

Day-Brite



by Signify

Industrial

FBY LED High bay

12,000 to 60,000 lumens



Control options available

Day-Brite / CFI FBY LED high bay provides versatility in form and function. With a wide range of lumen packages and accessories available, this luminaire can be used in many different applications ranging from warehouses and manufacturing facilities to retail outlets and school gymnasiums.

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

Ordering guide

Example: FBY24L840-UNV-LCA

Family	Lumens (nominal) ¹	Color Temperature	Voltage	Options
FBY				
FBY	12L 12,000 lumens 18L 18,000 lumens 24L 24,000 lumens 30L 30,000 lumens 36L 36,000 lumens 48L 48,000 lumens 60L 60,000 lumens	835 3500K (CRI 80) 840 4000K (CRI 80) 850 5000K (CRI 80)	UNV Universal voltage 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	WP6² Wired 6' 16/3 cord & NEMA twist lock plug WC6 Wired 6' 16/3 cord WP6D² Wired 6' 16/3 cord & NEMA twist lock plug for line voltage and wired 6' 16/3 cord & plug for dimming control WC6/4³ Wired 6' 16/4 cord for line voltage plus unswitched hot for BSL10LST WC6/5³ Wired 6' 18/5 cord for line voltage plus 0-10V dimming WC6/6³ Wired 6' 18/6 cord for line voltage plus unswitched hot for BSL10LST plus 0-10V dimming BSL10LST³ Factory wired Philips Bodine integral emergency pack, nominal 1100 to 1400 lumens MD360⁴ 360° Motion detector (ON/OFF) MD360D⁴ 360° Motion detector (ON/DIM to 10%) LCA Clear acrylic lens LFA Frosted acrylic lens SNH200⁵ Integral EasySense occupancy & daylight sensor, with advanced SpaceWise type wireless grouping IAI⁵ Integral Interact Industry daylighting and occupancy sensor, enables wireless connected lighting control

¹ Nominal delivered lumens at 25°C ambient

² Must specify line voltage

³ Order proper cord option for dimming or emergency

⁴ Not for use with SNH200 option.

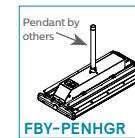
⁵ High bay motion detector. Motion sensing zone is extremely limited if used below 15' mounting height.



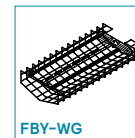
HHN5-VHOOK



HCH5-VHOOK



FBY-PENHGR



FBY-WG

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

Accessories (order separately)

- **HHN5-VHOOK** 54" chains & V hooks
- **HCH5-VHOOK** 5' cables & V hooks
- **HCH10-VHOOK** 10' cables & V hooks
- **HCH15-VHOOK** 15' cables & V hooks
- **HCH20-VHOOK** 20' cables & V hooks
- **FBY-PENHGR** Pendant hanger (adds 3" to height)
- **FBY-WG** Wire guard (order 2 for FBY36, FBY48, & FBY60)
- **FBX-SLCA-2N** Clear acrylic snap lens
- **FBX-SLFA-2N** Frosted acrylic snap lens
- **FBX-SLCA-2W** Clear acrylic snap lens for FBY36, FBY48, & FBY60
- **FBX-SLFA-2W** Frosted acrylic snap lens for FBY36, FBY48, & FBY60

Light to go

Compatible configurations

Luminaire

FBY12L840UNV FBY24L840UNV
 FBY12L850UNV FBY24L850UNV
 FBY18L840UNV
 FBY18L850UNV

Accessories

HHN5-VHOOK
 HCH5-VHOOK
 HCH10-VHOOK
 FBY-PENHGR

every job matters



interact ready.

FBY LED high bay

12,000, 18,000, 24,000, 30,000 36,000, 48,000, & 60,000 lumens

Application

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

Construction/Finish

- Metal housing and reflectors provide excellent thermal transfer to extend component life.
- End holes to attach V hooks for chain or cable hanging.
- Cable/chain mounting capability is standard (ordered separately or furnished by others). Accessories are available for other mounting methods.
- 7/8" K.O. at each end of luminaire for wiring or motion detector.
- Polyester powder finish for excellent impact and corrosion resistance.
- LED light engines and drivers are field replaceable.
- 5 Year Limited Warranty, 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 damp locations and -20° to 45°C ambient. (0° to 45°C for BSL10LST 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).
- 6KV surge protection standard.

