KBL Series

LED Low-Bay/High-Bay Luminaire

Rev. Date: V12 05/31/2022

Product Description

KBL LED Low-Bay/High-Bay delivers 9,000 - 30,000 lumens, allowing for one-for-one replacement or fixture count reduction of 150W to 400W HID or up to six lamp 54W T5H0 fixtures. With energy savings of up to 65% over traditional light sources, lightweight construction and multiple mounting options, the KBL is optimized for new construction or retrofit installations. The KBL delivers even illumination with reflector choices of aluminum, clear acrylic, clear polycarbonate, or white acrylic. Optional lenses offer enhanced uplight and maximum uniformity, making it ideal for a variety of applications including retail, gymnasiums, light manufacturing, and warehouses.

Applications: Retail, gymnasiums, industrial, manufacturing and warehouse spaces.

Performance Summary

Initial Delivered Lumens: 9,000 - 30,000 lumens

Operating Temperature Range: 9L - 18L Lumen Packages: -40°C to 50°C (-40°F to +122°F); 24L - 30L Lumen Packages: -40°C to 40°C (-40°F to +104°F); minimum operating temperature of -20°C (-4°F) for ML/MLS option, and 0°C (32°F) for EB, SWC and SWS/SWSS

Efficacy: Up to 156 LPW

CRI: 70, 80+

CCT: 3000K, 3500K, 4000K, 5000K

Input Voltage: 120-277 VAC or 347-480 VAC (without step-down transformer)

 L_{70} Lifetime: > 100,000 hours at maximum operating temperature

Limited Warranty*: 5 years on luminaire, ML, MLS, PML, PMLS, SWC, SWS, SWSS options; up to 5 years for Synapse® accessories; 1 year on luminaire accessories; 10-year luminaire warranty option also available

Limited Warranty Emergency Back Up (EB) Battery: 1 Year Battery Back Up. Test regularly in accordance with local codes

Mounting: Universal Hook & Cord or Pendant Mount or Dedicated Pendant Mount

Weight: Maximum 14 lbs. (6.4kg)

Controls: 0-10V dimming to 10%, Multi-Level /Programmable Multi-Level Occupancy

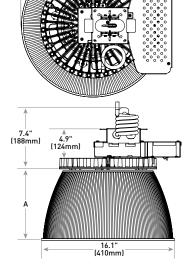
Assembled in the USA by Cree Lighting from US and imported parts

 $See \ \underline{\text{http://creelighting.com/warranty}}\ for\ warranty\ terms.\ For\ Synapse\ accessories,\ consult\ Synapse\ spec\ sheets\ for\ details\ on\ warranty\ terms.$

Reflector	"A" Height	Reflector	"A" Height
ALR16 (Aluminum)	9.0" (229mm)	PCR16 (Clear Polycarbonate)	8.5" (216mm)
ACR16 (Clear Prismatic Acrylic)	8.5" (216mm)	SACR16 (Low-Profile Clear Prismatic Acrylic)	4.5" (114mm)
AWR16 (White Acrylic)	8.5" (216mm)	SPCR16 (Low-Profile Clear Polycarbonate)	4.5" [114mm]

24L Lumen Package Shown Fully Assembled with Prismatic Reflector and Universal Mount





Refer to pages 6-9 for EB1, EB2, ML/MLS, PML/PMLS, low-profile reflectors, and wireless.

