

# ESSENTIALS SERIES 4.0

## LED High Bay Fixtures

Essentials Series 4.0 provides the highest quality, reliability and performance with extraordinary lumen maintenance and efficacy, delivering superior ROI for your application.

Designed with best-in-class thermal management to perform at ambient temperatures up to 65°C.

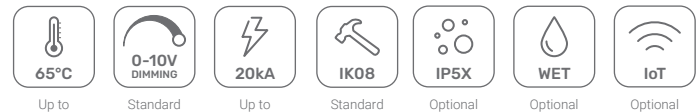
**APPLICATIONS:** Industrial and Commercial Facilities, Warehouses, Manufacturing, Parking Garages, Distribution Centers, Hangars, and Indoor Sports.



## FEATURES & SPECIFICATIONS

- **Environment:** Dry/Damp, for interior applications. Dust-resistant (IP5X) option available (LED modules only). Wet Location available. Impact protection (IK08).<sup>17</sup>
- **Ambient Range Operation:** -40°C up to 65°C (-40°F up to 149°F), depending on product line<sup>1</sup>.
- **Heat Sinks:** Extruded aluminum heat sinks provide optimal thermal management, decreasing LED junction temperature and ensuring long life and high efficacy. In addition, we attach the LED boards to the heat sink using a high quality thermally conductive adhesive instead of screws. This promotes long life even at high ambient temperatures.
- **High-Quality Materials:** FR4 PCB is used to limit stress on solder joints by matching coefficient of thermal expansion between the LED and the PCB more closely.
- **Power Supply Access:** Wireway cover is captured and hinged, opening over 120° for hands-free, easy access and quick wiring. Center hole accepting 3/4" stem and also 1/2" KO near top end of wire way.
- **Mounting:** Fixture is cable ready (CRM) and has a center opening to accept a 3/4" stem mount, cable (CRM), HOOK or surface mount options with optional MBR. Minimum 4" distance from fixture to ceiling required to allow air flow for cooling. MBR reduces ambient range by 5°C when mounted flush to junction box.
- **Lenses:** UV stable polycarbonate clear and aisle or acrylic (PMMA) frosted available.
- **CCT:** 3500K, 4000K and 5000K standard, other CCT available (extended lead time).<sup>2</sup>
- **Wire Guards:** Optional factory-installed wire guards for the fixture and OCC occupancy sensors are available.
- **10 Year Performance Warranty:** Fixture is guaranteed for 10 years, including lumen maintenance (L70), color temperature, and driver.

Project Name	
Date	
Cat. Number	
Type	



MULTIPLE PATENTS PENDING

- **Rotatable LED Modules:** Field adjustable rotating modules. Easily adjusted outer modules with stops at 45°, 90° and 135°. Factory set at 0°. Allows for customizing light pattern to suit individual situations.<sup>3,14</sup>
- **Bulk Packaging:** All fixtures come in eco-friendly bulk packaging. Individual boxes are also available.

## POWER & CONTROL

- **Power Input:** 120-277V or 347-480 (50/60Hz), typical.
- **Power Factor:** Greater than 0.9 (0.96-0.99 typical).
- **Total Harmonic Distortion:** Less than 20%, 10% typical.
- **Networked Lighting Controls:** UltraLink Wireless Controls with Bluetooth® NLC Mesh technology. Available as factory installed and as EZ-Connect™ Twist Lock System for field installation, (requires adding an EZ-Connect™ Receptacle, see Controls).
- **Occupancy Sensors:**<sup>27</sup> PIR and Microwave occupancy sensors, On/Off/Dim. Available options: Factory installed and EZ-Connect™ Twist Lock System for field installation, (requires adding an EZ-Connect™ Receptacle, see Controls).
- **Emergency Battery Backup (EMB and EMB2):** EMB produces ~2000 lumens for a minimum of 90 minutes. EMB2 produces ~2200 lumens for a minimum of 90 minutes. EMB has 16 watts output, EMB2 has 20 watts output. EMB factory installation only, not able to be field installed. Available in LV and HV (EMB, M fixtures only)<sup>1,8,10,14,15,16,22</sup>
- **Surge Protection:** Standard is 6kV for drivers. Additional surge protection is available. All HV orders will have 10kV SRG automatically added.
- **Driver Quick Disconnect:** A Driver Quick Disconnect feature is available as an additional option.

