ACE LED
ULTRA VALUE LIGHTING
By Linmore LED

PROJECT NAME		DATE	
CAT. NUMBER			
NOTES			

Ace LED Area Light (AA1)

AREA LIGHT FIXTURE

5 YEAR PRODUCT WARRANTY

DLC LISTED PREMIUM

TRUSTED WARRANTY · N³B NATIONAL LIGHTING BUREAU

Bluetooth Ready

c(UL)us LISTED

IP65   IK08   10kV   0-10V

Projected L70 up to 150,000 hours

Selectable Wattage and CCT

Integrated switches in the fixture allow to select four output wattage options and three color temperatures: 3000K, 4000K, or 5000K.

Easy Swap Lenses

Open two latches to change the optic lens in seconds without tools while keeping the IP65 rating. Available optics: T2, T3, T4, and T5.

EZ-Connect™ Receptacle

The simplest and fastest way to add sensors and UltraLink wireless controls at any time in the field. Twist Lock system, no tools or wiring needed.
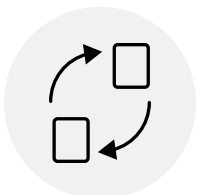
KEY FEATURES

- 10,500 to 45,000 Lumens

- Up to 150 LPW

- Up to 50°C (122°F) Ambient

- Die-cast Aluminum Housing and Heatsink

- Compact Low-Profile Design

- Versatile Mounting Options

- Tool-less Access via Latches

- Wet Location Rated

FEATURES & SPECIFICATIONS

CONSTRUCTION

- **Housing:** Aluminum die-cast, compact low profile design.

- **Housing Color:** Bronze (RAL 8019).

- **Wireway Cover:** Aluminum die-cast.

- **Heat Sink:** Cast aluminum.

- **Latches:** Tool-less access to driver and lens compartments.

- **EZ-Connect™ Receptacle:** The simplest and fastest way to add sensors and wireless controls at any time on the field. Twist Lock System, no tools or wiring needed.

ELECTRICAL

- **Power Input:** 120-277V or 220-480V (50/60Hz) typical.

- **Power Factor:** Greater than 0.9.

- **Total Harmonic Distortion:** Less than 20%.

- **Surge Protection:** 10kV standard.

OPERATION

- **Environment:** Wet location for exterior applications. IP65 rated.

- **Ambient Range Operation:** -40°C up to 50°C (-22°F up to 122°F).

OPTICS

- **CCT:** Selectable via switch 3000K, 4000K, 5000K.

- **CRI:** 80+ standard.

- **Lens:** UV stable clear polycarbonate. T2, T3, T4, and T5 available. Replaceable in the field by opening two clasps, no tools needed.

MOUNTING

- **Mounting:** The fixture comes standard with a bracket base attached. Slip Fitter, Straight Arm, and Trunnion (Yoke) brackets are field installed (see Accessories).

LG model

CONTROLS

- **Dimming:** 0-10V standard. Dimming range 100% to Off.

- **Photocell Sensor:** On/Off based on ambient light. EZ-Connect™ Twist Lock system for field installation.

- **Occupancy Sensors:** PIR and Microwave occupancy sensors, On/Off/Dim. EZ-Connect™ Twist Lock System for field installation.

- **Networked Lighting Controls:** UltraLink Wireless Controls with Bluetooth® NLC Mesh technology. EZ-Connect™ Twist Lock System for field installation.

WARRANTY

- **5 Year Warranty:** The fixture is guaranteed for 5 years free of defects in materials and workmanship, including LEDs and driver. "Defective" is considered if ten percent (10%) or more of the LEDs, per product, are non-operating LEDs, or color temperature has shifted more than 500° Kelvin within the warranty period. See terms and conditions at https://linmoreled.com/warranty

LISTINGS & CERTIFICATIONS

- cUL, UL 1598.

- RoHS compliant.

- IP65 and IK08 rated.

- DesignLights™ Consortium Premium.

IP65 | IK08 | 10kV | 0-10V | DLC LISTED PREMIUM | N3 TRUSTED WARRANTY | RoHS | c UL us LISTED

TECHNICAL SPECS

SIZE	SELECTABLE WATTS	SELECTABLE CCT	LUMEN OUTPUT	EFFICACY	PART NUMBER
MD	75	3000K	10,500	140	AA10S-A2-ADJ-MD-ADJ-80-T3-LV-BRN-BB-Z10R-CW-SRG-10V
		4000K	11,250	150	
		5000K	10,875	145	
	100	3000K	14,000	140	
		4000K	15,000	150	
		5000K	14,500	145	
	120	3000K	16,800	140	
		4000K	18,000	150	
		5000K	17,400	145	
	150	3000K	21,000	140	
		4000K	22,500	150	
		5000K	21,750	145	
LG	175	3000K	24,500	140	AA10S-A2-ADJ-LG-ADJ-80-T3-LV-BRN-BB-Z10R-CW-SRG-10V
		4000K	26,250	150	
		5000K	25,375	145	
	200	3000K	28,000	140	
		4000K	30,000	150	
		5000K	29,000	145	
	240	3000K	33,600	140	
		4000K	36,000	150	
		5000K	34,800	145	
	300	3000K	42,000	140	
		4000K	45,000	150	
		5000K	43,500	145	

Typical lumen output (±10%) at 277V (LV) under 25°C ambient temperature.

