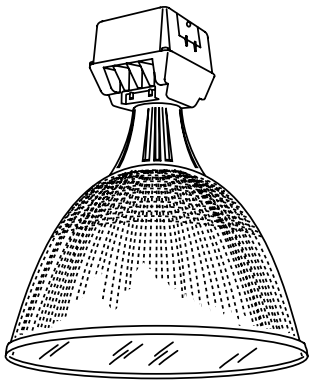
Day-Brite CFI by signify

Industrial

HBE high bay

Acrylic reflector
175-400W MH, 200-400W HPS,
175-400W PSMH



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

The Day-Brite / CFI HBE high bay features an enclosed, acrylic reflector for maximum efficiency in general purpose retail, educational and industrial applications requiring uplight and enclosed construction.

Ordering guide

Example: HBE400PMT-PSC-OR AR22 22FL

Ballast Assembly	Wattage	Lamp Source	Voltage	Options	Optical	Lens Assembly
HBE			–			
HBE	**175** 175[4] **200** 200[31] **250** 250 **320** 320[1,30] **350** 350[1,30] **400** 400	**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 MH and PSMH 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] **NFZ** Non Food Zone	**AR16** Open 16" Acrylic Reflector (175W only) **AR22** Open 22" Acrylic Reflector **AR22T** Open 22" Translucent Acrylic Reflector **AR25** Open 25" Acrylic Reflector	**16FL** 16" Flat Acrylic Lens **16CL** 16" Conical Acrylic Lens **16DL** 16" Drop Acrylic Lens **22FL** 22" Flat Acrylic Lens **22CL** 22" Conical Acrylic Lens **22DL** 22" Drop Acrylic Lens **25FL** 25" Flat Acrylic Lens **25DL** 25" Drop Acrylic Lens

Accessories (order separately)

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
HMR	Suspension Hook Male
SCB3	Ballast Retainer Chain 3'
WGA16	Wire Guard 16" Acrylic
WGA22	Wire Guard 22" Acrylic
WGA25	Wire Guard 25" Acrylic

Footnotes

[1]Not available in 480V.
[4]Not available in High Pressure Sodium.
[8]Coated lamp recommended.
[30]Pulse Start Metal Halide Only.
[31]Not available in standard Metal Halide.
[40]Requires 120V secondary power supply.
[45]Use with 208, 240, and 480 volt.
[46]Use with 120, 277, and 347 volt.
[99]Consult factory for availability.

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

General Notes

- All accessories are field installed.
- Mogul base lamp only.
- All options factory 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.
- For areas where optical assemblies are subject to impact (gymnasiums, etc.) use appropriate full wire cage. Installation using a hook, cord and plug are also recommended.
- A phosphor protected lamp is recommended.
- Use "O" rated, protected metal halide lamps only.
- Ballast assembly and optical assembly to be ordered and shipped separately.

WARNING: Refer to and follow the lamp manufacturer's warnings and instructions.

c UL us

HBE High bay

Acrylic reflector, 175-400W MH, 200-400WHPS, 175-400W PSMH

Application

- HBE high bay features an enclosed, acrylic reflector for maximum efficiency in general purpose retail, educational and industrial applications requiring uplight and enclosed construction.

Construction/Finish

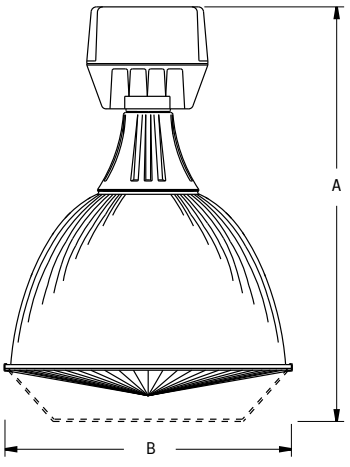
- UL 1598 Listed suitable for damp location and 40°C ambient for all lamp wattages listed with magnetic ballast. Consult factory for ambient temperature rating for electronic ballast (WEB option).
- 3/4" threaded cast aluminum nut and hub for easy, positive mounting.
- Large wiring access with captive 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.
- Die cast aluminum neck provides positive mounting of reflector to ballast assembly and field adjustable light distribution patterns.
- Injection molded 100% virgin acrylic prismatic reflector.
- Acrylic lens: conical, drop or flat.

