PHILIPS

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EvoKit Click LED Retrofit Kit 1x4

Philips EvoKit click LED retrofit kit is an aesthetically pleasing and energy efficient LED retrofit kit designed to deliver a refreshed sleek and modern look with minimal material waste. Not only does it offer energy savings[1], it also helps reduce maintenance and installation costs due to its modular design, bulk packaging, and long LED lifetime. Additional information can be found at www.philips.com/evokit. Products can be found on the DLC QPL by searching the 6 digit product number.

Ordering guide (continued on next page)

Product Number	Description	Watts[3]	Volts	Lumen Maint. (Hrs.)[2]	Approx. Lumens[3]	Color Temp. (K)	Efficacy	Dim	Pkg	DLC Code
CLKE (Energy Efficient)										
523605	EvoKit CLKE 1x4 32L 24W 840 UNV 0-10 P4	24W	120–277	70,000	3200	4000	140	0-10	4 Pack	PULZ4OCY
521260	EvoKit CLKE 1x4 23L 16W 835 UNV 0-10 P1	16W	120–277	70,000	2300	3500	144	0-10	Single Pack	PD9TLK7C
521278	EvoKit CLKE 1x4 23L 16W 840 UNV 0-10 P1	16W	120–277	70,000	2300	4000	149	0-10	Single Pack	P088231I
521286	EvoKit CLKE 1x4 32L 24W 835 UNV 0-10 P1	24W	120–277	70,000	3200	3500	140	0-10	Single Pack	POBYGPA0
♦ 520239	EvoKit CLKE 1x4 32L 24W 840 UNV 0-10 P1	24W	120–277	70,000	3200	4000	145	0-10	Single Pack	PULZ4OCY
CLKE SWZDT (Energy Efficient SpaceWise DT)										
523431	EvoKit CLKE 1x4 32L 24W 835 UNV SWZ P1	24W	120–277	70,000	3200	3500	140	SWZDT	Single Pack	PUDWOZ0T
523449	EvoKit CLKE 1x4 32L 24W 840 UNV SWZ P1	24W	120–277	70,000	3200	4000	145	SWZDT	Single Pack	PF9UBV0K
CLKE IAP (Energy Efficient Interact Pro)										
523845	EvoKit CLKE 1x4 32L 25W 840 UNV IAP P4	25W	120–277	70,000	3200	4000	137	IAP	4 Pack	P536CGEE
523175	EvoKit CLKE 1x4 32L 25W 835 UNV IAP P1	25W	120–277	70,000	3200	3500	132	IAP	Single Pack	PLBSWJJC
523191	EvoKit CLKE 1x4 32L 25W 840 UNV IAP P1	25W	120–277	70,000	3200	4000	137	IAP	Single Pack	P536CGEE
CLKE SR (Energy Efficient Sensor Ready)										
523613	EvoKit CLKE 1x4 32L 25W 840 UNV SR P4	25W	120–277	70,000	3200	4000	137	SR	4 Pack	PXX1QGV3
521294	EvoKit CLKE 1x4 32L 25W 835 UNV SR P1	25W	120–277	70,000	3200	3500	132	SR	Single Pack	P5DLLIVX
521328	EvoKit CLKE 1x4 32L 25W 840 UNV SR P1	25W	120–277	70,000	3200	4000	137	SR	Single Pack	PXX1QGV3
CLKE VDO (Energy Efficient Lutron Vive)										
523324	EvoKit CLKE 1x4 32L 24W 835 UNV VDO P1	24W	120–277	70,000	3200	3500	140	VDO	Single Pack	PCZYOH9U
523332	EvoKit CLKE 1x4 32L 24W 840 UNV VDO P1	24W	120–277	70,000	3200	4000	145	VDO	Single Pack	P56HX14J

See footnotes on the last page.

♦ Made to stock product (Contact your Philips sales representative for stock availability and lead time).

Attention Interact Pro users: Please familiarize yourself with the Interact pro system before beginning your project installation. It is important that the gateway is powered before the Interact ready EvoKits are installed. Design guides and tutorials are available at: https://www.interact-lighting.com/en-us/what-is-possible/interact-pro.

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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 Interact, Philips SpaceWise, and EasySense 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:
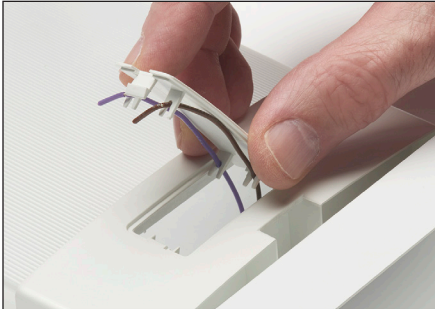
Step 1: EvoKit click SR is shipped with a plate covering the sensor hole. There are two wires secured to the back of the plate. The plate can be removed before or after you install the EvoKit click SR in the ceiling.

