



The **RKTF**TM Series

Troffer LED Retrofit Kit





Troffer LED Retrofit Kit



PROJECT: _____

DATE: _____

TYPE: _____

PREPARED BY: _____



KEY FEATURES

- Power and Color Selectable** on selected models
- Quick Retrofit** for traditional linear fluorescent troffers
- Transform into a fresh LED fixture in less than **5-minutes**
- Controls Ready** - optional motion, daylight or network controls
- Optional **Emergency Battery Backup**

TECHNICAL SPECIFICATIONS

Compliance

UL Listed

UL 1598 Suitable for damp locations

IESNA LM79 & LM-80 Testing

Paclights LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Qualification

Selected models of this product are on the Design Lights Consortium (DLC) Qualified Products List and are eligible for rebates from DLC Member Utilities. To view our DLC qualified products, please consult the DLC Qualified Products List at www.design-lights.org/qpl

LED Characteristics

LEDs

Long-life, high-efficacy, surface-mount LEDs

LEDs Lifespan

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Lumen Maintenance

L70 ≥ 100,000 hours

Color Rendering Index

>81

Color Uniformity

PacLights' range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377

Other

5-Year Limited Warranty**

The PacLights 5-year, limited warranty covers light output, driver performance and paint finish.

**PacLights's warranty is subject to all terms and conditions found at paclights.com/warranty

Construction

Ambient Temperature

Suitable for up to 50° C (122° F) ambient temperature

Cold Weather Starting

The minimum starting temperature is -4 F°/-20° C

Housing & Lens

Durable cold rolled steel housing provides strength and uniformity. Luminaire is pre-painted to enhanced smooth finish. Frosted Polycarbonate lens

Installation

Replace existing 2x2, 2x4, 1x4 traditional linear fluorescent troffers, by utilizing the existing fixture housing. The kit provides all the components needed to perform the change out, completely assembled within the frame. The kit fits for both air return troffers and standard troffers.

Green Technology

Mercury and UV free, and RoHS compliant. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Electrical

LED Driver

Designed to last ≥50,000 hours when at allowable operating temperature

Input Voltage: 120-277v AC, 50-60 Hz

0-10V dimming (dim to off); Power Factor > 0.95; THD < 13%

MODEL	Watt.	120v	208v	240v	277v
RKTF/2-14D-30/25/20	max 30W	0.28A	0.16A	0.14A	0.12A
RKTF/2-22D-30/25/20	max 30W	0.28A	0.16A	0.14A	0.12A
RKTF/2-24D-35/30/25	max 35W	0.32A	0.19A	0.16A	0.14A
RKTF/2-24D-45/38/34	max 45W	0.42A	0.24A	0.21A	0.18A

Control Receptacle

Control receptacle included for field-installable plug & play lighting controls. Compatible with selected motion, daylight and network lighting controls.

ORDERING INFORMATION

RKTF™ generation 2

FAMILY	MODEL	CCT	CONTROL	EMERGENCY BACKUP
RKTF/2	MODEL	CCT	CONTROL	EMERGENCY

EXAMPLE

RKTF/2-24D-45/38/34-35/40/50

RKTF/2-22D-25-40-EM500

RKTF/2-24D-38-35/40/50-MCP-EM1000

MODEL

* MUST SELECT ONE

CODE	SIZE	LUMEN PACKAGE	WATTAGE
22D-20	2 x 2'	2,700	20w
22D-25	2 x 2'	3,400	25w
22D-30	2 x 2'	4,100	30w

CODE	SIZE	LUMEN PACKAGE	WATTAGE
14D-20	1 x 4'	2,700	20w
14D-25	1 x 4'	3,400	25w
14D-30	1 x 4'	4,100	30w

CODE	SIZE	LUMEN PACKAGE	WATTAGE
24D-25	2 x 4'	3,400	25w
24D-30	2 x 4'	4,100	30w
24D-34	2 x 4'	4,600	34w
24D-35	2 x 4'	4,800	35w
24D-38	2 x 4'	5,200	38w
24D-45	2 x 4'	6,100	45w

