



ACE ELECTRIC

INDIAN WELLS TENNIS GARDEN SOUTH OF MILES DROP OFF  
LIGHTING SUBMITTALS

11.09.2021  
MAIN ELECTRIC SUPPLY  
4674 CARDIN ST., SAN DIEGO, CA 92111  
PHONE: (858) 737-7000  
FAX: (858) 737-7055



**ACE ELECTRIC**

**INDIAN WELLS TENNIS GARDEN SOUTH OF MILES DROP OFF**

**LIGHTING SUBMITTAL PACKAGE**

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<b>TYPE</b>	<b>MFGR</b>	<b>CATALOG#</b>
SA	BEGA	#84249-K4/ #1508HR-STD. COLORS/ #EMS-L*
SB	BEGA	#84407-K4/ #1508HR-STD. COLORS/ #EMS-L*

PLEASE SPECIFY FINISH

PLEASE PROVIDED WHICH MOTION SENSOR ARM MOUNT  
NEEDED EM S-L2, EM S-L3, EM S-L4, EM S-L7.

Pole-top luminaire - asymmetric distribution - twin

**Application**

Twin pole-top luminaire with asymmetric forward throw light distribution (Type III). The asymmetric forward throw provides light in front of the luminaire to uniformly wash surfaces. Slip fits 3" O.D. pole top or tenon.

**Materials**

Luminaire housing and pole fitter constructed of die-cast marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy  
 Clear safety glass  
 Reflector made of pure anodized aluminum  
 High temperature silicone gasket  
 Mechanically captive stainless steel fasteners

**NRTL** listed to North American Standards, suitable for wet locations  
 Protection class IP 66  
 Effective projection area: 1.01 sq. ft.  
 Weight: 25.1 lbs

**Electrical**

Operating voltage	120-277V AC
Minimum start temperature	-30° C
LED module wattage	(2) 55.3 W
System wattage	123.0 W
Controllability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	13,344 lumens (4000K)
LED service life (L70)	60,000 hours

**LED color temperature**

- 4000K - Product number + **K4**
- 3500K - Product number + **K35**
- 3000K - Product number + **K3**
- 2700K - Product number + **K27**

**BEGA** can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

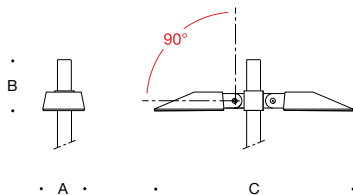
**Finish**

All BEGA standard finishes are matte, textured powder coat with minimum 3 mil thickness. BEGA Unidure® finish, a fluoropolymer technology, provides superior fade protection in Black, Bronze, and Silver. BEGA standard White, as well as optionally available RAL and custom colors, are a polyester powder.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:

**Available options**

**FSC** Fusing



Pole-top luminaire · asymmetric distribution

	LED	A	B	C
<b>84 249</b>	(2) 55.3 W	8 <sup>7</sup> / <sub>8</sub>	10 <sup>5</sup> / <sub>8</sub>	38 <sup>3</sup> / <sub>4</sub>



Type:  
 Project:  
 Options:  
 Modified:  
 Luminaire:  
 Fixture EPA:  
 Optional Tenon:  2<sup>3</sup>/<sub>8</sub>" $\phi$  x 3<sup>1</sup>/<sub>2</sub>" H  
 GCO:   
 GFI:

Approval:

**1508HR 3" - 5" Tapered round hinged pole**

**Shaft:** Extruded from all new seamless 6063 aluminum alloy tubing, heat treated to a T-6 condition.

**Anchor base:** Round cast aluminum A356 alloy, heat treated to a T-6 condition. Anchor base and shaft continuously welded at the outside top and inside bottom of the anchor base casting. Pole base to be round hinged two piece casting. Hinge Pole shaft to be welded to upper base casting which is secured to lower base casting by three (3) stainless steel bolts. Bolts to be fastened to cast-in stainless threaded inserts in lower casting. Cast round two piece base cover supplied with pole.

**Anchor bolts:** Four (4) 3/4" x 17" galvanized steel anchor bolts supplied with double nuts and flat washers. Maximum bolt projection 3 1/2".

**GCO or GFI:** Standard GCO/GFI location is opposite the hinge. Height above base for ballast in luminaires is 18". For single luminaires with a pole base mounted (PBM) ballast the minimum height is 24" and 42" minimum for double PBM luminaires.

Weight: 76.0 lbs.

