

DATE: LOCATION: TYPE: PROJECT: CATALOG #:

FEATURES

- · Sensor and wireless operation
- · Field rotatable optics and housing
- · Customizable side panels
- True IES Type 2, 3, 4, 5 distributions
- 3000K, 4000K, 5000K CCT
- · Integral thermal protection







KICK™



Kick Bollard

CONTROL TECHNOLOGY

LIGHTGRID

SPECIFICATIONS

HOUSING

- Housing shroud shall be extruded 6061-T6 aluminum alloy with a welded top cap that shall be free of any visible weld or grind marks
- Luminaire housing shall be free of any visible heat fins, hardware or fasteners.
- Bracketry shall be aluminum and hardware shall be stainless steel.
- Housing shall be independently field rotatable of the optical distribution.
- Default factory orientations of shielding location relative to the optical system shall be:
- A Street Side
 C House SideLED/Optics

LED/OPTICS

- LEDs shall be mounted to a metal printed circuit board assembly (MCPCB).
- Optical lenses shall be clear injection molded PMMA acrylic.
- House side shield shall be field installable on any face of the housing.
- Light engine and optical distributions shall be field rotatable.

INSTALLATION

- Anchor bolts and anchor bolt template shall be included.
- Service access to the driver assembly shall require a 3/16" hex driver (information provided by engineering) to loosen (4) stainless steel set screws to allow the housing to be removed for access to the gear compartment. Gear compartment shall require a Philips driver (information provided by engineering) to open service panel.

INSTALLATION (CONTINUED)

 Driver assembly shall be mounted to a prewired internal tray with quick disconnects for removal.

ELECTRICAL

- Luminaires shall have integral surge protection that shall be U.L. recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372 I
- · Drivers shall be U.L recognized.
- 100%-1% dimming range. Fixture will be wired for low voltage 0-10V dimming control
- Luminaire shall be capable of operating at 100% power in a 40° ambient environment. Both driver and optical array shall have integral thermal protection that shall dim the luminaire upon detection of fixture temperatures in excess of 85°C.
- Luminaires not configured with an optional control system shall be provided with 0-10V purple and gray dimming leads.

| | Standard Input Black (+) |
|-------------|--------------------------|
| 1 | White (-) |
| b | Green (GND) |
| 9 | Gray Dimming Lead (-) |
| Fixture | Purple Dimming Lead (+) |
| Housing | ← 1 mA Max |
| | l |

CONTROLS

- Wireless enabled fixtures shall support bi-directional radio frequency (RF) communications utilizing IEEE 802.15.4 operating in the 2.4GHZ ISM band.
- Up to 1000' wireless range may be reduced by physical obstructions between lighting fixtures.

CERTIFICATIONS

- Luminaire shall be listed with UL for outdoor, wet location use, UL1598, UL 8750 and Canadian CSA Std. C22.2 no.250.
- IDA approved, 3000K and warmer CCTs only.
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020.

WARRANTY

5 year warranty

continued on page 3

| KEY DATA | | | | | | | | |
|----------------------|----------------|--|--|--|--|--|--|--|
| Lumen Range | 7,744–18,763 | | | | | | | |
| Wattage Range | 87–173 | | | | | | | |
| Efficacy Range (LPW) | 79–119 | | | | | | | |
| Weight | 20 lbs 9.07 kg | | | | | | | |
| EPA | 1.4 | | | | | | | |





| DATE: | LOCATION: |
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ORDERING GUIDE

CATALOG #

| Example: KB6-LED-Y2-B-2040-34/-BLI | |
|---|--|
| | |

| Model | | Dis | tribution | Shiel | ding | Light E | ngine ¹ | Control (may choose one) | | | | |
|---------|--------------------------------|----------------------------|--|--------------------------|--|--|--|--------------------------|--|--|--|--|
| KB6-LED | 6" Square x 42" OAH Bollard | Y2 Y3 Y4 Y5 YD | IES Type III Clear Lens IES Type IV Clear Lens IES Type V Clear Lens | sides D or s Refer | onal, may choose from 1 to 3 closed from options A, B, C, you may choose HSS option. to page 4 for additional mation Short side closed Side 90° counterclockwise | 1030 1040 1050 2030 2040 2050 | 3000K CCT, CRI 70, 14 watts 4000K CCT, CRI 70, 14 watts 3000K CCT, CRI 70, 14 watts 3000K CCT, CRI 70, 29 watts 4000K CCT, CRI 70, 29 watts 5000K CCT, CRI 70, 29 watts | WIR BPC | LightGRID+ connectivity Button Type Photocell | | | |
| | | | | C D HSS | from short side closed Side 180° counterclockwise from short side closed Side 270° counterclockwise from short side closed House side shield | | | | | | | |