## TECHNICAL SPECIFICATIONS

**PERFORMANCE LINE:** Highest efficacy and longest life. Up to 65°C [149°F]

Lumen Output <sup>5</sup>	Efficacy	Watts	Frame <sup>6</sup>	Part Number
8,291	165	50	2MS	ES40P-A1-08K-2MS
13,438	167	81	4MS or 2M	ES40P-A1-13K-4MS or -2M
15,544	165	94	4MS or 2M	ES40P-A1-15K-4MS or -2M
17,818	164	109	4MS or 2M	ES40P-A1-17K-4MS or -2M
21,743	168	129	6MS	ES40P-A1-21K-6MS
24,874	167	149	6MS	ES40P-A1-24K-6MS
31,088	167	186	4M	ES40P-A1-31K-4M
36,044	166	217	4M	ES40P-A1-36K-4M
43,486	168	258	6M	ES40P-A1-43K-6M
49,749	167	298	6M	ES40P-A1-49K-6M
58,933	165	358	6M	ES40P-A1-58K-6M

**STANDARD LINE:** High efficacy and long life. Up to 55°C [131°F]

Lumen Output <sup>5</sup>	Efficacy	Watts	Frame <sup>6</sup>	Part Number
6,453	159	41	2MS	ES40S-A1-06K-2MS
9,822	158	62	2MS	ES40S-A1-09K-2MS
12,280	152	81	2MS	ES40S-A1-12K-2MS
17,295	142	122	4MS or 2M	ES40S-A1-17K-4MS or -2M
20,646	161	128	4MS or 2M	ES40S-A1-20K-4MS or -2M
23,789	157	151	4MS or 2M	ES40S-A1-23K-4MS or -2M
30,969	163	190	6MS	ES40S-A1-30K-6MS
35,394	157	227	6MS	ES40S-A1-36K-6MS
43,277	160	271	4M	ES40S-A1-43K-4M
49,121	156	315	4M	ES40S-A1-49K-4M
73,681	159	465	6M	ES40S-A1-73K-6M

**VALUE LINE:** Lowest cost per lumen. Up to 45°C [113°F]

Lumen Output <sup>5</sup>	Efficacy	Watts	Frame <sup>6</sup>	Part Number
6,135	151	41	2MS	ES40V-A1-06K-2MS <sup>21</sup>
13,699	150	92	2MS	ES40V-A1-13K-2MS
15,378	147	105	4MS or 2M	ES40V-A1-15K-4MS or -2M
27,398	151	181	4MS or 2M	ES40V-A1-27K-4MS or -2M
41,097	151	271	6MS	ES40V-A1-41K-6MS
54,796	154	356	4M	ES40V-A1-54K-4M
70,787	157	455	6M	ES40V-A1-70K-6M

**2M model available as a variation of 4MS.** Consult factory.

<sup>4</sup>LM-79, LM 80 tests and reports are performed in accordance to IESNA standards, per TM-21. Lumen maintenance in hours (L70 via TM-21) based on 24/7 operation. <sup>5</sup>Typical (±10%) at 277V (LV), 25°C, 4000K/5000K, Clear Lens, CRI 80+. Lumen Multipliers: 3500K = 0.97 ; Frosted Lens = 0.98 ; Aisle Lens = 0.96

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

**PROJECTED L70 VIA TM-21 (24/7 OPERATION)**

25°C Ambient Temp.	65°C Ambient Temp. <sup>1</sup>
<b>309,000 hours</b>	<b>194,000 hours</b>

Ambient	Year 1	Year 5	Year 10
<b>25°C</b>	99.66%	95.60%	90.76%
<b>45°C</b>	99.51%	94.55%	88.68%
<b>55°C</b>	99.34%	93.81%	87.34%
<b>65°C</b>	99.12%	93.00%	85.88%

Ambient	25°C	35°C	45°C	55°C	65°C
Lumen Multiplier	1.00	0.99	0.98 <sup>4</sup>	0.98	0.97

**PROJECTED L70 VIA TM-21 (24/7 OPERATION)**

25°C Ambient Temp.	55°C Ambient Temp. <sup>1</sup>
<b>256,000 hours</b>	<b>184,000 hours</b>

Ambient	Year 1	Year 5	Year 10
<b>25°C</b>	99.60%	94.99%	89.53%
<b>45°C</b>	99.29%	93.63%	87.01%
<b>55°C</b>	99.09%	92.82%	85.55%

Ambient	25°C	35°C	45°C	55°C	65°C
Lumen Multiplier	1.00	0.98	0.97	0.97	X

**PROJECTED L70 VIA TM-21 (24/7 OPERATION)**

25°C Ambient Temp.	45°C Ambient Temp. <sup>1</sup>
<b>238,000 hours</b>	<b>191,000 hours</b>

Ambient	Year 1	Year 5	Year 10
<b>25°C</b>	99.52%	94.66%	88.92%
<b>45°C</b>	99.19%	93.22%	86.27%

