

Curvilinear LED



The Next Generation
of LED Site Lighting



KIM LIGHTING

CURVILINEAR LED

The Next Generation of LED Site Lighting



Contents:

Exclusive Optical Technology	2
Thermal Management System	3
Even, Uniform Distribution	4
The Future is Today	6
Design Tools	7
HID to LED Upgrade Kit	8
Design Innovation	9
Ordering Information	10-13
Specifications	14
Lumen Performance	15
LM-79 Compliance	15
Photometry and BUG Ratings	16-17
Warranty	Back Cover

Kim Lighting is known throughout the world as the premier designer and manufacturer of quality, high performance, and architecturally relevant outdoor lighting solutions. Kim Lighting is a division of Hubbell Lighting, Inc.





Curvilinear LED

Kim brings LED to its Curvilinear series of performance luminaires expanding to feature the most current technology in specification-grade outdoor lighting. The Curvilinear LED series is conceived as a total integration of design and technology.

This family of luminaires is a direct response to the needs of today, engineered with tomorrow's insight. The CC/CCS product line is designed to surpass tough demands, such as energy efficiency, glare control, light trespass, aesthetic and structural integrity, all manufactured to Kim's standards for quality, longevity, and performance.

This is LED site lighting perfection. This is Kim Lighting.

Exclusive Optical Technology

Canted MicroEmitter™

Design Each of the Curvilinear LED Emitter reflectors is precisely aimed at optimal angles for maximum reach and uniform illumination.

Sealed EmitterDeck™ Assembly

LED'S RECESSED INTO FIXTURE HOUSING

Achieving Zero Uplight

Curvilinear LED MicroEmitter reflectors are recessed into the fixture housing for shielding and zero uplight above the horizontal plane with flat glass lens.

Zero Uplight

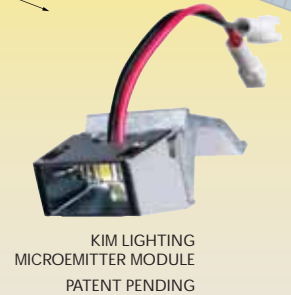
Zero Uplight

Glare-Free Zone

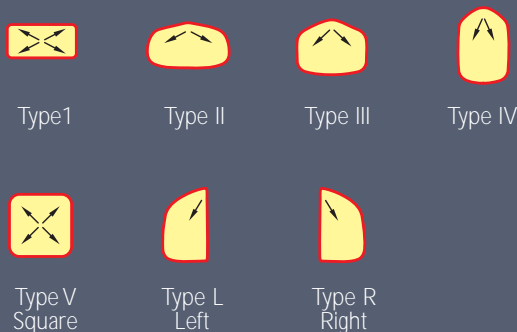
Glare-Free Zone

Glass Lens

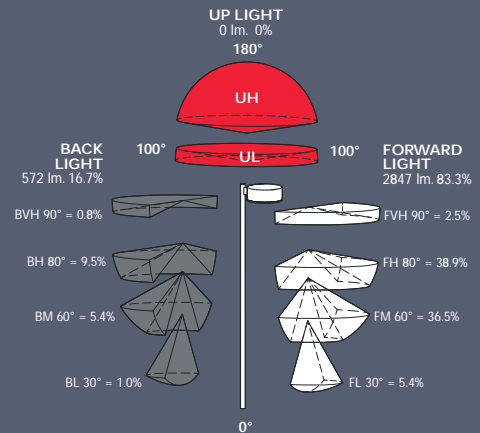
Durable, clear tempered flat glass lens. Polycarbonate and convex glass lenses also available.



Imagine Any Distribution

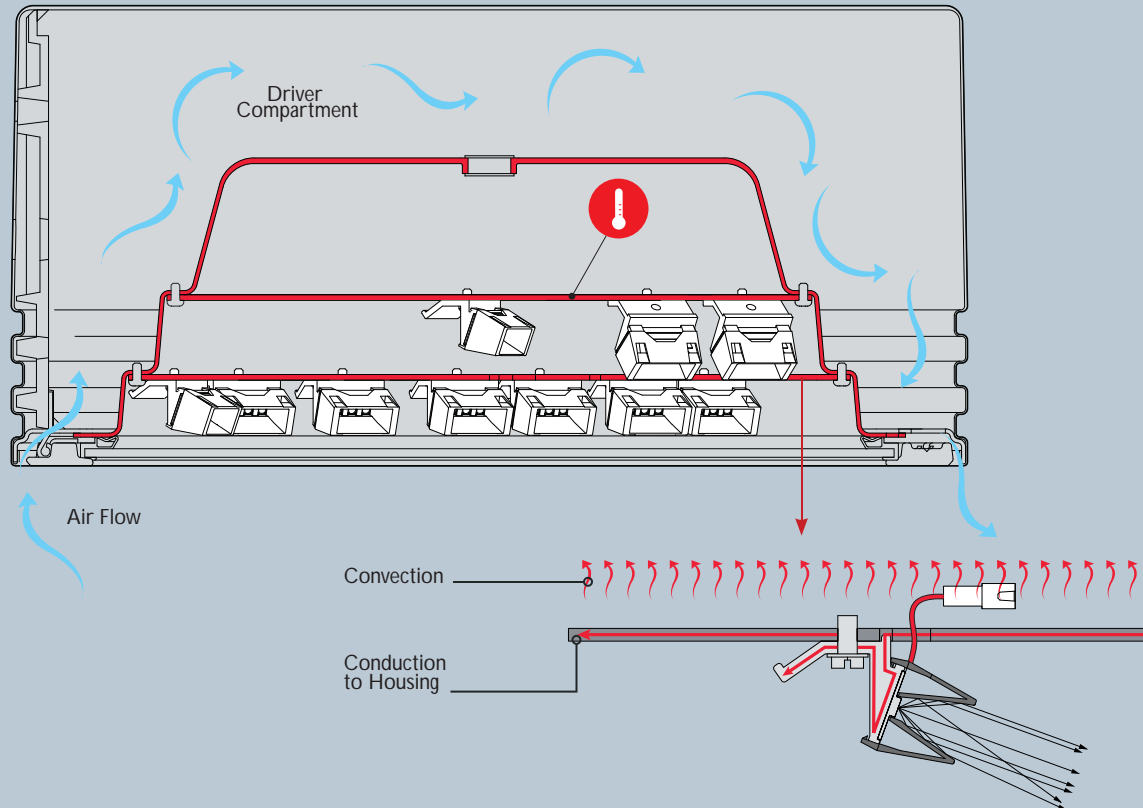


Dark Sky Compliance



Curvilinear LED luminaires meet requirements for applications where light pollution or light trespass may be a concern. Curvilinear LED's unique optical system and flat lens produces zero light above 90°.

Thermal Management System



Dual Heat Management with Exclusive LifeShield® Protection System

Kim Lighting Curvilinear LED luminaires employ two distinct but complimentary methods to manage the life-limiting heat produced by the LED diode. Both conduction and convection are used to disperse heat, thereby maintaining diode performance and long life. Heat is drawn away from the housing chamber and dispersed into the free air around the luminaire. Additionally, each MicroEmitter™ module incorporates a solid aluminum heat sink, which is mechanically secured to the EmitterDeck™. The EmitterDeck is composed of a heavy gauge aluminum carrier plate and spinning to dissipate heat to the outside environment.

