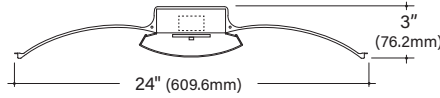


ADEO AD22

2x2 Architectural Recessed



Key Features

- Formed 22 gauge cold rolled steel housing
- Highly reflective die-formed white painted reflector
- Wiring access available on top of housing
- LED offered with a 5-year limited warranty. Covers LED, driver and fixture
- UL and cUL Listed, LO, MO, and HO lumen packages are IC Rated
- Approved for dry/damp location unless otherwise noted
- Maximum fixture weight is 15 lbs - Surface Mount Box adds 10 lbs
- Room-Side Maintenance for LED system
- Buy American Act compliant
- Indigo-Clean available, see Indigo-Clean specification sheets for details



Example Part #: AD22-A-830HO-G1-U-FSD-1-0-W

AD22 - **SHIELDING** - **CRI, CCT & OUTPUT** - **MOUNTING** - **VOLTAGE** - **DRIVER** - **CIRCUITING** - **BATTERY & EMERGENCY** - **FINISH** - **FIXTURE OPTIONS** - **CONTROLS**

| --- | --- | --- | --- |
|---|--|--|---|
| SHIELDING | SOURCE <i>QS</i> ¹ | MOUNTING | VOLTAGE |
| A - Satine Lens <i>QS</i> R - Round Perf L - Linear Perf <i>Shielding pg. 2</i> | _27_ - 2700K _30_ - 3000K _35_ - 3500K _40_ - 4000K CL - Custom Lumens CW - Custom Watts MOD - Mod options available <i>Lumen Output pg. 2</i> | G1 - 15/16" Grid <i>QS</i> G9 - 9/16" Grid <i>QS</i> GS - Screw Slot Grid <i>QS</i> FL - Flanged S - Surface Mount <i>Mounting pg. 3</i> | U - Universal (120 thru 277V) <i>QS</i> 1 - 120V <i>QS</i> 2 - 277V <i>QS</i> 3 - 347V <i>Voltage pg. 3</i> |
| --- | --- | --- | --- |
| DRIVER | CIRCUITING | BATTERY & EMERGENCY | FINISH |
| FSD - Factory Select Driver (1%, 0-10v) <i>QS</i> PL2 - Advance Xitanium (1%, 0-10v) <i>QS</i> OL2 - Osram (1%, 0-10v) <i>QS</i> OL4 - Osram 347v (1%, 0-10v) EE1 - eldoLED ECODrive (1%, 0-10v) ES1 - eldoLED SOLOdrive (0.1%, 0-10v) LH1 - Lutron Hi-lume (1%, EcoSystem) PS1 - Advance Xitanium (50%/100%) MOD - Mod options available <i>Driver pg. 4</i> | 1 - Single Circuit <i>QS</i> E - Emergency (entire fixture) <i>QS</i> N - Night Light (entire fixture) <i>QS</i> <i>Circuiting pg. 4</i> | 0 - None <i>QS</i> FSB - Factory Select Battery FSG - Factory Select ALCR GI - Iota ETS DR GB - Bodine GTD 11C - Iota 10W, CEC Listed <i>QS</i> 1P - Bodine 10W <i>QS</i> <i>Battery and Emergency pg. 4</i> | W - White <i>QS</i> MOD - Mod options available <i>Finish pg. 5</i> |
| --- | --- | --- | --- |
| FIXTURE OPTIONS ² | CONTROLS | | |
| QS - QuickShip <i>QS</i> TW - Through-wiring CP - Chicago Plenum <i>QS</i> AM - Antimicrobial Paint AR - Air Return FW6 - 6' Flex Whip <i>QS</i> GLR - Fast Blow Fusing <i>QS</i> DSP - Customer Supplied Battery/Driver/ Sensor GMF - Slow Blow Fusing MOD - Mod options available <i>Fixture Options pg. 5</i> | MOD - Mod options available <i>Controls pg. 6</i> | | |

¹When specifying SOURCE the first ____ is for specifying either 8 - 80CRI, 9 - 90CRI or B - BIOS. The ending ____ are for specifying output, example HO - High Output. When specifying BIOS use B and then specify color temperature, either 3500K or 4000K, and output, example B35HO - BIOS 3500K High Output. See output charts for more information. BIOS dynamic available, please contact factory for more information. ²If specifying QS, QS must be used in fixture options section of part number to qualify.


