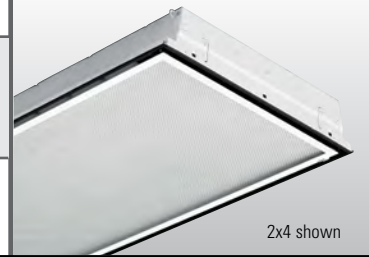


AIR TROFFER

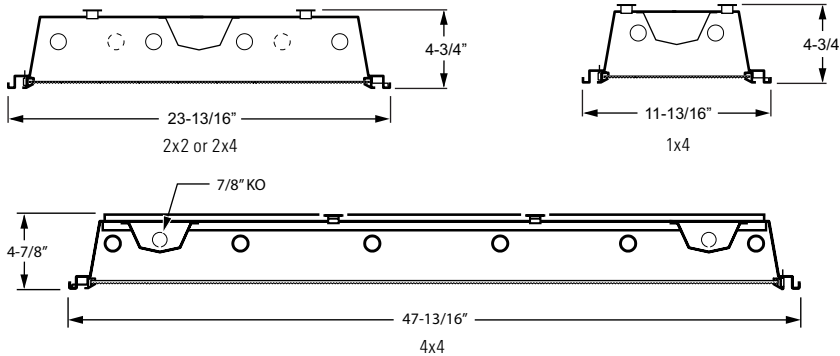
50

T5 | T8

CATALOG #:		TYPE:							
PROJECT:		NOTES:							
EXAMPLE 50 G - A 2 4 - 3 32 - R A12125 - OPTIONS - EB3 - UNV									
SERIES	CEILING TYPE	AIR FUNC.	NOM. W. L.	TOTAL WATTAGE/LAMPS	DOOR FRAME	SHIELDING	OPTIONS	BALLAST TYPE	VOLTAGE



CROSS SECTIONS



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.
- ▶ 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.

ORDERING INFORMATION

SERIES
50 Air Troffer

CEILING TYPE
G NEMA Type "G"
F NEMA Type "F"

AIR FUNCTION

A Adjustable heat extract through lamp cavity—supply/return air through side slots

B Adjustable heat extract through lamp cavity—no side slots

E No heat extract through lamp cavity—supply/return air through side slots

D Static—no heat extract through lamp cavity—no side slots

F Non-adjustable heat extract through lamp cavity—supply/return air through side slots (standard with six 54T5H lamps)

NOMINAL WIDTH

1 1'
2 2'
4 4'

NOMINAL LENGTH

2 2' (2' width only)
4 4'

TOTAL LAMPS

2 (1' x 4' only)
2, 3, or 4 (2' x 2' only)
2, 3, 4, or 6 (2' x 4' only)
4, 6, or 8 (4' x 4' only)

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

LAMP WATTAGE/TYPE (Continued)

1x4, 2x4, or 4x4 LAMP OPTIONS

28T5S 4', 28-watt T5
32 4', 32-watt T8
54T5H 4', 54-watt T5HO (4 lamps max. in 2' x 4')

DOOR FRAME

F White flat aluminum
R White regress aluminum
FB Black flat aluminum
RB Black regress aluminum

SHIELDING

1' or 2' WIDTHS

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

4' WIDTH

A12187 Acrylic, pattern #12, .187" thick
A19187 Acrylic, pattern #19, .187" thick

OPTIONS

For generic EM ballast options (must specify voltage), see [Technical Info](#).

For flexible whip options, see [Technical Info](#).

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

BALLAST TYPE

Additional ballast options available, see [Technical Info](#).

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

VOLTAGE

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



PHOTOMETRY – 1x4

Catalog #: 50G-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 style (D) 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.

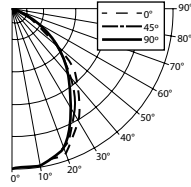
(Example: Static non-air fixture required change "A" to "D" = 50G-D24-232-RA12125.

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 #: 8648.0
- ▶ Date: 02/08/96
- ▶ Lamp Type: F32T8/SPX35/RS
- ▶ Lamp Quantity: 2



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	1769.	1769.	1769.	
5°	1755.	1754.	1754.	167.5
15°	1715.	1708.	1701.	484.2
25°	1579.	1547.	1501.	714.5
35°	1309.	1221.	1137.	768.0
45°	986.	883.	849.	695.0
55°	563.	521.	482.	466.9
65°	287.	236.	234.	251.5
75°	140.	112.	144.	137.5
85°	54.	42.	42.	48.8
90°	0.	0.	0.	

