Columbia LIGHTING

LJT22
## 2' × 2' LED TROFFER

FEATURES

- Full distribution LED troffer
- Direct replacement of fluorescent 2x2
- Wet location option available
- Long-life, 60,000 hour LEDs at L80 reduce life cycle maintenance costs
- Four LED color choices and 80 CRI
- Many shielding choices
- Two door frame choices
- Metal to metal light leak protection on all four sides of shielding frame
- Fixed output, step dimming (high/low/off), 0-10V dimming, 0-10V dimming-dim to off drivers available
- Hinged optical system allows easy access to LED modules and electrical from below the ceiling
- UL Sanitation certified per NSF standards
- All models standard with IC rating

SERVICE PROGRAMS

QS10
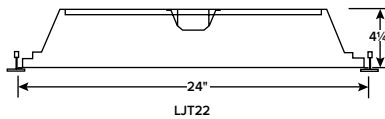
Typical Dimensions and Weights

Sizes	(A) Length Inches (mm)	(B) Width Inches (mm)	(C) Height Inches (mm)	Weight lbs (kg)
2x2	24 (610)	24 (610)	4.5 (114)	10 (4.5)

LJT22 — 24" — 4¼"

SPECIFICATIONS

CONSTRUCTION
- Luminaire housing, end caps, and reflectors are die-formed code-gauge cold-rolled steel
- Optical system hinges from either side for easy access to LED module and electrical components
- Mechanical light trap prevents light leaks

FINISH
- All metal parts processed with a multi-stage phosphate bonding treatment and finished with a high reflectance baked white enamel

SHIELDING
- Lens is high transmission pattern #12 acrylic (A12) for light diffusion without compromise to light output
- Other shielding may be specified
- If desired shielding media is not shown in ordering guide, contact your local representative

INSTALLATION
- An access plate is furnished with each recessed fixture for fast wiring connections without the necessity to open the fixture or wireway

CEILING COMPATIBILITY
- Designed for recessed installation in standard inverted tee grid ceilings (G)
- Also available for recessed installation in hard ceilings (G with FK accessory), surface mount at ceiling plane (SM), or cable mount suspension below ceiling plane (CM)
- For compatibility with specific ceilings contact your representative

CERTIFICATIONS
- All luminaires are built to UL 1598 standards, and bear appropriate CSA labels
- UL Sanitation Certified per NSF Standards
- Damp location labeling standard, wet location labeling is optional
- CSA certified to UL 924 standards with battery pack or DTS (Dimming Bypass Module) options
- Adheres to LM79, LM80 and TM21 industry standards
- IC rating is standard on all models
- DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at www.designlights.org

CERTIFICATIONS (CONTINUED)
- The DTS, Dimming Bypass Module, is for emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. See wiring diagram.
- Product configurations not including battery packs or controls meet federal procurement law requirements under the Trade Agreements Act (FAR 52.225-11) See Buy America(n) Solutions

WARRANTY
- 5 year warranty

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Current

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2' × 2' LED TROFFER

Gray Shading = Service Program **Limit of 250 Luminaries**   **QS**10

ORDERING GUIDE

Example: LJT22-35MLG-FSA12-EU

LJT	22	—
Model	**Size**	
LJT LED Lensed Troffer	**22** 2'x2'	

Color Temp		Lumen Output		Ceiling Type	
30	3000K	**VW**	Very Low Watt	**G**	Grid [1]
35	3500K	**MW**	Medium Low Watt	**SM**	Surface Mount
40	4000K	**LW**	Low Watt	**CM**	Cable Mount
50	5000K	**ML**	Medium Lumen		
		HL	High Lumen		
		VL	Very High Lumen		
		XL	Extra High Lumen		
		UL	Ultra High Lumen		
		See Product Availability Table Below			

