4/14/2014

1104602_LFS_CUPERMIT_041414_GJ.xls

## LUMINAIRE SCHEDULE

| TYPE | DESCRIPTION | MOUNTING | LAMPS | WATTS / LUMINAIRE | VOLTAGE | EMERGENCY | MANUFACTURER | CATALOG NUMBER | ALTERNATE MANUFACTURERS | NOTES |
|------|-------------|----------|-------|-------------------|---------|-----------|--------------|----------------|-------------------------|-------|
| B1 | BOLLARD LUMINAIRE, LED SOURCE, DIE-CAST ALUMINUM HOUSING, STRAIGHT SHAFT, DARK BRONZE FINISH | SEE DETAIL | LED ENGINE, 27 4000K | 29 | 277 | N/A | KIM LIGHTING | BNB1-27L5KUV-DB | PRE-BID APPROVED EQUAL | |
| P1 | POLE LIGHT, LED SOURCE, FLAT GLASS LENS, TYPE V DISTRIBUTION, SPUN ALUMINUM HOUSING WITH REVEALS, DARK BRONZE FINISH, WITH STRAIGHT ROUND STEEL POLE, 20', DARK BRONZE FINISH | SEE DETAIL | LED ENGINE, 10862 LUMEN 4000K | 120 | 277 | N/A | KIM LIGHTING | HEAD NO.  CC-21-A-5-250-120L-4K-277-DB-DBREV POLE NO.  KRS20-4120-A-DB | PRE-BID APPROVED EQUAL | |
| P2 | POLE LIGHT, PEDESTRIAN TYPE, LED SOURCE, FLAT GLASS LENS, TYPE II DISTRIBUTION, SPUN ALUMINUM HOUSING WITH REVEALS, DARK BRONZE FINISH, WITH STRAIGHT ROUND STEEL POLE, 14', DARK BRONZE FINISH | SEE DETAIL | LED ENGINE, 3414 LUMEN 4000K | 66 | 277 | N/A | KIM LIGHTING | HEAD NO.  CC-17-A-2-60-4K-277-DB-DBREV POLE NO.  KRS14-4120-A-DB | PRE-BID APPROVED EQUAL | |

LUMINAIRE SCHEDULE NOTES:

*BOLLARD TYPE B1*

# KIM LIGHTING

**BNB**
Bounce Bollard
revision 5/31/11 • bnb.pdf

**Type:**

**Job:**

**Catalog number:**

**Approvals:**

| | / | | / | | / | |
|---|---|---|---|---|---|---|
| Fixture | Electrical Module | | Luminaire Finish | Options | | |

See page 4 ——— See page 5 ———

**Date:**

**Page: 1 of 5**

# Specifications

## BNB1 and BNB4
70 to 100 watt PMH
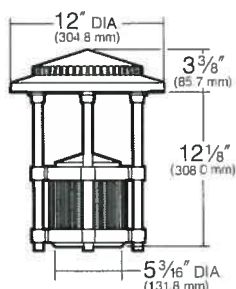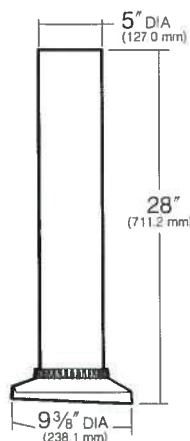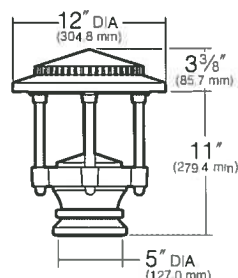70 to 100 watt HPS
Medium Base Lamps
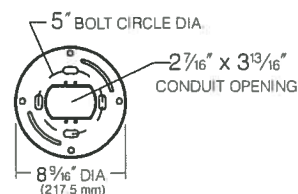42 watt Compact Fluorescent
18, 27 or 36 LED

**BNB1**

12" DIA (304.8 mm)
3⅜" (85.7 mm)
12⅛" (308.0 mm)
5³/₁₆" DIA (131.8 mm)
5" DIA (127.0 mm)
28" (711.2 mm)
Straight
9⅜" DIA (238.1 mm)

5" BOLT CIRCLE DIA
2⁷/₁₆" x 3¹³/₁₆" CONDUIT OPENING
8⁹/₁₆" DIA (217.5 mm)

**BNB4**

12" DIA (304.8 mm)
3⅜" (85.7 mm)
11" (279.4 mm)
5" DIA (127.0 mm)

**Hood and Lens Frame:** Die-cast, low copper (<0.6% Cu) aluminum alloy with stainless steel hinge. Hood is opened by loosening one stainless steel captive button-head socket cap screw. ³/₁₆" thick clear flat tempered glass lens seals against the lens frame by a one-piece molded silicone gasket. Lens frame seals against the hood by a one-piece extruded and vulcanized silicone gasket.

**Reflector Module:** Specular Alzak® optical segments are rigidly mounted within an aluminum frame and fastened securely to the hood. A porcelain medium base socket rated 4KV is provided for HID, and a GX24q-4 universal socket is provided for fluorescent. No reflector provided for LED.

**Body Support: BNB1:** Die-cast, low copper (<0.6% Cu) aluminum alloy flanges compress a ribbed extruded aluminum chamber. The four heavy wall extruded aluminum support rods are mechanically fastened to the lens frame with stainless steel fasteners. The support rods are held in position through die-cast arms and mechanically fastened at the bottom with a custom aluminum bolt. The electrical wiring is channeled through a support rod with a brass bushing. **BNB4:** Heavy cast low copper (<0.6% Cu) aluminum alloy wiring chamber. The four extruded aluminum support rods are mechanically fastened between the lens frame and wiring chamber with stainless steel bolts. The wiring is channeled through the support rods.

**Body Cap:** Die-cast, low copper (<0.6% Cu) aluminum, retained by two captive stainless steel screws. Optional matte black finish to eliminate bounce light. See page **5**.

**Shaft:** One-piece aluminum extrusion, .125" minimum wall thickness and two internal ³/₁₆"-16 mounting rods sandwich shaft between base and head.

**Anchor Base Plate:** A heavy cast aluminum anchor base is provided for mounting to the four ⅜" x 10" + 2" zinc plated J-bolts, each with two nuts and washers. A rigid pressed board template is provided to secure the anchor bolts during concrete pour (5" B.C.D.).

**Electrical Module:** Factory mounted to a rigid harness attached to the anchor base. **HID:** High Power Factor with starting temperatures of -20°F for PMH and -40°F for HPS lamp modes. **Fluorescent:** High Power Factor with starting temperature of 0°F. **LED:** A total of 9 LED emitters configured in a rectangular array comprised together as a module. Two (2) modules for 18 LED version; three (3) modules for 27 LED version; and four (4) modules for 36 LED version. Available in 3500K and 5100K.

**LED Driver:** Rated for 18 LED, 27 LED or 36 LED. Universal voltage from 120 to 277V with a ±10% tolerance. -40°F starting temperature. All drivers are Underwriters Laboratories recognized.

**Finish/Color:** Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a titanated zirconium conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Stealth Gray™, Platinum Silver, or White. Custom colors are available.

