



FEATURES

- T8 optimized fluorescent lensed troffer
- Shallow design frees up plenum space
- Hemmed fixture edges reduce risk of injury during fixture handling and installation
- Integral T-bar clips quickly secure fixture to the grid
- Corner hinging for easy insertion and removal of shielding frame
- Housing embossments provide extra strength and rigidity
- Housing ends secured by unique corner interlock and screws
- Snap-in ballast cover requires no tools for wireway access
- Flush steel shielding frame, screw assembled for easy diffuser replacement
- Rotary action cam latches. Smooth operating for secure shielding retention
- Metal to metal light leak protection on all four sides of shielding frame
- Rotary lock lampholders for positive lamp contact
- Heat sink embossments behind ballasts for cooler operation, longer life
- Recessed, surface or cable mount
- UL listed 1598

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Housing is constructed of heavy gauge steel, die formed for extra rigidity. Four T-bar clips integral to housing. Housing features hemmed edges. Door frame hinges and latches from either side. Wireway accessible from below for upgrades or maintenance.

BALLASTS

Energy efficient, thermally protected, automatic resetting, Class "P", high power factor, sound rated A, unless otherwise specified. For a specific vendor and/or ballast, specify as option. CEE NEMA Premium compliant.

ELECTRICAL

Standard class "P," thermally protected, autoresetting HPF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6" through access location. NEC/CEC compliant ballast disconnect is standard.

FINISH

All metal parts processed with a phase phosphate bonding treatment. Grid units are pre-painted with high gloss baked white enamel, 86% reflective. Polyester powder coat paint after fabrication (PAF) option available, reflectance 90%.

SHIELDING

100% virgin acrylic prismatic 12, extruded and roll-embossed, diagonally oriented female prisms standard. Other shielding may be specified. If desired shielding media is not shown in ordering guide, contact your local Hubbell Lighting representative.

CEILING COMPATIBILITY

Designed for recessed installation in standard inverted tee grid ceilings (G), 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 Hubbell Lighting representative.

CERTIFICATION

All luminaires are built to UL 1598 standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard. Emergency-equipped fixtures labeled UL 924. UL Sanitation Approved.

ORDERING INFORMATION

EXAMPLE JT824-232G-FSA12-EU-F0735-C388-GLR

JT8	24	32					
MODEL	NO. OF LAMPS	CEILING TYPE	SHIELDING	VOLTAGE	BALLAST	OPTIONS	
JT8 Dedicated T8 Lensed Troffer	2 Two 3 Three	G Inverted T-Bar ¹ SM Surface Mount CM Cable Mount ²	A12 Pattern 12 Acrylic 0.100" Nominal (Std.) A12.125 Pattern 12 Acrylic 0.125" Nominal A19 Pattern 19 Acrylic 0.156" Male Prism	U 120V-277V 347 347V	E Electronic T8, Instant Start 3E 3-Lamp Electronic T8, Instant Start 24E (1) 2-Lamp & (1) 4-Lamp Electronic T8, Instant Start (For use with MS9) EP Electronic T8, Programmed Start 3EP 3-Lamp Electronic T8, Programmed Start	F830 30K 78+CRI T8 Lamps Installed F835 35K 78+CRI T8 Lamps Installed F841 41K 78+CRI T8 Lamps Installed GLR Fast Blow Fuse EL Emergency Battery Pack Installed PAF Paint After Fabrication MS9 Master/Satellite w/9' Harness C388 3/8" Flex with 3 No. 18 Wires C384 3/8" Flex with 3 No. 14 Wires C488 3/8" Flex with 4 No. 18 Wires C424 1/2" Flex with 4 No. 14 Wires M4R Specular Reflector G1 Single Gasket (Door to Housing) G2 Double Gasketing (G1 and Lens to Door) G3 Triple Gasketing (G2 and Housing to Ceiling) EOR End of Row (SM/CM only) ^{3,4} INT Intermediate (SM/CM only) ^{3,4} CP Chicago Plenum	
	SIZE 24 2' x 4'	DOOR STYLE FS Flush Steel FA Flush Aluminum	For more shielding, see Options and Accessories.				
	LAMP TYPE 32 4', T8: 32, 30, 28 or 25 Watt	For additional door styles contact your local Columbia Lighting representative.					
		ACCESSORIES (ORDER SEPARATELY) FK24 2' x 4' Flange Kit FKCR Flange Kit Continuous Row Connector CM48Y25C3F-KIT 48" Cable Mount Kit for 2' wide CM ceiling type, 3 Wire Feed Cord			For a specific ballast vendor, show as option.		

