

JOB _____

TYPE _____

NOTES _____

APPROVALS _____

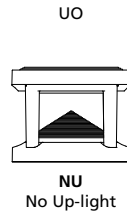
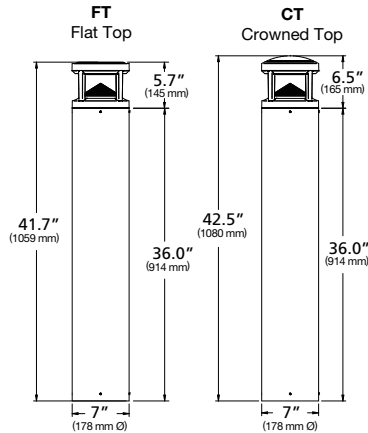
FEATURES

- Traditional or Performance Optics
- Bluetooth enabled RGBW accent
- Integral NEMA 3R Enclosure
- Dual receptacle power panel
- PA System capability
- IP66 optical system

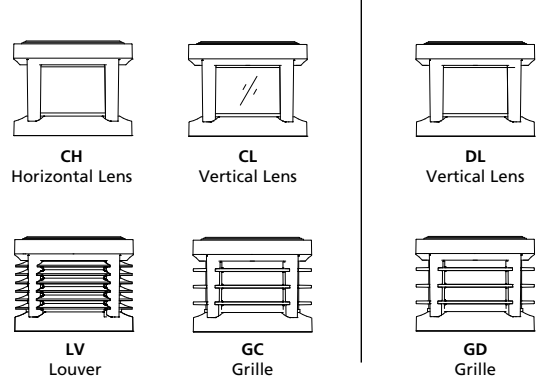
CERTIFICATIONS



SPECIFICATIONS



OPTICS



ORDERING CODE

Model	Top	Optics	Distribution	Light Engine
PA7R Pavilion 7" Ø Round	FT Flat Top CT ¹ Crowned Top	NU No Up-light CH Clear Horizontal Lens CL ² Clear Vertical Lens DL ^{2,3} Diffuse Vertical Lens LV Louvers GC Grille with clear vertical lens GD ³ Grille with diffuse vertical lens	1 Type I 2 Type II 3 Type III 3HS Type III + House side shield 4 Type IV 5 Type V	12L-010-5K7 14W (1000 nominal lm), 5000K, 70 CRI 12L-010-4K7 14W (1000 nominal lm), 4000K, 70 CRI 12L-010-3K7 14W (1000 nominal lm), 3000K, 70 CRI 12L-010-AMB 14W, Amber 560 nm Monochromatic 12L-020-5K7 22W (2000 nominal lm), 5000K, 70 CRI 12L-020-4K7 22W (2000 nominal lm), 4000K, 70 CRI 12L-020-3K7 22W (2000 nominal lm), 3000K, 70 CRI 12L-020-AMB 22W, Amber 560 nm Monochromatic
Body	Fixture Finish	Controls	Voltage	Options
24A 24" OAH, Aluminum 42A 42" OAH, Aluminum 42BR-C 42" OAH, Brown Concrete 42NG-C 42" OAH, Natural Gray Concrete 42A-ROP 42" OAH, Aluminum + Dual Receptacle Outlet Panel and Cover 42A-ROP-L 42" OAH, Aluminum + Dual Receptacle Outlet Panel and Locking Cover 42A-2GEB 42" OAH, Aluminum + Integral Recessed 2 Gang Electrical Box 42A-SG3 42" OAH, Aluminum + Speaker Grille Enclosure for 3" Ø speaker	BL Black DB Dark Bronze LG Light Gray GT Graphite PS Platinum Silver TT Titanium WH White RAL RAL Color CC Custom Color* *Consult factory	SWP ^{1,5} SiteSync pre-commission MW ⁴ Motion sensing (50% dim, 100% output upon detection) SiteSync Accessories [†] SWUSB SiteSync Software on USB SWTAB SiteSync Windows® Tablet SWBRG SiteSync Wireless Bridge Node	UNV 120-277V 120 ⁶ 120V 277 ⁶ 208-277V 347 ⁶ 347V 480 ⁶ 480V	EM ⁷ Battery Backup LR ⁸ Luminous Accent SF ⁹ Single Fuse DF ⁹ Double Fuse

†PRECOMMISSIONED SITESYNC ORDERING INFORMATION: When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit www.HubbellLighting.com/products/sitesync or contact Hubbell Lighting tech support at (800) 345-4928.

