

# Day-Brite



by Signify

## Industrial

### HBY LED High bay

12,000 to 36,000 lumens



Control options available

Day-Brite / CFI HBY LED high bay provides durability in an appealing compact form. With a wide 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.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lumens: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

### Ordering guide

Example: **HBY24L840-UNV-M-WT**

Family	Lumens (nominal <sup>1</sup> )	Color Temperature	Voltage	Distribution	Paint Colors	Options
<b>HBY</b>		–	–	–	–	
<b>HBY</b>	<b>12L</b> 12,000 lumens <b>18L</b> 18,000 lumens <b>24L</b> 24,000 lumens <b>30L</b> <sup>2</sup> 30,000 lumens <b>36L</b> <sup>2</sup> 36,000 lumens	<b>835</b> 3500K (CRI 80) <b>840</b> 4000K (CRI 80) <b>850</b> 5000K (CRI 80)	<b>UNV</b> Universal voltage 120–277V <b>120</b> 120V <b>208</b> 208V <b>240</b> 240V <b>277</b> 277V <b>347</b> <sup>2,3</sup> 347V <b>480</b> <sup>2,3</sup> 480V	<b>N</b> Narrow <b>M</b> Medium <b>W</b> Wide <b>A</b> Aisle	<b>BZ</b> Dark Bronze <b>WT</b> White <b>BK</b> Black <b>AL</b> Silver Aluminum	<b>WP6</b> <sup>4</sup> Wired 6' 16/3 Cord & NEMA Twist Lock Plug <b>WP6D</b> <sup>4</sup> Wired 6' 16/3 Cord & NEMA Twist Lock Plug for Line Voltage and Wired 6' 16/3 Cord & Plug for Dimming Control <b>WC6D</b> Wired 6' 16/3 Cord for Line Voltage and Wired 6' 16/3 Cord for Dimming Control <b>BSL10LST</b> Factory wired Philips Bodine integral emergency pack, nominal 1100 to 1400 lumens <b>MD360W</b> Wet location occupancy sensor, (ON/OFF) <b>MD360WD</b> Wet location occupancy sensor, (ON/DIM to 10%) <b>SNH200</b> <sup>6</sup> Integral EasySense occupancy & daylight sensor, with advanced SpaceWise type wireless grouping <b>IAI</b> <sup>6</sup> Integral Interact Industry daylighting and occupancy sensor, enables wireless connected lighting control <b>FGS</b> Solite stippled tempered glass lens <b>XTM</b> <sup>3,7</sup> Extreme Environment (see specification notes for details) <b>NFZ</b> NSF listed for Non-Food Zone (Factory wired 6' 16/3 black cord is standard)

### Footnotes

- Nominal delivered lumens at 25°C ambient
- Not available with BSL10LST option
- Not available with 30,000 or 36,000 lumens
- Must specify line voltage
- Do not use with XTM option luminaire in natatoriums or other corrosive environments.
- High bay motion detector. Motion sensing zone is extremely limited if used below 15' mounting height.
- Only available with 840 color temperature (4000K).

### Accessories (order separately, see last page for details)

- HCH5-SNAP**<sup>5</sup> 5' cables with snap hooks
- HCH10-SNAP**<sup>5</sup> 10' cables with snap hooks
- HBY-ADJHGR**<sup>5</sup> Adjustable hanger
- HBY-ADJHGR-XTM** Adjustable hanger for Extreme Environment
- HBY-IND**<sup>5</sup> Hanging bracket pair for indirect suspension
- HBY-IND-XTM** Hanging bracket pair for indirect suspension for Extreme Environments

### 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.

### Wiring Notes

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



interact  
ready.

