

## DESCRIPTION

The Optica HP series is an energy saving solution for new construction applications. It uses a high performance T8 system that can save over 40% of energy costs when compared to standard 3-lamp, 12-cell parabolics. The Optica HP series incorporates a 97% reflective housing finish with a 2" high, 6-cell louver and a precision engineered cross blade to create a soft, even distribution while delivering a highly efficient T8 luminaire. The Optica HP is compatible with all of today's popular ceiling systems and is available with a number of options and accessories for increased application versatility. The Optica HP series is an excellent choice for new commercial office spaces, schools, hospitals or retail merchandising areas.

## SPECIFICATION FEATURES

### Construction

4-3/4" deep, para-contoured housing, die formed code gauge, prime cold rolled steel. Full length die formed stiffeners for added strength. Contoured ballast/wireway cover, easily removed without tools. Die formed captive lampholder bracket fully encloses lampholder wiring permitting easy lampholder replacement. Heavy end plates, securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. KOs for continuous row wiring. End plates have integral Grid-Lock feature for safety and convenience.

### Electrical\*\*

Ballasts are CBM/ETL Class "P" are positively secured by mounting bolts. Pressure lock lampholders. UL/CUL listed. Suitable for damp locations.

### Hinging/Latching

Positive cam action spring loaded, self locking, steel latches with safety lock T-hinges allow hinging and latching from either side.

### Louver

Die formed white louver w/faceted straight-blade crossmembers are engineered for optimal efficiency and performance. True-cut mitered corners and interlocking features provide strength and durability. Louver is protected by polyethylene cover when shipped w/fixture.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

### Controls

Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Controls ([www.cooperlighting.com](http://www.cooperlighting.com)) to maximize energy savings.

### Compliance

Options to meet Buy American and other domestic preference requirements.

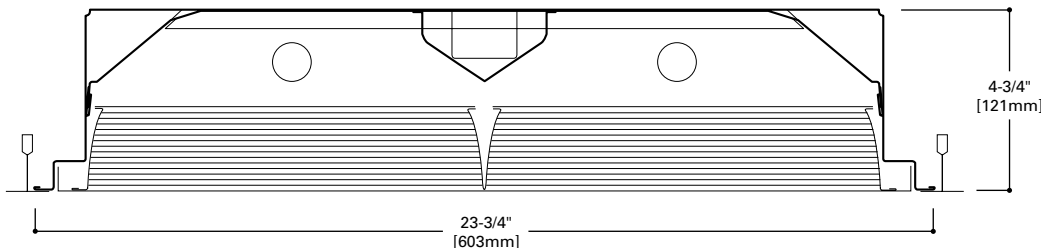


## OPTICA HP SERIES 228T8 232

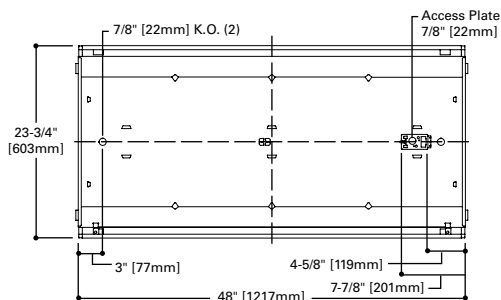
12 Cell

2' X 4'  
2 LAMP

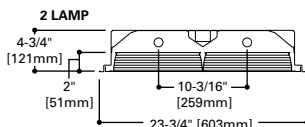
**OPTICA**  
ARCHITECTURAL LIGHTING MEDIA



## MOUNTING DATA



## LAMP CONFIGURATIONS



## CEILING COMPATIBILITY

G Grid/Lay-in Standard	F Aluminum Flange Trim With Supporting Swing Gates	MZ Modular Trim With Supporting Swing Gates	Ceiling Type	Trim Type
			Exposed Grid	G
			Concealed T	G
			Slot Grid	G
			Flange	F
			Concealed "T" or "Z"	MZ
			Metal Pan	MZ
(Verify compatibility/ consult Pre Sales Technical Support.)				

