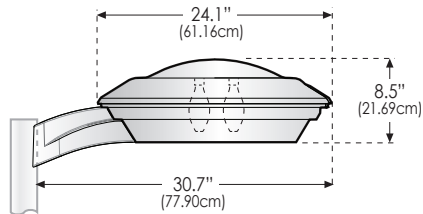


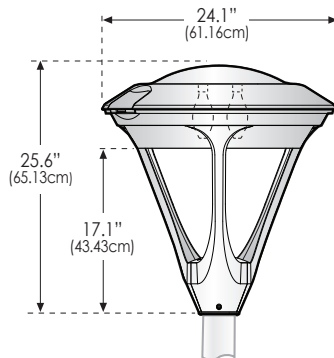
Type:	Job:	Approvals:					
Catalog Number:						Date:	
Series/Source-Wattage	Optics	Voltage	Ballast Type	Mounting	Options (Factory Installed)	Finish	Accessories (Field Installed)
Page 1 of 6							

Overall Dimensions *For Reference Only*

OP2-E Single Arm Mount SR4



OP2-E Post Top Mount PTTR



EPA (Effective Projected Area in Ft²)

Arm Mount		Post Top single unit only	
1@90		0.49	0.74
2@180		0.98	
2@90		0.98	
3@90		1.27	
3@120		1.15	
4@90		1.37	

Weight (maximum)

Arm Mount	Post Top Mount
40 lbs. (18.2 kgs)	43 lbs. (19.5 kgs)

Specifications



Housing

200 watt max Optra-2 EONS luminaire features a 24" optical housing incorporating an electronic or magnetic ballast. Die-cast aluminum housing. Corrosion resistant hardware. Optic chamber constructed to IP65.

Full Cutoff Optical System

Vertical lamping with flat lens meets IES Full Cutoff classification. Multi-faceted segmented reflectors of high purity, anodized "Super Sheet" aluminum, minimum 94% reflectivity with an inorganic dielectric coating. Optical head equipped with an electrical disconnect and is fully gasketed to ensure Dust-Tite construction for higher maintained light levels. Symmetric pattern provides excellent spacing to mounting height ratios. Asymmetric pattern provides house side spill light control. Luminaire is Dark Sky Ordinance compliant.

Lamp Access

Spring loaded latch at side of upper optical housing allows toolless lamp access and assures proper resealing to maintain Dust-Tite construction.

Lamp / Socket

Porcelain medium base socket, 4KV pulse rated, maintains proper photometric alignment.

Lens

Precision manufactured fully tempered flat glass lens provides full cutoff performance.

Ballast Specification Overview

Electronic Ballast units: High frequency electronic ballast operation provides constant wattage regulation and features THD in the range of <10% to <15% with a optional low voltage (0-10v) dimming capabilities and is suitable for Pulse Start Metal Halide operation in an ambient temperature range of -30°C (-22°F) to 40°C (104°F).

Magnetic Ballast units: Ballasts shall be high power factor with reliable starting at temperatures as low as -34°C (-30°F) for Pulse Start Metal Halide, and -40°C (-40°F) for High Pressure Sodium. Crest factor does not exceed 1.8. Ballast has Class H, 180°C (356°F) rated insulation system.

EONS Extended ON System

Optra-2 EONS features a dual-lamp optic and ballast system designed to ignite and operate the lamp with the highest remaining life. This innovative technology results in installations that sustain higher light levels for twice as long with faster restrike times. Other benefits include twice the time between group relamping, resulting in significant maintenance cost savings.

Mounting

Field installed surface arm mount shall be of die-cast aluminum for mounting to 3" to 5" O.D. round or square pole. Post top version mounts to a 2-3/8" O.D. x 4" vertical tenon.

Finish

Standard finish shall be Textured Satin Aluminum UltraClad polyester powder coating, 2.5 mil nominal thickness, electrostatically applied and oven cured to ensure extreme durability. Other colors may be specified.

Listings

ETL/cETL Listed luminaire, UL 1598, suitable for Wet Locations. The quality systems of this facility have been registered by UL to the ISO 9001 Series Standards.

