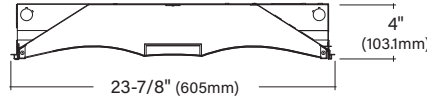




CONVERJ CJ24

2x4 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
- Pre-painted fixtures are to be used in dry locations only
- For damp location, must specify Paint After Fabrication (PAF) in the Options section of the luminaire specification
- Maximum fixture weight is 25 lbs - Surface Mount Box adds 10 lbs
- Room-Side Maintenance for LED system



Example Part #: CJ24-A-835HO-G1-U-FSD-1-0-W

CJ24



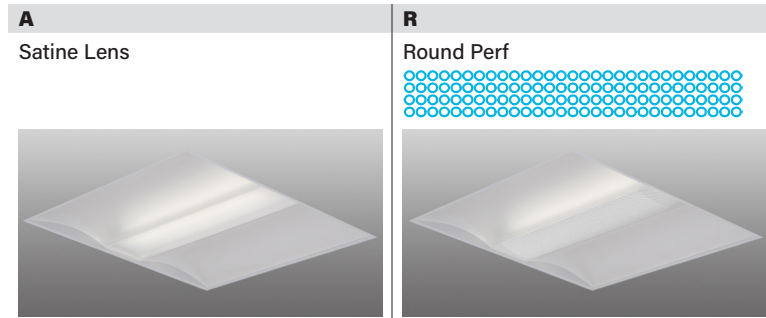
| --- | --- | --- | --- |
|---|---|---|---|
| SHIELDING | CRI, CCT & OUTPUT ^{1, 2} | MOUNTING | VOLTAGE ³ |
| A - Satine Lens R - Round Perf <i>Shielding pg. 2</i> | 27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K TW - 2CH Tunable White (2700-6500K, 90CRI) CL - Custom Lumens CW - Custom Watts <i>Lumen Output pg. 2</i> | G1 - 15/16" Grid G9 - 9/16" Grid GS - Screw Slot Grid FL - Flanged S - Surface Mount <i>Mounting pg. 3</i> | U - Universal (120 thru 277V) 1 - 120V 2 - 277V 3 - 347V <i>Voltage pg. 3</i> |
| --- | --- | --- | --- |
| DRIVER | CIRCUITING ⁴ | BATTERY & EMERGENCY | FINISH |
| FSD - Factory Select Driver (1%, 0-10v) PL2 - Advance Xitanium (1%, 0-10v) OL2 - eldoLED Optotronic (1%, 0-10v) OL4 - eldoLED Optotronic 347v (1%, 0-10v) EE1 - eldoLED ECODrive (1%, 0-10v) ES1 - eldoLED SOLOdrive (0.1%, 0-10v) LH1 - Lutron Hi-lume (1%, EcoSystem) PR1 - Advance Xitanium SR <i>Driver pg. 3</i> | 1 - Single Circuit E - Emergency (entire fixture) N - Night Light (entire fixture) <i>Circuiting pg. 4</i> | 0 - None FSB - Factory Select Battery FSG - Factory Select ALCR GI - Iota ETS DR GB - Bodine GTD 1ILL - Iota 10W 1PLL - Bodine 10W <i>Battery and Emergency pg. 4</i> | W - White <i>Finish pg. 4</i> |
| --- | --- | | |
| FIXTURE OPTIONS | CONTROLS | | |
| TW - Through-wiring CP - Chicago Plenum AM - Antimicrobial Paint DSP - Customer Supplied Battery/Driver/ Sensor FW6 - 6' Flex Whip GLR - Fast Blow Fusing GMF - Slow Blow Fusing BA - Buy American Act Compliant <i>Fixture Options pg. 5</i> | <i>Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.</i> | | |

¹When specifying SOURCE the first _ is for specifying either **8** - 80CRI, **9** - 90CRI. The ending _ are for specifying output, example 835HO - 80CRI, 3500K High Output. See output charts for more information. ²When specifying Tunable White, use **TW** and then specify output, example TWHO - Tunable White 90CRI, High Output 2700-6500K. See output charts for more information. Tunable White option requires driver option **FSD** which provides separate 0-10v control leads for Intensity and CCT. ³Tunable White (**TW**) option only available with Universal (**U**), 120V (**1**) or 277V (**2**) options. ⁴Consult factory for Emergency (**E**) or Night Light (**N**) options with Tunable White option.