AUTOMATIC THERMAL SELF-MONITORING AND ADJUSTMENT

Each EmitterDeck incorporates two temperature sensors located at the hottest locations of the backside of the deck. Each sensor sends temperature readings every 30 seconds to Kim Lighting's exclusive LifeShield Protection System. In extreme conditions, LifeShield detects above tolerance temperature and automatically lowers the current to the system to preserve diode life. Lumen output is restored to full capacity once the temperature is stabilized to within acceptable limits. The LifeShield Protection System provides consistent performance with minimal output reduction in extreme and fluctuating environmental conditions. See page 15 for further details.

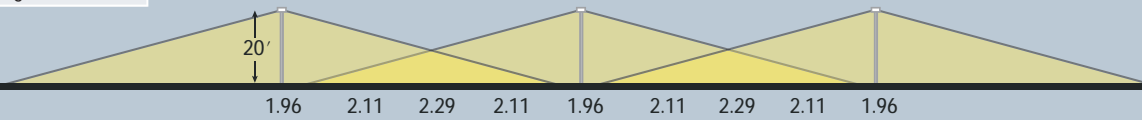


LifeShield®
Protection System

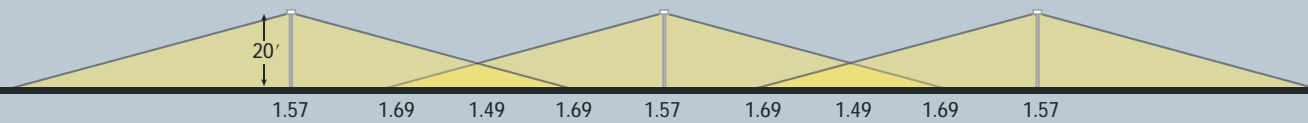
Even, Uniform Distribution

Curvilinear LED is perfect for upgrade projects because communities can safely utilize existing pole installations and still maintain uniform illumination between luminaires. Compare Curvilinear LED's low max-to-min uniformity ratio to other LED systems, and the difference is clear.

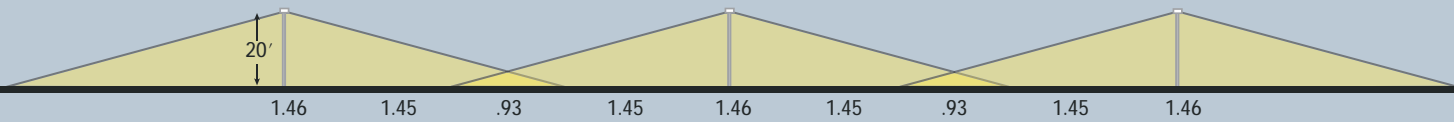
60' Spacing →



80' Spacing →



100' Spacing →



Footcandle readings at one mounting height forward for CC21A3-120L5K

Uniform, Illumination

Kim Lighting's patent pending MicroEmitter™ Technology features unparalleled ability to capture and harness light using an optical system that shapes, points and tightly controls the beam of individual clusters of LEDs within independent MicroEmitter modules. The result places light where it is needed, creating superior uniformity by evenly distributing horizontal footcandles and, in turn, reducing energy waste.

Description	Wattage	Avg. FC	Max. FC	Min. FC	Avg. to Min.	Max. to Min.
Curvilinear CC21 LED	134.5	2.27	3.13	1.04	2.18:1	3.01:1
Curvilinear CC21 150W PMH	185	2.74	4.51	.97	2.82:1	4.65:1
Curvilinear CC21 200W PMH	240	3.30	5.44	1.16	2.85:1	4.69:1
Curvilinear CC21 250W PMH	291	3.82	6.30	1.35	2.83:1	4.67:1
Curvilinear CC21 150W HPS	188	2.90	4.19	1.25	2.32:1	3.35:1
Curvilinear CC21 200W HPS	240	4.10	5.93	1.76	2.33:1	3.37:1
Curvilinear CC21 250W HPS	295	5.21	7.55	2.25	2.32:1	3.36:1

Criteria: Mounting height is 20', on a street width of 35', and spacing is 100' apart. Luminaires are staggered on each side of the street. Mean Lumens and photopic equipment were used for this data.



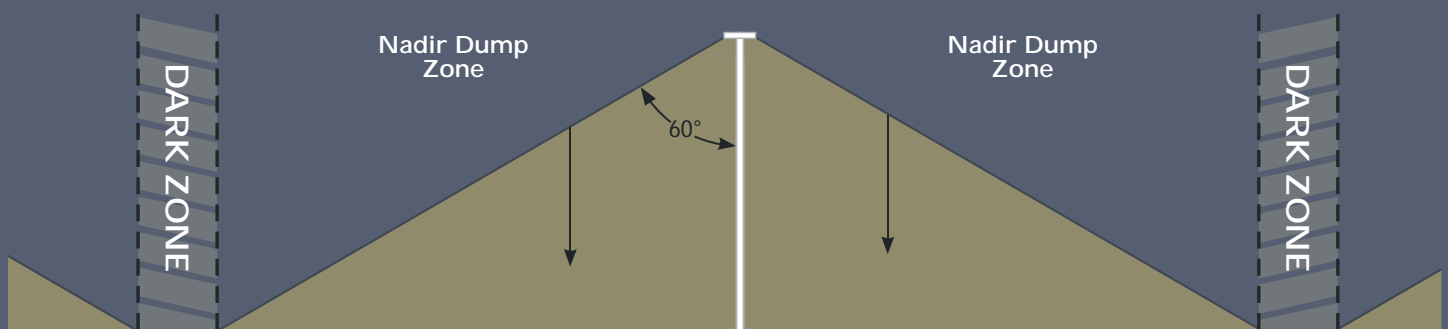
The above illustration is a BIM project example using Kim Lighting's .rfa and .ies formatted files. To create your own layout using Kim Lighting's technical data, register at www.kimlighting.com and download Curvilinear LED's design files.

Avoid Nadir Dump

Curvilinear LED eliminates the staccato of glare and hot spots experienced by humans as they travel through vehicular and pedestrian zones. In contrast, other optically compromised products create a striped-street strobe effect with alternating regions of extreme brightness and darkness, and in turn, disregarding the importance of uniformity creates disability glare. The resulting human experience is annoying at best, but can be potentially hazardous in heavy traffic environments.

Competitor LED Distribution

Maximum to Minimum Ratio = (6:1)



The Future Is Today



ROHS/WEEE COMPLIANT



RENEWABLE ENERGY
SOURCE COMPATIBILITY



PRE AND POST
RECYCLED MATERIAL

Preserving Resources

Kim Lighting is working closely with numerous organizations to develop industry standards ensuring the efficiency, dependability and quality of LED products that are sold to our customers.

Kim Lighting is doing its part to limit hazardous waste and utilize resources to their fullest. MicroEmitter luminaire housings and LED components meet strict US and international environmental protection laws, and are constructed from more than 90% pre and post recycled materials and are entirely lead and mercury free.