Ordering Information

Example: KBL-B-UV-24L-40K-7-UL-10V

KBL	В									
Product	Version	Mounting	Lumen Package*	CCT	CRI	Voltage	Controls	Cord	Plug	Options
KBL	В	UV Universal Hook & Cord Mount w/ Adaptor Plate for Pendant Mount - Wireless controls (SWC, SWS, SWSS) come with hook and cord mount only. Adaptor plate for pendant mount not included with wireless controls PD Pendant Dedicated Pendant Mount	9L 9,000 Lumens 12L 12,000 Lumens 18L 18,000 Lumens 24L 24,000 Lumens 30L 30,000 Lumens	300K 3000K 355K 3500K 400K 4000K 5000K	80	UL Universal 120-277V UH Universal 347-480V Dedicated Voltages for Use ONLY with Plugs 12 120V 25 208-240V 27 277V 34 34 347V 48 480V	10V 0-10V Dimming ML Multi-Level (Standard Reflector)/ MLS Multi-Level (Low-Profile Reflector) Refer to ML install instructions for details Coverage Lens Mounting Hts: 9L &12L: 7-15' [2.4-6.6m]; 18L-30L: 15-45' [4.6-13.7m] - detects walking to 35' and fork lifts to 45' PML Programmable Multi-Level (Standard Reflector)/ PMLS Programmable Multi-Level (Low-Profile Reflector) Refer to PML spec sheet for details Coverage Lens Mounting Hts: 9L&12L: 10-30' [3.0-9.1m]; 18L-30L: up to 40' [12.2m] - detects walking to 30' and fork lifts to 40' Wireless SWC Synapse Wireless® Controls SimplySNAP On-Site Controller is required (see Accessory table on page 3) 9L/12L available only with UL, 12, 25 & 27 voltages 18L, 24L & 30L available with all voltages SWS Synapse Wireless® Controls w/Network Sensor (Low-Profile Reflector) SimplySNAP On-Site Controller is required (see Accessory table on page 3) 9L/12L available only with UL, 12, 25 & 27 voltages Accessory table on page 3) 9L/12L available only with UL, 12, 25 & 27 voltages 18L, 24L & 30L available with all voltages	Blank (standard) 6' 16/3 Cord (IV) mount), no cord (PD mount), 3' 18/4 Cord (EB Options) Cord Options for Use ONLY with UV Mount 5C 6' 16/5 Cord - Not available with Synapse controls 5C12 12' 16/5 Cord - Not available with Synapse controls 5C15 15' 16/5 Cord - Not available with Synapse controls 5C15 12' 16/5 Cord - Not available with Synapse controls 5C10 12' 16/5 Cord C110 12' 16/3 Cord C12 12' 16/3 Cord C12 12' 16/3 Cord C20 20' 16/3 Cord C20 20' 16/3 Cord	Blank (standard) No Plug P Twist-Lock Plug - Must specify voltage [12, 25, 27, 34, 48] - 15A for 120-277V - 20A for 347-480V - Not for use with 5-Conductor cord options SP Straight Blade Plug - Available only in 120V - Must specify voltage [12] - Not for use with 5-Conductor cord options	EB1 Emergency (10W/90 min.) 9 L & 12L lumen packages only - Available with UL voltage only Not available with plug options per NEC requirements EB2 Emergency (20W/90 min.) 1 18L - 30L lumen packages only - Available with UL voltage only Not available with plug options NEC requirements MX NOM Certified - Not available with SWC, SWS or SWS: controls PP Pallet Packaging (0ty. 45) Not available with EB options W10 10-Year Limite Luminaire Warranty

*Lumen Package codes identify approximate light output only. Actual lumen output levels vary depending on CCT and reflector/lens selection. Refer to Delivered Lumens & Electrical Data and Reflector Illumination Performance tables for specific lumen values.













Product Specifications

CONSTRUCTION & MATERIALS

- · Die cast aluminum heatsink
- IP65 optics with tempered glass lens protect LEDs while keeping the dust out
- · Low-profile, lightweight design provides ease of installation
- UV mount is provided with factory installed spring lock hook for mounting, and an adaptor plate to accept a 3/4 IP pendant (by others). Adaptor plate for pendant mount not included with wireless controls (SWC, SWS, SWSS)
- Factory-installed 16/3 or 14/3 SEOW/STOW white cord standard; 16/5 SEOW/ STOW or 14/5 SOOW white cord optional
- Optional cord lengths and plug accessories are also available
- 9L-24L luminaires come with a perforated driver cover, and 30L luminaires and luminaires with the W10 option include a heat sink driver cover
- PD mount is provided with factory installed pendant adaptor plate to accept a 3/4 IP pendant (by others)
- EB options come with factory installed 3' (0.9m) 18/4 STOW white cord w/1.5" (38mm) flying leads
- Factory calibrated to hang straight
- Designed for downlight applications only
- Weight: Maximum 14 lbs. (6.4kg); 20 lbs. (9.1kg) w/EB Options

