

Phuzion™ PHS Twin

LED High Bay with uplight



Arm will be field assembled and installed. See page 2 for ordering logic.



Catalog Number	
Notes	Type

Description

The Phuzion PHS twin LED High Bay luminaire takes high-bay lighting to new levels of lumen output with intentional uplight. By marrying the latest in LED technology with the legendary illuminating dynamics of HoloPhane's prismatic glass, PHST is designed for use in applications where uplight may be desired. Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location. [Click here for a list of substances that may not be suitable for interaction with LEDs and other electronic components.](#)

Optics

- Prismatic borosilicate glass maintains highest levels of luminosity over time.
- Glass doesn't fade, discolor or otherwise degrade in harsh environments.
- Two distributions (narrow and wide).
- Highly engineered LED system ensures superior uniformity and maximizes spacing.
- Up to 10,000 lumens uplight.

Mechanical

- Robust cast aluminum housing with low copper content (0.6% CU content) withstands hot and dirty environments.
- Pendant mount fixtures standard (3/4" entry) with CD-3.
- Twin arm is painted cold rolled steel with 3/4" nipples for easy fixture attachment.

Electrical

- 70, 80 and 90 CRI are available.
- 3000K, 3500K, 4000K or 5000K CCT available.
- Luminaire Surge Protection Level: Designed to withstand up to 10kV/5kA per ANSI C82.77-5-2015.
- 93% lumen maintenance at 60,000 hours per fixture.

Wireless Networking

- nLight® AIR is the ideal solution for retrofit or new construction spaces where additional wiring can be labor intensive. It is available with or without an integral sensor. Integrated smart sensors or dimming and switching modules must be part of each luminaire in the nLight Air network, which can be grouped to control multiple luminaires. It pairs to other luminaires and wall switches through our mobile app. CLAIRITY PRO, which allows for simple sensor adjustment. The granularity of control with the digital PIR occupancy detection and daylight sensing makes this a great solution for any application.

Listings

- CSA Certified for use in damp locations.
- -40 °F (-40 °C) up to 122 °F (50 °C).
- Patent D 780,972

Warranty

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_Conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

Typical Applications

- Heavy industrial
- Light manufacturing
- Warehousing
- Large indoor

Dimensions: Inches (millimeters) unless otherwise noted.

Length: 47.53 (1207.26)
Width: 21.22 (538.99)
Height: 19.02-23.46 (483.11-595.88)
Weight: 110 lbs. (49.8 kg)

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® or XPoint™ Wireless control networks marked by a **shaded background***

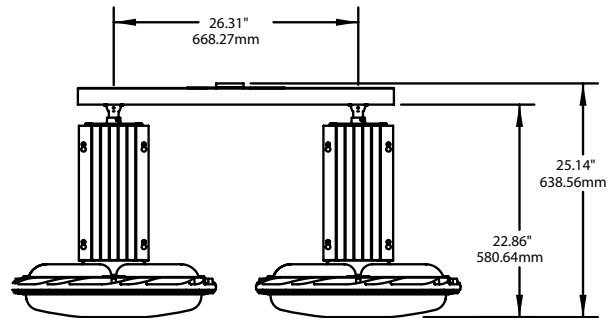
To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

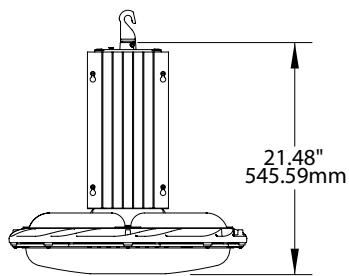
Phuzion™ PHS Twin

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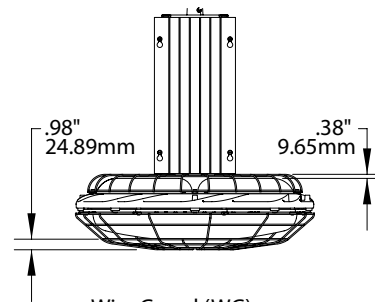
DIMENSIONAL DATA



