

PHILIPS Day-Brite CFI

Recessed

FluxGrid LED 2x4

3800, 4200, 4300, 4800,
5400, or 7400 lumens



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

The Philips Day-Brite / Philips CFI Recessed FluxGrid LED offers architectural appeal with “must have” features. Two different lens styles, discrete air handling, integral emergency, and access to the boards and driver from below make FluxGrid an ideal solution for a wide range of applications.

Ordering guide

Example: 2FGG42B840-4-D-UNV-DIM

Width	Family	Ceiling Type	Air Function	Lumens	Color	Length	Center Diffuser	Voltage	Driver	Options
2	FG	G				4				
2 2'	FG FluxGrid	G Grid	Blank ¹ Static H Air return	Standard Configurations 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 Base Configurations 42B¹ 4200 nominal delivered lumens	830 80 CRI, 3000K 835¹ 80 CRI, 3500K 840¹ 80 CRI, 4000K 850 80 CRI, 5000K	4 4'	D¹ Diffuse (ribbed) DS¹ Diffuse (smooth)	UNV¹ Universal voltage 120-277V 120³ 120V 277³ 277V 347 347V	DIM^{1,7} 0-10V dimming SDIM² Step dimming to 40% input power XDIM³ MarkX phase dimming L3D⁴ Lutron Hi-lume A 1% dimming LDE Lutron LDE5 5% dimming DALI DALI	F1¹ 3/8" flex, 3 wire 18 gauge 6' F2¹ 3/8" flex, 4 wire 18 gauge 6' F1/D¹ 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/5W¹ 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires F2/6W¹ 3/8" single flex, 6 wire 18 gauge 6' for dimmable and EMLD luminaires GLR¹ Fusing, fast blow EMLED^{1,6} Integral emergency battery pack DAYOCC⁵ Integral sensor, daylighting and occupancy, Philips EasySense SNS102 CHIC¹ Chicago Plenum rated

Footnotes:

- Base configurations available with noted options.
- Consult factory for SDIM on 74L package.
- XDIM requires 120V or 277V specification. Not available on 30L package.
- Specify up to 43L package. Consult factory for higher lumen packages.
- Specify DIM driver option only with DAYOCC controls option. Dimming via wall switch.
- Philips Bodine BSL310, 1100lm nominal delivered.
- 0-10v dimming to 1% for Standard, and 5% for Base configurations.

Accessories (order separately)

- **FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting
- **FGD4L** – FG 4' ribbed replacement lens
- **FGDS4L** – FG 4' smooth replacement lens
- **FGHD4L** – FG 4' air return ribbed replacement lens
- **FGHDS4L** – FG 4' air return smooth replacement lens

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4 Standard	2FGG38L840	31.8	120
	2FGG43L840	36.2	119
	2FGG48L840	41.5	116
	2FGG54L840	48.9	114
	2FGG74L840	69.2	106
2x4 Base	2FGG42B840	33.9	124



2FG Recessed FluxGrid LED 2x4

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Application

- 3" deep low profile configuration provides minimal penetration into the plenum space
- Acrylic diffuser available in ribbed and smooth configurations provides even illumination with comfortable appeal
- Standard and base configurations available in multiple lumen packages to suit the needs of various applications
- Lambertian distribution creates uniform horizontal and vertical illuminance on the work plane and reduces scalloping on the walls
- CRI 80 minimum color rendering with balanced spectrum
- LEDs coupled with standard dimming provide prolonged lumen maintenance. Optional integral sensors contribute further to LED lumen maintenance
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG" ceiling T-bars. Drywall or plaster applications require use with the FMA24 "F" mounting frame accessory (sold and shipped separately)
- Continuous row mounting is possible with a 1" gap between fixtures accommodated by others

Enclosure

- Opal acrylic diffuser provides visually comfortable lumenance without compromise to luminaire efficacy.
- Diffuser requires no frames or fasteners and can be easily removed from below without the use of tools

Construction/Finish

- Uncomplicated design is 3" deep with minimal material overlap creating several benefits:
 - Less material required
 - Less packaging required
 - Reduced weight for ease of handling and transit
 - Less energy required for construction and assembly
 - More luminaires can be shipped per truck to reduce fuel consumption
- Metal side covers are die formed with a conical shape to enhance light distribution and visual aesthetic
- Injection molded lens retainers allow for easy, tool-free access to the LED boards and driver from below, and provide positive lens retention
- Luminaire finish is matte white polyester powder coat for high quality, durable finish
- T-bar grid clips are integral to the body
- Air return option provides air flow through a unique lens retainer design. Air passes through architectural forms in the lens retainers (each end), and through the end plate of the luminaire. A cover plate is provided to control air flow through the luminaire, or make it static as required
- Integral controls options include sensor mounted in one lens retainer. Controls are commissioned via intuitive Philips app on a Droid smartphone either through NFC or an IR blaster
- EMLED option requires the emergency battery pack be installed with a top side cover. Access from above