ELECTRICAL SYSTEM

- Input Voltage: 120-277V or 347-480V 50/60Hz
- Power Factor: > 0.9 at full load
- Total Harmonic Distortion: < 20% at full load
- **Operating Temperature Range:** 9L 18L Lumen Packages: -40° C to 50° C (-40° F to $+122^{\circ}$ F); 24L 30L Lumen Packages: -40° C to 40° C (-40° F to $+104^{\circ}$ F); minimum operating temperature for ML/MLS option is -20° C (-4° F); minimum operating temperature for Synapse Wireless controls or EB options
- Transient Protection: 6kV/3kA tested in accordance to IEEE/ANSI
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- EB options are wired for switched emergency mode (lights can be turned off without going into emergency model

0-10V DIMMING

- Continuous dimming to 10% with 0-10V DC control protocol
- 10V Source Current: 0.15mA
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- Reference dimming document for additional information

MULTI-LEVEL OPTION (PIR)

- High/low occupancy, dim to min of 30%
- Available with UL and UH voltages
- Refer to KBL install instructions for details on sensor functionality, operation and lumen and power multipliers

PROGRAMMABLE MULTI-LEVEL OPTION (PIR)

- High/low/off photo/motion sensor
- Available with UL and UH voltages
- Refer to PML spec sheet for details on sensor functionality, operation and lumen and power multipliers

SYNAPSE WIRELESS

- · Connected lighting via a wireless mesh network
- Utility grade power monitoring (+/-2%)
- Daylight harvesting accessory (see table on page 3)
- Scheduling, zonal control, alerts and notifications

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed (UL1598; UL8750)
- Designed for indoor use only
- Suitable for damp locations
- Requires minimum 90°C supply conductors
- . NOM Certified when ordered with MX option
- · LED optics meet IP65 requirements
- UL924 (EB options). Refer to table at right for maximum mounting heights
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated
- Luminaire with SWC, SWS, or SWSS options meet FCC Part 15, Subpart C limits for conducted and radiated emissions
- Assembled in the USA by Cree Lighting from US and imported parts
- Meets Buy American requirements within ARRA
- DLC and DLC Premium qualified versions available. Please refer to https:// www.designlights.org/search/ for most current information
- RoHS compliant. Consult factory for additional details
- CA RESIDENTS WARNING: Cancer and Reproductive Harm www.p65warnings.ca.gov

Product Specifications

SYNAPSE® SIMPLYSNAP INTELLIGENT CONTROL

The Synapse SimplySNAP platform is a highly intuitive connected lighting solution featuring zone dimming, motion sensing, and daylight harvesting with utility-grade power monitoring and support of up to 1000 nodes per gateway. The system features a reliable and robust self-healing mesh network with a browser-based interface that runs on smartphones, tablets, and PCs. The integrated Synapse® Wireless Controller (SWC) and Wireless Controller with Network Sensor (SWS/SWSS) take the KBL Series to a new performance plateau, providing extreme energy productivity, code compliance and a better light experience.

Electrical Da	Electrical Data*										
Lumen	System Watts	Total Current (A)									
Package	120-480V	120V	208V	240V	277V	347V	480V				
9L	62	0.52	0.30	0.26	0.22	0.18	0.13				
12L	85	0.72	0.41	0.36	0.31	0.24	0.18				
18L	126	1.06	0.61	0.53	0.45	0.36	0.26				
24L	164	1.38	0.79	0.69	0.59	0.47	0.34				
30L	190	1.60	0.92	0.80	0.69	0.55	0.40				

Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%

Delivered Emergency Lumens at 70 CRI*									
Lumen Package	3000K	3500K	4000K	5000K					
12L	1,430	1,430	1,510	1,510					
12L w/ACR16	1,410	1,410	1,490	1,490					
24L	2,930	2,930	3,090	3,090					
24L w/ACR16	2,900	2,900	3,050	3,050					

^{*} To calculate approximate delivered lumens in EB mode, multiply the initial delivered lumen values on pages 4-5 by 0.12.