Ambient	25°C	35°C	45°C	55°C	65°C
Lumen Multiplier	1.00	0.98	0.97	X	X

## ORDERING

When submitting for utility incentives and rebates, please use catalog numbers. When ordering OPTIONS, separate each option with a "-". Catalog number always ends with dimming selection "10V"

Series-Compliance-Lumens-Frame		Color Temp	CRI	Lens	Voltage	Mounting
ES40S-A1-06K-2MS <sup>2,7</sup>	ES40V-A1-27K-4MS <sup>5,7</sup>	35 <sup>2</sup>	80+	CL	LV	CRM <sup>9</sup>
ES40V-A1-06K-2MS <sup>2,7,21</sup>	ES40S-A1-30K-6MS <sup>7</sup>	3500K	(Standard)	Clear Lens, Wide Distribution	120-277V	Cable-ready (standard) for suspension mounting or 3/4" stem mount
ES40P-A1-08K-2MS <sup>2,7</sup>	ES40P-A1-31K-4M <sup>7</sup>	40		FR	HV <sup>23</sup>	MBR <sup>110</sup>
ES40S-A1-09K-2MS <sup>2,7</sup>	ES40P-A1-36K-4M	4000K	Other CRI available upon request	Frosted Lens, Wide Distribution	347-480V	Factory installed mounting box and bracket for surface mount applications - adds 1 1/8" to fixture height
ES40S-A1-12K-2MS <sup>2,7</sup>	ES40S-A1-36K-6MS	50		AL		HOOK <sup>10</sup>
ES40P-A1-13K-4MS <sup>2,6,7</sup>	ES40V-A1-41K-6MS <sup>1,8,19</sup>	5000K		Aisle Distribution		Field installed mounting kit, includes hook and one leveling Y-cable.
ES40V-A1-13K-2MS <sup>2,7</sup>	ES40P-A1-43K-6M	Other CCT available upon request				Plate and Hanger mount also available, sold and packaged separately, see Accessories, order as CRM.
ES40P-A1-15K-4MS <sup>2,6,7</sup>	ES40S-A1-43K-4M					Other mounting options available, contact factory
ES40V-A1-15K-4MS <sup>2,6,7</sup>	ES40P-A1-49K-6M					
ES40P-A1-17K-4MS <sup>5,7</sup>	ES40S-A1-49K-4M					
ES40S-A1-17K-4MS <sup>5,7</sup>	ES40V-A1-54K-4M <sup>7,19</sup>					
ES40S-A1-20K-4MS <sup>5,7</sup>	ES40P-A1-58K-6M <sup>19</sup>					
ES40S-A1-23K-4MS <sup>5,7</sup>	ES40V-A1-70K-6M <sup>19</sup>					
ES40P-A1-24K-6MS <sup>7</sup>	ES40S-A1-73K-6M <sup>7,19</sup>					

Controls <sup>14,30</sup>			Cord & Plug - No cord/plug (Standard) <sup>10,13</sup>		Option <sup>10</sup>	Dimming
EZ-CONNECT RECEPTACLE (for field installed controls)			6' 18AWG CORD, WHITE WITH THE FOLLOWING-		EMB <sup>1,8,10,14,15,16,22</sup>	10V 0-10V Interface (Standard)
EZ10 Adds an EZ-Connect Receptacle with Twist Lock System to the fixture for field installed EZ-Connect Controls (sold separately as accessories and must be ordered as a separate line item).		EZ-CONNECT BASIC CONTROLS (See Page 5)	10' 18AWG CORD, WHITE WITH THE FOLLOWING-		WG <sup>3,10</sup>	
		EZ-CONNECT ULTRALINK WIRELESS CONTROLS (See Page 6)			CTOPEND <sup>1,8,10</sup>	
					WET <sup>3,10,14,15</sup>	
					INDR <sup>1,3,10,14</sup>	
FACTORY INSTALLED					SRG <sup>10,14,23</sup>	GTD <sup>10,15,19</sup>
BASIC CONTROLS		ULTRALINK WIRELESS CONTROLS			BOX <sup>10</sup>	
LINMORE LED	WATTSTOPPER				CTRW <sup>7,10</sup>	
LOCCDIM12 (LV) PIR Occupancy and Daylight Sensor, On/Off/Dim, 12" Max Mounting Height, IP66. LV only.	OCC8 (HV) OCC sensor, on/off, w/ photocell, 8' mounting height	ULTRA UltraLink Bluetooth NLC Wireless Receiver and Fixture Controller			R45 <sup>25</sup>	
LOCCDIM40 (LV) PIR Occupancy and Daylight Sensor, On/Off/Dim, 20" to 40" Mounting Height, IP66. LV only.	OCC20 (HV) OCC sensor, on/off, w/ photocell, up to 20' mounting height	ULTRAHGA UltraLink Bluetooth NLC Wireless Receiver and Fixture Controller with Long Range Antenna			R90 <sup>25</sup>	
	OCC40 (HV) OCC sensor, on/off, w/ photocell, up to 40' mounting height	ULTRAPIR20 UltraLink Bluetooth NLC Wireless Fixture Controller with PIR Occupancy Sensor, 8' to 20' Mounting Height			R135 <sup>1,25</sup>	
	OCCDIM8 (LV/HV) <sup>7</sup> OCC sensor, dimmable, w/ photocell, 8' mounting height, programmable via remote	ULTRAPIR40 UltraLink Bluetooth NLC Wireless Fixture Controller with PIR Occupancy Sensor, 20' to 40' Mounting Height				
	OCCDIM20 (LV/HV) <sup>7</sup> OCC sensor, dimmable, w/ photocell, 20' mounting height, programmable via remote					
	OCCDIM40 (LV/HV) <sup>7</sup> OCC sensor, dimmable, w/ photocell, 40' mounting height, programmable via remote					