| Voltage | | Fixture | e Finish |
|----------|--|---------|--|
| 120-277V | 120-277 input standard or you may choose one | BLS | Black Gloss Smooth |
| 347 | 347 VAC input | BLT | Black Matte Textured Dark Bronze Gloss Smooth |
| 480 | 480 VAC input | DBT | Dark Bronze Matte Textured |
| | | GTT | Graphite Matte Texture |
| | | LGS | Light Grey Gloss Smooth |
| | | LGT | Light Grey Matte Textured |
| | | PSS | Platinum Silver Gloss Smooth |
| | | VGT | Verde Green Matte Textured |
| | | WHS | White Gloss Smooth |
| | | WHT | White Matte Textured |
| | | СС | Custom Color ² |

Notes:

- Consult factory for the following options: 560nm monochromatic amber, 2700K 80 CRI, Custom Lumen Packages
- 2 Consult factory for custom color, marine and corrosive finish



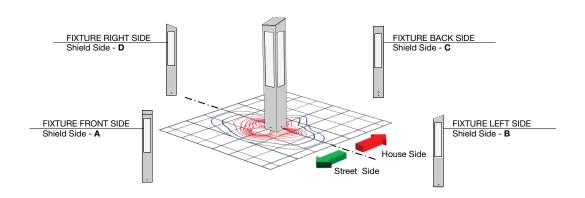


| DATE: | LOCATION: |
|------------|-----------|
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DELIVERED LUMENS