Door		Shielding	
FS	White Flush Steel	**A12**	Pattern 12 Acrylic Lens
FA	White Flush Aluminum	**A12125**	Pattern 12 Acrylic Lens, 0.125" Nominal
RA	Regressed Aluminum	**A12F**	Pattern 12 Frosted Acrylic Lens
		A12125F	Pattern 12 Frosted Acrylic Lens, 0.125" Nominal
		A19	Pattern 19 Acrylic Lens, 0.156" Nominal
		A19F	Pattern 19 Frosted Acrylic Lens 0.156"
		CP	Clear Polycarbonate
		SFA	Smooth Frosted Acrylic

Driver		Voltage		—
E	Fixed Output	**U**	120–277V	
ED	0–10V Dimming	**347**	347V	
ED1	0–10V 1% Dimming			
EDD	0-10V Dimming, Dim to Off			
ESD	Step Dimming [2, 3]			
LUTH	Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology [2, 3]			

Options	
ELL14	Emergency Battery Pack (CEC Title 20 compliant) Installed [3, 4, 5, 6, 7]
C388	3-wire Flex
C488	4-wire Flex
C588	5-wire Flex
C688	6-wire Flex
TB4	T-Bar Clips
GLR	Fast Blow Fuse
GTD	Generator Transfer Device [8]
DTS	Dimming Bypass Module [3, 5, 9]
G1	Single Gasketing (Door to Housing)
G2	Double Gasketing (G1 and Lens to Door)
G3	Triple Gasketing (G2 and Housing to Ceiling)
WL	Wet Location (Select G2 or G3 Gasketing) [10]
EOR	End of Row (SM and CM only. Provides end wiring access for continuous row mounting.)
INT	Intermediate (SM and CM only. Provides ends with wiring access for continuous row mounting.)
CP	Chicago Plenum
PAF	Paint After Fabrication

ACCESSORY ORDERING GUIDE

Accessories	
☐ **FK22**	2' × 2' Single Flange Kit (Shipped separately)
☐ **CM48YSC3F-KIT**	48" Cable Mount Kit for CM ceiling type, 3 Wire Feed Cord

Notes:

1. For drywall, order G with flange kit accessory
2. Not available in all lumen packages, refer to Driver Availability table.
3. Not available in 347V
4. To determine lumen output in emergency mode, multiply the battery pack wattage by the fixture lumens per watt (LPW)
5. For compatibility with Dual-Lite Litegear inverters, contact lighting representative
6. Not available with Surface or Cable Mount
7. UL lumen package not available with thru-wire when ELL14 is ordered.
8. Only available with E, Fixed Output driver option
9. For emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. See wiring diagram.
10. Only available with FA door and Grid ceiling mount.

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PRODUCT EXCEPTIONS & DETAILS

Driver options listed below are available for the outputs as shown.

DRIVER AVAILABILITY TABLE								
	VW	MW	LW	ML	HL	VL	XL	UL
E	x	x	x	x	x	x	x	x
ED	x	x	x	x	x	x	x	x
ED1	x	x	x	x	x	x	x	x
EDD	x	x	x	x	x	x	x	x
ESD		x	x	x	x	x	x	x
LUTH	x	x	x	x	x			

