

MOFFAT MW

Outdoor Linear Luminaire

Key Features

- 6063-T6 Extruded aluminum housing
- Highly reflective die-formed white painted aluminum reflector
- Die-cast aluminum end caps
- MOFFAT offered with a 5-year limited warranty that covers LED, driver and fixture
- ETL listed conforming to UL 1598 in US and CSA 250 in Canada
- Approved for wet location, IP65 Rated, fully gasketed lens and endcaps
- Maximum fixture weight is 20 lbs per standard 4' fixture
- Fixture head rotation provides asymmetric and general illumination
- Buy American Act compliant



Example Part #: MW-HE-835HO-26'-FL-U-OL2-1-0-W

MW - **HE** - _____ - _____ - _____ - _____ - _____ - _____ - _____ - _____ - _____ - _____

SHIELDING CRI, CCT & OUTPUT LENGTH MOUNTING VOLTAGE DRIVER CIRCUITING BATTERY & EMERGENCY FINISH FIXTURE OPTIONS CONTROLS

| M_ | HE | _____ | _____ |
|--|---|---|--|
| HOUSING | SHIELDING | CRI, CCT & OUTPUT ¹ | LENGTH ² |
| MW - Moffat Wet MN - Moffat Natatorium (<i>FL mounting only</i>) | HE - High Efficiency Lens WHE - Asymmetric Lens <i>Shielding pg. 2</i> | _ 27 _ - 2700K _ 30 _ - 3000K _ 35 _ - 3500K _ 40 _ - 4000K CL _____ - Custom Lumens CW _____ - Custom Watts <i>Lumen Output pg. 2</i> | __ - Individual Fixture ___ - Continuous Row <i>Length pg. 3</i> |
| _____ | _____ | _____ | _____ |
| MOUNTING | VOLTAGE | DRIVER | CIRCUITING |
| FL - Flush Mount PH __ - Pendant Hub (<i>specify 12", 18", 24"</i>) WH __ - Wall Hub (<i>specify 6", 12", 18", 24"</i>) <i>Mounting pg. 3</i> | U - Universal (120 thru 277V) 1 - 120V 2 - 277V 3 - 347V <i>Voltage pg. 3</i> | OL2 - Osram (1%, 0-10v, standard) OL3 - Osram 347v (10%, 0-10v) EE1 - eldoLED ECOdrive (1%, 0-10v) ES1 - eldoLED SOLOdrive (0%, 0-10v) LH1 - Lutron Hi-lume (1%, EcoSystem) L51 - Lutron 5-Series (5%, EcoSystem) PL2 - Advance Xitanium (1%, 0-10v) PS1 - Advance Xitanium (50%/100%) ND - Non-Dimming <i>Driver pg. 3</i> | 1 - Single Circuit M - Multi Circuit E - Emergency (<i>entire fixture</i>) N - Night Light (<i>entire fixture</i>) <i>Circuiting pg. 4</i> |
| _____ | _____ | _____ | _____ |
| BATTERY & EMERGENCY ³ | FINISH | FIXTURE OPTIONS | CONTROLS |
| 0 - None _ PLL - Bodine 10W (<i>low profile</i>) _ E - Emergency circuit section _ N - Night Light circuit section _ L - Life Safety circuit section _ G - Bodine GTD <i>Battery and Emergency pg. 4</i> | W - White S - Metallic Silver BL - Textured Black BR - Bronze GR - Graphite CC - Custom Color <i>Finish pg. 4</i> | V - Visor <i>Fixture Options pg. 4</i> | <i>Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.</i> |

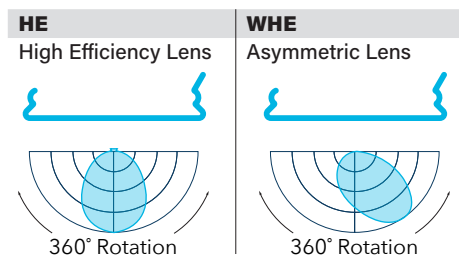
¹When specifying CRI, CCT, & OUTPUT the first _ is for specifying either **8** - 80CRI, **9** - 90CRI. The ending __ are for specifying output, example **HO** - High Output. See output charts for more information. ²Individual fixtures come in **2', 3', 4', 6' & 8'** lengths. Continuous rows available in 1' increments, starting at 2' ³Enter quantity for Battery and Emergency, Example 2PL.

Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions.



Shielding

- The distributions for each shielding option below are shown in a direct orientation. See Mounting for all rotating head options.



CRI, CCT & Output

- Specify either 80 or 90 CRI
- Longer lead-time may apply for 90 CRI. Consult factory
- 80 CRI = R9≥19 and 90 CRI = R9≥61

Custom Output- Lumens OR Wattage

| | | |
|-----------------|--|--|
| CL _____ | Specify CRI, CCT and desired lumens (i.e. CL835950) | Specify lumens between standard offering listed below. Lumens are specified per color temp |
| CW _____ | Specify CRI, CCT and desired wattage (i.e. CW9409.5) | Specify watts between standard offering listed below |

80 CRI

| | Color | Output | Lumens per foot | Shielding HE High Efficiency | | WHE Asymmetric Lens | |
|---------------|-------|-----------|--------------------|---|----------|-------------------------------|----------|
| | | | | LPW | Watts/ft | LPW | Watts/ft |
| 830LO | 3000K | Low | 350 | 122 | 2.9 | 103 | 3.4 |
| 830 | 3000K | Standard | 750 | 126 | 5.9 | 109 | 6.9 |
| 830HO | 3000K | High | 1000 | 127 | 7.9 | 111 | 9.0 |
| 830VHO | 3000K | Very High | 1250 | 129 | 9.7 | 109 | 11.4 |
| 835LO | 3500K | Low | 350 | 125 | 2.8 | 106 | 3.3 |
| 835 | 3500K | Standard | 750 | 128 | 5.8 | 111 | 6.8 |
| 835HO | 3500K | High | 1000 | 131 | 7.7 | 111 | 9.0 |
| 835VHO | 3500K | Very High | 1250 | 133 | 9.4 | 112 | 11.1 |
| 840LO | 4000K | Low | 350 | 127 | 2.8 | 108 | 3.3 |
| 840 | 4000K | Standard | 750 | 130 | 5.8 | 112 | 6.7 |
| 840HO | 4000K | High | 1000 | 132 | 7.6 | 112 | 8.9 |
| 840VHO | 4000K | Very High | 1250 | 135 | 9.3 | 114 | 11.0 |

90 CRI

| | | | | | | | |
|--------------|-------|----------|------|-----|-----|----|------|
| 927LO | 2700K | Low | 350 | 101 | 3.5 | 88 | 4.0 |
| 927 | 2700K | Standard | 750 | 107 | 7.0 | 91 | 8.3 |
| 927HO | 2700K | High | 1000 | 109 | 9.2 | 92 | 10.8 |
| 930LO | 3000K | Low | 350 | 105 | 3.3 | 91 | 3.9 |
| 930 | 3000K | Standard | 750 | 109 | 6.9 | 94 | 8.0 |
| 930HO | 3000K | High | 1000 | 109 | 9.1 | 96 | 10.5 |
| 935LO | 3500K | Low | 350 | 107 | 3.3 | 93 | 3.8 |
| 935 | 3500K | Standard | 750 | 112 | 6.7 | 96 | 7.8 |
| 935HO | 3500K | High | 1000 | 112 | 8.9 | 98 | 10.2 |
| 940LO | 4000K | Low | 350 | 106 | 3.3 | 92 | 3.8 |
| 940 | 4000K | Standard | 750 | 111 | 6.8 | 95 | 7.9 |
| 940HO | 4000K | High | 1000 | 111 | 9.0 | 97 | 10.3 |

¹LPW and watts/ft based off 48" fixture size.

