

### SOLID STATE LIGHTING

# LCKM WALL MOUNT-PLED

#### Luminaire

Optical Crown, Arms and Hub are welded to create a one piece unitized Housing consisting of precise heavy wall cast low copper (A356 alloy; <0.2%Cu) aluminum. Hood is fastened to the Housing with a stainless steel hinge and secured with a single stainless steel hex head cap screw 180° opposite the hinge. Hood and Optical Crown are sealed with an extruded closed cell silicone gasket. Driver/wiring accessed through top of Electrical Access Hub. All exposed hardware is stainless steel.

#### **Decorative Arm**

One piece unitized decorative arm assembly and Wall Mount Plate consisting of cast low copper (A356 alloy;<0.2% Cu) aluminum. Arm is welded to the Wall Mount plate and to either the LCKM13 Hood (XKM-P) or Hub (XKM-T) or both (XKM-TP). All welds are blended to create a homogeneous appearance. Wall Mount plate affixed to mounting surface covering a recessed j-box.

#### **PLED™** Optics

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. LED refractors produce standard asymmetric site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

## LED Driver(s)

Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F. Driver(s) is/are UL and cUL recognized. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

#### **LED Emitters**

High output LED's are utilized with drive currents ranging from 175mA to 525mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

#### Amber LED's

**TRA** (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

#### **Finish**

Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.

#### PROJECT NAME:

#### FIXTURE TYPE:



LCKM13/XKM-DT (Post Top Mount)



LCKM13/XKM-UP (Pendant Mount)



LCKM13/XKM-TP (Post Top & Pendant Mount)









# **LCKM-WM SERIES - LED**



## **SPECIFICATIONS**

## **MOUNTING OPTIONS**





XKM-DT

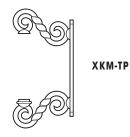
XKM-DP



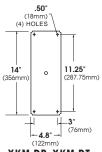


XKM-UT

XKM-UP

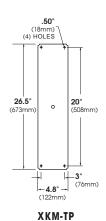


## **WALL PLATE**

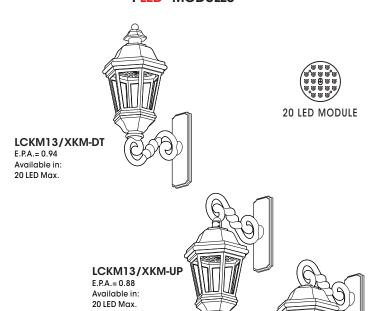


#### XKM-DP, XKM-DT XKM-UP & XKM-UT

Mounting hardware by others.



## **PLED® MODULES**





### **ORDERING INFORMATION**

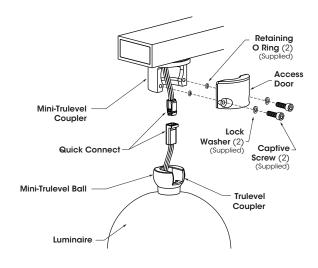
Spec/Order Example: LCKM13/XKM-DT/PLED-III-M/20LED-350mA/NW/277V/RAL-9005-T/PC+V

				<u> </u>	<u> </u>					
Luminaire & Mounting	Optics		# of LED's Drive Current Color Volt		Voltage	Finish	Options			
Luminaire & Mounting	Optics		LED			Voltage	Finish	Options		
	PLED™ Distribution Type		# of LEDs	Drive Current	Color Temp - CCT		Standard Textured Finish			
☐ LCKM13/XKM-DT	Type II PLED-II		☐ 20LED	☐ 175mA	NW (4000K)*  *Standard	UNV (120-277)	☐ Black RAL-9005-T	House Side Shield <b>HS-PLED</b>		
☐ LCKM13/XKM-DP	☐ Type II Front Row			☐ 350mA	☐ CW (5000K)	□ 347	☐ White RAL-9003-T	High-Low Dimming for Switch by Others/Select		
☐ LCKM13/XKM-UT	PLED-II-FR  Type III Med.			☐ 450mA	☐ WW (3000K)	□ 480	☐ Grey	Levels 50/100 or 25/100 (Example: HLSW/25) <b>HLSW</b>		
_	PLED-III-M			☐ 525mA	Other LED Colors Available Consult Factory		RAL-7004-T	Photo Cell + Voltage (Example: PC120V) PC+V		
LCKM13/XKM-UP	Type III Wide PLED-III-W				,		RAL-8019-T	Single Fuse (120V, 277V) SF		
LCKM13/XKM-TP	Type IV PLED-IV				Amber <sup>1</sup> True Amber <sup>2</sup>		Green RAL-6005-T	☐ Double Fuse		
	_				TRA			(208V, 240V) <b>DF</b>		
	Type IV PLED-IV-FT									
					rs have no definable CCT & 525mA drive currents		For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S) Consult factor for custom colors	Contact factory for Step Dim Motion Sensor (Programmed 25-50/100)		

