

COOPER LIGHTING - METALUX®

DESCRIPTION

The 2HB series is an outstanding solution for high mounting height industrial or retail applications. The 2HB optic has been optimized to provide maximum performance from either the T5 or T8 lamps. Optional uplight component is provided to enable excellent ceiling uniformity. 2HB's high lumen package allows the benefits of fluorescent to be applied at high mounting heights that were traditionally exclusive to H.I.D. The primary benefits include exceptional color rendering, high system efficacy, 95% lumen maintenance, long lamp life, instant on/instant re-strike, economical dimming, and uniform brightness control. Primary applications include retail, shopping malls, light industrial, gymnasiums and recreational environments.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

A...Construction

Full bodied steel housing utilizes captive fasteners to protect optical assembly and assure structural integrity. The housing features an integral ballast channel that adds strength and provides numerous KO's for easy installation. Center access plate location allows for easy access to ballast leads on all new and retrofit projects regardless of mounting type.

B...Electrical

Class "P" ballasts are positively secured by mounting bolts. Pressure-lock lampholders. Optional modular power receptacle meets UL2459 and NEC 410.73 and is UL/cUL rated for make and break under load from outside the luminaire to speed maintenance. UL/CUL listed. Suitable for damp locations. Thermally optimized for environments up to 149°F (65°C) when used with high temperature ballasts in an open uplight configuration.

C...Finish

White enamel finish preceded by a multistage cleaning cycle, iron phosphate coating with rust inhibitor to protect against contaminants and oxidation.

D...Downlight/Uplight Optics

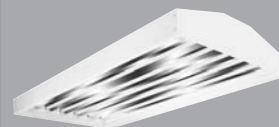
Die formed reflectors are faceted with two optical distributions -medium and wide. Medium beam optical modules utilize 95% specular aluminum while the wide distribution utilizes a high performance 95% reflective polyester powder coated finish. Gasketed door frame & lens assembly is optional for more demanding environments. Uplight option provided to enable ceiling uniformity.

Mounting

The 2HB series is suited for surface, suspension mounting with optional wire hook and chain set, stem or cable mounting.

Options

Integral Occupancy Sensor available and provides from 600 sq. ft. (MS) up to 1250 sq. ft. (MSO) of coverage in a maximum mounting height of 40'.



F-BAY 2HB SERIES

2' x 4' High-Bay
6 Lamp

HIGH-BAY INDUSTRIAL
LUMINAIRE



ENERGY DATA

Input Watts:

EB Ballast
632 = 169W

EB/Plus Ballast
632 = 221W

ER Ballast
632 = 169W
654 = 346W

ER/Plus Ballast
632 = 218W

Luminaire Efficacy Rating

LER = 66 (White)

LER = 69 (Specular)

Catalog Number: 2HB-632-UPL

Yearly Cost of 1000 Lumens,
3000 hrs. at .08 KWH = \$3.47

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

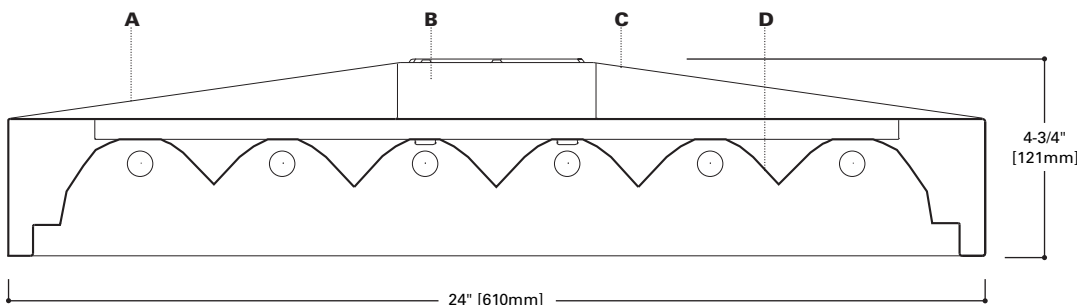
** Consult Pre Sales Technical Support.

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

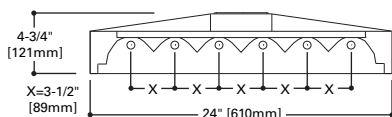
LINEAR DISCONNECT

Safe and convenient means of disconnecting power.

