

# PHILIPS

## Recessed

### EvoKit LED Retrofit Kit Gen 4



Project: \_\_\_\_\_

Location: \_\_\_\_\_

Cat.No: \_\_\_\_\_

Type: \_\_\_\_\_

Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_

Notes: \_\_\_\_\_

Philips EvoKit LED retrofit kit gen 4 is an energy efficient LED alternative to traditional linear fluorescent troffers. Not only does it offer energy savings<sup>1</sup>, it also helps reduce maintenance costs due to its long lifetime. Simple construction helps decrease the installation time meaning you can have an LED solution in your ceiling in just minutes.

#### Ordering guide (continued on next page)

Product Number	12NC	Description	Watts <sup>3</sup>	Volts	Lumen Maintenance (Hrs.) <sup>2</sup>	Approx. Lumens <sup>3</sup>	Color Temp. (K)	Efficacy	Diffusor
<b>Dimming: 0-10V</b>									
515692	929000781813	EvoKit 2x2 P 23L 17W 835 2 0-10 7 G4	17	120-277	70,000	2300	3500	134	Ribbed
515759	929000782213	EvoKit 2x2 P 23L 17W 840 2 0-10 7 G4	17	120-277	70,000	2300	4000	137	Ribbed
◆ 516005	929000783313	EvoKit 2x2 P 32L 24W 835 2 0-10 7 G4	24	120-277	70,000	3200	3500	132	Ribbed
◆ 515940	929000782713	EvoKit 2x2 P 32L 24W 840 2 0-10 7 G4	24	120-277	70,000	3200	4000	135	Ribbed
516237	929000785513	EvoKit 2x4 P 30L 22W 835 2 0-10 7 G4	22	120-277	70,000	3000	3500	135	Ribbed
516039	929000783613	EvoKit 2x4 P 30L 22W 840 2 0-10 7 G4	22	120-277	70,000	3000	4000	137	Ribbed
◆ 516286	929000786013	EvoKit 2x4 P 36L 27W 835 2 0-10 7 G4	27	120-277	70,000	3600	3500	135	Ribbed
◆ 516328	929000786413	EvoKit 2x4 P 36L 26W 840 2 0-10 7 G4	26	120-277	70,000	3600	4000	137	Ribbed
◆ 516427	929000787413	EvoKit 2x4 P 42L 32W 835 2 0-10 7 G4	32	120-277	70,000	4200	3500	134	Ribbed
◆ 516369	929000786813	EvoKit 2x4 P 42L 31W 840 2 0-10 7 G4	31	120-277	70,000	4200	4000	136	Ribbed
516534	929000788513	EvoKit 2x4 P 47L 36W 835 2 0-10 7 G4	36	120-277	70,000	4700	3500	132	Ribbed
516476	929000787913	EvoKit 2x4 P 47L 35W 840 2 0-10 7 G4	35	120-277	70,000	4700	4000	135	Ribbed
517482	929000798813	EvoKit 2x2 P 32L 24W 835 2 0-10 7 G4 SM	24	120-277	70,000	3200	3500	132	Smooth
517466	929000798613	EvoKit 2x2 P 32L 24W 840 2 0-10 7 G4 SM	24	120-277	70,000	3200	4000	135	Smooth
517508	929000799013	EvoKit 2x4 P 36L 27W 835 2 0-10 7 G4 SM	27	120-277	70,000	3600	3500	135	Smooth
517516	929000799113	EvoKit 2x4 P 36L 26W 840 2 0-10 7 G4 SM	26	120-277	70,000	3600	4000	137	Smooth
517540	929000799413	EvoKit 2x4 P 42L 32W 835 2 0-10 7 G4 SM	32	120-277	70,000	4200	3500	134	Smooth
517524	929000799213	EvoKit 2x4 P 42L 31W 840 2 0-10 7 G4 SM	31	120-277	70,000	4200	4000	136	Smooth

See footnotes on page 9.