Enclosed Acrylic Temperature Guidelines

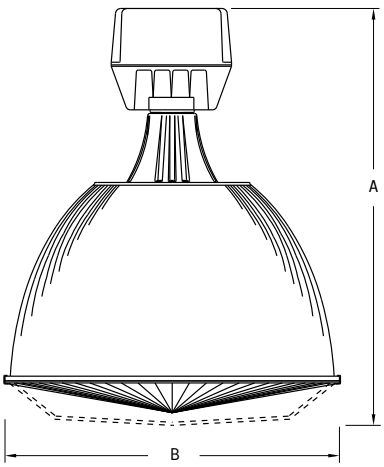
Lamp Wattage	175	200/250/320/350/400
Ambient Temp	**40°C**	**40°C**
Reflector/Lens		
AR16/16FL	X	
AR16/16CL	X	
AR16/16DL	X	
AR22/22FL	X	X
AR22/22CL	X	X
AR22/22DL	X	X
AR25/25FL	X	X
AR25/25DL	X	X

Dimensions

AR16



AR22 & AR25



A DIMENSION
AR16
FL - 24-5/16" (617.5mm)
CL - 26-1/16" (661.9mm)
DL - 27-5/8" (701.6mm)
AR22
FL - 26-3/16" (665.1mm)
CL - 28-5/16" (719.1mm)
DL - 28-15/16" (735mm)
AR25
FL - 28-15/16" (735mm)
DL - 32" (812.8mm)

B DIMENSION
AR16
16-1/4" (412.8mm)
AR22
22-7/16" (569.9mm)
AR25
25-3/8" (644.5mm)

Energy Data

HIGH PRESSURE SODIUM

CWA BALLAST INPUT WATTS
200 watt–240 watts
250 watt–295 watts
400 watt–464 watts

METAL HALIDE

BALLAST INPUT WATTS		
CWA		WEB
175 watt	210 watts	–
200 watt	232 watts	213 watts
250 watt	295 watts	263 watts
320 watt	368 watts	–
350 watt	400 watts	363 watts
400 watt	458 watts	413 watts

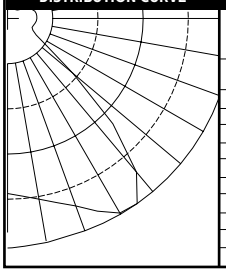
HBE High bay

Acrylic reflector, 175-400W MH, 200-400WHPS, 175-400W PSMH

HBE COATED 400W MH AR22-22FL/POSITION 3

MEDIUM SPREAD S/MH = 1.7 **TEST NO. 19333**

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	94	94	94	94	90	90	90	90	83	83	83	76	76	76	70	70	70	
1	86	82	79	76	82	79	76	73	73	70	68	67	65	63	61	60	59	
2	79	73	67	63	75	70	65	61	64	61	57	60	57	54	55	53	50	
3	73	65	59	54	69	62	57	52	58	53	49	53	50	47	50	47	44	
4	67	58	51	46	64	56	50	45	52	47	43	48	44	41	45	41	39	
5	62	52	45	40	59	50	44	39	47	42	38	44	39	36	41	37	34	
6	57	47	40	36	55	46	39	35	43	37	33	40	35	32	37	33	30	
7	53	43	36	32	51	42	35	31	39	34	30	37	32	28	34	30	27	
8	50	39	33	28	48	38	32	28	36	30	27	34	29	26	32	28	25	
9	46	36	30	25	44	35	29	25	33	28	24	31	26	23	29	25	22	
10	43	33	27	23	42	32	26	22	30	25	22	29	24	21	27	23	20	

AVERAGE BRIGHTNESS

ZONE	END	45	CROSS
45	21528	20183	20683
55	7244	6976	7495
65	4517	4375	4418
75	4838	4748	4806
85	6128	6109	6080

ZONAL SUMMARY

Degrees	Lumens	% Lamp	%Fixture
(0-30)	7529	20.9	25.4
(0-40)	13534	37.6	45.6
(0-60)	20306	56.4	68.5
(0-90)	24173	67.1	81.5
(90-180)	5491	15.3	18.5
(0-180)	29664	82.4	100.0

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = $3.69 BASED ON 3000 HRS. AND $.08 PER KWH.
LER-65

CANDLEPOWER

Angle	Avg. Candela	Angle	Avg. Candela
0	7754	95	1296
5	7882	105	1254
15	8444	115	1029
25	9409	125	699
35	9908	135	513
45	6372	145	499
55	2133	155	478
65	1216	165	429
75	1176	175	471
85	1274		

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

AR22-22FL 250W METAL HALIDE

SOCKET	S/MH	TEST NUMBER
POSITION 1	1.4	19292
POSITION 2	1.5	19293
POSITION 3	1.6	19294
POSITION 4	1.9	19295
POSITION 5	2.1	19296
POSITION 6	2.2	19297

AR22-22FL 400W METAL HALIDE

SOCKET	S/MH	TEST NUMBER
POSITION 1	1.5	19331
POSITION 2	1.6	19332
POSITION 3	1.7	19333
POSITION 4	2.0	19334
POSITION 5	2.1	19335
POSITION 6	2.2	19336

AR25-25FL 400W METAL HALIDE

SOCKET	S/MH	TEST NUMBER
POSITION 1	1.0	19355
POSITION 2	1.1	19356
POSITION 3	1.2	19357
POSITION 4	1.5	19358
POSITION 5	1.6	19359
POSITION 6	1.7	19360

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