

DESCRIPTION

The HBI series is an outstanding solution for high mounting height industrial or retail applications. The HBI optic has been optimized to provide maximum performance from T8 lamps. Optional uplight component is provided to enable excellent ceiling uniformity. HBI's high lumen package allows the benefits of fluorescent to be applied at high mounting heights that were traditionally exclusive to H.I.D. The primary benefits include exceptional color rendering, high system efficacy, 95% lumen maintenance, long lamp life, instant on/instant re-strike, economical dimming, and uniform brightness control. Primary applications include retail, shopping malls, light industrial, gymnasiums and recreational environments.

SPECIFICATION FEATURES

Construction

Full bodied steel housing with integral ballast channel adds strength, rigidity and structural protection for optical assembly.

Electrical

The HBI comes with a standard Class P electronic ballast and twistlock lampholders. UL/cUL listed for high ambient environments up to 55°C (131°F) for all lamps and ballast combinations when used in open uplight configurations. Suitable for damp locations. Optional modular power receptacle meets UL2459 and NEC 410.73 and is UL/cUL rated for make and break under load from outside the luminaire to speed maintenance.

Finish

White enamel finish preceded by a multistage cleaning cycle, iron phosphate coating with rust inhibitor to protect against contaminants and oxidation.

Downlight/Uplight Optics

Die formed, segmented optical design optimizes performance across three distributions. Optical choices include a narrow distribution for aisles, medium distribution for assembly and loading areas, or wide distribution for general, open area lighting. An uplight option is offered to permit ceiling uniformity and allow for ample lamp and luminaire heat dissipation. Gasketed door frame & lens assembly is optional for more demanding environments.

Options

Integral Occupancy Sensor available and provides from 600 sq. ft. (MS) up to 1250 sq. ft. (MSO) of coverage in a maximum mounting height of 40' using interchangeable lens caps provided.

Catalog #

Type

Project

Comments

Date

Prepared by



HBI SERIES

6 T8 LAMPS

High-Bay Industrial
Fluorescent Luminaire



ENERGY DATA

Input Watts:

EB Ballast
632=169W

EB/Plus Ballast
632=218W

ER Ballast
632=169W

ER/Plus Ballast
632=218W

Luminaire Efficacy Rating

LER = FL-84 (Narrow Beam)

Catalog Number: HBI-632-N-UPL

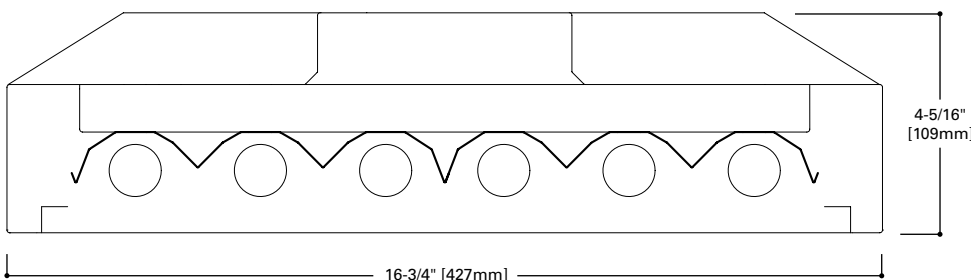
Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$2.85

*Reference the lamp/ballast data in the
Technical Section for specific lamp/ballast
requirements.

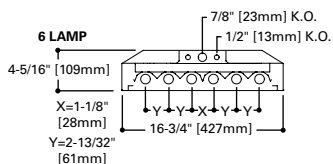
**Consult Pre Sales Technical Support.