## ACCESSORIES

Must be ordered separately. Packaged separately.

### FIXTURE ACCESSORIES

Part Number	Description
<b>SAFETYCABLE</b>	Kit includes (one) 5 ft. aircraft cable with single snap hook, L-bracket, screw and nut. For use with HOOK, MBR, PLATE MOUNT or stem mounting options.
<b>CABLEKIT</b>	Kit includes (two) 10 ft. aircraft "Y" cables and snap hooks (one pair).
<b>HANGER</b>	Kit includes two wire V hangers. Order fixture with CRM mounting option.
<b>PLATE</b>	Kit includes hanging plate with mounting hole for 3/4" conduit and (four) each 5 ft. aircraft cables and snap hooks. Order fixture with CRM option.
<b>OWG</b>	Wire guard for occupancy sensors, field install. Shipped in separate box.
<b>REPLACEMENT POWER SUPPLY</b>	Available upon request. Contact factory for details.

### BASIC CONTROLS

<b>OCCDIMPROG</b>	Handheld wireless programmer for setup OCCDIMXX dimmable occupancy sensors. Required with OCCDIM8, OCCDIM20 and OCCDIM40 selection.
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The performance of sensors and lenses is influenced by various factors beyond Linmore LED's control, including but not limited to environmental conditions, user settings, and proper maintenance. While we provide detailed specifications and guidelines to help optimize performance, we cannot guarantee or be held liable for the performance of sensors or lenses under any particular circumstance(s). Customers are advised to test the products in their specific application environments to ensure suitability for their intended use and are responsible for all sensor and lens selections.





## LISTINGS & CERTIFICATIONS

- ETL listed (UL 1598) - RoHS Compliant
- DesignLights™ Consortium Listed
- EMI: Title 47 CFR 15 Class A and ICES-005 - CSA 22.2

## EZ-CONNECT™ BASIC CONTROLS

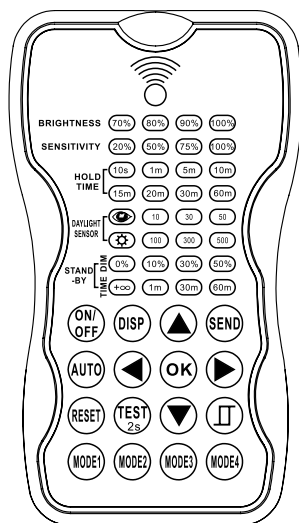
Controls are field installed, must be ordered as a new line item and will ship in a separate box.

### BASIC SENSORS<sup>30</sup>

	Part Number	Description
	<b>PC-WH-EZ10</b>	Photocell, White Color, EZ-Connect Twist Lock System, Plug & Play, Field installed.
	<b>PIR-WH-EZ10</b>	PIR Occupancy and Daylight Sensor, White or Color, EZ-Connect Twist Lock System, Plug & Play, On/Off/Dim, 40' Max Mounting Height, IP65. Field installed.
	<b>MW-WH-EZ10</b>	Microwave Occupancy and Daylight Sensor, White Color, EZ-Connect Twist Lock System, Plug & Play, On/Off/Dim, 40' Max Mounting Height, IP65. Field installed.
	<b>SEN-PROG</b>	Infrared Remote Programmer for Occupancy Sensors. Required to change default settings, modes of operation, and detection sensitivity for all EZ10 basic sensors.



### DEFAULT SETTINGS

For PIR and MW Sensors: Sensitivity=100%, Hold time=5min, Daylight sensor=disabled, Stand-by dim level=30%, Stand-by time=60min.