Maximum Mounting Height w/EB Options								
Lumen Package	With Prismatic Diffuser	With Prismatic Diffuser and Conic Lens						
9L-12L	30' (9.1m)	23' (7.0m)						
18L-30L	44' (13.4m)	33' (10.1m)						

KBL Series (Version B) Ambient Adjusted Lumen Maintenance ¹									
Ambient	Initial LMF	25K hr Reported ² LMF	50K hr Reported ² LMF	75K hr Estimated ³ LMF	100K hr Estimated ³ LMF				
25°C (77°F)	1.00	0.93	0.88	0.83	0.79				
30°C (86°F)	0.99	0.92	0.87	0.82	0.78				
35°C (95°F)	0.99	0.92	0.87	0.82	0.78				
40°C (104°F)	0.98	0.90	0.84	0.79	0.75				
45°C (113°F)	0.97	0.88	0.83	0.77	0.72				
50°C (122°F)	0.97	0.88	0.82	0.76	0.71				

¹Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all luminaire ambient temperature factors.

In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are



up to 6x the tested duration in the IES LM-80 report for the LED

³ Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

Accessories

16" (406mm) O.D. Reflectors

Standard Profile Reflectors (recommended for 18L - 30L lumen

packages)

ALR16 (Single Pack) ALR16-MP (Multi-Pack) - Aluminum

ACR16 (Single Pack) ACR16-MP (Multi-Pack) - Clear Prismatic Acrylic AWR16 (Single Pack) AWR16-MP (Multi-Pack)

- White Acrylic

PCR16 (Single Pack) PCR16-MP (Multi-Pack)

Clear Polycarbonate

Low-Profile Reflectors (recommended for 9L & 12L lumen packages)

SACR16 (Single Pack) SACR16-MP (Multi-Pack) Clear Prismatic Acrylic

- If ordering light engine with sensor, must order MLS, PMLS or SWSS controls

SPCR16 (Single Pack) SPCR16-MP (Multi-Pack) - Clear Polycarbonate

- If ordering light engine with sensor, must order MLS, PMLS or SWSS controls

- Single pack SKUs ship as one reflector per box
- Multi-packs MUST be ordered in quantities of 10
- Acrylic or polycarbonate reflectors and lenses are not intended for use in environments containing airborne corrosive agents such as chemical solvents, cleaners, or cutting fluids

Wire Guards

16" (406mm) Wire Guards

- For Aluminum Reflector

WG-AP

- For Acrylic and Polycarbonate Reflectors

Note: Not for use with lens accessories

Full Body Wire Guard

FBGWH

- Suitable for use with reflector and lens accessories

- 8 AWG steel construction w/painted white finish

DLA16

16" (406mm) Clear Prismatic Drop Acrylic Lenses

Note: Lenses and WG-A/WG-AP wire guard accessories can't be used together

- For Aluminum Reflector

DL16

- For Acrylic and Polycarbonate Reflectors

16" (406mm) Clear Conical Acrylic Lenses

CLA16

- For Aluminum Reflector

CL 16

- For Acrylic and Polycarbonate Reflectors

Safety Cables

Galvanized Safety Cables

SC-5 (Single Cable) SC5 B100 (Bulk Pack of 100) - 5.0' (1.5m) Cable

SC-10 (Single Cable) - 10.0' (3.0m) Cable

Field-Installed NEMA® Plugs

AP-515P

- 15 amp 120V Straight Blade Plug

AP-L515P

- 15 amp 120V Twist Lock Plug Note: Not for use with EB options

AP-L615P

- 15 amp 240V Twist Lock Plug

AP-L715P

- 15 amp 277V Twist Lock Plug

- Refer to WSN-DPM spec sheet for details

AP-L2420P

- 20 amp 347V Twist Lock Plug

AP-L820P

- 20 amp 480V Twist Lock Plug

Field-Installed

Anti-Spin Adaptor HXB-AS

- Anti-spin accessory for hook and cord mounting configuration

Hand-Held Remote

XA-SENSREM

Synapse Wireless Sensor

- Motion and light sensor

- Control multiple zones

WSN-DPM

- For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

Synapse Wireless Control Accessories

SimplySNAP On-Site Controller

SS450-002

- Verizon® LTE-enabled
- Designed for indoor applications - Refer to <u>SS450-002</u> spec sheet for details **Synapse 10V Interface**

