LEDALUX®

KH45Q- LARGE KITTY HAWK AREA, WALL & FLOOD LIGHT

eZ SPEC

CATALOG NUMBER:

NOTES:

BUY AMERICAN ACT COMPLIANT

FIXTURE TYPE:

PROJECT:

L70 25°C **290,000 Hours**

NEW
EXPANDED Wattages
OPTIMIZED OPTICS
Auto Dealership Rotated Optics

Shown with "WM" Wall Mount Bracket Option.

Shown with "MA" Pole Mounting Arm Adpator Option.

Shown with House Side Shield

Shown with "Y" Yoke Option.

Shown with "BR" Bracket Option.

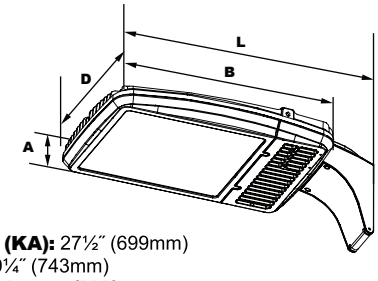
Shown with "SF" Slipfitter Mounting Option.

LED Eco-Smart

IP66

DIMENSIONS

Width (D)	15¾″ (400mm)
Length (B)	22″ (559mm)
Height (A)	4″ (102mm)
Length with Mount (L)	**Kitty Hawk Arm (KA):** 27½″ (699mm) **Slipfitter (SF):** 29¼″ (743mm) **Mounting Arm Adaptor (MA):** 26⅛″ (664mm) **Yoke (Y):** 26¼″ (667mm) **Bracket (BR):** 25¾″ (654mm) **Wall Mount Bracket (WM):** 605mm (23¼″)



PRODUCT DESCRIPTION

The KH45 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 KH45 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.

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, 2Yoke, 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.

LEDALUX®

KH45Q- LARGE KITTY HAWK AREA, WALL & FLOOD LIGHT

eZ SPEC

L70 25°C 290,000 Hours

Standard Models

ORDERING INFORMATION

EXAMPLE: KH45QF1X256U5KCZKASP

Model	Optics/Beam	Wattage	Driver	CCT	Lens	Color	Mounting	Options
KH45Q = Large Bentley Kitty Hawk Area, Wall, and Flood Light	A=Type I/NEMA 7H x 5V B=Type II/NEMA 7H x 6V C=Type III/NEMA 7H x 7V D=Type IV/NEMA 7H x 6V F=Type V/NEMA 7H x 7V I=Narrow Beam/NEMA 4H x 4V* *Use with 5K Models Only. See Page 5 for Distribution Information.	1X99 =99w 1X111 =111w 1X133 =133w OPTIMIZED 1X136 =136w* 1X167 =167w 1X183 =183w 1X199 =199w OPTIMIZED 1X225 =225w* 1X256 =256w *C, D, & F Optics Only	U=120-277V H=347-480V	3K =3000K* 4K =4000K 5K =5000K *Only for C & F Optics. Not available in 136W & 225W	C=Standard Clear Flat Glass Lens S=SoftLED Flat Glass Lens P=Clear Flat Prismatic Glass Lens* *Use with Type V Optic Only.	Z=Bronze C=Custom (Consult Factory)	KA =Kitty Hawk Arm SF = Slipfitter MA= Mounting Arm Adapter Y=Yoke BR =Two-Piece Swivel Bracket WM=Wall Mount Bracket NM=No Mount	SF =Single Fuse (120-277V Only) DF =Double Fuse (120-277V Only) SP =Surge Protection M1=Motion Sensor, IR for mounting heights of 20ft to 35ft M2=Motion Sensor, IR for mounting heights of 18ft or less 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 S23 =Internal Microwave Sensor with dimming for mounting heights of 35´ or less (120-277V Only) S43 =Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19', (120-277V Only)

Auto Dealership Front Line Models

ORDERING INFORMATION

EXAMPLE: KH45QF1X256U5KCZKARDSP

Model	Optics/Beam	Wattage	Driver	CCT	Lens	Color	Options
KH45Q=Large Bentley Kitty Hawk Area Light	C=Type III D=Type IV See Page 5 for Distribution Information.	OPTIMIZED 1X225=225w 1X256=256w	U=120-277V H=347-480V	5K=5000K	C =Standard Clear Flat Glass Lens	Z=Bronze C=Custom (Consult Factory)	SF =Single Fuse (120-277V Only) DF=Double Fuse (120-277V Only) 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

Mounting
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

KH45Q w/ Kitty Hawk Arm (KA)

Kitty Hawk Die-Cast Mounting Arm, Bronze Powdercoat Finish, Includes Hardware. Mounts Directly to Square Poles. Replacement Model KH45AZ.