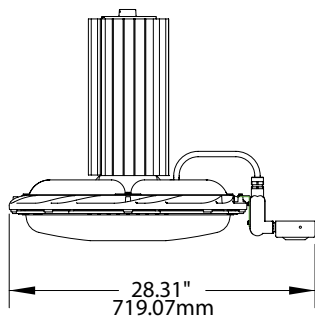
Twin Configuration



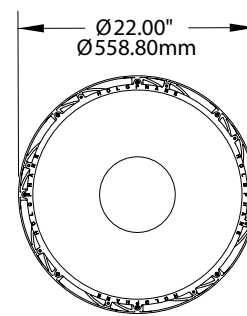
Pendant (P)



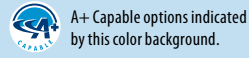
Wire Guard (WG)



Occupancy Sensor



Diameter



ORDERING INFORMATION

Example: PHST 90L 40K 80CRI AS P W W

Series	Lumens	Color temperature	Color rendering index	Voltage	Mounting	Finish	Optics	
PHST	60L	60,000 nominal lumens ¹	30K 3000K CCT	70CRI	AS Auto sensing (120-277)	P Pendant	W White super durable	N Narrow
	70L	70,000 nominal lumens ¹	35K 3500K CCT	80 CRI	12 120V	G Gray super durable	K Black super durable	W Wide
			40K 4000K CCT	90CRI	20 208V			
			50K 5000K CCT		24 240V			
	27 277V							
90L	90,000 nominal lumens ¹			AH Auto sensing (347/480)	H Graphite super durable			
				34 347V				
				48 480V				

Options	
MSI6DL	360° motion sensor embedded, high bay 15-45 ft., on/off. ²
MSI6 DSCDL	360° motion sensor embedded, high bay 15-45 ft., on/off with second time-out period, goes to a dimmed state before turning off max./ 3volt min. dim setting. ³
MSI6XADL	XPoint™ Wireless enabled high bay 360° relay sensor and photo controller all in one device, fixture mounted, passive infrared 15-45 ft., on/off. Sensor is a point of control for an XPoint™ wireless network. ⁴
AXA10	XPoint™ Wireless enabled, dimmed 1% ⁵
NLTAIR2 RKOA	nLight AIR Generation 2 enabled 360° high motion sensor ⁶
NLTAIR2 RKOB	nLight AIR Generation 2 enabled 360° low motion sensor ⁷
2X NLTAIR2 rPP20D	nLight AIR Generation 2 dimming and switching module ⁸
2X NLTAIR2 rPP20DER	nLight AIR Generation 2 dimming and switching module with emergency relay (not available with battery pack) ⁹
2X NLTAIR2 rPP20DEM	nLight AIR Generation 2 dimming and switching module with emergency relay (not available with battery pack) ¹⁰
2XnPP16D	Upper and lower nLight enabled ¹¹

Accessories: Order as separate catalog number.					
PHZCHAIN3	3 ft. safety chain	UPH-35-***-WH	Thru-way powerhook for 120V, 208V, 240V, 277V and 347V ²¹	PF-116-A	Loop, 3/4" male
PHZCHAIN6	6 ft. safety chain	UPH-35-L8-480-WH	Thru-way powerhook for 480V	PF-122-A	Safety hook, 3/4" male
PHZCHAINX	X ft. safety chain	UPH-36-***-WH	Powerhook for 120V, 208V, 240V, 277V and 347V ⁸	PF-129-A	Anti-rotational hook, 3/4" male
PHCB	Powerhook cord for 120-277, 347V ¹⁹	UPH-36-L8-480-WH	Pendant powerhook for 480V	PF-105-B	Loop, 3/4" male
PHCB-L8-480	Powerhook cord for 480V ¹⁰			PF-121-A	Safety hook, 3/4" male
				WGPS	Wireguard

