

Spec Grade  
**PROlite** LED Lighting™

A Division of Emergensee® Lighting, Inc.



Job Name: \_\_\_\_\_

Type: \_\_\_\_\_

Part #: \_\_\_\_\_

Notes: \_\_\_\_\_

# PKH45Q

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



The LEPG PKH45 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 PKH45 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 3/4" Diameter Mounting Arm Adapter, 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.



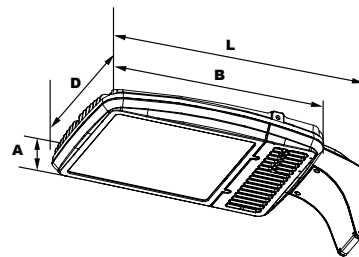
### Dimensions

**Width (D)** 15 1/4" (400mm)

**Length (B)** 22" (559mm)

**Height (A)** 4" (102mm)

**Kitty Hawk Arm (KA):** 27 1/2" (699mm)  
**Slipfitter (SF):** 29 1/4" (743mm)  
**Mounting Arm Adaptor (MA):** 26 1/2" (664mm)  
**Yoke (Y):** 26 1/4" (667mm)  
**Bracket (BR):** 25 3/4" (654mm)  
**Wall Mount Bracket (WM):** 23 1/4" (605mm)



### Certification & Listings:

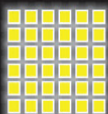


DesignLights Consortium™ Qualified Luminaires:

KH45QA1X[167 256][U H]5KC\*\*\* KH45QD1X167[U H]5KC\*\*\*  
 KH45QB1X[167 256][U H]5KC\*\*\* KH45QF1X[167 256][U H]5KC\*\*\*  
 KH45QC1X[167 256][U H]5KC\*\*\*



SoftLED



Spec Grade  
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Job Name: \_\_\_\_\_

Type: \_\_\_\_\_

Part #: \_\_\_\_\_

Notes: \_\_\_\_\_

## Standard Models

Order Information Example:		PKH45QF1X256U5KCZKASP						
<b>PKH45Q</b>								
Model	Optics/Beam	Wattage	Driver	CTT	Lens	Color	Mounting	Options
<b>PKH45Q</b> Large Bentley Kitty Hawk Area, Wall, and Flood Light	<b>A</b> =Type I/NEMA 7H x 5V <b>B</b> =Type II/NEMA 7H x 6V <b>C</b> =Type III/NEMA 7H x 7V <b>D</b> =Type IV/NEMA 7H x 6V <b>F</b> =Type V/NEMA 7H x 7V <b>I</b> =Narrow Beam/NEMA 4H x 4V*  *5K Models Only. See Page 5 for Distribution Information.	<b>1X99</b> =99w <b>1X111</b> =111w <b>1X133</b> =133w  <b>OPTIMIZED</b> <b>1X136</b> =136w*  <b>1X167</b> =167w <b>1X183</b> =183w <b>1X199</b> =199w  <b>OPTIMIZED</b> <b>1X225</b> =225w*  <b>1X256</b> =256w *C, D & F Optics Only	<b>U</b> =120-277V <b>H</b> =347-480V	<b>3K</b> =3000K* <b>4K</b> =4000K <b>5K</b> =5000K  *C & F Optics. Only Not available in 136 & 225w.	<b>C</b> =Standard Clear Flat Glass Lens <b>S</b> =SoftLED Flat Glass Lens* <b>P</b> =Clear Flat Prismatic Glass Lens*  *Type V Optic Only	<b>Z</b> =Bronze <b>C</b> =Custom (Consult Factory)	<b>KA</b> =Kitty Hawk Arm <b>SF</b> =Slipfitter <b>MA</b> =Mounting Arm Adapter <b>Y</b> =Yoke <b>BR</b> =Two-Piece Swivel Bracket <b>WM</b> =Wall Mount Bracket <b>NM</b> =No Mount	<b>SF</b> =Single Fuse* <b>DF</b> =Double Fuse* <b>SP</b> =Surge Protection <b>M1</b> =Motion Sensor, IR for mounting heights of 20ft to 35ft <b>M2</b> =Motion Sensor, IR for mounting heights of 18ft or less <b>R3</b> =3-Pin Twist Lock Photocell Receptacle <b>R5</b> =5-Pin Twist Lock Photocell Receptacle <b>R7</b> =7-Pin ANSI C136.41—2013 Twist Lock Photocell Receptacle <b>S23</b> =Internal Microwave Sensor with dimming for mounting heights of 35' or less* <b>S43</b> =Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19*  *120-277V Models Only.