# EvoKit LED retrofit kit gen 4

## Ordering guide (continued from previous page)

Product Number	12NC	Description	Watts	Volts	Lumen Maintenance (Hrs.) <sup>2</sup>	Approx. Lumens <sup>3</sup>	Color Temp. (K)	Efficacy	Diffusor
<b>Dimming: SR</b>									
516013	929000783413	EvoKit 2x2 P 32L 25W 835 2 SR 7 G4	25	120-277	70,000	3200	3500	129	Ribbed
515957	929000782813	EvoKit 2x2 P 32L 24W 840 2 SR 7 G4	24	120-277	70,000	3200	4000	132	Ribbed
516245	929000785613	EvoKit 2x4 P 30L 23W 835 2 SR 7 G4	23	120-277	70,000	3000	3500	131	Ribbed
516203	929000785213	EvoKit 2x4 P 30L 23W 840 2 SR 7 G4	23	120-277	70,000	3000	4000	133	Ribbed
516435	929000787513	EvoKit 2x4 P 42L 32W 835 2 SR 7 G4	32	120-277	70,000	4200	3500	132	Ribbed
516377	929000786913	EvoKit 2x4 P 42L 32W 840 2 SR 7 G4	32	120-277	70,000	4200	4000	134	Ribbed
516542	929000788613	EvoKit 2x4 P 47L 36W 835 2 SR 7 G4	36	120-277	70,000	4700	3500	130	Ribbed
516484	929000788013	EvoKit 2x4 P 47L 36W 840 2 SR 7 G4	36	120-277	70,000	4700	4000	132	Ribbed
517557	929000799513	EvoKit 2x4 P 42L 32W 835 2 SR 7 G4 SM	32	120-277	70,000	4200	3500	132	Smooth
517532	929000799313	EvoKit 2x4 P 42L 32W 840 2 SR 7 G4 SM	32	120-277	70,000	4200	4000	134	Smooth
517490	929000798913	EvoKit 2x2 P 32L 25W 835 2 SR 7 G4 SM	25	120-277	70,000	3200	3500	129	Smooth
517474	929000798713	EvoKit 2x2 P 32L 24W 840 2 SR 7 G4 SM	24	120-277	70,000	3200	4000	132	Smooth
<b>EvoKit with Air Return</b>									
515494	929000781013	EvoKit 2x2 A 23L 17W 835 2 0-10 7 G4	17	120-277	70,000	2300	3500	134	Ribbed
515544	929000781113	EvoKit 2x2 A 23L 17W 840 2 0-10 7 G4	17	120-277	70,000	2300	4000	136	Ribbed
515551	929000781213	EvoKit 2x2 A 32L 24W 835 2 0-10 7 G4	24	120-277	70,000	3200	3500	135	Ribbed
515585	929000781513	EvoKit 2x2 A 32L 25W 835 2 SR 7 G4	24	120-277	70,000	3200	3500	130	Ribbed
515569	929000781313	EvoKit 2x2 A 32L 24W 840 2 0-10 7 G4	24	120-277	70,000	3200	4000	135	Ribbed
515577	929000781413	EvoKit 2x2 A 32L 24W 840 2 SR 7 G4	24	120-277	70,000	3200	4000	133	Ribbed
516054	929000783813	EvoKit 2x4 A 30L 22W 835 2 0-10 7 G4	22	120-277	70,000	3000	3500	135	Ribbed
516062	929000783913	EvoKit 2x4 A 30L 23W 835 2 SR 7 G4	23	120-277	70,000	3000	3500	132	Ribbed
516195	929000785113	EvoKit 2x4 A 30L 22W 840 2 0-10 7 G4	22	120-277	70,000	3000	4000	138	Ribbed
516047	929000783713	EvoKit 2x4 A 30L 22W 840 2 SR 7 G4	22	120-277	70,000	3000	4000	136	Ribbed
516088	929000784013	EvoKit 2x4 A 36L 27W 835 2 0-10 7 G4	27	120-277	70,000	3600	3500	135	Ribbed
516096	929000784113	EvoKit 2x4 A 36L 26W 840 2 0-10 7 G4	26	120-277	70,000	3600	4000	137	Ribbed
516120	929000784413	EvoKit 2x4 A 42L 31W 835 2 0-10 7 G4	32	120-277	70,000	4200	3500	134	Ribbed
516138	929000784513	EvoKit 2x4 A 42L 32W 835 2 SR 7 G4	32	120-277	70,000	4200	3500	132	Ribbed
516104	929000784213	EvoKit 2x4 A 42L 31W 840 2 0-10 7 G4	31	120-277	70,000	4200	4000	136	Ribbed
516112	929000784313	EvoKit 2x4 A 42L 31W 840 2 SR 7 G4	36	120-277	70,000	4200	4000	135	Ribbed
516161	929000784813	EvoKit 2x4 A 47L 36W 835 2 0-10 7 G4	36	120-277	70,000	4700	3500	132	Ribbed
516179	929000784913	EvoKit 2x4 A 47L 36W 835 2 SR 7 G4	36	120-277	70,000	4700	3500	131	Ribbed
516146	929000784613	EvoKit 2x4 A 47L 35W 840 2 0-10 7 G4	35	120-277	70,000	4700	4000	135	Ribbed
516153	929000784713	EvoKit 2x4 A 47L 35W 840 2 SR 7 G4	35	120-277	70,000	4700	4000	134	Ribbed

See footnotes on page 9.

