

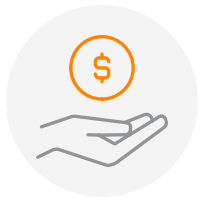
PROJECT NAME		DATE	
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SPEC SHEET

# URS Economy (URS-ECO)

## DIRECT LINEAR APPLICATION AND RETROFIT SYSTEM

\*U.S. PATENT NO. 10,054,296



### Economical Retrofit Option

An economical, cost effective solution to the standard URS bar.



### Quality Components

Comprised of a patented aluminum extrusion, high efficacy LEDs and an external dimmable LED driver.



### Control and Sensors

Linmore LED driver with 0-10V dimming. Plus motion and dimming sensors, daylight and wireless controls available.

## KEY FEATURES

- 2,400 to 13,500 lumens
- Up to 170 LPW
- 240° light distribution
- Up to 55°C ambient
- Estimated L70 >200,000 hours
- FCC CFR 47 Part 15
- 2' and 4' standard. Custom lengths available.<sup>5</sup>



# TECHNICAL SPECS

	LUMEN OUTPUT <sup>2</sup>	EFFICACY	WATTS	PART NUMBER
<b>4NA-1</b> 4 ft. 1 bar	1,350	150	9	LL-URS-ECO-4NA-1-50K-09W
	1,824	152	12	LL-URS-ECO-4NA-1-50K-12W
	2,235	149	15	LL-URS-ECO-4NA-1-50K-15W
	2,628	146	18	LL-URS-ECO-4NA-1-50K-18W
	3,168	144	22	LL-URS-ECO-4NA-1-50K-22W
	3,692	142	26	LL-URS-ECO-4NA-1-50K-26W
	4,200	140	30	LL-URS-ECO-4NA-1-50K-30W
	4,960	138	36	LL-URS-ECO-4NA-1-50K-36W
<b>4NA-2</b> 4 ft. 2 bars	2,898	161	18	LL-URS-ECO-4NA-2-50K-18W
	3,476	158	22	LL-URS-ECO-4NA-2-50K-22W
	4,056	156	26	LL-URS-ECO-4NA-2-50K-26W
	4,620	154	30	LL-URS-ECO-4NA-2-50K-30W
	5,505	153	36	LL-URS-ECO-4NA-2-50K-36W
	6,662	151	44	LL-URS-ECO-4NA-2-50K-44W
	8,900	148	60	LL-URS-ECO-4NA-2-50K-60W
	9,968	138	72	LL-URS-ECO-4NA-2-50K-72W
<b>4NA-3</b> 4 ft. 3 bars	4,212	162	26	LL-URS-ECO-4NA-3-50K-26W
	4,830	161	30	LL-URS-ECO-4NA-3-50K-30W
	5,749	160	36	LL-URS-ECO-4NA-3-50K-36W
	6,956	158	44	LL-URS-ECO-4NA-3-50K-44W
<b>4NA-4</b> 4 ft. 4 bars	5,886	164	36	LL-URS-ECO-4NA-4-50K-36W
	7,122	162	44	LL-URS-ECO-4NA-4-50K-44W
	9,483	158	60	LL-URS-ECO-4NA-4-50K-60W
	11,066	153	72	LL-URS-ECO-4NA-4-50K-72W
	13,464	153	88	LL-URS-ECO-4NA-4-50K-88W
<b>2NA-1</b> 2 ft. 1 bars	1,305	145	9	LL-URS-ECO-2NA-1-41K-09W
	1,740	145	12	LL-URS-ECO-2NA-1-41K-12W
	2,175	145	15	LL-URS-ECO-2NA-1-41K-15W
	2,610	145	18	LL-URS-ECO-2NA-1-41K-18W
<b>2NA-2</b> 2 ft. 2 bars	2,880	160	18	LL-URS-ECO-2NA-2-50K-18W
	3,498	159	22	LL-URS-ECO-2NA-2-50K-22W
	4,082	157	26	LL-URS-ECO-2NA-2-50K-26W
	4,650	155	30	LL-URS-ECO-2NA-2-50K-30W
	5,572	155	36	LL-URS-ECO-2NA-2-50K-36W

	LUMEN OUTPUT <sup>2</sup>	EFFICACY	WATTS	PART NUMBER
<b>2NA-3</b> 2 ft. 3 bars	3,696	168	22	LL-URS-ECO-2NA-3-50K-22W
	4,316	166	26	LL-URS-ECO-2NA-3-50K-26W
	4,920	164	30	LL-URS-ECO-2NA-3-50K-30W
	5,817	162	36	LL-URS-ECO-2NA-3-50K-36W
	6,968	158	44	LL-URS-ECO-2NA-3-50K-44W
<b>2NA-4</b> 2 ft. 4 bars	5,494	153	36	LL-URS-ECO-2NA-4-50K-36W
	6,580	150	44	LL-URS-ECO-2NA-4-50K-44W
	8,520	142	60	LL-URS-ECO-2NA-4-41K-60W
	11,223	156	72	LL-URS-ECO-2NA-4-41K-72W

Typical lumen output (±10%) at 120V (LV) under 25°C ambient temperature at 5000K.

