

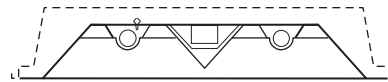
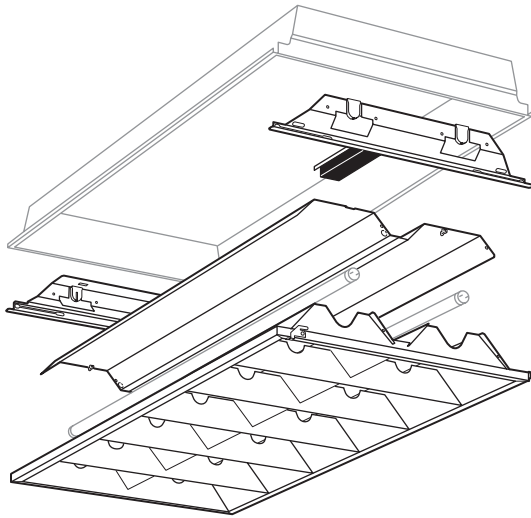
2' x 4' EFFICIENT TROFFER RETROFIT KIT

SERIES **EFTR**
2' x 4' T8

JOB _____

TYPE _____

VOLTAGE _____



Housing provided by others.
See back for dimensional requirements.
Lamps not included.

SPECIFICATIONS

- HOUSING – Provided by others, must fit within approved minimum dimensions (see back for details).
- REFLECTORS/WIREWAY COVERS – 25-gauge C.R.S.
- DOOR FRAME & LOUVER – Door Frame: 22-gauge C.R.S., flat with mitered corners. T-slot steel hinge allows reversible hinging and latching. Louver: 25-gauge C.R.S.
- FINISH – Reflectors/Wireway Covers: 92% minimum average reflective white powder coat with multi-stage iron/phosphate prepared metal. Door Frame & Louver: Highly-reflective texture matte white powder coat.
- ELECTRICAL – Electronic ballast standard, instant start T8, rated Class P.
- LABELS – UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations. UL/CUL classified as luminaire conversion, retrofit kit.
- MOUNTING – Designed to retrofit existing troffers and parabolics in grid ceiling applications.

FEATURES

- Attractive and environmentally sensitive—provides the fresh appearance of a new architecturally designed fixture while recycling the existing fixture housing.
- Can improve optical efficiency as much as 20% when replacing dated troffers and parabolics, realizing substantial energy savings.
- Allows fixture upgrades without disturbing the ceiling.
- 2-5/8" cross baffles provide lamp cutoff and assist in glare reduction.
- Designed to fit into most 2' x 4' fixture housings with a minimum fixture depth of 4".
- T-slot steel hinge allows reversible hinging and latching and ensures positive retention when door is opened.
- Cam latches close securely and allow hassle-free maintenance.
- Tool-less access to the electrical from room-side of fixture.
- Quick and easy installation.
- All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- This fixture is proudly made in the USA.

*H.E. Williams, Inc.
strongly recommends
installing a trial fixture
prior to ordering full
project quantities.*

ORDERING INFORMATION

Submittal

EXAMPLE: SERIES **EFTR** - NOM. WIDTH **2** - NOM. LENGTH **4** - NOM. TOTAL WATTAGE/LAMPS **32** - OPTIONS **OPTIONS** - BALLAST **EB2** - VOLTAGE **120**

SERIES	EFTR	Efficient Troffer Retrofit Kit
NOMINAL WIDTH	2	2'
NOMINAL LENGTH	4	4'

TOTAL LAMPS	2
LAMP WATTAGE/TYPE	32 4', 32-watt T8
OPTIONS	For emergency ballasts and other options, consult factory.