- Notes**
- Max. 50°C rated without AXA10. 45°C with AXA10.
 - Not available with MSI6 DSCDL, MSI6XADL, AXA10, nPP16D, 2XnPP16D, NLTAIR2RKO, NLTAIR2RKOB, NLTAIR2 rPP20D, NLTAIR2 rPP20DER, NLTAIR2 rPP20DEM, 2XNLTAIR2 rPP20D, 2XNLTAIR2 rPP20DER, 2XNLTAIR2 rPP20DEM options.
 - Not available with MSI6DL, MSI6XADL, AXA10, D, D2, AO, nPP16D, 2XnPP16D, NLTAIR2RKO, NLTAIR2RKOB, NLTAIR2 rPP20D, NLTAIR2 rPP20DER, NLTAIR2 rPP20DEM, 2XNLTAIR2 rPP20D, 2XNLTAIR2 rPP20DER, 2XNLTAIR2 rPP20DEM options.
 - Not available with MSI6DL, MSI6 DSCDL, AXA10, D, D2, AO, nPP16D, 2XnPP16D, NLTAIR2RKO, NLTAIR2RKOB, NLTAIR2 rPP20D, NLTAIR2 rPP20DER, NLTAIR2 rPP20DEM, 2XNLTAIR2 rPP20D, 2XNLTAIR2 rPP20DER, 2XNLTAIR2 rPP20DEM options.
 - Not available with MSI6DL, MSI6 DSCDL, MSI6XADL, D, D2, AO, nPP16D, 2XnPP16D, NLTAIR2RKO, NLTAIR2RKOB, NLTAIR2 rPP20D, NLTAIR2 rPP20DER, NLTAIR2 rPP20DEM, 2XNLTAIR2 rPP20D, 2XNLTAIR2 rPP20DER, 2XNLTAIR2 rPP20DEM options.
 - Not available with MSI6DL, MSI6 DSCDL, MSI6XADL, D, D2, AO, nPP16D, 2XnPP16D, NLTAIR2RKO, NLTAIR2RKOB, NLTAIR2 rPP20D, NLTAIR2 rPP20DER, NLTAIR2 rPP20DEM, 2XNLTAIR2 rPP20D, 2XNLTAIR2 rPP20DER, 2XNLTAIR2 rPP20DEM options.
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- Not available with MSI6 DSCDL, MSI6XADL, AXA10, D, D2, AO, 2XnPP16D, NLTAIR2RKO, NLTAIR2RKOB, NLTAIR2 rPP20D, NLTAIR2 rPP20DER, NLTAIR2 rPP20DEM, 2XNLTAIR2 rPP20D, 2XNLTAIR2 rPP20DER, 2XNLTAIR2 rPP20DEM options.
- Not available with MSI6 DSCDL, MSI6XADL, AXA10, D2, AO, nPP16D, 2XnPP16D, NLTAIR2RKO, NLTAIR2RKOB, NLTAIR2 rPP20D, NLTAIR2 rPP20DER, NLTAIR2 rPP20DEM, 2XNLTAIR2 rPP20D, 2XNLTAIR2 rPP20DER, 2XNLTAIR2 rPP20DEM options.
- Available with AS, 129, 208, 240, and 277 voltages only. Not available with MSI6 DSCDL, MSI6XADL, AXA10, D, AO, nPP16D, 2XnPP16D, NLTAIR2RKO, NLTAIR2RKOB, NLTAIR2 rPP20D, NLTAIR2 rPP20DER, NLTAIR2 rPP20DEM, 2XNLTAIR2 rPP20D, 2XNLTAIR2 rPP20DER, 2XNLTAIR2 rPP20DEM options.
- Not available with MSI6 DSCDL, MSI6XADL, AXA10, D, D2, nPP16D, 2XnPP16D, NLTAIR2RKO, NLTAIR2RKOB, NLTAIR2 rPP20D, NLTAIR2 rPP20DER, NLTAIR2 rPP20DEM, 2XNLTAIR2 rPP20D, 2XNLTAIR2 rPP20DER, 2XNLTAIR2 rPP20DEM options.
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- X = Length of chain in feet.
- Bulk pack consists of 8 luminaires: this would be the equivalent of 4 twin units, otherwise each luminaire ships in a single carton.
- Available with 12, 20, 24, 27, 34 voltages. For new installation, order matching UPH accessory. For existing installation with UPH accessory, match PHCB voltage to existing UPH.
- Available with 48 voltage only. For new installation, order matching UPH accessory. For existing installation with UPH accessory, match PHCB voltage to existing UPH.
- *** = Voltage.