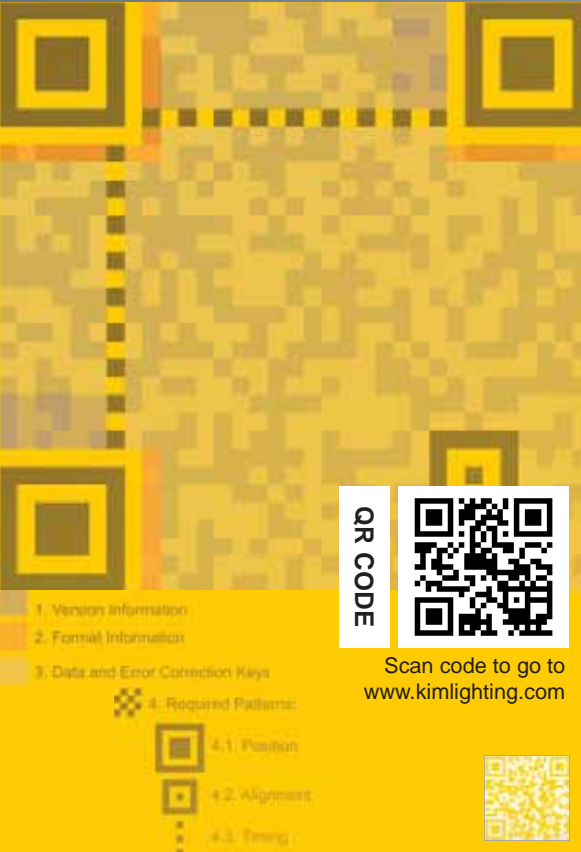
RoHS – Identifies product components with restricted use of hazardous substances.



Recyclable – Identifies products that use pre and post recycled materials.



Renewable – Identifies products that are compatible with renewable energy systems.



1. Version Information
 2. Format Information
 3. Data and Error Correction Keys
 4. Required Patterns:
 4.1. Position
 4.2. Alignment
 4.3. Timing

QR CODE

Scan code to go to www.kimlighting.com



QR CODE TECHNOLOGY

BUILDING INFORMATION MODELING

Design Tools

Kim Lighting offers the most advanced design tools that allow the design community to select products that meet all aspects of a project's criteria.

Kim Lighting's 3D BIM and SketchUp models allow designers to seamlessly integrate lighting and energy consumption into their project, saving both time and money as they eliminate the guesswork on how the lighting performs and integrates in the built environment.

Kim Lighting's QR codes allow you to download the most up to date product spec sheets, LED performance summaries and HID to LED conversion video segments straight to your smart mobile device.



BIM – Simulate, discover and innovate with Kim Lighting's Building Information Modeling data tools.



QR Codes – Direct access to specification and installation sheets, performance data and video information segments.

HID to LED Upgrade



QR CODE



Scan code to view HID to LED Upgrade video

EmitterDeck Upgradeability

Existing Curvilinear HID installations can now be upgraded to cutting edge LED technology. The Upgrade Kits install in just minutes providing a value-added upgrade solution. As a Kim Lighting product, the upgrade kit preserves ETL listing to UL standards and manufacture's warranty ... something that third party retrofits cannot do.

Kim Lighting's MicroEmitter based LED luminaires can also be upgraded to the latest LED technology as it evolves over time. Replacement EmitterDecks featuring the latest LED technology are available exclusively from Kim Lighting.

Description	Total Luminaire Wattage	Energy Savings (Watt)	Energy Savings (Kw)	Savings Per Yr @ 11 Hrs per night @ \$0.10 Per Kwh ¹
Curvilinear CC21 LED	134.5	-	-	-
Curvilinear CC21 150W PMH	185	50.5	.051	\$ 20.48
Curvilinear CC21 200W PMH	240	105.5	.106	\$ 42.56
Curvilinear CC21 250W PMH	291	156.5	.157	\$ 63.04
Curvilinear CC21 150W HPS	188	53.5	.054	\$ 21.68
Curvilinear CC21 200W HPS	240	105.5	.106	\$ 42.56
Curvilinear CC21 250W HPS	295	160.5	.161	\$ 64.64

¹ Assumes HID lamp replacement every three years, includes labor and lamp.

Design Innovation



EmitterDeck™ and Electronic Driver Assembly

The Curvilinear LED EmitterDeck and electronic driver assembly are modularly designed for installation in just minutes. Individual MicroEmitters are also easily replaceable.



Open lens frame with flathead screw driver and insert electronic driver assembly into upper part of housing and lock into place. Tighten with flathead screw driver



Connect electrical quick connector from EmitterDeck to electronic driver assembly.



Hang Curvilinear LED EmitterDeck. Connect temperature sensor wiring from EmitterDeck to LifeShield Protection System on electronic driver assembly.



Swing EmitterDeck into place and tighten flathead screw. Raise and close lens frame.

Curvilinear LED Arm Mount

Ordering Example:

1A / CC17A3 / 60L5K120 / DB / A-30 / PRA20-4188A/DB

1 2 3 4 5-13 14

1 Mounting
3Y configuration is available for round poles only.
EPA is for luminaire with standard arm

Plan View:

CC/CCS	Cat. No.:	1A	2B	2L	3T	3Y	4C	1W
	EPA 17"	0.9	1.8	1.6	2.5	2.5	2.8	-
	EPA 21"	1.2	2.4	2.2	3.4	3.4	3.9	-

2 Fixture
Catalog no. designates fixture and light distribution.



CC – 3 horizontal reveals.



CCS – 1 horizontal groove.

HOUSING
CC
CCS

SIZE
17 = 17", 60 LED's
21 = 21", 120 LED's

DISTRIBUTION
1 = Type I Full Cutoff
2 = Type II Full Cutoff
3 = Type III Full Cutoff
4 = Type IV Full Cutoff
5 = Type V Square Full Cutoff
R = Type R Right Full Cutoff
L = Type L Left Full Cutoff

Light Distribution

A = Arm Mount

3 Electrical Module

SOURCE
60 = 17", 60 LED's
120 = 21", 120 LED's

COLOR TEMPERATURE¹
L3K = 3500K
L5K = 5100K
L2K = 580nm Amber

VOLTAGE
120 = 120V
208 = 208V
240 = 240V
277 = 277V
347 = 347V²
480 = 480V²

² Due to current unavailability of 347V and 480V drivers, specification of these voltages shall feature an integral step-down transformer.

¹ 4300K and 6500K are also available on an "Engineered to Order" basis

4 Finish
Super TGIC powder coat paint over titanated zirconium conversion coating.

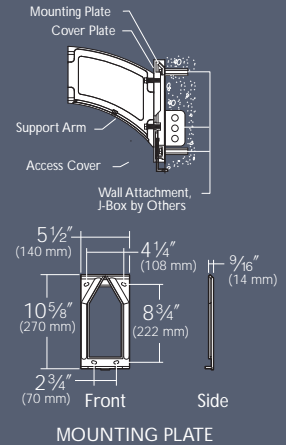
Color: Stealth Gray Light Gray Platinum Silver White Black Dark Bronze Custom Colors Consult your Kim Lighting representative for custom colors.

Cat. No.: **SG** **LG** **PS** **WH** **BL** **DB** **CC**

5 Wall Mounting:

Cat. No.: **1W** A cast mounting plate of 356 alloy, low-copper (<0.6% Cu) aluminum, is mounted to the wall with bolts (by others). Fixture and arm are mounted to a cast 356 alloy aluminum cover plate before attaching to the wall mounting plate. The fixture-arm-cover plate assembly is hooked to the wall mounting plate, and secured with stainless steel screws provided. After mounting to the wall, field splices are made at the opening in the cover plate, then covered by a cast 356 alloy aluminum plate that blends with the cover plate design. Complete fixture-arm-cover plate assembly can therefore be mounted before field splices are made. Cover plate is finished to match arm and fixture powder coat color.

