

Alphalite

PROJECT NAME

CATALOG NO.

TYPE

DATE

NOTE

ALPHA SERIES Fluorescent High Bay

HBA

DESCRIPTION

The Alpha series is an outstanding solution for high mounting height industrial or retail applications. The HBA optic has been optimized to provide maximum performance from either the T5 or T8 lamps. HBA'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.

APPLICATION

Primary applications include retail, shopping malls, light industrial, gymnasiums and recreational environments.

SPECIFICATION FEATURES

Construction

Full bodied rigid low-profile steel housing, made from 22 gauge prime cold rolled steel. Center access plate location allows for easy access to ballast leads. Sufficient knockouts for mounting, electrical, and occupancy sensor accessories. Housing features radiator slots for ample lamp and luminaire heat dissipation.

Electrical

Ballasts are Class "P" and are positively secured by mounting bolts. Pressure-lock lampholders. UL/CUL listed. Suitable for damp locations.

Mounting

The Alpha series is ideally suited for surface, suspension mounting with optional wire hook and chain set or cable mounting. (2) sets v-hook hangers included.



HBA

Alpha Series

Fluorescent High Bay

632, 432, 654, 454

Optics

Die formed, segmented optical design optimizes performance. HBA comes standard in wide distribution. Three distributions available. Optical choices include a narrow distribution for aisles, medium distribution for assembly and loading areas, or wide distribution for general, open area lighting. Optical modules produce 95% reflectivity.

Finish

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

Warranty

When operated in high ambient conditions, the HBA is supported by a 5 yr/55°C and 3 yr/65°C ballast warranty for T5 and T8 configurations.

Quick Ship Product

ORDERING INFORMATION

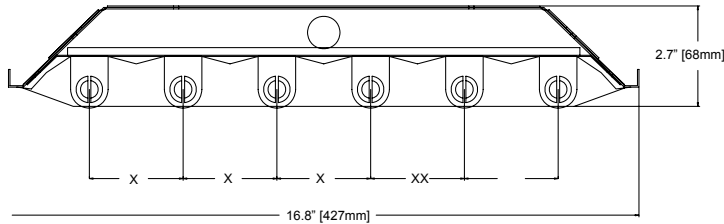
Sample Number: HBA-632-UNV-ISH

| HBA | 6 | 32 | UNV | IS | H | (Blank) |
|---------------------|-------------------|--------------------------------|--|---|-----------------------|---|
| Series | # of Lamps | Individual Lamp Wattage | Voltage | Ballast Starting Method | Ballast Factor | Ballast Type |
| HBA = | 4 Lamps | | 120V = 120V | | N = Normal | (Blank) = T8 Electronic, Fixed Output, THD < 10% |
| Alpha Series | 6 Lamps | 32 = 32W T8 | 277V = 277V | IS = Instant Start | L = Low | HP = High Efficiency T8, Fixed Output, THD < 10% |
| Commercial High Bay | (not included) | 54 = 54W T5/HO | UNV = 120-277V 347V = 347V 480V = 480V | PS = Programmed Start RS = Rapid Start | H = High (Standard) | DT = T8 Electronic, Step-Dimming DC = T8 Electronic, Continuous- Dimming |

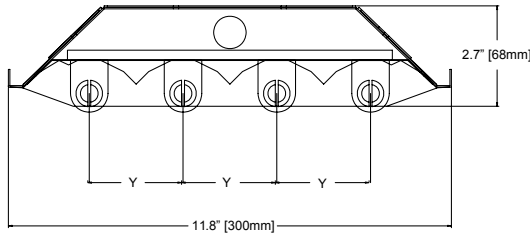
Accessories (order separately)

WG = Wire Guard
 Y-Toggle/30 = Y-mounting tool, #2 cable, 30'
 Y-Toggle/10 = Y-mounting tool, #2 cable, 10'
 OS = Occupancy Sensor
 LN = Lens

LAMP CONFIGURATION

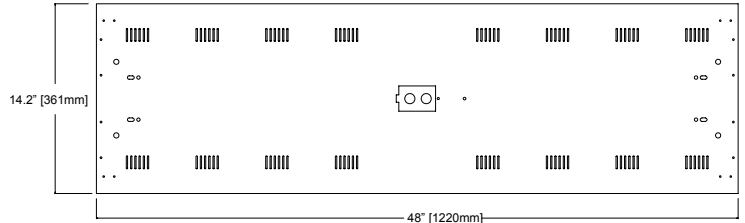
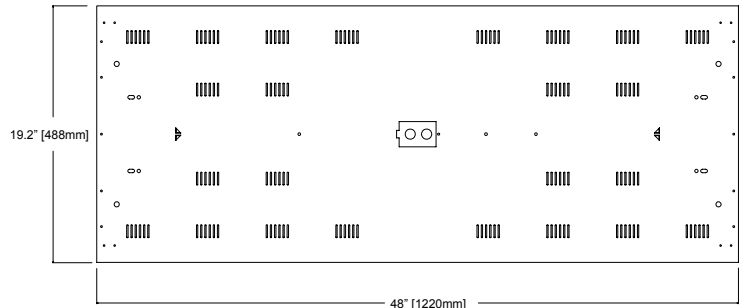