## Auto Dealership Front Line Models

Order Information Example:		PKH45QF1X256U5KCZKARDSP						
<b>PKH45Q</b>				<b>5K</b>	<b>C</b>			
Model	Optics/Beam	Wattage	Driver	CTT	Lens	Color	Mounting	Options
<b>PKH45Q</b> Large Bentley Kitty Hawk Area Light	<b>C</b> =Type III <b>D</b> =Type IV  See Page 5 for Distribution Information.	<b>OPTIMIZED</b> <b>1X225</b> =225w  <b>1X256</b> =256w	<b>U</b> =120-277V <b>H</b> =347-480V	<b>5K</b> =5000K	<b>C</b> =Standard Clear Flat Glass Lens	<b>Z</b> =Bronze <b>C</b> =Custom (Consult Factory)		<b>SF</b> =Single Fuse* <b>DF</b> =Double Fuse* <b>SP</b> =Surge Protection <b>R3</b> =3-Pin Twist Lock Photocell Receptacle <b>R5</b> =5-Pin Twist Lock Photocell Receptacle <b>R7</b> =7-Pin ANSI C136.41—2013 Twist Lock Photocell Receptacle  *120-277V Only
<b>KARD</b> =Kitty Hawk Arm, Optics Rotated Right Auto Dealership Mount <b>KALD</b> =Kitty Hawk Arm, Optics Rotated Left Auto Dealership Mount <b>SFRD</b> =Slipfitter, Optics Rotated Right Auto Dealership Mount <b>SFLD</b> =Slipfitter, Optics Rotated Left Auto Dealership Mount <b>MARD</b> =Mounting Arm Adapter, Optics Rotated Right Auto Dealership Mount <b>MALD</b> =Mounting Arm Adapter, Optics Rotated Left Auto Dealership Mount								

### Mounting Options:



#### PKH45Q w/ Kitty Hawk Arm (KA)

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

#### PKH45Q w/ Pole Mounting Arm Adaptor (MA)

Die-Cast Adaptor for 2 1/4" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Replacement Model ALMAAZ.

#### PKH45Q w/ "SF" External Mount Slipfitter (SF)

External Mount Die-Cast Adjustable Slipfitter for 2 1/4" 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



#### PKH45Q w/ Yoke (Y)

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



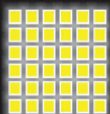
#### PKH45Q w/ Two-Piece Swivel Bracket (BR)

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



#### PKH45Q w/ Wall Mount (WM)

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



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Notes: \_\_\_\_\_


### EPA (Effective Projected Area)

Shown with Large Kitty Hawk Arm mounting.

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
 <b>1</b>	1.00	33 Lbs

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

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

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
 <b>4@90° Mount</b>	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\***

2 3/8" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Mounts to 2 3/8" 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
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.**



**ACCHSG1Z**

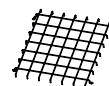


**ACCHSG3**



**KH45GSZ**

Aluminum Glare/House Side Shield



**KH45WG**

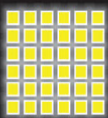
Replacement Parts (Order Separately, Field Installed)	
KH45GL	Tempered Clear Flat Glass Lens.
KH45GLSS	SoftLED Flat Glass Lens
KH45GLP	Tempered Prismatic Flat Glass Lens.
P17117	Internal Microwave Sensor with Dimming, 120-277VAC, 50/60Hz. See P17117 Specification Page for Details.
P17123	Internally Mounted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



