ESX1 LED
Area Luminaire

DLC PREMIUM · NIGHTTIME FRIENDLY · WET LOCATION™ · c UL us LISTED · 5 YEAR warranty

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. Eight configurations of ESX1 luminaires are stocked in Acuity Brands distribution centers.

Specifications

EPA 0.40 ft^2 (0.04 m^2)

Length: 19.9" (50.5 cm)

Width: 12" (30.5 cm)

Height: 2.9" (7.4 cm)

Weight: 11.2 lbs (5.1 kg)

Ordering Information

HID Equivalent	Luminaire / Performance Package	High		Low		Distribution	Voltage	Catalog Number	CI Code	UPC
		Lumens	Watts	Lumens	Watts					
4000K										
150W to 250W	**ESX1 LED P2**	14,000	98W	8,000	50W	Type 3	120-277V	ESX1 LED P2 40K R3 MVOLT UPA BLS DDBXD M2	*269PG3	00194994838302
400W	**ESX1 LED P4**	25,000	190W	21,000	146W	Type 3	120-277V	ESX1 LED P4 40K R3 MVOLT UPA BLS DDBXD M2	*269PG8	00194994838340
							347-480V	ESX1 LED P4 40K R3 HVOLT UPA BLS DDBXD M2	*269PGC	00194994838364
						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
5000K										
150W to 250W	**ESX1 LED P2**	14,000	98W	8,000	50W	Type 3	120-277V	ESX1 LED P2 50K R3 MVOLT UPA BLS DDBXD M2	*269PGY	00194994838555
400W	**ESX1 LED P4**	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.

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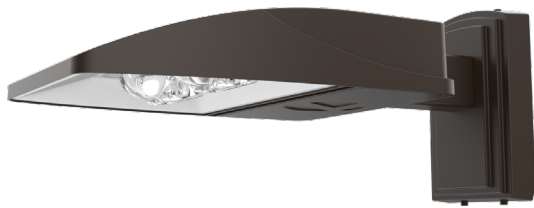
Wall Bracket (WBA)
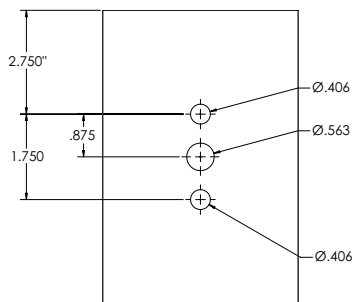

House Side Shield (HS)

Pole/Mounting Informatiion

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

HANDHOLE ORIENTATION

C

D — B

A
Handhole

DRILLING TEMPLATE #20

2.750"
.875
1.750
Ø.406
Ø.563
Ø.406
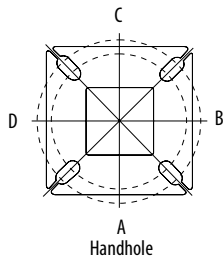
Round Tenon Mount - Pole Top Slipfitters

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
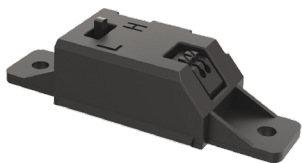
Adjustable Light Output (ALO) technology:

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

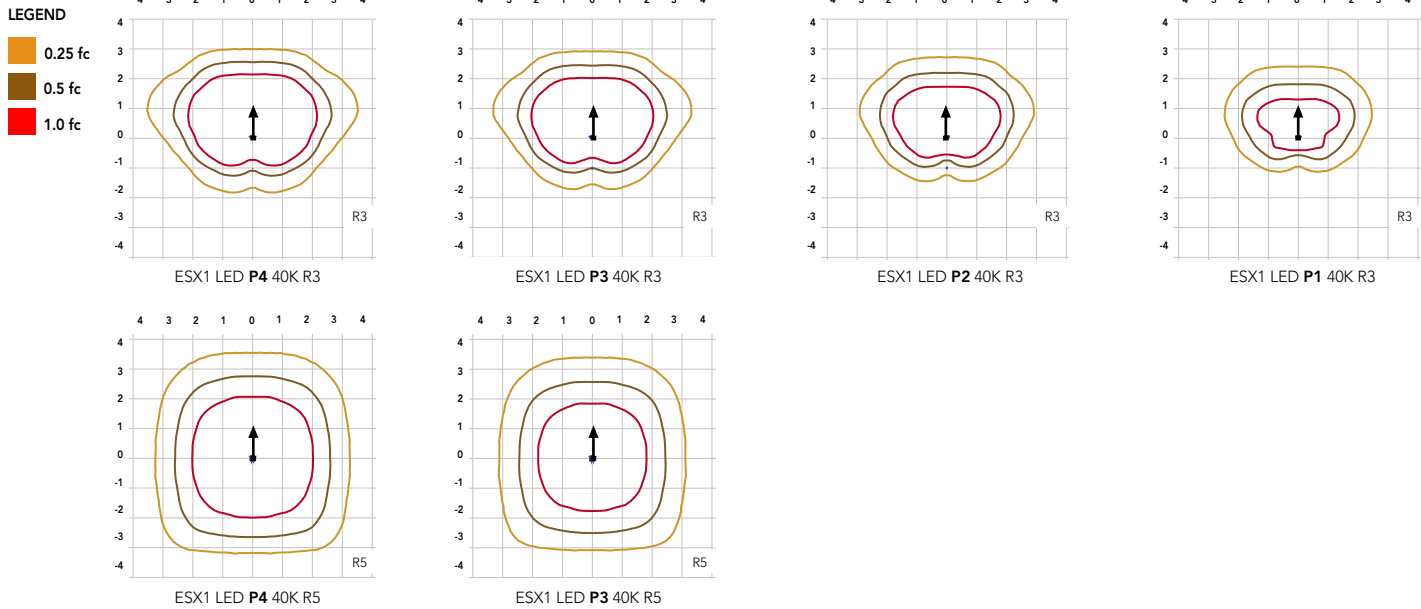### UPA - Reversible Arm Mount

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.

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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').

LEGEND

- 🟧 0.25 fc
- 🟫 0.5 fc
- 🟥 1.0 fc

ESX1 LED **P4** 40K R3

ESX1 LED **P3** 40K R3

ESX1 LED **P2** 40K R3

ESX1 LED **P1** 40K R3

ESX1 LED **P4** 40K R5

ESX1 LED **P3** 40K R5

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).

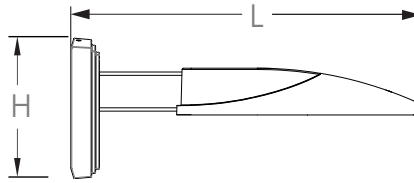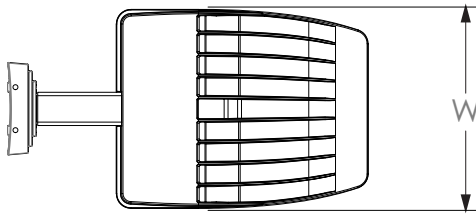| Ambient Temperature		Lumen Multiplier
0°C	32°F	1.03
5°C	41°F	1.03
10°C	50°F	1.02
15°C	59°F	1.01
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.99
40°C	104°F	0.98

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.

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

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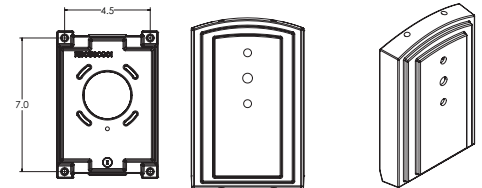
ESX1 with Wall Bracket (WBA)

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 to confirm which versions are qualified.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
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.

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