



# ESX1 LED Area Luminaire

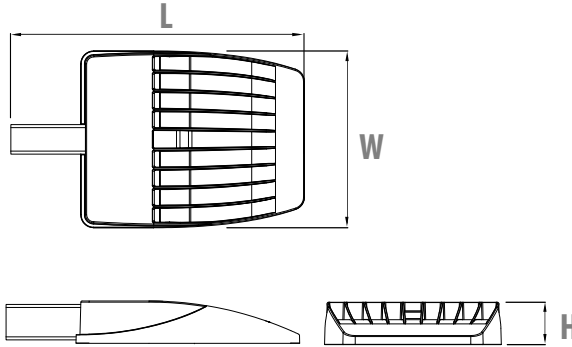


|                |
|----------------|
| Catalog Number |
| Notes          |
| Type           |

Hit the Tab key or mouse over the page to see all interactive elements.

## Specifications

|                |   |
|----------------|---|
| <b>EPA</b>     | 0.40 ft <sup>2</sup> (0.04 m <sup>2</sup> ) |
| <b>Length:</b> | 19.9" (50.5 cm)                             |
| <b>Width:</b>  | 12" (30.5 cm)                               |
| <b>Height:</b> | 2.9" (7.4 cm)                               |
| <b>Weight:</b> | 11.2 lbs (5.1 kg)                           |



## Introduction

The ESX LED area luminaire provides the combination of best product, best price and best delivery. ESX is ideal for one-for-one replacement of HID area lighting and provides up to 76% energy savings, long service life and fast payback.

The ESX1 delivers 8,000 to 25,000 lumens allowing it to replace 150W to 400W HID luminaires. All ESX luminaires feature adjustable light output, providing two light levels from one product, allowing greater flexibility in the field and on distributors' shelves.

All luminaires feature a reversible arm that allows for mounting on both round and square poles. Seven configurations of ESX1 luminaires are stocked in Acuity Brands distribution centers.

## Ordering Information

| HID Equivalent | Luminaire / Performance Package | High   |       | Low    |       | Distribution | Voltage  | Catalog Number                            | CI Code | UPC            |
|----------------|---------------------------------|--------|-------|--------|-------|--------------|----------|---|---------|----------------|
|                |                                 | Lumens | Watts | Lumens | Watts |              |          |   |         |                |
| <b>4000K</b>   |                                 |        |       |        |       |              |          |   |         |                |
| 150W to 250W   | <b>ESX1 LED P2</b>              | 14,000 | 98W   | 8,000  | 50W   | Type 3       | 120-277V | ESX1 LED P2 40K R3 MVOLT UPA BLS DDBXD M2 | *269PG3 | 00194994838302 |
| 400W           | <b>ESX1 LED P4</b>              | 25,000 | 190W  | 21,000 | 146W  | Type 3       | 120-277V | ESX1 LED P4 40K R3 MVOLT UPA BLS DDBXD M2 | *269PG8 | 00194994838340 |
|                |                                 |        |       |        |       | Type 5       | 120-277V | ESX1 LED P4 40K R5 MVOLT UPA BLS DDBXD M2 | *269PGG | 00194994838418 |
|                |                                 |        |       |        |       |              | 347-480V | ESX1 LED P4 40K R5 HVOLT UPA BLS DDBXD M2 | *269PGN | 00194994838463 |
| <b>5000K</b>   |                                 |        |       |        |       |              |          |   |         |                |
| 150W to 250W   | <b>ESX1 LED P2</b>              | 14,000 | 98W   | 8,000  | 50W   | Type 3       | 120-277V | ESX1 LED P2 50K R3 MVOLT UPA BLS DDBXD M2 | *269PGY | 00194994838555 |
| 400W           | <b>ESX1 LED P4</b>              | 25,000 | 190W  | 21,000 | 146W  | Type 3       | 120-277V | ESX1 LED P4 50K R3 MVOLT UPA BLS DDBXD M2 | *269PH1 | 00194994838531 |
|                |                                 |        |       |        |       | Type 5       | 120-277V | ESX1 LED P4 50K R5 MVOLT UPA BLS DDBXD M2 | *269PH2 | 00194994838548 |

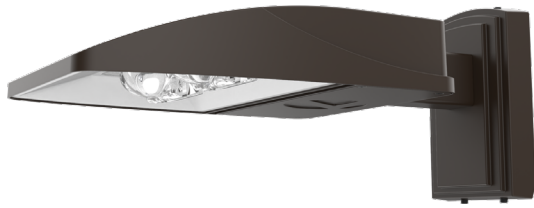
Note: Luminaire ships set on high (switchable to low). All luminaires feature adjustable light output, a reversible arm for mounting on round and square poles (drilling template #20) and dark bronze finish. The lumen output and input watts shown are nominal values. Refer to the lumens table on page 3 for specific values.