**CAUTION:** Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

| Listings and Ratings | | | |
|---|---|---|---|
| ETL[1] to UL Standards 1598 & 8750 | IP46 Rated | CE | 25C Ambient |
| (FCO) Full Cutoff[2] | | | |

[1]Suitable for wet locations
[2]Dark Sky Legislation Compliant

KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE.

**HUBBELL**
HUBBELL LIGHTING INC

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**KIM LIGHTING**

**BNB**
Bounce Bollard
revision 5/31/11 • bnb.pdf

Type:

Job:                                                                    **Page: 4 of 5**

# Standard Features

**Fixture**



| Cat. No. | ☑ **BNB1** | ☐ **BNB2** | ☐ **BNB3** | ☐ **BNB4** | ☐ **BNB5** | ☐ **BNB6** |

**Electrical Module**

**PMH** = Pulse Start Metal Halide
**HPS** = High Pressure Sodium
**PL** = Compact Fluorescent
**LED** = Light Emitting Diode

Lamp Lamp Line
Watts Type Volts
**70   PMH   120**
For PMH, HPS and PL.
See footnote 2 below for LED
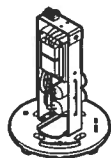


**NOTE:** For lamp/ballast information outside of the U.S.A. and Canada, please consult your local Kim representative.

Cat. Nos. for Electrical Modules available:

| Pulse Start Metal Halide | | High Pressure Sodium | |
|---|---|---|---|
| ☐ **70PMH120** | ☐ **100PMH120** | ☐ **70HPS120** | ☐ **100HPS120** |
| ☐ **70PMH208** | ☐ **100PMH208** | ☐ **70HPS208** | ☐ **100HPS208** |
| ☐ **70PMH240** | ☐ **100PMH240** | ☐ **70HPS240** | ☐ **100HPS240** |
| ☐ **70PMH277** | ☐ **100PMH277** | ☐ **70HPS277** | ☐ **100HPS277** |
| ☐ **70PMH347** | ☐ **100PMH347** | ☐ **70HPS347** | ☐ **100HPS347** |

| | | | | |
|---|---|---|---|---|
| Lamp | ED-17, Coated | ED-17, Coated | ED-17, Coated | ED-17, Coated |
| Socket | Medium Base | Medium Base | Medium Base | Medium Base |
| ANSI Ballast Type | M-98, M-143 | M-90, M-140 | S62 | S54 |

| Compact Fluor. | LED | | |
|---|---|---|---|
| ☐ **42PL120**[1] | ☐ **18L3KUV**[2] | ☐ **27L3KUV**[2] | ☐ **36L3KUV**[2] |
| ☐ **42PL208**[1] | ☐ **18L5KUV**[2] | ☑ **27L5KUV**[2] | ☐ **36L5KUV**[2] |
| ☐ **42PL240**[1] | -⊗- | -⊗- | -⊗- |
| ☐ **42PL277**[1] | IES Type 1 | IES Type 3 | IES Type 5 |

| | | | | |
|---|---|---|---|---|
| Lamp | Compact Fluor. | LED | LED | LED |
| Socket | GX24q-4 | N/A | N/A | N/A |

[1]**42PL** operates one 26, 32, or 42 watt lamp at 120 thru 277 volts (50-60 Hz).

**NOTE:** Coated lamps are recommended.

[2]For LED, 18L = 18 LED Emitters; 27L = 27 LED Emitters; 36L = 36 LED Emitters; 3K = 3500K color temperature; 5K = 5100K color temperature; UV = Universal Voltage from 120 to 277V with a ± 10% tolerance.

**Luminaire Finish**
Super TGIC powder coat paint over a titanated zirconium conversion coating on fixture and shaft.

| Color: | Black | Dark Bronze | Light Gray | Stealth Gray™ | Platinum Silver | White | Custom Color[3] |
|---|---|---|---|---|---|---|---|
| Cat. No.: | ☐ BL | ☐ DB | ☐ LG | ☐ SG | ☐ PS | ☐ WH | ☐ CC |

[3]Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____

**KIM LIGHTING**

Type:

Job:

# Optional Features

| **Fusing (internal only):** | High temperature fuse holders factory installed inside the fixture housing. Fuse is included. |
|---|---|
| Cat. No.   (see chart at right) | |

| Line Volts: | 120V | 208V | 240V | 277V | 347V |
|---|---|---|---|---|---|
| Cat. No.: | ☐ SF | ☐ DF | ☐ DF | ☐ SF | ☐ SF |

☐ No Option

Single Fuse

---

**Houseside Shield**
Cat. No.   ☐ HS
☐ No Option

Optional shield made of stamped louvered aluminum allows streetside light to pass while blocking houseside light. Blackened reflector panels within the reflector also reduces the houseside reflection.
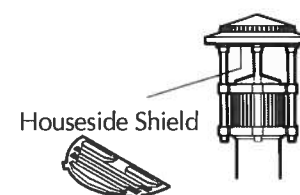
Houseside Shield

---

**Matte Black Body Cap:**
Cat. No.   ☐ BBC
☐ No Option

For locations where complete cutoff optical control is desired, an Optional Matte Black Body Cap can be specified. This significantly reduces the indirect up-light distribution, providing complete cutoff. To further reduce the nighttime visual presence of the fixture, specify Black or Dark Bronze luminaire finish.

Optional Cap

---

**Textured Glass Lens**
Cat. No.   ☐ TG
☐ No Option

Unique textured glass reduces LED glare and improves visual comfort.

---

**Emergency Battery Back-up**
Cat. No.   ☐ EM
☐ No Option

Internal battery pack provides 90 minutes of supplemental light at 23% of initial lamp lumens for 26, 32, or 42 watt compact fluorescent lamps.

Battery Back-up

---

**Cold-Pack Emergency Battery Pack**
Cat. No.   ☐ EM-CP
☐ No Option

The EM-CP option is a temperature controlled ballast designed to maintain operation without interruption within a range of hi/low ambient temperatures, -20°C to +55°C.

Internal Cold-Pack emergency battery pack provides up to 90 minutes of supplemental light. See following table for max. lumens output by lamps.

cold-pack battery back-up

| Lamp (4-Pin) | 1 lamp lumens |
|---|---|
| 42W | 750 |
| 32W | 575 |
| 26W | 450 |

---

*POLE TYPE P2*

# KIM LIGHTING

## CC/CCS17
### 17" Arm Mounted, Curvilinear, PicoEmitter™ LED
revision 12/19/13 • kl_cc17aeled_spec.pdf

**Type:**
**Job:**
**Catalog number:**

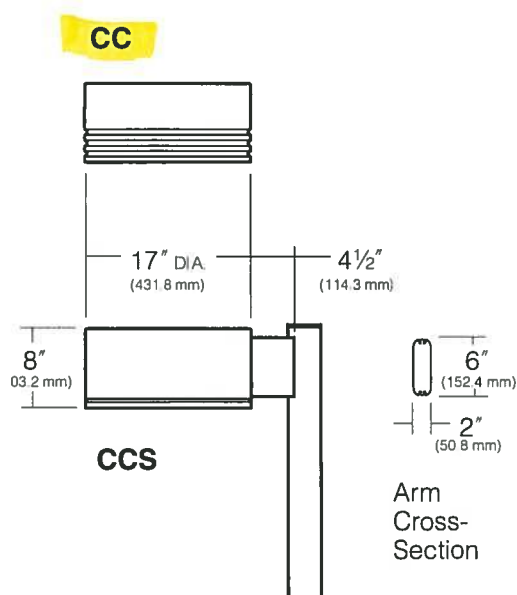___ / ___ / ___ / ___

Mtg.  Fixture  Electrical Module  Finish  Options
See page 2  See pages 3-4

Select pole from Kim Arms and Poles Selection Guide. If pole is provided by others indicate O.D. for arm fitting.

