 619 | |
| 143 | 187 | 263 | 459 | 348 | |
| 92 | 120 | 168 | 294 | 223 | |
| 64 | 83 | 117 | 204 | 155 | |
| 47 | 61 | 86 | 150 | 114 | |
| 36 | 47 | 66 | 115 | 87 | |
| 28 | 37 | 52 | 91 | 69 | |
| 23 | 30 | 42 | 74 | 56 | |
| 19 | 25 | 35 | 61 | 46 | |
| 16 | 21 | 29 | 51 | 39 | |
| 14 | 18 | 25 | 43 | 33 | |
| 12 | 15 | 21 | 38 | 28 | |
| 10 | 13 | 19 | 33 | 25 | |
| 9 | 12 | 16 | 29 | 22 | |
| 8 | 10 | 15 | 25 | 19 | |
| 7 | 9 | 13 | 23 | 17 | |
| 6 | 8 | 12 | 20 | 15 | |
| 6 | 7 | 11 | 18 | 14 | |
| 5 | 7 | 10 | 17 | 13 | |
| 5 | 6 | 9 | 15 | 12 | |
| 4 | 6 | 8 | 14 | 11 | |
| 4 | 5 | 7 | 13 | 10 | |
| 4 | 5 | 7 | 12 | 9 | |

All Distances in Feet



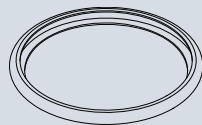
Photometric Data based on LED Rating: 18-92 (1800 Lumens/92CRI/22watts)

LUMELX® 2024 SERIES • ACCESSORIES



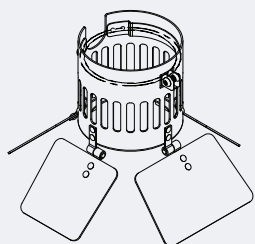
LX2024-HOLDER

External holder for size AA accessories and LXM Gels. Specify finish.



BACKER RING AA

Aluminum ring to hold gel when no other size AA accessories are being used.



LX2024 BARNDOOR

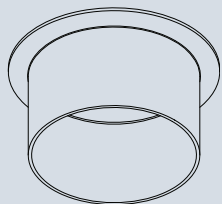
External holder with 4-way individually adjustable blades for control of light beam. Holds size AA accessories and LXM Gels. Specify finish.



1'LIGHT BLOCKING SCREENS AA

Stainless steel mesh screens used alone or in combinations will block from approximately 20% to 90% of the transmitted light without changing color temperature of the light. (LX2024-Holder or LX2024 Barndoor required for use with size AA Light Blocking Screens)

| No. | % of Light Blocked |
|--------|--------------------|
| AA801S | 20 |
| AA802S | 30 |
| AA803S | 40 |



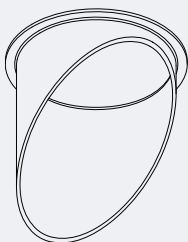
HOOD 2IN AA

2 inch deep hood (LX2024-Holder or LX2024 Barndoor required for use with Hood 2IN AA)



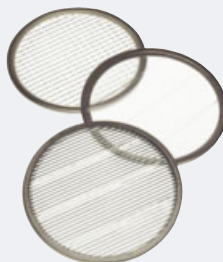
LOUVER HEX AA

1/8" thick Hexcell black metal louver used for thin profile. (LX2024-Holder or LX2024 Barndoor required for use with LOUVER HEX AA)



ANG HOOD 2IN AA

2 inch deep angled hood (LX2024-Holder or LX2024 Barndoor required for use with ANG Hood 2IN AA)



SPREAD LENSES AND BEAM SOFTENER

| No. | Description | % of Light Transmission |
|-----|---------------------|-------------------------|
| 990 | Spread Lens/Clear | 83 (5°X 50°) |
| 992 | Spread Lens/Clear | 85 (5°X 30°) |
| 995 | Spread Lens/Clear | 83 (50°X 50°) |
| 996 | Spread Lens/Clear | 86 (45°X 50°) |
| 998 | Beam Softener/Clear | 80 (45°X 45°) |

(LX2024-Holder or LX2024 Barndoor required for use with size AA Spread Lens/Beam Softener)

LUMeLEX® 2024 SERIES • GELS

As the foremost innovator in accent lighting, LSI offers a complete range of pre-cut Gels to modify the spread and color of light for the LumeLEX LED Series.



LumeLEX® SPREAD GELS

| Size: AA (76 mm diameter) | Spread Gel |
|------------------------------|------------------------|
| GEL-L1-AA | 1° Spread Gel |
| GEL-L5-AA | 5° Spread Gel |
| GEL-L10-AA | 10° Spread Gel |
| GEL-L20-AA | 20° Spread Gel |
| GEL-L30-AA | 30° Spread Gel |
| GEL-L40-AA | 40° Spread Gel |
| GEL-L60-AA | 60° Spread Gel |
| GEL-L80-AA | 80° Spread Gel |
| GEL-L30B5-AA | 30° by 5° Spread Gel |
| GEL-L40B2-AA | 40° by 0.2° Spread Gel |
| GEL-L60B1-AA | 60° by 1° Spread Gel |
| GEL-L60B10-AA | 60° by 10° Spread Gel |
| GEL-L75B45-AA | 75° by 45° Spread Gel |
| GEL-L90B60-AA | 90° by 60° Spread Gel |
| GEL-R101-AA | Beam Softener |

* LX2024-Holder and Backer Ring AA required to hold gels when no other rimmed "AA" accessories are used.