Day-Brite CFI by Signify

Recessed

SofTrace LED 2x2

Up to 4400 lumens

Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

Day-Brite / CFI SofTrace LED recessed brings new meaning to the concept of combining style with performance. Equipped with a fresh streamlined design and innovative technology, SofTrace provides a huge step forward for the lighting industry. The sleek profile design belies the true "horsepower under the hood". This architectural product delivers leading edge performance for the most environmentally conscious user.

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

Example: 2STG30L840-2-D-UNV-DIM

Width	Family	Ceiling Type	Lumen Package[1]	Color Temp.	Length	Center Diffuser	Voltage	Driver	Options
2	ST			–	2 –	–	–	–	
2 2'	ST Softrace	G Grid F Flange Z Z Spline / Modular	**Standard configurations** **30L** 3000 nominal delivered lumens **34L** 3400 nominal delivered lumens **38L** 3800 nominal delivered lumens **44L** 4400 nominal delivered lumens **Base configuration** **35B** 3500 nominal delivered lumens	**830** 80 CRI, 3000K **835** 80 CRI, 3500K **840** 80 CRI, 4000K **850** 80 CRI, 5000K	2 2'	**D** Diffuse (ribbed) **DS** Diffuse (smooth) **PMW** Round perf w/ white overlay	**UNV** Universal voltage 120-277V **347** 347V	**DIM**[2] 0-10V 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	**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 **PAF** Housing painted after fabrication **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) **EMLED** Integral emergency battery pack, 1100lm nominal (ballast enclosure on top of luminaire) **CHIC** Chicago plenum rated

Footnotes:

1 The lumen values stated above are relevant only to the "D" center diffuser option. For lumen values with the other diffusers, check the photometrics tests online for those specific catalog numbers.
2 0-10V dimming to 1% for Standard configurations and 5% for Base configurations.
3 Specify 38L lumen package only. Consult factory for other lumen packages.
4 Specify for 30L or 34L lumen packages only. Consult facotry for other lumen packages.
5 Available only with Base configurations.

Accessories (order separately)

- **FKDP22** Flange conversion kit 2'X2'
- **FMA22** 2'x2' "F" mounting frame for NEMA "F" mounting

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x2 Standard	2STG30L840	26	115
	2STG34L840	29	114
	2STG38L840	34	113
2x2 Base	2STG35B840	33	107

2ST SofTrace LED recessed 2x2

Up to 4400 lumens

Application

- Subtle enclosure curves provide 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.
- Outstanding visual comfort, ideal for modern offices, schools and retail environments.
- High CRI source provides excellent color rendering with a CRI of 80.
- LEDs are an excellent source for use with controls since frequent switching does not affect the life of the light source.
- Grid, Flange or Z-spline/ Modular models available.
- Some SofTrace luminaires are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers. (www.designlights.org/QPL)

Construction/Finish

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

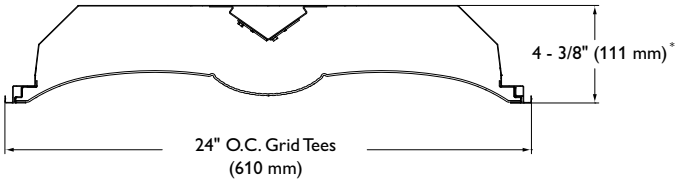
Electrical

- Driver and LED boards are easily accessible from below. LED boards are individually replaceable, if required, via plug-in connectors.
- Standard configurations are 0-10V dimming to 1% and 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 maintanance 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.

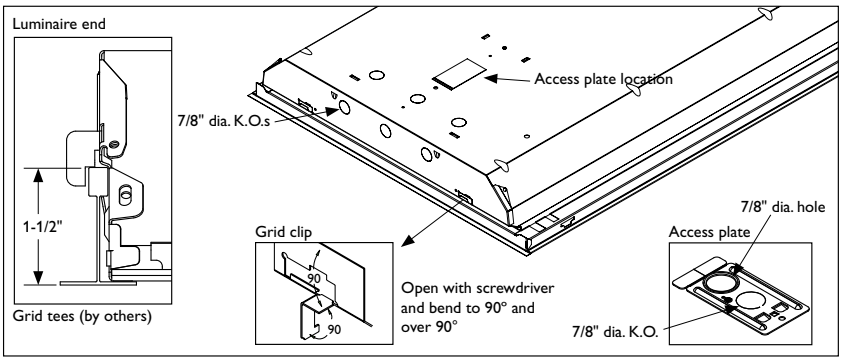
Enclosure

- Choice of three enclosures:
  - Single piece thermo formed acrylic lens with ribbed center diffuser (D)
  - Single piece acrylic lens with smooth center diffuser (DS).
  - Three piece acrylic lens with round perforated steel center diffuser (PMW)

Dimensions



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



2ST SofTrace LED recessed 2x2

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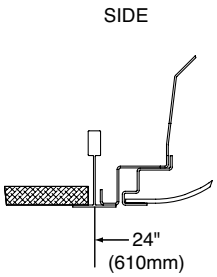
Ceiling configuration

2 ST G 34L840

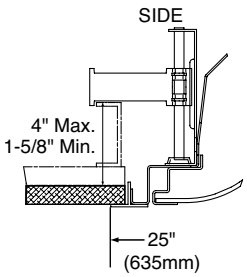
Ceiling type

G = Grid (NEMA G)



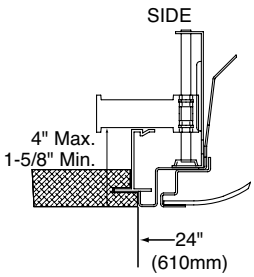
(NEMA Type G)
Lay-in acoustical ceilings using exposed grid suspension, with tees for luminaires on 24" x 24" spacing.

