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



Shown with "BR" Bracket Option.



Shown with "WM" Wall Mount Bracket Option.



Shown with "MA" Pole Mounting Arm Adpator Option.



Shown with "Y" Yoke Option.

The DuraGuard KH45Q 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.

PRODUCTS INC®

DuraGuard

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%" Diameter Mounting Arm Adapter, Yoke, Two-Piece Bracket or Wall Mount Bracket. (Factory Installed)

DURALED 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 DuraGuard Controls and May Not Function Properly With Controls Supplied By Others. Fixtures are NOT Designed for Use with Line Voltage Dimmers.

WARRANTY:

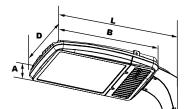
5-Year Warranty for -40°C to +50°C Environment.

See Page 5 for Projected Lumen Maintenance Table.

DuraLED TECHNOLOGY



NEW EXPANDED WATTAGES OPTIMIZED OPTICS Auto Dealership Rotated Optics



Dimensions

Width (D)	15¾ (400mm)				
Length (B)	22" (559mm)				
Height (A)	4" (102mm)				

Length with Mount (L)

Kitty Hawk Arm (KH45A): 27½" (699mm) Slipfitter (SSF): 29¼" (743mm) Mounting Arm Adaptor (ALMAAA): 26¼" (664mm) Yoke (KH45Y): 26¼" (667mm) Bracket (SSB): 25¾" (654mm) Wall Mount Bracket (WM): 605mm (23¼")



DesignLights Consortium¹⁴ Qualified Luminaires: KH45QA1X[167 256][U H]5KC*** KH4 KH45QB1X[167 256][U H]5KC*** KH4

KH45QD1X167[U H]5KC*** KH45QF1X[167 256][U H]5KC***



Specifications subject to change without notice.



\$43=Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19', (120-277V Only)

SF=Single Fuse (120-277V Only) DF=Double Fuse (120-277V Only) SP=Surge Protection R3=3-Pin Twist Lock Photocell Receptacle

Model SSFZ.

STANDARD MODELS:

Complete Units Ordering Information Example: KH45QF1X256U5KCZSSFSP

KH45Q

Model	Optics/Beams	Wattage	Driver	ССТ	Lens	Color	Mounting	Options	
KH45Q=Large A=Type I/NEMA 7H x 5V Hampton Kitty Hawk B=Type II/NEMA 7H x 6V Area, Wall and Flood C=Type II/NEMA 7H x 7V Light D=Type IV/NEMA 7H x 6V F=Type V/NEMA 7H x 7V Isomorphic II/NEMA 7H x 7V Hampton Kitty Hawk Here II/NEMA 7H x 7V Area, Wall and Flood Here II/NEMA 7H x 7V Isomorphic II/NEMA 7H x 7V Isomorphic II/NEMA 7H x 7V Isomorphic II/NEMA 7H x 7V Isomorphic II/NEMA 7H x 7V	1X99 =99w 1X111 =111w 1X133 =133w	U=120-277V H=347-480V	3K =3000K* 4K =4000K 5K =5000K		Z =Bronze C =Custom (Consult Factory)	C=Custom			
	OPTIMIZED 1X136 =136w*		*Only for C & F Op available in 136 &		KH45A=Kitty Hawk Arm SSF= Slipfitter				
	*Use with 5K Model Only.	1X167 =167w		C=Standard Clear Flat Glass Le		ALMAA= Mounting Arm Adapter KH45Y=Yoke			
See Page 5 for Distribution Information.	1X183 =183w 1X199 =199w		S=SoftLED Flat Gla P=Clear Flat Prisma		SSB=Two-Piece Swivel Bracket WM=Wall Mount Bracket				
	mornauon.	OPTIMIZED 1X225 =225w*		*Use with Type V Optic Only. SF=Single Fuse (120-27 DF=Double Fuse (120-2 SP=Surge Protection		NM=No Mount			
		1X256 =256w			uble Fuse (120-277V O				
		*C, D & F Optics Only		M1=Mo M2=Mo R3=3-P R5=5-P R7=7-P	less. (120-277V O				