**Accessories:** Order as separate catalog number.

| Catalog Number | Description                              | CI Code | UPC            |
|----------------|--|---------|----------------|
| ESXWBA DDBXD U | ESX WBA wall bracket, dark bronze finish | *270S5T | 00194995092826 |
| ESX1HS U       | ESX1 House side shield, dark bronze      | *272VS8 | 00194995602926 |

Note: Accessories are ordered and shipped separately from the luminaire. Additional lead times may apply.





Wall Bracket (WBA)

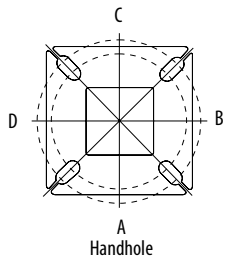


House Side Shield (HS)

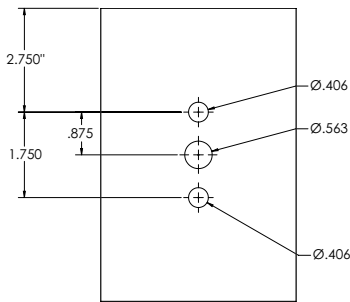
Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

HANDHOLE ORIENTATION



DRILLING TEMPLATE #20



Round Tenon Mount - Pole Top Slipfitters

| Tenon O.D. | ESX1 Mounting | Single     | 2 at 180°  | 2 at 90°   | 3 at 120°  | 3 at 90°   | 4 at 90°   |
|------------|---------------|------------|------------|------------|------------|------------|------------|
| 2 - 3/8"   | UPA (round)   | ASR4-5 190 | ASR4-5 280 | ASR4-5 290 | ASR4-5 320 | ASR4-5 390 | ASR4-5 490 |

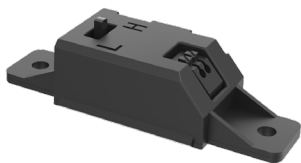
Drill/Side Location by Configuration Type

| Drilling Template | Mounting Option    | Single  | 2 @ 180    | 2 @ 90     | 3 @ 120         | 3 @ 90        | 4 @ 90           |
|-------------------|--------------------|---------|------------|------------|-----------------|---------------|------------------|
|                   | Head Location      | Side B  | Side B & D | Side B & C | Round Pole Only | Side B, C & D | Side A, B, C & D |
| #20               | Drill Nomenclature | DM19ESX | DM28ESX    | DM29ESX    | DM32ESX         | DM39ESX       | DM49ESX          |

Luminaire EPA

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

| Fixture Quantity & Mounting Configuration | Single | 2 @ 90 | 2 @ 180 | 3 @ 90 | 3 @ 120 | 4 @ 90 | 2 Side by Side | 3 Side by Side | 4 Side by Side |
|---|--------|--------|---------|--------|---------|--------|----------------|----------------|----------------|
| Mounting Type                             |        |        |         |        |         |        |                |                |                |
| UPA - Reversible Arm Mount                | 0.40   | 0.79   | 0.79    | 1.19   | 1.19    | 1.58   | 0.79           | 1.19           | 1.58           |



UPA - Reversible Arm Mount

The UPA reversible arm is designed to mount onto round and square poles. During installation, the flat end of the arm is placed against the flat surface on square poles. When using with round poles, the arm can be turned around so that the curved end is placed against the curvature on round poles. ESX1 can be mounted onto minimum 3.5" square and round poles.



Adjustable Light Output (ALO) technology:

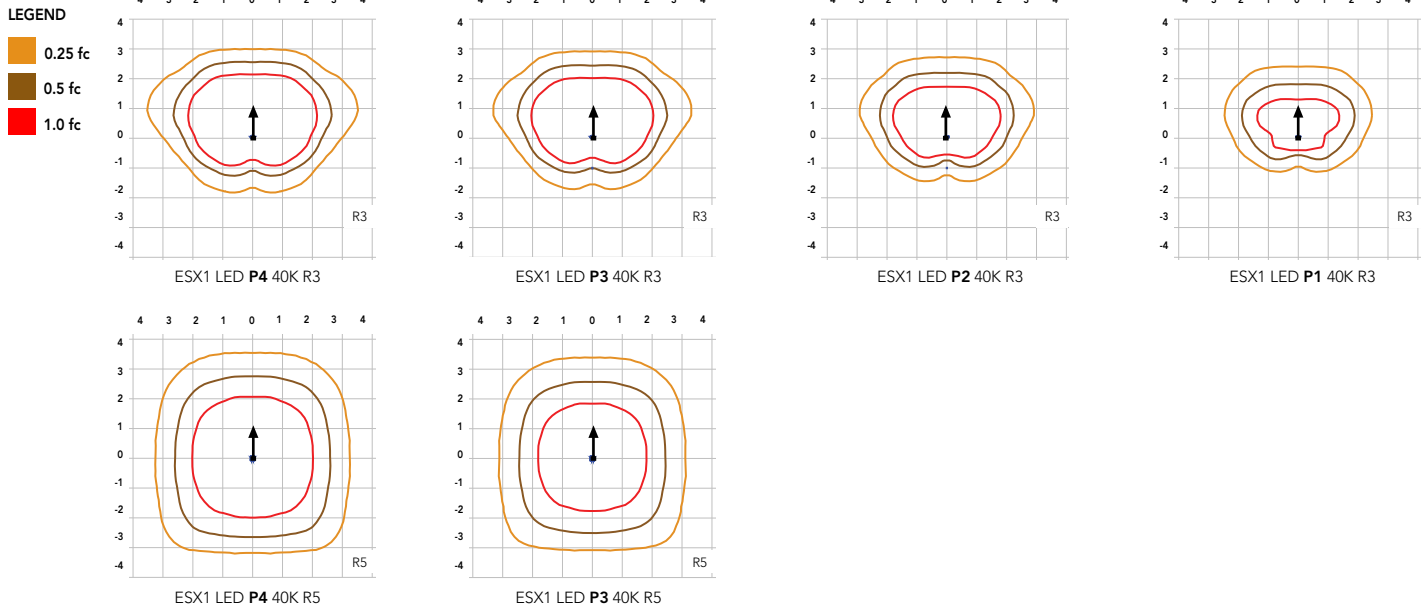
Internal bi-level switch with two light levels for greater flexibility within one product (default set to high)

|             | High Lumens | Low Lumens | HID Replacement |
|-------------|-------------|------------|-----------------|
| ESX1 LED P2 | 14,000      | 8,000      | 150W to 250W    |
| ESX1 LED P4 | 25,000      | 21,000     | 400W            |

## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [ESX Area homepage](#).

Isofootcandle plots for the ESX1. Distances are in units of mounting height (25').



## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

| Series      | Performance Package  | System Watts | Distribution Type | 40K (4000K, 70 CRI) |   |   |   |     | 50K (5000K, 70 CRI) |   |   |   |     |
|-------------|----------------------|--------------|-------------------|---------------------|---|---|---|-----|---------------------|---|---|---|-----|
|             |                      |              |                   | Lumens              | B | U | G | LPW | Lumens              | B | U | G | LPW |
| ESX1 LED P2 | P1 (switched to low) | 50W          | R3                | 7,874               | 2 | 0 | 2 | 157 | 7,993               | 2 | 0 | 2 | 160 |
|             | P2                   | 98W          | R3                | 13,917              | 2 | 0 | 2 | 142 | 14,128              | 2 | 0 | 2 | 144 |
| ESX1 LED P4 | P3 (switched to low) | 146W         | R3                | 20,658              | 3 | 0 | 3 | 141 | 20,881              | 3 | 0 | 3 | 143 |
|             |                      |              | R5                | 21,680              | 5 | 0 | 3 | 148 | 21,914              | 5 | 0 | 3 | 150 |
|             | P4                   | 190W         | R3                | 25,034              | 3 | 0 | 3 | 132 | 25,304              | 3 | 0 | 3 | 133 |
|             |                      |              | R5                | 26,273              | 5 | 0 | 3 | 138 | 26,557              | 5 | 0 | 3 | 140 |

### Electrical Load

| Performance Package | System Watts (W) | Current (A) |      |      |      |      |      |
|---------------------|------------------|-------------|------|------|------|------|------|
|                     |                  | 120V        | 208V | 240V | 277V | 347V | 480V |
| P1 (low)            | 50W              | 0.41        | 0.24 | 0.21 | 0.18 | ---  | ---  |
| P2                  | 98W              | 0.81        | 0.47 | 0.41 | 0.35 | ---  | ---  |
| P3 (low)            | 146W             | 1.22        | 0.70 | 0.61 | 0.53 | 0.42 | 0.30 |
| P4                  | 190W             | 1.58        | 0.91 | 0.79 | 0.69 | 0.55 | 0.40 |