Warranty / Terms and Conditions

Philips Gardco luminaires feature a 5 year limited warranty. See Warranty Information on www.sitelighting.com for complete details and exclusions. Polycarbonate lenses carry a 1 year warranty only.

All sales of items in this catalogue shall be subject to the Philips Gardco Standard Terms and Conditions of Sale current at the time of shipment. If you do not have a copy of the Philips Gardco Warranty and Standard Terms, please contact the factory for same prior to ordering.



Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled 'Contain Mercury' and/or with the symbol 'Hg'. Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycle and disposal can be found at www.lamprecycle.org.

OP2-E Series




Optra-2 EONS (Extended On System) Area Luminaire, 70-200W HID

Type:	Job:	Page 2 of 6
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Optra-2 EONS
OP2-E

post top mount

Series/Source-Wattage ⁽¹⁾	Distribution	Voltage ⁽⁴⁾	Ballast type	Mounting
Pulse Start Metal Halide (E17 lamp) <input type="checkbox"/> OP2P-70 <input type="checkbox"/> OP2P-100 <input type="checkbox"/> OP2P-150 <input type="checkbox"/> OP2P-175 ⁽²⁾ <input type="checkbox"/> OP2P-200 	<input type="checkbox"/> ES Optra-2 EONS Symmetric <input type="checkbox"/> EA Optra-2 EONS Asymmetric	<input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> QV ⁽⁵⁾ <input type="checkbox"/> 120-277 ⁽⁶⁾	<input type="checkbox"/> E Electronic Ballast Available for Pulse Start Metal Halide units only. <input type="checkbox"/> C Magnetic (core & coil) Available for all sources and wattages except as noted.	<input type="checkbox"/> SR4 Arm Mount to 4"-5" O.D. Round Pole ⁽⁷⁾ <input type="checkbox"/> SR3 Arm Mount to 3"- 3.9" O.D. Round Pole ⁽⁷⁾ <input type="checkbox"/> SS Arm Mount to 3"-5" Square Pole ⁽⁷⁾ <input type="checkbox"/> PTTR Post Top Mount to 4" O.D. Round Pole ⁽⁸⁾ <input type="checkbox"/> PTTR-3 Post Top Mount to 3" O.D. Round Pole ⁽⁸⁾
High Pressure Sodium (E17 lamp) <input type="checkbox"/> OP2S-70 ⁽³⁾ <input type="checkbox"/> OP2S-100 ⁽³⁾ <input type="checkbox"/> OP2S-150 ⁽³⁾				

Options (Factory Installed)	Finish	Accessories (Ordered Separately)
<input type="checkbox"/> BL ^{9, 10} Bi-Level (Hi-Low) dimming to 50% power <input type="checkbox"/> AD ^{9, 10} Analog (full range) dimming to 50% power <input type="checkbox"/> CSR Hot Quartz Restrike <input type="checkbox"/> LQ Hot/Cold Quartz Restrike <input type="checkbox"/> LQ1 ¹⁰ Separately Wired (120V) Quartz Restrike <input type="checkbox"/> F1 Single Fuse (120/277V) <input type="checkbox"/> F2 Double Fuse (208/240V) <input type="checkbox"/> PCB Photocell Button Specify voltage, 480V not available. <input type="checkbox"/> 50HZ 50 Hz Ballast Operation 50-60 Hz operation is standard in electronic ballasts.	<input type="checkbox"/> TSA Textured Satin Aluminum <input type="checkbox"/> TDB Textured Dark Bronze <input type="checkbox"/> TBK Textured Black <input type="checkbox"/> TGR Textured Gray <input type="checkbox"/> TWHT Textured White <input type="checkbox"/> TGN Textured Green <input type="checkbox"/> RAL(*) Special Tiger Drylac® powder coat finish (*) Specify RAL color number from RAL color chart (Consult factory.) Custom color matching is also available. Provide paint chip to assure accurate color matching.	<input type="checkbox"/> F1-KIT Single Fuse Kit (120/277V) <input type="checkbox"/> F2-KIT Double Fuse Kit (208/240V) <input type="checkbox"/> SK-OP2 External House Side Shield <input type="checkbox"/> RPTA-190-DT14 Round Pole Tenon Adapter - 1 @ 90 <input type="checkbox"/> RPTA-290-DT14 Round Pole Tenon Adapter - 2 @ 90 <input type="checkbox"/> RPTA-2180-DT14 Round Pole Tenon Adapter - 2 @ 180 <input type="checkbox"/> RPTA-390-DT14 Round Pole Tenon Adapter - 3 @ 90 <input type="checkbox"/> RPTA-3120-DT14 Round Pole Tenon Adapter - 3 @ 120 <input type="checkbox"/> RPTA-490-DT14 Round Pole Tenon Adapter - 4 @ 90 <input type="checkbox"/> SPTA-190-DT14 Square Pole Tenon Adapter - 1 @ 90 <input type="checkbox"/> SPTA-290-DT14 Square Pole Tenon Adapter - 2 @ 90 <input type="checkbox"/> SPTA-2180-DT14 Square Pole Tenon Adapter - 2 @ 180 <input type="checkbox"/> SPTA-390-DT14 Square Pole Tenon Adapter - 3 @ 90 <input type="checkbox"/> SPTA-490-DT14 Square Pole Tenon Adapter - 4 @ 90 <input type="checkbox"/> SW-OP2 Wall Mount Junction Box

