

Q-KH25Q AmberLED Technology



Description

The Lumecon AmberLED Q-KH25Q luminaire is available with a wide choice of mounting configurations and an IES Type V distribution designed to replace HID lighting systems from 150w to 250w MH or HPS for wildlife, dark skies, or security applications requiring monochromatic AMBER light. LEDs operate between 585 and 595 nm, greater than 560nm required for wildlife protection. 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 14 to 25 feet can be used based on light level and uniformity requirements.

Dimensions

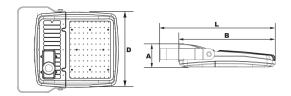
Width (D) 13%" (340mm) Length (B) 15" (381mm) Height (A) 3 5/8" (92mm) Length with Kit

Kitty Hawk Arm (KA): 19½" (491mm) Slipfitter (SF): 18¾" (476mm)

Mounting Arm Adaptor (MA): 19% (486mm)

Yoke (Y): 18" (457mm) Bracket (BR): 183/4" (476mm)

Easy-Hang Wall Bracket (EH): 16" (406mm)



Catalog Number:	
Project:	
Comments:	
Prepared By:	Date:

Technical Specifications

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

Lens: Tempered Clear Flat Glass Lens.

Mounting: Mounts with Adjustable Knuckle, Kitty Hawk Arm, Adjustable Slipfitter, 23%" Diameter Mounting Arm Adapter, Yoke, Two-Piece Bracket or Easy Hang Wall Bracket (Factory Installed).

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

AmberLED: Aluminum Boards

Wattage: 81w: Array: 80.5w, System: 86.6w; (150-250w HID Equivalent.)

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

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

Buy American Act: The product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS, and DOT regulations.

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





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*120-277V Models only

Ordering Information

Q-KH25Q - Options / Ordering Example: Q-KH25Q-F-1X37-U-AM-C-Z-KA-SP

Model	Optics / Beam	Wattage	Driver	ССТ	Lens	Color	Mounting	Options
Q-KH25Q	F - Type V / NEMA 7H x 7V	1x81 - 81W	U - 120-277V	AM - 1400K	C - Standard Clear	Z - Dark Bronze	KA - Arm	SF - Single Fuse*
	/n x / v		H - 347-480V		Flat Glass Lens	C - Custom Color	SF - Slipfitter ¹	DF - Double Fuse*
							MA - Mounting Arm Adapter	SP - Surge Protection
							Y - Yoke	M1 - Motion Senor (for 20' to 35'
							BR - Two Piece Swivel Bracket ¹	mounting heights) M2 - Motion Sensor (for 18' or less
							EH - Easy-Hang Wall Bracket	mounting heights)
							NM - No Mount	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
Notes: 1. Maximur	n tilt angle of 45° abo	ve horizontal w	ith R3, R5, or R7	ohotocell recept	acle options.			S23 - Internal Microwave Sensor with dimming for mounting heights of 25' or less*
								S43 - Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19'