Selectable Wattage and Color Temperature

Fixtures ship from the factory with the highest wattage and 5000K CCT, to change these settings:

1. Make sure the fixture is off.
2. Unscrew the 3/4" plug.
3. Adjust the corresponding dip switches to desired wattage and CCT.
4. Install and tighten the 3/4" plug.
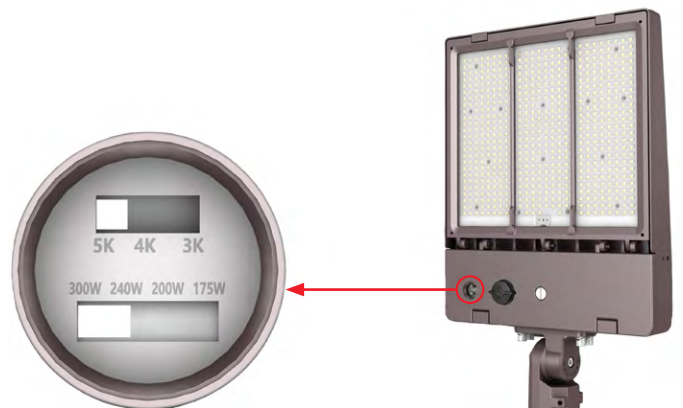
ORDERING

SERIES MODEL - COMPLIANCE - WATTS - SIZE	COLOR TEMP	CRI	LENS		VOLTAGE
AA10S-A2-ADJ-MD **AA10S-A2-ADJ-LG**	**ADJ** Adjustable (selectable): 3000K, 4000K, 5000K	**80** 80+ CRI	**T2** Type 2 **T3** Type 3	**T4** Type 4 **T5** Type 5	**LV** 120-277V **HV** 220-480V

HOUSING COLOR	MOUNTING	SENSORS	CORD	OPTIONS	DIMMING
BRN Bronze (standard)	**BB** Bracket Base (standard)	**Z10R** EZ-Connect™ Receptacle with Twist Lock System (standard) Sensors not included, see Controls pages for available products	**CW** Cord Whip, 6A, no plug (standard)	**SRG** Fixture installed Surge Protector, 10kV (standard)	**10V** 0-10V

Ordering Example: AA10S-A2-ADJ-MD-ADJ-80-T3-LV-BRN-BB-Z10R-CW-SRG-10V

ACCESSORIES

Must be ordered separately. Packaged separately.

FIXTURE ACCESSORIES

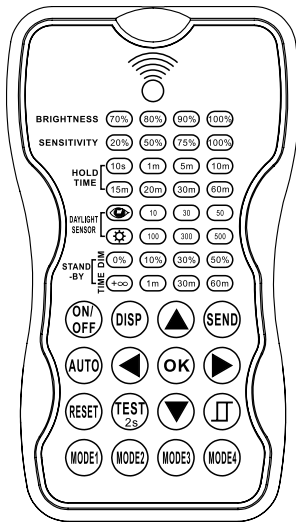| Part Number	Type	Description
AA1-SF	Mounting Bracket	Slip Fitter Bracket. Field installed.
AA1-SA	Mounting Bracket	Straight Arm Bracket. For round and square poles. Field installed.
AA1-TM	Mounting Bracket	Trunnion (Yoke) Bracket. Field installed.
AA1-GSFB-MD	Glare Shield	Front and Back Glare Shields for MD fixtures. Field installed.
AA1-GSFB-LG	Glare Shield	Front and Back Glare Shields for LG fixtures. Field installed.
AA1-GSLR-MD	Glare Shield	Left and Right Glare Shields for MD fixtures. Field installed.
AA1-GSLR-LG	Glare Shield	Left and Right Glare Shields for LG fixtures. Field installed.
AA1-T2-MD	Replacement Optics	Type 2 Optics for MD fixtures. Easy swap, no tools needed. Field installed.
AA1-T3-MD	Replacement Optics	Type 3 Optics for MD fixtures. Easy swap, no tools needed. Field installed.
AA1-T4-MD	Replacement Optics	Type 4 Optics for MD fixtures. Easy swap, no tools needed. Field installed.
AA1-T5-MD	Replacement Optics	Type 5 Optics for MD fixtures. Easy swap, no tools needed. Field installed.
AA1-T2-LG	Replacement Optics	Type 2 Optics for LG fixtures. Easy swap, no tools needed. Field installed.
AA1-T3-LG	Replacement Optics	Type 3 Optics for LG fixtures. Easy swap, no tools needed. Field installed.
AA1-T4-LG	Replacement Optics	Type 4 Optics for LG fixtures. Easy swap, no tools needed. Field installed.
AA1-T5-LG	Replacement Optics	Type 5 Optics for LG fixtures. Easy swap, no tools needed. Field installed.

