

Day-Brite

CFI

by  Signify

Recessed

ClearAppeal LED 2x4

Up to 7000 lumens



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

Day-Brite / CFI ClearAppeal LED recessed architectural provides excellent visual comfort. Its modern architectural styling complements any space.

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

Example: 2CAG42L840-4-DS-UNV-DIM-SWZDT

Width	Family	Ceiling Type	Lumens	Color	Length	Center Diffuser	Voltage	Driver	Options
2	CA			–	4	DS	–	–	
2 2'	CA ClearAppeal	G Grid F Flange	Standard configurations 36L 3600 nominal delivered lumens 42L 4200 nominal delivered lumens 55L 5500 nominal delivered lumens 70L 7000 nominal delivered lumens <u>Base configuration</u> 40B 4000 nominal delivered lumens	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 ^{1,2} SDIM Dimming Step dimming to 40% input power L3D ³ Hi-lume A 1% dimming LDE ⁴ Lutron LDE5, 5% dimming DALI DALI dimming	AG Antimicrobial paint 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 ⁵ Generator transfer device EMLED ⁵ Bodine BSL310 10W battery pack (requires driver enclosure on top of luminaire) EMLED ^{7,5} Bodine BSL17 7W battery pack (requires driver enclosure on top of luminaire) DSC Quick driver disconnect SWZG2 ^{8,7} Integral sensor, daylighting and occupancy, advanced grouping with dwell time and zoning SWZDT ⁶ Integral sensor, daylighting and occupancy, advanced grouping with dwell time DAYOCC ⁶ Integral sensor, daylighting and occupancy, basic grouping CHIC Chicago Plenum rated

SpaceWise (SWZG2) 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

Footnotes

- 1 Integral SWZDT and DAYOCC options dimmable to 5% via wireless wall switch. See page 2.
- 2 Non-controls and SWZG2 configurations are 0-10v dimmable to 1% for Standard configurations. Base configurations are 0-10v dimmable to 5%.
- 3 Specify for 36L lumen package only. Consult factory for other lumen packages.
- 4 Specify for 36L or 42L lumen packages only. Consult factory for other lumen packages.
- 5 Available only with Base configurations.
- 6 Specify only with -DIM driver option.
- 7 Must order SWZ-REMOTE SpaceWise handheld remote with each SWZG2 order.
- 8 Switching to auxiliary circuit in the event of utility power loss. Luminaire operates as normal including with integrated controls.



2CA ClearAppeal LED recessed 2x4

Up to 7000 lumens

Application

- Modern architectural styling to complement any space.
- Smooth brightness across the face of the luminaire prevents glare and provides excellent visual comfort.
- Directs a controlled amount of light to higher angles to eliminate “cave effect” without creating glare.
- Ideal for modern offices, schools and retail environments.
- Excellent luminaire efficacy provides significant energy savings.
- 80 CRI minimum source provides excellent color rendering.
- LEDs are an excellent source for use with controls since frequent switching does not affect the life of the light source.
- Grid and Flange models available.
- Non-controls Standard configurations are 0-10v dimming to 1%. Base configurations are to 5%.
- Five year limited luminaire warranty includes LED boards and driver. **Visit www.philips.com/warranties** for complete warranty information.
- Predicted L70 lumen maintenance up to 70,000 hours for standard configurations and 50,000 hours for base configurations.
- To estimate lumen output in emergency mode, multiply emergency pack wattage by luminaire efficacy, then by 1.10. Typical lumen output is 1300lm for EMLED, and 900lm for EMLED7.
- cETLus listed to UL standards, suitable for damp locations.
- ClearAppeal luminaires are Designlights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers (<http://www.designlights.org/QPL>).

Construction/Finish

- One piece die-formed embossed steel housing provides added rigidity, resists damage during shipment/handling.
- Captive hinged door frame assembly for maintenance accessibility.
- T-bar grid clips are built into luminaire ends for quick and easy installation, no extra parts required.
- Suitable for end-to-end mounting.
- End K.O.s for thru wiring or conduit entry in shallow plenums.

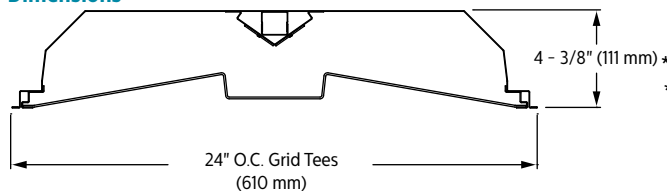
Electrical

- Driver and LED boards are easily accessible from below. LED boards are individually replaceable if required.