LINEAR DISCONNECT

Designed to provide safe and convenient
means of disconnecting power



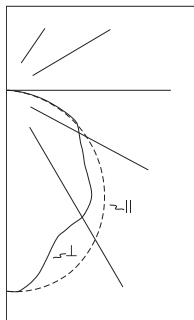
LAMP CONFIGURATIONS



DIMENSION TOP VIEW



PHOTOMETRICS



HBI-632-N-UNV-EB82
 Electronic Ballasts
 (6) 32WT8 Lamps
 2850 lumens
 Spacing criterion:
 (H) 1.3 x mounting
 height, (L) 1.1 x
 mounting height
 Efficiency 91.3%
 Test Report:
 HBI632.IES
 LER =FL81
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$2.95

| Candela | | | | |
|---------|---------|------|----------|--|
| Angle | Along H | 45° | Across L | |
| 0 | 5981 | 5981 | 5981 | |
| 5 | 6000 | 5958 | 5900 | |
| 10 | 5959 | 5716 | 5516 | |
| 15 | 5861 | 5330 | 4953 | |
| 20 | 5702 | 4832 | 4572 | |
| 25 | 5468 | 4418 | 4452 | |
| 30 | 5189 | 4191 | 4398 | |
| 35 | 4862 | 3996 | 4222 | |
| 40 | 4491 | 3834 | 3894 | |
| 45 | 4085 | 3563 | 3314 | |
| 50 | 3649 | 3169 | 2953 | |
| 55 | 3186 | 2598 | 2657 | |
| 60 | 2699 | 2220 | 2469 | |
| 65 | 2193 | 1914 | 2291 | |
| 70 | 1668 | 1693 | 1766 | |
| 75 | 1144 | 1291 | 1226 | |
| 80 | 635 | 760 | 703 | |
| 85 | 194 | 274 | 227 | |
| 90 | 10 | 14 | 14 | |

Coefficients of Utilization

| rc | Effective floor cavity reflectance | | | | | | | | | | | | | | | | | |
|----|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|
| | 80% | | | | 70% | | | | 50% | | | | 0% | | | | | |
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | 50 | 30 | 10 | 0 | | |
| 0 | 109 | 109 | 109 | 109 | 106 | 106 | 106 | 106 | 101 | 101 | 101 | 97 | 97 | 97 | 93 | 93 | 93 | 91 |
| 1 | 99 | 94 | 90 | 87 | 96 | 92 | 89 | 85 | 89 | 85 | 83 | 85 | 82 | 80 | 82 | 80 | 78 | 76 |
| 2 | 90 | 82 | 76 | 70 | 87 | 80 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | 71 | 68 | 65 | 63 |
| 3 | 82 | 72 | 64 | 58 | 79 | 70 | 63 | 58 | 68 | 62 | 57 | 65 | 60 | 56 | 63 | 58 | 55 | 53 |
| 4 | 75 | 64 | 55 | 49 | 73 | 62 | 55 | 49 | 60 | 53 | 48 | 58 | 52 | 48 | 56 | 51 | 47 | 45 |
| 5 | 69 | 57 | 49 | 42 | 67 | 56 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 41 | 50 | 45 | 41 | 39 |
| 6 | 64 | 51 | 43 | 37 | 62 | 50 | 43 | 37 | 49 | 42 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 34 |
| 7 | 59 | 46 | 38 | 33 | 57 | 46 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 30 |
| 8 | 55 | 42 | 35 | 29 | 53 | 42 | 34 | 29 | 41 | 34 | 29 | 39 | 33 | 29 | 38 | 33 | 29 | 27 |
| 9 | 51 | 39 | 31 | 26 | 50 | 38 | 31 | 26 | 37 | 31 | 26 | 36 | 30 | 26 | 35 | 30 | 26 | 24 |
| 10 | 48 | 36 | 29 | 24 | 47 | 36 | 29 | 24 | 35 | 28 | 24 | 34 | 28 | 24 | 33 | 27 | 24 | 22 |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 4244 | 24.8 | 27.2 |
| 0-40 | 6874 | 40.2 | 44.0 |
| 0-60 | 12002 | 70.2 | 76.9 |
| 0-90 | 15606 | 91.3 | 100.0 |
| 0-180 | 15606 | 91.3 | 100.0 |