Shielding

- Unique twin-arched wings and articulated center spine
- Utilizes a proprietary layered lens creating a fully luminous housing with optimal glare control
- Highly reflective white reflectors maintain uniform lens brightness
- Wiring access available on both side and top of housing



Output

- Specify either 80 or 90 CRI for White light LED
- Longer lead-time may apply for 90 CRI or Tunable White option. Consult factory
- Tunable White option requires driver option FSD which provides separate 0-10v control
- leads for Intensity and CCT.
- Tunable White lumen packages shown at 4000K CCT setpoint
- 90 CRI = R9≥50

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 |
| CLTW _____ | Specify desired lumens for Tunable White (i.e. CLTW3200) | Specify lumens between Tunable White offering listed below. Lumens are specified at 4000K CCT setpoint. |

80 CRI

| | Color | Output | Watts | Shielding | | | |
|---------------|-------|-----------|-------|------------------|-----------------|--------|-----|
| | | | | A Satine Lens | R Round Perf | | |
| | | | | Lumens | LPW | Lumens | LPW |
| 830LO | 3000K | Low | 22.1 | 3257 | 147 | 2566 | 116 |
| 830MO | | Middle | 29.9 | 4342 | 145 | 3420 | 114 |
| 830HO | | High | 37.5 | 5400 | 144 | 4254 | 113 |
| 830VHO | | Very High | 55.9 | 7708 | 138 | 6071 | 109 |
| 835LO | 3500K | Low | 22.1 | 3271 | 148 | 2577 | 117 |
| 835MO | | Middle | 29.9 | 4361 | 146 | 3435 | 115 |
| 835HO | | High | 37.5 | 5423 | 145 | 4271 | 114 |
| 835VHO | | Very High | 55.9 | 7740 | 138 | 6097 | 109 |
| 840LO | 4000K | Low | 22.1 | 3359 | 152 | 2646 | 120 |
| 840MO | | Middle | 29.9 | 4477 | 150 | 3527 | 118 |
| 840HO | | High | 37.5 | 5568 | 148 | 4386 | 117 |
| 840VHO | | Very High | 55.9 | 7948 | 142 | 6260 | 112 |

90 CRI

| | | | | | | | |
|---------------|-------|-----------|------|------|-----|------|-----|
| 927LO | 2700K | Low | 22.1 | 2701 | 122 | 2128 | 96 |
| 927MO | | Middle | 29.9 | 3601 | 120 | 2836 | 95 |
| 927HO | | High | 37.5 | 4478 | 119 | 3527 | 94 |
| 927VHO | | Very High | 55.9 | 6392 | 114 | 5035 | 90 |
| 930LO | 3000K | Low | 22.1 | 2767 | 125 | 2180 | 99 |
| 930MO | | Middle | 29.9 | 3689 | 123 | 2905 | 97 |
| 930HO | | High | 37.5 | 4587 | 122 | 3613 | 96 |
| 930VHO | | Very High | 55.9 | 6548 | 117 | 5157 | 92 |
| 935LO | 3500K | Low | 22.1 | 2888 | 131 | 2274 | 103 |
| 935MO | | Middle | 29.9 | 3849 | 129 | 3032 | 101 |
| 935HO | | High | 37.5 | 4787 | 128 | 3771 | 101 |
| 935VHO | | Very High | 55.9 | 6833 | 122 | 5382 | 96 |
| 940LO | 4000K | Low | 22.1 | 2964 | 134 | 2335 | 106 |
| 940MO | | Middle | 29.9 | 3952 | 132 | 3113 | 104 |
| 940HO | | High | 37.5 | 4914 | 131 | 3871 | 103 |
| 940VHO | | Very High | 55.9 | 7014 | 125 | 5525 | 99 |