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1366.	23.2	36.6
0 - 40	2134.	36.2	57.2
0 - 60	3296.	55.9	88.3
0 - 90	3734.	63.3	100.0
Total Luminaire:			
0 - 180	3734.	63.3	100.0

Total Luminaire Optical Efficiency: **63.3%**
 IES Spacing Criteria: Across = 1.1
 Along = 1.2

ZONAL CAVITY COEFFICIENTS

	Ceiling			Wall			Floor		
	.80	.70	.50	.70	.50	.30	.50	.30	.10
0	.75	.75	.75	.74	.74	.74	.70	.70	.70
1	.70	.68	.66	.69	.66	.64	.64	.62	.61
2	.65	.61	.57	.64	.60	.57	.58	.55	.53
3	.61	.55	.51	.59	.54	.50	.52	.49	.46
4	.56	.50	.45	.55	.49	.44	.47	.44	.41
5	.52	.45	.40	.51	.44	.39	.43	.39	.35
6	.48	.41	.36	.47	.40	.35	.39	.35	.32
7	.45	.37	.32	.44	.36	.32	.35	.31	.28
8	.41	.33	.28	.40	.33	.28	.32	.28	.25
9	.38	.30	.25	.37	.30	.25	.29	.25	.22
10	.35	.27	.23	.35	.27	.22	.26	.22	.19

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	19.5 CFM	82 CFM	101.5 CFM	0
.02	29	117	146	0
.03	37	145	182	0
.04	44	170	214	0
.05	50	190	240	0
.10	74	280	354	0

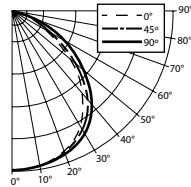
Tested in the standard heat removal calorimeter as specified in the Air Diffusing Troffer Heat Removal Test Code TC-66.

PHOTOMETRY – 2x2

Catalog #: 50G-A22-232U-RA12125-EB2-120

TEST REPORT INFORMATION

- ▶ Test Report #: 8729.0
- ▶ Date: 03/19/96
- ▶ Lamp Type: F8032/835/6
- ▶ Lamp Quantity: 2



CANDLEPOWER DISTRIBUTION

Vertical Angle	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
Total Luminaire:			
0 - 180	4079.	71.6	100.0

Total Luminaire Optical Efficiency: **71.6%**
 IES Spacing Criteria: Across = 1.3
 Along = 1.3

ZONAL CAVITY COEFFICIENTS

	Ceiling			Wall			Floor		
	.80	.70	.50	.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

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	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

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

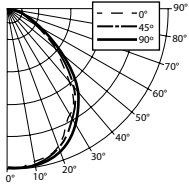


PHOTOMETRY – 2x4

Catalog #: **50G-A24-332-RA12125-EB3-120**

TEST REPORT INFORMATION

- ▶ Test Report #: 7464.0
- ▶ Date: 07/14/93
- ▶ Lamp Type: F32T8/SP35/RS
- ▶ Lamp Quantity: 3



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	2557.	2557.	2557.	
5°	2578.	2571.	2558.	245.0
15°	2472.	2498.	2533.	709.6
25°	2205.	2282.	2338.	1055.2
35°	1866.	1970.	2032.	1232.4
45°	1294.	1369.	1475.	1062.1
55°	780.	792.	886.	733.9
65°	454.	337.	478.	394.1
75°	294.	237.	302.	270.8
85°	101.	101.	108.	111.2
90°	0.	0.	0.	

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	2010.	23.1	34.6
0 - 40	3242.	37.3	55.8
0 - 60	5038.	57.9	86.7
0 - 90	5814.	66.8	100.0
Total Luminaire:			
0 - 180	5814.	66.8	100.0

Total Luminaire Optical Efficiency: **66.8%**
IES Spacing Criteria: Across = 1.3
Along = 1.2

ZONAL CAVITY COEFFICIENTS

	Ceiling			.70			.50			
	Wall	.70	.50	.30	.70	.50	.30	.50	.30	.10
Room Cavity Ratio	0	.80	.80	.80	.78	.78	.78	.74	.74	.74
	1	.74	.71	.69	.72	.70	.67	.67	.65	.63
	2	.68	.64	.60	.67	.63	.59	.60	.57	.55
	3	.63	.57	.53	.62	.56	.52	.54	.51	.48
	4	.59	.52	.47	.57	.51	.46	.49	.45	.41
	5	.54	.46	.41	.53	.46	.41	.44	.40	.37
	6	.50	.42	.37	.49	.41	.36	.40	.36	.32
	7	.46	.38	.33	.45	.38	.32	.37	.32	.29
	8	.43	.34	.29	.42	.34	.29	.33	.28	.25
	9	.40	.31	.26	.39	.31	.26	.30	.25	.22
	10	.37	.28	.23	.36	.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	23 CFM	82 CFM	105 CFM	0
.02	37	117	154	0
.03	52	145	197	0
.04	64	170	234	0
.05	74	190	264	0
.10	124	280	404	0

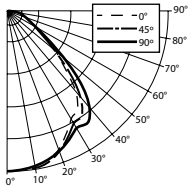
Tested in the standard heat removal calorimeter as specified in the Air Diffusing Troffer Heat Removal Test Code TC-66.