**Approvals:**

**Date:**
**Page: 1 of 6**

## Specifications

17" Diameter
60 Light Emitting Diodes
Total System Watts = 64W

**CC**

17" DIA. (431.8 mm)

4½" (114.3 mm)

8" (03.2 mm)

6" (152.4 mm)

2" (50.8 mm)

**CCS**

Arm Cross-Section

**Housing:** Spun aluminum. (Rollformed linear reveals; **CC:** Three equally spaced reveals, ½" wide, separated by ½" ribs, ¼" deep. **CCS:** One ¼" groove, ¼" deep.) Sidewalls have a maximum 1° of taper, and are free of welds or fasteners. A rollformed aluminum flange is hemmed into the bottom providing support for the reflector module. An internal aluminum casting provides for mounting of the electrical module plus reinforcing for side-arm mounting of the fixture.

**Lens Frame Assembly:** One-piece cast aluminum lens frame is attached to the housing by a zinc plated cold rolled steel hinge with a stainless steel pin. Closure is by one self-retained stainless steel screw. A stainless steel self-locking stop arm is provided to hold the lens frame in the open position while servicing. A ³⁄₁₆" thick clear flat tempered glass lens is fully gasketed by a one-piece extruded and vulcanized silicone gasket. Lens is retained in the frame by removable zinc plated steel clips.

**Standard Arm Mounting:** Arm is one-piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut to mate with specified round pole.

**Electronic Module:** All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Module includes a driver, LifeShield™ temperature control device and surge protector. Electrical module attaches to housing with key hole slots, accessible by opening the lens frame and removing optical module.. Driver is rated for –40°F starting and has a 0-10V dimming interface for multi-level illumination options.

**Optical Module:** Precision, replaceable PicoEmitters are positioned to achieve directional control toward desired task. The entire EmitterDeck™ mounting assembly fastens to the housing as a one-piece module.

**Finish/Color:** TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness. Standard colors are Black, Dark Bronze, Light Gray, Stealth Gray™, Platinum Silver, or White. Custom colors are available.

**Listed To:** UL 1598 Standard for Luminaires - UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products and CSA C22.2#250.0 Luminaires.

**Warranty:** Kim Lighting warrants Curvilinear LED products ("Product(s)") sold by Kim Lighting to be free from defects in material and workmanship for (i) a period of five (5) years for metal parts, (ii) a period of ten (10) years for exterior housing paint finish(s), (iii) a period of six (6) years for LED Light Engines (PicoEmitter reflectors) and, (iv) a period of five (5) years for LED power components (LED Driver, LifeShield temperature control device, surge protector), from the date of sale of such goods to the buyer as specified in Kim Lighting shipment documents for each product.

**CAUTION:** Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious injury.

**HUBBELL**
HUBBELL LIGHTING, INC

**KIM LIGHTING**

Type:

Job:

# Standard Features

**Mounting**
**3Y** configuration is available for round poles only.

Plan View:

Wall Mount

| EPA: | 0.9 | 1.8 | 1.6 | 2.5 | 2.5 | 2.8 | — |
|---|---|---|---|---|---|---|---|
| Cat. No.: | ☐1A | ☐2B | ☐2L | ☐3T | ☐3Y | ☐4C | ☐1W |

**Fixture**
Cat. No. designates **CC/CCS** fixture and light distribution.

x   17   A   x        E35

E35 = 350mA

**Housing:**
☐ CC
☐ CCS

**Size:**
17 = 17" Small
60 LEDs

A = Arm Mount

**Distribution:**
☐ 1 = Type I Full Cutoff
☐ 2 = Type II Full Cutoff
☐ 3 = Type III Full Cutoff
☐ 4 = Type IV Full Cutoff
☐ 5 = Type V Square Full Cutoff
☐ L = Type L Left Full Cutoff
☐ R = Type R Right Full Cutoff

Light Distribution:

Type I    Type II    Type III

Type IV Forward Throw    Type V Square    Type R Right    Type L Left

**Electrical Module**

Cat. Nos. for Electrical Modules available:

60        LxK        x

**Source:**
60 = 60 LED's

**Color Temperature:**
☐ 3K = 3000K
☐ 4K = 4200K
☐ 5K = 5100K
☐ 2K = 580nm - Amber

**Voltage:**
☐ 120 = 120V
☐ 208 = 208V
☐ 240 = 240V
☐ 277 = 277V
☐ 347 = 347V[1]
☐ 480 = 480V[1]

[1]Due to current unavailability of 347V and 480V drivers, specification of these voltages may feature an integral step-down transformer.

**Finish**
TGIC powder coat paint over a titanated zirconium conversion coating.

| Color: | Black | Dark Bronze | Light Gray | Stealth Gray | Platinum Silver | White | Custom Color[2] |
|---|---|---|---|---|---|---|---|
| Cat. No.: | ☐ BL | ☐ DB | ☐ LG | ☐ SG | ☐ PS | ☐ WH | ☐ CC |

[2]Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____
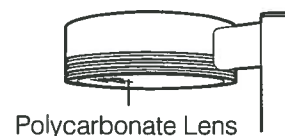
# Optional Features

**Polycarbonate Lens**
Cat. No.   ☐ L17F
☐ No Option

Clear UV stabilized polycarbonate replaces standard flat glass lens, gasketed and integral with lens frame.

**CAUTION:** Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight.

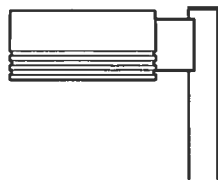Polycarbonate Lens
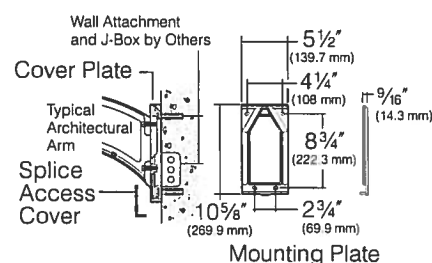
**KIM LIGHTING**

Type:

Job:

# Optional Features

## Wall Mounting
Cat. No. ☐ **1W**
☐ **No Option**

Select from Mounting on page **2**.

