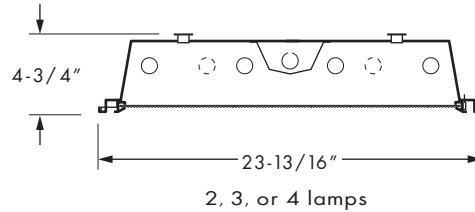
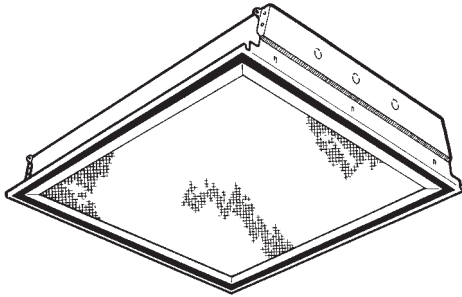


# 2' x 2' AIR TROFFER

SERIES **50**  
AIR

VOLTAGE TYPE JOB \_\_\_\_\_  
TYPE \_\_\_\_\_  
JOB \_\_\_\_\_



## 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.
- SHIELDING – #12 pattern, .125" acrylic overlay standard—other patterns and thicknesses available.
- FINISH – 92% minimum average reflective white powder coat with multi-stage iron/phosphate prepared metal.
- ELECTRICAL – Electronic ballast standard, instant start T8, programmed start T5, rated Class P.
- LABELS – UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations.
- MOUNTING – NEMA Type "G" standard. NEMA Type "F" available.

## FEATURES

- 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.
- 4-3/8" deep housing eliminates lens shadowing.
- Deep reinforcement ribs provide added strength.
- Rolled-edge channel adds superior strength.
- Optional anti-microbial powder coating available to prevent the spread of dangerous micro-organisms and suppress the growth of mold and bacteria.
- Integral T-bar clips quickly secure fixture to structure.
- 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.

## ORDERING INFORMATION

Submittal

EXAMPLE: **50** **G** - **A** **2** **2** - **2** **32U** - **R** **A12125** - **OPTIONS** - **EB2** - **120**

### SERIES

**50** Air Troffer

### CEILING TYPE

**G** NEMA Type "G"  
**F** NEMA Type "F" (field convertible)

### AIR FUNCTION

See back for air handling options

### NOMINAL WIDTH

**2** 2'

### NOMINAL LENGTH

**2** 2'

### TOTAL LAMPS

**2, 3, or 4**

### LAMP WATTAGE/TYPE

**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  
**32U** 2', U-bent, 32-watt T8, 6" leg spacing  
**40TT** 2', 40-watt long twin tube

### DOOR FRAME TYPE

**F** White Flat aluminum  
**R** White Regress aluminum  
**FB** Black Flat aluminum  
**RB** Black Regress aluminum

### SHIELDING

**A12125** #12 pattern acrylic, .125" thick  
**A19156** #19 pattern acrylic, .156" thick

**Note:** For more options/accessories, ballast combinations, and product details, please consult factory.

### OPTIONS

**F338** 6', 3/8" flex, 3 conductor, No. 18 AWG  
**AMW** Anti-microbial White finish

### BALLAST TYPE

**EB2** 2-lamp electronic ballast  
**EB3** 3-lamp electronic ballast  
**EB4** 4-lamp electronic ballast  
**EB2/1** (1) 2-lamp & (1) 1-lamp electronic ballast  
**EB2/2** (2) 2-lamp electronic ballasts

### VOLTAGE

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



FLUORESCENT LIGHTING

**50**  
AIR

SERIES

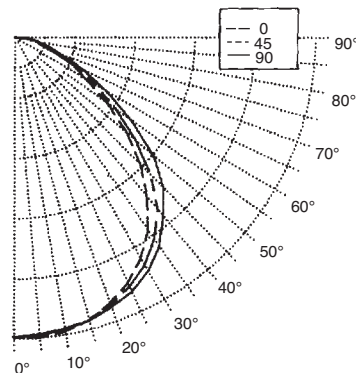
**PHOTOMETRY INFORMATION**

Williams Catalog #50G-A22-232U-RA12125-EB2-120  
Test Report #8729.0, Dated 03/19/96

Lamp Type: FB032/835/6  
Lamp Quantity: 2

**CANDLEPOWER DISTRIBUTION**

VERT. ANG.	HORIZONTAL ANGLE			ZONAL LUMENS
	0	45	90	
0	1595.	1595.	1595.	
5	1604.	1591.	1585.	152.0
15	1556.	1554.	1559.	440.8
25	1437.	1459.	1490.	676.2
35	1247.	1305.	1353.	817.9
45	954.	1031.	1127.	798.9
55	604.	664.	757.	603.2
65	339.	342.	401.	354.9
75	169.	139.	183.	163.2
85	53.	71.	70.	72.1
90	0.	0.	0.	