# EvoKit LED retrofit kit gen 4

## EvoKit with SpaceWise DT technology

Product Number	12NC	Description	Watts	Volts	Lumen Maint. (Hrs.) <sup>2</sup>	Approx. Lumens <sup>3</sup>	Color Temp. (K)	Efficacy	Diffusor
◆ 518332	929001709313	EvoKit 2x2 P 32L 25W 835 2 SWZDT 7 G4	25	120-277	70,000	3200	3500	129	Ribbed
◆ 518324	929001709213	EvoKit 2x2 P 32L 24W 840 2 SWZDT 7 G4	24	120-277	70,000	3200	4000	132	Ribbed
518407	929001710013	EvoKit 2x4 P 30L 23W 835 2 SWZDT 7 G4	23	120-277	70,000	3000	3500	131	Ribbed
518415	929001710113	EvoKit 2x4 P 30L 23W 840 2 SWZDT 7 G4	23	120-277	70,000	3000	4000	133	Ribbed
◆ 518423	929001710213	EvoKit 2x4 P 42L 32W 835 2 SWZDT 7 G4	32	120-277	70,000	4200	3500	132	Ribbed
◆ 518431	929001710313	EvoKit 2x4 P 42L 32W 840 2 SWZDT 7 G4	32	120-277	70,000	4200	4000	134	Ribbed
518449	929001710413	EvoKit 2x4 P 47L 36W 835 2 SWZDT 7 G4	36	120-277	70,000	4700	3500	130	Ribbed
518456	929001710513	EvoKit 2x4 P 47L 36W 840 2 SWZDT 7 G4	36	120-277	70,000	4700	4000	132	Ribbed
518316	929001709113	EvoKit 2x2 A 32L 25W 835 2 SWZDT 7 G4	25	120-277	70,000	3200	3500	130	Ribbed
518308	929001709013	EvoKit 2x2 A 32L 24W 840 2 SWZDT 7 G4	24	120-277	70,000	3200	4000	133	Ribbed
518357	929001709513	EvoKit 2x4 A 30L 23W 835 2 SWZDT 7 G4	23	120-277	70,000	3000	3500	132	Ribbed
518340	929001709413	EvoKit 2x4 A 30L 22W 840 2 SWZDT 7 G4	22	120-277	70,000	3000	4000	136	Ribbed
518373	929001709713	EvoKit 2x4 A 42L 32W 835 2 SWZDT 7 G4	32	120-277	70,000	4200	3500	132	Ribbed
518365	929001709613	EvoKit 2x4 A 42L 31W 840 2 SWZDT 7 G4	31	120-277	70,000	4200	4000	135	Ribbed
518399	929001709913	EvoKit 2x4 A 47L 36W 835 2 SWZDT 7 G4	36	120-277	70,000	4700	3500	131	Ribbed
518381	929001709813	EvoKit 2x4 A 47L 35W 840 2 SWZDT 7 G4	35	120-277	70,000	4700	4000	134	Ribbed

See footnotes on page 9. Please refer to Philips.com/Spacewise for more detailed specification sheets as well as a list of compatible wireless dimming switches.

### Features

- Occupancy sensing, daylight harvesting and task tuning in one device
- Granular dimming (occupancy sharing)
- Dwell time
- Scene setting
- Configuration of sensor parameters – if desired – using NFC or IR via intuitive Android-based Philips field apps
- Quick task tuning in the field to optimize light and power levels
- Enables auto-off/manual-on and auto-off/partial-on application
- DLC qualified: Listed on the QPL for Networked Lighting Controls