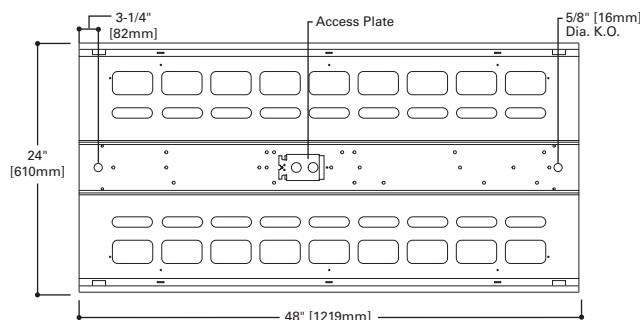
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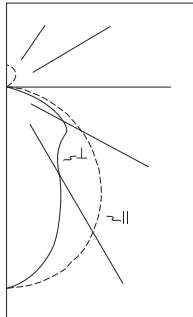
LAMP CONFIGURATIONS



DIMENSION TOP VIEW



PHOTOMETRICS



2HB-632-UNV-EB82-UPL
 Electronic Ballasts
 (6) 32W T8 Lamps
 2850 lumens
 Spacing criterion:
 (II) 1.3 x mounting
 height, (⊥) 1.0 x
 mounting height
 Efficiency 96%
 Test Report:
 2HB632UNVEB82UPL.IES
 LER =85
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$2.82

Candela				
Angle	Along II	45°	Across ⊥	
0	7471	7471	7471	
5	7431	7377	7326	
10	7335	7100	6834	
15	7171	6590	5978	
20	6937	5851	5097	
25	6641	5104	4372	
30	6286	4365	3919	
35	5864	3816	3455	
40	5389	3367	3079	
45	4865	2897	2652	
50	4303	2499	2408	
55	3694	2070	2246	
60	3070	1808	2131	
65	2422	1628	1887	
70	1767	1395	1544	
75	1134	1068	1110	
80	571	650	712	
85	144	246	199	
90	9	13	15	

Coefficients of Utilization

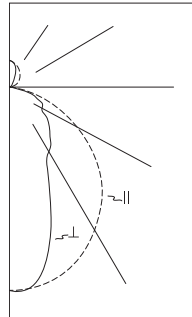
rc rw RCR	Effective floor cavity reflectance																				
	80%			70%			50%			30%			10%			0%					
	70	50	30	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30			
0	113	113	113	113	109	109	109	109	103	103	103	98	98	98	92	92	92	90			
1	103	99	95	91	100	96	92	89	91	88	85	86	84	82	82	80	78	76			
2	94	87	80	75	91	84	79	74	80	75	71	76	72	69	72	69	66	64			
3	86	77	69	63	83	75	68	62	71	65	60	68	63	58	64	60	57	54			
4	79	68	60	54	77	67	59	53	63	57	52	61	55	51	58	53	49	47			
5	73	61	53	47	71	60	52	46	57	51	45	55	49	44	52	47	43	41			
6	68	56	47	41	66	54	47	41	52	45	40	50	44	39	48	43	39	37			
7	63	51	43	37	61	50	42	37	48	41	36	46	40	35	44	39	35	33			
8	59	46	39	33	57	46	38	33	44	37	32	42	36	32	41	35	31	29			
9	55	43	35	30	54	42	35	30	41	34	29	39	33	29	38	32	29	27			
10	52	40	32	28	50	39	32	27	38	31	27	36	31	27	35	30	26	25			

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	4989	29.2	30.4
0-40	7631	44.6	46.5
0-60	12278	71.8	74.9
0-90	15392	90.0	93.8
0-180	16403	95.9	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	9147	5049	4647
55	8328	4207	4597
65	7088	4118	4820
75	4942	3725	3928
85	1306	1453	1206



2HB-654T5-UNV-EBT2-UPL
 (2) Electronic Ballasts
 (6) F54T5/HO 830
 54W Lamps
 4400 lumens
 Spacing criterion:
 (II) 1.2 x mounting
 height, (⊥) 1.0 x
 mounting height
 Efficiency 95.7%
 Test Report:
 2HB654T5UNVEBT2UPL.IES
 LER =73
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$3.28

Candela				
Angle	Along II	45°	Across ⊥	
0	10464	10464	10464	
5	10404	10564	10640	
10	10257	10682	10692	
15	10016	10409	10055	
20	9674	9747	9020	
25	9245	8877	7674	
30	8740	7708	6161	
35	8131	6429	4792	
40	7461	5079	4255	
45	6705	3961	3966	
50	5881	3449	3714	
55	5009	3093	3414	
60	4101	2773	3120	
65	3174	2416	2936	
70	2284	2105	2808	
75	1439	1888	2227	
80	711	1277	1370	
85	156	409	286	
90	9	4	10	