Examples:
PA7R/FT/NU3/12L-020-3K7/42A/TT/SWP/UNV/LR

- Adds .6 / 15mm to OAH (over all height).
- CL and DL configurations shall be IK04
- Only Available with 1 Type I or 5 Type V distributions only.
- 24" Ø typical coverage area, not Available with CH.
- 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.
- Dedicated input voltage, required for MW Motions sensing.
- 20°C min starting temperature, 90+ minute run time, output equivalent to 12L-010-#K7
- Adds +5 watts and 1" / 254mm to overall height.
- SF for 120, 277 and 347 input voltage, DF for 208, 240 and 480 input voltage.

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LUMINAIRE PERFORMANCE

LED #	Nominal Lumen Package	Nominal Wattage	Lens Options	Distribution	3000K				4000K				5000K						
					Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
						B	U	G			B	U	G			B	U	G	
12L	1,000	14	NU UO Optics	1	749	0	0	0	54	815	0	0	0	59	835	0	0	0	60
				2	860	0	0	0	62	936	0	0	0	67	958	0	0	0	69
				3	809	0	0	0	58	881	0	0	0	63	902	0	0	0	65
				3HS	684	0	0	0	49	744	0	0	0	53	762	0	0	0	55
				4	977	0	0	0	70	1063	0	0	0	76	1089	0	0	0	78
			5	908	1	0	0	65	988	1	0	0	71	1011	1	0	0	73	
			CH Clear Horizontal Lens	1	1184	0	3	1	85	1288	0	3	1	92	1319	0	3	1	95
				2	1139	0	3	1	82	1239	0	3	1	89	1269	0	3	1	91
				3	1094	0	3	1	79	1190	0	3	1	85	1219	0	3	1	87
				3HS	960	0	3	1	69	1045	0	3	1	75	1070	0	3	1	77
				4	1152	0	3	1	83	1254	0	3	1	90	1284	0	3	1	92
			5	1225	1	3	1	88	1333	1	3	1	96	1365	1	3	1	98	
			CL Clear Vertical Lens	1	1146	0	3	1	82	1247	0	3	1	90	1277	0	3	1	92
				2	1228	0	3	1	88	1336	1	3	1	96	1368	1	3	1	98
				3	1276	0	3	1	92	1389	1	3	1	100	1422	1	3	1	102
				3HS	1030	0	3	1	74	1121	0	3	1	80	1148	0	3	1	82
				4	1272	0	3	1	91	1384	0	3	1	99	1417	0	3	1	102
			5	1305	1	3	1	94	1420	1	3	1	102	1454	1	3	1	104	
			DL Diffused Vertical Lens	1	1086	0	3	1	78	1182	0	3	1	85	1210	0	3	1	87
				5	1141	1	3	1	82	1241	1	3	1	89	1271	1	3	1	91
			LV External Louvers	1	489	0	3	1	35	533	0	3	1	38	545	0	3	1	39
				2	534	0	3	1	38	581	0	3	1	42	595	0	3	1	43
				3	550	0	3	1	40	599	0	3	1	43	613	0	3	1	44
				3HS	397	0	3	1	29	432	0	3	1	31	442	0	3	1	32
				4	577	0	3	1	41	628	0	3	1	45	643	0	3	1	46
			5	583	1	3	1	42	634	1	3	1	46	649	1	3	1	47	
			GC Grille with Clear Lens	1	843	0	3	1	61	917	0	3	1	66	939	0	3	1	67
				2	829	0	3	1	60	903	0	3	1	65	924	0	3	1	66
				3	831	0	3	1	60	905	0	3	1	65	926	0	3	1	67
				3HS	694	0	3	1	50	755	0	3	1	54	773	0	3	1	56
4	901	0		3	1	65	980	0	3	1	70	1004	0	3	1	72			
5	842	1	3	1	60	916	1	3	1	66	938	1	3	1	67				
GD Grille with Diffused Lens		728	0	3	1	52	792	0	3	1	57	811	0	3	1	58			
		782	1	3	1	56	851	1	3	1	61	872	1	3	1	63			