**P17117**



**P17123**



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Job Name: \_\_\_\_\_

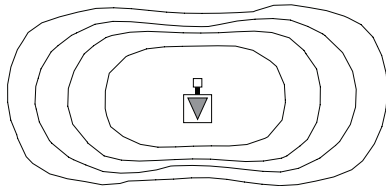
Type: \_\_\_\_\_

Part #: \_\_\_\_\_

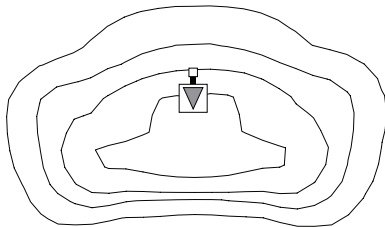
Notes: \_\_\_\_\_

### Photometric Data

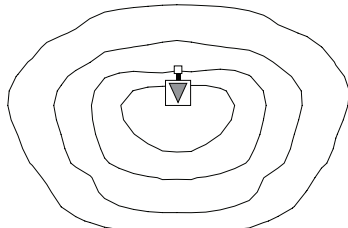
#### IES Roadway Distribution Optics



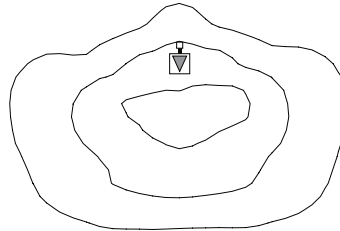
"A" = Type I



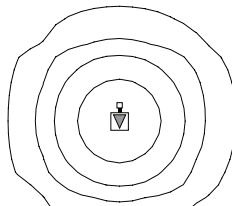
"B" = Type II



"C" = Type III



"D" = Type IV

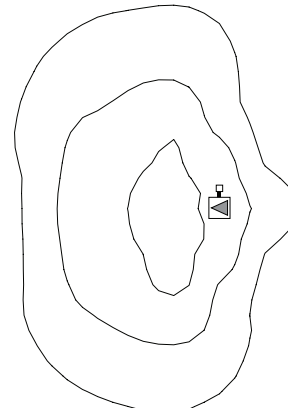


"F" = Type V

#### Auto Dealership Front Line Rotated Optics

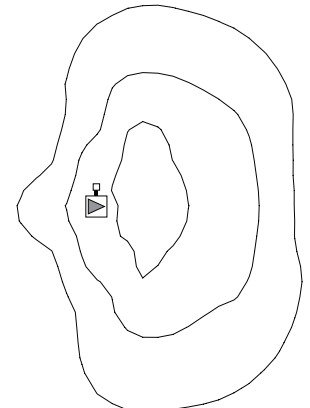
(Factory Configured Mounting Option)

Optic Rotated RIGHT

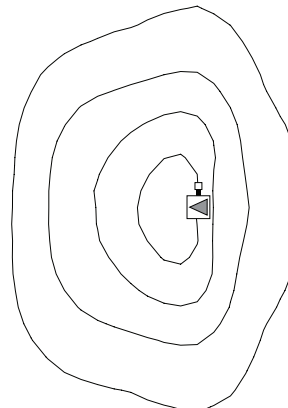


"D" = Type IV  
Mounting RD

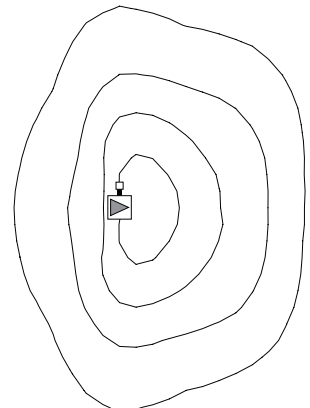
Optic Rotated LEFT



"D" = Type IV  
Mounting LD



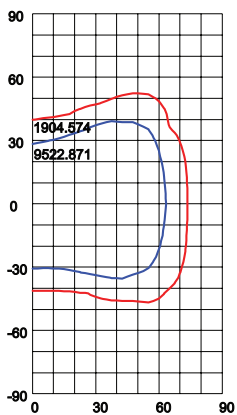
"C" = Type III  
Mounting RD



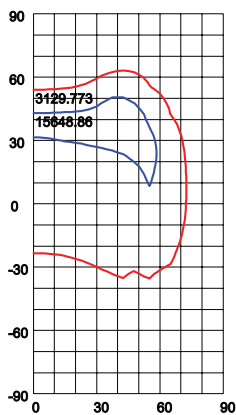
"C" = Type III  
Mounting LD

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

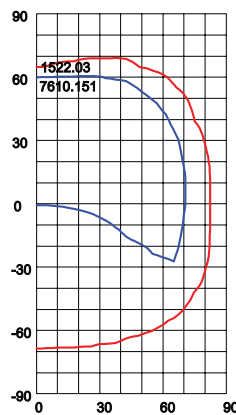
#### NEMA Flood Light Distribution Optics



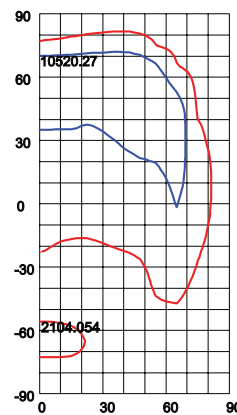
"A" = NEMA 7H x 5V  
256W Max. Candela = 34,471



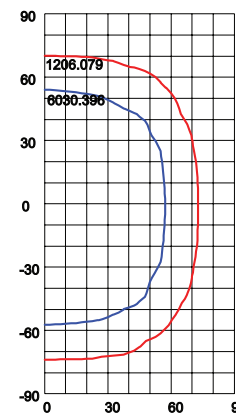
"B" = NEMA 7H x 6V  
256W Max. Candela = 32,884



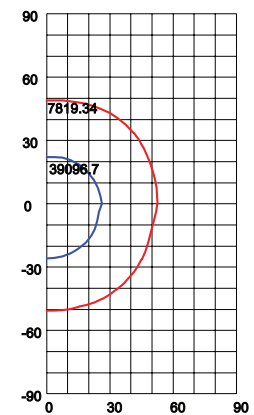
"C" = NEMA 7H x 7V  
256W Max. Candela = 36,926



"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
<b>L70 Lumen Maintenance @ 25°C / 77°F</b>	1.00	0.97	0.95	0.90	290,000
<b>L70 Lumen Maintenance @ 50°C / 122°F</b>	1.00	0.94	0.88	0.76	84,000
<b>L80 Lumen Maintenance @ 40°C / 104°F</b>	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 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.