1) Electronic ballast operation standard for Pulse Start Metal Halide only at time of publication. Magnetic ballast operation available for all wattages except as noted.

2) 175W PSMH available with electronic ballast only.

3) Not available with electronic ballast.

4) Voltage must be specified. Luminaire provided with pre-wired disconnects. Not available in 480V.

5) Quad-voltage ballast available with magnetic ballasts only, for field selection of 120/208/240/277V. Options may require voltage selection.

6) Variable voltage 120-277V available with electronic ballasts only.

7) Refer to Optra-2 Arm Mount Drill Template #14.

8) Requires a 2-3/8" O.D. x 4" vertical tenon (by others).

9) See dimming option details on page 4. AD dimming option is available with electronic ballasts only.

10) LQ1 may not be combined with either BL or AD option.

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EONS Lamp Life Chart

Optra-2 EONSsystem doubles the average lamp life of each luminaire

** Based on the use of Philips ceramic metal halide lamps @ 4000K color temperature.*

PSMH Wattage	Rated Life in hours	HPS Wattage	Rated Life in hours
70W	40,000*	70W	48,000
100W	40,000*	100W	48,000
150W	40,000*	150W	48,000
175W	30,000		
200W	24,000		

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Option details (Factory Installed)

BL Bi-Level (Hi-Low) Dimming to 50% power

AD Analog (variable) Dimming to 50% power
available with electronic ballasts only

Units with electronic ballasts may be specified with either 0-10VDC dimming option:

Hi-Low Bi-Level (**BL**) or variable Analog (**AD**)

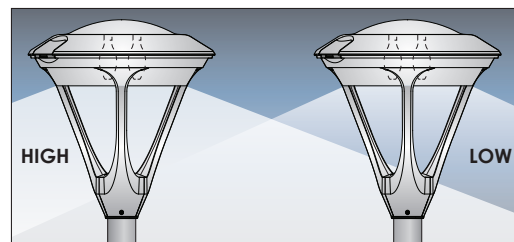
Units with magnetic ballasts may be specified with 120 or 277V Hi-Low Bi-Level (**BL**) control only.

Available with CWA ballasts only.

(Limited availability, consult factory.)

Bi-level provides high / low level of lamp output with up to 50% power consumption. Zero crossover network avoids strobing and lamp dropout.

Unlike horizontal lamp full cutoff fixtures, Optra-2's vertical lamp system can accommodate energy efficiency standards requiring bi-level systems.



Note: BL dimming is suitable for HPS in 150 watt, 120 or 277 volt units only. Metal halide dimming

LQ1 option may not be combined with either BL or AD dimming option.

CSR Hot Quartz Restrike

LQ Hot/Cold Quartz Restrike

LQ1 Separately Wired (120V) Quartz Restrike
LQ1 requires an Interlock (by others) to ensure HID and Quartz source are not operated concurrently.

LQ1 option may not be combined with either BL or AD dimming option.

Note: Standard 150 watt (120V) double contact bayonet base socket. Combined Quartz wattage may not exceed HID lamp wattage.