Luminance Data

| Angle in Deg | Average 0-Deg cd/sm | Average 45-Deg cd/sm | Average 90-Deg cd/sm |
|--------------|---------------------|----------------------|----------------------|
| 45 | 12912 | 11262 | 10475 |
| 55 | 12415 | 10124 | 10353 |
| 65 | 11598 | 10122 | 12116 |
| 75 | 9879 | 11148 | 10587 |
| 85 | 4975 | 7027 | 5821 |

Modular F-Bay Power Supply Option

Cooper Lighting's F-Bay Modular Power Supply option is available for use with all F-Bay products. The modular power supply allows external fixture access for safe and easy servicing. There is no need to remove lamps or reflectors to disconnect fixture power with F-Bay Modular Power Supply. Access to the individual fixture's power supply allows servicing without turning off all the fixtures, disrupting occupants. F-Bay Modular Power Supply is a time-saver in installation – **simply plug & power.**



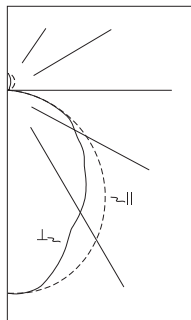
1. Modular Power Supply Receptacle supplied mounted into fixture Access Plate
2. Modular Power Cord & Plugs in 120, 277, 347, & 480V configurations for easy plug & power into existing supply

No internal fixture access required for installation or disconnecting power

Modular Motion Sensor Option supplied with Mounting Box and Modular Power Supply Receptacle

Code Compliance

- UL/cUL Certified for Make/Break under load (UL2549)
- Meets NEC requirements for ballast disconnect (NEC 410.73G)
- Allows for addition of Occupancy Sensor without hard connections
- Receptacles complete with insulating/dust cap



HBI-632-N-UNV-EBT2-UPL
 Electronic Ballasts
 (6) 32WT8 Lamps
 2850 lumens
 Spacing criterion:
 (H) 1.0 x mounting
 height, (L) 1.1 x
 mounting height
 Efficiency 94.5%
 Test Report:
 HBI632-UPL.IES
 LER =FL84
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$2.85

| Candela | | | | |
|---------|---------|------|----------|--|
| Angle | Along H | 45° | Across L | |
| 0 | 6096 | 6096 | 6096 | |
| 5 | 6103 | 6109 | 6097 | |
| 10 | 6057 | 6018 | 5933 | |
| 15 | 5952 | 5772 | 5528 | |
| 20 | 5776 | 5383 | 5054 | |
| 25 | 5542 | 4964 | 4556 | |
| 30 | 5252 | 4442 | 4306 | |
| 35 | 4916 | 4027 | 4025 | |
| 40 | 4529 | 3719 | 3653 | |
| 45 | 4117 | 3379 | 3251 | |
| 50 | 3665 | 2969 | 2984 | |
| 55 | 3186 | 2542 | 2597 | |
| 60 | 2686 | 2231 | 2288 | |
| 65 | 2169 | 1823 | 2045 | |
| 70 | 1634 | 1539 | 1588 | |
| 75 | 1105 | 1147 | 1089 | |
| 80 | 602 | 660 | 616 | |
| 85 | 174 | 218 | 158 | |
| 90 | 5 | 6 | 7 | |

