

AKH45Q

L70
25°C

290,000 Hours



EasyLED Large Bentley Kitty Hawk Area, Wall, and Flood Light

The LEPG AKH45 LED area, site, wall and flood luminaire combines optical performance, energy efficiency and long term reliability using a market proven contemporary design. Utilizing the latest LED technology, the AKH45 luminaire delivers unparalleled uniformity resulting in greater pole spacing. The fixture is available in multiple wattages with a wide choice of mounting configurations and optical distributions to serve the needs of lighting designers for varying project light level requirements. Applications include general area, parking, flood, security, and accent lighting for retail centers, automotive dealerships, industrial parks, schools and universities, public transit and airports, office buildings and medical facilities.

Specifications and Features:

Housing:

Die Cast Aluminum Housing and Front Frame, Integral Heat Sinking and Driver Compartment. Photocell Adaptable. Nickel-Plated Stainless Steel Hardware.

Listing & Ratings:

CSA: Listed for Wet Locations, ANSI/UL 1598, 8750; IP66 Sealed LED Compartment.

Finish:

Textured Architectural Bronze Powdercoat Finish Over a Chromate Conversion Coating. Custom Colors Available Upon Request.

Lens:

Tempered Clear Flat or SoftLED Flat Glass, or Tempered Clear Flat Prismatic Glass Lens.

Mounting Options:

Mounts with Kitty Hawk Arm, Adjustable Slipfitter, 2" Diameter Mounting Arm Adaptor, Yoke, Two-Piece Bracket or Wall Mount Bracket. (Factory Installed)

EasyLED LED:

Aluminum Boards

Wattages:

Multiple Wattages Available: 99w, 111w, 133w, 136w, 167w, 183w, 199w, 225w, 256w

Driver:

Electronic Driver, 120-277V, 50/60Hz or 347-480V, 50/60Hz; Less Than 20% THD and PF>0.90. Standard Internal Surge Protection 6kV. 0-10V Dimming Standard for a Dimming Range of 100% to 10%; Dimming Source Current is 150 Microamps.

Controls:

Fixtures Ordered with Factory-Installed Photocell or Motion Sensor Controls are Internally Wired for Switching and/or 1-10V Dimming Within the Housing. Remote Direct Wired Interface of 1-10V Dimming is Not Implied and May Not Be Available, Please Consult Factory. Fixtures are Tested with LEPG Controls and May Not Function Properly With Controls Supplied By Others. Fixtures are NOT Designed for Use with Line Voltage Dimmers.

Warranty:

5-Year Warranty for -40°C to +50°C Environment.

See Page 5 for Projected Lumen Maintenance Table.

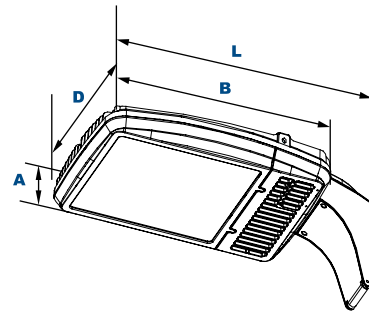


Dimensions

Width (D)	15 1/4" (400mm)
Length (B)	22" (559mm)
Height (A)	4" (102mm)

Length with Mount (L)

Kitty Hawk Arm (KA): 27 1/2" (699mm)
Slipfitter (SF): 29 1/4" (743mm)
Mounting Arm Adaptor (MA): 26 1/8" (664mm)
Yoke (Y): 26 1/4" (667mm)
Bracket (BR): 25 1/4" (654mm)
Wall Mount Bracket (WM): 23 1/4" (605mm)



Certification & Listings:



DesignLights Consortium™ Qualified Luminaires:
 AKH45QA1X[167 256][U H]5KC*** AKH45QD1X167[U H]5KC***
 AKH45QB1X[167 256][U H]5KC*** AKH45QF1X[167 256][U H]5KC***
 AKH45QC1X[167 256][U H]5KC***