2 CH Tunable White (2700-6500K, 90CRI)

| | | | | | | | |
|--------------|--------------|-----------|------|------|-------|------|------|
| TWLO | 2700 - 6500K | Low | 29.1 | 3200 | 110.1 | 2553 | 87.8 |
| TWMO | | Middle | 39.2 | 4300 | 109.8 | 3380 | 86.3 |
| TWHO | | High | 48.8 | 5300 | 108.7 | 4201 | 86.1 |
| TWVHO | | Very High | 82.7 | 7700 | 93.1 | 6099 | 73.8 |

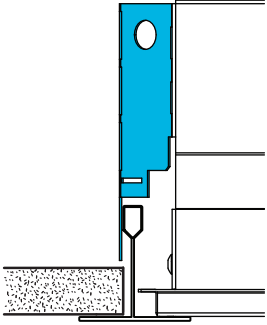
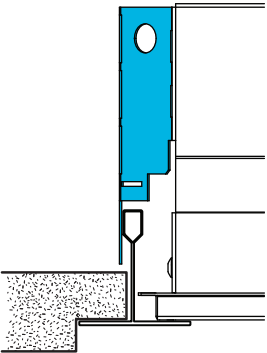
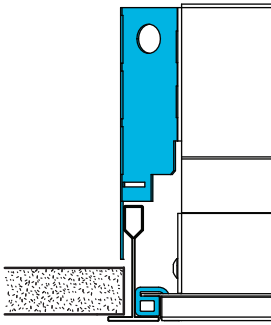
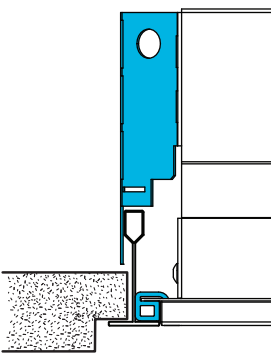
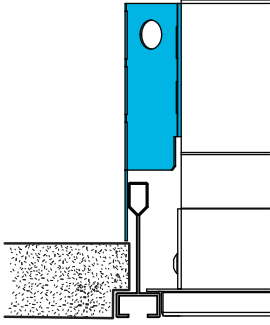
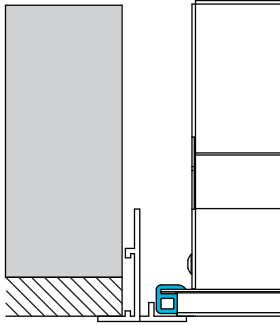
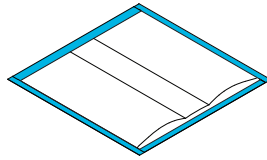
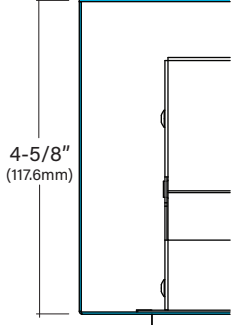
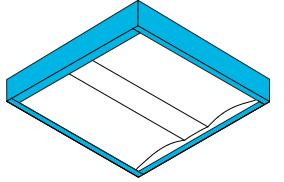
Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions.

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Mounting

- CONVERJ is offered with a universal flange for all grid types. See below for fixture placement in relation to the tile for each grid type
- Grid retention clips integral to housing and require mechanical attachment
- Tie off fixture to structure with retention wires
- Maximum fixture weight is 25 lbs - Surface Mount Box adds 10 lbs
- Refer to installation instructions during installation at the job site

| G1 | G9 | GS | FL | S |
|--|--|---|--|--|
| <p>1" Grid Mount Works with 15/16" grid ceiling types. See profile for fixture position in relation to ceiling grid and tile.</p>  <p>Standard Tile</p>  <p>Tegular Tile</p> | <p>9/16" Grid Mount 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.</p>  <p>Standard Tile</p>  <p>Tegular Tile</p> | <p>Screw Slot Mounting 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. Consult factory for detailed installation instructions.</p>  | <p>Flange Kit 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.</p>   | <p>Surface Mount Utilize for hard lid ceiling applications. The 20 gauge steel frame easily secures to ceiling. Surface Mount Box adds 10 lbs.</p>  <p>4-5/8" (117.6mm)</p>  |