PHOTOMETRY – 4x4

Catalog #: **50G-A44-632-RA12187-EB3/3-120**

TEST REPORT INFORMATION

- ▶ Test Report #: 7466.0
- ▶ Date: 07/09/93
- ▶ Lamp Type: F32T8/SP35/RS
- ▶ Lamp Quantity: 6



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	5244.	5244.	5244.	
5°	5222.	5236.	5236.	498.1
15°	5084.	5139.	5111.	1446.9
25°	4558.	4648.	4738.	2150.6
35°	3998.	4260.	4565.	2672.0
45°	2836.	2953.	3493.	2373.6
55°	1418.	1549.	1763.	1436.2
65°	864.	781.	919.	802.7
75°	518.	525.	567.	569.3
85°	214.	179.	214.	218.2
90°	0.	0.	0.	

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	4096.	23.5	33.7
0 - 40	6768.	38.9	55.6
0 - 60	10577.	60.8	86.9
0 - 90	12168.	69.9	100.0
Total Luminaire:			
0 - 180	12168.	69.9	100.0

Total Luminaire Optical Efficiency: **69.9%**
IES Spacing Criteria: Across = 1.3
Along = 1.2

ZONAL CAVITY COEFFICIENTS

	Ceiling			.70			.50			
	Wall	.70	.50	.30	.70	.50	.30	.50	.30	.10
Room Cavity Ratio	0	.83	.83	.83	.81	.81	.81	.78	.78	.78
	1	.77	.75	.72	.76	.73	.71	.70	.68	.66
	2	.72	.67	.63	.70	.65	.62	.63	.60	.57
	3	.66	.60	.55	.65	.59	.54	.57	.53	.50
	4	.61	.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	.35	.30	.26
	9	.41	.32	.27	.40	.32	.27	.31	.26	.23
	10	.38	.29	.24	.37	.29	.24	.28	.24	.20

Effective Floor Cavity Reflectance = .20

AIR DATA

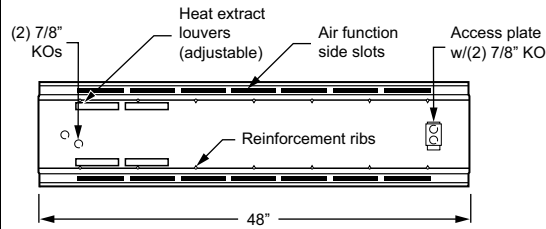
Neg. Static Pressure In Water Ga.	Heat Extract (LC) B - 1' x 4'	Return (SS) E - 1' x 4'	SS + LC A - 1' x 4'	Static D
.01	23 CFM	82 CFM	105 CFM	0
.02	37	117	154	0
.03	52	145	197	0
.04	64	170	234	0
.05	74	190	264	0
.10	124	280	404	0

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

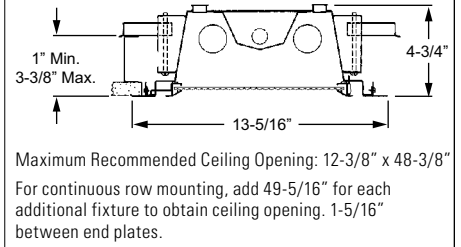


FIXTURE DETAILS

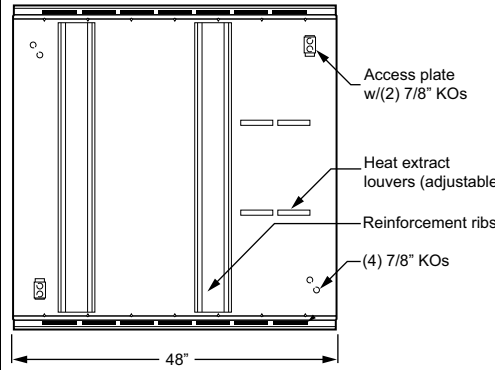
1x4 BACK VIEW



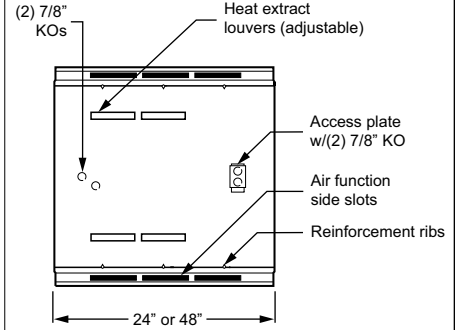
1x4 NEMA TYPE "F" INSTALLATION



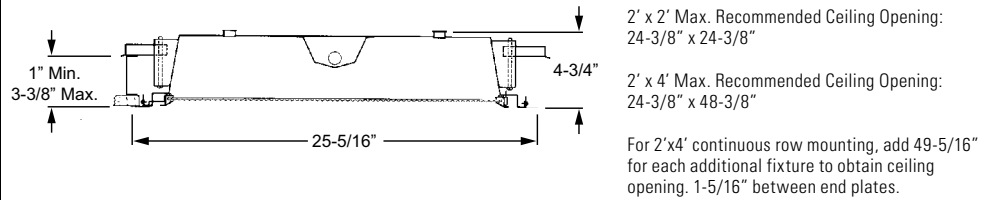
4x4 BACK VIEW



2x2 | 2x4 BACK VIEW



2x2 | 2x4 NEMA TYPE "F" INSTALLATION



4x4 NEMA TYPE "F" INSTALLATION

