

PHILIPS Day-Brite CFI

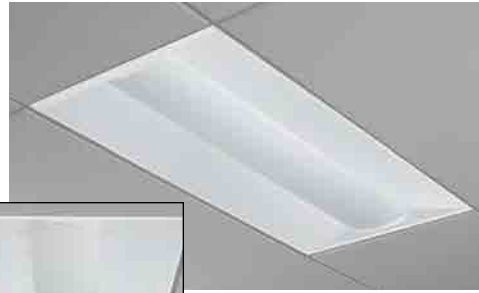
Recessed

EvoGrid
LED 2x4

3800, 4300, 4800,
5400, or 7400 lumens



Air return model



Static model



Project: _____
Location: _____
Cat.No: _____
Type: _____
Lamps: _____ Qty: _____
Notes: _____

The Philips Day-Brite / Philips CFI EvoGrid recessed LED utilizes highly reliable and efficient Philips LED platform boards and dimmable driver enabling market leading performance in its category. Its soft opal diffuser with large luminous area minimizes apparent brightness compared to other basket luminaires and provides general lighting perfect for a wide variety of applications.

Ordering guide

Example: 2EVG38L840-4-D-UNV-DIM

Width	Family	Ceiling Type	Air Function	Lumens	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G				4	D			
2 2'	EV EvoGrid	G Grid	blank Static H Air Return	Standard efficacy 38L 3800 nominal delivered lumens 43L 4300 nominal delivered lumens 48L 4800 nominal delivered lumens 54L 5400 nominal delivered lumens 74L 7400 nominal delivered lumens High efficacy 38LH 3800 nominal delivered lumens 43LH 4300 nominal delivered lumens 48LH 4800 nominal delivered lumens 54LH 5400 nominal delivered lumens 74LH 7400 nominal delivered lumens	830¹ 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850¹ 80 CRI, 5000K	4 4'	D Diffuse (opal)	UNV Universal Voltage, 120-277 volt 120² 120V 277² 277V 347 347V	DIM 0-10V dimming Step dimming to 40% input power SDIM³ MarkX phase dimming L3D⁴ Lutron Hi-lume A 1% dimming LDE Lutron EcoSystem 5% dimming DALI DALI	F1 3/8" flex, 3 wire 18 gauge 6' F2 3/8" flex, 4 wire 18 gauge 6' F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires. F2/SW 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires. GLR Fusing, fast blow EMLED Integral emergency battery pack, 1100lm nominal (ballast enclosure on top of luminaire) DAYOCC^{5,6,7} Integral sensor, daylighting and occupancy, Philips EasySense SNS102 SWZG2^{5,7,8} SpaceWise automated wireless technology for integrated occupancy and daylight harvesting CHIC Chicago Plenum rated CRM⁹ Continuous row mount

Footnotes

- 3000K and 5000K color temperatures available only on high efficacy configurations
- XDIM requires 120V or 277V specification.
- Consult factory for SDIM on 74L and 74LH packages.
- Specify with 38L or 43L lumen packages only. Consult factory for higher lumen packages.
- Specify only with -DIM driver option
- Dimming via wall switch. See page 2 for details.
- Integral sensing options (DAYOCC, SWZG2) may not be combined.
- Must order SWZ-REMOTE SpaceWise handheld remote with each system order.
- CRM includes side cover with top access plate and additional end cover. 7/8" gap between fixtures.

SpaceWise accessories (order separately)

- LRM1743** – External sensor to increase occupancy coverage area of SpaceWise luminaire groups
- SWZ-REMOTE** – SpaceWise handheld remote for grouping and configuration (at least one remote required for any SpaceWise installation)
- UID8451/10** – Wireless Dimmer Switch Selector
- UID8461/10** – Wireless Scene Selector

Other accessories (order separately)

- FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting
- EVD4L** – EvoGrid 2'x4' replacement lens

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4	2EVG38L840	36.5	109.9
	2EVG43L840	40.6	107.8
	2EVG48L840	47.7	105.2
	2EVG54L840	54.8	102.7
	2EVG74L840	82.6	92.8
2x4 High Efficacy	2EVG38LH840	27.0	139.1
	2EVG43LH840	32.0	138.5
	2EVG48LH840	35.5	137.9
	2EVG54LH840	39.4	136.5
	2EVG74LH840	56.2	133.9



