

EES KH45Q Large Stealth Area, Wall and Flood Light



Project Name: **Project Information** Fixture Type:

Complete Catalog #:

Date:

Comments:

The EnviroLux EES-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 EES-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.

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 Adapter, Yoke, Two-Piece Bracket or Wall Mount Bracket. (Factory Installed)

LED:

Aluminum Metal Core Boards with 2oz Copper Inlay

WATTAGES:

Multiple Wattages Available: 99w, 111w, 133w, 136w, 167w, 183w, 199w, 225w, 293w

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

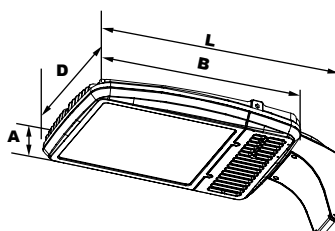
WARRANTY:

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

See Page 5 for Projected Lumen Maintenance Table.



NEW
EXPANDED WATTAGES
OPTIMIZED OPTICS
AUTO DEALERSHIP ROTATED OPTICS



Dimensions

Width (D)	15 3/4" (400mm)
Length (B)	22" (559mm)
Height (A)	4" (102mm)

Length with Mount (L)

Pole Mount 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)
Wall Mount Bracket (WM):	605mm (23 7/8")



DesignLights Consortium™

Qualified Luminaires:

EESKH45QA1X[167 256][U H]5KC***

EESKH45QB1X[167 256][U H]5KC***

EESKH45QC1X[167 256][U H]5KC***

EESKH45QD1X[167 256][U H]5KC***

EESKH45QE1X[167 256][U H]5KC***



EES KH45Q Large Stealth Area, Wall and Flood Light



ENVIROLUX®
ENERGY SYSTEMS

STANDARD MODELS:

Complete Units Ordering Information Example: **EES-KH45QF1X256U5KCZSSFSF**

Model	Optics/Beams	Wattage	Driver	CCT	Lens	Color	Mounting	Options
EES-KH45Q	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 Model Only. See Page 5 for Distribution Information.	1X99 =99w 1X111 =111w 1X133 =133w OPTIMIZED 1X136 =136w* 1X167 =167w 1X180 =180w 1X200 =200w OPTIMIZED 1X250 =250w* 1X293 =293w *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 136 & 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) KH45A =Kitty Hawk Arm SSF = Slipfitter ALMAA = Mounting Arm Adapter KH45Y =Yoke SSB =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:

Complete Units Ordering Information Example: **EES-KH45QF1X2505KCZKARDSP**

Model	Optics/Beams	Wattage	Driver	CCT	Lens	Color	Mounting	Options
EESKH45Q	C =Type III D =Type IV See Page 5 for Distribution Information.	OPTIMIZED 1X250 =250w 1X293 =256w	U =120-277V H =347-480V	5K =5000K	C =Standard Clear Flat Glass Lens	Z =Bronze C =Custom (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 Left Auto Dealership Mount MARD =Mounting Arm Adapter, Optics Rotated Right Auto Dealership Mount MALD =Mounting Arm Adapter, Optics Rotated Left Auto Dealership Mount 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 OPTIONS:



EES-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.



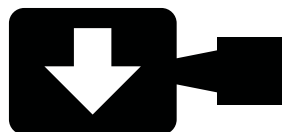
EES-KH45Q Shown with "**ALMAA**" Pole Mounting Arm Adaptor, Die-Cast Adaptor for 2 1/2" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Replacement Model ALMAAZ.



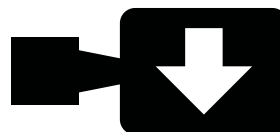
EES-KH45Q Shown with "**SSF**" External Mount Slipfitter, External Mount Die-Cast Adjustable Slipfitter for 2 1/2" Tenons, Bronze Powdercoat Finish, Includes Hardware. Replacement Model SSFZ.

AUTO DEALERSHIP FRONT LINE ROTATED OPTICS

(FACTORY CONFIGURED MOUNTING OPTION)



ROTATE OPTICS LEFT



ROTATE OPTICS RIGHT

Available for Stealth Arm (**KALD**, **KARD**); Mounting Arm Adapter (**MALD**, **MARD**); and Slipfitter (**SFLD**, **SFRD**) above



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






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






EES-KH45Q Shown with "**WM**" Wall Mount Bracket, Wall Bracket, Heavy-Duty Stamped Steel, Bronze Powdercoat Finish, Includes Hardware. Replacement Model WBR2Z

EPA (EFFECTIVE PROJECTED AREA) SHOWN WITH LARGE Stealth 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



PTB1SZ



PTB290SZ



PTB2180SZ



PTB390SZ*



PTB3120SZ*



PTB490SZ*

2 3/4" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Mounts to 2 3/4" 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.