BASIC CONTROLS

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

BASIC SENSORS

	Part Number	Description
	PC-Z10	Photocell, EZ-Connect Twist Lock System, Plug & Play, Field installed.
	PIR-Z10	PIR Occupancy and Daylight Sensor, EZ-Connect Twist Lock System, Plug & Play, On/Off/Dim, 40' Max Mounting Height, IP65. Field installed. Sensor can be re-programmed with remote SEN-PROG (sold separately).
	MW-Z10	Microwave Occupancy and Daylight Sensor, EZ-Connect Twist Lock System, Plug & Play, On/Off/Dim, 40' Max Mounting Height, IP65. Field installed. Sensor can be re-programmed with remote SEN-PROG (sold separately).
	SEN-PROG	Infrared Remote Programmer for Occupancy Sensors. Required to change default settings and modes of operation for PIR-Z10 and MW-Z10.

DEFAULT SETTINGS

PIR-Z10 and MW-Z10. 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 and modes of operation.

Brightness	Light output level during occupancy.		Selects the current surrounding lux value as the daylight threshold.
Sensitivity	Detection area of the sensor.		Disables the daylight sensor. All motion detected turns on the light, no matter how bright the natural light is.
Hold Time	Time the sensor waits to turn off or dim the light after the area is vacated.	**Stand-by Dim**	Light output level during vacancy.
Daylight Sensor	Natural light threshold.	**Stand-by Time**	Time the sensor keeps the light at stand-by dim level after the hold time has ellapsed.

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
MODE 1	Indoor	100%	75%	5min	30%	30min	Disabled
MODE 2	Indoor	100%	75%	1min	30%	+∞	Disabled
MODE 3	Indoor	100%	75%	5min	30%	30min	30lux
MODE 4	Outdoor	100%	75%	1min	30%	+∞	30lux/300lux

ULTRALINK BLUETOOTH CONTROLS

Linmore LED's UltraLink, powered by Silvair, is a wireless lighting control system that uses Bluetooth NLC communications at 2.4 GHz. A complete mesh network system can include wireless receivers and fixture controllers, motion and daylight sensors, wall switches, gateways, and other accessories.

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

ULTRALINK CONTROLLERS / SENSORS

	Part Number	Description
	ULTRA-Z10	UltraLink Bluetooth NLC Wireless Receiver and Fixture Controller, EZ-Connect Twist Lock System, IP65, Silvair Firmware. Field installed.
	ULTRAHGA-Z10	UltraLink Bluetooth NLC Wireless Receiver and Fixture Controller with Long Range Antenna, EZ-Connect Twist Lock System, IP65, Silvair Firmware. Field installed.
	ULTRAPIR-Z10	UltraLink Bluetooth NLC Wireless Fixture Controller with PIR Occupancy and Daylight Sensor, EZ-Connect Twist Lock System, 40' Max Mounting Height, IP65, Silvair Firmware. Field installed. Detection sensitivity can be changed with remote SEN-PROG (sold separately).
	ULTRAMW-Z10	UltraLink Bluetooth NLC Wireless Fixture Controller with Microwave Occupancy and Daylight Sensor, EZ-Connect Twist Lock System, 40' Max Mounting Height, IP65, Silvair Firmware. Field installed. Detection sensitivity can be changed with remote SEN-PROG (sold separately).

ULTRALINK ACCESSORIES

	Part Number	Description
	ULTRAGATEWAY	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.
	ULTRAGATEWAY-EXT	UltraLink Bluetooth NLC Wireless Exterior Rated Gateway Box with Long Range Antenna, includes ULTRAGATEWAY. 120-277V Power Supply required.
	ULTRATIME-BAT	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.
	ULTRADASH	UltraLink Dashboards for Energy, Occupancy Heat Mapping, and Energy Heat Mapping. Gateway (ULTRAGATEWAY) required, sold separately.