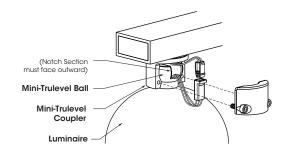


## **INSTALLATION DETAIL**

#### Mini-Trulevel System® Assembly

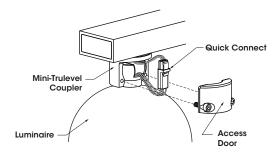


 Loosen (2) Captive Screws and remove Access Door from Mini-Trulevel Coupler, pull out Quick Connect from Mini-Trulevel Coupler and Mini-Trulevel Ball.



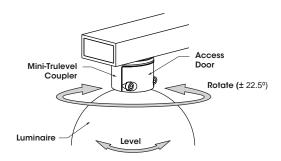


- 2. Place Mini-Trulevel Ball inside of Mini-Trulevel Coupler as illustrated.
  - A Notched Section of Mini-Trulevel Ball must face outward as illustrated.
  - B Flat Section of Mini-Trulevel Ball must face inward.



3. Connect Quick Connect components, push components inside of Mini-Trulevel Coupler cavity, replace Access Door and loosely secure, do not tighten.

Fixture will suspend without Access Door during installation.



 Rotate (left to right ± 22.5°) and level Luminaire to desired position. Tighten Access Door.

(Tighten each bolt to recommended torque: 10 ft-lb, foot-pound)

Mini-Trulevel Pendant Mount is intended to allow for fixture leveling, but is not intended to be "free-swinging" upon proper installation.



## **LCKM-WM SERIES - LED**



#### A Note on B-U-G Ratings for Open Frame Luminaires

U.S. Architectural/Sun Valley Lighting practices full disclosure in photometric testing/reporting. To this end we address the Uplight component of the B-U-G Rating System as it applies to Open Frame luminaires.

All U.S. Architectural/Sun Valley VLED and PLED Optical Systems have a U0 B-U-G rating, however the luminaire model in which they are used impacts the overall Uplight rating. In no unit does the Uplight component exceed .3% and this is due to the light bouncing off the arm structure of post top mounted luminaires. This is so in ANY manufacturer's product, however the test protocol allows a manufacturer/test lab to subjectively ignore this "bounce" illumination and report the Uplight as U0. We refer to this as our Applied B-U-G Rating. In addition, the U0 rating in combination with the use of 3000K CCT LED's meets the intent of Dark Skies applications.

For questions, please contact Applications Engineering at Lucasp@usaltg.com or call 661-233-2051.

#### Excerpt from article written by a software developer of a popular Photometric Applications program regarding B-U-G ratings:

"...If any luminaire has a U0 rating, it can only be because the photometric laboratory technician made a decision to either not measure the upper hemisphere or simply ignore the measurements. Somewhat surprisingly, this is explicitly permitted by TM-15-11, which reads in Appendix A:

To determine BUG ratings, the photometric test data must include data in the upper hemisphere unless no light is emitted above 90 degrees vertical (for example if the luminaire has a flat lens and opaque sides) per the IES Testing Procedures Committee recommendations.

Simply put, U0 ratings are not based on the measured photometric data. Rather, they are achieved by fiat.

The problem is that it is possible for the same luminaire to be measured by two independent photometric laboratories and as a result be assigned two completely different BUG ratings. Given that there are no IESNA or CIE requirements to subtract stray light from the photometric measurements, the same luminaire could be assigned an uplight rating of U0, U1, or even U2, and a glare rating of G0 or G1."

