

# Day-Brite

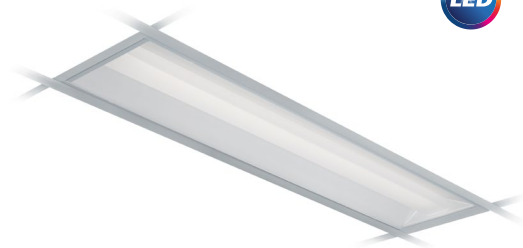
## CFI

by @signify

Recessed

ClearAppeal 1x4

1CAX up to 4500 lumens



**Day-Brite / CFI ClearAppeal LED recessed** is a fully luminous aperture luminaire providing modern appeal to architectural spaces. Featuring a regressed aesthetic with balanced glare gradient, ClearAppeal delivers high performing even illumination and high visual comfort. Its architectural style, coupled with controls options, makes ClearAppeal an ideal choice for applications such as office, institutional, and healthcare, where energy savings and customized effect are desired.

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

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

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

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

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

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

### Ordering guide – standard & wireless controls

Standard configurations available with all choices, unless otherwise noted. Base configurations selections indicated by blue.

example: 1CAXG38L840-4-DS-UNV-DIM-SWZDT

Width	Family	Ceiling Type	Lumens (nominal delivered)	Efficacy	Color	Length	Center Diffuser	Voltage	Driver	Options
1	CAX	G			—	4	DS	—	—	
1 1'	CAX  ClearAppeal Gen 2	G Grid	Standard configurations 30L 3000 38L 3800 45L 4500  Base configuration 38B 3800	Blank Standard H <sup>5</sup> High	830 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K	4 4'	DS Diffuse (smooth)	UNV Universal Voltage, 120-277 volt 347 347V	DIM <sup>1</sup> SDIM Dimming Step dimming to 40% input power  LDE Lutron LDE5, 5% dimming LDEH Lutron LDE1, 1% dimming DALI DALI dimming	AG Antimicrobial Finish 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 F2/5W 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires F2/6W 3/8" single flex, 6 wire 18 gauge 6' for dimmable and emergency luminaires GLR Fusing, fast blow GTD/E <sup>4,6</sup> UL924 listed Bodine GTD factory installed on driver input GTD/SNSR <sup>4,6,7</sup> UL924 listed Bodine GTD factory installed between driver and sensor

### Ordering guide – PoE controls

example: 1CAXG38L840-4-DS-LV-POE-IAO

Width	Family	Ceiling Type	Lumens (nominal delivered)	Efficacy	Color	Length	Center Diffuser
1	CAX	G			–	4	DS
1	1'	CAX	G Grid	Standard configurations 30L 3000 38L 3800 45L 4500	Blank Standard	830 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K	4 4'
Voltage		Driver		Options			
LV		POE					
LV Low voltage		POE Power over ethernet		IAO Integral Interact Office daylighting and occupancy sensor, enables wired connected lighting control EMPOE 600lm integral emergency driver and battery pack			

### Footnotes

- 1 Integral controls options dimmable to 5% via wireless wall switch. Non-controls options are 0-10v dimmable to 1% for Standard configurations, and to 10% for Base configurations.
- 2 Specify only with -DIM driver option.
- 3 CHIC option not provided with air return functionality.
- 4 Not available with 347V.
- 5 High efficacy option may only be ordered with Standard lumen configurations.
- 6 Must be installed in conjunction with a UL1008 device.
- 7 Must be ordered with an integral sensing option.

### Accessories (order separately)

- **FSF414** – 1'x4' surface mount field installation kit (field assembled)
- **FMA14** – 1'x4' "F" mounting frame for NEMA "F" ceiling
- **CAXGDS14L** – 1'x4' ClearAppeal Gen2 replacement lens
- **CAXGDS14LC** – 1'x4' ClearAppeal Gen2 with controls replacement lens



interact  
ready.