### INFRARED REMOTE PROGRAMMER

Required to change default settings, modes of operation, and sensitivity.

<b>Brightness</b>	Light output during occupancy (70%, 80%, 90%, 100%).		<b>Daylight harvesting function.</b> Selects the current surrounding lux value as the daylight threshold.
<b>Sensitivity</b>	Detection area of the sensor (20%, 50%, 75%, 100%).		<b>Daylight sensor disabled.</b> All motion detected turns on the light, no matter how bright the natural light is.
<b>Hold Time</b>	Time the sensor waits to turn off or dim the light after the area is vacated.	<b>Stand-by Dim</b>	Light output during vacancy (0%, 10%, 30%, 50%).
<b>Daylight Sensor</b>	Daylight sensor status and daylight threshold values in lux.	<b>Stand-by Time</b>	Time the sensor keeps the light at stand-by dim level after the hold time has elapsed.

### Scene Modes






The remote comes with four pre-programmed modes. These can be used as is, or adjusted with different parameters and saved over an existing mode.

Scene	Application	Brightness	Sensitivity	Hold Time	Stand-by Dim	Stand-by Time	Daylight Sensor
<b>MODE 1</b>	Indoor	100%	75%	5min	30%	30min	Disabled
<b>MODE 2</b>	Indoor	100%	75%	1min	30%	+∞	Disabled
<b>MODE 3</b>	Indoor	100%	75%	5min	30%	30min	30lux
<b>MODE 4</b>	Outdoor	100%	75%	1min	30%	+∞	30lux/300lux





## EZ-CONNECT™ ULTRALINK BLUETOOTH CONTROLS

Controls are field installed, must be ordered as a new line item and will ship in a separate box.

### ULTRALINK CONTROLLERS / SENSORS<sup>30</sup>

Part Number	Description
 <b>ULTRA-WH-EZ10</b>	UltraLink Bluetooth NLC Wireless Receiver and Fixture Controller, White Color, EZ-Connect Twist Lock System, IP65, Silvair Firmware. Field installed.
 <b>ULTRAHGA-CL-EZ10</b>	UltraLink Bluetooth NLC Wireless Receiver and Fixture Controller with Long Range Antenna, Clear Color, EZ-Connect Twist Lock System, IP65, Silvair Firmware. Field installed.
 <b>ULTRAPIR-WH-EZ10</b>	UltraLink Bluetooth NLC Wireless Fixture Controller with PIR Occupancy and Daylight Sensor, White Color, EZ-Connect Twist Lock System, 40' Max Mounting Height, IP65, Silvair Firmware. Field installed.
 <b>ULTRAMW-WH-EZ10</b>	UltraLink Bluetooth NLC Wireless Fixture Controller with Microwave Occupancy and Daylight Sensor, White Color, EZ-Connect Twist Lock System, 40' Max Mounting Height, IP65, Silvair Firmware. Field installed.
 <b>SEN-PROG</b>	Infrared Remote Programmer for Occupancy Sensors. Only required for EZ10 UltraLink sensors to change detection sensitivity.

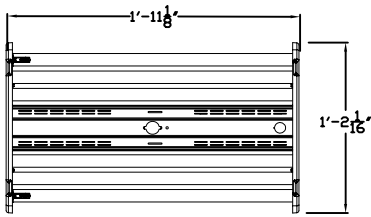
### ULTRALINK ACCESSORIES

Part Number	Description
 <b>ULTRAGATEWAY</b>	UltraLink Bluetooth NLC Wireless Gateway, required for Advanced Features and Time-Based Events. One gateway can control up to 200 fixtures, allowing for energy monitoring, people tracking, and scheduling. Interior installation only.
 <b>ULTRAGATEWAY-EXT</b>	UltraLink Bluetooth NLC Wireless Exterior Rated Gateway Box with Long Range Antenna, includes ULTRAGATEWAY. 120-277V Power Supply required.
 <b>ULTRATIME-BAT</b>	UltraLink Bluetooth NLC Time-Keeping Battery Backup includes an Outdoor Rated Enclosure, a Long Range Antenna and a Backup Battery. For use to keep time during a power outage and for in-node scheduling.
 <b>ULTRADASH</b>	UltraLink Dashboards for Energy, Occupancy Heat Mapping, and Energy Heat Mapping. Gateway (ULTRAGATEWAY) required, sold separately.