**Wall Mount:** A cast mounting plate of 356 alloy, low-copper (<0.6% Cu) aluminum, is mounted to the wall with bolts (by others). Fixture and arm are mounted to a cast 356 alloy aluminum cover plate before attaching to the wall mounting plate. The fixture-arm-cover plate assembly is hooked to the wall mounting plate, and secured with stainless steel screws provided. After mounting to the wall, field splices are made at the opening in the cover plate, then covered by a cast 356 alloy aluminum plate that blends with the cover plate design. Complete fixture-arm-cover plate assembly can therefore be mounted before field splices are made. Cover plate is finished to match arm and fixture powder coat color.

Wall Attachment and J-Box by Others
Cover Plate
Typical Architectural Arm
Splice Access Cover

5½" (139.7 mm)
4¼" (108 mm)
¹¹⁄₁₆" (14.3 mm)
8¾" (222.3 mm)
10⅝" (269.9 mm)
2¾" (69.9 mm)

Mounting Plate

**CAUTION:** Structural integrity of mounting plate attachment to wall is by others.

## Photocell Control
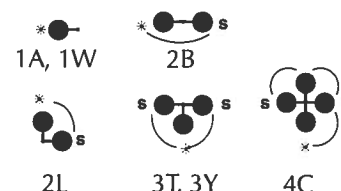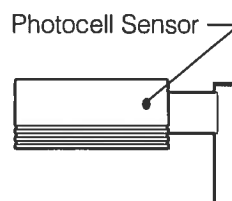Cat. No. **(See right)**
☐ **No Option**

Factory installed photocell inside housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others.

| Cat. No. | Line Volts: |
|---|---|
| ☐ A-30 | 120V |
| ☐ A-31 | 208V |
| ☐ A-32 | 240V |
| ☐ A-33 | 277V |
| ☐ A-35 | 347V |
| ☐ A-34 | 480V |

Photocell Sensor

Mounting Configuration:
✳ – Fixture with Photocell Sensor
**S** – slave unit(s)
No fixture wattage limit.

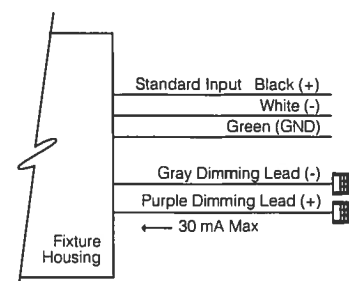1A, 1W    2B    2L    3T, 3Y    4C

## Neighbor Friendly Optic:
Cat. No. ☐ **NFO**
☐ **No Option**

Integrated Neighbor Friendly Optic on each PicoEmitter™ module to completely control unwanted backlight. Most effective with Type III and IV distibutions.

TYPE III-NFO    TYPE IV-NFO

## 0-10V Dimming Interface

Driver has a 0-10V dimming interface with a dimming range of 10-100%. Is compatible with most control systems including Hubbell Building Automation wiHUBB™. Approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV. Note: Not compatible with current sourcing dimmers. Controls compatible via Gray and Purple dimming lead.

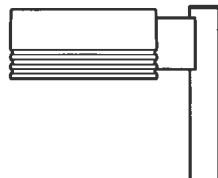Standard Input   Black (+)
White (-)
Green (GND)
Gray Dimming Lead (-)
Purple Dimming Lead (+)
← 30 mA Max
Fixture Housing

**KIM LIGHTING**

**Type:**

**Job:**

# Optional Features

**Outdoor Occupancy Sensor**
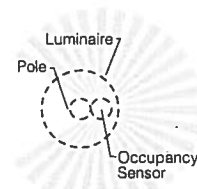
Cat. No.    (See right)
☐ **No Option**

### Side Pole Mount

Outdoor Occupancy Sensor with 0-10VDC dimming control mounts directly to the underside of the luminaire. Wide 360° pattern. Available in voltages to match luminaire from 120 through 480VAC. Module color available in Black, Gray, or White (Picked at the factory when luminaire color is chosen, black used for dark colors). Field Adjustable Timeout settings for 5, 10, 15, and 30 minutes (Factory default is 5-minutes). Field adjustable unoccupied dimming level, 20%, 50%, 60%, or 70% (Factory default is 50%). One sensor can support multiple units up to 1500 watts. (Wiring from module to luminaire(s) is by-others). Mounted to a cast pole adapter painted to match pole.
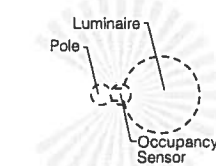
Cat. No.

☐ **SCL-R*/ **/ ***–** Pole Occupancy Sensor up to 16′,
UNV (120-347V) or 480V. Specify pole diameter.

☐ **SCL-S/ **/ *** –** Pole Occupancy Sensor up to 16′,
UNV (120-347V) or 480V. Square pole mount.

☐ **SCH-R*/ **/ ***–** Pole Occupancy Sensor up to 30′,
UNV (120-347V) or 480V. Specify pole diameter.

☐ **SCH-S/ **/ *** –** Pole Occupancy Sensor up to 30′,
UNV (120-347V) or 480V. Square pole mount.

\* Pole Diameter, \*\* Voltage, \*\*\* Color

**Ordering Example: SCL-R4/277/BL**

Luminaire
Pole
Occupancy Sensor

Side Pole Mount
Detection Pattern
Top View for Round Luminaire
Mounted on Post Top

**NOTE:** Occupancy detection is blocked directly behind pole Install occupancy sensor as far away from pole as possible to maximize detection.

Outdoor
Occupancy Sensor
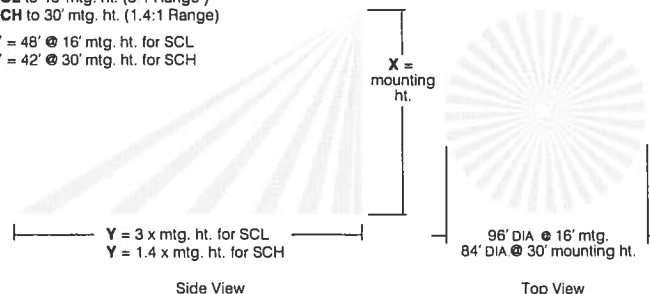Side Pole Mount

Luminaire
Pole
Occupancy Sensor

Side Pole Mount
Detection Pattern
Top View for Round Luminaire
Mounted on Arm

**NOTE:** For 360° coverage, install two occupancy sensors 180° apart on pole

### Sensor Lens Coverage and Detection Patterns

**SCL** to 16′ mtg. ht. (3:1 Range )
**SCH** to 30′ mtg. ht. (1.4:1 Range)

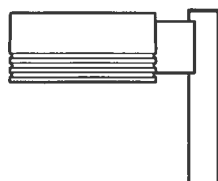Y = 48′ @ 16′ mtg. ht. for SCL
Y = 42′ @ 30′ mtg. ht. for SCH

X = mounting ht.

Y = 3 x mtg. ht. for SCL
Y = 1.4 x mtg. ht. for SCH

Side View

96′ DIA @ 16′ mtg.
84′ DIA @ 30′ mounting ht.

Top View

**KIM LIGHTING**

**Type:**

**Job:**

# Optional Features

## Accent Reveals

Cat. No. **(See right)**
☐ **No Option**

**(For CC series only)** Three aluminum bands riveted inside the housing reveals. Available in five standard Kim powder coat finishes. Custom colors available.