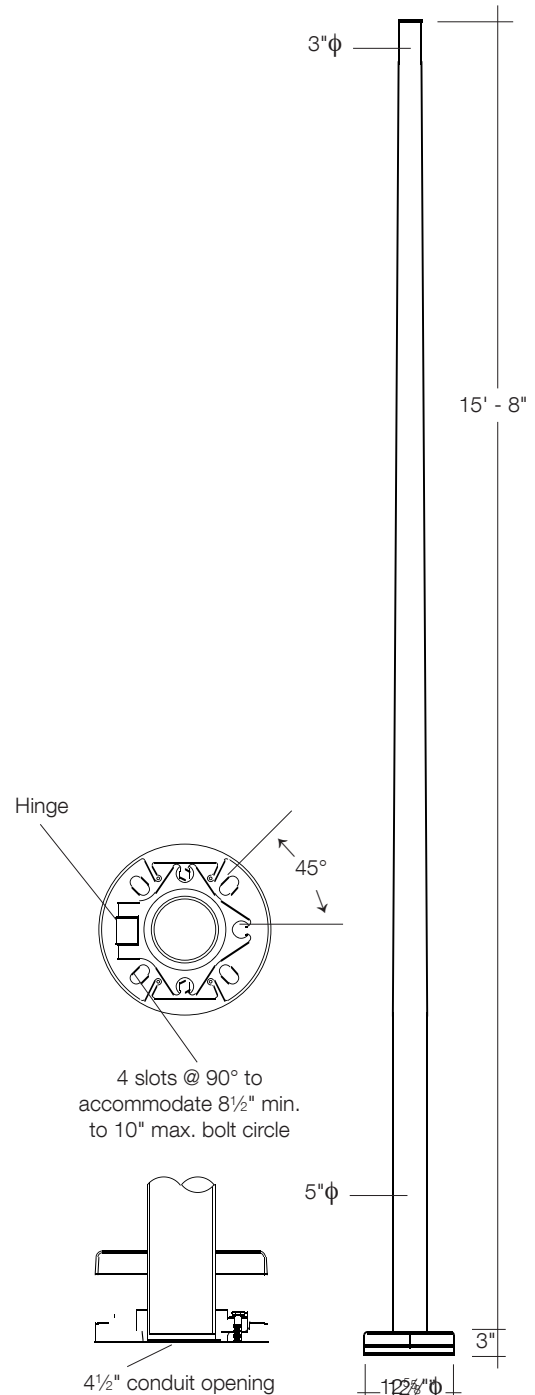
**Disclaimer**

BEGA-US warrants the specific anchor bolts and pole combination according to the product number(s) and description(s) indicated on this submittal sheet. Structural changes to the pole requested by the customer, including changes to pole length, may affect the compatibility of the anchor bolts and corresponding poles. BEGA-US is not responsible for the incompatibility of the anchor bolts and poles resulting from such structural changes without review by the BEGA-US engineering department. This includes, but is not limited to, any labor charges, charges for replacement materials and shipping.

Pole wind load rating:

MPH:	70	80	90	100	120
EPA:	15.4	11.2	8.5	6.5	4.4

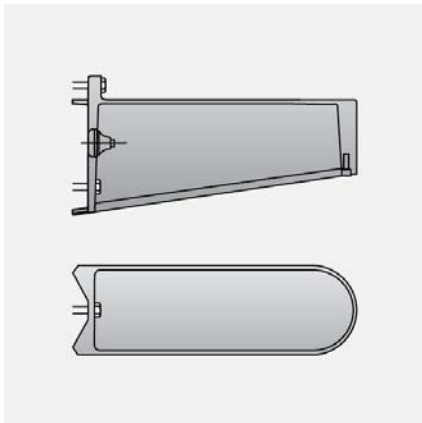
**Note:** Data above assumes grade level installation and a maximum luminaire weight of 75 lbs.



O

PLEASE PROVIDED WHICH MOTION SENSOR ARM MOUNT  
NEEDED EM S-L2, EM S-L3, EM S-L4, EM S-L7.  
SEE NEXT PAGES

Product (4) o



Sensors • Arm mounted • External motion sensor

	LED	EXPRESS o	$\beta$	A	B o
<b>EM S-L2</b>				9½	3½
<b>EM S-L3</b> o				9½	3½ o
<b>EM S-L4</b> o				9½	3½
<b>EM S-L7</b> o				9½	3½ o

Motion sensor - arm mounted

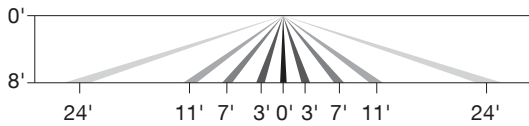
**Housing:** One piece, die cast aluminum housing with aluminum access door secured with mechanically captive stainless steel screw. Die castings are marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy.

**Description:** The EMS-L2 motion sensor provides multi-level lighting control based on motion. The EMS-L2 provides a maximum coverage of 48' diameter 360° coverage at 8' mounting heights. The EMS-L2 motion sensor unit is mounted inside a pole mount arm for attachment to BEGA poles for use with BEGA 0-10V dimmable LED pole top luminaires. The sensor ramps lighting ON to 100% light output when motion is first detected. After the sensor stops detecting movement and the 5 minute time delay elapses, lights fade to 10% light output. If there is no motion during the subsequent 1 hour cut off time delay, the lights will turn off. Any time the sensor detects motion after it has dimmed to 10% or off, it will ramp the light level back to 100%.

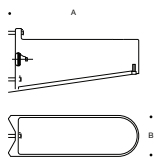
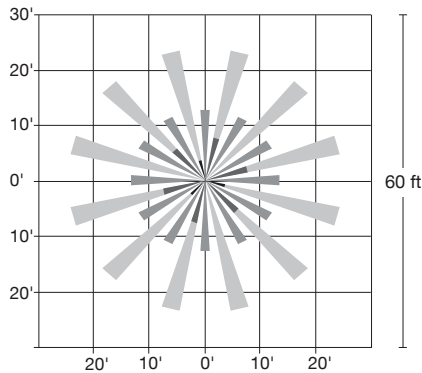
Desired subsequent sensor adjustments are made using a handheld configuration tool (FSIR-100). This tool enables adjustment of parameters including high and low light levels, motion sensitivity, time delay, and cut off time. The wireless tool stores up to five sensor parameter profiles to speed configuration of multiple sensors. The FSIR-100 is sold separately.

