

# LLX

## Intelligent LED Linear Luminaire

The LLX luminaire family offers unparalleled performance and reliability across a broad range of industrial and commercial applications. Featuring a value-optimized chassis design, LLX intelligent LED luminaires are an energy-efficient, cost-effective alternative to uncontrolled LED and fluorescent luminaires.

Date: \_\_\_\_\_

Quantity: \_\_\_\_\_

Company: \_\_\_\_\_

Project: \_\_\_\_\_



### Key Features & Benefits

- Light output from 2,762 to 12,048 lumens and efficacy up to 149 lumens per watt
- Diffuse optic
- Surface or suspension mountable, continuous raceway and row-mounting capability
- Available in 1.2 and 2.4 m (4 and 8 ft) lengths
- Incorporates Lightelligence®, the Digital Lumens core technology that ensures openness, connectivity, and scalability

Digital Lumens' suite of SiteWorx® applications and an array of smart devices can meter your utilities, monitor your entire facility, and observe critical areas. SiteWorx starts delivering meaningful data and actionable insights right out of the box. Now you can make data-informed decisions, spot hidden problems, and take immediate action. All while keeping your people safe and productive and your operation efficient and sustainable.

SiteWorx Tune is an intelligent lighting control application that uses smart sensors and advanced cloud-based software to maximize energy savings, improve productivity, and maintain safe, comfortable light levels. It brings new control and savings to your lighting infrastructure. With SiteWorx Tune, you can stay informed via the Savings dashboard, which displays real-time energy usage and savings data.

Digital Lumens products are designed and manufactured to satisfy the highest quality standards of customers worldwide. Our products deliver performance, reliability, and long life and are supported by a global network of partners and product specialists.

## Specifications

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### SENSING AND CONTROL

#### Onboard Intelligence

- Energy and fault monitoring
- Protective temperature monitoring and control

#### Wireless Networking

- IEEE 802.15.4 Wireless Mesh

#### Connected IoT Platform

- SiteWorx Facility Insights Application Suite

#### Control Options

- Integrated SiteWorx Core Node (SCN-I)
- Integrated Connected Lighting Module (CLM)

#### Control Capabilities

- On-demand adjustments via mobile and web applications
- kWh and occupancy logging (SCN-I only)
- Daylight harvesting (SCN-I only)

#### Dimming

- 0% to 100%, continuous

### PERFORMANCE

#### Power Factor

- 0.9 minimum

#### Surge Protection

- Per IEC 61547
- 1 kV line-line / 2 kV line-earth

#### Wiring

- Direct wiring with PG-7 (0.5 inch) trade-size knockout

### ENVIRONMENTAL

#### Operating Temperature

- -10° to 40°C (-14° to 104°F)

#### Maximum Storage Temperature

- 40°C (104°F)

#### Operating Humidity

- 0% to 95% non-condensing

### PHYSICAL

#### Luminaire Frame & Power Enclosure

- White, polyester powder painted housing

#### Optic Material

- Square polycarbonate lens

#### Optic Options

- Diffuse

#### Mounting Options

- Surface or suspension mounted

### WARRANTY

- 5-Year Limited

### CERTIFICATIONS & SAFETY

#### Approbation

- UL/cUL

#### Environmental Suitability

- UL Damp Location



**lightelligence**  
ready

# LLX-B1

## Specifications

### PERFORMANCE

#### Length

- 1.2 m (4 ft)

#### Color Temperature<sup>1</sup>

- 5,000 K
- 4,000 K

#### Lumen Output (nominal)

- 2,762 lm

#### Power Consumption

- 18.6 W

#### Efficacy<sup>2</sup>

- 148 lm/W

#### CRI

- 80 minimum, 82 typical

#### Input Voltage

- 100 to 277 VAC, 50/60 Hz

### PHYSICAL

#### Dimensions (H x W x D)

- 71 x 1,219 x 73 mm (2.78 x 48 x 2.875 inches)

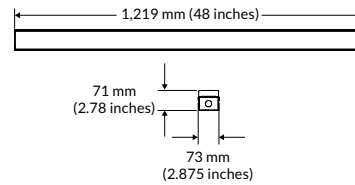
#### Weight

- 3 kg (6.6 lbs)