Technology Partner SILVAIR

MOUNTING

Bracket Base

The fixture ships with the Bracket Base attached to it. Mounting brackets can be attached to the base with just one screw.
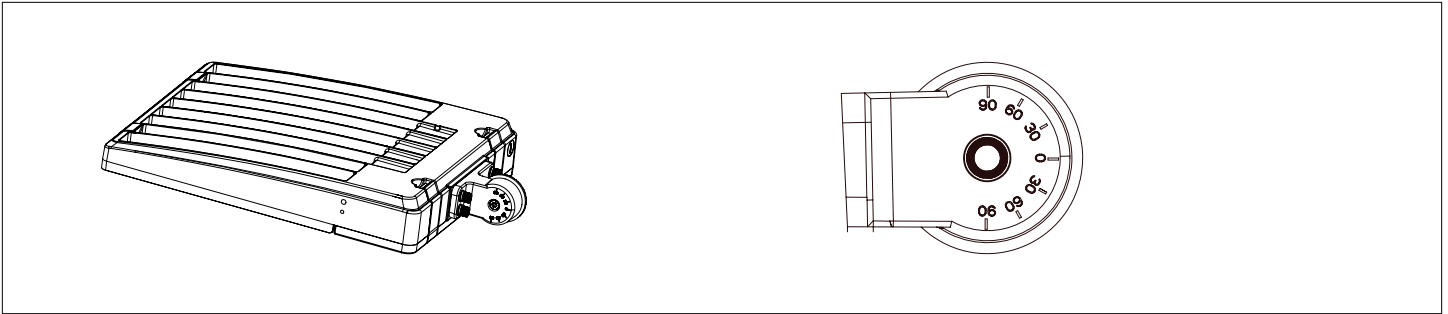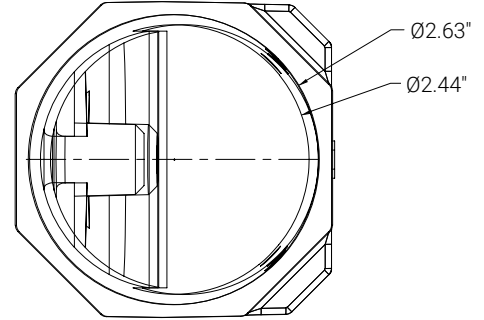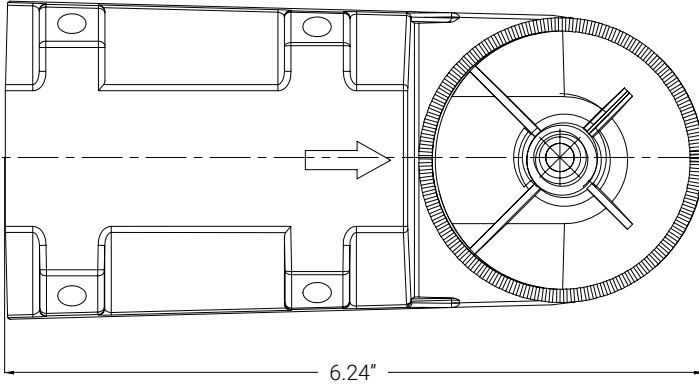

Mounting Brackets

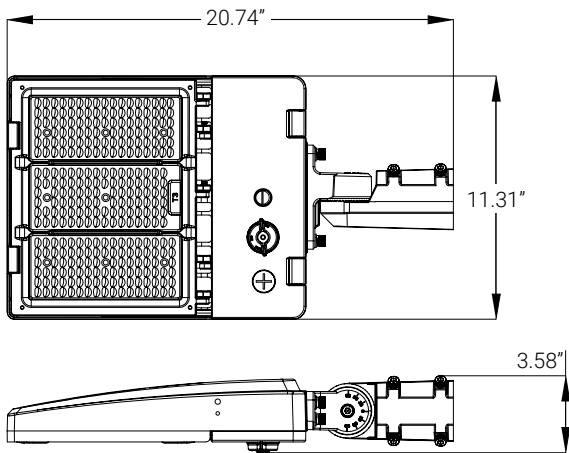Mounting brackets are sold separately and are field installed.

