

# CRUZER

AREA LUMINAIRE

## FEATURES

- Unique thermal management system yields a 434,000 hour rated life
- Can be mounted on round or square poles
- Easy hinged access, field replaceable optical bezel and heat dissipating fins



\*3000K and warmer CCTs only

## CONTROL TECHNOLOGY



## SPECIFICATIONS

### CONSTRUCTION

- Die cast aluminum two-piece housing
- Die cast main (thermal) housing provides direct heat exchange between the LED light engine and the cool outdoor air
- LED drivers are thermally isolated from the main housing, mechanically attached and heat sunked to the rear housing
- Shape of the main housing is designed to prevent debris accumulation and is a bird nesting deterrent. Back and main housings are designed to hinge open for easy mounting and easy access
- IFS polyester powder-coat electrostatically applied and thermocured
- IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds

### OPTICS

- Optical one piece cartridge system consisting of an LED engine, LEDs, optics, gasket and stainless steel bezel
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system
- Optics are held in place without the use of adhesives

### OPTICS (CONTINUED)

- Cartridge assembly is available in various lighting distributions using TIR designed acrylic optical lenses over each LED

### ELECTRICAL

- Luminaire accepts 100V through 277V, 347V or 480V input, 50 to 60 Hz
- Power factor is  $\geq .90$  at full load
- Optional 0 to 10 volt dimming leads are available upon request
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher
- Plug disconnects are listed by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Surge protection - 20kA

### CONTROLS

- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration
- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night ([see www.beaconproducts.com/products/energeni](http://www.beaconproducts.com/products/energeni))



SHOWN WITH SITESYNC™

## RELATED PRODUCTS

[Traverse](#)

### CONTROLS (CONTINUED)

- Cruzer can be specified with SiteSync™ wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or visit [www.hubbellighting.com/sitesync](http://www.hubbellighting.com/sitesync) for more details

### INSTALLATION

- Arm mount for attachment to round or square pole
- Slip fitter or adjustable knuckle fits 2 3/8" arm or tenon
- Suitable for applications requiring 3G testing prescribed by ANSI C136.31

### CERTIFICATIONS

- CSA labeled, suitable for wet locations (standard)
- IDA approved for 3000K or warmer CCT

### WARRANTY

- 5 year warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	3,414–15,549
Wattage Range	27–136
Efficacy Range (LPW)	99–139
Life (Hours)	L70 > 430,000
Input Current Range (Amps)	0.12–1.36

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

**ORDERING GUIDE**
**Example:** CRZ-36L-80-4K7-3-UNV-AM-BLT

 CATALOG # 

CRZ Series	Engine Watts	LED Color	Optics	Voltage	Electrical Options
CRZ Cruzer	<b>24L-27</b> 27 Watt - LED array <b>24L-55</b> 55 Watts - LED array <b>36L-80</b> 80 Watts - LED array <b>48L-110</b> 110 Watts - LED array <b>60L-136</b> 136 Watts - LED array	<b>3K7</b> 3000K, 70 CRI <b>4K7</b> 4000K, 70 CRI <b>5K7</b> 5000K, 70 CRI	<b>2</b> Type II <b>3</b> Type III <b>4F</b> Type IV, forward <b>4W</b> Type IV, wide <b>5R</b> Type V, rectangular <b>SQM</b> Type V, square medium <b>5W</b> Type V, round wide	<b>UNV</b> 120-277V <b>347</b> 347V <b>480</b> 480V	<b>PCU</b> Photocell, Button Universal

Control Options	Sensor Options	Mounting Options	Shield Options	Finish
<b>GENI-XX</b> Energeni <sup>3,6</sup> <b>WIS</b> wiSCAPE Fixture Module, in-fixture relay for wireless lighting control <sup>1,6</sup> <b>WISSC</b> wiSCAPE Fixture Module, in-fixture relay for wireless lighting control and motion/occupancy control <sup>1,6</sup> <b>SWP</b> SiteSync Wireless Pre-Commission <sup>4,6</sup> <b>SWPM</b> SiteSync Wireless Pre-Commission w/ MOtion Detection <sup>4,5,6</sup>	<b>MOB</b> Motion sensor 33% or 50% dimming <sup>2,5,6</sup> <b>OCS</b> Occupancy sensor (on/off)	<b>MAF</b> Mast Arm Fitter (formerly SF2) for 2 3/8" OD horizontal arm <b>K</b> Knuckle (formerly PK2) limit to 30° tilt or 2 3/8" OD horizontal arm or vertical tenon <b>AM</b> Arm mount <b>WB</b> Wall Bracket	<b>BC</b> Backlight control <b>90</b> 90° house side shield <b>270</b> 270° house side shield <b>360</b> 360° house side shield	<b>BLT</b> Black Matte Textured <b>BLS</b> Black Gloss Smooth <b>DBT</b> Dark Bronze Matte Textured <b>DBS</b> Dark Bronze Gloss Smooth <b>GTT</b> Graphite Matte Textured <b>LGS</b> Light Grey Gloss Smooth <b>PSS</b> Platinum Silver Smooth <b>WHT</b> White Matte Textured <b>WHS</b> White Gloss Smooth <b>VGT</b> Verde Green Textured <b>Color Option</b> <b>CC</b> Custom color