### LUMEN MAINTENANCE<sup>3,4</sup>

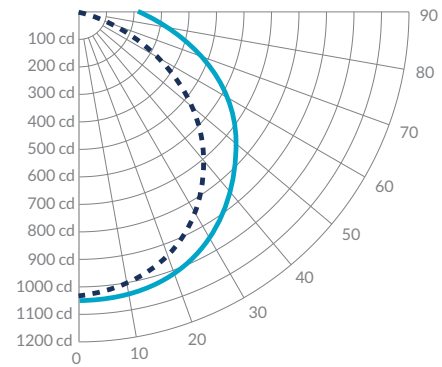
	25°C	40°C
<b>L<sub>90</sub></b>	66,000	54,000
<b>L<sub>80</sub></b>	139,000	114,000
<b>L<sub>70</sub></b>	223,000	82,000

## Dimensions



## Polar Candela Distribution

### Diffuse



# LLX-C1

## Specifications

### PERFORMANCE

#### Length

- 1.2 m (4 ft)

#### Color Temperature<sup>1</sup>

- 5,000 K
- 4,000 K

#### Lumen Output (nominal)

- 4,441 lm

#### Power Consumption

- 31 W

#### Efficacy<sup>2</sup>

- 143 lm/W

#### CRI

- 80 minimum, 82 typical

#### Input Ratings

- 100 to 277 VAC, 50/60 Hz

### PHYSICAL

#### Dimensions (H x W x D)

- 71 x 1,219 x 73 mm (2.78 x 48 x 2.875 inches)

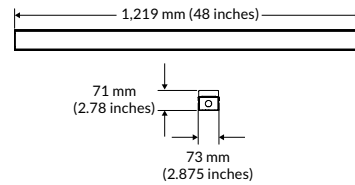
#### Weight

- 3 kg (6.6 lbs)

### LUMEN MAINTENANCE<sup>3,4</sup>

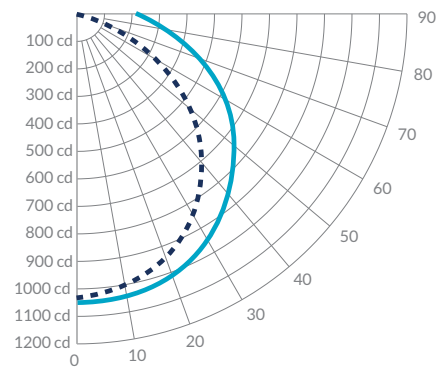
	25°C	40°C
<b>L<sub>90</sub></b>	66,000	54,000
<b>L<sub>80</sub></b>	139,000	114,000
<b>L<sub>70</sub></b>	223,000	82,000

## Dimensions



## Polar Candela Distribution

### Diffuse



# LLX-D1

## Specifications

### PERFORMANCE

#### Length

- 1.2 m (4 ft)

#### Color Temperature<sup>1</sup>

- 5,000 K
- 4,000 K

#### Lumen Output (nominal)

- 7,858 lm

#### Power Consumption

- 57 W

#### Efficacy<sup>2</sup>

- 137 lm/W

#### CRI

- 80 minimum, 82 typical

#### Input Ratings

- 100 to 277 VAC, 50/60 Hz

### PHYSICAL

#### Dimensions (H x W x D)

- 71 x 1,219 x 73 mm (2.78 x 48 x 2.875 inches)

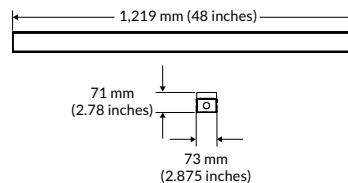
#### Weight

- 3 kg (6.6 lbs)

### LUMEN MAINTENANCE<sup>3,4</sup>

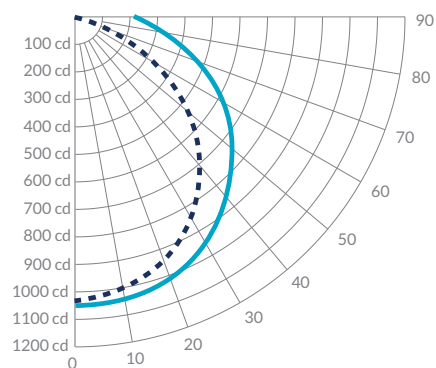
	25°C	40°C
<b>L<sub>90</sub></b>	66,000	54,000
<b>L<sub>80</sub></b>	139,000	114,000
<b>L<sub>70</sub></b>	223,000	82,000

## Dimensions



## Polar Candela Distribution

### Diffuse



# LLX-E1

## Specifications

### PERFORMANCE

#### Length

- 2.4 m (8 ft)

#### Color Temperature<sup>1</sup>

- 5,000 K
- 4,000 K

#### Lumen Output (nominal)

- 5,525 lm

#### Power Consumption

- 37 W

#### Efficacy<sup>2</sup>

- 149 lm/W

#### CRI

- 80 minimum, 82 typical

#### Input Ratings

- 100 to 277 VAC, 50/60 Hz

### PHYSICAL

#### Dimensions (H x W x D)

- 71 x 2,438 x 73 mm (2.78 x 96 x 2.875 inches)