Slip Fitter
AA1-SF

Straight Arm
AA1-SA
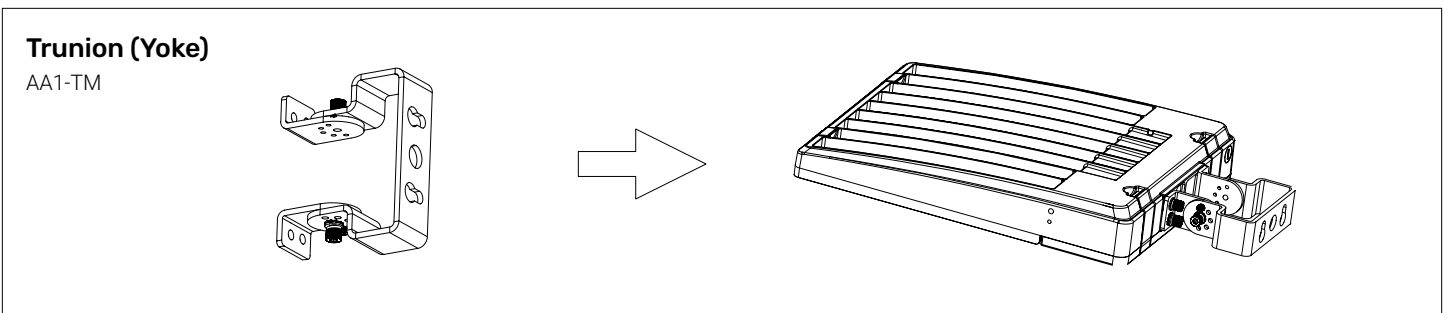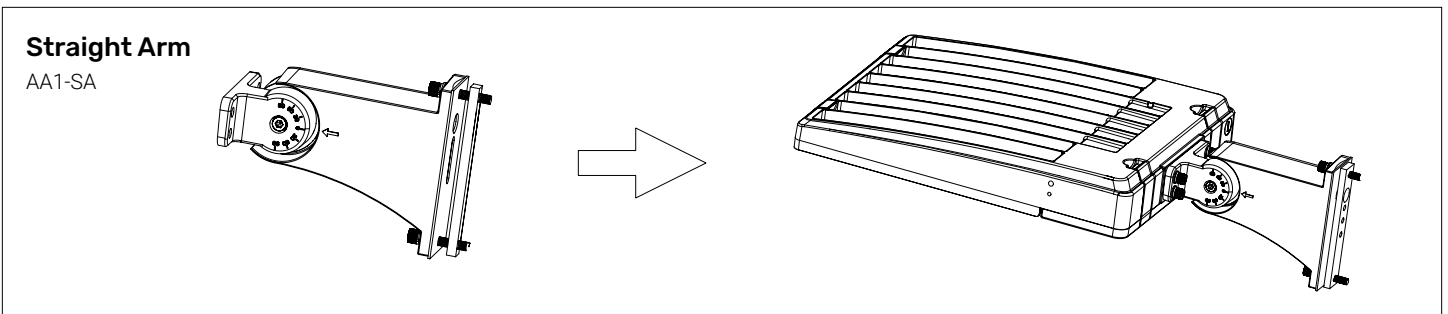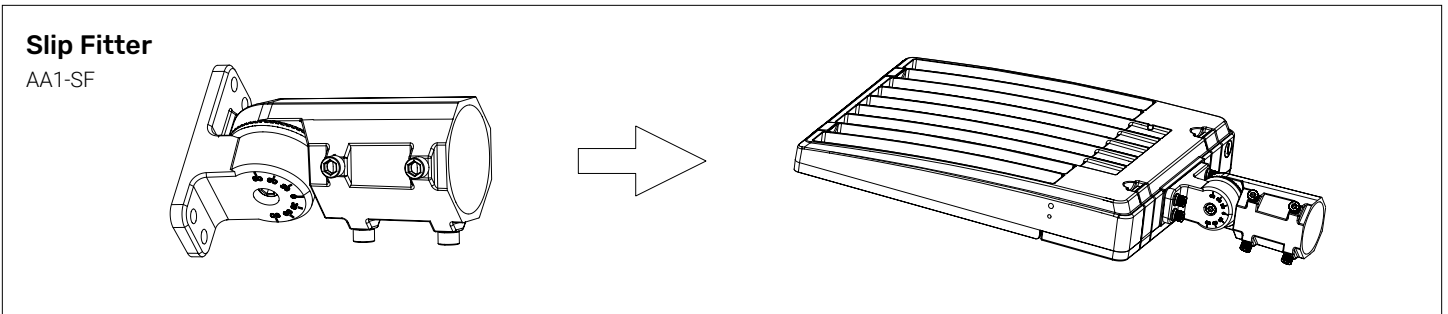
Trunion (Yoke)
AA1-TM