- Notes:
- 1 Not available at 347V or 480V input
  - 2 Not available on 48L-110, not available on 60L-136
  - 3 When ordering Energeni, specify the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options
  - 4 Must specify group and zone information at time of order. See [www.hubbellighting.com/sitesync](http://www.hubbellighting.com/sitesync) for further details
  - 5 Specify time delay, dimming level and mounting height
  - 6 Not available with other control or sensor options

**Accessories**

- SWUSB** SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node
- SWTAB** Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node
- SWBRG** SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested

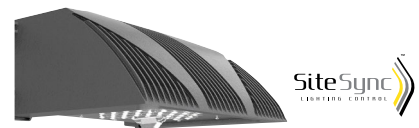
\* When ordering with SiteSync, one of these interface options must be chosen and ordered separately. Each option contains the SiteSync License, GUI and Bridge Node

+ If needed, an additional Bridge Node can be ordered

**PRECOMMISSIONED SITESYNC ORDERING INFORMATION:** When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit [www.hubbellighting.com/products/sitesync/](http://www.hubbellighting.com/products/sitesync/) or contact Hubbell Lighting tech support at (864) 678-1000

SiteSync fixtures with motion control (SWPM) require the mounting height of the fixture for selection of the lens

Examples: CRZ-60L-136-5K7-T3-UNV-SWP-BLT SiteSync only  
 CRZ-60L-136-5K7-T3-UNV-SWPM-20F-BLT SiteSync with Motion Control



SiteSync Lighting Control is available from our most popular brands in a broad range of award-winning product families.

**PERFORMANCE DATA**

# LED'S	Drive Current	System Watts	Distribution Type	5K (5000K nominal, 70CRI)					4K (4000K nominal, 70CRI)					3K (3000K nominal, 70CRI)				
				Lumens	LPW <sup>1</sup>	B	U	G	Lumens	LPW <sup>1</sup>	B	U	G	Lumens	LPW <sup>1</sup>	B	U	G
24	350mA	27W	2	3703	132	1	0	1	3817	136	1	0	1	3474	124	1	0	1
			3	3680	131	1	0	1	3794	135	1	0	1	3453	123	1	0	1
			4	3721	133	2	0	1	3836	137	2	0	1	3491	125	2	0	1
			4W	3647	124	1	0	2	3759	128	1	0	2	3421	117	1	0	1
			5R	3765	134	2	0	1	3882	139	2	0	1	3532	126	2	0	1
			5W	3640	130	2	0	1	3752	134	2	0	1	3414	122	2	0	1
24	700 mA	55W	2	6171	107	1	0	1	6362	110	1	0	2	5789	100	1	0	1
			3	6134	106	1	0	2	6323	109	1	0	2	5754	99	1	0	2
			4	6201	107	3	0	1	6323	110	3	0	1	5817	100	3	0	1
			4W	6078	113	1	0	2	6265	117	1	0	2	5701	106	1	0	2
			5R	6275	108	3	0	1	6469	112	3	0	1	5887	102	3	0	1
			5W	6066	105	3	0	1	6254	108	3	0	1	5691	98	3	0	1
36	700 mA	80W	2	9430	115	1	0	2	9722	119	1	0	2	8847	108	1	0	2
			3	9374	110	1	0	3	9664	113	1	0	3	8794	103	1	0	2
			4	9477	111	1	0	3	9770	114	3	0	2	8891	104	3	0	2
			4W	9288	115	1	0	2	9575	119	1	0	3	8713	108	1	0	2
			5R	9591	112	3	0	2	9887	116	3	0	2	8997	105	3	0	1
			5W	9265	108	4	0	2	9552	112	4	0	2	8692	102	3	0	2
48	700 mA	110	2	12574	108	4	0	2	12963	118	2	0	2	11796	108	2	0	2
			3	12498	114	1	0	3	12884	117	1	0	3	11725	107	1	0	3
			4	12635	115	4	0	2	13026	119	4	0	2	11854	108	4	0	2
			4W	12383	115	1	0	3	12766	119	1	0	3	11617	108	1	0	3
			5R	12787	117	4	0	2	13182	120	4	0	2	11996	109	3	0	2
			5W	12360	113	4	0	2	12742	116	4	0	2	11595	106	4	0	2
60	700 mA	136W	2	15291	112	2	0	2	15764	116	2	0	2	14321	105	2	0	2
			3	15198	111	2	0	3	15668	115	2	0	3	14234	104	2	0	3
			4	15365	113	2	0	3	15840	116	4	0	2	14391	105	4	0	2
			4W	15059	112	2	0	4	15524	116	2	0	4	14104	105	2	0	3
			5R	15549	114	4	0	2	16030	117	4	0	2	14563	107	4	0	2
			5W	15022	110	4	0	2	15487	113	4	0	2	14070	103	4	0	2