### Benefits

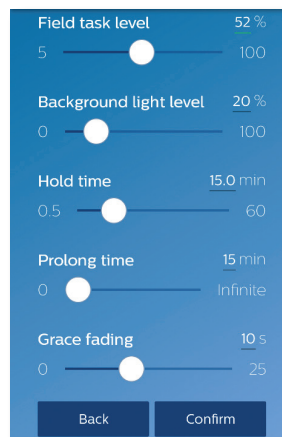
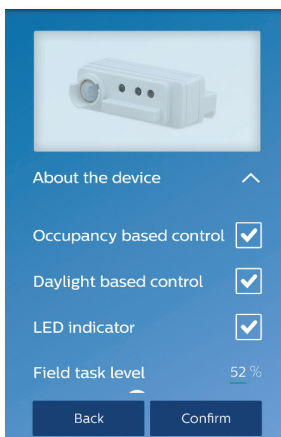
- Installation savings – integral wireless controls factory installed. No need to order separate components.
- Minimal startup and configuration expertise – savings on labor time & effort
- Deep energy savings & code compliance strategies
- Faster ROI with attractive payback periods (varies depending on luminaire choices)

### Applications

- Conference rooms
- Individual offices
- Open offices
- Classrooms
- Storage and break areas
- Restrooms
- Lobbies



### New configuration tool



Sensor parameters can be configured via Philips field apps. Two versions are available:

1. NFC – This app allows configuring sensor parameters only when you can physically access the sensor with a smartphone.
2. IR – This app allows configuring sensor parameters plus enables grouping to a wireless switch, which can be done with the IR feature of applicable phones from floor level.

You must first register for the app to receive a username and password, then download Philips field apps from the Google Play Store.

Refer to the website for registration details:

[www.usa.lighting.philips.com/support/support/tools/](http://www.usa.lighting.philips.com/support/support/tools/)

# EvoKit LED retrofit kit gen 4

## Application

- A highly efficient, visually comfortable, architecturally styled LED retrofit kit designed to replace recessed linear fluorescent troffers.
- Unique modular design offers refreshing new look in the ceiling when compared to traditional fluorescent luminaires.
- Single light bar combined with slanted troffer helps reflect light to reduce glare and provide uniform light distribution making it ideal for applications such as offices, schools, healthcare and retail.
- Excellent color rendering with a CRI above 80.
- Extremely high efficacies up to 138 lumens per watt.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source.
- Designed for use with standard grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-Grids.
- High efficiency source and luminaire design help significantly reduce energy consumption and more easily comply with known energy codes.
- Helps meet regulation requirements such as ASHRAE 90.1 and Title 24 when matched with suitable controls.

## Construction/Finish

- Simple design allows for quick installation in existing luminaire without the need to break the ceiling plenum.

- Constructed using galvanized steel which helps fight rust and makes for more durable product.
- Integrated ceiling tabs for securement within the ceiling for areas prone to extreme conditions
- Minimum depth of only 3" necessary to allow proper clearance and installation of the EvoKit.
- Retrofit kit is powder coated after fabrication with high quality, durable finish to ensure no unfinished edges and avoid future potential of corrosion.
- Components fit together easily without the need for tools during installation.

## Electrical

- Multiple driver options available
  - Philips Advance Xitanium SR driver allows flexibility to integrate a range of control options.
  - 0-10V dimming satisfies universal voltage requirements
- 5-year limited warranty includes all components of the retrofit kit, including driver, LED board and nonelectrical components.\*\*
- Listed with UL and Design Lights Consortium† to ensure quality performance and safety standards are met.
- High efficiency LEDs have a minimum 70,000 hour rated life (L<sub>70</sub>).

## Enclosure

- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

## Accessories

- Suitable for use with Philips 503441 emergency backup.
- Suitable for use with a wide range of control systems.
- Appropriate for new construction when used with standard listed lensed or parabolic troffers.

Prod. No.	Description
502583	EvoKit 2x4 replacement lens ribbed
517748	EvoKit 2x4 replacement lens smooth
502575	EvoKit 2x2 replacement lens ribbed
517755	EvoKit 2x2 replacement lens smooth
503441	EvoKit field installed emergency battery backup (requires the use of bracket)
517730	EvoKit emergency battery backup bracket (brackets come in packs of 4)

## EvoKit with new SimpleSet technology for wireless lumen level programming

EvoKit with new SimpleSet technology allows the maximum lumen level to be set prior to installation using a smartphone-based app without requiring power to the luminaire. Available in the 0-10V and SR versions only. The app can be downloaded at Google Play. Please contact your Philips representative for the current list of approved Android smartphones. Distributors can set lumen levels prior to shipping, and contractors can set lumen levels prior to installation. Lumen level is quickly and easily set in two steps:



Step 1: Place the smartphone next to the NFC antenna on the driver.