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)

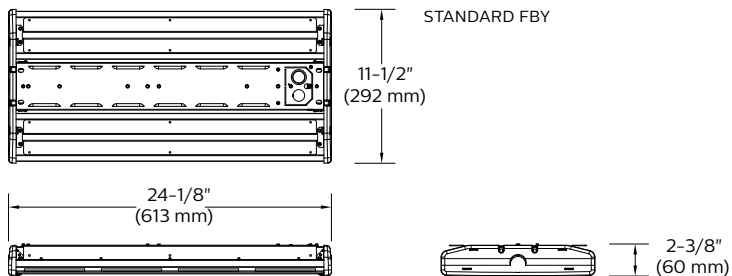
- A wireless IoT connected lighting solution for large warehouses, gymnasiums and industrial facilities that require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Combine Interact Office and Interact Industry sensors 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

FBY LED high bay

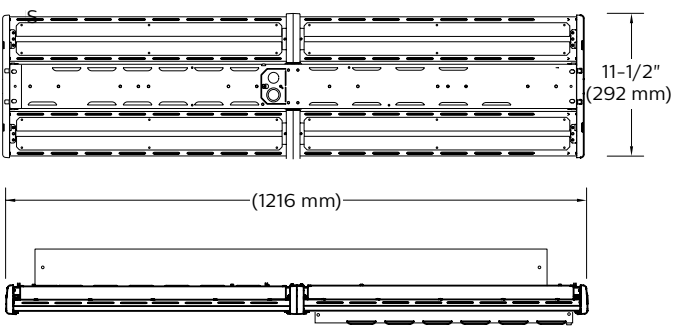
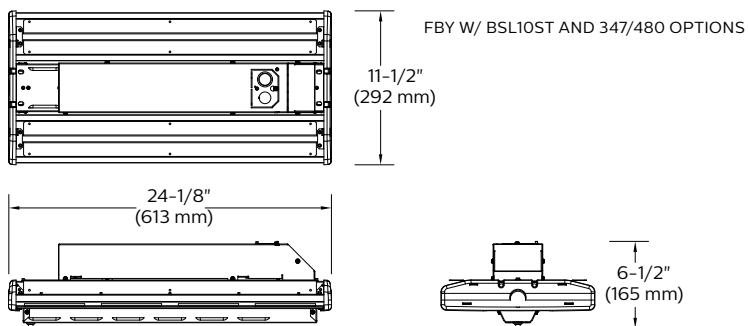
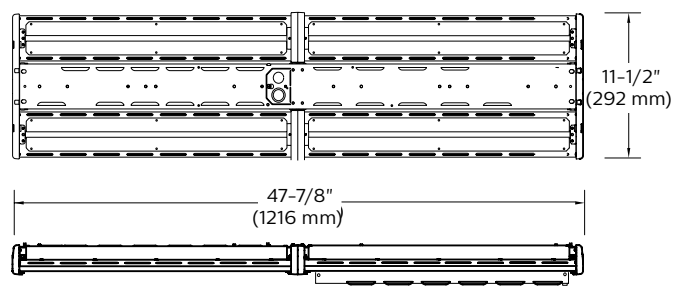
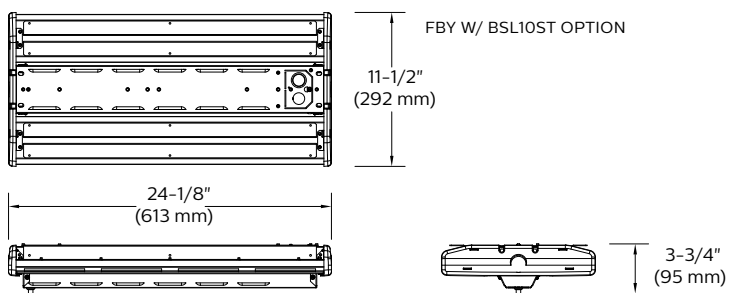
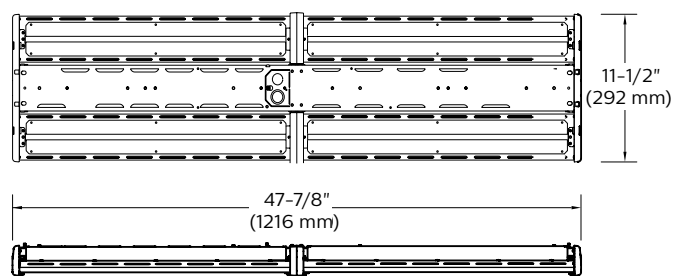
12,000, 18,000, 24,000, 30,000 36,000, 48,000, & 60,000 lumens