F = Flange (NEMA F)



(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.

Z = Modular & "Z" Spline (NEMA F)



(NEMA M/Z)
Modular and "Z" Spline using concealed mechanical suspension. Swing-jack mounting brackets: adjustment 4" max. and 1-5/8" min.

2x2 SofTrace LED, 3500 nominal delivered lumens, diffuse — LER – 107

Catalog No.	2STG35B840-2-D-UNV
Test No.	38125
S/MH	1.3
Lamp Type	LED
Lumens/Lamp	3592
Input Watts	34

Comparative yearly lighting energy cost per 1000 lumens – **$2.24** 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	1331	1331	1331	1331
5	1315	1326	1332	1326
15	1254	1276	1297	1276
25	1138	1177	1218	1177
35	977	1033	1088	1033
45	787	847	901	847
55	584	636	681	636
65	358	399	449	399
75	181	220	251	220
85	45	58	57	58

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1028	28.6
0-40	1674	46.6
0-60	2893	80.5
0-90	3591	100.0

Average Luminance

Angle	End	45°	Cross
45	3655	3937	4185
55	3345	3645	3900
65	2782	3100	3488
75	2303	2788	3184
85	1689	2179	2156

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	97	94
2	98	91	83	96	89	82	85	80
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	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	54	40	33	52	40	32	39	32

Room Cavity Ratio

2x2 SofTrace LED, 3000 nominal delivered lumens, diffuse — LER – 115

Catalog No.	2STG30L840-2-D-UNV-DIM
Test No.	35381
S/MH	1.3
Lamp Type	LED
Lumens/Lamp	3049
Input Watts	26.3

Comparative yearly lighting energy cost per 1000 lumens – **$2.07** 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	1094	1094	1094	1094
5	1084	1090	1096	1090
15	1039	1057	1071	1057
25	945	976	1007	976
35	814	860	906	860
45	660	712	758	712
55	494	541	578	541
65	325	366	397	366
75	164	204	233	204
85	38	57	57	57

Light Distribution

Degrees	Lumens	% Luminaire
0-30	851	27.9
0-40	1389	45.6
0-60	2418	79.3
0-90	3049	100.0

Average Luminance

Angle	End	45°	Cross
45	3066	3308	3524
55	2827	3098	3312
65	2525	2842	3083
75	2079	2583	2954
85	1444	2156	2153

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	91	83	95	89	81	84	80
3	90	80	70	88	78	69	75	68
4	82	70	61	80	68	60	67	59
5	76	63	54	73	61	54	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

2ST SofTrace LED recessed 2x2

Up to 4400 lumens

2x2 SofTrace LED, 3400 nominal delivered lumens, diffuse — LER – 114

Catalog No.	2STG34L840-2-D-UNV-DIM
Test No.	35382
S/MH	1.3
Lamp Type	LED
Lumens/Lamp	3415
Input Watts	29.7

Comparative yearly lighting energy cost per 1000 lumens – **$2.09** 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	1224	1224	1224	1224
5	1213	1220	1226	1220
15	1163	1183	1198	1183
25	1056	1093	1127	1093
35	910	964	1013	964
45	739	798	848	798
55	553	606	647	606
65	363	410	443	410
75	182	229	259	229
85	42	64	63	64

Light Distribution

Degrees	Lumens	% Luminaire
0-30	953	27.9
0-40	1555	45.5
0-60	2707	79.3
0-90	3415	100.0

Average Luminance

Angle	End	45°	Cross
45	3431	3709	3941
55	3167	3474	3707
65	2821	3184	3446
75	2314	2901	3293
85	1595	2401	2367

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	91	83	95	89	81	84	80
3	90	80	70	88	78	69	75	68
4	82	70	61	80	68	60	67	59
5	76	63	54	73	61	54	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

2x2 SofTrace LED, 3800 nominal delivered lumens, diffuse — LER – 113

Catalog No.	2STG38L840-2-D-UNV-DIM
Test No.	35383
S/MH	1.3
Lamp Type	LED
Lumens/Lamp	3879
Input Watts	34.2

Comparative yearly lighting energy cost per 1000 lumens – **$2.12** 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	1392	1392	1392	1392
5	1379	1387	1394	1387
15	1322	1344	1362	1344
25	1201	1242	1281	1242
35	1035	1094	1151	1094
45	840	906	963	906
55	629	688	735	688
65	412	464	503	464
75	207	259	295	259
85	48	72	71	72

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1083	27.9
0-40	1767	45.5
0-60	3075	79.3
0-90	3879	100.0

Average Luminance

Angle	End	45°	Cross
45	3902	4209	4476
55	3600	3941	4209
65	3204	3606	3910
75	2625	3282	3745
85	1821	2695	2673

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	91	83	95	89	81	84	80
3	90	80	70	88	78	69	75	68
4	82	70	61	80	68	60	67	59
5	76	63	54	73	61	54	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

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