## DIMENSIONS & DRAWINGS

See End Note #16

**Bottom View**



Model	Length (in)	Width (in)	Height (in)	Weight (lb)
<b>2MS</b>	23.1	8.28	2.1	~8
<b>4MS</b>	23.1	11.2	2.1	~10
<b>6MS</b>	23.1	14.1	2.1	~14
<b>2M*</b>	43.72	8.28	2.1	~16
<b>4M</b>	43.72	11.2	2.1	~18
<b>6M</b>	43.72	14.1	2.1	~20.6

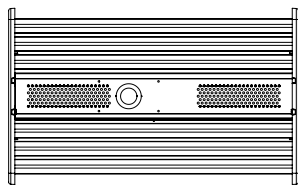
**\*2M available as a variation of 4MS.** Consult factory.

MBR and EMB mounting options adds 1 1/8" to fixture height.

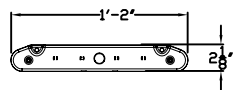
MBR on MS (short) fixtures with EMB adds 1 1/4" to fixture height to fixture height.

Weights are approximate and vary by model, if weight is a concern, please contact factory.

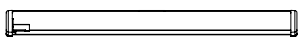
**Cable Ready Mount  
(CRM)**



**TOP VIEW**

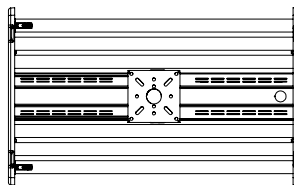


**END VIEW**

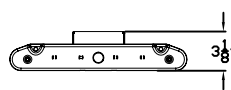


**SIDE VIEW**

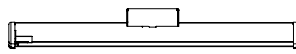
**Fixture Mounting Box  
(MBR)**



**TOP VIEW**

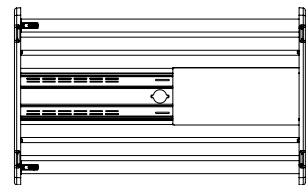


**END VIEW**

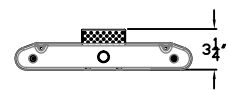


**SIDE VIEW**

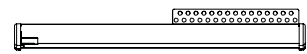
**Fixture Mounting Box  
(EMB)**



**TOP VIEW**

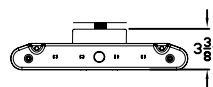


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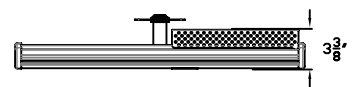


**SIDE VIEW**

**Surface Mount Option  
(when ordering EMB with MBR)**



**END VIEW**



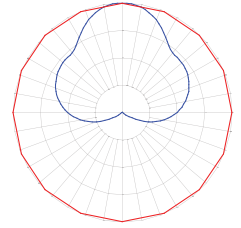
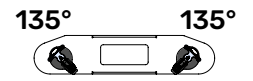
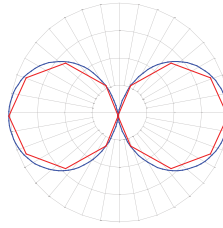
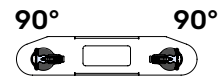
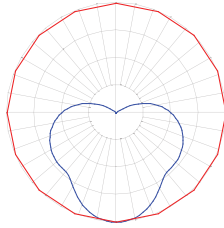
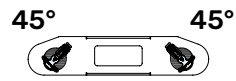
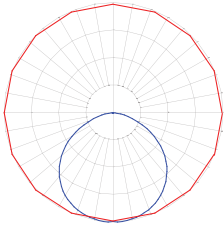
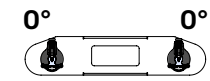
**SIDE VIEW**



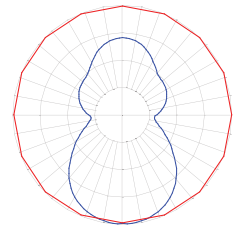
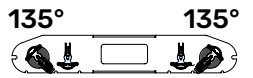
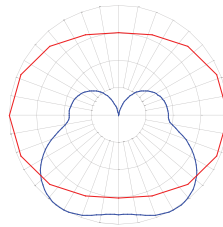
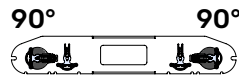
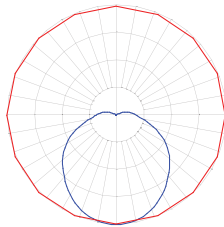
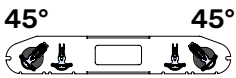
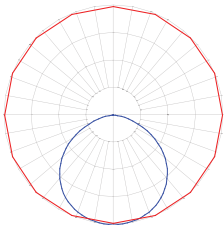
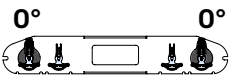
## LIGHT DISTRIBUTION

