Metalux

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 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 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.

Catalog #	Туре
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 polyethyline cover when shipped w/fixture.

Hinging/Latching

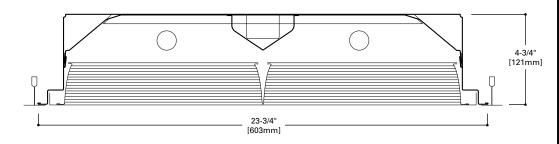
Positive cam action spring loaded, self locking, steel latches with safety lock T-hinges allow hinging and latching from either side.

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.



OPTICAHP SERIES 217

2U1-5/8

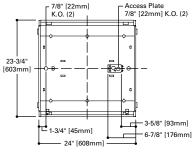
6 Cell

2' X 2' 2 LAMP

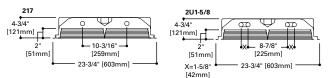




MOUNTING DATA



LAMP CONFIGURATIONS



CEILING COMPATIBILITY



Modular Trim With Supporting Swing Gates

ΜZ

Exposed Grid Concealed T Slot Grid Flange Concealed ' Metal Par

Ceiling

Туре

(Verify compatibility/ consult Pre Sales Technical Support.)

Trim

Туре

G

G

MZ

MZ



HB Ballast & HL Lamps 217 (32), 2U1-5/8 (61)

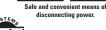
Luminaire Efficacy Rating I FR = FP-65Catalog Number: 20PG-217 Yearly Cost of 1000 lumens. 3000 hrs at .08 KWH = \$3.69

*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

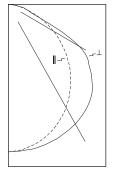
LINEAR DISCONNECT



ADF091033 December 1, 2021 1:33 PM



PHOTOMETRICS



20PG-217FB23MW-UNV-EB81-U **Electronic Ballast**

(2) F17T8 17W lamps 1450 lumens.

Spacing criterion: (II) 1.2 x mounting

height, (\perp) 1.4 x mounting height.

Efficiency = 82.5%.

Test Report: ITL62948

LER = FP-65

Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$3.69

Effective floor cavity reflectance 20%

Coefficients of Utilization

rc		80	1%			7	0%			50%)		30%	5		10%		0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
CR																		
0	98	98	98	98	96	96	96	96	92	92	92	88	88	88	84	84	84	82
1	90	87	83	8 80	88	85	82	79	81	79	76	78	76	74	75	73	72	70
2	82	76	5 70	66	80	74	69	65	71	67	64	69	65	62	66	63	61	59
3	75	67	60) 55	73	65	59	55	63	58	54	61	56	53	59	55	52	50
4	69	59	52	47	67	58	51	46	56	50	46	54	49	45	52	48	44	43
5	63	53	46	6 40	62	52	45	40	50	44	40	49	43	39	47	42	39	37
6	58	48	3 40) 35	57	47	40	35	45	39	35	44	38	34	43	38	34	32
7	54	43	36	5 31	53	42	36	31	41	35	31	40	34	30	39	34	30	29
8	50	39	32	28	49	39	32	27	38	32	27	37	31	27	36	31	27	25
9	47	36	5 29	25	46	36	29	25	35	29	25	34	28	24	33	28	24	23
10	44	- 33	3 27	22	43	33	27	22	32	26	22	31	26	22	30	26	22	21
10	44	33	3 27	22	43	33	27	22	32	26	22	31	26	22	30	26	22	

Candela

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	672	23.2	28.1
0-40	1108	38.2	46.3
0-60	1982	68.3	82.9
0-90	2392	82.5	100.0
90-180	0	0.0	0.0
0-180	2392	82.5	100.0

nce Data	
Average	Average
0-Deg	45-Deg
cd/sm	cd/sm
	Average 0-Deg

Angle In Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	2361	2772	3249
55	2121	2657	3285
65	1775	2339	2010
75	1315	1303	1328
85	986	986	910



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Specifications and dimensions subject to change without notice.

ORDERING INFORMATION

SAMPLE NUMBER: 20PG-217FB23W-UNV-HB81-U

Domestic Preferences ⁽¹²⁾ [Blank]=Standard BAA=Buy American Act TAA=Trade Agreements Act Rating Blank= Standard Width 2=2' Width 0P=Optica HP Series	Number of Lamps 2=2 Lamps Wattage (Length) 17=17WT8 (24") U1-5/8=31WT8 (24") ⁽⁸⁾ Cross Blade FB=Faceted Blade Cell Configuration 23=2 Rows of 3, 6 Cell Louver Finish W=Matte White	Voltage ⁽²⁾ 120V=120 Volt 277V=277 Volt 347V=347 Volt UNV=Universal Voltage 120-277 ⁽³⁾ Options GL=Single Element Fuse GM=Double Element Fuse Flex=Flex Installed (Reference Flex ordering information) EL=Emergency Installed ^{(4), (11)}	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% High Performance T8 Ballasts HB8_=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .8688 HB8_L=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Low Ballast Factor .7782 HB8_N=T8 Electronic Instant Start.	Options R=Internal Reflector (Not available for U1-5/8 lamp) Packaging U=Unit Pack PAL=Job Pack, out of carton PALC=Job Pack, in carton
Trim Type G=Grid/Lay-in (Standard) ⁽⁶⁾ F=Aluminum Flange Trim ⁽⁵⁾ MZ=Modular Trim	Option - Aluminum Flange Tim Blank=SW (Single White) Type Color 'S' Single 'N' Natural 'R' In Row 'W' White 'E' End of Row	Lamps Installed L8835=T8 Lamp, 17W and 32W, 3500K L8841=T8 Lamp, 17W and 32W, 4100K	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.	ACCESSORIES ⁽¹³⁾ EQ-CLIP-U=T-BAR Safety Earthquake Clips ⁽¹⁾

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. ⁽⁶⁾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⁾For a complete listing of Fifthlight Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com ⁽⁸⁾Fifthlight ballast option not available. ⁽⁹⁾O-10V ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system. ⁽¹⁰⁾Specification grade 0-10V 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. ⁽¹²⁾ 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 maybe separately analyzed under domestic preference requirements. Consult factory for further information.

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 availabili and ordering information.

	Total Harmonic Distortion < 10%.								
	High Ballast Factor > 1.15.								
	ER8_=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%								
	High Performance T8 Ballasts								
	HB8_=T8 Electronic Instant Start. Total Harmonic Distortion < 10%.								
	Standard Ballast Factor .86 – .88								
	HB8 L=T8 Electronic Instant Start.								
ng	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								
	0-10V Dimming Ballasts ⁽⁹⁾								
elv	5LTV8_=T8 0-10V Program Rapid Start.								
'	Total Harmonic Distortion < 10%.								
ity	Ballast Factor 0.87								
,	5LTVS8_=T8 0-10V Spec Grade Program Rapid								
	Start. Total Harmonic Distortion <								
	10%. Ballast Factor 0.87 ⁽¹⁰⁾								
	Fifth Light DALI Ballasts (7)								
	5LT8_=T8 DALI Program Rapid Start.								
	Total Harmonic Distortion < 10%.								
	Ballast Factor 1.0								

Number of Ballasts

1=1 Ballast

2=2 Ballasts 3=3 Ballasts

SHIPPING DATA

Catalog No.	
20PG-217	
20PG-2U1-5/8	

Wt. 18 lbs. 18 lbs.

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