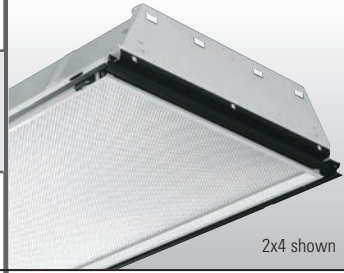


# PREMIUM AIR TROFFER

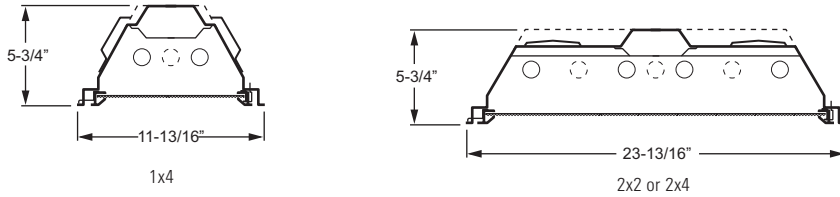
**EP**

1x4 | 2x2 | 2x4



CATALOG #:					TYPE:					
PROJECT:				NOTES:						
<b>EXAMPLE</b> <b>EP G - A 2 4 - 3 32 - R A12125 - OPTIONS - EB3 - UNV</b>										
SERIES	CEILING TYPE	AIR FUNC.	NOM. W.	NOM. L.	TOTAL WATTAGE/LAMPS	DOOR FRAME	SHIELDING	OPTIONS	BALLAST TYPE	VOLTAGE

## CROSS SECTIONS



## ORDERING INFORMATION

SERIES	
<b>EP</b>	Premium Air Troffer

CEILING TYPE	
<b>G</b>	NEMA Type "G"
<b>F</b>	NEMA Type "F"

AIR FUNCTION	
<b>A</b>	Adjustable heat extract through lamp cavity—supply/return air through side slots
<b>B</b>	Adjustable heat extract through lamp cavity—no side slots
<b>E</b>	No heat extract through lamp cavity—supply/return air through side slots
<b>D</b>	Static—no heat extract through lamp cavity—no side slots
<b>F</b>	Non-adjustable heat extract through lamp cavity—supply/return air through side slots (standard with six 54T5H lamps)

NOMINAL WIDTH	
<b>1</b>	1'
<b>2</b>	2'

NOMINAL LENGTH	
<b>2</b>	2' (2' width only)
<b>4</b>	4'

TOTAL LAMPS	
<b>1, 2, or 3</b>	(1' x 4' fixture size)
<b>2, 3, or 4</b>	(2' x 2' fixture size)
<b>2, 3, 4, or 6</b>	(2' x 4' fixture size)

LAMP WATTAGE/TYPE	
2x2 LAMP OPTIONS	
<b>14T5S</b>	2', 14-watt T5
<b>17</b>	2', 17-watt T8
<b>24T5H</b>	2', 24-watt T5HO
<b>31UN</b>	2', U-bent, 31-watt T8, 1-5/8" leg spacing
<b>32U</b>	2', U-bent, 32-watt T8, 6" leg spacing
<b>40TT</b>	2', 40-watt long twin tube
1x4 or 2x4 LAMP OPTIONS	
<b>28T5S</b>	4', 28-watt T5
<b>32</b>	4', 32-watt T8
<b>54T5H</b>	4', 54-watt T5HO

DOOR FRAME	
<b>F</b>	White flat aluminum
<b>R</b>	White regress aluminum
<b>FB</b>	Black flat aluminum
<b>RB</b>	Black regress aluminum

SHIELDING	
<b>A12125</b>	Acrylic, pattern #12, .125" thick
<b>A19156</b>	Acrylic, pattern #19, .156" thick

OPTIONS	
For generic EM ballast options (must specify voltage), see <a href="#">Technical Info</a> .	
For flexible whip options, see <a href="#">Technical Info</a> .	
<b>F338</b>	6', 3/8" flex, 3-conductor, No. 18 AWG
<b>AMW</b>	Anti-microbial white finish

BALLAST TYPE	
Additional ballast options available, see <a href="#">Technical Info</a> .	
<b>EB1</b>	1-lamp electronic ballast
<b>EB2</b>	2-lamp electronic ballast
<b>EB3</b>	3-lamp electronic ballast
<b>EB4</b>	4-lamp electronic ballast
<b>EB3/3</b>	(2) 3-lamp electronic ballasts

VOLTAGE	
<b>120</b>	120V
<b>277</b>	277V
<b>UNV</b>	120-277V
<b>347</b>	347V

## FEATURES

- ▶ 1/2" deep aluminum regress for architectural appearance.
- ▶ Full black reveal provides floating door appearance.
- ▶ Fully-enclosed spring-loaded cam latches allow years of hassle-free maintenance.
- ▶ T-slot steel hinge ensures positive retention when door is opened.
- ▶ 5-3/4" deep housing eliminates lens shadowing.
- ▶ Back reinforcement ribs provide added strength.
- ▶ Optional anti-microbial powder coating available to prevent the spread of dangerous micro-organisms and suppress the growth of mold and bacteria.
- ▶ Field convertible to NEMA Type "F".
- ▶ Fully gasketed door minimizes contaminants.
- ▶ All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ▶ This fixture is proudly made in the USA.