## Lumen Multipliers

Allows to calculate the actual lumen output for your application. Apply each multiplier to the lumens of the shaded table.

COLOR TEMP	
CCT	Multiplier
5000	1.000
4100	1.000
3500	0.980

**Example:** How to calculate the actual lumen output of the 13,464 model at 3500K.

- 1) Find the nominal lumens from the table above.
- 2) Apply all the corresponding multipliers.

$$13,464 \times 0.980 = 13,195$$

Nominal lumens      CCT      Actual lumens

## ORDERING

SERIES MODEL	SIZE	# OF BARS	CCT	WATTAGE	
LL-URS-ECO	<b>2NA</b>  <b>4NA</b>  Max wattage per bar is 18W for a 2' bar 36W for a 4' bar.	1	<b>35K</b> 3500K  <b>41K</b> 4100K  <b>50K</b> 5000K  Other CCT options available with extended lead time.	<b>12W</b>	<b>36W</b>
		2		<b>15W</b>	<b>44W</b>
		3		<b>18W</b>	<b>60W</b>
		4		<b>22W</b>	<b>72W</b>
				<b>26W</b>	<b>88W</b>
				<b>30W</b>	

\*Includes 25 URS-ECO bars per case.

## ORDERING EXAMPLES

**Standard:** LL-URS-ECO-4NA-4-41K-36W

# FEATURES & SPECIFICATIONS

## CONSTRUCTION

- **Extruded Aluminum Heat Sinks:** The heat sink extrusion is made of 6063 T5 Aluminum with substantial fins & surface area for superior heat dissipation.
- **Patented Air Flow Cavity:** Patented Air Flow Cavity under LED PCB allows dissipated heat to leave the URS area.
- **LED Boards:** Interior PCB Board made of aluminum core and mechanically bonded to the aluminum extrusion heat sink.
- **Assembled in USA.**

## ELECTRICAL

- **Power Input:** 120-277V.
- **Power Factor:** >0.9 (0.99 typical).
- **Total Harmonic Distortion:** <10%.

## OPERATION

- **Environment:** Dry/Damp, for interior applications.
- **Ambient Range Operation:** -40°C up to 55°C (-40°F up to 130°F).

## OPTICS

- **CCT:** 3500K, 4100K and 5000K standard, other CCT available (extended lead time).
- **CRI:** >80, other CRI available (extended lead time).
- **Lenses:** Integral Volumetric Diffuser eliminates glare, evenly distributes light and transmits 94% of generated lumens. Suitable for all of your lighting applications. The beam angle is 240° for a wide distribution of light. Glass-free.

## MOUNTING

- **Installation Aid:** End cap design includes a rare earth magnet which may assist in the installation process.
- Option to remote-mount the LED driver, enabling multiple installation options.

## CONTROLS<sup>3</sup>

- **Dimming:** 0-10V standard. Dim to OFF.
- **Networked Control Options:** Compatible with Avi-on networked controls and UltraLink SIG Bluetooth® with Mesh Networked Controls<sup>4</sup>.
- **Switches:** Compatible Enocean switches.

## WARRANTY

- **Standard:** 10-year product warranty on the light bar and driver.

## LISTINGS & CERTIFICATIONS

- U.S. Patent No. 10,054,296
- UL 1598
- RoHS compliant
- DesignLights™ Consortium<sup>1</sup>
- FCC CFR 47, Part 15
- cUL



# ACCESSORIES

Must be ordered separately. Packaged separately.

## BATTERY BACKUP

Part Number	Description
LL-BBU-08W-001	Emergency backup battery at 8W.
LL-BBU-25W-001	Emergency backup battery at 25W. <sup>6</sup>

## SURGE SUPPRESSOR

SPD-277P-20KA-EC1	20kA Surge Suppressor
SPD-480P-20KA-EC1	480V 20kA Surge Suppressor

## MOUNTING ACCESSORIES

LL-HBR-HBA46	High Bay Adapter Plate, Aluminum, 11.5" W x 46.15" L
LL-URS-EC	URS Magnetic End Cap

Channels, channel covers and ballast cover available. Contact factory for more information.