AUTO DEALERSHIP FRONT LINE MODELS:

Complete Units Ordering Information Example: KH45QF1X256U5KCZKARDSP

KH45Q				5K	C							
Model	Optics/Beams	Wattage	Driver	ССТ	Lens	Color	Mounting	Options				
KH45Q =Large Hampton Kitty Hawk	C=Type III D=Type IV	OPTIMIZED 1X225 =225w	U=120-277V H=347-480V	5K =5000K	C=Standard Clear Flat Glass Lens	Z =Bronze C =Custom						
Area Light	See Page 5 for Distribution Information.	1X256 =256w	(Consult Factory) 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 Right Auto Dealership Mount MARD=Mounting Arm Adapter, Optics Rotated Left Auto Dealership Mount MALD=Mounting Arm Adapter, Optics Rotated Left Auto Dealership Mount									

MOUNTING OPTIONS:



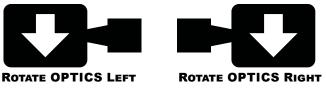
KH45Q Shown with "KH45A" Kitty Hawk Arm, Kitty Hawk Die-Cast Mounting Arm, Bronze Powdercoat Finish, Includes Hardware. Mounts Directly to Square Poles. Replacement Model KH45AZ.



KH45Q Shown with "ALMAA" Pole Mounting Arm Adaptor, Die-Cast Adaptor for 2%" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Replacement Model ALMAAZ.

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) above

KH45Q Shown with "SSF" External Mount Slipfitter, External Mount Die-Cast Adjustable Slipfitter for 2%" Tenons,

Bronze Powdercoat Finish, Includes Hardware. Replacement

R5=5-Pin Twist Lock Photocell Receptacle R7=7-Pin ANSI C136.41—2013 Twist Lock Photocell Receptacle



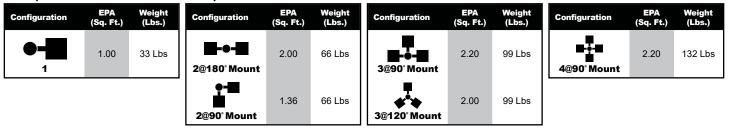
KH45Q Shown with "KH45Y" Yoke, Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat Finish, Includes Hardware. Replacement Model KH45YZ.

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

KH45Q Shown with "WM" Wall Mount Bracket, Wall Bracket, Heavy-Duty Stamped Steel, Bronze Powdercoat Finish, Includes Hardware. Replacement Model WBR2Z Soecifications subject to chance without notice.



EPA (EFFECTIVE PROJECTED AREA) SHOWN WITH LARGE KITTY HAWK ARM MOUNTING



ACCESSORIES & REPLACEMENT PARTS:



Accessories Replacement Parts (Order Separately, Field Installed) (Order Separately, Field Installed) P18131 Twist Lock Non-Shorting (Open) Cap KH45GL Tempered Clear Flat Glass Lens. Disconnects Service to Fixture for KH45GLSS SoftLED Flat Glass Lens Temporary or Permanent Disabling (Fixture Always Off). IP65, 480V KH45GLP Tempered Prismatic Flat Glass Lens. Maximum. P17117 Internal Microwave Sensor with P18132 Twist Lock Shorting Cap Provides Dimming, 120-277VAC, 50/60Hz. See P17117 Specification Page for Details. Fixed Service to Fixture (Fixture Always on). IP65, Rated Load 7200w Tungsten P17123 Internally Mounted Microwave On/Off Motion Sensor for Mounting Heights of P18140 110-120VAC Instant Twist Lock 8' to 19', 120-277VAC, 50/60Hz Photocell 120VAC Time Delay Twist Lock P18150 Photocell P18152 277VAC Time Delay Twist Lock Photocell P17117 P17123 120-277VAC Universal Twist Lock P18156 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.



KH45GSZ Aluminum Glare/House Side Shield ACCHSG3



KH45WG

Specifications subject to change without notice.