X = 2.5" [63.5mm]



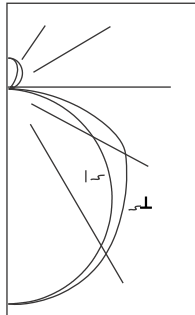
Y = 2.5" [63.5mm]

DIMENSION TOP VIEW



PHOTOMETRICS

HBA-632



(2) Electronic Ballast, High BF

(6) F32/T8/TL835 32W T8 lamps, 3100 lumens

Spacing Criterion:
(H) 1.3 x mounting height, (L) 1.3 x mounting height Efficiency 95.9%

Candlepower

| Angle | Along H | 45° | Across L |
|-------|---------|------|----------|
| 0 | 4685 | 4685 | 4685 |
| 5 | 4663 | 4674 | 4692 |
| 10 | 4608 | 4631 | 4654 |
| 15 | 4512 | 4555 | 4594 |
| 20 | 4380 | 4446 | 4503 |
| 25 | 4209 | 4303 | 4374 |
| 30 | 4000 | 4121 | 4203 |
| 35 | 3762 | 3909 | 4000 |
| 40 | 3492 | 3658 | 3774 |
| 45 | 3195 | 3377 | 3562 |
| 50 | 2870 | 3081 | 3354 |
| 55 | 2527 | 2785 | 3150 |
| 60 | 2165 | 2500 | 2962 |
| 65 | 1781 | 2230 | 2707 |
| 70 | 1384 | 1985 | 2246 |
| 75 | 975 | 1569 | 1685 |
| 80 | 569 | 1025 | 1107 |
| 85 | 200 | 500 | 566 |
| 90 | 3 | 111 | 177 |

Coefficients of Utilization

| rc | Effective floor cavity reflectance e | | | | | | | | | | | | | | | | | |
|----|--------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|----|----|----|----|
| | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0% | | |
| rw | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| CR | | | | | | | | | | | | | | | | | | |
| 0 | 113 | 113 | 113 | 113 | 110 | 110 | 110 | 110 | 104 | 104 | 104 | 99 | 99 | 99 | 94 | 94 | 94 | 92 |
| 1 | 103 | 98 | 93 | 89 | 100 | 95 | 91 | 88 | 90 | 87 | 84 | 86 | 83 | 81 | 82 | 80 | 78 | 75 |
| 2 | 93 | 85 | 78 | 72 | 90 | 82 | 76 | 71 | 78 | 73 | 69 | 75 | 70 | 66 | 71 | 68 | 64 | 62 |
| 3 | 85 | 74 | 66 | 60 | 82 | 72 | 65 | 59 | 69 | 62 | 57 | 66 | 60 | 56 | 63 | 58 | 54 | 52 |
| 4 | 77 | 66 | 57 | 50 | 75 | 64 | 56 | 50 | 61 | 54 | 49 | 58 | 52 | 47 | 56 | 51 | 46 | 44 |
| 5 | 71 | 58 | 50 | 43 | 69 | 57 | 49 | 43 | 55 | 47 | 42 | 52 | 46 | 41 | 50 | 45 | 40 | 38 |
| 6 | 66 | 53 | 44 | 38 | 64 | 52 | 43 | 37 | 49 | 42 | 37 | 47 | 41 | 36 | 45 | 40 | 35 | 33 |
| 7 | 61 | 48 | 39 | 33 | 59 | 47 | 39 | 33 | 45 | 38 | 33 | 43 | 37 | 32 | 42 | 36 | 31 | 29 |
| 8 | 57 | 44 | 35 | 30 | 55 | 43 | 35 | 30 | 41 | 34 | 29 | 40 | 33 | 29 | 38 | 33 | 28 | 26 |
| 9 | 53 | 40 | 32 | 27 | 51 | 39 | 32 | 27 | 38 | 31 | 26 | 37 | 30 | 26 | 35 | 30 | 26 | 24 |
| 10 | 50 | 37 | 29 | 24 | 48 | 36 | 29 | 24 | 35 | 28 | 24 | 34 | 28 | 24 | 33 | 27 | 23 | 22 |

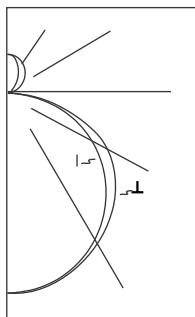
Zonal Lumen Summary

| Zone | Lumen s | %Lam p | %Fix ture |
|------|---------|--------|-----------|
| 0-30 | 4562 | 24.5 | 25.6 |
| 0-40 | 7320 | 39.4 | 41.1 |
| 0-60 | 12827 | 69.0 | 71.9 |
| 0-90 | 17094 | 91.9 | 95.8 |
| 180 | 17837 | 95.9 | 100.0 |