DIMENSIONS & DRAWINGS

Dimension tolerances: ± 0.1″. Mounting hardware and sensors add height to the fixture.
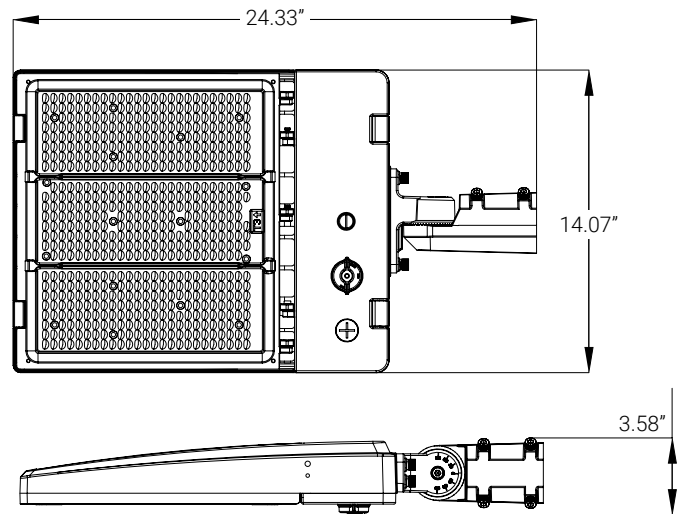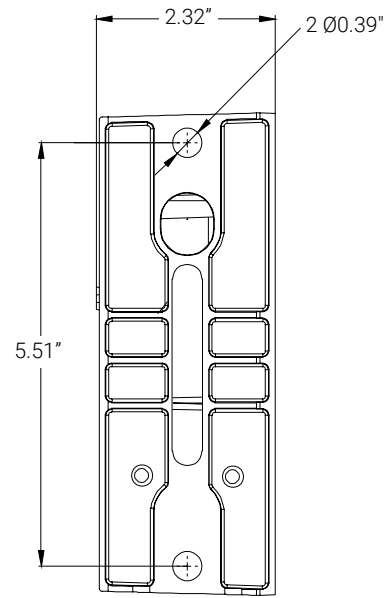
Slip Fitter Bracket

6.24″

Ø2.63″
Ø2.44″

Fixture with Slip Fitter

MD

20.74″

11.31″

3.58″

LG

24.33″

14.07″

3.58″

Straight Arm Bracket
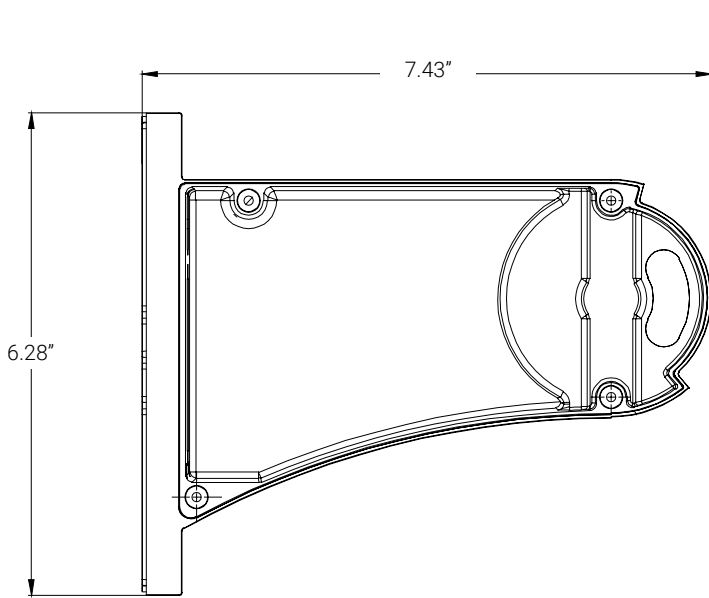
Fixture with Straight Arm

