



SOLID STATE LIGHTING



Fixture Housing

Hub, Cage, and Top (Hood) consist of cast low copper (A356 alloy; < 0.2%Cu) aluminum. Hood is fastened to the top of the Cage with a stainless steel hinge and secured with a single stainless steel hex head cap screw 180° opposite the hinge. Hood and Cage are sealed with an extruded closed cell silicone gasket. Cage is welded to the Hub with blended or concealed weldments to create an open frame appearance. Driver/wiring accessed through top of Electrical Access Hub. All exposed hardware is stainless steel. Optical Assembly secures in Hood.

Arm

One piece unitized arm and Wall Mount plate consisting of cast low copper (A356 alloy;<0.2% Cu) aluminum. Arm is welded to the Wall Mount plate and entire Arm/Wall Mount assembly is either welded to the COL12 Hood (WM-P) or mechanically6 fastened to the Hub (WM-T). 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

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:



COL12/XCA-UT (Post Top Mount)



COL12/XCA-UP (Pendant Mount)



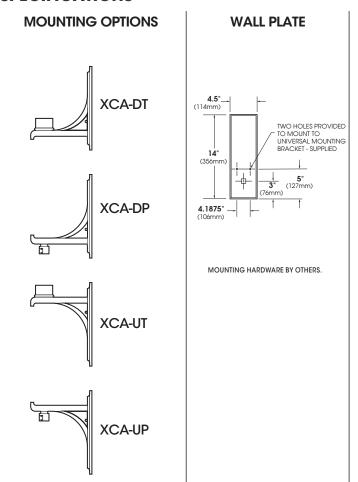




COL-WM SERIES - LED



SPECIFICATIONS



PLED™ MODULES







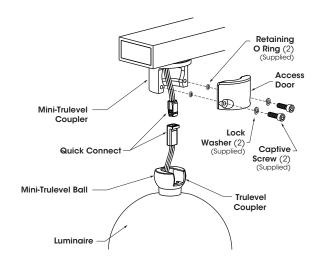
ORDERING INFORMATION

Luminaire & Mounting	Optics	# of LED's	Drive Current	Color	Voltage	Finish	Options
Luminaire & Mounting	Optics		LED		Voltage	Finish	Options
	PLED™ Distribution Type	# of LED's	Drive Current	Color Temp-CCT	Voltage	Standard Textured Finish	
☐ COL12/XCA-DT	TYPE II	☐ 20LED	☐ 175mA	NW (4000K) *STANDARD	□ 120	☐ BLACK RAL-9005-T	☐ HOUSE SIDE SHIELDS HS-PLED
☐ COL12/XCA-DP	☐ TYPE II FRONT ROW		☐ 350mA	☐ CW (5000K)	□ 208 —	☐ WHITE RAL-9003-T	HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR
☐ COL12/XCA-UT	PLED-II-FR		☐ 450mA	OTHER LED COLORS	□ 240	GREY	NON-INTEGRATED MOTION SENSOR HLSW
☐ COL12/XCA-UP	PLED-III-M		☐ 525mA	AVAILABLE CONSULT FACTORY	□ 277 □ 347	RAL-7004-T	PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) PC+V
	TYPE III WIDE			AMBER ¹	□ 480	DARK BRONZE RAL-8019-T	☐ SINGLE FUSE (120V, 277V) SF
	TYPE IV PLED-IV			PHOSPHOR CONVERTED AMBER PCA		GREEN RAL-6005-T	DOUBLE FUSE (208V, 240V)DF
	TYPE IV PLED-IV-FT			TRUE AMBER		For smooth finish replace suffix "T" with suffix "S"	CONTACT FACTORY FOR STEP DIM MOTION SENSOR (PROGRAMMED 25-50/100)
			NOTES: 1 - NARROW BAND AMB CCT EQUIVALENT	BERS HAVE NO DEFINABLE		(Example: RAL-9500-S) Consult factor for custom colors	

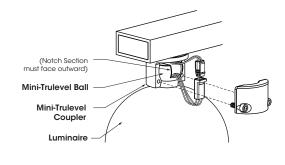


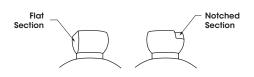
INSTALLATION DETAIL

Mini-Trulevel System® Assembly

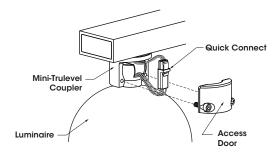


 Loosen (2) Captive Screws and remove Access Door from Mini-Trulevel Coupler, pull out Quick Connect from Mini-Trulevel Coupler and Mini-Trulevel Ball.