ACCHSG1Z

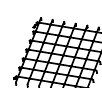


ACCHSG3



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



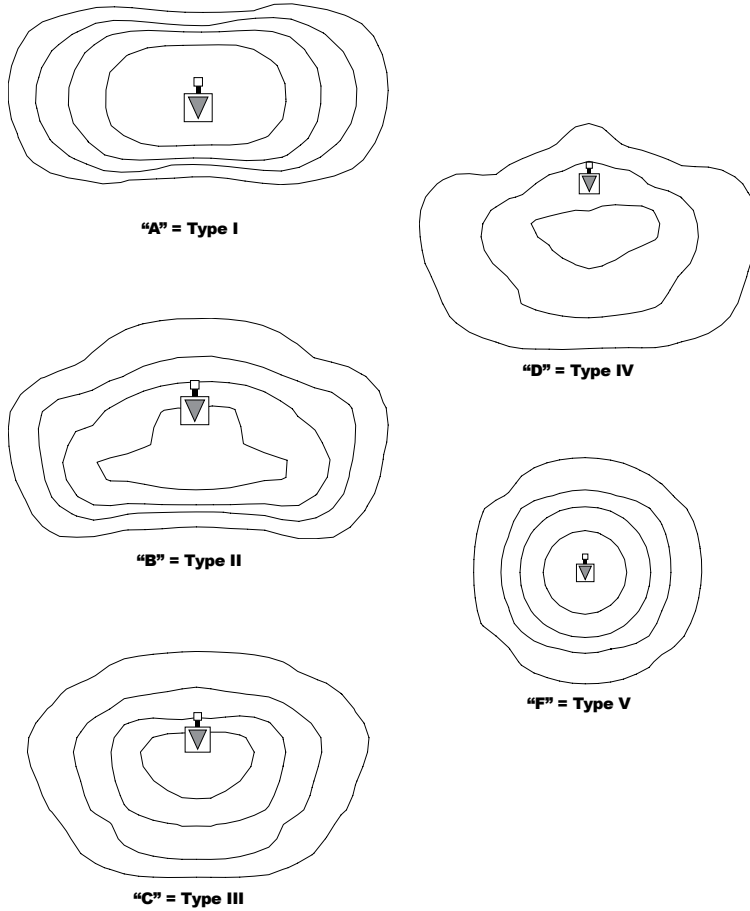
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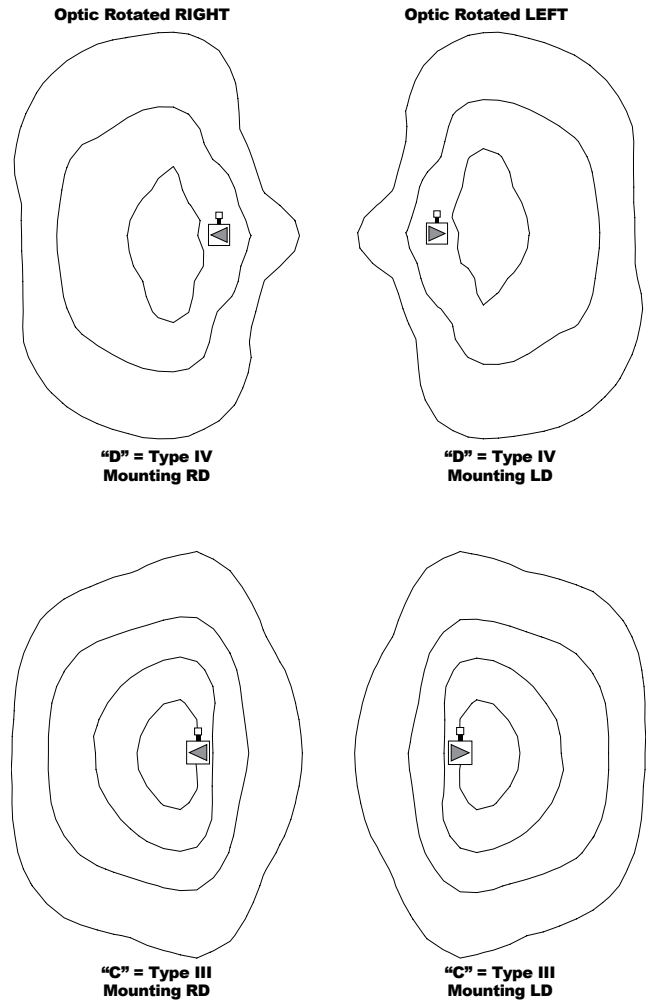
P17123