Coefficients of Utilization

| rc | Effective floor cavity reflectance | | | | | | | | | | | | | | | | | |
|----|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|
| | 80% | | | | 70% | | | | 50% | | | | 0% | | | | | |
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | 50 | 30 | 10 | 0 | | |
| 0 | 112 | 112 | 112 | 112 | 109 | 109 | 109 | 109 | 103 | 103 | 103 | 98 | 98 | 98 | 93 | 93 | 93 | 91 |
| 1 | 102 | 98 | 94 | 90 | 99 | 95 | 91 | 88 | 90 | 87 | 85 | 86 | 84 | 82 | 82 | 80 | 78 | 76 |
| 2 | 93 | 85 | 79 | 73 | 90 | 83 | 77 | 72 | 79 | 74 | 70 | 75 | 71 | 68 | 72 | 69 | 66 | 64 |
| 3 | 85 | 75 | 67 | 61 | 82 | 73 | 66 | 60 | 70 | 64 | 59 | 67 | 62 | 57 | 64 | 60 | 56 | 54 |
| 4 | 78 | 66 | 58 | 52 | 75 | 65 | 57 | 51 | 62 | 55 | 50 | 59 | 54 | 49 | 57 | 52 | 48 | 46 |
| 5 | 71 | 59 | 51 | 45 | 69 | 58 | 50 | 44 | 56 | 49 | 44 | 54 | 47 | 43 | 51 | 46 | 42 | 40 |
| 6 | 66 | 54 | 45 | 39 | 64 | 52 | 45 | 39 | 50 | 43 | 38 | 49 | 42 | 38 | 47 | 41 | 37 | 35 |
| 7 | 61 | 49 | 40 | 35 | 59 | 48 | 40 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 43 | 37 | 33 | 31 |
| 8 | 57 | 44 | 37 | 31 | 55 | 44 | 36 | 31 | 42 | 35 | 30 | 41 | 35 | 30 | 39 | 34 | 30 | 28 |
| 9 | 53 | 41 | 33 | 28 | 52 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 36 | 31 | 27 | 25 |
| 10 | 50 | 38 | 30 | 25 | 49 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 34 | 28 | 25 | 23 |

Zonal Lumen Summary

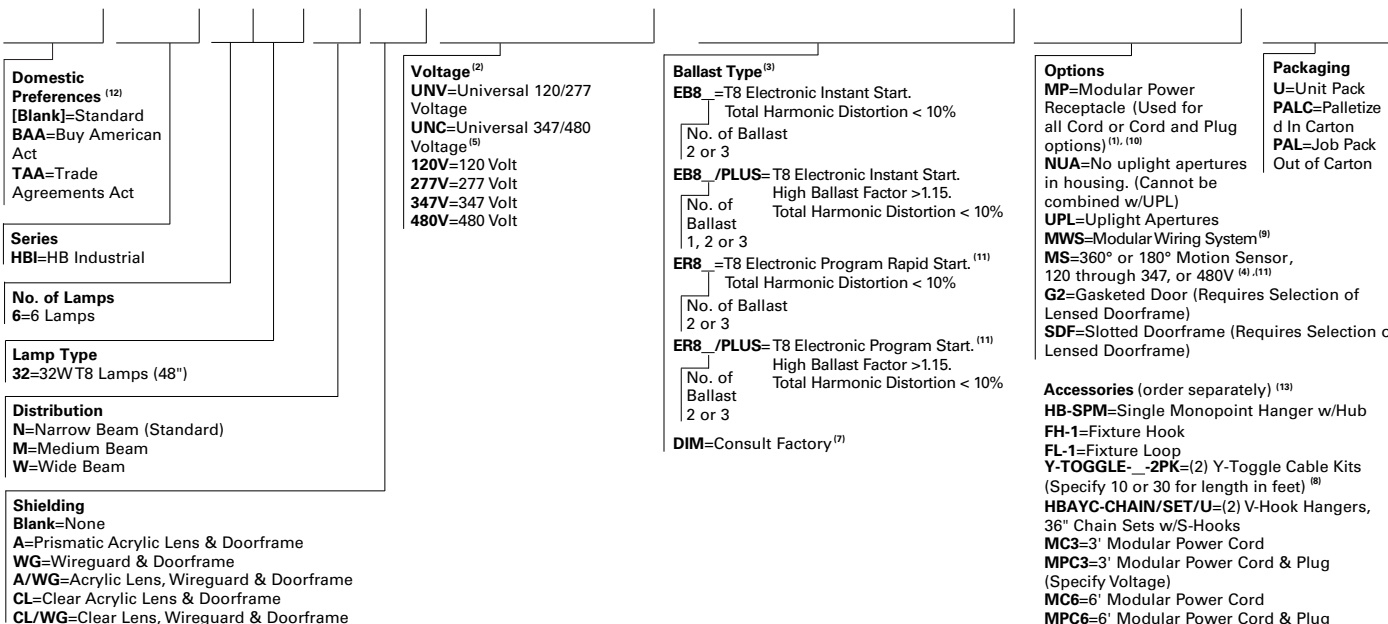
| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 4812 | 26.4 | 27.9 |
| 0-40 | 7183 | 42.0 | 44.5 |
| 0-60 | 12252 | 71.7 | 75.8 |
| 0-90 | 15556 | 91.0 | 96.3 |
| 0-180 | 16155 | 94.5 | 100.0 |

