

KH45Q DuraLED 1800K CCT LED Large Kitty Hawk Area, Wall, and Flood Light



Project Information	
Project Name:	Fixture Type:
Complete Catalog #:	Date:
Comments:	

The DuraGuard KH45Q luminaire is available in two wattages with a wide choice of mounting configurations. The **1800K CCT LED** arrays are the latest alternative to Low Pressure Sodium (LPS) designed for dark sky preservation without loss of lumens. Typical applications include general area, parking, flood, security, and accent lighting for retail centers, industrial parks, schools and universities, public transit and airports, office buildings and medical facilities. Mounting heights of 16 to 25 feet can be used based on light level and uniformity requirements.

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

MOUNTING OPTIONS:

Mounts with Kitty Hawk Arm, Adjustable Slipfitter, 2 3/8" Diameter Mounting Arm Adaptor, Yoke, Two-Piece Bracket or Wall Mount Bracket. (Factory Installed)

1800K CCT LED:

Aluminum Boards. Delivers 1800K CCT and can be successfully applied on projects requiring a nominal CCT range of 1700K to 2200K CCT. See Page 3 for Spectral Chart.

WATTAGE:

76w: Array: 76w, System: 82w (55w SOX 1800K CCT LED)
164w: Array: 163.8w, System: 176.4w (135w SOX 1800K CCT LED)



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 DuraGuard 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 4 for Projected Lumen Maintenance Table.



Shown with "KH45A" Kitty Hawk Arm Mounting Option.



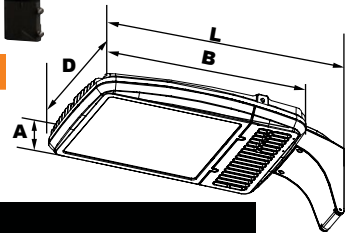
Shown with "WM" Wall Mount Bracket Option.



Shown with "SSF" Slipfitter Mounting Option.

Dimensions

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



Length with Mount (L)

Kitty Hawk Arm (KH45A):	27 1/2" (699mm)
Slipfitter (SSF):	29 1/4" (743mm)
Mounting Arm Adaptor (ALMAAA):	26 1/8" (664mm)
Yoke (KH45Y):	26 1/4" (667mm)
Bracket (SSB):	25 3/4" (654mm)

1800K CCT LED

Complete Units Ordering Information
Example: **KH45QF1X164UHACZSSFSP**

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KH45Q			HA					
Model	Optics/Beams	Wattage	Driver	CCT	Lens	Color	Mounting	Options
		1X76 =76w 1X164 =164w	U =120-277V H =347-480V	HA =1800K		Z =Bronze C =Custom (Consult Factory)	KH45A =Kitty Hawk Arm SSF = Slipfitter ① ALMAA = Mounting Arm Adaptor KH45Y =Yoke SSB =Two-Piece Swivel Bracket ① WM =Wall Mount Bracket NM =No Mount	
	C =Type III/NEMA 7H x 7V* F =Type V/NEMA 7H x 7V			C =Standard Clear Flat Glass Lens S =SoftLED Flat Glass Lens* P =Clear Flat Prismatic Glass Lens*				
	*76w Model Only See Page 4 for Distribution Information.			*Type V Models Only				

KH45Q=DuraLED 1800K CCT LED Large Kitty Hawk Area Light

Notes

① Maximum tilt angle of 45° above horizontal with R3, R5, or R7 photocell receptacle options

SF=Single Fuse*
DF=Double Fuse*
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 ①
R5=5-Pin Twist Lock Photocell Receptacle ①
R7=7-Pin ANSI C136.41—2013 Twist Lock Photocell Receptacle ①
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*
***120-277V Models Only.**



Specifications subject to change without notice.

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MOUNTING OPTIONS:



KH45Q Shown with "KH45A" Kitty Hawk Arm,
Kitty Hawk Die-Cast Mounting Arm, Bronze Powdercoat Finish,
Includes Hardware. Mounts Directly to Square Poles.



KH45Q Shown with "ALMAA" Pole Mounting Arm Adaptor,
Die-Cast Adaptor for 2 3/4" Horizontal Mounting Arms, Bronze
Powdercoat Finish, Includes Hardware.



KH45Q Shown with "KH45Y" Yoke,
Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat Finish, Includes
Hardware.



KH45Q Shown with "SSF" External Mount Slipfitter,
External Mount Die-Cast Adjustable Slipfitter for 2 3/4" Tenons,
Bronze Powdercoat Finish, Includes Hardware.



