

MHDA Series

Aluminum marine heavy duty luminaire for hazardous locations

 **RIG-A-LITE™**
An Avail Infrastructure Solutions Company



Classifications

- Class I, Division 2, Groups A, B, C & D
- Class II, Division 2, Groups F & G
- Class III
- UL 844 Hazardous Locations
- UL 1598A Marine Outside Type
- CSA C22.2 #137; C22.2 #213
- CUL
- 55° C Ambient Temperature
- IP66
- Buy American Act (BAA) Compliant



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Houston, TX 77075
(713) 943-0340

MHDA Series

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Key Features

- 1 Stainless steel mounting brackets
- 2 Captive stainless steel latches
- 3 Low copper aluminum housing with baked on white polyester finish
- 4 3/4 in. NPT aluminum hub
- 5 Heavy duty aluminum ballast tray
- 6 Heavy duty injection molded lens with reinforced corners



Additional Features

Housing:

- Corrosion resistant aluminum housing
- Water tight gasket attached to the lens
- Captive SS latches
- Heavy duty aluminum ballast tray
- 3/4 in. NPT aluminum conduit hubs

Diffuser:

- High Impact DR acrylic diffuser-polycarbonate option available

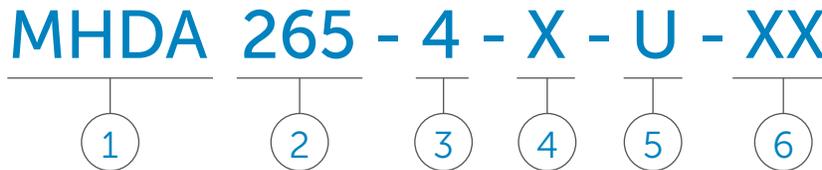
Mounting:

- Stainless steel mounting brackets standard

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Catalog Number Logic



1

BASIC SERIES

MHDA Aluminum Fluorescent
 Class I, Division 2, Groups A, B, C and D
 Class II, Division 2 Groups F & G
 Class III
 UL 844 Hazardous Locations
 UL 1598A Marine Outside Type
 CSA C22.2 #137; C22.2 #213
 CUL
 55° C Ambient Temperature
 IP66

2

LAMP CURRENT/LAMP WATTAGE

800 = 800mA, 60 Watt
 430 = 430mA, 34 Watt (export only)
 425 = 425mA, 40 Watt (Slimline)
 265 = 265mA, 32 Watt T8
 T8HO = T8HO, 44 Watt
 T5 = T5, 28 Watt
 T5HO = T5HO, 54 Watt

3

NOMINAL FIXTURE LENGTH

4 = 4 Foot

4

NUMBER OF LAMPS

2 = Two Lamp
 3 = Three Lamp (T8, T5 & T5HO Only)

5

VOLTAGE/FREQUENCY

U = 120 thru 277V 50/60 HZ
 N = 347 thru 480V 50/60 HZ
 H = 347V 60 HZ

6

OPTIONS¹

P = Polycarbonate Lens
 F = Single Fuse²
 FB = Fuse Block²
 TB = Terminal Block
 TW = Thru Wire Cable
 Installations Only
 PM = Pendant Mount
 EM = Emergency Battery Backup
 EM NON = Non-Hazardous Emergency

¹ Consult factory for pricing.

² Fuse option not available for marine listed fixtures.

Catalog logic is for explaining catalog number structure only. Not all combinations are possible; consult factory for catalog numbers not listed in charts.

Certification Guide

| Model | Ambient Temperature (°C) | Class I, Div. 2, Groups A, B, C, & D | Class II, Div. 2, Groups F & G, Class III | Supply Wire Suitable Temp., °C |
|---------------|--------------------------|---|---|-----------------------------------|
| MHDA 265 | 40 | T4 | T3C | 90 |
| MHDA 265 | 55 | T4A | - | 90 |
| MHDA T5, T5HO | 40 | T4 | T3C | 90 |
| MHDA T5, T5HO | 55 | T3C | - | 90 |
| MHDA T8HO | 40 | T4A | T3C | 90 |
| MHDA T8HO | 55 | T4 | - | 90 |