DELIVERED LUMENS

| Product Availability			
Lumen Package	Lumens	Input Watts	LPW
LJT22-50VWG-FSA12-EU	1572	13	120
LJT22-40VWG-FSA12-EU	1443	13	110
LJT22-35VWG-FSA12-EU	1421	13	108
LJT22-30VWG-FSA12-EU	1380	13	105
LJT22-50MWG-FSA12-EU	2130	18	117
LJT22-40MWG-FSA12-EU	1956	18	107
LJT22-35MWG-FSA12-EU	1926	18	106
LJT22-30MWG-FSA12-EU	1870	18	103
LJT22-50LWG-FSA12-EU	2741	24	116
LJT22-40LWG-FSA12-EU	2517	24	106
LJT22-35LWG-FSA12-EU	2479	24	105
LJT22-30LWG-FSA12-EU	2407	24	102
LJT22-50MLG-FSA12-EU	3722	31	119
LJT22-40MLG-FSA12-EU	3419	31	109
LJT22-35MLG-FSA12-EU	3365	31	108
LJT22-30MLG-FSA12-EU	3267	31	104
LJT22-50HLG-FSA12-EU	4074	33	125
LJT22-40HLG-FSA12-EU	3743	33	114
LJT22-35HLG-FSA12-EU	3684	33	113
LJT22-30HLG-FSA12-EU	3577	33	109
LJT22-50VLG-FSA12-EU	4718	42	113
LJT22-40VLG-FSA12-EU	4334	42	104
LJT22-35VLG-FSA12-EU	4265	42	103
LJT22-30VLG-FSA12-EU	4142	42	100
LJT22-30XLG-FSA12-EU	4684	40	119
LJT22-35XLG-FSA12-EU	4824	40	122
LJT22-40XLG-FSA12-EU	4899	40	124
LJT22-50XLG-FSA12-EU	5334	40	135
LJT22-30ULG-FSA12-EU	6212	53	117
LJT22-35ULG-FSA12-EU	6398	53	121
LJT22-40ULG-FSA12-EU	6497	53	123
LJT22-50ULG-FSA12-EU	7075	53	133

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2' × 2' LED TROFFER

DIMENSIONS

24"
LJT22
4¼"

24"
3"
4½"
A   K
16½"
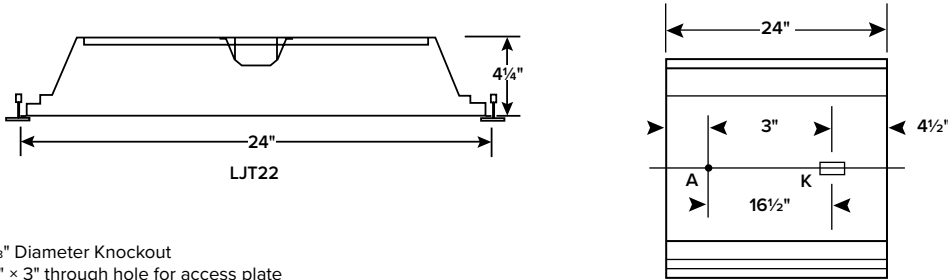
A - ⅞" Diameter Knockout
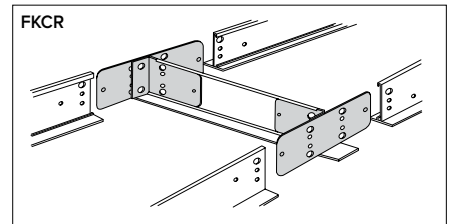**K** - 2" × 3" through hole for access plate

CEILING COMPATIBILITY

Type G

Side   End
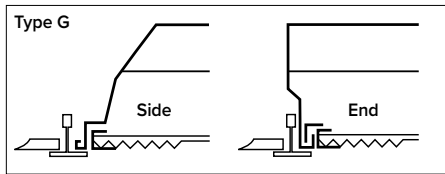
For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.

FK22 Flange Kit

Side   End
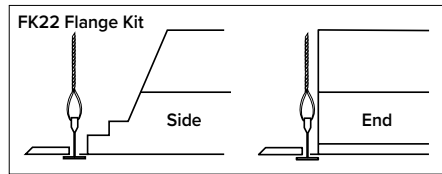
For hard ceiling applications order FK22 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.
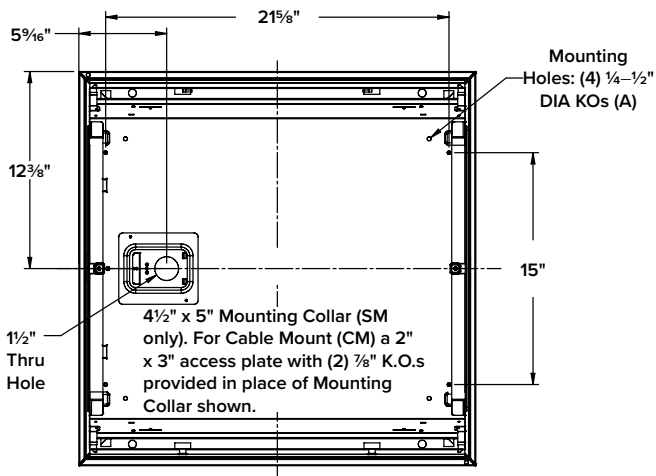
FKCR