Ordering/Shipping Logic	
PHS70L ships as: (qty 1) TWIN-ARM-XX (qty 2) PHS35L	PHS 90L ships as: (qty 1) TWIN-ARM-XX (qty 2) PHS 45L

OPERATIONAL DATA

Ambient Temperature Ratings

Lumens	Mounting	Occ Sensor	Xpoint	VOLTS	Max Ambient°C	Min Supply wire Temp °C
30L	P	Yes	Yes	All	40	75
30L	P	Yes	No	All	50	75
35L	P	Yes	No	All	50	75
35L	P	No	Yes	All	40	75
40L	P	Yes	No	All	50	75
40L	P	No	Yes	120V-277V	30	75
45L	P	Yes	No	All	50	75
45L	P	No	Yes	120V-277V	30	75

Operating Characteristics – single fixture performance

Lumen Package	Distribution	Delivered Lumens												Input Wattage @ 120V ¹	LPW @ 5000K 70CRI
		3000K 70CRI @25°C	3500K 70CRI @25°C	4000K 70CRI @25°C	5000K 70CRI @25°C	3000K 80CRI @25°C	3500K 80CRI @25°C	4000K 80CRI @25°C	5000K 80CRI @25°C	3000K 90CRI @25°C	3500K 90CRI @25°C	4000K 90CRI @25°C	5000K 90CRI @25°C		
30L	N	29206	29950	31942	32686	28198	28942	30694	31438	22702	23206	23710	23206	246	133
	W	29951	30714	32757	33520	28918	29680	31477	32240	23282	23799	24315	23799	246	136
	N FR	24459	25082	26750	27373	23614	24238	25705	26328	19012	19434	19856	19434	246	111
	W FR	25083	25722	27432	28071	24217	24856	26361	27000	19497	19930	20363	19930	246	114
35L	N	33935	34799	37113	37978	32763	33628	35663	36528	26378	26964	27549	26964	296	128
	W	34801	35687	38061	38947	33600	34486	36574	37460	27051	27652	28252	27652	296	132
	N FR	28419	29143	31081	31805	27438	28162	29866	30590	22090	22581	23071	22581	296	107
	W FR	29144	29886	31874	32616	28138	28881	30629	31371	22654	23157	23660	23157	296	110
40L	N	38681	39667	42305	43290	37346	38332	40652	41637	30068	30735	31403	30735	353	123
	W	39669	40679	43385	44395	38300	39310	41690	42700	30835	31520	32204	31520	353	126
	N FR	32394	33219	35428	36254	31276	32101	34044	34869	25181	25740	26298	25740	353	103
	W FR	33221	34067	36333	37179	32074	32920	34913	35759	25823	26396	26970	26396	353	105
45L	N	40674	41710	44484	45521	39271	40307	42747	43783	31617	32319	33021	32319	379	120
	W	41712	42775	45620	46682	40273	41335	43837	44900	32424	33144	33864	33144	379	123
	N FR	34063	34931	37254	38121	32887	33755	35798	36666	26478	27066	27653	27066	379	101
	W FR	34932	35822	38205	39094	33727	34617	36712	37602	27154	27756	28359	27756	379	103

OPERATIONAL DATA CONTINUED

Projected Lumen Maintenance

*Shaded Cells NOT compliant with TM21 since this exceeds 6x rule (6x9000hr testing = 54000hrs)

Lumen Maintenance 30L Package

Ambient °C	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
25	1	0.98	0.96	0.94	0.92	0.88
30	1	0.97	0.95	0.93	0.91	0.86
35	1	0.97	0.95	0.92	0.90	0.84
40	1	0.97	0.94	0.92	0.89	0.83
45	1	0.96	0.93	0.91	0.88	0.81
50	1	0.96	0.93	0.90	0.87	0.79

Lumen Maintenance 35L Package

Ambient °C	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
25	1	0.96	0.93	0.90	0.88	0.81
30	1	0.95	0.93	0.90	0.87	0.80
35	1	0.95	0.92	0.89	0.86	0.79
40	1	0.95	0.92	0.89	0.86	0.78
45	1	0.94	0.90	0.87	0.83	0.75
50	1	0.93	0.89	0.85	0.81	0.72

Lumen Maintenance 40L Package

Ambient °C	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
25	1	0.95	0.92	0.89	0.87	0.80
30	1	0.95	0.92	0.89	0.86	0.78
35	1	0.94	0.91	0.87	0.84	0.76
40	1	0.94	0.90	0.86	0.82	0.73
45	1	0.93	0.88	0.84	0.80	0.69
50	1	0.92	0.87	0.82	0.77	0.65