CODE	SIZE	LUMEN SELECTABLE	WATT. SELECTABLE
22D-30/25/20	2 x 2'	2,700	20w
		3,400	25w
		4,100	30w
14D-30/25/20	1 x 4'	2,700	20w
		3,400	25w
		4,100	30w
24D-35/30/25	2 x 4'	3,400	25w
		4,100	30w
		4,800	35w
24D-45/38/34	2 x 4'	4,600	34w
		5,200	38w
		6,100	45w

CCT

* MUST SELECT ONE

CODE	CCT	CRI
35/40/50	3500K/4000K/5000K SELECTABLE	>81
35	3500K	
40	4000K	
50	5000K	

CONTROL

* LEAVE BLANK, or SELECT ONE

CODE	TYPE	PARTS SKU	SENSOR	MOUNT	INSTALL
MCP	Standalone	SE-KE-IFS06R	PIR & Daylight Dimming	Plug & Play	FIELD
WBP	Bluetooth Networked	KEILTON-IFS108	PIR & Daylight Dimming		

EMERGENCY BATTERY BACKUP

* LEAVE BLANK, or SELECT ONE

CODE	PARTS SKU	WATT	EMERGENCY LUMEN	CA CEC TITLE 20 MODEL#	EMERGENCY RUNTIME	INSTALL
EM500	EMB-4	4w	500 Lumen	BLD-FM04E-600400	> 90 mins	FACTORY
EM1000	EMB-8	8w	1,000 Lumen	BLD-CM20N-480800-8W		

PERFORMANCE

Models	Lumen Package	Wattage	CCT Setting	Lumen Output
Delivered Lumens, 80 CRI	2 x 4' RKTF/2-24D-35/30/25	3,400	25w	3500K 3,250
				4000K 3,500
				5000K 3,375
		4,100	30w	3500K 3,900
				4000K 4,200
				5000K 4,050
	2 x 4' RKTF/2-24D-45/38/34	4,800	35w	3500K 4,550
				4000K 4,900
				5000K 4,725
		4,600	34w	3500K 4,420
				4000K 4,760
				5000K 4,590
		5,200	38w	3500K 4,940
				4000K 5,320
				5000K 5,130
		6,100	45w	3500K 5,850
				4000K 6,300
				5000K 6,075

Models	Lumen Package	Wattage	CCT Setting	Lumen Output
Delivered Lumens, 80 CRI	2 x 2' RKTF/2-22D-30/25/20	2,700	20w	3500K 2,600
				4000K 2,800
				5000K 2,700
		3,400	25w	3500K 3,250
				4000K 3,500
				5000K 3,375
	1 x 4' RKTF/2-14D-30/25/20	4,100	30w	3500K 3,900
				4000K 4,200
				5000K 4,050
		2,700	20w	3500K 2,600
				4000K 2,800
				5000K 2,700
		3,400	25w	3500K 3,250
				4000K 3,500
				5000K 3,375
		4,100	30w	3500K 3,900
				4000K 4,200
				5000K 4,050

DLC CHART

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DLC Primary use designation: Integrated Retrofit Kits for 2x2 Luminaires



MODEL#	CLASS	DLC PRODUCT ID
RKTF/2-22D-20-35/40/50-(MC,EM,Blank,Both)	Standard	S-JHHH2P
RKTF/2-22D-25-35/40/50-(MC,EM,Blank,Both)	Standard	S-5K3Q9R
RKTF/2-22D-30-35/40/50-(MC,EM,Blank,Both)	Standard	S-KYX0M5
RKTF/2-22D-30/25/20-35/40/50-(MC,EM,Blank,Both)	Standard	S-WTN01Z

DLC Primary use designation: Integrated Retrofit Kits for 1x4 Luminaires

MODEL#	CLASS	DLC PRODUCT ID
RKTF/2-14D-20-35/40/50-(MC,EM,Blank,Both)	Standard	S-C5QDDZ
RKTF/2-14D-25-35/40/50-(MC,EM,Blank,Both)	Standard	S-LDJ26T
RKTF/2-14D-30-35/40/50-(MC,EM,Blank,Both)	Standard	S-WL6JL1
RKTF/2-14D-30/25/20-35/40/50-(MC,EM,Blank,Both)	Standard	S-9BHD42