2EV EvoGrid recessed LED 2x4

3800, 4300, 4800, 5400, or 7400 lumens

Application

- A highly efficient, visually comfortable, architecturally styled recessed LED luminaire designed with a minimalistic strategy to achieve sustainable objectives.
- Low profile configuration is only 2-3/4" deep, requiring minimal plenum space.
- Soft opal diffuser with large luminous area minimizes apparent brightness and provides high visual comfort perfect for a wide variety of general lighting applications like offices, schools, retail, or healthcare.
- Multiple lumen packages over a wide range to provide significant application flexibility over light levels and/or luminaire spacing.
- Directs a controlled amount of light to the higher angles in the room to balance the brightness of the surfaces and eliminate "cave effect" while creating the impression of a larger, brighter space without glare.
- Excellent color rendering with a CRI of 80.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source. Integral or external sensors are available for use.
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-bars. Drywall or plaster requirements can be accommodated by using an FMA24 "F" mounting frame (sold separately.)
- Continuous row mount option (CRM) includes wireway covers on each end and on one side of housing.

Construction/Finish

- Uncomplicated design is 2-3/4" in depth and only requires a few parts outside of the electrical system and hardware, creating several benefits:
 - Less material required
 - Less packaging required
 - Reduced weight
 - Less energy required for construction and assembly
 - More luminaires can be shipped per truck to reduce fuel use and emissions
- Luminaire finish is matte white polyester for a high quality, durable finish.
- T-bar grid clips are integral to body.

Electrical

- Integral sensor options for occupancy sensing and/or daylight harvesting are available for additional energy savings with no reduction of life or increase in installation labor.
- Total luminaire efficacy exceeding 139 LPW (lumens per Watt) with high efficiency packages.
- LED board is easily accessible from below without tools. Single LED board is replaceable if needed via plug-in connectors to ensure long service life.
- LED driver is accessible from above.
- Step dim 100/40% and additional dimming options available.
- Five year limited luminaire warranty includes LED boards and driver (emergency driver and batteries have a three year warranty in models so equipped). Visit www.philips.com/warranties for complete warranty information.
- TM-21 predicted L70 lumen maintenance up to 80,000 hours for high efficacy and 50,000 hours for standard efficacy configurations.
- cETLus listed to UL and CSA standards, suitable for damp locations.
- EvoGrid luminaires are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers (<http://www.designlights.org/QPL>)

Enclosure

- Opal diffuser provides soft, comfortable lighting while maintaining high efficiency.
- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

SpaceWise Technology (SWZG2)

- Optional SpaceWise automated wireless technology provides integrated occupancy sensing and daylight harvesting for additional control and energy savings.
- Requiring no system re-wiring, SpaceWise technology is appropriate for retrofit or new design and is an ideal replacement system for typical office layouts.
- Occupancy sensors are integral to each luminaire, with embedded automatic dimming behaviors appropriate to multiple office applications. Applications modes are selected using the handheld remote control, including open plan office, private office, conference room, and corridor.
- Daylight sensors are integral to each luminaire, eliminating the need for daylight zoning. Daylight sensing is automatic and re-calibration occurs daily when luminaires turn on.

- Open plan office mode offers occupant friendly granular dimming for maximum energy savings with no compromise to light levels or visual quality. Luminaires in large rooms and open plan areas are grouped together up to a maximum of 50 using a handheld remote, and max light output can be tuned. Granular dimming then provides full light output for occupied workstations, and non-occupied workstations stay at a background level to ensure visual quality. Grouped luminaires will dim to off when no presence is detected in the group.
- SpaceWise remote control must be purchased separately. Other peripherals include code compliant, wireless, batteryless switches and external sensors.
- Visit philips.com/spacewise for more information about SpaceWise technology.

