

KB6-LED

BOLLARDS

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



3000K and warmer CCTs only

See Certification Specifications

CONTROL TECHNOLOGY



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 372J.
- 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.

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.
- Sensor enabled fixture settings shall come to full brightness upon detecting motion and go to 50% output after 5 minutes of detecting no motion.

KICK™



Kick Bollard

RELATED PRODUCTS

Ø [K4](#)

Ø [KM4](#)

Ø [K5](#)

CONTROLS (CONTINUED)

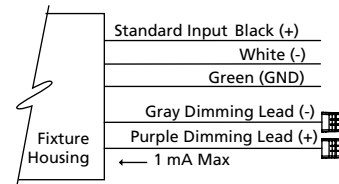
- Motion Sensor shall use microwave sensing technology that reacts to physical changes in within the coverage area. Careful consideration must be given to objects or activity that may trigger the sensor unintentionally.

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. [See Buy American Solutions](#)

WARRANTY

- See [HLI Standard Warranty](#) for additional information



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:
TYPE:	PROJECT:
CATALOG #:	

ORDERING GUIDE

Example: KB6-LED-Y2-B-2040-347-BLT

CATALOG #

Model	Distribution	Shielding	Light Engine ¹	Control (May choose one)
KB6-LED 6" Square x 42" OAH Bollard	Y2 IES Type II Clear Lens	Optional, may choose from 1 to 3 sides closed from options A, B, C, D or you may choose HSS option. Refer to page 4 for additional information A Short side closed B Side 90° counterclockwise from short side closed C Side 180° counterclockwise from short side closed D Side 270° counterclockwise from short side closed HSS House side shield	1030 3000K CCT, CRI 70, 15 Watts	SWP SiteSync Pre-commissioned ²
	Y3 IES Type III Clear Lens		1040 4000K CCT, CRI 70, 15 Watts	SC-MW SiteSync Motion Sensor, ~24'Ø coverage
	Y4 IES Type IV Clear Lens		1050 5000K CCT, CRI 70, 15 Watts	WIR wiScape Connectivity Ready
	Y5 IES Type V Clear Lens		2030 3000K CCT, CRI 70, 30 Watts	BPC Button Type Photocell
	YD Symmetric distribution, diffused lens		2040 4000K CCT, CRI 70, 30 Watts	SWF SiteSync Field Commission
			2050 5000K CCT, CRI 70, 30 Watts	

Voltage	Fixture Finish	Controls Accessories
120-277V 120-277 input standard or you may choose one	BLS Black Gloss Smooth	SWUSB SiteSync loaded on USB flash drive (Windows® operating system only ^{2,4} SWTAB SiteSync Window® based Tablet ^{2,4} SWBRG SiteSync Wireless Bridge Node ^{2,4}
347 347 VAC input	BLT Black Matte Textured	
480 480 VAC input	DBS Dark Bronze Gloss Smooth	
	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	
	CC Custom Color ³	

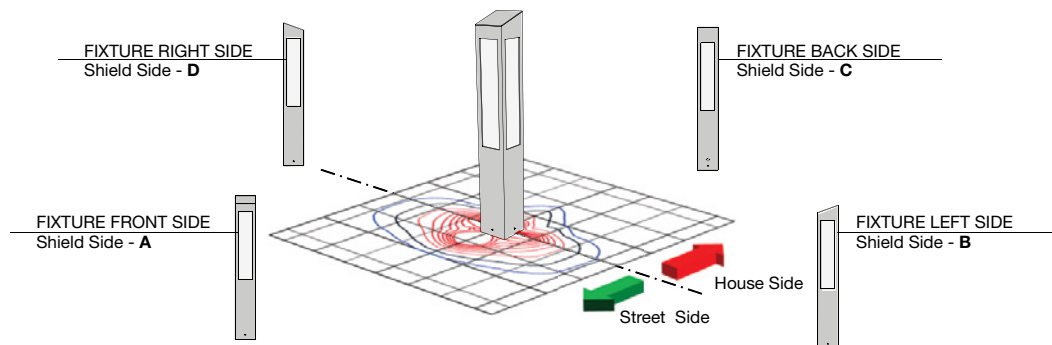
Notes:

- Consult factory for the following options: 560nm monochromatic amber, 2700K 80 CRI, Custom Lumen Packages
- Specify group and zone at time of order. See www.hubbellighting.com/sitesync for more details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node
- Consult factory for custom color, marine and corrosive finish
- When ordering with SiteSync, one of the following interface options must be chosen and ordered separately. Each option contains the SiteSync License, GUI and Bridge Node