PHOTOMETRIC DATA

IES ROADWAY DISTRIBUTION OPTICS

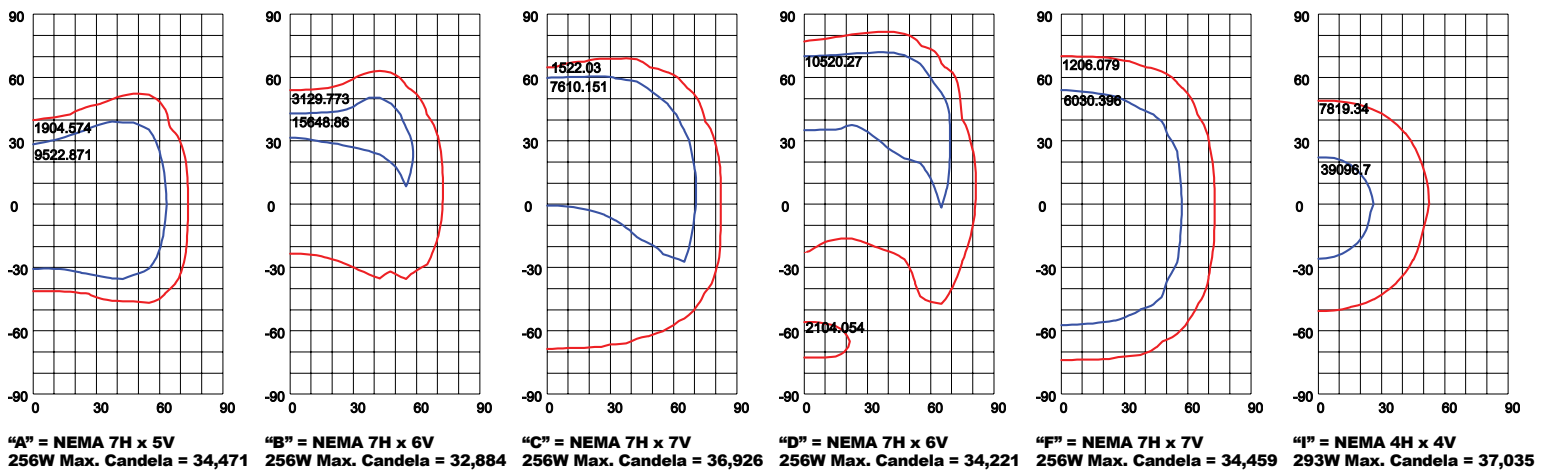


AUTO DEALERSHIP FRONT LINE ROTATED OPTICS (FACTORY CONFIGURED MOUNTING OPTION)



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

NEMA FLOOD LIGHT DISTRIBUTION OPTICS



PHOTOMETRIC PERFORMANCE

		Optimized					Optimized				
		"Wattage (Catalog Logic)"	99W (1X99)	111W (1X111)	133W (1X133)	136W (1X136)	167W (1X167)	180W (1X183)	200W (1X199)	250W (1X225)	293W (1X256)
Optic	CCT										
A = Type I NEMA 7H x 5V (130"H x 70"V)	3000K	-	-	-	-	-	-	-	-	-	-
	4000K	18,052	17,072	23,364	-	29,726	32,574	35,442	-	49,546	
	5000K	18,052	17,072	23,364	-	29,726	32,574	35,442	-	49,546	
	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	17,540	16,224	24,738	-	30,876	34,038	37,014	-	51,773	
	5000K	12,540	16,224	24,738	-	30,876	34,038	37,014	-	51,773	
	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	17,822	17,244	24,790	-	31,498	34,887	36,975	-	52,645	
	4000K	18,044	17,752	25,802	26,384	32,204	35,502	38,606	41,467	53,999	
	5000K	18,044	15,752	25,802	26,384	32,204	35,502	38,606	41,467	53,999	
	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	-	-	-	-	-	-	-	42,200	54,443	
	BUG Rating	-	-	-	-	-	-	-	B5-U1-G5	B5-U1-G5	
D = Type IV NEMA 7H x 6V (110"H x 50"V)	3000K	-	-	-	-	-	-	-	-	-	-
	4000K	17,857	19,420	25,270	25,840	31,540	34,770	37,810	40,251	52,886	
	5000K	17,857	19,420	25,270	25,840	31,540	34,770	37,810	40,251	52,886	
	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	-	-	-	-	-	-	-	39,980	51,537	
	BUG Rating	-	-	-	-	-	-	-	B5-U1-G5	B5-U1-G5	
F = Type V NEMA 7H x 7V (115"H x 110"V)	3000K	17,480	17,883	24,580	-	30,793	32,785	36,778	-	51,181	
	4000K	17,557	18,423	25,004	25,568	31,208	34,404	37,412	40,185	52,329	
	5000K	17,557	18,423	25,004	25,568	31,208	34,404	37,412	40,185	52,329	
	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	18,057	20,246	19,238	-	32,204	36,051	39,203	-	54,834	
	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.