KH45Q Shown with "SSB" Two-Piece Swivel Bracket,
Two-Piece Stamped Steel Adjustable Bracket, Bronze Powdercoat Finish,
Includes Hardware.






KH45Q Shown with "WM" Wall Mount Bracket,
Wall Bracket, Heavy-Duty Stamped Steel, Bronze
Powdercoat Finish, Includes Hardware.



Notes


① Maximum tilt angle of 45° above horizontal with R3, R5, or R7 photocell receptacle options

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:



Mounting Accessories (Order Separately, Field Installed)		Accessories (Order Separately, Field Installed)		Replacement Parts (Order Separately, Field Installed)	
KH40RPZ	Die-Cast Adaptor for 4" to 6" Round Poles, Bronze Powdercoat Finish. Use with KH45A Kitty Hawk Mounting Arm only.	P18131	Twist Lock Non-Shorting (Open) Cap Disconnects Service to Fixture for Temporary or Permanent Disabling (Fixture Always Off). IP65, 480V Maximum.	KH45GL	Tempered Clear Flat Glass Lens.
KH40WMZ	Die-Cast Wall Mount Adaptor, Bronze Powdercoat Finish. Use with KH45A Kitty Hawk Mounting Arm only.	P18132	Twist Lock Shorting Cap Provides Fixed Service to Fixture (Fixture Always on). IP65, Rated Load 7200w Tungsten.	KH45GLSS	SoftLED Flat Glass Lens
PTSB1SZ	Single Pole Tenon Spoke Bracket, 2 3/4" Horizontal Mounting Arm, Bronze Powdercoat Finish, Includes Hardware.	P18140	110-120VAC Instant Twist Lock Photocell	KH45GLP	Tempered Prismatic Flat Glass Lens.
PTSB290SZ	Twin Pole Tenon Spoke Bracket, 2 3/4" Horizontal 90° Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.	P18152	277VAC Time Delay Twist Lock Photocell	KH45AZ	Kitty Hawk Die-Cast Mounting Arm, Bronze Powdercoat Finish, Includes Hardware. Mounts Directly to Square Poles.
PTSB2180SZ	Twin Pole Tenon Spoke Bracket, 2 3/4" Horizontal 180° Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.	P18156	120-277VAC Universal Twist Lock Photocell	ALMAAZ	Die-Cast Adaptor for 2 3/4" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.
PTSB390SZ*	Triple Pole Tenon Spoke Bracket, 2 3/4" Horizontal 90° Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.	P18157	480VAC Time Delay Twist Lock Photocell. For 480V use only.	KH45YZ	Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat Finish, Includes Hardware.
PTSB3120SZ*	Triple Pole Tenon Spoke Bracket, 2 3/4" Horizontal 120° Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.	ACCHSG1Z	Die Cast Accessory Housing for Installing Sensors or Other Lighting Controls, Bronze Powdercoat Finish	SSBZ	Two-Piece Stamped Steel Adjustable Bracket, Bronze Powdercoat Finish, Includes Hardware.
PTSB490SZ*	Quad Pole Tenon Spoke Bracket, 2 3/4" Horizontal 90° Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.	KH45GSZ	Aluminum Glare/House Side Shield, Bronze Powdercoat Finish, Includes Hardware.	WBR2Z	Wall Bracket, Heavy-Duty Stamped Steel, Bronze Powdercoat Finish, Includes Hardware.
		KH45WG	Wire Guard, Stainless Steel Construction	P17117	Internal Microwave Sensor with Dimming, 120-277VAC, 50/60Hz. See P17117 Specification Page for Details.
		ACCHSG3	Bronze UV-Stabilized Polycarbonate Housing for Installing Sensors, Includes Sensor Bracket and Gasket.	P17123	Internally Mounted Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19', 120-277VAC, 50/60Hz

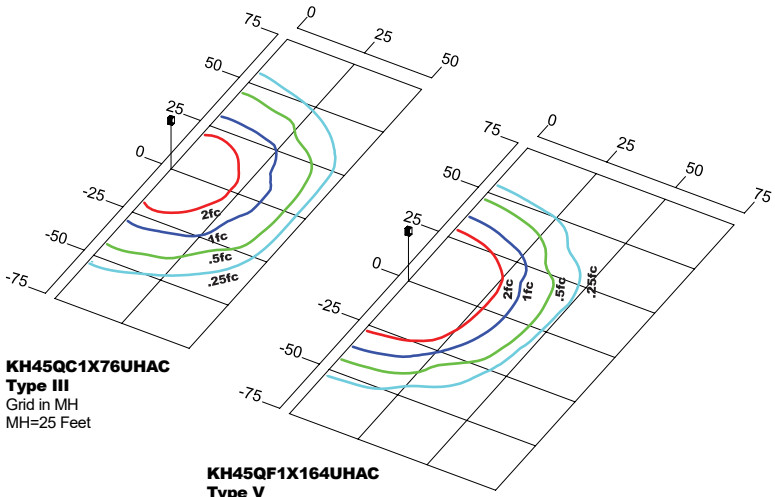
*Non-stock item. Consult factory for lead time.