Dimensions

12,000lm - 30,000lm



36,000lm - 60,000lm



FBY LED high bay

12,000, 18,000, 24,000, 30,000 36,000, 48,000, & 60,000 lumens

Photometry

LED high bay FBY, general distribution, 24,000 nominal delivered lumens

Catalog No.	FBY24L840-UNV	Candela distribution				Light Distribution			Average Luminance				
Test No.	39981	Vertical Angle	Horizontal Angle				Degrees	Lumens	% Linaire	Angle	End	45°	Cross
S/MH	1.0	0°	45°	90°	-45°	0-30	7094	28.7	45	61608	56669	57032	
Lamp Type	LED	5	9226	9324	9359	9324	0-40	11466	46.3	55	57290	48239	36303
Lumens/Lamp	24748	15	8987	9023	9017	9023	0-60	19649	79.4	65	54261	39759	35384
Input Watts	177	25	8467	8303	6893	8303	0-90	23883	96.5	75	46401	21588	24030
Efficacy	140	35	7724	6077	7031	6077	90-180	865	3.5	85	26466	18436	18481
		45	6672	6137	6177	6137	0-180	24748	100.0				
		55	5033	4238	3189	4238							
		65	3512	2574	2290	2574							
		75	1839	856	953	856							
		85	353	246	247	246							
		95	99	94	73	94							
		105	124	107	85	107							
		115	154	137	113	137							
		125	175	155	146	155							
		135	188	169	154	169							
		145	183	176	162	176							
		155	166	162	160	162							
		165	146	152	140	152							
		175	127	128	120	128							

Comparative yearly lighting energy cost per 1000 lumens – \$1.70 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)												
Ceiling (pcc)			80%			70%			50%			
Wall (pw)			70	50	30	70	50	30	50	30		
RCR			Zonal cavity method - Effective floor reflectance = 20%									
Room Cavity Ratio	0	118	118	118	115	115	115	109	109			
	1	109	104	100	106	102	98	97	94			
	2	99	91	85	96	89	83	85	80			
	3	91	81	73	88	79	72	75	69			
	4	83	72	63	81	70	62	67	60			
	5	77	64	56	74	63	55	60	53			
	6	71	58	49	69	57	49	55	47			
	7	66	53	44	64	52	44	50	43			
	8	61	48	40	60	47	39	46	39			
	9	57	44	36	56	43	36	42	35			
	10	54	41	33	52	40	33	39	32			

LED high bay FBY, general distribution, 24,000 nominal delivered lumens

Catalog No.	FBY24L840-UNV-LCA	Candela distribution				Light Distribution			Average Luminance				
Test No.	39993	Vertical Angle	Horizontal Angle				Degrees	Lumens	% Linaire	Angle	End	45°	Cross
S/MH	1.1	0°	45°	90°	-45°	0-30	6984	29.7	45	59177	50287	54250	
Lamp Type	LED	5	9028	9092	9182	9092	0-40	11233	47.7	55	53347	47077	34772
Lumens/Lamp	23532	15	8784	8837	8875	8837	0-60	19040	80.9	65	47445	32827	33525
Input Watts	176	25	8252	8197	7032	8197	0-90	22761	96.7	75	34002	22618	18791
Efficacy	133	35	7487	6221	6508	6221	90-180	771	3.3	85	17589	18795	19185
		45	6409	5446	5875	5446	0-180	23532	100.0				
		55	4687	4136	3055	4136							
		65	3071	2125	2170	2125							
		75	1348	897	745	897							
		85	235	251	256	251							
		95	114	72	47	72							
		105	126	82	56	82							
		115	136	107	81	107							
		125	150	131	113	131							
		135	160	149	127	149							
		145	155	166	148	166							
		155	135	191	159	191							
		165	116	191	220	191							
		175	98	102	96	102							