¹ For drywall order flange kit accessories separately.

² Order hanger accessories separately.

³ Provides ends with wiring access for continuous row mounting.

⁴ Contact Hubbell representative for continuous row, 3-lamp fixtures.

For a complete set of options, see Options and Accessories.

PHOTOMETRIC DATA

LUMINAIRE DATA

Luminaire	JT824-332G-FSA12 J Lensed Troffer 2' x 4' 3-Lamp with A-12 Pattern Acrylic Prismatic Lens
Ballast	B3321120RH-A
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Watts	84
Shielding Angle	N/A
Spacing Criterion	0° = 1.23 90° = 1.36

AVG. LUMINANCE (Candela/Sq. M.)

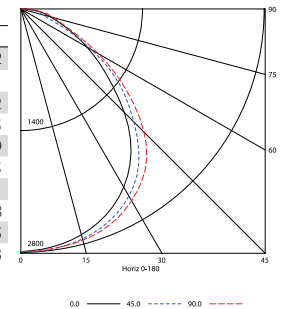
	0.0	22.5	45.0	67.5	90.0
0	4289	4289	4289	4289	4289
30	4196	4277	4409	4495	4518
40	3635	4032	4230	4421	4515
45	3655	3764	3994	4218	4355
50	3299	3469	3761	3940	4047
55	2993	3133	3443	3569	3647
60	2706	2694	2903	3078	3161
65	2420	2238	2231	2547	2631
70	2178	1908	1643	2223	2326
75	2101	1792	1501	2130	2368
80	2255	1822	1831	2229	2583
85	2344	2009	2079	2555	2696

COEFFICIENTS OF UTILIZATION (%)

RCR	RC	80				70				50				0
	RW	70	50	30	10	70	50	30	10	70	50	30	10	0
	1	93	89	85	82	90	87	84	81	83	81	79	77	72
	2	85	78	73	68	83	77	72	67	74	70	66	61	56
	3	78	69	63	58	76	68	62	57	65	60	56	52	48
	4	71	62	55	49	70	61	54	49	59	53	48	45	41
	5	66	55	48	43	64	54	48	42	53	47	42	39	35
	6	61	50	43	38	59	49	42	37	48	42	37	35	31
	7	57	45	38	33	55	45	38	33	44	37	33	31	27
	8	53	42	35	30	51	41	34	30	40	34	29	28	23
9	49	38	31	27	48	38	31	27	37	31	27	25	21	
10	46	35	29	24	45	35	29	24	34	28	24	23	19	

Test 13120 Test Date 11/07/2003

INDOOR CANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	Lamp	Fixt.
0-30	2232	25.7	30.3
0-40	3678	42.3	49.9
0-60	6216	71.4	84.4
0-90	7364	84.6	100.0
0-180	7364	84.6	100.0

ENERGY DATA

Total Luminaire Efficiency	84.6%
Luminaire Efficacy Rating (LER)	77
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.12 based on 3000 hrs. and \$0.08 per KWH

LUMINAIRE DATA

Luminaire	JT824-232G-FSA12 J Lensed Troffer 2' x 4' 2-Lamp with A-12 Pattern Acrylic Prismatic Lens
Ballast	B2321120RH-A
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Watts	60
Shielding Angle	N/A
Spacing Criterion	0° = 1.23 90° = 1.36

AVG. LUMINANCE (Candela/Sq. M.)