DELIVERED LUMENS

System Watts	Output	Closed Sides	IES Type	Distribution	Optional Shielding		3000K 70CRI				4000K 70CRI				5000K 70CRI						
					Shielding	Equivalent	Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)
								B	U	G			B	U	G			B	U	G	
15	Assymmetric	(none)	Type 2	Y2	(none)	-	1281	1	0	1	92	1294	1	0	1	92	1323	1	0	1	95
			Type 3	Y3	(none)	-	1192	1	0	1	85	1204	1	0	1	86	1233	1	0	1	88
			Type 4	Y4W	(none)	-	1232	0	1	1	88	1245	0	1	1	89	1273	0	1	1	91
		1 Side	Type 2	Y2	C	HSS	1187	1	0	1	85	1199	1	0	1	86	1226	1	0	1	88
			Type 3	Y3	C	HSS	1092	0	0	1	78	1103	0	0	1	79	1128	0	0	1	81
			Type 4	Y4W	C	HSS	1168	0	1	1	83	1180	0	1	1	84	1207	0	1	1	86
			-	Y5	C	A / B / D	897	1	0	1	64	906	1	0	1	65	926	1	0	1	66
				YD	C	A / B / D	350	0	3	1	25	373	0	3	1	27	373	0	3	1	27
		2 Sides (adjacent)	-	Y5	BC	AB / CD / AD	620	0	0	1	44	626	0	0	1	45	640	0	0	1	46
				YD	BC	AB / CD / AD	236	0	3	1	17	251	0	3	1	18	251	0	3	1	18
		3 Sides (adjacent)	-	Y5	BCD	ABC / ABD / ACD	307	0	0	1	22	310	0	0	1	22	317	0	0	1	23
				YD	BCD	ABC / ABD / ACD	57	0	0	1	4	61	0	0	1	4	61	0	0	1	4
	Symmetric	(none)	Type 5	Y5	(none)	-	1098	1	0	1	78	1189	1	0	1	85	1179	1	0	1	84
				YD	(none)	-	478	0	3	1	34	509	0	3	1	36	509	0	3	1	36
		2 Sides (opposing)	-	Y5	AC	BD	593	1	0	1	42	599	1	0	1	43	612	1	0	1	44
				YD	AC	BD	233	0	3	1	17	248	0	3	1	18	248	0	3	1	18
30	Assymmetric	(none)	Type 2	Y2	(none)	-	2289	1	0	1	76	2302	1	0	1	77	2451	1	0	2	82
			Type 3	Y3	(none)	-	2153	1	0	1	72	2165	1	0	1	72	2305	1	0	1	77
			Type 4	Y4W	(none)	-	2276	1	2	1	76	2299	1	2	1	77	2351	1	2	1	78
		1 Side	Type 2	Y2	C	HSS	2199	1	0	2	73	2221	1	0	1	74	2271	1	0	2	76
			Type 3	Y3	C	HSS	2041	1	0	1	68	2066	1	0	1	69	2107	1	0	1	70
			Type 4	Y4W	C	HSS	2158	0	1	1	72	2179	0	1	1	73	2229	0	1	1	74
			-	Y5	C	A / B / D	1645	1	0	1	55	1662	1	0	1	55	1699	1	0	1	57
				YD	C	A / B / D	634	0	3	1	21	685	0	3	1	23	679	0	3	1	23
		2 Sides (adjacent)	-	Y5	BC	AB / CD / AD	1138	1	0	1	38	1149	1	0	1	38	1175	1	0	1	39
				YD	BC	AB / CD / AD	427	0	3	1	14	461	0	3	1	15	457	0	3	1	15
		3 Sides (adjacent)	-	Y5	BCD	ABC / ABD / ACD	563	0	0	1	19	568	0	0	1	19	581	0	0	1	19
				YD	BCD	ABC / ABD / ACD	104	0	0	1	3	112	0	0	1	4	111	0	0	1	4
	Symmetric	(none)	Type 5	Y5	(none)	-	1978	2	0	1	66	2188	2	0	1	73	2163	2	0	1	72
				YD	(none)	-	866	0	3	4	29	935	0	3	1	31	927	0	3	1	31
		2 Sides (opposing)	-	Y5	AC	BD	1075	1	0	1	36	1085	1	0	1	36	1110	1	0	1	37
				YD	AC	BD	426	0	3	1	14	460	0	3	1	15	456	0	3	1	15.2

* - 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	K41-...-SMK
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