SoftLED

Standard Models

Order Information Example:		AKH45QF1X256U5KCZKASP						
AKH45Q								
Model	Optics/Beam	Wattage	Driver	CCT	Lens	Color	Mounting	Options
AKH45Q=Large Bentley Kitty Hawk Area, Wall, and Flood Light	A=Type I/NEMA 7H x 5V	1X99=99w	U=120-277V	3K=3000K*	C=Standard Clear Flat Glass Lens	Z=Bronze	KA=Kitty Hawk Arm	SF=Single Fuse*
	B=Type II/NEMA 7H x 6V	1X111=111w	H=347-480V	4K=4000K	S=SoftLED Flat Glass Lens*	C=Custom (Consult Factory)	SF=Slipfitter	DF=Double Fuse*
	C=Type III/NEMA 7H x 7V	1X133=133w		5K=5000K	P=Clear Flat Prismatic Glass Lens*		MA=Mounting Arm Adapter	SP=Surge Protection
	D=Type IV/NEMA 7H x 6V						Y=Yoke	M1=Motion Sensor, IR for mounting heights of 20ft to 35ft
	F=Type V/NEMA 7H x 7V						BR=Two-Piece Swivel Bracket	M2=Motion Sensor, IR for mounting heights of 18ft or less
	I=Narrow Beam/NEMA 4H x 4V*						WM=Wall Mount Bracket	R3=3-Pin Twist Lock Photocell Receptacle
							NM=No Mount	R5=5-Pin Twist Lock Photocell Receptacle
								R7=7-Pin ANSI C136.41—2013 Twist Lock Photocell Receptacle
								S23=Internal Microwave Sensor with dimming for mounting heights of 35' or less*
								S43=Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19"

*5K Models Only.
 See Page 5 for Distribution Information.

*C, D & F Optics Only

*120-277V Models Only.

Auto Dealership Front Line Models

Order Information Example:		AKH45QF1X256U5KCZKARDSP						
AKH45Q								
Model	Optics/Beam	Wattage	Driver	CCT	Lens	Color	Mounting	Options
AKH45Q=Large Bentley Kitty Hawk Area Light	C=Type III	OPTIMIZED	U=120-277V	5K=5000K	C=Standard Clear Flat Glass Lens	Z=Bronze		SF=Single Fuse*
	D=Type IV	1X225=225w	H=347-480V			C=Custom (Consult Factory)		DF=Double Fuse*
		1X256=256w						SP=Surge Protection
								R3=3-Pin Twist Lock Photocell Receptacle
								R5=5-Pin Twist Lock Photocell Receptacle
								R7=7-Pin ANSI C136.41—2013 Twist Lock Photocell Receptacle

*120-277V Only

KARD=Kitty Hawk Arm, Optics Rotated Right Auto Dealership Mount
 KALD=Kitty Hawk Arm, Optics Rotated Left Auto Dealership Mount
 SFRD=Slipfitter, Optics Rotated Right Auto Dealership Mount
 SFLD=Slipfitter, Optics Rotated Left Auto Dealership Mount
 MARD=Mounting Arm Adapter, Optics Rotated Right Auto Dealership Mount
 MALD=Mounting Arm Adapter, Optics Rotated Left Auto Dealership Mount

Mounting Options:



AKH45Q w/ Kitty Hawk Arm (KA)

Kitty Hawk Die-Cast Mounting Arm, Bronze Powdercoat Finish, Includes Hardware. Mounts Directly to Square Poles. Replacement Model AKH45AZ.

AKH45Q w/ Pole Mounting Arm Adaptor (MA)

Die-Cast Adaptor for 2 1/2" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Replacement Model ALMAAZ.

AKH45Q w/ "SF" External Mount Slipfitter (SF)

External Mount Die-Cast Adjustable Slipfitter for 2 1/2" Tenons, Bronze Powdercoat Finish, Includes Hardware. Replacement Model FL73SFZX.

Auto Dealership Front Line Rotated Optics

(Factory Configured Mounting Option)



Rotate OPTICS Left

Rotate OPTICS Right

Available for Kitty Hawk Arm (KALD, KARD); Mounting Arm Adapter (MALD, MARD); and Slipfitter (SFLD, SFRD) above



AKH45Q w/ Yoke (Y)

Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat Finish, Includes Hardware. Replacement Model AKH45YZ.

AKH45Q w/ Two-Piece Swivel Bracket (BR)







Two-Piece Stamped Steel Adjustable Bracket, Bronze Powdercoat Finish, Includes Hardware. Replacement Model FL73BRZ.

AKH45Q w/ Wall Mount (WM)

Wall Bracket, Heavy-Duty Stamped Steel, Bronze Powdercoat Finish, Includes Hardware. Replacement Model WBR2Z

EPA (Effective Projected Area)

Shown with Large Kitty Hawk Arm mounting.

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)	Configuration	EPA (Sq. Ft.)	Weight (Lbs.)	Configuration	EPA (Sq. Ft.)	Weight (Lbs.)	Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
 1	1.00	33 Lbs	 2@180° Mount	2.00	66 Lbs	 3@90° Mount	2.20	99 Lbs	 4@90° Mount	2.20	132 Lbs
			 2@90° Mount	1.36	66 Lbs	 3@120° Mount	2.00	99 Lbs			

Accessories & Replacement Parts:



Round Pole & Wall Adaptors for KA Arm



AKH40RPZ

Die-Cast Adaptor for 4" to 6" Round Poles, Bronze Powdercoat Finish.