DAYOCC

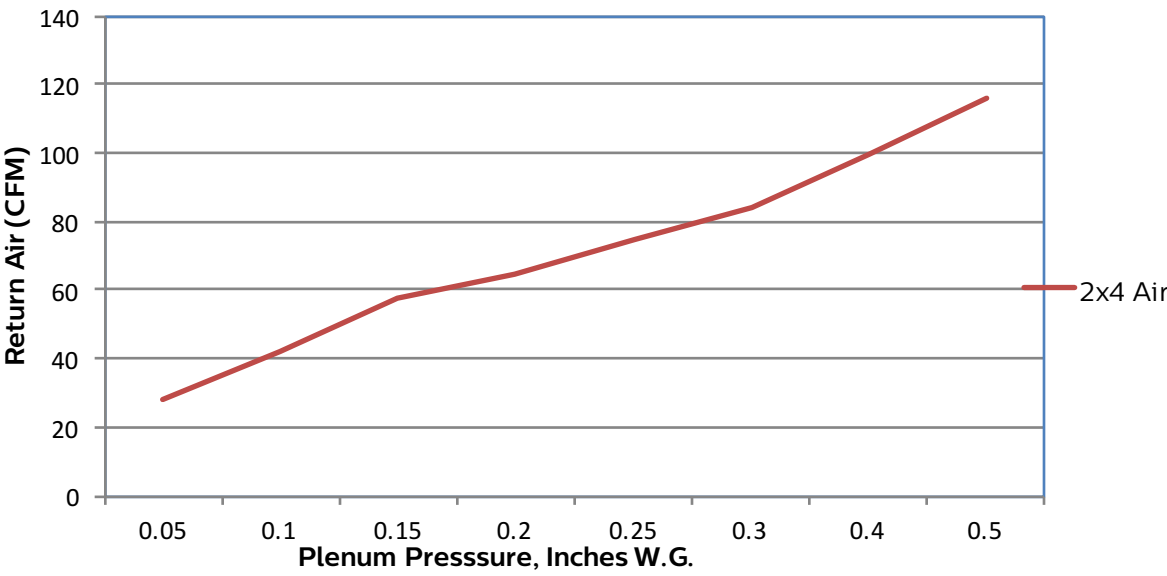
- Integrated fixture mount Philips EasySense sensor featuring daylight and PIR occupancy sensing.
- Compatibility with Philips Advance Xitanium SR Sensor Ready LED drivers.
- Features automatic or manual on/off scenarios for code compliance and to realize full energy savings potential.
- Basic grouping to a wireless switch via an IR interface with the Philips Field App.
- Self-powered single rocker switch Illumra #ZBT-S1AWH (sourced by others), up to 40 luminaires may be grouped to a single switch.
- Register for the commissioning app at <http://registration.componentcloud.philips.com/appregistration/>
- For more information visit www.philips.com/EasySense

General Notes

- All options factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

2EV EvoGrid recessed LED 2x4

3800, 4300, 4800, 5400, or 7400 lumens

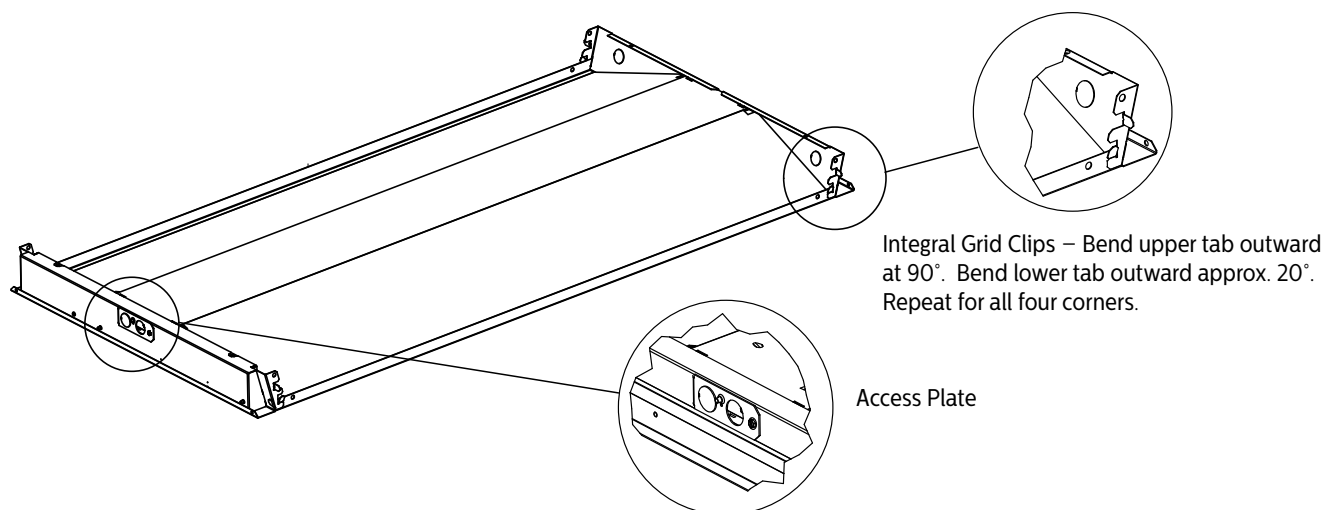
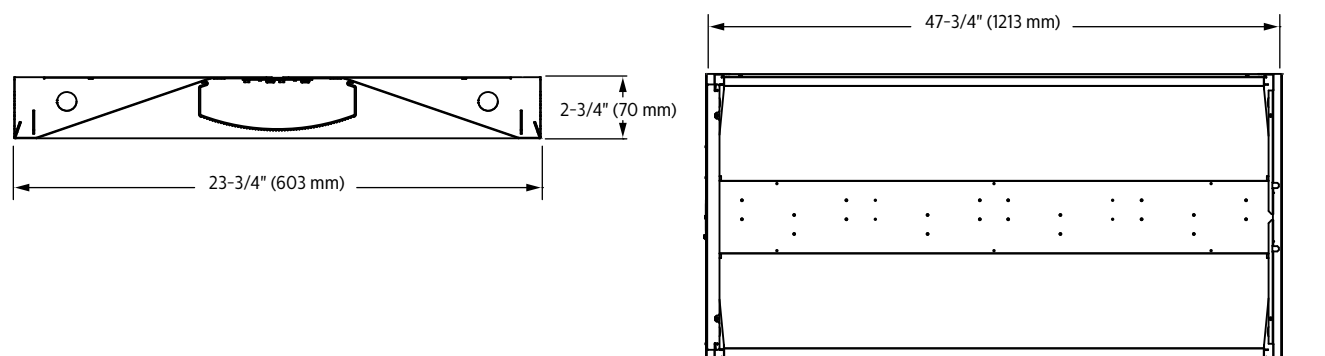