Step 2: Follow the on-screen instructions.



# EvoKit LED retrofit kit gen 4

## EvoKit with air return

The air return versions of EvoKit are suitable for retrofitting listed air return troffers.

### 2x2 air return data

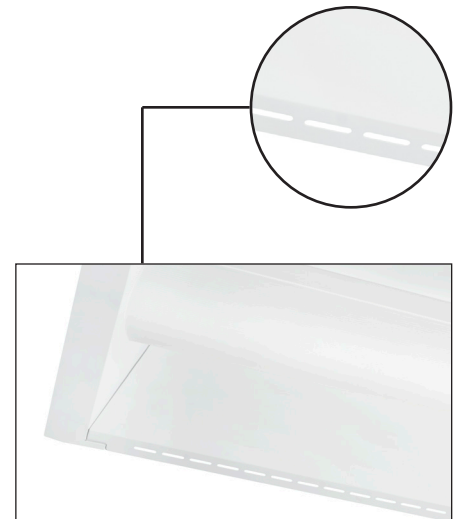
Return Air Volume, SCFM.	61	69	80	97	112	131
Negative Static Pressure, in. H <sub>2</sub> O	0.11	0.15	0.20	0.30	0.40	0.55
**Noise Criteria (NC)	17	21	25	31	34	38

Note: 24 total air slots, each 30mm x 6mm.

### 2x4 air return data

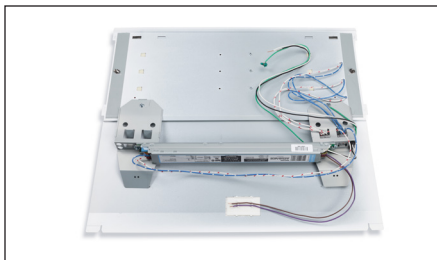
Return Air Volume, SCFM.	105	119	128	162	259	272
Negative Static Pressure, in. H <sub>2</sub> O	0.05	0.08	0.10	0.20	0.45	0.55
**Noise Criteria (NC)	<15	32	32	36	38	40

Note: 50 total air slots, each 30mm x 6mm.



## EvoKit Sensor Ready (SR) with Philips Advance Xitanium SR for connected lighting solutions

EvoKit SR is a new platform that allows users to choose different control platforms to suit their needs and budget; from simple occupancy and daylight sensing to cloud-connected data-reporting sensing. This empowers users to fine-tune their energy use for reduced energy costs. Various Philips EasySense, SpaceWise and other SR certified controls are available. Please refer to Philips.com/Evokit for details. Contact your Philips representative for a current list of additional approved sensors. Sensors are connected in the field with just a few simple steps:



Step 1: EvoKit SR is shipped with a plate covering the sensor hole. There are two wires secured to the back of the plate.



Step 2: The plate can be removed before or after you install EvoKit SR. Just gently slide the plate to one end and remove.



Step 3: Remove the two wires that were secured to the back of the plate.



Step 4: Take these two wires and insert them into the sensor. They are not polarity sensitive.



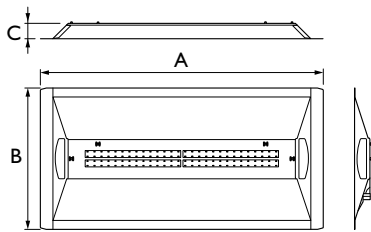
Step 5: Insert the sensor back into the hole. The sensor may or may not require a socket.

Commercial Product Name	Order Code
EasySense EVO102	514877
EasySense EVO200	516575
EasySense EVO300	517763

# EvoKit LED retrofit kit gen 4

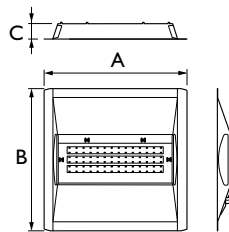
## Dimensions 2x4

A Face Plate Length	B Face Plate Width	C Height
47.83"	23.9"	2.95"



## Dimensions 2x2

A Face Plate Length	B Face Plate Width	C Height
23.9"	23.9"	2.95"



## 2'x2' EvoKit, P 23L 17W 835 2 0-10 7 G4, 2,202 delivered lumens

Catalog No.	515692
Test No.	x223L
S/MH	1.2
Lamp Type	LED
Lumens/Watt	131
Input Watts	17

Comparative yearly lighting energy cost per 1000 lumens - \$1.83 based on 3000 hours and \$0.08/kWh