LED Count	Applied B-U-G Rating	Source	Initial Lumens - 4000K CCT	Initial Lumens - 3000K CCT	Initial Lumens - 5000K CCT	L70 greater than (HR)	Starting Temp.	System Watts	Volts	Max Input Amps
20	III B0-U0-G1 VSQ B1-U0-G0	20 <b>PLED</b> <sup>®</sup> Optical Module - 175mA	1,242- 1,447	1,180 - 1,375	1,304- 1,519	90,000+	-40°F	11	120 277 347	0.09 0.04 0.03
20	III B1-U0-G1 VSQ B2-U0-G1	20 PLED® Optical Module - 350mA	2,074 - 2,285	1,970 - 2,171	2,178 - 2,399	90,000+	-40°F	22	120 277 347	0.18 0.08 0.06
20	III B1-U0-G1 VSQ B2-U0-G1	20 <b>PLED</b> <sup>®</sup> Optical Module - 450mA	2,564 - 2,824	2,435 - 2,683	2,692 - 2,966	90,000+	-40°F	28.1	120 277 347	0.23 0.10 0.08
20	III B1-U0-G1 VSQ B2-U0-G1	20 PLED® Optical Module - 525mA	2,987 - 3,290	2,837 - 3,126	3,136 - 3,455	90,000+	-40°F	43.4	120 277 347	0.28 0.12 0.10

#### **NOTES:**

- 1. Max Input Amps is the highest of starting, operating, or open circuit currents.
- 2. Lumen values for LED Modules vary according to the distribution type.
- 3. System Watts includes the source watts and all driver components.
- 4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV 20KV surge suppressors.
- 5. L70(14K) TM-21 6x rule applied.
- 6. Applied B-U-G Rating reflects adjustment for bounce illumination from the luminaire housing pre TM-15-11. Actual values are in the IES file.

WARNING: All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.





#### SOLID STATE LIGHTING

# LCKM-CPA WALL MOUNT-PLED

#### Luminaire

Optical Crown, Arms and Hub are welded to create a one piece unitized Housing consisting of precise heavy wall cast low copper (A356 alloy; <0.2%Cu) aluminum. Housing retains six Clear Patterned Acrylic lenses. Hood is fastened to the Housing with a stainless steel hinge and secured with a single stainless steel hex head cap screw 180° opposite the hinge. Hood and Optical Crown are sealed with an extruded closed cell silicone gasket. Driver/wiring accessed through top of Electrical Access Hub. All exposed hardware is stainless steel.

### **Decorative Arm**

One piece unitized decorative arm assembly and Wall Mount Plate consisting of cast low copper (A356 alloy;<0.2% Cu) aluminum. Arm is welded to the Wall Mount plate and to either the LCKM13 Hood (XKM-P) or Hub (XKM-T) or both (XKM-TP). All welds are blended to create a homogeneous appearance. Wall Mount plate affixed to mounting surface covering a recessed j-box.

#### **PLED™** Optics

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. LED refractors produce standard asymmetric site/area distributions. Panels are field replaceable. Housing frame retains Clear Patterned Acrylic diffusing panels.

#### LED Driver(s)

Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F. Driver(s) is/are UL and cUL recognized. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

#### **LED Emitters**

High output LED's are utilized with drive currents ranging from 175mA to 525mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

#### Amber LED's

**PCA** (Phosphor Converted Amber) LED's utilize phosphors to create color output similar to LPS lamps and have a slight output in the blue spectral bandwidth. **TRA** (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

#### **Finish**

Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.

## FIXTURE TYPE:



#### LCKM13-CPA/XKM-DT (Post Top Mount)



#### LCKM13-CPA/XKM-UP (Pendant Mount)



LCKM13-CPA/XKM-TP (Post Top & Pendant Mount)









# **LCKM-WM-CPA SERIES - LED**



## **SPECIFICATIONS**

## **MOUNTING OPTIONS**





XKM-DT

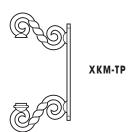
XKM-DP



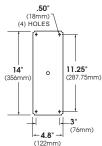


XKM-UT

XKM-UP

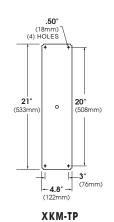


## **WALL PLATE**



#### XKM-DP, XKM-DT XKM-UP & XKM-UT

Mounting hardware by others.



## **PLED® MODULES**



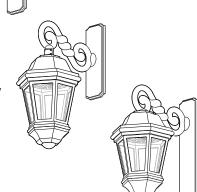


#### LCKM13-CPA/ XKM-DT

E.P.A.= 0.94 Available in: 20 LED Max.



Available in: 20 LED Max.



LCKM13-CPA/ XKM-TP E.P.A.= 1.15 Available in: 20 LED Max.