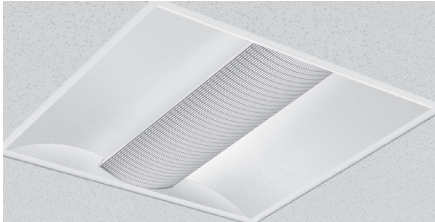
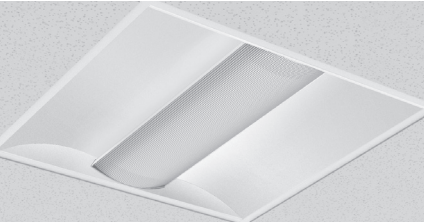
Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions.



Shielding

- Captive and hinged center lens
- Co-extruded acrylic lens with ribbed side channels evenly illuminates the side reflector giving the appearance of a fully lensed luminaire
- Highly reflective die-formed white painted reflector
- Wiring access available on top of housing

Ordering Code

| A | L | R |
|--|---|--|
| Satine Lens | Linear Slot | Round Perf |
|  |  |  |

Output

- Specify either 80 or 90 CRI
- Longer lead-time may apply for 90 CRI. Consult factory.
- 90 CRI = R9≥50
- Not all products qualify for DLC listing. For a complete listing of the ADEO products that qualify for DLC, please go to the DLC website.

Custom Output- Lumens OR Wattage

| | | |
|---------|--|--|
| CL_____ | Specify CRI, CCT and desired lumens (i.e. CL8351200) | Specify lumens between standard offering listed below. Lumens are specified per color temp |
| CW_____ | Specify CRI, CCT and desired wattage (i.e. CW94015) | Specify watts between standard offering listed below |

80 CRI

| | Color | Output | Watts | Shielding | | | | | |
|-------|-------|--------|-------|------------------|-------|------------------|------|-----------------|------|
| | | | | A Satine Lens | | L Linear Slot | | R Round Perf | |
| | | | | Lumens | LPW | Lumens | LPW | Lumens | LPW |
| 830LO | 3000K | Low | 19.6 | 2131 | 108.7 | 1266 | 64.6 | 1082 | 55.2 |
| 830MO | 3000K | Middle | 30.9 | 3332 | 107.8 | 1979 | 64.0 | 1692 | 54.8 |
| 830HO | 3000K | High | 41.7 | 4311 | 103.4 | 2561 | 61.4 | 2190 | 52.5 |
| 835LO | 3500K | Low | 19.6 | 2190 | 111.7 | 1301 | 66.4 | 1113 | 56.8 |
| 835MO | 3500K | Middle | 30.9 | 3424 | 110.8 | 2034 | 65.8 | 1739 | 56.3 |
| 835HO | 3500K | High | 41.7 | 4431 | 106.3 | 2632 | 63.1 | 2251 | 54.0 |
| 840LO | 4000K | Low | 19.6 | 2328 | 118.8 | 1383 | 70.6 | 1183 | 60.3 |
| 840MO | 4000K | Middle | 30.9 | 3635 | 117.6 | 2160 | 69.9 | 1845 | 59.7 |
| 840HO | 4000K | High | 41.7 | 4713 | 113.0 | 2800 | 67.1 | 2394 | 57.4 |