| | | | Closed Sides | | | Optiona | l Shielding | | 300 | OOK : | 70CF | XI | | 400 | 00K | 70CR | 21 | | 50 | OOK | 70CF | रा | | | | | | | | | | | | | | | |
|-----------------|------------|-------------|-----------------|--------------|--------------|--------------------|---------------------|----------|---------------|--------|-----------|-------------|---------------|--------|--------|-----------|-------------|---------------|--------|----------|-----------|-----|------|----|----|------|----|------|---|----|---|----|------|---|---|---|----|
| System Watts | Output | IES Type | | Distribution | Shielding | . | Lumen | | Bug Rating | | Efficancy | Lumen | Bug Rating | | 9 | Efficancy | Lumen | Bug Rating | | | Efficancy | | | | | | | | | | | | | | | | |
| | | | | | Snielding | Equivalent | | В | U | G | (Lm/W) | | В | U | G | (Lm/W) | | В | U | G | (Lm/W) | | | | | | | | | | | | | | | | |
| | | | Type 2 | Y2 | (none) | - | 1281 | 1 | 0 | 1 | 92 | 1294 | 1 | 0 | 1 | 92 | 1323 | 1 | 0 | 1 | 95 | | | | | | | | | | | | | | | | |
| | | (none) | Type 3 | Y3 | (none) | - | 1192 | 1 | 0 | 1 | 85 | 1204 | 1 | 0 | 1 | 86 | 1233 | 1 | 0 | 1 | 88 | | | | | | | | | | | | | | | | |
| | | | Type 4 | Y4 | (none) | - | 1183 | 1 | 0 | 2 | 85 | 1195 | 0 | 0 | 1 | 85 | 1222 | 0 | 0 | 1 | 87 | | | | | | | | | | | | | | | | |
| | | | Type 2 | Y2 | С | HSS | 1187 | 1 | 0 | 2 | 85 | 1199 | 1 | 0 | 1 | 86 | 1226 | 1 | 0 | 1 | 88 | | | | | | | | | | | | | | | | |
| | | | Type 3 | Y3 | С | HSS | 1092 | 1 | 0 | 1 | 78 | 1103 | 0 | 0 | 1 | 79 | 1128 | 0 | 0 | 1 | 81 | | | | | | | | | | | | | | | | |
| | | 1 Side | Type 4 | Y4 | С | HSS | 1105 | 1 | 0 | 2 | 79 | 1116 | 0 | 0 | 1 | 80 | 1141 | 0 | 0 | 1 | 82 | | | | | | | | | | | | | | | | |
| | Assymetric | | | Y5 | С | A/B/D | 897 | 1 | 0 | 1 | 64 | 906 | 1 | 0 | 1 | 65 | 926 | 1 | 0 | 1 | 66 | | | | | | | | | | | | | | | | |
| | | | - | YD | С | A/B/D | 350 | 0 | 3 | 1 | 25 | 373 | 0 | 3 | 1 | 27 | 373 | 0 | 3 | 1 | 27 | | | | | | | | | | | | | | | | |
| 15 | | 2 Sides | _ | Y5 | BC | AB/CD/AD | 620 | 1 | 0 | 1 | 44 | 626 | 0 | 0 | 1 | 45 | 640 | 0 | 0 | 1 | 46 | | | | | | | | | | | | | | | | |
| | | (adjacent) | - | YD | BC | AB/CD/AD | 236 | 0 | 3 | 1 | 17 | 251 | 0 | 3 | 1 | 18 | 251 | 0 | 3 | 1 | 18 | | | | | | | | | | | | | | | | |
| | | 3 Sides | | Y5 | BCD | ABC / ABD / ACD | 307 | 0 | 0 | 1 | 22 | 310 | 0 | 0 | 1 | 22 | 317 | 0 | 0 | 1 | 23 | | | | | | | | | | | | | | | | |
| | | (adjacent) | - | YD | BCD | ABC / ABD / ACD | 57 | 0 | 0 | 1 | 4 | 61 | 0 | 0 | 1 | 4 | 61 | 0 | 0 | 1 | 4 | | | | | | | | | | | | | | | | |
| | | (none) | Type 5 | Y5 | (none) | - | 1098 | 2 | 0 | 1 | 78 | 1189 | 1 | 0 | 1 | 85 | 1179 | 1 | 0 | 1 | 84 | | | | | | | | | | | | | | | | |
| | Symmetric | (Horie) | Type 3 | YD | (none) | - | 478 | 0 | 3 | 4 | 34 | 509 | 0 | 3 | 1 | 36 | 509 | 0 | 3 | 1 | 36 | | | | | | | | | | | | | | | | |