General notes

- All options are 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

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
- Standard configurations provide up to 120 lumens per watt and are available with 5 lumen packages and 3000, 3500, 4000, and 5000K color temperatures
- Base configurations provide up to 124 lumens per watt and are available in 4200 lumen flux and 3500K and 4000K color temperatures
- LED boards are accessible from below by removal of the lens. Lens removal is tool-free by compressing the sides and pushing to one end
- LED driver is accessible from below by removal of the lens and integral wireway cover. The wireway cover is easily removed with a flat head screwdriver
- Other driver options including step dimming (SDIM, 100%/40%), DALI, phase dimming (XDIM), and Lutron are 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 70,000 hours
- cETLus listed to UL and CSA standards, suitable for damp locations
- FluxGrid luminaires are DesignLights Consortium qualified. Please see the DLC QPL list for exact catalog numbers (<http://www.designlights.org/QPL>)

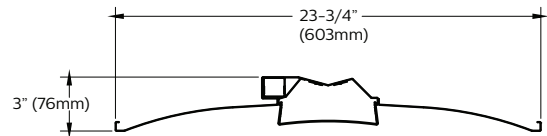
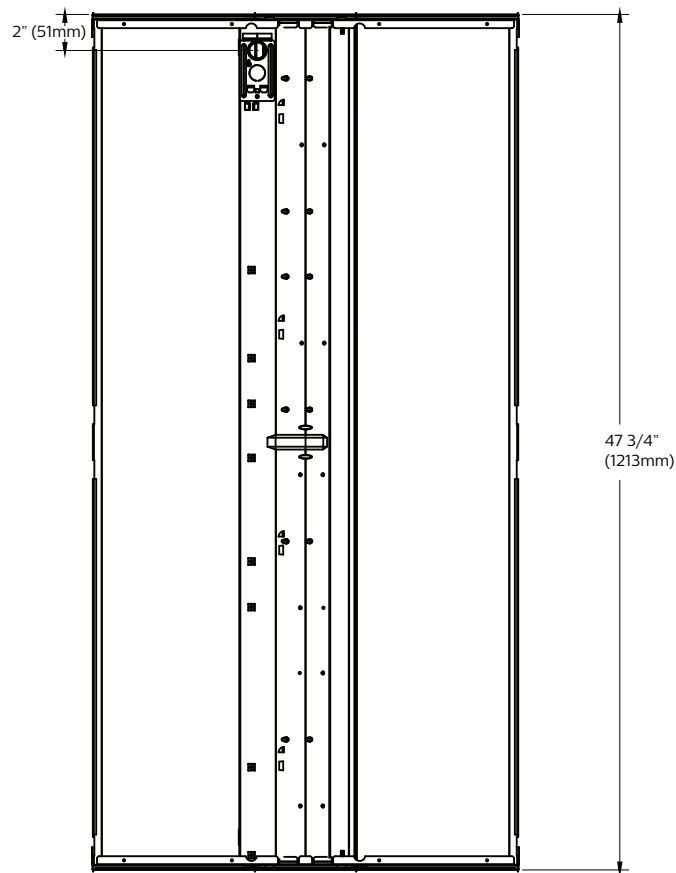
DAYOCC

- 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

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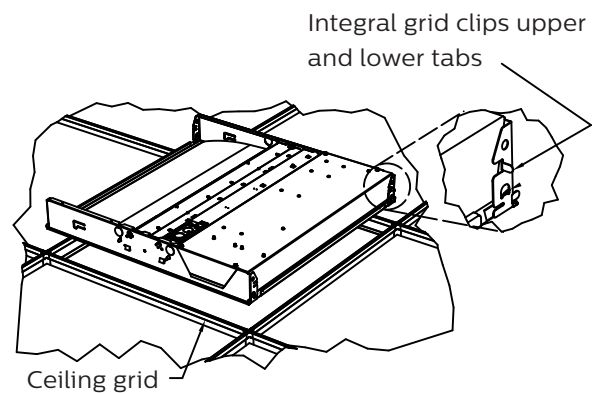
Dimensions



Controls sensor integrated into one lens retainer.