Accent Reveals

| Color: | Black | Dark Bronze | Light Gray | Stealth Gray™ | Platinum Silver | White | Custom Colors[1] |
|---|---|---|---|---|---|---|---|
| Cat. No.: | ☐ BL-REV | ☐ DB-REV | ☐ LG-REV | ☐ SG-REV | ☐ PS-REV | ☐ WH-REV | ☐ CC-REV |

[1]Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____
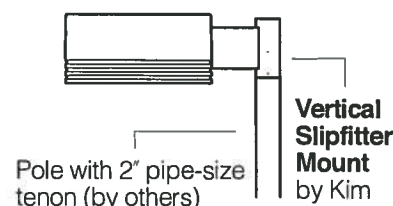
## Vertical Slipfitter Mounts

Cat. No. includes Mounting.
Cat. No. **(See right)**
☐ **No Option**

Allows fixture with standard support arm to be mounted to steel poles having a 2" pipe-size steel tenon (2⅜" O.D. x 4½" min. length). 4" round or square cast aluminum with flush cap, secured by four ⅜" stainless steel set point allen screws. Pole tenon must be field drilled at one set screw location to insure against fixture rotation. Finished to match fixture.

**NOTE:** 3Y only available on round slipfitter.

Pole with 2" pipe-size tenon (by others)

**Vertical Slipfitter Mount** by Kim

| Cat. No. | | | Cat. No. | Mounting Configuration |
|---|---|---|---|---|
| ☐ VSF-1A | | | ☐ SVSF-1A | 1A - single arm mount |
| ☐ VSF-2B | Stainless | | ☐ SVSF-2B | 2B - 2 at 180° |
| ☐ VSF-2L | steel set | | ☐ SVSF-2L | 2L - 2 at 90° |
| ☐ VSF-3T | screws | | ☐ SVSF-3T | 3T - 3 at 90° |
| ☐ VSF-3Y | | | | 3Y - 3 at 120° |
| ☐ VSF-4C | Round | Square | ☐ SVSF-4C | 4C - 4 at 90° |

## Horizontal Slipfitter Mount

Cat. No. ☐ **HSF**
☐ **No Option**

Replaces standard mounting arm with a slipfitter which allows **CC/CCS** Arm Mount model to be mounted to a horizontal pole davit-arm with 2" pipe-size mounting end (2⅜" O.D.). Cast aluminum slipfitter with set screw anti-rotation lock. Bolts to housing from inside the electrical compartment using mounting holes for the standard support arm. Davit-arm must be field drilled at a set screw location to insure against fixture rotation. Finished to match fixture and arm.

Horizontal Slipfitter Mount

Davit-arm with 2" pipe-size fixture mount (by others)

## Support Arm

Cat. No. **(See right)**
☐ **No Option**

**Note:** Refer to Kim Lighting's Arms & Poles Selection Guide for complete details.

Arm View:

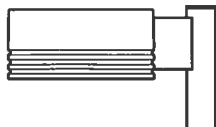| | Swept Solid Arm | Swept Hollow Arm | Upsweep Solid Arm | Upsweep Hollow Arm | Uplift Adjustable Aluminum Arm | Uplift Admustable Stainless Steel Arm |
|---|---|---|---|---|---|---|
| Cat. No.: | ☐ AA01 | ☐ AA03 | ☐ AA05 | ☐ AA07 | ☐ AA09 | ☐ AA11 |

**KIM LIGHTING**

**CC/CCS17**
17" Arm Mounted, Curvilinear, PicoEmitter™ LED
revision 12/19/13 • kl_cc17aeled_spec.pdf

Type:

Job:

# Lumen Data

| Spectroradiometric | 3000K Average | 4200K Average | 5100K Average |
|---|---|---|---|
| Correlated Color Temp. CCT (K) | 2800K-3175K | 3800K-4600K | 4600K-5600K |
| Color Rendering Index (CRI) | ≤80 | ≤80 | ≤70 |
| Power Factor | >.90 | >.90 | >.90 |

| Projected Lumen Maintenance | | |
|---|---|---|
| mA | 100,000 hrs | (Calculated L70) |
| 350 | 93.22% | 584,00 hrs. |

| Electrical Drive Current | | |
|---|---|---|
| Volts - AC | Amps - AC | System Watts |
| 120 | 0.56 | 67 |
| 208 | 0.32 | 67 |
| 240 | 0.28 | 67 |
| 277 | 0.24 | 67 |
| 347 | 0.19 | 67 |
| 480 | 0.14 | 67 |

**B.U.G. Rating** (TM15) in Lumens wher B = Backlight, U = Uplight, G = Glare

| Temperature | TYPE 1 | TYPE 2 | TYPE 3 | TYPE 3 NFO | TYPE 4 | TYPE 4 NFO | TYPE 5 | TYPE L/R |
|---|---|---|---|---|---|---|---|---|
| 3000K | B2 U0 G2 | B1 U0 G1 | B1 U0 G1 | B1 U0 G1 | B1 U0 G1 | B0 U0 G1 | B2 U0 G1 | TBD |
| 4200K | B3 U0 G3 | B2 U0 G2 | B1 U0 G1 | B1 U0 G1 | B1 U0 G2 | B1 U0 G1 | B3 U0 G1 | TBD |
| 5100K | B3 U0 G3 | B2 U0 G2 | B1 U0 G1 | B1 U0 G1 | B1 U0 G2 | B1 U0 G1 | B3 U0 G1 | TBD |

| Absolute Lumens | | | | | | | |
|---|---|---|---|---|---|---|---|
| Temperature | TYPE 1 | TYPE 2 | TYPE 3 | TYPE 3 NFO | TYPE 4 | TYPE 4 NFO | TYPE 5 | TYPE L/R |
| 3000K | 3861 | 3959 | 3931 | 3248 | 3912 | 3294 | 3971 | TBD |
| 4200K | 5062 | 5190 | 4972 | 4258 | 5129 | 4319 | 5206 | TBD |
| 5100K | 5426 | 5564 | 5524 | 4564 | S581 | 4626 | 5576 | TBD |

LED performance and lumen output continues to improve at a rapid pace. Log onto www.kimlighting.com to download the most current photometric files from Kim Lighting's IES File Library. For custom optics and color temperature configurations, contact factory.