CAUTION: Structural integrity of mounting plate attachment to wall is by others.



6 Optional Photocell:
Factory installed photocell in housing with fully gasketed sensor on side wall.

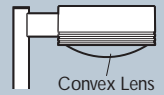
Cat. No.: **A-30** 120V
A-31 208V
A-32 240V
A-33 277V
A-34 480V
A-35 347V

Mounting Configuration
S – Fixture with Photocell Receptacle
s – slave unit(s)

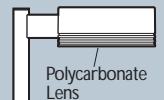
Ordering Information

7 Optional Dimming Controls: The Curvilinear LED driver features a 0-10V dimming interface on the LifeShield® device, allowing 0-100% illumination output when synchronized with a control and dimming system, provided by others. Kim Lighting will advise availability of complete control packages, once they have been tested and exceed Kim's high quality standards.

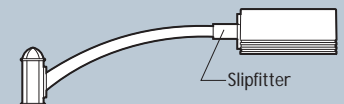
8 Optional Convex Glass Lens: Cat. No.: **CGL** The 3/16" thick clear convex tempered glass lens replaces the standard flat glass lens. Provides increased lens presence and provides a subtle improvement in uniformity where pole spacing is extreme.



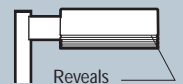
9 Optional Polycarbonate Lens: Cat. No.: **L17F** For 17" Clear UV stabilized polycarbonate lens replaces standard flat glass lens, gasketed and integral with lens frame.
L21F For 21"
CAUTION: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight.



10 Optional Horizontal Slipfitter Mount: Cat. No.: **HSF** Replaces standard mounting arm with a slipfitter for mounting to a horizontal pole davit-arm with 2" pipe-size mounting end (2 3/8" O.D.). Provides ±5° vertical fixture adjustment.



11 Optional Accent Reveals: For CC series only. Three aluminum bands riveted inside the housing reveals. Available in five standard Kim powder coat finishes. Custom colors available.



Color: Stealth Gray Light Gray Platinum Silver White Black Dark Bronze Custom Colors Consult your Kim Lighting representative for custom colors.
Cat. No.: **SG-REV LG-REV PS-REV WH-REV BL-REV DB-REV CC-REV**

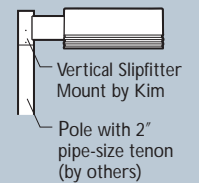
12 Optional Vertical Slipfitter Mounts:

Note: 3SY available only on round slipfitter.

For existing pole installation or for use with poles provided by others.

Cat. No. for 4" Round:	Cat. No. for 4" Square:	Mounting Configuration
VSF-1A	SVSF-1A	1A - Single arm mnt.
VSF-2B	SVSF-2B	2B - 2 at 180°
VSF-2L	SVSF-2L	2L - 2 at 90°
VSF-3T	SVSF-3T	3T - 3 at 90°
VSF-3Y	—	3Y - 3 at 120°
VSF-4C	SVSF-4C	4C - 4 at 90°

Allows fixtures, with standard support arm to be mounted to poles having a steel 2" pipe-size tenon (2 3/8" O.D. x 4 1/2" min. length).



13 Optional Support Arm: **NOTE:** Refer to Kim Lighting's Arms and Poles Selection Guide for complete details.

	Swept Solid Arm		Swept Hollow Arm		Upsweep Solid Arm		Upsweep Hollow Arm		Uplift Adjustable Aluminum Arm		Uplift Adjustable Stainless Steel Arm	
Cat. No.:	CC17	CC21	CC17	CC21	CC17	CC21	CC17	CC21	CC17	CC21	CC17	CC21
	AA01	AA01	AA03	AA03	AA05	AA05	AA07	AA07	AA09	AA09	AA11	AA11
EPA for Fixture and Arm												
Mounting:	CC17	CC21	CC17	CC21	CC17	CC21	CC17	CC21	CC17	CC21	CC17	CC21
1A	1.3	1.6	1.0	1.3	1.5	1.8	1.0	1.4	1.3	2.1	1.3	2.1
2B	2.6	3.2	2.0	2.6	3.0	3.6	2.0	2.8	2.6	4.2	2.6	4.2
2L	2.0	2.6	1.7	2.3	2.2	2.8	1.4	2.4	1.8	3.1	1.8	3.1
3T	3.3	4.2	2.7	3.6	3.7	4.6	2.4	3.8	3.1	5.2	3.1	5.2
3Y	3.3	4.2	2.7	3.6	3.7	4.6	2.4	3.8	3.1	5.2	3.1	5.2
4C	3.6	4.7	3.0	4.1	4.0	5.1	2.5	4.3	3.5	5.7	3.5	5.7

14 Poles: See Kim Lighting's Arms and Poles Selection Guide for a complete selection of round or square poles in aluminum or steel.

Curvilinear LED Post Top Mount

Ordering Example:

FM / CC21P5 / 120L5K240 / DB / A-32 / PRA20-4188FM/DB

1 2 3 4 5-9 10

1 Mounting

17" 21"

EPA: 0.7 1.0



Cat. No:	FM Flush Mount	PT Post Tenon Mount	DM Direct Mount
Pole Top Requirements:	17" 3 $\frac{3}{8}$ ", 4", 4 $\frac{1}{2}$ " or 5" Dia. 21" 4", 4 $\frac{1}{2}$ ", 5", or 6" Dia.	2" Pipe-size Tenon (2 $\frac{3}{8}$ " O.D. x 4 $\frac{3}{4}$ " L) 2" Pipe-size Tenon (2 $\frac{3}{8}$ " O.D. x 4 $\frac{3}{4}$ " L)	n/a 3.1" to 3.9" Dia.

2 Fixture

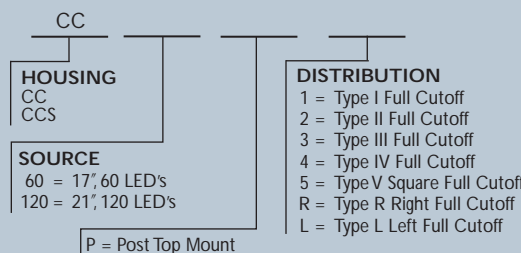
Catalog no. designates fixture and light distribution.



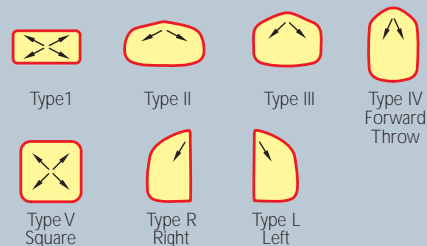
CC – 3 horizontal reveals.



CCS – 1 horizontal groove.



Light Distribution



3 Electrical Module

SOURCE 17 = 17", 60 LED's 21 = 21", 120 LED's	COLOR TEMPERATURE ¹ L3K = 3500K L5K = 5100K L2K = 580nm Amber	VOLTAGE 120 = 120V 208 = 208V 240 = 240V 277 = 277V 347 = 347V ² 480 = 480V ²	² Due to current unavailability of 347V and 480V drivers, specification of these voltages shall feature an integral step-down transformer.
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¹ 4300K and 6500K are also available on an "Engineered to Order" basis

4 Finish:

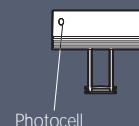
Super TGIC powder coat paint over titanated zirconium conversion coating.