DLC Primary use designation: Integrated Retrofit Kits for 2x4 Luminaires

MODEL#	CLASS	DLC PRODUCT ID
RKTF/2-24D-25-35/40/50-(MC,EM,Blank,Both)	Standard	S-W7531L
RKTF/2-24D-30-35/40/50-(MC,EM,Blank,Both)	Standard	S-BNCYHL
RKTF/2-24D-35-35/40/50-(MC,EM,Blank,Both)	Standard	S-T6V1N4
RKTF/2-24D-35/30/25-35/40/50-(MC,EM,Blank,Both)	Standard	S-KF2VG5
RKTF/2-24D-34-35/40/50-(MC,EM,Blank,Both)	Standard	S-R0HM4V
RKTF/2-24D-38-35/40/50-(MC,EM,Blank,Both)	Standard	S-1M24SS
RKTF/2-24D-45-35/40/50-(MC,EM,Blank,Both)	Standard	S-YRPHDB
RKTF/2-24D-45/38/34-35/40/50-(MC,EM,Blank,Both)	Standard	S-CY8TYM

STANDARD FEATURES

Field Selectable Power & Color (selected models)



Select the desired output power by sliding the respective wattage and/ or color selection Dip Switches to the desired value, for different lumen or color outputs. Outputs can be changed before, during and after installation.

MODEL	Power(Wattage) Selectable	Color(CCT) Selectable
RKTF/2-14D-30/25/20	30W/25W/20W	3500K/4000K/5000K
RKTF/2-22D-30/25/20	30W/25W/20W	
RKTF/2-24D-35/30/25	35W/30W/25W	
RKTF/2-24D-45/38/34	45W/38W/34W	

Controls Ready



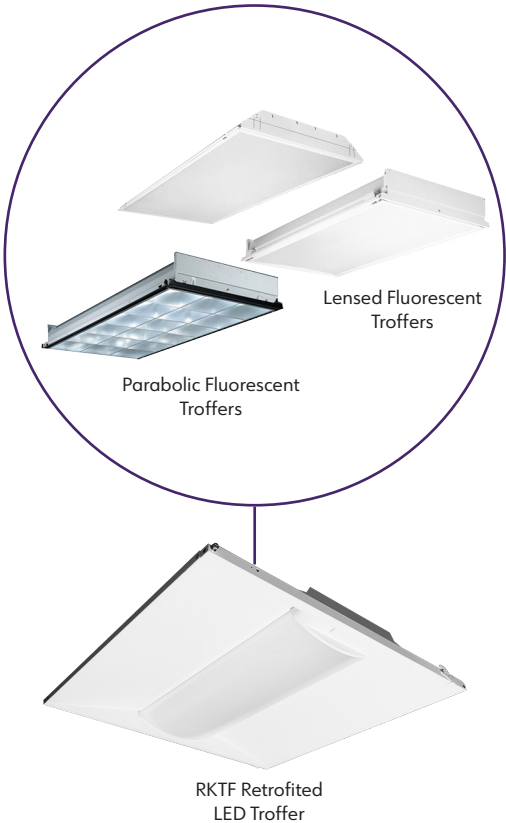
The RKTF is equipped as standard with a control receptacle, ensuring seamless compatibility with various lighting control options. This includes plug & play daylight and motion sensors, as well as networked lighting control systems, allowing for flexible and efficient lighting management.



RETROFIT STRATEGY

SYSTEM	BALLAST FACTOR	LUMENS	INPUT WATTS	LED ENERGY SAVINGS
2x2 LED Retrofitted Troffer	-	4,100	30 *	-
2 Lamp 34W T12 U-Bend	0.88	4,420	74	60%
2 Lamp 32W T8 U-Bend	0.88	4,275	58	49%
2 Lamp 24W T5HO	1.0	3,145	54	45%
2x4 LED Retrofitted Troffer	-	6,100	45 *	-
3 Lamp 32W T8 HBF	1.18	6,960	93	52%
3 Lamp 32W T8 NBF	0.88	6,681	89	50%
2x4 LED Retrofitted Troffer	-	4,800	35 *	-
2 Lamp 32W T8 HBF	1.18	4,658	65	46%
2 Lamp 28W T5	1.0	4,675	63	44%
2 Lamp 32W T8 NBF	0.88	4,468	59	41%

