

DESCRIPTION

The OpticaHP series is an energy saving solution for a multitude of applications. The OpticaHP series incorporates a 2" high, 6-cell louver combined with a precision engineered cross blade to create a soft, even distribution while delivering a highly efficient T8 luminaire. The OpticaHP series is an excellent choice for new commercial office spaces, schools, hospitals or retail merchandising areas.

Catalog #		Type
Project		
Comments		Date
Prepared by		

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.

Finish

Cold rolled steel w/multistage iron phosphate pretreatment for maximum bonding and a highly reflective matte white finish on reflective surfaces for increased efficiency.

Optics

Die formed white louver w/faceted straight-blade cross-members 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.

Hinging/Latching

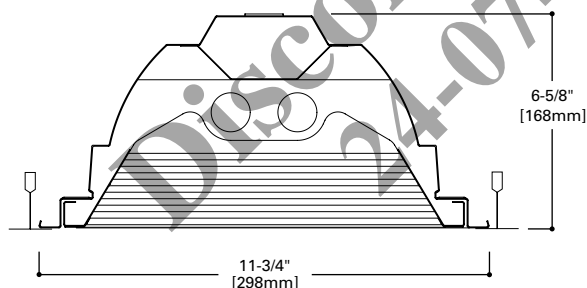
Positive cam action spring loaded, self locking, steel latches with safety lock T-hinges allow hinging and latching from either side.

Controls

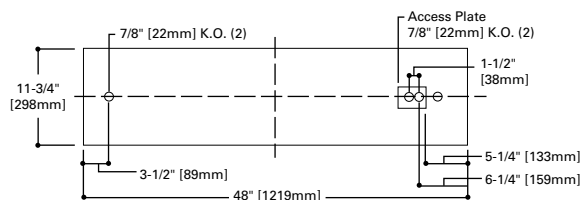
Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Controls (www.cooperlighting.com) to maximize energy savings.

Compliance

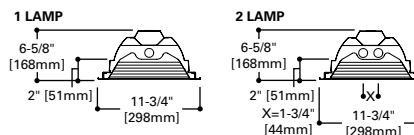
Options to meet Buy American and other domestic preference requirements.



MOUNTING DATA



LAMP CONFIGURATIONS



CEILING COMPATIBILITY

G	F	MZ	Ceiling Type	Trim Type
Grid/Lay-in Standard	Aluminum Flange Trim With Supporting Swing Gates	Modular Trim With Supporting Swing Gates	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.)	



OPTICAHP SERIES

128T8

132

228T8

232

6 Cell

1' X 4'

1 OR 2 LAMPS

OPTICA
ARCHITECTURAL LIGHTING MEDIA



ENERGY DATA

Input Watts:

HB Ballast & HL Lamps

128T8 (27), 132 (30)

228T8 (48), 232 (55)

Luminaire Efficacy Rating

LER = FP-79

Catalog Number: OPG-232FB16W

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.04

*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

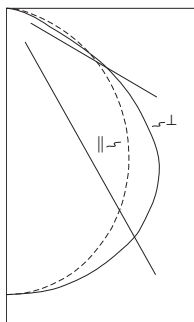
LINEAR DISCONNECT

Safe and convenient means of disconnecting power.



ADF092092
December 1, 2021 11:24 AM

PHOTOMETRICS

**OPG-232FB16W**

Electronic Ballast

F32T8/50K Lamps

3100 Lumens

Spacing criterion:
(||) 1.2 x mounting
height, (⊥) 1.3 x
mounting height

Efficiency 83.5%

Test Report:

OPG-232FB16W.IES

LER = FP79

Yearly Cost of 1000
lumens, 3000 hrs at
.08 KWH = \$3.04

Candlepower

Angle	Along	45°	Across ⊥
0	632	632	632
5	628	631	631
10	616	623	628
15	598	609	619
20	572	588	607
25	542	563	592
30	506	533	576
35	465	502	548
40	421	465	518
45	375	422	477
50	326	376	408
55	276	323	334
60	226	254	247
65	174	184	139
70	122	112	82
75	76	62	50
80	45	36	26
85	20	15	10
90	0	0	0

Coefficients of Utilization

Effective floor cavity reflectance												20%												
rc rw RCR	80%				70%				50%				30%				10%				0%			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0			
0	99	99	99	99	97	97	97	97	93	93	93	89	89	89	85	85	85	84						
1	92	88	85	82	89	86	83	80	83	80	78	79	77	76	76	75	73	72						
2	84	77	72	68	82	76	71	67	73	69	65	70	67	64	68	65	62	61						
3	77	68	62	57	75	67	61	56	65	59	55	62	58	54	60	57	53	52						
4	70	61	54	48	69	60	53	48	58	52	47	56	51	47	54	50	46	44						
5	65	54	47	42	63	54	47	42	52	46	41	50	45	41	49	44	40	39						
6	60	49	42	37	58	48	41	36	47	41	36	45	40	36	44	39	36	34						
7	56	45	37	32	54	44	37	32	43	36	32	41	36	32	40	35	32	30						
8	52	41	34	29	50	40	33	29	39	33	29	38	32	28	37	32	28	27						
9	48	37	31	26	47	37	30	26	36	30	26	35	30	26	34	29	26	24						
10	45	34	28	24	44	34	28	24	33	27	23	32	27	23	32	27	23	22						