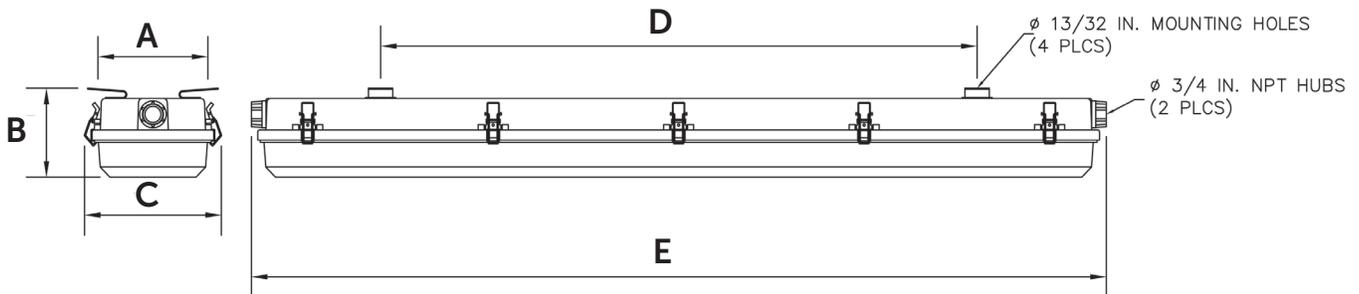
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Fluorescent Series

| | Description | Voltage | Catalog Number* |
|-------------------|--|--------------------|-----------------|
| Four Foot Fixture | 32 Watt Instant Start F32T8 Medium Bi-Pin 265mA Lamps, 48" | 120-277V 50/60 HZ | MHDA265-4-2-U |
| | 44 Watt Rapid Start T8HO Medium Bi-Pin 265mA Lamps, 48" | 120-277V 50/60 HZ | MHDAT8HO-4-2-U |
| | 28 Watt, Rapid Start T5 Miniature Bi-Pin Lamps, 48" | 120-277V 50/60 HZ | MHDAT5-4-2-U |
| | 54 Watt, Rapid Start T5HO Miniature Bi-Pin Lamps, 48" | 120-277 V 50/60 HZ | MHDAT5HO-4-2-U |

Fixture Dimension (inches)



| Nominal Fixture Length | A | B | C | D | E | Boxed Weight | Shipping Volume (Boxed Fixture) |
|------------------------|------|------|------|-------|-------|--------------|---------------------------------|
| Four Foot Fixture | 6.88 | 5.00 | 7.88 | 36.63 | 53.13 | 24.2 lbs. | 2.0 cu. ft. |

Accessories

Fixed Mounting Kit

Stainless Steel Fixed 45°

Catalog Number:
53070

Shipping Weight:
2 lbs.



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MHDA265-4-2

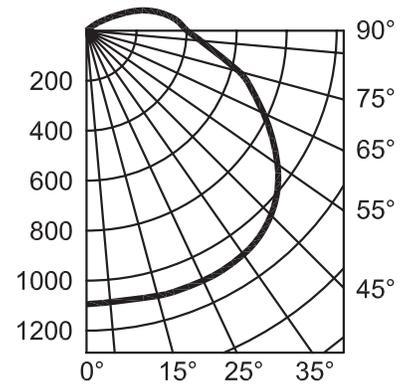
Coefficients of Utilization

| % Effective Ceiling Cavity Reflectance rcc | 80 | | | 50 | | | 10 | | |
|--|--|-----|-----|-----|-----|-----|-----|-----|-----|
| | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| % Wall Reflectance rw | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| Room Cavity Ratio RCR | Effective Floor Cavity Reflectance 20% | | | | | | | | |
| 0 | .93 | .93 | .93 | .84 | .84 | .84 | .74 | .74 | .74 |
| 1 | .76 | .71 | .66 | .68 | .64 | .61 | .59 | .57 | .54 |
| 2 | .64 | .57 | .51 | .57 | .52 | .47 | .49 | .46 | .43 |
| 3 | .55 | .47 | .41 | .49 | .43 | .38 | .42 | .38 | .34 |
| 4 | .48 | .39 | .33 | .43 | .36 | .31 | .37 | .32 | .28 |
| 5 | .42 | .34 | .28 | .38 | .31 | .26 | .33 | .28 | .24 |
| 6 | .37 | .29 | .23 | .34 | .27 | .22 | .29 | .24 | .20 |
| 7 | .33 | .26 | .20 | .30 | .24 | .19 | .26 | .21 | .18 |
| 8 | .30 | .23 | .17 | .27 | .21 | .17 | .24 | .19 | .15 |
| 9 | .27 | .20 | .15 | .25 | .19 | .15 | .22 | .17 | .13 |
| 10 | .25 | .18 | .14 | .23 | .17 | .13 | .20 | .15 | .12 |