## ADDITIONAL URS-ECO BAR

LL-URS-ECO-2NA-1-xxK	Universal Retrofit ECO Light Bar, High Efficacy LEDs, 21.25", 1 Bar, Frosted Diffuser, Magnetic End Caps, Max 15 Watts/Bar, 100-227V
LL-URS-ECO-4NA-1-xxK	Universal Retrofit ECO Light Bar, High Efficacy LEDs, 45.25", 1 Bar, Frosted Diffuser, Magnetic End Caps, Max 30 Watts/Bar, 100-227V

## CONTROLS

FSP-201-L7	Wattstopper Digital High/Low Passive Infrared Occupancy Sensor, Bottom Mount, IP66 Rated, 12V DC Input, Dimming Control, Ambient, Remotely Programmable, includes L7 lens unless otherwise requested
FSP-211-L7	Wattstopper Digital High/Low Passive Infrared Occupancy Sensor, Bottom Mount, IP66 Rated, 120-277V Input, Dimming Control, Ambient, Remotely Programmable, includes L7 lens unless otherwise requested
FSP-L2	360° lens, max coverage 48' diameter from 8' height for use with FSP-201
FSP-L3	360° lens, max coverage 40' diameter from 20' height for use with FSP-201
FSIR-100	Wattstopper Remote Handheld Configuration Tool

## ULTRALINK

<b>LL-QBM-WFC-12V-SIL</b>	Linmore Bluetooth Wireless Fixture Controller, 12V Input, Silvair Firmware
<b>LL-QBM-RB-HGA-EXT</b>	Linmore Bluetooth Wireless Fixture Controller, 12V Input, Silvair Firmware, Includes 2.4GHz Omni Directional High-Gain Antenna.
<b>ULTRADIM20</b>	UltraLink Wireless Fixture Controller with Sensor, PIR, 20FT, BLE
<b>ULTRADIM40</b>	UltraLink Wireless Fixture Controller with Sensor, PIR, 40FT, BLE
<b>PSC-BL-I-RD-DCO-BLE-SR</b>	Bluetooth Passive Infrared (PIR) Bi-Level Dimming Motion Sensor, Photocell, NO Daylight Harvesting, 12V DC Input, Remote Head Mount
<b>PSC-BL-I-RT-DCO-BLE-SR</b>	Bluetooth Passive Infrared (PIR) Bi-Level Dimming Motion Sensor, Photocell, Daylight Harvesting, 12V DC Input, Remote Head Mount
<b>PSC-ND-I-CM-DC-BLE-SR</b>	Bluetooth Passive Infrared (PIR) Ceiling Mount Occupancy Dimming Sensor, 12-24V DC Input.

## ULTRALINK ACCESSORIES

<b>ULTRAGATEWAY</b>	Gateway, Long Range Bluetooth Mesh, 800 MHz ARM with 512 MB RAM, 8 GB Storage, Hardware Security Module, Encrypted File System, Secure Boot, Interior Installation Only
<b>LL-QBM-GWB-EXT</b>	Linmore Qualified Bluetooth Mesh Exterior Rated Gateway Box with High-Gain 2.4Ghz Antenna, 120-277V supply required. Gateway included.
<b>ULTRASR</b>	Bluetooth Wireless, self-powered Dimming Wall Switch, Single Rocker, On/Off/Dim, for use with UltraLink
<b>ULTRADR</b>	Bluetooth Wireless, self-powered Dimming Wall Switch, Double Rocker, On/Off/Dim/Scenes, for use with UltraLink
<b>SCS-2</b>	Dashboards for Energy, Occupancy Heat Mapping, and Energy Heat Mapping. Gateway (ULTRAGATEWAY) required, Sold Separately
<b>ULTRAFACT</b>	UltraLink Factory Activation, Zone Identification on Packaging. For use with all Bluetooth Ready Fixtures / Systems
<b>ULTRADESIGN</b>	UltraLink System Design Services
<b>PSC-TKP-200-BLE-SR</b>	Battery Backup Bluetooth Node, includes outdoor rated enclosure and long range antenna. For use to keep time during a power outage and for in node scheduling

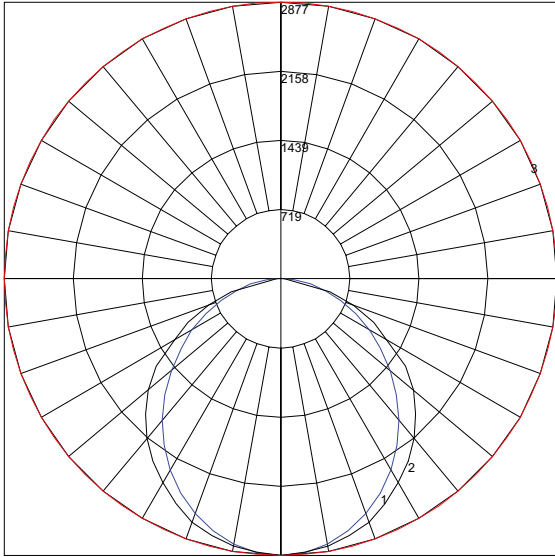
## ULTRALINK WALL MOUNTED SENSORS

<b>PSC-DM-I-WS-100-BLE-SR</b>	Bluetooth Dimming Wall Switch with Sensor, 120-277V, for use with UltraLink
<b>PSC-DM-WS-100-BLE-SR</b>	Bluetooth Dimming Wall Switch, 120-277V, for use with UltraLink