<sup>1</sup> Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application

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## ELECTRICAL DATA

# OF LEDs	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
24	1	350 mA	120	27	0.27
			277		0.12
			347		0.09
			480		0.06
24	2	700 mA	120	55	0.55
			277		0.24
			347		0.19
			480		0.14
36	1	700 mA	120	80	0.80
			277		0.35
			347		0.28
			480		0.20
48	1	700 mA	120	110	1.10
			277		0.48
			347		0.38
			480		0.27
60	1	700 mA	120	136	1.36
			277		0.59
			347		0.54
			480		0.34

## PROJECTED LUMEN MAINTENANCE

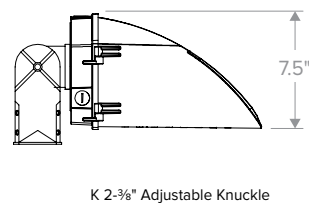
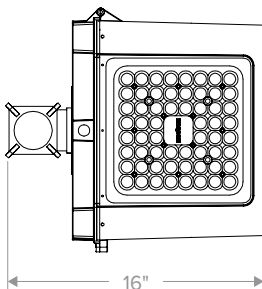
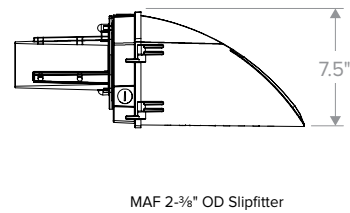
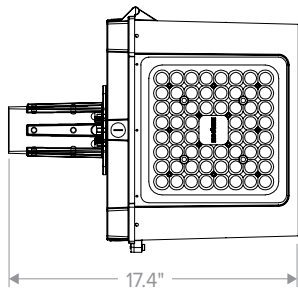
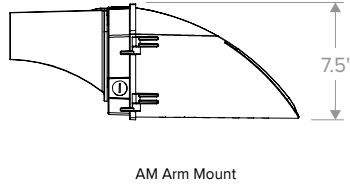
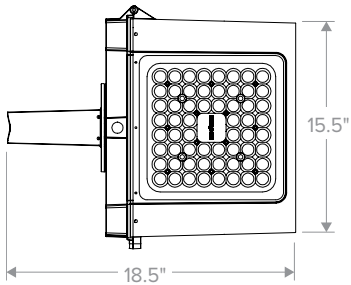
AMBIENT TEMP.	0	25,000	50,000	1TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°C	1.00	0.97	0.95	0.94	0.91	>434,000

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

AMBIENT TEMPERATURE		LUMEN MULTIPLIER
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00

Use these factors to determine relative lumen output for average ambient temperatures from 0–25°C (32–122°F)

## DIMENSIONS



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## PHOTOMETRY

### CRZ-60L-136-5K7-2-UNV TYPE II

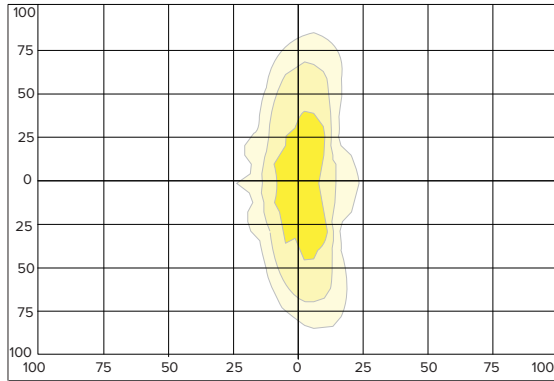
#### LUMINAIRE DATA

Description	5000 Kelvin, 70 CRI
Distribution Type	Type 2
Delivered Lumens	15,291
Watts	136
Efficacy	112
Mounting	Wall

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12920.5	84.5
Downward House Side	2370.4	15.5
Downward Total	15290.9	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	15290.9	100.0

