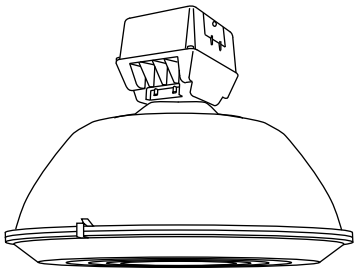
# Day-Brite CFI by signify

## Industrial

LBH low bay

150-400W MH, HPS, or PSMH



Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

Day-Brite / CFI LBH low bay is a high efficiency low bay luminaire designed for use in general purpose retail, educational and industrial applications.

## Ordering guide

**Example: LBH400PMT-PSC LR28**

| Ballast Assembly | Wattage | Lamp Source | Voltage | Options | Optical Assembly |
|---|---|---|---|---|---|
| LBH | | | – | | |
| LBH | **150** 150<br>**175** 175[4]<br>**200** 200[31]<br>**250** 250<br>**320** 320[30]<br>**350** 350[30]<br>**400** 400 | **M** Metal Halide<br>**S** High Pressure Sodium<br>**P** Pulse Start Metal Halide (PSC ballasts option must be specified to comply with EISA for 175W-400W) | **12** 120<br>**20** 208<br>**24** 240<br>**27** 277<br>**34** 347<br>**48** 480<br>**MT** 120/208 240/277<br>**TT** 120/277 347<br>**2T** 208/277 (WEB only) | **CUL** UL Listing to meet CSA standards<br>**WEB** Pulse Start Electronic Ballast (Consult factory for available voltages and ambient temperature rating[48]<br>**OR** Option required for metal halide and pulse start metal halide lamps (exclusionary "pink" socket)<br>**PSC** Pulse Start CWA Ballast<br>**Q** Quartz Standby<br>**QEM** Quartz Emergency[40]<br>**QTD** Quartz Time Delay<br>**WDF** Wired Double Fuse[45]<br>**WSF** Wired Single Fuse[46] | **LR23** Acrylic Lens 23"<br>**LR23P** Polycarbonate Lens 23"<br>**LR28** Acrylic Lens 28"<br>**LR28P** Polycarbonate Lens 28" |

## Accessories (order separately)

- **CH** Cover Half for Power Hook (use with PB)
- **PB** Power Box for Power Hook (use with CH)
- **HMR** Suspension Hook Male
- **LMR** Suspension Loop Male
- **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
- **SCB3** Ballast Retainer Chain 3'
- **WGLR23** Wire Guard 23"
- **WGLR28** Wire Guard 28"

(Refer to Section 18000 for additional accessories.)

## Footnotes

[4] Not available in High Pressure Sodium
[30] Pulse Start Metal Halide Only.
[31] Not available in standard Metal Halide.
[40] Requires 120 volt secondary power supply.
[45] Use with 208, 240, and 480 volt.
[46] Use with 120, 277, and 347 volt.
[48] May require deep ballast housing.

## General Notes

- All accessories are field installed.
- Mogul base lamp only.
- All options factory installed.
- Ballast assembly and optical assembly to be ordered and shipped separately.
- 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.

- **Warning:** Refer to and follow the lamp manufacturer's warnings and instructions.

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

# LBH Low bay

## 150-400W MH, HPS, or PSMH

### Application

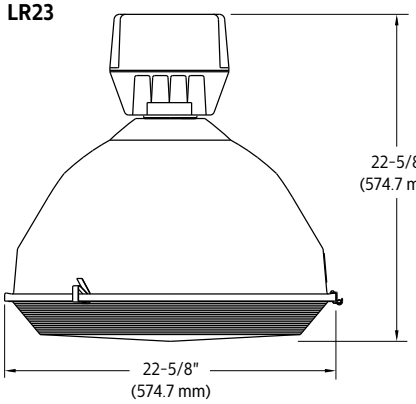
- The Day-Brite / LBH low bay is a high efficiency low bay luminaire designed for use in general purpose retail, educational and industrial applications.

### Construction/Finish

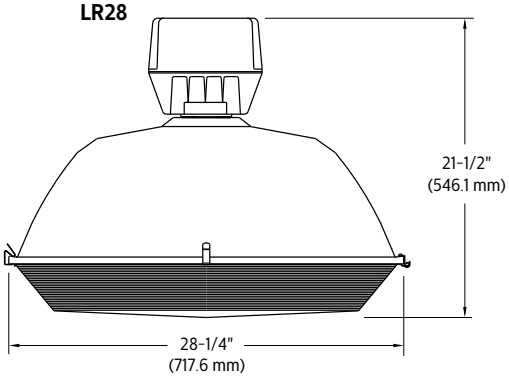
- UL 1598 Listed suitable for damp location and 55˚C ambient for all lamp wattages listed with magnetic ballast. Consult factory for ambient temperature rating for electronic ballast. (WEB option).
- 3/4" threaded cast aluminum nut and hub for easy, positive mounting.
- Use "O" rated, protect metal halide lamps only.
- Heavy wall, one 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.
- Precision spun heavy gauge aluminum reflector coated inside and out with highly reflective (90-92%) white polyester powder finish.
- One piece injection molded 100% virgin acrylic lens hinged and latched to the reflector for ease of installation and maintenance. UL Listed for Metal Halide arc tube containment.
- Large wiring access with captive retainer screw.