1x4 | 2x2 | 2x4

PHOTOMETRY – 1x4

Catalog #: EPG-A14-232-RA12125-EB2-120

SPECIFICATIONS

**Housing** – 22-gauge die-formed C.R.S.  
**Door Frame** – .050" extruded aluminum, flat or regress, with mitered corners. T-slot steel hinge allows reversible hinging and latching. Fully enclosed spring-loaded cam latches.  
**Shielding** – Acrylic, pattern #12, .125" thick.  
**Finish** – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. 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 air handling use, for dry locations only. Static (D) style fixtures listed for dry or damp locations.

AIR FUNCTION CODE

All air handling styles are UL listed as recessed fluorescent fixture suitable for air handling use, for dry locations only.

"D" style static fixtures are UL listed as recessed fluorescent fixtures suitable for dry or damp locations.

Select air function required from table below. If function other than style "A" is required, change letter prefix to required function.

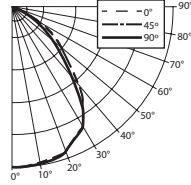
(Example: Static non-air fixture required change "A" to "D" = EPG-D24-232-RA12125.

AIR FUNCTIONS	SUPPLY/ RETURN AIR THROUGH SIDE SLOTS	NO SIDE SLOTS
Adjustable heat extract through lamp cavity	A	B
NO heat extract through lamp cavity	E	D (static)

All the above styles have full floating door effect with black reveal around entire perimeter of door frame.

TEST REPORT INFORMATION

- ▶ Test Report #: 3133.0
- ▶ Date: 04/13/83
- ▶ Lamp Type: F32T8/41K
- ▶ Lamp Quantity: 2



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	1753.	1753.	1753.	
5°	1766.	1767.	1772.	168.8
15°	1726.	1741.	1750.	493.2
25°	1610.	1614.	1594.	744.3
35°	1391.	1380.	1348.	862.9
45°	890.	830.	766.	647.8
55°	553.	366.	448.	366.8
65°	236.	141.	197.	171.8
75°	85.	101.	69.	103.9
85°	28.	27.	15.	29.3
90°	0.	0.	0.	

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1402.	24.2	39.2
0 - 40	2269.	39.1	63.2
0 - 60	3284.	56.6	91.5
0 - 90	3589.	61.9	100.0
<b>Total Luminaire:</b>			
0 - 180	3589.	61.9	100.0

Total Luminaire Optical Efficiency: **61.9%**  
 IES Spacing Criteria: Across = 1.3  
 Along = 1.3

ZONAL CAVITY COEFFICIENTS

	Ceiling			.80			.70			.50		
	Wall	.70	.50	.30	.70	.50	.30	.50	.30	.10		
0	.74	.74	.74	.72	.72	.72	.69	.69	.69			
1	.69	.67	.65	.67	.65	.64	.63	.61	.60			
2	.64	.60	.57	.63	.59	.56	.57	.55	.53			
3	.60	.55	.51	.59	.54	.50	.52	.49	.47			
4	.56	.50	.45	.55	.49	.45	.48	.44	.41			
5	.52	.45	.40	.51	.44	.40	.43	.39	.36			
6	.48	.41	.36	.47	.41	.36	.40	.36	.33			
7	.45	.37	.33	.44	.37	.33	.36	.32	.29			
8	.41	.34	.29	.41	.34	.29	.33	.29	.26			
9	.38	.31	.26	.37	.30	.26	.30	.26	.23			
10	.36	.28	.23	.35	.28	.23	.27	.23	.20			

Effective Floor Cavity Reflectance = .20

AIR DATA

Neg. Static Pressure In Water Ga.	Heat Extract (LC) B - 1' x 4'	Return (SS) E - 1' x 4'	SS + LC A - 1' x 4'	Static D
.01	16 CFM	99 CFM	115 CFM	0
.02	23	140	163	0
.03	27	175	202	0
.04	31	190	221	0
.05	38	220	258	0
.10	50	>300	>350	0

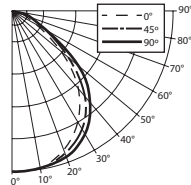
Tested in the standard heat removal calorimeter as specified in the Air Diffusing Troffer Heat Removal Test Code TC-66.