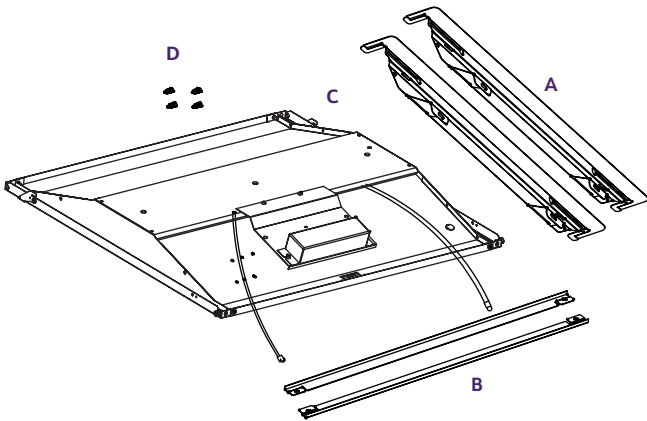
* lower wattage models and sensors can be selected for maximum energy savings



THE KIT

RKTF series troffer LED retrofit kit comes completely assembled as a lensed kit. It requires only a few minutes to install, reduces labor costs compared with installing the whole new fixture, and reduces waste.

The Troffer Retrofit Kit provides the ideal way to replace existing 2x2, 2x4, 1x4 recessed troffers, by utilizing the existing fixture housing. The kit provides all the components needed to perform the change out quickly and efficiently, allowing for system upgrades without disturbing the ceiling. The LED troffer retrofit is completely assembled within the frame. With its special design, the kit fits for both air return troffers and standard troffers.



KIT COMPONENTS	QTY
A. End Plates	2
B. Side Plates	2
C. Door Assembly Body	1
D. Self-tapping Screws	4

Existing Troffer	Required Housing Inner Height
2' x 2'	78mm (3-1/16 in)
2' x 4'	78mm (3-1/16 in)
1' x 4'	100mm (3-15/16 in)



STEP 1
Disconnect power wires, remove lens, tubes, ballast and cover of the host troffer



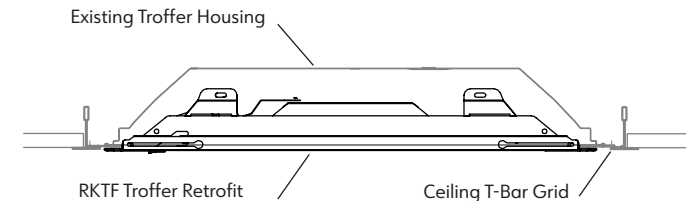
STEP 2
Insert provided end plates, and side plates if necessary, between the host troffer and T-grid



STEP 3
Hang the retrofit door assembly to the end plates installed in step 2, connect the wires



FINISH!
Close and secure the retrofit door assembly, remove protective film of the lens.



* refer to installation guide for detailed instructions

CONTROL Options

Passive Infrared Bi-level Motion & Daylight Control (option: -MCP)



A PIR sensor can detect changes in the amount of infrared radiation impinging upon it, which varies depending on the temperature and surface characteristics of the objects in front of the sensor. It can be mounted as high as 40 ft high and contains a signature 3-step dimming function, which is perfect for areas that require a light change notice totally switching off the light. Optional daylight(threshold) function will turn off fixture on pre-set level of ambient light. Control parameters are adjustable by an optional wireless commissioning device.



- Fixture integral
- PIR motion
- Daylight threshold
- Daylight harvesting
- Wireless configurable

-MCP Sensor Control Option Specification *default setting

Manual Trim/Dim	0%-100%; Quick Preset 50%/75%/100%*
Sensitivity	Sensor-Off/50%/100%*
Hold Time (before dim)	30s/5min*/15min/30min
Daylight Threshold	1/20/50 Fc, or Disable*, or current lux level (CAL)
Daylight Harvesting	Set to desired light level, Enable/Disable*
Stand-by Time(before turn off)	10s/5min/15min/30min*/1h, or Never
Stand-by Dimming Level	10%/30%/50%*
Detection Height	up to 15ft
Detection Radius	up to 48ft



SE-KE-IFS06R



SE-KE-RM51

Optional wireless commissioning device can be purchased separately to customize settings.