*POLE TYPE P1*

# KIM LIGHTING

## CC/CCS21
### 21″ Arm Mounted, Curvilinear, PicoEmitter™ LED
revision 12/19/13 • kim_cc21aeled_spec.pdf

**Type:**
**Job:**
**Catalog number:**

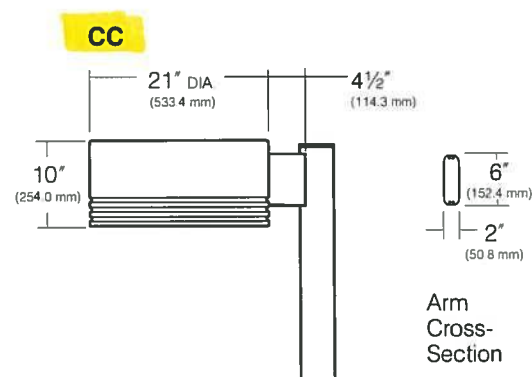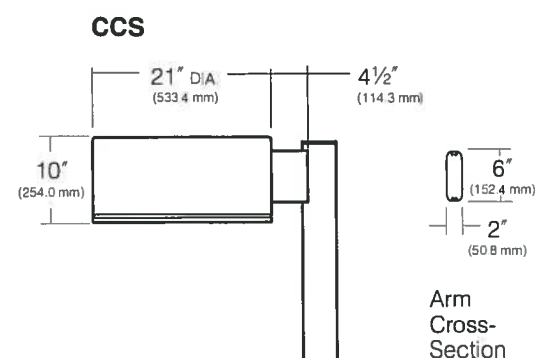| / | / | / | / |
|---|---|---|---|
| Mtg. | Fixture | Electrical Module Finish | Options |

|___ See page 2 ___| |___ See page 2 ___| See pages 3-4

Select pole from Kim Arms and Poles Selection Guide. If pole is provided by others indicate O.D. for arm fitting.

**Approvals:**

**Date:**
**Page: 1 of 6**

## Specifications

21″ Diameter
120 Light Emitting Diodes
Total Max System Watts = 130W

### CC

21″ DIA (533.4 mm)
4½″ (114.3 mm)
10″ (254.0 mm)
6″ (152.4 mm)
2″ (50.8 mm)

Arm Cross-Section

### CCS

21″ DIA (533.4 mm)
4½″ (114.3 mm)
10″ (254.0 mm)
6″ (152.4 mm)
2″ (50.8 mm)

Arm Cross-Section

**Housing:** Spun aluminum. (Rollformed linear reveals; **CC:** Three equally spaced reveals, ½″ wide, separated by ½″ ribs, ¼″ deep. **CCS:** One ¼″ groove, ¼″ deep.) Sidewalls have a maximum 1° of taper, and are free of welds or fasteners. A rollformed aluminum flange is hemmed into the bottom providing support for the reflector module. An internal aluminum casting provides for mounting of the electrical module plus reinforcing for side-arm mounting of the fixture.

**Lens Frame Assembly:** One-piece cast aluminum lens frame is attached to the housing by a zinc plated cold rolled steel hinge with a stainless steel pin. Closure is by three self-retained stainless steel screws. A stainless steel self-locking stop arm is provided to hold the lens frame in the open position while servicing. A ³⁄₁₆″ thick clear flat tempered glass lens is fully gasketed by a one-piece extruded and vulcanized silicone gasket. Lens is retained in the frame by removable zinc plated steel clips.

**Standard Arm Mounting:** Arm is one-piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut to mate with specified round pole.

**Electronic Module:** All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Module includes a driver, LifeShield™ temperature control device and surge protector. Electrical module attaches to housing with key hole slots, accessible by opening the lens frame and removing optical module. Driver is rated for -40°F starting and has a 0-10V dimming interface for multi-level illumination options.

**Optical Module:** Precision, replaceable PicoEmitter reflectors are positioned to achieve directional control toward desired task. The entire EmitterDeck® mounting assembly fastens to the housing as a one-piece module.

**Finish/Color:** TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness. Standard colors are Black, Dark Bronze, Light Gray, Stealth Gray™, Platinum Silver, or White. Custom colors are available.

**Listed To:** UL 1598 Standard for Luminaires - UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products and CSA C22.2#250.0 Luminaires.

**Warranty:** Kim Lighting warrants Curvilinear LED products ("Product(s)") sold by Kim Lighting to be free from defects in material and workmanship for (i) a period of five (5) years for metal parts, (ii) a period of ten (10) years for exterior housing paint finish(s), (iii) a period of six (6) years for LED Light Engines (PicoEmitters) and, (iv) a period of five (5) years for LED power components (LED Driver, LifeShield® temperature control device, surge protector), from the date of sale of such goods to the buyer as specified in Kim Lighting shipment documents for each product.

**CAUTION:** Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

## HUBBELL
HUBBELL LIGHTING, INC.

**Type:**

**Job:**

# Standard Features

| | | | | | | | | | Wall Mount |
|---|---|---|---|---|---|---|---|---|---|
| **Mounting** <br> **3Y** configuration is available for round poles only. | Plan View: | • | •—• | •• | ••• | ••• | ••• | | •—\| |
| | EPA: | 1.2 | 2.4 | 2.2 | 3.4 | 3.4 | 3.9 | | — |
| | Cat. No.: | ☐ **1A** | ☐ **2B** | ☐ **2L** | ☐ **3T** | ☐ **3Y** | ☐ **4C** | | ☐ **1W** |

**Fixture**
Cat. No. designates **CC/CCS** fixture and light distribution.

CC    21    A    x    350mA          Light Distribution:

E35 = 350mA

**Housing:**
CC
CCS

**Size:**
21 = 21″ Large 120 LEDs

A = Arm Mount

**Distribution:**
☐ 1 = Type I Full Cutoff
☐ 2 = Type II Full Cutoff
☐ 3 = Type III Full Cutoff
☐ 4 = Type IV Full Cutoff
☐ 5 = Type V Square Full Cutoff
☐ L = Type L Left Full Cutoff
☐ R = Type R Right Full Cutoff

Type I    Type II    Type III

Type IV Forward Throw    Type V Square    Type R Right    Type L Left

**Electrical Module**

Cat. Nos. for Electrical Modules available:

120L          xK          x

**Source:**
120L = 120 LED's

**Color Temperature:**
☐ 3K = 3000K
☐ 4K = 4200K
☐ 5K = 5100K
☐ 2K = 580nm - Amber

**Voltage:**
☐ 120 = 120V
☐ 208 = 208V
☐ 240 = 240V
☐ 277 = 277V
☐ 347 = 347V
☐ 480 = 480V

**Finish**
TGIC powder coat

| Color: | Black | Dark Bronze | Light Gray | Stealth Gray | Platinum Silver | White | Custom Color[1] |
|---|---|---|---|---|---|---|---|
| Cat. No.: | ☐ **BL** | ☐ **DB** | ☐ **LG** | ☐ **SG** | ☐ **PS** | ☐ **WH** | ☐ **CC** |

[1]Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description:
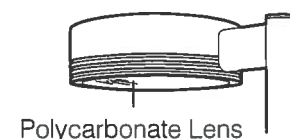
# Optional Features

**Polycarbonate Lens**
Cat. No.   ☐ **L21F**
          ☐ **No Option**

Clear UV stabilized polycarbonate replaces standard flat glass lens, gasketed and integral with lens frame.

**CAUTION:** Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight.

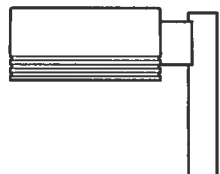Polycarbonate Lens

**KIM LIGHTING**
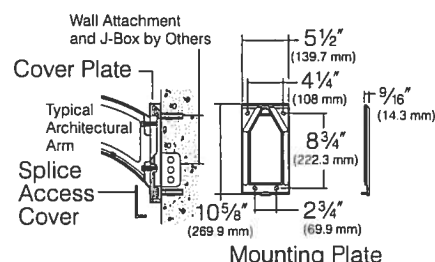
Type:

Job:

# Optional Features

## Wall Mounting

Cat. No.  ☐ 1W
          ☐ No Option

Select from Mounting on page **2**.