**LUMEN SUMMARY**

ZONE	LUMENS	% LAMP	% FIXTURE
0 - 30	1269.	22.3	31.1
0 - 40	2087.	36.6	51.2
0 - 60	3489.	61.2	85.5
0 - 90	4079.	71.6	100.0
90 - 120	0.	0.	0.
90 - 130	0.	0.	0.
90 - 150	0.	0.	0.
90 - 180	0.	0.	0.
Total Luminaire			
0-180	4079.	71.6	100.0

**ZONAL CAVITY COEFFICIENTS**

EFFECTIVE FLOOR CAVITY REFL. = .20

CEILING WALL RCR	.80			.70			.50		
	.70	.50	.30	.70	.50	.30	.50	.30	.10
0	.85	.85	.85	.83	.83	.83	.80	.80	.80
1	.79	.76	.73	.77	.74	.72	.71	.69	.68
2	.73	.68	.64	.71	.67	.63	.64	.61	.58
3	.67	.61	.56	.66	.60	.55	.58	.54	.50
4	.62	.54	.49	.61	.54	.48	.52	.47	.44
5	.57	.49	.43	.56	.48	.42	.46	.41	.38
6	.53	.44	.38	.51	.43	.37	.42	.37	.33
7	.49	.39	.33	.47	.39	.33	.38	.33	.29
8	.45	.35	.29	.44	.35	.29	.34	.29	.25
9	.41	.32	.26	.40	.31	.26	.30	.25	.22
10	.38	.29	.23	.37	.28	.23	.28	.23	.19

**TOTAL LUMINAIRE**

OPTICAL EFFICIENCY = **71.6 %**

SPACING CRITERIA: ACROSS= 1.3 ALONG= 1.3

**AIR DATA**

In Cubic Feet Per Minute

Neg. Static Pressure In Water Ga.	Heat Extract (LC) B - 2' x 2'	Return (SS) E - 4 Ft. Lgth.	SS + LC A - 2' x 2'	Static D
.01	23 CFM	82 CFM	105 CFM	0
.02	37	59	96	0
.03	52	73	125	0
.04	64	85	149	0
.05	74	95	169	0
.10	124	140	264	0

The H.E. Williams, Inc. Series 50 Air Troffers were tested in the standard heat removal calorimeter as specified in the Air Diffusing Troffer Heat Removal Test Code TC-66.

**AIR FUNCTION CODE**

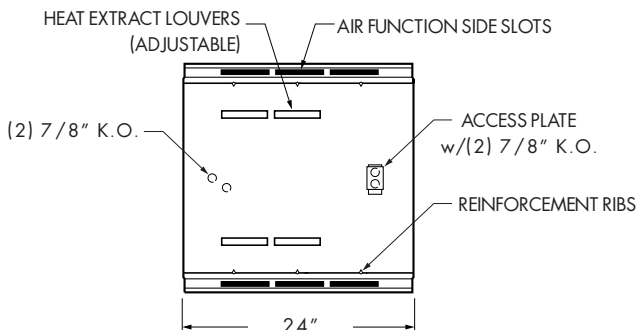
All air handling styles are UL listed as recessed fluorescent fixture suitable for air handling use, for dry locations only.

"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" = 50G-D24-232-RA12125.

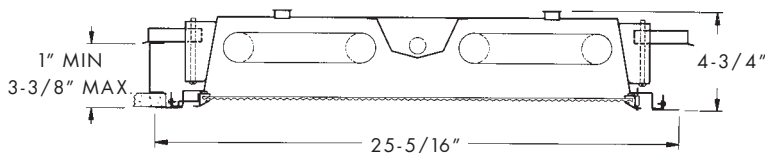
AIR FUNCTIONS	SUPPLY/RETURN AIR THROUGH SIDE SLOTS	NO SIDE SLOTS
Adjustable heat extract through lamp cavity	<b>A</b>	<b>B</b>
NO heat extract through lamp cavity	<b>E</b>	<b>D (static)</b>

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

**BACK VIEW**



**CROSS SECTION NEMA TYPE "F" INSTALLATION**



MAXIMUM RECOMMENDED CEILING OPENING IS 24-3/8" X 24-3/8"



H. E. WILLIAMS, INC.

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Information contained herein is subject to change without notice.

HEWJP43292 08/17/09JJ