KH45Q w/ Pole Mounting Arm Adaptor (MA)

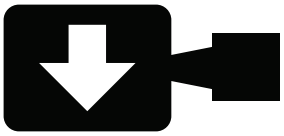
Die-Cast Adaptor for 2⅜" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Replacement Model ALMAAZ.

KH45Q w/ "SF" External Mount Slipfitter (SF)

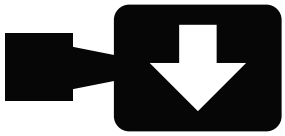
External Mount Die-Cast Adjustable Slipfitter for 2⅜" Tenons, Bronze Powdercoat Finish, Includes Hardware. Replacement Model FL73SFXZ.

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

KH45Q w/ Yoke (Y)

Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat Finish, Includes Hardware. Replacement Model KH45YZ.

KH45Q w/ Two-Piece Swivel Bracket (BR)

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

KH45Q w/ Wall Mount (WM)

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

Specifications subject to change without notice. Rev. 111320

EPA (EFFECTIVE PROJECTED AREA)

Shown with Large Kitty Hawk Arm mounting.

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
1	1.00	33 Lbs

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
2@180° Mount	2.00	66 Lbs
2@90° Mount	1.36	66 Lbs

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
3@90° Mount	2.20	99 Lbs
3@120° Mount	2.00	99 Lbs

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
4@90° Mount	2.20	132 Lbs

ACCESSORIES & REPLACEMENT PARTS

Round Pole & Wall Adaptors for KA Arm

KH40RPZ
Die-Cast Adaptor for 4" to 6" Round Poles, Bronze Powdercoat Finish.

KH40WMZ
Die-Cast Wall Mount Adaptor, Bronze Powdercoat Finish.

Pole Tenon Spoke Brackets

PTSB1SZ

PTSB290SZ

PTSB2180SZ

PTSB390SZ*

PTSB3120SZ*

PTSB490SZ*

2⅜" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Mounts to 2⅜" Vertical Pole Top Tenons. *Non-stock item. Consult factory for lead time

Accessories (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.
P18132	Twist Lock Shorting Cap Provides Fixed Service to Fixture (Fixture Always on). IP65, Rated Load 7200w Tungsten.
P18140	110-120VAC Instant Twist Lock Photocell
P18150	120VAC Time Delay Twist Lock Photocell
P18152	277VAC Time Delay Twist Lock Photocell
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.
KH45GSZ	Aluminum Glare/House Side Shield, Bronze Powdercoat Finish, Includes Hardware.
KH45WG	Wire Guard, Stainless Steel Construction, Includes Hardware.

Sensors not available for 480V.

Replacement Parts (Order Separately, Field Installed)	
KH45GL	Tempered Clear Flat Glass Lens.
KH45GLSS	SoftLED Flat Glass Lens
KH45GLP	Tempered Prismatic Flat Glass Lens.
P17117	Internal Microwave Sensor with Dimming, 120-277VAC, 50/60Hz. See P17117 Specification Page for Details.
P17123	Internally Mounted Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19', 120-277VAC, 50/60Hz

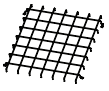
P17117

P17123

ACCHSG1Z

ACCHSG3

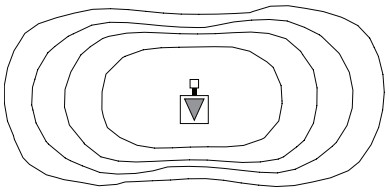
KH45GSZ
Aluminum Glare/House Side Shield



