

Date: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Firm: \_\_\_\_\_  
 Project: \_\_\_\_\_

# LLE B1·D1

## Intelligent LED Linear Product Family

### Product Family Features:

- Flexible controls for fine-tuning of lighting settings
- Wireless compatibility with LightRules® software
- Control flexibility for individual or group management
- Diffuse optics eliminate point sources and glare
- Digital Lumens' signature intelligence — occupancy sensing, daylight sensing, logging of all key energy and occupancy data
- Software-defined coordinated control and progressive dimming maximize occupant comfort and energy savings
- No glass or mercury



### SENSING & CONTROL (DLA)

Onboard Intelligence	<ul style="list-style-type: none"> <li>• Modular sensing with data logging</li> <li>• Energy and fault monitoring</li> </ul>
Native Sensing	<ul style="list-style-type: none"> <li>• Integrated PIR occupancy sensor</li> <li>• Integrated daylight sensor</li> </ul>
Wireless Networking	IEEE 802.15.4 Wireless Mesh
Control Capabilities	<ul style="list-style-type: none"> <li>• Scheduling via LightRules®</li> <li>• kWh and occupancy logging</li> <li>• Daylight harvesting</li> </ul>
Dimming	<ul style="list-style-type: none"> <li>• 0-100%, continuous</li> <li>• PAR1789-compliant with modulation &gt;1.25 kHz</li> </ul>

### ENVIRONMENTAL

Operating Temp.	-10° to 40° C
IP Rating <sup>1</sup>	IP40
Humidity	0-95%, non-condensing
Photobiological Safety	Exempt group per IEC 62471

### CERTIFICATION & WARRANTY

Certifications	UL, cUL, UL-MX NOM, CE, DLC Premium, FCC Part 15 Class B, CISPR 15
Fixture Warranty	10-Year Limited

<sup>1</sup> ⚠️ Maintain 3 m setback from walls open to exterior.  
 ⚠️ Clean with mild soap and water only.

## Fixture Specifications

### PERFORMANCE<sup>2</sup>

	LLE-B1-ST		LLE-D1-ST	
Color Temperature <sup>3</sup>	5000 K CCT	4000 K CCT	5000 K CCT	4000 K CCT
CRI	80 minimum, 82 typical		80 minimum, 82 typical	
Lumen Output (Nominal)	4,157 lm	3,987 lm	6,525 lm	6,265 lm
Power Consumption (Nominal)	33 W	33 W	52 W	51 W
Efficacy	126 lm/W	119 lm/W	125 lm/W	123 lm/W
Input Ratings <sup>4</sup>	120-277 V AC, 50-60 Hz, 0.27 A		120-277 V AC, 50-60 Hz, 0.50 A	
Unified Glare Rating	20			
Lumen Maintenance <sup>5</sup>	<ul style="list-style-type: none"> <li>• L70: 60,000 hours</li> <li>• L70 &gt; 120,000 hours</li> <li>• L80 &gt; 100,000 hours</li> <li>• L90 &gt; 80,000 hours</li> </ul>			
Power Factor	0.9 minimum			
Surge Protector	<ul style="list-style-type: none"> <li>• Per IEC 61547</li> <li>• 1 kV line-line / 2 kV line-earth</li> </ul>			

