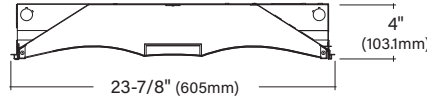




CONVERJ CJ24

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
- Room-Side Maintenance for LED system



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

CJ24



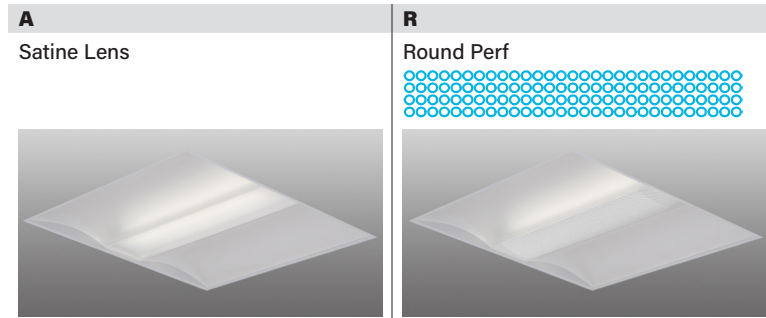
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SHIELDING	CRI, CCT & OUTPUT ^{1, 2}	MOUNTING	VOLTAGE ³
A - Satine Lens R - Round Perf <i>Shielding pg. 2</i>	27 _ - 2700K 30 _ - 3000K 35 _ - 3500K 40 _ - 4000K TW _ - 2CH Tunable White (2700-6500K, 90CRI) CL _ - Custom Lumens CW _ - Custom Watts <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>
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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. 4</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>
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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 <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

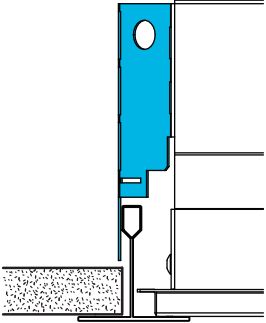
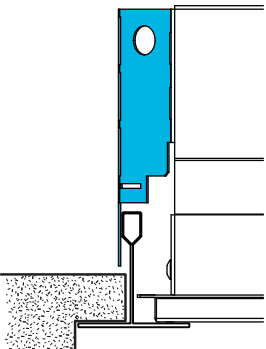
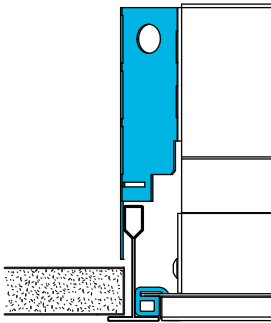
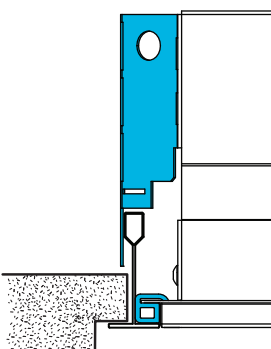
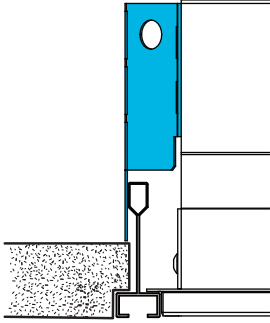
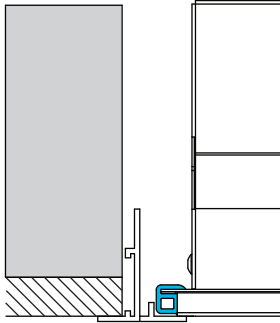
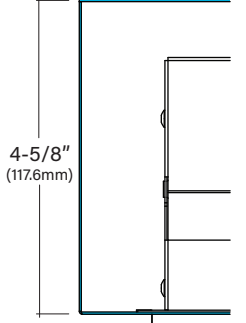
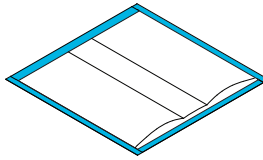
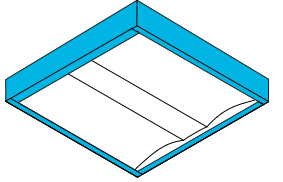
Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions.

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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
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. 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. Surface Mount Box adds 10 lbs.</i>
 <p>Standard Tile</p>  <p>Tegular Tile</p>	 <p>Standard Tile</p>  <p>Tegular Tile</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 option
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
PL5	Advance Xitanium 1%, 0-10v, AUX, Dim to Off
OL5	eldoLED Optotronic 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
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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

W	White
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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

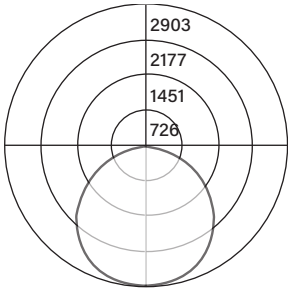
Controls

- 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.

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. TM-21-21 Lifetime Rating L70 = >54,000 hours, L90 = >54,000 hours. MacAdam 3-Step Ellipses. 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: Not all lumen packages available. 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 PL4 or 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 Factory Select Driver 0-10V, 1% = FSD. 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 112°F/45°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.