### Dimensions

**LR23**




**LR28**




### Energy Data

| HIGH PRESSURE SODIUM | | |
|---|---|---|
| HX BALLAST INPUT WATTS | | |
| 150 watt–188 watts | | |
| CWA BALLAST INPUT WATTS | | |
| 200 watt–240 watts | | |
| 250 watt–295 watts | | |
| 310 watt–365 watts | | |
| 400 watt–464 watts | | |
| **METAL HALIDE** | | |
| HX BALLAST INPUT WATTS | | |
| 150 watt–185 watts | | |
| BALLAST INPUT WATTS | | |
| | CWA | WEB |
| 150 watt | 189 watts | 163 watts |
| 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 |

# LBH Low bay

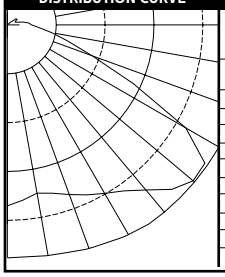
## 150-400W MH, HPS, or PSMH

### Photometry

## LBH 400W MH LR28

MEDIUM SPREAD S/MH = 1.8 TEST NO. 19950

**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 | 97 | 97 | 97 | 97 | 94 | 94 | 94 | 94 | 89 | 89 | 89 | | 84 | 84 | 84 | | 80 | 80 | 80 | |
| 1 | 87 | 83 | 79 | 75 | 84 | 80 | 77 | 73 | 76 | 73 | 70 | | 72 | 69 | 67 | | 68 | 66 | 64 | |
| 2 | 78 | 71 | 64 | 59 | 75 | 69 | 63 | 58 | 65 | 60 | 56 | | 61 | 57 | 54 | | 58 | 55 | 52 | |
| 3 | 70 | 61 | 53 | 47 | 68 | 59 | 52 | 47 | 56 | 50 | 45 | | 53 | 48 | 44 | | 50 | 46 | 43 | |
| 4 | 64 | 53 | 45 | 39 | 61 | 51 | 44 | 38 | 49 | 42 | 37 | | 46 | 41 | 36 | | 44 | 39 | 35 | |
| 5 | 58 | 46 | 38 | 32 | 56 | 45 | 38 | 32 | 43 | 36 | 31 | | 41 | 35 | 30 | | 39 | 34 | 30 | |
| 6 | 53 | 41 | 33 | 27 | 51 | 40 | 33 | 27 | 38 | 31 | 26 | | 36 | 30 | 26 | | 34 | 29 | 25 | |
| 7 | 49 | 37 | 29 | 23 | 47 | 36 | 28 | 23 | 34 | 27 | 23 | | 32 | 27 | 22 | | 31 | 26 | 22 | |
| 8 | 45 | 33 | 26 | 20 | 43 | 32 | 25 | 20 | 31 | 24 | 20 | | 29 | 24 | 19 | | 28 | 23 | 19 | |
| 9 | 42 | 30 | 23 | 18 | 40 | 29 | 22 | 18 | 28 | 22 | 17 | | 27 | 21 | 17 | | 26 | 20 | 17 | |
| 10 | 39 | 27 | 20 | 16 | 38 | 27 | 20 | 16 | 26 | 20 | 15 | | 25 | 19 | 15 | | 24 | 18 | 15 | |

**AVERAGE BRIGHTNESS**

| ZONE | END | 45 | CROSS |
|---|---|---|---|
| 45 | 23196 | 23402 | 23213 |
| 55 | 26538 | 27003 | 27655 |
| 65 | 20334 | 20268 | 19440 |
| 75 | 11774 | 11911 | 11669 |
| 85 | 9498 | 9619 | 9351 |

**ZONAL SUMMARY**

| Degrees | Lumens | % Lamp | %Fixture |
|---|---|---|---|
| (0-30) | 5206 | 13.0 | 15.8 |
| (0-40) | 9552 | 23.9 | 29.1 |
| (0-60) | 22672 | 56.7 | 69.0 |
| (0-90) | 31070 | 77.7 | 94.5 |
| (90-180) | 1801 | 4.5 | 5.5 |
| (0-180) | 32871 | 82.2 | 100.0 |

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = $3.33 BASED ON 3000 HRS. AND $.08 PER KWH.
LER=72

**CANDLEPOWER**

| Angle | Avg. Candela | Angle | Avg. Candela |
|---|---|---|---|
| 0 | 6111 | 95 | 719 |
| 5 | 6003 | 105 | 358 |
| 15 | 5912 | 115 | 316 |
| 25 | 6354 | 125 | 341 |
| 35 | 6878 | 135 | 20 |
| 45 | 7874 | 145 | 3 |
| 55 | 7969 | 155 | 2 |
| 65 | 4835 | 165 | 2 |
| 75 | 2137 | 175 | 2 |
| 85 | 1097 | | |

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

**ADDITIONAL TEST NUMBERS**

| DESCRIPTION | S/MH | TEST NUMBER |
|---|---|---|
| LBH400S-LR28 | 1.8 | 20146 |
| LBH400M-LR23 | 1.7 | 18671 |
| LBH400S-LR23 | 1.7 | 18727 |

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



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