Type:  
 BEGA Product:  
 Project:  
 Voltage:  
 Color:  
 Options:  
 Modified:

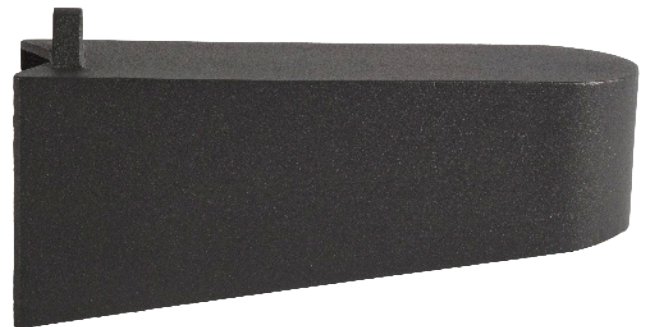
Side Coverage Pattern:



Top Coverage Pattern



		A	B
EMS-L2	Arm mounted motion sensor	9 1/2	3 1/2



Motion sensor - arm mounted

**Housing:** One piece, die cast aluminum housing with aluminum access door secured with mechanically captive stainless steel screw. Die castings are marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy.

**Description:** The EMS-L3 motion sensor provides multi-level lighting control based on motion. The EMS-L3 provides a maximum coverage of 40' diameter 360° coverage at 20' mounting heights. The EMS-L3 motion sensor unit is mounted inside a pole mount arm for attachment to BEGA poles for use with BEGA LED 0-10V dimmable pole top luminaires.

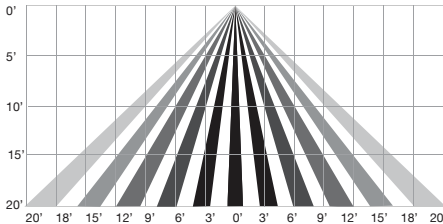
The sensor ramps lighting ON to 100% light output when motion is first detected. After the sensor stops detecting movement and the 5 minute time delay elapses, lights fade to 10% light output. If there is no motion during the subsequent 1 hour cut off time delay, the lights will turn off. Any time the sensor detects motion after it has dimmed to 10% or off, it will ramp the light level back to 100%.

Desired subsequent sensor adjustments are made using a handheld configuration tool (FSIR-100). This tool enables adjustment of parameters including high and low light levels, motion sensitivity, time delay, and cut off time. The wireless tool stores up to five sensor parameter profiles to speed configuration of multiple sensors. The FSIR-100 is sold separately.

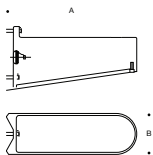
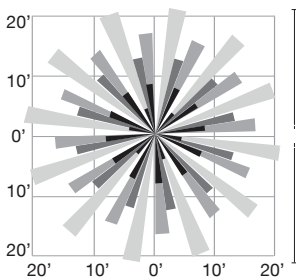
**Weight:** 2 lbs

Type:  
 BEGA Product:  
 Project:  
 Voltage:  
 Color:  
 Options:  
 Modified:

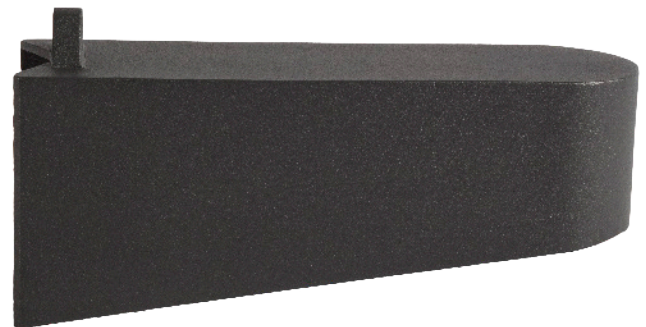
Side Coverage Pattern:



Top Coverage Pattern



		A	B
<b>EMS-L3</b>	Arm mounted motion sensor	9 1/2	3 1/2



Motion sensor - arm mounted

**Housing:** One piece, die cast aluminum housing with aluminum access door secured with mechanically captive stainless steel screw. Die castings are marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy.

**Description:** The EMS-L4 motion sensor provides multi-level lighting control based on motion. The EMS-L4 provides a maximum coverage of 60' diameter 360° coverage at 40' mounting heights. The EMS-L4 motion sensor unit is mounted inside a pole mount arm for attachment to BEGA poles for use with BEGA LED 0-10V dimmable pole top luminaires.

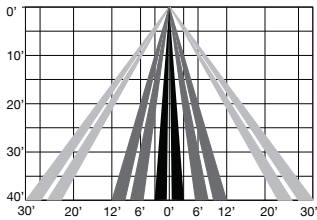
The sensor ramps lighting ON to 100% light output when motion is first detected. After the sensor stops detecting movement and the 5 minute time delay elapses, lights fade to 10% light output. If there is no motion during the subsequent 1 hour cut off time delay, the lights will turn off. Any time the sensor detects motion after it has dimmed to 10% or off, it will ramp the light level back to 100%.