**Wall Mount:** A cast mounting plate of 356 alloy, low-copper (<0.6% Cu) aluminum, is mounted to the wall with bolts (by others). Fixture and arm are mounted to a cast 356 alloy aluminum cover plate before attaching to the wall mounting plate. The fixture-arm-cover plate assembly is hooked to the wall mounting plate, and secured with stainless steel screws provided. After mounting to the wall, field splices are made at the opening in the cover plate, then covered by a cast 356 alloy aluminum plate that blends with the cover plate design. Complete fixture-arm-cover plate assembly can therefore be mounted before field splices are made. Cover plate is finished to match arm and fixture powder coat color.

Wall Attachment and J-Box by Others
Cover Plate
Typical Architectural Arm
Splice Access Cover
5½″ (139.7 mm)
4¼″ (108 mm)
9⁄16″ (14.3 mm)
8¾″ (222.3 mm)
10⅝″ (269.9 mm)
2¾″ (69.9 mm)
Mounting Plate

**CAUTION:** Structural integrity of mounting plate attachment to wall is by others.

## Photocell

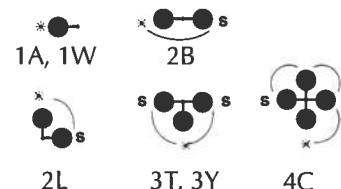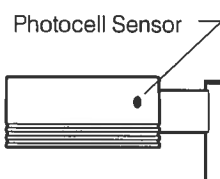Cat. No.  **(See right)**
          ☐ No Option

Factory installed photocell inside housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others. (Exception: Four 400 watt fixtures where two fixtures will have photocells.)

| Cat. No. | | Line Volts |
|----------|-----------|------------|
| ☐ A-30 | ☐ 2A-30 | 120V |
| ☐ A-31 | ☐ 2A-31 | 208V |
| ☐ A-32 | ☐ 2A-32 | 240V |
| ☐ A-33 | ☐ 2A-33 | 277V |
| ☐ A-35 | ☐ 2A-35 | 347V |
| ☐ A-34 | ☐ 2A-34 | 480V |

Photocell Sensor

Mounting Configuration:
✳ – Fixture with Photocell Sensor
**S** – slave unit(s)
No fixture wattage limit.

1A, 1W     2B
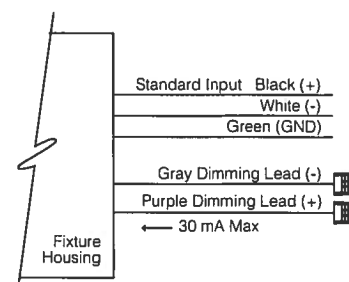2L     3T, 3Y     4C

## Neighbor Friendly Optic:

Cat. No.  ☐ NFO
          ☐ No Option

Integrated Neighbor Friendly Optic on each PicoEmitter™ module to completely control unwanted backlight. Most effective with Type III and IV distibutions.

TYPE III-NFO     TYPE IV-NFO

## 0-10V Dimming Interface

Driver has a 0-10V dimming interface with a dimming range of 10-100%. Is compatible with most control systems including Hubbell Building Automation wiHUBB™. Approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV. Note: Not compatible with current sourcing dimmers. Controls compatible via Gray and Purple dimming lead.
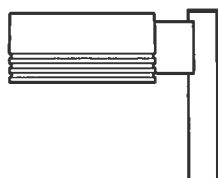
Standard Input   Black (+)
                 White (-)
                 Green (GND)
Gray Dimming Lead (-)
Purple Dimming Lead (+)
← 30 mA Max
Fixture Housing

**KIM LIGHTING**

# CC/CCS21
21″ Arm Mounted, Curvilinear, PicoEmitter™ LED
revision 12/19/13 • kim_cc21aeled_spec.pdf

**Type:**

**Job:**                                                                                   **Page: 4 of 6**

# Optional Features

**Outdoor Occupancy Sensor**

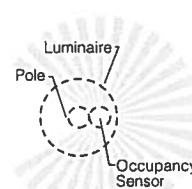Cat. No.    **(See right)**
☐ **No Option**

## Side Pole Mount
Outdoor Occupancy Sensor with 0-10VDC dimming control mounts directly to the underside of the luminaire. Wide 360° pattern. Available in voltages to match luminaire from 120 through 480VAC. Module color available in Black, Gray, or White (Picked at the factory when luminaire color is chosen, black used for dark colors). Field Adjustable Timeout settings for 5, 10, 15, and 30 minutes (Factory default is 5-minutes). Field adjustable unoccupied dimming level, 20%, 50%, 60%, or 70% (Factory default is 50%). One sensor can support multiple units up to 1500 watts. (Wiring from module to luminaire(s) is by-others). Mounted to a cast pole adapter painted to match pole.
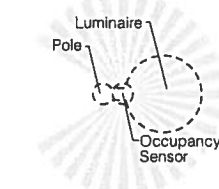
Cat. No.

☐ **SCL-R\*/\*\*/\*\*\***– Pole Occupancy Sensor up to 16′,
UNV (120-347V) or 480V. Specify pole diameter.

☐ **SCL-S/\*\*/\*\*\*** – Pole Occupancy Sensor up to 16′,
UNV (120-347V) or 480V. Square pole mount.

☐ **SCH-R\*/\*\*/\*\*\***– Pole Occupancy Sensor up to 30′,
UNV (120-347V) or 480V. Specify pole diameter.

☐ **SCH-S/\*\*/\*\*\*** – Pole Occupancy Sensor up to 30′,
UNV (120-347V) or 480V. Square pole mount.

\* Pole Diameter, \*\* Voltage, \*\*\* Color

**Ordering Example: SCL-R4/277/BL**

Luminaire
Pole
Occupancy Sensor

Side Pole Mount
Detection Pattern
Top View for Round Luminaire
Mounted on Post Top

**NOTE:** Occupancy detection is blocked directly behind pole. Install occupancy sensor as far away from pole as possible to maximize detection.

Outdoor
Occupancy Sensor
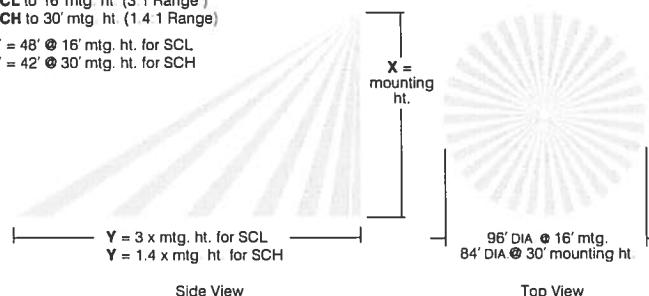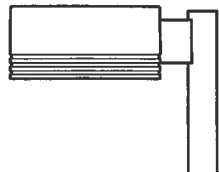Side Pole Mount

Luminaire
Pole
Occupancy Sensor

Side Pole Mount
Detection Pattern
Top View for Round Luminaire
Mounted on Arm

**NOTE:** For 360° coverage, install two occupancy sensors 180° apart on pole.

## Sensor Lens Coverage and Detection Patterns

SCL to 16′ mtg. ht. (3:1 Range)
SCH to 30′ mtg. ht. (1.4:1 Range)

Y = 48′ @ 16′ mtg. ht. for SCL
Y = 42′ @ 30′ mtg. ht. for SCH

X = mounting ht.