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Length

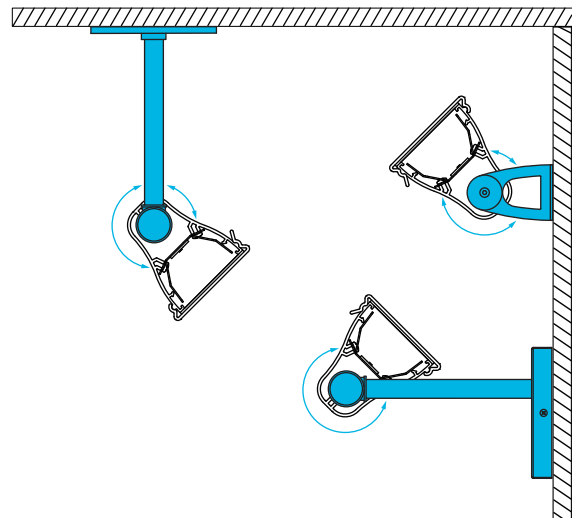
- All individual units cannot be joined
- The PH and WH mounting options have a 1-3/8" hub on each side of the fixture, the FL mounting option has 1/2" hub at each end of the fixture, see installation instructions for more details and chart.

| | | | | | |
|-------------------|-------------------|--------------------|--------------------|--------------------|---|
| 2 | 3 | 4 | 6 | 8 | – |
| Indiv. Fixture | Indiv. Fixture | Indiv. Fixture | Indiv. Fixture | Indiv. Fixture | Cont. Run Specify nominal overall row length to the 1' |
| 24-5/8" (610.2mm) | 36-5/8" (930.3mm) | 48-5/8" (1235.1mm) | 72-5/8" (1844.7mm) | 96-5/8" (2454.3mm) | |
| | | | | | Specify to the 1' >>> |

Mounting

- Pendant lengths are 12", 18", and 24"
- Wall Hub lengths are 6", 12", 18", and 24"
- End caps and standard white power cord attached at factory
- Canopies, hubs, and pendants match fixture finish, power cords are white, grey, or black depending on fixture finish. See Finish section for additional details
- Approved for wet location, IP65 rated, unless otherwise noted
- Refer to installation instructions during installation at the job site
- Maximum fixture weight is 20 lbs. per 4' fixture
- Fixture head rotation provides asymmetric output
- The PH and WH mounting options have a 1-3/8" hub on each side of the fixture, the FL mounting option has 1/2" hub at each end of the fixture, see installation instructions for more details and chart.

| | |
|-----------|----------------------------------|
| FL | Flush Mount (360° rotating head) |
| PH | Pendant Hub (360° rotating head) |
| WH | Wall Hub (360° rotating head) |



Voltage

- Some MOFFAT configurations will not accommodate all voltage options; consult with factory

| | |
|----------|-----------|
| U | Universal |
| 1 | 120 volt |
| 2 | 277 volt |
| 3 | 347 volt |

Driver

- Standard Driver Option = OL2
- Driver Lifetime: 50,000 hours at 25°C ambient operating conditions
- For more driver options see Pinnacle Resource Guide
- Some MOFFAT configurations will not accommodate all driver options; consult with factory

| | |
|------------|---|
| OL2 | Osram Optotronic 1%, 0-10v |
| OL3 | Osram Optotronic 347v 10%, 0-10v, requires 347v option |
| EE1 | eldoLED ECOdrive 1%, 0-10v Logarithmic |
| EE2 | eldoLED ECOdrive 1%, 0-10v Linear |
| ES1 | eldoLED ECOdrive 1%, DALI Logarithmic |
| ES2 | eldoLED SOLOdrive 0%, 0-10v Linear |
| LH1 | Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1 |
| L51 | Lutron 5-Series 5%, EcoSystem, LDE5 |
| PL2 | Advance Xitanium 1% , 0-10v |
| PS1 | Advance Xitanium Step Dimming 50%/100% |
| ND | Non-Dimming |

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How to specify Circuiting, Battery and Emergency