Luminance Data

| Angle in Deg | Average 0-Deg cd/s m | Average 45-Deg cd/s m | Average 90-Deg cd/s m |
|--------------|----------------------|-----------------------|-----------------------|
| 5 | 10283 | 8782 | 8691 |
| 5 | 9860 | 8372 | 8802 |
| 5 | 9142 | 8470 | 10454 |
| 5 | 7699 | 10076 | 10592 |
| 5 | 3898 | 10123 | 11480 |

HBA-654



(2) Electronic Ballast, High BF

(6) F54T5/841H0 54W T5 lamps, 4400 lumens

Spacing criterion:
(H) 1.3 x mounting height, (L) 1.3 x mounting height Efficiency 93.3%

Candlepower

| Angle | Along H | 45° | Across L |
|-------|---------|------|----------|
| 0 | 6850 | 6850 | 6850 |
| 5 | 6814 | 6836 | 6863 |
| 10 | 6739 | 6770 | 6796 |
| 15 | 6607 | 6648 | 6668 |
| 20 | 6418 | 6461 | 6487 |
| 25 | 6179 | 6222 | 6278 |
| 30 | 5891 | 5945 | 6049 |
| 35 | 5558 | 5637 | 5792 |
| 40 | 5183 | 5301 | 5498 |
| 45 | 4773 | 4929 | 5187 |
| 50 | 4335 | 4526 | 4827 |
| 55 | 3866 | 4100 | 4434 |
| 60 | 3370 | 3638 | 3997 |
| 65 | 2843 | 3159 | 3437 |
| 70 | 2283 | 2630 | 2685 |
| 75 | 1672 | 1932 | 1941 |
| 80 | 1012 | 1216 | 1267 |
| 85 | 348 | 548 | 548 |
| 90 | 4 | 37 | 50 |

Coefficients of Utilization

| rc | Effective floor cavity reflectance e | | | | | | | | | | | | | | | | | |
|-----|--------------------------------------|-----|-----|-----|-----|-----|-----|-----|----|-----|----|----|-----|----|----|----|----|----|
| | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0% | | |
| rw | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 109 | 109 | 109 | 109 | 105 | 105 | 105 | 105 | 98 | 98 | 98 | 92 | 92 | 92 | 86 | 86 | 86 | 84 |
| 1 | 99 | 94 | 90 | 86 | 95 | 91 | 87 | 84 | 85 | 82 | 79 | 80 | 77 | 75 | 75 | 73 | 71 | 68 |
| 2 | 89 | 81 | 74 | 69 | 86 | 78 | 72 | 67 | 74 | 69 | 64 | 69 | 65 | 61 | 65 | 62 | 59 | 56 |
| 3 | 81 | 71 | 63 | 57 | 78 | 68 | 61 | 55 | 64 | 58 | 53 | 60 | 55 | 51 | 57 | 53 | 49 | 46 |
| 4 | 74 | 62 | 54 | 47 | 71 | 60 | 53 | 47 | 57 | 50 | 45 | 53 | 48 | 43 | 50 | 46 | 42 | 39 |
| 5 | 68 | 55 | 47 | 40 | 65 | 54 | 46 | 40 | 51 | 44 | 38 | 48 | 42 | 37 | 45 | 40 | 36 | 34 |
| 6 | 62 | 50 | 41 | 35 | 60 | 48 | 40 | 34 | 46 | 39 | 33 | 43 | 37 | 32 | 41 | 35 | 31 | 29 |
| 7 | 58 | 45 | 37 | 31 | 55 | 44 | 36 | 30 | 41 | 34 | 29 | 39 | 33 | 29 | 37 | 32 | 28 | 26 |
| 8 | 54 | 41 | 33 | 27 | 52 | 40 | 32 | 27 | 38 | 31 | 26 | 36 | 30 | 25 | 34 | 29 | 25 | 23 |
| 9 | 50 | 37 | 30 | 24 | 48 | 36 | 29 | 24 | 35 | 28 | 23 | 33 | 27 | 23 | 31 | 26 | 22 | 20 |
| 10 | 47 | 34 | 27 | 22 | 45 | 34 | 26 | 22 | 32 | 26 | 21 | 30 | 25 | 21 | 29 | 24 | 20 | 18 |

Zonal Lumen Summary

| Zone | Lumen s | %Lam p | %Fix ture |
|-------|---------|--------|-----------|
| 0-30 | 5401 | 20.5 | 21.9 |
| 0-40 | 8947 | 33.9 | 36.3 |
| 0-60 | 16453 | 62.3 | 66.8 |
| 0-90 | 22065 | 83.6 | 89.6 |
| 0-180 | 24626 | 93.3 | 100.0 |

Luminance Data

| Angle in Deg | Average 0-Deg cd/s m | Average 45-Deg cd/s m | Average 90-Deg cd/s m |
|--------------|----------------------|-----------------------|-----------------------|
| 45 | 11468 | 11843 | 12463 |
| 55 | 11451 | 12144 | 13134 |
| 65 | 11429 | 12699 | 13817 |
| 75 | 10975 | 12682 | 12741 |
| 85 | 6784 | 10682 | 10682 |

Specifications and dimensions subject to change without notice.