CSR Quartz restrike using a current sensing relay; extinguishes auxiliary lamp when main arc strikes.

LQ Provides LiteMatic operation for fixtures with 120V or multi-tap ballasts.

LQ1 Separately wired, externally controlled emergency lighting from a separate power source.

LiteMatic Operation



Normal Start: Main and Quartz lamps both energized.



Main Lamp Reaches Approximately 40% of Rated Output: Quartz lamp automatically extinguishes (combined lamp currents never exceed that of main lamp at 100% output).



When Arc Extinguished: Auxiliary quartz lamp automatically energized when power is restored.



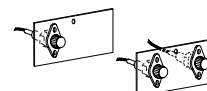
Main Lamp Reaches 40% of Rated Output: Quartz lamp automatically extinguishes

F1 Single Fuse (120V/277V)

F2 Double Fuse (208V/240V)

Standard unit consists of 1 or 2 fuses mounted internally.

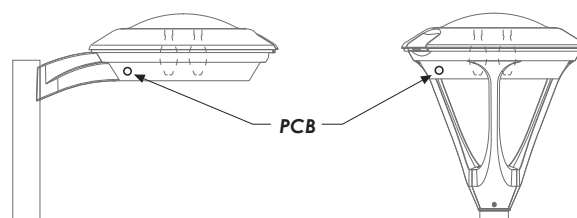
Note: Voltage must be specified.



PCB Photocell Button

Factory installed photocell button.

Note: Voltage must be specified.



50HZ 50 Hz Ballast Operation
50-60Hz operation is standard in electronic ballasts.

Specified for applications (outside the U.S.) where 50 Hertz operation is standard. Consult factory for availability in units with electronic ballasts.

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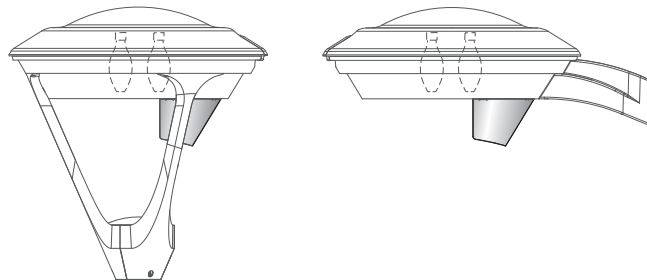
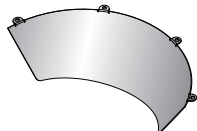
Accessory details (Field Installed - Shipped Separately)

F1-Kit	Single Fuse (120V/277V)	Consists of 1 or 2 fuse holders and 1 or 2 fuses. Field installed.
F2-Kit	Double Fuse (208V/240V)	

SK-OP2 External House Side Shield

additional EPA
per shield:

0.49



Field installed accessory provides supplemental spill light control.

RPTA-190-DT14	Round Pole Tenon Adapter - 1 @ 90°
RPTA-290-DT14	Round Pole Tenon Adapter - 2 @ 90°
RPTA-2180-DT14	Round Pole Tenon Adapter - 2 @ 180°
RPTA-390-DT14	Round Pole Tenon Adapter - 3 @ 90°
RPTA-3120-DT14	Round Pole Tenon Adapter - 3 @ 120°
RPTA-490-DT14	Round Pole Tenon Adapter - 4 @ 90°

Round Pole Tenon Adapter allows mounting of Optra-2 EONS **SR4** arm mount unit to round pole with 2-3/8" O.D. X 4" tall pole top tenon.

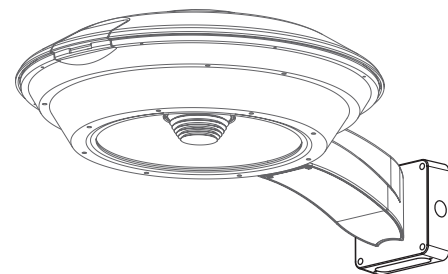
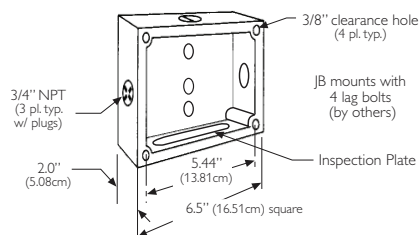


