

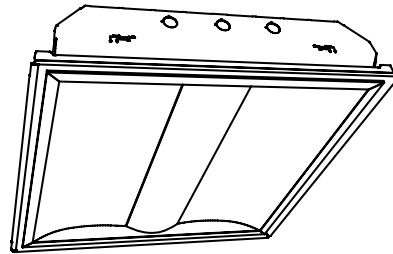
# Day-Brite CFI

by @ignify

## Recessed

SofTrace Air LED 2x2

2400, 3000, 3400,  
3800 or 4400lm



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: 2STGA24L840-2-D-UNV-DIM

Width	Family	Ceiling Type	Air Function	Lumen Package <sup>1</sup>	Color Temp.	Length	Center Diffuser	Voltage	Driver	Options
2	ST				—	2	—	—	—	
2 2'	ST Softrace	<b>G</b> Grid <b>F</b> Flange <b>Z</b> Z Spline / Modular <b>T</b> Screw Slot	<b>A</b> Air Supply/ Return <b>S</b> Static (Reveal w/o air slots)	<b>24L</b> 2400 nominal delivered lumens <b>30L</b> 3000 nominal delivered lumens <b>34L</b> 3400 nominal delivered lumens <b>38L</b> 3800 nominal delivered lumens <b>44L</b> 4400 nominal delivered lumens	<b>835</b> 80 CRI, 3500K <b>840</b> 80 CRI, 4000K <b>850</b> 80 CRI, 5000K	2 2'	<b>D</b> Diffuse (ribbed) <b>DS</b> Diffuse (smooth) <b>PMW</b> Round perf w/ white overlay	<b>UNV</b> Universal voltage 120-277V <b>347</b> 347V	<b>DIM</b> 0-10V dimming <b>SDIM</b> Step dimming to 40% input power <b>DALI</b> DALI dimming	<b>F1</b> 3/8" flex, 3 wire 18 gauge 6' <b>F2</b> 3/8" flex, 4 wire 18 gauge 6' <b>F1/D</b> 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires <b>F2/5W</b> 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires <b>GLR</b> Fusing, fast blow <b>WR</b> White reveal <b>PAF</b> Housing painted after fabrication <b>EMLED</b> Integral emergency battery pack, 1100lm nominal (ballast enclosure on top of luminaire)

#### Footnotes:

<sup>1</sup> 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)

- **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	2STGA24L840	20.6	116
	2STGA30L840	26.3	115
	2STGA34L840	29.7	114
	2STGA38L840	34.2	113



# 2ST SofTrace Air LED 2X2

2400, 3000, 3400, 3800, or 4400lm

## 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.
- Lumen packages range from 2,400 to 4,400 initial lumens, providing flexibility to optimize light levels for a specific application.
- 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, Z-spline/ Modular or Screw Slot models available.
- Designed for air supply/return through side slots in black reveal. See sheet SofTrace\_LED\_2x4 for air flow data.

## Construction/Finish

- One piece die-formed embossed steel housing provides added rigidity, resists damage during shipment/handling.
- Black reveal around enclosure provides floating appearance and disguises air slots. White reveal is available.
- 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.
- 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.

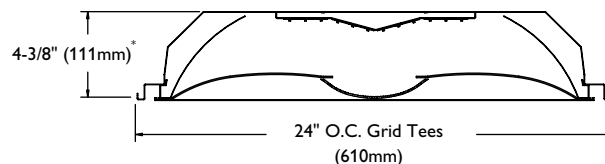
## Electrical

- Driver and LED boards are easily accessible from below without tools. LED boards are individually replaceable, if required, via plug-in connectors.
- 0-10V dimming is available for 3,000 lumen or 4,400 lumen models.
- Available emergency option provides 1100 delivered lumens in emergency mode (requires ballast enclosure on top of luminaire).
- 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](http://www.philips.com/warranties) for complete warranty information.
- High efficiency LEDs have a minimum 70,000 hour rated life (L70).
- cETLus listed to UL standards, suitable for damp locations.

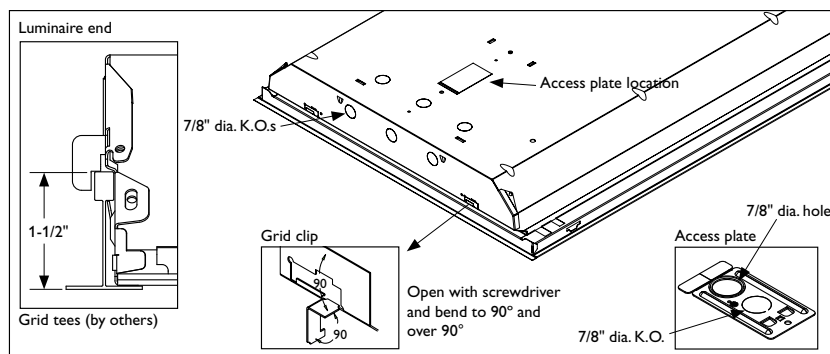
## Enclosure

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

## Dimensions



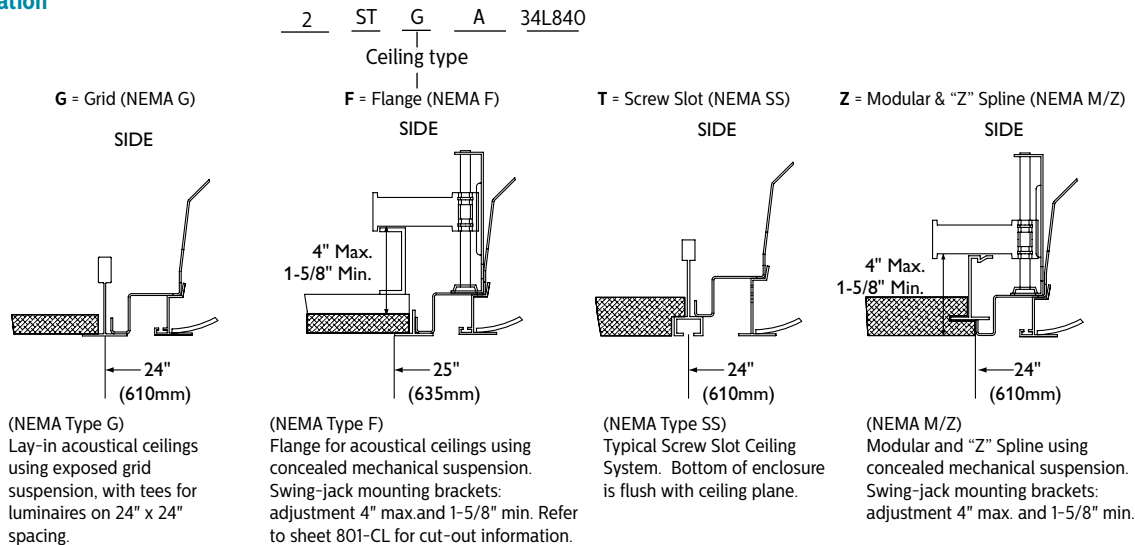
\* EMLED is 1-3/4" (45mm) deeper



# 2ST SofTrace Air LED 2X2

2400, 3000, 3400, 3800, or 4400lm

## Ceiling configuration



## 2x2 SofTrace Air LED, 2400 nominal delivered lumens, diffuse

<b>Catalog No.</b>	2STGA24L840-2-D-UNV-DIM
<b>Test No.</b>	35380
<b>S/MH</b>	1.3
<b>Lamp Type</b>	LED
<b>Lumens/Lamp</b>	2393
<b>Input Watts</b>	20.6

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	859	859	859	859
5	851	856	860	856
15	816	829	840	829
25	741	766	790	766
35	639	675	711	675
45	517	558	595	558
55	387	424	453	424
65	254	286	311	286
75	128	159	182	159
85	30	46	45	46

## LER – 116

### Light Distribution

Degrees	Lumens	% Luminaire
0-30	668	27.9
0-40	1090	45.6
0-60	1897	79.3
0-90	2393	100.0

### Average Luminance

Angle	End	45°	Cross
45	2404	2593	2763
55	2219	2426	2597
65	1978	2224	2415
75	1625	2022	2310
85	1131	1715	1681

### 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	30
Wall (pw)	Zonal cavity method - Effective floor reflectance = 20%								
RCR									
Room Cavity Ratio	0	118	118	118	115	115	115	111	111
1	109	104	100	106	102	97	96	93	93
2	98	91	83	95	89	81	84	80	80
3	90	80	70	88	78	69	75	68	68
4	82	70	61	80	68	60	67	59	59
5	76	63	54	73	61	54	59	52	52
6	69	56	47	68	56	46	54	46	46
7	65	52	42	63	51	41	48	41	41
8	60	46	39	58	46	38	45	38	38
9	56	42	34	55	42	34	40	34	34
10	53	40	32	52	39	32	38	30	30

## 2x2 SofTrace Air LED, 3000 nominal delivered lumens, diffuse

<b>Catalog No.</b>	2STGA30L840-2-D-UNV-DIM
<b>Test No.</b>	35381
<b>S/MH</b>	1.3
<b>Lamp Type</b>	LED
<b>Lumens/Lamp</b>	3049
<b>Input Watts</b>	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

## LER – 115

### 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%		
	70	50	30	70	50	30	50	30	30
Wall (pw)	Zonal cavity method - Effective floor reflectance = 20%								
RCR									
Room Cavity Ratio	0	118	118	118	115	115	115	111	111
1	109	104	100	106	102	97	96	93	93
2	98	91	83	95	89	81	84	80	80
3	90	80	70	88	78	69	75	68	68
4	82	70	61	80	68	60	67	59	59
5	76	63	54	73	61	54	59	52	52
6	69	56	47	68	56	46	54	46	46
7	65	52	42	63	51	41	48	41	41
8	60	46	39	58	46	38	45	38	38
9	56	42	34	55	42	34	40	34	34
10	53	40	32	52	39	32	38	30	30

# 2ST SofTrace Air LED 2X2

2400, 3000, 3400, 3800, or 4400lm

## 2x2 SofTrace Air LED, 3400 nominal delivered lumens, diffuse

<b>Catalog No.</b> 2STGA34L840-2-D-UNV-DIM <b>Test No.</b> 35382 <b>S/MH</b> 1.3 <b>Lamp Type</b> LED <b>Lumens/Lamp</b> 3415 <b>Input Watts</b> 29.7  Comparative yearly lighting energy cost per 1000 lumens – <b>\$2.09</b> 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.	<b>Candela distribution</b>					<b>Light Distribution</b>			<b>Average Luminance</b>			
	<b>Vertical Angle</b>	<b>0°</b>	<b>45°</b>	<b>90°</b>	<b>-45°</b>	<b>Degrees</b>	<b>Lumens</b>	<b>% Luminaire</b>	<b>Angle</b>	<b>End</b>	<b>45°</b>	<b>Cross</b>
	0	1224	1224	1224	1224	0-30	953	27.9	45	3431	3709	3941
	5	1213	1220	1226	1220	0-40	1555	45.5	55	3167	3474	3707
	15	1163	1183	1198	1183	0-60	2707	79.3	65	2821	3184	3446
	25	1056	1093	1127	1093	0-90	3415	100.0	75	2314	2901	3293
	35	910	964	1013	964				85	1595	2401	2367
	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							

## LER – 114

### 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	104	100	106	102	97	96	93	93
2	98	91	83	95	89	81	84	80	80
3	90	80	70	88	78	69	75	68	68
4	82	70	61	80	68	60	67	59	59
5	76	63	54	73	61	54	59	52	52
6	69	56	47	68	56	46	54	46	46
7	65	52	42	63	51	41	48	41	41
8	60	46	39	58	46	38	45	38	38
9	56	42	34	55	42	34	40	34	34
10	53	40	32	52	39	32	38	30	30

## 2x2 SofTrace Air LED, 3800 nominal delivered lumens, diffuse

<b>Catalog No.</b> 2STGA38L840-2-D-UNV-DIM <b>Test No.</b> 35383 <b>S/MH</b> 1.3 <b>Lamp Type</b> LED <b>Lumens/Lamp</b> 3879 <b>Input Watts</b> 34.2  Comparative yearly lighting energy cost per 1000 lumens – <b>\$2.12</b> 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.	<b>Candela distribution</b>					<b>Light Distribution</b>			<b>Average Luminance</b>			
	<b>Vertical Angle</b>	<b>0°</b>	<b>45°</b>	<b>90°</b>	<b>-45°</b>	<b>Degrees</b>	<b>Lumens</b>	<b>% Luminaire</b>	<b>Angle</b>	<b>End</b>	<b>45°</b>	<b>Cross</b>
	0	1392	1392	1392	1392	0-30	1083	27.9	45	3902	4209	4476
	5	1379	1387	1394	1387	0-40	1767	45.5	55	3600	3941	4209
	15	1322	1344	1362	1344	0-60	3075	79.3	65	3204	3606	3910
	25	1201	1242	1281	1242	0-90	3879	100.0	75	2625	3282	3745
	35	1035	1094	1151	1094				85	1821	2695	2673
	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							

## LER – 113

### 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	104	100	106	102	97	96	93	93
2	98	91	83	95	89	81	84	80	80
3	90	80	70	88	78	69	75	68	68
4	82	70	61	80	68	60	67	59	59
5	76	63	54	73	61	54	59	52	52
6	69	56	47	68	56	46	54	46	46
7	65	52	42	63	51	41	48	41	41
8	60	46	39	58	46	38	45	38	38
9	56	42	34	55	42	34	40	34	34
10	53	40	32	52	39	32	38	30	30