Desired subsequent sensor adjustments are made using a handheld configuration tool (FSIR-100). This tool enables adjustment of parameters including high and low light levels, motion sensitivity, time delay, and cut off time. The wireless tool stores up to five sensor parameter profiles to speed configuration of multiple sensors. The FSIR-100 is sold separately.

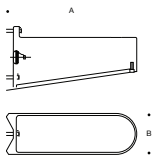
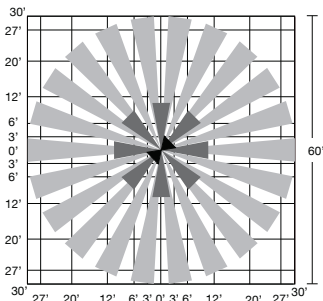
**Weight:** 2 lbs

Type:  
 BEGA Product:  
 Project:  
 Voltage:  
 Color:  
 Options:  
 Modified:

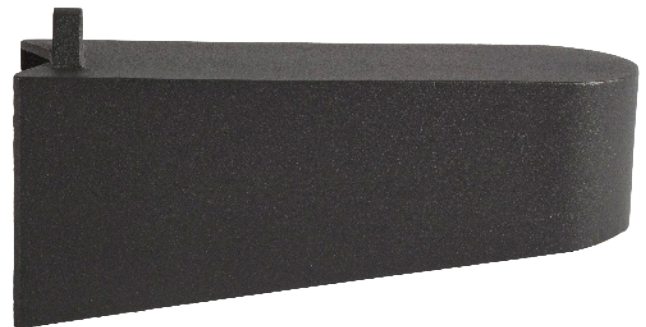
**Side Coverage Pattern:**



**Top Coverage Pattern**



		A	B
<b>EMS-L4</b>	Arm mounted motion sensor	9 1/2	3 1/2





Motion sensor - arm mounted

**Housing:** One piece, die cast aluminum housing with aluminum access door secured with mechanically captive stainless steel screw. Die castings are marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy.

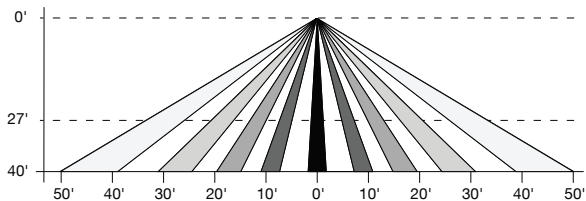
**Description:** The EMS-L7 motion sensor provides multi-level lighting control based on motion. The EMS-L7 provides a maximum coverage of 100' diameter 360° coverage at 40' mounting heights. The EMS-L7 motion sensor unit is mounted inside a pole mount arm for attachment to BEGA poles for use with BEGA LED 0-10V dimmable pole top luminaires.

The sensor ramps lighting ON to 100% light output when motion is first detected. After the sensor stops detecting movement and the 5 minute time delay elapses, lights fade to 10% light output. If there is no motion during the subsequent 1 hour cut off time delay, the lights will turn off. Any time the sensor detects motion after it has dimmed to 10% or off, it will ramp the light level back to 100%.

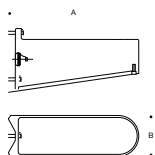
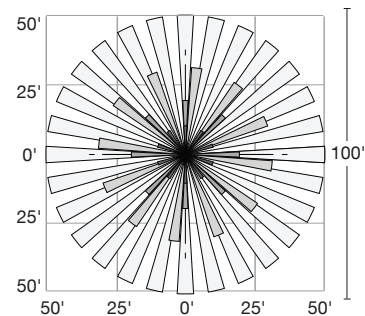
Desired subsequent sensor adjustments are made using a handheld configuration tool (FSIR-100). This tool enables adjustment of parameters including high and low light levels, motion sensitivity, time delay, and cut off time. The wireless tool stores up to five sensor parameter profiles to speed configuration of multiple sensors. The FSIR-100 is sold separately.

**Weight:** 2 lbs

**Side Coverage Pattern:**

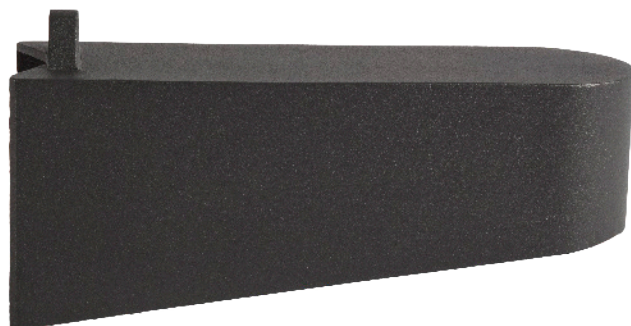


**Top Coverage Pattern**



		A	B
<b>EMS-L7</b>	Arm mounted motion sensor	9 1/2	3 1/2

Type:  
 BEGA Product:  
 Project:  
 Voltage:  
 Color:  
 Options:  
 Modified:



Pole-top luminaire - asymmetric distribution

**Application**

LED pole-top luminaires with twin head and asymmetric light distribution ideal of the illumination of roadways, squares, driveways and pedestrian areas while meeting full cut-off requirements. Slip fits 3" O.D, pole top of tenon.