## ENERGY DATA

Input Watts:  
**HB Ballast & Std. Lamps**  
228T8 (48)  
232 (53)

\*\*Convertibility applies to housing only. Appropriate shielding media assemblies must be utilized.

\*\*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

## LINEAR DISCONNECT

Safe and convenient means of disconnecting power.



**ORDERING INFORMATION**

SAMPLE NUMBER: 2OPG-232FB26W-UNV-HB81-U

<p><b>Domestic Preferences</b> <sup>(12)</sup>  <b>[Blank]</b>=Standard  <b>BAA</b>=Buy American Act  <b>TAA</b>=Trade Agreements Act</p>	<p><b>Number of Lamps</b>  <b>2</b>=2 Lamps</p> <p><b>Wattage (Length)</b>  <b>28T8</b>=28WT8 (48")  <b>32</b>=32WT8 (48")</p>	<p><b>Voltage</b> <sup>(2)</sup>  <b>120V</b>=120 Volt  <b>277V</b>=277 Volt  <b>347V</b>=347 Volt  <b>UNV</b>=Universal Voltage 120-277 <sup>(8)</sup></p>	<p><b>Ballast Type</b>  <b>EB8_</b>=T8 Electronic Start.                  Total Harmonic Distortion &lt; 10%  <b>EB8_ /PLUS</b>=T8 Electronic Start.                  Total Harmonic Distortion &lt; 10%.                  High Ballast Factor &gt; 1.15.  <b>ER8_</b>=T8 Electronic Program Rapid Start.                  Total Harmonic Distortion &lt; 10%</p>	<p><b>Options</b>  <b>R</b>=Internal Reflector</p> <p><b>Packaging</b>  <b>U</b>=Unit Pack  <b>PAL</b>=Job Pack, out of carton  <b>PALC</b>=Job Pack, in carton</p>								
<p><b>Rating</b>  <b>Blank</b>=Standard</p>	<p><b>Cross Blade</b>  <b>FB</b>=Faceted Blade</p>	<p><b>Options</b>  <b>GL</b>=Single Element Fuse  <b>GM</b>=Double Element Fuse  <b>Flex</b>=Flex Installed (Reference Flex ordering information)  <b>EL</b>=Emergency Installed <sup>(4), (11)</sup></p>	<p><b>High Performance T8 Ballasts</b>  <b>HB8_</b>=T8 Electronic Instant Start.                  Total Harmonic Distortion &lt; 10%.                  Standard Ballast Factor .86 – .88  <b>HB8_ L</b>=T8 Electronic Instant Start.                  Total Harmonic Distortion &lt; 10%.                  Low Ballast Factor .77 – .82  <b>HB8_ N</b>=T8 Electronic Instant Start.                  Total Harmonic Distortion &lt; 10%.                  Normal Ballast Factor 1.0  <b>HB8_ H</b>=T8 Electronic Instant Start.                  Total Harmonic Distortion &lt; 10%.                  High Ballast Factor 1.15 – 1.20</p>	<p><b>ACCESSORIES</b> <sup>(13)</sup>  <b>EQ-CLIP-U</b>=T-BAR Safety Earthquake Clips <sup>(1)</sup></p>								
<p><b>Width</b>  <b>2</b>=2' Width</p>	<p><b>Cell Configuration</b>  <b>26</b>=2 Rows of 6, 12 Cell</p>	<p><b>Lamps Installed</b>  <b>Blank</b>=No Lamps Installed  <b>L8835</b>=T8 Lamp, 28W and 32W, 3500K  <b>L8841</b>=T8 Lamp, 28W and 32W, 4100K  <b>L8835HL</b>=T8 Lamp, 32W, 3500K, 3100 Lumens  <b>L8841HL</b>=T8 Lamp, 32W, 4100K, 3100 Lumens</p>	<p><b>HR8_ T8</b> Electronic Program Rapid Start.                  Total Harmonic Distortion &lt; 10%.                  Standard Ballast Factor .86 – .88  <b>HR8_ DIM</b>=T8 Electronic Program Rapid Start.                  Total Harmonic Distortion &lt; 10%.                  Step Dimming. Ballast Factor .88  <b>HR8_ L</b>=T8 Electronic Program Rapid Start.                  Total Harmonic Distortion &lt; 10%.                  Low Ballast Factor .71 – .79  <b>HR8_ H</b>=T8 Electronic Program Rapid Start.                  Total Harmonic Distortion &lt; 10%.                  High Ballast Factor 1.15 – 1.20</p>									
<p><b>OP</b>=Optica HP Series</p> <p><b>Trim Type</b>  <b>G</b>=Grid/Lay-in (Standard) <sup>(5)</sup>  <b>F</b>=Aluminum Flange Trim <sup>(6)</sup>  <b>MZ</b>=Modular Trim</p>	<p><b>Option – Aluminum Flange Trim</b> <sup>(6)</sup>  <b>Blank</b>=SW (Single White)</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>'S' Single</td> <td>'N' Natural</td> </tr> <tr> <td>'R' In Row</td> <td>'W' White</td> </tr> <tr> <td>'E' End of Row</td> <td></td> </tr> </tbody> </table>	Type	Color	'S' Single	'N' Natural	'R' In Row	'W' White	'E' End of Row			<p><b>0-10V Dimming Ballasts</b> <sup>(8)</sup>  <b>SLTV8_</b>=T8 0-10V Program Rapid Start.                  Total Harmonic Distortion &lt; 10%.                  Ballast Factor 0.87 <sup>(10)</sup>  <b>SLTVS8_</b>=T8 0-10V Spec Grade Program Rapid Start. Total Harmonic Distortion &lt; 10%.                  Ballast Factor 0.87 <sup>(9)</sup></p>	
Type	Color											
'S' Single	'N' Natural											
'R' In Row	'W' White											
'E' End of Row												
			<p><b>Fifth Light DALI Ballasts</b> <sup>(7)</sup>  <b>SLT8_</b>=T8 DALI Program Rapid Start.                  Total Harmonic Distortion &lt; 10%.                  Ballast Factor 1.0</p>									
			<p><b>Number of Ballasts</b>  <b>1</b>=1 Ballast  <b>2</b>=2 Ballasts</p>									