BALLAST TYPE	EB2	2-lamp electronic ballast
For additional ballast combinations, consult factory.		
VOLTAGE	120	120V
	277	277V
	UNV	120 - 277V
	347	347V



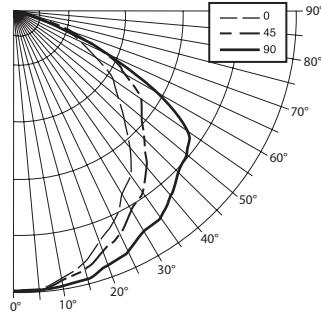
FLUORESCENT LIGHTING

Williams Catalog #EFTR-24-232-EB2-120
Test Report #14758.0, Dated 06/22/09

Lamp Type: F32WT8/835/RS
Lamp Quantity: 2

CANDLEPOWER DISTRIBUTION

VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0	45	90	
0	1884.	1884.	1884.	
5	1878.	1883.	1892.	179.8
15	1761.	1802.	1866.	512.4
25	1560.	1651.	1782.	768.4
35	1339.	1481.	1687.	937.9
45	1023.	1210.	1535.	959.9
55	788.	1021.	1399.	946.2
65	489.	666.	679.	613.2
75	207.	204.	154.	200.9
85	54.	49.	32.	51.0
90	0.	0.	0.	



LUMEN SUMMARY

ZONE	LUMENS	%LAMP	% FIXTURE
0 - 30	1461.	24.8	28.3
0 - 40	2398.	40.7	46.4
0 - 60	4305.	73.0	83.3
0 - 90	5170.	87.6	100.0
0 - 180	5170.	87.6	100.0

ZONAL CAVITY COEFFICIENTS

EFFECTIVE FLOOR CAVITY REFL. = .20

WALL RCR	CEILING .80			.70			.50		
	.70	.50	.30	.70	.50	.30	.50	.30	.10
0	1.04	1.04	1.04	1.02	1.02	1.02	.97	.97	.97
1	.97	.93	.90	.94	.91	.88	.87	.85	.83
2	.89	.82	.77	.87	.81	.76	.78	.74	.70
3	.82	.73	.67	.80	.72	.66	.70	.64	.60
4	.75	.65	.58	.73	.64	.57	.62	.56	.52
5	.68	.58	.50	.67	.57	.50	.55	.49	.44
6	.63	.52	.44	.61	.51	.44	.49	.43	.38
7	.58	.46	.39	.56	.45	.38	.44	.38	.33
8	.53	.41	.34	.52	.41	.34	.40	.33	.29
9	.49	.37	.30	.48	.36	.30	.35	.29	.25
10	.45	.34	.27	.44	.33	.26	.32	.26	.22

TOTAL LUMINAIRE

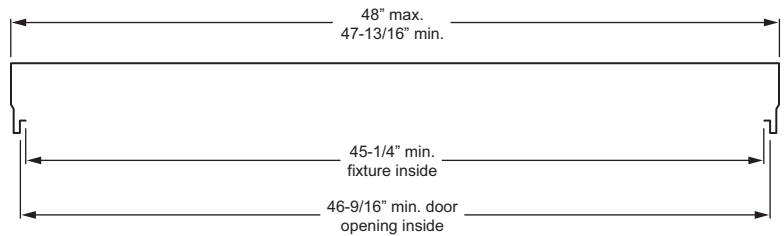
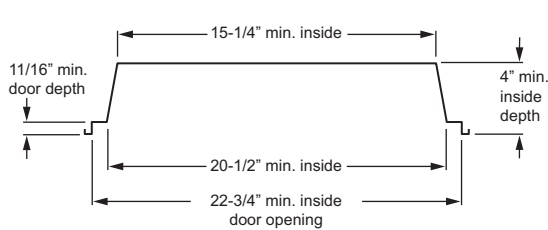
OPTICAL EFFICIENCY = **87.6%**

SPACING CRITERIA: END=1.1 DIAG=1.2 ACROSS=1.4

ADDITIONAL INFORMATION

MINIMUM FIXTURE HOUSING DIMENSIONS

H.E. Williams, Inc. strongly recommends installing a trial fixture prior to ordering full project quantities.



H. E. WILLIAMS, INC.