**Materials**

Luminaire housing and pole fitter constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy  
 Clear safety glass  
 Reflector made of pure anodized aluminum  
 High temperature silicone gasket  
 Mechanically captive stainless steel fasteners

**NRTL** listed to North American Standards, suitable for wet locations  
 Protection class IP66

**Weight:** 14.1 lbs.

**EPA (Effective projection area):** 0.65 sq. ft.

**Electrical**

Operating voltage 120-277VAC  
 Minimum start temperature -30° C  
 LED module wattage 55.3W  
 System wattage 61.0W  
 Controllability 0-10V dimmable  
 Color rendering index Ra > 80  
 Luminaire lumens 6,672 lumens (4000K)  
 Lifetime at Ta = 15° C 232,000 h (L70)  
 Lifetime at Ta = 35° C 73,000 h (L70)

**LED color temperature**

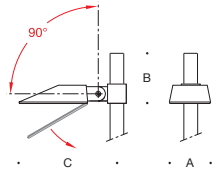
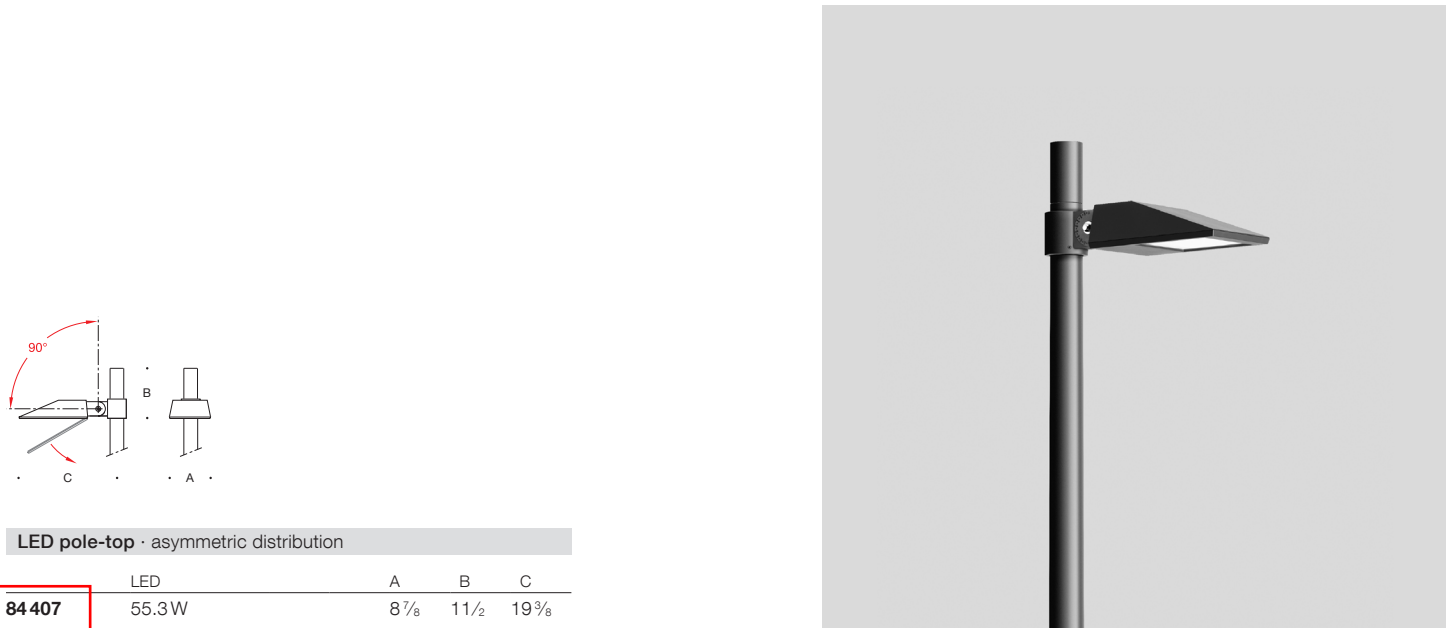
- 4000K - Product number + **K4**
- 3500K - Product number + **K35**
- 3000K - Product number + **K3**
- 2700K - Product number + **K27**

**BEGA** can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

**Finish**

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:



LED pole-top · asymmetric distribution

	LED	A	B	C
<b>84407</b>	55.3W	8 7/8	11 1/2	19 3/8

Recommended for use with 14' to 25' poles

**BEGA** 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com

Type:  
 Project:  
 Options:  
 Modified:  
 Luminaire:  
 Fixture EPA:  
 Optional Tenon:  2 3/8" φ x 3 1/2" H  
 GCO:   
 GFI:

Approval:

**1508HR 3" - 5" Tapered round hinged pole**

**Shaft:** Extruded from all new seamless 6063 aluminum alloy tubing, heat treated to a T-6 condition.

**Anchor base:** Round cast aluminum A356 alloy, heat treated to a T-6 condition. Anchor base and shaft continuously welded at the outside top and inside bottom of the anchor base casting. Pole base to be round hinged two piece casting. Hinge Pole shaft to be welded to upper base casting which is secured to lower base casting by three (3) stainless steel bolts. Bolts to be fastened to cast-in stainless threaded inserts in lower casting. Cast round two piece base cover supplied with pole.