# 1CAX ClearAppeal recessed 1x4

up to 4500 lumens

## Application

- Ideal for modern offices, institutional, retail, and healthcare applications.
- Modern architectural styling to complement any space.
- Full width luminous lens provides smooth brightness and high visual comfort.
- Directs a controlled amount of light to higher angles to eliminate "cave effect" without creating glare.
- Available in standard efficacy and high efficacy (H) configurations up to 130lm/W.
- 80 CRI minimum source provides a balanced spectral power distribution.
- Suitable for use with NEMA G (15/16") and NFG (9/16") suspended t-grid ceilings. NEMA F flange ceilings require the FMA24 accessory (ordered separately).

## Construction/Finish

- Robust and durable dieformed embossed steel housing and end caps.
- Molded one-piece acrylic diffuser may be removed without tools for access to LED boards and driver(s).
- Unique spring retainers ensure the diffuser is centered in the housing opening at all times.
- T-bar grid clips are built into luminaire end caps for quick and easy installation, no extra parts.
- Air return functionality is standard for all configurations. See air flow and noise data on page 4.

## Energy data

Configuration	Nominal CCT/ CRI	Flux (lm)	Input Power (W)	Efficacy (LPW)	DLC
1CAXG38B835	3500K/80	4034	34	118	Standard
1CAXG38B840	4000K/80	4029	34	117	Standard
1CAXG30L835	3500K/80	3054	26	116	Standard
1CAXG30L840	4000K/80	3054	27	115	Standard
1CAXG30LH835	3500K/80	3014	24	124	Standard
1CAXG30LH840	4000K/80	3086	24	127	Premium
1CAXG38L835	3500K/80	3885	34	114	Standard
1CAXG38L840	4000K/80	3888	34	114	Standard
1CAXG38LH835	3500K/80	3777	30	126	Premium
1CAXG38LH840	4000K/80	3873	30	130	Premium
1CAXG45L835	3500K/80	4619	41	112	Standard
1CAXG45L840	4000K/80	4620	42	111	Standard
1CAXG45LH835	3500K/80	4590	36	126	Premium
1CAXG45LH840	4000K/80	4706	36	130	Premium

- Suitable for end to end continuous row mounting. 1" gap between luminaires requires chase nipple to accommodate through wiring (by others).
- Sheetmetal components are multi-stage phosphate treated for maximum corrosion resistance and finish coat is high reflectance baked white enamel.
- Integral louvers on housing ends allow air from the heated space to return to a pressurized plenum.

## Electrical

- Driver and LED board are accessible from below by easy removal of lens.
- Non-controls Base configurations 0-10V dimmable to 10%.
- Non-controls Standard configurations 0-10V dimmable to 1%.
- Standard configurations with controls options dimmable via wireless switches (see below).
- Predicted L70 lumen maintenance up to 80,000 hours at 25°C ambient for all configurations.
- Emergency battery packs accessible from above. To estimate lumen output in emergency mode, multiply emergency pack wattage by luminaire efficacy, then by 1.10.
- The GTD/E option is used to bypass wall switches and allow luminaire operation on auxiliary power. Generator transfer requires installation in conjunction with a UL1008 listed device.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Compliance to CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.

## Validation

- cETLus listed for use in damp locations
- When ordered with -WL option code, suitable for use in wet locations with covered ceilings
- Rated for direct contact with insulation (IC)
- CCEA Chicago Plenum listed
- ClearAppeal luminaires are Designlights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers, [www.designlights.org/QPL](http://www.designlights.org/QPL)