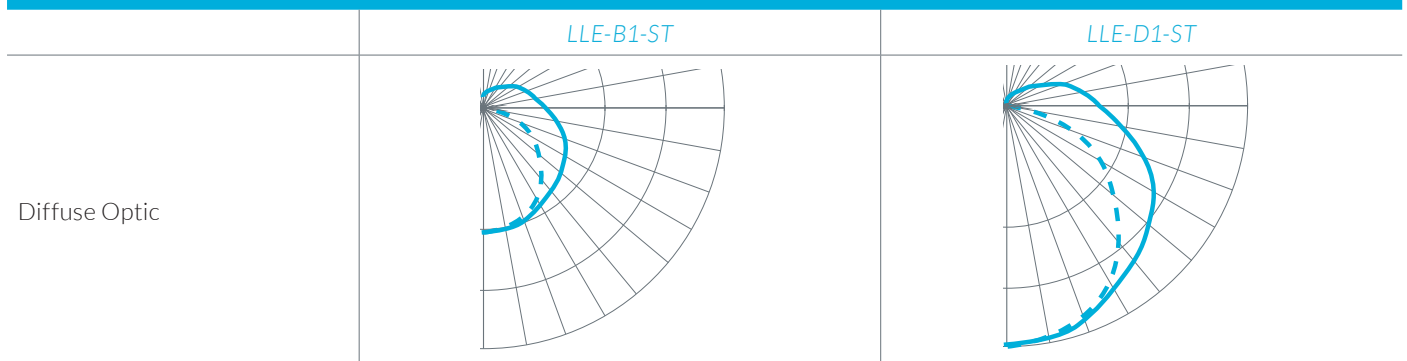
### PHYSICAL

	LLE-B1-ST	LLE-D1-ST
Weight	<i>Fixture Only:</i> 3.0 kg <i>Fixture with DLA-LLE:</i> 3.2 kg	<i>Fixture Only:</i> 3.3 kg <i>Fixture with DLA-LLE:</i> 3.5 kg
Dimensions (H x W x D)	<i>Fixture Only:</i> 10.9 x 9.3 x 123.2 cm <i>Fixture with DLA-LLE:</i> 12.4 x 9.7 x 130.2 cm	
Mounting Options	Aircraft Cable or Fixed Mount (ceiling or wall)	
Enclosure	PC lens, PC/ABS endcaps, power-coated steel and aluminum	

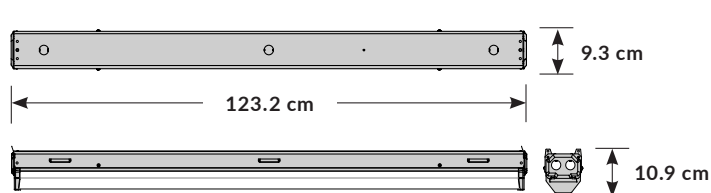
### SPACING CRITERIA<sup>6</sup>

	LLE-B1-ST	LLE-D1-ST
Diffuse Optic	1.24	1.32

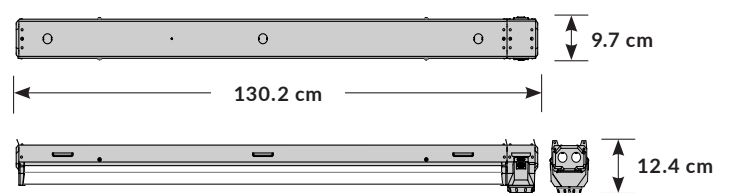
### POLAR CANDELA DISTRIBUTION



#### Fixture only<sup>7</sup>



#### Fixture with DLA-LLE



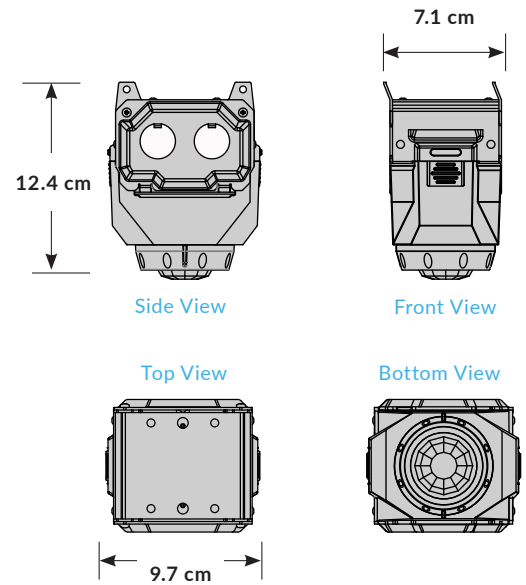
## DLA-LLE Specifications

### PERFORMANCE

Input Voltage	12 - 24 V DC
Power Consumption	< 0.5 W
Connections	<ul style="list-style-type: none"> <li>• DC (Power)</li> <li>• DALI (Data)</li> </ul>