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4 Standard	2CAG36L840	31	118
	2CAG42L840	36	117
	2CAG55L840	48	117
	2CAG70L840	61	114
2x4 Base	2CAG40B840	32	121

Dimensions



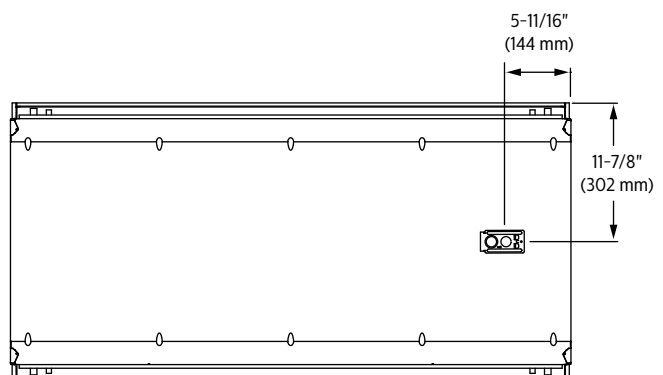
* EMLED and EMLED7 are 1-3/4" (45mm) deeper

SpaceWise (SWZG2)

- Commissioning via SWZ-REMOTE handheld remote, must order a minimum of one per installation
- Integral sensing options (DAYOCC, SWZG2, SWZDT) may not be combined
- 0-10v dimmable to 1%
- For more information on the sensor, please refer to www.lightingproducts.philips.com/documents/webdb2/DayBrite/pdf/SWZG2_sensor.pdf
- Visit www.philips.com/spacewise for more information about SpaceWise Technology (SWZG2)

DAYOCC & SpaceWise DT (SWZDT)

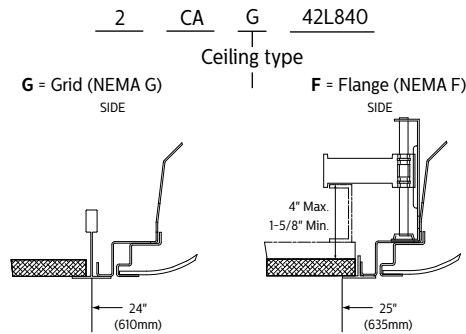
- Commissioning via compatible Android phone and Philips Field App
- Dimming via compatible wireless wall switch only (see sensor spec sheets linked to below)
- Register for the commissioning app at <http://registration.componentcloud.philips.com/appregistration/>
- Integral sensing options (DAYOCC, SWZG2, SWZDT) may not be combined
- For more information including recommended switches, refer to the following –
 DAYOCC – www.lightingproducts.philips.com/documents/webdb2/DayBrite/pdf/DAYOCC_sensor.pdf
 SWZDT – www.lightingproducts.philips.com/documents/webdb2/DayBrite/pdf/SWZDT_sensor.pdf



2CA ClearAppeal LED recessed 2x4

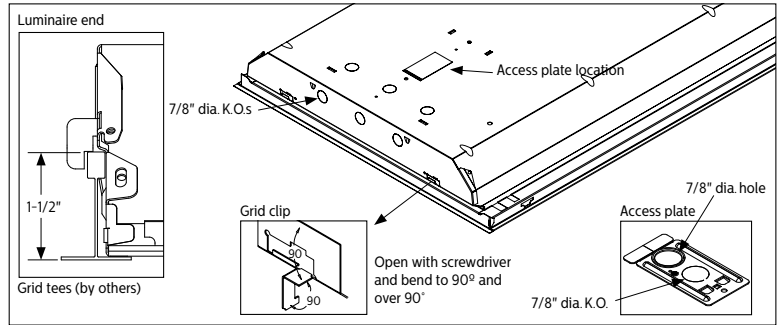
Up to 7000 lumens

Ceiling configuration



(NEMA Type G)
Lay-in acoustical ceilings using exposed grid suspension, with tees for luminaires on 24" x 48" spacing.

(NEMA Type F)
Flange for acoustical ceilings using concealed mechanical suspension. Swing-jack mounting brackets: adjustment 4" max. and 1-5/8" min. Refer to sheet 801-CL for cut-out information.



Photometry

2x4 ClearAppeal LED recessed, 3600 nominal delivered lumens

LER – 118

Catalog No.	2CAG36L840-4-DS-UNV
Test No.	35365
S/MH	1.3
Lamp Type	LED
Lumens	3626
Input Watts	30.7

Comparative yearly lighting energy cost per 1000 lumens – **\$2.03** 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.

