

## 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.

## APPLICATION

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 "big box" retail, shopping malls, light industrial, etc.

## SPECIFICATION FEATURES

### A...Construction

Housing, end plates and socket tracks are die formed code gauge, prime cold rolled steel. The housing features an integral ballast channel that adds strength and provides numerous KO's for easy installation. Die formed internal reflectors are available in both high reflectance specular material or in painted after fabrication white enamel.

### B...Electrical

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

### C...Finish

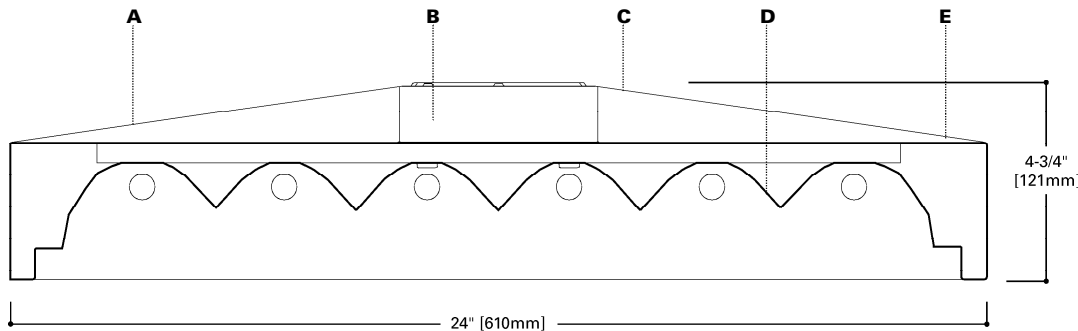
Electrostatically applied baked white enamel finish is preceded by a multistage cleaning cycle, iron phosphate coating with rust inhibitor.

### D...Downlight/Uplight Optics

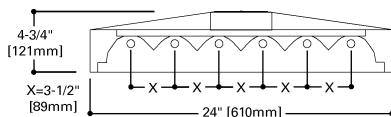
Open downlight design optimizes performance. Gasketed door frame & lens assembly is optional for more demanding environments. Uplight option provided to enable ceiling uniformity.

### E...Mounting

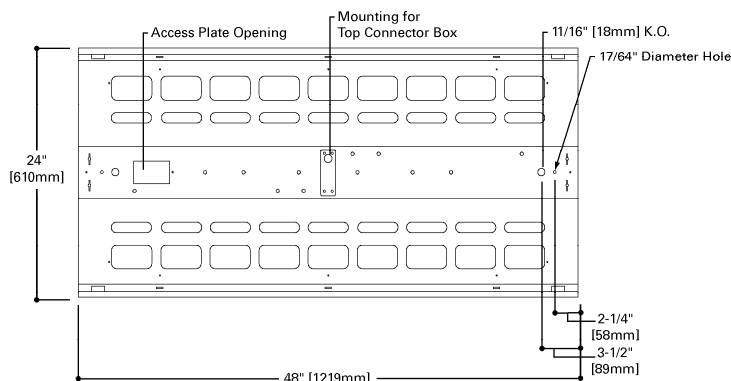
The 2HB series is ideally suited for surface, suspension mounting with optional wire hook and chain set, stem or cable mounting. Top connector box mounting is also available.



## LAMP CONFIGURATIONS



## DIMENSION TOP VIEW



COOPER LIGHTING

Catalog #		Type
Project		
Comments		Date
Prepared by		



## 2HB65

2' x 4' High-Bay  
6 Lamp

HIGH-BAY INDUSTRIAL  
LUMINAIRE



### PRODUCT INCLUDES:

- 6-Lamp T8
- 5000K GE Lamps
- Universal Voltage Ballast
- GE UltraMax Instant Ballasts
- Up-light
- Top Connector Box Plate
- 277V 3 ft. Cord & Plug
- Motion Sensor

### ENERGY DATA

Input Watts:

EB Ballast & STD Lamps

632 = 176W

654 = 363W

Luminaire Efficacy Rating

LER = 66 (White)

LER = 84 (Specular Inserts)

Catalog Number: 2HB-632-UPL

Yearly Cost of 1000 Lumens,  
3000 hrs. at .08 KWH = \$2.84

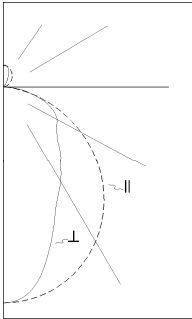
\* Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements

\*\* Consult Pre Sales Technical Support.

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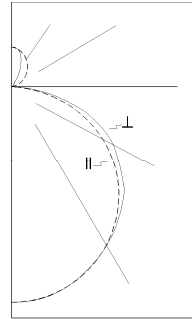


PHOTOMETRICS



**2HB-632-UNV**  
 (2) Electronic Ballasts  
 (6) F032/35K 32W T8 lamps  
 2850 lumens  
 Spacing criterion:  
 (II) 1.2 x mounting height,  
 (⊥) 0.8 x mounting height  
 Efficiency 95.9%  
 Test Report: 09306  
 LER =84  
 Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$2.84

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	



**2HB-632-G-UNV**  
 (2) Electronic Ballasts  
 (6) F032/35K 32W T8 lamps  
 2850 lumens  
 Spacing criterion:  
 (II) 1.3 x mounting height,  
 (⊥) 1.3 x mounting height  
 Efficiency 92.1%  
 Test Report: 09308  
 LER =82  
 Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$2.94