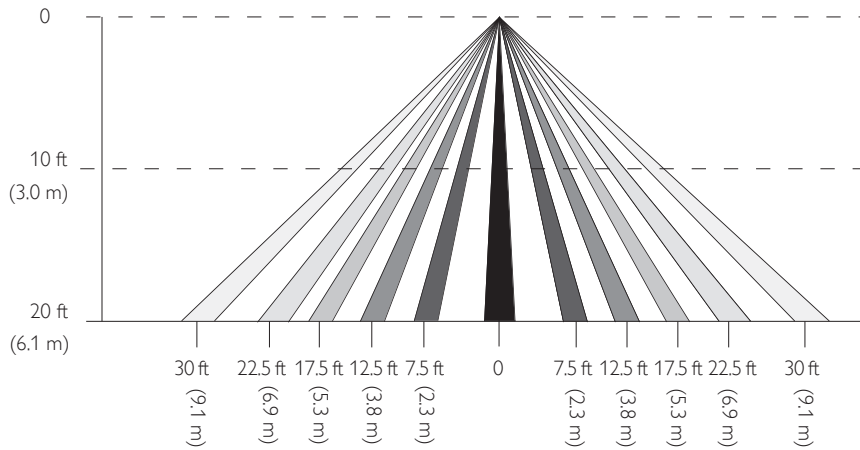
### PHYSICAL

Dimensions (H x W x D)	12.4 x 9.7 x 7.1 x cm
Weight	< 0.5 W
Enclosure	PC/ABS, powder-coated steel and aluminum

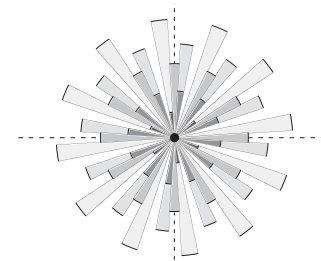


## Sensor Coverage

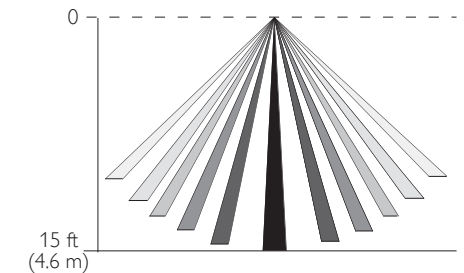
### Ceiling Mount (Side View)