Luminance Data

| Angle in Deg | Average 0-Deg cd/sm | Average 45-Deg cd/sm | Average 90-Deg cd/sm |
|--------------|---------------------|----------------------|----------------------|
| 45 | 13013 | 10680 | 10276 |
| 55 | 12415 | 9905 | 10120 |
| 65 | 11471 | 9641 | 10815 |
| 75 | 9542 | 9905 | 9404 |
| 85 | 4462 | 5590 | 4052 |

ORDERING INFORMATION

SAMPLE NUMBER: HBI-632-N-UNV-EB82/PLUS-MP-UPL-U Includes V Hangers for rapid installation⁽⁶⁾



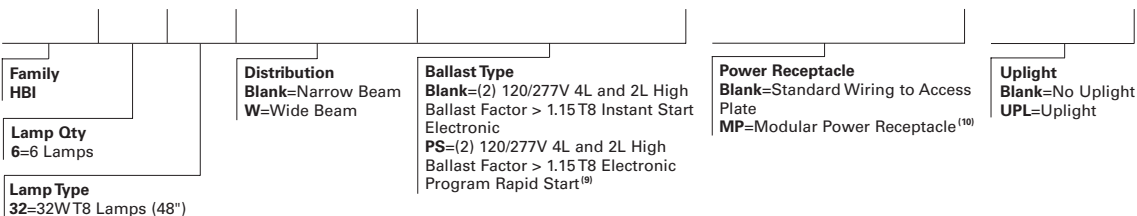
NOTES: ⁽¹⁾Requires use of MC_ or MPC_cord accessories, specify voltage for plugs. ⁽²⁾Voltage must be specified when ordered with plugs or emergency ballasts. ⁽³⁾ER8 and EB8 ballast systems suitable for operation in ambient environments up to 122°F (50°C) in open upright configuration. ⁽⁴⁾When ordering MS option, specify UNV (for 120 or 277V), 347 or 480V. ⁽⁵⁾2/3 lamp ballast configurations in EB8/PLUS only for T8 UNC versions. ⁽⁶⁾Can be used in high abuse applications such as gymnasiums. ⁽⁷⁾Dimming ballast must be specified at time of order. ⁽⁸⁾Two required. ⁽⁹⁾Cannot be combined with Modular Power Receptacle (MP). ⁽¹⁰⁾For MWS with MP, choose MP in fixture logic and then choose MWS accessory such as MDS6. ⁽¹¹⁾Recommend Program Rapid Start Ballast when using MS option. ⁽¹²⁾Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. ⁽¹³⁾Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Solutions Representative for availability and ordering information.



Quick Ship Ordering Information Sample Number: HBI632-MP-UPL-L5

Quick Ship orders ship in 5 days in order quantities not to exceed 200 pieces. Includes V Hangers for rapid installation⁽⁶⁾
 NOTE: Orders received after noon are entered on the following day.



NOTES: ⁽⁹⁾Recommended when utilizing Motion Sensor option. ⁽¹⁰⁾Requires use of Modular cord and plug accessories.

SHIPPING DATA

Catalog No. HBI-632-UPL
 Wt. 16 lbs.