## **ORDERING INFORMATION**

Spec/Order Example: LCKM13-CPA/XKM-DT/PLED-III-M/20LED-525mA/NW/277V/RAL-9005-T/PC+V

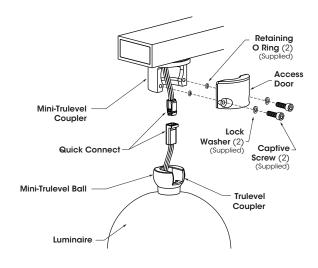
			- opoo	, 0.00. <u>2</u> ,0p.0. 20.		223 11111, 20223 02011	1A/11W/277 V/RAE 7000 1/1 01 V
Luminaire & Mounting	Optics	# of LED's Drive Current		Color	Voltage	Finish	Options
Luminaire & Mounting	Optics	LED			Voltage	Finish	Options
	PLED™ Distribution Type	# of LEDs	Drive Current	Color Temp - CCT		Standard Textured Finish	
LCKM13-CPA/ XKM-DT	Type II PLED-II	☐ 20LED	☐ 175mA	NW (4000K)*  *Standard	UNV (120-277)	Black RAL-9005-T	House Side Shield <b>HS-PLED</b>
☐ LCKM13-CPA/	Type II Front Row		☐ 350mA	☐ CW (5000K)	□ 347	☐ White RAL-9003-T	High-Low Dimming for Switch by Others/Select
XKM-DP	PLED-II-FR  Type III Med.		☐ 450mA	☐ WW (3000K)	□ 480	Grey	Levels 50/100 or 25/100 (Example: HLSW/25) <b>HLSW</b>
LCKM13-CPA/ XKM-UT	PLED-III-M		☐ 525mA	Other LED Colors Available Consult Factory		RAL-7004-T	Photo Cell + Voltage (Example: PC120V) PC+V
LCKM13-CPA/	Type III Wide PLED-III-W			,		Dark Bronze RAL-8019-T	Single Fuse
XKM-UP	Type IV PLED-IV			Amber <sup>1</sup> True Amber <sup>2</sup>		Green RAL-6005-T	Double Fuse
LCKM13-CPA/ XKM-TP				TRA		Premium	(208V, 240V) <b>DF</b>
7	Type IV PLED-IV-FT	NOTES:				Finishes  Rust	
				rs have no definable CCT		☐ Patina	
	NOTES:		2 - Available in 350mA only	& 525mA drive currents		Copper <b>PC</b>	
	Clear patterned acrylic lenses will impact distribution patterns as compared to open frame models. (see related les files)					For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S)	Contact factory for Step Dim Motion Sensor (Programmed 25-50/100)
						Consult factor for custom colors	

## **LCKM-WM-CPA SERIES - LED**

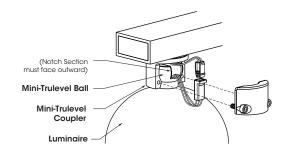


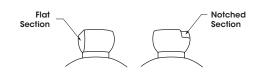
## **INSTALLATION DETAIL**

#### Mini-Trulevel System® Assembly

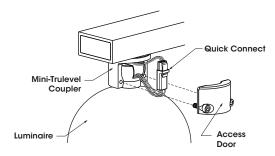


 Loosen (2) Captive Screws and remove Access Door from Mini-Trulevel Coupler, pull out Quick Connect from Mini-Trulevel Coupler and Mini-Trulevel Ball.



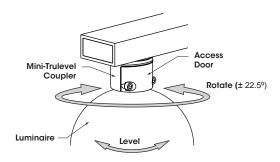


- 2. Place Mini-Trulevel Ball inside of Mini-Trulevel Coupler as illustrated.
  - A Notched Section of Mini-Trulevel Ball must face outward as illustrated.
  - B Flat Section of Mini-Trulevel Ball must face inward.



3. Connect Quick Connect components, push components inside of Mini-Trulevel Coupler cavity, replace Access Door and loosely secure, do not tighten.

Fixture will suspend without Access Door during installation.



 Rotate (left to right ± 22.5°) and level Luminaire to desired position. Tighten Access Door.

(Tighten each bolt to recommended torque: 10 ft-lb, foot-pound)

Mini-Trulevel Pendant Mount is intended to allow for fixture leveling, but is not intended to be "free-swinging" upon proper installation.