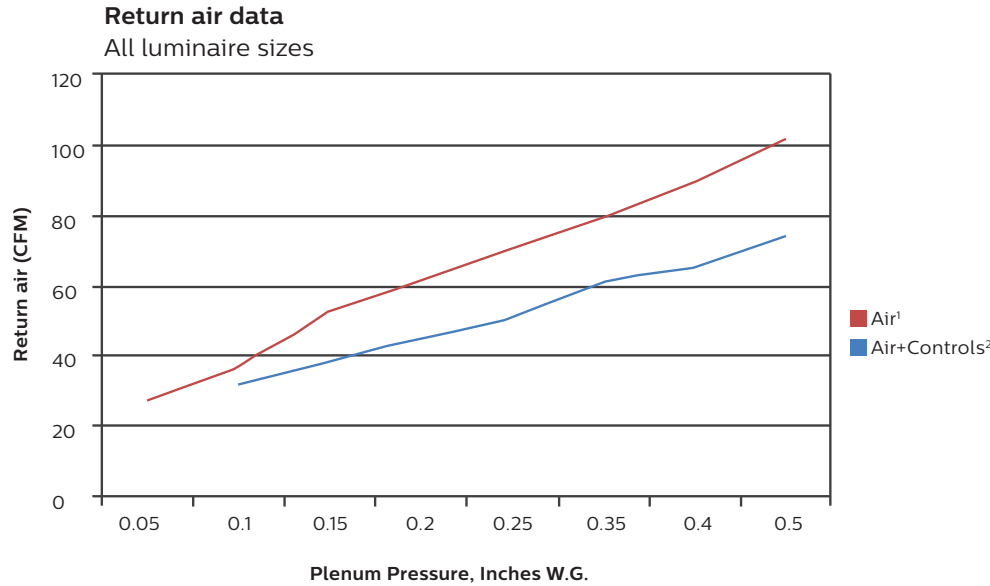
The air return option allows air to flow through vents in the lens retainers on each end. Air blades are provided on each end of the luminaire to control air flow to the plenum.



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Air return



Return air - noise criteria

All luminaire sizes

		CFM							
Mode		27	37	53	62	71	80	90	102
Air ¹	NC (dB)	<15	24	25	29	33	35	38	40

		CFM							
Mode			31	38	45	51	61	65	74
Air+Controls ²	NC (dB)		<15	19	21	25	28	30	34

1. Air-only option includes air return lens retainers and pattern control blades on both ends of luminaire.
2. Air+Controls includes the air return lens retainer and pattern control blade on one end of the luminaire.
Control lens retainer on the other with matching width.

2FG Recessed FluxGrid LED 2x4

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Photometry

2x4 FluxGrid recessed LED, base configuration, 4200 nominal delivered lumens

LER - 124

Catalog No.	2FGG42B840-4-D-UNV-DIM
Test No.	36564
S/MH	1.2
Lamp Type	LED
Lumens	4212
Input Watts	34

Comparative yearly lighting energy cost per 1000 lumens – **\$1.94** 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	1567	1567	1567	1567
5	1541	1556	1559	1556
15	1467	1473	1476	1473
25	1323	1330	1339	1330
35	1124	1147	1165	1147
45	896	949	978	949
55	659	737	779	737
65	404	534	587	534
75	203	323	365	323
85	43	104	108	104

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1176	27.9
0-40	1893	44.9
0-60	3273	77.6
0-90	4215	100
0-180	4216	100

Average Luminance

Zone	End	45°	Cross
45	8102	8584	8845
55	7349	8219	8685
65	6120	8077	8890
75	5025	7991	9014
85	3186	7597	7905

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pfc =	20								
Ceil		80			70			50	
Wall	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	84	79	
3	90	79	70	86	77	69	73	68	
4	81	69	60	80	68	59	66	58	
5	76	63	54	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	32	38	30	

2x4 FluxGrid recessed LED, standard configuration, 4300 nominal delivered lumens

LER - 119

Catalog No.	2FGG43L840-4-D-UNV-DIM
Test No.	36563
S/MH	1.2
Lamp Type	LED
Lumens	4318
Input Watts	36

Comparative yearly lighting energy cost per 1000 lumens – **\$2.02** 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	1613	1613	1613	1613
5	1587	1602	1604	1602
15	1511	1517	1520	1517
25	1362	1369	1380	1369
35	1157	1182	1199	1182
45	922	978	1006	978
55	679	759	800	759
65	416	514	605	514
75	209	332	377	332
85	44	106	111	106

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1210	28.0
0-40	1948	45.1
0-60	3367	77.9
0-90	4320	100
0-180	4321	100

Average Luminance

Zone	End	45°	Cross
45	8341	8843	9099
55	7569	8460	8924
65	6302	7782	9152
75	5161	8208	9321
85	3259	7773	8155

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pfc =	20								
Ceil		80			70			50	
Wall	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	84	79	
3	90	79	70	86	78	69	75	68	
4	81	69	60	80	68	60	66	58	
5	76	63	54	73	61	53	58	52	
6	69	56	47	68	56	46	54	46	
7	65	51	42	63	51	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	32	38	30	

