COOPER LIGHTING - 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. 20P-IC is designed for installations when the housing will be in direct contact with insulation. 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 for Type IC Recessed Luminaire (Rated for direct contact with insulation) 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.

Hinging/Latching

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

23-3/4

[603mm]

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.

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.coopercontrol.com) to maximize energy savings.

Compliance

Options to meet Buy American and other domestic preference requirements.

> 4-3/4" [121mm]



20P-IC 217 2U1-5/8

6 Cell

2' X 2' 2 LAMP FOR USE IN **INSULATED CEILINGS**







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

Luminaire Efficacy Rating

LER = FP-65

Catalog Number: 20PG-IC-217

3000 hrs at .08 KWH = \$3.69

*Convertibility applies to housing only

**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

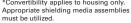


disconnecting power

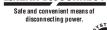


ENERGY DATA

Yearly Cost of 1000 lumens,









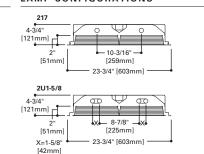


MOUNTING DATA

7/8" [22mm

K.O. (2)

LAMP CONFIGURATIONS





Access Plate

7/8" [22mm] K.O. (2)

Grid/Lay-in

Standard

24" [608mm] **CEILING COMPATIBILITY**

[™] 1-3/4" [45mm]

Aluminum FlangeTrim With Supporting Swing Gates





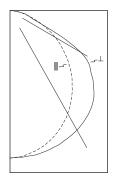
M7



Ceiling

Trim

PHOTOMETRICS



20PG-IC-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: 2OPG-IC-217.IES

LER = FP-65

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

Coefficients of Utilization

Effective floor cavity reflectance							20	%											
rc		80	%			7	0%			50%	, 0		30%	, 0		10%		0	%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																			
0	98	98	98	98	96	96	96	96	92	92	92	88	88	88	84	84	84	8	2
1	90	87	83	80	88	85	82	79	81	79	76	78	76	74	75	73	72	7	0
2	82	76	70	66	80	74	69	65	71	67	64	69	65	62	66	63	61	5	9
3	75	67	60	55	73	65	59	55	63	58	54	61	56	53	59	55	52	5	0
4	69	59	52	47	67	58	51	46	56	50	46	54	49	45	52	48	44	4	3
5	63	53	46	40	62	52	45	40	50	44	40	49	43	39	47	42	39	3	7
6	58	48	40	35	57	47	40	35	45	39	35	44	38	34	43	38	34	3	2
7	54	43	36	31	53	42	36	31	41	35	31	40	34	30	39	34	30	2	9
8	50	39	32	28	49	39	32	27	38	32	27	37	31	27	36	31	27	2	5
9	47	36	29	25	46	36	29	25	35	29	25	34	28	24	33	28	24	2	3
10	44	33	27	22	43	33	27	22	32	26	22	31	26	22	30	26	22	2	1

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

Luminance Data

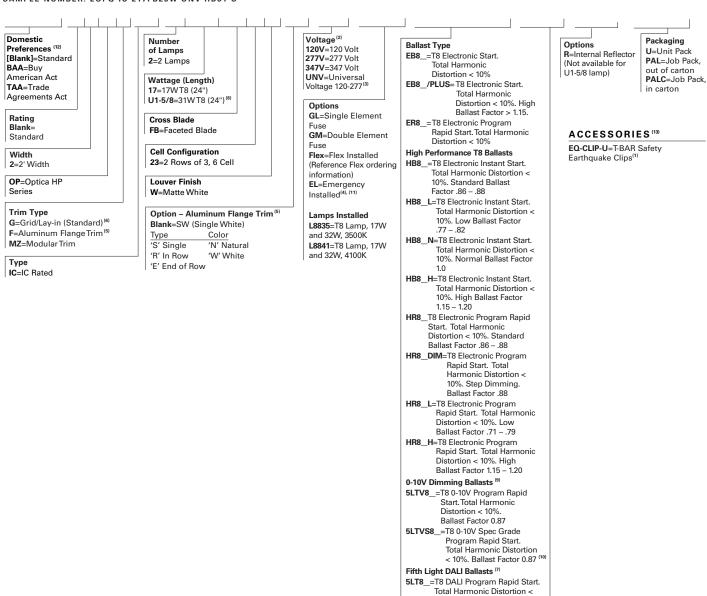
Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
2361	2772	3249
2121	2657	3285
1775	2339	2010
1315	1303	1328
986	986	910
	0-Deg cd/sm 2361 2121 1775 1315	0-Deg cd/sm 45-Deg cd/sm 2361 2772 2121 2657 1775 2339 1315 1303

Candela

Angle	Along II	45°	Across⊥
0	862	862	862
5	854	857	860
10	835	844	857
15	809	827	847
20	774	802	835
25	731	771	817
30	682	734	798
35	626	691	772
40	565	643	740
45	505	593	695
50	438	531	634
55	368	461	570
60	298	381	462
65	227	299	257
70	159	183	142
75	103	102	104
80	61	60	61
85	26	26	24
90	0	0	0

ORDERING INFORMATION

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



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. (1) Louver is recessed by 5/16" in Concealed T or Slot Grid. (7) For a complete listing of Fifthightif Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com (1) Fifthightight ballast option not available. (8) C-10 ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system. (10) Specification grade 0-10 V 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. (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 analyzed under domestic preference requirements. (13) 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 INFORMATION

Catalog No.	Wt.				
20PG-IC-217	18 lbs.				
20PG-IC-2U1-5/8	18 lbs.				



10%. Ballast Factor 1.0

Number of Ballasts 1=1 Ballast 2=2 Ballasts 3=3 Ballasts