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology

Photometric values based on tests performed in compliance with LM-79

Candlepower Angle	End	Cross	Back-45
0	800	800	0
5	799	796	0
10	785	784	0
15	763	765	0
20	733	738	0
25	695	704	0
30	650	663	0
35	600	617	0
40	545	569	0
45	486	519	0
50	427	468	0
55	365	418	0
60	304	367	0
65	243	313	0
70	182	255	0
75	124	192	0
80	71	126	0
85	26	60	0

### Coefficients of Utilization

#### EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

pcc	80			70			50		
	pw	70	50	30	70	50	30	50	30
RCR									
0	118	118	118	115	115	115	111	111	
1	108	104	98	106	101	96	96	93	
2	97	90	82	95	88	81	84	79	
3	90	79	70	86	77	69	73	68	
4	81	69	60	80	68	59	66	58	
5	76	63	53	72	60	53	58	52	
6	69	56	46	68	55	46	54	46	
7	65	51	41	63	50	41	48	40	
8	59	46	38	58	46	38	45	36	
9	56	42	34	55	41	34	40	34	
10	53	40	32	52	39	30	38	30	

### Light Distribution

Degrees	Lumens	% Luminaire	Average Luminance			
Angle	End	45°	Cross			
0-30	609	27.7	45	5897	6110	6297
0-40	984	44.7	55	5463	5913	6259
0-60	1709	77.6	65	4936	5867	6356
0-90	2202	100	75	4122	5880	6369
			85	2597	5689	5953

## 2'x2' EvoKit, P 32L 24W 835 2 0-10 7 G4, 3,062 delivered lumens

Catalog No.	516005
Test No.	x232L
S/MH	1.2
Lamp Type	LED
Lumens/Watt	129
Input Watts	24

Comparative yearly lighting energy cost per 1000 lumens - \$1.86 based on 3000 hours and \$0.08/kWh

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology

Photometric values based on tests performed in compliance with LM-79

Candlepower Angle	End	Cross	Back-45
0	1112	1112	0
5	1109	1102	0
10	1090	1082	0
15	1060	1052	0
20	1018	1010	0
25	966	959	0
30	903	901	0
35	832	836	0
40	756	768	0
45	674	699	0
50	591	630	0
55	506	559	0
60	421	486	0
65	338	410	0
70	254	328	0
75	173	238	0
80	99	148	0
85	37	51	0

### Coefficients of Utilization

#### EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

pcc	80			70			50		
	pw	70	50	30	70	50	30	50	30
RCR									
0	118	118	118	115	115	115	111	111	
1	108	104	98	106	101	96	96	93	
2	97	90	82	95	88	81	84	79	
3	90	79	70	86	77	69	73	67	
4	81	69	60	80	68	59	66	58	
5	76	63	53	72	60	53	58	52	
6	69	56	46	68	55	46	54	46	
7	65	51	41	63	50	41	48	40	
8	59	46	38	58	46	38	45	36	
9	56	42	34	55	41	34	40	34	
10	53	40	32	52	39	30	38	30	

### Light Distribution

Degrees	Lumens	% Luminaire	Average Luminance			
Angle	End	45°	Cross			
0-30	846	27.6	45	8183	8270	8488
0-40	1369	44.7	55	7572	7953	8358
0-60	2377	77.6	65	6858	7768	8336
0-90	3062	100	75	5744	7440	7901
			85	3651	5398	4985

# EvoKit LED retrofit kit gen 4

## 2'x4' EvoKit, P 30L 22W 835 2 0-10 7 G4, 2,758 delivered lumens

Candlepower					
Angle	End	45	Cross	Back-45	
0	952	952	952	952	
5	937	948	962	946	
15	899	911	927	907	
25	824	838	855	832	
35	585	613	642	604	
45	445	488	531	480	
55	648	700	762	686	
65	299	369	413	362	
75	156	239	263	232	
85	35	79	78	67	

Catalog No. 516237  
 Test No. x430L  
 S/MH 1.2  
 Lamp Type LED  
 Lumens/Watt 133  
 Input Watts 21

Comparative yearly lighting energy cost per 1000 lumens - \$1.80 based on 3000 hours and \$0.08/kWh