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	493	24.6	29.5
0-40	809	40.4	48.4
0-60	1412	70.6	84.6
0-90	1669	83.5	100.0
0-180	1669	83.5	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	1427	1605	1815
55	1294	1515	1566
65	1108	1171	885
75	790	644	520
85	617	463	309

ORDERING INFORMATION

SAMPLE NUMBER: OPG-232FB16W-UNV-HB81-U

Domestic Preferences ⁽¹¹⁾ [Blank] =Standard BAA =Buy American Act TAA =Trade Agreements Act	Number of Lamps 1 =1 Lamp 2 =2 Lamps	Voltage ⁽²⁾ 120V =120 Volt 277V =277 Volt 347V =347 Volt UNV =Universal Voltage 120-277 ⁽³⁾	Ballast Type EB8_ =T8 Electronic Start. Total Harmonic Distortion < 10% EB8_/PLUS =T8 Electronic Start. Total Harmonic Distortion < 10%. High Ballast Factor > 1.15. ER8_ =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%	Packaging U =Unit Pack PAL =Job Pack, out of carton PALC =Job Pack, in carton								
Width Blank =1' Width	Wattage 28T8 =28W T8 (48") ⁽⁷⁾ 32 =32W T8 (48")	Options GL =Single Element Fuse GM =Double Element Fuse Flex =Flex Installed (Reference Flex ordering information) EL =Emergency Installed ^{(4), (11)}	High Performance T8 Ballasts HB8_ =T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 – .88 HB8_L =T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Low Ballast Factor .77 – .82 HB8_N =T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Normal Ballast Factor 1.0 HB8_H =T8 Electronic Instant Start. Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20 HR8_ =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 – .88 HR8_DIM =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Step Dimming. Ballast Factor .88 HR8_L =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Low Ballast Factor .71 – .79 HR8_H =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20	ACCESSORIES ⁽¹²⁾ EQ-CLIP-U =T-BAR Safety Earthquake Clips ⁽¹⁾								
Series OP =Optica	Cross-Blade FB =Faceted Blade	Lamps Installed Blank =No Lamps Installed L8835 =T8 Lamp, 28W and 32W, 3500K ⁽⁷⁾ L8841 =T8 Lamp, 28W and 32W, 4100K ⁽⁷⁾ L8835HL =T8 Lamp, 32W, 3500K, 3100 Lumens L8841HL =T8 Lamp, 32W, 4100K, 3100 Lumens	0-10V Dimming Ballasts ⁽⁹⁾ SLTV8_ =T8 0-10V Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87 SLTVS8_ =T8 0-10V Spec Grade Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87 ⁽¹⁰⁾									
Trim Type G =Grid/Lay-in – Standard ⁽⁶⁾ F =Aluminum Flange Trim ⁽⁵⁾ MZ =Modular Trim	Cell Configuration 16 =1 Row of 6, 6 Cell (1'x4')		Fifth Light DALI Ballasts ⁽⁸⁾ 5LT8_ =T8 DALI Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 1.0									
	Louver Finish W =Matte White		Number of Ballasts 1 =1 Ballast 2 =2 Ballasts 3 =3 Ballasts									
	Option – Aluminum Flange Trim ⁽⁵⁾ Blank =SW (Single White) <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				
Type	Color											
'S' Single	'N' Natural											
'R' In Row	'W' White											
'E' End of Row												

NOTES: ⁽¹⁾ An EQ Grid Clip is recommended for all 9/16" ceiling systems. Four required per fixture. ⁽²⁾ Products also available in non-US voltages and frequencies for international markets. ⁽³⁾ Not available when specifying emergencies, voltage must be specific. ⁽⁴⁾ Fixtures equipped with "EL" option may require a 5-1/2" housing depth. If installing in field, must use low profile battery pack. ⁽⁵⁾ Specify row configuration, type in catalog number when ordering complete fixture. ⁽⁶⁾ Louver is recessed by 5/16" in Concealed T or Slot Grid. ⁽⁷⁾ When utilizing 28W T8 lamps, HBT8 ballast must be specified. ⁽⁸⁾ For a complete listing of Fifth Light Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com. ⁽⁹⁾ 0-10V ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system. ⁽¹⁰⁾ Specification grade 0-10V dimming ballast are NEMA premium and CEE listed. They are compatible with low mercury and energy saving lamps. ⁽¹¹⁾ Please specify required voltage, 120V or 277V.

⁽¹¹⁾ 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. ⁽¹²⁾ 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.
OPG-132FB16W	29 lbs.
OPG-232FB16W	29 lbs.