For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK22 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK22 & (1) FKCR)

Row cut out dimensions using FK22 & FKCR adapters:
Width 24⅜", Length [24" × (# in row)] + ¾". Example: (24" × 2) + ⅜"= 48⅜"

Flange kit rough in dimensions for single unit only: 24⅜" × 24⅜"

SURFACE MOUNT OR CABLE MOUNT

21⅝"
5⁹⁄₁₆"
12⅜"
1½" Thru Hole

Mounting Holes: (4) ¼–½" DIA KOs (A)

15"

4½" x 5" Mounting Collar (SM only). For Cable Mount (CM) a 2" x 3" access plate with (2) ⅞" K.O.s provided in place of Mounting Collar shown.

NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

25"

Side View

4⅝"

End View
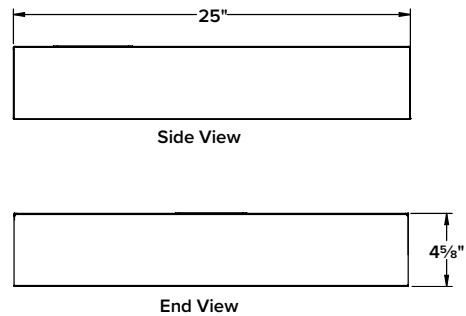
SURFACE MOUNT

Order SM ceiling type. Mounting collar required for surface mounting. (4) Mounting knock-outs, ¼" to ½" provided as shown, marked "A".

CABLE MOUNT

Order CM ceiling type. Access plate supplied for cable mounting or suspension. Use CM48Y2C3F-KIT 48" cable mount kit. Includes 3 wire feed cord. For other wiring needs, contact representative. Mounting knock-outs, ¼" to ½", provided as shown, marked "A".

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2' × 2' LED TROFFER

PHOTOMETRY

LUMINAIRE DATA

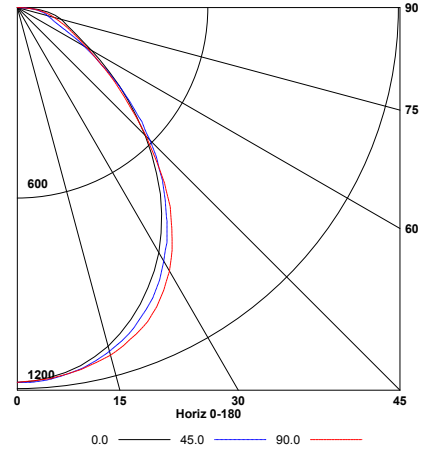|	
Luminaire	**LJT22-40LWG-FSA12-EU** **LJT LED, Lensed Troffer** **2' X 2' LED with A12 pattern acrylic prismed lens**
Ballast	**XI040C110V054BST1**
Ballast Factor	**1.00**
Lamp	**LED**
Fixture Lumens	**2518**
Watts	**23.70**
Mounting	**Recessed**
Shielding Angle	**0° = 90 90° = 90**
Spacing Criterion	**0° = 1.14 90° = 1.20**
Luminous Opening in feet	**Length:1.92** **Width: 1.92** **Height: 0.00**

ENERGY DATA

Total Luminaire Efficiency	**100.0%**
Total Lumens per Watt	**106**
ANSI/IESNA RP-1-2004 Compliance	**Noncompliant**
Comparative Yearly Lighting Energy Cost per 1000 Lumens	**$2.29 based on 3000 hrs. and $0.08 per KWH**

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt.
0-30	889	35.3	35.3
0-40	1401	55.6	55.6
0-60	2157	85.7	85.7
0-90	2518	100.0	100.0
0-180	2518	100.0	100.0