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LUMINAIRE PERFORMANCE

LED #	Nominal Lumen Package	Nominal Wattage	Lens Options	Distribution	3000K				4000K				5000K						
					Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
						B	U	G			B	U	G			B	U	G	
12L	2,000	22	NU UO Optics	1	1044	0	0	0	48	1136	0	0	0	52	1164	0	0	0	54
				2	1199	0	0	0	55	1305	0	0	0	60	1336	0	0	0	62
				3	1128	0	0	1	52	1228	0	0	1	57	1257	0	0	1	58
				3HS	953	0	0	0	44	1037	0	0	0	48	1062	0	0	1	49
				4	1362	0	0	0	63	1482	0	0	1	68	1518	0	0	1	70
			5	1265	1	0	0	58	1377	1	0	0	63	1410	1	0	0	65	
			CH Clear Horizontal Lens	1	1778	0	3	1	82	1935	0	3	1	89	1981	0	3	1	91
				2	1711	1	3	1	79	1862	1	3	1	86	1906	1	3	1	88
				3	1643	1	3	1	76	1788	1	3	1	82	1831	1	3	1	84
				3HS	1443	0	3	1	66	1570	0	3	1	72	1608	0	3	1	74
				4	1731	0	3	1	80	1884	0	3	1	87	1929	0	3	1	89
			5	1841	1	3	1	85	2003	1	3	1	92	2051	1	3	1	95	
			CL Clear Vertical Lens	1	1852	0	4	1	85	2016	1	4	1	93	2064	1	4	1	95
				2	1984	1	3	1	91	2159	1	3	1	99	2211	1	3	1	102
				3	2062	1	3	1	95	2244	1	3	1	103	2298	1	3	1	106
				3HS	1665	0	3	1	77	1811	0	3	1	83	1855	0	3	1	85
				4	2055	0	3	1	95	2236	1	3	1	103	2290	1	3	1	106
			5	2109	1	3	1	97	2295	1	3	1	106	2350	1	3	1	108	
			DL Diffused Vertical Lens	1	1639	1	3	2	76	1783	1	3	2	82	1826	1	3	2	84
				5	1721	1	3	2	79	1873	1	3	2	86	1918	1	3	2	88
			LV External Louvers	1	746	0	3	1	34	811	1	3	1	37	831	1	3	1	38
				2	814	1	3	1	37	885	1	3	1	41	907	1	3	1	42
				3	838	1	3	1	39	912	1	3	1	42	934	1	3	1	43
				3HS	605	0	3	1	28	658	0	3	1	30	674	0	3	1	31
				4	879	0	3	1	41	956	1	3	1	44	979	1	3	1	45
			5	888	1	3	1	41	966	1	3	1	45	989	1	3	1	46	
			GC Grille with Clear Lens	1	1038	0	3	1	48	1130	0	3	1	52	1157	0	3	1	53
				2	1021	0	3	1	47	1111	1	3	1	51	1138	1	3	1	52
				3	1024	0	3	1	47	1114	1	3	1	51	1141	1	3	1	53
				3HS	854	0	3	1	39	930	0	3	1	43	952	0	3	1	44
4	1109	0		3	1	51	1207	0	3	1	56	1236	0	3	1	57			
5	1037	1	3	1	48	1128	1	3	1	52	1155	1	3	1	53				
GD Grille with Diffused Lens		1036	0	3	1	48	1127	1	3	2	52	1154	1	3	2	53			
		953	1	3	1	44	1037	1	3	1	48	1062	1	3	1	49			

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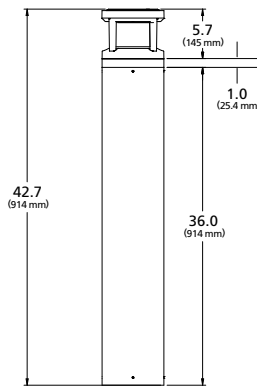
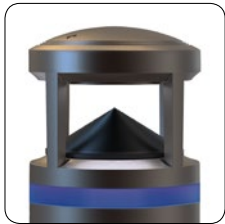
LUMINAIRE PERFORMANCE