Step 2: Remove the two wires that were secured to the back of the plate and insert them in an approved sensor for use with EvoKit. They are not polarity sensitive.

Step 3. An adapter bracket is shipped with every EvoKit click SR. Install this adapter ring to the sensor and make sure it is securely fit. Then place the sensor and adapter bracket into the EvoKit SR endcap.

Commercial Product Name	Order Code
EasySense EVO200	516575
Philips single rocker self powered wireless switch	UID8451/10

* EVO200 comes pre-installed in the Gen4 bracket. To install in EvoKit click, this bracket will need removed in the field. Please see www.philips.com/evokit for instructions on removing bracket.

EvoKit bulk pack

EvoKit click is designed to reduce the hidden environmental costs of lighting retrofits. With newly designed multi-unit packaging for EvoKit click, cardboard waste from the 2x4 and 2x2 troffer kits has been reduced by 66% and 77% respectively compared to its predecessor, EvoKit Gen4.

Previously, only 24 kits were able to fit on a single pallet, but, with the new multi-unit packaging, 60 2x4 kits fit on one pallet. This allows for 3,840 units to be fully loaded onto a 53' truck compared to 1,536 units of the previous generation. This results in 2.5x better transportation utilization and storage capacity with the EvoKit click.

EvoKit click LED retrofit kit 1x4

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 149 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.

· EvoKit click is designed for use in most recessed troffers. Some existing fixtures may have features which interfere. Please refer to schematics below.

Enclosure 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 securement tabs for securement to existing troffer housing.

· 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. in addition the light module can be removed from below the ceiling for continent maintenance and upgrades

Electrical

· Multiple driver options available
  – Philips Advance CertaDrive drivers with 0-10V dimming allow for maximum fixture efficiency and provide 10% dimming.
  – Philips Advance Xitanium SR drivers allow for connectivity options to multiple platforms.

· 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.

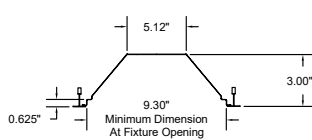· High efficiency LEDs have a minimum 70,000 hour rated life (L_{70}).

Accessories

· Suitable for use with 503441 emergency back up. The 503441 needs to be field installed in the existing troffer according to the field install instructions provided.

· Suitable for use with a wide range of control systems.

· Earthquake cables available for additional securement to the existing troffer for areas where required.

· EvoKit accessory replacement kit comes with quarter turns, quick disconnects, and spare sensor brackets.
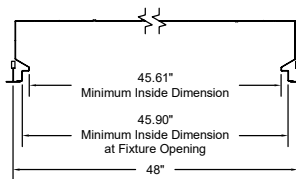
Prod. No.	Description
502435	Earthquake cable 317mm
503441	EvoKit field installed emergency battery backup
522094	EvoKit accessory replacement kit

Dimensions 1x4

EvoKit click was designed to fit into most parabolic and lensed-recessed troffers with minimum dimensional requirements shown below. Philips recommends a sample installation prior to ordering project quantities to ensure compatibility. Philips EvoKit click retrofit kits are not compatible with air handling fixtures.

A Face Plate Length	B Face Plate Width	C Height
47.83"	23.9"	2.99"

5.12"
3.00"
9.30" Minimum Dimension At Fixture Opening
0.625"

**Please Note: When installing emergency lighting, a greater minimum depth may be required.

45.61" Minimum Inside Dimension
45.90" Minimum Inside Dimension at Fixture Opening
48"
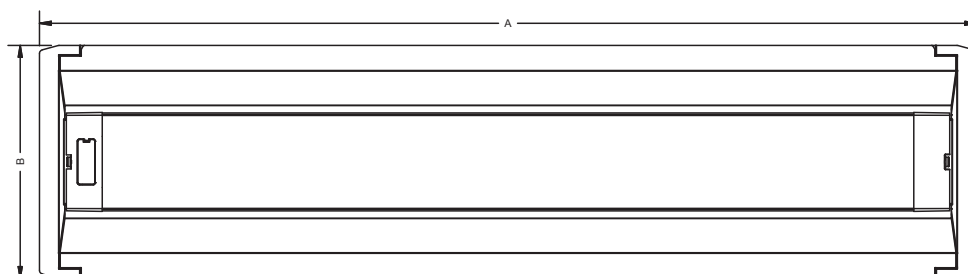
EvoKit click LED retrofit kit 1x4

EvoKit CLKE 1x4 23L 16W 835 UNV 0–10 P1, 2,368 delivered lumens

Catalog No.	521260
Test No.	21260
S/MH	1.4
Lamp Type	LED
Lumens/Watt	144
Input Watts	16