Color:	Stealth Gray	Light Gray	Platinum Silver	White	Black	Dark Bronze	Custom Colors	Consult your Kim Lighting representative for custom colors.
Cat. No.:	SG	LG	PS	WH	BL	DB	CC	

5 Optional Photocell:

Factory installed photocell in housing with fully gasketed sensor on side wall.

Line Volts:	120V	208V	240V	277V	480V	347V
Cat. No.:	A-30	A-31	A-32	A-33	A-34	A-35



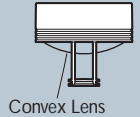
Ordering Information

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7 Optional Convex Glass Lens:

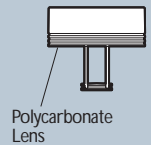
Cat. No.: **CGL** The 3/16" thick clear convex tempered glass lens replaces the standard flat glass lens. Provides increased lens presence and provides a subtle improvement in uniformity where pole spacing is extreme.



8 Optional Polycarbonate Lens:

Cat. No.: **L17F** For 17" Clear UV stabilized polycarbonate replaces standard flat glass lens, gasketed and integral with lens frame.
L21F For 21"

CAUTION: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight.



9 Optional Accent Reveals:
For CC series only.

Three aluminum bands riveted inside the housing reveals. Available in five standard Kim powder coat finishes. Custom colors available.



Color: Stealth Gray Light Gray Platinum Silver White Black Dark Bronze Custom Colors
 Cat. No.: **SG-REV LG-REV PS-REV WH-REV BL-REV DB-REV CC-REV**

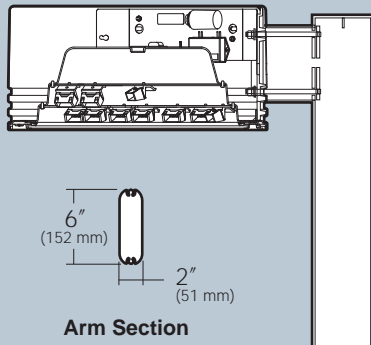
Consult your Kim Lighting representative for custom colors.

10 Poles:

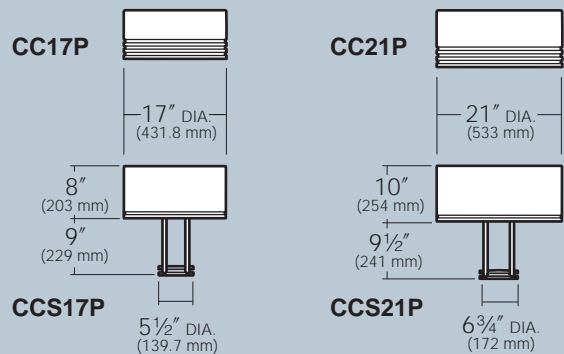
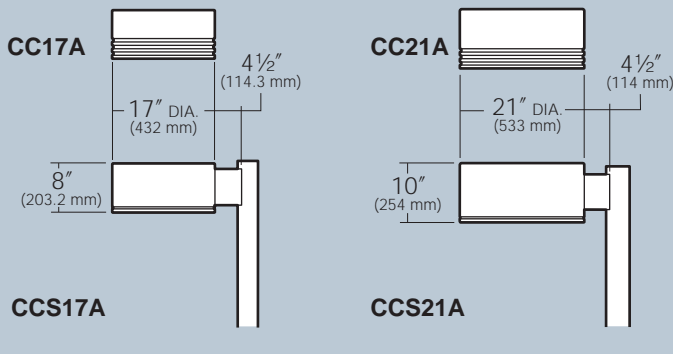
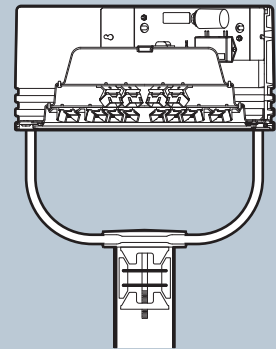
See Kim Lighting's Arms and Poles Selection Guide for a complete selection of round or square poles in aluminum or steel.

Specifications

CC/CCS17
 Small LED
 60 LEDs
 Maximum System
 Watts = 73 W



CC/CCS21
 Large LED
 120 LEDs
 Maximum System
 Watts = 140 W



HOUSING: Spun aluminum. (Rollformed linear reveals: **CC:** Three equally spaced reveals, 1/2" wide, separated by 1/2" ribs, 1/4" deep. **CCS:** One 1/4" groove, 1/4" deep.) Sidewalls have a maximum 1° of taper, and are free of welds or fasteners. A rollformed aluminum flange is hemmed into the bottom providing support for the reflector module. An internal aluminum casting provides for mounting of the electrical module and support for the housing hinge.

LENS FRAME ASSEMBLY: One-piece cast aluminum lens frame is attached to the housing by a zinc plated cold rolled steel hinge with a stainless steel pin. Closure of the housing is by three self-retained stainless steel screws. A stainless steel self-locking stop arm is provided to hold the housing in the open position while servicing. A 3/16" thick clear flat tempered glass lens is fully gasketed by a one-piece extruded and vulcanized silicone gasket. Lens is retained in the frame by removable zinc plated steel clips.

STANDARD ARM MOUNTING: Arm is one-piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut to mate with specified round pole.

POST TOP MOUNT YOKE: Lens frame is supported at four points by two aluminum U-shaped tubular arms cradled in a cast aluminum hub. Arms are welded to the lens frame, and welded to the hub along their longitudinal axis. Hub contains a field-splice compartment, a cast aluminum cover and one of the following pole attachment means: **FM** - Flush Mounting, **PT** - Pole Tenon mounting, or **DM** - Direct Mounting.

ELECTRONIC MODULE: All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Module includes a driver, LifeShield® temperature control device and surge protector. Electrical module attaches to housing with key hole slots, accessible

by opening the lens frame and removing optical module. Driver is rated for -40°F starting and has a 0-10V dimming interface on the LifeShield device for multi-level illumination options.

OPTICAL MODULE: Precision, replaceable MicroEmitter™ reflectors are positioned to achieve directional control toward desired task. The entire EmitterDeck mounting assembly fastens to the housing as a one-piece module.

FINISH/COLOR: Finish is TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness. Standard colors are Black, Dark Bronze, Light Gray, Stealth Gray™, Platinum Silver, or White. Custom colors are available.