At Different Module Angles with Clear Lens

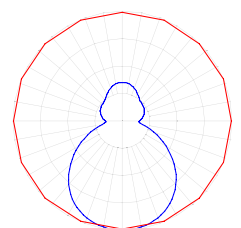
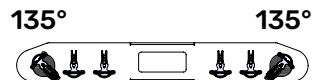
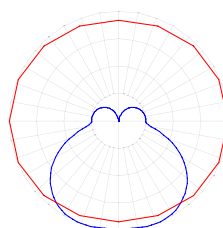
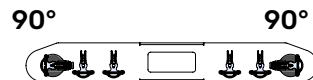
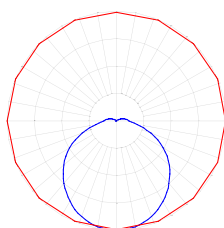
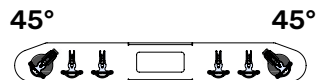
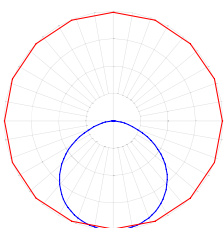
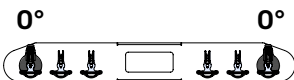
### 2M and 2MS



### 4M and 4MS



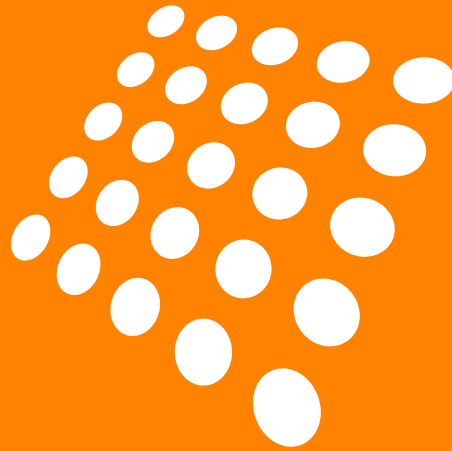
### 6M and 6MS





## END NOTES

1. MBR, 135° module setting and INDR fixtures max. temp 5°C less, typical. EMB fixtures 32°F to 113°F (0°C to 45°C). EMB for ES40V-A1-41K-6MS fixtures 32°F to 95°F (0°C to 30°C) and not available with EMB and Occupancy sensor. HV EMB not available on Short Module (MS) fixtures. HV EMB Max ambient 35°C. HV EMB includes step-down transformer. Temperatures below -20° have limited switch cycles, consult factory. Generator Transfer Device ambient range 0°C to 50°C (32°F to 122°F). EMB and EMB2 not available with CTOPEND. EMB factory installation only, not able to be field installed.
2. Fixtures not DLC listed: All 3500K CCT models and fixtures below.  
 ES40S-A1-06K-2MS-40-80-CL, ES40S-A1-06K-2MS-50-80-CL, ES40S-A1-06K-2MS-40-80-FR, ES40S-A1-06K-2MS-50-80-FR, ES40S-A1-06K-2MS-40-80-AL, ES40V-A1-06K-2MS-40-80-CL, ES40V-A1-06K-2MS-50-80-CL, ES40V-A1-06K-2MS-40-80-FR, ES40V-A1-06K-2MS-50-80-FR, ES40V-A1-06K-2MS-40-80-AL, ES40P-A1-08K-2MS-40-80-CL, ES40P-A1-08K-2MS-50-80-CL, ES40P-A1-08K-2MS-40-80-FR, ES40P-A1-08K-2MS-50-80-FR, ES40P-A1-08K-2MS-40-80-AL, ES40S-A1-09K-2MS-40-80-CL, ES40S-A1-09K-2MS-50-80-CL, ES40S-A1-09K-2MS-40-80-FR, ES40S-A1-09K-2MS-50-80-FR, ES40S-A1-09K-2MS-40-80-AL, ES40S-A1-12K (all models), ES40P-A1-13K (all models), ES40V-A1-13K (all models), ES40P-A1-15K-4MS-40-80-FR, ES40P-A1-15K-4MS-50-80-FR, ES40V-A1-15K-4MS-40-80-FR, ES40V-A1-15K-4MS-50-80-FR, ES40V-A1-15K-4MS-40-80-AL, ES40V-A1-15K-4MS-50-80-AL. 2M variations of the 4MS fixtures listed above are also not DLC listed.
3. Rotatable Modules will rotate when wire guards are installed. Rotatable Modules will function in INDR mode on 4M, 4MS, 6M and 6MS only. With WET and DUST options, the Rotatable Modules are not able to be set in the field; if custom settings are required, please consult factory.
4. LM-79, LM 80 tests and reports are performed in accordance to IESNA standards, per TM-21. Lumen maintenance in hours (L70 via TM-21) based on 24/7 operation.
5. Typical (±10%) at 277V (LV), 25°C, 4000K/5000K, Clear Lens, CRI 80+. Lumen Multipliers: 3500K = 0.93 ; Frosted Lens = 0.98 ; Aisle Lens = 0.96.
6. All 4MS units can be configured in the 2M (longer) size for additional cost, please contact factory.
7. Counterweight is available for fixtures with odd number of power supplies which may not hang level from a non-rigid, single point mount. Models affected are:  
 ES40S-A1-06K-2MS, ES40V-A1-06K-2MS, ES40P-A1-08K-2MS, ES40S-A1-09K-2MS, ES40S-A1-12K-2MS, ES40P-A1-13K-4MS, ES40V-A1-13K-2MS, ES40P-A1-15K-4MS, ES40P-A1-17K-4MS, ES40S-A1-17K-4MS, ES40S-A1-20K-4MS, ES40P-A1-21K-6MS, ES40S-A1-23K-4MS, ES40V-A1-27K-4MS, ES40P-A1-24K-6MS, ES40S-A1-30K-6MS, ES40P-A1-31K-4M, ES40V-A1-54K-4M and ES40S-A1-73K-6M, ES40S-A1-36K-6MS.
8. ES40V-A1-41K-6MS not available with CTOPEND. HV EMB not available on ES40V-A1-41K-6MS. When ordered with EMB it MUST have a cord selected. When ordered with any OCC sensor this unit will have the MBR mounting option only. This unit is not available with EMB and OCC sensor together. Even with the MBR mounting option these may be cable mounted.