- 1**
- Select fixture circuiting from options below
 - Some MOFFAT configurations will not accommodate all circuiting options, consult with factory

Circuiting

| | |
|----------|--------------------------|
| 1 | Single Circuit |
| M | Multi Circuit |
| E | Emergency Circuit only |
| N | Night Light Circuit only |

- 2** + **3**
- Battery and emergency section options are available in addition to fixture circuit
 - Select battery and emergency section options below; factory shop drawing required
 - Some MOFFAT configurations will not accommodate all circuiting options, consult with factory

Battery and/or Emergency If Required

- 0** No battery or specific emergency section required

Battery

- Select battery section type if required, indicate total QTY. *Example 2PL*
- 90 minute battery runtime; test button is integral to fixture
- For more battery options available, see Pinnacle Resource Guide

| | |
|--------------|---|
| 0 | No battery |
| _ PLL | Bodine 10w Integral Lithium Self Testing (<i>low profile</i>) |

Emergency

- Select emergency section type if required, indicate total QTY. *Example 1E*
- Combine battery and emergency section ordering codes if both options are selected

| | |
|------------|---|
| _ E | Emergency circuit section |
| _ N | Night Light circuit section |
| _ L | Life Safety circuit section NO THROUGH WIRE |
| _ G | Bodine GTD, Generator Transfer Device section |

Battery OR Emergency Ordering Examples

- Single circuit, 10w Integral Battery Ordering Code: 1-1PL
- Emergency only, 10w Integral Battery Ordering Code: E-1PL
- Single circuit, GTD required Ordering Code: 1-1G

For Approximate Battery Lumen Output

- Multiply battery wattage X fixture LPW shown on Lumen Table
- $92.3 \text{ (LPW)} \times 10 \text{ (watts)} = 923 \text{ battery lumen output}$

Combination Section Ordering Examples

- Single circuit, (1) 10w battery, (1) emergency section
Ordering Code: 1-1PL1E
- Multi circuit, (2) 10w battery, (2) emergency sections
Ordering Code: M-2PL2E
- Single circuit, (1) night light section
Ordering Code: 1-1N

Finish

- Standard powder-coat textured white, metallic silver, textured black, graphite or bronze painted finish; consult factory for chip of standard paint finishes
- Selecting a fixture finish other than white may impact lumen output; consult factory for more information

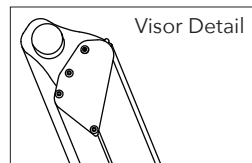
| | |
|-----------|---|
| W | White (<i>white cord/white canopy</i>) |
| S | Metallic Silver (<i>grey cord/silver canopy</i>) |
| BL | Textured Black (<i>black cord/black canopy</i>) |
| BR | Bronze (<i>white cord/bronze canopy</i>) |
| GR | Graphite (<i>white cord/graphite canopy</i>) |
| CC | Custom Color (<i>white cord/color match canopy</i>) |

- Specify finish options for mounting hardware (endcaps, hubs, and pendants) in fixture options section

Fixture Options

- Additional options to enhance the fixture and finish of the product
- Specify CC-C, CC-H, and CC-P to match housing. If not specified, canopy will be standard matte white.

| | |
|----------|-------|
| V | Visor |
|----------|-------|



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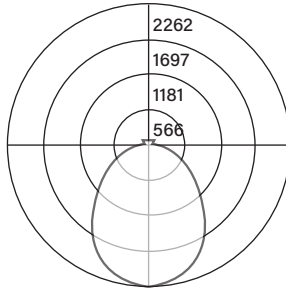
MW_LED_SPEC_DEC2020



Photometrics

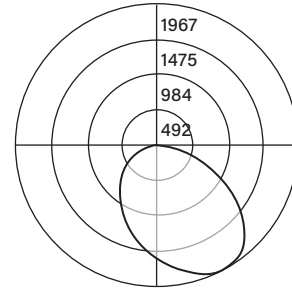
Satine Lens

Test # ITL91824
 Catalog # MW-HE-840VHO-4
 Lumens 5401 lm
 Watts 39.1 W
 Efficacy 138 LPW