Electrical Characteristics											Dimming					
Current	System Watts	Line Voltage		Amps AC						Min. Power Factor	Max THD (%)	Dimming Range	Source current out		Absolute voltage	
		VAC	Hz	120	208	240	277	347	480				Min	Max	Min	Max
350mA	14	120-480	50/60	0.18	0.11	0.09	0.08	0.06	0.05	>0.9	20	10% to 100%	0mA	1mA	0V	10V
500mA	22			0.12	0.07	0.06	0.05	0.04	0.03							

TM-21 LIFETIME CALCULATION

Ambient Temp.	Operating Hours					Calculated L ₇₀ (hours)
	0	25,000	TM-21-11 36,000	50,000	100,000	
25°C / 77°F	100%	98%	97%	95%	90%	60khrs
40°C / 104°F	100%	98%	97%	95%	90%	

LUMINOUS ACCENT



The Luminous Accent option adds an additional 1" / 25.4mm to the overall fixture height and may be controlled via wired DMX RDM or Bluetooth wireless. The Luminous Accent shall be IK08.



HUBBELL LIGHTING RGBW REMOTE APP

The Hubbell Lighting RGBW Remote application may be downloaded free of charge from the Apple App Store or Google Play.

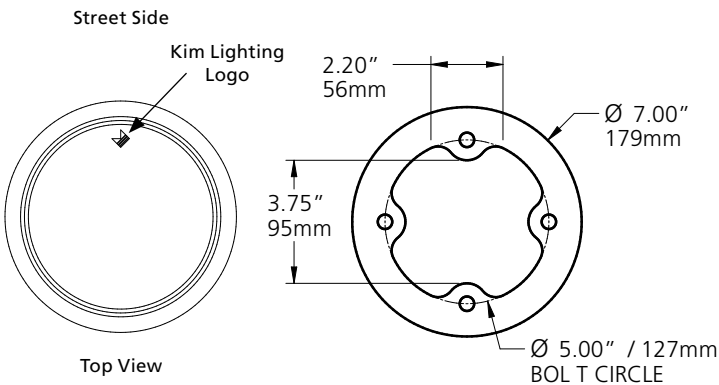
- Color selection and adjustment.
- Camera function for color matching.
- Intensity slider for dimming/ramping up.
- Save and rename up to 10 presets.
- Group and rename fixtures.
- Fixture is password protected, refer to instructions to set unique password.



MOUNTING

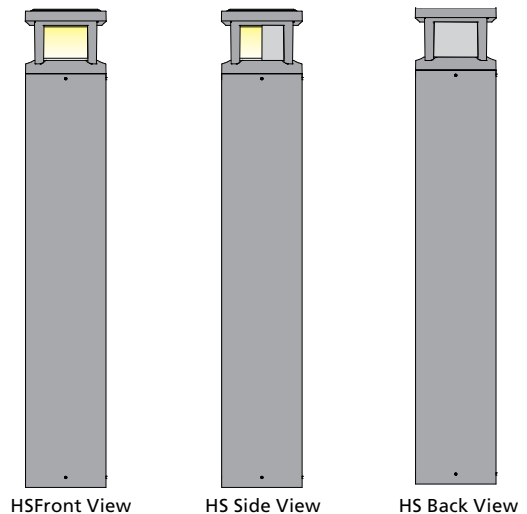
Aluminum Body

Once attached to base mounting plate, fixture may be rotated 20° in either direction and secured with set screws at base of the bollard body. KIM Lighting logo indicates 'street side' output.



SHIELDING

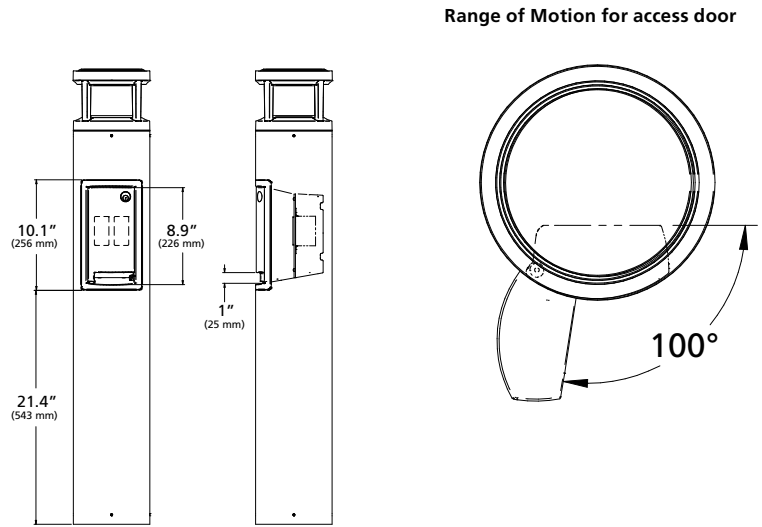
HS configurations feature factory installed 180° shield(s) that may also be installed in the field for any Optic configuration.