AKH40WMZ

Die-Cast Wall Mount Adaptor, Bronze Powdercoat Finish.

Pole Tenon Spoke Brackets



PTSB1SZ



PTSB290SZ



PTSB2180SZ



PTSB390SZ*



PTSB3120SZ*



PTSB490SZ*

2 3/4" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Mounts to 2 3/4" Vertical Pole Top Tenons. *Non-stock item. Consult factory for lead time

Accessories (Order Separately, Field Installed)	Replacement Parts (Order Separately, Field Installed)
P18131 Twist Lock Non-Shorting (Open) Cap Disconnects Service to Fixture for Temporary or Permanent Disabling (Fixture Always Off). IP65, 480V Maximum.	AKH45GL Tempered Clear Flat Glass Lens. AKH45GLSS SoftLED Flat Glass Lens
P18132 Twist Lock Shorting Cap Provides Fixed Service to Fixture (Fixture Always on). IP65, Rated Load 7200w Tungsten.	AKH45GLP Tempered Prismatic Flat Glass Lens.
P18140 110-120VAC Instant Twist Lock Photocell	P17117 Internal Microwave Sensor with Dimming, 120-277VAC, 50/60Hz. See P17117 Specification Page for Details.
P18152 277VAC Time Delay Twist Lock Photocell	P17123 Internally Mounted Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19', 120-277VAC, 50/60Hz
P18156 120-277VAC Universal Twist Lock Photocell	
P18157 480VAC Time Delay Twist Lock Photocell. For 480V use only.	
ACCHSG1Z Die Cast Accessory Housing for Installing Sensors or Other Lighting Controls, Bronze Powdercoat Finish	
ACCHSG3 Bronze UV-Stabilized Polycarbonate Housing for Installing Sensors, Includes Sensor Bracket and Gasket.	
AKH45GSZ Aluminum Glare/House Side Shield, Bronze Powdercoat Finish, Includes Hardware.	
AKH45WG Wire Guard, Stainless Steel Construction, Includes Hardware.	

Sensors not available for 480V.



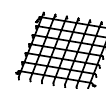
ACCHSG1Z



ACCHSG3



Aluminum Glare/House Side Shield



AKH45WG



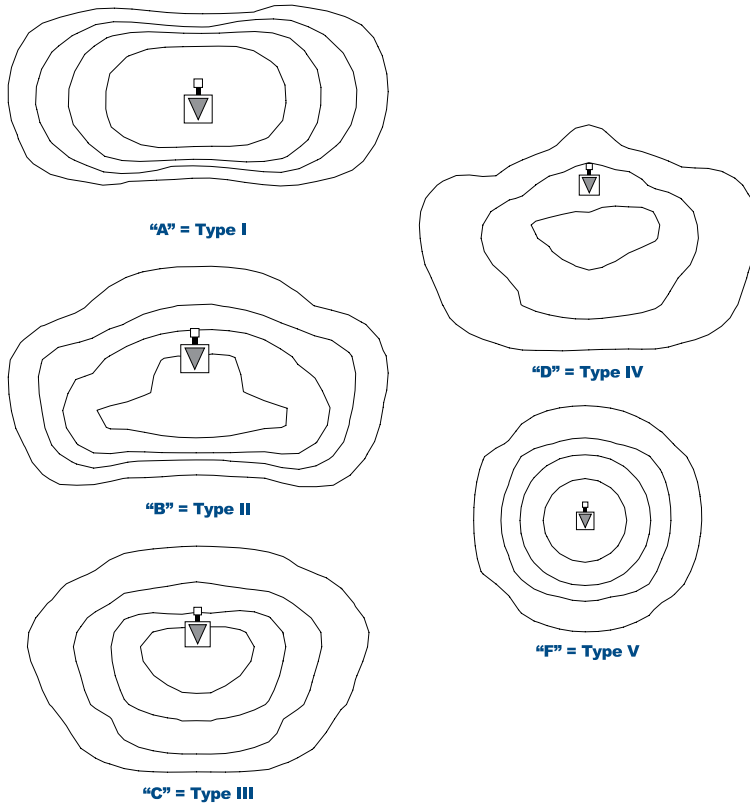
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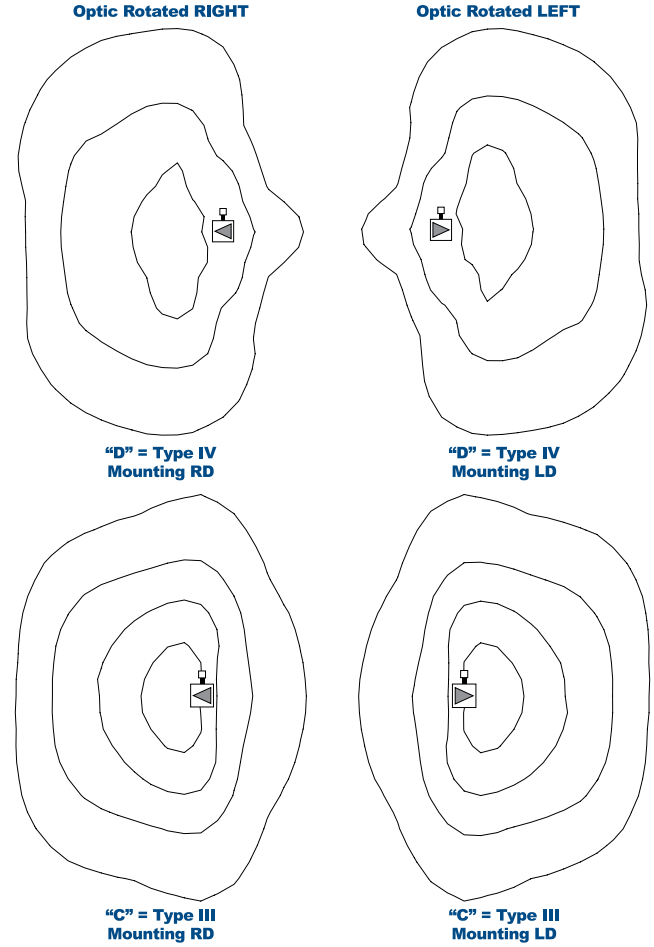
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Photometric Data