90 CRI

| | | | | | | | | | |
|-------|-------|--------|------|------|-------|------|------|------|------|
| 927LO | 2700K | Low | 19.6 | 1867 | 95.3 | 1109 | 56.6 | 948 | 48.4 |
| 927MO | 2700K | Middle | 30.9 | 2915 | 94.3 | 1732 | 56.0 | 1481 | 47.9 |
| 927HO | 2700K | High | 41.7 | 3780 | 90.6 | 2245 | 53.8 | 1920 | 46.0 |
| 930LO | 3000K | Low | 19.6 | 1963 | 100.2 | 1166 | 59.5 | 997 | 50.9 |
| 930MO | 3000K | Middle | 30.9 | 3069 | 99.3 | 1823 | 59.0 | 1559 | 50.5 |
| 930HO | 3000K | High | 41.7 | 3971 | 95.2 | 2359 | 56.6 | 2017 | 48.4 |
| 935LO | 3500K | Low | 19.6 | 1969 | 100.5 | 1170 | 59.7 | 1000 | 51.0 |
| 935MO | 3500K | Middle | 30.9 | 3079 | 99.6 | 1829 | 59.2 | 1564 | 50.6 |
| 935HO | 3500K | High | 41.7 | 3984 | 95.5 | 2366 | 56.8 | 2024 | 48.5 |
| 940LO | 4000K | Low | 19.6 | 2077 | 106.0 | 1234 | 62.9 | 1055 | 53.8 |
| 940MO | 4000K | Middle | 30.9 | 3243 | 105.0 | 1926 | 62.3 | 1647 | 53.3 |
| 940HO | 4000K | High | 41.7 | 4204 | 100.8 | 2497 | 59.9 | 2136 | 51.2 |



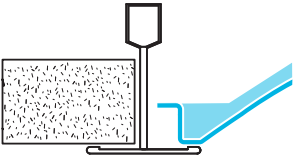
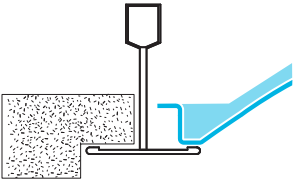
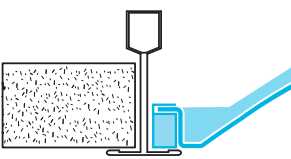
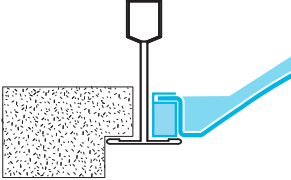
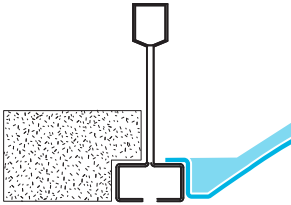
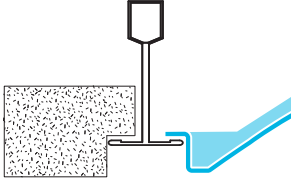
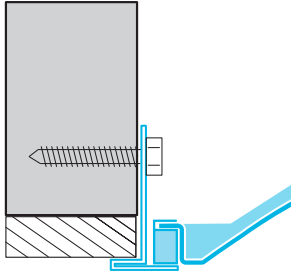
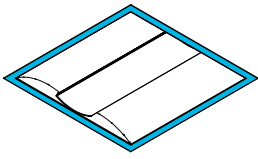
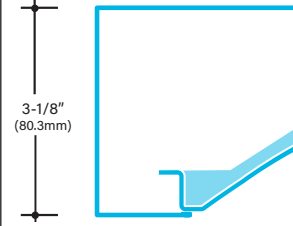
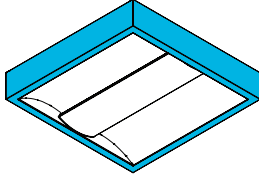
Direct Source: MOD Options

- Specify **MOD** in the part number for any of the below options
- All RGB_Source Options will require specific driver and control
- Consult factory for MOD specification details, pricing, and lead-time information

| MOD | | Required Driver | Required Control |
|-----|--------------------------|-----------------|------------------|
| | Color Changing RGB LED | EC1/EC4 | DMX |
| | Color Changing RGB-W LED | EC1/EC4 | DMX |
| | 2 Channel Tunable White | | |
| | Dynamic BIOS | | |

