

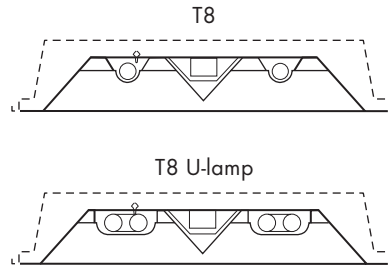
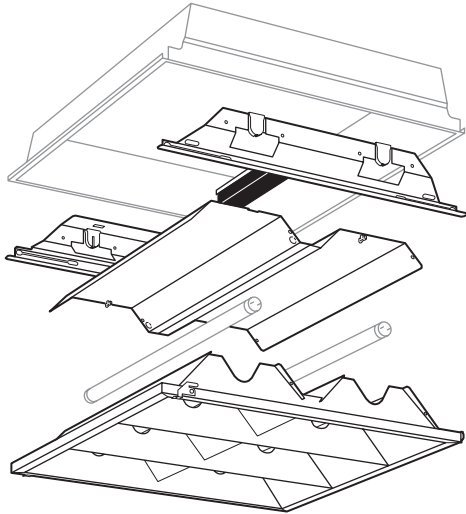
2' x 2' EFFICIENT TROFFER RETROFIT KIT

SERIES **EFTR**
2' x 2' 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 textured 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 2' 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 **2** - TOTAL WATTAGE/LAMPS **17** - OPTIONS **OPTIONS** - BALLAST **EB2** - VOLTAGE **120**

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

TOTAL LAMPS	
2	
LAMP WATTAGE/TYPE	
17	2', 17-watt T8
31UN	2', U-bent, 31-watt T8, 1-5/8" leg spacing
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



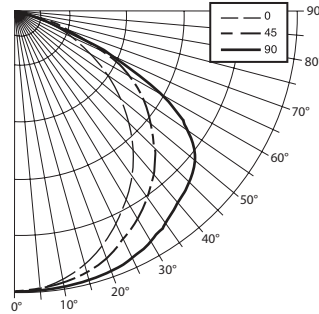
FLUORESCENT LIGHTING

Williams Catalog #EFTR-22-217-EB2-120
Test Report #14756.0, Dated 06/19/09

Lamp Type: F17WT8/835/RS
Lamp Quantity: 2

CANDLEPOWER DISTRIBUTION

VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0	45	90	
0	839.	839.	839.	
5	834.	835.	838.	79.8
15	786.	809.	833.	229.4
25	706.	756.	815.	350.8
35	600.	681.	777.	429.3
45	475.	584.	729.	457.1
55	331.	464.	628.	422.9
65	193.	292.	310.	267.4
75	75.	79.	61.	77.5
85	13.	13.	8.	13.0
90	0.	0.	0.	



LUMEN SUMMARY

ZONE	LUMENS	%LAMP	% FIXTURE
0 - 30	660.	23.6	28.4
0 - 40	1089.	38.9	46.8
0 - 60	1969.	70.3	84.6
0 - 90	2327.	83.1	100.0
0 - 180	2327.	83.1	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	.99	.99	.99	.97	.97	.97	.92	.92	.92
1	.92	.89	.85	.90	.87	.84	.83	.81	.79
2	.85	.79	.74	.83	.77	.73	.74	.71	.67
3	.78	.70	.64	.76	.69	.63	.66	.62	.58
4	.72	.62	.56	.70	.61	.55	.59	.54	.50
5	.65	.55	.48	.64	.54	.48	.52	.47	.42
6	.60	.49	.42	.58	.48	.42	.47	.41	.37
7	.55	.44	.37	.54	.43	.37	.42	.36	.32
8	.51	.39	.32	.49	.39	.32	.38	.32	.27
9	.46	.35	.28	.45	.35	.28	.34	.28	.24
10	.43	.32	.25	.42	.32	.25	.31	.25	.21

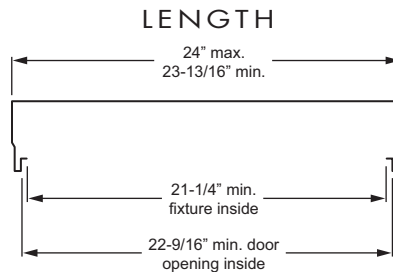
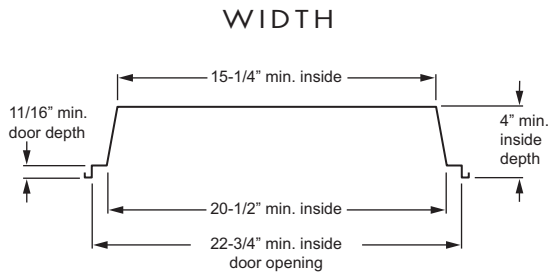
TOTAL LUMINAIRE OPTICAL EFFICIENCY = 83.1%

SPACING CRITERIA: END=1.2 DIAG=1.3 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.