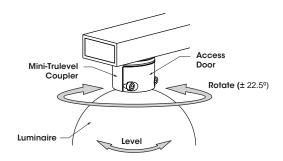


- 2. Place Mini-Trulevel Ball inside of Mini-Trulevel Coupler as illustrated.
 - A Notched Section of Mini-Trulevel Ball must face outward as illustrated.
 - B Flat Section of Mini-Trulevel Ball must face inward.



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.



COL-WM SERIES - LED



ELECTRICAL GUIDE

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 PLED ° Optical Module - 175mA	1,141 - 1,257	1,084 - 1,194	1,198- 1,320	85,000+	-20°F	11	120 277	0.09 0.04
20	LED	20 PLED ° Optical Module - 350mA	2,074 - 2,285	1,970 - 2,171	2,178 - 2,399	85,000+	-20°F	22	120 277	0.18 0.09
20	LED	20 PLED [®] Optical Module - 450mA	2,564 - 2,824	2,435 - 2,683	2,692 - 2,966	85,000+	-20°F	29	120 277	0.23 0.10
20	LED	20 PLED ° Optical Module - 525mA	2,987 - 3,290	2,837 - 3,126	3,136 - 3,455	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



Fixture Housing

Hub, Cage, and Top (Hood) consist of cast low copper (A356 alloy; < 0.2%Cu) aluminum. Hood is fastened to the top of the Cage with a stainless steel hinge and secured with a single stainless steel hex head cap screw 180° opposite the hinge. Cage retains four Clear Patterned Acrylic lenses. Hood and Cage are sealed with an extruded closed cell silicone gasket. Cage is welded to the Hub with blended or concealed weldments. Driver/wiring accessed through top of Electrical Access Hub. All exposed hardware is stainless steel. Optical Assembly secures in Hood.

One piece unitized arm and Wall Mount plate consisting of cast low copper (A356 alloy;<0.2% Cu) aluminum. Arm is welded to the Wall Mount plate and entire Arm/Wall Mount assembly is either welded to the COL12 Hood (WM-P) or mechanically fastened to the Hub (WM-T). 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.

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Finish

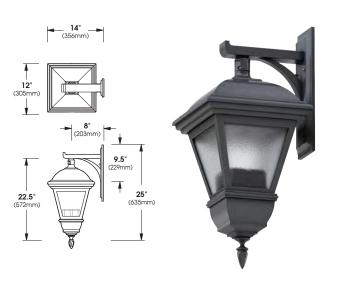
Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.



FIXTURE TYPE:



COL12-CPA/XCA-UT(Post Top Mount)



COL12-CPA/XCA-UP (Pendant Mount)



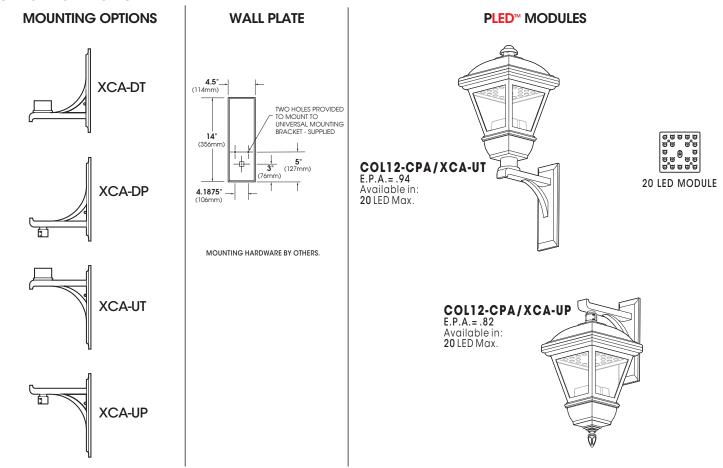




COL-WM-CPA SERIES - LED



SPECIFICATIONS



ORDERING INFORMATION

Spec/Order Example: COL12-CPA/XCA-UP/PLED-III M/20LED-350mA/NW/277V/RAL-9005-T/PC+V