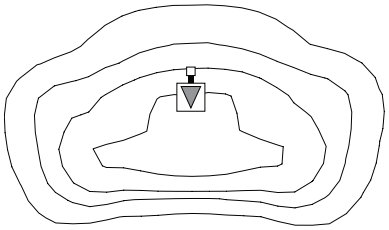
KH45WG

PHOTOMETRIC DATA

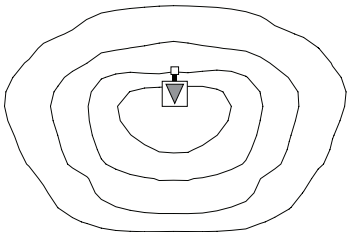
IES Roadway Distribution Optics



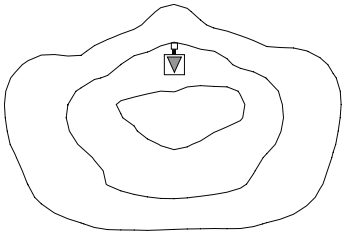
"A" = Type I



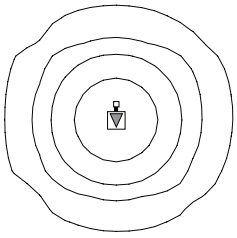
"B" = Type II



"C" = Type III



"D" = Type IV

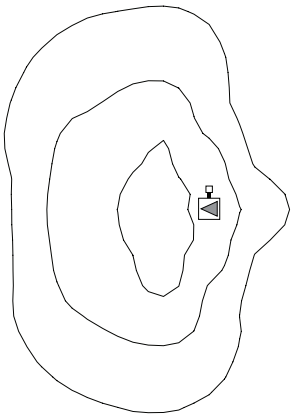


"F" = Type V

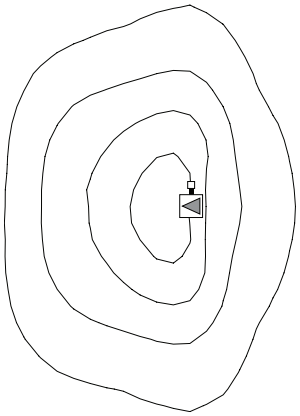
Auto Dealership Front Line Rotated Optics

(Factory Configured Mounting Option)

Optic Rotated RIGHT

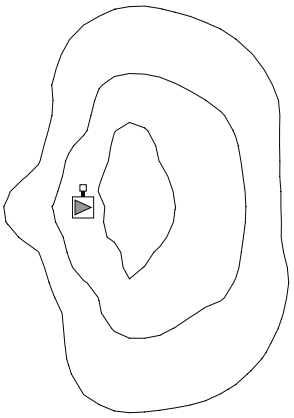


"D" = Type IV Mounting RD

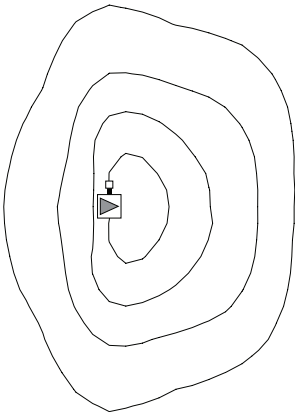


"C" = Type III Mounting RD

Optic Rotated LEFT



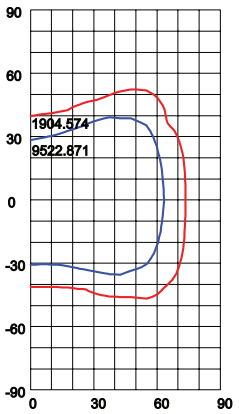
"D" = Type IV Mounting LD



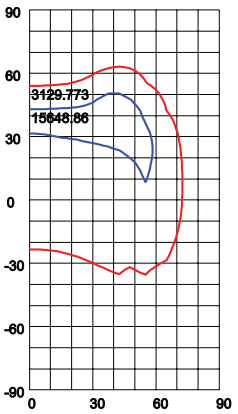
"C" = Type III Mounting LD

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

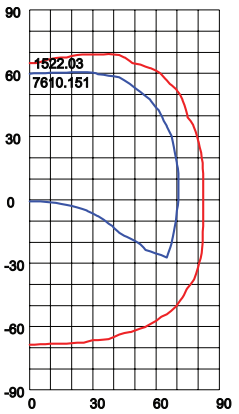
NEMA Flood Light Distribution Optics



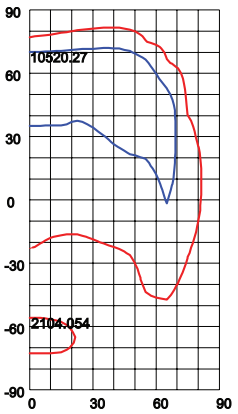
"A" = NEMA 7H x 5V
256W Max. Candela = 34,471



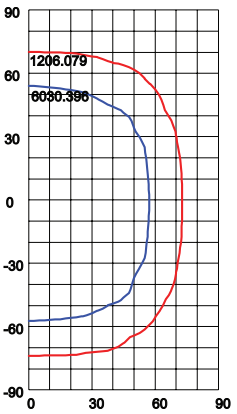
"B" = NEMA 7H x 6V
256W Max. Candela = 32,884



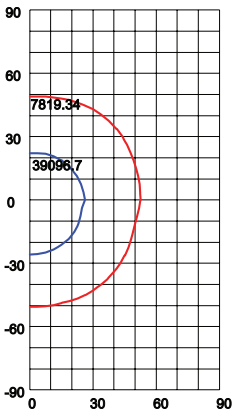
"C" = NEMA 7H x 7V
256W Max. Candela = 36,926



"D" = NEMA 7H x 6V
256W Max. Candela = 34,221



"F" = NEMA 7H x 7V
256W Max. Candela = 34,459



"I" = NEMA 4H x 4V
256W Max. Candela = 37,035

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	290,000
L70 Lumen Maintenance @ 50°C / 122°F	1.00	0.94	0.88	0.76	84,000
L80 Lumen Maintenance @ 40°C / 104°F	1.00	0.95	0.91	0.81	108,000

NOTES:
1. Projected per IESNA TM-21-11. Data references the extrapolated performance projections for the 525mA 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.