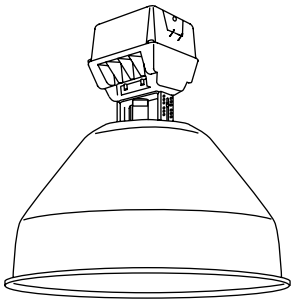
Day-Brite CFI

by signify

Industrial

HBO high bay

Aluminum reflector
400W MH or HPS,
320–450W PSMH



Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

Day-Brite / CFI HBO high bay features open, spun aluminum reflectors for maximum efficiency in general purpose retail, educational and industrial applications.

Ordering guide

Example: HBO400PMT-PSC A24

Ballast Assembly	Wattage	Lamp Source	Voltage	Options	Optical	Optical Options
HBO			–		–	
HBO	**320** 320[30] **350** 350[30] **400** 400 **450** 450[30]	**M** Metal Halide **S** High Pressure Sodium **P** Pulse Start Metal Halide (PSC Ballast option must be specified to comply with EISA for 175W-400W)	**12** 120 **20** 208 **24** 240 **27** 277 **34** 347 **48** 480 **2T** 208/240/277 **MT** 120/208 240/277 **TT** 120/277 347 **5T** 120/208/240/277/480[99]	**CUL** UL Listing to meet CSA standards **WEB** Pulse Start Electronic Ballast Consult factory for available voltages and ambient temperature rating. **OR** Open Rated Socket (required for metal halide and pusle start metal halide lamps) (Exculsionary "pink"socket) **PSC** Pulse Start CWA Ballast **Q** Quartz Standby **QEM** Quartz Emergency[40] **QTD** Quartz Time Delay **WDF** Wired Double Fuse[45] **WSF** Wired Single Fuse[46] **65** 65˚C Ambient[48] **NFZ** Non Food Zone	**A24** Open 24" Aluminum Reflector (MH only) **A24S** Open 24" Aluminum Reflector (HPS only)	**WT** Reflector finished inside and out with White Polyester Powder Coating

Accessories (order separately)

24BE	Flat Tempered 24" Glass Bottom Enclosure
CH	Cover Half for Power Hook (use with PB)
PB	Power Box for Power Hook (use with CH)
HP12-3	3' Hook-Cord-Plug Assembly 120V
HP25-3	3' Hook-Cord-Plug Assembly 208-240V
HP27-3	3' Hook-Cord-Plug Assembly 277V
HP48-3	3' Hook-Cord-Plug Assembly 480V
HMR	Suspension Hook Male
LMR	Suspension Loop Male
SCB3	Ballast Retainer Chain 3'
WGN24	Wire Guard

(Refer to Section 18000 for additional accessories.)

Footnotes

[30]Pulse Start Metal Halide Only.
[40]Requires 120 volt secondary power supply.
[45]Use with 208, 240, and 480 volt.
[46]Use with 120, 277, and 347 volt.
[99]Consult factory for availability.

General Notes

- All accessories are field installed.
- Mogul base lamp only.
- All options factory installed.
- Use "O"rated, protected metal halide lamps only.
- Ballast assembly and optical assembly to be ordered and shipped separately.
- For open luminiares, open rated lamp and exculsionary socket "OR"option are required to meet National Electrical Code.

WARNING: Many Metal Halide lamps are rated for enclosed luminaires only. Some lamps are specifically rated for open luminaires and require an open rated socket (option code - "OR"). Refer to and follow the lamp manufacturer's warnings and instructions.

E **Standard Metal Halide Between 175W and 400W Not available in USA**

HBO High bay

Aluminum reflector, 400W MH or HPS, 320-450W PSMH

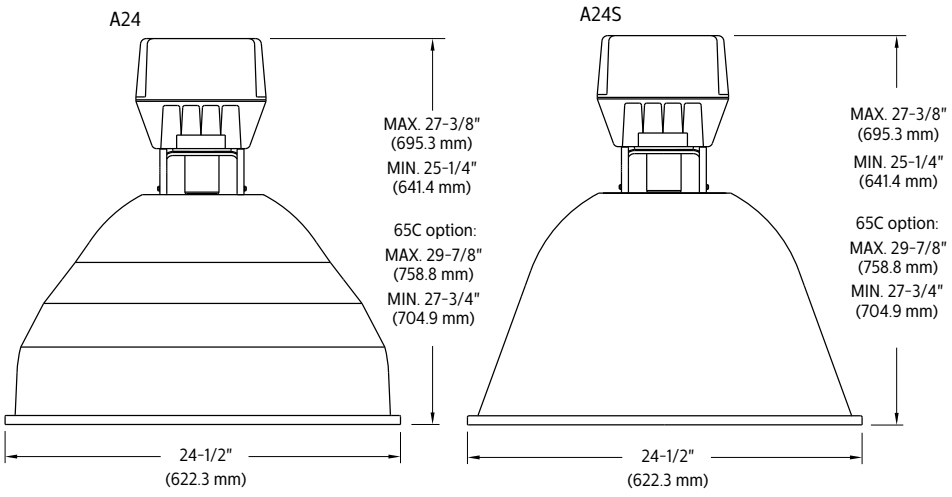
Application

- HBO400 high bay features open, spun aluminum reflectors for maximum efficiency in general purpose retail, educational and industrial applications.