Vertical Angle	Horizontal Angle			
	0°	45°	90°	-45°
0	1263	1263	1263	1263
5	1249	1258	1266	1258
15	1198	1219	1231	1219
25	1095	1126	1146	1126
35	950	994	1015	994
45	778	829	857	829
55	590	647	680	647
65	394	460	498	460
75	200	286	319	286
85	42	76	70	76

Degrees	Lumens	% Luminaire
0-30	981	27.0
0-40	1599	44.1
0-60	2808	77.4
0-90	3627	100.0

Angle	End	45°	Cross
45	1709	1821	1883
55	1596	1751	1841
65	1446	1690	1828
75	1200	1716	1912
85	754	1350	1247

Ceiling (pcc)	80%			70%			50%		
	70	50	30	70	50	30	50	30	
RCR	Zonal cavity method - Effective floor reflectance = 20%								
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	51	
6	69	56	46	68	55	46	53	46	
7	64	51	41	63	50	41	47	40	
8	59	46	38	57	46	36	44	36	
9	56	42	34	55	41	34	40	34	
10	53	39	30	51	39	30	38	30	

2x4 ClearAppeal LED recessed, 4200 nominal delivered lumens

LER – 117

Catalog No.	2CAG42L840-4-DS-UNV
Test No.	35364
S/MH	1.3
Lamp Type	LED
Lumens	4270
Input Watts	36.4

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.

Vertical Angle	Horizontal Angle			
	0°	45°	90°	-45°
0	1487	1487	1487	1487
5	1471	1481	1490	1481
15	1410	1434	1449	1434
25	1288	1325	1348	1325
35	1119	1169	1194	1169
45	917	976	1009	976
55	694	761	801	761
65	464	541	587	541
75	237	336	376	336
85	51	92	82	92

Degrees	Lumens	% Luminaire
0-30	1154	27.0
0-40	1882	44.1
0-60	3306	77.4
0-90	4272	100.0

Angle	End	45°	Cross
45	2013	2143	2215
55	1880	2059	2168
65	1705	1987	2157
75	1419	2017	2256
85	900	1637	1464

Ceiling (pcc)	80%			70%			50%		
	70	50	30	70	50	30	50	30	
RCR	Zonal cavity method - Effective floor reflectance = 20%								
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	51	
6	69	56	46	68	55	46	53	46	
7	64	51	41	63	50	41	47	40	
8	59	46	38	57	46	36	44	36	
9	56	42	34	55	41	34	40	34	
10	53	39	30	51	39	30	38	30	

2CA ClearAppeal LED recessed 2x4

Up to 7000 lumens

2x4 ClearAppeal LED recessed, 5500 nominal delivered lumens

LER – 116

Catalog No. 2CAG55L840-4-DS-UNV Test No. 35363 S/MH 1.3 Lamp Type LED Lumens 5556 Input Watts 47.6 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.	Candela distribution				Light Distribution			Average Luminance																																																																																																																																																						
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2x4 ClearAppeal LED recessed, 7000 nominal delivered lumens

LER – 114

Catalog No. 2CAG70L840-4-DS-UNV Test No. 35362 S/MH 1.3 Lamp Type LED Lumens 7011 Input Watts 61.3 Comparative yearly lighting energy cost per 1000 lumens – \$2.11 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.	Candela distribution				Light Distribution			Average Luminance																																																																																																																																																						
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25	2118	2177	2214	2177																																																																																																																																																										
35	1836	1922	1961	1922																																																																																																																																																										
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	9	56	42	34	55	41	34	40	34																																																																																																																																																					
	10	53	39	30	51	39	30	38	30																																																																																																																																																					

2CA ClearAppeal LED recessed 2x4

Up to 7000 lumens

2x4 ClearAppeal LED recessed, 4000 nominal delivered lumens

LER – 122

Catalog No. 2CAG40B840-4-DS-UNV Test No. 38127 S/MH 1.2 Lamp Type LED Lumens 3941 Input Watts 32 Comparative yearly lighting energy cost per 1000 lumens – \$1.97 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.	Candela distribution				Light Distribution			Average Luminance				
	Vertical Angle	Horizontal Angle				Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
		0°	45°	90°	-45°							
	0	1416	1416	1416	1416	0-30	1090	27.7	45	1880	1989	2050
	5	1390	1413	1424	1413	0-40	1771	44.9	55	1757	1901	1985
	15	1327	1360	1374	1360	0-60	3091	78.4	65	1592	1814	1938
	25	1212	1249	1268	1249	0-90	3940	100.0	75	1251	1689	1844
	35	1048	1093	1115	1093				85	852	1377	1258
	45	856	906	934	906							
	55	649	702	733	702							
65	433	494	528	494								
75	209	282	307	282								
85	48	77	71	77								

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)	80%			70%			50%	
	70	50	30	70	50	30	50	30
Wall (pw)								
RCR	Zonal cavity method - Effective floor reflectance = 20%							
Room Cavity Ratio	0	118	118	118	115	115	115	111
	1	109	104	98	106	101	96	96
	2	98	90	82	95	88	81	84
	3	90	79	70	86	78	69	75
	4	81	69	60	80	68	60	66
	5	76	63	54	73	61	53	59
	6	69	56	47	68	56	46	54
	7	65	51	41	63	50	41	48
	8	59	46	38	58	46	38	45
	9	56	42	34	55	41	34	40
	10	53	40	32	52	39	32	38