9. Optional CABLEKIT ordered separately. See ACCESSORIES.
10. Optional add-on. See price list for pricing.
11. Wireless programmer required for final field setup. See ACCESSORIES.
12. 120-277V only.
13. All cords are 18/3 AWG, 600V and white. DW and 15DW are 18/5, 600V and white.
14. WET rating covers the fixture and OCCDIM20/40 only (if ordered as an option). It does NOT include the following sensors or controls: ULTRAHGA, ULTRAPIR20 or ULTRAPIR40. QDC and EMB/EMB2 not available with WET option. Not compatible with INDR. SRG and SRGOFF are IP66 and will work with WET option when used with approved, WET LOCATION connectors (supplied by other).
15. Consult factory for orders requiring EMB, EMB2, and WET. GTD, SRGOFF, CACS and CACSMC may have extended lead times.
16. Dimensions listed are for the fixture only. See dimensional drawings for measurements with mounting hardware. Weights are approximate and vary by model, if weight is a concern, please contact factory. Weight changes when battery backup is added.
17. Clear and Aisle lens only and all fixtures including a wire guard.
18. 20kA Surge suppression device in which, when triggered, the fixture will fail in the "Off" mode (fixture will not illuminate). Not available with ES40-A1-41K-6MS.
19. Generator Transfer Device. Ambient range is 0°C to +50°C (32°F to 122°F). Provides full fixture output on generator power for all fixtures except ES40V-A1-54K-4M, ES40P-A1-58K-6M, ES40V-A1-70K-6M, which will have 50% output and ES40S-A1-73K-6M, which will have 60% output. The GTD is not available on the ES40V-A1-41K-6MS. GTD is available on LV only; not available on HV fixtures. Voltage must be specified as either 120V or 277V. Requires separate line for GTD to function. Available cord options DW and 15DW only.
20. American Cable Systems connector for modular wiring. The connector is 277/480V, 2-wire with Ground. If a different connector is required, please contact factory with details of the installation.
21. ES40V-A1-06K-2MS Max ambient is 55°C.
22. When using EMB or EMB2, ES40V-A1-06K-2MS, ES40V-A1-15K-4MS (2M) and ES40S-A1-17K-4MS (2M) have ~74% of rated output in battery powered mode.
23. SRG (10kA protection) is standard option on all HV fixtures. Controls and sensors should have optional SRG or SRGOFF added. They are not protected by the internal surge suppression provided by the driver.
24. With WET option only.
25. Can only select one rotation angle per fixture. Both outer LED modules are rotated at the same angle. Not compatible with INDR option.
26. ULTRA requires separate commissioning and ACCESSORIES, contact factory.
27. The performance of sensors and lenses is influenced by various factors beyond Linmore LED's control, including but not limited to environmental conditions, user settings, and proper maintenance. While we provide detailed specifications and guidelines to help optimize performance, we cannot guarantee or be held liable for the performance of sensors or lenses under any particular circumstance(s). Customers are advised to test the products in their specific application environments to ensure suitability for their intended use and are responsible for all sensor and lens selections.



# LinmoreLED<sup>®</sup>

ULTRA PERFORMANCE LIGHTING

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