**NOTES:** <sup>(1)</sup>An EQ Grid Clip is recommended for all 9/16" ceiling systems. Four required per fixture. <sup>(2)</sup>Products also available in non-US voltages and frequencies for international markets. <sup>(3)</sup>Not available when specifying emergencies, voltage must be specific. <sup>(4)</sup>Fixtures equipped with "EL" option may require a 5-1/2" housing depth. If installing in field, must use low profile battery pack. <sup>(5)</sup>Louver is recessed by 5/16" in Concealed T or Slot Grid. <sup>(6)</sup>Specify row configuration, type in catalog number when ordering complete fixture. <sup>(7)</sup>For a complete listing of FifthlightTechnology products and other solutions from Cooper Controls, visit www.cooperlighting.com. <sup>(8)</sup>0-10V ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system. <sup>(9)</sup>Specification grade 0-10V dimming ballast are NEMA premium and CEE listed. They are compatible with low mercury and energy saving lamps. <sup>(10)</sup>Standard 0-10V ballast not available for 28WT8 lamps. <sup>(11)</sup>Please specify required voltage, 120V or 277V.

<sup>(12)</sup>Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. <sup>(13)</sup>Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Solutions Representative for availability and ordering information.

**SHIPPING DATA**

Catalog No.	Wt.
2OPG-228T8	28 lbs.
2OPG-232	28 lbs.