Lumen Maintenance 45L Package

Ambient °C	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
25	1	0.95	0.92	0.89	0.86	0.79
30	1	0.95	0.91	0.88	0.85	0.77
35	1	0.94	0.90	0.86	0.82	0.74
40	1	0.93	0.88	0.84	0.80	0.70
45	1	0.92	0.87	0.82	0.77	0.66
50	1	0.91	0.85	0.79	0.74	0.62

Independant Dimming Wattage

Lumen Package	Wattage
30L	230
35L	290
40L	320
45L	360
D2 @120v	

OPERATIONAL DATA CONTINUED

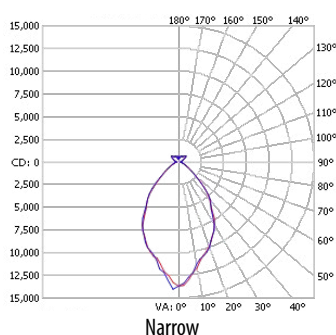
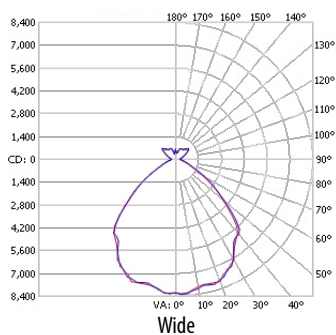
Performance with AO Field Adjustable Output

FAO Position	% Light Output	% Power Consumption
8	100%	100%
7	94%	93%
6	83%	80%
5	72%	67%
4	59%	55%
3	47%	42%
2	34%	30%
1	20%	18%

LAT Factors

Ambient °C	30L	35L	40L	45L
25	1.00	1	1	1
30	0.99	0.99	0.99	0.99
35	0.98	0.98	0.98	0.98
40	0.97	0.97	0.97	0.97
45	0.96	0.96	0.96	0.96
50	0.95	0.95	0.95	0.95

DISTRIBUTION DATA



Phuzion™ PHS Twin

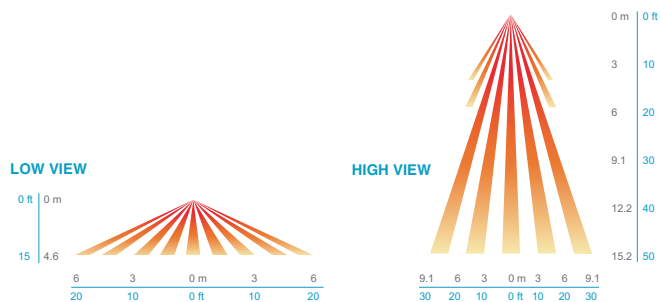
LED High Bay with uplight



CONTROLS

MSI6NDL, MSI6 DSCDL, MSI6 XADL, EXA1; Sensor Coverage Data

- Best choice for 15 to 45 ft. (4.57 to 13.72 m) mounting heights
- 15 to 20 ft. (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Large motion (e.g., walking) detection up to a 35-ft. (10.76 m) mounting height
- Extra large motion (e.g., forklifts) detection up to a 45-ft. (13.72 m) mounting height
- **EXA1, means wireless dimming control with XPoint™ Wireless, down to 10%. Lights on 100% output when energized. The 0-10 dimming leads of the drivers are connected internally to the XPoint™ Wireless device so the fixtures are capable of dimming, but only in response to XPoint™ Wireless mesh network.**
- **MSI6 XADL, means XPoint™ Wireless High Bay 360° is a relay sensor and photcontrol all in one, fixture mounted. Sensor is a point of control for a flexible XPoint™ Wireless mesh network. Fixture operation is 100% on at start up and dims to 30% when not occupied. Photcontrol is disabled by default until an XPoint™ Wireless control mesh network has been field programmed.**



COMPONENTS & OPTIONS DATA



XPoint™ wireless

Integrated wireless control technology connecting fixtures, sensors, and other modules together.

Dimming drivers standard.

Drivers use 0-10V protocol with dimming down to 1% dimming power



Surge protection

Phuzion surge protection is standard and provides 20kV of protection.



Uplight optics

Standard prismatic, borosilicate glass that doesn't fade or degrade. Optional frosted optics.