

Day-Brite CFI

by Signify

Industrial

HBX LED high bay

13,000, 17,000, or 24,000 lms



Project: _____
Location: _____
Cat.No: _____
Type: _____
Lamps: _____ Qty: _____
Notes: _____

Day-Brite / CFI HBX LED high bay provides durability in an appealing compact form. With a range of lumen packages, optical distributions, and accessories available, this luminaire can be used in many different applications ranging from warehouses and manufacturing facilities to retail outlets and natatoriums.

Ordering guide

Example: HBX24LL40-UNV-M-WT

Family	Lumen Package	Source	Color Temperature	Voltage	Distribution	Paint Colors	Options
HBX		L	40	—	—	—	
HBX	13L 13,000 nominal delivered lumens	L LED	40 4000K (CRI 80)	UNV Universal voltage 120-277V	N Narrow M Medium W Wide A ¹ Aisle	BZ Dark Bronze WT White BK Black AL Silver Aluminum	WP6 Wired 6' 16/3 Cord & NEMA Twist Lock Plug ²
	17L 17,000 nominal delivered lumens			120 120V			WP6D Wired 6' 16/3 Cord & NEMA Twist Lock Plug for Line Voltage and Wired 6' 16/3 Cord & Plug for Dimming Control ²
	24L 24,000 nominal delivered lumens			208 208V			WC6D Wired 6' 16/3 Cord for Line Voltage and Wired 6' 16/3 Cord for Dimming Control
				240 240V			MD360 ¹ 360° Motion Detector (ON/OFF)
				277 277V			MD360D ¹ 360° Motion Detector (ON/DIM)
				347 347V			XTM Extreme Environment (see specs for details)
				480 480V			(WC6 cord is standard)

Footnotes

- ¹ Not available with XTM Extreme Environment option
² Must specify line voltage
³ Do not use with XTM option luminaire in natatoriums or other corrosive environments

Accessories (order separately, see last page for details)

- HBX-GRIP5³ 5' cables with snap hooks
- HBX-GRIP10³ 10' cables with snap hooks
- HBX-PENHGR³ Pendant hanger
- HBX-ADJHGR³ Adjustable surface/pendant yoke bracket
- HBX-ADJHGR-WT-XR Adjustable surface/pendant yoke bracket for Extreme Environment
- HBX-PENHGR-XTR Pendant hanger for Extreme Environment
- HBX-IND³ Hanging bracket pair for indirect suspension
- HBX-IND-XTR Hanging bracket pair for indirect suspension for Extreme Environment

Wiring Notes

- Standard cords have 3 wires. Consult factory for other cord options.

General Notes

- All options factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

Predicted L₇₀ Lifetime

- 45°C Ambient or 55°C Ambient option >100,000 hours (based upon LED manufacturer's supplied LM-80 data and in-situ laboratory testing)

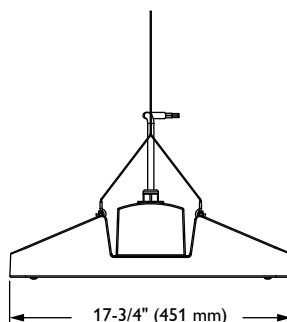


13,000, 17,000, or 24,000 lms

- This luminaire can be used to illuminate manufacturing, warehousing, gymnasiums, arenas and many other large indoor spaces with control and precision.

- Die cast aluminum housing provides excellent thermal transfer to extend component life.
- Tempered glass lens with molded gasket seals the optical compartment.
- May be cable or pendant mounted.

- Polyester powder finish on all die cast parts for excellent impact and corrosion resistance.
- Each unit comes standard with 6' 16/3 wired cord (see options for other wiring configurations).
- LED light engines and drivers are field replaceable.
- 5 Year Limited Warranty
- Components are RoHS compliant.
- Listed by ETL to meet UL 1598 standards for wet location and -40°C to 45°C ambient (55°C for XTM option).
- Standard construction is IP65 without motion detector option.
- Dimming drivers are standard. Control is 0-10V DC.
- Optional motion detector.
- DLC Listed. Please check the DLC Qualified Products List to confirm (www.designlights.org/QPL).
- XTM Extreme Environment option provides extra protection from heat and chemicals. Finish coating, stainless steel hardware, and LED upgrades allow use in areas such as natatoriums and in ambients up to 55°C.