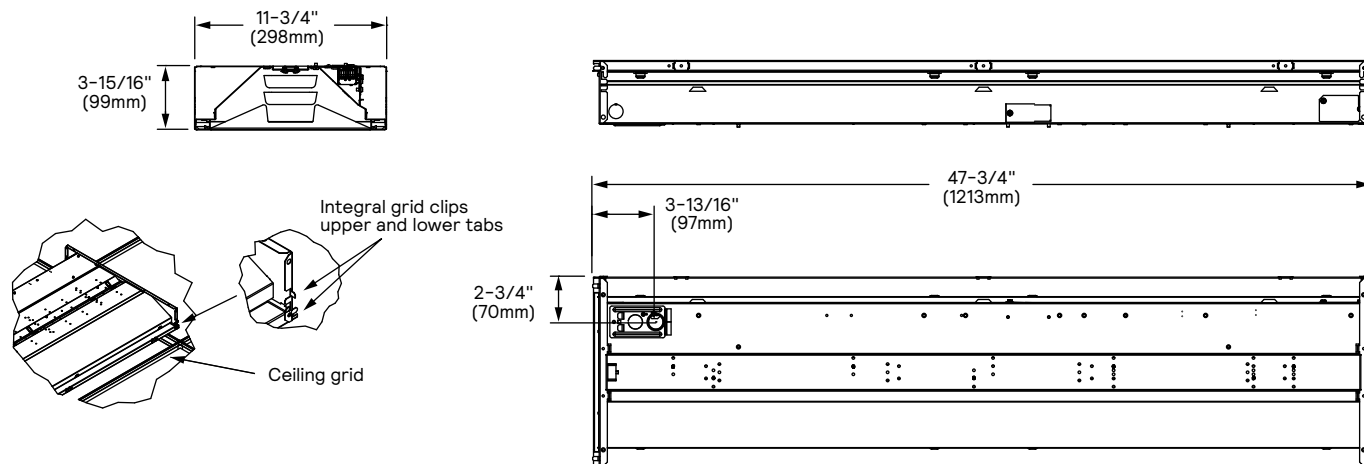
## Environment

- Rated for dry or damp locations in operating ambient temperatures 0-30°C (32-86°F). 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. Not suitable for natatorium environments.

## Warranty

- 5 year manufacturer's limited warranty.
- Visit [signify.com/warranties](http://signify.com/warranties) for complete warranty information.

## Dimensions



# 1CAX ClearAppeal recessed 1x4

up to 4500 lumens

## Wireless Controls Options

### SpaceWise DT (SWZDT)

- Standalone daylight and occupancy sensing with advanced grouping and dwell time
- Commissioning via compatible Android phone and Philips Field App
- Dimming via compatible Zigbee wireless wall switch only (see link below for details)
- Register for the commissioning app at [www.componentcloud.philips.com/#/register;first=true](http://www.componentcloud.philips.com/#/register;first=true)
- Integral sensing options may not be combined
- For more information including recommended switches, refer to the following: –

**SWZDT** – [www.usa.lighting.philips.com/systems/lighting-systems/spacewise](http://www.usa.lighting.philips.com/systems/lighting-systems/spacewise)

### ClearAppeal shown with integral sensor



### Interact Pro (IAP)

- Interact Pro brings the power of connected lighting to **small and medium businesses** without the complexity usually associated with connected lighting.
- Interact Pro includes an app, a portal and a broad portfolio of wireless Luminaires, lamps and retrofit kits all working on the same system.
- Commissioning via Interact Pro App (Android or iPhone)
- Prepare commissioning remotely via Interact Pro portal
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1)
- For more information on Interact Pro visit: [www.interact-lighting.com/pro](http://www.interact-lighting.com/pro)
- For more information on Interact Ready visit: [www.philips.com/interact-ready](http://www.philips.com/interact-ready)

### Interact Office (IAO)

- A wireless IoT connected lighting solution for **large enterprises** that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: [www.interact-lighting.com/office](http://www.interact-lighting.com/office) or [www.usa.lighting.philips.com/systems/system-areas/offices](http://www.usa.lighting.philips.com/systems/system-areas/offices)

## Wired Controls Options

### Interact Office Wired (PoE)

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.
- Optional integral emergency controller and battery pack provides 600lm nominal output. Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45–85% relative humidity.
- For more information on Interact Office Wired, visit: [www.interact-lighting.com/office](http://www.interact-lighting.com/office) or [www.usa.lighting.philips.com/systems/system-areas/offices](http://www.usa.lighting.philips.com/systems/system-areas/offices)