Candlepower Distribution

| Deg. | Parl. | 22.5 | 45 | 67.5 | Norm |
|------|-------|------|------|------|------|
| 0 | 1094 | 1094 | 1094 | 1094 | 1094 |
| 5 | 1094 | 1092 | 1092 | 1088 | 1090 |
| 15 | 1057 | 1063 | 1077 | 1090 | 1098 |
| 25 | 978 | 1003 | 1040 | 1085 | 1103 |
| 35 | 867 | 912 | 991 | 1066 | 1093 |
| 45 | 718 | 789 | 906 | 1010 | 1043 |
| 55 | 531 | 632 | 780 | 899 | 932 |
| 65 | 316 | 440 | 610 | 747 | 781 |
| 75 | 140 | 268 | 463 | 598 | 631 |
| 85 | 38 | 147 | 314 | 432 | 458 |
| 90 | 16 | 102 | 261 | 365 | 402 |
| 95 | 16 | 78 | 230 | 331 | 373 |
| 105 | 10 | 41 | 159 | 249 | 292 |
| 115 | 4 | 16 | 70 | 134 | 172 |
| 125 | 0 | 2 | 20 | 37 | 57 |
| 135 | 0 | 0 | 7 | 14 | 16 |
| 145 | 0 | 0 | 0 | 5 | 8 |
| 155 | 0 | 0 | 0 | 0 | 1 |
| 165 | 0 | 0 | 0 | 0 | 0 |

Photometric Data



MHDA265-4-3

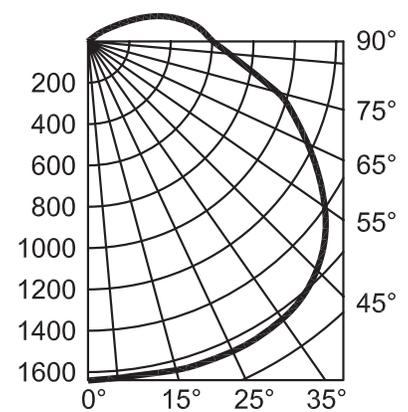
Coefficients of Utilization

| % Effective Ceiling Cavity Reflectance rcc | 80 | | | 50 | | | 10 | | |
|--|--|-----|-----|-----|-----|-----|-----|-----|-----|
| | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| % Wall Reflectance rw | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| Room Cavity Ratio RCR | Effective Floor Cavity Reflectance 20% | | | | | | | | |
| 0 | .93 | .93 | .93 | .84 | .84 | .84 | .74 | .74 | .74 |
| 1 | .76 | .71 | .66 | .68 | .64 | .61 | .59 | .57 | .54 |
| 2 | .64 | .57 | .51 | .57 | .52 | .47 | .49 | .46 | .43 |
| 3 | .55 | .47 | .41 | .49 | .43 | .38 | .42 | .38 | .34 |
| 4 | .48 | .39 | .33 | .43 | .36 | .31 | .37 | .32 | .28 |
| 5 | .42 | .34 | .28 | .38 | .31 | .26 | .33 | .28 | .24 |
| 6 | .37 | .29 | .23 | .34 | .27 | .22 | .29 | .24 | .20 |
| 7 | .33 | .26 | .20 | .30 | .24 | .19 | .26 | .21 | .18 |
| 8 | .30 | .23 | .17 | .27 | .21 | .17 | .24 | .19 | .15 |
| 9 | .27 | .20 | .15 | .25 | .19 | .15 | .22 | .17 | .13 |
| 10 | .25 | .18 | .14 | .23 | .17 | .13 | .20 | .15 | .12 |

Candlepower Distribution

| Deg. | Parl. | 22.5 | 45 | 67.5 | Norm |
|------|-------|------|------|------|------|
| 0 | 1641 | 1641 | 1641 | 1641 | 1641 |
| 5 | 1641 | 1638 | 1638 | 1632 | 1635 |
| 15 | 1585 | 1594 | 1616 | 1635 | 1647 |
| 25 | 1466 | 1504 | 1560 | 1627 | 1655 |
| 35 | 1301 | 1368 | 1487 | 1599 | 1640 |
| 45 | 1076 | 1184 | 1359 | 1515 | 1565 |
| 55 | 797 | 948 | 1170 | 1348 | 1398 |
| 65 | 474 | 660 | 916 | 1120 | 1172 |
| 75 | 211 | 402 | 694 | 987 | 947 |
| 85 | 58 | 220 | 471 | 647 | 686 |
| 90 | 23 | 153 | 392 | 548 | 604 |
| 95 | 23 | 117 | 345 | 496 | 560 |
| 105 | 16 | 61 | 239 | 373 | 438 |
| 115 | 6 | 23 | 105 | 201 | 257 |
| 125 | 0 | 3 | 30 | 56 | 86 |
| 135 | 0 | 0 | 11 | 20 | 23 |
| 145 | 0 | 0 | 3 | 8 | 12 |
| 155 | 0 | 0 | 0 | 0 | 2 |
| 165 | 0 | 0 | 0 | 0 | 0 |

Photometric Data



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