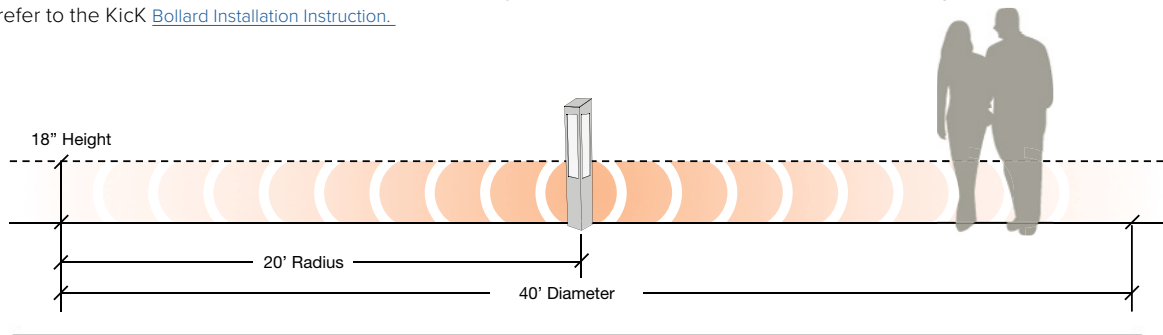
* Housing and optical distribution are independently field rotatable in 90° increments. Default factory orientations shown above.

DISTRIBUTION OUTPUT*
SHIELDING SIDE



SENSOR COVERAGE

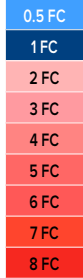
Motion Sensor uses microwave sensing technology that reacts to physical changes in within the coverage area. Careful consideration must be given to objects or activity that may trigger the sensor unintentionally. Dip Switch Settings on the microwave sensor will be pre-set at the factory. For additional information on troubleshooting, please refer to the Kick [Bollard Installation Instruction](#).



PHOTOMETRICS

ISOLINE TEMPLATES 5' grid spacing.

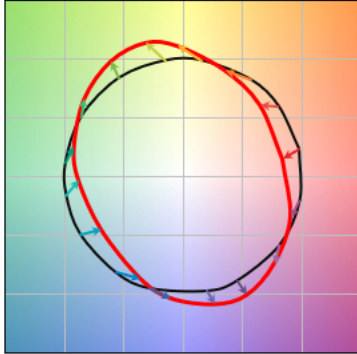
Equivalent (rotated) configurations are shown in *italics*.



		Asymmetric Distribution					Symmetric Distribution	
Shielding		Type II	Type III	Type IV	Type V	Diffused Lens	Type V	Diffused Lens
	(none)							
		KB6-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 <i>KB6-Y5-AB-1050</i> <i>KB6-Y5-BC-1050</i> <i>KB6-Y5-AD-1050</i>	KB6-YD-CD-1050 <i>KB6-YD-AB-1050</i> <i>KB6-YD-BC-1050</i> <i>KB6-YD-AD-1050</i>		
	2 Sides opposing AC or BD							
							KB6-Y5-AC-1050 <i>KB6-Y5-BD-1050</i>	KB6-YD-AC-1050 <i>KB6-YD-BD-1050</i>
	3 Sides BCC, ABC, or ACD							
					KB6-Y5-BCD-1050 <i>KB6-Y5-ABC-1050</i> <i>KB6-Y5-ACD-1050</i>	KB6-YD-BCD-1050 <i>KB6-YD-ABC-1050</i> <i>KB6-YD-ACD-1050</i>		

TM-30 DATA

COLOR VECTOR GRAPHIC

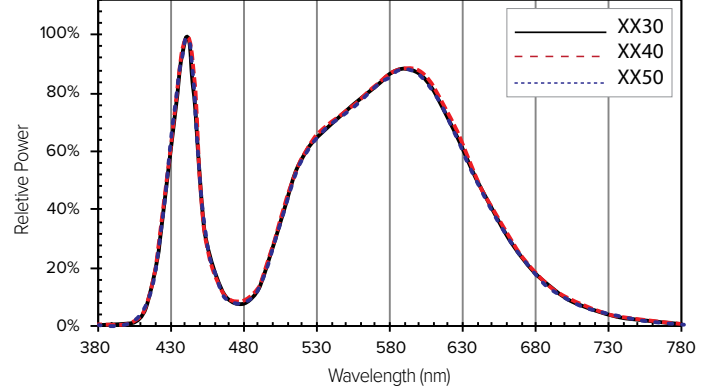


— Reference Illuminant — Test Source

TEST SOURCE

Value	Ordering Code		
	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

Ordering Code	LED Current (mA)	System Wattage (W)	Input				Min. Power Factor	Max THD (%)	Dimming Range (V)	Source/Sink Current (mA)	Inrush Current Peak				
			Amps AC								Hz	(A)		T@50% (μs)	
			120	277	347	480						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						21	49	160	

TM-21 LIFETIME CALCULATION (500MA)

Ambient Environment °C	Projected Lumen Maintenance (Khrs)					Reported L70
	25	50	60 (TM-21)	75	100	
25	98%	95%	94%	93%	90%	>60Khrs.
40	98%	95%	94%	93%	90%	