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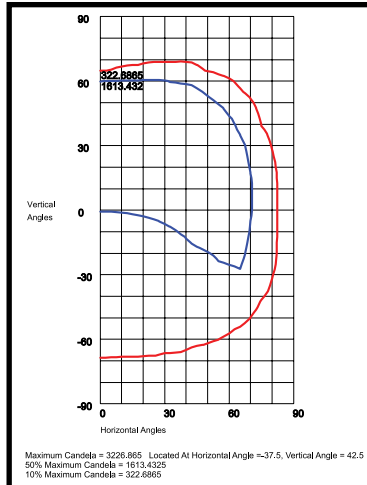


PHOTOMETRIC DATA

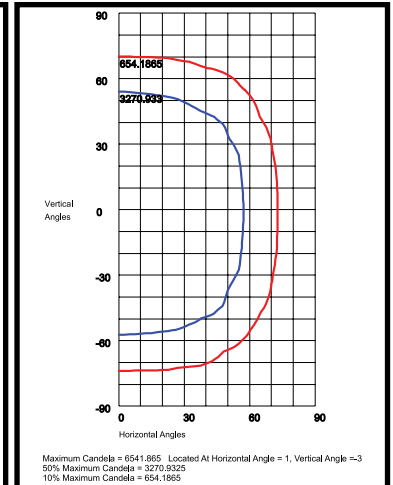


KH45QC1X76UHAC
Type III
Grid in MH
MH=25 Feet

KH45QF1X164UHAC
Type V
Grid in MH
MH=25 Feet

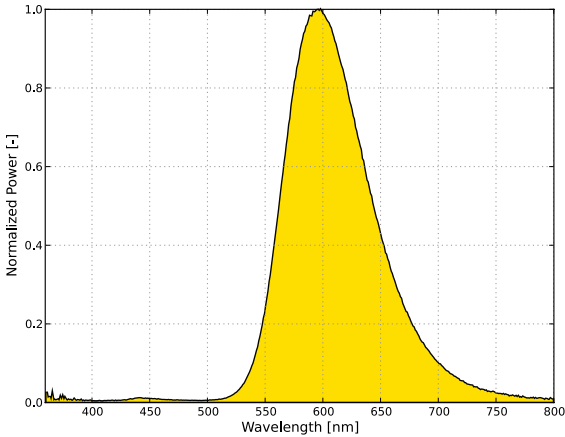


KH45QC1X76UHAC
120"H x 70"V Beam, NEMA 7H x 7V



KH45QF1X164UHAC
115"H x 110"V Beam, NEMA 7H x 7V

SPECTRAL CHART



1800K CCT LEDs provide the same visual light output as traditional Low Pressure Sodium systems, but provide substantially reduced energy and maintenance costs, and increased lifespan and lumen maintenance values.

1800K CCT LED: Dominant Wavelength 588.8-592.6
Low Pressure Sodium Wavelength: 589 and 589.6

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PHOTOMETRIC PERFORMANCE

LED Board Watts	Input Watts	1800K CCT LED						
		Optics	Lumens	LPW	B	U	G	
1800K CCT LED 76w	82	C	Type III	7,659	94	2	0	2
		F	Type V	8,825	108	3	0	1
1800K CCT LED 164w	176	F	Type V	18,691	106	4	0	1

LED Board Watts	Input Watts	1800K CCT LED			
		Optics	Lumens	LPW	
1800K CCT LED 76w	82	C	120°H x 70°V, NEMA 7H x 7V	7,604	93
		F	115°H x 110°V, NEMA 7H x 7V	8,848	108
1800K CCT LED 164w	176	F	115°H x 110°V, NEMA 7H x 7V	18,739	106

PROJECTED LUMEN MAINTENANCE

Data shown for 1800K CCT LED	Input Watts	Compare to LPS				
		Initial	25,000 Hrs	50,000 Hrs	100,000 Hrs	Calculated LED Life
TM-21-11						
L70 Lumen Maintenance @ 25°C / 77°F	All wattages up to and including 176w	1.00	0.97	0.94	0.89	272,000

- 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 LPS box indicates suggested Light Loss Factor (LLF) to be used when comparing to Low Pressure Sodium (LPS) systems