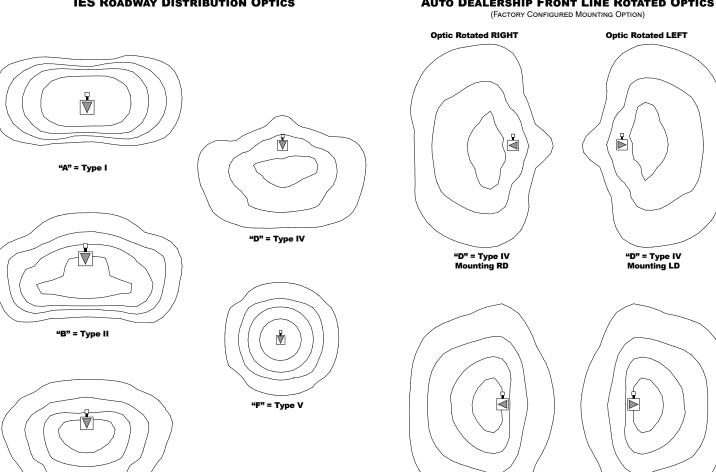


PHOTOMETRIC DATA

"C" = Type III

IES ROADWAY DISTRIBUTION OPTICS

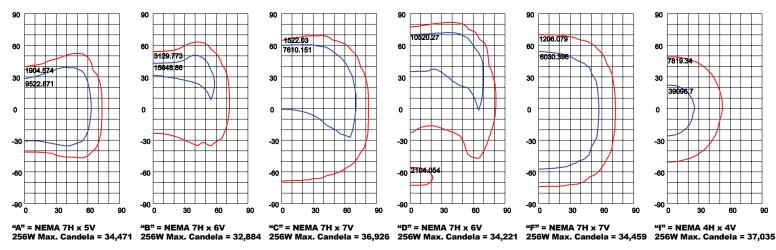
AUTO DEALERSHIP FRONT LINE ROTATED OPTICS



"C" = Type III Mounting RD

AVAILABLE FOR KITTY HAWK ARM (KALD, KARD); MOUNTING ARM ADAPTER (MALD. MARD); AND SLIPFITTER (SFLD, SFRD).

"C" = Type III Mounting LD



NEMA FLOOD LIGHT DISTRIBUTION OPTICS

Specifications subject to change without notice.

12802 Commodity Place • Tampa, FL 33626 • www.duraguard.com • Toll Free: (800) 736-7991 • Fax: (800) 287-4175



PHOTOMETRIC PERFORMANCE

					Optimized				Optimized	
(Cat	"Wattage talog 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	ССТ				De	livered Lume	ens			
A = Type I	3000K	-	-	-	-	-	-	-	-	-
NEMA 7H x 5V (130°H x 70°V)	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-G
B = Type II	3000K	-	-	-	-	-	-	-	-	-
NEMA 7H x 6V (110°H x 30°V)	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-G
C = Type III	3000K	12,922	14,489	17,360	-	21,798	23,887	25,975	-	33,416
NEMA 7H x 7V (120°H x 70°V)	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	3000K	-	-	-	-	-	-	-	-	-
= Type III, Auto Front Rotated	4000K	-	-	-	-	-	-	-	-	-
RIGHT or LEFT	5000K	-	-	-	-	-	-	-	36,387	36,926
	BUG Rating	-	-	-	-	-	-	-	B5-U1-G5	B5-U1-G
D = Type IV	3000K	-	-	-	-	-	-	-	-	-
NEMA 7H x 6V (110°H x 50°V)	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-G
D-xRD or D-xLD	3000K	-	-	-	-	-	-	-	-	-
= Type IV, Auto Front Rotated	4000K	-	-	-	-	-	-	-	-	-
RIGHT or LEFT	5000K	-	-	-	-	-	-	-	33,047	33,537
	BUG Rating	-	-	-	-	-	-	-	B5-U1-G5	B5-U1-G
F = Type V	3000K	12,327	13,821	16,560	-	20,793	22,785	24,778	-	31,875
NEMA 7H x 7V (115°H x 110°V)	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-G
I = Narrow	3000K	-	-	-	-	-	-	-	-	-
Beam NEMA 4H x 4V	4000K	-	-	-	-	-	-	-	-	-
(30°H x 30°V)	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.