SUPPORT ARM: One-piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

OPTIONAL WALL MOUNTING: A cast-aluminum mounting plate is mounted to the wall with four bolts (by others). Fixture and arm are mounted to the cast aluminum cover plate before attaching to the wall mounting plate. The fixture-arm-cover plate assembly is hooked to the wall mounting plate and secured with stainless steel screws provided. Field splices are made at the opening in the cover plate. Cover is finished to match arm and fixture color.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

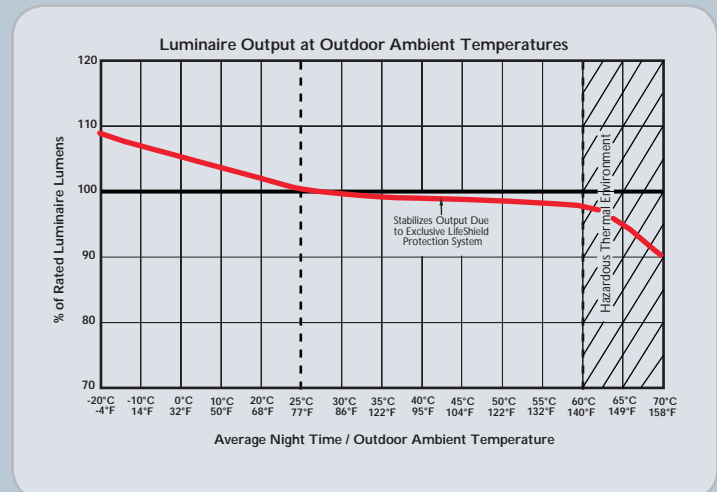
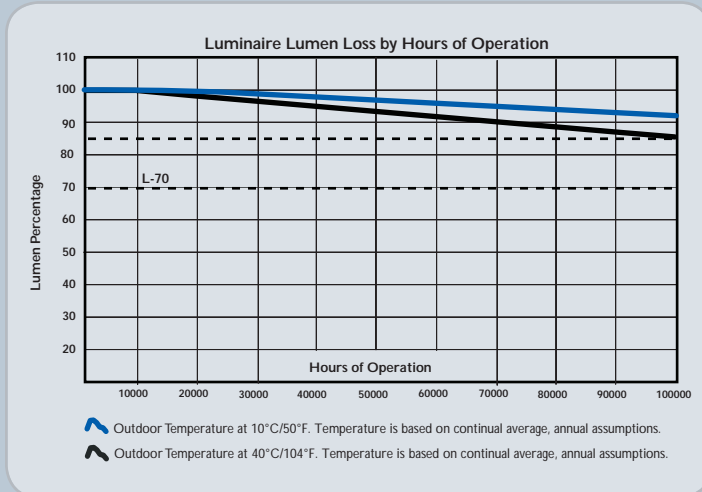
LISTINGS AND RATINGS	
ETL ¹	UL 1598, UL 8750

¹Suitable for wet locations

Kim Lighting reserves the right to change specifications without notice.

Lumen Performance

Curvilinear LED's exclusive LifeShield® Protection System controls lumen depreciation in extreme and fluctuating environments to preserve operational lifespan. Always consult www.kimlighting.com for the most current performance data.



Notes:

- Lumen loss stabilization is a result of Kim Lighting's MicroEmitter luminaires exclusive LifeShield Protection System and Dual Heat Management.
- The LifeShield Protection System will lower the current to the LEDs significantly if the luminaire is exposed to direct heat (sun) or excessive abnormal conditions.
- Luminaire Lumen Loss assumptions are based on LM-80 results and an actual outdoor product testing based upon 5100K CCT, 350mA drive current, 25°C lab ambient and cathode temperature at 85°C. Assumptions past 6,000 hours are interpolated.
- Cathode temperature baseline is at 85°C. If cathode temperature increases during ambient changes and abnormal environment conditions, % of rated lumens will slightly decrease.
- Outdoor ambient temperatures are assumed SITU averages by geographic region.
- As Solid State Lighting technology and thermal management systems continually advance, lumen loss projections are subject to improvement.

LM-79-2008 Compliance

(INDICATES STANDARD IES FORMATTING)