PHOTOMETRY – 2x2

Catalog #: EPG-A22-232U-RA12125-EB2-120

TEST REPORT INFORMATION

- ▶ Test Report #: 8535.0
- ▶ Date: 11/15/95
- ▶ Lamp Type: F8032/835/6
- ▶ Lamp Quantity: 2



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	1747.	1747.	1747.	
5°	1749.	1741.	1742.	166.5
15°	1693.	1699.	1719.	483.4
25°	1557.	1601.	1648.	741.6
35°	1301.	1403.	1472.	876.9
45°	960.	1057.	1181.	819.3
55°	582.	665.	757.	600.5
65°	319.	262.	342.	293.9
75°	207.	139.	205.	176.1
85°	75.	65.	68.	76.8
90°	0.	0.	0.	

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1391.	23.2	32.9
0 - 40	2268.	37.8	53.6
0 - 60	3688.	61.5	87.1
0 - 90	4235.	70.6	100.
<b>Total Luminaire:</b>			
0 - 180	4235.	70.6	100.0

Total Luminaire Optical Efficiency: **70.6%**  
 IES Spacing Criteria: Across = 1.3  
 Along = 1.2

ZONAL CAVITY COEFFICIENTS

	Ceiling			.80			.70			.50		
	Wall	.70	.50	.30	.70	.50	.30	.50	.30	.10		
0	.84	.84	.84	.82	.82	.82	.78	.78	.78			
1	.78	.75	.73	.76	.74	.71	.71	.69	.67			
2	.72	.67	.63	.70	.66	.62	.64	.60	.58			
3	.67	.60	.55	.65	.59	.55	.57	.53	.50			
4	.62	.54	.49	.60	.53	.48	.52	.47	.44			
5	.57	.49	.43	.55	.48	.43	.46	.42	.38			
6	.53	.44	.38	.51	.43	.38	.42	.37	.34			
7	.49	.40	.34	.47	.39	.34	.38	.33	.30			
8	.45	.36	.30	.44	.35	.30	.34	.29	.26			
9	.41	.32	.26	.40	.32	.26	.31	.26	.22			
10	.38	.29	.24	.37	.29	.24	.28	.23	.20			

Effective Floor Cavity Reflectance = .20

AIR DATA In Cubic Feet Per Minute

Neg. Static Pressure In Water Ga.	Heat Extract (LC) B - 2' x 2'	Return (SS) E - 2'	SS + LC A - 2' x 2'	Static D
.01	19.5 CFM	67 CFM	86.5 CFM	0
.02	26.5	69	95.5	0
.03	35	85	120	0
.04	40	95	135	0
.05	44	110	154	0
.10	63	155	218	0

Tested in the standard heat removal calorimeter as specified in the Air Diffusing Troffer Heat Removal Test Code TC-66.

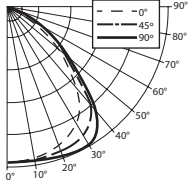
PHOTOMETRY – 2x4

Catalog #: EPG-A24-332-RA12125-EB3-120

1x4 | 2x2 | 2x4

TEST REPORT INFORMATION

- ▶ Test Report #: 3076.0
- ▶ Date: 03/16/83
- ▶ Lamp Type: F032/41K
- ▶ Lamp Quantity: 3



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	2682.	2682.	2682.	
5°	2655.	2665.	2676.	254.5
15°	2611.	2663.	2719.	755.2
25°	2459.	2613.	2755.	1209.2
35°	2147.	2466.	2666.	1533.7
45°	1488.	1648.	1741.	1274.4
55°	995.	728.	995.	727.4
65°	435.	277.	416.	337.9
75°	153.	209.	153.	215.3
85°	55.	75.	46.	75.1
90°	0.	0.	0.	

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	2219.	25.5	34.8
0 - 40	3753.	43.1	58.8
0 - 60	5754.	66.1	90.2
0 - 90	6383.	73.4	100.0
<b>Total Luminaire:</b>			
0 - 180	6383.	73.4	100.0

Total Luminaire Optical Efficiency: **73.4%**  
IES Spacing Criteria: Across = 1.5  
Along = 1.3