Networked Lighting Control (option: -WBP)



Network Lighting Controls (NLC) offer Luminaire Level Lighting Control (LLLC) based on Bluetooth-enabled Mesh Networking of Luminaires. Individual addressability enables luminaires to be communicated with each other within the zone/network. Luminaires can be grouped, trim and controlled by using the smart device app or connected wall switches. Scheduling, scene and sensors can be added for automation among the lights within the zone/group.

- **(-WBP)** Wireless bluetooth networked control with PIR occupancy and daylight harvesting sensor



- Fixture integral
- PIR motion sensor
- Daylight sensor
- Bluetooth Mesh Networked
- App configurable



KEILTON-IFS108



iOS/Android APP will be used to commissioning or customize settings of options: -WBP networked controls.

EMERGENCY BACKUP Options

Emergency Battery Backup (option: -EM500 / -EM1000)



RKTF series emergency backup models save time and cost in the installation. When there is a power outage, the emergency backup driver and battery will power the RKTF to a brightness of up to 1,000 lumen for at least 90 mins.

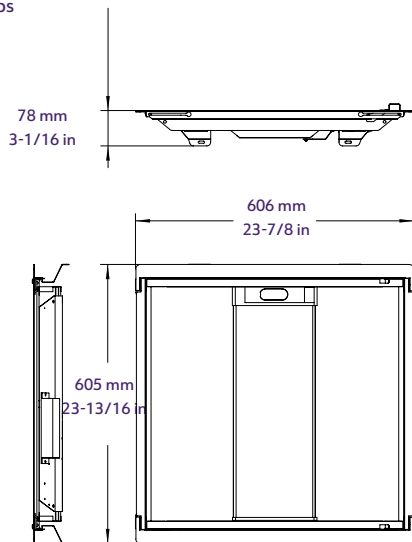
Options:

- **(-EM500)** 500 lumen for at least 90 mins
- **(-EM1000)** 1,000 lumen for at least 90 mins

DIMENSIONS

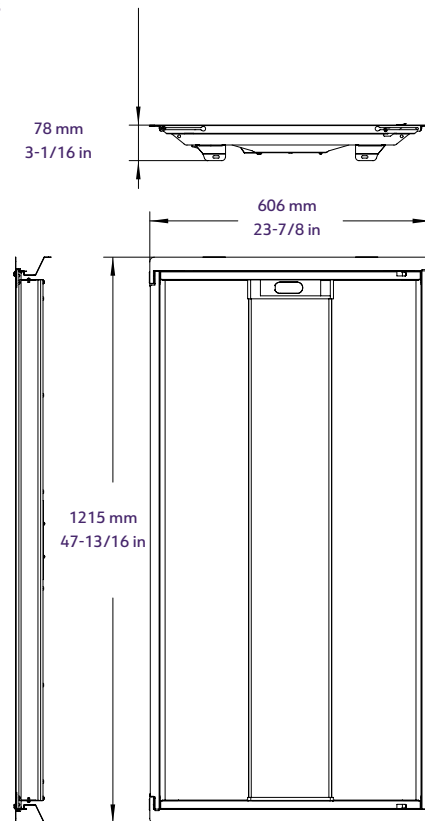
RKTF/2 - 22D (2x2 Ft)

Weight 8.7 lbs



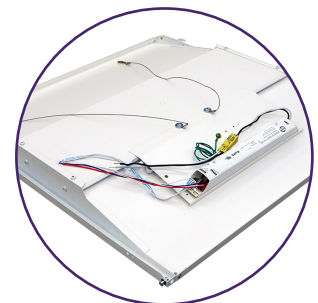
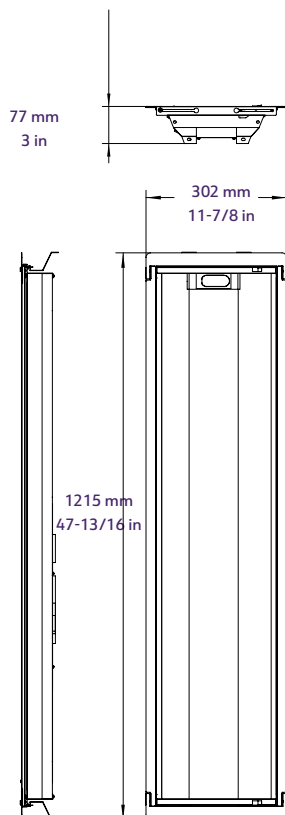
RKTF/2 - 24D (2x4 Ft)