Comparative yearly lighting energy cost per 1000 lumens – $1.74 based on 3000 hours and $0.08/kWh

The photmetric 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	45	Cross	Back–45
0	731	731	731	731
5	715	730	747	726
15	678	715	746	704
25	607	681	730	666
35	514	628	689	613
45	411	551	614	535
55	310	449	507	436
65	211	328	371	319
75	113	193	199	189
85	27	43	34	43

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	98	106	101	96	96	93
2	97	90	82	94	88	81	83	79
3	89	78	69	86	77	68	73	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	52	45
7	64	50	40	61	48	40	47	40
8	58	46	36	57	45	36	42	35
9	55	41	33	54	40	33	40	33
10	52	38	29	51	38	29	36	29

Light Distribution

Degrees	Lumens	% Luminaire
0–30	578	25.5
0–40	958	42.2
0–60	1742	76.8
0–90	2269	100.0

Average Luminance

Angle	End	45°	Cross
45	2190	2935	3271
55	2036	2948	3331
65	1877	2923	3306
75	1648	2806	2899
85	1171	1837	1482

EvoKit CLKE 1x4 32L 24W 835 UNV 0–10 P1, 3,406 delivered lumens

Catalog No.	521286
Test No.	21286
S/MH	1.4
Lamp Type	LED
Lumens/Watt	140
Input Watts	24

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

The photmetric 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	45	Cross	Back–45
0	1049	1049	1049	1049
5	1025	1044	1072	1043
15	967	1019	1071	1018
25	862	967	1049	970
35	729	890	990	896
45	577	777	881	787
55	434	629	723	642
65	296	456	525	469
75	160	266	280	276
85	38	59	50	66

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	98	106	101	96	96	93
2	97	90	82	94	88	81	83	79
3	89	78	69	86	77	68	73	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	52	45
7	64	50	40	61	48	40	47	40
8	58	46	36	57	45	36	42	35
9	55	41	33	54	40	33	40	33
10	52	38	29	51	38	29	36	29

Light Distribution

Degrees	Lumens	% Luminaire
0–30	831	25.5
0–40	1378	42.3
0–60	2504	76.9
0–90	3255	100.0

Average Luminance

Angle	End	45°	Cross
45	3075	4139	4693
55	2848	4130	4750
65	2634	4068	4679
75	2323	3864	4077
85	1634	2567	2174

EvoKit CLKE 1x4 32L 25W 835 UNV SR P1, 3,438 delivered lumens

Catalog No.	521294
Test No.	21294
S/MH	1.4
Lamp Type	LED
Lumens/Watt	132
Input Watts	26

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

The photmetric 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	45	Cross	Back–45
0	1058	1058	1058	1058
5	1032	1054	1081	1052
15	972	1026	1078	1025
25	864	974	1056	975
35	724	897	999	902
45	572	784	894	794
55	429	639	739	651
65	292	467	539	478
75	158	272	288	283
85	38	59	49	64

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	98	106	101	96	96	93
2	97	90	82	94	88	81	83	79
3	89	78	69	86	77	68	73	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	52	45
7	64	50	40	61	48	40	47	40
8	58	46	36	57	45	36	42	35
9	55	41	33	54	40	33	40	33
10	52	38	29	51	38	29	36	29

Light Distribution

Degrees	Lumens	% Luminaire
0–30	836	25.4
0–40	1386	42.2
0–60	2523	76.8
0–90	3286	100.0

Average Luminance

Angle	End	45°	Cross
45	3468	4752	5415
55	3205	4771	5517
65	2959	4729	5466
75	2610	4504	4772
85	1868	2876	2418

EvoKit click LED retrofit kit 1x4

Energy saving solution — EvoKit CLKE 1'x4'

Estimated lighting costs using a standard 3 lamp T8 troffer

Present wattage		59	W
× Annual operating hours		4,380	hrs
	=	258,420	Watt-Hours
÷ 1,000	=	258.40	kWh per year
× kWh rate of $0.10	=	$25.84	per year
× 125 fixtures		$3,230.25	annual energy cost per space

Estimated lighting costs using a Philips 42L 2x4 EvoKit CLKE

Present wattage		24	W
× Annual operating hours		4,380	hrs
	=	105,120	Watt-Hours
÷ 1,000	=	105.12	kWh per year
× kWh rate of $0.10	=	$10.51	per year
× 125 fixtures		$1,314.00	annual energy cost per space

Total estimated annual savings◊	**$1,916.25**

◊ 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_{70} 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.
*** Please visit http://www.usa.lighting.philips.com/support/support/warranty 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).