#### ISOMETRIC FOOTCANDLE



10' Mounting Height  
 .5 FC  
 1.0 FC  
 2.0 FC

### CRZ-60L-136-5K7-3-UNV TYPE III

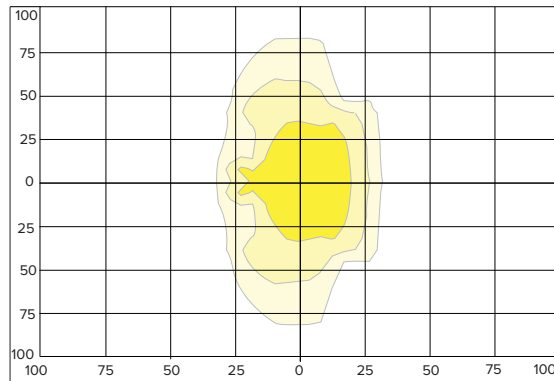
#### LUMINAIRE DATA

Description	5000 Kelvin, 70 CRI
Distribution Type	Type 3
Delivered Lumens	15,198
Watts	136
Efficacy	111
Mounting	Wall

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	13292.7	87.5
Downward House Side	1905.3	12.5
Downward Total	15198.0	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	15198.0	100.0

#### ISOMETRIC FOOTCANDLE



10' Mounting Height  
 .5 FC  
 1.0 FC  
 2.0 FC

### CRZ-60L-136-5K7-4-UNV TYPE IV

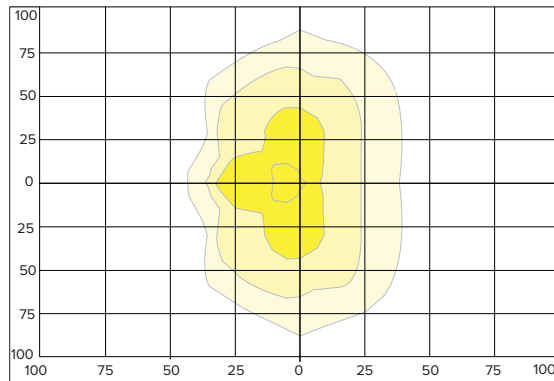
#### LUMINAIRE DATA

Description	5000 Kelvin, 70 CRI
Distribution Type	Type 4
Delivered Lumens	15,365
Watts	136
Efficacy	113
Mounting	Wall

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7682.7	50.0
Downward House Side	7682.7	50.0
Downward Total	15365.4	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	15365.4	100.0

#### ISOMETRIC FOOTCANDLE



10' Mounting Height  
 .5 FC  
 1.0 FC  
 2.0 FC

# CRUZER

AREA LUMINAIRE

## PHOTOMETRY CONTINUED

### CRZ-60L-136-5K7-5R-UNV TYPE V RECTANGULAR

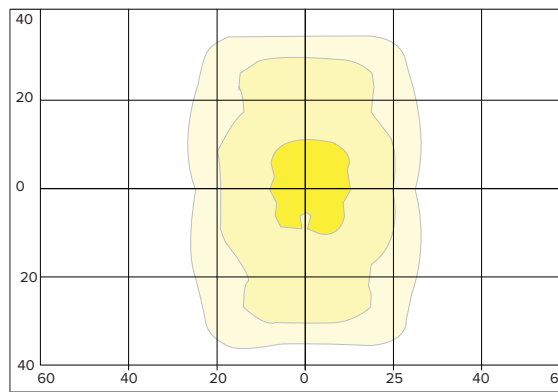
#### LUMINAIRE DATA

Description	5000 Kelvin, 70 CRI
Distribution Type	Type 5R
Delivered Lumens	15,549
Watts	137
Efficacy	114
Mounting	Wall

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7774.7	50.0
Downward House Side	7774.7	50.0
Downward Total	15549.4	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	15549.4	100.0

#### ISOMETRIC FOOTCANDLE



10' Mounting Height

.5 FC
  2.0 FC

1.0 FC

### CRZ-60L-136-5K7-5W-UNV TYPE V ROUND WIDE

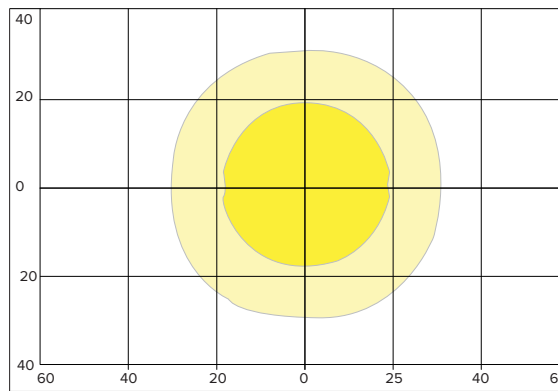
#### LUMINAIRE DATA

Description	5000 Kelvin, 70 CRI
Distribution Type	Type 5QM
Delivered Lumens	15,022
Watts	137
Efficacy	110
Mounting	Wall

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7511.2	50.0
Downward House Side	7511.2	50.0
Downward Total	15022.4	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	15022.4	100.0

#### ISOMETRIC FOOTCANDLE



10' Mounting Height

.5 FC
  2.0 FC

1.0 FC