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RECEPTACLE OUTLET PANEL

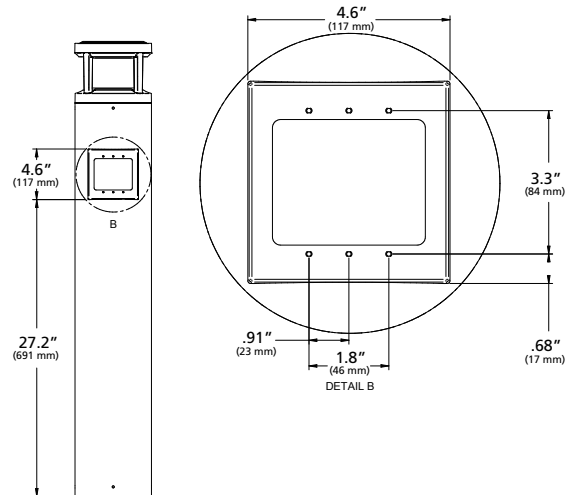
The Receptacle outlet panel shall be NEMA 3R rated for wet location(s) while in use and shall be compatible with any single receptacle outlet device with standard mounting holes. Door shall be self-closing. Tamper resistant lock must be specified at time of order. Devices and device wiring by others.



HUBBELL WIRING DEVICES USB DEVICES: <http://ecatalog.hubbell-wiring.com/productinformation/viewcatalog.aspx?Dest=hubbell-wiring.com/press/catalog/A.pdf&Page=18>

INTEGRAL ELECTRICAL BOX

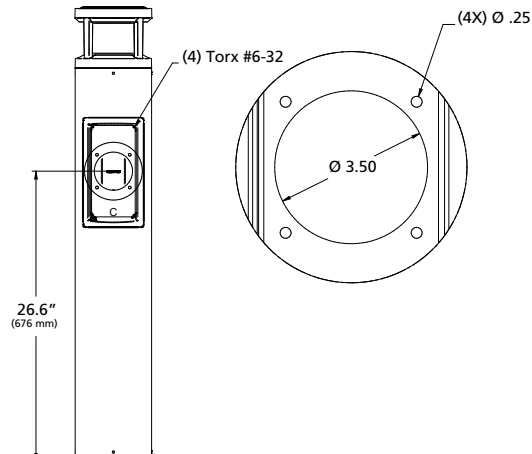
The integral 2 Gang electrical box shall be # deep and have standard mounting holes for installing either a single receptacle outlet device or a pair of single receptacle outlet device. Devices, device wiring, device hardware and bezel by others.



HUBBELL WIRING DEVICES GFCI DEVICES: <http://ecatalog.hubbell-wiring.com/productinformation/viewcatalog.aspx?Dest=hubbell-wiring.com/press/catalog/K.pdf>

SPEAKER GRILLE ENCLOSURE

The speaker grille enclosure shall accommodate a 3"Ø marine grade speaker rated for outdoor use. Grille shall be secured with (4) Torx # screws for accessibility. Mounting provisions as shown. Speaker, mounting hardware and wiring by others.



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SPECIFICATIONS

Housing:

- Castings shall be low copper aluminum alloy die-cast.
- Gaskets shall be molded silicone to prevent harmful ingress to the lamp and driver compartments.
- Optical system shall be IP66 rated.