Y = 3 x mtg. ht. for SCL
Y = 1.4 x mtg. ht. for SCH

96′ DIA @ 16′ mtg.
84′ DIA @ 30′ mounting ht.

Side View                    Top View

**KIM LIGHTING**

**Type:**

**Job:**

# Optional Features

## Accent Reveals
Cat. No.  **(See right)**
☐ No Option

**(For CC series only)** Three aluminum bands riveted inside the housing reveals. Available in five standard Kim powder coat finishes. Custom colors available.

Accent Reveals

| Color: | Black | Dark Bronze | Light Gray | Stealth Gray | Platinum Silver | White | Custom Colors[1] |
|---|---|---|---|---|---|---|---|
| Cat. No.: | ☐ BL-REV | ☐ DB-REV | ☐ LG-REV | ☐ SG-REV | ☐ PS-REV | ☐ WH-REV | ☐ CC-REV |

[1]Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description:_____

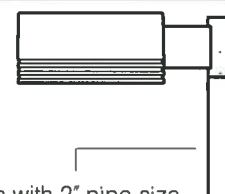## Vertical Slipfitter Mounts
Cat. No.  **(See right)**
☐ No Option

Allows fixture with standard support arm to be mounted to steel poles having a 2" pipe-size steel tenon (2⅜" O.D. x 4½" min. length). 4" round or square cast aluminum with flush cap, secured by four ⅜" stainless steel set point allen screws. Pole tenon must be field drilled at one set screw location to insure against fixture rotation. Finished to match fixture.

**NOTE:** 3Y only available on round slipfitter.

Pole with 2" pipe-size tenon (by others)

**Vertical Slipfitter Mount** by Kim

| Cat. No. | | Cat. No. | Mounting Configuration |
|---|---|---|---|
| ☐ VSF-1A | | ☐ SVSF-1A | 1A - single arm mount |
| ☐ VSF-2B | Stainless | ☐ SVSF-2B | 2B - 2 at 180° |
| ☐ VSF-2L | steel set | ☐ SVSF-2L | 2L - 2 at 90° |
| ☐ VSF-3T | screws | ☐ SVSF-3T | 3T - 3 at 90° |
| ☐ VSF-3Y | | | 3Y - 3 at 120° |
| ☐ VSF-4C  Round | Square | ☐ SVSF-4C | 4C - 4 at 90° |

## Horizontal Slipfitter Mount
Cat. No.  ☐ HSF
☐ No Option

Replaces standard mounting arm with a slipfitter which allows **CC/CCS** Arm Mount model to be mounted to a horizontal pole davit-arm with 2" pipe-size mounting end (2⅜" O.D.). Cast aluminum slipfitter with set screw anti-rotation lock. Bolts to housing from inside the electrical compartment using mounting holes for the standard support arm. Davit-arm must be field drilled at a set screw location to insure against fixture rotation. Finished to match fixture and arm.

Horizontal Slipfitter Mount

Davit-arm with 2 pipe-size fixture mount (by others)

## Support Arm
Cat. No.  **(See right)**
☐ No Option

**Note:** Refer to Kim Lighting's Architectural Arms Catalog for complete details.

Arm View:

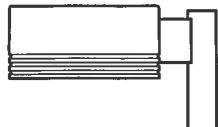| | Swept Solid Arm | Swept Hollow Arm | Upsweep Solid Arm | Upsweep Hollow Arm | Uplift Adjustable Aluminum Arm | Uplift Adjustable Stainless Steel Arm |
|---|---|---|---|---|---|---|
| Cat. No.: | ☐ AA01 | ☐ AA03 | ☐ AA05 | ☐ AA07 | ☐ AA09 | ☐ AA11 |

# KIM LIGHTING

## CC/CCS21
### 21" Arm Mounted, Curvilinear, PicoEmitter™ LED
revision 12/19/13 • kim_cc21aeled_spec.pdf

**Type:**

**Job:**

## Lumen Data

### Spectroradiometric

|  | 3000K Average | 4200K Average | 5100K Average |
|---|---|---|---|
| Correlated Color Temp. CCT (K) | 2800K-3175K | 3800K-4600K | 4600K-5600K |
| Color Rendering Index (CRI) | ≤80 | ≤80 | ≤70 |
| Power Factor | >.90 | >.90 | >.90 |

### Projected Lumen Maintenance*

| mA | 100,000 hrs | (Calculated L70) |
|---|---|---|
| 350 | 93.92% | 669,000 hrs. |

*Still awaiting independent third party verification

### Electrical Drive Current

| Volts - AC | Amps - AC | System Watts |
|---|---|---|
| 120 | 1.05 | 126 |
| 208 | 0.61 | 126 |
| 240 | 0.53 | 126 |
| 277 | 0.45 | 126 |
| 347 | 0.36 | 126 |
| 480 | 0.26 | 126 |

### B.U.G. Rating (TM15) in Lumens wher B = Backlight, U = Uplight, G = Glare

| Temperature | TYPE 1 | TYPE 2 | TYPE 3 | TYPE 3 NFO | TYPE 4 | TYPE 4 NFO | TYPE 5 | TYPE L/R |
|---|---|---|---|---|---|---|---|---|
| 3000K | TBD | B2 U0 G2 | B2 U0 G2 | B1 U0 G2 | B1 U0 G2 | B1 U0 G2 | B3 U0 G1 | TBD |
| 4200K | TBD | B3 U0 G3 | B2 U0 G2 | B2 U0 G2 | B1 U0 G2 | B1 U0 G2 | B3 U0 G2 | TBD |
| 5100K | TBD | B3 U0 G3 | B2 U0 G2 | B2 U0 G2 | B1 U0 G2 | B1 U0 G2 | B3 U0 G2 | TBD |

### Absolute Lumens

| Temperature | TYPE 1 | TYPE 2 | TYPE 3 | TYPE 3 NFO | TYPE 4 | TYPE 4 NFO | TYPE 5 | TYPE L/R |
|---|---|---|---|---|---|---|---|---|
| 3000K | TBD | 8280 | 8097 | 6638 | 8074 | 6752 | 8541 | TBD |
| 4200K | TBD | 10530 | 10297 | 8440 | 10268 | 8586 | 10862 | TBD |
| 5100K | TBD | 11434 | 11181 | 9164 | 11149 | 9323 | 11794 | TBD |

LED performance and lumen output continues to improve at a rapid pace. Log onto www.kimlighting.com to download the most current photometric files from Kim Lighting's IES File Library.
For custom optics and color temperature configurations, contact factory.