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance																				
	80%			70%			50%			30%			10%			0%					
	70	50	30	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30			
0	113	113	113	113	109	109	109	109	103	103	103	98	98	98	93	93	93	90			
1	103	99	95	91	100	96	92	89	91	88	85	86	84	82	82	80	78	76			
2	94	86	80	75	91	84	78	73	80	75	71	76	72	68	72	69	66	64			
3	86	76	69	63	83	74	67	62	71	65	60	67	63	58	64	60	57	54			
4	79	68	60	54	77	66	59	53	63	57	52	61	55	51	58	53	49	47			
5	73	61	53	47	71	60	52	46	57	51	45	55	49	44	53	48	43	41			
6	68	56	47	41	66	54	47	41	52	45	40	50	44	39	48	43	39	37			
7	63	51	43	37	61	50	42	37	48	41	36	46	40	35	44	39	35	33			
8	59	46	39	33	57	46	38	33	44	37	33	42	36	32	41	35	31	29			
9	55	43	35	30	54	42	35	30	41	34	30	39	33	29	38	33	29	27			
10	52	40	32	28	50	39	32	27	38	31	27	37	31	27	35	30	26	25			

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	7884	29.9	31.2
0-40	11985	45.4	47.5
0-60	18923	71.7	74.9
0-90	23788	90.1	94.2
0-180	25252	95.7	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	12576	6871	6917
55	11257	6246	6945
65	9246	6057	7435
75	6225	6501	7783
85	1392	2362	1695

Modular F-Bay Power Supply

Cooper Lighting's F-Bay Modular Power Supply option allows external fixture access for safe and easy servicing. There is no need to remove lamps or reflectors to disconnect fixture power with F-Bay Modular Power Supply. Access to the individual fixtures power supply allows servicing without turning off all the fixtures disrupting occupants. F-Bay Modular Power Supply is a time saver in installation – simply plug & power.



1. Modular Power Supply Receptacle supplied mounted into fixture Access Plate.
2. Modular Power Cord & Plugs in 120, 277, 347, & 480V configurations for easy plug & power into existing supply.

No internal fixture access required for installation or disconnecting power.

Modular Motion Sensor Option supplied with Mounting Box and Modular Power Supply Receptacle.

Code Compliance

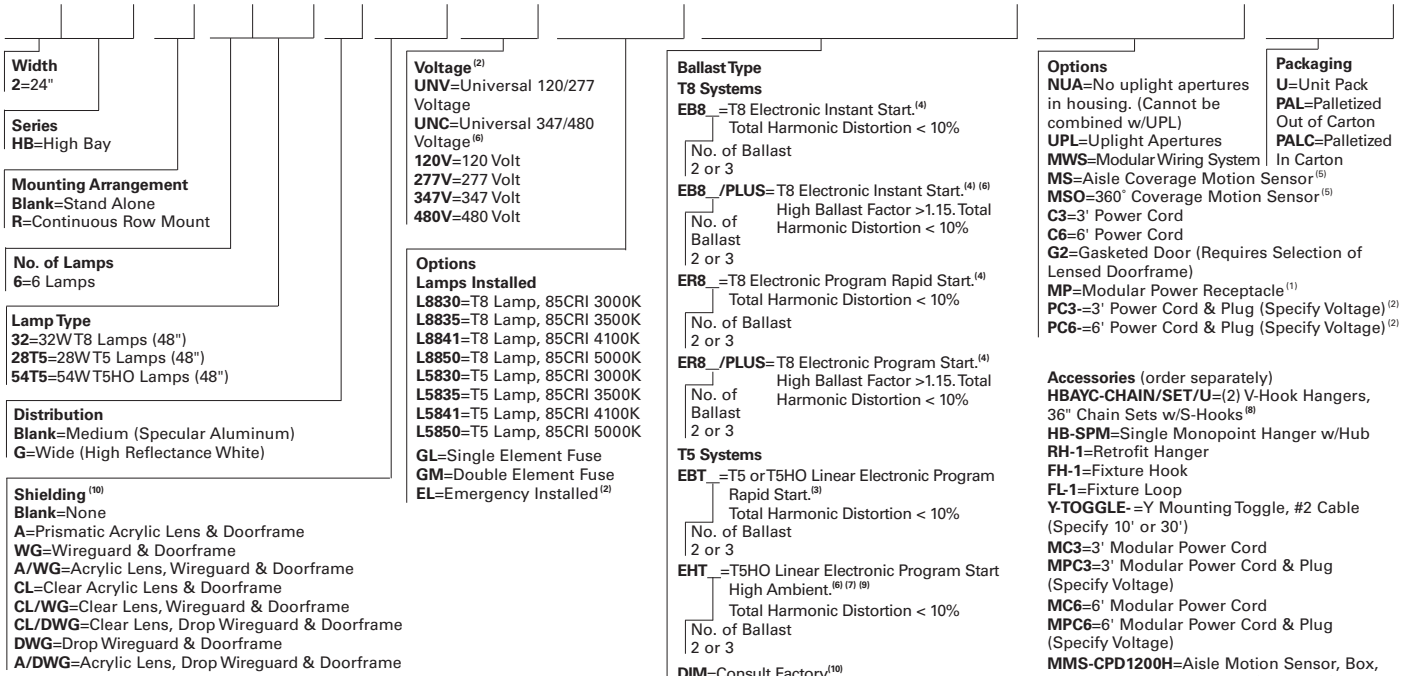
- UL/cUL Certified for Make/Break under load (UL2549)
- Meets NEC requirements for ballast disconnect (NEC 410.73G)
- Allows for addition of Occupancy Sensor without hard connections
- Receptacles complete with insulating dustcap