Asymmetric Lens

Test # ITL92383
 Catalog # MW-HE-840VHO-4
 Lumens 4536 lm
 Watts 41.2 W
 Efficacy 110 LPW



Candela Distribution

| Vert Angle | Horizontal Angle | | | | |
|------------|------------------|------|------|------|------|
| | 0 | 22.5 | 45 | 67.5 | 90 |
| 0 | 2262 | 2262 | 2262 | 2262 | 2262 |
| 5 | 2251 | 2249 | 2248 | 2245 | 2246 |
| 10 | 2216 | 2207 | 2204 | 2196 | 2192 |
| 15 | 2160 | 2136 | 2132 | 2115 | 2104 |
| 20 | 2072 | 2041 | 2025 | 1996 | 1974 |
| 25 | 1959 | 1921 | 1894 | 1846 | 1819 |
| 30 | 1828 | 1781 | 1732 | 1666 | 1633 |
| 35 | 1669 | 1622 | 1554 | 1470 | 1434 |
| 40 | 1497 | 1445 | 1362 | 1269 | 1232 |
| 45 | 1310 | 1261 | 1170 | 1074 | 1037 |
| 50 | 1121 | 1075 | 985 | 896 | 865 |
| 55 | 938 | 890 | 809 | 731 | 706 |
| 60 | 753 | 718 | 648 | 588 | 565 |
| 65 | 587 | 558 | 502 | 457 | 443 |
| 70 | 425 | 409 | 372 | 341 | 330 |
| 75 | 279 | 271 | 252 | 236 | 233 |
| 80 | 149 | 152 | 148 | 145 | 144 |
| 85 | 49 | 57 | 68 | 75 | 78 |
| 90 | 3 | 15 | 32 | 44 | 48 |

Luminance Data (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|------------------|---------------|----------------|----------------|
| 45 | 17878 | 14124 | 12022 |
| 55 | 15696 | 11420 | 9438 |
| 65 | 13212 | 8855 | 7254 |
| 75 | 10055 | 6174 | 5122 |
| 85 | 4793 | 2869 | 2735 |

Bug Rating
 B2-U3-G1

Candela Distribution

| Vert Angle | Horizontal Angle | | | | |
|------------|------------------|------|------|------|------|
| | 0 | 22.5 | 45 | 67.5 | 90 |
| 0 | 1613 | 1613 | 1613 | 1613 | 1613 |
| 5 | 1717 | 1711 | 1686 | 1649 | 1607 |
| 10 | 1813 | 1797 | 1744 | 1668 | 1586 |
| 15 | 1897 | 1869 | 1789 | 1669 | 1550 |
| 20 | 1949 | 1915 | 1811 | 1652 | 1502 |
| 25 | 1967 | 1929 | 1809 | 1617 | 1434 |
| 30 | 1939 | 1900 | 1774 | 1557 | 1352 |
| 35 | 1863 | 1827 | 1698 | 1474 | 1252 |
| 40 | 1736 | 1705 | 1591 | 1368 | 1141 |
| 45 | 1570 | 1542 | 1442 | 1239 | 1015 |
| 50 | 1366 | 1349 | 1272 | 1091 | 880 |
| 55 | 1149 | 1143 | 1078 | 931 | 749 |
| 60 | 941 | 927 | 886 | 767 | 611 |
| 65 | 732 | 726 | 689 | 600 | 479 |
| 70 | 537 | 532 | 512 | 446 | 353 |
| 75 | 367 | 361 | 344 | 296 | 233 |
| 80 | 214 | 211 | 198 | 167 | 124 |
| 85 | 94 | 92 | 81 | 62 | 40 |
| 90 | 39 | 35 | 26 | 12 | 1 |