Accessories & Replacement Parts

Mounting Arms, Bronze Powder Hardware.	ronze Powdercoa wk Mounting Arm only et, 2%" Horizontal oat Finish, Includes 2,2%" Horizontal 90° coat Finish, Includes P18	Si Di	wist Lock Non-Shorting (Open) Cap Disconnects ervice to Fixture for Temporary or Permanent issabling (Fixture Always Off). IP65, 480V Maximum. wist Lock Shorting Cap Provides Fixed Service to ixture (Fixture Always on). IP65, Rated Load 7200w Ingsten 10-120VAC Instant Twist Lock Photocell 77VAC Time Delay Twist Lock Photocell	KH25GL KH25AZ ALMAAZ KH25YZ	Tempered Clear Flat Glass Lens. Kitty Hawk Die-Cast Mounting Arm, Bronze Powdercoat Finish, Includes Hardware. Mounts Directly to Square Pole Die-Cast Adaptor for 2%" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat Finish, Includes Hardware
Mounting Arm only KH20WMZ Die-Cast Wall Mount Adaptor, Brinish. Use with KH25A Kitty Ha PTSB1SZ Single Pole Tenon Spoke Brack Mounting Arm, Bronze Powderc Hardware. PTSB290SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware. PTSB2180SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware.	ronze Powdercoa wk Mounting Arm only et, 2%" Horizontal oat Finish, Includes P18 2%" Horizontal 90° coat Finish, Includes P18	Di 8132 Tw Fi Tu 8140 11 8152 27	isabling (Fixture Always Off), ÍP65, 480V Maximum. wist Lock Shorting Cap Provides Fixed Service to ixture (Fixture Always on). IP65, Rated Load 7200w ingsten 10-120VAC Instant Twist Lock Photocell 77VAC Time Delay Twist Lock Photocell	ALMAAZ KH25YZ	Finish, Includes Hardware. Mounts Directly to Square Pole Die-Cast Adaptor for 2%" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat
Finish. Use with KH25A Kitty Ha PTSB1SZ Single Pole Tenon Spoke Brack Mounting Arm, Bronze Powderc Hardware. PTSB290SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware. PTSB2180SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware.	wk Mounting Arm only et, 2%" Horizontal oat Finish, Includes P18 P2%" Horizontal 90° coat Finish, Includes P18 P18	Fi Tu 8140 11 8152 27	ixture (Fixture Always on). IP65, Rated Load 7200w ingsten I0-120VAC Instant Twist Lock Photocell 77VAC Time Delay Twist Lock Photocell	KH25YZ	Bronze Powdercoat Finish, Includes Hardware. Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat
Mounting Arm, Bronze Powderc Hardware. PTSB290SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware. PTSB2180SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware.	pat Finish, Includes P18 P18 , 2%" Horizontal 90° coat Finish, Includes P18 P18	8140 11 8152 27	10-120VAC Instant Twist Lock Photocell 77VAC Time Delay Twist Lock Photocell		Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat
PTSB290SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware. PTSB2180SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware.	p18, 2%" Horizontal 90° coat Finish, Includes P18	8152 27	77VAC Time Delay Twist Lock Photocell		
PTSB290SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware. PTSB2180SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware.	, 2%" Horizontal 90° coat Finish, Includes P18		•	EI 720EV7	
Mounting Arms, Bronze Powder Hardware. PTSB2180SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware.	coat Finish, Includes P18	8156 12		=	External Mount Die-Cast Adjustable Slipfitter for 2%
PTSB2180SZ Twin Pole Tenon Spoke Bracket Mounting Arms, Bronze Powder Hardware.			20-277VAC Universal Twist Lock Photocell	1 2.00.712	Tenons, Bronze Powdercoat Finish, Includes Hardware
Mounting Arms, Bronze Powder Hardware.	. 2%" Horizontal 180°		30VAC Time Delay Twist Lock Photocell. or 480V use only.	FL73BRZ	Two-Piece Stamped Steel Adjustable Bracket, Bronze Powdercoat Finish, Includes Hardware
	coat Finish Includes		Die Cast Accessory Housing for Installing Sensors or Other Lighting Controls, Bronze Powdercoat Finish	KHEHZ	Die-Cast Easy-Hang Wall Bracket, Bronze Powdercoat Finish, Includes Hardware.
PTSB390SZ* Triple Pole Tenon Spoke Bracke Mounting Arms, Bronze Powder		25GSZ A	Aluminum Glare/House Side Shield, Bronze Powder- coat Finish, Includes Hardware.	P17117	Internal Microwave Sensor with Dimming, 120-277VAC, 50/60Hz. See P17117 Specification Page for Details.
Hardware PTSB3120SZ* Triple Pole Tenon Spoke Bracke Mounting Arms, Bronze Powder		25WG W	Vire Guard, Stainless Steel Construction, Includes lardware.	P17123	Internally Mounted Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19', 120-277VAC, 50/60Hz
Hardware.	KH2	25BFZ B	saffle, Aluminum with Bronze Powdercoat Finish		
PTSB490SZ* Quad Pole Tenon Spoke Bracke Mounting Arms, Bronze Powder Hardware		In	ronze UV-Stabilized Polycarbonate Housing for nstalling Sensors, Includes Sensor Bracket and	-	
Non-stock item. Consult factory for lead time		Gasket.			7117 P17123
	+1				
KH20RPZ KH20WMZ PTSB1S	Z PTSB290SZ AC	CCHSG1Z	KH25GSZ KH25WG KH25BFZ*		
		-	•		

ACCHSG3

PTSB2180SZ PTSB390SZ* PTSB3120SZ* PTSB490SZ*



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Mounting Options



Q-KH25Q with Kitty Hawk Arm (KA)

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



Q-KH25Q with Pole Mounting Arm Adaptor (MA)

Die-Cast Adaptor for 2%" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.



Q-KH25Q with Yoke (Y)

Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat Finish, Includes



Q-KH25Q with "SF" External Mount Slipfitter (SF)

External Mount Die-Cast Adjustable Slipfitter for 23/8" Tenons, Bronze Powdercoat Finish. Includes Hardware



Q-KH25Q with Two-Piece Swivel Bracket (BR)

Two-Piece Stamped Steel Adjustable Bracket, Bronze Powdercoat Finish, Includes Hardware



Q-KH25Q with Easy-Hang Bracket (EH)

Die-Cast Easy-Hang Wall Bracket, Bronze Powdercoat Finish, Includes

Notes

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

EPA (Effective Projected Area)

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
1	0.60	15 Lbs

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
2 @180° Mount	1.20	30 Lbs
2@90° Mount	0.82	30 Lbs

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
1	1.32	45 Lbs
3@120° Mount	1.20	45 Lbs

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
1 1 1 1 1 1 1 1 1 1	1.32	60 Lbs

Performance Data

						Amber LEDs	;		
LED Board Watts	Drive Current (mA)	Input Watts		Optics	Lumens	LPW	В	U	G
AmberLED 81w	525	82	F	Type V	2,607	32	1	2	0

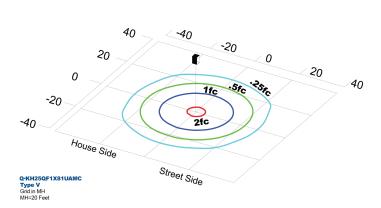
Projected Lumen Maintenance

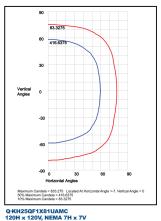
Data shown for Amber LEDs			Compare to MH			
TM-21-11	Input Watts	Initial	25,000 Hrs	50,000 Hrs	100,000 Hrs	Calculated LED Life
L70 Lumen Maintenance @ 25°C / 77°F		1.00	0.98	0.97	0.93	429,000
L70 Lumen Maintenance @ 50°C / 122°F	82w	1.00	0.97	0.94	0.88	259,000
L80 Lumen Maintenance @ 40°C / 104°F		1.00	0.97	0.95	0.90	195,000

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 MH box indicates suggested Light Loss Factor (LLF) to be used when comparing to Metal Halide (MH) systems

Photometric Data





Spectral Chart