Mounting

- Designed to install into acoustical grid and inaccessible ceilings
- Grid retention clips integral to housing and require mechanical attachment
- Tie off fixture to structure with retention wires
- Maximum fixture weight is 15 lbs - Surface Mount Box adds 10 lbs
- Refer to installation instructions during installation at the job site
- Approved for dry/damp location unless otherwise noted

| G1 | G9 | GS | FL | S |
|--|--|---|---|---|
| 1" Grid Mount <i>Works with 15/16" grid ceiling types. See profile for fixture position in relation to ceiling grid and tile.</i> | 9/16" Grid Mount <i>Works with 9/16" grid ceiling type. For tegular tile installations, fixture position will not be flush to the bottom of the tile. See tegular tile profile image below.</i> | Screw Slot Mounting <i>Works with screw slot, bolt slot and 9/16" grid ceiling types. For 9/16" installations with tegular tile, fixture position will be flush to the bottom of the tile. See bottom profile image of 9/16" with tegular tile. Consult factory for detailed installation instructions.</i> | Flange Kit <i>A separate flange kit is supplied for installations into inaccessible or drywall applications. Flange kit ships from factory uninstalled separately from fixture. Consult factory for detailed installation instructions.</i> | Surface Mount <i>Utilize for hard lid ceiling applications. The 20 gauge steel frame easily secures to ceiling.</i> |
|  <p>Standard Tile</p>  <p>Tegular Tile</p> |  <p>Standard Tile</p>  <p>Tegular Tile</p> |  <p>Tegular Tile</p>  <p>Tegular Tile</p> |   |  <p>3-1/8" (80.3mm)</p>  |

Voltage

- Some ADEO 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 = PL2
- Driver Lifetime: 50,000 hours at 25°C ambient operating conditions
- For more Driver options, see Pinnacle Resource Guide
- Some ADEO configurations will not accommodate all driver options; consult with factory

| 0-10V Drivers | |
|-------------------|---|
| FSD | Factory Select Driver 1%, 0-10v |
| PL2 | Advance Xitanium 1%, 0-10v |
| PL4 | Advance Xitanium 347v 1%, 0-10v, requires 347v |
| OL2 | Osram Optotronic, 1%, 0-10v |
| OL4 | Osram Optotronic 347v, 1% 0-10v (requires 347v) |
| EE1 | eldoLED ECOdrive 1%, 0-10v Logarithmic |
| EE2 | eldoLED ECOdrive 1%, 0-10v Linear |
| ES1 | eldoLED SOLOdrive 0-10v, 0.1% Logarithmic |
| ES2 | eldoLED SOLOdrive 0-10v, 0% Linear |
| OL5 | Osram Optotronic 1%, 0-10v, AUX |
| PL5 | Advance Xitanium 1%, 0-10v, AUX |
| DALI Drivers | |
| EE3 | eldoLED ECOdrive .1%, DALI (logarithmic) |
| ES3 | eldoLED SOLOdrive .1%, DALI (logarithmic) |
| OD1 | Osram Optotronic 1%, DEXAL |
| OD2 | Osram Optotronic 1%, DALI 2 Channel |
| Lutron Drivers | |
| LH1 | Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1 |
| Alternate Drivers | |
| PS1 | Signify Advance Xitanium Step Dimming 50%/100% |
| PR1 | Philips Advance Xitanium SR, requires EASYS, VDO or VRF |
| OD1 | Osram Optotronic 1%, DEXAL |
| EH1 | ELV 120v only, 0-10v universal |

Drivers: MOD Options

- Specify **MOD** in the part number for any of the below options
- Consult factory for MOD specification details, pricing, and lead-time information

| | |
|------------|---------------------|
| MOD | Power Over Ethernet |
|------------|---------------------|

Circuiting

- Select fixture circuiting from options below
- Some ADEO configurations will not accommodate all circuiting options; consult with factory

