

**FEATURES**

- Optical performance designed for T8 and T5 lamp technology
- 2½" minimum spacing from bottom of lamp to bottom of lens
- Mechanical light seal
- Mitered corners on door present a clean uninterrupted appearance
- Spring loaded latches optional
- Rolled fixture edges reduce risk of injury during fixture handling and installation
- Integral T-Bar clips quickly secure fixture to grid system without the need for time consuming loose parts
- Snap-on ballast covers can be removed with lamps installed
- Corner hinging for easy insertion and removal of door frame from either side
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches
- Housing ends secured by unique corner interlock and screws
- Available with exclusive wiHUBB technology preinstalled
  - Peer to peer, self-healing wireless mesh network
  - Integrated control system for 0-10VDC or step dimming, or On/Off

**PROJECT INFORMATION**

Project Name \_\_\_\_\_

Type \_\_\_\_\_

Catalog No. \_\_\_\_\_

Date \_\_\_\_\_

**HOUSING**

Heavy gauge steel. Die formed for extra rigidity. Grid housings are designed for installation in standard 1½" T-Bar ceilings. Integral T-Bar clips are located in the end of the housing. Flanged housings for hard ceilings feature overlap flange trim and wing hangers.

**BALLASTS**

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, magnetic or electronic ballasts. 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 parts are pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pretreatment for maximum adhesion and resistance.

**SHIELDING**

100% clear prismatic acrylic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

**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.

**ORDERING INFORMATION**

**EXAMPLE ST824-232G-FSA12-EU-F0735-C388**

ST8		24		-		-		-		-	
MODEL	NO. OF LAMPS	CEILING TYPE	SHIELDING	VOLTAGE	OPTIONS	SIZE	LAMP TYPE	DOOR STYLE	BALLAST		
ST8 Shallow Specification Troffer	2 Two 3 Three	G Inverted T-Bar (Std.) F Overlap Flange (4½" overall fixture height)	A12 Pattern 12 Acrylic 0.100" Nominal (Standard) A12.125 Pattern 12 Acrylic 0.125" Nominal A19 Pattern 19 Acrylic 0.15" Male Prism PC1 Silver Parabolic Louver ½" x ½" x ½" PC2 Silver Parabolic Louver 1½" x 1½" x 1" <small>For more shielding see Options and Accessories.</small>	U 120V-277V 347 347V	F0730 T8, 70CRI, 3000K Lamps, Furnished/Installed F0735 T8, 70CRI, 3500K Lamps, Furnished/Installed F0741 T8, 70CRI, 4100K Lamps, Furnished/Installed GLR Fast Blow Fuse EL Emergency Battery Pack PAF Paint After Fabrication SLL Spring Loaded Latches MS9 Master/Satellite Pair w/9' Harness C388 ¾" Flex with 3 No. 18 Wires C384 ¾" Flex with 3 No. 14 Wires C488 ¾" Flex with 4 No. 18 Wires C424 ½" Flex with 4 No. 14 Wires M4R Miro®-4 Aluminum Reflector SAR Low Iridescent Specular Alum Reflector NYC NYC Compliant NYCU NYC Compliant, Union Label WIH wiHUBB Enabled <sup>1</sup>	24 2' x 4'	28 4', T5: 28 Watt 32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 or 51 Watt	FS Flush Steel FA Flush Aluminum RA Regressed Aluminum PS Premium Steel	E Electronic T8, Instant Start ELW 2-Lamp Electronic T8, 0.77 Ballast Factor, Low Wattage, Instant Start 3E 3-Lamp Electronic T8, Instant Start 3ELW 3-Lamp Electronic T8, 0.77 Ballast Factor, Low Wattage, Instant Start EP Electronic T5HO or T8, Programmed Start 3EP 3-Lamp Electronic T5HO or T8, Programmed Start	<small>For specific ballast vendor, show as option.</small>	

<sup>1</sup> Not available with Surface Mount Ceiling Types.



## PHOTOMETRIC DATA

Test 12581 Test Date 1/08/03

### LUMINAIRE DATA

Luminaire	ST824-332G-FSA12 ST8 Lensed Troffer 2' x 4' 3-Lamp with A12 Lens
Ballast	B332I120RH
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Total Input Watts	84
Mounting	Recessed
Shielding Angle	N/A
Spacing Criterion	0° = 1.24 90° = 1.35

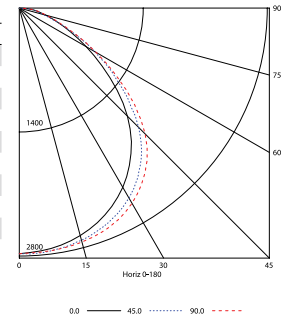
### AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	4282	4282	4282	4282	4282
30	4165	4260	4415	4515	4538
40	3967	4106	4326	4471	4523
45	3767	3920	4154	4322	4387
50	3462	3637	3851	4009	4084
55	3075	3282	3478	3559	3616
60	2696	2863	3045	3079	3098
65	2338	2412	2528	2565	2572
70	2036	2005	1987	2122	2140
75	1838	1784	1659	1921	1909
80	1841	1761	1770	1903	1956
85	1967	1825	2002	1967	2038

### COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	93	89	86	83	91	87	84	81	84	81	79	72	
2	85	78	73	69	83	77	72	68	74	70	66	61	
3	78	69	63	58	76	68	62	57	66	60	56	53	
4	72	62	55	49	70	61	54	49	59	53	48	45	
5	66	55	48	43	64	55	48	43	53	47	42	39	
6	61	50	43	37	59	49	42	37	48	42	37	35	
7	57	45	38	33	55	45	38	33	44	37	33	31	
8	53	42	35	30	51	41	34	30	40	34	29	27	
9	49	38	31	27	48	38	31	27	37	31	27	25	
10	46	35	29	24	45	35	28	24	34	28	24	22	

### INDOOR CANDELA PLOT



### ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	2213	25.4	30.0
0-40	3657	42.0	49.6
0-60	6242	71.7	84.7
0-90	7373	84.7	100.0
0-180	7373	84.7	100.0

### ENERGY DATA

Total Luminaire Efficiency	84.7%
Luminaire Efficacy Rating (LER)	77
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.12 based on 3000 hrs. and \$0.08 per KWH

### LUMINAIRE DATA

Luminaire	ST824-232G-FSA12 ST8 Lensed Troffer 2' x 4' 2-Lamp with A12 Lens
Ballast	REL-2P32-SC
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Total Input Watts	58
Shielding Angle	N/A
Spacing Criterion	0° = 1.22 90° = 1.35

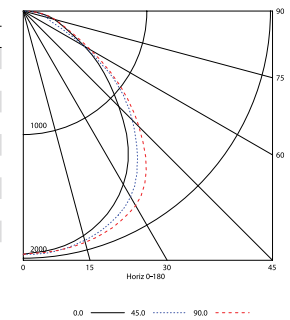
### AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	3037	3037	3037	3037	3037
30	2885	2962	3095	3208	3240
40	2619	2711	2877	3058	3104
45	2387	2524	2723	2878	2891
50	2184	2318	2537	2631	2643
55	1995	2062	2202	2261	2318
60	1767	1739	1745	1838	1952
65	1553	1418	1297	1494	1666
70	1485	1242	1047	1341	1540
75	1545	1259	1175	1354	1587
80	1601	1378	1352	1432	1699
85	1683	1559	1400	1577	1736

### COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	94	90	87	84	92	88	85	82	85	82	80	73	
2	86	79	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	51	71	62	55	50	60	54	49	46	
5	67	57	49	44	65	56	49	44	54	48	43	41	
6	62	51	44	39	61	50	44	39	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	31	29	
9	50	39	32	28	49	39	32	28	38	32	28	26	
10	47	36	30	25	46	36	29	25	35	29	25	23	

### INDOOR CANDELA PLOT



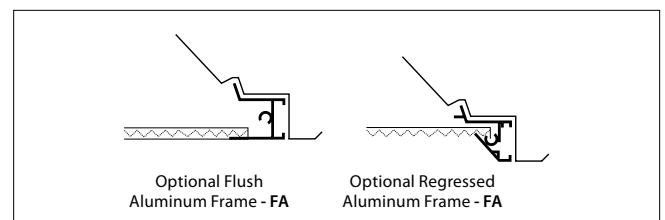
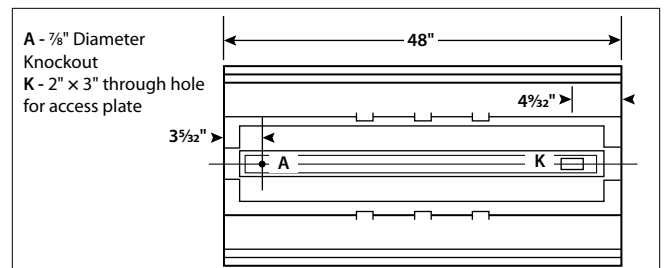
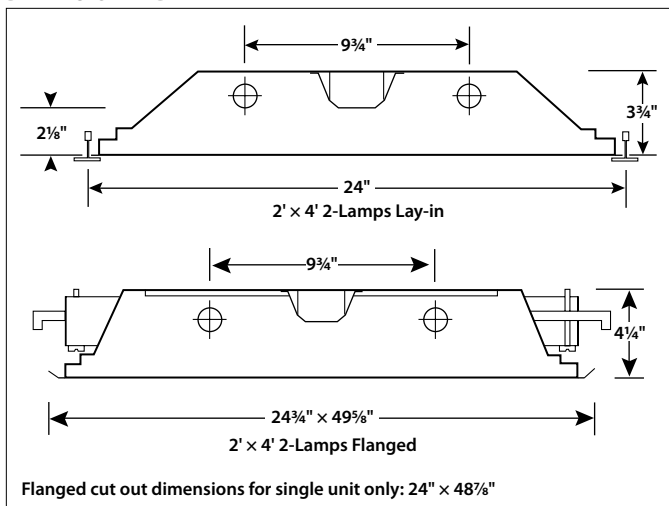
### ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1563	27.0	31.5
0-40	2561	44.2	51.6
0-60	4231	72.9	85.2
0-90	4967	85.6	100.0
0-180	4967	85.6	100.0

### ENERGY DATA

Total Luminaire Efficiency	85.6%
Luminaire Efficacy Rating (LER)	75
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.20 based on 3000 hrs. and \$0.08 per KWH

## DIMENSIONAL DATA



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