### Energy Data (PoE)

Configuration	Nominal CCT/CRI	Flux (lm)	DC Power (W)*	Efficacy (LPW)
1CAXG30L840	4000K/80	3059	25	125
1CAXG38L840	4000K/80	3902	32	122
1CAXG45L840	4000K/80	4637	40	117

\*DC power supply

# 1CAX ClearAppeal recessed 1x4

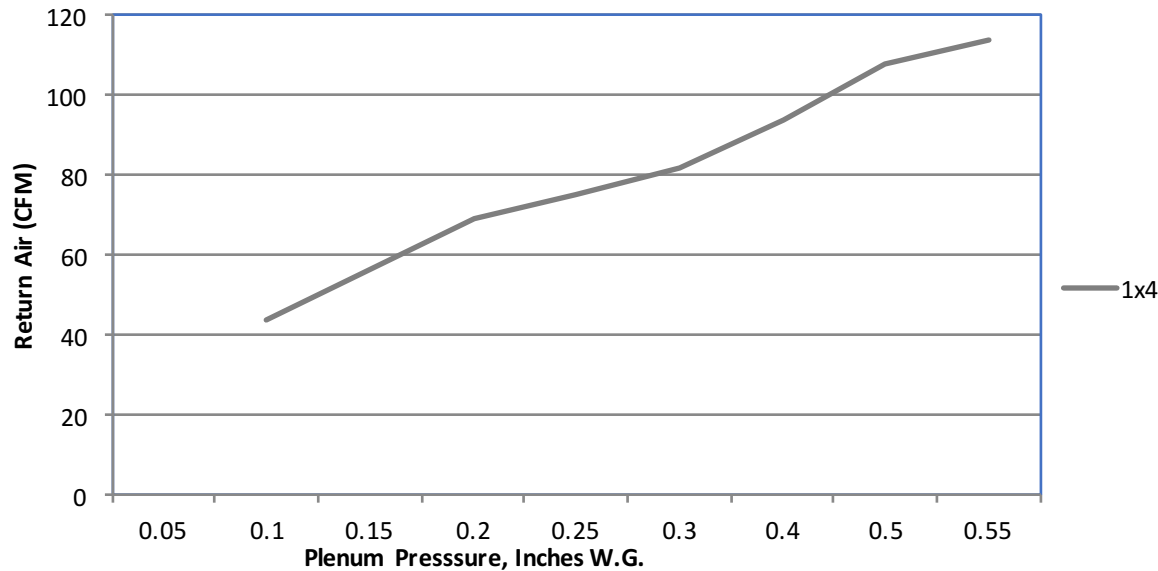
up to 4500 lumens

## Air return



Integral louvers on housing ends allow air from the heated space to return to a pressurized plenum.

Return Air Data



2x4 Return Air - noise criteria

CFM		44	56.5	69	75.5	82	94	108
NC (dB)	<15	19	21.5	24	27	30	35	39

## Photometry

1x4 ClearAppeal recessed LED, base configuration, 3800 nominal delivered lumens

LER - 117

Catalog No.	1CAXG38B840-4-DS-UNV-DIM
Test No.	40617
S/MH	1.2
Lamp Type	LED
Lumens	4033
Input Watts	34

Comparative yearly lighting energy cost per 1000 lumens - \$2.05 based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the 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	1528	1528	1528	1528
5	1494	1522	1531	1522
15	1425	1452	1462	1452
25	1297	1318	1320	1318
35	1120	1139	1137	1139
45	915	938	944	938
55	697	732	739	732
65	443	517	478	517
75	227	244	217	244
85	52	45	40	45

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1158	28.7
0-40	1868	46.3
0-60	3237	80.3
0-90	4033	100.0
0-180	4033	100.0

Average Luminance

Zone	End	45	Cross
45	4436	4544	4574
55	4164	4372	4413
65	3593	4196	3876
75	3005	3236	2870
85	2029	1762	1585

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	109	104	100	106	102	97	97	94	
2	98	91	83	96	89	82	85	81	
3	91	80	71	88	79	70	76	68	
4	82	70	61	81	69	61	67	59	
5	76	64	55	73	63	54	59	53	
6	70	56	48	68	56	47	55	46	
7	66	52	42	64	51	42	50	41	
8	60	47	39	58	46	39	46	38	
9	56	44	35	56	42	34	41	34	
10	53	40	32	52	40	32	39	32	

# 1CAX ClearAppeal recessed 1x4

up to 4500 lumens

1x4 ClearAppeal recessed LED, standard configuration, 3800 nominal delivered lumens

LER - 114

Catalog No.	1CAXG38L840-4-DS-UNV-DIM
Test No.	40615
S/MH	1.2
Lamp Type	LED
Lumens	3888
Input Watts	34

Candlepower

Angle	End	45	Cross	Back-45
0	1480	1480	1480	1480
5	1447	1475	1483	1475
15	1381	1406	1416	1406
25	1257	1277	1278	1277
35	1086	1104	1100	1104
45	887	908	914	908
55	675	709	715	709
65	422	467	446	467
75	219	238	209	238
85	50	44	39	44

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1121	28.8
0-40	1809	46.5
0-60	3135	80.6
0-90	3891	100.0
0-180	3891	100.0

Average Luminance

Zone	End	45°	Cross
45	4298	4402	4429
55	4034	4235	4275
65	3424	3786	3616
75	2895	3145	2770
85	1954	1711	1530

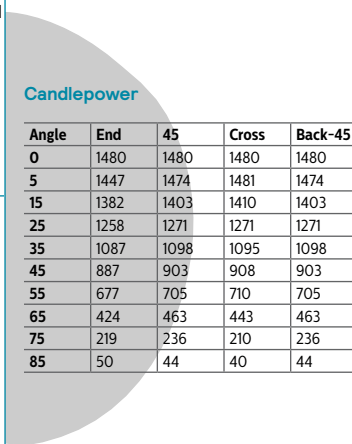
Coefficients of Utilization

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	109	104	100	106	102	97	97	94	
2	98	91	84	96	89	82	85	81	
3	91	80	71	88	79	70	76	68	
4	82	70	63	81	69	61	67	59	
5	76	64	55	73	63	54	60	53	
6	70	56	48	68	56	47	55	46	
7	66	52	42	64	51	42	50	41	
8	60	47	39	59	46	39	46	38	
9	56	44	35	56	42	34	41	34	
10	54	40	33	52	40	32	39	32	

1x4 ClearAppeal recessed LED, high efficacy configuration, 3800 nominal delivered lumens

LER - 130

Catalog No.	1CAXG38LH840-4-DS-UNV-DIM		Light Distribution		Average Luminance						
Test No.	40623		Degrees	Lumens	% Luminaire	Zone	End	45°	Cross		
S/MH	1.2		0-30	1119	28.9	45	4301	4377	4403		
Lamp Type	LED		0-40	1804	46.5	55	4044	4214	4243		
Lumens	3877		0-60	3123	80.6	65	3438	3756	3595		
Input Watts	30		0-90	3876	100.0	75	2901	3126	2776		
		0-180	3877	100.0	85	1950	1734	1573			
Comparative yearly lighting energy cost per 1000 lumens – \$1.85 based on 3000 hrs. and \$.08 pwr KWH.											
The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.			Coefficients of Utilization								
Photometric values based on test performed in compliance with LM-79.			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	109	104	100	106	102	97	97	94
			2	98	91	84	96	89	82	85	81
			3	91	80	71	88	79	70	76	68
			4	82	70	63	81	69	61	67	59
			5	76	64	55	73	63	54	60	53
			6	70	56	48	68	56	47	55	46
			7	66	52	42	64	51	42	50	41
			8	60	47	39	59	46	39	46	38
			9	56	44	35	56	42	34	41	34
			10	54	40	33	52	40	32	39	32

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