DIM10-220F

- 120V-277V

- Requires other Synapse components to complete system
- Use to retro fit controls to existing KBL 10V projects
- Refer to DIM10-220F spec sheet for details

Building Management System (BMS)

Gateway BMS-GW-002

- Required for BACnet integration
- Refer to BMS-GW-002 spec sheet for

details

Synapse Wireless Switch

WSW-08-PS

- Two or eight button low-voltage wall

control

- Refer to WSW spec sheet for details



KBL Series LED Low-Bay/High-Bay Luminaire

Delivered Lumens										
		300)OK	350	00K	400	00K		5000	K
		70 CRI	80 CRI	70 CRI	80 CRI	70 CRI	80 CRI	70	CRI	80 CRI
Luminaire	Lumen Package	Initial Delivered Lumens*	Initial Delivered Lumens*	Efficacy (LPW)	Initial Delivered Lumens*					
	9L	9,000	8,475	9,000	8,475	9,500	8,800	9,500	153	8,800
	12L	12,125	11,600	12,125	11,600	12,800	11,850	12,800	151	11,850
Light Engine Only	18L	18,300	17,200	18,300	17,200	19,300	17,900	19,300	153	17,900
Only	24L	24,000	21,900	24,000	22,100	25,300	23,500	25,300	154	23,500
	30L	28,000	25,700	29,100	25,800	29,700	27,400	29,700	156	27,400
	9L	8,450	7,975	8,450	7,975	8,925	8,275	8,925	144	8,275
	12L	11,400	10,900	11,400	10,900	12,025	11,150	12,025	141	11,150
KBL w/ALR16 Aluminum Reflector	18L	17,200	16,200	17,200	16,200	18,100	16,800	18,100	144	16,800
/ Kummum Nemeeter	24L	22,600	20,600	22,600	20,800	23,800	22,100	23,800	145	22,100
	30L	26,300	24,200	27,400	24,300	27,900	25,800	27,900	147	25,800
	9L	8,900	8,400	8,900	8,400	9,400	8,700	9,400	152	8,700
	12L	12,000	11,475	12,000	11,475	12,675	11,725	12,675	149	11,725
KBL w/ACR16 Clear Prismatic Acrylic Reflector	18L	18,100	17,000	18,100	17,000	19,100	17,700	19,100	152	17,700
, , , , , , , , , , , , , , , , , , , ,	24L	23,800	21,700	23,800	21,900	25,000	23,300	25,000	152	23,300
	30L	27,700	25,400	28,800	25,500	29,400	27,100	29,400	155	27,100
	9L	8,925	8,400	8,925	8,400	9,425	8,725	9,425	152	8,725
	12L	12,025	11,500	12,025	11,500	12,675	11,750	12,675	149	11,750
KBL w/SACR16 Low-Profile Acrylic Reflector	18L	18,100	17,000	18,100	17,000	19,100	17,700	19,100	152	17,700
