Day-Brite CFI by signify

Recessed

ClearAppeal LED 2x2

Up to 4400 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: 2CAG38L840-2-DS-UNV-DIM-SWZDT

Width	Family	Ceiling Type	Lumens	Color	Length	Center Diffuser	Voltage	Driver	Options
2	CA				2	DS			
2 2'	CA ClearAppeal	G Grid F Flange	**Standard configurations** **30L** 3000 nominal delivered lumens **34L** 3400 nominal delivered lumens **38L** 3800 nominal delivered lumens **44L** 4400 nominal delivered lumens **Base configuration** **33B** 3300 nominal delivered lumens	**830** 80 CRI, 3000K **835** 80 CRI, 3500K **840** 80 CRI, 4000K **850** 80 CRI, 5000K	2 2'	DS Diffuse (smooth)	**UNV** Universal Voltage, 120-277 volt **347** 347V	**DIM**[1,2] Dimming **SDIM** Step dimming to 40% input power **L3D**[3] Lutron 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**[8] Generator transfer device **EMLED** Bodine BSL310 10W battery pack (requires driver enclosure on top of luminaire) **EMLED7**[5] Bodine BSL17 7W battery pack (requires driver enclosure on top of luminaire) **DSC** Quick driver disconnect **SWZG2**[6,7] 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)

- **FMA22 –** 2'x2' "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 38L lumen package only. Consult factory for other lumen packages.
4 Specify for 30L or 34L 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 2x2

Up to 4400 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.

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.
- 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).

Enclosure

- Single piece thermo formed acrylic lens with smooth center diffuser (DS).

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.

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 –

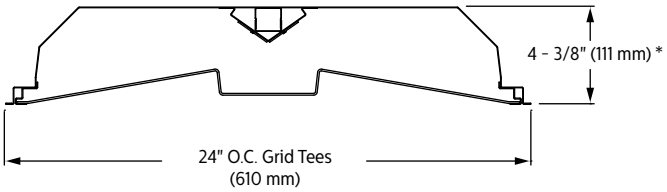
  DAYOCC – www.lightingproducts.philips.com/documents/webdb2/DayBrite/pdf/DAYOCC_sensor.pdf

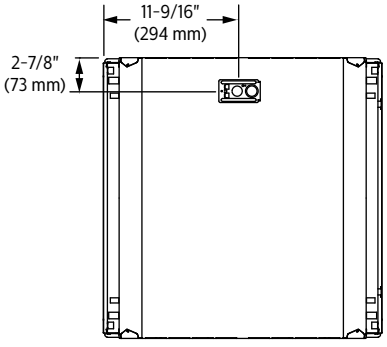
  SWZDT – www.lightingproducts.philips.com/documents/webdb2/DayBrite/pdf/SWZDT_sensor.pdf

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x2 Standard	2CAG30L840	28	106
	2CAG34L840	33	105
	2CAG38L840	37	103
	2CAG44L840	46	95
2x2 Base	2CAG33B840	34	100

Dimensions





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

2CA ClearAppeal LED recessed 2x2

Up to 4400 lumens

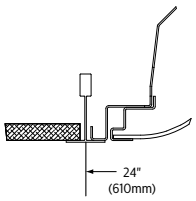
Ceiling configuration

2 CA G 30L840

Ceiling type

G = Grid (NEMA G)

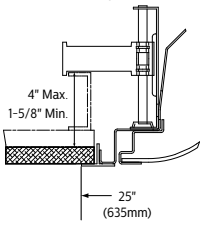
SIDE



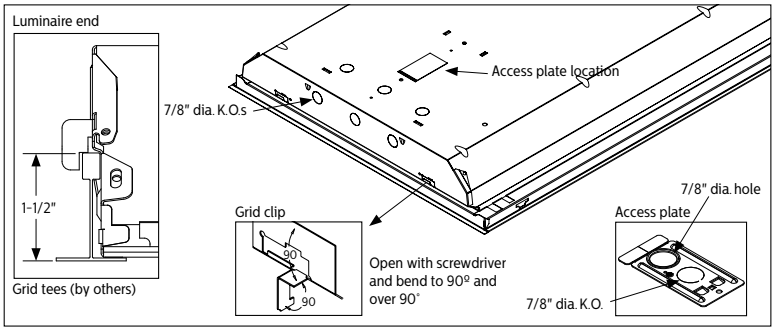
(NEMA Type G)
Lay-in acoustical ceilings using exposed grid suspension, with tees for luminaires on 24" x 48" spacing.

F = Flange (NEMA F)

SIDE



(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

2x2 ClearAppeal LED recessed, 3000 nominal delivered lumens — LER – 106

Catalog No.	2CAG30L840-2-DS-UNV
Test No.	35385
S/MH	1.3
Lamp Type	LED
Lumens	3002
Input Watts	28.4

Comparative yearly lighting energy cost per 1000 lumens – **$2.26** 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

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	1046	1046	1046	1046
5	1037	1042	1046	1042
15	995	1009	1018	1009
25	905	930	948	930
35	781	819	846	819
45	636	683	720	683
55	480	533	577	533
65	320	380	431	380
75	163	231	277	231
85	37	59	63	59

Light Distribution

Degrees	Lumens	% Luminaire
0- 30	811	27.0
0- 40	1322	44.0
0- 60	2324	77.4
0- 90	3001	100.0