IES Roadway Distribution Optics

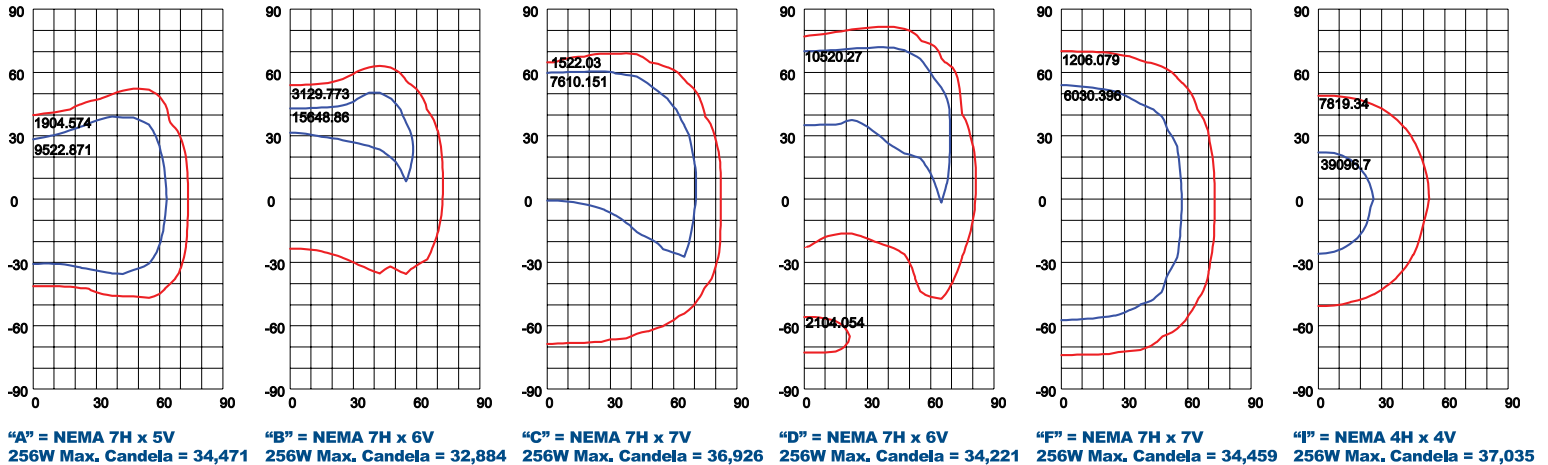


Auto Dealership Front Line Rotated Optics (Factory Configured Mounting Option)



Available for Kitty Hawk Arm (KALD, KARD); Mounting Arm Adapter (MALD, MARD); and Slipfitter (SFLD, SFRD).