| | Symmetric | 2 Sides | | _ | _ | _ | Y5 | AC | BD | 593 | 1 | 0 | 1 | 42 | 599 | 1 | 0 | 1 | 43 | 612 | 1 | 0 | 1 | 44 | | | | | | | | | | | | | |
| | | (opposing) | (opposing) | (opposing) | | YD | AC | BD | 233 | 0 | 3 | 1 | 17 | 248 | 0 | 3 | 1 | 18 | 248 | 0 | 3 | 1 | 18 | | | | | | | | | | | | | | |
| | | | Type 2 | Y2 | (none) | - | 2289 | 1 | 0 | 1 | 76 | 2302 | 1 | 0 | 1 | 77 | 2451 | 1 | 0 | 2 | 76 | | | | | | | | | | | | | | | | |
| | | (none) | (none) | Type 3 | Y3 | (none) | - | 2153 | 1 | 0 | 1 | 72 | 2165 | 1 | 0 | 1 | 72 | 2305 | 1 | 0 | 1 | 72 | | | | | | | | | | | | | | | |
| | | | Type 4 | Y4 | (none) | - | 2108 | 1 | 0 | 2 | 70 | 2120 | 1 | 0 | 2 | 71 | 2257 | 1 | 0 | 2 | 70 | | | | | | | | | | | | | | | | |
| | | | Type 2 | Y2 | С | HSS | 2199 | 1 | 0 | 2 | 73 | 2221 | 1 | 0 | 1 | 74 | 2271 | 1 | 0 | 2 | 73 | | | | | | | | | | | | | | | | |
| | | 1 Side | 1 Side | 1 Side | 1 Side | 1 Side | 1 Side | 1 Side | 1 Side | 1 Side | 1 Side | Type 3 | Y3 | С | HSS | 2041 | 1 | 0 | 1 | 68 | 2066 | 1 | 0 | 1 | 69 | 2107 | 1 | 0 | 1 | 68 | | | | | | | |
| | | | | | | | | | | | | 1 Side | 1 Side | 1 Side | 1 Side | 1 Side | 1 Side | 1 Side | Type 4 | Y4 | С | HSS | 2041 | 1 | 0 | 2 | 68 | 2061 | 1 | 0 | 2 | 69 | 2107 | 1 | 0 | 2 | 68 |
| | Assymetric | | | | | | | | | | | _ | Y5 | С | A/B/D | 1645 | 1 | 0 | 1 | 55 | 1662 | 1 | 0 | 1 | 55 | 1699 | 1 | 0 | 1 | 55 | | | | | | | |
| | | | | YD Y5 | C | A/B/D | 634 | 0 | 3 | 1 | 21 38 | 685 | 1 | 3 | 1 | 23 38 | 679 | 0 | 3 | 1 | 21 38 | | | | | | | | | | | | | | | | |
| 30 | | 2 Sides | _ | | BC | AB/CD/AD | 1138 | <u> </u> | 0 | - | | 1149 | | 0 | r i | | 1175 | | 0 | <u> </u> | | | | | | | | | | | | | | | | | |
| | | (adjacent) | (adjacent) | | YD | BC | AB/CD/AD ABC/ABD | 427 | 0 | 3 | 1 | 14 | 461 | 0 | 3 | 1 | 15 | 457 | 0 | 3 | 1 | 14 | | | | | | | | | | | | | | | |
| | | 3 Sides | - | Y5 | BCD | /ACD ABC/ABD | 581 | 0 | 0 | 1 | 19 | 568 | 0 | 0 | 1 | 19 | 581 | 0 | 0 | 1 | 19 | | | | | | | | | | | | | | | | |
| | | (adjacent) | | YD | BCD | / ACD | 104 | 0 | 0 | 1 | 3 | 112 | 0 | 0 | 1 | 4 | 111 | 0 | 0 | 1 | 3 | | | | | | | | | | | | | | | | |
| | | (none) | Type 5 | Y5 | (none) | - | 1978 | 2 | 0 | 11 | 66 | 2188 | 2 | 0 | 11 | 73 | 2163 | 2 | 0 | 1 | 66 | | | | | | | | | | | | | | | | |
| | Symmetric | , , | 7,50 | YD Y5 | (none) AC | - BD | 866 1075 | 0 | 3 | 1 | 29 36 | 935 1085 | 0 | 3 | 1 | 31 36 | 927 1110 | 0 | 3 | 1 | 29 36 | | | | | | | | | | | | | | | | |
| | ' | 2 Sides | - | YD | AC | BD | | 0 | 3 | 1 | 14 | 460 | 0 | 3 | 1 | 15 | 456 | 0 | 3 | 1 | 14 | | | | | | | | | | | | | | | | |
| | | (opposing) | (opposing) | | עז ן | AC | RD | 426 | LU | 3 | - | 14 | 460 | U | 3 | - 1 | ľΣ | 456 | U | <u>ا</u> | 1 | 14 | | | | | | | | | | | | | | | |

