

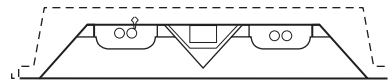
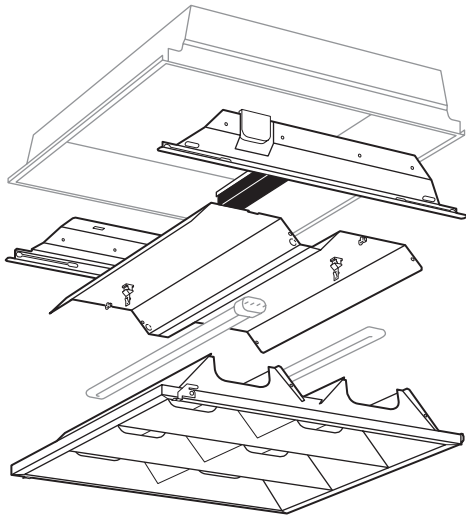
2' x 2' EFFICIENT TROFFER RETROFIT KIT

SERIES **EFTR**
2' x 2' TT

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, either instant start or programmed start, 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 LAMPS **2** - WATTAGE/TYPE **40TT** - 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	
40TT	2', 40-watt long twin tube
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



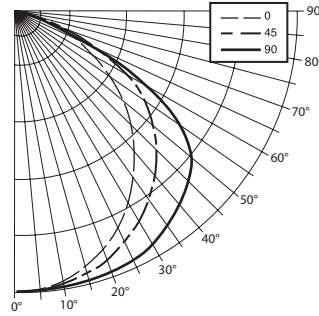
FLUORESCENT LIGHTING

Williams Catalog #EFTR-22-240TT-EB2-120
Test Report #14757.0, Dated 06/19/09

Lamp Type: FT40W/2G11/RS
Lamp Quantity: 2

CANDLEPOWER DISTRIBUTION

VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0	45	90	
0	1886.	1886.	1886.	
5	1881.	1876.	1876.	179.2
15	1774.	1819.	1872.	516.3
25	1598.	1708.	1842.	793.1
35	1353.	1543.	1762.	974.1
45	1069.	1317.	1623.	1029.6
55	740.	1033.	1340.	927.9
65	430.	592.	536.	532.8
75	175.	167.	117.	166.4
85	36.	33.	15.	32.3
90	0.	0.	0.	



LUMEN SUMMARY

ZONE	LUMENS	%LAMP	% FIXTURE
0 - 30	1489.	23.6	28.9
0 - 40	2463.	39.1	47.8
0 - 60	4420.	70.2	85.8
0 - 90	5152.	81.8	100.0
0 - 180	5152.	81.8	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	.97	.97	.97	.95	.95	.95	.91	.91	.91
1	.90	.87	.84	.88	.85	.83	.82	.80	.78
2	.83	.78	.73	.81	.76	.72	.73	.70	.66
3	.77	.69	.63	.75	.68	.63	.66	.61	.57
4	.71	.62	.55	.69	.61	.55	.59	.53	.49
5	.65	.55	.48	.63	.54	.47	.52	.46	.42
6	.59	.49	.42	.58	.48	.42	.47	.41	.37
7	.55	.44	.37	.53	.43	.37	.42	.36	.32
8	.50	.39	.32	.49	.39	.32	.38	.32	.27
9	.46	.35	.28	.45	.35	.28	.34	.28	.24
10	.43	.32	.25	.42	.31	.25	.30	.25	.21

TOTAL LUMINAIRE

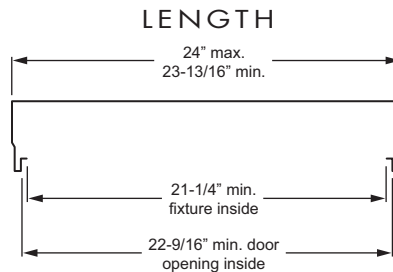
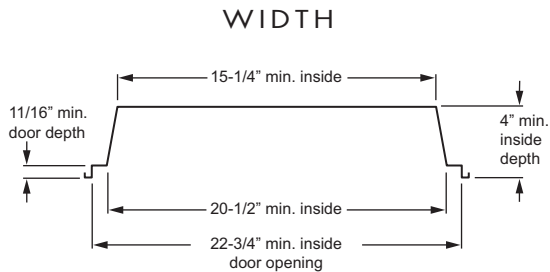
OPTICAL EFFICIENCY = **81.8%**

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.