MD
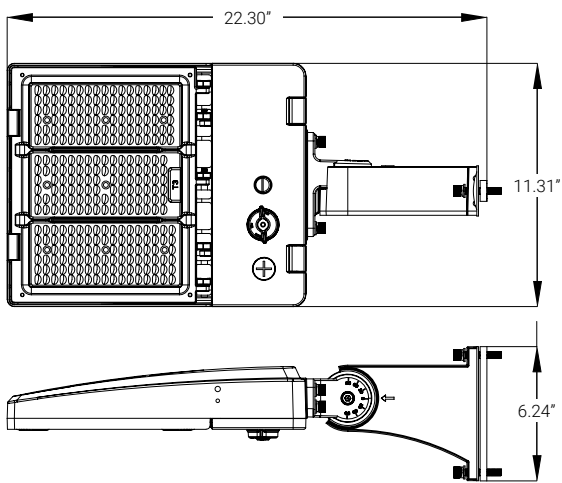
LG
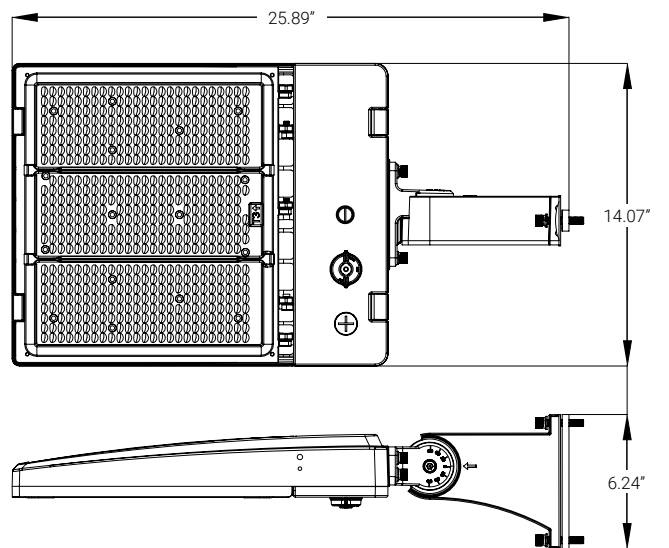
Trunnion (Yoke) Bracket
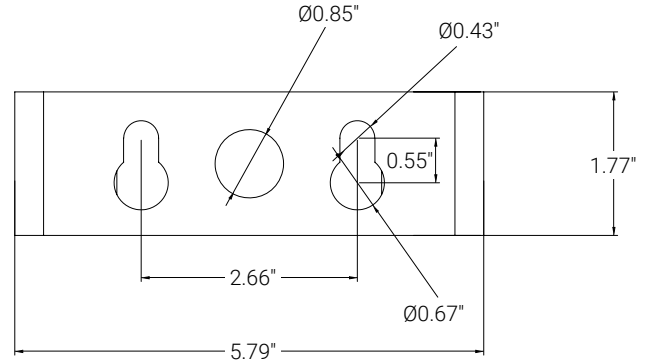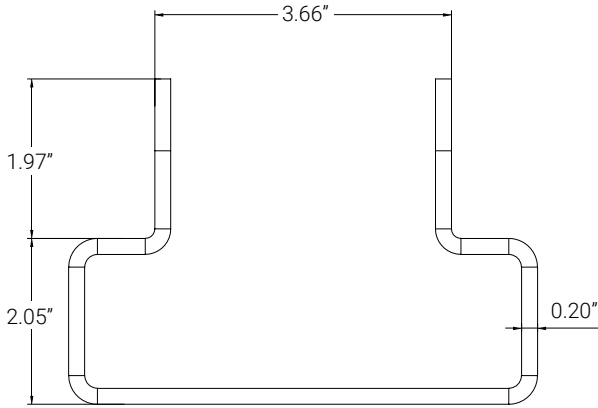
Fixture with Trunnion (Yoke)
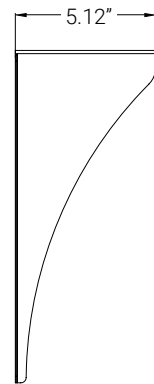
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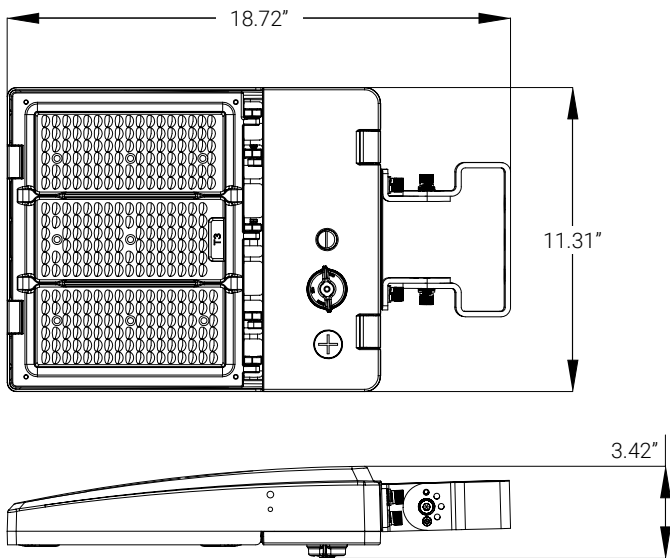
LG
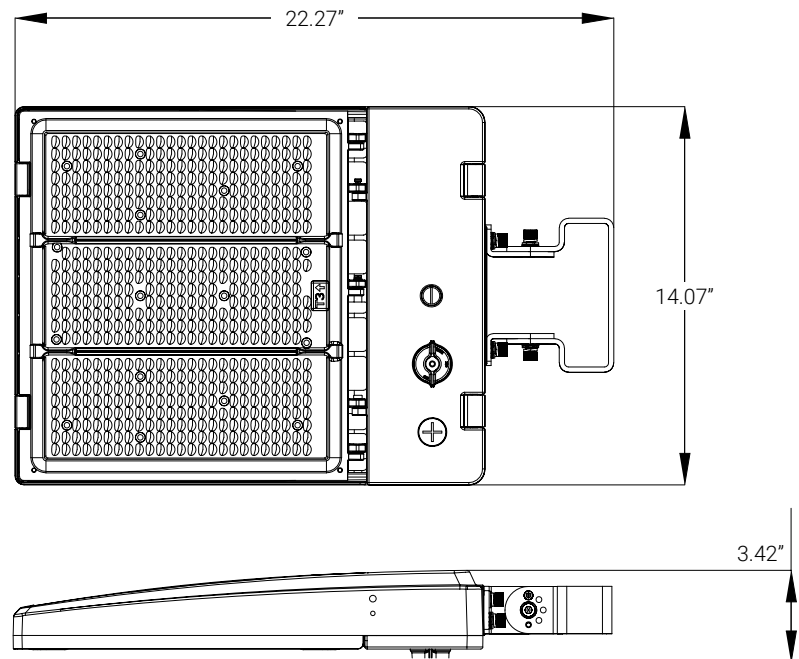
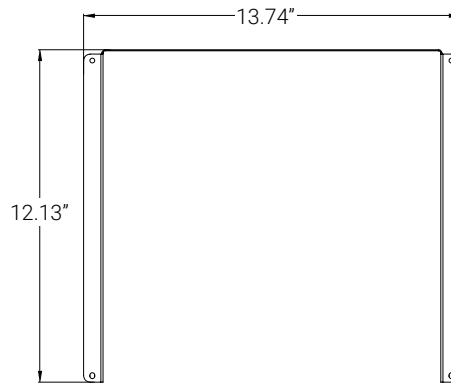# Glare Shields