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

Battery & Emergency

- Select battery or emergency options if required
- Battery duration is 90 minutes
- Test button is integral to fixture
- For more Battery options, see Pinnacle Resource Guide

| | |
|--------------|--|
| 0 | No Battery |
| FSB | Factory Select Battery (10w option) |
| FSBST | Factory Select Battery (10w, Self Testing) |
| FSG | Factory Select Automatic Load Control Relay (ALCR), UNV |
| GI | Emergency Transfer Switch (ETS) DR Emergency Control Device, UNV |
| GB | Bodine GTD, Generator Transfer Device, 120v or 277v |
| 1IC | Iota 10w Integral |
| 1ILL | Iota 10w Integral Lithium, Self Testing |
| 1IRH | Iota 20w Remote |
| 1P | Bodine 10w Integral |
| 1PRH | Bodine 20w Remote |
| 1PLL | Bodine 10w Integral Lithium, Self Testing |

For Approximate Battery Lumen Output

- Multiply battery wattage X fixture LPW shown on Lumen Table
- 10 (watts) x 92.3 (LPW) = 923 battery lumen output

Battery & Emergency Ordering Examples

- Single circuit, 10w integral battery Ordering Code: 1-1P
- Emergency circuit only, 10w integral battery Ordering Code: E-1P

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.

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AD22_LED_SPEC_APRIL2023



Finish

- Powder-coat white painted finish on exposed trim

W White

Finish: MOD Options

- Specify **MOD** in the part number for any of the below options
- Consult factory for MOD specification details, pricing, and lead-time information

| | |
|------------|-----------------|
| MOD | Wood Grain |
| | Metallic Silver |
| | Textured Black |
| | Bronze |
| | Graphite |
| | Custom Color |
| | Natural |

Fixture Options

- Additional options to enhance the fixture and finish of the product

| | |
|------------|---|
| QS | Quick Ship |
| TW | Through-Wiring |
| CP | Chicago Plenum |
| AM | Antimicrobial Paint |
| AR | Air Return |
| FW6 | Flex Whip 6' |
| GLR | Internal Fast Blow Fuse |
| DSP | Customer Supplied Battery/Driver/Sensor |
| GMF | Internal Slow Blow Fuse |

Fixture Options: MOD Options

- Specify **MOD** in the part number for any of the below options
- Consult factory for MOD specification details, pricing, and lead-time information

| | |
|------------|----------------|
| MOD | Remote Driver |
| | End Power Feed |

Quick Ship

| | CRI, CCT & Output | Mounting | Voltage | Driver | Circuiting | Battery | Finish | Options |
|----------|---|---|--|---|---|---|----------------|--|
| 10-Day | | | | | | | | |
| A | 80 CRI, All color temperatures, all lumen packages <i>See pg 4&5</i> | G1 1" Grid G9 9/16" Grid GS Screw Slot | U Universal 1 120V 2 277V | PL2 Advance Xitanium 0-10v, 1% OL2 Osram 0-10v, 1% FSD Factory Select Driver (1%, 0-10v) | 1 Single E Emergency N Night Light | 1P Bodine 10w Integral 1IC Iota 10w Integral | W White | CP Chicago Plenum FW6 Flex Whip 6' 18-gauge GLR Internal Fast-Blow Fuse |

Consult Factory for projects that are larger than 200 units.



Controls

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

Controls: MOD Options

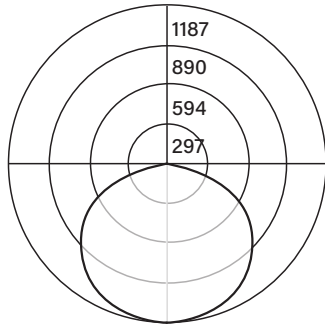
- Specify **MOD** in the part number for any of the below options
- Control** Options may require specific driver. Refer to the chart below
- Consult factory for MOD specification details, pricing, and lead-time information

| MOD | Encelium Sensilum | Rwquired Driver |
|-----|-----------------------------|-----------------|
| | Enlighted (Wireless) - ENLI | OD1, OL5 |
| | Enlighted (Wireless) - ENLC | Any 0-10v |

Photometrics

Satine Lens

| | |
|-----------|-------------|
| Test # | ITL88941 |
| Catalog # | AD22A-840MO |
| Lumens | 3635 lm |
| Watts | 30.9 W |
| Efficacy | 118 LPW |