# **LCKM-WM-CPA SERIES - LED**

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)-TM21	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
20	LED	20 <b>PLED</b> <sup>®</sup> Optical Module - 175mA	1,078 - 1,198	1,024 - 1,138	1,132- 1,258	85,000+	-20°F	11	120 277	0.09 0.04
20	LED	20 <b>PLED</b> <sup>®</sup> Optical Module - 350mA	1,960 - 2,178	1,862 - 2,069	2,058 - 2,287	85,000+	-20°F	22	120 277	0.18 0.09
20	LED	20 PLED® Optical Module - 450mA	2,427 - 2,697	2,305 - 2,562	2,548 - 2,831	85,000+	-20°F	29	120 277	0.23 0.10
20	LED	20 <b>PLED</b> <sup>®</sup> Optical Module - 525mA	2,828 - 3,143	2,687 - 2,986	2,969 - 3,300	85,000+	-20°F	33	120 277	0.27 0.12

#### **NOTES:**

- 1. Max Input Amps is the highest of starting, operating, or open circuit currents
- 2. Lumen values for LED Modules vary according to the distribution type
- 3. System Watts includes the source watts and all driver components.
- Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV 20KV surge suppressors.
- 5. L70(14K) TM-21 6x rule applied

WARNING: All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.





#### SOLID STATE LIGHTING

# LCKM-WA WALL MOUNT-PLED

#### Luminaire

Optical Crown, Arms and Hub are welded to create a one piece unitized Housing consisting of precise heavy wall cast low copper (A356 alloy; <0.2%Cu) aluminum. Housing retains six white acrylic lenses. Hood is fastened to the Housing with a stainless steel hinge and secured with a single stainless steel hex head cap screw 180° opposite the hinge. Hood and Optical Crown are sealed with an extruded closed cell silicone gasket. Driver/wiring accessed through top of Electrical Access Hub. All exposed hardware is stainless steel.

#### **Decorative Arm**

One piece unitized decorative arm assembly and Wall Mount Plate consisting of cast low copper (A356 alloy;<0.2% Cu) aluminum. Arm is welded to the Wall Mount plate and to either the LCKM13 Hood (XKM-P) or Hub (XKM-T) or both (XKM-TP). All welds are blended to create a homogeneous appearance. Wall Mount plate affixed to mounting surface covering a recessed j-box.

#### **PLED™** Optics

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Housing retains white acrylic diffusing panels.

#### LED Driver(s)

Constant current electronic with a power factor of >.90 and a minimum operating temperature of  $-40^{\circ}F$ . Driver(s) is/are UL and cUL recognized. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

#### **LED Emitters**

High output LED's are utilized with drive currents ranging from 175mA to 525mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

#### Amber LED's

**TRA** (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

#### Finish

Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.

# FIXTURE TYPE:



#### LCKM13-WA/XKM-DT (Post Top Mount)



#### LCKM13-WA/XKM-UP (Pendant Mount)



#### LCKM13-WA/XKM-TP (Post Top & Pendant Mount)









# **LCKM-WM-WA SERIES - LED**



## **SPECIFICATIONS**

## **MOUNTING OPTIONS**





XKM-DT

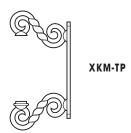
XKM-DP



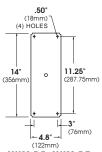


XKM-UT

XKM-UP

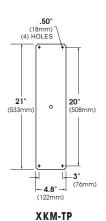


## **WALL PLATE**



# XKM-DP, XKM-DT XKM-UP & XKM-UT

Mounting hardware by others.



## **PLED® MODULES**









Available in:

20 LED Max.



**ORDERING INFORMATION** 

Spec/Order Example: LCKM13-WA/XKM-DT/PLED-III-M/20LED-700mA/NW/277V/RAL-9005-T/PC+V