^{* -} Values are representative of the Distribution + Shielding Ordering Code combination, IES file may need to be rotated to match an equivalent shielding configuration.







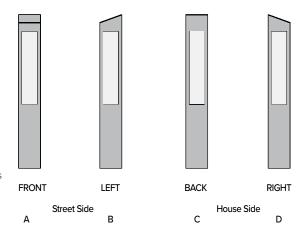
DIMENSIONS

| MODEL | K41SMK |
|----------------|------------------|
| Overall Height | 42" / 1067mm |
| Overall Length | 6" / 152mm |
| Overall Width | 6" / 152mm |
| Window Height | 19.9" / 51cm |
| Window Width | 4" / 10cm |
| WEIGHT | 30 lbs. / 13.6kg |

| DATE: | LOCATION: |
|------------|-----------|
| TYPF. | PROJECT: |
| 111 5. | TROSECT. |
| CATALOG #: | |

* Housing and optical distribution are independently field rotatable in 90° increments . Default factory orientations shown above.

DISTRIBUTION OUTPUT* SHIELDING SIDE







| DATE: | LOCATION: |
|------------|-----------|
| TYPE: | PROJECT: |
| CATALOG #: | |

0.5 FC

2 FC 3 FC 4 FC 5 FC 6 FC 7 FC 8 FC

PHOTOMETRICS

| ISOLINE TEMPLATES 5' grid spacing. Equivalent (rotated) configurations are shown in italics. | | | | | | | | | | | |
|--|----------------------------------|----------------------------------|----------------------------------|--|----------------------------------|----------------------------------|----------------------------------|--|--|--|--|
| | | As | symmetric Distri | bution | | Symmetric I | Distribution | | | | |
| Shielding | Type II | Type III | Type IV | Type V | Diffused Lens | Type V | Diffused Lens | | | | |
| (none) | K86-Y2-1050 | KB6-Y3-1050 | KB6-Y4-1050 | | | KB6-Y5-1050 | KB6-YD-1050 | | | | |
| 1 Side C or HSS | KB6-Y2-C-1050 KB6-Y2-HSS-1050 | KB6-Y3-C-1050 KB6-Y3-HSS-1050 | KB6-Y4-C-1050 KB6-Y4-HSS-1050 | KB6-Y5-C-1050 | KB6-YD-C-1050 | | | | | | |
| 2 Sides adjacent CD, AB, BC or AD | | | | KB6-Y5-CD-1050 KB6-Y5-AB-1050 KB6-Y5-BC-1050 KB6-Y5-AD-1050 | KB6-YD-AB-1050 KB6-YD-BC-1050 | | | | | | |
| 2 Sides opposing AC or BD | | | | | | KB6-Y5-AC-1050 KB6-Y5-BD-1050 | KB6-YD-AC-1050 KB6-YD-BD-1050 | | | | |
| 3 Sides BCC, ABC, or | | | | KB6-Y5-BCD-10 KB6-Y5-AC-0.10 | 50 KB6-YD-ABC-1050 | | | | | | |

KB6-Y5-ACD-1050



ACD

KB6-YD-ACD-1050



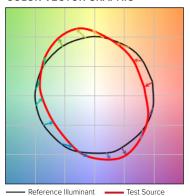
DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

TM-30 DATA

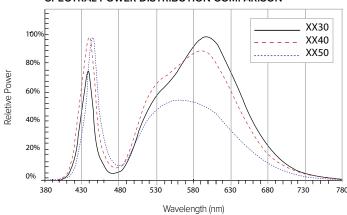
COLOR VECTOR GRAPHIC



TEST SOURCE

| | Ordering Code | | | | | | | |
|--------|---------------|--------|--------|--|--|--|--|--|
| Value | XX30 | XX40 | XX50 | | | | | |
| Rf | 69 | 69 | 71 | | | | | |
| Rg | 99 | 99 | 98 | | | | | |
| CCT(K) | 3122 | 3852 | 5020 | | | | | |
| Duv | 0.001 | 0.0004 | 0.0005 | | | | | |
| CIE Ra | 74 | 73 | 74 | | | | | |

SPECTRAL POWER DISTRIBUTION COMPARISON



ELECTRICAL CHARACTERISTICS

| | | | System Wattage (W) | Input | | | | | | | | Inrush Current Peak | | | | |
|--|------------------|---------------------|--------------------------|---------|------|------|------|-------------------------|-------------------|----------------------|-----------------------------|---------------------|-----|------------|-----|-----|
| | ordering Code | LED Current (mA) | | Amps AC | | | Hz | Min. Power Factor | Max THD (%) | Dimming Range (V) | Source/Sink Current (mA) | \ <u>\</u> _\ | | T@50% (µs) | | |
| | | | | 120 | 277 | 347 | 480 | | 1 actor | (/0) | | | 120 | 277 | 120 | 277 |
| | 10XX | 350 | 15 | 0.12 | 0.05 | 0.04 | 0.03 | 50/60 | >0.9 | 20 | 0-10 | 1 | 15 | | N/A | |
| | 20XX | 700 | 30 | 0.25 | 0.11 | 0.09 | 0.06 | 50/60 | | | | | 21 | 49 | 160 | |

TM-21 LIFETIME CALCULATION (500MA)

| Ambient | Proje | | men Maintena (Khrs) | | Reported L70 | |
|----------------|-------|-----|------------------------|-----|--------------|-----------|
| Environment °C | 25 | 50 | 60 (TM-21) | 75 | 100 | • |
| 25 | 98% | 95% | 94% | 93% | 90% | >60Khrs. |
| 40 | 98% | 95% | 94% | 93% | 90% | >OUKIIIS. |