Luminance Data (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|------------------|---------------|----------------|----------------|
| 45 | 18201 | 17407 | 13852 |
| 55 | 15361 | 15217 | 12534 |
| 65 | 11986 | 12154 | 10781 |
| 75 | 8068 | 8428 | 8397 |
| 85 | 3296 | 3418 | 3912 |

Bug Rating
 B2-U3-G1

Fixture tested in direct orientation. Fixture head is rotatable for asymmetric aiming as needed. For all available IES files, please visit our website at pinnacle-ltg.com. Photometry testing in accordance to IESNA-LM-79-08 at an NVLAP accredited testing laboratory. Testing conducted at 25°C ambient conditions

Approvals & Certifications

Construction: 6063-T6 Extruded aluminum housing. Fixtures can be joined to create continuous runs. Standard high reflectance die-formed reflector. Fully gasketed lens and endcaps.

Shielding: Diffuse snap-in acrylic lens, removable for maintenance.

Mounting: Pendant mount, wall mount, and flush mounts available. Fixture head rotation provides asymmetric output. Refer to installation instructions for appropriate ceiling detail. Maximum fixture weight is 20 lbs. per 4' fixture.

LED: 25°C test environment. Lumen output/wattage has a margin of +/- 5%. All luminaire configurations tested in accordance with IES LM-79. Diodes tested in accordance with IES LM-80. Lifetime calculated using IES TM-21. Minimum lifetime greater than 60,000 hours. Lifetime Projection: L70 lifetime - 146,500 hours and L90 lifetime - 45,000 hours. MacAdam 3-Step Ellipses. Not all products are Lighting Facts listed. For all available IES files, please visit our website at pinnacle-ltg.com.

CRI, CCT & Lumen Output: Four lumen packages available. Low (LO), Standard, High (HO), and Very High (VHO). Custom outputs are available. Specify custom lumens or watts between standard offering listed on CRI, CCT & Output page. 80 CRI is available for 3000K, 3500K, and 4000K. 90 CRI is available for 2700K, 3000K, 3500K, and 4000K. 80 CRI = R9≥19 and 90 CRI = R9≥61. Fixture performance and photometric data based on 4' configuration. Published lumen or wattage data based on OL1 configuration.

Voltage: Universal (U), 120 volt (1), 277 volt (2) and 347 volt (3) options available. Must specify OL3 in Driver section when 347 volt (3) is selected. Some MOFFAT configurations will not accommodate all voltage options; consult with factory.

Driver: Standard Driver Option is Osram 0-10V, 1% = OL2. Electronic driver, Power factor is >0.9 with a THD <20%. Driver Lifetime: 50,000 hours at 25°C ambient operating conditions. Ambient operating range: -4F/-20C to 122F/50C For more driver options, see Pinnacle Resource Guide. Some MOFFAT configurations will not accommodate all driver options.

Circuiting: Select from single circuit (1), Multi circuit (M), Emergency circuit (E), Night Light circuit (N) or Life Safety (L). For emergency circuiting situations that require no through wire or circuit separation, Life Safety Circuit should be selected. This will provide a separate power feed and only the Life Safety Circuit in that section. Some MOFFAT configurations will not accommodate all circuiting options; consult with factory.

Battery & Emergency: Select battery or emergency options if required. If battery or emergency option is not required, enter 0. Battery duration is 90 minutes as standard. Test button is integral to fixture, fixture length increases by 1". For more Battery options, see Pinnacle Resource Guide.

Finish: Standard powder-coat textured white, metallic silver, textured black, graphite or bronze painted finish, consult factory for chip of standard paint finishes. Canopies, hubs, and pendants painted white unless specified differently in the options section of the part number. Contact factory for additional custom color and finish options.

Controls: Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.

Labels: ETL listed conforming to UL1598 and CSA 250. Approved for Wet location unless otherwise noted. IP65 rated.

Fixture Weight: Maximum fixture weight is 20 lbs (per 4' fixture).

Buy American Act Compliant

Warranty: MOFFAT LED offered with a 5-year limited warranty. Covers LED, driver and fixture.

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