HBX LED high bay, Narrow Distribution, 24,000 nominal delivered lumens

Catalog No.		HBX24LL40-UNV-N			
Test No.		32766			
S/MH		0.8			
Lamp Type		LED			
Lumens		24,256			
Input Watts		213			
Efficacy		114			
Comparative yearly lighting energy cost per 1000 lumens – \$2.11 based on 3000 hrs. and \$.08 pwr KWH.					
The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.					
Photometric values based on test performed in compliance with LM-79.					

Candlepower				
Angle	End	45	Cross	
0	29172	29172	29172	
5	29075	28817	28530	
10	28605	27652	26747	
15	27618	25821	24069	
20	25524	22931	20566	
25	22438	18808	15873	
30	17262	13545	10762	
35	7306	5997	5282	
40	2119	1275	1380	
45	1262	677	622	
50	1145	587	530	
55	1195	469	457	
60	786	408	392	
65	640	337	326	
70	290	252	244	
75	195	174	162	
80	110	101	84	
85	30	31	25	

Light Distribution				Average Luminance			
Degrees	Lumens	% Luminaire		Angle	End	45°	Cross
0-30	18459	76.1		45	6341	3404	3125
0-40	22536	92.9		55	7403	2906	2832
0-60	23672	97.6		65	5382	2837	2744
0-80	24215	99.8		75	2683	2389	2225
0-90	24256	100.0		85	1206	1278	1026

Coefficients of Utilization									
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	119	119	119	116	116	116	111	111	
1	113	111	108	111	108	106	104	103	
2	108	103	99	106	101	97	98	95	
3	102	96	91	100	95	90	92	88	
4	97	90	84	96	89	84	87	82	
5	93	84	79	91	83	78	82	77	
6	88	79	73	87	79	73	77	72	
7	84	75	69	83	74	69	73	68	
8	80	71	65	79	70	65	69	64	
9	76	67	61	75	66	61	66	60	
10	72	64	58	72	62	58	62	57	

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HBX LED high bay, Wide Distribution, 24,000 nominal delivered lumens

		Candlepower				Light Distribution			Average Luminance			
Catalog No.	HBX24LL40-UNV-W	Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
Test No.	32769	0	5342	5342	5342	0-30	5925	24.7	45	36743	40686	44625
S/MH	2.2	5	5615	5617	5471	0-40	11060	46.1	55	28782	35928	31789
Lamp Type	LED	10	6130	6054	5736	0-60	22253	92.8	65	6402	7434	4963
Lumens	23,969	15	6699	6541	6181	0-80	23918	99.8	75	4401	3325	2642
Input Watts	212	20	7412	7190	6807	0-90	23969	100.0	85	2050	939	351
Efficacy	113	25	8166	7974	7589							
Comparative yearly lighting energy cost per 1000 lumens – \$2.12 based on 3000 hrs. and \$.08 pwr KWH.		30	8070	8160	8444							
		35	7783	8122	8718							
The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.		40	7678	8276	9040							
		45	7312	8096	8880							
Photometric values based on test performed in compliance with LM-79.		50	6165	7433	7520							
		55	4646	5799	5131							
		60	2909	3150	1986							
		65	761	884	590							
		70	559	439	352							
		75	321	242	192							
		80	163	106	76							
		85	50	23	9							

Coefficients of Utilization									
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	119	119	119	116	116	116	111	111	
1	111	107	103	108	104	101	100	97	
2	101	94	88	99	92	87	89	84	
3	93	83	76	90	82	75	79	73	
4	85	74	65	83	72	65	70	63	
5	78	66	57	76	64	56	62	55	
6	72	59	50	70	58	49	56	49	
7	66	53	44	64	52	44	50	43	
8	61	48	39	60	47	39	46	38	
9	57	43	35	55	43	35	42	34	
10	53	40	32	52	39	32	38	31	