,	24L	23,800	21,700	23,800	21,900	25,100	23,300	25,100	153	23,300
	30L	27,700	25,500	28,800	25,600	29,400	27,200	29,400	155	27,200
	9L	8,725	8,225	8,725	8,225	9,225	8,525	9,225	149	8,525
	12L	11,750	11,250	11,750	11,250	12,425	11,500	12,425	146	11,500
KBL w/AWR16 White Acrylic Reflector	18L	17,800	16,700	17,800	16,700	18,700	17,400	18,700	148	17,400
,	24L	23,300	21,200	23,300	21,400	24,500	22,800	24,500	149	22,800
	30L	27,200	24,900	28,200	25,000	28,800	26,600	28,800	152	26,600
	9L	8,450	7,975	8,450	7,975	8,925	8,275	8,925	144	8,275
	12L	11,400	10,900	11,400	10,900	12,025	11,150	12,025	141	11,150
KBL w/PCR16 Polycarbonate Reflector	18L	17,200	16,200	17,200	16,200	18,100	16,800	18,100	144	16,800
,	24L	22,600	20,600	22,600	20,800	23,800	22,100	23,800	145	22,100
	30L	26,300	24,200	27,400	24,300	27,900	25,800	27,900	147	25,800
	9L	8,675	8,175	8,675	8,175	9,175	8,500	9,175	148	8,500
	12L	11,700	11,200	11,700	11,200	12,350	11,425	12,350	145	11,425
KBL w/SPCR16 Low-Profile Polycarbonate Reflector	18L	17,700	16,600	17,700	16,600	18,600	17,300	18,600	148	17,300
	24L	23,200	21,100	23,200	21,300	24,400	22,700	24,400	149	22,700
	30L	27,000	24,800	28,100	24,900	28,700	26,400	28,700	151	26,400
	9L	7,550	7,125	7,550	7,125	7,975	7,400	7,975	129	7,400
KBL w/ALR16 Aluminum Reflector	12L	10,175	9,750	10,175	9,750	10,750	9,950	10,750	126	9,950
and CLA16 Conical or DLA16 Drop Lens	18L	15,400	14,450	15,400	14,450	16,200	15,000	16,200	129	15,000
Drop Lens	24L	20,200	18,400	20,200	18,600	21,300	19,700	21,300	130	19,700
	30L	23,500	21,600	24,400	21,700	24,900	23,000	24,900	131	23,000
	9L	8,650	8,125	8,650	8,125	9,125	8,450	9,125	147	8,450
VPI/ACD4/ CI D :	12L	11,650	11,125	11,650	11,125	12,300	11,375	12,300	145	11,375
KBL w/ACR16 Clear Prismatic Acrylic Reflector and CL16 Conical	18L	17,600	16,500	17,600	16,500	18,500	17,200	18,500	147	17,200
or DL16 Drop Lens	24L	23,000	21,000	23,000	21,200	24,300	22,600	24,300	148	22,600
	30L	26,900	24,700	27,900	24,800	28,500	26,300	28,500	150	26,300