NEMA Flood Light Distribution Optics



Photometric Performance

					Optimized					Optimized	
"Wattage (Catalog Logic)"		99W (1X99)	111W (1X111)	133W (1X133)	136W (1X136)	167W (1X167)	183W (1X183)	199W (1X199)	225W (1X225)	256W (1X256)	
Input Watts		104.8	116.5	139.5	148.1	178.8	193.7	210.6	241.1	271.2	
Optic	CCT	Delivered Lumens									
A = Type I NEMA 7H x 5V (130°H x 70°V)	3000K	-	-	-	-	-	-	-	-	-	
	4000K	12,831	14,386	17,237	-	21,644	23,717	25,791	-	33,178	
	5000K	13,331	14,946	17,909	-	22,487	24,641	26,796	-	34,471	
	BUG Rating	B3-U0-G2	B3-U0-G2	B4-U0-G2	-	B4-U0-G3	B4-U0-G3	B4-U0-G3	-	B5-U0-G3	
B = Type II NEMA 7H x 6V (110°H x 30°V)	3000K	-	-	-	-	-	-	-	-	-	
	4000K	12,240	13,724	16,444	-	20,648	22,626	24,604	-	31,651	
	5000K	12,717	14,259	17,084	-	21,452	23,507	25,563	-	32,884	
	BUG Rating	B2-U0-G2	B2-U0-G2	B3-U0-G2	-	B3-U0-G3	B3-U0-G3	B3-U0-G3	-	B3-U0-G3	
C = Type III NEMA 7H x 7V (120°H x 70°V)	3000K	12,922	14,489	17,360	-	21,798	23,887	25,975	-	33,416	
	4000K	13,446	15,076	18,064	21,166	22,682	24,855	27,028	34,305	34,770	
	5000K	13,970	15,664	18,768	21,990	23,566	25,824	28,082	35,641	36,125	
	BUG Rating	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	
C-xRD or C-xLD = Type III, Auto Front Rotated RIGHT or LEFT	3000K	-	-	-	-	-	-	-	-	-	
	4000K	-	-	-	-	-	-	-	-	-	
	5000K	-	-	-	-	-	-	-	36,387	36,926	
	BUG Rating	-	-	-	-	-	-	-	B5-U1-G5	B5-U1-G5	
D = Type IV NEMA 7H x 6V (110°H x 50°V)	3000K	-	-	-	-	-	-	-	-	-	
	4000K	13,629	15,282	18,312	21,455	22,992	23,545	25,604	34,775	32,937	
	5000K	14,160	15,877	19,024	22,291	23,888	24,462	26,601	36,128	34,221	
	BUG Rating	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	
D-xRD or D-xLD = Type IV, Auto Front Rotated RIGHT or LEFT	3000K	-	-	-	-	-	-	-	-	-	
	4000K	-	-	-	-	-	-	-	-	-	
	5000K	-	-	-	-	-	-	-	33,047	33,537	
	BUG Rating	-	-	-	-	-	-	-	B5-U1-G5	B5-U1-G5	
F = Type V NEMA 7H x 7V (115°H x 110°V)	3000K	12,327	13,821	16,560	-	20,793	22,785	24,778	-	31,875	
	4000K	12,826	14,381	17,231	20,190	21,636	23,709	25,782	32,723	33,167	
	5000K	13,326	14,941	17,903	20,976	22,479	24,633	26,787	33,998	34,459	
	BUG Rating	B3-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G1	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	
I = Narrow Beam NEMA 4H x 4V (30°H x 30°V)	3000K	-	-	-	-	-	-	-	-	-	
	4000K	-	-	-	-	-	-	-	-	-	
	5000K	14,320	16,059	19,238	-	24,160	26,475	28,791	-	37,035	
	BUG Rating	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	

Projected Lumen Maintenance

Data shown for 5000 CCT		Compare to MH			
TM-21-11		Initial	25,000 Hrs	50,000 Hrs	100,000 Hrs
Calculated LED Life					
L70 Lumen Maintenance @ 25°C / 77°F		1.00	0.97	0.95	0.90
L70 Lumen Maintenance @ 50°C / 122°F		1.00	0.94	0.88	0.76
L80 Lumen Maintenance @ 40°C / 104°F		1.00	0.95	0.91	0.81

NOTES:

1. Projected per IESNA TM-21-11. Data references the extrapolated performance projections for the base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.
2. Compare to MH box indicates suggested Light Loss Factor (LLF) to be used when comparing to Metal Halide (MH) systems.