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IESNA:LM-79-2008
[ISSUE DATE] 03/08/11
[TEST] I7L67707
[TEST LAB] INDEPENDENT TESTING LABORATORIES, INC.
[MANUFACTURER] KIM LIGHTING
[LUMEN CATEGORY] L70
[LUMINAIRE] FABRICATED BROWN PAINTED METAL HOUSING, FABRICATED
[NOTE] DIFFUSE METAL TIBBED LED MODULE MOUNTING PLATES AND MOUNTING
[NOTE] HOUSINGS, 40 LED MODULES EACH CONSISTING OF: EXTRUDED
[NOTE] SEMI-DIFFUSE METAL MOUNTING BRACKET/HEAT SINK, ONE WHITE
[NOTE] CIRCUIT BOARD WITH 3 LEDS, MOLDED PLASTIC REFLECTOR WITH
[NOTE] SPECULAR FINISH, CLEAR FLAT GLASS LENS IN CAST BROWN PAINTED
[NOTE] METAL DOOR FRAME.
[LAMP] ONE HUNDRED TWENTY WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDS),
[NOTE] 84 LENS AIMED 30-DEGREES BELOW THE HORIZON, 36 LEDS AIMED
[NOTE] 55-DEGREES BELOW THE HORIZON.
[LEDDRIVER] ADVANCE LED-INTA-0350C-425-DO, HUBBELL LIGHTING
[NOTE] INC. 91026182-1803 LED DRIVER CONTROLLER
[NOTE] DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT
[NOTE] VOLTAGE (120VAC, 60Hz) TO THE LED DRIVER AND CONTROLLER.
[OTHER] TOTAL INPUT WATTS = 124.0 AT 120.0 VOLTS
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[OTHER] TEST DISTANCE = 33.25 FEET
[ADDRESS] TEL#8004461
[TEST]
120.0 1 1 41 1 1 -1.458333 -1.458333 0
```

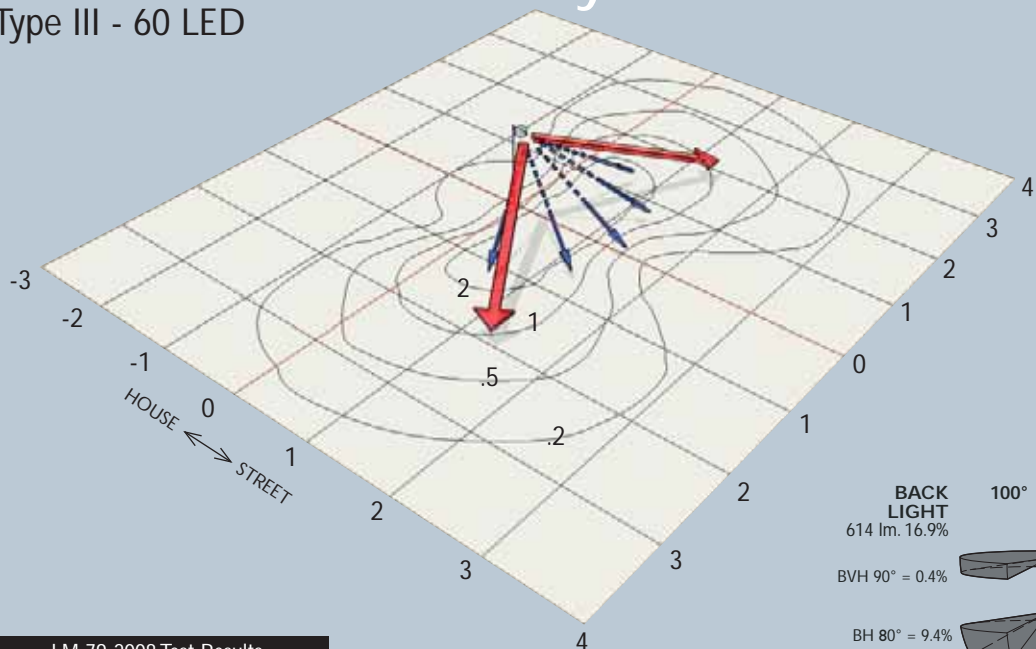
Kim Lighting's photometric data for Curvilinear LED luminaires is tested to the IESNA LM-79-2008 standard, and Kim Lighting only uses LEDs that are tested to the IESNA LM-80-2008 standard. When evaluating photometric data for LED luminaires, look for a negative one (-1) in the lumen output space of the photometric data file to assure compliance with LM-79-2008.

Test reports on page 16-17 reflect photometry performed under LM-79-2008 standards.

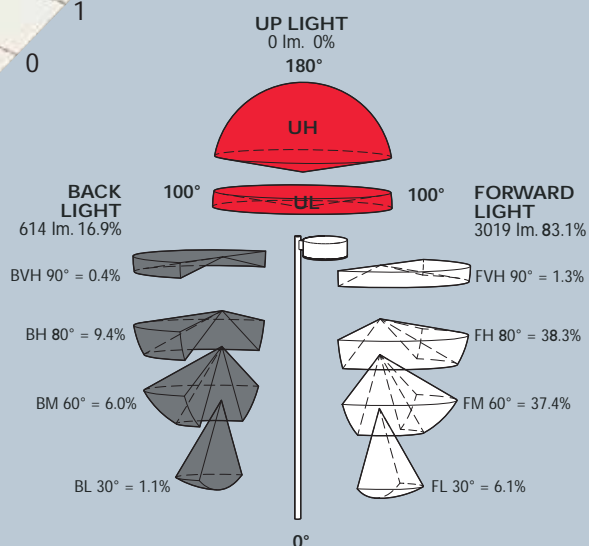
Actual Test Report

CC17A Photometry

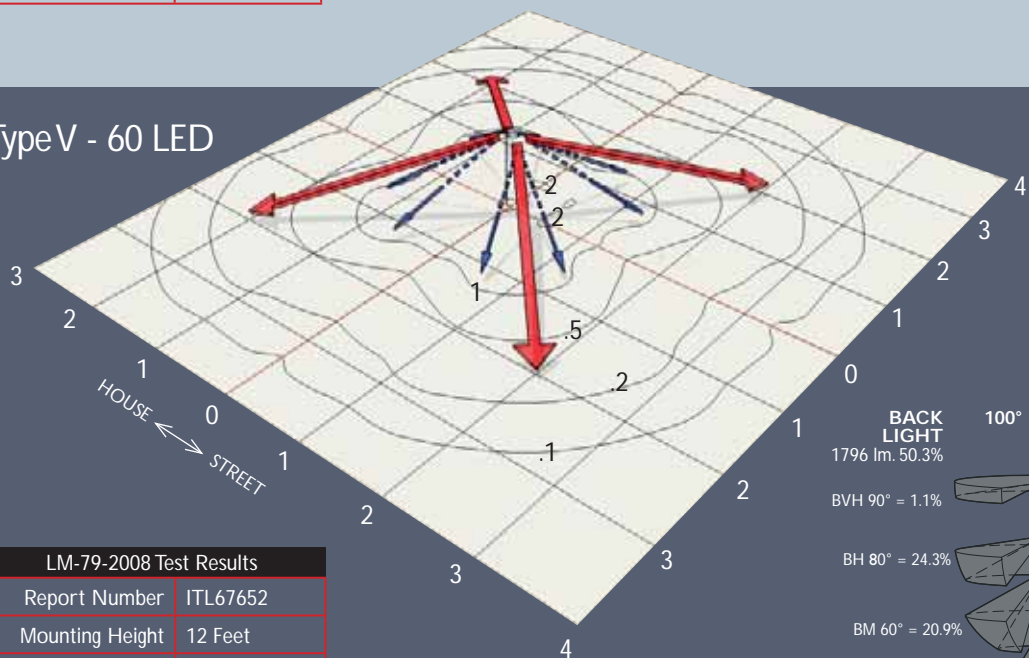
Type III - 60 LED



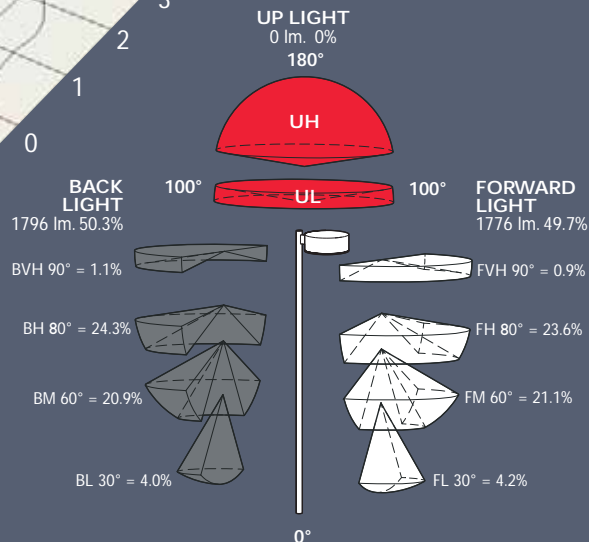
LM-79-2008 Test Results	
Report Number	ITL67651
Mounting Height	12 Feet
Light Dist. Type	Type III
Total Flux	3633 Lm.
System Watts	68.1W



Type V - 60 LED

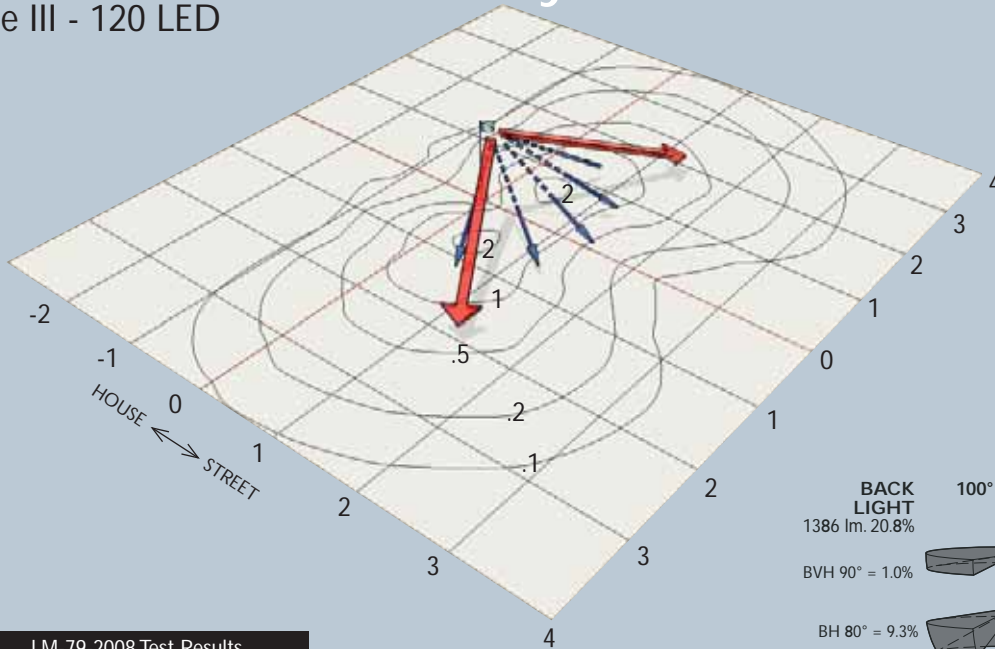


LM-79-2008 Test Results	
Report Number	ITL67652
Mounting Height	12 Feet
Light Dist. Type	Type V
Total Flux	3572 Lm.
System Watts	68.3W

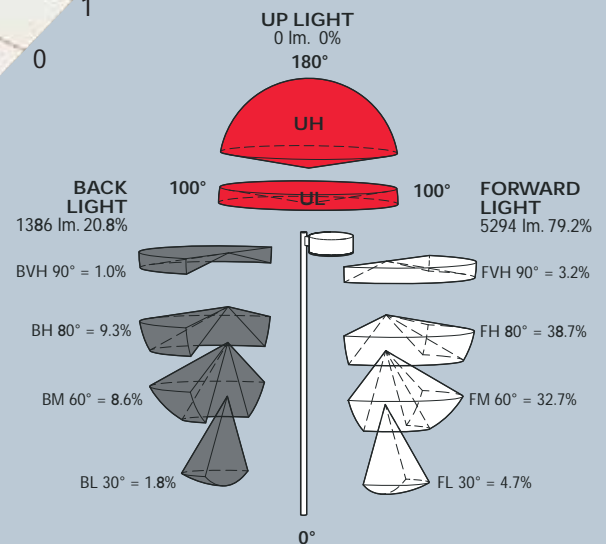


CC21A Photometry

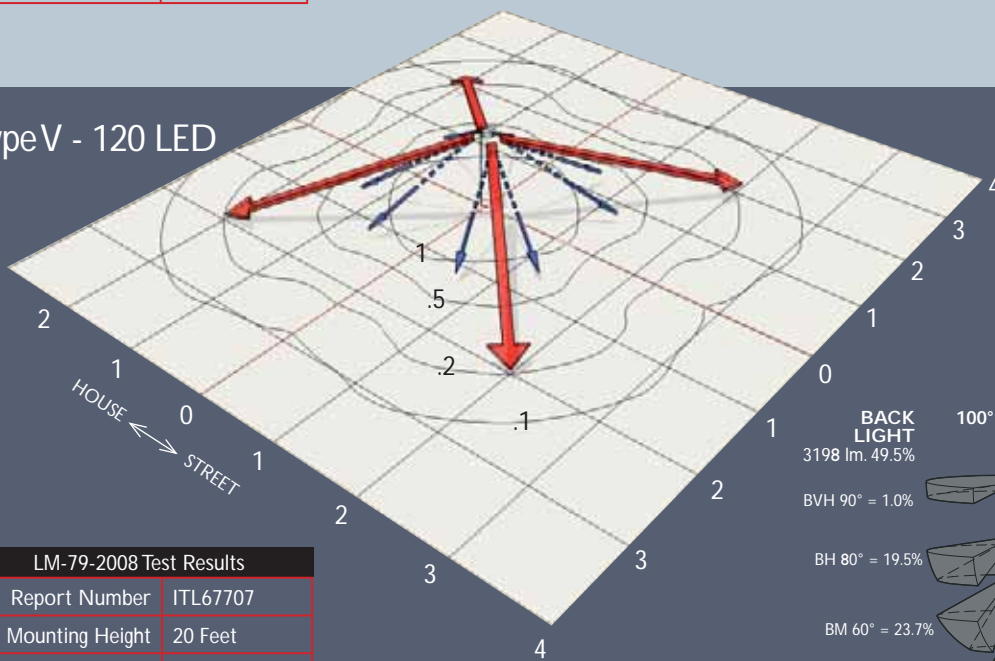
Type III - 120 LED



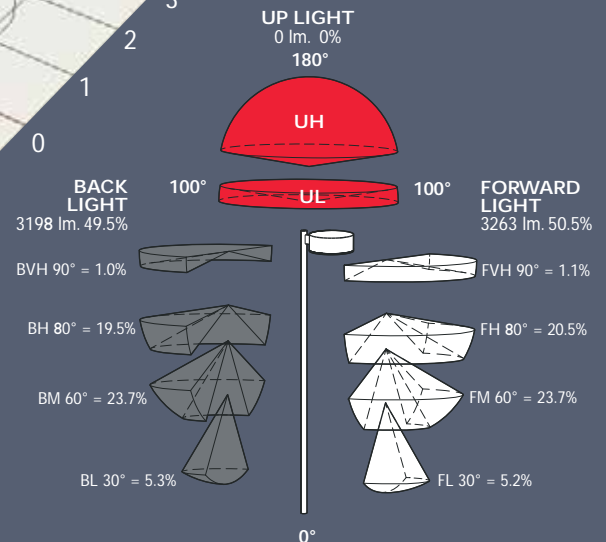
LM-79-2008 Test Results	
Report Number	KL02385
Mounting Height	20 Feet
Light Dist. Type	Type III
Total Flux	6680 Lm.
System Watts	134.5W