**Anchor bolts:** Four (4) 3/4" x 17" galvanized steel anchor bolts supplied with double nuts and flat washers. Maximum bolt projection 3 1/2".

**GCO or GFI:** Standard GCO/GFI location is opposite the hinge. Height above base for ballast in luminaires is 18". For single luminaires with a pole base mounted (PBM) ballast the minimum height is 24" and 42" minimum for double PBM luminaires.

Weight: 76.0 lbs.

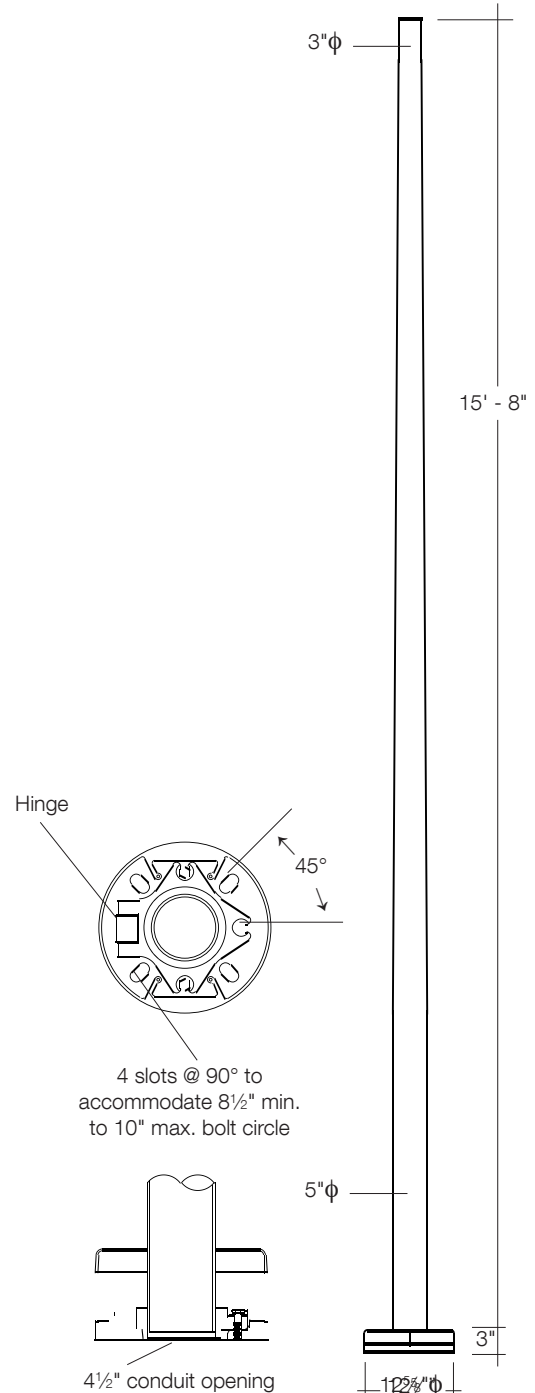
**Disclaimer**

BEGA-US warrants the specific anchor bolts and pole combination according to the product number(s) and description(s) indicated on this submittal sheet. Structural changes to the pole requested by the customer, including changes to pole length, may affect the compatibility of the anchor bolts and corresponding poles. BEGA-US is not responsible for the incompatibility of the anchor bolts and poles resulting from such structural changes without review by the BEGA-US engineering department. This includes, but is not limited to, any labor charges, charges for replacement materials and shipping.

Pole wind load rating:

MPH:	70	80	90	100	120
EPA:	15.4	11.2	8.5	6.5	4.4

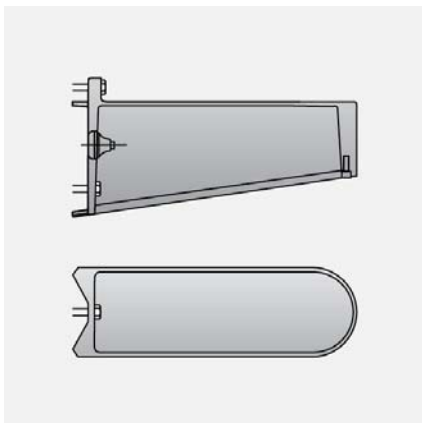
**Note:** Data above assumes grade level installation and a maximum luminaire weight of 75 lbs.



PLEASE PROVIDED WHICH MOTION SENSOR ARM MOUNT  
NEEDED EM S-L2, EM S-L3, EM S-L4, EM S-L7.  
SEE NEXT PAGES

O

Product (4) o



Sensors • Arm mounted • External motion sensor

	LED	EXPRESS o	$\beta$	A	B o
<b>EM S-L2</b>				9½	3½
<b>EM S-L3</b> o				9½	3½ o
<b>EM S-L4</b> o				9½	3½
<b>EM S-L7</b> o				9½	3½ o

Motion sensor - arm mounted

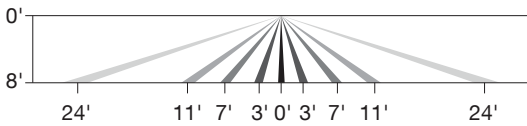
**Housing:** One piece, die cast aluminum housing with aluminum access door secured with mechanically captive stainless steel screw. Die castings are marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy.

