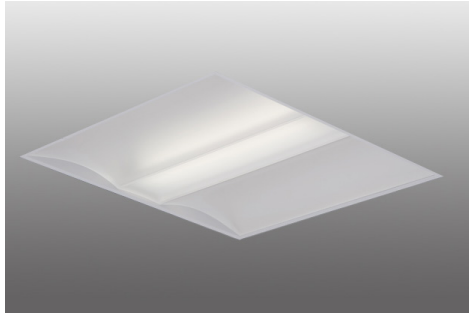
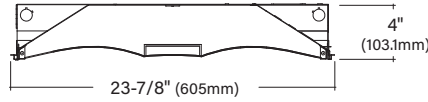




CONVERJ CJ22

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
- Room-Side Maintenance for LED system



Example Part #: CJ22-A-835HO-G1-U-FSD-1-0-W

CJ22	SHIELDING	CRI, CCT & OUTPUT	MOUNTING	VOLTAGE	DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH	FIXTURE OPTIONS	CONTROLS
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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>

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>

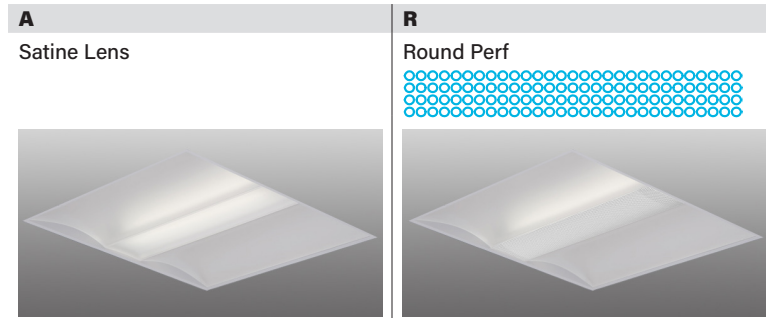
FIXTURE OPTIONS	CONTROLS
TW - Through-wiring CP - Chicago Plenum AM - Antimicrobial Paint DSP - Customer Supplied Battery/Driver/Sensor FW6 - 6' Flex Whip GLR - Fast Blow Fusing GMF - Slow Blow Fusing <i>Fixture Options pg. 5</i>	<i>Pinnacle is able to accommodate different control solutions from different 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)	<i>Specify lumens between standard offering listed below. Lumens are specified per color temp</i>
CW _____	Specify CRI, CCT and desired wattage (i.e. CW94015)	<i>Specify watts between standard offering listed below</i>
CLTW _____	Specify desired lumens for Tunable White (i.e. CLTW3200)	<i>Specify lumens between Tunable White offering listed below. Lumens are specified at 4000K CCT setpoint.</i>

80 CRI

	Color	Output	Watts	Shielding			
				A Satine Lens		R Round Perf	
				Lumens	LPW	Lumens	LPW
830LO	3000K	Low	17.0	2257	132	1778	104
830MO		Middle	28.5	3570	125	2812	99
830HO		High	38.2	4668	122	3677	96
835LO	3500K	Low	17.0	2267	133	1786	105
835MO		Middle	28.5	3585	126	2824	99
835HO		High	38.2	4687	123	3692	97
840LO	4000K	Low	17.0	2328	137	1834	108
840MO		Middle	28.5	3681	129	2899	102
840HO		High	38.2	4813	126	3791	99

90 CRI

927LO	2700K	Low	17.0	1872	110	1475	87
927MO		Middle	28.5	2960	104	2332	82
927HO		High	38.2	3871	101	3049	80
930LO	3000K	Low	17.0	1918	112	1511	89
930MO		Middle	28.5	3032	107	2388	84
930HO		High	38.2	3965	104	3123	82
935LO	3500K	Low	17.0	2001	117	1576	92
935MO		Middle	28.5	3164	111	2493	88
935HO		High	38.2	4138	108	3259	85
940LO	4000K	Low	17.0	2054	121	1618	95
940MO		Middle	28.5	3248	114	2559	90
940HO		High	38.2	4248	111	3346	88