MD: Front / Back Shield

AA1-GSFB-MD

10.95″

8.50″

5.12″
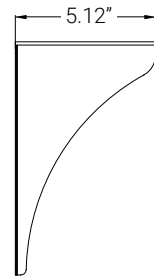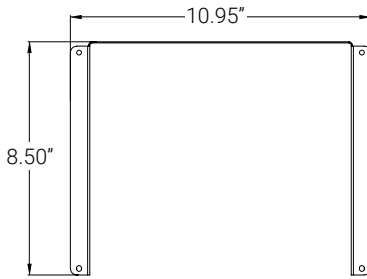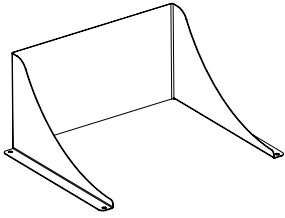
MD: Left / Right Shield

AA1-GSLR-MD

8.50″

5.12″

0.71″
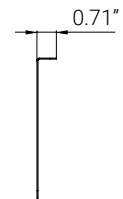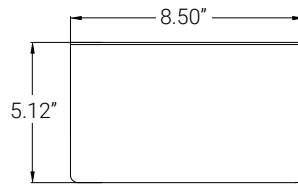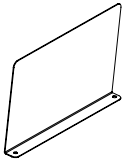
LG: Front / Back Shield

AA1-GSFB-LG

13.74″

12.13″

5.12″
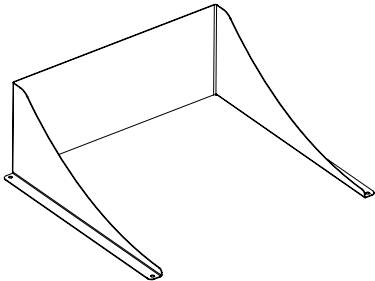
LG: Left / Right Shield

AA1-GSLR-LG

12.05″

5.12″

0.71″
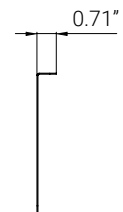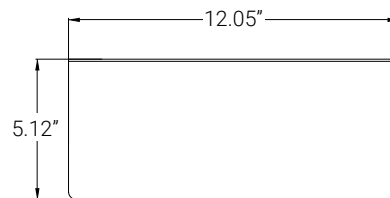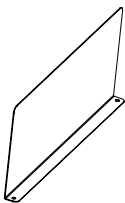
BUG RATINGS

SIZE	T2	T3	T4	T5
MD	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G2
LG	B4-U0-G3	B4-U0-G3	B4-U0-G4	B5-U0-G4

EPA RATINGS

BEAM ANGLE	SIZE					
0°	MD	0.32	0.55	0.65	0.71	0.71
	LG	0.39	0.66	0.81	0.87	0.87
15°	MD	0.37	0.75	0.76	0.93	0.93
	LG	0.65	1.05	1.36	2.45	2.45
30°	MD	0.46	0.97	1.12	1.40	1.40
	LG	1.07	1.83	2.87	3.16	3.16
45°	MD	0.63	1.18	1.29	1.89	1.89
	LG	1.43	2.13	3.02	4.23	4.23
60°	MD	1.30	1.87	2.67	3.73	3.73
	LG	2.08	2.91	4.16	5.49	5.49

EPA ratings measured in square feet.