Type V - 120 LED



LM-79-2008 Test Results	
Report Number	ITL67707
Mounting Height	20 Feet
Light Dist. Type	Type V
Total Flux	6461 Lm.
System Watts	124.8W



Curvilinear LED

When properly installed and under normal conditions of use, Kim Lighting warrants Curvilinear LED products ("Product(s)") sold by Kim Lighting to be free from defects in material and workmanship for (i) a period of five (5) years for metal parts, (ii) a period of ten (10) years for exterior housing paint finish(s), (iii) a period of six (6) years for LED Light Engines (MicroEmitters) and, (iv) a period of five (5) years for LED power components (LED Driver, LifeShield® Device, Surge Protector), from the date of sale of such goods to the buyer as specified in Kim Lighting shipment documents for each Product(s). Occupancy sensors, LED drivers, dimmers and relay wiring components are covered by the manufacturer's warranty. The buyer agrees to make all claims regarding defects or deficiencies in the Product(s) according to the terms of Kim Lighting's official warranty. Warranty claims must be made in writing according to Kim Lighting procedures existing at the time of the claim. Valid warranty claims must be made within the warranty period specified herein above, and submitted within thirty (30) days of discovery of the damage or defect. No FIELD labor, repair, DISMANTLE, or installation charges are included with this warranty. Kim Lighting may repair or replace any Product(s) covered by this warranty at its sole discretion and in accordance with its procedure. Any unauthorized return, repair, replacement or modification of the Product(s) shall void this warranty. This warranty applies only to the use of the Product(s) as intended by Kim Lighting and does not cover any misapplication or misuse of said Product(s), or installation in hazardous or corrosive environments. In no event shall Kim Lighting's total liability for any reason arising hereunder exceed the purchase price paid to Kim Lighting for the product purchased by the buyer hereunder. Contact Kim Lighting for complete warranty language, exceptions, and limitations.

Additional Kim Lighting Premium LED Families



HID to LED
UPGRADE KIT



MicroEmitter™ LED Technology
COMPREHENSIVE CATALOG



WARP9® LED
SITE / ROADWAY



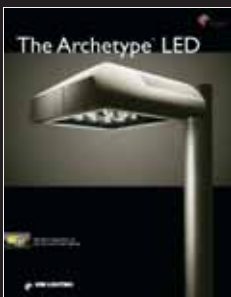
Structural LED
SITE / ROADWAY



Era® Bell/Era® Acorn LED
SITE / ROADWAY



Era® LED
SITE / ROADWAY



The Archetype® LED
SITE / ROADWAY



Wall Director® LED
WALL MOUNTED



PGL7 LED
PARKING STRUCTURE



All Inclusive LED
LANDSCAPE COLLECTION