# HBY LED high bay

12,000, 18,000, 24,000, 30,000 & 36,000 lumens

## Application

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

## Construction/Finish

- Die cast aluminum housing provides excellent thermal transfer to extend component life.
- Tempered glass lens with molded gasket seals the optical compartment.
- Cable/chain mounting capability is standard (ordered separately or furnished by others). Accessories are available for other mounting methods.
- 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, [www.signify.com/warranties](http://www.signify.com/warranties)
- Components are RoHS compliant.
- L70 LED predicted lumen maintenance >100,000 hours
- cETLus listed to UL 1598 standards. Suitable for use in wet locations.
- NSF Certified option for Non-FoodZone installation.
- Standard construction is IP65.
- Dimming drivers are standard. Control is 0-10V DC. Note: proper cord options required to use dimming controls.
- Optional motion detector.
- DLC Listed. Please check the DLC Qualified Products List to confirm ([www.designlights.org/QPL](http://www.designlights.org/QPL)).
- 6KV surge protection standard.
- 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.

## SNH200 EasySense

- Philips field apps allow programming of occupancy & daylight sensing parameters and fine-tuning of light levels during installation. It can also be used for grouping of fixtures.
- Download "Philips field apps" from the Google Play Store.
- Register for the commissioning app at <http://registration.componentcloud.philips.com/appregistration/>.
- The app works on certain Android phones with NFC or IR. See Recommended Phones and the EasySense App User Manual in the download section at <http://www.usa.lighting.philips.com/products/lighting-components/easysense> and follow the "View Downloads" link to register for access to the download area. Navigate to Connected-Lighting-Components and then Philips-EasySense-Sensors to find downloads.

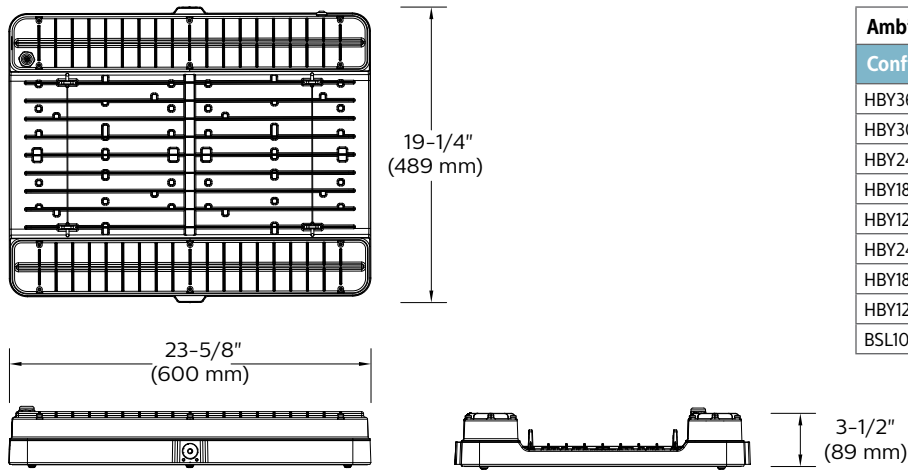
## Interact Industry (IAI)

- A wireless IoT connected lighting solution for large warehouses, gymnasiums and industrial facilities that require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Combine Interact Office and Interact Industry sensors on a single project and for a common dashboard view.
- Compatible Zigbee Green Power wall dimmer.
- Maximize energy savings with integrated sensors and integration with BMS.
- Use Interact Industry software and insights to reduce maintenance cost by remotely configuring and managing the system, creating flexible lighting zones, insights on lamp burn hours etc. Optimize warehouse operations with real time occupancy analytics and minimize potential bottlenecks.
- Requires compatible Interact Gateway and internet connectivity for commissioning.
- For more information on Interact Industry Wireless, visit: [www.interact-lighting.com/en-us/what-is-possible/interact-industry](http://www.interact-lighting.com/en-us/what-is-possible/interact-industry)

# HBY LED high bay

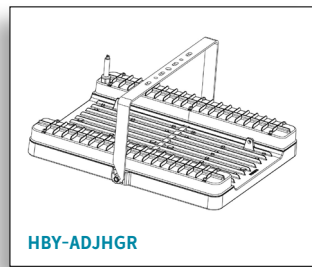
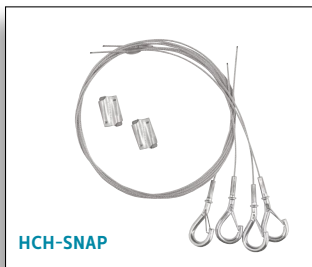
12,000, 18,000, 24,000, 30,000 & 36,000 lumens

