

# EFFICIENT TROFFER

# EFT

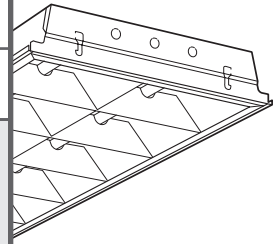
**SUBMITTAL:**

2x2 | 2x4

**JOB:**

**TYPE:**

**VOLTAGE:**



EXAMPLE

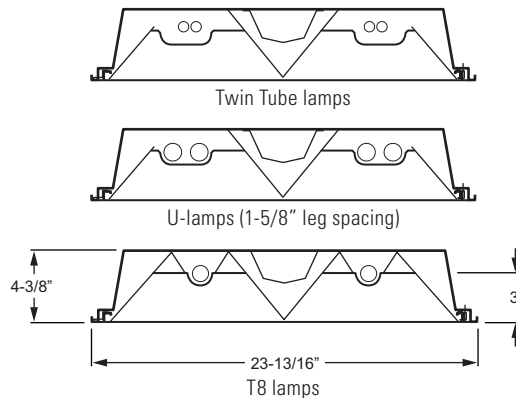
**EFT G - 2 4 - 2 32 - OPTIONS - EB2 - UNV**

SERIES    CEILING TYPE    NOM. W.    NOM. L.    TOTAL WATTAGE/LAMPS TYPE    OPTIONS    BALLAST TYPE    VOLTAGE



## FEATURES

- ▶ Performing at efficiencies above 88%, the EFT is a high quality, economical, energy-efficient fixture.
- ▶ Full 3" cross baffles provide lamp cutoff and assist in glare reduction.
- ▶ Fully enclosed, spring-loaded cam latches allow years of hassle-free maintenance.
- ▶ T-slot steel hinge ensures positive retention when door is opened.
- ▶ Deep reinforcement ribs provide added strength.
- ▶ Integral T-bar clips quickly secure fixture to structure.
- ▶ This fixture is proudly made in the USA.



## SPECIFICATIONS

**Housing** – 22-gauge die-formed C.R.S.

**Door Frame & Louver** – Door: 20-gauge C.R.S., flat with mitered corners. T-slot steel hinge allows reversible hinging and latching. Louver: 25-gauge C.R.S.

**Finish** – Door and Housing: 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. Louver: highly reflective non-glare matte white polyester powder coat. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.

**Electrical** – Electronic ballast standard, instant start T8, program start T5, rated Class P.

**Mounting** – NEMA Type "G" standard. NEMA Type "F" available.

**Labels** – UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations.

## ORDERING INFORMATION

### SERIES

**EFT** Efficient Troffer

### CEILING TYPE

**G** NEMA Type "G"  
**F** NEMA Type "F"

### NOMINAL WIDTH

**2** 2'

### NOMINAL LENGTH

**2** 2'  
**4** 4'

### TOTAL LAMPS

**2**

### LAMP WATTAGE/TYPE

#### 2x2 LAMP OPTIONS

- 14T5S** 2', 14-watt T5
- 17** 2', 17-watt T8
- 24T5H** 2', 24-watt T5HO
- 31UN** 2', U-bent, 31-watt T8, 1-5/8" leg spacing
- 40TT** 2', 40-watt long twin tube

#### 2x4 LAMP OPTIONS

- 28T5S** 4', 28-watt T5
- 32** 4', 32-watt T8
- 54T5H** 4', 54-watt T5HO

### OPTIONS

For generic EM ballast options (must specify voltage), see Information section.

### BALLAST TYPE

**EB2** 2-lamp electronic ballast

### VOLTAGE

**120** 120V  
**277** 277V  
**UNV** 120-277V  
**347** 347V

2x2 | 2x4

## PHOTOMETRY INFORMATION

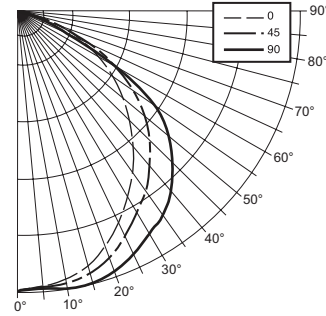
Catalog #: EFTG-24-232-EB2

### TEST REPORT INFORMATION

- ▶ Test Report #: 14240.0
- ▶ Date: 08/06/08
- ▶ Lamp Type: F32T8/835
- ▶ Lamp Quantity: 2

### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	2032.	2032.	2032.	
5°	2013.	2021.	2028.	192.9
15°	1923.	1978.	2051.	561.8
25°	1697.	1807.	1949.	839.2
35°	1430.	1589.	1813.	1007.1
45°	1114.	1327.	1554.	1025.4
55°	802.	984.	1197.	883.8
65°	481.	587.	385.	500.3
75°	204.	176.	126.	181.2
85°	56.	48.	31.	49.5
90°	0.	0.	0.	



### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1594.	27.0	30.4
0 - 40	2601.	44.1	49.6
0 - 60	4510.	76.4	86.1
0 - 90	5241.	88.8	100.0
<b>Total Luminaire:</b>			
0 - 180	5241.	88.8	100.0

Total Luminaire Optical Efficiency: **88.8%**  
 IES Spacing Criteria: End = 1.1  
 Diagonal = 1.2  
 Across = 1.4

### ZONAL CAVITY COEFFICIENTS

	Ceiling	.80			.70			.50		
		.70	.50	.30	.70	.50	.30	.50	.30	.10
Room Cavity Ratio	0	1.06	1.06	1.06	1.03	1.03	1.03	.99	.99	.99
	1	.98	.95	.91	.96	.93	.90	.89	.87	.84
	2	.91	.84	.79	.89	.83	.78	.80	.76	.72
	3	.84	.76	.69	.82	.74	.68	.72	.67	.62
	4	.77	.68	.61	.75	.66	.60	.64	.59	.54
	5	.71	.60	.53	.69	.59	.52	.57	.51	.46
	6	.65	.54	.46	.63	.53	.46	.51	.45	.41
	7	.60	.48	.41	.58	.48	.41	.46	.40	.35
	8	.55	.43	.36	.54	.43	.36	.42	.35	.31
	9	.51	.39	.32	.49	.38	.31	.37	.31	.27
	10	.47	.35	.28	.46	.35	.28	.34	.28	.23

Effective Floor Cavity Reflectance = .20

### QUANTITY ESTIMATOR

Room Size	±40 fc.	±60 fc.	±80 fc.
30' x 30' (900 sq. ft.)	10	15	20
50' x 50' (2,500 sq. ft.)	28	43	57
100' x 100' (10,000 sq. ft.)	114	170	227

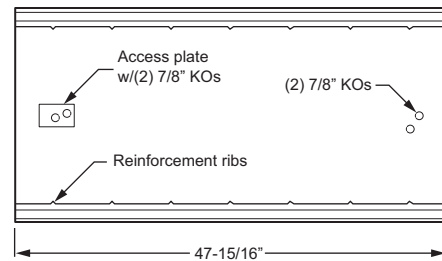
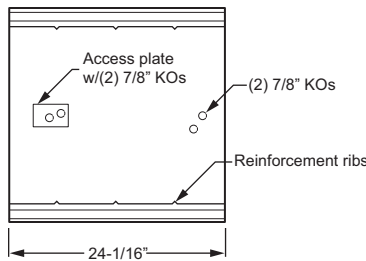
Calculations based on standard reflectance of 80/50/20 and a light loss factor of .85 with a 9'-0" ceiling height.

### EFFICIENCY COMPARISON

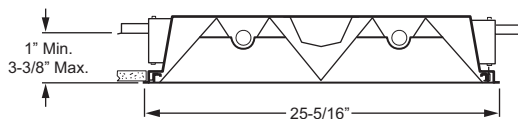
	EFT	Typical 2x4 3-Lamp T8 Parabolic
Fixture Efficiency	88.8%	69%
Lighting Power Density	.70 W/ft <sup>2</sup>	1.003 W/ft <sup>2</sup>
Input Wattage	60 W	86 W
Lighting Power Density	55 Fc	65 Fc

Light level calculated on 9' ceilings, 60' x 60' room, 80/50/20 reflectances, 95 LLD, 90 LDD, horizontal light level on 2'-6" workplane height. Fixture spacing: 8' x 10' centers.

### BACKVIEW



### NEMA TYPE "F" INSTALLATION



2' x 2' Max. Recommended Ceiling Opening: 24-3/8" x 24-3/8"  
 2' x 4' Max. Recommended Ceiling Opening: 24-3/8" x 48-3/8"

For continuous row mounting, add 49-5/16" for each additional fixture to obtain ceiling opening. 1-5/16" between end plates.