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Luminaire & Mounting	Optics	# of LED's	Drive Current	Color	Voltage	Finish	Options
Luminaire & Mounting	Optics		LED		Voltage	Finish	Options
	PLED™ Distribution Type	# of LED's	Drive Current	Color Temp-CCT	Voltage	Standard Textured Finish	
☐ COL12-CPA/XCA-DT	TYPE II PLED-II	☐ 20LED	☐ 175mA	□ NW (4000K) *STANDARD	□ 120	☐ BLACK RAL-9005-T	HOUSE SIDE SHIELDS ¹ HS-PLED¹
☐ COL12-CPA/XCA-DP	☐ TYPE II FRONT ROW _		☐ 350mA	☐ CW (5000K)	□ 208	WHITE	HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR
☐ COL12-CPA/XCA-UT	PLED-II-FR		☐ 450mA	OTHER LED COLORS	□ 240	RAL-9003-T	NON-INTEGRATED MOTION SENSOR
☐ COL12-CPA/XCA-UP	TYPE III MED. PLED-III-M		☐ 525mA	AVAILABLE CONSULT FACTORY	□ 277	GREY RAL-7004-T	PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) PC+V
					□ 347	☐ DARK BRONZE	SINGLE FUSE
	TYPE III WIDE PLED-III-W			AMBER ¹	□ 480	RAL-8019-T	(120V, 277V) SF
	TYPE IV PLED-IV			PHOSPHOR CONVERTED AMBER PCA		GREEN RAL-6005-T	DOUBLE FUSE (208V, 240V) DF
	TYPE IV PLED-IV-FT			TRUE AMBER		For smooth finish replace suffix "T"	NOTE: 1- HOUSESIDE SHIELDS ARE MOUNTED ON THE PLED
	NOTE: CLEAR PATTERNED ACRYLIC LENSES WILL IMPACT DISTRIBUTION PATTERNS AS COMPARED TO OPEN FRAME MODELS. (SEE RELATED IES FILES)		NOTES: 1 - NARROW BAND AME CCT EQUIVALENT	SERS HAVE NO DEFINABLE		with suffix "S" (Example: RAL-9500-S) Consult factor for custom colors	PANEL INTERNAL TO THE CPA LENSES CONTACT FACTORY FOR STEP DIM MOTION SENSOR (PROGRAMMED 25-50/100)

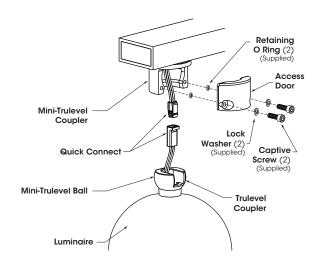


COL-WM-CPA SERIES - LED

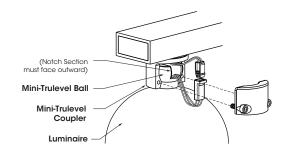


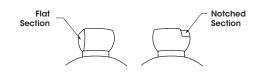
INSTALLATION DETAIL

Mini-Trulevel System® Assembly

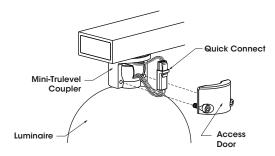


 Loosen (2) Captive Screws and remove Access Door from Mini-Trulevel Coupler, pull out Quick Connect from Mini-Trulevel Coupler and Mini-Trulevel Ball.



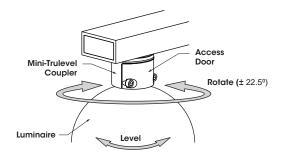


- 2. Place Mini-Trulevel Ball inside of Mini-Trulevel Coupler as illustrated.
 - A Notched Section of Mini-Trulevel Ball must face outward as illustrated.
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3. Connect Quick Connect components, push components inside of Mini-Trulevel Coupler cavity, 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.







ELECTRICAL GUIDE

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 PLED [®] 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 PLED [®] 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 PLED [®] 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
- ${\bf 2.}$ 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

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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.)