# LIGHT DISTRIBUTION

## 2NA MODEL

**Polar Graph**  
LL-URS-ECO-2NA-4-35K-60W



Maximum Candela: 2877

Located at horizontal angle: 0, Vertical angle : 0

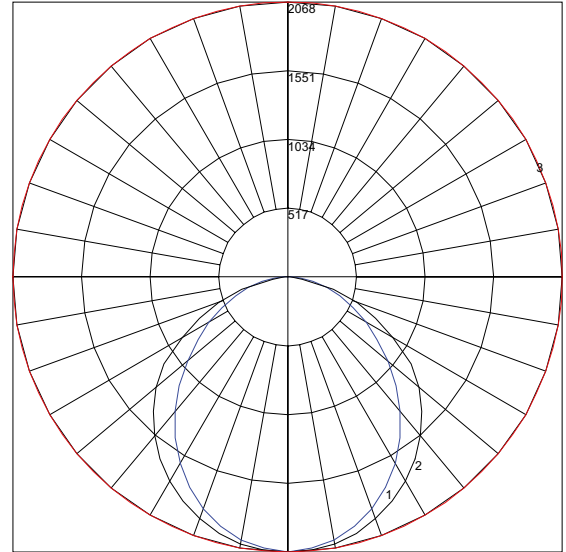
#1: Vertical plane through horizontal angles (0-180)(through max Cd.)

#2: Vertical plane through horizontal angles (90-270)

#3: Horizontal cone through vertical angle (0)(through max Cd.)

## 4NA MODEL

**Polar Graph**  
LL-URS-ECO-4NA-4-35K-36W



Maximum Candela: 2068

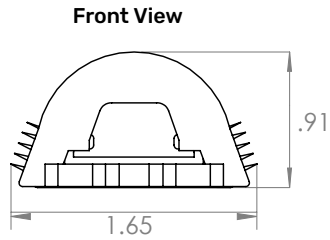
Located at horizontal angle: 0, Vertical angle : 0

#1: Vertical plane through horizontal angles (0-180)(through max Cd.)

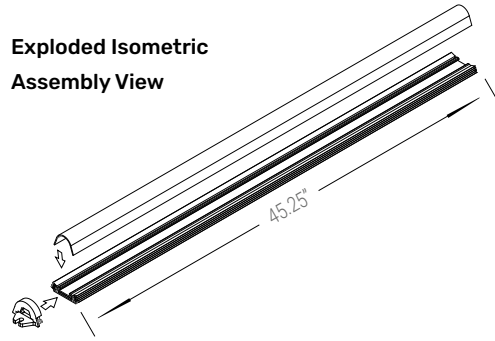
#2: Vertical plane through horizontal angles (90-270)

#3: Horizontal cone through vertical angle (0)(through max Cd.)

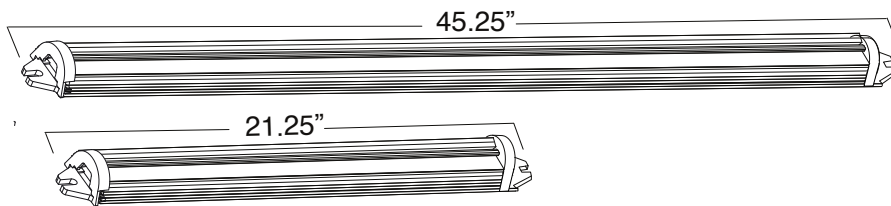
# DIMENSIONS & DRAWINGS



Exploded Isometric Assembly View



Choices in Length



## DIMENSIONS

Size	Length (in)	Width (in)	Height (in)	Weight (lb)
2NA	21.25	1.65	0.91	<1
4NA	45.25	1.65	0.91	<1

## FOOTNOTES

1. Check QPL for up-to-date listings.
2. Estimated lumen output based on calculations.
3. Synapse, Daintree and Enlighted are available with extended lead time. Electrical changes and additional components required to make fixture compatible.
4. Requires Enoccean switch, McWong sensor or a gateway for complete functionality.
5. Extended lead time. Contact factory.
6. 25W BBU can only be used when system wattage exceeds 26W.

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