^{*} Initial delivered lumens at 25°C [77°F]. Actual production yield may vary between -10 and +10% of initial delivered lumens.



KBL Series LED Low-Bay/High-Bay Luminaire

Delivered Lumens						1		ı			
		3000K		350	3500K 4000				5000K		
		70 CRI	80 CRI	70 CRI	80 CRI	70 CRI	80 CRI	70 (CRI	80 CRI	
Luminaire	Lumen Package	Initial Delivered Lumens*	Initial Delivered Lumens*	Efficacy (LPW)	Initial Delivered Lumens*						
	9L	8,400	7,900	8,400	7,900	8,875	8,200	8,875	143	8,200	
KBL w/SACR16 Low-Profile	12L	11,325	10,825	11,325	10,825	11,950	11,050	11,950	141	11,050	
Acrylic Reflector and CL16 Coni-	18L	17,100	16,000	17,100	16,000	18,000	16,700	18,000	143	16,700	
cal or DL16 Drop Lens	24L	22,400	20,400	22,400	20,600	23,600	21,900	23,600	144	21,900	
	30L	26,100	24,000	27,200	24,100	27,700	25,600	27,700	146	25,600	
	9L	8,275	7,800	8,275	7,800	8,750	8,100	8,750	141	8,100	
KBL w/AWR16 White Acrylic	12L	11,150	10,675	11,150	10,675	11,775	10,900	11,775	139	10,900	
Reflector and CL16 Conical or DL16 Drop Lens	18L	16,800	15,800	16,800	15,800	17,800	16,500	17,800	141	16,500	
DE 16 Drop Lens	24L	22,100	20,100	22,100	20,300	23,300	21,600	23,300	142	21,600	
	30L	25,800	23,600	26,800	23,700	27,300	25,200	27,300	144	25,200	
	9L	8,000	7,550	8,000	7,550	8,450	7,825	8,450	136	7,825	
I/DL/DCD1/ Dalamakanaka	12L	10,800	10,325	10,800	10,325	11,400	10,550	11,400	134	10,550	
KBL w/PCR16 Polycarbonate Reflector and CL16 Conical or	18L	16,300	15,300	16,300	15,300	17,200	15,900	17,200	137	15,900	
DL16 Drop Lens	24L	21,400	19,500	21,400	19,700	22,500	20,900	22,500	137	20,900	
	30L	24,900	22,900	25,900	23,000	26,400	24,400	26,400	139	24,400	
	9L	8,150	7,675	8,150	7,675	8,600	7,975	8,600	139	7,975	
VDL/CDCD1/ L Dr. 51	12L	10,975	10,500	10,975	10,500	11,575	10,725	11,575	136	10,725	
KBL w/SPCR16 Low-Profile Polycarbonate Reflector and CL16	18L	16,600	15,600	16,600	15,600	17,500	16,200	17,500	139	16,200	
Conical or DL16 Drop Lens	24L	21,700	19,800	21,700	20,000	22,900	21,300	22,900	140	21,300	
	30L	25,300	23,300	26,300	23,300	26,900	24,800	26,900	142	24,800	

^{*} Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens.

Optional Reflectors/Lens: shown fully assembled with universal mount

Aluminum Reflector w/Drop Lens

Clear Prismatic Acrylic Reflector

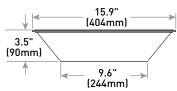
White Acrylic Reflector w/Conical Lens

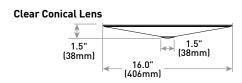






Drop Lens



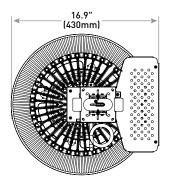


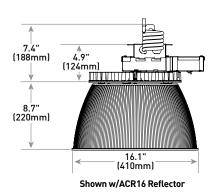
Reflector Uplight Illumination Performance						
Reflector	% Uplight					
ALR16 (Aluminum)	0%					
ALR16 w/CLA16 (Aluminum w/Clear Conical Lens)	0%					
ALR16 w/DLA16 (Aluminum w/Clear Drop Lens)	2%					
ACR16 (Clear Prismatic Acrylic)	3%					
ACR16 w/CL16 (Clear Prismatic Acrylic w/Clear Conical Lens)	6%					
ACR16 w/DL16 (Clear Prismatic Acrylic w/Clear Drop Lens)	8%					
AWR16 (White Acrylic)	13%					
AWR16 w/CL16 (White Acrylic w/Clear Conical Lens)	16%					
AWR16 w/DL16 (White Acrylic w/Clear Drop Lens)	16%					

Reflector	% Uplight
PCR16 (Clear Polycarbonate)	2%
PCR16 w/CL16 (Clear Polycarbonate w/Clear Conical Lens)	5%
PCR16 w/DL16 (Clear Polycarbonate w/Clear Drop Lens)	7%
SACR16 (Low-Profile Clear Prismatic Acrylic)	2%
SACR16 w/CL16 (Low-Profile Clear Prismatic Acrylic w/Clear Conical Lens)	7%
SACR16 w/DL16 (Low-Profile Clear Prismatic Acrylic w/Clear Drop Lens)	7%
SPCR16 (Low-Profile Clear Polycarbonate)	2%
PCR16 w/CL16 (Low-Profile Clear Polycarbonate w/Clear Conical Lens)	6%
PCR16 w/DL16 (Low-Profile Clear Polycarbonate w/Clear Drop Lens)	6%

 $Reference\ http://creelighting.com/products/indoor/high-bay-low-bay/kbl-series\ for\ detailed\ photometric\ data.$