Shaft:

- Aluminum shaft(s) shall be .125" thick extruded aluminum 6061 alloy.
- Concrete shaft(s) shall conform to current specifications for "Portland Cement." ASTM C150, Type I or II. Aggregates shall meet current requirements of "Specifications for Concrete Aggregates," ASTM C33. Water shall be clean and free from deleterious amounts of silt, oil, acids, alkalis or organic materials. Wire for reinforcement shall conform to ASTM A185. Steel for lugs and plates shall conform to ASTM A36, or A283 grade D.
- Concrete shaft(s) shall be medium sand-blasted with anti-graffiti sealer and material color shall be integral to the concrete mix.
- Concrete shaft(s) shall be cured to allow for completion of the hydration process, and result in a 28 day compressive strength of not less than 4,500 psi.
- Concrete shaft(s) shall be cast from fiberglass molds used to insure uniform parts. Mold parting lines maybe slightly visible in finished parts.

Optics:

- U0 configurations shall have an optically clear flat tempered glass lens, all other configurations shall have either an optically clear or high transmission diffused acrylic lens.
- Maximum surge current shall be 20KA and shall fail open at end of life to prevent harm to the electrical components from uncontrolled or excess incoming power
- Driver shall be rated for -40°C environment

Bluetooth:

- The Integral module shall enable the adjustment of the Luminous Accent to dim or change color to the desired setting when paired with Hubbell Lighting RGBW Remote App via cellular/tablet device.
- The integral module shall be compatible with Bluetooth Low Energy (BLE) or Bluetooth Smart mobile devices operating on iOS8 or Android Gingerbread operating systems or newer.

DMX:

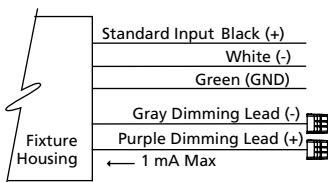
- 6 wires: Red (DMX+), Yellow (DMX-), Brown (DMX Ground), Black (Voltage), White (common), and Green (Ground)
- Single DMX universe with six slots/addresses of virtual control which are pre-programmed at the factory:

DMX slot/address 1 = red
 DMX slot/address 2 = blue
 DMX slot/address 3 = green
 DMX slot/address 4 = white
 DMX slot/address 5 = X tilt, a 127 means do nothing, a value between 1-63 means left, a value between 192-254 means right
 DMX slot/address 6 = Y tilt, a 127 means do nothing, a value between 1-63 means up, a value between 192-254 means down

- Fully DMX RDM compatible.

Controls

- Standard fixtures dimming range shall be from 10% to 100% and be compatible with 0-10V, user-defined, control devices. (Wiring illustration)
- Optional motion sensor shall be capable of detecting motion 360° around the bollard. When no motion is detected for the specified time, the sensor wattage to factory preset level, reducing the light level accordingly. When motion is detected by the sensor, the bollard shall return to full wattage and full light output. Please contact KIM Lighting if project requirements vary from standard configuration.
- Pavilion may be specified with SiteSync™ wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7. For more details, see ordering information or visit: www.hubbellighting.com/sitesync



Electrical:

- High temperature fuse holders factory installed inside the fixture housing. Fuse is included.
- Battery Backup shall have an operating range of -20°C to 50°C with a typical recharge time of 32 hours.

Installation

- Aluminum shaft configurations shall have four 3/8" x 10" x 2" zinc plated L-hook anchor bolts

shall to be installed with an included template. Nuts and washers shall be provided to level and secure the mounting plate to the anchor bolts.

- Aluminum shaft configurations shall have a mounting plate shall be able to be rotated 20° in either direction during installation for aiming adjustment.
- Concrete shaft configurations shall have four steel mounting tabs for installation on four 1/2" x 10" + 2" zinc electroplated L-hook anchor bolts. Each anchor bolt is supplied with two nuts, two washers, and a rigid pressed board template.
- Concrete shaft configurations shall be palletized with adequate hold-downs to prevent load movement in transit.

Finish:

- Fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powder coat.
- Standard colors include (BL) Black, (DB) Dark Bronze, (GT) Graphite, (PS) Platinum Silver, (LG) Light Gray, (TT) Titanium, (WH) White, and (CC) Custom Color (Include RAL#).

Certifications and Listings:

- UL 1598 Standard for wet locations for Luminaires.
- UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products.
- CSA C22.2#250.0 Luminaires.
- RoHS compliant.
- IP66 rated.
- IDA approved, 3000K and warmer CCTs only.

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.

Warranty:

- For full warranty see <http://www.hubbellighting.com/resources/warranty>



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