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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:



COL12-WA/XCA-UT (Post Top Mount)



COL12-WA/XCA-UP (Pendant Mount)



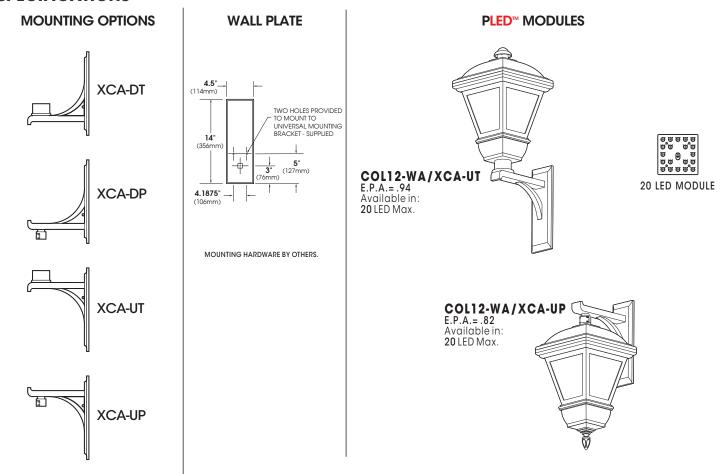




COL-WM-WA SERIES - LED



SPECIFICATIONS



ORDERING INFORMATION

Spec/Order Example: COL12-WA/XCA-UP/PLED-III M/20LED-525mA/NW/277V/RAL-9005-T/PC+V

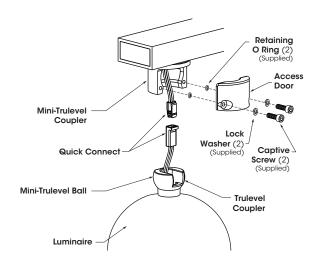
			<u> </u>	<u>.</u>			
Luminaire & Mounting	Optics	# of LED's	Drive Current	Color	Voltage	Finish	Options
Luminaire & Mounting	Optics		LED		Voltage	Finish	Options
	PLED™ Distribution Type	# of LEDs	Drive Current	Color Temp - CCT	Voltage	Standard Textured Finish	
☐ COL12-WA/XCA-DT	TYPE SYMMETRIC PLED-ASY-N	☐ 20LED	☐ 175mA	NW (4000K) *STANDARD	□ 120	☐ BLACK RAL-9005-T	☐ HOUSE SIDE SHIELDS¹ HS-PLED¹
☐ COL12-WA/XCA-DP	☐ TYPE SYMMETRIC		☐ 350mA	☐ CW (5000K)	□ 208	☐ WHITE	HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR
☐ COL12-WA/XCA-UT	PLED-ASY-W		☐ 450mA	☐ WW (3000K) OTHER LED COLORS	☐ 240	RAL-9003-T ☐ GREY	NON-INTEGRATED MOTION SENSOR HLSW
☐ COL12-WA/XCA-UP			☐ 525mA	AVAILABLE CONSULT FACTORY	□ 277	RAL-7004-T	PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) PC+V
				AMBER ¹	☐ 347 ☐ 480	☐ DARK BRONZE RAL-8019-T	☐ SINGLE FUSE (120V, 277V) SF
				PHOSPHOR CONVERTED AMBER PCA		GREEN RAL-6005-T	DOUBLE FUSE (208V, 240V) DF
			NOTES: 1 - NARROW BAND AM CCT EQUIVALENT	TRUE AMBER TRA BERS HAVE NO DEFINABLE		For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S) Consult factor for custom colors	NOTE: 1-HOUSESIDE SHIELDS ARE MOUNTED ON THE PLED PANEL INTERNAL TO THE CPA LENSES CONTACT FACTORY FOR STEP DIM MOTION SENSOR (PROGRAMMED 25-50/100)



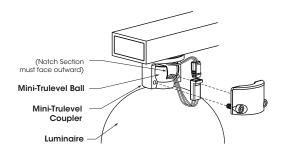


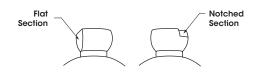
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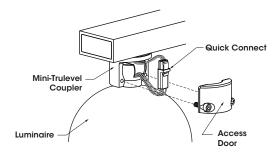


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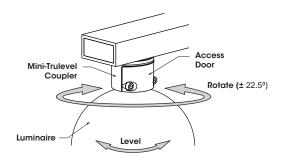


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20	LED	20 PLED [®] Optical Module - 350mA	1,656 - 1,823	1,573 - 1,732	1,739 - 1,914	85,000+	-20°F	22	120 277	0.18 0.09
20	LED	20 PLED [®] Optical Module - 450mA	2,050 - 2,257	1,948 - 2,144	2,153 - 2,370	85,000+	-20°F	29	120 277	0.23 0.10
20	LED	20 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

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