Photometric Test List

Catalog No.	Test No.	Delivered Lumens	Input Watts	Efficacy
HBX13LL40-UNV-N	32767	12284	106	116
HBX13LL40-UNV-M	32763	12264	106	115
HBX13LL40-UNV-W	32770	12118	106	115
HBX13LL40-UNV-A	32773	12348	106	117
HBX17LL40-UNV-N	32765	17088	142	120
HBX17LL40-UNV-M	32762	17077	142	121
HBX17LL40-UNV-W	32768	16950	143	119
HBX17LL40-UNV-A	32771	17436	142	123
HBX24LL40-UNV-N	32766	24256	213	114
HBX24LL40-UNV-M	32760	24295	212	115
HBX24LL40-UNV-W	32769	23969	212	113
HBX24LL40-UNV-A	32772	24456	213	115
HBX24LL40-UNV-M-XTM	38176	24638	194	127
HBX17LL40-UNV-M-XTM	38177	17901	135	133
HBX13LL40-UNV-M-XTM	38178	12423	97	128
HBX24LL40-UNV-N-XTM	38179	24265	193	126
HBX17LL40-UNV-N-XTM	38180	17715	134	132
HBX13LL40-UNV-N-XTM	38181	12411	97	128
HBX24LL40-UNV-W-XTM	38182	24525	194	127
HBX17LL40-UNV-W-XTM	38183	17741	134	132
HBX13LL40-UNV-W-XTM	38184	12212	97	126

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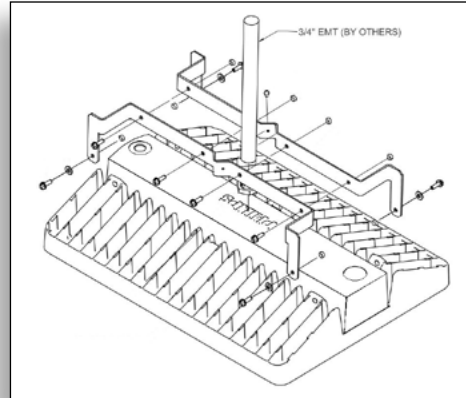
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Accessories

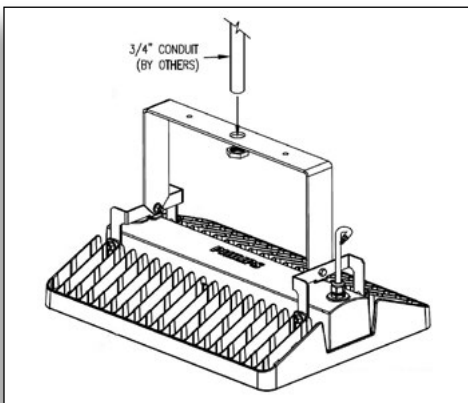
HBX-GRIP



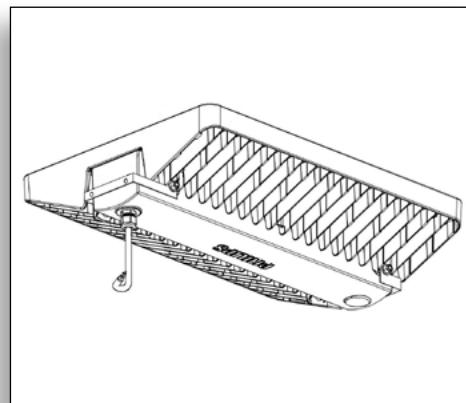
HBX-PENHGR



HBX-ADJHGR



HBX-IND



Accessory Catalog Code	Description
HBX-GRIP5	5' hanging pair of cables with snap hooks
HBX-GRIP10	10' hanging pair of cables with snap hooks
HBX-PENHGR	Pendant hanger kit -galvanized steel (pendant supplied by others)
HBX-PENHGR-XTR	Pendant hanger kit for Extreme Environment - painted white (pendant supplied by others)
HBX-ADJHGR	Adjustable surface/pendant yoke kit - galvanized steel (pendant supplied by others)
HBX-ADJHGR-WT-XTR	Adjustable surface/pendant yoke kit for Extreme Environment - painted white (pendant supplied by others)
HBX-IND	Hanging bracket pair for indirect suspension
HBX-IND-XTR	Hanging bracket pair for indirect suspension for Extreme Environment