**Description:** The EMS-L2 motion sensor provides multi-level lighting control based on motion. The EMS-L2 provides a maximum coverage of 48' diameter 360° coverage at 8' mounting heights. The EMS-L2 motion sensor unit is mounted inside a pole mount arm for attachment to BEGA poles for use with BEGA 0-10V dimmable LED pole top luminaires. The sensor ramps lighting ON to 100% light output when motion is first detected. After the sensor stops detecting movement and the 5 minute time delay elapses, lights fade to 10% light output. If there is no motion during the subsequent 1 hour cut off time delay, the lights will turn off. Any time the sensor detects motion after it has dimmed to 10% or off, it will ramp the light level back to 100%.

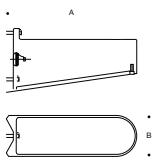
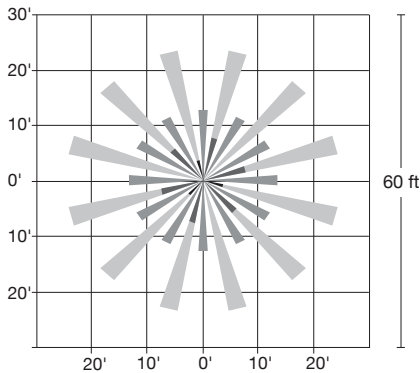
Desired subsequent sensor adjustments are made using a handheld configuration tool (FSIR-100). This tool enables adjustment of parameters including high and low light levels, motion sensitivity, time delay, and cut off time. The wireless tool stores up to five sensor parameter profiles to speed configuration of multiple sensors. The FSIR-100 is sold separately.

Type:  
 BEGA Product:  
 Project:  
 Voltage:  
 Color:  
 Options:  
 Modified:

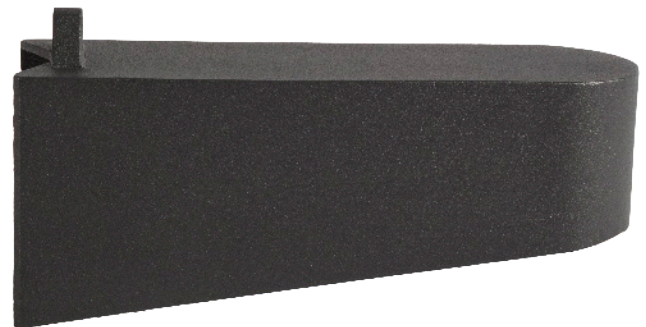
Side Coverage Pattern:



Top Coverage Pattern



		A	B
EMS-L2	Arm mounted motion sensor	9 1/2	3 1/2



Motion sensor - arm mounted

**Housing:** One piece, die cast aluminum housing with aluminum access door secured with mechanically captive stainless steel screw. Die castings are marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy.

**Description:** The EMS-L3 motion sensor provides multi-level lighting control based on motion. The EMS-L3 provides a maximum coverage of 40' diameter 360° coverage at 20' mounting heights. The EMS-L3 motion sensor unit is mounted inside a pole mount arm for attachment to BEGA poles for use with BEGA LED 0-10V dimmable pole top luminaires.

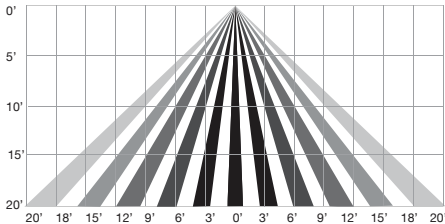
The sensor ramps lighting ON to 100% light output when motion is first detected. After the sensor stops detecting movement and the 5 minute time delay elapses, lights fade to 10% light output. If there is no motion during the subsequent 1 hour cut off time delay, the lights will turn off. Any time the sensor detects motion after it has dimmed to 10% or off, it will ramp the light level back to 100%.

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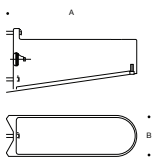
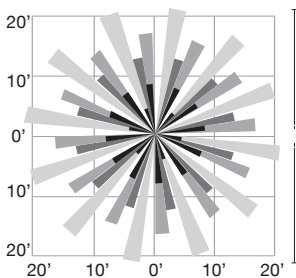
**Weight:** 2 lbs

Type:  
 BEGA Product:  
 Project:  
 Voltage:  
 Color:  
 Options:  
 Modified:

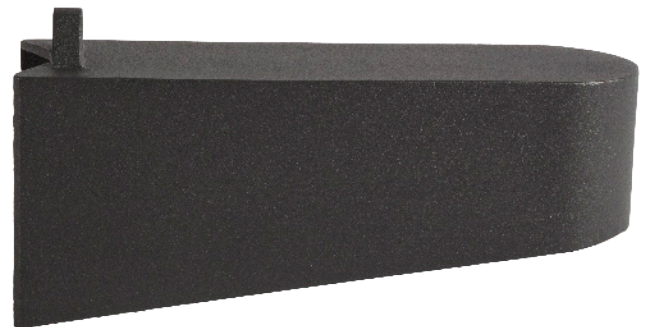
Side Coverage Pattern:



Top Coverage Pattern



		A	B
<b>EMS-L3</b>	Arm mounted motion sensor	9 1/2	3 1/2



Motion sensor - arm mounted

**Housing:** One piece, die cast aluminum housing with aluminum access door secured with mechanically captive stainless steel screw. Die castings are marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy.