Candela				
Angle	Along II	45°	Across ⊥	
0	4632	4632	4632	
5	4614	4621	4616	
10	4559	4576	4570	
15	4465	4487	4474	
20	4347	4358	4331	
25	4187	4184	4176	
30	3997	3987	4007	
35	3778	3770	3819	
40	3529	3535	3607	
45	3259	3273	3391	
50	2951	2990	3111	
55	2619	2699	2807	
60	2262	2338	2531	
65	1881	2000	2177	
70	1481	1663	1776	
75	1056	1242	1267	
80	606	756	803	
85	184	292	258	
90	15	17	15	

Coefficients of Utilization

rc	Effective floor cavity reflectance																							
	80%				70%				50%				30%				10%				0%			
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	0	113	113	113	113	109	109	109	109	103	103	103	98	98	98	92	92	92	90	90	90	90	90	
1	104	100	96	93	101	97	94	91	92	89	87	87	85	83	83	81	80	77	77	77	77	75	74	71
2	95	88	82	77	92	86	81	76	82	77	73	78	74	71	74	71	68	66	66	66	65	62	60	
3	88	79	71	66	85	77	70	65	73	68	63	70	65	61	67	63	59	57	57	57	55	53	50	
4	81	70	62	57	78	69	61	56	66	59	54	63	57	53	60	56	52	50	50	49	47	45	43	
5	74	63	55	49	72	61	54	48	59	52	47	56	50	46	54	49	45	43	43	42	40	38	36	
6	69	57	48	43	66	55	48	42	53	46	41	51	45	41	49	44	40	38	38	37	35	33	31	
7	64	51	43	38	62	50	43	37	48	41	37	46	40	36	45	39	35	33	33	32	30	29	27	
8	59	46	38	33	57	45	38	33	44	37	32	42	36	32	40	35	31	29	29	28	27	26	24	
9	54	42	34	29	53	41	34	29	40	33	28	38	32	28	37	31	27	26	26	25	24	23	21	
10	51	38	31	26	49	38	30	26	36	30	25	35	29	25	34	28	25	23	23	22	21	20	19	

Coefficients of Utilization

rc	Effective floor cavity reflectance																							
	80%				70%				50%				30%				10%				0%			
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	0	108	108	108	108	105	105	105	105	98	98	98	93	93	93	87	87	87	85	85	85	85		
1	99	94	91	87	95	92	88	85	86	84	81	82	79	77	77	75	74	71	71	71	71	70	68	
2	90	82	76	71	87	80	74	70	76	71	67	72	68	64	68	65	62	60	60	60	59	57	55	
3	82	73	65	59	79	71	64	58	67	61	56	63	59	55	60	56	53	50	50	49	47	45	43	
4	75	64	56	50	72	62	55	49	59	53	48	56	51	47	53	49	45	43	43	42	40	38	36	
5	68	56	48	42	66	55	47	42	52	46	40	50	44	39	47	42	38	36	36	35	33	31	29	
6	63	50	42	36	60	49	41	36	47	40	35	44	39	34	42	37	33	31	31	30	28	26	24	
7	58	45	37	31	56	44	36	31	42	35	30	40	34	29	38	33	29	27	27	26	24	22	20	
8	53	40	32	27	51	39	32	27	38	31	26	36	30	25	34	29	25	23	23	22	21	20	19	
9	49	36	28	23	47	35	28	23	34	27	22	32	26	22	31	25	21	20	20	19	18	17	16	
10	45	33	25	20	44	32	25	20	31	24	20	29	24	19	28	23	19	17	17	16	15	14	13	

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	5000	29.2	30.5
0-40	7643	44.7	46.6
0-60	12290	71.9	74.9
0-90	15393	90.0	93.9
0-180	16401	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	9819	5847	5353
55	9191	5150	5588
65	8179	5498	6372
75	6253	5889	6121
85	2358	4028	3259

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	3639	21.3	23.1
0-40	6011	35.1	38.2
0-60	10954	64.1	69.6
0-90	14505	84.8	92.1
0-180	15743	92.1	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	6578	6606	6844
55	6516	6716	6984
65	6352	6754	7352
75	5823	6848	6986
85	3013	4781	4225

ORDERING INFORMATION

SAMPLE NUMBER: 2HB-632-277-LGSP50M/OC8-GE-GE432MAXHULTRA/GE232MAXHULTRA-UPL-TCBP-PC3-MS-U

<b>Width</b> 2=24"	<b>Series</b> HB=High Bay	<b>No. of Lamps</b> 6=6 Lamps	<b>Lamp Type</b> 32=32WT8 GE Lamps (48"), 5000K	<b>Voltage</b> UNV=Universal 120/277V Voltage	<b>Ballast</b> =GE 4 Lamp and 2 Lamp UltraMax High Ballast Factor Instant Start Electronic Ballasts	<b>Additional Items</b> UPL=Uplight Apertures TCBP=Top Connector Box Plate PC3=3' Power Cord & Plug MS=Motion Sensor	<b>Packaging</b> U=Unit Pack
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NOTES: Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

SHIPPING INFORMATION

Catalog No.	Wt.
2HB65	27 lbs.