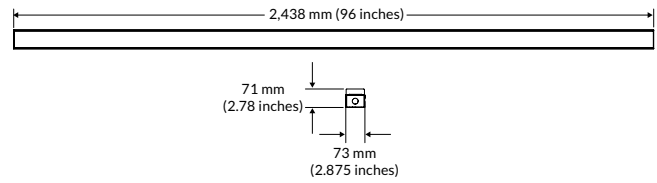
#### Weight

- 6 kg (13.2 lbs)

### LUMEN MAINTENANCE<sup>3,4</sup>

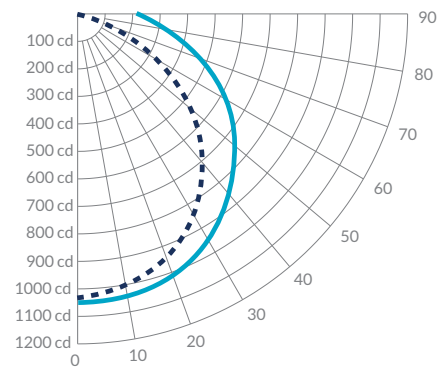
	25°C	40°C
<b>L<sub>90</sub></b>	71,000	71,000
<b>L<sub>80</sub></b>	149,000	149,000
<b>L<sub>70</sub></b>	238,000	238,000

## Dimensions



## Polar Candela Distribution

### Diffuse



# LLX-F1

## Specifications

### PERFORMANCE

#### Length

- 2.4 m (8 ft)

#### Color Temperature<sup>1</sup>

- 5,000 K
- 4,000 K

#### Lumen Output (nominal)

- 7,805 lm

#### Power Consumption

- 54 W

#### Efficacy<sup>2</sup>

- 144 lm/W

#### CRI

- 80 minimum, 82 typical

#### Input Ratings

- 100 to 277 VAC, 50/60 Hz

### PHYSICAL

#### Dimensions (H x W x D)

- 71 x 2,438 x 73 mm (2.78 x 96 x 2.875 inches)

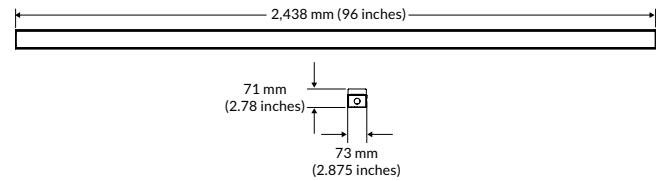
#### Weight

- 6 kg (13.2 lbs)

### LUMEN MAINTENANCE<sup>3,4</sup>

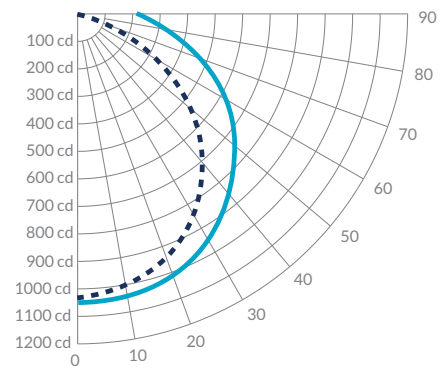
	25°C	40°C
<b>L<sub>90</sub></b>	71,000	71,000
<b>L<sub>80</sub></b>	149,000	149,000
<b>L<sub>70</sub></b>	238,000	238,000

## Dimensions



## Polar Candela Distribution

### Diffuse



# LLX-H1

## Specifications

### PERFORMANCE

#### Length

- 2.4 m (8 ft)

#### Color Temperature<sup>1</sup>

- 5,000 K
- 4,000 K

#### Lumen Output (nominal)

- 12,048 lm

#### Power Consumption

- 85 W

#### Efficacy<sup>2</sup>

- 142 lm/W

#### CRI

- 80 minimum, 82 typical

#### Input Ratings

- 100 to 277 VAC, 50/60 Hz

### PHYSICAL

#### Dimensions (H x W x D)

- 71 x 2,438 x 73 mm (2.78 x 96 x 2.875 inches)

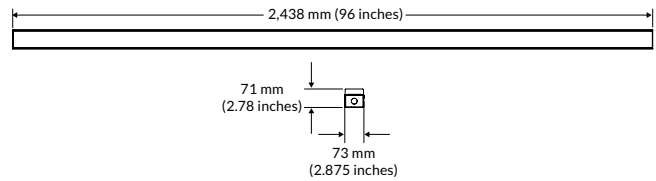
#### Weight

- 6 kg (13.2 lbs)