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology

Photometric values based on tests performed in compliance with LM-79

Coefficients of Utilization									
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
	pw	70	50	30	70	50	30	50	30
RCR									
0	118	118	118		115	115	115		111 111
1	108	103	97		105	101	96		95 93
2	97	89	81		94	86	81		83 78
3	89	78	69		86	76	68		72 67
4	81	68	59		79	68	58		65 57
5	75	61	52		72	59	52		57 51
6	68	55	46		67	54	46		53 45
7	64	50	40		61	48	40		47 40
8	59	46	36		57	45	36		44 35
9	56	41	34		54	40	34		40 33
10	52	39	30		51	38	30		36 29

Light Distribution			Average Luminance			
Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
0-30	731	26.5	45	4125	4319	4526
0-40	1189	43.1	55	3864	4239	4613
0-60	2092	75.9	65	3524	4350	4864
0-90	2758	100	75	3004	4607	5066
			85	2007	4500	4471

## 2'x4' EvoKit, P 36L 27W 835 2 0-10 7 G4, 3,368 delivered lumens

Candlepower					
Angle	End	45	Cross	Back-45	
0	1167	1167	1167	1167	
5	1149	1161	1180	1159	
15	1103	1117	1136	1111	
25	1012	1027	1048	1019	
35	883	901	925	890	
45	718	749	783	738	
55	548	596	645	586	
65	370	450	502	441	
75	195	290	320	282	
85	45	87	93	82	

Catalog No. 516286  
 Test No. x436L  
 S/MH 1.3  
 Lamp Type LED  
 Lumens/Watt 132  
 Input Watts 26

Comparative yearly lighting energy cost per 1000 lumens - \$1.82 based on 3000 hours and \$0.08/kWh

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology

Photometric values based on tests performed in compliance with LM-79

Coefficients of Utilization									
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
	pw	70	50	30	70	50	30	50	30
RCR									
0	118	118	118		115	115	115		111 111
1	108	103	97		105	101	96		95 93
2	97	89	81		94	86	81		83 78
3	89	78	69		86	77	68		73 67
4	81	68	59		79	68	58		65 57
5	75	61	52		72	60	52		57 51
6	68	56	46		67	55	46		53 45
7	64	50	40		61	50	40		47 40
8	59	46	36		57	45	36		44 35
9	56	41	34		54	41	34		40 33
10	52	39	30		51	38	30		36 29

Light Distribution			Average Luminance			
Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
0-30	896	26.6	45	5063	5281	5517
0-40	1456	43.2	55	4758	5181	5606
0-60	2559	76.0	65	4363	5306	5915
0-90	3368	100	75	3758	5574	6159
			85	2550	4992	5340

# EvoKit LED retrofit kit gen 4

## 2'x4' EvoKit, P 42L 32W 835 2 0-10 7 G4, 4,134 delivered lumens

Catalog No.	516427	<b>Candlepower</b>			
Test No.	x442L	<b>Angle</b>	<b>End</b>	<b>45</b>	<b>Cross</b>
S/MH	1.3	<b>0</b>	1435	1435	1435
Lamp Type	LED	<b>5</b>	1414	1428	1451
Lumens/Watt	131	<b>15</b>	1359	1375	1396
Input Watts	32	<b>25</b>	1247	1264	1288
		<b>35</b>	1087	1109	1135
		<b>45</b>	888	924	961
		<b>55</b>	676	734	791
		<b>65</b>	457	552	614
		<b>75</b>	242	358	392
		<b>85</b>	56	122	117

Comparative yearly lighting energy cost per 1000 lumens - \$1.83 based on 3000 hours and \$0.08/kWh

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology

Photometric values based on tests performed in compliance with LM-79

<b>Coefficients of Utilization</b>									
<b>EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)</b>									
<b>p<sub>cc</sub></b>	80			70			50		
<b>p<sub>w</sub></b>	70	50	30	70	50	30	50	30	
<b>RCR</b>									
0	118	118	118	115	115	115	111	111	
1	108	103	97	105	101	96	95	93	
2	97	89	81	94	86	81	83	78	
3	89	78	69	86	77	68	73	67	
4	81	68	59	79	68	58	65	57	
5	75	61	53	72	60	52	57	51	
6	68	56	46	67	55	46	53	45	
7	64	50	40	61	50	40	47	40	
8	59	46	36	57	45	36	44	35	
9	56	41	34	54	41	34	40	33	
10	52	39	30	51	38	30	36	29	