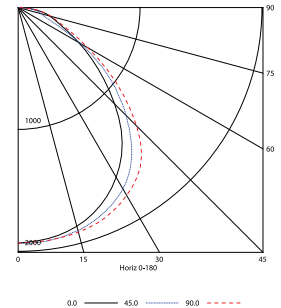
	0.0	22.5	45.0	67.5	90.0
0	2967	2967	2967	2967	2967
30	2850	2921	3045	3133	3155
40	2638	2733	2893	3073	3160
45	2430	2537	2719	2912	2986
50	2198	2308	2513	2669	2714
55	1973	2046	2220	2327	2394
60	1757	1754	1806	1923	2036
65	1577	1461	1377	1563	1752
70	1509	1302	1100	1361	1603
75	1596	1329	1169	1377	1650
80	1716	1450	1389	1512	1778
85	1780	1656	1568	1709	1850

COEFFICIENTS OF UTILIZATION (%)

	RC	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0	
RCR	1	94	91	87	84	92	89	85	83	85	82	80	74	
	2	87	80	74	70	84	78	73	69	75	71	67	62	
	3	79	71	64	59	77	69	63	58	67	62	57	54	
	4	73	63	56	50	71	62	55	50	60	54	49	46	
	5	67	57	49	44	66	56	49	44	54	48	43	40	
	6	62	51	44	39	61	50	43	38	49	43	38	36	
	7	58	47	39	34	56	46	39	34	45	38	34	32	
	8	54	43	36	31	53	42	35	31	41	35	30	28	
	9	50	39	32	28	49	39	32	28	38	32	27	26	
	10	47	36	30	25	46	36	29	25	35	29	25	23	

Test 13121 Test Date 1/8/03

INDOOR CANDELA PLOT



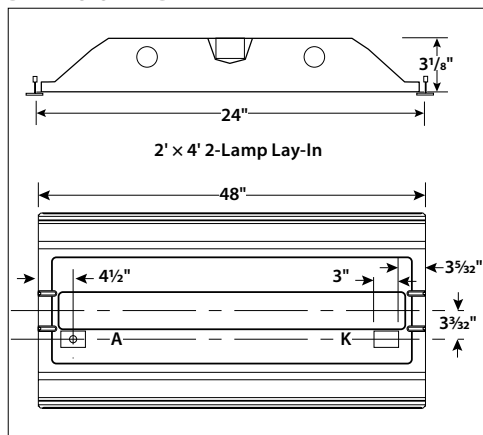
ZONAL LUMEN SUMMARY

Zone	Lumens	Lamp	Fixt.
0-30	1542	26.6	30.8
0-40	2538	43.8	50.7
0-60	4234	73.0	84.6
0-90	5004	86.3	100.0
0-180	5004	86.3	100.0

ENERGY DATA

Total Luminaire Efficiency	86.3%
Luminaire Efficacy Rating (LER)	73
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.29 based on 3000 hrs. and \$0.08 per KWH

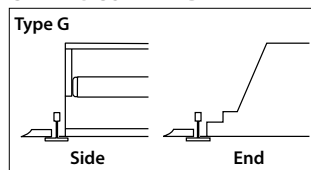
DIMENSIONAL DATA



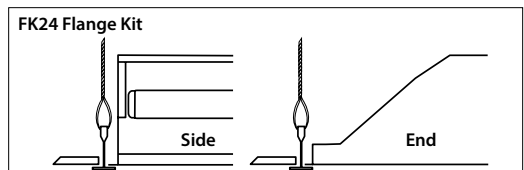
A: 7/8" Diameter knockout
K: 2" x 3" through hole for access plate.

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

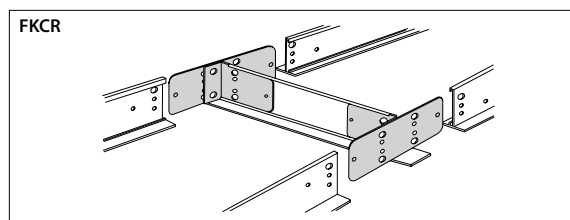
CEILING COMPATIBILITY



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



For hard ceiling applications order FK24 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.