SHIPPING INFORMATION

Catalog No.	Wt.
2HB-632-G-120V-UPL	27 lbs.
2HB-654T5-120V-UPL	27 lbs.

ORDERING INFORMATION

SAMPLE NUMBER: 2HB-632-A-UNV-EB82/PLUS-UPL-U



NOTES: ⁽¹⁾Requires use of MC_ or MPC_cord accessories, specify voltage for plugs. ⁽²⁾Voltage must be specified when ordered with plugs, motion sensor or emergency ballasts. ⁽³⁾EBT ballast systems suitable for operation in ambient environments up to 104°F (40°C) in open upright configuration. ⁽⁴⁾ER8 and EB8 ballast systems suitable for operation in ambient environments up to 122°F (50°C) in open upright configuration. ⁽⁵⁾Specify voltage. ⁽⁶⁾2 lamp ballast configurations only for T5 UNC versions. 2/3 lamp ballast configurations in EB8/PLUS only for T8 UNC versions. ⁽⁷⁾EHT/HT5/HCT5 ballast systems suitable for ambient environments not to exceed 149°F (65°C) in open upright configurations and less lens option. ⁽⁸⁾Use in high abuse applications such as gymnasiums. ⁽⁹⁾Lensed 6-Lamp T5HO luminaire must use High Ambient ballast option (EHT). ⁽¹⁰⁾Dimming ballast must be specified at time of order.

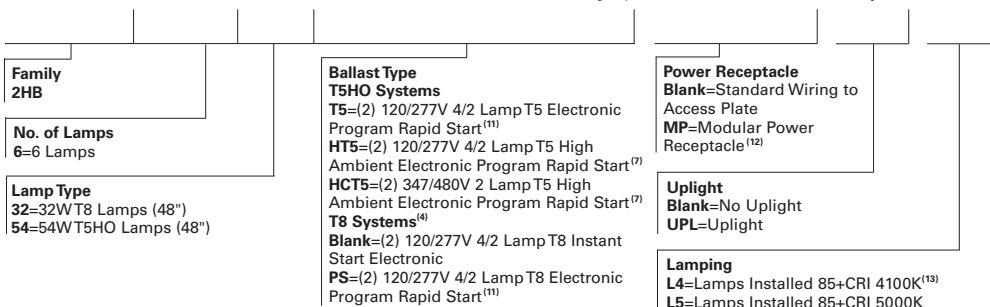


Quick Ship Ordering Information Sample Number: 2HB632PS-MP-UPL-L5

Quick Ship orders ship in 5 days in order quantities not to exceed 200 pieces.

NOTE: Orders received after noon are entered on the following day.

Includes V Hangers for rapid installation



NOTES: ⁽¹¹⁾Recommended when utilizing Motion Sensor option. ⁽¹²⁾Requires use of Modular cord and plug accessories. ⁽¹³⁾High lumen (3100 initial) T8 lamps supplied.