<b>Light Distribution</b>			<b>Average Luminance</b>			
<b>Degrees</b>	<b>Lumens</b>	<b>% Luminaire</b>	<b>Angle</b>	<b>End</b>	<b>45°</b>	<b>Cross</b>
0-30	1102	26.7	45	4688	4877	5077
0-40	1790	43.3	55	4403	4775	5147
0-60	3143	76.0	65	4033	4881	5427
0-90	4134	100	75	3484	5171	5655
			85	2412	5244	5021

## 2'x4' EvoKit, P 47L 36W 835 2 0-10 7 G4, 4,662 delivered lumens

Catalog No.	516534	<b>Candlepower</b>			
Test No.	x447L	<b>Angle</b>	<b>End</b>	<b>45</b>	<b>Cross</b>
S/MH	1.3	<b>0</b>	1616	1616	1616
Lamp Type	LED	<b>5</b>	1593	1609	1634
Lumens/Watt	131	<b>15</b>	1534	1548	1574
Input Watts	36	<b>25</b>	1408	1425	1451
		<b>35</b>	1230	1250	1280
		<b>45</b>	1007	1041	1085
		<b>55</b>	767	827	893
		<b>65</b>	519	624	693
		<b>75</b>	277	405	443
		<b>85</b>	68	139	133

Comparative yearly lighting energy cost per 1000 lumens - \$1.83 based on 3000 hours and \$0.08/kWh

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology

Photometric values based on tests performed in compliance with LM-79

<b>Coefficients of Utilization</b>									
<b>EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)</b>									
<b>p<sub>cc</sub></b>	80			70			50		
<b>p<sub>w</sub></b>	70	50	30	70	50	30	50	30	
<b>RCR</b>									
0	118	118	118	115	115	115	111	111	
1	108	103	97	105	101	96	95	93	
2	97	89	81	94	86	81	83	78	
3	89	78	69	86	77	68	73	67	
4	81	68	59	79	68	58	65	57	
5	75	61	52	72	60	52	57	51	
6	68	56	46	67	55	46	53	45	
7	64	50	40	61	50	40	47	40	
8	59	46	36	57	45	36	44	35	
9	56	41	34	54	41	34	40	33	
10	52	39	30	51	38	30	36	29	

<b>Light Distribution</b>			<b>Average Luminance</b>			
<b>Degrees</b>	<b>Lumens</b>	<b>% Luminaire</b>	<b>Angle</b>	<b>End</b>	<b>45°</b>	<b>Cross</b>
0-30	1241	26.6	45	5317	5496	5727
0-40	2017	43.3	55	4990	5386	5813
0-60	3543	76.0	65	4587	5511	6119
0-90	4662	100	75	3990	5849	6384
			85	2913	5968	5711



# EvoKit LED retrofit kit gen 4

## Energy saving solution – EvoKit 2'x4'

### Estimated lighting costs using a standard 3 lamp T8 troffer

Present Wattage		85	W
× Annual operating hours	=	4,380	hrs
		372,300	Watt-Hours
÷ 1,000	=	372.3	kWh per year
× kWh rate of \$0.10	=	\$37.23	per year
× 125 fixtures		\$4,653.75	annual energy cost per space

### Estimated lighting costs using a Philips 42L 2x4 Evokit G4

Present Wattage		31	W
× Annual operating hours	=	4,380	hrs
		135,780	Watt-Hours
÷ 1,000	=	135.78	kWh per year
× kWh rate of \$0.10	=	\$13.58	per year
× 125 fixtures		\$1,697.25	annual energy cost per space

**Total estimated annual savings<sup>‡</sup> \$2,956.50**

<sup>‡</sup> Based on 125 fixtures per space operating 4,380 hours a year. 125 fixtures is roughly equivalent to a 10,000 square foot space. kWh rates will vary.

#### FOOTNOTES:

1) Please refer to the energy saving chart above for details.

2) L<sub>70</sub> 72,000 hours @ 35°C based on TM21 and LM80.

3) Based on photometric testing consistent with IES LM-79. Actual wattage may differ by +/- 10%.

Actual initial lumen output may vary between -10 and +10% of the rated lumens.

◆ Made to Stock product (Contact your Philips Sales Representative for stock availability and lead time. MTS products may initially be MTO).

\*\*\* Please visit [www.philips.com/warranties](http://www.philips.com/warranties) for full details.

† Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electrical products. For products used in North America, compliance with RoHS is voluntary and self-certified.

‡ Evokit luminaires are Design Lights Consortium qualified. Please see the DLC QPL list for exact catalog numbers (<http://www.designlights.org/QPL>).

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