### Ceiling Mount (Top View)

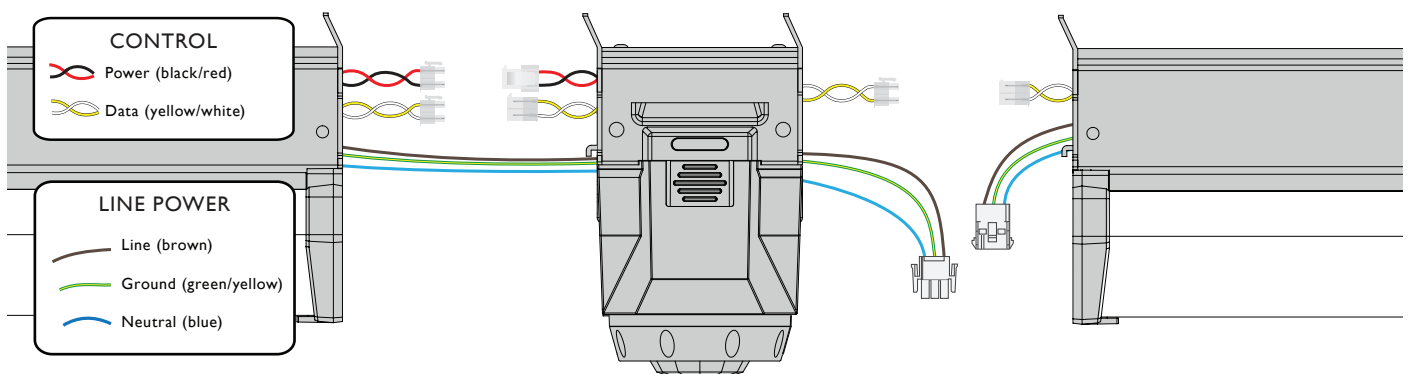


### Wall Mount (Top View)



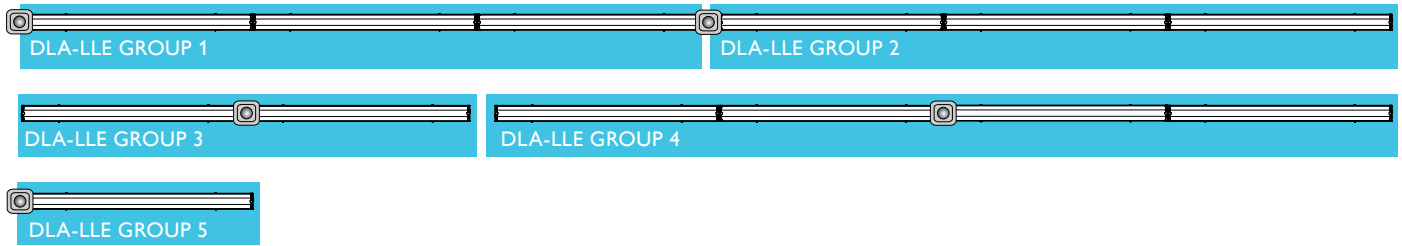
## Wiring Schematic

Each fixture contains line power leads that connect to either the power source or to an adjacent fixture. Additionally, control data and power wires are provided to connect to the Digital Light Agent.



## LLE/DLA-LLE Schematic

Fixtures can be installed and wired end-to-end in a multi-fixture run, or as standalone units. Each DLA can control up to fifteen LLE fixtures. The number of DLA modules installed in a fixture run will depend on preference and room characteristics.



## Ordering Information

**Note:** For short/standard leadtimes, select options in **bold**.

LLE (Fixture):

Using the table below, encode the item number for the fixture you wish to order. For example, *LLE-B1-ST-D-850*.

FIXTURE	LUMEN OUTPUT		VOLTAGE		OPTIC		CRI/CCT	
LLE	<b>-B1</b>	<b>4,000 lumens</b>	<b>-ST</b>	<b>Standard</b>	<b>-D</b>	<b>Diffuse</b>	-840	4000 K CCT
	<b>-D1</b>	<b>6,500 lumens</b>					<b>-850</b>	<b>5000 K CCT</b>

Digital Light Agent (DLA) for LLE:

CATEGORY	PART NUMBER	DESCRIPTION
Modular Control	<b>DLA-LLE-D</b>	Digital Light Agent for LLE, Dense Motion Sensor

Accessories:

CATEGORY	PART NUMBER	DESCRIPTION
Hanging Hardware (LLE)	<b>LHHAS</b>	Aircraft Cable Hanging Hardware (includes cables, fasteners, and spring clips for five (5x) fixtures)
	<b>LHHRM</b>	Fixed Mount Hanging Hardware (includes mounting brackets and locking screws for five (5x) fixtures)
LLE Demonstration Kit	<b>LLEDK</b>	Carrying case, DLA-LLE-D, pre-wired NEMA 5-15, power cord, DLUSB wireless antenna (includes fixture)



- Individual fixture performance may vary.
- Nominal CCT, as defined by ANSI C78.377-2008
- Input ratings may vary for international certifications.
- Projected, based on TM-21 data. L70 = Time to 70% lumen maintenance. For additional details, refer to the Statement of Lumen Maintenance.
- Ratio of fixture spacing to mounting height.
- LLE fixture length is 48 in (122 cm) when mounted end to end.