## Dimensions



Ambient Temperature Data	
Configuration	Ambient
HBY36L - UNV	-20°C to 45°C
HBY30L - UNV	-20°C to 55°C
HBY24L - UNV	-20°C to 55°C
HBY18L - UNV	-20°C to 55°C
HBY12L - UNV	-20°C to 55°C
HBY24L - 347/480V	-20°C to 50°C
HBY18L - 347/480V	-20°C to 50°C
HBY12L - 347/480V	-20°C to 55°C
BSL10LST option	0°C to 50°C

## Accessories



Accessory Catalog Code	Description
<b>HCH5-SNAP</b>	5' hanging pair of cables with snap hooks
<b>HCH10-SNAP</b>	10' hanging pair of cables with snap hooks
<b>HBY-ADJHGR</b>	Adjustable hanger kit -galvanized steel

# HBY LED high bay

12,000, 18,000, 24,000, 30,000 & 36,000 lumens

## Photometry

### HBY LED high bay, Aisle Distribution, 18,000 nominal delivered lumens

Catalog No.	HBY18L840-UNV-A	Candlepower					Light Distribution			Average Luminance			
		Angle	End	45	Cross	-45	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
Test No.	39538	0	4328	4328	4328	4328	0-30	4202	22.6	45	9692	30621	44187
S/MH	2.5	5	4271	4395	4466	4395	0-40	7739	41.5	55	3923	34162	51156
Lamp Type	LED	15	4083	4788	5317	4788	0-60	16317	87.6	65	3451	11922	37530
Lumens	18,628	25	3653	5335	6542	5335	0-90	18627	100.0	75	2525	2813	6770
Input Watts	136	35	2919	5861	7886	5861	0-180	18628	100.0	85	1207	1101	1508
Efficacy	137	45	1929	6094	8793	6094							
		55	633	5514	8258	5514							
		65	410	1418	4464	1418							
		75	184	205	493	205							
		85	30	27	37	27							
		95	0	0	0	0							
		105	0	0	0	0							
		115	0	0	0	0							
		125	0	0	0	0							
		135	0	0	0	0							
		145	0	0	0	0							
		155	0	0	0	0							
		165	0	0	0	0							
		175	0	0	0	0							

Comparative yearly lighting energy cost per 1000 lumens – \$1.75 based on 3000 hrs. and 5.08 pwr KWH.

The photometric results were obtained in the Philips 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.

### HBY LED high bay, Medium Distribution, 18,000 nominal delivered lumens

Catalog No.	HBY18L840-UNV-M	Candlepower					Light Distribution			Average Luminance			
		Angle	End	45	Cross	-45	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
Test No.	39535	0	10992	10992	10992	10992	0-30	9339	49.9	45	13681	21646	17583
S/MH	1.4	5	10894	11060	11107	11060	0-40	14604	78.0	55	4654	3013	2861
Lamp Type	LED	15	11006	11387	11551	11387	0-60	18155	96.9	65	3892	2320	2708
Lumens	18,729	25	9515	11218	12414	11218	0-90	18723	100.0	75	2593	2151	2475
Input Watts	136	35	6966	8827	9647	8827	0-180	18729	100.0	85	2467	2430	2597
Efficacy	138	45	2722	4308	3499	4308							
		55	751	486	462	486							
		65	463	276	322	276							
		75	189	157	180	157							
		85	61	60	64	60							
		95	0	0	0	0							
		105	0	0	0	0							
		115	0	0	0	0							
		125	0	0	0	0							
		135	0	0	0	0							
		145	0	0	0	0							
		155	0	0	0	0							
		165	0	0	0	0							
		175	0	0	0	0							

Comparative yearly lighting energy cost per 1000 lumens – \$1.74 based on 3000 hrs. and 5.08 pwr KWH.

The photometric results were obtained in the Philips 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.