Voltage

- Some CONVERJ configurations will not accommodate all voltage options; consult with factory
- 347 volt not available with Tunable White (TW) option

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



Driver

- Standard Driver Option = FSD 1%, 0-10v
- Driver Lifetime: 50,000 hours at 25°C ambient operating conditions
- For more Driver options, see Pinnacle Resource Guide
- Some CONVERJ 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 | eldoLED Optotronic, 1%, 0-10v |
| OL4 | eldoLED Optotronic 347v, 1% 0-10v (requires 347v) |
| EE1 | eldoLED ECOdrive 1%, 0-10v, Logarithmic |
| EE2 | eldoLED ECOdrive 1%, 0-10v, Linear |
| ES1 | eldoLED SOLOdrive 0.1%, 0-10v, Logarithmic |
| ES2 | eldoLED SOLOdrive 0.1%, 0-10v, Linear |
| OL5 | eldoLED Optotronic 1%, 0-10v, AUX, Dim to Off |
| PL5 | Advance Xitanium 1%, 0-10v, AUX, Dim to Off |

DALI Drivers

| | |
|------------|--|
| EE3 | eldoLED ECOdrive 1%, DALI 2, Logarithmic, DT6 |
| ES3 | eldoLED SOLOdrive 0.1%, DALI 2, Logarithmic, DT6 |
| OD1 | eldoLED Optotronic 1%, DEXAL, DALI 2, DT6, Self powered link |
| PR1 | Advance Xitanium SR, DALI 2, Self powered link |

Lutron Drivers

| | |
|------------|---|
| LH1 | Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1 |
|------------|---|

Alternate Drivers

| | |
|------------|--|
| PS1 | Advance Xitanium Step Dimming 50%/100% |
| EH1 | ERP 1%, Line Voltage and ELV (requires 120v) |

Circuiting

- Select fixture circuiting from options below
- Some CONVERJ configurations will not accommodate all circuiting options; consult with factory
- Consult factory for Emergency (E) or Night Light (N) circuit with Tunable White (TW) option

| | |
|----------|--------------------------|
| 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
- For Tunable White (TW) option, battery with illuminate 6500K LED unless otherwise specified.
- Test button is integral to fixture
- For more Battery options, see Pinnacle Resource Guide
- Consult factory for Emergency Control Devices with Tunable White (TW) option

| | |
|--------------|--|
| 0 | No Battery |
| FSB | Factory Select Battery (10w option) |
| FSBST | Factory Select Battery (10w, Self Testing) |
| FSG | Factory Select ALCR Emergency Control Device, UNV |
| GI | Iota ETS-DR, Emergency Control Device, UNV |
| GB | Bodine GTD, Emergency Control Device, 120v or 277v |
| 1ILL | Iota 10w Integral Lithium, Self Testing |
| 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 120 (LPW) = 1200 battery lumen output

Battery & Emergency Ordering Examples

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

Finish

- Pre-painted white polyester polymer finish, optional paint after fabrication (PAF) option available

| | |
|----------|-------|
| W | White |
|----------|-------|



Fixture Options

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

| | |
|------------|----------------------------|
| TW | Through-Wiring |
| CP | Chicago Plenum |
| AM | Antimicrobial Paint |
| FW6 | Flex Whip 6' |
| GLR | Internal Fast Blow Fuse |
| GMF | Internal Slow Blow Fuse |
| BA | Buy American Act Compliant |