Weight 14.1 lbs



RKTF/2 - 14D (1x4 Ft)

Weight 8.1 lbs



FINISHES

all models

White

NETWORKED CONTROLS MADE EASY

Keilton Networked Controls, a DLC® Qualified Networked Lighting Controls Product, make it easy for facilities to save energy, improve occupancy comfort and achieve code compliance by adding Luminaire Level Lighting Controls (LLLC) to indoor and outdoor applications. It allows for easy field installation of sensors and network nodes with selected PacLights controls ready fixtures. Using the Keilton app, nodes can be commissioned without the need for a gateway or internet access.

Keilton®



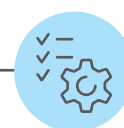
A Cost-Effective Decentralized Architecture

Direct Mobile Device Provisioning

Best-In-Class Scale, Performance & Reliability



INSTALL



COMMISSION



CONTROL



LEARN MORE, VISIT
www.paclights.com/NLC



FEATURES

- Luminaire Level Lighting Control (LLLC)
- Bluetooth-enabled Mesh Networking of Luminaires and Devices
- Individual Addressability, address individual or multiple luminaires
- High-end and Low-end Trim
- Zoning & Grouping
 - ◊ Add and control up to 100 devices per zone
 - ◊ Add unlimited zones to scale for bigger installation
 - ◊ Create unlimited groups (combination of sensor or network nodes) within a zone
 - ◊ Link and control the whole group or zone
- Scene control
 - ◊ Create and link scenes to individual lights or groups within a zone
 - ◊ Select scene with App or wall switch
- Time Scheduling for individual lights, groups or scenes
- Sensors integrated with BLE, occupancy and daylight sensing
- Multi-level Dimming, Daylight Harvesting and Occupancy controls
- Manual/Automatic ON/OFF and Automatic partial ON/OFF control capability
- Control with wireless wall switch or smart device
- Secure commissioning with Keilton App
- Up to 100 ft node-to-node and 50 ft node-to-device
- Demand Response option (works with OpenADR gateways)
- Controlled 120v 20A Receptacle available
- Other control features to meet code compliance



Keilton and its logo is a trademark of Litetrace; **PacLights** and its logo is a trademark of PacLights, LLC
DLC and its logo is a trademark of DesignLights Consortium.
Keilton is the qualified system name listed on the DLC Networked Lighting Controls QPL.


NETWORKED

CONTROLS for

RKTF series

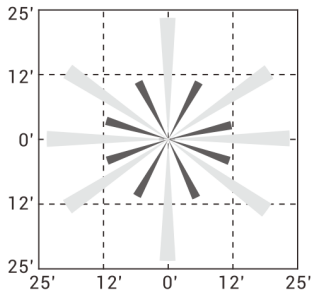
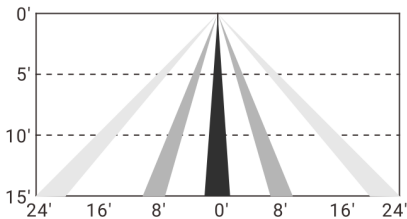


NETWORKED NODES WITH SENSOR

SKU	DESCRIPTION	FUNCTION	OPTION ORDER CODE
KEILTON-IFS108	<div>  <div> <div>KEILTON IFS108 BLUETOOTH MESH NODE W/ PIR DLH SENSOR</div> <div></div> </div> </div>	<div> <div>Enable network controlled - on & off, dim, trim, zone, group, scene & schedule, etc.</div> <div>And, PIR occupancy & daylight (harvesting) sensing.</div> </div>	-WBP



without KEILTON-IFS108



Height 15ft

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