ZONAL CAVITY COEFFICIENTS

	Ceiling	.80			.70			.50		
	Wall	.70	.50	.30	.70	.50	.30	.50	.30	.10
Room Cavity Ratio	0	.87	.87	.87	.85	.85	.85	.82	.82	.82
	1	.82	.79	.76	.80	.77	.75	.74	.72	.70
	2	.76	.71	.67	.74	.70	.66	.67	.64	.61
	3	.70	.64	.59	.69	.63	.58	.61	.57	.54
	4	.65	.58	.52	.64	.57	.52	.55	.51	.47
	5	.60	.52	.46	.59	.51	.46	.50	.45	.42
	6	.56	.47	.42	.55	.47	.41	.45	.41	.37
	7	.52	.43	.37	.51	.42	.37	.41	.36	.33
	8	.48	.39	.33	.47	.38	.33	.37	.32	.29
	9	.44	.35	.29	.43	.34	.29	.33	.28	.25
	10	.41	.31	.26	.40	.31	.26	.30	.25	.22

Effective Floor Cavity Reflectance = .20

AIR DATA

Neg. Static Pressure In Water Ga.	Heat Extract (LC) B - 1' x 4'	Return (SS) E - 1' x 4'	SS + LC A - 1' x 4'	Static D
.01	22.5 CFM	99 CFM	121.5 CFM	0
.02	32.5	140	143.5	0
.03	40	175	215	0
.04	45	190	235	0
.05	50	220	270	0
.10	74	300	374	0

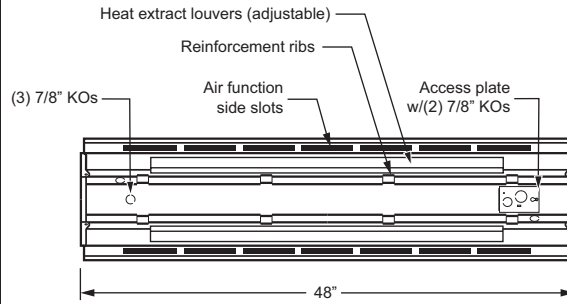
Tested in the standard heat removal calorimeter as specified in the Air Diffusing Troffer Heat Removal Test Code TC-66.



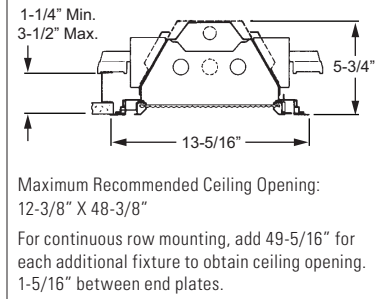
1x4 | 2x2 | 2x4

FIXTURE DETAILS

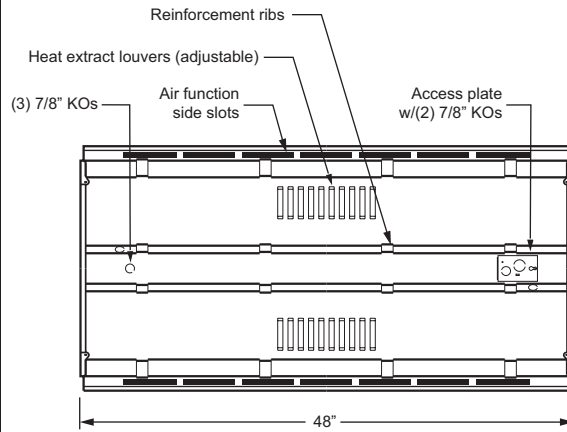
1x4 BACK VIEW



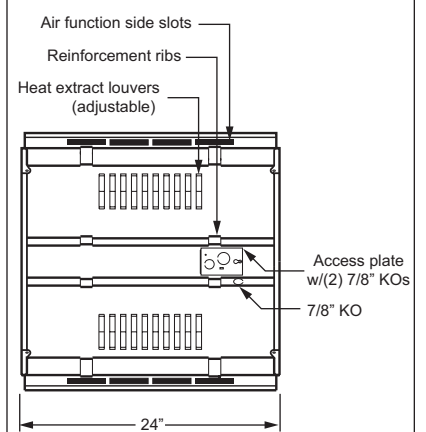
1x4 NEMA TYPE "F" INSTALLATION



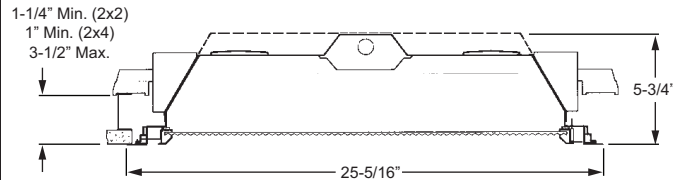
2x4 BACK VIEW



2x2 BACK VIEW



2x2 | 2x4 NEMA TYPE "F" INSTALLATION



Maximum Recommended Ceiling Opening: **2x2:** 24-3/8" X 24-3/8" **2x4:** 24-3/8" X 48-3/8"

For continuous row mounting (2x4), add 49-5/16" for each additional fixture to obtain ceiling opening. 1-5/16" between end plates.