Candela Distribution

| Vert Angle | Horizontal Angle | | | | |
|------------|------------------|------|------|------|------|
| | 0 | 22.5 | 45 | 67.5 | 90 |
| 0 | 1187 | 1187 | 1187 | 1187 | 1187 |
| 5 | 1183 | 1184 | 1184 | 1184 | 1185 |
| 10 | 1170 | 1170 | 1169 | 1170 | 1171 |
| 15 | 1146 | 1144 | 1145 | 1149 | 1150 |
| 20 | 1109 | 1108 | 1111 | 1117 | 1118 |
| 25 | 1061 | 1062 | 1068 | 1076 | 1079 |
| 30 | 1006 | 1007 | 1016 | 1027 | 1031 |
| 35 | 941 | 945 | 956 | 971 | 975 |
| 40 | 868 | 874 | 890 | 908 | 914 |
| 45 | 791 | 798 | 817 | 837 | 844 |
| 50 | 706 | 716 | 740 | 762 | 770 |
| 55 | 618 | 630 | 656 | 681 | 689 |
| 60 | 525 | 540 | 567 | 597 | 606 |
| 65 | 429 | 447 | 479 | 509 | 522 |
| 70 | 332 | 351 | 385 | 422 | 434 |
| 75 | 234 | 257 | 296 | 334 | 351 |
| 80 | 144 | 165 | 206 | 237 | 245 |
| 85 | 65 | 80 | 101 | 118 | 125 |
| 90 | 0 | 0 | 0 | 0 | 0 |

Luminance Data (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|------------------|---------------|----------------|----------------|
| 45 | 3266 | 3373 | 3485 |
| 55 | 3146 | 3339 | 3507 |
| 65 | 2964 | 3309 | 3606 |
| 75 | 2639 | 3339 | 3959 |
| 85 | 2177 | 3383 | 4187 |

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

Applications & Certificates

Construction: Formed 22 gauge cold rolled steel housing. Highly reflective die-formed white painted reflector. Wiring access available on top of housing. Captive and hinged center lens swings open for room-side maintenance of lens, driver and LED boards.

Shielding: Co-extruded acrylic lens with ribbed side channels evenly illuminates the side reflector giving the appearance of a fully luminous aperture. Available with standard satine lens or optional clear lens with linear slot or round perf insert.

Mounting: Designed to install into acoustical grid and inaccessible ceilings. Specify G1, G9 or GS for acoustical grid ceiling. Specify FL for inaccessible ceilings. Grid retention clips integral to housing and require mechanical attachment. Tie off fixture to structure with retention wires. Maximum fixture weight is 15 lbs - Surface Mount box adds 10 lbs

LED: 25°C test environment. Lumen output/wattage has a margin of +/- 5%. 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. L70 = 107,300 hours and L90 = 32,000 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 & Output: Three lumen packages available. Low (LO), Medium (MO) and High (HO). Custom outputs are available. Specify custom lumens or watts between standard offering listed on Color Temperature & Output page. 80 CRI is available for 3000K, 3500K, and 4000K. 90 CRI is available for 2700K, 3000K, 3500K, and 4000K. 90 CRI = R9≥50.

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 ADEO configurations will not accommodate all voltage options; consult with factory.

Driver: Standard Driver Option is Advance Xitanium 0-10V, 1% = PL2. 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: -20°F/-30°C to 91°F/33°C. For more driver options, see Pinnacle Resource Guide. Some ADEO configurations will not accommodate all driver options.

Circuiting: Select from single circuit (1), Emergency circuit (E) or Night Light circuit (N). Some ADEO 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. For more Battery options, see Pinnacle Resource Guide.

Finish: Powder-coat white painted finish on exposed trim.

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

Labels: UL and cUL 1598 listed. LO, MO, and HO lumen packages are IC Rated, approved for dry/damp location unless otherwise noted.

Fixture Weight: 15 lbs maximum - Surface Mount box adds 10 lbs

Buy American Act Compliant

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