**Description:** The EMS-L4 motion sensor provides multi-level lighting control based on motion. The EMS-L4 provides a maximum coverage of 60' diameter 360° coverage at 40' mounting heights. The EMS-L4 motion sensor unit is mounted inside a pole mount arm for attachment to BEGA poles for use with BEGA LED 0-10V dimmable pole top luminaires.

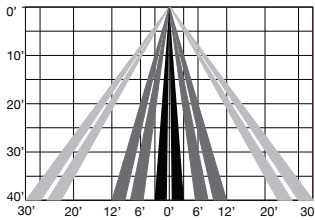
The sensor ramps lighting ON to 100% light output when motion is first detected. After the sensor stops detecting movement and the 5 minute time delay elapses, lights fade to 10% light output. If there is no motion during the subsequent 1 hour cut off time delay, the lights will turn off. Any time the sensor detects motion after it has dimmed to 10% or off, it will ramp the light level back to 100%.

Desired subsequent sensor adjustments are made using a handheld configuration tool (FSIR-100). This tool enables adjustment of parameters including high and low light levels, motion sensitivity, time delay, and cut off time. The wireless tool stores up to five sensor parameter profiles to speed configuration of multiple sensors. The FSIR-100 is sold separately.

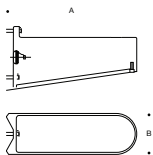
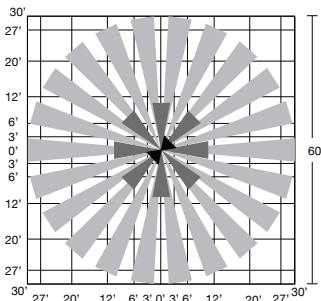
**Weight:** 2 lbs

Type:  
 BEGA Product:  
 Project:  
 Voltage:  
 Color:  
 Options:  
 Modified:

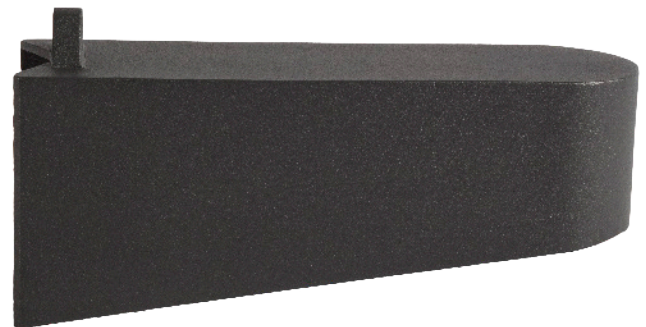
Side Coverage Pattern:



Top Coverage Pattern



		A	B
EMS-L4	Arm mounted motion sensor	9 1/2	3 1/2



Motion sensor - arm mounted

**Housing:** One piece, die cast aluminum housing with aluminum access door secured with mechanically captive stainless steel screw. Die castings are marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy.

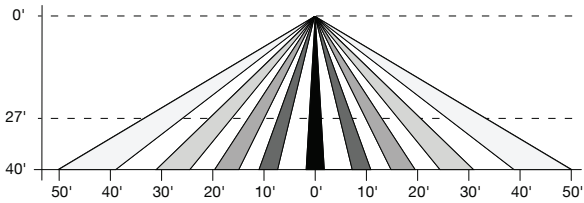
**Description:** The EMS-L7 motion sensor provides multi-level lighting control based on motion. The EMS-L7 provides a maximum coverage of 100' diameter 360° coverage at 40' mounting heights. The EMS-L7 motion sensor unit is mounted inside a pole mount arm for attachment to BEGA poles for use with BEGA LED 0-10V dimmable pole top luminaires.

The sensor ramps lighting ON to 100% light output when motion is first detected. After the sensor stops detecting movement and the 5 minute time delay elapses, lights fade to 10% light output. If there is no motion during the subsequent 1 hour cut off time delay, the lights will turn off. Any time the sensor detects motion after it has dimmed to 10% or off, it will ramp the light level back to 100%.

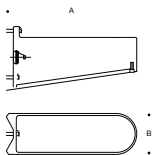
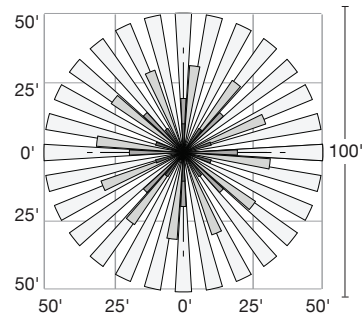
Desired subsequent sensor adjustments are made using a handheld configuration tool (FSIR-100). This tool enables adjustment of parameters including high and low light levels, motion sensitivity, time delay, and cut off time. The wireless tool stores up to five sensor parameter profiles to speed configuration of multiple sensors. The FSIR-100 is sold separately.

**Weight:** 2 lbs

**Side Coverage Pattern:**



**Top Coverage Pattern**



		A	B
<b>EMS-L7</b>	Arm mounted motion sensor	9 1/2	3 1/2

Type:  
 BEGA Product:  
 Project:  
 Voltage:  
 Color:  
 Options:  
 Modified:

