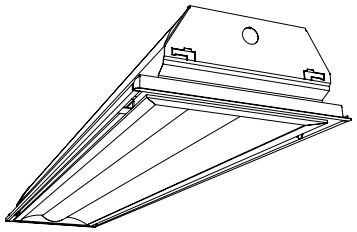
Day-Brite CFI by Signify

Recessed

SofTrace Air LED 1x4

2200, 2600, 2900, 3500 or 4000lm



Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

Day-Brite / CFI SofTrace recessed LED 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

Example: 1STG22L840-4-D-UNV-DIM

Width	Family	Ceiling Type	Air Function	Lumen Package[1]	Color Temp.	Length	Center Diffuser	Voltage	Driver	Options
1	ST				–	4 –	–	–	–	
1 1'	**ST** Softrace	**G** Grid **F** Flange **Z** Z Spline / Modular **T** Screw Slot	**A** Air Supply/ Return **S** Static (Reveal w/o air slots)	**22L** 2200 nominal delivered lumens **26L** 2600 nominal delivered lumens **29L** 2900 nominal delivered lumens **35L** 3500 nominal delivered lumens **40L** 4000 nominal delivered lumens	**830** 80 CRI, 3000K **835** 80 CRI, 3500K **840** 80 CRI, 4000K **850** 80 CRI, 5000K	**4** 4'	**D** Diffuse **PMW** Round perf w/ white overlay	**UNV** Universal voltage 120-277V **347** 347V	**DIM** 0-10V dimming **SDIM** Step dimming to 40% input power **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 **GLR** Fusing, fast blow **WR** White reveal **PAF** Housing painted after fabrication **EMLED** Integral emergency battery pack, 1100lm nominal (ballast enclosure on top of luminaire)

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.

Accessories (order separately)

- **FMA14** 1'x4' “F” mounting frame for NEMA “F” mounting

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
1x4	1STGA22L840	19.4	115
	1STGA26L840	22.6	115
	1STGA29L840	26.3	115
	1STGA35L840	31.1	114
	1STGA40L840	35.3	113

1ST SofTrace Air LED 1x4

2200, 2600, 2900, 3500 or 4000 lm

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.
- Ideal for modern offices, schools and retail environments.
- Excellent luminaire efficacy provides significant energy savings.
- Lumen packages range from 2,200 to 4,000 initial lumens, providing flexibility to optimize light levels for a specific application.
- High CRI 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, Flange or Z-spline/ Modular models available.
- Designed for air supply/return through side slots in reveal. See sheet SofTrace_LED_2x4 for air flow data.

Construction/Finish

- Black reveal around enclosure provides floating appearance and disguises air slots. White reveal is optional.
- T-bar grid clips are built into luminaire ends for quick and easy installation, no extra parts required.
- Suitable for end-to-end mounting.
- K.O. in luminaire ends for thru wiring or conduit entry in shallow plenums.
- 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.

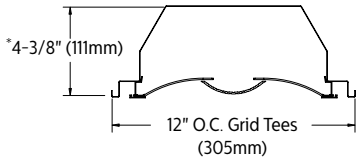
Electrical

- Driver and LED boards are easily accessible from below. LED boards are individually replaceable if required.
- 0-10V dimming is standard.
- 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.
- High efficiency LEDs have 70,000 hour L70 rated life (defined as 70% lumen maintenance.)
- cETLus listed to UL Standards, suitable for damp locations.

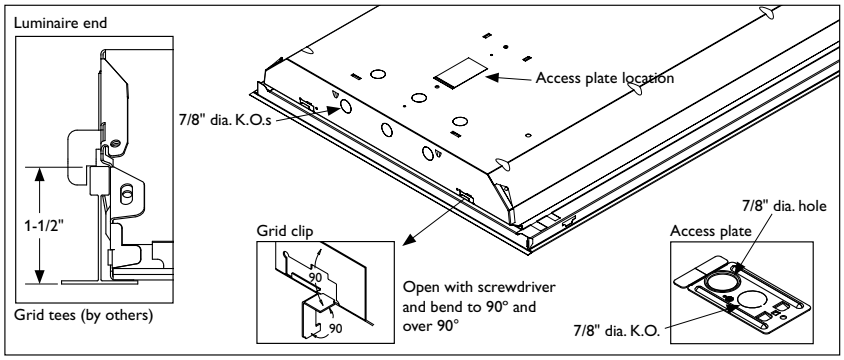
Enclosure

- Choice of two enclosures:
  – Single piece thermo formed acrylic lens with ribbed center diffuser (D)
  – Three piece acrylic lens with round perforated steel center diffuser (PMW)

Dimensions



* **EMLED** is 1-3/4" (45mm) deeper



1ST SofTrace Air LED 1x4

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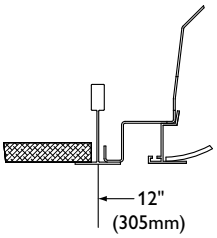
Ceiling configuration

1 ST G A 1 22L840

Ceiling type

G = Grid (NEMA G)

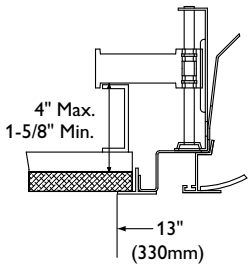
SIDE



(NEMA Type G)
Lay-in acoustical ceilings using exposed grid suspension, with tees for luminaires on 12" x 48" spacing.

F = Flange (NEMA F)

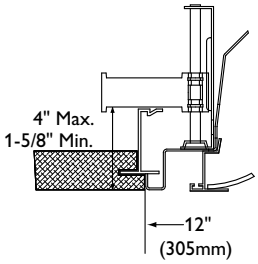
SIDE



(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.

Z = Modular & "Z" Spline (NEMA M/Z)

SIDE



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

1x4 SofTrace Air LED, 2200 nominal delivered lumens, diffuse

LER – 115

Catalog No.	1STGA22L840-4-D-UNV-DIM
Test No.	35063
S/MH	1.2
Lamp Type	LED
Lumens/Lamp	2234
Input Watts	19.4

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	926	926	926	926
5	912	922	927	922
15	873	888	892	888
25	793	803	796	803
35	678	674	649	674
45	539	517	482	517
55	392	365	334	365
65	251	232	212	232
75	123	120	104	120
85	27	27	25	27

Light Distribution

Degrees	Lumens	% Luminaire
0-30	705	31.5
0-40	1123	50.2
0-60	1847	82.6
0-90	2235	100.0

Average Luminance

Angle	End	45°	Cross
45	2608	2504	2331
55	2340	2178	1991
65	2030	1882	1716
75	1627	1585	1368
85	1064	1056	978

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	105	101	107	103	98	97	94
2	100	92	85	96	90	83	86	81
3	92	81	73	89	80	72	77	70
4	83	72	64	81	70	64	68	61
5	78	65	56	76	64	56	61	55
6	71	58	51	69	57	50	56	48
7	67	54	45	65	53	45	52	44
8	61	48	40	60	48	40	46	40
9	57	45	36	56	45	36	44	36
10	55	41	34	54	40	34	40	34

Room Cavity Ratio

1x4 SofTrace Air LED, 2600 nominal delivered lumens, diffuse

LER – 115

Catalog No.	1STGA26L840-4-D-UNV-DIM
Test No.	35064
S/MH	1.2
Lamp Type	LED
Lumens/Lamp	2612
Input Watts	22.6

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	1082	1082	1082	1082
5	1066	1079	1085	1079
15	1021	1038	1043	1038
25	928	938	932	938
35	793	787	759	787
45	631	606	563	606
55	459	427	390	427
65	293	272	248	272
75	144	140	121	140
85	32	31	29	31

Light Distribution

Degrees	Lumens	% Luminaire
0-30	824	31.5
0-40	1313	50.2
0-60	2159	82.6
0-90	2613	100.0

Average Luminance

Angle	End	45°	Cross
45	3054	2930	2725
55	2738	2545	2327
65	2375	2203	2006
75	1904	1851	1601
85	1245	1229	1139

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	105	101	107	103	98	97	94
2	100	92	85	96	90	83	86	81
3	92	81	73	89	80	72	77	70
4	83	72	64	81	70	64	68	61
5	78	65	56	76	64	56	61	55
6	71	58	51	69	57	50	56	48
7	67	54	45	65	53	45	52	44
8	61	48	40	60	48	40	46	40
9	57	45	36	56	45	36	44	36
10	55	41	34	54	40	34	40	34

Room Cavity Ratio

1ST SofTrace Air LED 1x4

2200, 2600, 2900, 3500 or 4000 lm

1x4 SofTrace Air LED, 2900 nominal delivered lumens, diffuse

Catalog No.	1STGA29L840-4-D-UNV-DIM
Test No.	35065
S/MH	1.2
Lamp Type	LED
Lumens/Lamp	3042
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	1260	1260	1260	1260
5	1241	1256	1262	1256
15	1188	1209	1214	1209
25	1079	1093	1085	1093
35	923	917	883	917
45	735	704	657	704
55	535	495	455	495
65	342	317	289	317
75	168	163	141	163
85	37	36	34	36

LER – 115

Light Distribution

Degrees	Lumens	% Luminaire
0-30	960	31.5
0-40	1529	50.2
0-60	2515	82.6
0-90	3044	100.0

Average Luminance

Angle	End	45°	Cross
45	3557	3407	3179
55	3193	2955	2717
65	2766	2567	2338
75	2222	2152	1867
85	1449	1421	1327

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	105	101	107	103	98	97	94
2	100	92	85	96	90	83	86	81
3	92	81	73	89	80	72	77	70
4	83	72	64	81	70	64	68	61
5	78	65	56	76	64	56	61	55
6	71	58	51	69	57	50	56	48
7	67	54	45	65	53	45	52	44
8	61	48	40	60	48	40	46	40
9	57	45	36	56	45	36	44	36
10	55	41	34	54	40	34	40	34

Room Cavity Ratio

1x4 SofTrace Air LED, 3500 nominal delivered lumens, diffuse

Catalog No.	1STGA35L840-4-D-UNV-DIM
Test No.	35066
S/MH	1.2
Lamp Type	LED
Lumens/Lamp	3557
Input Watts	31.1

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	1474	1474	1474	1474
5	1451	1648	1477	1468
15	1390	1414	1420	1414
25	1263	1279	1269	1279
35	1078	1074	1033	1074
45	859	826	768	826
55	626	582	532	582
65	399	371	337	371
75	195	190	190	190
85	43	43	43	43

LER – 114

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1122	31.5
0-40	1788	50.2
0-60	2940	82.6
0-90	3558	100.0

Average Luminance

Angle	End	45°	Cross
45	4152	3991	3711
55	3731	3470	3168
65	3223	2997	2727
75	2581	2515	2171
85	1683	1671	1526

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	119	119	119	116	116	116	111	111
1	109	105	101	107	103	99	98	95
2	100	92	86	97	90	84	87	82
3	92	82	74	89	80	73	77	71
4	84	73	64	82	71	64	69	62
5	78	65	57	76	64	56	62	55
6	72	59	51	70	58	50	56	49
7	67	54	45	65	53	45	52	44
8	62	49	41	61	49	41	47	40
9	58	45	37	57	45	37	44	37
10	55	42	34	54	41	34	40	34

Room Cavity Ratio

1ST SofTrace Air LED 1x4

2200, 2600, 2900, 3500 or 4000 lm

1x4 SofTrace Air LED, 4000 nominal delivered lumens, diffuse

LER – 113

Catalog No.	1STGA40L840-4-D-UNV-DIM
Test No.	35068
S/MH	1.2
Lamp Type	LED
Lumens/Lamp	3999
Input Watts	35.3

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 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.

Candela distribution

Vertical Angle	Horizontal Angle 0°	45°	90°	-45°
0	1656	1656	1656	1656
5	1631	1650	1659	1650
15	1561	1589	1597	1589
25	1419	1437	1427	1437
35	1212	1207	1161	1207
45	966	929	863	929
55	703	656	598	656
65	449	417	379	417
75	221	215	185	215
85	48	48	44	48

Light Distribution

Degrees	Lumens	% Luminaire
0- 30	1261	31.5
0- 40	2009	50.2
0- 60	3305	82.6
0- 90	4000	100.0

Average Luminance

Angle	End	45°	Cross
45	4673	4494	4177
55	4193	3911	3568
65	3632	3372	3070
75	2915	2848	2447
85	1896	1885	1716

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%							
Room Cavity Ratio	0	118	118	118	115	115	115	111	111
	1	109	105	101	107	103	98	97	94
	2	100	92	85	96	90	83	86	81
	3	92	81	73	89	80	72	77	70
	4	83	72	64	81	70	64	68	61
	5	78	65	56	76	64	56	61	55
	6	71	58	51	69	57	50	56	48
	7	67	54	45	65	53	45	52	44
	8	61	48	40	60	48	40	46	40
	9	57	45	36	56	45	36	44	36
	10	55	41	34	54	40	34	40	34

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