Comparative yearly lighting energy cost per 1000 lumens – \$1.79 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)												
Ceiling (pcc)			80%			70%			50%			
Wall (pw)			70	50	30	70	50	30	50	30		
RCR			Zonal cavity method - Effective floor reflectance = 20%									
Room Cavity Ratio	0	118	118	118	115	115	115	109	109			
	1	109	104	101	106	102	98	97	94			
	2	100	92	86	97	90	84	86	81			
	3	91	81	74	89	79	72	76	70			
	4	84	72	64	81	70	63	68	61			
	5	77	65	56	75	64	56	61	54			
	6	71	59	50	69	58	49	55	48			
	7	66	53	45	64	52	44	51	43			
	8	62	49	40	60	48	40	46	39			
	9	58	45	37	56	44	36	43	36			
	10	54	41	34	53	41	33	40	33			

FBY LED high bay

12,000, 18,000, 24,000, 30,000 36,000, 48,000, & 60,000 lumens

Photometry (continued)

LED high bay FBY, general distribution, 24,000 nominal delivered lumens, frosted acrylic lens

Catalog No.	FBY24L840-UNV-LFA	Candela distribution				Light Distribution			Average Luminance				
Test No.	39991	Vertical Angle	Horizontal Angle				Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
S/MH	1.2	0°	45°	90°	-45°	0-30	6258	28.4	45	42919	43907	45150	
Lamp Type	LED	5	8355	8355	8355	0-40	10031	45.5	55	39758	41537	38779	
Lumens/Lamp	22055	15	8277	8334	8374	0-60	16828	76.3	65	35977	36034	35599	
Input Watts	176	25	7910	7855	7834	0-90	20948	95.0	75	31825	31863	31706	
Efficacy	125	35	4648	4755	4890	90-180	1107	5.0	85	25635	28174	28384	
		45	3493	3649	3407		22055	100.0					
		55	65	2329	2333								
		65	75	1262	1263								
		75	85	342	376								
		85	95	124	96								
		95	105	195	105								
		105	115	263	133								
		115	125	315	158								
		125	135	340	190								
		135	145	334	227								
		145	155	305	275								
		155	165	277	292								
		165	175	254	256								
		175											

Comparative yearly lighting energy cost per 1000 lumens – \$1.92 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)									
Ceiling (pcc)	80%			70%			50%		
Wall (pw)	70	50	30	70	50	30	50	30	
RCR	Zonal cavity method - Effective floor reflectance = 20%								
Room Cavity Ratio	0	118	118	118	115	115	115	108	108
	1	108	103	99	105	100	97	95	92
	2	98	90	84	95	88	82	84	79
	3	90	80	72	87	78	70	74	68
	4	82	71	62	80	69	61	66	59
	5	76	63	55	74	62	54	59	52
	6	70	57	49	68	56	48	54	46
	7	65	52	43	63	51	43	49	42
	8	61	48	39	59	47	39	45	38
	9	57	44	36	55	43	35	41	34
	10	53	40	33	52	40	32	38	32

Catalog No.	Delivered Lumens	Input Watts *	Efficacy	Uplight%
FBY12L840-UNV	12139	88	138	2.7
FBY12L840-UNV-LCA	11689	88	133	3.5
FBY12L840-UNV-LFA	11085	88	126	5.6
FBY18L840-UNV	18797	133	142	2.4
FBY18L840-UNV-LCA	18037	133	136	3.4
FBY18L840-UNV-LFA	16889	133	127	5.1
FBY24L840-UNV	24748	177	140	3.5
FBY24L840-UNV-LCA	23532	176	133	3.3
FBY24L840-UNV-LFA	22055	176	125	5.0
FBY30L840-UNV	30435	208	146	2.3
FBY30L840-UNV-LCA	29316	209	140	4.0
FBY30L840-UNV-LFA	27578	208	132	4.6
FBY36L840-UNV	39683	268	148	2.6
FBY36L840-UNV-LCA	37844	267	142	3.5
FBY36L840-UNV-LFA	35176	269	131	5.1
FBY48L840-UNV	50849	356	143	2.7
FBY48L840-UNV-LCA	48521	355	137	3.5
FBY48L840-UNV-LFA	45050	355	127	5.1
FBY60L840-UNV	62499	423	148	2.7
FBY60L840-UNV-LCA	59257	420	141	3.5
FBY60L840-UNV-LFA	55837	421	133	3.9

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