Pressure	0.05	0.1	0.15	0.2	0.25	0.3	0.4	0.5
CFM	28	42	58	65	75	84	100	116
Noise	<15	24	34	37	41	45	47	49

2EV EvoGrid recessed LED 2x4

3800, 4300, 4800, 5400, or 7400 lumens

Dimensions



SpaceWise (SWZG2) automated wireless technology is available for integrated occupancy and daylight harvesting. Individual options for dimming, occupancy detection, and daylight harvesting are also available if SpaceWise option is not selected.

2EV EvoGrid recessed LED 2x4

3800, 4300, 4800, 5400, or 7400 lumens

Photometry

2x4 EvoGrid recessed LED, high efficacy, 4800 nominal delivered lumens

LER – 138

Catalog No.	2EVG48LH840-4-D-UNV-DIM
Test No.	34935
S/MH	1.2
Lamp Type	LED
Lumens	4897
Input Watts	36

Comparative yearly lighting energy cost per 1000 lumens – **\$1.74** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1778	1778	1778	1778
5	1749	1771	1782	1771
15	1669	1701	1714	1701
25	1509	1545	1566	1545
35	1283	1333	1364	1333
45	1022	1087	1134	1087
55	751	838	913	838
65	494	613	704	613
75	264	393	465	393
85	74	114	119	114

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1358	27.7
0-40	2189	44.7
0-60	3775	77.1
0-90	4899	100.0
0-180	4899	100.0

Average Luminance

Zone	End	45°	Cross
45	7532	8012	8362
55	6828	7614	8295
65	6090	7566	8686
75	5319	7922	9360
85	4450	6795	7112

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	95	88	81	83	79	
3	90	79	69	86	77	68	73	68	
4	81	69	60	80	68	59	66	58	
5	75	61	53	72	60	53	58	52	
6	69	56	46	68	55	46	53	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	

2x4 EvoGrid recessed LED, 4800 nominal delivered lumens

LER – 105

Catalog No.	2EVG48L840-4-D-UNV-DIM
Test No.	34090
S/MH	1.2
Lamp Type	LED
Lumens	5015
Input Watts	48

Comparative yearly lighting energy cost per 1000 lumens – **\$1.29** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1830	1830	1830	1777
5	1813	1820	1825	1770
15	1725	1739	1746	1700
25	1554	1571	1582	1541
35	1317	1347	1365	1330
45	1048	1096	1132	1086
55	771	851	930	838
65	510	642	733	614
75	279	417	485	394
85	81	123	132	111

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1387	27.6
0-40	2228	44.4
0-60	3836	76.4
0-90	5019	100.0
0-180	5020	100.0

Average Luminance

Zone	End	45°	Cross
45	7725	8080	8349
55	7009	7732	8457
65	6290	7919	9045
75	5613	8389	9769
85	4870	7342	7903

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	105	101	96	96	93	
2	97	90	82	94	88	81	83	79	
3	89	79	69	86	77	68	73	67	
4	81	69	60	79	68	59	66	57	
5	75	61	53	72	60	52	58	51	
6	69	56	46	68	55	46	53	46	
7	65	51	41	63	50	41	47	40	
8	59	46	38	58	46	38	44	36	
9	56	42	34	55	41	34	40	34	
10	53	39	32	51	39	30	38	30	