Construction/Finish

- UL 1598 Listed suitable for damp location and 55°C ambient for all lamp wattages listed with magnetic ballast. Consult factory for ambient temperature rating for electronic ballast (WEB option).
- 3/4" threaded cast aluminum nut and hub for easy, positive mounting.
- Large wiring access with captive retainer screw.
- Heavy wall, two piece die cast aluminum housing with white polyester powder finish.
- Day-Brite "Slant 2" ballast mounting for cooler operation. Ballast has high temperature class H insulation and a minimum starting temperature of -40°C (-40°F) for HPS and Pulse Start MH or -30°C (-20°F) for MH
- Heavy gauge yoke provides positive mounting of reflector to ballast assembly and field adjustable light distribution patterns.
- Precision spun heavy gauge aluminum reflector with clear anodized finish.

Dimensions



Energy Data

HIGH PRESSURE SODIUM

CWA BALLAST INPUT WATTS
400 watt–464 watts

METAL HALIDE

BALLAST INPUT WATTS		
CWA		WEB
320 watt	368 watts	–
350 watt	400 watts	363 watts
400 watt	458 watts	413 watts
450 watt	508 watts	465 watts

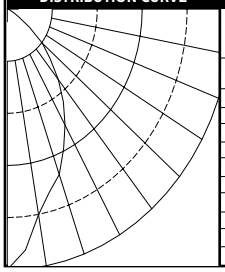
HBO High bay

Aluminum reflector, 400W MH or HPS, 320-450W PSMH

HBO 400W MH A24/POSITION 6

NARROW SPREAD S/MH = 0.8 TEST NO. 18915

DISTRIBUTION CURVE



COEFFICIENTS OF UTILIZATION

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

CEIL	80				70				50			30			10		
WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	93	93	93	93	91	91	91	91	87	87	87	83	83	83	80	80	80
1	88	85	83	81	86	84	81	79	80	79	77	77	76	75	75	73	72
2	82	78	74	70	80	76	73	70	73	71	68	71	69	66	69	67	65
3	77	71	66	62	75	69	65	61	67	63	60	65	62	59	63	61	58
4	72	64	59	55	70	63	58	55	62	57	54	60	56	53	58	55	53
5	67	59	53	49	66	58	53	49	57	52	49	55	51	48	54	50	48
6	63	54	49	44	61	54	48	44	52	48	44	51	47	44	50	46	43
7	59	50	44	40	58	50	44	40	48	44	40	47	43	40	46	43	40
8	55	46	41	37	54	46	41	37	45	40	37	44	40	36	43	39	36
9	52	43	38	34	51	43	37	34	42	37	34	41	37	34	40	36	33
10	49	40	35	31	48	40	35	31	39	34	31	39	34	31	38	34	31

AVERAGE BRIGHTNESS

ZONE	END	45	CROSS
45	35047	34950	33157
55	20095	18948	18142
65	6721	6364	5197
75	2793	2820	2436
85	1258	1219	943

ZONAL SUMMARY

Degrees	Lumens	% Lamp	%Fixture
(0-30)	14753	36.9	47.0
(0-40)	21910	54.8	69.9
(0-60)	30282	75.7	96.5
(0-90)	31328	78.3	99.9
(90-180)	37	0.1	0.1
(0-180)	31365	78.4	100.0

CANDLEPOWER

Angle	Avg. Candela	Angle	Avg. Candela
0	26736	95	0
5	24598	105	0
15	19061	115	0
25	15384	125	0
35	11534	135	0
45	7096	145	2
55	3191	155	27
65	752	165	0
75	203	175	0
85	29		

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = $3.53 BASED ON 3000 HRS. AND $.08 PER KWH.
LER=68

These photometric results were obtained in the Day-Brite Lighting Laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

ADDITIONAL TEST NUMBERS

A24 400 WATT		METAL HALIDE
SOCKET	S/MH	TEST NUMBER
POSITION 1	0.3	18910
POSITION 2	0.3	18911
POSITION 3	0.4	18912
POSITION 4	0.4	18913
POSITION 5	0.5	18914
POSITION 6	0.8	18915

A24S 400 WATT		METAL HALIDE
SOCKET	S/MH	TEST NUMBER
POSITION 1	0.4	19041
POSITION 2	0.4	19040
POSITION 3	0.6	19039
POSITION 4	1.1	19038
POSITION 5	1.3	19037
POSITION 6	1.6	19036

A24S 400 WATT		HPS
SOCKET	S/MH	TEST NUMBER
POSITION 1	0.3	18322
POSITION 2	0.3	18321
POSITION 3	0.4	18320
POSITION 4	0.8	18319
POSITION 5	1.2	18318
POSITION 6	1.5	18317

Hg

Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled, "Contain Mercury" and/or the symbol "HG". Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at www.lamprecycle.org

Signify North America Corporation
200 Franklin Square Drive,
Somerset, NJ 08873
Telephone 855-486-2216

Signify Canada Ltd.
281 Hillmount Road,
Markham, ON, Canada L6C 2S3
Telephone 800-668-9008