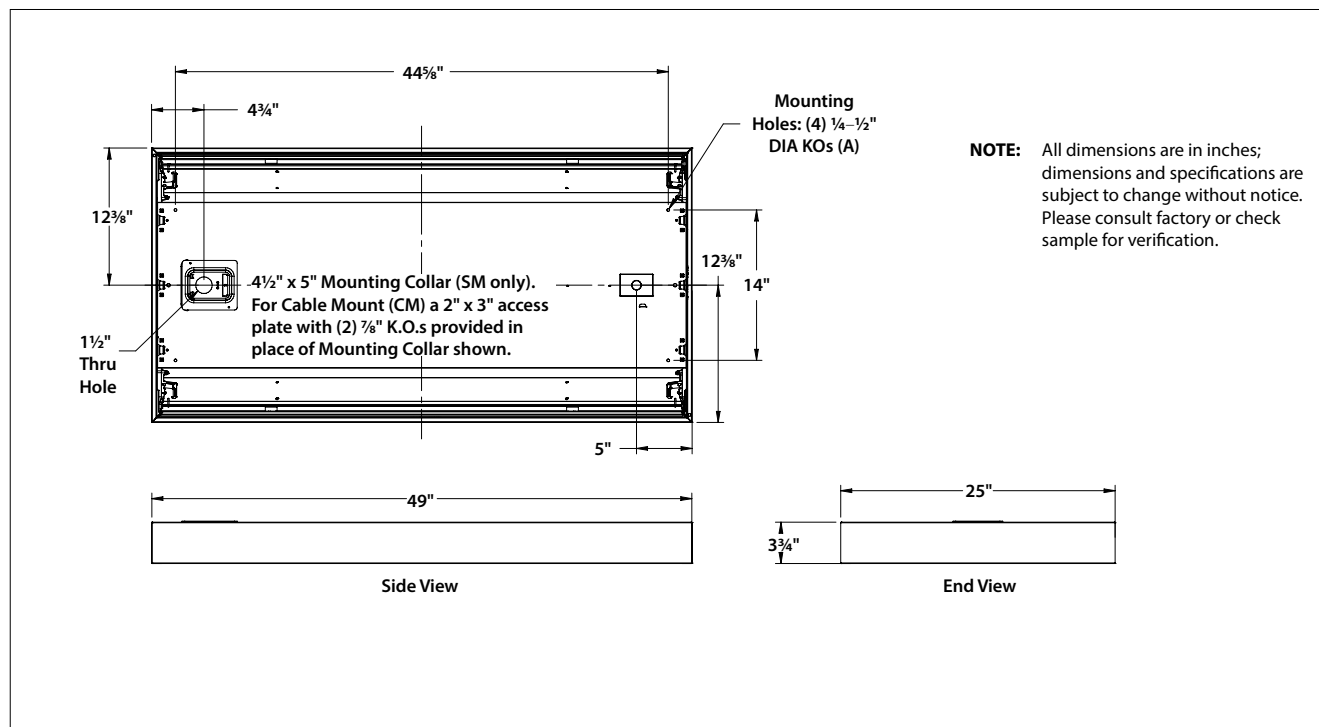


Row cut out dimensions using FK24 & FKCR adapters:
Width 24 3/8", Length [48" x (# in row)] + 3/8". Example: (48" x 2) + 3/8" = 96 3/8"

Flange kit rough in dimensions for single unit only: 24 3/8" x 48 3/8"

For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK24 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK24 & (1) FKCR)

DIMENSIONAL DATA - SURFACE MOUNT (SM) AND CABLE MOUNT (CM)



SURFACE MOUNT

Order SM ceiling type. Mounting collar required for surface mounting. (4) Mounting knock-outs, 1/4" to 1/2" provided as shown, marked "A".

CABLE MOUNT

Order CM ceiling type. Access plate supplied for cable mounting or suspension. Use CM48Y2SC3F-KIT 48" cable mount kit. Includes 3 wire feed cord. For other wiring needs, contact Hubbell Lighting representative. Mounting knock-outs, 1/4" to 1/2", provided as shown, marked "A".