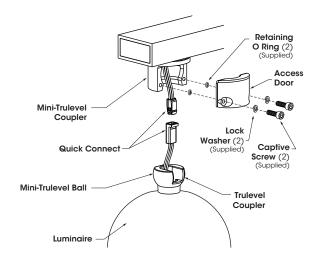
	·	]					1		
Luminaire & Mounting	Optics	# of LED's Drive Current		Color	Voltage	Finish	Options		
Luminaire & Mounting	Optics	LED			Voltage	Finish	Options		
	PLED™ Distribution Type	# of LEDs	Drive Current	Color Temp - CCT		Standard Textured Finish			
LCKM13-WA/ XKM-DT	Type Symmetric PLED-ASY-W	☐ 20LED	☐ 175mA	NW (4000K)*  *Standard	UNV (120-277)	☐ Black RAL-9005-T	House Side Shield <b>HS-PLED</b>		
LCKM13-WA/	☐ Type Symmetric		☐ 350mA	☐ CW (5000K)	□ 347	☐ White	High-Low Dimming for Switch by Others/Select		
XKM-DP	PLED-ASY-N	☐ 450mA		☐ WW (3000K)	□ 480	RAL-9003-T	Levels 50/100 or 25/100 (Example: HLSW/25) <b>HLSW</b>		
LCKM13-WA/			☐ 525mA	Other LED Colors Available		RAL-7004-T	☐ Photo Cell + Voltage		
XKM-UT				Consult Factory		☐ Dark Bronze  RAL-8019-T	(Example: PC120V) PC+V		
LCKM13-WA/				Amber <sup>1</sup>		Green	Single Fuse (120V, 277V) <b>SF</b>		
				☐ True Amber²		RAL-6005-T	☐ Double Fuse		
LCKM13-WA/ XKM-TP				TRA		Premium Finishes	(208V, 240V) <b>DF</b>		
			NOTES:	rs have no definable CCT		☐ Rust			
			equivalent	& 525mA drive currents		Patina Copper PC			
						For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S)	Contact factory for Step Dim Motion Sensor (Programmed 25-50/100)		
						Consult factor for custom colors			

## **LCKM-WM-WA SERIES - LED**

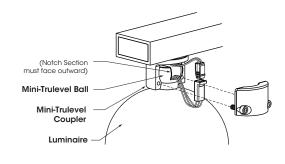


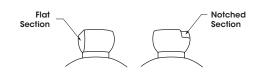
## **INSTALLATION DETAIL**

#### Mini-Trulevel System® Assembly

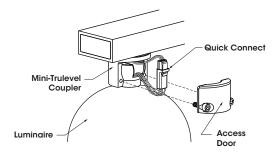


 Loosen (2) Captive Screws and remove Access Door from Mini-Trulevel Coupler, pull out Quick Connect from Mini-Trulevel Coupler and Mini-Trulevel Ball.



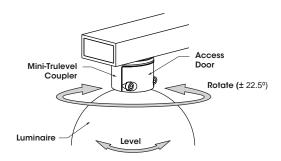


- 2. Place Mini-Trulevel Ball inside of Mini-Trulevel Coupler as illustrated.
  - A Notched Section of Mini-Trulevel Ball must face outward as illustrated.
  - B Flat Section of Mini-Trulevel Ball must face inward.



3. Connect Quick Connect components, push components inside of Mini-Trulevel Coupler cavity, replace Access Door and loosely secure, do not tighten.

Fixture will suspend without Access Door during installation.



 Rotate (left to right ± 22.5°) and level Luminaire to desired position. Tighten Access Door.

(Tighten each bolt to recommended torque: 10 ft-lb, foot-pound)

Mini-Trulevel Pendant Mount is intended to allow for fixture leveling, but is not intended to be "free-swinging" upon proper installation.





# **LCKM-WM-WA SERIES - LED**

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)-TM21	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
20	LED	20 <b>PLED</b> <sup>®</sup> Optical Module - 175mA	911- 1,003	865 - 953	956 - 1,053	85,000+	-20°F	11	120 277	0.09 0.04
20	LED	20 <b>PLED</b> <sup>®</sup> Optical Module - 350mA	1,656 - 1,823	1,573 - 1,732	1,739 - 1,914	85,000+	-20°F	22	120 277	0.18 0.09
20	LED	20 PLED® Optical Module - 450mA	2,050 - 2,257	1,948 - 2,144	2,153 - 2,370	85,000+	-20°F	29	120 277	0.23 0.10
20	LED	20 PLED® Optical Module - 525mA	2,389 - 3,630	2,270 - 2,499	2,509 - 2,762	85,000+	-20°F	33	120 277	0.27 0.12

#### **NOTES:**

- 1. Max Input Amps is the highest of starting, operating, or open circuit currents
- 2. Lumen values for LED Modules vary according to the distribution type
- 3. System Watts includes the source watts and all driver components.
- 4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV 20KV surge suppressors.

  5. L70(14K) TM-21 6x rule applied L70(14K) Calculated = 244,000 @ 700mA

WARNING: All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