SPTA-190-DT14	Square Pole Tenon Adapter - 1 @ 90°
SPTA-290-DT14	Square Pole Tenon Adapter - 2 @ 90°
SPTA-2180-DT14	Square Pole Tenon Adapter - 2 @ 180°
SPTA-390-DT14	Square Pole Tenon Adapter - 3 @ 90°
SPTA-490-DT14	Square Pole Tenon Adapter - 4 @ 90°

Square Pole Tenon Adapter allows mounting of Optra-2 EONS **SS** arm mount unit to square pole with 2-3/8" O.D. X 4" tall pole top tenon.



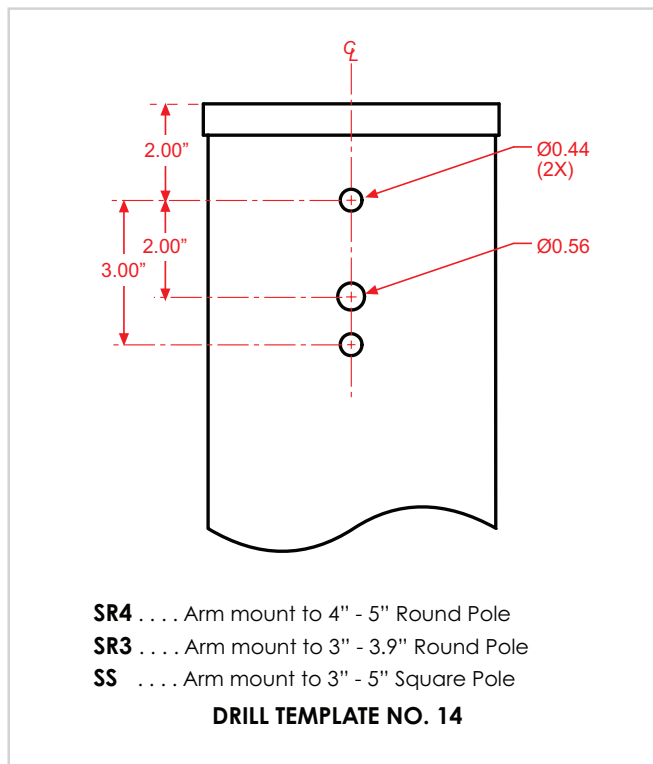
SW-OP2 Wall Mount Junction Box



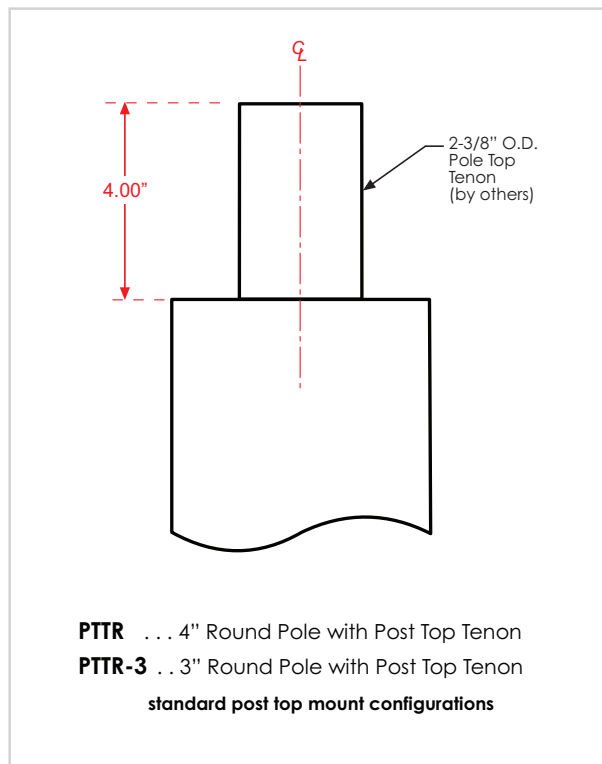
Thru-Wire junction box allows wall mounting of Optra-2 EONS **SS** arm mount unit.

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Arm Mount Drill Template (NTS)



Post Top Detail (NTS)



Notes



ISO 9001
Certified



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G200-100/0313

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