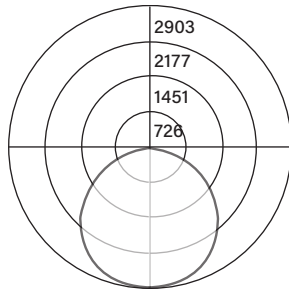
Controls

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

Photometrics

Satine Lens

| | |
|-----------|---------------|
| Test # | KPL2015-95 |
| Catalog # | CJ24-A-840VHO |
| Lumens | 7920 lm |
| Watts | 55.8W |
| Efficacy | 142LPW |



Candela Distribution

| Vert Angle | Horizontal Angle | | | | |
|---------------|------------------|------|------|------|------|
| | 0 | 22.5 | 45 | 67.5 | 90 |
| 0 | 2896 | 2896 | 2896 | 2896 | 2896 |
| 5 | 2884 | 2886 | 2878 | 2879 | 2881 |
| 10 | 2842 | 2843 | 2837 | 2838 | 2841 |
| 15 | 2773 | 2774 | 2777 | 2773 | 2774 |
| 20 | 2681 | 2681 | 2677 | 2681 | 2684 |
| 25 | 2563 | 2561 | 2560 | 2563 | 2569 |
| 30 | 2419 | 2420 | 2419 | 2425 | 2427 |
| 35 | 2253 | 2256 | 2255 | 2263 | 2265 |
| 40 | 2079 | 2073 | 2069 | 2078 | 2086 |
| 45 | 1877 | 1870 | 1865 | 1875 | 1880 |
| 50 | 1627 | 1653 | 1642 | 1650 | 1652 |
| 55 | 1426 | 1417 | 1409 | 1410 | 1413 |
| 60 | 1185 | 1171 | 1160 | 1167 | 1176 |
| 65 | 930 | 921 | 916 | 925 | 932 |
| 70 | 681 | 674 | 683 | 700 | 710 |
| 75 | 416 | 438 | 474 | 500 | 512 |
| 80 | 238 | 258 | 296 | 325 | 342 |
| 85 | 92 | 117 | 142 | 150 | 153 |
| 90 | 0 | 0 | 0 | 0 | 0 |

Luminance Data (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 4073 | 4046 | 4080 |
| 55 | 3814 | 3768 | 3780 |
| 65 | 3378 | 3324 | 3383 |
| 75 | 2465 | 2808 | 3033 |
| 85 | 1612 | 2493 | 2693 |



Approvals & Certifications

Construction: Pre-painted formed 22 gauge cold rolled steel housing. Highly reflective die-formed reflectors maintain uniform lens brightness. Wiring access on both sides and top of housing. Housing designed to maintain optimal temperature of LED diodes and driver. Captive door frame swings open for room-side maintenance of lens, driver and LED boards.

Shielding: Single piece co-extruded unique twin-arched wings and articulated center spine. Utilizes a proprietary layered lens creating a fully luminous housing with optimal glare control. Available with standard satine lens.

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 25 lbs - Surface Mount Box adds 10 lbs.

White 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 = 134,700 hours and L90 = 40,100 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.

Tunable White LED: 2 channel solution with 2700K and 6500K LED, 90CRI only, R9 >50. Lumen packages available shown at 4000K CCT setpoint, lumen output varies based on CCT. Use multipliers for other CCT; 2700K = .91 3000K = .93 3500K = .97 4000K = 1.0 5000K = 1.044 6500K = 1.078.

Color & Lumen Output: Four lumen packages available. Low (LO), Medium (MO), 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. 90 CRI = R9≥50.

Voltage: Universal (U), 120 volt (1), 277 volt (2) and 347 volt (3) options available. Must specify OL4 in Driver section when 347 volt (3) is selected. Some CONVERJ 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 95°F/35°C. For more driver options, see Pinnacle Resource Guide. Some CONVERJ configurations will not accommodate all driver options.

Circuiting: Select from single circuit (1), Emergency circuit (E) or Night Light circuit (N). Some CONVERJ 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

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: 25 lbs maximum - Surface Mount Box 10 lbs.

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