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

| Ambient Temperature |       | Lumen Multiplier |
|---------------------|-------|------------------|
| 0°C                 | 32°F  | 1.03             |
| 5°C                 | 41°F  | 1.03             |
| 10°C                | 50°F  | 1.02             |
| 15°C                | 59°F  | 1.01             |
| 20°C                | 68°F  | 1.01             |
| 25°C                | 77°F  | 1.00             |
| 30°C                | 86°F  | 0.99             |
| 35°C                | 95°F  | 0.99             |
| 40°C                | 104°F | 0.98             |

### Projected LED Lumen Maintenance

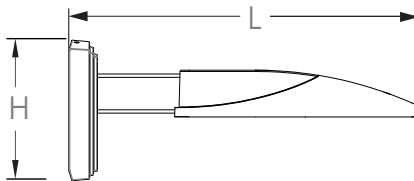
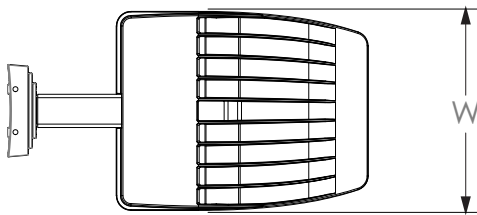
Data references the extrapolated performance projections for the platforms noted in a 25°C ambient and hours of LED testing (tested per IESNA LM-80-08 and reported per IESNA M-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the luminaire performance package below. For other lumen maintenance values, contact factory.

| Performance Package | TM-21 Percent Lumen Maintenance at 60,000 hrs |
|---------------------|---|
| P1 / P2             | 89%   |
| P3                  | 88%   |
| P4                  | 87%   |

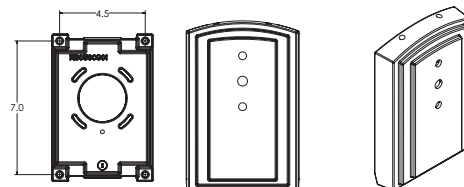
## Dimensions

### ESX1 with Wall Bracket (WBA)



- Length: 21.7" (55.1)  
Width: 12" (30.5 cm)  
Height: 2.9" (7.4 cm) Main Body  
8.9" (22.6 cm) Wall Bracket  
Weight: 14.2 lbs (6.4 kg)

### Wall Bracket (WBA) Mounting Detail



## FEATURES & SPECIFICATIONS

### INTENDED USE

The ESX1 offers a complete area lighting package providing everything needed to replace 150W to 400W HID area luminaires. Adjustable light output provides two light levels from one product, allowing greater flexibility while helping reduce inventory costs.

### CONSTRUCTION

The ESX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED efficacy and extends component life. The mounting arm is made of extruded aluminum and its universal function allows for mounting on round and square poles. The luminaires optics are IP66 rated, and sealed against moisture and environmental contaminants. The low-profile design results in a low EPA. ESX is rated for minimum 1.5 G vibration load per ANSI C136.31.

### FINISH

Exterior parts are protected by a Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. The result is a high-quality finish that is warrantied not to crack or peel. The standard finish provided on the housing and mounting arm is dark bronze.

### OPTICS

Designed for one-for-one replacement of HID luminaires, acrylic refractive lenses are engineered for application efficiency, distributing the light to where it is needed most, providing greater coverage and improved back-light control. Available in distributions Type 3 and Type 5. A house side shield accessory is available and can be used with both optics.

### ELECTRICAL

Light engines consist of high-efficacy LEDs with LED lumen maintenance greater than L87/60,000 hours. Color temperature (CCT) options of 4000K and 5000K with minimum CRI of 70 are available. Electronic drivers are 0-10V, capable of continuous dimming, and ensure system power factor >90% and THD <20%. All luminaires have 6kV surge protection. Driver input voltages available in MVOLT (120-277V) and HVOLT (347-480V).

### ADJUSTABLE LIGHT OUTPUT (ALO)

ALO allows dimming the luminaire via a switch that is accessible in the driver compartment. Luminaires ship on the high setting. Use ESX1 LED P4 at 25,000 lumens to replace 400W HID luminaires. When less light and/or more energy savings is desired, switch to low (P3) setting at 21,000 lumens. Use ESX1 LED P2 to replace 250W HID luminaires. When less light and/or more energy savings is desired, switch to low (P1) setting at 8,000 lumens or when replacing down to 150W HID.

### INSTALLATION

The ESX1 features an extruded aluminum arm that is reversible allowing it to mount on both round and square poles. ESX1 can be mounted onto minimum 3.5" square and round poles. A wall mount bracket is also available.

### LISTINGS

UL listed to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

### WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**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. Specifications subject to change without notice.



COMMERCIAL OUTDOOR

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