### LUMEN MAINTENANCE<sup>3,4</sup>

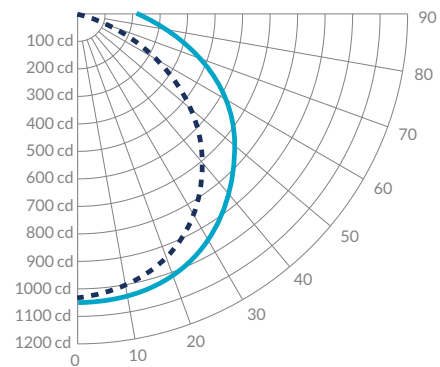
	25°C	40°C
<b>L<sub>90</sub></b>	71,000	71,000
<b>L<sub>80</sub></b>	149,000	149,000
<b>L<sub>70</sub></b>	238,000	238,000

## Dimensions



## Polar Candela Distribution

### Diffuse



#### Footnotes:

<sup>1</sup> Nominal CCT, as defined by ANSI C78.377-2008.

<sup>2</sup> Efficacy is based on 5000 K nominal.

<sup>3</sup> LEDs are driven below current rated limit to enhance efficiency and increase lifetime of the LEDs. Drivers are tested at ambient 25°C (77°F), 100% continuous duty. Driver design target is always minimum > 50,000 hours at 25°C (77°F).

<sup>4</sup> LM-79, LM-80 tests and reports are performed in accordance to IESNA standards, per TM-21. Lumen maintenance calculated in hours (L70 via TM-21) based on continuous operation.



## Ordering Information

The table below provides guidelines for encoding item numbers when ordering LLX luminaires. Select a luminaire type (lumen output), voltage, optic, and CRI/CCT and Control, and then use the hyphenated character codes to build a part number.

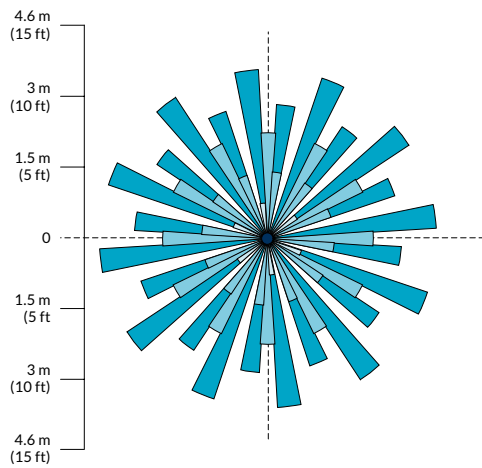
### LLX

Luminaire	Type	Voltage	Optic	CRI/CCT and Control
	<b>-B1</b>			<b>SCN-CLM Enabled</b> <b>-840</b> 80 CRI/82 TYP 4,000 K
	<b>-C1</b>			<b>-850</b> 80 CRI/82 TYP 5,000 K
	<b>-D1</b>			<b>SCN-I Enabled</b> <b>-841</b> 80 CRI/82 TYP 4,000 K
<b>LLX</b>		<b>-ST</b> Standard Voltage 100 to 277 VAC	<b>-D</b> (Diffuse)	<b>-851</b> 80 CRI/82 TYP 5,000 K
	<b>-E1</b>			<b>No Control</b> <b>-842</b> 80 CRI/82 TYP 4,000 K
	<b>-F1</b>			<b>-852</b> 80 CRI/82 TYP 5,000 K
	<b>-H1</b>			

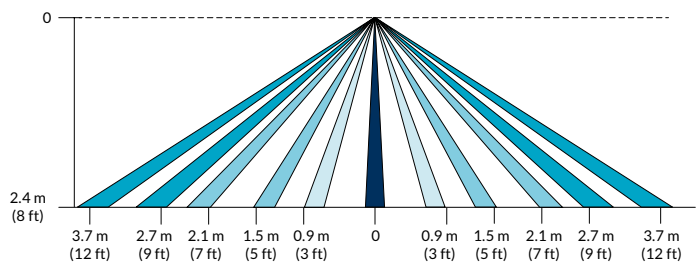
## SCN-I Sensor Coverage

### Standard Optic

Top View



Side View



## Luminaire/Control Schematic

Luminaires can be installed and wired end-to-end in a multi-luminaire run, or as standalone units. Each LLX luminaire has wireless control built in and can be coordinated to a standalone SCN/DLA. Each SCN/DLA can control a single or a group of LLX luminaires providing flexible control options through coordinated control via the SiteWorx Tune Application.