Standard 9L-24L

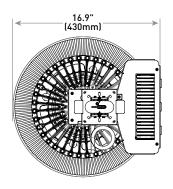


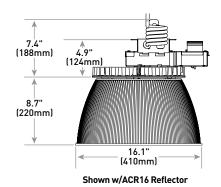


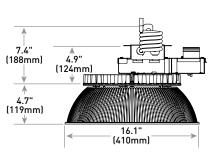
7.4"
(188mm)
(124mm)
4.7"
(119mm)
16.1"
(410mm)

Shown w/SACR16 Reflector

Standard 30L & All Lumen Packages w/W10 Option

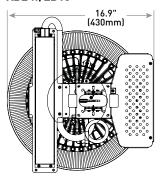


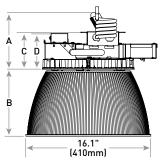




Shown w/SACR16 Reflector

KBL w/EB10

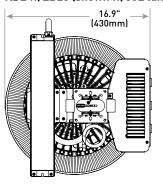


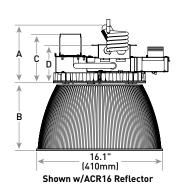


Shown w/ACR16 Reflector

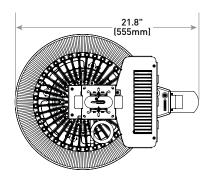
Dimensions	EB10	EB20
A 7.4" (188mm)	7.4" (188mm)	
B 8.7" (220mm)	8.7" (220mm)	
C 4.9" (124mm)	6.3" (159mm)	
D 4.7" (118mm)	4.9" (124mm)	

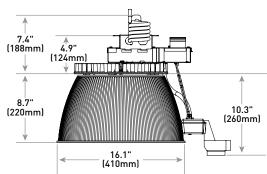
KBL w/EB20 (shown w/30L lumen package) or 18L & 24L lumen packages w/W10 option





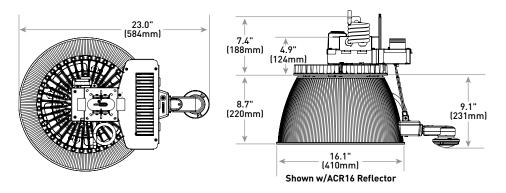
KBL w/ML Sensor (shown w/30L lumen package) or all lumen packages w/W10 option



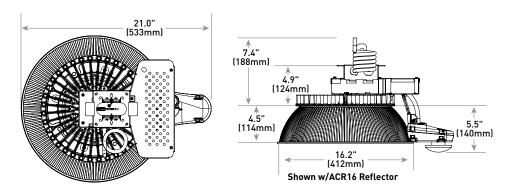


Shown w/ACR16 Reflector

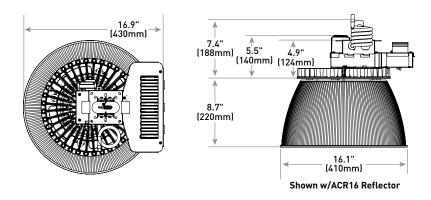
KBL w/PML Sensor (shown w/30L lumen package) or all lumen packages w/W10 option



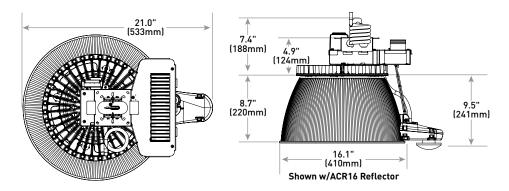
KBL w/PMLS Sensor (shown w/9L lumen package)



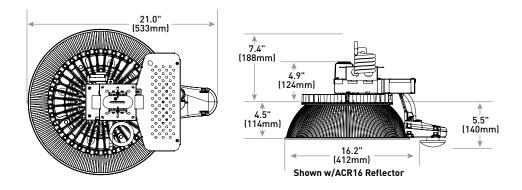
KBL w/SWC Control (shown w/30L lumen package)



KBL w/SWS Control (shown w/30L lumen package)



KBL w/SWSS Control (shown w/9L lumen package)



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