INDOOR CANDELA PLOT

LUMINAIRE DATA

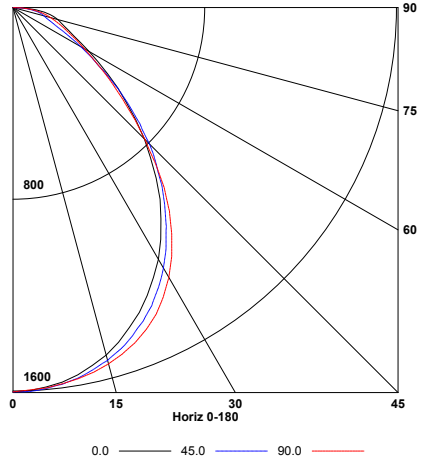|	
Luminaire	**LJT22-40MLG-FSA12-EU** **LJT LED, Lensed Troffer** **2' X 2' LED with A12 pattern acrylic prismed lens**
Ballast	**XI040C110V054BST1**
Ballast Factor	**1.00**
Lamp	**LED**
Fixture Lumens	**3419**
Watts	**31.30**
Mounting	**Recessed**
Shielding Angle	**0° = 90 90° = 90**
Spacing Criterion	**0° = 1.14 90° = 1.20**
Luminous Opening in feet	**Length:1.92** **Width: 1.92** **Height: 0.00**

ENERGY DATA

Total Luminaire Efficiency	**100.0%**
Total Lumens per Watt	**109**
ANSI/IESNA RP-1-2004 Compliance	**Noncompliant**
Comparative Yearly Lighting Energy Cost per 1000 Lumens	**$2.18 based on 3000 hrs. and $0.08 per KWH**

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt.
0-30	1209	35.3	35.3
0-40	1903	55.7	55.7
0-60	2930	85.7	85.7
0-90	3419	100.0	100.0
0-180	3419	100.0	100.0

INDOOR CANDELA PLOT

LUMINAIRE DATA

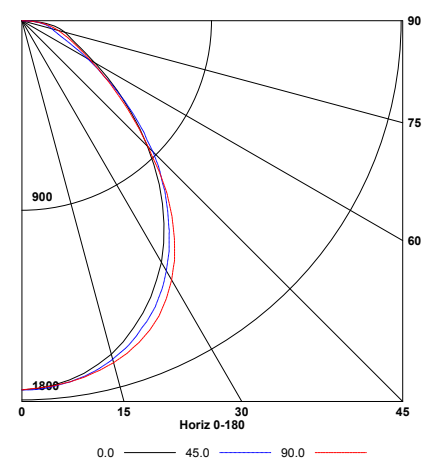|	
Luminaire	**LJT22-40HLG-FSA12-EU** **LJT LED, Lensed Troffer** **2' X 2' LED with A12 pattern acrylic prismed lens**
Ballast	**XI040C110V054BST1**
Ballast Factor	**1.00**
Lamp	**LED**
Fixture Lumens	**3743**
Watts	**32.70**
Mounting	**Recessed**
Shielding Angle	**0° = 90 90° = 90**
Spacing Criterion	**0° = 1.14 90° = 1.20**
Luminous Opening in feet	**Length:1.92** **Width: 1.92** **Height: 0.00**

ENERGY DATA

Total Luminaire Efficiency	**100.0%**
Total Lumens per Watt	**114**
ANSI/IESNA RP-1-2004 Compliance	**Noncompliant**
Comparative Yearly Lighting Energy Cost per 1000 Lumens	**$2.12 based on 3000 hrs. and $0.08 per KWH**

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt.
0-30	1321	35.3	35.3
0-40	2081	55.6	55.6
0-60	3206	85.7	85.7
0-90	3743	100.0	100.0
0-180	3743	100.0	100.0

INDOOR CANDELA PLOT

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DTS WIRING DIAGRAM (0–10V DIMMING DRIVER SHOWN)

WHITE/BLUE	Emergency Neutral
BLUE	Emergency Line
BLACK	Utility Line (Unswitched Hot)
WHITE	Utility Neutral
RED	Switched Hot
VIOLET	Dimming
PINK	Dimming

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