### HBY LED high bay, Narrow Distribution, 18,000 nominal delivered lumens

Catalog No.	HBY18L840-UNV-N	Candlepower					Light Distribution			Average Luminance			
		Angle	End	45	Cross	-45	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
Test No.	39528	0	22170	22170	22170	22170	0-30	14259	76.3	45	5152	2796	2840
S/MH	0.8	5	22002	22046	21880	22046	0-40	17090	91.5	55	5224	2625	2685
Lamp Type	LED	15	21538	20143	18829	20143	0-60	18028	96.5	65	2920	2695	2908
Lumens	18,676	25	17376	14592	12008	14592	0-90	18669	100.0	75	5089	2342	2917
Input Watts	136	35	5368	3879	3142	3879	0-180	18676	100.0	85	3551	3103	2707
Efficacy	137	45	1025	556	565	556							
		55	843	424	433	424							
		65	347	321	346	321							
		75	371	171	213	171							
		85	87	76	66	76							
		95	0	0	0	0							
		105	0	0	0	0							
		115	0	0	0	0							
		125	0	0	0	0							
		135	0	0	0	0							
		145	0	0	0	0							
		155	0	0	0	0							
		165	0	0	0	0							
		175	0	0	0	0							

Comparative yearly lighting energy cost per 1000 lumens – \$1.75 based on 3000 hrs. and 5.08 pwr KWH.

The photometric results were obtained in the Philips 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.

# HBY LED high bay

12,000, 18,000, 24,000, 30,000 & 36,000 lumens

## HBY LED high bay, Wide Distribution, 18,000 nominal delivered lumens

Catalog No.	HBY18L840-UNV-W	Candlepower					Light Distribution			Average Luminance			
		Angle	End	45	Cross	-45	Degrees	Lumens	% Luminaire	Angle	End	45'	Cross
Test No.	39525	0	3954	3954	3954	3954	0-30	4621	25.5	45	23736	29129	34058
S/MH	2.2	5	4116	4096	4009	4096	0-40	8452	46.7	55	21243	27082	30550
Lamp Type	LED	15	4919	4793	4425	4793	0-60	16579	91.6	65	5817	8351	5348
Lumens	18,092	25	6468	6376	5876	6376	0-90	18086	100.0	75	3575	3357	3370
Input Watts	136	35	5124	5951	7157	5951	0-180	18092	100.0	85	2878	2711	2662
Efficacy	133	45	4723	5797	6778	5797							
		55	3429	4372	4931	4372							
		65	692	993	636	993							
		75	260	245	246	245							
		85	71	67	65	67							
		95	0	0	0	0							
		105	0	0	0	0							
		115	0	0	0	0							
		125	0	0	0	0							
		135	0	0	0	0							
		145	0	0	0	0							
		155	0	0	0	0							
		165	0	0	0	0							
		175	0	0	0	0							

Comparative yearly lighting energy cost per 1000 lumens – **\$1.80** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips 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.

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	110	106	103	108	104	101	100	97	
2	101	94	88	99	92	86	89	84	
3	93	83	75	90	81	74	78	72	
4	85	73	65	83	72	64	70	63	
5	78	65	57	76	64	56	62	55	
6	72	59	50	70	58	49	56	48	
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
HBY12L840-UNV-N	39527	12642	86	148
HBY12L840-UNV-M	39536	12533	85	147
HBY12L840-UNV-W	39526	12403	86	145
HBY12L840-UNV-A	39537	12518	86	146
HBY18L840-UNV-N	39528	18676	136	137
HBY18L840-UNV-M	39535	18729	136	138
HBY18L840-UNV-W	39525	18092	136	133
HBY18L840-UNV-A	39538	18628	136	137
HBY24L840-UNV-N	39529	24261	188	129
HBY24L840-UNV-M	39534	24281	187	130
HBY24L840-UNV-W	39523	23844	187	128
HBY24L840-UNV-A	39539	23914	187	128
HBY30L840-UNV-N	39531	30155	225	134
HBY30L840-UNV-M	39532	30386	226	135
HBY30L840-UNV-W	39524	29985	226	133
HBY30L840-UNV-A	39541	30094	225	134
HBY36L840-UNV-N	39530	35912	280	128
HBY36L840-UNV-M	39533	36115	280	129
HBY36L840-UNV-W	39522	35626	280	127
HBY36L840-UNV-A	39540	36038	280	129

\* 347V and 480V models have the same input watts.