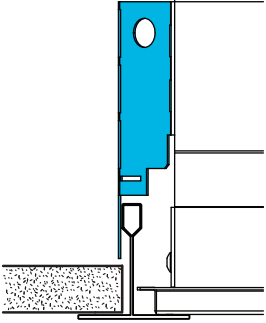
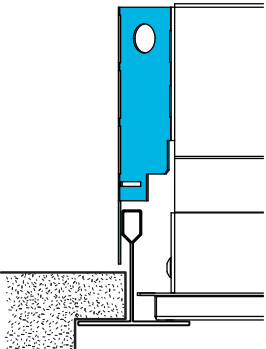
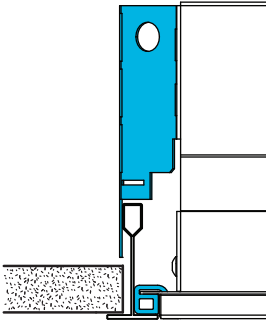
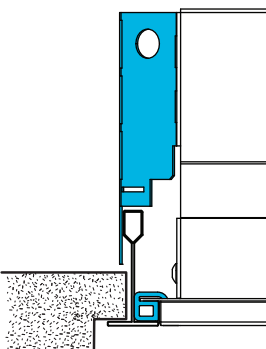
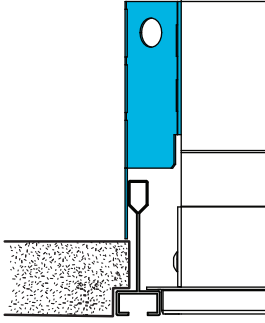
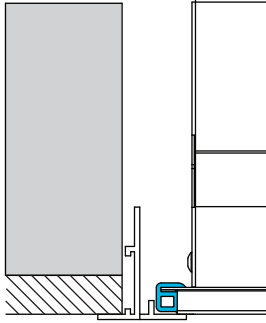
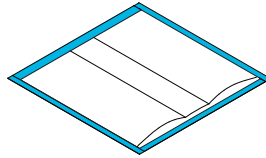
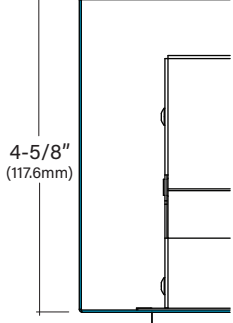
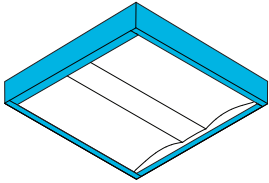
2 CH Tunable White (2700-6500K, 90CRI)

TWLO	2700 - 6500K	Low	24.1	2300	95.2	1817	75.2
TWMO		Middle	41.8	3600	86.2	2844	68.1
TWHO		High	45.2	4600	101.7	3633	80.3



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 15 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>
 Standard Tile  Tegular Tile	 Standard Tile  Tegular Tile		 	 4-5/8" (117.6mm) 

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%, 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, optional paint after fabrication (PAF) option available

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

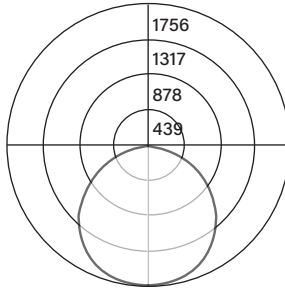
Controls

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

Photometrics

Satine Lens

Test #	KPL2015-92
Catalog #	CJ22-A-840HO
Lumens	4814
Watts	38.6
Efficacy	125



Candela Distribution

Vert Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1755	1755	1755	1755	1755
5	1749	1749	1747	1745	1743
10	1722	1722	1723	1723	1722
15	1677	1680	1683	1687	1687
20	1616	1621	1629	1637	1641
25	1541	1546	1559	1572	1579
30	1448	1453	1475	1494	1502
35	1344	1355	1378	1401	1410
40	1233	1242	1265	1293	1308
45	1107	1116	1141	1169	1184
50	973	983	1006	1035	1044
55	833	841	862	893	893
60	692	693	708	733	743
65	540	543	556	579	589
70	381	389	408	429	429
75	257	261	282	305	319
80	136	147	172	196	208
85	47	61	79	86	87
90	0	0	0	0	0

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5028	5183	5375
55	4664	4824	5000
65	4104	4225	4477
75	3194	3496	3955
85	1750	2923	3190



Approvals & Certifications

Construction: Formed 20 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: 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.

CRI, CCT & Output: Not all lumen packages available. 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 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 107°F/42°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.

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: 15 lbs maximum - Surface Mount Box adds 10 lbs.

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