Average Luminance

Angle	End	45°	Cross
45	2956	3174	3345
55	2751	3055	3307
65	2485	2957	3351
75	2069	2938	3510
85	1406	2220	2360

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)	80%			70%			50%	
Wall (pw)	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

Room Cavity Ratio

2x2 ClearAppeal LED recessed, 3400 nominal delivered lumens — LER – 105

Catalog No.	2CAG34L840-2-DS-UNV
Test No.	35386
S/MH	1.3
Lamp Type	LED
Lumens	3431
Input Watts	32.8

Comparative yearly lighting energy cost per 1000 lumens – **$2.29** 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

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	1196	1196	1196	1196
5	1186	1191	1196	1191
15	1137	1153	1164	1153
25	1034	1063	1084	1063
35	892	936	966	936
45	728	781	823	781
55	549	610	661	610
65	366	435	493	435
75	186	265	316	265
85	42	69	71	69

Light Distribution

Degrees	Lumens	% Luminaire
0- 30	927	27.0
0- 40	1511	44.0
0- 60	2656	77.4
0- 90	3432	100.0

Average Luminance

Angle	End	45°	Cross
45	3380	3630	3824
55	3147	3497	3788
65	2842	3379	3833
75	2360	3362	4006
85	1583	2601	2684

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)	80%			70%			50%	
Wall (pw)	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

Room Cavity Ratio

2CA ClearAppeal LED recessed 2x2

Up to 4400 lumens

2x2 ClearAppeal LED recessed, 3800 nominal delivered lumens — LER – 103

Catalog No.	2CAG38L840-2-DS-UNV
Test No.	35387
S/MH	1.2
Lamp Type	LED
Lumens	3778
Input Watts	36.6

Comparative yearly lighting energy cost per 1000 lumens – **$2.33** 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

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	1316	1316	1316	1316
5	1305	1311	1316	1311
15	1251	1269	1281	1269
25	1138	1171	1193	1171
35	982	1032	1064	1032
45	800	861	905	861
55	604	673	726	673
65	402	480	542	480
75	204	292	347	292
85	46	75	77	75

Light Distribution

Degrees	Lumens	% Luminaire
0- 30	1020	27.0
0- 40	1662	44.0
0- 60	2923	77.4
0- 90	3777	100.0

Average Luminance

Angle	End	45°	Cross
45	3717	4003	4204
55	3460	3857	4160
65	3122	3729	4214
75	2590	3706	4404
85	1734	2839	2910

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)	80%			70%			50%	
Wall (pw)	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

Room Cavity Ratio

2x2 ClearAppeal LED recessed, 4400 nominal delivered lumens — LER – 95

Catalog No.	2CAG44L835-2-DS-UNV
Test No.	34639
S/MH	1.2
Lamp Type	LED
Lumens	4343
Input Watts	45.7

Comparative yearly lighting energy cost per 1000 lumens – **$2.53** 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

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	1576	1576	1576	1576
5	1565	1571	1577	1571
15	1502	1523	1535	1523
25	1361	1397	1416	1397
35	1167	1215	1238	1215
45	943	996	1030	996
55	705	762	801	762
65	465	527	570	527
75	238	307	342	307
85	56	78	75	78

Light Distribution

Degrees	Lumens	% Luminaire
0- 30	1219	28.1
0- 40	1976	45.5
0- 60	3421	78.7
0- 90	4345	100.0

Average Luminance

Angle	End	45°	Cross
45	4379	4627	4784
55	4037	4366	4590
65	3615	4099	4427
75	3024	3893	4340
85	2107	2925	2820

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)	80%			70%			50%	
Wall (pw)	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	109	104	100	106	102	97	96	93
2	98	90	83	95	89	81	84	80
3	90	79	70	88	78	69	75	68
4	81	69	61	80	68	60	67	58
5	76	63	54	73	61	53	59	52
6	69	56	47	68	56	46	54	46
7	65	52	42	63	51	41	48	41
8	60	46	39	58	46	38	45	38
9	56	42	34	55	42	34	40	34
10	53	40	32	52	39	32	38	30

Room Cavity Ratio

2CA ClearAppeal LED recessed 2x2

Up to 4400 lumens

2x2 ClearAppeal LED recessed, 3300 nominal delivered lumens — LER – 100

Catalog No.	2CAG33B840-2-DS-UNV
Test No.	38124
S/MH	1.3
Lamp Type	LED
Lumens	3339
Input Watts	34

Comparative yearly lighting energy cost per 1000 lumens – **$2.40** 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

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	1202	1202	1202	1202
5	1188	1197	1203	1197
15	1134	1149	1162	1149
25	1032	1057	1076	1057
35	889	926	954	926
45	725	770	804	770
55	549	598	639	598
65	344	396	458	396
75	177	238	276	238
85	44	57	56	57

Light Distribution

Degrees	Lumens	% Luminaire
0- 30	923	27.6
0- 40	1501	45.0
0- 60	2627	78.7
0- 90	3338	100.0

Average Luminance

Angle	End	45°	Cross
45	3368	3577	3737
55	3145	3427	3659
65	2677	3082	3558
75	2252	3020	3507
85	1647	2141	2119

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)	80%			70%			50%	
Wall (pw)	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	109	104	98	106	101	97	96	93
2	98	90	82	95	88	81	84	80
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	59	52
6	69	56	47	68	56	46	54	46
7	65	51	42	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

Room Cavity Ratio

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